ILIX Präzisionswerkzeuge GmbH



2021



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Die Firma ILIX Präzisionswerkzeuge GmbH wurde am 1. Juli 1895 in Frankfurt am Main gegründet. Ziel des Unternehmens war schon damals die Herstellung von Gewindebohrern, Reibahlen, Fräsern und Spiralbohrern. Mit der Fertigung von Werkzeugen aus dem neuartigen Werkstoff Schnellarbeitsstahl rief man im Jahr 1918 den Markennamen ILIX ins Leben. Wir bieten ein breites Programm ausgereifter Lösungen für die mechanische Bearbeitung. Unsere langjährige Erfahrung in der Konstruktion von Werkzeugen bildet die Basis qualitativ hochwertiger, präziser und leistungsfähiger Produkte für die unterschiedlichsten Anwendungen.
Unsere über hundertjährige Präsenz im Markt hat zu einem geschlossenen Netzwerk von Geschäftspartnern geführt, das uns ermöglicht, weltweit mit den Werkzeugen aus dem Hause ILIX mit professioneller Unterstützung in Betrieben rund um die Zerspanung vertreten zu sein.

ILIX Präzisionswerkzeuge GmbH was founded on the 1st of July 1895 in Frankfurt / Main. Ever since the company objective has been the production of precision twist drills, taps countersinks and reamers. With the opportunity to use the advantages of high-speed alloy steel in 1918 the brand name ILIX was introduced.
Today we offer a wide range of fully developed solutions for metal cutting. Our long experience in manufacturing tools builds the strong foundation for our high-quality, precise and highly productive precision products for even the most demanding metal cutting applications. Our presence for more than 100 years led to a network of business partners, which helps ILIX Präzisionswerkzeuge tools to be represented all over the world.



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info@ilix.com
www.ilix.com

ILIX Präzisionswerkzeuge GmbH
bietet ein breites Programm
ausgereifter Lösungen für
die mechanische Bearbeitung.
Die langjährige Erfahrung der ILIX
Gruppe bildet die Basis qualitativ
hochwertiger, präziser
und leistungsfähiger Produkte
für die unterschiedlichsten
Anwendungsgebiete.

ILIX Präzisionswerkzeuge GmbH
offers a wide range of advanced solutions for mechanical applications.
The accumulated experience of the
ILIX group has led to tools of high
quality, precision and performance
covering the most diverse
of applications.

Hochleistungswerkzeuge letzter Generation ermöglichen die Bearbeitung schwieriger Materialien mit besten Schnittgeschwindigkeiten und hervorragenden Ergebnissen.
Last generation high performance tools permit machining difficult materials with high cutting data and excellent results.



Werkzeuge mit Schwerpunkt auf besten Bohrergebnissen und Spanverhalten.
Tools for best cutting action and chip removal.



Gewindebohrer aus speziellen Materialien mit bester Produktivität und Verlässlichkeit.
Taps constructed out of special materials for best productivity and reliability.



Zum Einsatz mit hohen Schnittgeschwindigkeiten und besonderem Augenmerk auf Stabilität und Zuverlässigkeit während der Bearbeitung.
Conceived for high speed threading applications, are reliable and guarantee high stability.



Mit hoher Leistung einsetzbar in verschiedensten Materialien.
High performance in a wide range of materials.



Zur Herstellung von Bohrungen mit engsten Toleranzen und hervorragenden Oberflächengüten.
For high precision holes and excellent surface finishing.



Technischer Teil mit Schnittwertempfehlungen.
Technical part with cutting data recommendation.

HOCHLEISTUNGS-SPIRALBOHRER / High Performance Twist Drills — 11

- Record HD - HDi
- Record PM
- Record 2S-2Si
- Record HPi
- Record VA-VAi
- Record Evolution TP
- Record DHi
- Record DHi Alu
- MicroDrill i
- Record 4Si
- Record STL-STLi
- Record 3S - 3SX
- PKD
- Record AG Drill
- GTRD-DHTR
- Record INDEX Drill
- DHMTR

SPIRALBOHRER / Twist Drills — 155

- Bohrer mit Zylinderschaft / Twist drills with straight shank
- Zentrierbohrer / Centre drills
- Stufenbohrer / Step drills
- Kleinstbohrer / Micro drills
- Stiftlochbohrer / Taper pin drills
- (HM) VHM-Bohrer (HM) Carbide Tipped drills
- N
- W
- VA
- HD
- NK
- STL
- Record VA
- H
- NS
- Record GG

HOCHLEISTUNGS-GEWINDEBOHRER / High Performance Taps — 287

- Multi VA
- Multi Rapid VA
- Multi HD
- Multi Rapid HD
- Multi Rapid HDi
- Sincro Ilix i
- Multi GG - GGi
- T-BLACK
- Ti
- Ni
- Multi Aero
- Multi TP HRC 52-58
- FORMER PM-PMi
- VHM-Gewindebohrer - Solid Carbide Taps
- N
- GGi-Ni
- VHM-Gewindefräser - Thread Milling Cutters
- TP-MICRO-MULTI: TM-TM AERO - CTM - DTM - TMI

GEWINDEBOHRER / Taps — 469

- N
- AZ
- VR - VR i
- HR
- GG Multi GGi
- Former - Former S
- Rapid - Rapid 2
- Langer Schaft / Long shank
- Verlängerter Schaft / Extended shank
- Extra langer Schaft / Extra long shank
- Muttergewindebohrer / Nut tap
- EGM Helicoil / Helicoil
- VA - VA i
- ALU
- TR
- Ti
- MS
- NL
- HD
- BAK
- Ultra - Ultra S

AUFBOHRER – SENKER / Core drills – Countersinks — 633

- N zylindrisch / Straight shank
- N konisch / Taper shank
- N Aufsteck-Aufbohrer / Shell core drills
- VHM Senker / Solid Carbide Countersinks 90°
- Senker / Countersinks 60°
- Senker / Countersinks 90°
- Kegelsenker mit festem Führungszapfen / Countersinks with solid pilot 90°
- Flachsenker mit festem Führungszapfen / Counterbores with solid pilot 180°

REIBAHLEN / Reamers — 657

- Gerade genutet/ Straight flutes
- Linksdrall / Left hand helix 12°-25°-45°
- Für Stiftlöcher / For conical holes
- Zylinderschaft / Straight shank
- Aufsteck-Reibahlen / Shell reamers
- Hundertstel-Reibahlen / Centesimal reamers
- PKD-Reibahlen / PKD carbide reamers
- Linksdrall / Left hand helix 7-8°
- Verstellbar (Gerade-Elicoidal) / Adjustable (Straight-Elicoidal)
- Für Morsekegel / For taper shank
- Morsekonus / Morse taper shank conical holes
- VHM-Reibahlen / Solid carbide reamers
- Cermet-Reibahlen / Cermet reamers
- Kegelreibahle für NPT/NPTF Gewinde / Taper pin reamer for NPT/NPTF thread

TECHNISCHE DATEN / Technical Guide — 713

ZEICHENERKLÄRUNG
Key to symbols

Werkzeugarten / Tool types


Hochleistungs-Bohrer
High Performance Twist Drills


Bohrer / Twist Drills


Hochleistungs-Gewindebohrer
High performance taps


Gewindefräser
Thread Milling Cutters


Gewindebohrer / Taps


Aufbohrer / Core drills


Kegelsenker / Countersinks


Reibahlen / Reamers

Gewindebearbeitung / Threading operations


Durchgangsloch / Through hole


Sackloch / Blind hole

Schäfte / Shank types


Zylinderschaft
Straight shank



Zylinderschaft in HSS
Straight shank in HSS



Zylinderschaft in VHM
Straight shank in Solide Carbide



Schaft Whistle Notch in HSS
Whistle notch shank in HSS



Schaft Whistle Notch in VHM
Whistle notch shank in Solide Carbide



Schaft für ISO 9766
shank for ISO 9766


Mitnehmerlappen
Shank with tang


Morsekegel
Taper shank

Baulängen / Tool lengths


Extra kurz / Stub length


Kurz / Jobber length


Lang / Long


Überlang / Extra long

Schneidstoff / Tool material

VHM/ S.C. | HSS-CO | HSS-CO-8 | HSS | HSS-CO-PM

PKD | CERMET

Gewindearten / Thread types

M | W | MF | G | UNC | UN

UNF | NPT | NPTF | RC | PG | EGM

TR | BSF | BSP | MJ | UNJF

Beschichtung / Coating

Unbeschichtet
Uncoated

TF
TiAlN
Futura

TF PLUS
TiAlN
Futura Plus

TT
TiAlN
Futura Top

TN
TiN

TX
TiAlCN

TX
TiNOX

NX
TiSi

TC
TiCN

XB
TiAlN
Multi Layer

TL
TiN+WCC

XP
TiAlN+WCC

TP
Kopfbeschichtung TiN
Tip coating TiN

HL
HARD LUBE

Oberflächenbehandlung / Surface treatment

VP
Vaporisiert
Vaporized

Fasennitriert
Nitrided lands

Nitriert
Nitrided

Schneidrichtung / Cutting direction

Links
Left hand

Rechts
Right hand

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60GMTF	123	6114	250	6204	250	6281	260	6513	220
60SMTL	123	6115	250	6208TN	33	6282	259	6516	222
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6003K	112	6126TF	107	6213TN	47	6290TN	265	6604	510
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6007	115	6131	180	6216/2	234	6292TN	265	6605XP	532
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6012TF	59	6132TN	180	6217/1	232	6294	265	66066G	522
6014TF	73	6133TN	31	6217/2	234	6295	265	6607	584
6015TF	49	6134TN	38	6217/3	235	6296	265	66073B	584
6015TN	49	6135	180	6218/1	232	6297	267	6607TN	584
6016TF	51	6135TX	180	6218/2	234	6298B	267	6608	508
6017TT	53	6140	208	6219/1	256	6299	265	6609	509
6018TT	55	6140TX	208	6219/2	257	6301	670	6610	607
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6022TFPLUS	66	6147TN	189	6222	254	6307	692	6614P	505
6025TT	75	6148	189	6223	266	6308	701	6614S	505
6026TT	77	6148TN	189	6223TN	266	6309	673	6614T	505
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6622TX	527	**6649TN**	523	**6679**	510	**6709TX**	529	**6749**	578
6623	540	**6651**	534	**6680**	582	**6710**	610	**6749VP**	578
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6623TF	541	**6652TC**	557	**6680TN**	582	**67116G**	536	**6751TN**	320
6623TN	541	**6652TN**	557	**6681**	519	**67117G**	537	**6752TN**	321
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6833TB	345	6896	362	6943TF	433	7000	396	7070	435
6834TB	346	6897	367	6944	431	7001	397	7070TF	435
6835TB	347	6899	554	6944TF	431	7001TF	397	7071	440
6836	595	6900	366	6945VP	(NEW) 590	7002	399	7071TF	440
6837	596	6902	513	6946	432	7002TF	399	7072TF	444
6838	582	6903	530	6946TF	432	7003	400	7073	441
6839	588	6904	557	6947	430	7003TF	400	7073TF	441
6840	548	6905	599	6947TF	430	7005	404	7074	445
6841	550	6906	363	6948	(NEW) 361	7005TF	404	7074TF	445
6842	549	6907	375	6950	449	7007	401	7075	442
6843	551	6908	613	6950TN	449	7007TF	401	7075TF	442
6844	370	6909	615	6951	599	7009	402	7076	446
6845	373	6910	612	6952	452	7009TF	402	7076TF	446
6846	372	6911	614	6952TN	452	7010	405	7077	443
6848	583	6912	601	6953	(NEW) 455	7010TF	405	7077TF	443
6849	589	6912TN	601	6953TC	455	7012	406	7078	447
6850TN	517	6913	599	6954	451	7012TF	406	7078TF	447
6850VP	517	6914	611	6954TN	451	7013	(NEW) 398	7081	393
6851TN	533	6915	610	6955	(NEW) 456	7013TF	(NEW) 398	7081TC	393
6851VP	533	6916	607	6955TC	(NEW) 456	7014	(NEW) 403	7982	394
6852VP	571	6917	608	6956	450	7014TF	(NEW) 403	7082TC	394
6853VP	577	6917TN	608	6956TN	450	7015TF	391	7083	(NEW) 395
6854VP	583	6918	609	6957	(NEW) 457	7016TF	392	7083TF	(NEW) 395
6855VP	589	6919	608	6957TC	(NEW) 457	7020	407		
6856VP	602	6920	609	6958	453	7020TF	407		
6857	600	6921	608	6958TN	453	7024	409		
6858	599	6921TN	608	6960	448	7024TF	409		
6859	521	6922	609	6961	448	7027	408		
6860	537	6923	608	6962	448	7027TF	408		
6861	515	6924	609	6963	448	7030	410		
6862	531	6925	608	6964	334	7030TF	410		



Hochleistungs-Spiralbohrer

High Performance Twist Drills





ILIX PRECISION



Hochleistungs-Spiralbohrer
High Performance Twist Drills

▶ Zeichenerklärung
Key to symbols

SCHNEIDSTOFF / TOOL MATERIAL

HSS-Co	HSS-Co PM	PKD	K ..
			VHM / Feinstkorn Solid carbide / Micro grain

BESCHICHTUNG / COATING

	TN	TF	TF PLUS	TT
Unbeschichtet Uncoated	TiN	TiAlN Futura	TiAlN Futura Plus	TiAlN Futura TOP

TP	TX	NX	TL	XB
Kopfbeschichtung TiN Tip coating TiN	TiAlCN	TiSi	TiN+WCC	TiAlN Multi Layer

▶ Werkzeug-Auswahlhilfe
Tool selection guide

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: HD, EVOLUTION VA, HD i, PM

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
RECORD HD							
6133	3xD	1897	1,0 ÷ 32,0	h8	130°		-
6143	3xD	1897	1,0 ÷ 20,0	h8	130°		-
6208	8xD	338	1,0 ÷ 20,0	h8	130°		-
6228	8xD	338	1,0 ÷ 16,0	h8	130°		-
6248	12xD	340	1,0 ÷ 12,0	h8	130°		-
6248	12xD	340	1,0 ÷ 12,0	h8	130°		-
RECORD EVOLUTION VA							
6134	3xD	ähnlich/ similar 1897	1,0 ÷ 20,0	h8	120°	1835 A	-
6229	8xD	ähnlich/ similar 338	1,0 ÷ 20,0	h8	120°	1835 A	-
RECORD HD i ■ mit Kühlkanälen / with internal cooling							
6522	5xD	ILIX NORM	5,0 ÷ 24,0	h8	130°	1835 E	
RECORD PM							
6178 NEW	3xD	1897	2,0 ÷ 12,0	h8	130°		-

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: HD, EVOLUTION VA, HD i, PM

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN		HSS-Co	●	❍	●	●	❍	-	31
TF		HSS-Co	●	❍	●	●	❍	-	31
TN		HSS-Co	●	❍	●	●	❍	-	33
TF		HSS-Co	●	❍	●	●	❍	-	33
TF		HSS-Co	●	❍	●	●	❍	-	35
TP		HSS-Co	●	❍	●	●	❍	-	35
TN		HSS-Co	❍	●	-	❍	●	-	38
TN		HSS-Co	❍	●	-	❍	●	-	40
TN		HSS-Co	●	●	●	●	❍	-	43
NX		HSS-Co-PM	●	❍	●	❍	-	-	45

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: 2 S, 2 S i, HP i

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
RECORD 2 S							
6213	3xD 	**6539**	1,5 ÷ 20,0	h7			-
6015	3xD 	**6537K**	3,0 ÷ 20,0	m7			-
6016	3xD 	**6537K**	3,0 ÷ 20,0	m7			-
6017	5xD 	**6537L**	3,0 ÷ 20,0	m7			-
6018	5xD 	**6537L**	3,0 ÷ 20,0	m7			-
RECORD 2 S i ■ mit Kühlkanälen / with internal cooling							
6011	3xD 	**6537K**	3,0 ÷ 20,0	m7			
6012	3xD 	**6537K**	3,0 ÷ 20,0	m7			
6020	5xD 	**6537L**	3,0 ÷ 20,0	m7			
6021	5xD 	**6537L**	3,0 ÷ 20,0	m7			
RECORD HP i ■ mit Kühlkanälen / with internal cooling							
6022	5xD 	**6537L**	3,0 ÷ 20,0	m7			

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: 2 S, 2 S i, HP i

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN		K 30F	●	●	●	●	-	❍	47
TN TF		K 30F	●	❍	●	●	-	❍	49
TT		K 30F	●	❍	●	●	-	❍	51
TT		K 30F	●	❍	●	●	-	❍	53
TT		K 30F	●	❍	●	●	-	❍	55
TF		K 30F	●	❍	●	●	-	❍	57
TF		K 30F	●	❍	●	●	-	❍	59
TN TF		K 30F	●	❍	●	●	-	❍	61
TF		K 30F	●	❍	●	●	-	❍	63
TF PLUS		K 40F	●	-	●	-	-	❍	66

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: VA, EVOLUTION TP, DH i

KAT.-NR. ITEM		LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
RECORD VA								
6051	NEW	3xD	6537K	3,0 ÷ 16,0	m7	140°	6535 HA	-
6052	NEW	5xD	6537L	3,00 ÷ 16,0	m7	140°	6535 HA	
RECORD EVOLUTION TP								
6014		5xD	ILIX NORM	3,00 ÷ 12,0	m7	140°	6535 HA	-
RECORD DH i ■ mit Kühlkanälen / with internal cooling								
6025		8xD	ILIX NORM	3,0 ÷ 20,0	m7	140°	6535 HA	
6026		8xD	ILIX NORM	3,0 ÷ 20,0	m7	140°	6535 HE	
6027		12xD	ILIX NORM	3,0 ÷ 20,0	m7	140°	6535 HA	
6028		12xD	ILIX NORM	3,0 ÷ 20,0	m7	140°	6535 HE	
6032	NEW	15xD	ILIX NORM	3,0 ÷ 12,0	h7	135°	6535 HA	
6034		20xD	ILIX NORM	2,0 ÷ 12,0	h7	135°	6535 HA	
6036		30xD	ILIX NORM	2,0 ÷ 12,0	h7	135°	6535 HA	
6038	NEW	40xD	ILIX NORM	3,0 ÷ 9,0	h7	135°	6535 HA	

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: VA, EVOLUTION TP, DH i

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
XB		K 40F	❍	●	-	●	●	-	69
XB		K 40F	❍	●	-	●	●	-	70
TF		K 10-20	-	-	❍	-	-	●	73
TT		K 20F	●	❍	●	❍	-	-	75
TT		K 20F	●	❍	●	❍	-	-	77
TT		K 20F	●	❍	●	❍	-	-	79
TT		K 20F	●	❍	●	❍	-	-	80
TT		K 30F	●	●	●	●	●	❍	82
TT		K 30F	●	●	●	●	●	❍	83
TT		K 30F	●	●	●	●	●	❍	84
TT		K 30F	●	●	●	●	●	❍	85

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: DH Alu, 4 S i, - MicroDrill i

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
RECORD DH i Alu ■ mit Kühlkanälen / with internal cooling							
6041 NEW	15xD	ILIX NORM	3,00 ÷ 12,0	h7	137°	6535 HA	
6042	20xD	ILIX NORM	3,00 ÷ 12,0	h7	137°	6535 HA	
6044	30xD	ILIX NORM	3,00 ÷ 7,0	h7	137°	6535 HA	
MicroDrill i ■ mit Kühlkanälen / with internal cooling							
6019	5xD	ILIX NORM	1,0 ÷ 3,0	h7	135°	6535 HA	
6029	8xD	ILIX NORM	1,0 ÷ 3,0	h7	135°	6535 HA	
6030	12xD	ILIX NORM	1,0 ÷ 3,0	h7	135°	6535 HA	
6031	20xD	ILIX NORM	1,0 ÷ 3,0	h7	135°	6535 HA	
Record 4 S i ■ mit Kühlkanälen / with internal cooling							
6040F5	5xD	ILIX NORM	4,0 ÷ 20,0	m7	130°	6535 HA	
6040/5	5xD	ILIX NORM	4,0 ÷ 20,0	m7	130°	6535 HA	
6040/7	7xD	ILIX NORM	5,0 ÷ 20,0	m7	130°	6535 HA	
6040/L	10xD	ILIX NORM	5,0 ÷ 20,0	m7	130°	6535 HA	

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: DH Alu, 4 S i, - MicroDrill i

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		K 40F	-	-	-	●	-	-	87
-		K 40F	-	-	-	●	-	-	88
-		K 40F	-	-	-	●	-	-	88
TF PLUS		K 10	●	❍	●	❍	❍	-	90
TF PLUS		K 10	●	❍	●	❍	❍	-	91
TF PLUS		K 10	●	❍	●	❍	❍	-	92
TF PLUS		K 10	●	❍	●	❍	❍	-	93
TF		K 20F	-	-	❍	●	-	-	95
-		K 20F	-	-	❍	●	-	-	96
-		K 20F	-	-	❍	●	-	-	97
-		K 20F	-	-	❍	●	-	-	98

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: STL, STL i, 3 S, 3 SX

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
Record STL							
6236	5xD 	6573L	3,0 ÷ 12,0	h7			-
6238	8xD 	338	3,0 ÷ 12,0	h7			-
Record STL i ■ mit Kühlkanälen / with internal cooling							
6080	7/8xD 	ILIX NORM	5,0 ÷ 12,0	h7			
6081	7/8xD 	ILIX NORM	5,0 ÷ 12,0	h7			
Record 3 S							
6126K	3xD 	1897	3,0 ÷ 20,0	h7			-
6123K	4xD 	ILIX NORM	3,0 ÷ 20,0	h7			-
6127K*	4xD 	ILIX NORM	3,0 ÷ 20,0	h7			-
6001K	5xD 	ILIX NORM	3,0 ÷ 20,0	h7			-
Record 3 SX							
6002K	5xD 	6537L	3,0 ÷ 16,0	h7			-
6003K	5xD 	6537L	3,0 ÷ 16,0	h7			-

SPIRALBOHRER TYP / DRILLS TYPE - RECORD: STL, STL i, 3 S, 3 SX

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TF		K 20F	❍	❍	●	●	-	-	100
TF		K 30F	❍	❍	●	●	-	-	101
TP		K 30F	❍	❍	●	●	-	-	104
TP		K 30F	❍	❍	●	●	-	-	105
TF		K 10-20	❍	❍	❍	●	-	-	107
TF		K 10-20	❍	❍	❍	●	-	-	109
-		K 10-20	-	-	❍	●	-	-	109
-		K 10-20	-	-	❍	●	-	-	111
TF		K 30F	-	-	❍	●	-	-	112
TF		K 30F	-	-	❍	●	-	-	112

SPIRALBOHRER TYP / DRILLS TYPE - PKD

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
PKD							
6005 	3xD	**1897**	3,0 ÷ 20,0	h7			-
6007 	8xD	**338**	3,0 ÷ 20,0	h7			-

Wechselplatten Bohrer ■ Insert indexable Drills

SPIRALBOHRER TYP / DRILLS TYPE - Record AG Drill

Record AG Drill ■ Körper / Bodies

503D NEW Ø 	3xD	**ILIX NORM**	12,0 ÷ 32,0	-	-		
505D NEW Ø 	5xD	**ILIX NORM**	12,0 ÷ 32,0	-	-		
507D NEW Ø 	7xD	**ILIX NORM**	12,0 ÷ 32,0	-	-		
603D 	3xD	**ILIX NORM**	16,0 ÷ 40,0	-	-		
605D 	5xD	**ILIX NORM**	16,0 ÷ 40,0	-	-		
607D 	7xD	**ILIX NORM**	16,0 ÷ 40,0	-	-		

SPIRALBOHRER TYP / DRILLS TYPE - PKD

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		PKD	-	-	-	●	-	-	114
-		PKD	-	-	-	●	-	-	115

Wechselplatten Bohrer ■ Insert indexable Drills

SPIRALBOHRER TYP / DRILLS TYPE - Record AG Drill

-		-	●	●	●	●	●	❍	117
-		-	●	●	●	●	●	❍	117
-		-	●	●	●	●	●	❍	117
-		-	●	●	●	●	●	❍	118
-		-	●	●	●	●	●	❍	118
-		-	●	●	●	●	●	❍	118

SPIRALBOHRER TYP / DRILLS TYPE - Record AG Drill - RECORD Index Drill

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
Record AG Drill ■ Wechselplatten / Inserts							
50GMTF NEW Ø 	-	-	12,0 ÷ 32,0	m7		-	-
50DMTX NEW Ø 	-	-	12,0 ÷ 32,0	m7		-	-
50SMTL NEW Ø 	-	-	12,0 ÷ 32,0	m7		-	-
50CMTF NEW Ø 	-	-	12,0 ÷ 32,0	m7		-	-
60GMTF 	-	-	16,0 ÷ 40,0	m7		-	-
60DMTX 	-	-	16,0 ÷ 40,0	m7		-	-
60SMTL 	-	-	16,0 ÷ 40,0	m7		-	-
60CMTF 	-	-	16,0 ÷ 40,0	m7		-	-
Record Index Drill ■ Körper / Bodies							
GTR3D NEW 3xD 		ILIX NORM	16,0 ÷ 50,0	-	-		
DHTR NEW 8xD 		ILIX NORM	25,0 ÷ 45,0	-	-		
DHMTR NEW 10xD 	-		45,0 ÷ 130,0	-	-		

SPIRALBOHRER TYP / DRILLS TYPE - Record AG Drill - RECORD Index Drill

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TF	-	K 30F	●	❍	❍	❍	-	❍	120
TX	-	K 30F	❍	●	-	❍	●	-	120
TL	-	K 30F	-	-	-	●	-	-	120
TF	-	K 30F	❍	-	●	-	-	❍	120
TF	-	K 30F	●	❍	❍	❍	-	❍	123
TX	-	K 30F	❍	●	-	❍	●	-	123
TL	-	K 30F	-	-	-	●	-	-	123
TF	-	K 30F	❍	-	●	-	-	❍	123
-		-	●	●	●	●	●	❍	126
-		-	●	●	●	●	●	❍	128
-		-	●	●	●	●	●	❍	131

Wechselplatten Bohrer ■ Insert indexable Drills

SPIRALBOHRER TYP / DRILLS TYPE - RECORD Index Drill

KAT.-NR. ITEM		LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
Record Index Drill ■ Wechselplatten / Inserts								
WCEX ... MC	 NEW		ILIX NORM	-	-	-	-	-
WCEX ... LC	 NEW		ILIX NORM	-	-	-	-	-
Record Index Drill ■ Pilot Bohrer / Pilot Drill								
DHP	NEW 	-	ILIX NORM	-	-	-	-	-
Record Index ■ Basis Schaft / Verlängerung - Basic/Extension								
DHMSH...	NEW 	-		13,0 ÷ 40,0	-	-	-	-
DHMEX...	NEW 	-		13,0 ÷ 40,0	-	-	-	-
Record Index ■ Reduzierhülse / Reduzierung - Reduction Sleeves/Reducers								
DHMBS...	NEW 	-		16,0 ÷ 40,0	-	-	-	-
DHMRD...	NEW 	-		28,0 ÷ 58,0	-	-	-	-
Record Index ■ Antriebsring - Drive Ring								
DHRG...	NEW 	-		28,0 ÷ 58,0	-	-	-	-

SPIRALBOHRER TYP / DRILLS TYPE - RECORD Index Drill

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TF	-	P 25	●	●	●	●	●	❍	134
TF	-	P 35	●	●	●	●	●	-	134
TN	-	HSS-CO	●	●	●	●	●	❍	134
-	-	-	-	-	-	-	-	-	131
-	-	-	-	-	-	-	-	-	132
-	-	-	-	-	-	-	-	-	132
-	-	-	-	-	-	-	-	-	133
-	-	-	-	-	-	-	-	-	133

RECORD **HD**

Rekord HD HSS Co Bohrer sind speziell entwickelt um in Stahl und Gusseisen zu bohren und sorgen für hohe Leistungen und Zuverlässigkeit.

Record HD HSS Co drills are specifically engineered to drill steel and cast iron and ensure high performances and reliability.





SPEZIELLE SPITZENGEOMETRIE 130°
130° point design

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

AUSGEZEICHNETE VORSCHUBKRAFT UND TORSIONSSTEIFIGKEIT BEI UNSTABILEN ARBEITSBEDINGUNGEN
Excellent feed force and torsional resistance in unstable working conditions

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

EINZIGARTIGE NUTENPROFIL
Unique flute design

GROSSE SPANRAUM FÜR EINE EFFIZIENTE UND SCHNELLE SPANABFUHR
Large flutes for an efficient and fast chip evacuation

SCHNEIDFÄHIGKEIT MIT GERINGEREN ANZAHL VON UNTERBRECHUNGEN ALS HERKÖMMLICHE HSS-CO BOHRER
Cutting capability with lower number of steps than conventional HSS-Co drills

QUALITÄT HSS-CO
Quality HSS-Co

PVD TIN UND TIALN-BESCHICHTUNGEN MIT HOHER VERSCHLEISSFESTIGKEIT UND NIEDRIGE HAFTUNG AUF LANGSPANENDEN STAHLWERKSTOFFEN
PVD TiN and TiAlN coating with high wear resistance and low adhesion to long chip steel materials

DIE HOCHGLANZPOLIERTE OBERFLÄCHE SORGT FÜR EINE BESSERE SPANABFUHR AUCH BEI ANWENDUNG VON NIEDRIGEM KÜHLMITTELDRUCK.
The highly polished surface ensures better chip evacuation even when low-pressure coolant is applied

ILIX® PRECISION

DIN 1897

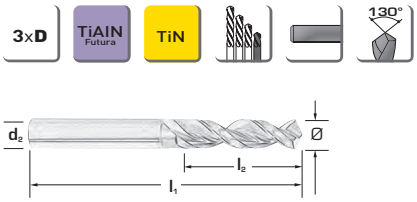
RECORD HD

EXTRA KURZ / STUB LENGTH

HSS-Co Hochleistungs-Spiralbohrer mit Zylinderschaft
HSS-Co High performance twist drills with straight shank



Record HD



Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2	6133 TN	6143 TF
1,0	26	6	1,0	●	●
1,1	28	7	1,1	●	●
1,2	30	8	1,2	●	●
1,3	30	8	1,3	●	●
1,4	32	9	1,4	●	●
1,5	32	9	1,5	●	●
1,6	34	10	1,6	●	●
1,7	34	10	1,7	●	●
1,8	36	11	1,8	●	●
1,9	36	11	1,9	●	●
2,0	38	12	2,0	●	●
2,1	38	12	2,1	●	●
2,2	40	13	2,2	●	●
2,3	40	13	2,3	●	●
2,4	43	14	2,4	●	●
2,5	43	14	2,5	●	●
2,6	43	14	2,6	●	●
2,7	46	16	2,7	●	●
2,8	46	16	2,8	●	●
2,9	46	16	2,9	●	●
3,0	46	16	3,0	●	●
3,1	49	18	3,1	●	●
3,2	49	18	3,2	●	●
3,3	49	18	3,3	●	●
3,4	52	20	3,4	●	●
3,5	52	20	3,5	●	●
3,6	52	20	3,6	●	●
3,7	52	20	3,7	●	●
3,8	55	22	3,8	●	●
3,9	55	22	3,9	●	●
4,0	55	22	4,0	●	●
4,1	55	22	4,1	●	●
4,2	55	22	4,2	●	●
4,3	58	24	4,3	●	●
4,4	58	24	4,4	●	●
4,5	58	24	4,5	●	●
4,6	58	24	4,6	●	●
4,7	58	24	4,7	●	●
4,8	62	26	4,8	●	●
4,9	62	26	4,9	●	●

Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2	6133 TN	6143 TF
5,0	62	26	5,0	●	●
5,1	62	26	5,1	●	●
5,2	62	26	5,2	●	●
5,3	62	26	5,3	●	●
5,4	66	28	5,4	●	●
5,5	66	28	5,5	●	●
5,6	66	28	5,6	●	●
5,7	66	28	5,7	●	●
5,8	66	28	5,8	●	●
5,9	66	28	5,9	●	●
6,0	66	28	6,0	●	●
6,1	70	31	6,1	●	●
6,2	70	31	6,2	●	●
6,3	70	31	6,3	●	●
6,4	70	31	6,4	●	●
6,5	70	31	6,5	●	●
6,6	70	31	6,6	●	●
6,7	70	31	6,7	●	●
6,8	74	34	6,8	●	●
6,9	74	34	6,9	●	●
7,0	74	34	7,0	●	●
7,1	74	34	7,1	●	●
7,2	74	34	7,2	●	●
7,3	74	34	7,3	●	●
7,4	74	34	7,4	●	●
7,5	74	34	7,5	●	●
7,6	79	37	7,6	●	●
7,7	79	37	7,7	●	●
7,8	79	37	7,8	●	●
7,9	79	37	7,9	●	●
8,0	79	37	8,0	●	●
8,1	79	37	8,1	●	●
8,2	79	37	8,2	●	●
8,3	79	37	8,3	●	●
8,4	79	37	8,4	●	●
8,5	79	37	8,5	●	●
8,6	84	40	8,6	●	●
8,7	84	40	8,7	●	●
8,8	84	40	8,8	●	●
8,9	84	40	8,9	●	●

● Standardartikel / Items available ex stock

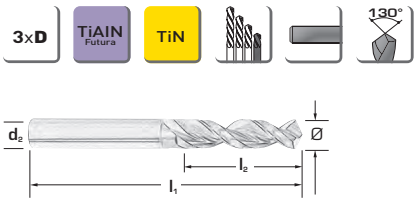
DIN 1897

RECORD HD

EXTRA KURZ / STUB LENGTH

HSS-Co Hochleistungs-Spiralbohrer mit Zylinderschaft
HSS-Co High performance twist drills with straight shank

Record HD





Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2	6133 TN	6143 TF
9,0	84	40	9,0	●	●
9,1	84	40	9,1	●	●
9,2	84	40	9,2	●	●
9,3	84	40	9,3	●	●
9,4	84	40	9,4	●	●
9,5	84	40	9,5	●	●
9,6	89	43	9,6	●	●
9,7	89	43	9,7	●	●
9,8	89	43	9,8	●	●
9,9	89	43	9,9	●	●
10,0	89	43	10,0	●	●
10,1	89	43	10,1	●	–
10,2	89	43	10,2	●	●
10,3	89	43	10,3	●	–
10,5	89	43	10,5	●	●
10,8	95	47	10,8	●	●
11,0	95	47	11,0	●	●
11,2	95	47	11,2	●	●
11,3	95	47	11,3	●	●
11,5	95	47	11,5	●	●
11,8	95	47	11,8	●	●
12,0	102	51	12,0	●	●
12,5	102	51	12,5	●	●
12,8	102	51	12,8	●	–
13,0	102	51	13,0	●	●
13,3	107	54	13,3	●	–
13,5	107	54	13,5	●	●
13,8	107	54	13,8	●	–
14,0	107	54	14,0	●	●
14,5	111	56	14,5	●	●
14,8	111	56	14,8	●	–
15,0	111	56	15,0	●	●
15,3	111	56	15,3	●	–
15,5	115	58	15,5	●	●
15,8	115	58	15,8	●	–
16,0	115	58	16,0	●	●
16,5	115	58	16,5	●	●
17,0	119	60	17,0	●	●
17,5	123	60	17,5	●	●
17,8	123	60	17,8	●	–

Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2	6133 TN	6143 TF
18,0	123	62	18,0	●	●
18,5	127	64	18,5	●	●
19,0	127	64	19,0	●	●
19,5	131	66	19,5	●	●
19,7	131	66	19,7	●	–
20,0	131	66	20,0	●	●
20,5	136	68	20,0	●	–
21,0	136	68	20,0	●	–
21,5	141	68	20,0	●	–
22,0	141	68	20,0	●	–
22,5	146	72	20,0	●	–
23,0	146	72	20,0	●	–
23,5	146	72	20,0	●	–
24,0	151	75	20,0	●	–
24,5	151	75	20,0	●	–
25,0	151	75	25,0	●	–
25,5	156	78	25,0	●	–
26,0	156	78	25,0	●	–
26,5	156	78	25,0	●	–
27,0	162	81	25,0	●	–
27,5	162	81	25,0	●	–
28,0	162	81	25,0	●	–
28,5	168	84	25,0	●	–
29,0	168	84	25,0	●	–
29,5	168	84	25,0	●	–
30,0	168	84	25,0	●	–
31,0	168	84	25,0	●	–
32,0	180	90	25,0	●	–

● Standardartikel / Items available ex stock

DIN 338

RECORD HD

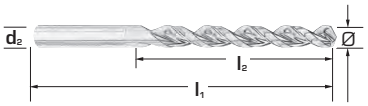
KURZ / JOBBER LENGTH

HSS-Co Hochleistungs-Spiralbohrer mit Zylinderschaft
HSS-Co High performance twist drills with straight shank



Record HD





Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2	6208 TN	6228 TF
1,0	34	12	1,0	●	●
1,1	36	14	1,1	●	●
1,2	38	16	1,2	●	●
1,3	38	18	1,3	●	●
1,4	40	18	1,4	●	●
1,5	40	20	1,5	●	●
1,6	43	20	1,6	●	●
1,7	43	22	1,7	●	●
1,8	46	22	1,8	●	●
1,9	46	24	1,9	●	●
2,0	49	24	2,0	●	●
2,1	49	24	2,1	●	●
2,2	53	27	2,2	●	●
2,3	53	27	2,3	●	●
2,4	57	30	2,4	●	●
2,5	57	30	2,5	●	●
2,6	57	30	2,6	●	●
2,7	61	33	2,7	●	●
2,8	61	33	2,8	●	●
2,9	61	33	2,9	●	●
3,0	61	33	3,0	●	●
3,1	65	36	3,1	●	●
3,2	65	36	3,2	●	●
3,3	65	36	3,3	●	●
3,4	70	39	3,4	●	●
3,5	70	39	3,5	●	●
3,6	70	39	3,6	●	●
3,7	70	39	3,7	●	●
3,8	75	43	3,8	●	●
3,9	75	43	3,9	●	●
4,0	75	43	4,0	●	●
4,1	75	43	4,1	●	●
4,2	75	43	4,2	●	●
4,3	80	47	4,3	●	●
4,4	80	47	4,4	●	●
4,5	80	47	4,5	●	●
4,6	80	47	4,6	●	●
4,7	80	47	4,7	●	●
4,8	86	52	4,8	●	●
4,9	86	52	4,9	●	●

Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2	6208 TN	6228 TF
5,0	86	52	5,0	●	●
5,1	86	52	5,1	●	●
5,2	86	52	5,2	●	●
5,3	86	52	5,3	●	●
5,4	93	57	5,4	●	●
5,5	93	57	5,5	●	●
5,6	93	57	5,6	●	●
5,7	93	57	5,7	●	●
5,8	93	57	5,8	●	●
5,9	93	57	5,9	●	●
6,0	93	57	6,0	●	●
6,1	101	63	6,1	●	●
6,2	101	63	6,2	●	●
6,3	101	63	6,3	●	●
6,4	101	63	6,4	●	●
6,5	101	63	6,5	●	●
6,6	101	63	6,6	●	●
6,7	101	63	6,7	●	●
6,8	109	69	6,8	●	●
6,9	109	69	6,9	●	●
7,0	109	69	7,0	●	●
7,1	109	69	7,1	●	●
7,2	109	69	7,2	●	●
7,3	109	69	7,3	●	●
7,4	109	69	7,4	●	●
7,5	109	69	7,5	●	●
7,6	117	75	7,6	●	●
7,7	117	75	7,7	●	●
7,8	117	75	7,8	●	●
7,9	117	75	7,9	●	●
8,0	117	75	8,0	●	●
8,1	117	75	8,1	●	●
8,2	117	75	8,2	●	●
8,3	117	75	8,3	●	●
8,4	117	75	8,4	●	●
8,5	117	75	8,5	●	●
8,6	125	81	8,6	●	●
8,7	125	81	8,7	●	●
8,8	125	81	8,8	●	●
8,9	125	81	8,9	●	●

● Standardartikel / Items available ex stock

DIN 338

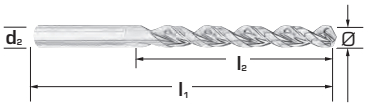
RECORD HD

KURZ / JOBBER LENGTH

HSS-Co Hochleistungs-Spiralbohrer mit Zylinderschaft
HSS-Co High performance twist drills with straight shank

Record HD







Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2	6208 TN	6228 TF
9,0	125	81	9,0	●	●
9,1	125	81	9,1	●	●
9,2	125	81	9,2	●	●
9,3	125	81	9,3	●	●
9,4	125	81	9,4	●	●
9,5	125	81	9,5	●	●
9,6	133	87	9,6	●	●
9,7	133	87	9,7	●	●
9,8	133	87	9,8	●	●
9,9	133	87	9,9	●	●
10,0	133	87	10,0	●	●
10,2	133	87	10,2	●	●
10,5	133	87	10,5	●	●
11,0	142	94	11,0	●	●
11,2	142	94	11,2	●	●
11,3	142	94	11,3	–	●
11,5	142	94	11,5	●	●
12,0	151	101	12,0	●	●
12,5	151	101	12,5	●	●
13,0	151	101	13,0	●	●
13,1	151	101	13,1	–	●
13,3	160	108	13,3	–	●
13,5	160	108	13,5	●	●
14,0	160	108	14,0	●	●
14,5	169	114	14,5	●	●
15,0	169	114	15,0	●	●
15,1	178	120	15,1	–	●
15,3	178	120	15,3	–	●
15,5	178	120	15,5	●	●
16,0	178	120	16,0	●	●
16,5	184	125	16,5	●	–
17,0	184	125	17,0	●	–
17,5	191	130	17,5	●	–
18,0	191	130	18,0	●	–
18,5	198	135	18,5	●	–
19,0	198	135	19,0	●	–
19,5	205	140	19,5	●	–
20,0	205	140	20,0	●	–

Typ / Type	HD	HD
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2	6208 TN	6228 TF

● Standardartikel / Items available ex stock

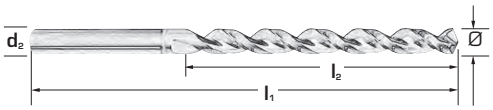
DIN 340

LANG / LONG

HSS-Co Hochleistungs-Spiralbohrer mit Zylinderschaft
HSS-Co High performance twist drills with straight shank

Record HD







Typ / Type				HD	HD
Schneidrichtung Cutting direction					
Schneidstoff / Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2	6248 TP	6248 TF
1,0	56	33	1,0	●	●
1,1	60	37	1,1	●	●
1,2	65	41	1,2	●	●
1,3	65	41	1,3	●	●
1,4	70	45	1,4	●	●
1,5	70	45	1,5	●	●
1,6	76	50	1,6	●	●
1,7	76	50	1,7	●	●
1,8	80	53	1,8	●	●
1,9	80	53	1,9	●	●
2,0	85	56	2,0	●	●
2,1	85	56	2,1	●	●
2,2	90	59	2,2	●	●
2,3	90	59	2,3	●	●
2,4	95	62	2,4	●	●
2,5	95	62	2,5	●	●
2,6	95	62	2,6	●	●
2,7	100	66	2,7	●	●
2,8	100	66	2,8	●	●
2,9	100	66	2,9	●	●
3,0	100	66	3,0	●	●
3,1	106	69	3,1	●	●
3,2	106	69	3,2	●	●
3,3	106	69	3,3	●	●
3,4	112	73	3,4	●	●
3,5	112	73	3,5	●	●
3,6	112	73	3,6	●	●
3,7	112	73	3,7	●	●
3,8	119	78	3,8	●	●
3,9	119	78	3,9	●	●
4,0	119	78	4,0	●	●
4,1	119	78	4,1	●	●
4,2	119	78	4,2	●	●
4,3	126	82	4,3	●	●
4,4	126	82	4,4	●	●
4,5	126	82	4,5	●	●
4,6	126	82	4,6	●	●
4,7	126	82	4,7	●	●
4,8	132	87	4,8	●	●
4,9	132	87	4,9	●	●

Typ / Type				HD	HD
Schneidrichtung Cutting direction					
Schneidstoff / Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2	6248 TP	6248 TF
5,0	132	87	5,0	●	●
5,1	132	87	5,1	●	●
5,2	132	87	5,2	●	●
5,3	132	87	5,3	●	●
5,4	139	91	5,4	●	●
5,5	139	91	5,5	●	●
5,6	139	91	5,6	●	●
5,7	139	91	5,7	●	●
5,8	139	91	5,8	●	●
5,9	139	91	5,9	●	●
6,0	139	91	6,0	●	●
6,1	148	97	6,1	●	●
6,2	148	97	6,2	●	●
6,3	148	97	6,3	●	●
6,4	148	97	6,4	●	●
6,5	148	97	6,5	●	●
6,6	148	97	6,6	●	●
6,7	148	97	6,7	●	●
6,8	156	102	6,8	●	●
6,9	156	102	6,9	●	●
7,0	156	102	7,0	●	●
7,1	156	102	7,1	●	●
7,2	156	102	7,2	●	●
7,3	156	102	7,3	●	●
7,4	156	102	7,4	●	●
7,5	156	102	7,5	●	●
7,6	165	109	7,6	●	●
7,7	165	109	7,7	●	●
7,8	165	109	7,8	●	●
7,9	165	109	7,9	●	●
8,0	165	109	8,0	●	●
8,1	165	109	8,1	●	●
8,2	165	109	8,2	●	●
8,3	165	109	8,3	●	●
8,4	165	109	8,4	●	●
8,5	165	109	8,5	●	●
8,6	175	115	8,6	●	●
8,7	175	115	8,7	●	●
8,8	175	115	8,8	●	●
8,9	175	115	8,9	●	●

● Standardartikel / Items available ex stock

DIN 340

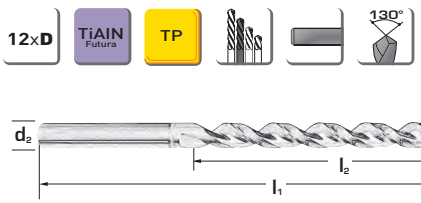
LANG / LONG

HSS-Co Hochleistungs-Spiralbohrer mit Zylinderschaft
HSS-Co High performance twist drills with straight shank

Record HD

RECORD HD





Typ / Type				HD	HD
Schneidrichtung Cutting direction					
Schneidstoff / Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2	6248 TP	6248 TF
9,0	175	115	9,0	●	●
9,1	175	115	9,1	●	●
9,2	175	115	9,2	●	●
9,3	175	115	9,3	●	●
9,4	175	115	9,4	●	●
9,5	175	115	9,5	●	●
9,6	184	121	9,6	●	●
9,7	184	121	9,7	●	●
9,8	184	121	9,8	●	●
9,9	184	121	9,9	●	●
10,0	184	121	10,0	●	●
10,2	184	121	10,2	●	●
10,5	184	121	10,5	●	●
11,0	195	128	11,0	●	●
11,5	195	128	11,5	●	●
12,0	205	134	12,0	●	●

Typ / Type				HD	HD
Schneidrichtung Cutting direction					
Schneidstoff / Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2	6248 TP	6248 TF

● Standardartikel / Items available ex stock

RECORD EVOLUTION **VA**

Rekord Evolution VA HSS-Co Bohrer sind speziell entwickelt um in Edelstahlwerkstoffe, Titanlegierungen zu bohren und hohe Leistung und Zuverlässigkeit zu erzielen.

Record Evolution VA HSS-Co drills are specifically engineered to drill stainless steel materials and titanium alloys ensuring high performances and reliability.





SPEZIELLE SPITZENGEOMETRIE 120°
120° point design

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

AUSGEZEICHNETE VORSCHUBKRAFT UND TORSIONSSTEIFIGKEIT BEI UNSTABILEN ARBEITSBEDINGUNGEN
Excellent feed force and torsional resistance in unstable working conditions

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

ERHÄLTLICH IN LÄNGEN DIN 1897 – DIN 338
Available in lengths DIN 1897 – DIN 338

SPEZIELLES NUTENPROFIL, GROSSE SPANRAUM FÜR EINE EFFIZIENTE UND SCHNELLE SPANABFUHR
Unique flute design, Large chip pockets for an efficient and fast chip evacuation

SCHNEIDFÄHIGKEIT MIT GERINGEREN ANZAHL VON UNTERBRECHUNGEN ALS HERKÖMMLICHE HSS-CO BOHRER
Cutting capability with lower number of steps than conventional HSS-Co drills

QUALITÄT HSS-CO
Quality HSS-Co

PVD TIN UND TIALN-BESCHICHTUNGEN MIT HOHER VERSCHLEISSFESTIGKEIT UND N IEDRIGE HAFTUNG AUF LANGSPANENDEN STAHLWERKSTOFFEN
PVD TiN coating with high wear resistance and low adhesion to steel and abrasive materials

DIE HOCHGLANZPOLIERTE OBERFLÄCHE SORGT FÜR EINE BESSERE SPANABFUHR AUCH BEI ANWENDUNG VON NIEDRIGEM KÜHLMITTELDRUCK.
The highly polished surface ensures better chip evacuation even when low-pressure coolant is applied

ILIX® PRECISION

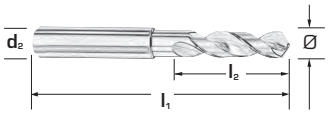
DIN 1897 ähnlich / Similar

EINHEITSSCHAFT / UNIFIED SHANK

DIN 1835 A
HSS-Co Hochleistungs-Spiralbohrer extra kurz
HSS-Co High performance stub length twist drills

Record Evolution VA







Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6134 TN
1,0	26	6	3	●
1,1	28	7	3	●
1,2	30	8	3	●
1,3	30	8	3	●
1,4	32	9	3	●
1,5	32	9	3	●
1,6	34	10	3	●
1,7	34	10	3	●
1,8	36	11	3	●
1,9	36	11	3	●
2,0	38	12	3	●
2,1	38	12	3	●
2,2	40	13	3	●
2,3	40	13	3	●
2,4	43	14	3	●
2,5	43	14	3	●
2,6	43	14	3	●
2,7	46	16	3	●
2,8	46	16	3	●
2,9	46	16	3	●
3,0	46	16	3	●
3,1	49	18	4	●
3,2	49	18	4	●
3,3	49	18	4	●
3,4	52	20	4	●
3,5	52	20	4	●
3,6	52	20	4	●
3,7	52	20	4	●
3,8	55	22	4	●
3,9	55	22	4	●
4,0	55	22	4	●
4,1	55	22	6	●
4,2	55	22	6	●
4,3	58	24	6	●
4,4	58	24	6	●
4,5	58	24	6	●
4,6	58	24	6	●
4,7	58	24	6	●
4,8	62	26	6	●
4,9	62	26	6	●

Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6134 TN
5,0	62	26	6	●
5,1	62	26	6	●
5,2	62	26	6	●
5,3	62	26	6	●
5,4	66	28	6	●
5,5	66	28	6	●
5,6	66	28	6	●
5,7	66	28	6	●
5,8	66	28	6	●
5,9	66	28	6	●
6,0	66	28	6	●
6,1	70	31	8	●
6,2	70	31	8	●
6,3	70	31	8	●
6,4	70	31	8	●
6,5	70	31	8	●
6,6	70	31	8	●
6,7	70	31	8	●
6,8	74	34	8	●
6,9	74	34	8	●
7,0	74	34	8	●
7,1	74	34	8	●
7,2	74	34	8	●
7,3	74	34	8	●
7,4	74	34	8	●
7,5	74	34	8	●
7,6	79	37	8	●
7,7	79	37	8	●
7,8	79	37	8	●
7,9	79	37	8	●
8,0	79	37	8	●
8,1	79	37	10	●
8,2	79	37	10	●
8,3	79	37	10	●
8,4	79	37	10	●
8,5	79	37	10	●
8,6	84	40	10	●
8,7	84	40	10	●
8,8	84	40	10	●
8,9	84	40	10	●

● Standardartikel / Items available ex stock

DIN 1897 ähnlich / Similar

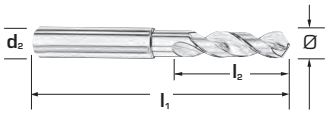
RECORD EVOLUTION VA

EINHEITSSCHAFT / UNIFIED SHANK

DIN 1835 A
HSS-Co Hochleistungs-Spiralbohrer extra kurz
HSS-Co High performance stub length twist drills

Record Evolution VA







Typ / Type				VA
Schneidrichtung Cutting direction				
Schneidstoff / Material				HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6134 TN
9,0	84	40	10	●
9,1	84	40	10	●
9,2	84	40	10	●
9,3	84	40	10	●
9,4	84	40	10	●
9,5	84	40	10	●
9,6	89	43	10	●
9,7	89	43	10	●
9,8	89	43	10	●
9,9	89	43	10	●
10,0	89	43	10	●
10,1	89	43	10	●
10,2	89	43	10	●
10,3	89	43	10	●
10,4	89	43	10	●
10,5	89	43	10	●
10,6	89	43	12	●
10,7	95	47	12	●
10,8	95	47	12	●
10,9	95	47	12	●
11,0	95	47	12	●
11,1	95	47	12	●
11,2	95	47	12	●
11,3	95	47	12	●
11,4	95	47	12	●
11,5	95	47	12	●
11,6	95	47	12	●
11,7	95	47	12	●
11,8	95	47	12	●
11,9	102	51	12	●
12,0	102	51	12	●
12,1	102	51	12	●
12,2	102	51	12	●
12,3	102	51	12	●
12,4	102	51	12	●
12,5	102	51	12	●
12,6	102	51	12	●
12,7	102	51	12	●
12,8	102	51	12	●
12,9	102	51	12	●

Typ / Type				VA
Schneidrichtung Cutting direction				
Schneidstoff / Material				HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6134 TN
13,0	102	51	12	●
13,5	107	54	16	●
14,0	107	54	16	●
14,5	111	56	16	●
15,0	111	56	16	●
15,5	115	58	16	●
16,0	115	58	16	●
16,5	119	60	20	●
17,0	119	60	20	●
17,5	123	62	20	●
18,0	123	62	20	●
18,5	127	64	20	●
19,0	127	64	20	●
19,5	131	66	20	●
20,0	131	66	20	●

● Standardartikel / Items available ex stock

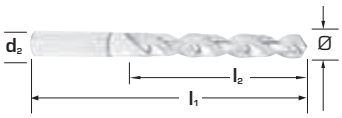
DIN 338 ähnlich / Similar

EINHEITSSCHAFT / UNIFIED SHANK

DIN 1835 A
HSS-Co Hochleistungs-Spiralbohrer kurz
HSS-Co High performance jobber length twist drills

Record Evolution VA







Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6229 TN
1,0	34	12	3	●
1,1	34	12	3	●
1,2	38	16	3	●
1,3	38	16	3	●
1,4	40	17	3	●
1,5	40	17	3	●
1,6	43	20	3	●
1,7	43	20	3	●
1,8	46	22	3	●
1,9	46	22	3	●
2,0	49	25	3	●
2,1	49	25	3	●
2,2	53	28	3	●
2,3	53	28	3	●
2,4	57	31	3	●
2,5	57	31	3	●
2,6	57	31	3	●
2,7	61	34	3	●
2,8	61	34	3	●
2,9	61	34	3	●
3,0	61	33	3	●
3,1	65	36	4	●
3,2	65	36	4	●
3,3	65	36	4	●
3,4	70	39	4	●
3,5	70	39	4	●
3,6	70	39	4	●
3,7	70	39	4	●
3,8	75	43	4	●
3,9	75	43	4	●
4,0	75	43	4	●
4,1	75	43	6	●
4,2	75	43	6	●
4,3	80	47	6	●
4,4	80	47	6	●
4,5	80	47	6	●
4,6	80	47	6	●
4,7	80	47	6	●
4,8	86	52	6	●
4,9	86	52	6	●

Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6229 TN
5,0	86	52	6	●
5,1	86	52	6	●
5,2	86	52	6	●
5,3	86	52	6	●
5,4	93	57	6	●
5,5	93	57	6	●
5,6	93	57	6	●
5,7	93	57	6	●
5,8	93	57	6	●
5,9	93	57	6	●
6,0	93	57	6	●
6,1	101	63	8	●
6,2	101	63	8	●
6,3	101	63	8	●
6,4	101	63	8	●
6,5	101	63	8	●
6,6	101	63	8	●
6,7	101	63	8	●
6,8	109	69	8	●
6,9	109	69	8	●
7,0	109	69	8	●
7,1	109	69	8	●
7,2	109	69	8	●
7,3	109	69	8	●
7,4	109	69	8	●
7,5	109	69	8	●
7,6	117	75	8	●
7,7	117	75	8	●
7,8	117	75	8	●
7,9	117	75	8	●
8,0	117	75	8	●
8,1	117	75	10	●
8,2	117	75	10	●
8,3	117	75	10	●
8,4	117	75	10	●
8,5	117	75	10	●
8,6	125	81	10	●
8,7	125	81	10	●
8,8	125	81	10	●
8,9	125	81	10	●

● Standardartikel / Items available ex stock

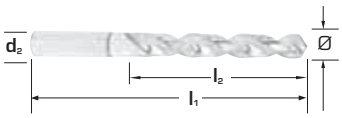
DIN 338 ähnlich / Similar

EINHEITSSCHAFT / UNIFIED SHANK

DIN 1835 A
HSS-Co Hochleistungs-Spiralbohrer kurz
HSS-Co High performance jobber length twist drills

Record Evolution VA







Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6229 TN
9,0	125	81	10	●
9,1	125	81	10	●
9,2	125	81	10	●
9,3	125	81	10	●
9,4	125	81	10	●
9,5	125	81	10	●
9,6	133	87	10	●
9,7	133	87	10	●
9,8	133	87	10	●
9,9	133	87	10	●
10,0	133	87	10	●
10,1	133	87	10	●
10,2	133	87	10	●
10,3	133	87	10	●
10,4	133	87	10	●
10,5	133	87	10	●
10,6	133	87	12	●
10,7	142	94	12	●
10,8	142	94	12	●
10,9	142	94	12	●
11,0	142	94	12	●
11,1	142	94	12	●
11,2	142	94	12	●
11,3	142	94	12	●
11,4	142	94	12	●
11,5	142	94	12	●
11,6	142	94	12	●
11,7	142	94	12	●
11,8	142	94	12	●
11,9	142	94	12	●
12,0	151	101	12	●
12,1	151	101	12	●
12,2	151	101	12	●
12,3	151	101	12	●
12,4	151	101	12	●
12,5	151	101	12	●
12,6	151	101	12	●
12,7	151	101	12	●
12,8	151	101	12	●
12,9	151	101	12	●

Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6229 TN
13,0	151	101	12	●
13,5	160	108	16	●
14,0	160	108	16	●
14,5	169	114	16	●
15,0	169	114	16	●
15,5	178	120	16	●
16,0	178	120	16	●
16,5	184	125	20	●
17,0	184	125	20	●
17,5	191	130	20	●
18,0	191	130	20	●
18,5	198	135	20	●
19,0	198	135	20	●
19,5	205	140	20	●
20,0	205	140	20	●

● Standardartikel / Items available ex stock

RECORD **HD i**

Record HDi HSS-Co Bohrer mit Innenkühlung sind speziell entwickelt, zum Bohren in Stahl und Gusseisen, dabei gewährleisten sie eine hohe Leistungen und Zuverlässigkeit.

Record HDi HSS-Co drills with internal coolant are specifically engineered to drill steel and cast iron and ensure high performances and reliability.



SPEZIELLE SPITZENGEOMETRIE 130°
130° point design

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

AUSGEZEICHNETE VORSCHUBKRAFT UND TORSIONSSTEIFIGKEIT BEI UNSTABILEN ARBEITSBEDINGUNGEN Excellent feed force and torsional resistance in unstable working conditions

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

SPEZIELLES NUTENPROFIL, GROSSE SPANRAUM FÜR EINE EFFIZIENTE UND SCHNELLE SPANABFUHR
Unique flute design, Large chip pockets for an efficient and fast chip evacuation

SCHNEIDFÄHIGKEIT MIT GERINGEREN ANZAHL VON UNTERBRECHUNGEN ALS HERKÖMMLICHE HSS CO BOHRER
Cutting capability with lower number of steps than conventional HSS-Co drills

QUALITÄT HSS-CO
Quality HSS-Co

PVD TIN UND TIALN-BESCHICHTUNGEN MIT HOHER VERSCHLEISSFESTIGKEIT UND NIEDRIGE HAFTUNG AUF LANGSPANENDEN STAHLWERKSTOFFEN
PVD TiN coating with high wear resistance and low adhesion to long chip steel materials

DIE HOCHGLANZPOLIERTE OBERFLÄCHE SORGT FÜR EINE BESSERE SPANABFUHR AUCH BEI ANWENDUNG VON NIEDRIGEM KÜHLMITTELDRUCK.
even when low-pressure coolant is applied

ILIX® PRECISION

ILIX NORM

EINHEITSSCHAFT / UNIFIED SHANK

RECORD HD i

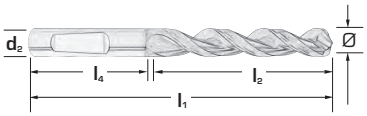
DIN 1835 E
HSS-Co Hochleistungs-Spiralbohrer mit Kühlkanälen
HSS-Co High performance twist drills with internal coolant



Record HD i



Innenliegende Kühlkanäle
internal coolant



Typ / Type	HD i
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	l_4 mm	d_2	6522 TN
5,0	82	44	36	6	●
5,1	82	44	36	6	●
5,2	82	44	36	6	●
5,3	82	44	36	6	●
5,4	82	44	36	6	●
5,5	82	44	36	6	●
5,6	82	44	36	6	●
5,7	82	44	36	6	●
5,8	82	44	36	6	●
5,9	82	44	36	6	●
6,0	82	44	36	6	●
6,1	91	53	36	8	●
6,2	91	53	36	8	●
6,3	91	53	36	8	●
6,4	91	53	36	8	●
6,5	91	53	36	8	●
6,6	91	53	36	8	●
6,7	91	53	36	8	●
6,8	91	53	36	8	●
6,9	91	53	36	8	●
7,0	91	53	36	8	●
7,1	91	53	36	8	●
7,2	91	53	36	8	●
7,3	91	53	36	8	●
7,4	91	53	36	8	●
7,5	91	53	36	8	●
7,6	91	53	36	8	●
7,7	91	53	36	8	●
7,8	91	53	36	8	●
7,9	91	53	36	8	●
8,0	91	53	36	8	●
8,1	103	61	40	10	●
8,2	103	61	40	10	●
8,3	103	61	40	10	●
8,4	103	61	40	10	●
8,5	103	61	40	10	●
8,6	103	61	40	10	●
8,7	103	61	40	10	●
8,8	103	61	40	10	●
8,9	103	61	40	10	●

Typ / Type	HD i
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	l_4 mm	d_2	6522 TN
9,0	103	61	40	10	●
9,1	103	61	40	10	●
9,2	103	61	40	10	●
9,3	103	61	40	10	●
9,4	103	61	40	10	●
9,5	103	61	40	10	●
9,6	103	61	40	10	●
9,7	103	61	40	10	●
9,8	103	61	40	10	●
9,9	103	61	40	10	●
10,0	103	61	40	10	●
10,2	122	75	45	12	●
10,5	122	75	45	12	●
11,0	122	75	45	12	●
11,5	122	75	45	12	●
12,0	122	75	45	12	●
12,5	134	87	45	14	●
13,0	134	87	45	14	●
13,5	134	87	45	14	●
14,0	134	87	45	14	●
14,5	150	100	48	16	●
15,0	150	100	48	16	●
15,5	150	100	48	16	●
16,0	150	100	48	16	●
16,5	162	112	48	18	●
17,0	162	112	48	18	●
17,5	162	112	48	18	●
18,0	162	112	48	18	●
18,5	176	124	50	20	●
19,0	176	124	50	20	●
19,5	176	124	50	20	●
20,0	176	124	50	20	●
20,5	207	145	56	25	●
21,0	210	145	56	25	●
21,5	207	145	56	25	●
22,0	207	145	56	25	●
22,5	207	145	56	25	●
23,0	207	145	56	25	●
23,5	207	145	56	25	●
24,0	207	145	56	25	●

● Standardartikel / Items available ex stock

RECORD **PM**

Rekord PM HSS-Co-PM-Sinter Bohrer sind speziell entwickelt um Stahl und Gusseisen zu bohren dabei sorgen sie für hohe Leistungen, Zuverlässigkeit und längere Standzeiten als konventionellen HSS Co Bohrer.

Record PM HSS-Co-PM sintered drills are specifically engineered to drill steel and cast iron and ensure high performances, reliability and longer tool life than conventional HSS-Co drills.



SPITZENGEOMETRIE 130°
130° point design

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

AUSGEZEICHNETE VORSCHUBKRAFT UND TORSIONSSTEIFIGKEIT BEI UNSTABILEN ARBEITSBEDINGUNGEN
Excellent feed force and torsional resistance in unstable working conditions.

EXZELLENTE ZENTRIERFÄHIGKEIT,SPEZIELLES NUTENPROFIL
Excellent centring capabilities, Unique flute design

GROSSE SPANRAUM FÜR EINE EFFIZIENTE UND SCHNELLE SPANABFUHR
Large chip pockets for an efficient and fast chip evacuation

SCHNEIDFÄHIGKEIT MIT GERINGEREN ANZAHL VON UNTERBRECHUNGEN ALS HERKÖMMLICHE HSS-CO BOHRER
Cutting capability with lower number of steps than HSS-Co drills

QUALTÄT HSS CO-PM-GESINTER
Quality HSS-Co sintered

MEHRLAGEN PVD TISI BESCHICHTUNG MIT HOHER VERSCHLEISSFESTIGKEIT UND GERINGE HAFTUNG AUF LANGSPANENDEN STAHLWERKSTOFFEN. DIE HOCHGLANZPOLIERTE OBERFLÄCHE SORGT FÜR EINE BESSERE SPANABFUHR AUCH BEI NIEDRIGEN KÜHLMITTELDRUCK
Multilayer PVD TiSi coating with high wear resistance and low adhesion to long chip steel materials. The highly polished surface ensures better chip evacuation even when low-pressure coolant is applied

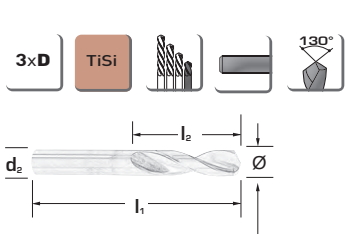
ILIX® PRECISION

DIN 1897

HSS-Co-PM Hochleistungs-Spiralbohrer mit Zylinderschaft
HSS-Co-PM high performance twist drills
with straight shank

RECORD PM

Record PM





Typ / Type	PM
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6178 NX
2,0	38	12	2,0	●
2,1	38	12	2,1	●
2,2	40	13	2,2	●
2,3	40	13	2,3	●
2,4	43	14	2,4	●
2,5	43	14	2,5	●
2,6	43	14	2,6	●
2,7	43	14	2,7	●
2,8	46	16	2,8	●
2,9	46	16	2,9	●
3,0	46	16	3,0	●
3,1	49	18	3,1	●
3,2	49	18	3,2	●
3,3	49	18	3,3	●
3,4	52	20	3,4	●
3,5	52	20	3,5	●
3,6	52	20	3,6	●
3,7	52	20	3,7	●
3,8	55	22	3,8	●
3,9	55	22	3,9	●
4,0	55	22	4,0	●
4,1	55	22	4,1	●
4,2	55	22	4,2	●
4,3	58	24	4,3	●
4,4	58	24	4,4	●
4,5	58	24	4,5	●
4,6	58	24	4,6	●
4,7	58	24	4,7	●
4,8	62	26	4,8	●
4,9	62	26	4,9	●
5,0	62	26	5,0	●
5,1	62	26	5,1	●
5,2	62	26	5,2	●
5,3	62	26	5,3	●
5,4	66	28	5,4	●
5,5	66	28	5,5	●
5,6	66	28	5,6	●
5,7	66	28	5,7	●
5,8	66	28	5,8	●
5,9	66	28	5,9	●

Typ / Type	PM
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

Ø mm h8	l_1 mm	l_2 mm	d_2 h6	6178 NX
6,0	66	28	6,0	●
6,1	70	31	6,1	●
6,2	70	31	6,2	●
6,3	70	31	6,3	●
6,4	70	31	6,4	●
6,5	70	31	6,5	●
6,6	70	31	6,6	●
6,7	70	31	6,7	●
6,8	74	34	6,8	●
6,9	74	34	6,9	●
7,0	74	34	7,0	●
7,1	74	34	7,1	●
7,2	74	34	7,2	●
7,3	74	34	7,3	●
7,4	74	34	7,4	●
7,5	74	34	7,5	●
7,6	79	37	7,6	●
7,7	79	37	7,7	●
7,8	79	37	7,8	●
7,9	79	37	7,9	●
8,0	79	37	8,0	●
8,1	79	37	8,1	●
8,2	79	37	8,2	●
8,3	79	37	8,3	●
8,4	79	37	8,4	●
8,5	79	37	8,5	●
9,0	84	40	9,0	●
9,5	84	40	9,5	●
10,0	89	43	10,0	●
10,2	89	43	10,2	●
10,5	89	43	10,5	●
11,0	95	47	11,0	●
11,5	95	47	11,5	●
12,0	102	51	12,0	●

● Standardartikel / Items available ex stock

RECORD **2S - 2S i**

Rekord 2S und 2Si Vollhartmetallbohrer bieten die höchsten Abtragsleistung und längste Lebensdauer in Stahl, Guss und NE-Materialien. Rekord 2S und 2Si Vollhartmetallbohrer sind mit und ohne innen Kühlmittel in 3xD und 5xD verfügbar.

Record 2S and 2Si solid carbide drills offer the highest metal removal rates and longest tool life in steel, cast iron, and non-ferrous materials.
Record 2S and 2Si solid carbide drills are available with and without internal coolant in 3xD and 5xD lengths.





BOHRERGEOMETRIE 2S
Drill Geometry 2S

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

QUALITÄT K30F
Quality K30F

VOLLHARTMETALL-FEINSTKORN K30F PLUS TF MEHRLAGEN-BESCHICHTUNG IN TIALN FUTURA PLUS UND TN TIN-BESCHICHTUNGEN, DURCH PVD-VERFAHREN ERHALTEN, UM SICHERZUSTELLEN EINE HERVORRAGENDE VERSCHLEISSFESTIGKEIT UND NIEDRIGE REIBUNG AUCH IN ANWENDUNG VON (MMS) MINIMALMENGENSCHMIERUNG.
Solid carbide micro-grain K30F has TF multilayer coating in TiAlN Futura Plus and TN TiN coatings, obtained through PVD processes, that ensure excellent wear resistance and low-friction even in minimum quantity lubrication (MQL) applications

ILIX® PRECISION

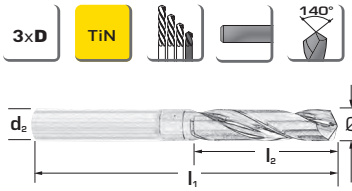
DIN 6539

EXTRA KURZ / STUB LENGTH

RECORD 2S

Hochleistungs-Spiralbohrer, extra kurze Ausführung
High Performance twist drills, stub length

Record 2 S VHM / Solid carbide





Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2	6213 TN
1,5	32	9	1,5	●
1,6	34	10	1,6	●
1,7	34	10	1,7	●
1,8	36	11	1,8	●
1,9	36	11	1,9	●
2,0	38	12	2,0	●
2,1	38	12	2,1	●
2,2	40	13	2,2	●
2,3	40	13	2,3	●
2,4	43	14	2,4	●
2,5	43	14	2,5	●
2,6	43	14	2,6	●
2,7	46	16	2,7	●
2,8	46	16	2,8	●
2,9	46	16	2,9	●
3,0	46	16	3,0	●
3,1	49	18	3,1	●
3,2	49	18	3,2	●
3,3	49	18	3,3	●
3,4	52	20	3,4	●
3,5	52	20	3,5	●
3,6	52	20	3,6	●
3,65	52	20	3,65	●
3,7	52	20	3,7	●
3,8	55	22	3,8	●
3,9	55	22	3,9	●
4,0	55	22	4,0	●
4,1	55	22	4,1	●
4,2	55	22	4,2	●
4,3	58	24	4,3	●
4,4	58	24	4,4	●
4,5	58	24	4,5	●
4,6	58	24	4,6	●
4,65	58	24	4,65	●
4,7	58	24	4,7	●
4,8	62	26	4,8	●
4,9	62	26	4,9	●
5,0	62	26	5,0	●
5,1	62	26	5,1	●
5,2	62	26	5,2	●

Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2	6213 TN
5,3	62	26	5,3	●
5,4	66	28	5,4	●
5,5	66	28	5,5	●
5,55	66	28	5,55	●
5,6	66	28	5,6	●
5,7	66	28	5,7	●
5,8	66	28	5,8	●
5,9	66	28	5,9	●
6,0	66	28	6,0	●
6,1	70	31	6,1	●
6,2	70	31	6,2	●
6,3	70	31	6,3	●
6,4	70	31	6,4	●
6,5	70	31	6,5	●
6,6	70	31	6,6	●
6,7	70	31	6,7	●
6,8	74	34	6,8	●
6,9	74	34	6,9	●
7,0	74	34	7,0	●
7,1	74	34	7,1	●
7,2	74	34	7,2	●
7,3	74	34	7,3	●
7,4	74	34	7,4	●
7,5	74	34	7,5	●
7,6	79	37	7,6	●
7,7	79	37	7,7	●
7,8	79	37	7,8	●
7,9	79	37	7,9	●
8,0	79	37	8,0	●
8,1	79	37	8,1	●
8,2	79	37	8,2	●
8,3	79	37	8,3	●
8,4	79	37	8,4	●
8,5	79	37	8,5	●
8,6	84	40	8,6	●
8,7	84	40	8,7	●
8,8	84	40	8,8	●
8,9	84	40	8,9	●
9,0	84	40	9,0	●
9,1	84	40	9,1	●

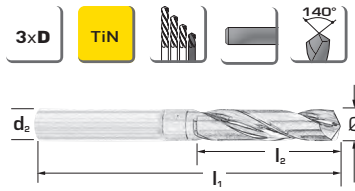
● Standardartikel / Items available ex stock

DIN 6539

EXTRA KURZ / STUB LENGTH

DIN 6535 HA
Hochleistungs-Spiralbohrer, extra kurze Ausführung
High Performance twist drills, stub length

Record 2 S VHM / Solid carbide





Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2	6213 TN
9,2	84	40	9,2	●
9,3	84	40	9,3	●
9,4	84	40	9,4	●
9,5	84	40	9,5	●
9,6	89	43	9,6	●
9,7	89	43	9,7	●
9,8	89	43	9,8	●
9,9	89	43	9,9	●
10,0	89	43	10,0	●
10,1	89	43	10,1	●
10,2	89	43	10,2	●
10,3	89	43	10,3	●
10,4	89	43	10,4	●
10,5	89	43	10,5	●
10,6	89	43	10,6	●
10,7	95	47	10,7	●
10,8	95	47	10,8	●
10,9	95	47	10,9	●
11,0	95	47	11,0	●
11,1	95	47	11,1	●
11,2	95	47	11,2	●
11,3	95	47	11,3	●
11,4	95	47	11,4	●
11,5	95	47	11,5	●
11,6	95	47	11,6	●
11,7	95	47	11,7	●
11,8	95	47	11,8	●
11,9	102	51	11,9	●
12,0	102	51	12,0	●
12,1	102	51	12,1	●
12,2	102	51	12,2	●
12,3	102	51	12,3	●
12,4	102	51	12,4	●
12,5	102	51	12,5	●
12,6	102	51	12,6	●
12,7	102	51	12,7	●
12,8	102	51	12,8	●
12,9	102	51	12,9	●
13,0	102	51	13,0	●
13,1	102	51	13,1	●

Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2	6213 TN
13,2	102	51	13,2	●
13,3	107	54	13,3	●
13,4	107	54	13,4	●
13,5	107	54	13,5	●
13,6	107	54	13,6	●
13,7	107	54	13,7	●
13,8	107	54	13,8	●
13,9	107	54	13,9	●
14,0	107	54	14,0	●
14,1	111	56	14,1	●
14,2	111	56	14,2	●
14,3	111	56	14,3	●
14,4	111	56	14,4	●
14,5	111	56	14,5	●
14,6	111	56	14,6	●
14,7	111	56	14,7	●
14,8	111	56	14,8	●
14,9	111	56	14,9	●
15,0	111	56	15,0	●
15,1	115	58	15,1	●
15,2	115	58	15,2	●
15,3	115	58	15,3	●
15,4	115	58	15,4	●
15,5	115	58	15,5	●
15,6	115	58	15,6	●
15,7	115	58	15,7	●
15,8	115	58	15,8	●
15,9	115	58	15,9	●
16,0	115	58	16,0	●
16,5	119	60	16,5	●
17,0	119	60	17,0	●
17,5	123	62	17,5	●
18,0	123	62	18,0	●
18,5	127	64	18,5	●
19,0	127	64	19,0	●
19,5	131	66	19,5	●
20,0	131	66	20,0	●

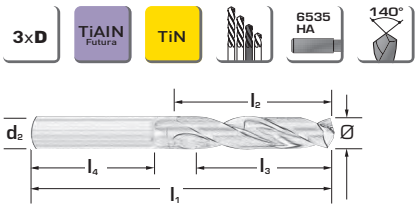
● Standardartikel / Items available ex stock

DIN 6537K

EXTRA KURZ / STUB LENGTH

DIN 6535 HA
Hochleistungs-Spiralbohrer, extra kurze Ausführung
High Performance twist drills, stub length

Record 2 S VHM / Solid carbide





Typ / Type						2 S	2 S
Schneidrichtung Cutting direction							
Schneidstoff / Material						K 30F	K 30F
Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6015 TN	6015 TF
3,0	62	20	14	36	6	●	●
3,1	62	20	14	36	6	●	●
3,2	62	20	14	36	6	●	●
3,3	62	20	14	36	6	●	●
3,4	62	20	14	36	6	●	●
3,5	62	20	14	36	6	●	●
3,6	62	20	14	36	6	●	●
3,7	62	20	14	36	6	●	●
3,8	66	24	17	36	6	●	●
3,9	66	24	17	36	6	●	●
4,0	66	24	17	36	6	●	●
4,1	66	24	17	36	6	●	●
4,2	66	24	17	36	6	●	●
4,3	66	24	17	36	6	●	●
4,4	66	24	17	36	6	●	●
4,5	66	24	17	36	6	●	●
4,6	66	24	17	36	6	●	●
4,7	66	24	17	36	6	●	●
4,8	66	28	20	36	6	●	●
4,9	66	28	20	36	6	●	●
5,0	66	28	20	36	6	●	●
5,1	66	28	20	36	6	●	●
5,2	66	28	20	36	6	●	●
5,3	66	28	20	36	6	●	●
5,4	66	28	20	36	6	●	●
5,5	66	28	20	36	6	●	●
5,6	66	28	20	36	6	●	●
5,7	66	28	20	36	6	●	●
5,8	66	28	20	36	6	●	●
5,9	66	28	20	36	6	●	●
6,0	66	28	20	36	6	●	●
6,1	79	34	24	36	8	●	●
6,2	79	34	24	36	8	●	●
6,3	79	34	24	36	8	●	●
6,4	79	34	24	36	8	●	●
6,5	79	34	24	36	8	●	●
6,6	79	34	24	36	8	●	●
6,7	79	34	24	36	8	●	●
6,8	79	34	24	36	8	●	●
6,9	79	34	24	36	8	●	●

Typ / Type						2 S	2 S
Schneidrichtung Cutting direction							
Schneidstoff / Material						K 30F	K 30F
Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6015 TN	6015 TF
7,0	79	41	29	36	8	●	●
7,1	79	41	29	36	8	●	●
7,2	79	41	29	36	8	●	●
7,3	79	41	29	36	8	●	●
7,4	79	41	29	36	8	●	●
7,5	79	41	29	36	8	●	●
7,6	79	41	29	36	8	●	●
7,7	79	41	29	36	8	●	●
7,8	79	41	29	36	8	●	●
7,9	79	41	29	36	8	●	●
8,0	79	41	29	36	8	●	●
8,1	89	47	35	40	10	●	●
8,2	89	47	35	40	10	●	●
8,3	89	47	35	40	10	●	●
8,4	89	47	35	40	10	●	●
8,5	89	47	35	40	10	●	●
8,6	89	47	35	40	10	●	●
8,7	89	47	35	40	10	●	●
8,8	89	47	35	40	10	●	●
8,9	89	47	35	40	10	●	●
9,0	89	47	35	40	10	●	●
9,1	89	47	35	40	10	●	●
9,2	89	47	35	40	10	●	●
9,3	89	47	35	40	10	●	●
9,4	89	47	35	40	10	●	●
9,5	89	47	35	40	10	●	●
9,6	89	47	35	40	10	●	●
9,7	89	47	35	40	10	●	●
9,8	89	47	35	40	10	●	●
9,9	89	47	35	40	10	●	●
10,0	89	47	35	40	10	●	●
10,1	102	55	40	45	12	●	●
10,2	102	55	40	45	12	●	●
10,3	102	55	40	45	12	●	●
10,4	102	55	40	45	12	●	●
10,5	102	55	40	45	12	●	●
10,6	102	55	40	45	12	●	●
10,7	102	55	40	45	12	●	●
10,8	102	55	40	45	12	●	●
10,9	102	55	40	45	12	●	●

● Standardartikel / Items available ex stock

DIN 6537K

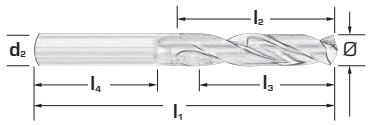
RECORD 2S

EXTRA KURZ / STUB LENGTH

DIN 6535 HA
Hochleistungs-Spiralbohrer, extra kurze Ausführung
High Performance twist drills, stub length

Record 2 S VHM / Solid carbide







Typ / Type	2 S	2 S
Schneidrichtung Cutting direction		
Schneidstoff / Material	K 30F	K 30F
Ø mm m7	6015 TN	6015 TF
11,0	●	●
11,1	●	●
11,2	●	●
11,3	●	●
11,4	●	●
11,5	●	●
11,6	●	●
11,7	●	●
11,8	●	●
11,9	●	●
12,0	●	●
12,1	●	●
12,2	●	●
12,3	●	●
12,4	●	●
12,5	●	●
12,6	●	●
12,7	●	●
12,8	●	●
12,9	●	●
13,0	●	●
13,1	●	●
13,2	●	●
13,3	●	●
13,4	●	●
13,5	●	●
13,6	●	●
13,7	●	●
13,8	●	●
13,9	●	●
14,0	●	●
14,1	●	●
14,2	●	●
14,3	●	●
14,4	●	●
14,5	●	●
14,6	●	●
14,7	●	●
14,8	●	●
14,9	●	●

Typ / Type	2 S	2 S
Schneidrichtung Cutting direction		
Schneidstoff / Material	K 30F	K 30F
Ø mm m7	6015 TN	6015 TF
15,0	●	●
15,1	●	●
15,2	●	●
15,3	●	●
15,4	●	●
15,5	●	●
15,6	●	●
15,7	●	●
15,8	●	●
15,9	●	●
16,0	●	●
16,5	●	●
17,0	●	●
17,5	●	●
18,0	●	●
18,5	●	●
19,0	●	●
19,5	●	●
20,0	●	●

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6
11,0	102	55	40	45	12
11,1	102	55	40	45	12
11,2	102	55	40	45	12
11,3	102	55	40	45	12
11,4	102	55	40	45	12
11,5	102	55	40	45	12
11,6	102	55	40	45	12
11,7	102	55	40	45	12
11,8	102	55	40	45	12
11,9	102	55	40	45	12
12,0	102	55	40	45	12
12,1	107	60	43	45	14
12,2	107	60	43	45	14
12,3	107	60	43	45	14
12,4	107	60	43	45	14
12,5	107	60	43	45	14
12,6	107	60	43	45	14
12,7	107	60	43	45	14
12,8	107	60	43	45	14
12,9	107	60	43	45	14
13,0	107	60	43	45	14
13,1	107	60	43	45	14
13,2	107	60	43	45	14
13,3	107	60	43	45	14
13,4	107	60	43	45	14
13,5	107	60	43	45	14
13,6	107	60	43	45	14
13,7	107	60	43	45	14
13,8	107	60	43	45	14
13,9	107	60	43	45	14
14,0	107	60	43	45	14
14,1	115	65	45	48	16
14,2	115	65	45	48	16
14,3	115	65	45	48	16
14,4	115	65	45	48	16
14,5	115	65	45	48	16
14,6	115	65	45	48	16
14,7	115	65	45	48	16
14,8	115	65	45	48	16
14,9	115	65	45	48	16
15,0	115	65	45	48	16
15,1	115	65	45	48	16
15,2	115	65	45	48	16
15,3	115	65	45	48	16
15,4	115	65	45	48	16
15,5	115	65	45	48	16
15,6	115	65	45	48	16
15,7	115	65	45	48	16
15,8	115	65	45	48	16
15,9	115	65	45	48	16
16,0	115	65	45	48	16
16,5	123	73	51	48	18
17,0	123	73	51	48	18
17,5	123	73	51	48	18
18,0	123	73	51	48	18
18,5	131	79	55	50	20
19,0	131	79	55	50	20
19,5	131	79	55	50	20
20,0	131	79	55	50	20

● Standardartikel / Items available ex stock

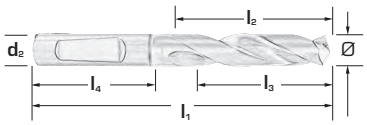
DIN 6537K

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, kurze Ausführung
High Performance twist drills, jobber length series

Record 2 S VHM / Solid carbide







Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6016 TF
3,0	62	20	14	36	6	●
3,1	62	20	14	36	6	●
3,2	62	20	14	36	6	●
3,3	62	20	14	36	6	●
3,4	62	20	14	36	6	●
3,5	62	20	14	36	6	●
3,6	62	20	14	36	6	●
3,7	62	20	14	36	6	●
3,8	66	24	17	36	6	●
3,9	66	24	17	36	6	●
4,0	66	24	17	36	6	●
4,1	66	24	17	36	6	●
4,2	66	24	17	36	6	●
4,3	66	24	17	36	6	●
4,4	66	24	17	36	6	●
4,5	66	24	17	36	6	●
4,6	66	24	17	36	6	●
4,7	66	24	17	36	6	●
4,8	66	28	20	36	6	●
4,9	66	28	20	36	6	●
5,0	66	28	20	36	6	●
5,1	66	28	20	36	6	●
5,2	66	28	20	36	6	●
5,3	66	28	20	36	6	●
5,4	66	28	20	36	6	●
5,5	66	28	20	36	6	●
5,6	66	28	20	36	6	●
5,7	66	28	20	36	6	●
5,8	66	28	20	36	6	●
5,9	66	28	20	36	6	●
6,0	66	28	20	36	6	●
6,1	79	34	24	36	8	●
6,2	79	34	24	36	8	●
6,3	79	34	24	36	8	●
6,4	79	34	24	36	8	●
6,5	79	34	24	36	8	●
6,6	79	34	24	36	8	●
6,7	79	34	24	36	8	●
6,8	79	34	24	36	8	●
6,9	79	34	24	36	8	●

Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6016 TF
7,0	79	41	29	36	8	●
7,1	79	41	29	36	8	●
7,2	79	41	29	36	8	●
7,3	79	41	29	36	8	●
7,4	79	41	29	36	8	●
7,5	79	41	29	36	8	●
7,6	79	41	29	36	8	●
7,7	79	41	29	36	8	●
7,8	79	41	29	36	8	●
7,9	79	41	29	36	8	●
8,0	79	41	29	36	8	●
8,1	89	47	35	40	10	●
8,2	89	47	35	40	10	●
8,3	89	47	35	40	10	●
8,4	89	47	35	40	10	●
8,5	89	47	35	40	10	●
8,6	89	47	35	40	10	●
8,7	89	47	35	40	10	●
8,8	89	47	35	40	10	●
8,9	89	47	35	40	10	●
9,0	89	47	35	40	10	●
9,1	89	47	35	40	10	●
9,2	89	47	35	40	10	●
9,3	89	47	35	40	10	●
9,4	89	47	35	40	10	●
9,5	89	47	35	40	10	●
9,6	89	47	35	40	10	●
9,7	89	47	35	40	10	●
9,8	89	47	35	40	10	●
9,9	89	47	35	40	10	●
10,0	89	47	35	40	10	●
10,1	102	55	40	45	12	●
10,2	102	55	40	45	12	●
10,3	102	55	40	45	12	●
10,4	102	55	40	45	12	●
10,5	102	55	40	45	12	●
10,6	102	55	40	45	12	●
10,7	102	55	40	45	12	●
10,8	102	55	40	45	12	●
10,9	102	55	40	45	12	●

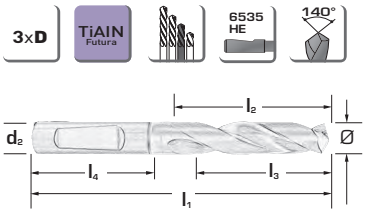
● Standardartikel / Items available ex stock

DIN 6537K

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, kurze Ausführung
High Performance twist drills, jobber length series

Record 2 S VHM / Solid carbide





Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6016 TF
11,0	102	55	40	45	12	●
11,1	102	55	40	45	12	●
11,2	102	55	40	45	12	●
11,3	102	55	40	45	12	●
11,4	102	55	40	45	12	●
11,5	102	55	40	45	12	●
11,6	102	55	40	45	12	●
11,7	102	55	40	45	12	●
11,8	102	55	40	45	12	●
11,9	102	55	40	45	12	●
12,0	102	55	40	45	12	●
12,1	107	60	43	45	14	●
12,2	107	60	43	45	14	●
12,3	107	60	43	45	14	●
12,4	107	60	43	45	14	●
12,5	107	60	43	45	14	●
12,6	107	60	43	45	14	●
12,7	107	60	43	45	14	●
12,8	107	60	43	45	14	●
12,9	107	60	43	45	14	●
13,0	107	60	43	45	14	●
13,1	107	60	43	45	14	●
13,2	107	60	43	45	14	●
13,3	107	60	43	45	14	●
13,4	107	60	43	45	14	●
13,5	107	60	43	45	14	●
13,6	107	60	43	45	14	●
13,7	107	60	43	45	14	●
13,8	107	60	43	45	14	●
13,9	107	60	43	45	14	●
14,0	107	60	43	45	14	●
14,1	115	65	45	48	16	●
14,2	115	65	45	48	16	●
14,3	115	65	45	48	16	●
14,4	115	65	45	48	16	●
14,5	115	65	45	48	16	●
14,6	115	65	45	48	16	●
14,7	115	65	45	48	16	●
14,8	115	65	45	48	16	●
14,9	115	65	45	48	16	●

Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6016 TF
15,0	115	65	45	48	16	●
15,1	115	65	45	48	16	●
15,2	115	65	45	48	16	●
15,3	115	65	45	48	16	●
15,4	115	65	45	48	16	●
15,5	115	65	45	48	16	●
15,6	115	65	45	48	16	●
15,7	115	65	45	48	16	●
15,8	115	65	45	48	16	●
15,9	115	65	45	48	16	●
16,0	115	65	45	48	16	●
16,5	123	73	51	48	18	●
17,0	123	73	51	48	18	●
17,5	123	73	51	48	18	●
18,0	123	73	51	48	18	●
18,5	131	79	55	50	20	●
19,0	131	79	55	50	20	●
19,5	131	79	55	50	20	●
20,0	131	79	55	50	20	●

● Standardartikel / Items available ex stock

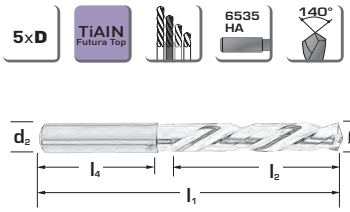
DIN 6537L

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, lang Ausführung
High Performance twist drills, long series



Record 2 S VHM / Solid carbide



Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6017 TT
3,0	66	28	36	6	●
3,1	66	28	36	6	●
3,2	66	28	36	6	●
3,3	66	28	36	6	●
3,4	66	28	36	6	●
3,5	66	28	36	6	●
3,6	66	28	36	6	●
3,7	66	28	36	6	●
3,8	74	36	36	6	●
3,9	74	36	36	6	●
4,0	74	36	36	6	●
4,1	74	36	36	6	●
4,2	74	36	36	6	●
4,3	74	36	36	6	●
4,4	74	36	36	6	●
4,5	74	36	36	6	●
4,6	74	36	36	6	●
4,7	74	36	36	6	●
4,8	82	44	36	6	●
4,9	82	44	36	6	●
5,0	82	44	36	6	●
5,1	82	44	36	6	●
5,2	82	44	36	6	●
5,3	82	44	36	6	●
5,4	82	44	36	6	●
5,5	82	44	36	6	●
5,6	82	44	36	6	●
5,7	82	44	36	6	●
5,8	82	44	36	6	●
5,9	82	44	36	6	●
6,0	82	44	36	6	●
6,1	91	53	36	8	●
6,2	91	53	36	8	●
6,3	91	53	36	8	●
6,4	91	53	36	8	●
6,5	91	53	36	8	●
6,6	91	53	36	8	●
6,7	91	53	36	8	●
6,8	91	53	36	8	●
6,9	91	53	36	8	●

Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6017 TT
7,0	91	53	36	8	●
7,1	91	53	36	8	●
7,2	91	53	36	8	●
7,3	91	53	36	8	●
7,4	91	53	36	8	●
7,5	91	53	36	8	●
7,6	91	53	36	8	●
7,7	91	53	36	8	●
7,8	91	53	36	8	●
7,9	91	53	36	8	●
8,0	91	53	36	8	●
8,1	103	61	40	10	●
8,2	103	61	40	10	●
8,3	103	61	40	10	●
8,4	103	61	40	10	●
8,5	103	61	40	10	●
8,6	103	61	40	10	●
8,7	103	61	40	10	●
8,8	103	61	40	10	●
8,9	103	61	40	10	●
9,0	103	61	40	10	●
9,1	103	61	40	10	●
9,2	103	61	40	10	●
9,3	103	61	40	10	●
9,4	103	61	40	10	●
9,5	103	61	40	10	●
9,6	103	61	40	10	●
9,7	103	61	40	10	●
9,8	103	61	40	10	●
9,9	103	61	40	10	●
10,0	103	61	40	10	●
10,1	118	71	45	12	●
10,2	118	71	45	12	●
10,3	118	71	45	12	●
10,4	118	71	45	12	●
10,5	118	71	45	12	●
10,6	118	71	45	12	●
10,7	118	71	45	12	●
10,8	118	71	45	12	●
10,9	118	71	45	12	●

● Standardartikel / Items available ex stock

DIN 6537L

RECORD 2S

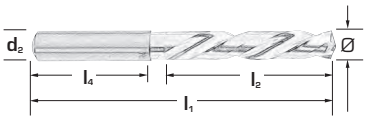
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, lang Ausführung
High Performance twist drills, long series



Record 2 S VHM / Solid carbide





Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6017 TT
11,0	118	71	45	12	●
11,1	118	71	45	12	●
11,2	118	71	45	12	●
11,3	118	71	45	12	●
11,4	118	71	45	12	●
11,5	118	71	45	12	●
11,6	118	71	45	12	●
11,7	118	71	45	12	●
11,8	118	71	45	12	●
11,9	118	71	45	12	●
12,0	118	71	45	12	●
12,2	124	77	45	14	●
12,5	124	77	45	14	●
12,7	124	77	45	14	●
12,8	124	77	45	14	●
13,0	124	77	45	14	●
13,1	124	77	45	14	●
13,5	124	77	45	14	●
13,8	124	77	45	14	●
14,0	124	77	45	14	●
14,5	133	83	48	16	●
14,8	133	83	48	16	●
15,0	133	83	48	16	●
15,1	133	83	48	16	●
15,5	133	83	48	16	●
15,8	133	83	48	16	●
16,0	133	83	48	16	●
16,5	143	93	48	18	●
17,0	143	93	48	18	●
17,5	143	93	48	18	●
18,0	143	93	48	18	●
18,5	153	101	50	20	●
19,0	153	101	50	20	●
19,5	153	101	50	20	●
20,0	153	101	50	20	●

Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6017 TT

● Standardartikel / Items available ex stock

DIN 6537L

RECORD 2S

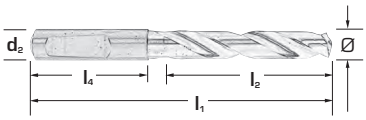
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, lang Ausführung
High Performance twist drills, long series



Record 2 S VHM / Solid carbide





Typ / Type	2S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6018 TT
3,0	66	28	36	6	●
3,1	66	28	36	6	●
3,2	66	28	36	6	●
3,3	66	28	36	6	●
3,4	66	28	36	6	●
3,5	66	28	36	6	●
3,6	66	28	36	6	●
3,7	66	28	36	6	●
3,8	74	36	36	6	●
3,9	74	36	36	6	●
4,0	74	36	36	6	●
4,1	74	36	36	6	●
4,2	74	36	36	6	●
4,3	74	36	36	6	●
4,4	74	36	36	6	●
4,5	74	36	36	6	●
4,6	74	36	36	6	●
4,7	74	36	36	6	●
4,8	82	44	36	6	●
4,9	82	44	36	6	●
5,0	82	44	36	6	●
5,1	82	44	36	6	●
5,2	82	44	36	6	●
5,3	82	44	36	6	●
5,4	82	44	36	6	●
5,5	82	44	36	6	●
5,6	82	44	36	6	●
5,7	82	44	36	6	●
5,8	82	44	36	6	●
5,9	82	44	36	6	●
6,0	82	44	36	6	●
6,1	91	53	36	8	●
6,2	91	53	36	8	●
6,3	91	53	36	8	●
6,4	91	53	36	8	●
6,5	91	53	36	8	●
6,6	91	53	36	8	●
6,7	91	53	36	8	●
6,8	91	53	36	8	●
6,9	91	53	36	8	●

Typ / Type	2S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6018 TT
7,0	91	53	36	8	●
7,1	91	53	36	8	●
7,2	91	53	36	8	●
7,3	91	53	36	8	●
7,4	91	53	36	8	●
7,5	91	53	36	8	●
7,6	91	53	36	8	●
7,7	91	53	36	8	●
7,8	91	53	36	8	●
7,9	91	53	36	8	●
8,0	91	53	36	8	●
8,1	103	61	40	10	●
8,2	103	61	40	10	●
8,3	103	61	40	10	●
8,4	103	61	40	10	●
8,5	103	61	40	10	●
8,6	103	61	40	10	●
8,7	103	61	40	10	●
8,8	103	61	40	10	●
8,9	103	61	40	10	●
9,0	103	61	40	10	●
9,1	103	61	40	10	●
9,2	103	61	40	10	●
9,3	103	61	40	10	●
9,4	103	61	40	10	●
9,5	103	61	40	10	●
9,6	103	61	40	10	●
9,7	103	61	40	10	●
9,8	103	61	40	10	●
9,9	103	61	40	10	●
10,0	103	61	40	10	●
10,1	118	71	45	12	●
10,2	118	71	45	12	●
10,3	118	71	45	12	●
10,4	118	71	45	12	●
10,5	118	71	45	12	●
10,6	118	71	45	12	●
10,7	118	71	45	12	●
10,8	118	71	45	12	●
10,9	118	71	45	12	●

● Standardartikel / Items available ex stock

DIN 6537L

RECORD 2S

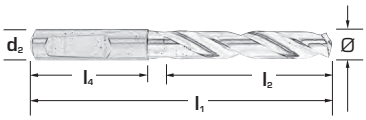
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, lang Ausführung
High Performance twist drills, long series



Record 2 S VHM / Solid carbide





Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6018 TT
11,0	118	71	45	12	●
11,1	118	71	45	12	●
11,2	118	71	45	12	●
11,3	118	71	45	12	●
11,4	118	71	45	12	●
11,5	118	71	45	12	●
11,6	118	71	45	12	●
11,7	118	71	45	12	●
11,8	118	71	45	12	●
11,9	118	71	45	12	●
12,0	118	71	45	12	●
12,2	124	77	45	14	●
12,5	124	77	45	14	●
12,7	124	77	45	14	●
12,8	124	77	45	14	●
13,0	124	77	45	14	●
13,1	124	77	45	14	●
13,5	124	77	45	14	●
13,8	124	77	45	14	●
14,0	124	77	45	14	●
14,5	133	83	48	16	●
14,8	133	83	48	16	●
15,0	133	83	48	16	●
15,1	133	83	48	16	●
15,5	133	83	48	16	●
15,8	133	83	48	16	●
16,0	133	83	48	16	●
16,5	143	93	48	18	●
17,0	143	93	48	18	●
17,5	143	93	48	18	●
18,0	143	93	48	18	●
18,5	153	101	50	20	●
19,0	153	101	50	20	●
19,5	153	101	50	20	●
20,0	153	101	50	20	●

Typ / Type	2 S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6018 TT

● Standardartikel / Items available ex stock

DIN 6537K

RECORD 2 Si

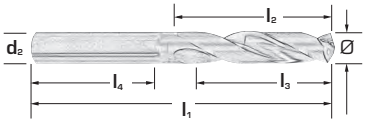
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, kurz Ausführung
High Performance twist drills, with internal coolant, jobber length series



Record 2 S i VHM / Solid carbide

3xD | TiAlN Futura | 6535 HA | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6011 TF
3,0	62	20	14	36	6	●
3,1	62	20	14	36	6	●
3,2	62	20	14	36	6	●
3,3	62	20	14	36	6	●
3,4	62	20	14	36	6	●
3,5	62	20	14	36	6	●
3,6	62	20	14	36	6	●
3,7	62	20	14	36	6	●
3,8	66	24	17	36	6	●
3,9	66	24	17	36	6	●
4,0	66	24	17	36	6	●
4,1	66	24	17	36	6	●
4,2	66	24	17	36	6	●
4,3	66	24	17	36	6	●
4,4	66	24	17	36	6	●
4,5	66	24	17	36	6	●
4,6	66	24	17	36	6	●
4,7	66	24	17	36	6	●
4,8	66	28	20	36	6	●
4,9	66	28	20	36	6	●
5,0	66	28	20	36	6	●
5,1	66	28	20	36	6	●
5,2	66	28	20	36	6	●
5,3	66	28	20	36	6	●
5,4	66	28	20	36	6	●
5,5	66	28	20	36	6	●
5,6	66	28	20	36	6	●
5,7	66	28	20	36	6	●
5,8	66	28	20	36	6	●
5,9	66	28	20	36	6	●
6,0	66	28	20	36	6	●
6,1	79	34	24	36	8	●
6,2	79	34	24	36	8	●
6,3	79	34	24	36	8	●
6,4	79	34	24	36	8	●
6,5	79	34	24	36	8	●
6,6	79	34	24	36	8	●
6,7	79	34	24	36	8	●
6,8	79	34	24	36	8	●
6,9	79	34	24	36	8	●

Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6011 TF
7,0	79	41	29	36	8	●
7,1	79	41	29	36	8	●
7,2	79	41	29	36	8	●
7,3	79	41	29	36	8	●
7,4	79	41	29	36	8	●
7,5	79	41	29	36	8	●
7,6	79	41	29	36	8	●
7,7	79	41	29	36	8	●
7,8	79	41	29	36	8	●
7,9	79	41	29	36	8	●
8,0	79	41	29	36	8	●
8,1	89	47	35	40	10	●
8,2	89	47	35	40	10	●
8,3	89	47	35	40	10	●
8,4	89	47	35	40	10	●
8,5	89	47	35	40	10	●
8,6	89	47	35	40	10	●
8,7	89	47	35	40	10	●
8,8	89	47	35	40	10	●
8,9	89	47	35	40	10	●
9,0	89	47	35	40	10	●
9,1	89	47	35	40	10	●
9,2	89	47	35	40	10	●
9,3	89	47	35	40	10	●
9,4	89	47	35	40	10	●
9,5	89	47	35	40	10	●
9,6	89	47	35	40	10	●
9,7	89	47	35	40	10	●
9,8	89	47	35	40	10	●
9,9	89	47	35	40	10	●
10,0	89	47	35	40	10	●
10,1	102	55	40	45	12	●
10,2	102	55	40	45	12	●
10,3	102	55	40	45	12	●
10,4	102	55	40	45	12	●
10,5	102	55	40	45	12	●
10,6	102	55	40	45	12	●
10,7	102	55	40	45	12	●
10,8	102	55	40	45	12	●
10,9	102	55	40	45	12	●

● Standardartikel / Items available ex stock

Din 6537K

RECORD 2 Si

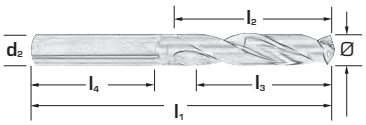
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, kurz Ausführung
High Performance twist drills, with internal coolant, jobber length series



Record 2 S i VHM / Solid carbide

3xD | TiAlN Futura | 6535 HA | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6011 TF
11,0	102	55	40	45	12	●
11,1	102	55	40	45	12	●
11,2	102	55	40	45	12	●
11,3	102	55	40	45	12	●
11,4	102	55	40	45	12	●
11,5	102	55	40	45	12	●
11,6	102	55	40	45	12	●
11,7	102	55	40	45	12	●
11,8	102	55	40	45	12	●
11,9	102	55	40	45	12	●
12,0	102	55	40	45	12	●
12,1	107	60	43	45	14	●
12,2	107	60	43	45	14	●
12,3	107	60	43	45	14	●
12,4	107	60	43	45	14	●
12,5	107	60	43	45	14	●
12,6	107	60	43	45	14	●
12,7	107	60	43	45	14	●
12,8	107	60	43	45	14	●
12,9	107	60	43	45	14	●
13,0	107	60	43	45	14	●
13,1	107	60	43	45	14	●
13,2	107	60	43	45	14	●
13,3	107	60	43	45	14	●
13,4	107	60	43	45	14	●
13,5	107	60	43	45	14	●
13,6	107	60	43	45	14	●
13,7	107	60	43	45	14	●
13,8	107	60	43	45	14	●
13,9	107	60	43	45	14	●
14,0	107	60	43	45	14	●
14,1	115	65	45	48	16	●
14,2	115	65	45	48	16	●
14,3	115	65	45	48	16	●
14,4	115	65	45	48	16	●
14,5	115	65	45	48	16	●
14,6	115	65	45	48	16	●
14,7	115	65	45	48	16	●
14,8	115	65	45	48	16	●
14,9	115	65	45	48	16	●

Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6011 TF
15,0	115	65	45	48	16	●
15,1	115	65	45	48	16	●
15,2	115	65	45	48	16	●
15,3	115	65	45	48	16	●
15,4	115	65	45	48	16	●
15,5	115	65	45	48	16	●
15,6	115	65	45	48	16	●
15,7	115	65	45	48	16	●
15,8	115	65	45	48	16	●
15,9	115	65	45	48	16	●
16,0	115	65	45	48	16	●
16,5	123	73	51	48	18	●
17,0	123	73	51	48	18	●
17,5	123	73	51	48	18	●
18,0	123	73	51	48	18	●
18,5	131	79	55	50	20	●
19,0	131	79	55	50	20	●
19,5	131	79	55	50	20	●
20,0	131	79	55	50	20	●

● Standardartikel / Items available ex stock

Din 6537K

RECORD 2 Si

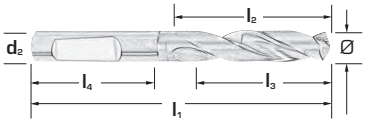
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, mit Kühlkanälen, kurz Ausführung
High Performance twist drills, with internal coolant, jobber length series



Record 2 S i VHM / Solid carbide

3xD | TiAlN Futura | 6535 HE | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type	2 Si	**Typ** / Type	2 Si
Schneidrichtung Cutting direction		**Schneidrichtung** Cutting direction	
Schneidstoff / Material	K 30F	**Schneidstoff** / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6012 TF
3,0	62	20	14	36	6	●
3,1	62	20	14	36	6	●
3,2	62	20	14	36	6	●
3,3	62	20	14	36	6	●
3,4	62	20	14	36	6	●
3,5	62	20	14	36	6	●
3,6	62	20	14	36	6	●
3,7	62	20	14	36	6	●
3,8	66	24	17	36	6	●
3,9	66	24	17	36	6	●
4,0	66	24	17	36	6	●
4,1	66	24	17	36	6	●
4,2	66	24	17	36	6	●
4,3	66	24	17	36	6	●
4,4	66	24	17	36	6	●
4,5	66	24	17	36	6	●
4,6	66	24	17	36	6	●
4,7	66	24	17	36	6	●
4,8	66	28	20	36	6	●
4,9	66	28	20	36	6	●
5,0	66	28	20	36	6	●
5,1	66	28	20	36	6	●
5,2	66	28	20	36	6	●
5,3	66	28	20	36	6	●
5,4	66	28	20	36	6	●
5,5	66	28	20	36	6	●
5,6	66	28	20	36	6	●
5,7	66	28	20	36	6	●
5,8	66	28	20	36	6	●
5,9	66	28	20	36	6	●
6,0	66	28	20	36	6	●
6,1	79	34	24	36	8	●
6,2	79	34	24	36	8	●
6,3	79	34	24	36	8	●
6,4	79	34	24	36	8	●
6,5	79	34	24	36	8	●
6,6	79	34	24	36	8	●
6,7	79	34	24	36	8	●
6,8	79	34	24	36	8	●
6,9	79	34	24	36	8	●

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6012 TF
7,0	79	41	29	36	8	●
7,1	79	41	29	36	8	●
7,2	79	41	29	36	8	●
7,3	79	41	29	36	8	●
7,4	79	41	29	36	8	●
7,5	79	41	29	36	8	●
7,6	79	41	29	36	8	●
7,7	79	41	29	36	8	●
7,8	79	41	29	36	8	●
7,9	79	41	29	36	8	●
8,0	79	41	29	36	8	●
8,1	89	47	35	40	10	●
8,2	89	47	35	40	10	●
8,3	89	47	35	40	10	●
8,4	89	47	35	40	10	●
8,5	89	47	35	40	10	●
8,6	89	47	35	40	10	●
8,7	89	47	35	40	10	●
8,8	89	47	35	40	10	●
8,9	89	47	35	40	10	●
9,0	89	47	35	40	10	●
9,1	89	47	35	40	10	●
9,2	89	47	35	40	10	●
9,3	89	47	35	40	10	●
9,4	89	47	35	40	10	●
9,5	89	47	35	40	10	●
9,6	89	47	35	40	10	●
9,7	89	47	35	40	10	●
9,8	89	47	35	40	10	●
9,9	89	47	35	40	10	●
10,0	89	47	35	40	10	●
10,1	102	55	40	45	12	●
10,2	102	55	40	45	12	●
10,3	102	55	40	45	12	●
10,4	102	55	40	45	12	●
10,5	102	55	40	45	12	●
10,6	102	55	40	45	12	●
10,7	102	55	40	45	12	●
10,8	102	55	40	45	12	●
10,9	102	55	40	45	12	●

● Standardartikel / Items available ex stock

Din 6537K

RECORD 2 Si

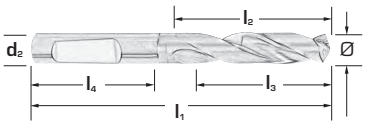
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, mit Kühlkanälen, kurz Ausführung
High Performance twist drills, with internal coolant, jobber length series



Record 2 S i VHM / Solid carbide

3xD | TiAlN Futura | 6535 HE | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6012 TF
11,0	102	55	40	45	12	●
11,1	102	55	40	45	12	●
11,2	102	55	40	45	12	●
11,3	102	55	40	45	12	●
11,4	102	55	40	45	12	●
11,5	102	55	40	45	12	●
11,6	102	55	40	45	12	●
11,7	102	55	40	45	12	●
11,8	102	55	40	45	12	●
11,9	102	55	40	45	12	●
12,0	102	55	40	45	12	●
12,1	107	60	43	45	14	●
12,2	107	60	43	45	14	●
12,3	107	60	43	45	14	●
12,4	107	60	43	45	14	●
12,5	107	60	43	45	14	●
12,6	107	60	43	45	14	●
12,7	107	60	43	45	14	●
12,8	107	60	43	45	14	●
12,9	107	60	43	45	14	●
13,0	107	60	43	45	14	●
13,1	107	60	43	45	14	●
13,2	107	60	43	45	14	●
13,3	107	60	43	45	14	●
13,4	107	60	43	45	14	●
13,5	107	60	43	45	14	●
13,6	107	60	43	45	14	●
13,7	107	60	43	45	14	●
13,8	107	60	43	45	14	●
13,9	107	60	43	45	14	●
14,0	107	60	43	45	14	●
14,1	115	65	45	48	16	●
14,2	115	65	45	48	16	●
14,3	115	65	45	48	16	●
14,4	115	65	45	48	16	●
14,5	115	65	45	48	16	●
14,6	115	65	45	48	16	●
14,7	115	65	45	48	16	●
14,8	115	65	45	48	16	●
14,9	115	65	45	48	16	●

Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6012 TF
15,0	115	65	45	48	16	●
15,1	115	65	45	48	16	●
15,2	115	65	45	48	16	●
15,3	115	65	45	48	16	●
15,4	115	65	45	48	16	●
15,5	115	65	45	48	16	●
15,6	115	65	45	48	16	●
15,7	115	65	45	48	16	●
15,8	115	65	45	48	16	●
15,9	115	65	45	48	16	●
16,0	115	65	45	48	16	●
16,5	123	73	51	48	18	●
17,0	123	73	51	48	18	●
17,5	123	73	51	48	18	●
18,0	123	73	51	48	18	●
18,5	131	79	55	50	20	●
19,0	131	79	55	50	20	●
19,5	131	79	55	50	20	●
20,0	131	79	55	50	20	●

● Standardartikel / Items available ex stock

Din 6537L

RECORD 2 Si

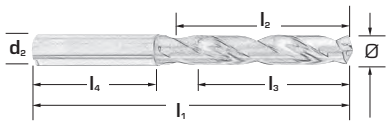
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, lang Ausführung
High performance twist drills, with internal coolant, long series



Record 2 S i VHM / Solid carbide

5xD | TiAlN Futura | TiN | 6535 HA | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type			2 Si	2 Si
Schneidrichtung / Cutting direction				
Schneidstoff / Material			K 30F	K 30F
Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6020 TN	6020 TF
3,0	66	28	23	36	6	-	●
3,1	66	28	23	36	6	-	●
3,2	66	28	23	36	6	-	●
3,3	66	28	23	36	6	-	●
3,4	66	28	23	36	6	-	●
3,5	66	28	23	36	6	-	●
3,6	66	28	23	36	6	-	●
3,7	66	28	23	36	6	-	●
3,8	74	36	29	36	6	-	●
3,9	74	36	29	36	6	-	●
4,0	74	36	29	36	6	●	●
4,1	74	36	29	36	6	●	●
4,2	74	36	29	36	6	●	●
4,3	74	36	29	36	6	●	●
4,4	74	36	29	36	6	●	●
4,5	74	36	29	36	6	●	●
4,6	74	36	29	36	6	●	●
4,7	74	36	29	36	6	●	●
4,8	82	44	35	36	6	●	●
4,9	82	44	35	36	6	●	●
5,0	82	44	35	36	6	●	●
5,1	82	44	35	36	6	●	●
5,2	82	44	35	36	6	●	●
5,3	82	44	35	36	6	●	●
5,4	82	44	35	36	6	●	●
5,5	82	44	35	36	6	●	●
5,6	82	44	35	36	6	●	●
5,7	82	44	35	36	6	●	●
5,8	82	44	35	36	6	●	●
5,9	82	44	35	36	6	●	●
6,0	82	44	35	36	6	●	●
6,1	91	53	43	36	8	●	●
6,2	91	53	43	36	8	●	●
6,3	91	53	43	36	8	●	●
6,4	91	53	43	36	8	●	●
6,5	91	53	43	36	8	●	●
6,6	91	53	43	36	8	●	●
6,7	91	53	43	36	8	●	●
6,8	91	53	43	36	8	●	●
6,9	91	53	43	36	8	●	●

Typ / Type			2 Si	2 Si
Schneidrichtung / Cutting direction				
Schneidstoff / Material			K 30F	K 30F
Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6020 TN	6020 TF
7,0	91	53	43	36	8	●	●
7,1	91	53	43	36	8	●	●
7,2	91	53	43	36	8	●	●
7,3	91	53	43	36	8	●	●
7,4	91	53	43	36	8	●	●
7,5	91	53	43	36	8	●	●
7,6	91	53	43	36	8	●	●
7,7	91	53	43	36	8	●	●
7,8	91	53	43	36	8	●	●
7,9	91	53	43	36	8	●	●
8,0	91	53	43	36	8	●	●
8,1	103	61	49	40	10	●	●
8,2	103	61	49	40	10	●	●
8,3	103	61	49	40	10	●	●
8,4	103	61	49	40	10	●	●
8,5	103	61	49	40	10	●	●
8,6	103	61	49	40	10	●	●
8,7	103	61	49	40	10	●	●
8,8	103	61	49	40	10	●	●
8,9	103	61	49	40	10	●	●
9,0	103	61	49	40	10	●	●
9,1	103	61	49	40	10	●	●
9,2	103	61	49	40	10	●	●
9,3	103	61	49	40	10	●	●
9,4	103	61	49	40	10	●	●
9,5	103	61	49	40	10	●	●
9,6	103	61	49	40	10	●	●
9,7	103	61	49	40	10	●	●
9,8	103	61	49	40	10	●	●
9,9	103	61	49	40	10	●	●
10,0	103	61	49	40	10	●	●
10,1	118	71	56	45	12	●	●
10,2	118	71	56	45	12	●	●
10,3	118	71	56	45	12	●	●
10,4	118	71	56	45	12	●	●
10,5	118	71	56	45	12	●	●
10,6	118	71	56	45	12	●	●
10,7	118	71	56	45	12	●	●
10,8	118	71	56	45	12	●	●
10,9	118	71	56	45	12	●	●

● Standardartikel / Items available ex stock

DIN 6537L

RECORD 2 Si

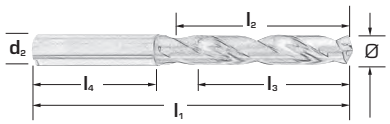
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, lang Ausführung
High performance twist drills, with internal coolant, long series



Record 2 S i VHM / Solid carbide

5xD | TiAlN Futura | TiN | 6535 HA | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type			2 Si	2 Si
Schneidrichtung / Cutting direction				
Schneidstoff / Material			K 30F	K 30F
Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6020 TN	6020 TF
11,0	118	71	56	45	12	●	●
11,1	118	71	56	45	12	●	●
11,2	118	71	56	45	12	●	●
11,3	118	71	56	45	12	●	●
11,4	118	71	56	45	12	●	●
11,5	118	71	56	45	12	●	●
11,6	118	71	56	45	12	●	●
11,7	118	71	56	45	12	●	●
11,8	118	71	56	45	12	●	●
11,9	118	71	56	45	12	●	●
12,0	118	71	56	45	12	●	●
12,1	124	77	60	45	14	●	●
12,2	124	77	60	45	14	●	●
12,3	124	77	60	45	14	●	●
12,4	124	77	60	45	14	●	●
12,5	124	77	60	45	14	●	●
12,6	124	77	60	45	14	●	●
12,7	124	77	60	45	14	●	●
12,8	124	77	60	45	14	●	●
12,9	124	77	60	45	14	●	●
13,0	124	77	60	45	14	●	●
13,1	124	77	60	45	14	●	●
13,2	124	77	60	45	14	●	●
13,3	124	77	60	45	14	●	●
13,4	124	77	60	45	14	●	●
13,5	124	77	60	45	14	●	●
13,6	124	77	60	45	14	●	●
13,7	124	77	60	45	14	●	●
13,8	124	77	60	45	14	●	●
13,9	124	77	60	45	14	●	●
14,0	124	77	60	45	14	●	●
14,1	133	83	63	48	16	●	●
14,2	133	83	63	48	16	●	●
14,3	133	83	63	48	16	●	●
14,4	133	83	63	48	16	●	●
14,5	133	83	63	48	16	●	●
14,6	133	83	63	48	16	●	●
14,7	133	83	63	48	16	●	●
14,8	133	83	63	48	16	●	●
14,9	133	83	63	48	16	●	●

Typ / Type			2 Si	2 Si
Schneidrichtung / Cutting direction				
Schneidstoff / Material			K 30F	K 30F
Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6020 TN	6020 TF
15,0	133	83	63	48	16	●	●
15,1	133	83	63	48	16	●	●
15,2	133	83	63	48	16	●	●
15,3	133	83	63	48	16	●	●
15,4	133	83	63	48	16	●	●
15,5	133	83	63	48	16	●	●
15,6	133	83	63	48	16	●	●
15,7	133	83	63	48	16	●	●
15,8	133	83	63	48	16	●	●
15,9	133	83	63	48	16	●	●
16,0	133	83	63	48	16	●	●
16,5	143	93	71	48	18	●	●
17,0	143	93	71	48	18	●	●
17,5	143	93	71	48	18	●	●
18,0	143	93	71	48	18	●	●
18,5	153	101	77	50	20	●	●
19,0	153	101	77	50	20	●	●
19,5	153	101	77	50	20	●	●
20,0	153	101	77	50	20	●	●

● Standardartikel / Items available ex stock

DIN 6537L

RECORD 2 Si

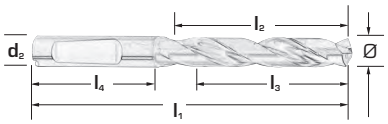
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, mit Kühlkanälen, lang Ausführung
High performance twist drills, with internal coolant, long series



Record 2 S i VHM / Solid carbide

5xD | TiAlN Futura | 6535 HE | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6021 TF
3,0	66	28	23	36	6	●
3,1	66	28	23	36	6	●
3,2	66	28	23	36	6	●
3,3	66	28	23	36	6	●
3,4	66	28	23	36	6	●
3,5	66	28	23	36	6	●
3,6	66	28	23	36	6	●
3,7	66	28	23	36	6	●
3,8	74	36	29	36	6	●
3,9	74	36	29	36	6	●
4,0	74	36	29	36	6	●
4,1	74	36	29	36	6	●
4,2	74	36	29	36	6	●
4,3	74	36	29	36	6	●
4,4	74	36	29	36	6	●
4,5	74	36	29	36	6	●
4,6	74	36	29	36	6	●
4,7	74	36	29	36	6	●
4,8	82	44	35	36	6	●
4,9	82	44	35	36	6	●
5,0	82	44	35	36	6	●
5,1	82	44	35	36	6	●
5,2	82	44	35	36	6	●
5,3	82	44	35	36	6	●
5,4	82	44	35	36	6	●
5,5	82	44	35	36	6	●
5,6	82	44	35	36	6	●
5,7	82	44	35	36	6	●
5,8	82	44	35	36	6	●
5,9	82	44	35	36	6	●
6,0	82	44	35	36	6	●
6,1	91	53	43	36	8	●
6,2	91	53	43	36	8	●
6,3	91	53	43	36	8	●
6,4	91	53	43	36	8	●
6,5	91	53	43	36	8	●
6,6	91	53	43	36	8	●
6,7	91	53	43	36	8	●
6,8	91	53	43	36	8	●
6,9	91	53	43	36	8	●

Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6021 TF
7,0	91	53	43	36	8	●
7,1	91	53	43	36	8	●
7,2	91	53	43	36	8	●
7,3	91	53	43	36	8	●
7,4	91	53	43	36	8	●
7,5	91	53	43	36	8	●
7,6	91	53	43	36	8	●
7,7	91	53	43	36	8	●
7,8	91	53	43	36	8	●
7,9	91	53	43	36	8	●
8,0	91	53	43	36	8	●
8,1	103	61	49	40	10	●
8,2	103	61	49	40	10	●
8,3	103	61	49	40	10	●
8,4	103	61	49	40	10	●
8,5	103	61	49	40	10	●
8,6	103	61	49	40	10	●
8,7	103	61	49	40	10	●
8,8	103	61	49	40	10	●
8,9	103	61	49	40	10	●
9,0	103	61	49	40	10	●
9,1	103	61	49	40	10	●
9,2	103	61	49	40	10	●
9,3	103	61	49	40	10	●
9,4	103	61	49	40	10	●
9,5	103	61	49	40	10	●
9,6	103	61	49	40	10	●
9,7	103	61	49	40	10	●
9,8	103	61	49	40	10	●
9,9	103	61	49	40	10	●
10,0	103	61	49	40	10	●
10,1	118	71	56	45	12	●
10,2	118	71	56	45	12	●
10,3	118	71	56	45	12	●
10,4	118	71	56	45	12	●
10,5	118	71	56	45	12	●
10,6	118	71	56	45	12	●
10,7	118	71	56	45	12	●
10,8	118	71	56	45	12	●
10,9	118	71	56	45	12	●

● Standardartikel / Items available ex stock

DIN 6537L

RECORD 2 Si

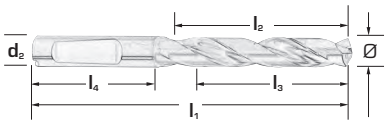
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, mit Kühlkanälen, lang Ausführung
High performance twist drills, with internal coolant, long series



Record 2 S i VHM / Solid carbide

5xD | TiAlN Futura | 6535 HE | 140° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6021 TF
11,0	118	71	56	45	12	●
11,1	118	71	56	45	12	●
11,2	118	71	56	45	12	●
11,3	118	71	56	45	12	●
11,4	118	71	56	45	12	●
11,5	118	71	56	45	12	●
11,6	118	71	56	45	12	●
11,7	118	71	56	45	12	●
11,8	118	71	56	45	12	●
11,9	118	71	56	45	12	●
12,0	118	71	56	45	12	●
12,1	124	77	60	45	14	●
12,2	124	77	60	45	14	●
12,3	124	77	60	45	14	●
12,4	124	77	60	45	14	●
12,5	124	77	60	45	14	●
12,6	124	77	60	45	14	●
12,7	124	77	60	45	14	●
12,8	124	77	60	45	14	●
12,9	124	77	60	45	14	●
13,0	124	77	60	45	14	●
13,1	124	77	60	45	14	●
13,2	124	77	60	45	14	●
13,3	124	77	60	45	14	●
13,4	124	77	60	45	14	●
13,5	124	77	60	45	14	●
13,6	124	77	60	45	14	●
13,7	124	77	60	45	14	●
13,8	124	77	60	45	14	●
13,9	124	77	60	45	14	●
14,0	124	77	60	45	14	●
14,1	133	83	63	48	16	●
14,2	133	83	63	48	16	●
14,3	133	83	63	48	16	●
14,4	133	83	63	48	16	●
14,5	133	83	63	48	16	●
14,6	133	83	63	48	16	●
14,7	133	83	63	48	16	●
14,8	133	83	63	48	16	●
14,9	133	83	63	48	16	●

Typ / Type	2 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6021 TF
15,0	133	83	63	48	16	●
15,1	133	83	63	48	16	●
15,2	133	83	63	48	16	●
15,3	133	83	63	48	16	●
15,4	133	83	63	48	16	●
15,5	133	83	63	48	16	●
15,6	133	83	63	48	16	●
15,7	133	83	63	48	16	●
15,8	133	83	63	48	16	●
15,9	133	83	63	48	16	●
16,0	133	83	63	48	16	●
16,5	143	93	71	48	18	●
17,0	143	93	71	48	18	●
17,5	143	93	71	48	18	●
18,0	143	93	71	48	18	●
18,5	153	101	77	50	20	●
19,0	153	101	77	50	20	●
19,5	153	101	77	50	20	●
20,0	153	101	77	50	20	●

● Standardartikel / Items available ex stock

RECORD **HP i**

Rekord HP i Vollhartmetallbohrer bieten die hohe Spanleistung und lange Standzeit in legierten Stählen bis 1300 N/mm² und Gusswerkstoffe.

Record HP i high performance solid carbide drills, offer the highest metal removal rates and longest tool life in high and medium alloyed steel and cast iron materials.



BOHRER MIT HP GEOMETRIE, VIER FÜHRUNGSFASEN UNTERSTÜTZEN GENAUE UND GERADE BOHRUNGEN
Drill with Geometry HP 4 margin lands improves hole straightness and quality

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

VERBESSERUNG FÜR EINE EFFIZIENTE SPANABFUHR IN LEGIERTEN STÄHLEN BIS 1300 N/MM² BEIM BOHREN
Improved chip evacuation in mid-L/D drilling operations

VHM FEINSTKORN K40F MIT EINER MEHRLAGEN TIALN FUTURA PLUS BESCHICHTUNG
Solid carbide micro-grain K40F with multilayer TiAlN Futura Plus coating

DIE HOCHGLANZPOLIERTE OBERFLÄCHE SORGT FÜR EINE BESSERE SPANABFUHR AUCH BEI ANWENDUNG VON NIEDRIGEM KÜHLMITTELDRUCK
The highly polished surface ensures superior chip evacuation even when low-pressure coolant is applied

ILIX® PRECISION

Din 6537L

RECORD HP i

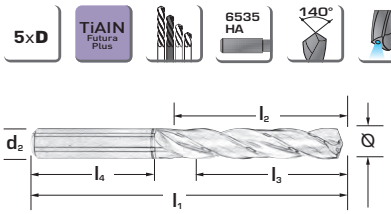
DIN 6535 HA

Hochleistungs-Spiralbohrer, mit innenliegenden Kühlkanälen, lange Ausführung

High performance drills long series with internal coolant

RECORD HP i VHM Feinstkorn / Solid carbide micro grain





Typ / Type	HP i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6022 TF
3.0	66	28	23	36	6	●
3.1	66	28	23	36	6	●
3.2	66	28	23	36	6	●
3.3	66	28	23	36	6	●
3.4	66	28	23	36	6	●
3.5	66	28	23	36	6	●
3.6	66	28	23	36	6	●
3.7	66	28	23	36	6	●
3.8	74	36	29	36	6	●
3.9	74	36	29	36	6	●
4.0	74	36	29	36	6	●
4.1	74	36	29	36	6	●
4.2	74	36	29	36	6	●
4.3	74	36	29	36	6	●
4.4	74	36	29	36	6	●
4.5	74	36	29	36	6	●
4.6	74	36	29	36	6	●
4.7	74	36	29	36	6	●
4.8	82	44	35	36	6	●
4.9	82	44	35	36	6	●
5.0	82	44	35	36	6	●
5.1	82	44	35	36	6	●
5.2	82	44	35	36	6	●
5.3	82	44	35	36	6	●
5.4	82	44	35	36	6	●
5.5	82	44	35	36	6	●
5.6	82	44	35	36	6	●
5.7	82	44	35	36	6	●
5.8	82	44	35	36	6	●
5.9	82	44	35	36	6	●
6.0	82	44	35	36	6	●
6.1	91	53	43	36	8	●
6.2	91	53	43	36	8	●
6.3	91	53	43	36	8	●
6.4	91	53	43	36	8	●
6.5	91	53	43	36	8	●
6.6	91	53	43	36	8	●
6.7	91	53	43	36	8	●
6.8	91	53	43	36	8	●
6.9	91	53	43	36	8	●

Typ / Type	HP i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6022 TF
7.0	91	53	43	36	8	●
7.1	91	53	43	36	8	●
7.2	91	53	43	36	8	●
7.3	91	53	43	36	8	●
7.4	91	53	43	36	8	●
7.5	91	53	43	36	8	●
7.6	91	53	43	36	8	●
7.7	91	53	43	36	8	●
7.8	91	53	43	36	8	●
7.9	91	53	43	36	8	●
8.0	91	53	43	36	8	●
8.1	103	61	49	40	10	●
8.2	103	61	49	40	10	●
8.3	103	61	49	40	10	●
8.4	103	61	49	40	10	●
8.5	103	61	49	40	10	●
8.6	103	61	49	40	10	●
8.7	103	61	49	40	10	●
8.8	103	61	49	40	10	●
8.9	103	61	49	40	10	●
9.0	103	61	49	40	10	●
9.1	103	61	49	40	10	●
9.2	103	61	49	40	10	●
9.3	103	61	49	40	10	●
9.4	103	61	49	40	10	●
9.5	103	61	49	40	10	●
9.6	103	61	49	40	10	●
9.7	103	61	49	40	10	●
9.8	103	61	49	40	10	●
9.9	103	61	49	40	10	●
10.0	103	61	49	40	10	●
10.2	118	71	56	45	12	●
10.5	118	71	56	45	12	●
10.7	118	71	56	45	12	●
10.8	118	71	56	45	12	●
11.0	118	71	56	45	12	●
11.2	118	71	56	45	12	●
11.5	118	71	56	45	12	●
11.8	118	71	56	45	12	●
12.0	118	71	56	45	12	●

● Standardartikel / Items available ex stock

Din 6537L

RECORD HP i

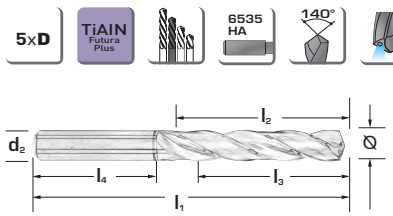
DIN 6535 HA

Hochleistungs-Spiralbohrer, mit innenliegenden Kühlkanälen, lange Ausführung

High performance drills long series with internal coolant

RECORD HP i VHM Feinstkorn / Solid carbide micro grain





Innenliegende Kühlkanäle
internal coolant

Typ / Type	HP i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6022 TF
12.2	124	77	60	45	14	●
12.50	124	77	60	45	14	●
12.75	124	77	60	45	14	●
12.80	124	77	60	45	14	●
13.00	124	77	60	45	14	●
13.10	124	77	60	45	14	●
13.50	124	77	60	45	14	●
13.80	124	77	60	45	14	●
14.00	124	77	60	45	14	●
14.20	133	83	63	48	16	●
14.50	133	83	63	48	16	●
14.80	133	83	63	48	16	●
15.00	133	83	63	48	16	●
15.10	133	83	63	48	16	●
15.20	133	83	63	48	16	●
15.50	133	83	63	48	16	●
15.80	133	83	63	48	16	●
15.90	133	83	63	48	16	●
16.00	133	83	63	48	16	●
16.50	143	93	71	48	18	●
16.70	143	93	71	48	18	●
16.75	143	93	71	48	18	●
17.00	143	93	71	48	18	●
17.20	143	93	71	48	18	●
17.50	143	93	71	48	18	●
18.00	143	93	71	48	18	●
18.50	153	101	77	50	20	●
19.00	153	101	77	50	20	●
19.50	153	101	77	50	20	●
20.00	153	101	77	50	20	●

Typ / Type	HP i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6022 TF

● Standardartikel / Items available ex stock

RECORD **VA** E **VA i**

Rekord VAi Vollhartmetallbohrer sind speziell entwickelt um in Stahl,Ed elstahl,Titanlegierungen Hochtemperaturlegierungen sorgen für hohe Leistungen längere Standzeit sogar in herkömmlichen Stahlmaterialien und Titanlegierungen.

Record VA and VAi solid carbide drills are specifically engineered to drill stainless steel and high temperature alloys and ensure high performances longer tool life even in conventional steel materials and titanium alloys.



BOHRERGEOMETRIE FÜR VA
Drill Geometry VA

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

EINZIARTIGES NUTENPROFIL
Unique flute design

VERBESSERT DIE SPANABFUHR
Improved chip evacuation

TIEFSTEN TIEFE DES SCHNITTS FÄHIGKEIT AUF SCHWER ZU BEARBEITENDEN MATERIALIEN
Deepest depth of cut capability on difficult-to-machine materials

QUALITÄT K40F
Quality K40F

EINLAGIGE TIALN-PVD BESCHICHTUNGEN MIT HOHER VERSCHLEISSFESTIGKEIT UND NIEDRIGE HAFTUNG BEI ROST.- SÄUREBESTÄNDIGEN STÄHLEN.
A Nanolayer TiAlN-PVD coating with high wear resistance and low adhesion to stainless steel materials

DIE HOCHGLANZPOLIERTE OBERFLÄCHE SORGT FÜR EINE BESSERE SPANABFUHR AUCH BEI ANWENDUNG VON NIEDRIGEM KÜHLMITTELDRUCK
The highly polished surface ensures better chip evacuation even when low-pressure coolant is applied

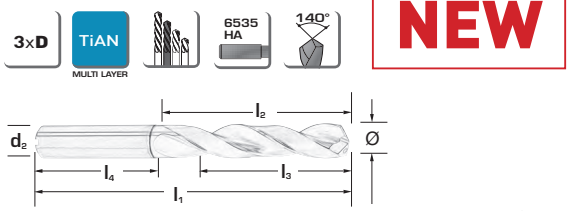
ILIX® PRECISION

DIN 6537K

RECORD VA

DIN 6535 HA
Hochleistungsbohrer, kurze Serie
High performance drills, short series

RECORD VA **VHM Feinstkorn** / Solid carbide micro grain





Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6051 XB
3,0	62	20	14	36	6	●
3,3	62	20	14	36	6	●
3,5	62	20	14	36	6	●
3,8	66	24	17	36	6	●
4,0	66	24	17	36	6	●
4,2	66	24	17	36	6	●
4,3	66	24	17	36	6	●
4,5	66	24	17	36	6	●
5,0	66	28	20	36	6	●
5,1	66	28	20	36	6	●
5,5	66	28	20	36	6	●
5,8	66	28	20	36	6	●
6,0	66	28	20	36	6	●
6,2	79	34	24	36	8	●
6,5	79	34	24	36	8	●
6,6	79	34	24	36	8	●
6,8	79	34	24	36	8	●
7,0	79	34	24	36	8	●
7,5	79	41	29	36	8	●
7,8	79	41	29	36	8	●
8,0	79	41	29	36	8	●
8,5	89	47	35	40	10	●
8,6	89	47	35	40	10	●
8,8	89	47	35	40	10	●
9,0	89	47	35	40	10	●
9,5	89	47	35	40	10	●
9,8	89	47	35	40	10	●
10,0	89	47	35	40	10	●
10,2	102	55	40	45	12	●
10,5	102	55	40	45	12	●
11,0	102	55	40	45	12	●
11,2	102	55	40	45	12	●
11,5	102	55	40	45	12	●
11,8	102	55	40	45	12	●
12,0	102	55	40	45	12	●
13,0	107	60	43	45	14	●
13,5	107	60	43	45	14	●
13,8	107	60	43	45	14	●
14,0	107	60	43	45	14	●
15,0	115	65	45	48	16	●

Typ / Type	VA
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6051 XB
16,0	115	65	45	48	16	●

● Standardartikel / Items available ex stock

DIN 6537L

RECORD VA i

DIN 6535 HA

Hochleistungsbohrer, lange Serie, mit innenliegenden Kühlkanälen

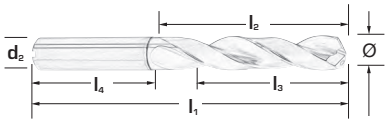
High performance drills, long series, with internal coolant

RECORD VAi VHM Feinstkorn / Solid carbide micro grain



5xD | TiAN MULTI LAYER | 6535 HA | 140° | **Innenliegende Kühlkanäle** internal coolant

NEW



Typ / Type	VA i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6052 XB
3,0	66	28	23	36	6	●
3,1	66	28	23	36	6	●
3,2	66	28	23	36	6	●
3,3	66	28	23	36	6	●
3,4	66	28	23	36	6	●
3,5	66	28	23	36	6	●
3,6	66	28	23	36	6	●
3,7	66	28	23	36	6	●
3,8	74	36	29	36	6	●
3,9	74	36	29	36	6	●
4,0	74	36	29	36	6	●
4,1	74	36	29	36	6	●
4,2	74	36	29	36	6	●
4,3	74	36	29	36	6	●
4,4	74	36	29	36	6	●
4,5	74	36	29	36	6	●
4,6	74	36	29	36	6	●
4,7	74	36	29	36	6	●
4,8	82	44	35	36	6	●
4,9	82	44	35	36	6	●
5,0	82	44	35	36	6	●
5,1	82	44	35	36	6	●
5,2	82	44	35	36	6	●
5,3	82	44	35	36	6	●
5,4	82	44	35	36	6	●
5,5	82	44	35	36	6	●
5,6	82	44	35	36	6	●
5,7	82	44	35	36	6	●
5,8	82	44	35	36	6	●
5,9	82	44	35	36	6	●
6,0	82	44	35	36	6	●
6,1	91	53	43	36	8	●
6,2	91	53	43	36	8	●
6,3	91	53	43	36	8	●
6,4	91	53	43	36	8	●
6,5	91	53	43	36	8	●
6,6	91	53	43	36	8	●
6,7	91	53	43	36	8	●
6,8	91	53	43	36	8	●
6,9	91	53	43	36	8	●

Typ / Type	VA i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6052 XB
7,0	91	53	43	36	8	●
7,1	91	53	43	36	8	●
7,2	91	53	43	36	8	●
7,3	91	53	43	36	8	●
7,4	91	53	43	36	8	●
7,5	91	53	43	36	8	●
7,6	91	53	43	36	8	●
7,7	91	53	43	36	8	●
7,8	91	53	43	36	8	●
7,9	91	53	43	36	8	●
8,0	91	53	43	36	8	●
8,1	103	61	49	40	10	●
8,2	103	61	49	40	10	●
8,3	103	61	49	40	10	●
8,4	103	61	49	40	10	●
8,5	103	61	49	40	10	●
8,6	103	61	49	40	10	●
8,7	103	61	49	40	10	●
8,8	103	61	49	40	10	●
8,9	103	61	49	40	10	●
9,0	103	61	49	40	10	●
9,1	103	61	49	40	10	●
9,2	103	61	49	40	10	●
9,3	103	61	49	40	10	●
9,4	103	61	49	40	10	●
9,5	103	61	49	40	10	●
9,6	103	61	49	40	10	●
9,7	103	61	49	40	10	●
9,8	103	61	49	40	10	●
9,9	103	61	49	40	10	●
10,0	103	61	49	40	10	●
10,1	118	71	56	45	12	●
10,2	118	71	56	45	12	●
10,3	118	71	56	45	12	●
10,4	118	71	56	45	12	●
10,5	118	71	56	45	12	●
10,6	118	71	56	45	12	●
10,7	118	71	56	45	12	●
10,8	118	71	56	45	12	●
10,9	118	71	56	45	12	●

● Standardartikel / Items available ex stock

DIN 6537L

RECORD VA i

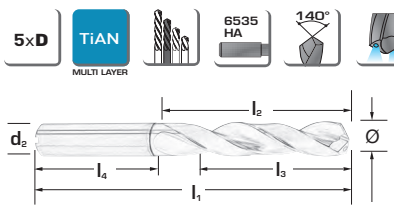
DIN 6535 HA

Hochleistungsbohrer, lange Serie, mit innenliegenden Kühlkanälen

High performance drills, long series, with internal coolant

RECORD VAi VHM Feinstkorn / Solid carbide micro grain





Typ / Type	VA i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6052 XB
11,0	118	71	56	45	12	●
11,1	118	71	56	45	12	●
11,2	118	71	56	45	12	●
11,3	118	71	56	45	12	●
11,4	118	71	56	45	12	●
11,5	118	71	56	45	12	●
11,6	118	71	56	45	12	●
11,7	118	71	56	45	12	●
11,8	118	71	56	45	12	●
11,9	118	71	56	45	12	●
12,0	118	71	56	45	12	●
12,5	124	77	60	45	14	●
13,0	124	77	60	45	14	●
13,5	124	77	60	45	14	●
14,0	124	77	60	45	14	●
14,5	133	83	63	48	16	●
15,0	133	83	63	48	16	●
15,5	133	83	63	48	16	●
16,0	133	83	63	48	16	●

Typ / Type	VA i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6052 XB

● Standardartikel / Items available ex stock

RECORD EVOLUTION **TP**

Möglichkeiten der Kosten und Prozessoptimierung basieren weitgehend auf dem Einsatz der für die Bearbeitungsfälle geeigneten Werkzeuge.
Bestimmte Einsatzgebiete erfordern ein Maximum an Maschinenstabilität vereint mit besonderen Werkzeuggeometrien und Oberflächenbeschaffenheiten.
ILIX neueste Programmerweiterung ermöglicht die Bearbeitung von Materialien mit Härten über 50 HRc.

Cost and process optimising depends largely on the use of tools adequate for the application. Some applications require a maximum machine stability combined with special tool geometries and surface characteristics. ILIX allows the machining of materials with a hardness superior to 50 HRc possible.



HOCHLEISTUNGS-SPIRALBOHRER AUSVHM - FEINSTKORN ZUR BEARBEITUNG VON MATERIALEN MIT HÄRTEN ÜBER 50 HRC
High Performance twist drills made of solid carbide micro grain for machining materials with a hardness superior to 50 HRC

ILIX® PRECISION

ILIX NORM

RECORD EVOLUTION TP

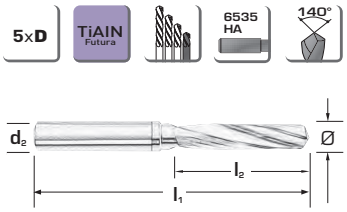
DIN 6535 HA

Hochleistungs-Spiralbohrer aus VHM - Feinstkorn zur Bearbeitung von Materialen mit Härten über 50 HRc.

High Performance twist drills made of solid carbide micro grain for machining materials with a hardness superior to 50 HRC.



Record Evolution TP



Typ / Type	TP
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10/20
Ø mm m7	l1 mm	l2 mm	d2	6014 TF
3,0	46	16	3	●
3,4	50	20	4	●
3,5	50	20	4	●
4,0	52	22	4	●
4,3	68	28	6	●
4,5	68	28	6	●
5,0	72	32	6	●
5,1	72	32	6	●
5,5	75	35	6	●
6,0	75	35	6	●
6,5	75	35	6	●
6,9	85	45	8	●
7,0	85	45	8	●
7,5	85	45	8	●
8,0	98	50	8	●
8,5	98	50	10	●
8,6	105	57	10	●
9,0	105	57	10	●
9,5	105	57	10	●
10,0	111	63	10	●
10,4	111	63	12	●
10,5	111	63	12	●
11,0	119	71	12	●
12,0	127	71	12	●

Typ / Type	TP
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10/20
Ø mm m7	l1 mm	l2 mm	d2	6014 TF

* Der Gewindebohrer 6770TC auf Seite 377 ist zur Gewindebearbeitung in genannten Materialien geeignet.
* The tap 6770TC on page 377 is adequate for tapping in listed materials.

● Standardartikel / Items available ex stock

RECORD **DH i**

Rekord DHi sind VHM-Tieflochbohrer mit Kühlkanälen für Kühlmittel - MMS. Diese Bohrer sind zum Bohren von tiefen Löchern in Stahl,Edelstahl, hochlegierte Stähle und Gusseisen.

Record DHi are solid carbide deep hole drills. Internal coolant - MQL
These drills are designed for drilling deep holes in stainless steel, cast iron materials and high temperature alloys.





4 FÜHRUNGSFASEN
Four margin lands

VERBESSERTE BOHRUNG GEOMETRIE
Improves hole geometry

VERBESSERT DIE BOHRUNGS AUSRICHTUNG WENN DURCH EINE QUERBOHRUNG GEBOHRT WIRD
Improves hole alignment when drilling through cross holes

EINZIGARTIGES NUTENPROFIL
Unique flute design

DIE HOCH POLIERTE UND GELÄPPTE OBERFLÄCHE, VOR UND NACH DEM BESCHICHTEN VERBESSERT DIE SPANABFUHR
The highly polished and lapped surface, before and after coating, improves chip evacuation

BESSERE BOHRUNGSOBERFLÄCHEN QUALITÄT. QUALITÄT K30F
Better hole surface quality, Quality K30F

VHM FEINSTKORN K20F UND K30F MIT TT MEHRLAGEN BESCHICHTUNG IN TIALN FUTURA PLUS PVD SORGT FÜR EINE HERVORRAGENDE VERSCHLEISSFESTINGKEIT, NIEDRIGE REIBUNG UND STABILITÄT AUCH IN DER MINIMALMENGENSCHMIERUNG (MMS) ANWENDUNG
Solid carbide micro-grain K20F with TT multilayer coating in TiAlN Futura Plus PVD ensures excellent wear resistance, low-friction and stability even in minimum quantity lubrication (MQL) applications

ILIX® PRECISION

ILIX NORM

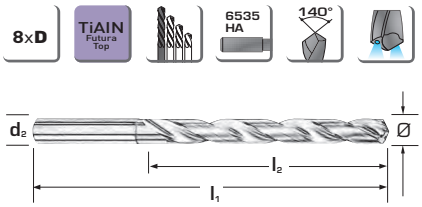
RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6025 TT
3,0	70	32	6	●
3,1	70	32	6	●
3,2	70	32	6	●
3,3	70	32	6	●
3,4	70	32	6	●
3,5	70	32	6	●
3,6	70	32	6	●
3,7	70	32	6	●
3,8	80	42	6	●
3,9	80	42	6	●
4,0	80	42	6	●
4,1	80	42	6	●
4,2	80	42	6	●
4,3	80	42	6	●
4,4	80	42	6	●
4,5	80	42	6	●
4,6	80	42	6	●
4,7	80	42	6	●
4,8	92	54	6	●
4,9	92	54	6	●
5,0	92	54	6	●
5,1	92	54	6	●
5,2	92	54	6	●
5,3	92	54	6	●
5,4	92	54	6	●
5,5	92	54	6	●
5,6	92	54	6	●
5,7	92	54	6	●
5,8	92	54	6	●
5,9	92	54	6	●
6,0	92	54	6	●
6,1	100	62	8	●
6,2	100	62	8	●
6,3	100	62	8	●
6,4	100	62	8	●
6,5	100	62	8	●
6,6	100	62	8	●
6,7	100	62	8	●
6,8	100	62	8	●
6,9	100	62	8	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6025 TT
7,0	108	70	8	●
7,1	108	70	8	●
7,2	108	70	8	●
7,3	108	70	8	●
7,4	108	70	8	●
7,5	108	70	8	●
7,6	108	70	8	●
7,7	108	70	8	●
7,8	108	70	8	●
7,9	108	70	8	●
8,0	108	70	8	●
8,1	122	80	10	●
8,2	122	80	10	●
8,3	122	80	10	●
8,4	122	80	10	●
8,5	122	80	10	●
8,6	122	80	10	●
8,7	122	80	10	●
8,8	122	80	10	●
8,9	122	80	10	●
9,0	122	80	10	●
9,1	130	88	10	●
9,2	130	88	10	●
9,3	130	88	10	●
9,4	130	88	10	●
9,5	130	88	10	●
9,6	130	88	10	●
9,7	130	88	10	●
9,8	130	88	10	●
9,9	130	88	10	●
10,0	130	88	10	●
10,1	152	105	12	●
10,2	152	105	12	●
10,3	152	105	12	●
10,4	152	105	12	●
10,5	152	105	12	●
10,6	152	105	12	●
10,7	152	105	12	●
10,8	152	105	12	●
10,9	152	105	12	●

● Standardartikel / Items available ex stock

ILIX NORM

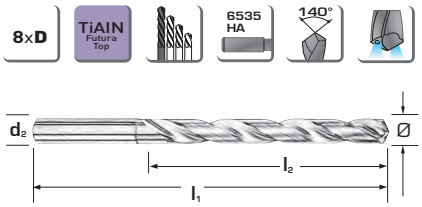
RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6025 TT
11,0	152	105	12	●
11,1	152	105	12	●
11,2	152	105	12	●
11,3	152	105	12	●
11,4	152	105	12	●
11,5	152	105	12	●
11,6	152	105	12	●
11,7	152	105	12	●
11,8	152	105	12	●
11,9	152	105	12	●
12,0	152	105	12	●
12,5	170	123	14	●
13,0	170	123	14	●
13,5	170	123	14	●
14,0	170	123	14	●
14,5	192	142	16	●
15,0	192	142	16	●
15,5	192	142	16	●
16,0	192	142	16	●
16,5	223	171	18	●
17,0	223	171	18	●
17,5	223	171	18	●
18,0	223	171	18	●
18,5	244	190	20	●
19,0	244	190	20	●
19,5	244	190	20	●
20,0	244	190	20	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6025 TT

● Standardartikel / Items available ex stock

ILIX NORM

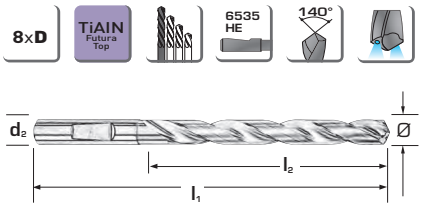
RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6026 TT
3,0	70	32	6	●
3,1	70	32	6	●
3,2	70	32	6	●
3,3	70	32	6	●
3,4	70	32	6	●
3,5	70	32	6	●
3,6	70	32	6	●
3,7	70	32	6	●
3,8	80	42	6	●
3,9	80	42	6	●
4,0	80	42	6	●
4,1	80	42	6	●
4,2	80	42	6	●
4,3	80	42	6	●
4,4	80	42	6	●
4,5	80	42	6	●
4,6	80	42	6	●
4,7	80	42	6	●
4,8	92	54	6	●
4,9	92	54	6	●
5,0	92	54	6	●
5,1	92	54	6	●
5,2	92	54	6	●
5,3	92	54	6	●
5,4	92	54	6	●
5,5	92	54	6	●
5,6	92	54	6	●
5,7	92	54	6	●
5,8	92	54	6	●
5,9	92	54	6	●
6,0	92	54	6	●
6,1	100	62	8	●
6,2	100	62	8	●
6,3	100	62	8	●
6,4	100	62	8	●
6,5	100	62	8	●
6,6	100	62	8	●
6,7	100	62	8	●
6,8	100	62	8	●
6,9	100	62	8	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6026 TT
7,0	108	70	8	●
7,1	108	70	8	●
7,2	108	70	8	●
7,3	108	70	8	●
7,4	108	70	8	●
7,5	108	70	8	●
7,6	108	70	8	●
7,7	108	70	8	●
7,8	108	70	8	●
7,9	108	70	8	●
8,0	108	70	8	●
8,1	122	80	10	●
8,2	122	80	10	●
8,3	122	80	10	●
8,4	122	80	10	●
8,5	122	80	10	●
8,6	122	80	10	●
8,7	122	80	10	●
8,8	122	80	10	●
8,9	122	80	10	●
9,0	122	80	10	●
9,1	130	88	10	●
9,2	130	88	10	●
9,3	130	88	10	●
9,4	130	88	10	●
9,5	130	88	10	●
9,6	130	88	10	●
9,7	130	88	10	●
9,8	130	88	10	●
9,9	130	88	10	●
10,0	130	88	10	●
10,1	152	105	12	●
10,2	152	105	12	●
10,3	152	105	12	●
10,4	152	105	12	●
10,5	152	105	12	●
10,6	152	105	12	●
10,7	152	105	12	●
10,8	152	105	12	●
10,9	152	105	12	●

● Standardartikel / Items available ex stock

ILIX NORM

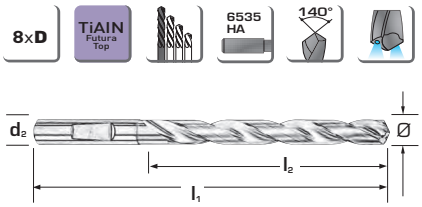
RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6026 TT
11,0	152	105	12	●
11,1	152	105	12	●
11,2	152	105	12	●
11,3	152	105	12	●
11,4	152	105	12	●
11,5	152	105	12	●
11,6	152	105	12	●
11,7	152	105	12	●
11,8	152	105	12	●
11,9	152	105	12	●
12,0	152	105	12	●
12,5	170	123	14	●
13,0	170	123	14	●
13,5	170	123	14	●
14,0	170	123	14	●
14,5	192	142	16	●
15,0	192	142	16	●
15,5	192	142	16	●
16,0	192	142	16	●
16,5	223	171	18	●
17,0	223	171	18	●
17,5	223	171	18	●
18,0	223	171	18	●
18,5	244	190	20	●
19,0	244	190	20	●
19,5	244	190	20	●
20,0	244	190	20	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6026 TT

● Standardartikel / Items available ex stock

ILIX NORM

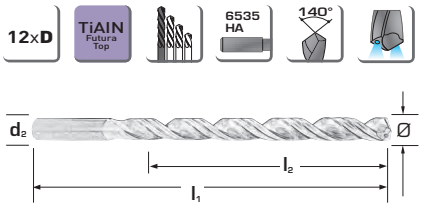
RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6027 TT
3.0	92	54	6	●
3.3	92	54	6	●
3.4	92	54	6	●
3.5	92	54	6	●
3.8	102	64	6	●
4.0	102	64	6	●
4.2	102	64	6	●
4.3	102	64	6	●
4.5	102	64	6	●
4.8	121	83	6	●
5.0	121	83	6	●
5.1	121	83	6	●
5.2	121	83	6	●
5.5	121	83	6	●
5.6	121	83	6	●
5.8	121	83	6	●
6.0	121	83	6	●
6.1	148	110	8	●
6.5	148	110	8	●
6.6	148	110	8	●
6.8	148	110	8	●
6.9	148	110	8	●
7.0	148	110	8	●
7.4	148	110	8	●
7.5	148	110	8	●
7.8	148	110	8	●
8.0	148	110	8	●
8.1	180	138	10	●
8.3	180	138	10	●
8.4	180	138	10	●
8.5	180	138	10	●
8.6	180	138	10	●
8.7	180	138	10	●
8.8	180	138	10	●
9.0	180	138	10	●
9.3	180	138	10	●
9.5	180	138	10	●
9.8	180	138	10	●
10.0	180	138	10	●
10.2	206	158	12	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6027 TT
10.3	206	158	12	●
10.4	206	158	12	●
10.5	206	158	12	●
10.8	206	158	12	●
11.0	206	158	12	●
11.2	206	158	12	●
11.5	206	158	12	●
11.8	206	158	12	●
12.0	206	158	12	●
12.5	230	182	14	●
13.0	230	182	14	●
13.5	230	182	14	●
14.0	230	182	14	●
14.5	260	208	16	●
15.0	260	208	16	●
15.5	260	208	16	●
16.0	260	208	16	●
16.5	285	234	18	●
17.0	285	234	18	●
17.5	285	234	18	●
18.0	285	234	18	●
18.5	310	258	20	●
19.0	310	258	20	●
19.5	310	258	20	●
20.0	310	258	20	●

● Standardartikel / Items available ex stock

ILIX NORM

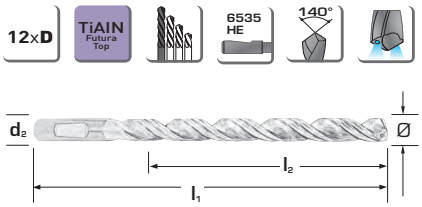
RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HE
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6028 TT
3.0	92	54	6	●
3.3	92	54	6	●
3.4	92	54	6	●
3.5	92	54	6	●
3.8	102	64	6	●
4.0	102	64	6	●
4.2	102	64	6	●
4.3	102	64	6	●
4.5	102	64	6	●
4.8	121	83	6	●
5.0	121	83	6	●
5.1	121	83	6	●
5.2	121	83	6	●
5.5	121	83	6	●
5.6	121	83	6	●
5.8	121	83	6	●
6.0	121	83	6	●
6.1	148	110	8	●
6.5	148	110	8	●
6.6	148	110	8	●
6.8	148	110	8	●
6.9	148	110	8	●
7.0	148	110	8	●
7.4	148	110	8	●
7.5	148	110	8	●
7.8	148	110	8	●
8.0	148	110	8	●
8.1	180	138	10	●
8.3	180	138	10	●
8.4	180	138	10	●
8.5	180	138	10	●
8.6	180	138	10	●
8.7	180	138	10	●
8.8	180	138	10	●
9.0	180	138	10	●
9.3	180	138	10	●
9.5	180	138	10	●
9.8	180	138	10	●
10.0	180	138	10	●
10.2	206	158	12	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6028 TT
10.3	206	158	12	●
10.4	206	158	12	●
10.5	206	158	12	●
10.8	206	158	12	●
11.0	206	158	12	●
11.2	206	158	12	●
11.5	206	158	12	●
11.8	206	158	12	●
12.0	206	158	12	●
12.5	230	182	14	●
13.0	230	182	14	●
13.5	230	182	14	●
14.0	230	182	14	●
14.5	260	208	16	●
15.0	260	208	16	●
15.5	260	208	16	●
16.0	260	208	16	●
16.5	285	234	18	●
17.0	285	234	18	●
17.5	285	234	18	●
18.0	285	234	18	●
18.5	310	258	20	●
19.0	310	258	20	●
19.5	310	258	20	●
20.0	310	258	20	●

● Standardartikel / Items available ex stock

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ILIX NORM

RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

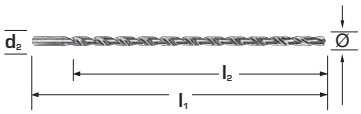
DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills with internal coolant, extra long series

Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

NEW





Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6032 TT
3,0	100	60	6	●
3,2	100	60	6	●
3,5	100	60	6	●
3,8	115	75	6	●
4,0	115	75	6	●
4,2	115	75	6	●
4,5	130	90	6	●
4,8	130	90	6	●
5,0	130	90	6	●
5,5	150	108	6	●
5,8	150	108	6	●
6,0	150	108	6	●
6,5	165	125	8	●
6,8	165	125	8	●
7,0	165	125	8	●
7,5	180	140	8	●
8,0	180	140	8	●
8,5	205	160	10	●
8,8	205	160	10	●
9,0	205	160	10	●
10,0	225	180	10	●
10,2	240	190	12	●
12,0	265	215	12	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6032 TT

● Standardartikel / Items available ex stock

Technische Informationen Seite 716 / Technical Suggestions page 716

ILIX NORM

RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

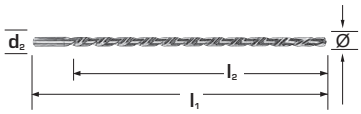
DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant



Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6034 TT
2,0	120	80	6	●
2,5	120	80	6	●
3,0	120	80	6	●
3,1	120	80	6	●
3,2	120	80	6	●
3,3	120	80	6	●
3,4	120	80	6	●
3,5	120	80	6	●
3,7	130	90	6	●
3,8	130	90	6	●
3,9	130	90	6	●
4,0	130	90	6	●
4,2	160	110	6	●
4,5	160	110	6	●
4,7	160	110	6	●
4,8	160	120	6	●
4,9	160	120	6	●
5,0	160	120	6	●
5,1	160	120	6	●
5,2	160	120	6	●
5,4	160	120	6	●
5,5	185	140	6	●
5,9	185	140	6	●
6,0	185	140	6	●
6,2	210	155	8	●
6,4	210	155	8	●
6,5	210	155	8	●
6,8	210	160	8	●
7,0	210	160	8	●
7,1	230	180	8	●
7,4	230	180	8	●
7,5	230	180	8	●
7,8	230	180	8	●
8,0	230	180	8	●
8,5	260	195	10	●
9,0	290	230	10	●
9,5	290	230	10	●
10,0	290	230	10	●
10,2	315	270	12	●
10,5	315	270	12	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm m7	l_1 mm	l_2 mm	d_2 h6	6034 TT
10,9	315	270	12	●
11,0	315	270	12	●
12,0	315	270	12	●

● Standardartikel / Items available ex stock

ILIX NORM

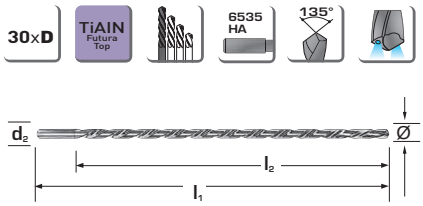
RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills, with internal coolant, extra long series



Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6036 TT
2,0	150	105	6	●
2,5	150	105	6	●
3,0	150	105	6	●
3,2	150	105	6	●
3,3	185	135	6	●
3,5	185	135	6	●
3,6	185	135	6	●
3,7	185	135	6	●
3,8	185	135	6	●
4,0	185	135	6	●
4,2	185	135	6	●
4,5	215	165	6	●
4,8	215	165	6	●
5,0	215	165	6	●
5,1	230	180	6	●
5,2	230	180	6	●
5,5	230	180	6	●
5,8	230	180	6	●
6,0	230	180	6	●
6,5	280	215	8	●
6,8	280	215	8	●
7,0	280	230	8	●
7,5	280	230	8	●
8,0	315	265	8	●
8,5	350	295	10	●
9,0	380	330	10	●
10,0	380	330	10	●
10,2	430	380	12	●
12,0	430	380	12	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6036 TT

● Standardartikel / Items available ex stock

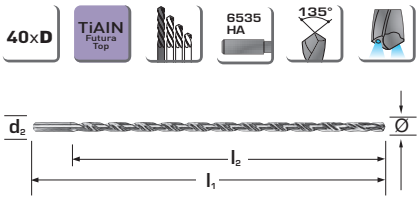
ILIX NORM

RECORD DH i

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung
High performance twist drills with internal coolant, extra long series

Record DH i VHM Feinstkorn / Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant

NEW

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6038 TT
3,0	195	150	6	●
4,0	220	175	6	●
4,2	245	200	6	●
4,5	245	200	6	●
4,8	275	230	6	●
5,0	275	230	6	●
5,5	305	260	6	●
5,8	305	260	6	●
6,0	305	260	6	●
6,5	345	300	8	●
6,8	345	300	8	●
7,0	345	300	8	●
7,5	345	300	8	●
8,0	430	380	8	●
9,0	430	380	10	●

Typ / Type	DH i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6038 TT

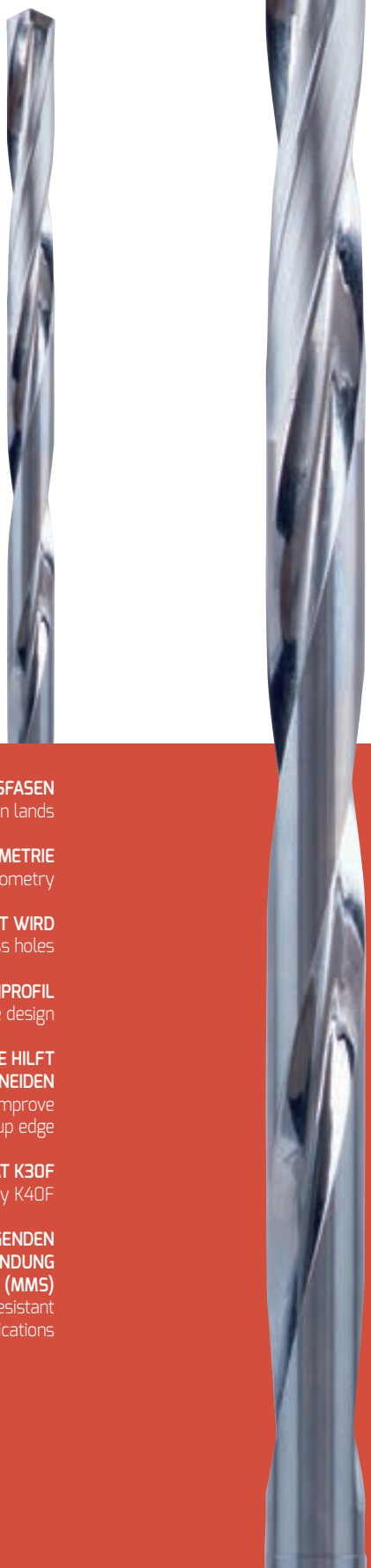
● Standardartikel / Items available ex stock

RECORD **DH i Alu**

RECORD
DH i

Rekord DHi Alu sind VHM-Tieflochbohrer. Innere Kühlmittel - MMS,diese Bohrer sind zum Bohren von tiefen Löchern in Aluminium, Aluminiumlegierungen und Nichteisen-Materialien.

Record DHi Alu are solid carbide deep hole drills. Internal coolant - MQL, these drills are designed for drilling deep holes in aluminium, aluminium alloys and non-ferrous materials.



4 FÜHRUNGSFASEN
Four margin lands

VERBESSERTE BOHRUNG GEOMETRIE
Improves hole geometry

VERBESSERT DIE BOHRUNGS AUSRICHTUNG WENN DURCH EINE QUERBOHRUNG GEBOHRT WIRD
Improves hole alignment when drilling through cross holes

EINZIGARTIGES NUTENPROFIL
Unique flute design

DIE HOCH POLIERTE UND GELÄPPTE OBERFLÄCHE MIT FORTSCHRITTLICHER TECHNOLOGIE HILFT DIE SPANABFUHR ZU VERBESSERN UND VERHINDERT AUFBAUSCHNEIDEN
The highly polished and lapped surface, with advanced technology, helps to improve chip evacuation and prevent build up edge

BESSERE BOHRUNGSOBERFLÄCHEN QUALITÄT. QUALITÄT K30F
Better hole surface quality, quality K40F

HOCHDREHFESTE VOLLHARTMETALL K40F FEINSTKORN BIETET EIN HERVORRAGENDEN VERSCHLEISSSCHUTZ, NIEDRIGE REIBUNG UND STABILITÄT AUCH IN ANWENDUNG MIT MINIMALMENGENSCHMIERUNG (MMS)
Highly torsional-resistant solid carbide K40F micro-grain, offers an excellent wear resistant low-friction and stability even in minimum quantity lubrication (MQL) applications

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RECORD DH i Alu

DIN 6535 HA

Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung

High performance twist drills with internal coolant, extra long series

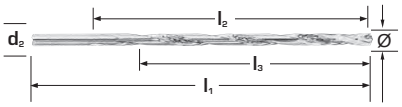
Record DH i Alu VHM Feinstkorn / Solid carbide micro grain





Innenliegende Kühlkanäle
internal coolant

NEW



Typ / Type	DH i Alu
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm h7	l_1 mm	l_2 mm	l_3 mm	d_2 h6	6041
3,0	95	51,0	45,0	6	●
4,0	110	68,0	60,0	6	●
4,5	120	76,5	67,5	6	●
5,0	125	85,0	75,0	6	●
5,5	135	93,5	82,5	6	●
6,0	140	100,0	90,0	6	●
6,5	150	110,5	97,5	8	●
7,0	160	119,0	105,0	8	●
8,0	180	136,0	120,0	8	●
8,5	190	144,5	127,5	10	●
10,0	215	170,0	150,0	10	●
12,0	255	204,0	180,0	12	●

Typ / Type	DH i Alu
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 40F

Ø mm h7	l_1 mm	l_2 mm	l_3 mm	d_2 h6	6041

● Standardartikel / Items available ex stock

ILIX NORM

RECORD DH i

DIN 6535 HA

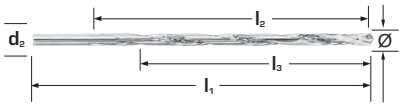
Hochleistungs-Spiralbohrer, mit Kühlkanälen, extra lange Ausführung

High performance twist drills with internal coolant, extra long series

Record DH i Alu VHM Feinstkorn / Solid carbide micro grain



20xD 6042 | 30xD 6044 | 6535 HA | 137° | Innenliegende Kühlkanäle / internal coolant



20xD

Typ / Type	DH i Alu
Schneidrichtung / Cutting direction	
Schneidstoff / Material	K 40F

Ø mm h7	l_1 mm	l_2 mm	l_3 mm	d_2 h6	6042
3,0	110	66	60	6	●
4,0	130	88	80	6	●
4,5	140	99	90	6	●
5,0	150	110	100	6	●
5,5	160	121	110	6	●
6,0	170	132	120	6	●
6,5	185	143	130	8	●
7,0	195	154	140	8	●
8,0	215	176	160	8	●
8,5	230	187	170	10	●
10,0	265	220	200	10	●
12,0	315	264	240	12	●

30xD

Typ / Type	DH i Alu
Schneidrichtung / Cutting direction	
Schneidstoff / Material	K 40F

Ø mm h7	l_1 mm	l_2 mm	l_3 mm	d_2 h6	6044
3,0	140	96	90	6	●
4,0	170	128	120	6	●
4,5	185	144	135	6	●
5,0	200	160	150	6	●
5,5	215	176	165	6	●
6,0	230	192	180	6	●
6,5	250	208	195	8	●
7,0	265	224	210	8	●

● Standardartikel / Items available ex stock

MicroDrill i

Microdrill sind VHM-Tieflochbohrer 135 °-Spitzen-Geometrie. Innere Kühlmittel - MMS diese Bohrer zum Bohren von tiefen Löchern in Stahl, Gusseisen und Titanlegierungen ausgelegt.

MicroDrill are solid carbide deep hole drills 135° point geometry.
Internal coolant MQL – the drills are designed for ensuring a good stability during the drilling process on materials like steel, cast iron and titanium alloys.



DIE HOCH POLIERTE UND GELÄPPTE OBERFLÄCHE, VOR UND NACH DEM BESCHICHTEN VERBESSERT DIE SPANABFUHR
The highly polished and lapped surface, before and after coating, improves chip evacuation

4 FÜHRUNGSFASEN FÜR BESSERE BOHRUNGS GERADHEIT
4 margin lands for a better hole straightness

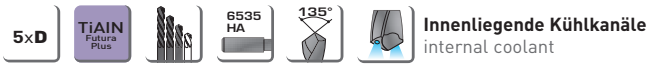
VHM FEINSTKORN K10 MIT KOPF-BESCHICHTUNG. DIE MEHRLAGEN BESCHICHTUNG IN TIALN FUTURA PLUS PVD SORGT FÜR EINE HERVORRAGENDE VERSCHLEISSFESTINGKEIT UND NIEDRIGE REIBUNG
Solid Carbide K10 Micro grain with coating only on the first part of the drill.
The coating TiAlN Futura Plus Multilayers, settled with PVD process, ensures excellent wear resistance and low friction

ILIX® PRECISION

ILIX NORM

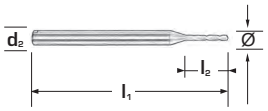
DIN 6535 HA
Zylinderschaft / Straight shank **Ø 3 mm**
Hochleistungs-Spiralbohrer, mit Kühlkanälen
High performance twist drills, with internal coolant,

MicroDrill i **VHM Feinstkorn**
Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant





Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6019 TF
1,00	50	6,50	3	●
1,05	50	6,80	3	●
1,10	50	7,20	3	●
1,15	50	7,50	3	●
1,20	50	7,80	3	●
1,25	50	8,10	3	●
1,30	50	8,50	3	●
1,35	50	8,80	3	●
1,40	50	9,10	3	●
1,45	50	9,40	3	●
1,50	50	9,80	3	●
1,55	50	10,10	3	●
1,60	50	10,40	3	●
1,65	55	10,70	3	●
1,70	55	11,10	3	●
1,75	55	11,40	3	●
1,80	55	11,70	3	●
1,85	55	12,00	3	●
1,90	55	12,40	3	●
1,95	55	12,70	3	●
2,00	55	13,00	3	●
2,05	55	13,30	3	●
2,10	55	13,70	3	●
2,15	55	14,00	3	●
2,20	55	14,30	3	●
2,25	55	14,60	3	●
2,30	55	15,00	3	●
2,35	55	15,30	3	●
2,40	55	15,60	3	●
2,45	55	15,90	3	●
2,50	55	16,30	3	●
2,55	55	16,60	3	●
2,60	55	16,90	3	●
2,65	55	17,20	3	●
2,70	55	17,60	3	●
2,75	55	17,90	3	●
2,80	55	18,20	3	●
2,85	55	18,50	3	●
2,90	55	18,90	3	●
2,95	55	19,20	3	●
3,00	55	19,50	3	●

Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

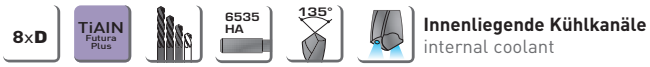
Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6019 TF

● Standardartikel / Items available ex stock

ILIX NORM

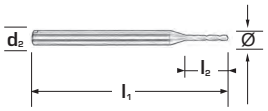
DIN 6535 HA
Zylinderschaft / Straight shank **Ø 3 mm**
Hochleistungs-Spiralbohrer, mit Kühlkanälen
High performance twist drills, with internal coolant,

MicroDrill i **VHM Feinstkorn**
Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant





Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6029 TF
1,00	50	9,5	3	●
1,05	50	10,0	3	●
1,10	50	10,5	3	●
1,15	50	10,9	3	●
1,20	50	11,4	3	●
1,25	50	11,9	3	●
1,30	50	12,4	3	●
1,35	50	12,8	3	●
1,40	50	13,3	3	●
1,45	50	13,8	3	●
1,50	50	14,3	3	●
1,55	50	14,7	3	●
1,60	50	15,2	3	●
1,65	60	15,7	3	●
1,70	60	16,2	3	●
1,75	60	16,6	3	●
1,80	60	17,1	3	●
1,85	60	17,6	3	●
1,90	60	18,1	3	●
1,95	60	18,5	3	●
2,00	60	19,0	3	●
2,05	60	19,5	3	●
2,10	60	20,0	3	●
2,15	60	20,4	3	●
2,20	60	20,9	3	●
2,25	60	21,4	3	●
2,30	60	21,9	3	●
2,35	60	22,3	3	●
2,40	60	22,8	3	●
2,45	60	23,3	3	●
2,50	60	23,8	3	●
2,55	60	24,2	3	●
2,60	60	24,7	3	●
2,65	60	25,2	3	●
2,70	60	25,7	3	●
2,75	60	26,1	3	●
2,80	60	26,6	3	●
2,85	60	27,1	3	●
2,90	60	27,6	3	●
2,95	60	28,0	3	●
3,00	60	28,5	3	●

Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6029 TF

● Standardartikel / Items available ex stock

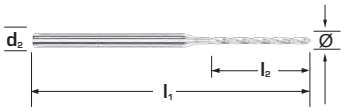
ILIX NORM

DIN 6535 HA
Zylinderschaft / Straight shank **Ø 3 mm**
Hochleistungs-Spiralbohrer, mit Kühlkanälen
High performance twist drills, with internal coolant,

MicroDrill i **VHM Feinstkorn**
Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant





Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6030 TF
1,00	55	13,50	3	●
1,05	55	14,20	3	●
1,10	55	14,90	3	●
1,15	55	15,50	3	●
1,20	55	16,20	3	●
1,25	55	16,90	3	●
1,30	55	17,60	3	●
1,35	55	18,20	3	●
1,40	55	18,90	3	●
1,45	55	19,60	3	●
1,50	55	20,30	3	●
1,55	55	20,90	3	●
1,60	65	21,60	3	●
1,65	65	22,30	3	●
1,70	65	23,00	3	●
1,75	65	23,60	3	●
1,80	65	24,30	3	●
1,85	65	25,00	3	●
1,90	65	25,70	3	●
1,95	65	26,30	3	●
2,00	65	27,00	3	●
2,05	65	27,70	3	●
2,10	65	28,40	3	●
2,15	65	29,00	3	●
2,20	65	29,70	3	●
2,25	65	30,40	3	●
2,30	65	31,10	3	●
2,35	75	31,70	3	●
2,40	75	32,40	3	●
2,45	75	33,10	3	●
2,50	75	33,80	3	●
2,55	75	34,40	3	●
2,60	75	35,10	3	●
2,65	75	35,80	3	●
2,70	75	36,50	3	●
2,75	75	37,10	3	●
2,80	75	37,80	3	●
2,85	75	38,50	3	●
2,90	75	39,20	3	●
2,95	75	39,80	3	●
3,00	75	40,50	3	●

Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6030 TF

● Standardartikel / Items available ex stock

Technische Informationen Seite 716 / Technical Suggestions page 716

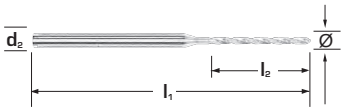
ILIX NORM

DIN 6535 HA
Zylinderschaft / Straight shank **Ø 3 mm**
Hochleistungs-Spiralbohrer, mit Kühlkanälen
High performance twist drills, with internal coolant,

MicroDrill i **VHM Feinstkorn**
Solid carbide micro grain



Innenliegende Kühlkanäle
internal coolant





Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6031 TF
1,00	65	21,50	3	●
1,05	65	22,60	3	●
1,10	65	23,70	3	●
1,15	65	24,70	3	●
1,20	65	25,80	3	●
1,25	65	26,90	3	●
1,30	65	28,00	3	●
1,35	65	29,00	3	●
1,40	65	30,10	3	●
1,45	75	31,20	3	●
1,50	75	32,30	3	●
1,55	75	33,30	3	●
1,60	75	34,40	3	●
1,65	75	35,50	3	●
1,70	75	36,60	3	●
1,75	75	37,60	3	●
1,80	75	38,70	3	●
1,85	75	39,80	3	●
1,90	75	40,90	3	●
1,95	75	41,90	3	●
2,00	82	43,00	3	●
2,05	82	44,10	3	●
2,10	82	45,20	3	●
2,15	82	46,20	3	●
2,20	82	47,30	3	●
2,25	82	48,40	3	●
2,30	100	49,50	3	●
2,35	100	50,50	3	●
2,40	100	51,60	3	●
2,45	100	52,70	3	●
2,50	100	53,80	3	●
2,55	100	54,80	3	●
2,60	100	55,90	3	●
2,65	100	57,00	3	●
2,70	100	58,10	3	●
2,75	100	59,10	3	●
2,80	100	60,20	3	●
2,85	100	61,30	3	●
2,90	100	62,40	3	●
2,95	100	63,40	3	●
3,00	100	64,50	3	●

Typ / Type	MicroDrill i
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 10

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6031 TF

● Standardartikel / Items available ex stock

RECORD **4 S i**

Vollhartmetall-Bohrer 4S i, X-förmig, 130°-Spitzen-Geometrie, Entwickelt zum Bohren in kurzspanenden Materialien, Aluminiumlegierungen, Gusseisen und NE-Materialien. Hohe Qualität, enge Bohrungstoleranzen und sehr gute Oberfläche Qualität.

Solid carbide 4S i drills, X-shaped, 130° point geometry are designed for drilling in aluminium alloys, cast iron and non-ferrous materials. Best suited for high quality, close tolerance holes that require a very good surface finish.





GERADE GENUTET MIT ZWEI SCHNEIDEN
Two cutting edges with straight flutes

GENAUE FORM DES LOCHS, AUCH WENN FÜR KOMPLEXE GEOMETRIEN STUFENBOHRER VERWENDET WERDEN
Precise shape of the hole even if used as geometry for complex step drills

KANN ZUM AUFBOHREN VERWENDET WERDEN, ENTWORFEN MIT VIER FÜHRUNGSFASEN
Can be used in cored holes, four margin lands design

DURCH DIE ZWEITE FÜHRUNGSFASE ERHALTEN WIR BESSERE OBERFLÄCHEN QUALITÄT UND GENAUERE BOHRUNGSTOLERANZEN
Second set of margin lands improves the surface quality obtaining more precise tolerances.

KANN DURCH QUERBOHRUNGEN UND AUF GENEIGTEN FLÄCHEN AUSTRETEN
Can run through cross holes and exit on inclined surfaces.

VERSCHLEISSFESTES VHM K20F QUALITÄT
Wear resistant carbide K20F Quality

VOLLHARTMETALL-FEINSTKORN K20F MIT TF MEHRLAGEN BESCHICHTUNG IN TIALN FUTURA PLUS-PVD SORGT FÜR EINE HERVORRAGENDE VERSCHLEISSFESTIGKEIT UND GERINGER REIBUNG. GEOMETRIE ENTWICKELT ZUM BOHREN IN SPHÄROGUSS UND ALUMINIUM MIT HOHEM SILIZIUMGEHALT. BESTEN GEEIGNET FÜR HOHE QUALITÄT, ENGE BOHRUNGSTOLERANZEN UND SEHR HOHE OBERFLÄCHEN QUALITÄT
Solid carbide micro-grain K20F with TF multilayer coating in TiAlN Futura Plus PVD ensures excellent wear resistance and low-friction on spheroidal cast iron and aluminium with a high silicon content materials.

DER UNBESCHICHTETE VHM K20F HILFT ZU VERHINDERN AUFBAU SCHNEIDEN BEIM BOHREN VON ALUMINIUMWERKSTOFFEN
The uncoated K20F grade helps to prevent build-up edge (BUE) in drilling aluminium materials.

ILIX® PRECISION

ILIX NORM

EINHEITSSCHAFT / UNIFIED SHANK

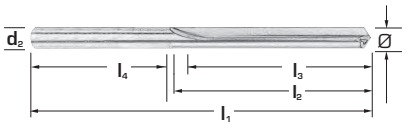
DIN 6535 HA
Hochleistung Spiralbohrer mit innenliegende Kühlkanäle
High performance twist drills with internal coolant

RECORD 4 Si



Record 4 S i aus Vollhartmetall
Solid carbide

5xD | TiAlN Futura | 6535 HA | 130° | **Innenliegende Kühlkanäle** internal coolant



Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 F5
4,0	74	36	22	36	6	●
4,2	74	36	21	36	6	●
5,0	82	44	30	36	6	●
5,5	82	44	30	36	6	●
6,0	82	44	30	36	6	●
6,5	91	53	37	36	8	●
6,8	91	53	37	36	8	●
7,0	91	53	37	36	8	●
7,5	91	53	37	36	8	●
8,0	91	53	37	36	8	●
8,5	103	61	43	40	10	●
9,0	103	61	43	40	10	●
10,0	103	61	43	40	10	●
10,2	118	71	51	45	12	●
10,5	118	71	51	45	12	●
11,0	118	71	51	45	12	●
11,5	118	71	51	45	12	●
12,0	118	71	51	45	12	●
12,5	124	77	56	45	14	●
13,0	124	77	56	45	14	●
14,0	124	77	56	45	14	●
15,0	133	83	60	48	16	●
15,5	133	83	60	48	16	●
16,0	133	83	60	48	16	●
17,0	143	93	69	48	18	●
17,5	143	93	69	48	18	●
18,0	143	93	69	48	18	●
19,5	153	101	76	50	20	●
20,0	153	101	76	50	20	●

Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 F5

● Standardartikel / Items available ex stock

ILIX NORM

RECORD 4Si

EINHEITSSCHAFT / UNIFIED SHANK

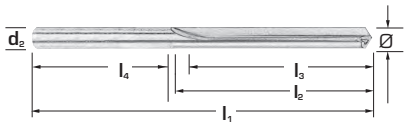
DIN 6535 HA
Hochleistungs-Spiralbohrer mit Kühlkanälen
High performance twist drills with internal coolant



Record 4 S i aus Vollhartmetall
Solid carbide



Innenliegende Kühlkanäle
internal coolant



Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 /5
4,0	74	36	22	36	6	●
4,2	74	36	21	36	6	●
5,0	82	44	30	36	6	●
5,5	82	44	30	36	6	●
6,0	82	44	30	36	6	●
6,5	91	53	37	36	8	●
6,8	91	53	37	36	8	●
7,0	91	53	37	36	8	●
7,5	91	53	37	36	8	●
8,0	91	53	37	36	8	●
8,5	103	61	43	40	10	●
9,0	103	61	43	40	10	●
10,0	103	61	43	40	10	●
10,2	118	71	51	45	12	●
10,5	118	71	51	45	12	●
11,0	118	71	51	45	12	●
11,5	118	71	51	45	12	●
12,0	118	71	51	45	12	●
12,5	124	77	56	45	14	●
13,0	124	77	56	45	14	●
14,0	124	77	56	45	14	●
15,0	133	83	60	48	16	●
15,5	133	83	60	48	16	●
16,0	133	83	60	48	16	●
17,0	143	93	69	48	18	●
17,5	143	93	69	48	18	●
18,0	143	93	69	48	18	●
19,5	153	101	76	50	20	●
20,0	153	101	76	50	20	●

Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 /5

● Standardartikel / Items available ex stock

ILIX NORM

RECORD 4 Si

EINHEITSSCHAFT / UNIFIED SHANK

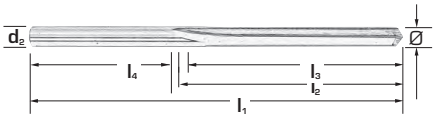
DIN 6535 HA
Hochleistungs-Spiralbohrer mit Kühlkanälen
High performance twist drills with internal coolant



Record 4 S i **aus Vollhartmetall**
Solid carbide



Innenliegende Kühlkanäle
internal coolant



Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 /7
5,0	98	60	46	36	6	●
6,0	98	60	46	36	6	●
7,0	114	76	60	36	8	●
8,0	114	76	60	36	8	●
9,0	134	92	74	40	10	●
10,0	134	92	74	40	10	●
11,0	155	108	88	45	12	●
12,0	155	108	88	45	12	●
14,0	172	125	104	45	14	●
15,0	193	143	120	48	16	●
16,0	193	143	120	48	16	●
17,0	210	160	136	48	18	●
17,5	210	160	136	48	18	●
18,0	210	160	136	48	18	●
20,0	229	177	152	50	20	●

Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 /7

● Standardartikel / Items available ex stock

ILIX NORM

RECORD 4 Si

EINHEITSSCHAFT / UNIFIED SHANK

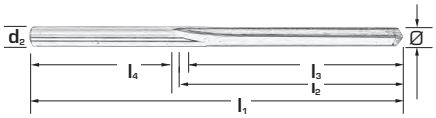
DIN 6535 HA
Hochleistungs-Spiralbohrer mit Kühlkanälen
High performance twist drills with internal coolant



Record 4 S i **aus Vollhartmetall**
Solid carbide



Innenliegende Kühlkanäle
internal coolant



Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 /L
5,0	121	82	68	36	6	●
5,5	121	82	68	36	6	●
6,0	121	82	68	36	6	●
6,5	146	106	90	36	8	●
6,8	146	106	90	36	8	●
7,0	146	106	90	36	8	●
7,5	146	106	90	36	8	●
8,0	146	106	90	36	8	●
8,5	175	130	112	40	10	●
9,0	175	130	112	40	10	●
10,0	175	130	112	40	10	●
10,2	209	159	139	45	12	●
10,5	209	159	139	45	12	●
11,0	209	159	139	45	12	●
11,5	209	159	139	45	12	●
12,0	209	159	139	45	12	●
12,5	233	183	162	45	14	●
13,0	233	183	162	45	14	●
14,0	233	183	162	45	14	●
15,0	260	207	184	48	16	●
16,0	260	207	184	48	16	●
17,0	284	231	207	48	18	●
18,0	284	231	207	48	18	●
20,0	308	255	230	50	20	●

Typ / Type	4 Si
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 20F

Ø mm m7	l_1 mm	l_2 mm	l_3 mm	l_4 mm	d_2 h6	6040 /L

● Standardartikel / Items available ex stock

RECORD **STL**

Rekord STL Vollhartmetallbohrer bieten die höchsten Spanleistungen in Stahl und Gusseisenwerkstoffe.

Record STL solid carbide drills offer the highest metal removal rates in steel and cast iron materials.



GEOMETRIE STL
Geometry STL

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

EINZIGARTIGES NUTENPROFIL
Unique flute design

GROSSER SPANRAUM FÜR EINE EFFIZIENTE UND SCHNELLE SPANABFUHR
Large chip pockets for an efficient and fast chip evacuation

QUALITÄT K30F
Quality K30F

VHM FEINSTKORN K30F MIT TF MEHRLAGEN BESCHICHTUNG IN TIALN FUTURA PLUS PVD SORGT FÜR EINE HERVORRAGENDE VERSCHLEISSFESTINGKEIT, NIEDRIGE REIBUNG UND STABILITÄT AUCH IN DER MINIMALMENGENSCHMIERUNG (MMS) ANWENDUNG
Solid carbide micro-grain K30F with TF multilayer coating in TiAlN Futura Plus PVD ensures excellent wear resistance, low-friction and stability even in minimum quantity lubrication (MQL) applications

ILIX® PRECISION

DIN 6537L

RECORD STL

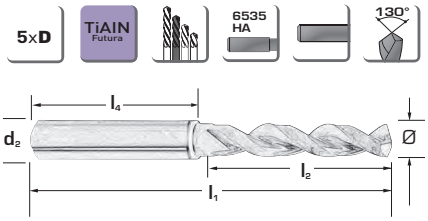
EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA
Hochleistungs-Spiralbohrer, lange Ausführung / High performance twist, long series



Record STL

aus Vollhartmetall, Solid carbide



Typ / Type	STL
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6236 TF
3,0	66	28	36	6	●
3,3	66	28	36	6	●
3,5	66	28	36	6	●
4,0	74	36	36	6	●
4,2	74	36	36	6	●
4,5	74	36	36	6	●
5,0	82	44	36	6	●
5,5	82	44	36	6	●
6,0	82	44	36	6	●
6,5	91	53	36	8	●
6,8	91	53	36	8	●
7,0	91	53	36	8	●
7,5	91	53	36	8	●
8,0	91	53	36	8	●
8,5	103	61	40	10	●
9,0	103	61	40	10	●
9,5	103	61	40	10	●
10,0	103	61	40	10	●
10,2	118	71	45	12	●
10,5	118	71	45	12	●
11,0	118	71	45	12	●
11,5	118	71	45	12	●
12,0	118	71	45	12	●

Typ / Type	STL
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6236 TF

● Standardartikel / Items available ex stock

DIN 338

GAMBO CILINDRICO / STRAIGHT SHANK

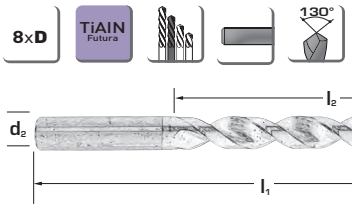
RECORD STL

Hochleistungs-Spiralbohrer, lange Ausführung
High performance twist drills, long series



Record STL

aus Vollhartmetall, Solid carbide



Typ / Type	STL
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6238 TF
3,0	61	33	3,0	●
3,1	65	36	3,1	●
3,2	65	36	3,2	●
3,3	65	36	3,3	●
3,4	70	39	3,4	●
3,5	70	39	3,5	●
3,7	70	39	3,7	●
3,8	75	43	3,8	●
4,0	75	43	4,0	●
4,2	75	43	4,2	●
4,3	80	47	4,3	●
4,5	80	47	4,5	●
4,7	80	47	4,7	●
4,8	86	52	4,8	●
5,0	86	52	5,0	●
5,1	86	52	5,1	●
5,2	86	52	5,2	●
5,5	93	57	5,5	●
5,8	93	57	5,8	●
6,0	93	57	6,0	●
6,1	101	63	6,1	●
6,5	101	63	6,5	●
6,6	101	63	6,6	●
6,8	109	69	6,8	●
7,0	109	69	7,0	●
7,5	109	69	7,5	●
7,8	117	75	7,8	●
8,0	117	75	8,0	●
8,1	117	75	8,1	●
8,5	117	75	8,5	●
9,0	125	81	9,0	●
9,5	125	81	9,5	●
10,0	133	87	10,0	●
10,2	133	87	10,2	●
10,5	133	87	10,5	●
11,0	142	94	11,0	●
11,5	142	94	11,5	●
12,0	151	101	12,0	●

Typ / Type	STL
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

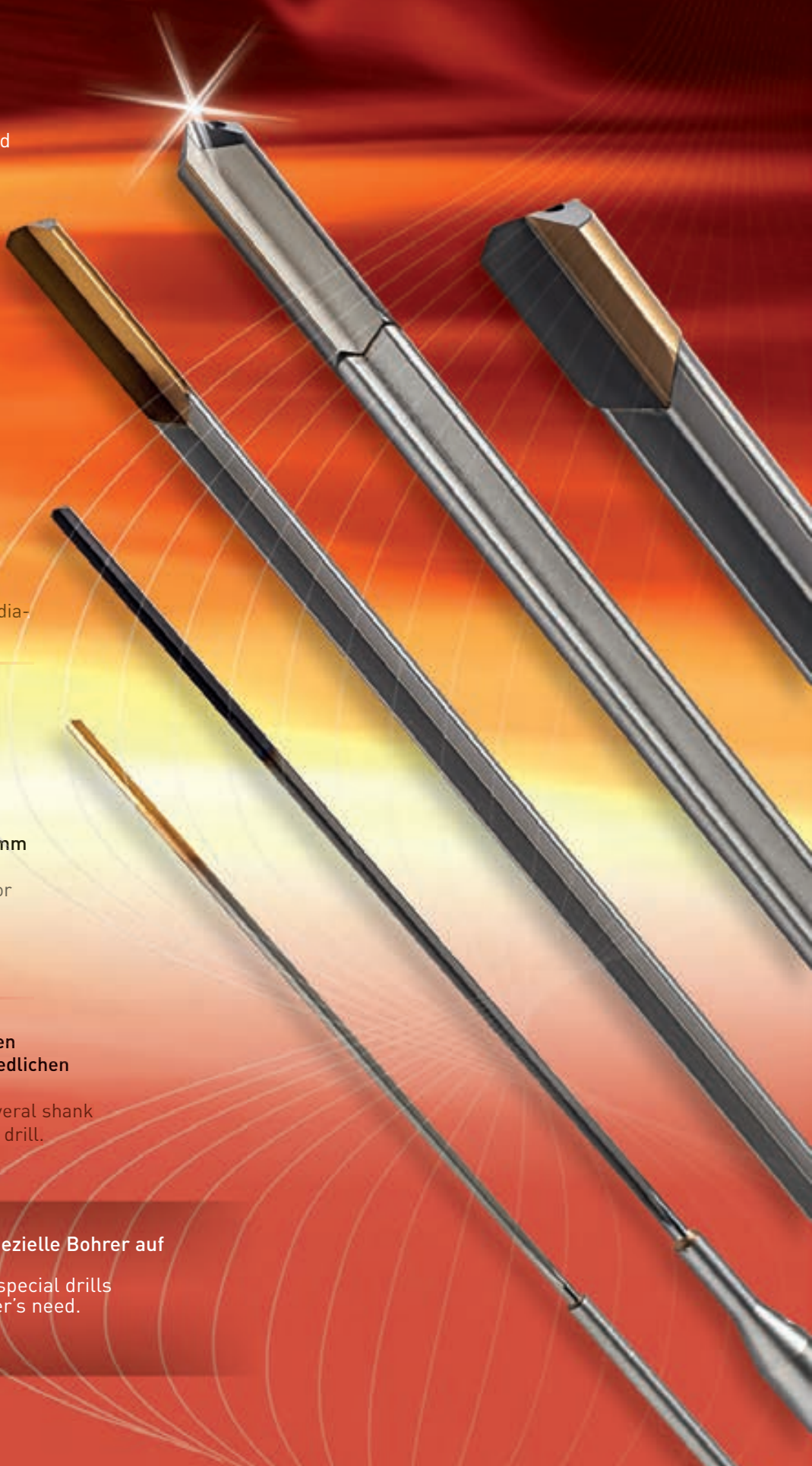
Ø mm h7	l_1 mm	l_2 mm	d_2 h6	6238 TF

● Standardartikel / Items available ex stock

Einlippenbohrer
Gun drills

ILIX liefert auch Einlippenbohrer auf Anfrage in VHM oder mit Hartmetall gelöteten Bohrkopf.

ILIX can provide gun drills for deep hole on demand, both in solid carbide and with carbide brazed head.



Produkt Typen
Types of products

SONDERANSCHLIFF
SINGLE POINT DRILLS

Mit verschiedenen Schneidgeometrien je nach Werkstoff. Von Bohrdurchmesser 0.5 mm bis 50 mm.
With different cutting geometries, depending on workpiece material. This kind of drills is available from diameter 0.5 mm to 50 mm.

ZWEI NUTEN MIT DOPPELTER FÜHRUNGSFASE.
TWO FLUTED DRILLS

Geeignet für höhere Vorschübe. Dieser Bohrer eignet sich für kurzspanige Materialien. Durchmesserbereich 4 mm bis 25 mm
They allow you to get a better feed rate. This kind of drills is suitable for short–chip materials. It's available a range from diameter 4 mm to 25 mm.

Beide Ausführungen sind mit einigen Schaftausführungen und unterschiedlichen Längen erhältlich.
Both versions are available with several shank fixtures and different lenghts of the drill.

Darüber hinaus ist es möglich, spezielle Bohrer auf Anfrage zu bekommen.
Furthermore, it is possible to get special drills on request - according to customer's need.

RECORD **STL i**

Rekord STLi Vollhartmetallbohrer bieten die höchsten Spanleistungen in Stahl,Gusseisenwerkstoffe und Titanlegierungen. Record STLi VHM mit innen Kühlung sind erhältlich in längen 7/8xD.

Record STLi solid carbide drills offer the highest metal removal rates in steel, stainless steel ,cast iron materials and titanium alloys.
Record STLi solid carbide drills are available with internal coolant in 7/8xD lengths.



GEOMETRIE STL
Geometry STL

NIEDRIGER DRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities.

EINZIGARTIGES NUTENPROFIL
Unique flute design

GROSSER SPANRAUM FÜR EINE EFFIZIENTE UND SCHNELLE SPANABFUHR
Large chip pockets for an efficient and fast chip evacuation

QUALITÄT K30F
Quality K30F

VHM FEINSTKORN K30F MIT TEIL TP BOHRSPITZEN BESCHICHTUNG IN PVD SORGT FÜR NIEDRIGE REIBUNG UND STABILITÄT AUCH IN DER MINIMALMENGENSCHMIERUNG (MMS) ANWENDUNG
Solid carbide micro-grain K30F with partial TP drill point coating in PVD Tin ensures low-friction and stability even in minimum quantity lubrication (MQL) applications

ILIX® PRECISION

ILIX NORM

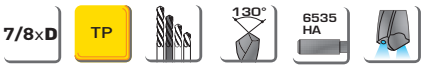
RECORD STLi



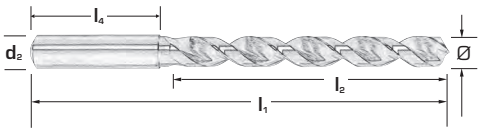
Ähnlich / similar **DIN 338**
Einheitsschaft / Unified shank
DIN 6535 HA
Hochleistungs-Spiralbohrer mit innenliegenden Kühlkanälen
High performance twist drills with internal coolant

Record STL i

aus Vollhartmetall mit Kopfbeschichtung TiN
Solid carbide, with head coating TiN



Innenliegende Kühlkanäle
internal coolant



Typ / Type	STLi
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6080 TP
5,0	101	63	36	6	●
5,1	101	63	36	6	●
5,2	101	63	36	6	●
5,5	101	63	36	6	●
5,8	101	63	36	6	●
6,0	101	63	36	6	●
6,1	117	79	36	8	●
6,5	117	79	36	8	●
6,6	117	79	36	8	●
6,8	117	79	36	8	●
7,0	117	79	36	8	●
7,5	117	79	36	8	●
7,8	117	79	36	8	●
8,0	117	79	36	8	●
8,1	133	91	40	10	●
8,5	133	91	40	10	●
9,0	133	91	40	10	●
9,5	133	91	40	10	●
10,0	133	91	40	10	●
10,2	151	104	45	12	●
10,5	151	104	45	12	●
11,0	151	104	45	12	●
11,5	151	104	45	12	●
12,0	151	104	45	12	●

Typ / Type	STLi
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6080 TP

● Standardartikel / Items available ex stock

ILIX NORM

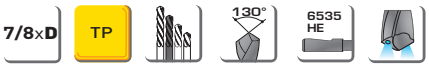
RECORD STLi



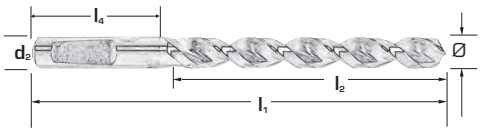
Ähnlich / similar **DIN 338**
Einheitsschaft / Unified shank
DIN 6535 HE
Hochleistungs-Spiralbohrer mit innenliegenden Kühlkanälen
High performance twist drills with internal coolant

Record STL i

aus Vollhartmetall mit Kopfbeschichtung TiN
Solid carbide, with head coating TiN



Innenliegende Kühlkanäle
internal coolant



Typ / Type	STLi
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6081 TP
5,0	101	63	36	6	●
5,1	101	63	36	6	●
5,2	101	63	36	6	●
5,5	101	63	36	6	●
5,8	101	63	36	6	●
6,0	101	63	36	6	●
6,1	117	79	36	8	●
6,5	117	79	36	8	●
6,6	117	79	36	8	●
6,8	117	79	36	8	●
7,0	117	79	36	8	●
7,5	117	79	36	8	●
7,8	117	79	36	8	●
8,0	117	79	36	8	●
8,1	133	91	40	10	●
8,5	133	91	40	10	●
9,0	133	91	40	10	●
9,5	133	91	40	10	●
10,0	133	91	40	10	●
10,2	151	104	45	12	●
10,5	151	104	45	12	●
11,0	151	104	45	12	●
11,5	151	104	45	12	●
12,0	151	104	45	12	●

Typ / Type	STLi
Schneidrichtung Cutting direction	
Schneidstoff / Material	K 30F

Ø mm h7	l_1 mm	l_2 mm	l_4 mm	d_2 h6	6081 TP

● Standardartikel / Items available ex stock

RECORD **3 S - 3 SX**

Rekord 3S Vollhartmetallbohrer sind ideal für hohe Zerspanungsleistung und bieten ausgezeichnete Lochqualität in kurzspanenden Werkstoffen wie Grauguss, Sphäroguss Stahl, Aluminium, sowie kurze Bohrtiefen in Titanlegierungen.

Record 3S solid carbide drills are ideal for high metal removal rates and offer excellent hole quality in short chipping materials such as, grey cast iron, ductile iron and aluminium.





DREI SCHNEIDEN FÜR EINE HÖHERE VORSCHUBGESCHWINDIGKEIT ALS MIT EINEM ZWEISCHNEIDIGEN BOHRER
Three cutting edges for a higher feed rate than with two edged drills.

DREI GROSSE SPANNUTEN FÜR EINE SCHNELLE SPANABFUHR
Three large chip pockets for a fast chip evacuation

DREI FÜHRUNGSFASEN LIEFERN BESSERE LOCHQUALITÄT ALS ZWEI FÜHRUNGSFASEN- BOHRER
Three margin lands deliver better hole quality than two-flutes drills.

QUALITÄT TF MIT TIALN-BESCHICHTUNG, VERBESSERT DIE VERSCHLEISSFESTIGKEIT BEI HOHEN SCHNITTGESCHWINDIGKEITEN
Quality TF with TiAlN coating, improves wear resistance at high cutting speeds.

DIE UNBESCHICHTETE K10 KLASSE HILFT DIE AUFBAUSCHNEIDE ZU VERHINDERN. ZUM BOHREN IN ALUMINIUM UND HOCHLEGIERTE STÄHLE
The uncoated K10 grade helps to prevent build-up edge (BUE) in drilling aluminium and high temperature alloys

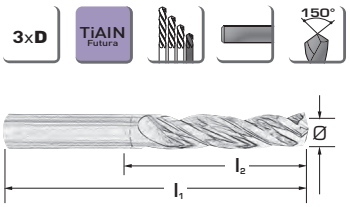
ILIX® PRECISION

DIN 1897

EXTRA KURZ / STUB LENGTH

Hochleistungs-Spiralbohrer mit 3 Nuten und Zylinderschaft
High performance twist drills with 3 flutes and straight shank

Record 3 S aus Vollhartmetall / Solid carbide





Typ / Type			3 S	3 S
Schneidrichtung Cutting direction				
Schneidstoff / Material			K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6126 K	6126 TF
3,0	46	16	●	●
3,1	49	18	●	●
3,2	49	18	●	●
3,3	49	18	●	●
3,4	52	20	●	●
3,5	52	20	●	●
3,6	52	20	●	●
3,7	52	20	●	●
3,8	55	22	●	●
3,9	55	22	●	●
4,0	55	22	●	●
4,1	55	22	●	●
4,2	55	22	●	●
4,3	58	24	●	●
4,4	58	24	●	●
4,5	58	24	●	●
4,6	58	24	●	●
4,7	58	24	●	●
4,8	62	26	●	●
4,9	62	26	●	●
5,0	62	26	●	●
5,1	62	26	●	●
5,2	62	26	●	●
5,3	62	26	●	●
5,4	66	28	●	●
5,5	66	28	●	●
5,6	66	28	●	●
5,7	66	28	●	●
5,8	66	28	●	●
5,9	66	28	●	●
6,0	66	28	●	●
6,1	70	31	●	●
6,2	70	31	●	●
6,3	70	31	●	●
6,4	70	31	●	●
6,5	70	31	●	●
6,6	70	31	●	●
6,7	70	31	●	●
6,8	74	34	●	●
6,9	74	34	●	●

Typ / Type			3 S	3 S
Schneidrichtung Cutting direction				
Schneidstoff / Material			K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6126 K	6126 TF
7,0	74	34	●	●
7,1	74	34	●	●
7,2	74	34	●	●
7,3	74	34	●	●
7,4	74	34	●	●
7,5	74	34	●	●
7,6	79	37	●	●
7,7	79	37	●	●
7,8	79	37	●	●
7,9	79	37	●	●
8,0	79	37	●	●
8,1	79	37	●	●
8,2	79	37	●	●
8,3	79	37	●	●
8,4	79	37	●	●
8,5	79	37	●	●
8,6	84	40	●	●
8,7	84	40	●	●
8,8	84	40	●	●
8,9	84	40	●	●
9,0	84	40	●	●
9,1	84	40	●	●
9,2	84	40	●	●
9,3	84	40	●	●
9,4	84	40	●	●
9,5	84	40	●	●
9,6	89	43	●	●
9,7	89	43	●	●
9,8	89	43	●	●
9,9	89	43	●	●
10,0	89	43	●	●
10,1	89	43	●	●
10,2	89	43	●	●
10,3	89	43	●	●
10,4	89	43	●	●
10,5	89	43	●	●
10,6	89	43	●	●
10,7	95	47	●	●
10,8	95	47	●	●
10,9	95	47	●	●

● Standardartikel / Items available ex stock

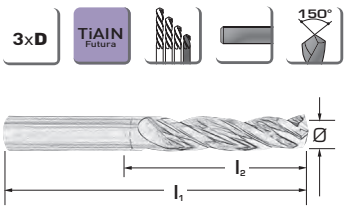
DIN 1897

RECORD 3S

EXTRA KURZ / STUB LENGTH

Hochleistungs-Spiralbohrer mit 3 Nuten und Zylinderschaft
High performance twist drills with 3 flutes and straight shank

Record 3 S aus Vollhartmetall / Solid carbide





Typ / Type	3 S	3 S
Schneidrichtung Cutting direction		
Schneidstoff / Material	K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6126 K	6126 TF
11,0	95	47	●	●
11,1	95	47	●	●
11,2	95	47	●	●
11,3	95	47	●	●
11,4	95	47	●	●
11,5	95	47	●	●
11,6	95	47	●	●
11,7	95	47	●	●
11,8	95	47	●	●
11,9	102	51	●	●
12,0	102	51	●	●
12,1	102	51	●	●
12,2	102	51	●	●
12,3	102	51	●	●
12,4	102	51	●	●
12,5	102	51	●	●
12,6	102	51	●	●
12,7	102	51	●	●
12,8	102	51	●	●
12,9	102	51	●	●
13,0	102	51	●	●
13,1	102	51	●	●
13,2	102	51	●	●
13,3	107	54	●	●
13,4	107	54	●	●
13,5	107	54	●	●
13,6	107	54	●	●
13,7	107	54	●	●
13,8	107	54	●	●
13,9	107	54	●	●
14,0	107	54	●	●
14,1	111	56	●	●
14,2	111	56	●	●
14,3	111	56	●	●
14,4	111	56	●	●
14,5	111	56	●	●
14,6	111	56	●	●
14,7	111	56	●	●
14,8	111	56	●	●
14,9	111	56	●	●

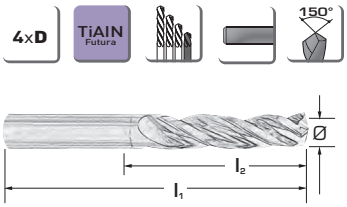
Typ / Type	3 S	3 S
Schneidrichtung Cutting direction		
Schneidstoff / Material	K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6126 K	6126 TF
15,0	111	56	●	●
15,1	115	58	●	●
15,2	115	58	●	●
15,3	115	58	●	●
15,4	115	58	●	●
15,5	115	58	●	●
15,6	115	58	●	●
15,7	115	58	●	●
15,8	115	58	●	●
15,9	115	58	●	●
16,0	115	58	●	●
16,5	119	60	●	●
17,0	119	60	●	●
17,5	123	62	●	●
18,0	123	62	●	●
18,5	127	64	●	●
19,0	127	64	●	●
19,5	131	66	●	●
20,0	131	66	●	●

● Standardartikel / Items available ex stock

ILIX NORM

Hochleistungs-Spiralbohrer mit 3 Nuten und Zylinderschaft
High performance twist drills with 3 flutes and straight shank

Record 3 S aus Vollhartmetall / Solid carbide





Typ / Type	3 S	3 S	3 S
Schneidrichtung Cutting direction			
Schneidstoff / Material	K10/20	K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6123 K	6123 TF	6127 K*
3,0	46	22	●	●	●
3,1	49	24	●	●	●
3,2	49	24	●	●	●
3,3	49	24	●	●	●
3,4	52	27	●	●	●
3,5	52	27	●	●	●
3,6	52	27	●	●	●
3,7	52	27	●	●	●
3,8	55	30	●	●	●
3,9	55	30	●	●	●
4,0	55	30	●	●	●
4,1	55	30	●	●	●
4,2	55	30	●	●	●
4,3	58	32	●	●	●
4,4	58	32	●	●	●
4,5	58	32	●	●	●
4,6	58	32	●	●	●
4,7	58	32	●	●	●
4,8	62	35	●	●	●
4,9	62	35	●	●	●
5,0	62	35	●	●	●
5,1	62	35	●	●	●
5,2	62	35	●	●	●
5,3	62	35	●	●	●
5,4	66	39	●	●	●
5,5	66	39	●	●	●
5,6	66	39	●	●	●
5,7	66	39	●	●	●
5,8	66	39	●	●	●
5,9	66	39	●	●	●
6,0	66	39	●	●	●
6,1	70	42	●	●	●
6,2	70	42	●	●	●
6,3	70	42	●	●	●
6,4	70	42	●	●	●
6,5	70	42	●	●	●
6,6	70	42	●	●	●
6,7	70	42	●	●	●
6,8	74	42	●	●	●
6,9	74	42	●	●	●

Typ / Type	3 S	3 S	3 S
Schneidrichtung Cutting direction			
Schneidstoff / Material	K10/20	K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6123 K	6123 TF	6127 K*
7,0	74	45	●	●	●
7,1	74	45	●	●	●
7,2	74	45	●	●	●
7,3	74	45	●	●	●
7,4	74	45	●	●	●
7,5	74	45	●	●	●
7,6	79	48	●	●	●
7,7	79	48	●	●	●
7,8	79	48	●	●	●
7,9	79	48	●	●	●
8,0	79	48	●	●	●
8,1	79	48	●	●	●
8,2	79	48	●	●	●
8,3	79	48	●	●	●
8,4	79	48	●	●	●
8,5	79	48	●	●	●
8,6	84	52	●	●	●
8,7	84	52	●	●	●
8,8	84	52	●	●	●
8,9	84	52	●	●	●
9,0	84	52	●	●	●
9,1	84	52	●	●	●
9,2	84	52	●	●	●
9,3	84	52	●	●	●
9,4	84	52	●	●	●
9,5	84	52	●	●	●
9,6	89	55	●	●	●
9,7	89	55	●	●	●
9,8	89	55	●	●	●
9,9	89	55	●	●	●
10,0	89	55	●	●	●
10,1	89	55	●	●	●
10,2	89	55	●	●	●
10,3	89	55	●	●	●
10,4	89	55	●	●	●
10,5	89	55	●	●	●
10,6	89	55	●	●	●
10,7	95	60	●	●	●
10,8	95	60	●	●	●
10,9	95	60	●	●	●

* **Ausführung zur Bearbeitung von langspanendem Aluminium / Execution for drilling aluminium alloy forming long chips**

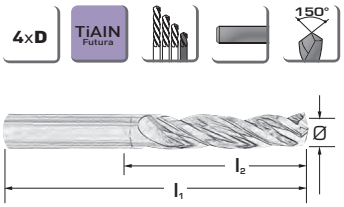
● Standardartikel / Items available ex stock

ILIX NORM

RECORD 3S

Hochleistungs-Spiralbohrer mit 3 Nuten und Zylinderschaft
High performance twist drills with 3 flutes and straight shank

Record 3 S aus Vollhartmetall / Solid carbide





Typ / Type	3S	3S	3S
Schneidrichtung Cutting direction			
Schneidstoff / Material	K10/20	K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6123 K	6123 TF	6127 K*
11,0	95	60	●	●	●
11,1	95	60	●	●	●
11,2	95	60	●	●	●
11,3	95	60	●	●	●
11,4	95	60	●	●	●
11,5	95	60	●	●	●
11,6	95	60	●	●	●
11,7	95	60	●	●	●
11,8	95	60	●	●	●
11,9	102	65	●	●	●
12,0	102	65	●	●	●
12,1	102	65	●	●	●
12,2	102	65	●	●	●
12,3	102	65	●	●	●
12,4	102	65	●	●	●
12,5	102	65	●	●	●
12,6	102	65	●	●	●
12,7	102	65	●	●	●
12,8	102	65	●	●	●
12,9	102	65	●	●	●
13,0	102	65	●	●	●
13,1	102	65	●	●	●
13,2	102	65	●	●	●
13,3	107	66	●	●	●
13,4	107	66	●	●	●
13,5	107	66	●	●	●
13,6	107	66	●	●	●
13,7	107	66	●	●	●
13,8	107	66	●	●	●
13,9	107	66	●	●	●
14,0	107	66	●	●	●
14,1	111	70	●	●	●
14,2	111	70	●	●	●
14,3	111	70	●	●	●
14,4	111	70	●	●	●
14,5	111	70	●	●	●
14,6	111	70	●	●	●
14,7	111	70	●	●	●
14,8	111	70	●	●	●
14,9	111	70	●	●	●

Typ / Type	3S	3S	3S
Schneidrichtung Cutting direction			
Schneidstoff / Material	K10/20	K10/20	K10/20
Ø mm h7	l_1 mm	l_2 mm	6123 K	6123 TF	6127 K*
15,0	111	70	●	●	●
15,1	115	73	●	●	●
15,2	115	73	●	●	●
15,3	115	73	●	●	●
15,4	115	73	●	●	●
15,5	115	73	●	●	●
15,6	115	73	●	●	●
15,7	115	73	●	●	●
15,8	115	73	●	●	●
15,9	115	73	●	●	●
16,0	115	73	●	●	●
16,5	119	73	●	●	●
17,0	119	73	●	●	●
17,5	123	76	●	●	●
18,0	123	76	●	●	●
18,5	127	76	●	●	●
19,0	127	76	●	●	●
19,5	131	79	●	●	●
20,0	131	79	●	●	●

* **Ausführung zur Bearbeitung von langspanendem Aluminium / Execution for drilling aluminium alloy forming long chips**

● Standardartikel / Items available ex stock

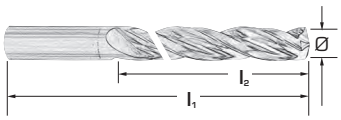
ILIX NORM

RECORD 3S

Hochleistungs-Spiralbohrer mit 3 Nuten und Zylinderschaft
High performance twist drills with 3 flutes and straight shank

Record 3 S aus Vollhartmetall / Solid carbide







Typ / Type	3S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K10/20

Ø mm h7	l_1 mm	l_2 mm	6001 K
3,0	61	22	●
3,1	65	24	●
3,2	65	24	●
3,3	65	24	●
3,5	70	27	●
3,6	70	27	●
3,7	70	27	●
3,8	75	30	●
3,9	75	30	●
4,0	75	30	●
4,1	75	30	●
4,2	75	30	●
4,3	80	32	●
4,5	80	32	●
4,6	80	32	●
4,7	80	32	●
5,0	86	35	●
5,1	86	35	●
5,2	86	35	●
5,3	86	35	■
5,4	93	39	■
5,5	93	39	●
5,7	93	39	●
5,8	93	39	●
5,9	93	39	■
6,0	93	39	●
6,2	101	42	●
6,4	101	42	■
6,5	101	42	●
6,6	101	43	●
6,7	101	43	■
6,8	109	45	●
7,0	109	45	●
7,2	109	47	●
7,4	109	48	●
7,5	109	49	●
7,8	117	51	●
7,9	117	51	■
8,0	117	52	●
8,5	117	55	●

Typ / Type	3S
Schneidrichtung Cutting direction	
Schneidstoff / Material	K10/20

Ø mm h7	l_1 mm	l_2 mm	6001 K
8,7	125	57	●
8,8	125	57	●
9,0	125	59	●
9,2	125	60	●
9,3	125	60	●
9,4	125	61	●
9,5	125	62	●
9,8	133	64	●
9,9	133	64	■
10,0	133	65	●
10,2	133	66	●
10,5	133	68	●
10,7	142	70	●
10,8	142	70	●
11,0	142	71	●
11,2	142	73	●
11,5	142	75	●
11,8	142	77	●
11,9	151	77	■
12,0	151	78	●
12,2	151	79	●
12,5	151	81	●
12,8	151	83	●
13,0	151	84	●
13,5	160	88	●
14,0	160	91	●
14,5	169	94	●
15,0	169	98	●
15,5	178	101	●
16,0	178	104	●
16,5	184	108	●
17,0	184	111	●
17,5	191	114	●
18,0	191	117	●
18,5	198	120	●
19,0	198	124	●
19,5	205	125	●
20,0	205	130	●

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 6537L

RECORD 3S

EINHEITSSCHAFT / UNIFIED SHANK

DIN 6535 HA / HE

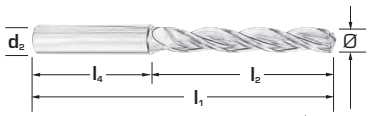
Hochleistungs-Spiralbohrer, mit 3 Nuten und Zylinderschaft, lange Ausführung

High performance twist drills, with 3 flutes and straight shank, long series



Record 3 SX aus Vollhartmetall / Solid carbide

5xD | TiAlN Futura | 6535 HA | 6535 HE | 130°



Typ / Type	3 SX	3 SX	3 SX	3 SX
Schneidrichtung Cutting direction				
Schneidstoff / Material	K 30F	K 30F	K 30F	K 30F
Ø mm h7	l1 mm	l2 mm	l4 mm	d2mm h6	6003 K	6003 TF	6002 K	6002 TF
3,00	66	28	36	6	●	●	●	●
3,15	66	28	36	6	●	●	●	●
3,30	66	28	36	6	●	●	●	●
3,50	66	28	36	6	●	●	●	●
3,70	66	28	36	6	●	●	●	●
3,80	74	36	36	6	●	●	●	●
4,00	74	36	36	6	●	●	●	●
4,20	74	36	36	6	●	●	●	●
4,30	74	36	36	6	●	●	●	●
4,45	74	36	36	6	●	●	●	●
4,50	74	36	36	6	●	●	●	●
4,65	74	36	36	6	●	●	●	●
5,00	82	44	36	6	●	●	●	●
5,50	82	44	36	6	●	●	●	●
5,55	82	44	36	6	●	●	●	●
5,75	82	44	36	6	●	●	●	●
5,90	82	44	36	6	●	●	●	●
6,00	82	44	36	6	●	●	●	●
6,50	91	53	36	8	●	●	●	●
6,55	91	53	36	8	●	●	●	●
6,80	91	53	36	8	●	●	●	●
7,00	91	53	36	8	●	●	●	●
7,25	91	53	36	8	●	●	●	●
7,40	91	53	36	8	●	●	●	●
7,50	91	53	36	8	●	●	●	●
7,55	91	53	36	8	●	●	●	●
8,00	91	53	36	8	●	●	●	●
8,50	103	61	40	10	●	●	●	●
8,75	103	61	40	10	●	●	●	●
9,00	103	61	40	10	●	●	●	●
9,30	103	61	40	10	●	●	●	●
9,40	103	61	40	10	●	●	●	●
9,50	103	61	40	10	●	●	●	●
10,00	103	61	40	10	●	●	●	●
10,20	118	71	45	12	●	●	●	●
10,50	118	71	45	12	●	●	●	●
11,00	118	71	45	12	●	●	●	●
11,20	118	71	45	12	●	●	●	●
11,30	118	71	45	12	●	●	●	●
11,50	118	71	45	12	●	●	●	●

Typ / Type	3 SX	3 SX	3 SX	3 SX
Schneidrichtung Cutting direction				
Schneidstoff / Material	K 30F	K 30F	K 30F	K 30F
Ø mm h7	l1 mm	l2 mm	l4 mm	d2mm h6	6003 K	6003 TF	6002 K	6002 TF
11,70	118	71	45	12	●	●	●	●
12,00	118	71	45	12	●	●	●	●
12,50	124	77	45	14	●	●	●	●
13,00	124	77	45	14	●	●	●	●
13,10	124	77	45	14	●	●	●	●
13,30	124	77	45	14	●	●	●	●
13,50	124	77	45	14	●	●	●	●
14,00	124	77	45	14	●	●	●	●
14,50	133	83	48	16	●	●	●	●
15,00	133	83	48	16	●	●	●	●
15,10	133	83	48	16	●	●	●	●
15,30	133	83	48	16	●	●	●	●
15,50	133	83	48	16	●	●	●	●
16,00	133	83	48	16	●	●	●	●

● Standardartikel / Items available ex stock

PKD

ILIX erweitert sein Programm um eine Diamantbeschichtung im VHM Spiralbohrerbereich um den hohen Anforderungen zu entsprechen, die in der Automobil- und Luftfahrtindustrie gefordert werden.

ILIX increases its wide range of innovative solutions for drilling adding a solid carbide drill with polycristalline diamond to face up to the new automotive and aerospace market's requirements.



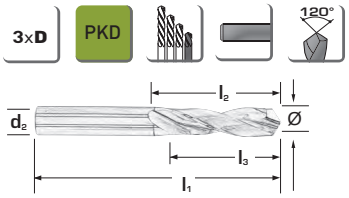
VHM - PKD BESTÜCKT
Solid carbide with PKD tipped

ILIX® PRECISION

DIN 1897

PKD

VHM Hochleistungs-Spiralbohrer mit zylinderschaft und Diamantbeschichtung
High performance drills in solid carbide with polycrystalline diamond and straight shank, stub length series





Schneidrichtung / Cutting direction					
Schneidstoff / Material					PKD
Ø mm h7	l_1 mm	l_2 mm	l_3 mm	d_2 h6	6005
3,0	46	16	12	3,0	●
3,1	49	18	14	3,1	●
3,2	49	18	14	3,2	●
3,3	49	18	14	3,3	●
3,4	52	20	15	3,4	●
3,5	52	20	15	3,5	●
3,6	52	20	15	3,6	●
3,7	52	20	15	3,7	●
3,8	55	22	17	3,8	●
3,9	55	22	17	3,9	●
4,0	55	22	17	4,0	●
4,1	55	22	17	4,1	●
4,2	55	22	17	4,2	●
4,3	52	24	18	4,3	●
4,4	52	24	18	4,4	●
4,5	52	24	18	4,5	●
4,6	52	24	18	4,6	●
4,7	52	24	18	4,7	●
4,8	62	26	20	4,8	●
4,9	62	26	20	4,9	●
5,0	62	26	20	5,0	●
5,1	62	26	20	5,1	●
5,2	62	26	20	5,2	●
5,3	62	26	20	5,3	●
5,4	66	28	21	5,4	●
5,5	66	28	21	5,5	●
5,6	66	28	21	5,6	●
5,7	66	28	21	5,7	●
5,8	66	28	21	5,8	●
5,9	66	28	21	5,9	●
6,0	66	28	21	6,0	●
6,1	70	31	23	6,1	●
6,2	70	31	23	6,2	●
6,3	70	31	23	6,3	●
6,4	70	31	23	6,4	●
6,5	70	31	23	6,5	●
7,0	74	34	25	7,0	●
7,5	74	34	25	7,5	●
8,0	79	37	27	8,0	●
8,5	79	37	27	8,5	●
9,0	84	40	29	9,0	●
9,5	84	40	29	9,5	●

Schneidrichtung / Cutting direction					
Schneidstoff / Material					PKD
Ø mm h7	l_1 mm	l_2 mm	l_3 mm	d_2 h6	6005
10,0	89	43	31	10,0	●
10,5	89	43	31	10,5	●
11,0	95	47	33	11,0	●
11,5	95	47	33	11,5	●
12,0	102	51	35	12,0	●
12,7	102	51	35	12,7	●
14,0	107	54	37	14,0	●
16,0	115	58	38	16,0	●
20,0	131	66	42	20,0	●

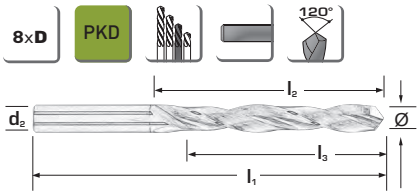
● Standardartikel / Items available ex stock

DIN 338

PKD

VHM Hochleistungs-Spiralbohrer mit zylinderschaft und Diamantbeschichtung
High performance drills in solid carbide with polycrystalline diamond and straight shank, stub length series





Schneidrichtung Cutting direction					
Schneidstoff / Material					PKD
Ø mm h7	**l_1 mm**	**l_2 mm**	**l_3 mm**	**d_2 h6**	**6007**
3,0	61	33	29	3,0	●
3,1	65	36	32	3,1	●
3,2	65	36	32	3,2	●
3,3	65	36	32	3,3	●
3,4	70	39	34	3,4	●
3,5	70	39	34	3,5	●
3,6	70	39	34	3,6	●
3,7	70	39	34	3,7	●
3,8	75	43	37	3,8	●
3,9	75	43	37	3,9	●
4,0	75	43	37	4,0	●
4,1	75	43	37	4,1	●
4,2	75	43	37	4,2	●
4,3	80	47	41	4,3	●
4,4	80	47	41	4,4	●
4,5	80	47	41	4,5	●
4,6	80	47	41	4,6	●
4,7	80	47	41	4,7	●
4,8	86	52	45	4,8	●
4,9	86	52	45	4,9	●
5,0	86	52	45	5,0	●
5,1	86	52	45	5,1	●
5,2	86	52	45	5,2	●
5,3	86	52	45	5,3	●
5,4	93	57	49	5,4	●
5,5	93	57	49	5,5	●
5,6	93	57	49	5,6	●
5,7	93	57	49	5,7	●
5,8	93	57	49	5,8	●
5,9	93	57	49	5,9	●
6,0	93	57	49	6,0	●
6,1	101	63	55	6,1	●
6,2	101	63	55	6,2	●
6,3	101	63	55	6,3	●
6,4	101	63	55	6,4	●
6,5	101	63	55	6,5	●
7,0	109	69	60	7,0	●
7,5	109	69	60	7,5	●
8,0	117	75	64	8,0	●
8,5	117	75	64	8,5	●
9,0	125	81	69	9,0	●
9,5	125	81	69	9,5	●

Schneidrichtung Cutting direction					
Schneidstoff / Material					PKD
Ø mm h7	**l_1 mm**	**l_2 mm**	**l_3 mm**	**d_2 h6**	**6007**
10,0	133	87	74	10,0	●
10,5	133	87	74	10,5	●
11,0	142	94	80	11,0	●
11,5	142	94	80	11,5	●
12,0	151	101	85	12,0	●
12,7	151	101	85	12,7	●
14,0	160	108	90	14,0	●
16,0	178	120	100	16,0	●
20,0	205	140	115	20,0	●

● Standardartikel / Items available ex stock

RECORD **AG Drill**

Das Record AG Drill system wurde erweiterte für Bohrungstiefen 3xD, 5xD und 7xD im Bohrdurchmesser bis 40 mm. Für die schwierigsten Anwendungen sind Wechselplatten Typen verfügbar.

The Record AG Drill system offers extended lengths and drilling diameters. Hole lengths 3xD, 5xD and 7xD are standard cover drilling diameters till 40 mm. Various grades are available for the most difficult applications.





WECHSELPLATTEN GEOMETRIE
Insert geometry

GERINGE BOHRDRUCK VERHINDERT WERKSTÜCKDURCHBIEGUNG
Low thrust prevents workpiece flexing

EXZELLENTE ZENTRIERFÄHIGKEIT
Excellent centring capabilities

ILIX® PRECISION

ILIX NORM

EINHEITSSCHAFT / UNIFIED SHANK

DIN 1835 E
Halter für Wechselplatten aus VHM
Body for solid carbide inserts

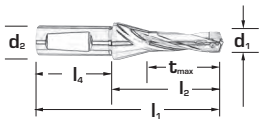
Record AG Drill

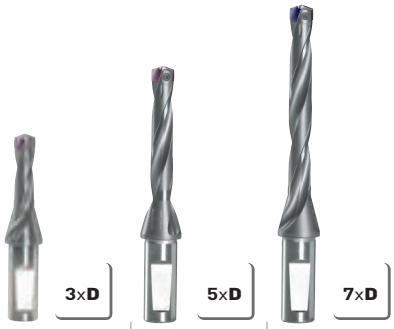
Halter / Body **(Ø 12,00 - Ø 32,00)**



Innenliegende Kühlkanäle
internal coolant

NEW Ø





Schneidrichtung
Cutting direction



				3xØ			5xØ			7xØ					
d_1 mm	Misura Corpo Body size	l_4 mm	d_{2mm} h6	l_1 mm	l_2 mm	t_{max} mm	l_1 mm	l_2 mm	t_{max} mm	l_1 mm	l_2 mm	t_{max} mm	503D	505D	507D
12,00 - 12,40	A	48	16	111	59	42	139	87	70	167	115	98	●	●	●
12,50 - 12,90	B	48	16	111	59	42	139	87	70	167	115	98	●	●	●
13,00 - 13,40	C	48	16	111	59	42	139	87	70	167	115	98	●	●	●
13,50 - 13,90	D	48	16	111	59	42	139	87	70	167	115	98	●	●	●
14,00 - 14,40	E	50	20	122	68	48	154	100	80	186	132	112	●	●	●
14,50 - 14,90	F	50	20	122	68	48	154	100	80	186	132	112	●	●	●
15,00 - 15,40	G	50	20	122	68	48	154	100	80	186	132	112	●	●	●
15,50 - 15,90	H	50	20	122	68	48	154	100	80	186	132	112	●	●	●
16,00 - 16,40	AA	48	20	130	76	54	166	112	90	202	148	126	●	●	●
*16,50 - 16,90	AB	50	20	130	76	54	166	112	90	202	148	126	●	●	●
*17,00 - 17,40	AC	50	20	130	76	54	166	112	90	202	148	126	●	●	●
*17,50 - 17,90	AD	50	20	130	76	54	166	112	90	202	148	126	●	●	●
*18,00 - 18,40	AE	50	20	138	84	60	178	124	100	218	164	140	●	●	●
*18,50 - 18,90	AF	50	20	138	84	60	178	124	100	218	164	140	●	●	●
*19,00 - 19,40	AG	50	20	138	84	60	178	124	100	218	164	140	●	●	●
*19,50 - 19,90	AH	50	20	138	84	60	178	124	100	218	164	140	●	●	●
*20,00 - 20,40	AI	56	25	153	93	66	197	137	110	241	181	154	●	●	●
*20,50 - 20,90	AJ	56	25	153	93	66	197	137	110	241	181	154	●	●	●
*21,00 - 21,40	AK	56	25	153	93	66	197	137	110	241	181	154	●	●	●
*21,50 - 21,90	AL	56	25	153	93	66	197	137	110	241	181	154	●	●	●
*22,00 - 22,40	AM	56	25	153	93	66	197	137	110	241	181	154	●	●	●
*22,50 - 22,90	AN	56	25	153	93	66	197	137	110	241	181	154	●	●	●
*23,00 - 23,40	AO	56	25	160	100	72	209	149	120	257	197	168	●	●	●
*23,50 - 23,90	AP	56	25	160	100	72	209	149	120	257	197	168	●	●	●
*24,00 - 24,40	AQ	56	25	160	100	72	209	149	120	257	197	168	●	●	●
*24,50 - 24,90	AR	56	25	170	110	78	222	162	130	274	214	182	●	●	●
*25,00 - 25,40	AS	56	25	170	110	78	222	162	130	274	214	182	●	●	●
*25,50 - 25,90	AT	60	32	170	110	78	222	162	130	274	214	182	●	●	●
*26,00 - 26,40	AU	60	32	182	118	84	238	174	140	294	230	196	●	●	●
*26,50 - 26,90	AV	60	32	182	118	84	238	174	140	294	230	196	●	●	●
*27,00-27,40	AW	60	32	182	118	84	238	174	140	294	230	196	●	●	●
*27,50 - 27,90	AX	60	32	182	118	84	238	174	140	294	230	196	●	●	●
*28,00 - 28,40	AY	60	32	190	126	90	250	186	150	310	246	210	●	●	●
*28,50 - 28,90	AZ	60	32	190	126	90	250	186	150	310	246	210	●	●	●
*29,00 - 29,40	BA	60	32	190	126	90	250	186	150	310	246	210	●	●	●
*29,50 - 29,90	BB	60	32	190	126	90	250	186	150	310	246	210	●	●	●
*30,00 - 30,40	BC	60	32	198	134	96	262	198	160	326	262	224	●	●	●
*30,50 - 30,90	BD	60	32	198	134	96	262	198	160	326	262	224	●	●	●
*31,00 - 31,40	BE	60	32	198	134	96	262	198	160	326	262	224	●	●	●
*31,50 - 31,90	BF	60	32	198	134	96	262	198	160	326	262	224	●	●	●
*32,00	BG	60	32	198	134	96	262	198	160	326	262	224	●	●	●

● Standardartikel / Items available ex stock * **NEW Ø**

ILIX NORM

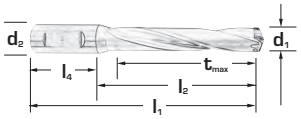
EINHEITSSCHAFT / UNIFIED SHANK

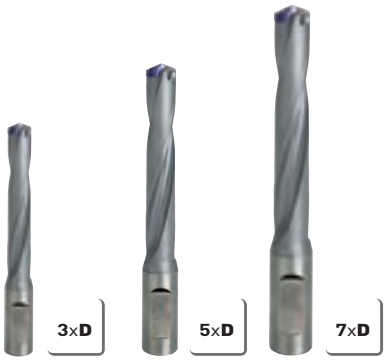
DIN 1835 E
Halter für Wechselplatten aus VHM
Body for solid carbide inserts

Record AG Drill
Halter / Body **(Ø 16,00 - Ø 40,00)**



Innenliegende Kühlkanäle
internal coolant





Schneidrichtung
Cutting direction

				3xØ			5xØ			7xØ					
d_1 mm	Misura Corpo Body size	l_4 mm	d_{2mm} h6	l_1 mm	l_2 mm	t_{max} mm	l_1 mm	l_2 mm	t_{max} mm	l_1 mm	l_2 mm	t_{max} mm	603D	605D	607D
16,00 - 17,00	A	50	20	130	76	54	166	112	90	202	148	126	●	●	●
17,10 - 17,90	B	50	20	130	76	54	166	112	90	202	148	126	●	●	●
18,00 - 19,00	C	50	20	138	84	60	178	124	100	218	164	140	●	●	●
19,10 - 20,00	D	50	20	138	84	60	178	124	100	218	164	140	●	●	●
20,10 - 21,00	E	56	25	153	93	66	197	137	110	241	181	154	●	●	●
21,10 - 22,50	F	56	25	153	93	66	197	137	110	241	181	154	●	●	●
22,60 - 24,00	G	56	25	161	101	72	209	149	120	257	197	168	●	●	●
24,10 - 25,50	H	56	25	170	110	78	222	162	130	274	214	182	●	●	●
25,60 - 27,50	I	60	32	182	118	84	238	174	140	294	230	196	●	●	●
27,60 - 29,50	L	60	32	190	126	90	250	186	150	310	246	210	●	●	●
29,60 - 32,00	M	60	32	198	134	96	262	198	160	326	262	224	●	●	●
32,10 - 34,50	N	60	32	206	142	102	274	210	170	342	278	238	●	●	●
34,60 - 37,50	O	60	32	218	154	114	292	228	190	366	302	266	●	●	●
37,60 - 40,00	P	60	32	231	167	120	311	247	200	391	327	280	●	●	●

● Standardartikel / Items available ex stock

RECORD **AG Drill**

WECHSELPLATTEN / INSERTS

Spitzengeometrien und Beschichtungen der Wechselplatten sind für eine Vielzahl von Anwendungen, sowohl in metallischen als auch in nicht metallischen Werkstoffen, kurz- oder langspanend ausgelegt und führen, auch durch ihre selbstzentrierende Auslegung, zu besten Ergebnissen.

Geometries and coatings of the inserts are designed for machining a big variety of ferrous and non ferrous materials, short and long chipping. The special design and the self centering characteristics produce satisfying results in all applications.

CM		**TF**	**DM**		**TX**
	Grauguss To work Cast iron			Rostfreier Stahl Stainless steel	
GM		**TF**	**SM**		**TL**
	Stahl und Stahlguss Grauguss Steel and cast iron			Ne Metalle Non-ferrous and soft materials	

ILIX® PRECISION

ILIX NORM

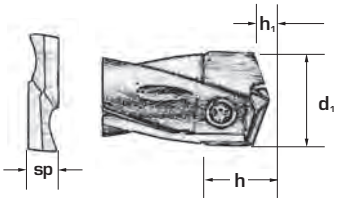
WECHSELPLATTEN / INSERTS

Record AG Drill
(Ø 12,00 - Ø 32,00)

TiAlN Futura | TiALCN | TiN+ WCC | 140°

NEW Ø







Record AG Drill				GM	DM	SM	CM		
Schneidstoff / Material				K 30F	K 30F	K 30F	K 30F		
d_1 mm m7	**h mm**	**h_1 mm**	**sp mm**	**50GM TF**	**50DM TX**	**50SM TL**	**50CM TF**	**Schraube** Screw	**Schlüssel** Screw driver
12,0	7,8	2,2	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,1	7,8	2,2	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,2	7,8	2,2	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,3	7,8	2,2	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,4	7,8	2,2	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,5	7,8	2,3	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,6	7,8	2,3	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,7	7,8	2,3	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,8	7,8	2,3	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
12,9	7,8	2,3	5,0	●	●	●	●	VTA M2,2 x 0,45	KY T 6
13,0	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,1	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,2	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,3	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,4	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,5	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,6	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,7	8,6	2,4	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,8	8,6	2,5	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
13,9	8,6	2,5	5,5	●	●	●	●	VTB M2,5 x 0,45	KY T 8
14,0	9,7	2,5	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,1	9,7	2,5	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,2	9,7	2,5	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,3	9,7	2,6	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,4	9,7	2,6	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,5	9,7	2,6	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,6	9,7	2,7	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,7	9,7	2,7	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,8	9,7	2,7	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
14,9	9,7	2,7	6,0	●	●	●	●	VTC M3 x 0,5	KY T 8
15,0	9,9	2,7	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,1	9,9	2,7	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,2	9,9	2,8	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,3	9,9	2,8	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,4	9,9	2,8	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,5	9,9	2,8	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,6	9,9	2,8	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,7	9,9	2,9	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,8	9,9	2,9	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9
15,9	9,9	2,9	6,0	●	●	●	●	VTD M3 x 0,5	KY T 9

GM: Stahl und Stahlguss Grauguss / general applications – **DM:** Rostfreier Stahl / difficult applications
SM: Ne Metalle / for soft materials - **CM:** Grauguss / To work Cast iron

● Standardartikel / Items available ex stock

ILIX NORM

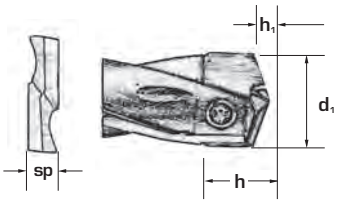
WECHSELPLATTEN / INSERTS

Record AG Drill
(Ø 12,00 - Ø 32,00)

TiAlN Futura | TiALCN | TiN+ WCC | 140°

NEW Ø







Record AG Drill				GM	DM	SM	CM		
Schneidstoff / Material				K 30F	K 30F	K 30F	K 30F		
d_1 mm m7	h mm	h_1 mm	sp mm	50GM TF	50DM TX	50SM TL	50CM TF	Schraube Screw	Schlüssel Screw driver
*16	11,1	3,1	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,1	11,1	3,1	7	●	●	●	●	VTD M3 x 0,5	KY T 9
◊16,15	11,1	3,1	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,2	11,1	3,1	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,3	11,1	3,1	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,4	11,1	3,1	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,5	11,1	3,2	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,6	11,1	3,2	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,7	11,1	3,2	7	●	●	●	●	VTD M3 x 0,5	KY T 9
◊16,75	11,1	3,2	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,8	11,1	3,2	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*16,9	11,1	3,2	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*17	11,1	3,2	7	●	●	●	●	VTD M3 x 0,5	KY T 9
*17,1	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,2	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,3	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,4	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,5	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,6	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,7	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,8	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*17,9	11,1	3,3	7	●	●	●	●	VTE M4 x 0,7	KY T 15
*18	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,1	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,2	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
◊18,3	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,4	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,5	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,6	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,7	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,8	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*18,9	12,7	3,4	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*19	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*19,1	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*19,2	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15
◊19,25	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*19,3	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*19,4	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*19,5	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15
*19,6	12,7	3,5	8	●	●	●	●	VTE M4 x 0,7	KY T 15

GM: Stahl und Stahlguss Grauguss / general applications – **DM:** Rostfreier Stahl / difficult applications
SM: Ne Metalle / for soft materials - **CM:** Grauguss / To work Cast iron

● Standardartikel / Items available ex stock - ◊ Durchmesser für Rohrböden - Diameters for tube sheets - * NEW Ø

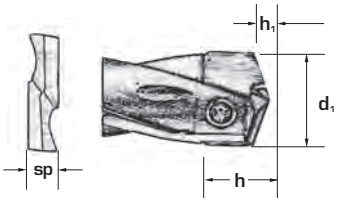
WECHSELPLATTEN / INSERTS

Record AG Drill
(Ø 12,00 - Ø 32,00)

TiAlN Futura | TiALCN | TiN+ WCC | 140°

NEW Ø







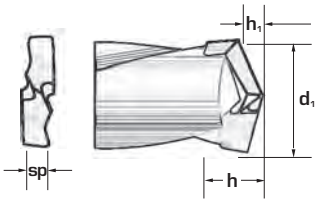
Record AG Drill				GM	DM	SM	CM		
Schneidstoff / Material				K 30F	K 30F	K 30F	K 30F		
d_1 mm m7	h mm	h_1 mm	sp mm	50GM TF	50DM TX	50SM TL	50CM TF	Schraube Screw	Schlüssel Screw driver
*19,7	12,7	3,5	8	●	●	●	●	VTE M5x 0,8	KY T 20
*19,8	12,7	3,5	8	●	●	●	●	VTE M5x 0,8	KY T 20
*19,9	12,7	3,5	8	●	●	●	●	VTE M5x 0,8	KY T 20
*20	14	3,6	9	●	●	●	●	VTE M5x 0,8	KY T 20
*20,5	14	3,7	9	●	●	●	●	VTE M5x 0,8	KY T 20
*21	14	3,9	9	●	●	●	●	VTE M5x 0,8	KY T 20
*21,5	14	3,9	9	●	●	●	●	VTE M5x 0,8	KY T 20
*22	15,4	3,9	9	●	●	●	●	VTE M5x 0,8	KY T 20
*22,5	15,4	3,9	9	●	●	●	●	VTE M5x 0,8	KY T 20
*23	15,4	4,2	10	●	●	●	●	VTE M5x 0,8	KY T 20
*23,5	15,4	4,2	10	●	●	●	●	VTE M5x 0,8	KY T 20
*24	15,9	4,2	10	●	●	●	●	VTE M5x 0,8	KY T 20
*24,5	15,9	4,5	11	●	●	●	●	VTE M5x 0,8	KY T 20
*25	15,9	4,5	11	●	●	●	●	VTE M5x 0,8	KY T 20
*25,5	15,8	4,5	11	●	●	●	●	VTE M5x 0,8	KY T 20
*26	20,1	4,9	12	●	●	●	●	VTE M5x 0,8	KY T 20
*26,5	20,1	4,9	12	●	●	●	●	VTE M5x 0,8	KY T 20
*27	20,1	4,9	12	●	●	●	●	VTE M5x 0,8	KY T 20
*27,5	20,1	4,9	12	●	●	●	●	VTE M5x 0,8	KY T 20
*28	20,8	5,2	13	●	●	●	●	VTE M5x 0,8	KY T 20
*28,5	20,8	5,2	13	●	●	●	●	VTE M5x 0,8	KY T 20
*29	20,8	5,2	13	●	●	●	●	VTE M5x 0,8	KY T 20
*29,5	20,8	5,2	13	●	●	●	●	VTE M5x 0,8	KY T 20
*30	22,4	5,6	14	●	●	●	●	VTE M5x 0,8	KY T 20
*30,5	22,4	5,6	14	●	●	●	●	VTE M5x 0,8	KY T 20
*31	22,4	5,8	14	●	●	●	●	VTE M5x 0,8	KY T 20
*31,5	22,4	5,8	14	●	●	●	●	VTE M5x 0,8	KY T 20
*32	23,2	6	15	●	●	●	●	VTE M5x 0,8	KY T 20

GM: Stahl und Stahlguss Grauguss / general applications – **DM:** Rostfreier Stahl / difficult applications
SM: Ne Metalle / for soft materials - **CM:** Grauguss / To work Cast iron

● Standardartikel / Items available ex stock - * **NEW Ø**

Record AG Drill
(Ø 16,00 - Ø 40,00)

TiAlN Futura | TiALCN | TiN+ WCC | 140°







Record AG Drill				GM	DM	SM	CM		
Schneidstoff / Material				K 30F	K 30F	K 30F	K 30F		
d_1 mm m7	**h mm**	**h_1 mm**	**sp mm**	**60GM TF**	**60DM TX**	**60SM TL**	**60CM TF**	**Schraube** Screw	**Schlüssel** Screw driver
16,0	8,0	2,9	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,1	8,0	2,9	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,2	8,0	3,0	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,3	8,0	3,0	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,4	8,0	3,0	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,5	8,0	3,0	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,6	8,0	3,0	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,7	8,0	3,1	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,8	8,0	3,1	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
16,9	8,0	3,1	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,0	8,0	3,1	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,1	8,0	3,1	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,2	8,0	3,1	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,3	8,0	3,1	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,4	8,0	3,2	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,5	8,0	3,2	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,6	8,0	3,2	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,7	8,0	3,2	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,8	8,0	3,2	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
17,9	8,0	3,3	4,5	●	●	●	●	SRA M3 x 0,35	KY T 6
18,0	8,0	3,3	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,1	8,0	3,3	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,2	8,0	3,3	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,3	8,0	3,3	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,4	8,0	3,3	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,5	8,0	3,4	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,6	8,0	3,4	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,7	8,0	3,4	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,8	8,0	3,4	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
18,9	8,0	3,4	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,0	8,0	3,5	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,1	8,0	3,5	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,2	8,0	3,5	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,3	8,0	3,5	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,4	8,0	3,5	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,5	8,0	3,5	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,6	8,0	3,6	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,7	8,0	3,6	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,8	8,0	3,6	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
19,9	8,0	3,6	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6

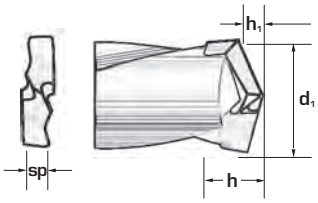
GM: Stahl und Stahlguss Grauguss / general applications – **DM:** Rostfreier Stahl / difficult applications
SM: Ne Metalle / for soft materials - **CM:** Grauguss / To work Cast iron

● Standardartikel / Items available ex stock

WECHSELPLATTEN / INSERTS

Record AG Drill
(Ø 16,00 - Ø 40,00)

TiAlN Futura | TiALCN | TiN+ WCC | 140°







Record AG Drill				GM	DM	SM	CM		
Schneidstoff / Material				K 30F	K 30F	K 30F	K 30F		
d_1 mm m7	h mm	h_1 mm	sp mm	60GM TF	60DM TX	60SM TL	60CM TF	Schraube Screw	Schlüssel Screw driver
20,0	8,0	3,6	5,0	●	●	●	●	SRB M3 x 0,35	KY T 6
20,5	8,8	3,7	5,5	●	●	●	●	SRB M3 x 0,35	KY T 6
21,0	8,8	3,8	5,5	●	●	●	●	SRB M3 x 0,35	KY T 6
21,5	8,8	3,9	5,5	●	●	●	●	SRB M3 x 0,35	KY T 6
22,0	8,8	4,0	5,5	●	●	●	●	SRB M3 x 0,35	KY T 6
22,5	8,8	4,1	5,5	●	●	●	●	SRB M3 x 0,35	KY T 6
23,0	10,0	4,2	6,3	●	●	●	●	SRC M3,5 x 0,35	KY T 6
23,5	10,0	4,3	6,3	●	●	●	●	SRC M3,5 x 0,35	KY T 6
24,0	10,0	4,4	6,3	●	●	●	●	SRC M3,5 x 0,35	KY T 6
24,5	10,0	4,5	6,3	●	●	●	●	SRC M3,5 x 0,35	KY T 6
25,0	10,0	4,5	6,3	●	●	●	●	SRC M3,5 x 0,35	KY T 6
25,5	10,0	4,6	6,3	●	●	●	●	SRC M3,5 x 0,35	KY T 6
26,0	11,6	4,7	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
26,5	11,6	4,8	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
27,0	11,6	5,9	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
27,5	11,6	5,0	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
28,0	11,6	5,1	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
28,5	11,6	5,2	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
29,0	11,6	5,3	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
29,5	11,6	5,4	7,3	●	●	●	●	SRD M4 x 0,5	KY T 8
30,0	13,6	5,5	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
30,5	13,6	5,6	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
31,0	16,6	5,6	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
31,5	13,6	5,7	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
32,0	13,6	5,8	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
32,5	13,6	5,9	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
33,0	13,6	6,0	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
33,5	13,6	6,1	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
34,0	13,6	6,2	8,5	●	●	●	●	SRE M4,5 x 0,5	KY T 8
34,5	16,0	6,3	13,6	●	●	●	●	SRE M4,5 x 0,5	KY T 8
35,0	16,0	6,4	10,0	●	●	●	●	SRF M5 x 0,5	KY T 10
36,0	16,0	6,6	10,0	●	●	●	●	SRF M5 x 0,5	KY T 10
37,0	16,0	6,7	10,0	●	●	●	●	SRF M5 x 0,5	KY T 10
37,5	16,0	6,8	10,0	●	●	●	●	SRF M5 x 0,5	KY T 10
38,0	16,0	6,9	10,0	●	●	●	●	SRF M5 x 0,5	KY T 10
39,0	16,0	7,1	10,0	●	●	●	●	SRF M5 x 0,5	KY T 10
40,0	16,0	7,3	10,0	●	●	●	●	SRF M5 x 0,5	KY T 10

GM: Stahl und Stahlguss Grauguss / general applications – **DM:** Rostfreier Stahl / difficult applications
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● Standardartikel / Items available ex stock

GTRD - DHTR

GTRD und DHTR Wendeplattenbohrer wurde konstruiert zum Bohren 3xD und 8xD in Stahl, Edelstahl, Grauguss, Sphäroguss und NichteisenmetallGTRD Serie hat einen Durchmesserbereich von 16 bis 50 mm.DHTR Serie hat einen Durchmesserbereich von 25 bis 45 mm.

GTRD and DHTR indexable drills are engineered for drilling 3xD e 8xD in steel, stainless steel, grey cast iron, spheroidal cast iron and non-ferrous material applications.
GTRD series covers a diameter range from 16 to 50 mm.
DHTR series covers a diameter range from 25 to 45 mm.



PRODUKTIVITÄT
Productivity

DANK EINES GUT ZENTRIERENDEN PILOTBOHRER WIRD EINE HOHE STABILITÄT UND GERADLINIGKEIT BEI BOHREN GESICHERT
Achive high stability and hole straightness thanks to a centered pilot drill that offer better centering capabilities

PROFITIEREN SIE VON DER KAMMERGEOMETRIE, DIE EINE HERVORRAGENDE SPANABFUHR UND LANGE LEBENSDAUER DES WERKZEUGKÖRPER SICHERSTELLT.
Benefit from the flute geometry that ensures an excellent chip evacuation and a long tool body life

IDEAL AUCH FÜR ÄLTERE MASCHINEN DIE EINEN NICHT SO STARKEN MOTOR HABEN KÖNNEN MIT REDUZIERTEM VORSCHUB UND SCHNITTGESCHWINDIGKEIT EIN GESETZTE WERDEN
Ideal for older or low-power machines, due to reduced feed and cutting speed capabilities.

VIELSEITIGKEIT
Versatility

PLATTEN GEOMETRIEN UND EIGENSCHAFTEN FÜR EINE VIELZAHL VON MATERIALIEN.
Insert geometries and qualities for a wide range of materials.

HSS-CO TIN- BESCHICHTUNG, PILOTBOHRER SIND VERFÜGBAR
HSS-Co TiN-based PVD coating pilot drill available

ILIX® PRECISION

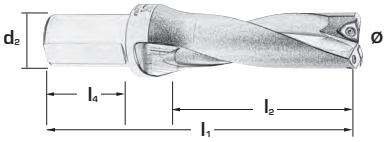
ILIX NORM

DIN 9766
Wendeplattenbohrer
Indexable Drills

Record INDEX Drill

Bohrkörper / Drills Bodies
(Ø 16,00 - Ø 50,00)





NEW













Ø mm	l_1 mm	l_2 mm	l_4 mm	d_2 mm	Schraube Screw GA	Wendeplatte Insert LC-MC	Schraube für Wendeplatte Screw insert VT	Schlüssel Screw driver KY	GTR3D
16,0	128	51	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
16,5	130	53	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
17,0	131	54	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
17,5	133	56	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
18,0	134	57	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
18,5	136	59	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
19,0	137	60	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
19,5	139	62	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
20,0	140	63	50	20	GA 1/8	WCEX 030204..	VT 2.2X0.45	KY T6	●
20,5	151	65	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
21,0	152	66	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
21,5	154	68	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
22,0	155	69	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
22,5	157	71	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
23,0	158	72	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
23,5	160	74	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
24,0	161	75	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
24,5	163	77	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
25,0	164	78	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
25,5	175	80	60	25	GA 1/8	WCEX 040204..	VT 2.5X0.45	KY T8	●
26,0	176	81	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
26,5	178	83	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
27,0	179	84	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
27,5	181	86	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
28,0	182	87	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
28,5	184	89	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
29,0	185	90	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
29,5	187	92	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
30,0	188	93	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	●
31,0	191	96	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
32,0	194	99	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
33,0	197	102	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
34,0	200	105	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
35,0	203	108	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
36,0	206	111	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
37,0	209	114	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
38,0	212	117	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
39,0	215	120	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
40,0	218	123	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
41,0	221	126	70	32	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	●
42,0	239	129	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●
43,0	242	132	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●
44,0	245	135	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●
45,0	248	138	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●

● Standardartikel / Items available ex stock

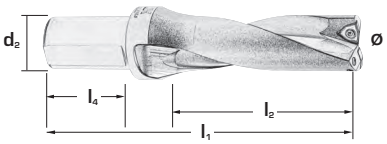
ILIX NORM

DIN 9766
Wendeplattenbohrer
Indexable Drills

RECORD INDEX DRILL

Record INDEX Drill
Bohrkörper / Drills Bodies
(Ø 16,00 - Ø 50,00)







NEW



Ø mm	l_1 mm	l_2 mm	l_4 mm	d_2 mm	Schraube Screw GA	Wendeplatte Insert LC-MC	Schraube für Wendeplatte Screw insert VT	Schlüssel Screw driver KY	GTR3D
46,0	251	141	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●
47,0	254	144	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●
48,0	257	147	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●
49,0	260	150	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●
50,0	263	153	80	40	GA 1/4	WCEX 080408..	VT 4X0.7	KY T15	●

● Standardartikel / Items available ex stock

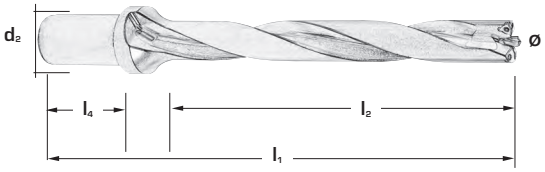
ILIX NORM

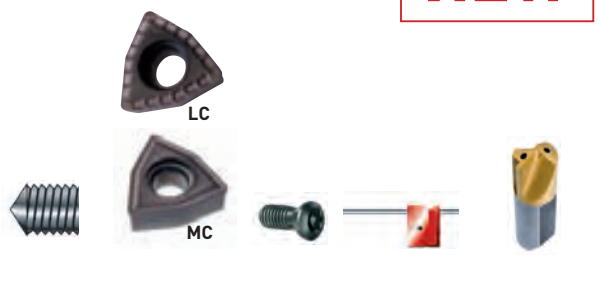
DIN 9766
Pilotbohrer für Wendeplattenbohrer
Indexable drills with pilot drill

Record INDEX Drill mit Pilotbohrer/with pilot drill

Bohrkörper / Drills Bodies
(Ø 25,00 - Ø 45,00)



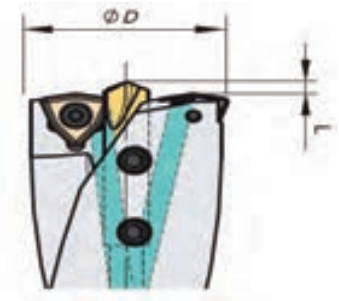




NEW



Ø mm	l_1 mm	l_2 mm	l_4 mm	d_2 mm	Schraube Screw GA	Wendeplatte Insert LC-MC	Schraube für Wendeplatte Screw insert VT	Schlüssel Screw driver KY	Pilotbohrer Pilot Drill DHP	DHTR
25	315	220	60	32	GA 1/4	WCEX 030204..	VT 2.2X0.45	KY T6	DHP 6X30	●
26	315	220	60	32	GA 1/4	WCEX 040204..	VT 2.5X0.45	KY T8	DHP 6X30	●
27	315	220	60	32	GA 1/4	WCEX 040204..	VT 2.5X0.45	KY T8	DHP 6X30	●
28	315	220	60	32	GA 1/4	WCEX 040204..	VT 2.5X0.45	KY T8	DHP 6X30	●
29	315	220	60	32	GA 1/4	WCEX 040204..	VT 2.5X0.45	KY T8	DHP 6X30	●
30	315	220	60	32	GA 1/4	WCEX 040204..	VT 2.5X0.45	KY T8	DHP 6X30	●
31	355	260	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
32	355	260	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
33	355	260	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
34	355	260	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
35	355	260	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
36	355	300	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
37	395	300	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
38	395	300	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
39	395	300	60	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
40	395	300	70	32	GA 1/4	WCEX 050308..	VT 3X0.5	KY T8	DHP 8X35	●
***41**	460	340	80	40	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	DHP 10X35	●
***42**	460	340	80	40	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	DHP 10X35	●
***43**	460	340	80	40	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	DHP 10X35	●
***44**	460	340	80	40	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	DHP 10X35	●
***45**	460	340	80	40	GA 1/4	WCEX 06T308..	VT 3.5X0.6	KY T15	DHP 10X35	●



Ø D	L mm
18-24	**2.5**
25-30	**3.0**
31-39	**4.0**
40-45	**4.5**

Ersatzteile/ Spare parts (siehe Seite 136 / see page 136)

● Standardartikel / Items available ex stock - * Patronen für DHTR CI-CE Bohrer separat bestellt werden (S.135) / Mounting Cartridges for DHTR CI-CE drill to be ordered separately (p.135)

DHMTR

DHTR Wendeplattenbohrer zum Bohren 10 x D in Stahl, Edelstahl, Grauguss , Sphäroguss und NE-Werkstoff entwickelt. DHTR Serie deckt einen Durchmesserbereich von 45 bis 130 mm ab.

DHMTR indexable drills are engineered for drilling up to 10xD in steel, stainless steel, grey cast iron, spheroidal cast iron and non-ferrous material applications. DHMTR modular series covers a diameter range from 45 to 130mm.



WENDEPLATTENBOHRER IM BAUKASTENSYSTEM
Indexable drills modular system

BREITE PALETTE VON DURCHMESSERN VON 45 BIS 130 MM UND STANDARD-BOHRKÖPFE
Wide range of diameters from 45 to 130 mm and standard drill heads

TRIGON WCEX EINSÄTZE BIETEN DIE BESTEN FÄHIGKEITEN ZENTRIERUNG AUF DIE INNEREN UND ÄUSSEREN PATRONEN FÜR VERBESSERTE OBERFLÄCHENQUALITÄT
Trigon WCEX inserts provide the best centering capabilities on inboard and outboard cartridges for improved surface hole quality

VERSCHIEDENE PLATTENGEOMETRIEN UND QUALITÄTEN ALS STANDARD VERFÜGBAR
Various insert geometries and qualities available as standard

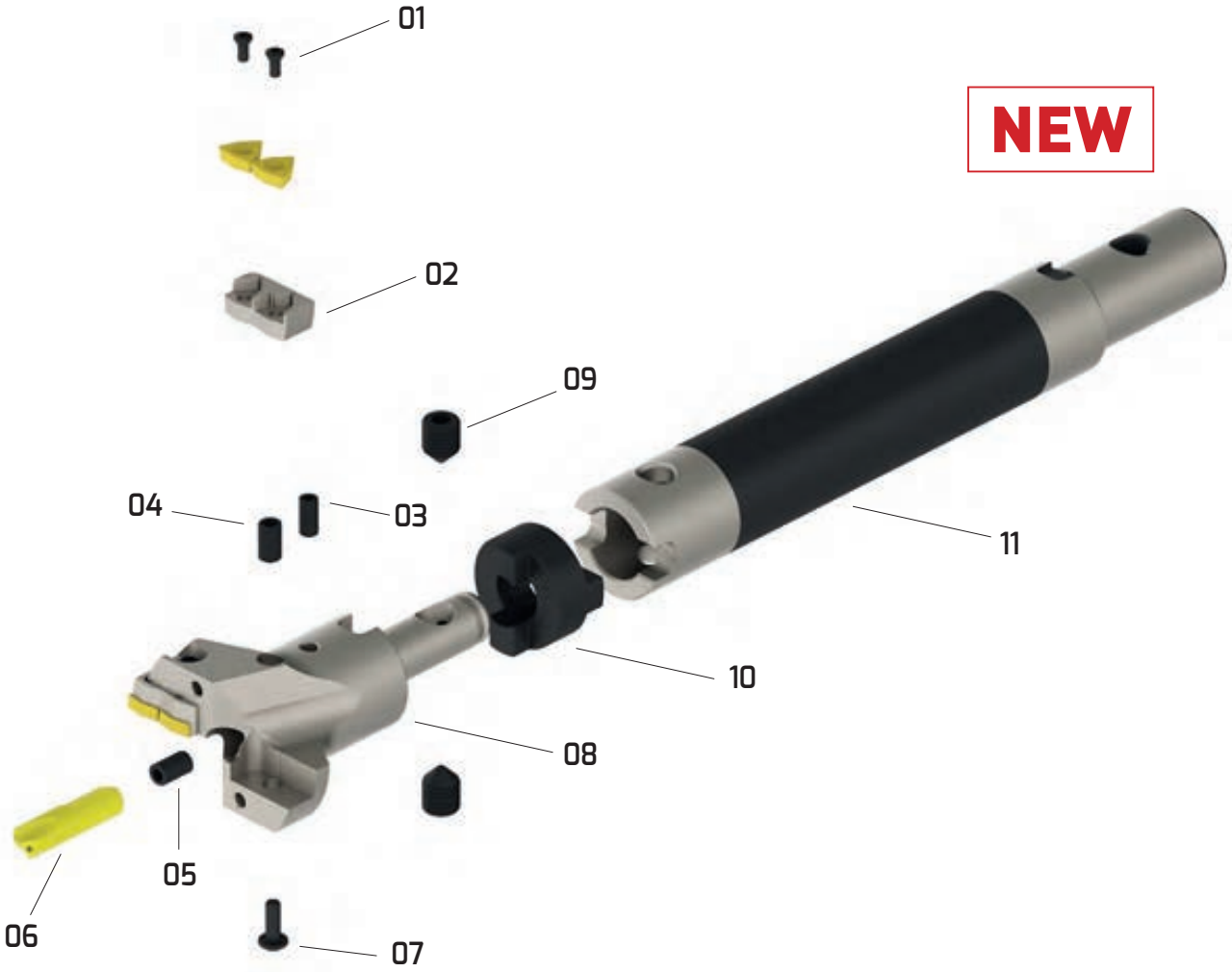
MÖGLICHKEIT DER ANPASSUNG FÜR BOHRTIEFE UND DURCHMESSERBEREICH MIT ERWEITERUNGEN UND REDUZIERUNGEN
Possibility of adjusting drilling depth and diameter range with extensions and reducers

DURCHMESSERVERSTELLUNG DURCH VERKÜRZUNG DER AUSSEN PATRONE
Diameter adjustment by shortening outer cartridge

BOHRKÖPFE BIS ZU 180 MM AUF ANFRAGE
Drilling heads up to 180 mm available upon request

ILIX® PRECISION

DHMTR



WENDEPLATTEN-SCHRAUBE - Insert screw ■ 01

PARTRONE INNEN / AUSSEN - Cartridge Inner/Outer ■ 02

BEFESTIGUNGSSCHRAUBE FÜR PILOTBOHRER - Fixing Screw for Pilot Drill ■ 03

KLEMMBOLZEN FÜR PILOTBOHRER - Clamping Bolt for Pilot Drill ■ 04

JUSTIERSCHRAUBE FÜR PILOTBOHRER - Adjustment Screw for Pilot Drill ■ 05

PILOTBOHRER - Pilot Drill ■ 06

BEFESTIGUNGSSCHRAUBE FÜE EINBAUKASSERTTE - Screw for Cartridge ■ 07

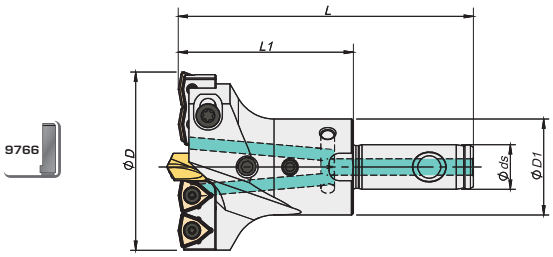
HALTER DHMTR - Drill Body DHMTR ■ 08

BEFESTIGUNGSSCHRAUBE - Fixation Screw ■ 09

ANTRIEBSRING - Drive Ring ■ 10

DHMSH SCHAFT UND DHMEX VERLÄNGERUNG - DHMSH Shank and DHMEX Extension ■ 11

ILIX® PRECISION



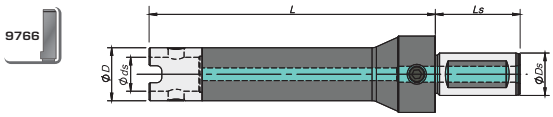


DHMTR Bohrer / Drill
(Ø 45,00 - Ø 130,00)

NEW

Ø D mm min-max	Ø D1 mm	Ø ds mm	L1 mm	L mm	Innen Patrone Internal Cartridge	Außen Patrone External Cartridge	Wendeplatte insert	Pilotbohrer Pilot Drill DHP	DHMTR
45-50	28	13	50	85	**CI** 45-50	**CE** 45-50	WCEX 030204..	DHP 10X35	●
50-55	28	13	50	85	**CI** 50-55	**CE** 50-55	WCEX 030204..	DHP 10X35	●
55-60	32	16	60	100	**CI** 55-60	**CE** 55-60	WCEX 040204..	DHP 12X38	●
60-65	32	16	60	100	**CI** 60-65	**CE** 60-65	WCEX 050308..	DHP 12X38	●
65-70	32	16	60	100	**CI** 65-70	**CE** 65-70	WCEX 050308..	DHP 12X38	●
70-75	40	22	70	115	**CI** 70-75	**CE** 70-75	WCEX 050308..	DHP 12X38	●
75-80	40	22	70	115	**CI** 75-80	**CE** 75-80	WCEX 06T308..	DHP 16X45	●
80-85	40	22	70	115	**CI** 80-85	**CE** 80-85	WCEX 06T308..	DHP 16X45	●
85-90	48	27	70	120	**CI** 85-90	**CE** 85-90	WCEX 06T308..	DHP 16X45	●
90-95	48	27	70	120	**CI** 90-95	**CE** 90-95	WCEX 06T308..	DHP 16X45	●
95-100	48	27	70	120	**CI** 95-100	**CE** 95-100	WCEX 06T308..	DHP 16X45	●
100-105	58	32	80	130	**CI** 100-105	**CE** 100-105	WCEX 050308..	DHP 20X45	●
105-110	58	32	80	130	**CI** 105-110	**CE** 105-110	WCEX 06T308..	DHP 20X45	●
110-115	58	32	80	130	**CI** 110-115	**CE** 110-115	WCEX 06T308..	DHP 20X45	●
115-120	70	40	90	145	**CI** 115-120	**CE** 115-120	WCEX 06T308..	DHP 20X45	●
120-125	70	40	90	145	**CI** 120-125	**CE** 120-125	WCEX 06T308..	DHP 25X56	●
125-130	70	40	90	145	**CI** 125-130	**CE** 125-130	WCEX 06T308..	DHP 25X56	●

Pilotbohrer separat bestellt werden / Pilot drill to be ordered separately (siehe Seite 134 / see page 134)
Patronen inbegriffen / Cartridges included (siehe Seite 135 / see page 135)



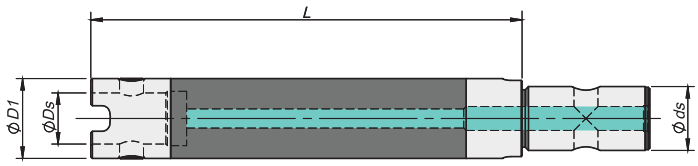
NEW



Schaft Basis / Shank

Abmessung mm Measure mm	Ø ds mm	Ø Ds mm	Ø D mm	L mm	Ls mm	Antriebsring Drive ring	DHMSH
13x115	13	32	28	115	70	**DHRG** 28	●
13x200	13	32	28	200	70	**DHRG** 28	●
13x300	13	32	28	300	70	**DHRG** 28	●
16x125	16	40	32	125	82	**DHRG** 32	●
16x200	16	40	32	200	82	**DHRG** 32	●
16x300	16	40	32	300	82	**DHRG** 32	●
22x148	22	40	40	148	82	**DHRG** 40	●
22x200	22	40	40	200	82	**DHRG** 40	●
22x300	22	40	40	300	82	**DHRG** 40	●
27x168	27	40	48	168	82	**DHRG** 48	●
27x300	27	40	48	300	82	**DHRG** 48	●
32x186	32	40	58	186	82	**DHRG** 58	●
32x300	32	40	58	300	82	**DHRG** 58	●
40x186	40	50	70	186	82	**DHRG** 70	●
40x300	40	50	70	300	82	**DHRG** 70	●

● Standardartikel / Items available ex stock



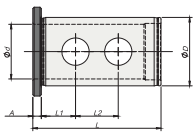


NEW

Verlängerung / Extension

Abmessung mm Measure mm	Ø ds mm	Ø Ds mm	Ø D1 mm	L mm	Antriebsring Drive ring	DHMEX
13x115	13	13	28	115	**DHRG** 28	●
13x150	13	13	28	150	**DHRG** 28	●
13x200	13	13	28	200	**DHRG** 28	●
13x300	13	13	28	300	**DHRG** 28	●
16x115	16	16	32	115	**DHRG** 32	●
16x200	16	16	32	200	**DHRG** 32	●
16x300	16	16	32	300	**DHRG** 32	●
22x113	22	22	40	113	**DHRG** 40	●
22x200	22	22	40	200	**DHRG** 40	●
22x300	22	22	40	300	**DHRG** 40	●
27x113	27	27	48	113	**DHRG** 48	●
27x200	27	27	48	200	**DHRG** 48	●
27x300	27	27	48	300	**DHRG** 48	●
32x186	32	32	58	186	**DHRG** 58	●
32x300	32	32	58	300	**DHRG** 58	●
40x186	40	40	70	186	**DHRG** 70	●
40x300	40	40	70	300	**DHRG** 70	●
40x500	40	40	70	500	**DHRG** 70	●

Antriebsring separat bestellen / Drive ring to be ordered separately
Verlängerung separat bestellen / Extension to be ordered separately



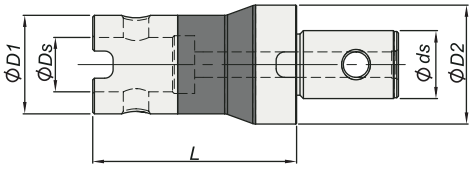


NEW

Antriebshülse / Reducer Drill Sleeves

Reihe mm Range mm	Ø D mm	Ø d mm	L mm	L1 mm	L2 mm	A mm	DHMBS
32-20	32	20	65	20	-	5	●
32-25	32	25	65	20	20	5	●
40-20	40	20	75	20	-	5	●
40-25	40	25	75	20	25	5	●
40-32	40	32	75	20	25	5	●

● Standardartikel / Items available ex stock



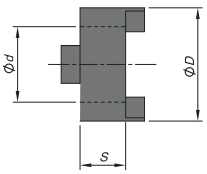


NEW

Reduzierstück / Reducer

Reihe mm Range mm	Ø ds mm	Ø Ds mm	Ø D1 mm	Ø D2 mm	L mm	Antriebsring (Ø D1) Drive ring	Antriebsring (Ø D2) Drive ring	DHMRD
16-13	16	13	28	32	100	**DHRG** 28	**DHRG** 32	●
22-16	22	16	32	40	100	**DHRG** 32	**DHRG** 40	●
27-22	27	22	40	48	100	**DHRG** 40	**DHRG** 48	●
32-13	32	13	28	58	100	**DHRG** 28	**DHRG** 58	●
32-16	32	16	32	58	100	**DHRG** 32	**DHRG** 58	●
32-22	32	22	40	58	100	**DHRG** 40	**DHRG** 58	●
32-27	32	27	48	58	100	**DHRG** 48	**DHRG** 58	●
40-32	40	32	58	70	100	**DHRG** 58	**DHRG** 70	●

Antriebsring separat bestellen / Drive ring to be ordered separately
Verlängerung separat bestellen / Extension to be ordered separately







NEW

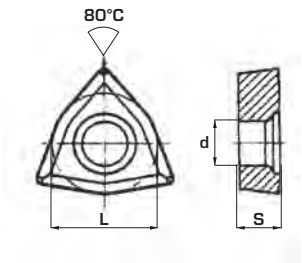
Antriebsring / Drive rings

Ø D mm	Ø d mm	s mm	Zugfestigkeit Tensile strength	DHRG
28	13	10	10	●
32	16	10	10	●
40	22	12	12	●
48	27	12	12	●
58	32	14	14	●
70	40	14	14	●

● Standardartikel / Items available ex stock

ILIX NORM

Bereich von Einsätzen nach Auswahl der richtigen Sorte nach Materialgruppen.
Range of inserts and selection of the proper grade according to the material groups.




MC

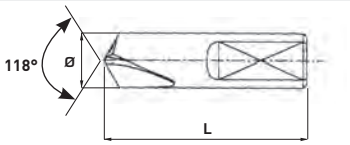

LC

NEW

Wendeplatten Schlüssel Insert code ISO	Geeignete Qualität Suitable quality AGP 25	 AGP 35	Größe Dimensions d	 s	 L
WCEX 030204-MC	●	●	2,50	2,43	5,56
WCEX 040204-MC	●	●	2,80	2,38	6,35
WCEX 050308-MC	●	●	3,37	3,25	7,94
WCEX 06T308-MC	●	●	4,40	4,04	9,52
WCEX 080408-MC	●	●	5,51	4,04	12,72
WCEX 050308-LC	●	●	3,37	3,25	7,94
WCEX 06T308-LC	●	●	4,40	4,04	9,52

NEW





Pilotbohrer Pilot drill DHP	Abmessung Dimensions Ø L	Qualität - Quality HSS-Co	Beschichtung - Coating TiN	Für Bohrer For Drills
DHP	6X30	●	●	DHTR
DHP	8X35	●	●	DHTR
DHP	10X35	●	●	DHTR - DHMTR
DHP	12X38	●	●	DHMTR
DHP	16x45	●	●	DHMTR
DHP	20x45	●	●	DHMTR
DHP	25x56	●	●	DHMTR

Schrauben für die axiale Verstellung des Pilotbohrer
Screw for pilot's axial adjust



Kat.-Nr. Cat. No	Abmessung Dimensions
GAR	M5X0.8
GAR	M6X1.0
GAR	M8X1.2

Schrauben für die Befestigung Pilotbohrer
Screw for pilot's axial adjust



Kat.-Nr. Cat. No	Abmessung Dimensions
GAF	M5X0.8
GAF	M6X1.0
GAF	M6X1.2
GAF	M8X1.2

● Standardartikel / Items available ex stock

NEW



Patrone für DHTR / Cartridges for DHTR

Ø D mm	Innen Patrone Internal Cartridge	Außen Patrone External Cartridge	Patronen Schraube Cartridge scew	Einsatz insert	Schraube für Einsatz Screw insert	CI-CE
41	**CI** 4145	**CE** 4141	VTS 5X10	WCEX 06T308..	VT 3.5X0.6	●
42	**CI** 4145	**CE** 4142	VTS 5X10	WCEX 06T308..	VT 3.5X0.6	●
43	**CI** 4145	**CE** 4143	VTS 5X10	WCEX 06T308..	VT 3.5X0.6	●
44	**CI** 4145	**CE** 4144	VTS 5X10	WCEX 06T308..	VT 3.5X0.6	●
45	**CI** 4145	**CE** 4145	VTS 5X10	WCEX 06T308..	VT 3.5X0.6	●

NEW



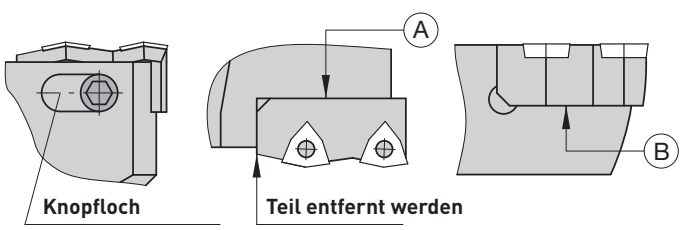
Patrone für DHMTR / Cartridges for DHMTR

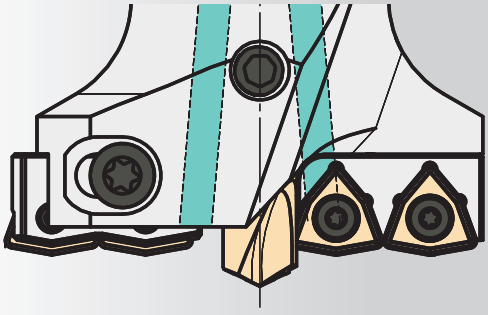
Ø D mm min-max	Innen Patrone Internal Cartridge	Außen Patrone External Cartridge	(07) Patronen Schraube Cartridge scew	Einsatz insert	Schraube für Einsatz Screw insert	CI-CE
45-50	**CI** 4550	**CE** 4550	VTSM 4X10	WCEX 030204..	VT 2.2X0.45	●
50-55	**CI** 5055	**CE** 5055	VTSM 4X10	WCEX 030204..	VT 2.2X0.45	●
55-60	**CI** 5560	**CE** 5560	VTSM 5X12	WCEX 040204..	VT 2.5X0.45	●
60-65	**CI** 6065	**CE** 6065	VTSM 5X12	WCEX 050308..	VT 3X0.5	●
65-70	**CI** 6570	**CE** 6570	VTSM 5X12	WCEX 050308..	VT 3X0.5	●
70-75	**CI** 7075	**CE** 7075	VTSM 5X12	WCEX 050308..	VT 3X0.5	●
75-80	**CI** 7580	**CE** 7580	VTSM 6X12	WCEX 06T308..	VT 3.5X0.6	●
80-85	**CI** 8085	**CE** 8085	VTSM 6X14	WCEX 06T308..	VT 3.5X0.6	●
85-90	**CI** 8590	**CE** 8590	VTSM 6X16	WCEX 06T308..	VT 3.5X0.6	●
90-95	**CI** 9095	**CE** 9095	VTSM 6X16	WCEX 06T308..	VT 3.5X0.6	●
95-100	**CI** 9510	**CE** 9510	VTSM 6X16	WCEX 06T308..	VT 3.5X0.6	●
100-105	**CI** 1105	**CE** 1105	VTSM 8X18	WCEX 050308..	VT 3X0.5	●
105-110	**CI** 1511	**CE** 1511	VTSM 8X18	WCEX 06T308..	VT 3.5X0.6	●
110-115	**CI** 1115	**CE** 1115	VTSM 8X18	WCEX 06T308..	VT 3.5X0.6	●
115-120	**CI** 1512	**CE** 1512	VTSM 8X20	WCEX 06T308..	VT 3.5X0.6	●
120-125	**CI** 1225	**CE** 1225	VTSM 8X25	WCEX 06T308..	VT 3.5X0.6	●
125-130	**CI** 1253	**CE** 1253	VTSM 8X25	WCEX 06T308..	VT 3.5X0.6	●

BOHRERDURCHMESSER ÄNDERUNG DURCH ÄUSSERE PATRONE EINSTELLUNG.

Drill diameter change by outer cartridge adjustment.

Einstellbare Außen Patronen durch Entfernen radialen Material kleinere Durchmesser angepasst.
Verkürzen bei 90 ° zur Flächenkontakt A und B
Adjustable outer cartridges adapted to minor diameter by removing radial material.
Shorten at 90° to the Face contact A and B



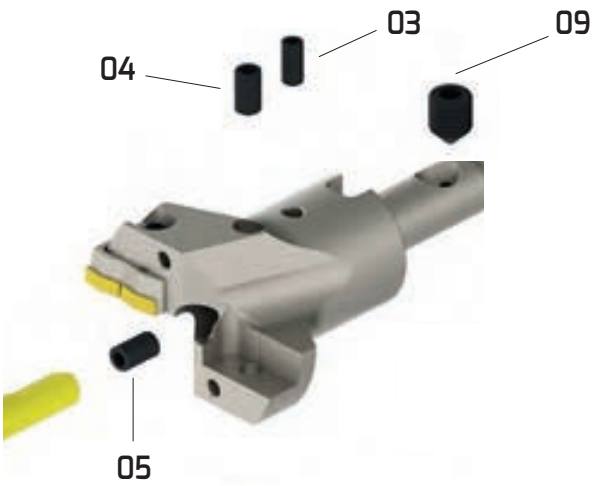


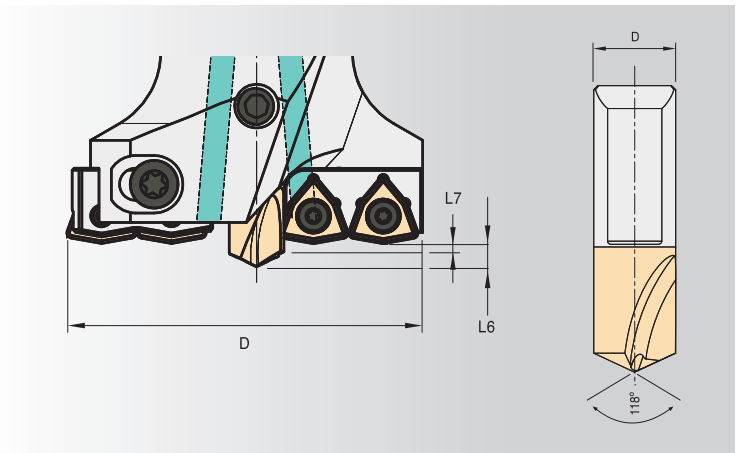
Ersatzteile / Spare Parts

NEW

DHMTR Bohrer / Drill:

Ø D mm min-max	(03) Befestigungsschraube für Pilotbohrer Fixing Screw for Pilot Drill	(04) Klemmbolzen für Pilotbohrer Clamping Bolt for Pilot Drill	(05) Justierschraube für Pilotbohrer Adjustment Screw for Pilot Drill	(09) Befestigungsschraube Fixation Screw
45-50	GASM 4X8	GAFM 6X10	GARM 6X10	GABM 8X12
50-55	GASM 4X8	GAFM 6X10	GARM 6X10	GABM 8X12
55-60	GASM 4X8	GAFM 8X12	GARM 8X15	GABM 8X12
60-65	GASM 5X8	GAFM 8X12	GARM 8X15	GABM 8X12
65-70	GASM 5X8	GAFM 8X12	GARM 8X15	GABM 8X12
70-75	GASM 5X8	GAFM 8X15	GARM 8X15	GABM 10X15
75-80	GASM 6X10	GAFM 10X20	GARM 10X16	GABM 10X15
80-85	GASM 6X10	GAFM 10X20	GARM 10X16	GABM 10X15
85-90	GASM 6X10	GAFM 10X20	GARM 10X18	GABM 12X18
90-95	GASM 6X10	GAFM 10X20	GARM 10X18	GABM 12X18
95-100	GASM 6X10	GAFM 10X20	GARM 10X18	GABM 12X18
100-105	GASM 6X10	GAFM 12X20	GARM 12X20	GABM 12X20
105-110	GASM 6X10	GAFM 12X20	GARM 12X20	GABM 12X20
110-115	GASM 6X10	GAFM 12X20	GARM 12X20	GABM 12X20
115-120	GASM 6X10	GAFM 12X25	GARM 14X20	GABM 16X27
120-125	GASM 6X10	GAFM 14X25	GARM 14X20	GABM 16X27
125-130	GASM 6X10	GAFM 14X25	GARM 14X20	GABM 16X27





Überlanger Pilotbohrer / Overlong Pilot Drill:

DC (mm)	2D bis 4D 2D to 4D		4D bis 6D 4D to 6D		›6D	
	L7	L6	L7	L6	L7	L6
45-50	1.6	4.0	1.8	4.2	2.0	4.4
50-75	1.8	5.4	2.0	5.6	2.2	5.8
75-100	2.2	6.5	2.5	6.8	2.8	7.1
100-130	2.4	7.7	2.8	8.1	3.2	8.5

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TECHNISCHE DATEN
TECHNICAL DATA








	Typ Type	RECORD HD		RECORD HD		RECORD PM		RECORD EV. VA		RECORD HD i		RECORD HD	
	ILIX Typ-siehe Seite Ilix Type -See page	14		14		14		14		14		14	
	DIN	1897								Ilix Norm.			
	Bohrtiefe Drilling depth	3xD								5xD			
	Schneidrichtung Cutting direction												
	Schneidstoff Material	HSS-CO		HSS-CO		HSS-CO PM		HSS-CO		HSS-CO		HSS-CO	
	Spitzenwinkel Point angle	130°		130°		130°		120°		130°		130°	
	Beschichtung Coating	TN		TF		NX		TN		TN		TN	
	Innenliegende Kühlkanäle Internal coolant	-		-		-		-				-	
	Verstärkter Schaft Reinforced shank	-		-		-						-	
		6133 TN		**6143 TF**		**6178 NX**		**6134 TN**		**6522 TN**		**6208 TN**	
		VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*
P	**< 800 N/mm²**	50	12	55	12	55	12	50	10	50	12	40	10
P	**700-1000 N/mm²**	40	10	43	10	45	10	30	9	40	10	30	9
P	**1000-1300 N/mm²**	30	9	33	9	35	9	-	-	30	10	20	8
M	**Austenitisch**	18	7	21	7	17	7	20	7	18	7	13	5
M	**Austenitisch / ferritisch**	-	-	-	-	-	-	15	5	12	5	-	-
K	**GG**	50	12	53	12	55	12	-	-	50	12	40	10
K	**GGG**	40	10	43	10	45	10	-	-	40	10	30	8
N	**Aluminium**	65	12	68	12	-	-	65	12	65	12	55	10
N	**NE-Metalle**	60	10	63	10	60	11	60	10	60	10	50	9
S	**Titan**	5	4	5	4	-	-	13	5	8	5	4	4
S	**Sonderlegierungen basiert auf Ni**	-	-	-	-	-	-	10	3	-	-	-	-
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-	-	-	-	-	-	-	-	-	-
H	**Gehärteter Stahl 48 / 58 HRC**	-	-	-	-	-	-	-	-	-	-	-	-
H	**Gehärteter Stahl 58 / 68 HRC**	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA










	RECORD HD	RECORD VA	RECORD HD	RECORD HD	RECORD 2S	RECORD PKD	RECORD 2S	RECORD 2S
	14	14	14	14	16	24	16	16
	338		340		6539		6537K	
	8xD		12xD		3xD			
	HSS-CO	HSS-CO	HSS-CO	HSS-CO	K30F	PKD	K30F	K30F
	130°	120°	130°	130°	140°	120°	140°	140°
	TF	TN	TF	TP	TN	BL	TN	TF
	-	-	-	-	-	-	-	-
	-	1835 A	-	-	-	-	6535 HA	6535 HA / 6535 HE
	6228 TF	6229 TN	6248 TF	6248 TP	6213 TN	6005	6015 TN	6015-6016 TF
	VC / f*	VC / f*	VC / f*	VC / f*	VC / f*	VC / f*	VC / f*	VC / f*
	43 / 10	40 / 10	35 / 9	38 / 10	90 / 12	- / -	80 / 12	85 / 12
	33 / 9	20 / 9	25 / 8	27 / 9	85 / 10	- / -	70 / 10	75 / 10
	23 / 8	- / -	18 / 7	20 / 8	60 / 9	- / -	60 / 9	65 / 9
	15 / 5	18 / 7	11 / 5	13 / 5	40 / 6	- / -	30 / 6	30 / 6
	- / -	10 / 6	- / -	- / -	30 / 5	- / -	- / -	- / -
	43 / 10	- / -	35 / 9	38 / 10	90 / 12	- / -	90 / 12	100 / 12
	33 / 8	- / -	25 / 7	28 / 8	70 / 11	- / -	50 / 10	55 / 10
	58 / 10	60 / 10	50 / 9	55 / 10	120 / 12	400 / 12	90 / 12	90 / 12
	53 / 9	55 / 9	45 / 8	47 / 9	110 / 10	200 / 10	70 / 10	70 / 10
	3 / 4	9 / 4	3 / 4	3 / 4	- / -	- / -	- / -	- / -
	- / -	6 / 2	- / -	- / -	- / -	- / -	- / -	- / -
	- / -	- / -	- / -	- / -	15 / 4	- / -	10 / 4	10 / 4
	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -

TECHNISCHE DATEN
TECHNICAL DATA








Typ Type	RECORD 2Si		RECORD EV.VA		RECORD 3S		RECORD 3S		RECORD 3S		RECORD 2S	
ILIX Typ-siehe Seite Ilix Type -See page	16		18		22		22		22		16	
DIN	6537K				ILIX Norm							
Bohrtiefe Drilling depth	3xD											
Schneidrichtung Cutting direction												
Schneidstoff Material	K30F		K40F		K10-20		K10-20		K10-20		K30F	
Spitzenwinkel Point angle	140°		140°		150°		150°		150°		140°	
Beschichtung Coating	TF		XB		-		TF		-		TT	
Innenliegende Kühlkanäle Internal coolant			-		-		-		-		-	
Verstärkter Schaft Reinforced shank	6535 HA		6535 HA		-		-		-		6535 HA, 6535 HE	
	6011-6012 TF		**6051 XB**		**6123K 6126K**		**6123K-6126K TF**		**6127K**		**6017TT 6018TT**	
	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*
P < 800 N/mm²	110	12	70	12	70	10	80	10	-	-	85	12
P 700-1000 N/mm²	90	10	60	10	60	9	70	9	-	-	75	10
P 1000-1300 N/mm²	70	10	-	-	-	-	-	-	-	-	60	8
M Austenitisch	40	6	50	8	30	6	40	6	-	-	30	5
M Austenitisch / ferritisch	-	-	40	6	-	-	-	-	-	-	-	-
K GG	100	12	-	-	90	12	100	12	110	10	100	12
K GGG	80	10	-	-	-	-	-	-	-	-	55	10
N Aluminium	150	12	120	11	120	12	130	12	140	12	90	16
N NE-Metalle	120	10	100	9	100	10	110	10	120	10	70	12
S Titan	-	-	35	6	-	-	-	-	-	-	-	-
S Sonderlegierungen basiert auf Ni	-	-	30	5	-	-	-	-	-	-	-	-
H Gehärteter Stahl 38 / 48 HRC	18	4	-	-	-	-	-	-	-	-	10	4
H Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-		-	

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
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TECHNISCHE DATEN
TECHNICAL DATA










RECORD 2Si	RECORD 2Si	RECORD Hpi	RECORD EV. VA i	RECORD 3SX	RECORD 3SX	RECORD TP	RECORD 4Si
16	16	16	18	22	22	18	20
6537L						ILIX Norm	
5xD							
K30F	K30F	K40F	K40F	K30F	K30F	K10F	K20F
140°	140°	140°	140°	130°	130°	140°	130°
TN	TF	TF PLUS	XB	-	TF	TF	TF
				-		-	
6535 HA	6535 HA, 6535 HE	6535 HA	6535 HA	6535 HA, 6535 HE	6535 HA, 6535 HE	6535 HA	6535 HA
6020 TN	**6020-6021 TF**	**6022 TF**	**6052 XB**	**6002K 6003K**	**6002K-6003K TF**	**6014 TF**	**6040/ 5**

VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*
100	12	110	12	170	16	110	12	-	-	-	-	-	-	-	-
90	10	95	10	150	12	90	10	-	-	-	-	-	-	-	-
70	8	75	8	120	10	-	-	-	-	-	-	-	-	-	-
40	6	40	6	-	-	70	7	-	-	-	-	-	-	-	-
-	-	-	-	-	-	55	6	-	-	-	-	-	-	-	-
100	12	110	12	180	16	-	-	110	12	120	12	70	8	100	12
70	10	75	10	150	10	-	-	-	-	-	-	-	-	-	-
150	16	150	16	-	-	150	16	140	16	150	16	-	-	120	12
120	12	120	12	-	-	120	12	120	10	130	10	-	-	100	10
-	-	-	-	-	-	45	6	-	-	-	-	-	-	-	-
-	-	-	-	-	-	35	5	-	-	-	-	-	-	-	-
15	3	15	3	20	5	-	-	-	-	-	-	20	5	-	-
-	-	-	-	15	4	-	-	-	-	-	-	15	4	-	-
-	-	-	-			-	-	-	-	-	-	10	3	-	-

TECHNISCHE DATEN
TECHNICAL DATA








	Typ Type	RECORD 4Si	MicroDrill i	RECORD 3S	PKD	STL	STL i
	ILIX Typ-siehe Seite Ilix Type -See page	20	20	22	24	22	22
	DIN	ILIX Norm			338		
	Bohrtiefe Drilling depth	5xD					7/8xD
	Schneidrichtung Cutting direction						
	Schneidstoff Material	K20F	K10	K30F	PKD	K30F	K30F
	Spitzenwinkel Point angle	130°	135°	130°	120°	130°	130°
	Beschichtung Coating	-	TF PLUS	-	-	TF	TP
	Innenliegende Kühlkanäle Internal coolant			-	-	-	
	Verstärkter Schaft Reinforced shank	6535 HA	6535 HA	-	-	-	6535 HA, 6535 HE
		6040 F5	6019 TF	6001 K	6007	6238 TF	6080-6081 TP

		VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*
P	< 800 N/mm²	-	-	70	16	-	-	-	-	70	10	70	10
P	700-1000 N/mm²	-	-	65	12	-	-	-	-	60	8	60	8
P	1000-1300 N/mm²	-	-	60	10	-	-	-	-	-	-	-	-
M	Austenitisch	-	-	30	7	-	-	-	-	30	4	30	4
M	Austenitisch / ferritisch	-	-	-	-	-	-	-	-	-	-	-	-
K	GG	110	12	90	16	100	12	-	-	80	10	90	12
K	GGG	-	-	60	10	-	-	-	-	50	8	50	10
N	Aluminium	130	12	-	-	130	12	400	16	80	10	90	10
N	NE-Metalle	110	10	90	20	110	10	200	10	60	8	70	8
S	Titan	-	-	30	6	-	-	-	-	-	-	-	-
S	Sonderlegierungen basiert auf Ni	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA










RECORD 4Si	MicroDrill i	RECORD DHi	RECORD 4Si	MicroDrill i	RECORD DHi	RECORD DHi	RECORD DHi ALU
20	20	18	20	20	18	18	20
ILIX Norm			ILIX Norm	ILIX Norm		ILIX Norm	
			10xD	12xD		15xD	
K20F	K10	K20F	K20F	K10	K20F	K30F	K40F
130°	135°	140°	130°	135°	140°	135°	137°
-	TF PLUS	TT	-	TF PLUS	TT	TT	-
6535 HA	6535 HA	6535 HA, 6535 HE	6535 HA	6535 HA	6535 HA, 6535 HE	6535 HA	6535 HA
6040/ 7	6029	6025-6026 TT	6040/ L	6030 TF	6027-6028 TT	6032 TT	6041

VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*	VC	f*
-	-	70	16	80	12	-	-	65	12	75	10	80	12	-	-
-	-	65	12	70	10	-	-	60	10	65	9	70	9	-	-
-	-	60	10	60	10	-	-	50	8	60	8	65	8	-	-
-	-	30	7	40	5	-	-	30	7	35	4	45	5	-	-
-	-	-	-	-	-	-	-	-	-	-	-	35	4	-	-
110	10	80	12	80	12	90	12	85	10	75	12	70	12	-	-
-	-	60	10	60	10	-	-	55	8	55	9	60	8	-	-
130	10	-	-	90	16	110	10	-	-	80	16	100	12	130	12
110	10	90	20	70	12	90	9	80	16	70	10	70	10	110	10
-	-	30	6	-	-	-	-	27	6	-	-	25	5	-	-
-	-	-	-	-	-	-	-	-	-	-	-	20	4	-	-
-	-	-	-	-	-	-	-	-	-	-	-	15	3	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA



	Typ Type	MicroDrill i		RECORD DHi		RECORD DHi ALU		RECORD DHi		RECORD DHi ALU		RECORD DHi	
	ILIX Typ-siehe Seite Ilix Type -See page	20		18		20		18		20		18	
	DIN	ILIX Norm						ILIX Norm				ILIX Norm	
	Bohrtiefe Drilling depth	20xD						30xD				40xD	
	Schneidrichtung Cutting direction												
	Schneidstoff Material	K10		K30F		K40F		K30F		K40F		K30F	
	Spitzenwinkel Point angle	135°		135°		137°		135°		137°		135°	
	Beschichtung Coating	TF PLUS		TT		-		TT		-		TT	
	Innenliegende Kühlkanäle Internal coolant												
	Verstärkter Schaft Reinforced shank	6535 HA		6535 HA		6535 HA		6535 HA		6535 HA		6535 HA	
		6031 TF		6034 TT		6042		6036 TT		6044		6038 TT	
		vc	f*	vc	f*	vc	f*	vc	f*	vc	f*	vc	f*
P	< 800 N/mm²	60	10	75	9	-	-	70	9	-	-	60	8
P	700-1000 N/mm²	50	8	65	8	-	-	60	8	-	-	50	7
P	1000-1300 N/mm²	45	7	60	7	-	-	55	7	-	-	40	6
M	Austenitisch	25	6	40	5	-	-	35	4	-	-	25	4
M	Austenitisch / ferritisch	-	-	30	4	-	-	27	3	-	-	20	3
K	GG	75	12	65	13	-	-	60	12	-	-	50	12
K	GGG	50	9	55	10	-	-	50	9	-	-	40	9
N	Aluminium	-	-	100	12	120	9	90	10	120	9	80	9
N	NE-Metalle	50	16	65	10	100	7	60	8	100	7	50	7
S	Titan	25	5	22	5	-	-	20	4	-	-	15	4
S	Sonderlegierungen basiert auf Ni	-	-	18	4	-	-	16	3	-	-	11	3
H	Gehärteter Stahl 38 / 48 HRC	-	-	13	3	-	-	10	2	-	-	8	2
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

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TECHNISCHE DATEN
TECHNICAL DATA








Typ Type		AG Drill										
ILIX Typ-siehe Seite Ilix Type -See page		26		26		26		26		26		26
DIN												
Bohrtiefe Drilling depth		3xD								5xD		
Schneidrichtung Cutting direction												
Schneidstoff Material		K30F		K30F		K30F		K30F		K30F		K30F
Spitzenwinkel Point angle		140°		140°		140°		140°		140°		140°
Beschichtung Coating		TF		TX		TF		TL		TF		TX
Innenliegende Kühlkanäle Internal coolant												
Verstärkter Schaft Reinforced shank		-		-		-		-		-		-
		50GM 60GM		**50DM 60DM**		**50CM 60CM**		**50SM 60SM**		**50GM 60GM**		**50DM 60DM**
		vc	f*	vc	f*	vc	f*	vc	f*	vc	f*	vc	f*
P	< 800 N/mm²	120	10	100	8	100	10	-	-	110	9	90	7
P	700-1000 N/mm²	110	9	-	-	90	9	-	-	100	8	-	-
P	1000-1300 N/mm²	80	7	-	-	-	-	-	-	85	6	-	-
M	Austenitisch	40	5	50	6	-	-	-	-	38	5	45	6
M	Austenitisch / ferritisch	35	4	45	5	-	-	-	-	33	4	40	5
K	GG	100	10	-	-	130	10	-	-	70	10	-	-
K	GGG	85	9	-	-	100	9	-	-	50	9	-	-
N	Aluminium	-	-	110	10	-	-	200	10	-	-	100	9
N	NE-Metalle	100	8	100	8	-	-	120	9	90	8	90	7
S	Titan	-	-	40	6	-	-	-	-	-	-	35	5
S	Sonderlegierungen basiert auf Ni	-	-	30	5	-	-	-		-	-	30	4
H	Gehärteter Stahl 38 / 48 HRC	25	3	-	-	25	3	-	-	23	3	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

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TECHNISCHE DATEN
TECHNICAL DATA








					AG Drill						
26		26		26		26		26		26	
					7xD						
K30F		K30F		K30F		K30F		K30F		K30F	
140°		140°		140°		140°		140°		140°	
TF		TL		T		TX		TF		TL	
-		-		-		-		-		-	
50CM 60CM		**50SM 60SM**		**50GM 60GM**		**50DM 60DM**		**50CM 60CM**		**50SM 60SM**	
VC	**f***	**VC**	**f***	**VC**	**f***	**VC**	**f***	**VC**	**f***	**VC**	**f***
90	9	-	-	100	8	85	7	80	8	-	-
80	8	-	-	90	7	-	-	70	7	-	-
-	-	-	-	80	5	-	-	-	-	-	-
-	-	-	-	35	5	40	6	-	-	-	-
-	-	-	-	30	4	37	5	-	-	-	-
120	9	-	-	60	10	-	-	110	8	-	-
90	8	-	-	40	9	-	-	80	7	-	-
-	-	180	10	-	-	90	8	-	-	170	7
-	-	100	9	80	8	80	6	-	-	100	6
-	-	-	-	-	-	30	5	-	-	-	-
-	-	-	-	-	-	28	5	-	-	-	-
25	3	-	-	20	3	-	-	22	3	-	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	

TECHNISCHE DATEN
TECHNICAL DATA



Typ Type						**GTR3D**							
ILIX Typ-siehe Seite Ilix Type -See page		26		26		26		26		26		26	
DIN													
Bohrtiefe Drilling depth								**3xD**					
Schneidrichtung Cutting direction													
Schneidstoff Material		P25		P35		-		-		-		-	
Spitzenwinkel Point angle		-		-		-		-		-		-	
Beschichtung Coating		TiAlN		TiAlN		TiAlN		TiAlN		TiAlN		TiAlN	
Innenliegende Kühlkanäle Internal coolant		-		-		-		-		-		-	
Verstärkter Schaft Reinforced shank		-		-		-		-		-		-	
		AGP25		**AGP35**		**WCEX 030204**		**WCEX 040204**		**WCEX 050308**		**WCEX 06T308**	
		vc	f	vc	f	vc	f	vc	f	vc	f	vc	f
P	< 800 N/mm²	250	-	220	-	-	0,06	-	0,07	-	0,09	-	0,11
P	700-1000 N/mm²	200	-	170	-	-	0,07	-	0,08	-	0,10	-	0,13
P	1000-1300 N/mm²	180	-	150	-	-	0,08	-	0,09	-	0,10	-	0,11
M	Austenitisch	110	-	90	-	-	0,05	-	0,07	-	0,09	-	0,12
M	Austenitisch / ferritisch	100	-	80	-	-	0,06	-	0,07	-	0,09	-	0,11
K	GG	200	-	170	-	-	0,08	-	0,10	-	0,12	-	0,15
K	GGG	150	-	120	-	-	0,07	-	0,09	-	0,11	-	0,14
N	Aluminium	350	-	300	-	-	0,07	-	0,09	-	0,10	-	0,13
N	NE-Metalle	220	-	190	-	-	0,08	-	0,10	-	0,12	-	0,15
S	Titan	70	-	60	-	-	0,03	-	0,04	-	0,05	-	0,07
S	Sonderlegierungen basiert auf Ni	50	-	40	-	-	0,03	-	0,04	-	0,05	-	0,07
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA



				DHTR				
26	26	26	26	26	26	26	26	
				8xD				
-	P25	P35	-	-	-	-	-	
-	-	-	-	-	-	-	-	
TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	TiAlN	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
WCEX 080408	AGP25	AGP35	WCEX 030204	WCEX 040204	WCEX 050308	WCEX 06T308	WCEX 080408	
vc	f	vc	f	vc	f	vc	f	vc	f	vc	f	vc	f	vc	f
-	0,15	150	-	130	-	-	0,06	-	0,07	-	0,09	-	0,11	-	0,15
-	0,18	120	-	100	-	-	0,07	-	0,08	-	0,10	-	0,13	-	0,18
-	0,15	100	-	90	-	-	0,08	-	0,09	-	0,10	-	0,11	-	0,15
-	0,15	90	-	80	-	-	0,05	-	0,07	-	0,09	-	0,12	-	0,15
-	0,14	80	-	70	-	-	0,06	-	0,07	-	0,09	-	0,11	-	0,14
-	0,20	150	-	130	-	-	0,08	-	0,10	-	0,12	-	0,15	-	0,20
-	0,18	120	-	100	-	-	0,07	-	0,09	-	0,11	-	0,14	-	0,18
-	0,16	200	-	180	-	-	0,07	-	0,09	-	0,10	-	0,13	-	0,16
-	0,18	150	-	130	-	-	0,08	-	0,10	-	0,12	-	0,15	-	0,18
-	0,09	35	-	30	-	-	0,03	-	0,04	-	0,05	-	0,07	-	0,09
-	0,09	30	-	25	-	-	0,03	-	0,04	-	0,05	-	0,07	-	0,09
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA



Typ Type						DHMTR							
ILIX Typ-siehe Seite Ilix Type -See page		26		26		26		26		26		26	
DIN													
Bohrtiefe Drilling depth							10xD						
Schneidrichtung Cutting direction													
Schneidstoff Material		P25		P35		-		-		-		-	
Spitzenwinkel Point angle		-		-		-		-		-		-	
Beschichtung Coating		TiAlN		TiAlN		TiAlN		TiAlN		TiAlN		TiAlN	
Innenliegende Kühlkanäle Internal coolant		-		-		-		-		-		-	
Verstärkter Schaft Reinforced shank		-		-		-		-		-		-	
		AGP25		**AGP35**		**WCEX 030204**		**WCEX 040204**		**WCEX 050308**		**WCEX 06T308**	
		vc	f	vc	f	vc	f	vc	f	vc	f	vc	f
P	< 800 N/mm²	150	-	130	-	-	0,08	-	0,08	-	0,10	-	0,12
P	700-1000 N/mm²	120	-	100	-	-	0,10	-	0,10	-	0,12	-	0,14
P	1000-1300 N/mm²	90	-	80	-	-	0,08	-	0,08	-	0,10	-	0,11
M	Austenitisch	80	-	70	-	-	0,07	-	0,10	-	0,12	-	0,14
M	Austenitisch / ferritisch	70	-	60	-	-	0,07	-	0,10	-	0,12	-	0,14
K	GG	150	-	130	-	-	0,10	-	0,12	-	0,14	-	0,16
K	GGG	120	-	100	-	-	0,10	-	0,12	-	0,14	-	0,16
N	Aluminium	200	-	180	-	-	0,07	-	0,10	-	0,12	-	0,15
N	NE-Metalle	150	-	130	-	-	0,07	-	0,10	-	0,12	-	0,15
S	Titan	35	-	30	-	-	0,05	-	0,04	-	0,07	-	0,08
S	Sonderlegierungen basiert auf Ni	30	-	25	-	-	0,05	-	0,06	-	0,07	-	0,08
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

	26														
															
	-														
	-														
	TiAlN														
	-														
	-														
	WCEX 080408														
	vc	**f**													
	-	0,15													
	-	0,16													
	-	0,13													
	-	0,16													
	-	0,16													
	-	0,20													
	-	0,20													
	-	0,18													
	-	0,18													
	-	0,10													
	-	0,10													
	-	-													
	-	-													
	-	-													



Spiralbohrer
Twist Drills





ILIX PRECISION



Spiralbohrer
Twist Drills

▶ Zeichenerklärung
Key to symbols

SCHNEIDSTOFF / TOOL MATERIAL

- HSS-Co
- HSS-Co-8
- HSS
- K 10-20F — VHM / Feinstkorn / Solid carbide / Micro grain

BESCHICHTUNG / COATING

- Unbeschichtet / Blank
- TN — TiN
- TF — TiAlN Futura
- TC — TiCN
- TX — TiNOX

OBERFLÄCHENBEHANDLUNG / SURFACE TREATMENT

- VP — Vaporisiert / Vaporized
- Fasennitriert / Nitrided lands

▶ Werkzeug-Auswahlhilfe
Tool selection guide

SPIRALBOHRER TYP / TWIST DRILLS TYPE - N

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
N							
6156 	3xD	**1897**	0,5 ÷ 32,0	h8			-
6159 	3xD	**1897**	0,5 ÷ 32,0	h8			-
6151 	8xD	**338**	0,2 ÷ 25,4	h8			-
6172 	8xD	**338**	1,5÷6,5 1,0÷13,0	h8			-
6158 	8xD	**338**	0,2 ÷ 20,0	h8			-
6106 	8xD	**338** mit Zapfen with tang	3,0 ÷ 10,0	h8			-
6202 	8xD	**339** mit Zapfen with tang	1,0 ÷ 12,0	h8			-
6165 	12xD	**340**	0,5 ÷ 25,0	h8			-
6108 	12xD	**340** mit Zapfen with tang	3,0 ÷ 10,0	h8			-
6217/1 	16xD	**1869-1**	2,0 ÷ 10,0	h8			-
6217/2 	22xD	**1869-2**	3,0 ÷ 10,0	h8			-
6217/3 	30xD	**1869-3**	3,5 ÷ 10,0	h8			-
6168 	8xD	**345**	3,0 ÷ 100,0	h8			-

SPIRALBOHRER TYP / TWIST DRILLS TYPE - N

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS	●	❍	●	●	-	-	180
-		HSS	●	❍	●	●	-	-	180
TN		HSS	●	❍	●	●	-	-	191
-		HSS	●	❍	●	●	-	-	207
-		HSS	●	❍	●	●	-	-	191
-		HSS	●	❍	●	●	-	-	191
-		HSS	●	❍	●	●	-	-	224
TN		HSS	●	❍	●	●	-	-	226
-		HSS	●	❍	●	●	-	-	226
-		HSS	●	❍	●	●	-	-	232
-		HSS	●	❍	●	●	-	-	234
-		HSS	●	❍	●	●	-	-	235
TN		HSS	●	❍	●	●	-	-	237

SPIRALBOHRER TYP / TWIST DRILLS TYPE - N, NK, H

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
N							
6176 	8xD	**346**	10,0 ÷ 50,0	h8			-
6233 	12xD	**341**	5,0 ÷ 50,0	h8			-
6220/1 	16xD	**1870-1**	8,0 ÷ 50,0	h8			-
6220/2 	22xD	**1870-2**	8,0 ÷ 50,0	h8			-
NK ■ **Doppelseitig /** Double end							
6109 	-	**1897***	2,0 ÷ 10,0	h8			-
H							
6186 	3xD	**1897**	1,0 ÷ 22,0	h8			-
6187 	8xD	**338**	0,35 ÷ 16,0	h8			-
6190 	8xD	**338**	0,4 ÷ 16,0	h8			-
6192 	12xD	**340**	1,0 ÷ 10,0	h8			-

* Nuten kürzer / Flutes shorter than DIN1897

SPIRALBOHRER TYP / TWIST DRILLS TYPE - N, NK, H

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS	●	❍	●	●	-	-	253
-		HSS	●	❍	●	●	-	-	254
-		HSS	●	❍	●	●	-	-	256
-		HSS	●	❍	●	●	-	-	257
-		HSS	●	❍	●	●	-	-	180
-		HSS	-	-	-	●	-	-	180
-		HSS	-	-	-	●	-	-	191
-		HSS	-	-	-	●	-	-	191
-		HSS	-	-	-	●	-	-	226

SPIRALBOHRER TYP / TWIST DRILLS TYPE - W, STL

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
W							
6197	8xD	338	0,5 ÷ 16,0	h8	130°		-
6199	8xD	338	0,5 ÷ 12,0	h8	130°		-
6200	12xD	340	1,0 ÷ 12,0	h8	130°		-
6201	8xD	345	10,0 ÷ 32,0	h8	130°		-
STL							
6210	8xD	338	1,0 ÷ 16,0	h8	130°		-
6209	8xD	338	1,500 ÷ 12,700	h8	130°		-
6173	12xD	340	1,0 ÷ 12,700	h8	130°		-
6184	12xD	340	2,0 ÷ 11,0	h8	130°		-
6216/1	16xD	1869/1	2,0 ÷ 12,7	h8	130°		-
6216/2	22xD	1869/2	3,0 ÷ 12,0	h8	130°		-
6216/3	30xD	1869/3	3,5 ÷ 12,0	h8	130°		-
6130	60/70xD	ILIX NORM	6,0 ÷ 14,0	h8	130°		-

SPIRALBOHRER TYP / TWIST DRILLS TYPE - W, STL

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS	❍	-	-	●	-	-	191
-		HSS	❍	-	-	●	-	-	191
-		HSS	❍	-	-	●	-	-	226
-		HSS	❍	-	-	●	-	-	237
TN TC		HSS	●	-	●	●	-	-	191
-		HSS	●	-	●	●	-	-	191
TN		HSS	●	-	●	●	-	-	226
-		HSS	●	-	●	●	-	-	226
-		HSS	●	-	●	●	-	-	232
-		HSS	●	-	●	●	-	-	234
-		HSS	●	-	●	●	-	-	235
-		HSS	●	-	●	●	-	-	236

SPIRALBOHRER TYP / TWIST DRILLS TYPE - STL

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
STL							
6212	8xD	345	10,0 ÷ 30,0	h8	130°		-
6222	12xD	341	10,0 ÷ 31,0	h8	130°		-
6221/1	16xD	1870/1	12,0 ÷ 30,0	h8	130°		-
6221/2	22xD	1870/2	8,0 ÷ 40,0	h8	130°		-
6150	40xD	ILIX NORM	10,0 ÷ 22,0	h8	130°		-

HSS-Co

SPIRALBOHRER TYP / TWIST DRILLS TYPE - N, STL

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
N							
6153	8xD	338	0,3 ÷ 16,0	h8	120°		-
6154	8xD	338	0,5 ÷ 16,0	h8	120°		-
6166	12xD	340	0,5 ÷ 17,0	h8	120°		-
STL							
6131	3xD	1897	1,0 ÷ 20,0	h8	130°		-
6132	3xD	ILIX NORM	1,0 ÷ 20,0	h8	130°		-

SPIRALBOHRER TYP / TWIST DRILLS TYPE - STL

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS	●	-	●	●	-	-	237
-		HSS	●	-	●	●	-	-	254
-		HSS	●	-	●	●	-	-	256
-		HSS	●	-	●	●	-	-	257
-		HSS	●	-	●	●	-	-	258

HSS-Co

SPIRALBOHRER TYP / TWIST DRILLS TYPE - N, STL

TN		HSS-Co	●	❍	●	●	-	-	208
-		HSS-Co8	●	❍	●	●	-	-	208
-		HSS-Co	●	❍	●	●	-	-	226
-		HSS-Co	●	-	❍	●	-	-	180
TN		HSS-Co	●	-	❍	●	-	-	180

SPIRALBOHRER TYP / TWIST DRILLS TYPE - STL, NS, VA

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
STL							
6218/1	16xD	1869-1	2,0 ÷ 12,0	h8	130°		-
6218/2	22xD	1869-2	3,0 ÷ 12,0	h8	130°		-
6219/1	16xD	1870-1	10,5 ÷ 30,0	h8	130°		-
6219/2	22xD	1870-2	10,0 ÷ 30,0	h8	130°		-
NS							
6246	3xD	1897	0,4 ÷ 12,0	h8	120°		-
6247	8xD	338	1,0 ÷ 15,0	h8	120°		-
6240	3xD	ILIX NORM	10 ÷ 30,0	h8	120°		-
6204	8xD	345	10 ÷ 32,0	h8	120°		-
VA							
6135	3xD	1897	1,0 ÷ 12,0	h8	130°		-
6234	8xD	338	0,3 ÷ 15,0	h8	130°		-
6112	12xD	340	1,0 ÷ 12,0	h8	130°		-

SPIRALBOHRER TYP / TWIST DRILLS TYPE - STL, NS, VA

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS-Co	●	-	●	●	-	-	232
-		HSS-Co	●	-	●	●	-	-	234
-		HSS-Co	●	-	●	●	-	-	256
-		HSS-Co	●	-	●	●	-	-	257
-		HSS-Co	●	❍	●	●	❍	-	180
-		HSS-Co	●	❍	●	●	❍	-	208
-		HSS-Co	●	❍	●	●	❍	-	252
-		HSS-Co	●	❍	●	●	❍	-	250
TX		HSS-Co	❍	●	❍	●	●	-	180
TX		HSS-Co	❍	●	❍	●	●	-	208
-		HSS-Co	❍	●	❍	●	●	-	226

SPIRALBOHRER TYP / TWIST DRILLS TYPE - VA, RECORD VA, HD, RECORD GG

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
VA							
6114 	8xD	**345**	10,0 ÷ 32,0	h8			-
6116 	8xD	**346**	12,0 ÷ 29,5	h8			-
RECORD VA							
6140 	8xD	**338**	1,0 ÷ 16,0	h8			-
HD							
6111 	8xD	**338**	1,0 ÷ 16,0	h8			-
6113 	12xD	**340**	1,0 ÷ 12,0	h8			-
6115 	8xD	**345**	10,0 ÷ 50,0	h8			-
6119 	12xD	**341**	10,0 ÷ 31,0	h8			-
RECORD GG							
6110 	8xD	**338**	4,0 ÷ 16,0	h8			-

SPIRALBOHRER TYP / TWIST DRILLS TYPE - VA, RECORD VA, HD, RECORD GG

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS-Co	❍	●	❍	●	●	-	250
-		HSS-Co	❍	●	❍	●	●	-	253
TX		HSS-Co	❍	●	❍	❍	●	-	208
TN TC		HSS-Co	●	-	●	●	-	-	208
-		HSS-Co	●	-	●	●	-	-	226
-		HSS-Co	●	-	●	●	-	-	250
-		HSS-Co	●	-	●	●	-	-	254
TF		HSS-Co	-	-	●	-	-	-	208

SPIRALBOHRER TYP / TWIST DRILLS TYPE - MICRODRILL, N, VHM / SOLID CARBIDE

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
MICRODRILL							
6511 	8xD	**1899A**	0,05 ÷ 1,45	h8			-
6513 	8xD	**1899A**	0,08 ÷ 1,45	h8			-
6516 	8xD	**ILIX NORM**	0,10 ÷ 2,95	h8			-
6230 	10xD	**ILIX NORM**	1,0 ÷ 3,0	h8			-
N							
6149 	3xD	**1897**	1,0 ÷ 10,0	h8			-
6214 	8xD	**338**	0,6 ÷ 12,0	h8			-
VHM / Solid Carbide ■ HM bestückt / Carbide tipped twist drills							
6120 	8xD	**338**	3,0 ÷ 13,0	h8			-
6211 	5xD	**8037**	3,0 ÷ 16,0	h8			-
6231 	5xD	**8041**	8,0 ÷ 32,0	h8			-

SPIRALBOHRER TYP / TWIST DRILLS TYPE - MICRODRILL, N, VHM / SOLID CARBIDE

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS-Co	●	●	●	-	-	-	220
-		HSS-Co	●	●	●	-	-	-	220
-		K 10-20	●	●	●	-	-	-	222
-		K 10-20	-	-	-	●	-	-	217
-		K 10-20	❍	❍	●	●	-	-	180
-		K 10-20	❍	❍	●	●	-	-	215
-		K 10-20	-	-	●	-	-	●	215
-		K 10-20	-	-	●	-	-	●	218
-		K 10-20	-	-	●	-	-	●	219

ZENTRIERBOHRER / CENTRE DRILLS TYPE - VHM - HSS

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
HSS - VHM / Solid Carbide ■ Zentrierbohrer Form A- 60° / Center drills with							
6296 		**333A**	0,5 ÷ 6,3	-	-	-	-
6290 		**333 A**	0,5 ÷ 12,5	-	-	-	-
6162 		**333 A** alte Norm former standard	0,63 ÷ 6,0	-	-	-	-
6294 		**333 A**	0,5 ÷ 6,3	-	-	-	-
6164 		**ANSI B** 94.11 M-1979	0,64 ÷ 7,94	-	-	-	-
6142 		**B.S. 328**	1,19 ÷ 7,94	-	-	-	-
HSS ■ Zentrierbohrer mit Radius Form R / Center drills with radius form R							
6292 		**333 R**	0,50 ÷ 12,5	-	-	-	-
6223 		**333 R** alte Norm former standard	1,0 ÷ 4,0	-	-	-	-
6295 		**333 R**	1,0 ÷ 4,0	-	-	-	-
6160 		**ANSI B** 94.11 M-1979	0,64 ÷ 4,76	-	-	-	-

ZENTRIERBOHRER / CENTRE DRILLS TYPE - **VHM - HSS**

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
included angle form A – 60°									
-		K 10-20	●	●	●	●	●	-	265
TN		HSS	●	●	●	●	●	-	265
TN		HSS	●	●	●	●	●	-	266
-		HSS	●	●	●	●	●	-	265
-		HSS	●	●	●	●	●	-	269
-		HSS	●	●	●	●	●	-	270
TN		HSS	●	●	●	●	●	-	265
TN		HSS	●	●	●	●	●	-	266
-		HSS	●	●	●	●	●	-	265
-		HSS	●	●	●	●	●	-	269

ZENTRIERBOHRER / CENTRE DRILLS TYPE - HSS, HSS-CO

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
HSS ■ Zentrierbohrer mit Schutzsenkung und Senkwinkel Form B 60/120° / Center drills							
6297 		**333 B**	1,0 ÷ 10,0	-	-	-	-
6298 B 		**333 B**	1,0 ÷ 6,3	-	-	-	-
6289 		**333 B**	1,6 ÷ 10,0	-	-	-	-
HSS-Co ■ Zentrierbohrer mit Senkwinkel Form A – 60° / Center drills included angle							
6291 		**333 A** **mit Fläche** with flat	1,6 ÷ 5,0	-	-	-	-
6299 		**333 A**	1,0 ÷ 12,5	-	-	-	-
6144 		**ILIX NORM***	0,75 ÷ 4,0	-	-	-	-
HSS-Co ■ Zentrierbohrer mit Radius Form R / Center drills with radius Form R							
6293 		**333 R** **con piano** with flat	1,6 ÷ 5,0	-	-	-	-

HSS
NC-ANBOHRER / NC-SPOTTING AND CHAMFERING DRILLS

HSS							
6148 		**1897***	4,0 ÷ 20,0	-			-
6147 		**1897***	4,0 ÷ 20,0	-			-

* Taglienti più corti del DIN 1897 / Flutes shorter than DIN 1897

ZENTRIERBOHRER / CENTRE DRILLS TYPE - HSS, HSS-CO

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
included angle Form B 60/120°									
-		HSS	●	●	●	●	●	-	**267**
-		HSS	●	●	●	●	●	-	**267**
-		HSS	●	●	●	●	●	-	**267**
form A – 60°									
-		HSS-Co	●	●	●	●	●	-	**265**
-		HSS-Co	●	●	●	●	●	-	**265**
-		HSS-Co	●	●	●	●	●	-	**268**
-		HSS-Co	●	●	●	●	●	-	**265**

HSS
NC-ANBOHRER / NC-SPOTTING AND CHAMFERING DRILLS

TN		HSS	●	●	●	●	●	-	**189**
TN		HSS	●	●	●	●	●	-	**189**

NC-ANBOHRER / NC-SPOTTING AND CHAMFERING DRILLS
HSS, VHM / SOLID CARBIDE

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
HSS - VHM/SOLID CARBIDE							
6100 		**1897***	6,0 ÷ 20,0	-			-
6102 		**ILIX NORM**	4,0 ÷ 20,0	-			-
6103 		**ILIX NORM**	4,0 ÷ 20,0	-			-
HSS ■ Stufenbohrer für Zentrierbohrungen nach DIN 332 / Step drills for center holes acc.							
6249 	Senkwinkel 60° Chamfer 60°	**ILIX NORM**	3,3 ÷ 21,0	-			-
6250 	Radius Radius	**ILIX NORM**	3,3 ÷ 21,0	-			-
HSS **MEHRFASEN-STUFENBOHRER / SUBLAND DRILLS - HSS**							
HSS							
6281 	90°	**8374**	M3 ÷ M10	-			-
6282 	90°	**8378**	M3 ÷ M12	-			-
6283 	180°	**8376**	M3 ÷ M10	-			-
6284 	90°	**8375**	M5 ÷ M16	-			-

* Taglienti più corti del DIN 1897 / Flutes shorter than DIN 1897

NC-ANBOHRER / NC-SPOTTING AND CHAMFERING DRILLS
HSS, VHM / SOLID CARBIDE

BESCHICHTUNG COATING	**SCHNEIDRICHTUNG** CUTTING DIRECT.	**SCHNEIDSTOFF** TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS	●	●	●	●	●	-	189
TN		K 10-20	●	●	●	●	●	●	190
TN		K 10-20	●	●	●	●	●	●	190

To din 332

-		HSS	●	●	●	●	●	-	271
-		HSS	●	●	●	●	●	-	271

HSS
MEHRFASEN-STUFENBOHRER / SUBLAND DRILLS **- HSS**

-		HSS	●	●	●	●	●	-	260
-		HSS	●	●	●	●	●	-	259
-		HSS	●	●	●	●	●	-	261
-		HSS	●	●	●	●	●	-	263

MEHRFASEN-STUFENBOHRER / SUBLAND DRILLS - HSS

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
HSS							
6285 	90°	**8379**	M8 ÷ M20	-			-
6286 	180°	**8377**	M5 ÷ M20	-			-
HSS ■ Stiftlochbohrer / Taper pin drills							
6501 		**1898 A**	1,25 ÷ 12,0	-			-
6502 		**1898 B**	5,0 ÷ 6,0	-			-

MEHRFASEN-STUFENBOHRER / SUBLAND DRILLS - HSS

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS	●	●	●	●	●	-	262
-		HSS	●	●	●	●	●	-	264
-		HSS	●	●	●	●	●	-	272
-		HSS	●	●	●	●	●	-	273

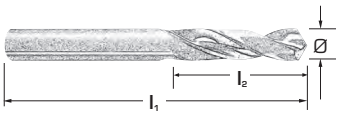
DIN 1897

EXTRA KURZ / STUB LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS, HSS-Co und VHM
Twist drills with straight shank made of HSS, HSS-Co and solid carbide



TiNOX TiN



Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
0,400			19	2		–	–	–	–	●	–	–	–	–	–	–
0,500			20	3		●	–	●	–	●	–	–	–	–	–	–
0,550			21	3		●	–	●	–	–	–	–	–	–	–	–
0,600			21	3		●	–	●	–	●	–	–	–	–	–	–
0,650			22	4		–	–	●	–	–	–	–	–	–	–	–
0,700			23	4		●	–	●	–	●	–	–	–	–	–	–
0,750			23	4		●	–	●	–	–	–	–	–	–	–	–
0,800			24	5		●	–	●	–	●	–	–	–	–	–	–
0,850			24	5		●	–	●	–	–	–	–	–	–	–	–
0,900			25	5		●	–	●	–	●	–	–	–	–	–	–
0,950			25	5		●	–	●	–	–	–	–	–	–	–	–
1,000			26	6	8	●	–	●	●	●	●	●	●	●	●	●
1,016		60	26	6		–	–	–	–	–	–	–	●	–	–	–
1,041		59	26	6		–	–	–	–	–	–	–	●	–	–	–
1,050			26	6		●	–	●	–	–	–	–	–	–	–	–
1,067		58	26	6		–	–	–	–	–	–	–	●	–	–	–
1,092		57	26	7		–	–	–	–	–	–	–	●	–	–	–
1,100			28	7	9	●	–	●	●	●	■	■	●	●	●	●
1,150			28	7		●	–	●	–	–	–	–	–	–	–	–
1,181		56	30	8		–	–	–	–	–	–	–	●	–	–	–
1,191	3/64		30	8		–	–	–	–	–	–	–	●	–	–	–
1,200			30	8	10	●	–	●	●	●	●	●	●	●	●	●
1,250			30	8		●	–	●	–	–	–	–	–	–	–	–
1,300			30	8	10	●	–	●	●	●	●	●	●	●	●	●
1,321		55	32	9		–	–	–	–	–	–	–	●	–	–	–
1,350			32	9		●	–	●	–	–	–	–	–	–	–	–
1,397		54	32	9		–	–	–	–	–	–	–	●	–	–	–
1,400			32	9	12	●	–	●	●	●	●	●	●	●	●	●
1,450			32	9		●	–	●	–	–	–	–	–	–	–	–
1,500			32	9	12	●	–	●	●	●	●	●	●	●	●	●
1,511		53	34	10		–	–	–	–	–	–	–	●	–	–	–
1,550			34	10		●	–	●	●	–	–	–	–	–	–	–
1,588	1/16		34	10		–	–	–	–	–	–	–	●	–	–	–
1,600			34	10	13	●	–	●	●	●	●	●	●	●	●	●
1,613		52	34	10		–	–	–	–	–	–	–	●	–	–	–
1,650			34	10		●	–	●	–	–	–	–	–	–	–	–
1,700			34	10	13	●	–	●	●	●	●	●	●	●	●	●
1,702		51	36	11		–	–	–	–	–	–	–	●	–	–	–
1,750			36	11		●	–	●	●	–	–	–	–	–	–	–

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

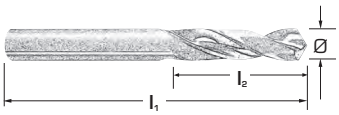
DIN 1897

SERIE EXTRA CORTA / STUB LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS, HSS-Co und VHM
Twist drills with straight shank made of HSS, HSS-Co and solid carbide



TiNOX TiN



Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
1,778		50	36	11		–	–	–	–	–	–	–	●	–	–	–
1,800			36	11	14	●	–	●	●	●	■	■	●	●	●	●
1,850			36	11		●	–	●	●	–	–	–	–	–	–	–
1,854		49	36	11		–	–	–	–	–	–	–	●	–	–	–
1,900			36	11	14	●	–	●	●	●	●	●	●	●	●	●
1,930		48	38	12		–	–	–	–	–	–	–	●	–	–	–
1,950			38	12		●	–	●	●	–	–	–	–	–	–	–
1,984	5/64		38	12		–	–	–	–	–	–	–	●	–	–	–
1,994		47	38	12		–	–	–	–	–	–	–	●	–	–	–
2,000			38	12	16	●	●	●	●	●	●	●	●	●	●	●
2,050			38	12		●	–	●	●	–	–	–	–	–	–	–
2,057		46	38	12		–	–	–	–	–	–	–	●	–	–	–
2,083		45	38	12		–	–	–	–	–	–	–	●	–	–	–
2,100			38	12	16	●	●	●	●	●	■	■	●	●	●	●
2,150			40	13		●	–	●	–	–	–	–	–	–	–	–
2,184		44	40	13		–	–	–	–	–	–	–	●	–	–	–
2,200			40	13	17	●	■	●	●	●	●	●	●	●	●	●
2,250			40	13		●	–	●	●	–	–	–	–	–	–	–
2,261		43	40	13		–	–	–	–	–	–	–	●	–	–	–
2,300			40	13	17	●	●	●	●	●	●	●	●	●	●	●
2,350			40	13		●	–	●	●	–	–	–	–	–	–	–
2,375		42	43	14		–	–	–	–	–	–	–	●	–	–	–
2,383	3/32		43	14		–	–	–	–	–	–	–	●	–	–	–
2,400			43	14	18	●	●	●	●	●	●	●	●	●	●	●
2,438		41	43	14		–	–	–	–	–	–	–	●	–	–	–
2,450			43	14		●	–	●	●	–	–	–	–	–	–	–
2,489		40	43	14		–	–	–	–	–	–	–	●	–	–	–
2,500			43	14	18	●	●	●	●	●	●	●	●	●	●	●
2,527		39	43	14		–	–	–	–	–	–	–	●	–	–	–
2,550			43	14		●	–	●	●	–	–	–	–	–	–	–
2,578		38	43	14		–	–	–	–	–	–	–	●	–	–	–
2,600			43	14	18	●	●	●	●	●	●	●	●	●	●	●
2,642		37	43	14		–	–	–	–	–	–	–	●	–	–	–
2,650			43	14		●	–	●	–	–	–	–	–	–	–	–
2,700			46	16	21	●	●	●	●	●	●	●	●	●	●	●
2,705		36	46	16		–	–	–	–	–	–	–	●	–	–	–
2,750			46	16		●	–	●	–	–	–	–	–	–	–	–
2,779	7/64		46	16		–	–	–	–	–	–	–	●	–	–	–
2,794		35	46	16		–	–	–	–	–	–	–	●	–	–	–
2,800			46	16	21	●	●	●	●	●	●	●	●	●	●	●

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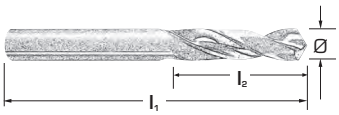
DIN 1897

EXTRA KURZ / STUB LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS, HSS-Co und VHM
Twist drills with straight shank made of HSS, HSS-Co and solid carbide



TiNOX TiN



Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
2,819		34	46	16		–	–	–	–	–	–	–	●	–	–	–
2,850			46	16		●	–	●	–	–	–	–	–	–	–	–
2,870		33	46	16		–	–	–	–	–	–	–	●	–	–	–
2,900			46	16	21	●	●	●	●	●	●	●	●	●	●	●
2,946		32	46	16		–	–	–	–	–	–	–	●	–	–	–
2,950			46	16		●	–	●	●	–	–	–	–	–	–	–
3,000			46	16	21	●	●	●	●	●	●	●	●	●	●	●
3,048		31	49	18		–	–	–	–	–	–	–	●	–	–	–
3,100			49	18	23	●	●	●	●	●	–	–	●	●	●	●
3,175	1/8		49	18		–	–	–	–	–	–	–	●	–	–	–
3,200			49	18	23	●	●	●	●	●	●	●	●	●	●	●
3,250			49	18		●	–	●	●	–	–	–	–	–	–	–
3,264		30	49	18		–	–	–	–	–	–	–	●	–	–	–
3,300			49	18	23	●	●	●	●	●	●	●	●	●	●	●
3,400			52	20	26	●	●	●	●	●	●	●	●	●	●	●
3,454		29	52	20		–	–	–	–	–	–	–	●	–	–	–
3,500			52	20	26	●	●	●	●	●	●	●	●	●	●	●
3,569		28	52	20		–	–	–	–	–	–	–	●	–	–	–
3,571	9/64		52	20		–	–	–	–	–	–	–	●	–	–	–
3,600			52	20	26	●	●	●	●	●	●	●	●	●	●	●
3,658		27	52	20		–	–	–	–	–	–	–	●	–	–	–
3,700			52	20	26	●	●	●	●	●	●	●	●	●	●	●
3,734		26	52	20		–	–	–	–	–	–	–	●	–	–	–
3,750			52	20		●	–	●	–	–	–	–	–	–	–	–
3,797		25	55	22		–	–	–	–	–	–	–	●	–	–	–
3,800			55	22	29	●	●	●	●	●	■	■	●	●	●	●
3,861		24	55	22		–	–	–	–	–	–	–	●	–	–	–
3,900			55	22	29	●	■	●	●	●	●	●	●	●	●	●
3,912		23	55	22		–	–	–	–	–	–	–	●	–	–	–
3,970	5/32		55	22		●	–	–	–	–	–	–	●	–	–	–
3,988		22	55	22		–	–	–	–	–	–	–	●	–	–	–
4,000			55	22	29	●	●	●	●	●	●	●	●	●	●	●
4,039		21	55	22		–	–	–	–	–	–	–	●	–	–	–
4,089		20	55	22		–	–	–	–	–	–	–	●	–	–	–
4,100			55	22	29	●	●	●	●	●	●	●	●	●	●	●
4,200			55	22	29	●	●	●	●	●	■	■	●	●	●	●
4,216		19	55	22		–	–	–	–	–	–	–	●	–	–	–
4,250			55	22		●	–	●	●	–	–	–	–	–	–	–
4,300			58	24	31	●	●	●	●	●	●	●	●	●	●	●
4,305		18	58	24		–	–	–	–	–	–	–	●	–	–	–

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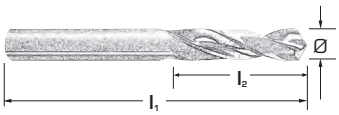
Spiralbohrer mit Zylinderschaft aus HSS, HSS-Co und VHM
Twist drills with straight shank made of HSS, HSS-Co and solid carbide



TiNOX TiN



Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
4,366	11/64		58	24		–	–	–	–	–	–	–	●	–	–	–
4,394		17	58	24		■	–	–	–	–	–	–	●	–	–	–
4,400			58	24	31	●	●	●	●	●	■	■	●	●	●	●
4,496		16	58	24		–	–	–	–	–	–	–	●	–	–	–
4,500			58	24	31	●	●	●	●	●	●	●	●	●	●	●
4,572		15	58	24		–	–	–	–	–	–	–	●	–	–	–
4,600			58	24	31	●	●	●	●	●	●	●	●	●	●	●
4,623		14	58	24		–	–	–	–	–	–	–	●	–	–	–
4,699		13	58	24		–	–	–	–	–	–	–	●	–	–	–
4,700			58	24	31	●	●	●	●	●	●	●	●	●	●	●
4,750			58	24		●	–	●	–	–	–	–	–	–	–	–
4,763	3/16		62	26		–	–	–	–	–	–	–	●	–	–	–
4,800			62	26	34	●	●	●	●	●	●	●	●	●	●	●
4,801		12	62	26		–	–	–	–	–	–	–	●	–	–	–
4,851		11	62	26		–	–	–	–	–	–	–	●	–	–	–
4,900			62	26	34	●	●	●	●	●	–	●	●	●	●	●
4,915		10	62	26		–	–	–	–	–	–	–	●	–	–	–
4,978		9	62	26		–	–	–	–	–	–	–	●	–	–	–
5,000			62	26	34	●	●	●	●	●	●	●	●	●	●	●
5,055		8	62	26		–	–	–	–	–	–	–	●	–	–	–
5,100			62	26	34	●	●	●	●	●	●	●	●	●	●	●
5,105		7	62	26		–	–	–	–	–	–	–	●	–	–	–
5,159	13/64		62	26		–	–	–	–	–	–	–	●	–	–	–
5,182		6	62	26		–	–	–	–	–	–	–	●	–	–	–
5,200			62	26	34	●	●	●	●	●	●	●	●	●	●	●
5,220		5	62	26		–	–	–	–	–	–	–	●	–	–	–
5,250			62	26		●	–	●	–	–	–	–	–	–	–	–
5,300			62	26	34	●	●	●	●	●	●	●	●	●	●	●
5,309		4	66	28		–	–	–	–	–	–	–	●	–	–	–
5,400			66	28	36	●	●	●	●	●	●	●	●	●	●	●
5,410		3	66	28		–	–	–	–	–	–	–	●	–	–	–
5,500			66	28	36	●	●	●	●	●	●	●	●	●	●	●
5,556	7/32		66	28		–	–	–	–	–	–	–	●	–	–	–
5,600			66	28	36	●	●	●	●	●	●	●	●	●	●	●
5,613		2	66	28		–	–	–	–	–	–	–	●	–	–	–
5,700			66	28	36	●	●	●	●	●	●	●	●	●	●	●
5,750			66	28		●	–	●	–	–	–	–	–	–	–	–
5,791		1	66	28		–	–	–	–	–	–	–	●	–	–	–
5,800			66	28	36	●	●	●	●	●	●	●	●	●	●	●
5,900			66	28	36	●	–	●	●	●	●	●	●	●	●	●

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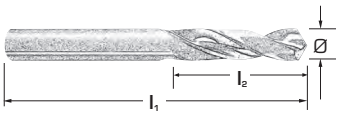
TiNOX TiN



Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
5,954	15/64		66	28		–	–	–	–	–	–	–	●	–	–	–
6,000			66	28	36	●	●	●	●	●	●	●	●	●	●	●
6,100			70	31	40	●	●	●	●	●	●	●	●	●	●	●
6,200			70	31	40	●	●	●	●	●	●	●	●	●	●	●
6,250			70	31		●	–	●	–	–	–	–	–	–	–	–
6,300			70	31	40	●	●	●	●	●	●	●	●	●	●	●
6,350	1/4		70	31	40	–	–	–	–	–	–	–	●	●	●	–
6,400			70	31	40	●	●	●	●	●	●	●	●	●	●	●
6,500			70	31	40	●	●	●	●	●	●	●	●	●	●	●
6,600			70	31	40	●	■	●	●	●	●	●	●	●	●	●
6,700			70	31	40	●	●	●	–	●	●	●	●	●	●	●
6,746	17/64		74	34		–	–	–	–	–	–	–	●	–	–	–
6,750			74	34		●	–	●	●	–	–	–	–	–	–	–
6,800			74	34	44	●	●	●	●	●	●	●	●	●	●	●
6,900			74	34	44	●	●	●	–	●	–	●	●	●	●	●
7,000			74	34	44	●	●	●	●	●	●	●	●	●	●	●
7,100			74	34	44	●	–	●	–	●	–	–	●	●	●	●
7,144	9/32		74	34		–	–	–	–	–	–	–	●	–	–	–
7,200			74	34	44	●	–	●	●	●	●	●	●	●	●	●
7,250			74	34		●	–	●	●	–	–	–	–	–	–	–
7,300			74	34	44	●	–	●	–	●	–	–	●	●	●	●
7,400			74	34	44	●	–	●	–	●	–	–	●	●	●	●
7,500			74	34	44	●	●	●	●	●	●	●	●	●	●	●
7,541	19/64		79	37		–	–	–	–	–	–	–	●	–	–	–
7,600			79	37	48	●	–	●	–	●	–	–	●	●	●	●
7,700			79	37	48	●	–	●	–	●	●	●	●	●	●	●
7,750			79	37		●	–	●	–	–	–	–	–	–	–	–
7,800			79	37	48	●	–	●	–	●	–	–	●	●	●	●
7,900			79	37	48	●	–	●	–	●	●	●	●	●	●	●
7,938	5/16		79	37		–	–	–	–	–	–	–	●	–	–	–
7,950			79	37	48	■	–	–	–	–	–	–	–	–	–	–
8,000			79	37	48	●	●	●	●	●	●	●	●	●	●	●
8,100			79	37	48	●	–	●	●	●	■	■	●	●	●	●
8,200			79	37	48	●	–	●	●	●	●	●	●	●	●	●
8,250			79	37		●	–	●	–	–	–	–	–	–	–	–
8,300			79	37	48	●	–	●	–	●	●	●	●	●	●	●
8,334	21/64		79	37		–	–	–	–	–	–	–	●	–	–	–
8,400			79	37	48	●	–	●	●	●	●	●	●	●	●	●
8,500			79	37	48	●	●	●	●	●	●	●	●	●	●	●
8,600			84	40	52	●	–	●	–	●	●	●	●	●	●	●
8,700			84	40	52	●	–	●	■	●	●	●	●	●	●	●

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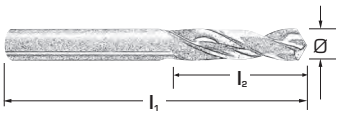

Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
8,733	11/32		84	40		–	–	–	–	–	–	–	●	–	–	–
8,750			84	40		●	–	●	–	–	–	–	–	–	–	–
8,800			84	40	52	●	–	●	–	●	●	●	●	●	●	●
8,900			84	40	52	●	–	●	–	●	–	–	●	●	●	●
9,000			84	40	52	●	●	●	●	●	●	●	●	●	●	●
9,100			84	40	52	●	–	●	–	●	–	–	●	●	●	●
9,129	23/64		84	40		–	–	–	–	–	–	–	●	–	–	–
9,200			84	40	52	●	–	●	●	●	●	●	●	●	●	●
9,250			84	40		●	–	●	–	–	–	–	–	–	–	–
9,300			84	40	52	●	–	●	–	●	●	●	●	●	●	●
9,400			84	40	52	●	–	●	–	●	–	–	●	●	●	●
9,500			84	40	52	●	●	●	●	●	●	●	●	●	●	●
9,525	3/8		89	43		–	–	–	–	–	–	–	●	–	–	–
9,600			89	43	56	●	–	●	–	●	–	–	●	●	●	●
9,700			89	43	56	●	–	●	–	●	–	–	●	●	●	●
9,750			89	43		●	–	●	–	–	–	–	–	–	–	–
9,800			89	43	56	●	–	●	●	●	●	●	●	●	●	●
9,900			89	43	56	●	–	●	–	●	–	–	●	●	●	●
9,921	25/64		89	43		–	–	–	–	–	–	–	●	–	–	–
10,000			89	43	56	●	●	●	●	●	●	●	●	●	●	●
10,100			89	43		●	–	●	–	–	–	–	–	–	–	–
10,200			89	43	56	●	–	●	●	–	●	●	●	●	●	–
10,250			89	43		●	–	●	–	–	–	–	–	–	–	–
10,300			89	43		●	–	●	–	–	–	–	–	–	–	–
10,320	13/32		89	43		–	–	–	–	–	–	–	●	–	–	–
10,400			89	43		●	–	●	–	–	–	–	–	–	–	–
10,500			89	43	56	●	–	●	●	●	●	●	●	●	●	–
10,600			89	43		●	–	●	–	–	–	–	–	–	–	–
10,700			95	47		●	–	●	●	–	–	–	–	–	–	–
10,716	27/64		95	47		–	–	–	–	–	–	–	●	–	–	–
10,750			95	47		●	–	●	–	–	–	–	–	–	–	–
10,800			95	47	61	●	–	●	–	–	–	–	●	●	●	–
10,900			95	47		●	–	●	–	–	–	–	–	–	–	–
11,000			95	47	61	●	–	●	●	●	●	●	●	●	●	–
11,100			95	47		●	–	●	–	–	–	–	–	–	–	–
11,113	7/16		95	47		–	–	–	–	–	–	–	●	–	–	–
11,200			95	47		●	–	●	–	–	–	–	●	–	–	–
11,250			95	47		●	–	●	–	–	–	–	–	–	–	–
11,300			95	47		●	–	●	–	–	–	–	–	–	–	–
11,400			95	47		●	–	●	–	–	–	–	–	–	–	–

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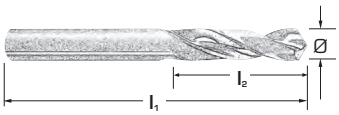

Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
11,500			95	47	61	●	–	●	●	●	●	●	●	●	●	–
11,509	29/64		95	47		–	–	–	–	–	–	–	●	–	–	–
11,600			95	47		●	–	●	–	–	–	–	–	–	–	–
11,700			95	47		●	–	●	–	–	–	–	–	–	–	–
11,750			95	47		●	–	●	–	–	–	–	–	–	–	–
11,800			95	47		●	–	●	–	–	–	–	●	–	–	–
11,900			102	51		●	–	●	–	–	–	–	–	–	–	–
11,908	15/32		102	51		–	–	–	–	–	–	–	●	–	–	–
12,000			102	51	66	●	–	●	●	●	●	●	●	●	●	–
12,100			102	51		●	–	●	–	–	–	–	–	–	–	–
12,200			102	51		●	–	●	–	–	–	–	–	–	–	–
12,250			102	51		●	–	●	–	–	–	–	–	–	–	–
12,300			102	51		●	–	●	■	–	–	–	–	–	–	–
12,304	31/64		102	51		–	–	–	–	–	–	–	●	–	–	–
12,400			102	51		●	–	●	–	–	–	–	–	–	–	–
12,500			102	51	66	●	–	●	●	–	–	–	●	●	●	–
12,600			102	51		●	–	●	–	–	–	–	–	–	–	–
12,700			102	51	66	●	–	●	●	–	–	–	–	●	●	–
12,700	1/2		102	51		–	–	–	–	–	–	–	●	–	–	–
12,750			102	51		●	–	●	–	–	–	–	–	–	–	–
12,800			102	51		●	–	●	–	–	–	–	●	–	–	–
12,900			102	51		●	–	●	–	–	–	–	–	–	–	–
13,000			102	51	66	●	–	●	●	–	–	–	●	●	●	–
13,100			102	51		●	–	●	–	–	–	–	–	–	–	–
13,200			102	51		●	–	●	–	–	–	–	–	–	–	–
13,250			107	54		●	–	●	–	–	–	–	–	–	–	–
13,300			107	54		●	–	●	–	–	–	–	●	–	–	–
13,400			107	54		●	–	●	–	–	–	–	–	–	–	–
13,500			107	54	70	●	–	●	●	–	–	–	●	●	●	–
13,600			107	54		●	–	●	–	–	–	–	–	–	–	–
13,700			107	54		●	–	●	–	–	–	–	–	–	–	–
13,750			107	54		●	–	●	–	–	–	–	–	–	–	–
13,800			107	54		●	–	●	–	–	–	–	–	–	–	–
13,900			107	54		●	–	●	–	–	–	–	–	–	–	–
14,000			107	54	70	●	–	●	●	–	–	–	●	●	●	–
14,100			111	56		●	–	●	–	–	–	–	–	–	–	–
14,200			111	56		●	–	●	–	–	–	–	–	–	–	–
14,250			111	56		●	–	●	–	–	–	–	–	–	–	–
14,300			111	56		●	–	●	–	–	–	–	–	–	–	–
14,400			111	56		●	–	●	–	–	–	–	–	–	–	–

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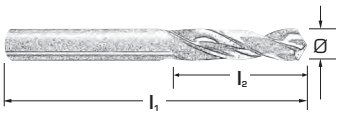


Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
14,500			111	56	73	●	–	●	●	–	–	–	●	●	●	–
14,600			111	56		●	–	●	–	–	–	–	–	–	–	–
14,700			111	56		●	–	●	–	–	–	–	–	–	–	–
14,750			111	56		●	–	●	–	–	–	–	–	–	–	–
14,800			111	56		●	–	●	–	–	–	–	–	–	–	–
14,900			111	56		●	–	●	–	–	–	–	–	–	–	–
15,000			111	56	73	●	–	●	●	–	–	–	●	●	●	–
15,300			115	58		–	–	–	–	–	–	–	●	–	–	–
15,500			115	58	75	●	–	●	–	–	–	–	●	●	●	–
16,000			115	58	75	●	–	●	●	–	–	–	●	●	●	–
16,500			115	58		●	–	●	–	–	–	–	●	–	–	–
16,800			119	60		–	–	–	–	–	–	–	–	–	–	–
16,900			119	60		–	–	–	–	–	–	–	–	–	–	–
17,000			119	60	78	●	–	●	●	–	–	–	●	●	●	–
17,500			123	62		●	–	●	–	–	–	–	●	–	–	–
18,000			123	62	81	●	–	●	●	–	–	–	●	●	●	–
18,500			127	64		●	–	●	–	–	–	–	●	–	–	–
19,000			127	64	83	●	–	●	●	–	–	–	●	●	●	–
19,500			131	66		●	–	●	–	–	–	–	●	–	–	–
20,000			131	66	86	●	–	●	●	–	–	–	●	●	●	–
20,500			136	68		●	–	●	–	–	–	–	–	–	–	–
21,000			136	68		●	–	●	■	–	–	–	–	–	–	–
21,500			141	70		●	–	●	–	–	–	–	–	–	–	–
22,000			141	70		●	–	●	■	–	–	–	–	–	–	–
22,500			146	72		●	–	●	–	–	–	–	–	–	–	–
23,000			146	72		●	–	●	–	–	–	–	–	–	–	–
23,500			146	72		●	–	●	–	–	–	–	–	–	–	–
24,000			151	75		●	–	●	–	–	–	–	–	–	–	–
24,500			151	75		●	–	●	–	–	–	–	–	–	–	–
25,000			151	75		●	–	●	–	–	–	–	–	–	–	–
25,500			156	78		●	–	●	–	–	–	–	–	–	–	–
26,000			156	78		●	–	●	–	–	–	–	–	–	–	–
26,500			156	78		●	–	–	–	–	–	–	–	–	–	–
27,000			162	81		●	–	●	–	–	–	–	–	–	–	–
27,500			162	81		●	–	–	–	–	–	–	–	–	–	–
28,000			162	81		●	–	●	–	–	–	–	–	–	–	–
28,500			168	84		●	–	–	–	–	–	–	–	–	–	–
29,000			168	84		●	–	●	–	–	–	–	–	–	–	–
29,500			168	84		●	–	–	–	–	–	–	–	–	–	–
30,000			168	84		●	–	●	–	–	–	–	–	–	–	–

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

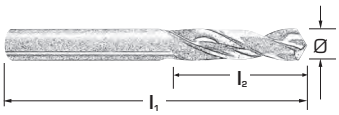
DIN 1897

EXTRA KURZ / STUB LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS, HSS-Co und VHM
Twist drills with straight shank made of HSS, HSS-Co and solid carbide



TiNOX TiN



Typ / Type	N	NK	N	H	NS	VA	VA	STL	STL	STL	N
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	K10/20
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	l_2 mm 6132	6156	6109	6159	6186	6246	6135	6135 TX	6131	6132	6132 TN	6149
31,000			174	87		●	–	●	–	–	–	–	–	–	–	–
32,000			180	90		●	–	●	–	–	–	–	–	–	–	–

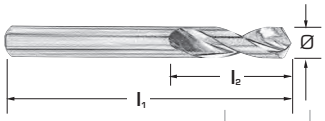
● Standardartikel / Items available ex stock

ILIX NORM

NC-Anbohrer mit Zylinderschaft aus HSS

NC – Spotting and chamfering drills with straight shank, made of HSS







Typ / Type			120°	120° TN	90°	90° TN	120°
Schneidrichtung Cutting direction							
Schneidstoff Material			HSS	HSS	HSS	HSS	HSS
Ø mm	l_1 mm	l_2 mm	6147	6147 TN	6148	6148 TN	6100
4,0	55	18	●	●	●	●	–
5,0	62	21	●	●	●	●	–
6,0	66	22	●	●	●	●	●
8,0	79	30	●	●	●	●	●
10,0	89	34	●	●	●	●	●
12,0	102	41	●	●	●	●	●
16,0	115	46	●	●	●	●	●
20,0	131	53	●	●	●	●	●

Typ / Type			120°	120° TN	90°	90° TN	120°
Schneidrichtung Cutting direction							
Schneidstoff Material			HSS	HSS	HSS	HSS	HSS
Ø mm	l_1 mm	l_2 mm	6147	6147 TN	6148	6148 TN	6100

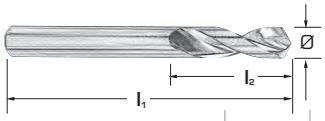
● Standardartikel / Items available ex stock

ILIX NORM

NC-Anbohrer mit Zylinderschaft aus HSS

NC – Spotting and chamfering drills with straight shank, made of solid carbide







Typ / Type			120°	120° TN	90°	90° TN
Schneidrichtung Cutting direction						
Schneidstoff Material			K10/20	K10/20	K10/20	K10/20
Ø mm	l_1 mm	l_2 mm	6102	6102 TN	6103	6103 TN
4,0	40	10	●	●	●	●
5,0	50	13	●	●	●	●
6,0	50	16	●	●	●	●
8,0	60	20	●	●	●	●
10,0	70	22	●	●	●	●
12,0	70	22	●	●	●	●
14,0	75	25	●	●	●	●
16,0	75	25	●	●	●	●
20,0	95	28	●	●	●	●

Typ / Type			120°	120° TN	90°	90° TN
Schneidrichtung Cutting direction						
Schneidstoff Material			K10/20	K10/20	K10/20	K10/20
Ø mm	l_1 mm	l_2 mm	6102	6102 TN	6103	6103 TN

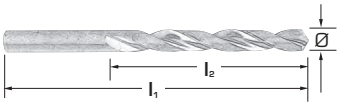
● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff/ Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
0,200			19	2,5	●	–	–	–	–	–	–	–	●	–	–	–
0,210			19	2,5	●	–	–	–	–	–	–	–	–	–	–	–
0,220			19	2,5	●	–	–	–	–	–	–	–	–	–	–	–
0,230			19	2,5	●	–	–	–	–	–	–	–	–	–	–	–
0,240			19	2,5	●	–	–	–	–	–	–	–	–	–	–	–
0,250			19	3,0	●	–	–	–	–	–	–	–	●	–	–	–
0,260			19	3,0	●	–	–	–	–	–	–	–	–	–	–	–
0,270			19	3,0	●	–	–	–	–	–	–	–	–	–	–	–
0,280			19	3,0	●	–	–	–	–	–	–	–	–	–	–	–
0,290			19	3,0	●	–	–	–	–	–	–	–	–	–	–	–
0,300			19	3,0	●	–	–	–	–	–	–	–	●	–	–	–
0,305		83	19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,310			19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,318		82	19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,320			19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,330			19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,330		81	19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,340			19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,343		80	19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,350			19	4,0	●	–	–	●	–	–	–	–	●	–	–	–
0,360			19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,368		79	19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,370			19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,380			19	4,0	●	–	–	–	–	–	–	–	–	–	–	–
0,390			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,396	1/64		20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,400			20	5,0	●	–	–	●	–	–	–	–	●	●	–	–
0,406		78	20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,410			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,420			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,430			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,440			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,450			20	5,0	●	–	–	●	–	–	–	–	●	–	–	–
0,457		77	20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,460			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,470			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,480			20	5,0	●	–	–	–	–	–	–	–	–	–	–	–
0,490			22	6,0	●	–	–	–	–	–	–	–	–	–	–	–
0,500			22	6,0	●	●	–	●	●	–	–	–	●	■	●	–
0,508		76	22	6,0	●	–	–	–	–	–	–	–	–	–	–	–

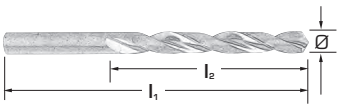
● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
0,510			22	6,0	●	–	–	–	–	–	–	–	–	–	–	–
0,520			22	6,0	●	–	–	–	–	–	–	–	–	–	–	–
0,530			22	6,0	●	–	–	–	–	–	–	–	–	–	–	–
0,533		75	24	7,0	●	–	–	–	–	–	–	–	–	–	–	–
0,540			24	7,0	●	–	–	–	–	–	–	–	–	–	–	–
0,550			24	7,0	●	–	–	●	●	–	–	–	●	–	–	–
0,560			24	7,0	●	–	–	–	–	–	–	–	–	–	–	–
0,570			24	7,0	●	–	–	–	–	–	–	–	–	–	–	–
0,572		74	24	7,0	●	–	–	–	–	–	–	–	–	–	–	–
0,580			24	7,0	●	–	–	–	–	–	–	–	–	–	–	–
0,590			24	7,0	●	–	–	–	–	–	–	–	–	–	–	–
0,600			24	7,0	●	●	–	●	●	–	–	–	●	■	●	–
0,610			26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,610		73	26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,620			26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,630			26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,635		72	26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,640			26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,650			26	8,0	●	–	–	●	●	–	–	–	●	–	–	–
0,660			26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,660		71	26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,670			26	8,0	●	–	–	–	–	–	–	–	–	–	–	–
0,680			28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,690			28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,700			28	9,0	●	●	–	●	●	–	–	–	●	■	■	–
0,710			28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,711		70	28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,720			28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,730			28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,740			28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,742		69	28	9,0	●	–	–	–	–	–	–	–	–	–	–	–
0,750			28	9,0	●	–	-	●	●	-	-	-	●	–	–	-
0,760			30	10,0	●	–	-	–	-	-	-	-	-	-	-	-
0,770			30	10,0	●	–	-	–	-	-	-	-	-	-	-	-
0,780			30	10,0	●	–	-	–	-	-	-	-	-	-	-	-
0,787		68	30	10,0	●	–	-	–	-	-	-	-	-	-	-	-
0,790			30	10,0	●	–	-	–	-	-	-	-	-	-	-	-
0,795	1/32		30	10,0	●	–	-	–	–	-	-	-	–	–	–	-
0,800			30	10,0	●	●	-	●	●	-	-	-	●	■	●	-
0,810			30	10,0	●	–	-	–	-	-	-	-	–	–	–	-

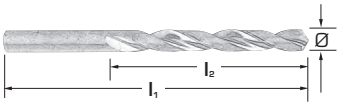
● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff/ Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

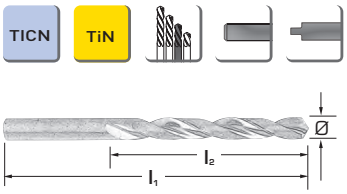
Ø mm h8	Ø "	Ø No.	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
0,813		67	30	10,0	●	–	-	–	–	-	-	-	–	–	–	-
0,820			30	10,0	●	–	-	–	-	-	-	-	–	-	-	-
0,830			30	10,0	●	-	-	-	-	-	-	-	-	-	-	-
0,838		66	30	10,0	●	-	-	-	-	-	-	-	-	-	-	-
0,840			30	10,0	●	–	-	–	–	-	-	-	–	–	–	-
0,850			30	10,0	●	–	-	●	●	-	-	-	●	-	-	-
0,860			32	11,0	●	–	-	–	–	-	-	-	–	–	–	-
0,870			32	11,0	●	–	-	–	-	-	-	-	–	-	-	-
0,880			32	11,0	●	–	-	–	–	-	-	-	–	–	–	-
0,889		65	32	11,0	●	–	-	–	-	-	-	-	–	-	-	-
0,890			32	11,0	●	–	-	–	–	-	-	-	–	–	–	-
0,900			32	11,0	●	●	-	●	●	-	-	-	●	■	●	-
0,910			32	11,0	●	–	-	–	-	-	-	-	-	-	-	-
0,914		64	32	11,0	●	–	-	–	-	-	-	-	-	-	-	-
0,920			32	11,0	●	–	-	–	-	-	-	-	-	-	-	-
0,930			32	11,0	●	–	-	–	-	-	-	-	-	-	-	-
0,940			32	11,0	●	–	-	–	-	-	-	-	-	-	-	-
0,940		63	32	11,0	●	–	-	–	-	-	-	-	-	-	-	-
0,950			32	11,0	●	–	-	●	●	-	-	-	●	-	-	-
0,960			34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
0,965		62	34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
0,970			34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
0,980			34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
0,990			34	12,0	●	–	-	-	-	-	-	-	-	-	-	-
0,991		61	34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
1,000			34	12,0	●	●	-	●	●	●	●	●	●	●	●	-
1,010			34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
1,016		60	34	12,0	●	–	-	-	-	●	●	●	-	-	-	-
1,020			34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
1,030			34	12,0	●	–	-	-	-	-	-	-	-	-	-	-
1,040			34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
1,041		59	34	12,0	●	–	-	–	–	●	●	●	–	–	–	-
1,050			34	12,0	●	–	-	●	●	-	-	-	●	■	-	-
1,060			34	12,0	●	–	-	–	-	-	-	-	-	-	-	-
1,067		58	36	14,0	●	–	-	–	-	●	●	●	-	-	-	-
1,070			36	14,0	●	–	-	–	-	-	-	-	-	-	-	-
1,080			36	14,0	●	–	-	–	-	-	-	-	-	-	-	-
1,090			36	14,0	●	–	-	–	–	-	-	-	–	–	–	-
1,092		57	36	14,0	●	-	-	-	-	●	●	●	–	-	-	-
1,100			36	14,0	●	●	-	●	●	●	●	●	●	■	●	-

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
1,110			36	14,0	●	–	-	–	–	-	-	-	–	–	–	-
1,120			36	14,0	●	–	-	–	-	-	-	-	–	-	-	-
1,130			36	14,0	●	-	-	-	-	-	-	-	-	-	-	-
1,140			36	14,0	●	-	-	-	-	-	-	-	-	-	-	-
1,150			36	14,0	●	–	-	●	●	-	-	-	●	●	–	-
1,160			36	14,0	●	–	-	–	-	-	-	-	–	-	-	-
1,170			36	14,0	●	–	-	–	–	-	-	-	–	–	–	-
1,180			36	14,0	●	–	-	–	-	-	-	-	–	-	-	-
1,181		56	38	16,0	●	–	-	–	–	●	●	●	–	–	–	-
1,190			38	16,0	●	–	-	–	-	-	-	-	–	-	-	-
1,191	3/64		38	16,0	●	–	-	–	–	●	●	●	–	–	–	-
1,200			38	16,0	●	●	-	●	●	●	●	●	●	●	●	-
1,210			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,220			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,230			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,240			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,250			38	16,0	●	–	-	●	●	-	-	-	●	■	●	-
1,260			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,270			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,280			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,290			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,300			38	16,0	●	●	-	●	●	●	●	●	●	■	●	-
1,310			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,320			38	16,0	●	–	-	–	-	-	-	-	-	-	-	-
1,321		55	40	18,0	●	–	-	–	-	●	●	●	-	-	-	-
1,330			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,340			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,350			40	18,0	●	–	-	●	●	-	-	-	●	■	-	-
1,360			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,370			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,380			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,390			40	18,0	●	–	-	–	–	-	-	-	–	–	–	-
1,397		54	40	18,0	●	–	-	–	-	●	●	●	-	-	-	-
1,400			40	18,0	●	●	-	●	●	●	●	●	●	●	●	-
1,410			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,420			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,430			40	18,0	●	–	-	–	-	-	-	-	-	-	-	-
1,440			40	18,0	●	–	-	–	–	-	-	-	–	–	–	-
1,450			40	18,0	●	-	-	●	●	-	-	-	●	■	-	-
1,460			40	18,0	●	–	-	–	-	-	-	-	–	–	–	-

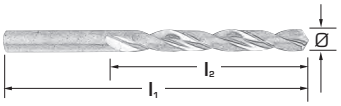
● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

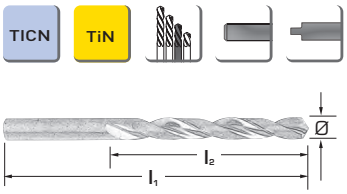
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
1,470			40	18,0	●	–	-	–	–	-	-	-	–	–	–	-
1,480			40	18,0	●	–	-	–	–	-	-	-	–	-	-	-
1,490			40	16,0	●	-	-	-	-	-	-	-	-	-	-	-
1,500			40	18,0	●	●	-	●	●	●	●	●	●	■	■	●
1,510			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,511		53	43	20,0	●	–	-	–	-	●	●	●	–	-	-	-
1,520			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,530			43	20,0	●	–	-	–	–	-	-	-	–	-	-	-
1,540			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,550			43	20,0	●	–	-	●	●	-	-	-	●	●	-	-
1,560			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,570			43	20,0	●	–	-	–	–	-	-	-	–	-	-	-
1,580			43	20,0	●	–	-	–	–	-	-	-	–	-	-	-
1,588	1/16		43	20,0	●	–	-	–	-	●	●	●	-	-	-	●
1,590			43	20,0	●	–	-	–	–	-	-	-	–	-	-	-
1,600			43	20,0	●	●	-	●	●	●	●	●	●	■	●	●
1,610			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,613		52	43	20,0	●	–	-	–	-	●	●	●	-	-	-	●
1,620			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,630			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,640			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,650			43	20,0	●	–	-	●	●	-	-	-	●	●	-	-
1,660			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,670			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,680			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,690			43	20,0	●	–	-	–	–	-	-	-	–	–	–	-
1,700			43	20,0	●	●	-	●	●	●	●	●	●	●	●	●
1,702		51	46	22,0	●	–	-	–	–	●	●	●	–	–	–	●
1,710			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,720			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,730			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,740			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,750			46	22,0	●	–	-	●	●	-	-	-	●	■	■	-
1,760			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,770			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,778		50	46	22,0	●	–	-	–	–	●	●	●	–	–	–	●
1,780			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,790			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,800			46	22,0	●	●	-	●	●	●	●	●	●	■	●	●
1,810			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-

● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS





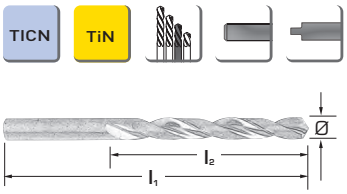
Typ / Type			N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction														
Schneidstoff / Material			HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
1,820			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,830			46	22,0	●	–	-	–	-	-	-	-	–	-	-	-
1,840			46	22,0	●	-	-	-	-	-	-	-	-	-	-	-
1,850			46	22,0	●	-	-	●	●	-	-	-	●	●	-	-
1,854		49	46	22,0	●	–	-	–	–	●	●	●	–	–	–	●
1,860			46	22,0	●	–	-	–	-	-	-	-	–	-	-	-
1,870			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,880			46	22,0	●	–	-	–	-	-	-	-	–	-	-	-
1,890			46	22,0	●	–	-	–	–	-	-	-	–	–	–	-
1,900			46	22,0	●	●	-	●	●	●	●	●	●	●	●	●
1,910			49	24,0	●	–	-	–	–	-	-	-	–	–	–	-
1,920			49	24,0	●	–	-	–	-	-	-	-	–	-	-	-
1,930			49	24,0	●	–	-	–	-	-	-	-	-	-	-	-
1,930		48	49	24,0	●	–	-	–	-	●	●	●	-	-	-	●
1,940			49	24,0	●	–	-	–	-	-	-	-	-	-	-	-
1,950			49	24,0	●	–	-	●	●	-	-	-	●	●	-	-
1,960			49	24,0	●	–	-	–	-	-	-	-	-	-	-	-
1,970			49	24,0	●	–	-	–	-	-	-	-	-	-	-	-
1,980			49	24,0	●	–	-	–	-	-	-	-	-	-	-	-
1,984	5/64		49	24,0	●	–	-	–	-	●	●	●	-	-	-	●
1,990			49	24,0	●	–	-	–	-	-	-	-	-	-	-	-
1,994		47	49	24,0	●	–	-	–	-	●	●	●	-	-	-	●
2,000			49	24,0	●	●	-	●	●	●	●	●	●	●	●	●
2,050			49	24,0	●	–	-	●	●	-	-	-	●	●	-	-
2,057		46	49	24,0	●	–	-	–	-	●	●	●	-	-	-	●
2,083		45	49	24,0	●	–	-	-	-	●	●	●	-	-	-	●
2,100			49	24,0	●	●	-	●	●	●	●	●	●	■	●	●
2,150			53	27,0	●	–	-	●	●	-	-	-	●	■	-	-
2,184		44	53	27,0	●	–	-	–	-	●	●	●	-	-	-	●
2,200			53	27,0	●	●	-	●	●	●	●	●	●	■	●	●
2,250			53	27,0	●	–	-	●	●	-	-	-	●	■	●	-
2,261		43	53	27,0	●	–	-	–	–	●	●	●	–	–	–	●
2,300			53	27,0	●	●	-	●	●	●	●	●	●	■	●	●
2,350			53	27,0	●	–	-	●	●	-	-	-	●	●	-	-
2,375		42	57	30,0	●	–	-	–	-	●	●	●	-	-	-	●
2,381	3/32		57	30,0	●	–	-	–	-	●	●	●	-	-	-	●
2,400			57	30,0	●	●	-	●	●	●	●	●	●	■	●	●
2,438		41	57	30,0	●	–	-	–	–	●	●	●	–	–	–	●
2,450			57	30,0	●	-	-	●	●	-	-	-	●	■	-	-
2,489		40	57	30,0	●	–	-	–	-	●	●	●	–	–	–	●

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

Ø mm h8	Ø "	Ø No.	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
2,500			57	30,0	●	●	-	●	●	●	●	●	●	●	●	●
2,527		39	57	30,0	●	–	-	–	-	●	●	●	–	-	-	●
2,550			57	30,0	●	-	-	●	●	-	-	-	●	■	-	-
2,578		38	57	30,0	●	-	-	-	-	●	●	●	-	-	-	●
2,600			57	30,0	●	●	-	●	●	●	●	●	●	■	●	●
2,642		37	57	30,0	●	–	-	–	-	●	●	●	–	-	-	●
2,650			57	30,0	●	–	-	●	●	-	-	-	●	■	–	-
2,700			61	33,0	●	●	-	●	●	●	●	●	●	■	●	●
2,705		36	61	33,0	●	–	-	–	–	●	●	●	–	–	–	●
2,750			61	33,0	●	–	-	●	●	-	-	-	●	●	●	-
2,779	7/64		61	33,0	●	–	-	–	–	●	●	●	–	–	–	●
2,794		35	61	33,0	●	–	-	–	-	●	●	●	-	-	-	●
2,800			61	33,0	●	●	-	●	●	●	●	●	●	●	●	●
2,819		34	61	33,0	●	–	-	–	-	●	●	●	-	-	-	●
2,850			61	33,0	●	–	-	●	●	-	-	-	●	●	-	-
2,870		33	61	33,0	●	–	-	–	-	●	●	●	-	-	-	●
2,900			61	33,0	●	●	-	●	●	●	●	●	●	■	●	●
2,946		32	61	33,0	●	–	-	–	-	●	●	●	-	-	-	●
2,950			61	33,0	●	–	-	●	●	-	-	-	●	●	-	-
3,000			61	33,0	●	●	●	●	●	●	●	●	●	●	●	●
3,048		31	65	36,0	●	–	-	–	-	●	●	●	-	-	-	●
3,050			65	36,0	●	–	-	●	-	-	-	-	●	●	-	-
3,100			65	36,0	●	●	-	●	●	●	●	●	●	■	●	●
3,150			65	36,0	●	–	-	●	-	-	-	-	●	■	-	-
3,175	1/8		65	36,0	●	–	-	–	-	●	●	●	-	-	-	●
3,200			65	36,0	●	●	●	●	●	●	●	●	●	●	■	●
3,250			65	36,0	●	–	-	●	●	-	-	-	●	●	-	-
3,264		30	65	36,0	●	–	-	-	-	●	●	●	-	-	-	●
3,300			65	36,0	●	●	-	●	●	●	●	●	●	●	■	●
3,350			65	36,0	●	–	-	●	-	-	-	-	●	■	-	-
3,400			70	39,0	●	●	-	●	●	●	●	●	●	■	●	●
3,450			70	39,0	●	–	-	●	–	-	-	-	●	●	–	-
3,454		29	70	39,0	●	–	-	–	-	●	●	●	-	-	-	●
3,500			70	39,0	●	●	●	●	●	●	●	●	●	●	●	●
3,550			70	39,0	●	–	-	●	-	-	-	-	●	■	-	-
3,569		28	70	39,0	●	–	-	–	-	●	-	●	-	-	-	●
3,571	9/64		70	39,0	●	–	-	–	-	●	●	●	-	-	-	●
3,600			70	39,0	●	●	-	●	●	●	●	●	●	■	●	●
3,650			70	39,0	●	-	-	●	●	-	-	-	●	●	-	-
3,658		27	70	39,0	●	–	-	–	-	●	●	●	–	–	–	●

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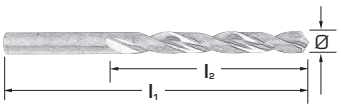
TICN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff/ Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

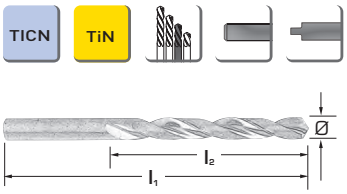
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
3,700			70	39,0	●	●	-	●	●	●	●	●	●	■	●	●
3,734		26	70	39,0	●	–	-	–	-	●	●	●	–	-	-	●
3,750			70	39,0	●	-	-	●	●	-	-	-	●	●	-	-
3,797		25	75	43,0	●	-	-	-	-	●	●	●	-	-	-	●
3,800			75	43,0	●	●	●	●	●	●	●	●	●	■	●	●
3,850			75	43,0	●	–	-	●	-	-	-	-	●	■	-	-
3,861		24	75	43,0	●	–	-	–	–	●	●	●	–	–	–	●
3,900			75	43,0	●	●	-	●	●	●	●	●	●	■	●	●
3,912		23	75	43,0	●	–	-	–	–	●	-	-	–	–	–	●
3,950			75	43,0	●	–	-	●	-	-	-	-	●	●	-	-
3,970	5/32		75	43,0	●	–	-	–	–	●	●	●	–	–	–	●
3,988		22	75	43,0	●	–	-	–	-	●	●	●	-	-	-	●
4,000			75	43,0	●	●	●	●	●	●	●	●	●	●	■	●
4,039		21	75	43,0	●	–	-	–	-	●	●	●	-	-	-	●
4,050			75	43,0	●	–	-	–	-	-	-	-	●	-	-	-
4,089		20	75	43,0	●	–	-	–	-	●	●	●	-	-	-	●
4,100			75	43,0	●	●	-	●	●	●	●	●	●	■	●	●
4,150			75	43,0	●	–	-	–	-	-	-	-	●	-	-	-
4,200			75	43,0	●	●	●	●	●	●	●	●	●	■	●	●
4,216		19	75	43,0	●	–	-	–	-	●	●	●	-	-	-	●
4,250			75	43,0	●	–	-	●	●	-	-	-	●	■	-	-
4,300			80	47,0	●	●	-	●	●	●	●	●	●	■	●	●
4,305		18	80	47,0	●	–	-	–	-	●	●	●	-	-	-	-
4,350			80	47,0	●	–	-	-	-	-	-	-	●	-	-	-
4,366	11/64		80	47,0	●	–	-	–	-	●	●	●	-	-	-	■
4,394		17	80	47,0	●	–	-	-	-	●	●	●	-	-	-	-
4,400			80	47,0	●	●	-	●	●	●	●	●	●	■	●	●
4,450			80	47,0	●	–	-	-	-	-	-	-	●	-	-	-
4,496		16	80	47,0	●	–	-	–	-	●	●	●	-	-	-	-
4,500			80	47,0	●	●	●	●	●	●	●	●	●	■	●	●
4,550			80	47,0	●	–	-	–	-	-	-	-	-	■	-	-
4,572		15	80	47,0	●	–	-	–	–	●	●	●	–	–	–	●
4,600			80	47,0	●	●	-	●	●	●	●	●	●	●	●	●
4,623		14	80	47,0	●	–	-	–	-	●	●	●	-	-	-	●
4,650			80	47,0	●	–	-	–	-	-	-	-	●	-	-	-
4,699		13	80	47,0	●	–	-	–	-	●	●	●	-	-	-	●
4,700			80	47,0	●	●	-	●	●	●	●	●	●	■	●	●
4,750			80	47,0	●	–	-	●	●	-	-	-	●	●	–	-
4,763	3/16		86	52,0	●	-	-	-	-	●	●	●	–	-	-	●
4,800			86	52,0	●	●	●	●	●	●	●	●	●	■	●	●

● Standardartikel / Items available ex stock ■ Auslaufender Artikel/discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS





Typ / Type			N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction														
Schneidstoff/ Material			HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
4,801		12	86	52,0	●	–	-	–	–	●	●	●	–	–	–	-
4,850			86	52,0	●	–	-	–	-	-	-	-	●	-	-	-
4,851		11	86	52,0	●	-	-	-	-	●	●	●	-	-	-	-
4,900			86	52,0	●	●	-	●	●	●	●	●	●	■	●	●
4,915		10	86	52,0	●	–	-	–	–	●	●	●	–	–	–	●
4,950			86	52,0	●	–	-	–	-	-	-	-	●	-	-	-
4,978		9	86	52,0	●	–	-	–	–	●	●	●	–	–	–	-
5,000			86	52,0	●	●	●	●	●	●	●	●	●	●	●	●
5,050			86	52,0	●	–	-	–	–	-	-	-	–	–	–	-
5,055		8	86	52,0	●	–	-	–	-	●	●	●	–	-	-	●
5,100			86	52,0	●	●	-	●	●	●	●	●	●	■	–	●
5,105		7	86	52,0	●	–	-	–	-	●	●	●	-	-	-	-
5,150			86	52,0	●	–	-	–	-	-	-	-	-	-	-	-
5,159	13/64		86	52,0	●	–	-	–	-	●	●	●	-	-	-	●
5,182		6	86	52,0	●	–	-	–	-	●	●	●	-	-	-	-
5,200			86	52,0	●	●	●	●	●	●	●	●	●	●	-	●
5,220		5	86	52,0	●	–	-	–	-	●	●	●	-	-	-	-
5,250			86	52,0	●	–	-	●	●	-	-	-	●	■	-	-
5,300			86	52,0	●	●	-	●	●	●	●	●	●	■	-	●
5,309		4	93	57,0	●	–	-	–	-	●	●	●	-	-	-	-
5,350			93	57,0	●	–	-	–	-	-	-	-	-	■	-	-
5,400			93	57,0	●	●	-	●	●	●	●	●	●	■	-	●
5,410		3	93	57,0	●	–	-	–	-	●	●	●	-	-	-	-
5,450			93	57,0	●	–	-	–	-	-	-	-	-	■	-	-
5,500			93	57,0	●	●	●	●	●	●	●	●	●	■	●	●
5,550			93	57,0	●	–	-	–	-	-	-	-	-	■	-	-
5,558	7/32		93	57,0	●	–	-	–	-	-	●	●	-	-	-	●
5,600			93	57,0	●	●	-	●	●	●	●	●	●	■	-	●
5,613		2	93	57,0	●	–	-	–	-	●	●	●	-	-	-	●
5,650			93	57,0	●	–	-	–	-	-	-	-	-	■	-	-
5,700			93	57,0	●	●	-	●	●	●	●	●	●	●	-	●
5,750			93	57,0	●	–	-	●	●	-	-	-	●	●	–	-
5,791		1	93	57,0	●	–	-	–	-	●	●	●	-	-	-	-
5,800			93	57,0	●	●	●	●	●	●	●	●	●	●	-	●
5,850			93	57,0	●	–	-	–	-	-	-	-	-	-	-	-
5,900			93	57,0	●	●	-	●	●	●	●	●	●	●	-	●
5,944		A	93	57,0	●	–	-	–	-	●	●	●	-	-	-	-
5,950			93	57,0	●	–	-	–	–	-	-	-	–	–	–	-
5,954	15/64		93	57,0	●	-	-	-	-	●	●	●	–	-	-	●
6,000			93	57,0	●	●	●	●	●	●	●	●	●	■	●	●

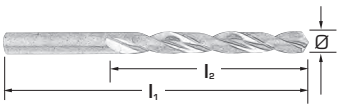
● Standardartikel / Items available ex stock ■ Auslaufender Artikel/discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





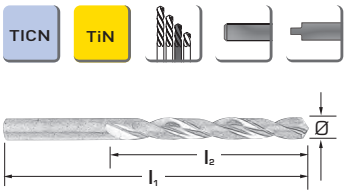
Typ / Type			N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction														
Schneidstoff / Material			HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
6,045		B	101	63,0	●	–	-	–	–	●	●	●	–	–	–	-
6,050			101	63,0	●	–	-	–	-	-	-	-	–	-	-	-
6,100			101	63,0	●	●	-	●	●	●	●	●	●	■	-	●
6,147		C	101	63,0	●	-	-	-	-	●	●	●	-	-	-	-
6,150			101	63,0	●	–	-	–	–	-	-	-	–	–	–	-
6,200			101	63,0	●	●	●	●	●	●	●	●	●	■	-	●
6,248		D	101	63,0	●	–	-	–	–	●	●	●	–	–	–	-
6,250			101	63,0	●	–	-	●	●	-	-	-	●	●	-	-
6,300			101	63,0	●	●	-	●	●	●	●	●	●	●	–	●
6,350		E	101	63,0	●	–	-	–	–	●	●	●	–	–	–	●
6,350	1/4		101	63,0	●	–	-	–	-	-	-	-	-	-	-	-
6,400			101	63,0	●	●	-	●	●	●	●	●	●	●	-	●
6,450			101	63,0	●	–	-	–	-	-	-	-	-	-	-	-
6,500			101	63,0	●	●	●	●	●	●	●	●	●	●	●	●
6,528		F	101	63,0	●	–	-	–	-	●	●	●	-	-	-	-
6,550			101	63,0	●	–	-	–	-	-	-	-	-	-	-	-
6,600			101	63,0	●	●	-	●	●	●	●	●	●	●	-	●
6,629		G	101	63,0	●	–	-	–	-	●	●	●	-	-	-	-
6,650			101	63,0	●	–	-	–	-	-	-	-	-	-	-	-
6,700			101	63,0	●	●	-	●	●	●	●	●	●	●	-	●
6,746	17/64		109	69,0	●	–	-	–	-	●	●	●	-	-	-	-
6,750			109	69,0	●	–	-	●	●	-	-	-	●	●	-	-
6,756		H	109	69,0	●	–	-	-	-	●	●	●	-	-	-	-
6,800			109	69,0	●	●	●	●	●	●	●	●	●	■	-	●
6,850			109	69,0	●	–	-	-	-	-	-	-	-	-	-	-
6,900			109	69,0	●	●	-	●	●	●	●	●	●	●	-	●
6,909		I	109	69,0	●	–	-	-	-	●	●	●	-	-	-	-
6,950			109	69,0	●	–	-	–	-	-	-	-	-	-	-	-
7,000			109	69,0	●	●	●	●	●	●	●	●	●	●	■	●
7,036		J	109	69,0	●	–	-	–	-	●	●	●	-	-	-	-
7,050			109	69,0	●	–	-	–	–	-	-	-	–	–	–	-
7,100			109	69,0	●	●	-	●	●	●	●	●	●	■	-	●
7,137		K	109	69,0	●	–	-	–	-	●	●	●	-	-	-	-
7,145	9/32		109	69,0	●	–	-	–	-	●	●	●	-	-	-	●
7,150			109	69,0	●	–	-	–	-	-	-	-	-	-	-	-
7,200			109	69,0	●	●	-	●	●	●	●	●	●	●	-	●
7,250			109	69,0	●	–	-	●	●	-	-	-	●	–	–	-
7,300			109	69,0	●	●	-	●	●	●	●	●	●	●	-	●
7,350			109	69,0	●	–	-	–	-	-	-	-	–	–	–	-
7,366		L	109	69,0	●	–	-	–	–	●	●	●	–	–	–	-

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS





Typ / Type			N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction														
Schneidstoff / Material			HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
7,400			109	69,0	●	●	-	●	●	●	●	●	●	●	-	●
7,450			109	69,0	●	-	-	-	-	-	-	-	-	-	-	-
7,493		M	109	69,0	●	-	-	-	-	●	●	●	-	-	-	-
7,500			109	69,0	●	●	●	●	●	●	●	●	●	●	●	●
7,541	19/64		117	75,0	●	–	-	–	-	●	●	●	–	-	-	-
7,550			117	75,0	●	–	-	–	–	-	-	-	–	–	–	-
7,600			117	75,0	●	●	-	●	●	●	●	●	●	-	-	●
7,650			117	75,0	●	–	-	–	–	-	-	-	–	–	–	-
7,671		N	117	75,0	●	–	-	–	-	●	●	●	–	-	-	-
7,700			117	75,0	●	●	-	●	●	●	●	●	●	–	–	●
7,750			117	75,0	●	–	-	●	●	-	-	-	●	-	-	-
7,800			117	75,0	●	●	-	●	●	●	●	●	●	-	-	●
7,850			117	75,0	●	–	-	–	-	-	-	-	-	-	-	-
7,900			117	75,0	●	●	-	●	●	●	●	●	●	-	-	●
7,938	5/16		117	75,0	●	–	-	–	-	●	●	●	-	-	-	-
7,950			117	75,0	●	–	-	–	-	-	-	-	-	-	-	-
8,000			117	75,0	●	●	●	●	●	●	●	●	●	■	●	●
8,026		O	117	75,0	●	–	-	–	-	●	●	●	-	-	-	-
8,050			117	75,0	●	–	-	–	-	-	-	-	-	-	-	-
8,100			117	75,0	●	●	-	●	●	●	●	●	●	-	-	●
8,150			117	75,0	●	–	-	–	-	-	-	-	-	-	-	-
8,200			117	75,0	●	●	-	●	●	●	●	●	●	-	-	●
8,204		P	117	75,0	●	–	-	-	-	●	●	●	-	-	-	-
8,250			117	75,0	●	–	-	●	●	-	-	-	●	-	-	-
8,300			117	75,0	●	●	-	●	●	●	●	●	●	-	-	●
8,334	21/64		117	75,0	●	–	-	–	-	●	●	●	-	-	-	-
8,350			117	75,0	●	–	-	-	-	-	-	-	-	-	-	-
8,400			117	75,0	●	●	-	●	●	●	●	●	●	-	-	●
8,433		Q	117	75,0	●	–	-	-	-	●	●	●	-	-	-	-
8,450			117	75,0	●	–	-	–	-	-	-	-	-	-	-	-
8,500			117	75,0	●	●	●	●	●	●	●	●	●	●	●	●
8,550			125	81,0	●	–	-	–	-	-	-	-	-	-	-	-
8,600			125	81,0	●	●	-	●	●	●	●	●	●	-	-	●
8,611		R	125	81,0	●	–	-	–	-	●	●	●	-	-	-	-
8,650			125	81,0	●	–	-	–	-	-	-	-	-	-	-	-
8,700			125	81,0	●	●	-	●	●	●	●	●	●	-	-	●
8,731	11/32		125	81,0	●	–	-	–	–	●	●	●	–	–	–	●
8,750			125	81,0	●	-	-	●	●	-	-	-	●	-	-	-
8,800			125	81,0	●	●	-	●	●	●	●	●	●	–	–	●
8,839		S	125	81,0	●	–	-	–	–	●	●	●	–	–	–	-

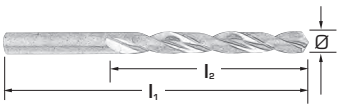
● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TiCN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
8,850			125	81,0	●	–	-	–	-	-	-	-	–	-	-	-
8,900			125	81,0	●	●	-	●	●	●	●	●	●	-	-	●
8,950			125	81,0	●	-	-	-	-	-	-	-	-	-	-	-
9,000			125	81,0	●	●	●	●	●	●	●	●	●	■	●	●
9,050			125	81,0	●	–	-	–	-	-	-	-	–	-	-	-
9,093		T	125	81,0	●	–	-	–	–	●	●	●	–	–	–	-
9,100			125	81,0	●	●	-	●	●	●	●	●	●	-	-	●
9,129	23/64		125	81,0	●	–	-	–	–	●	●	●	–	–	–	-
9,150			125	81,0	●	–	-	–	-	-	-	-	–	-	-	-
9,200			125	81,0	●	●	-	●	●	●	●	●	●	–	–	●
9,250			125	81,0	●	–	-	●	●	-	-	-	●	-	-	-
9,300			125	81,0	●	●	-	●	●	●	●	●	●	-	-	●
9,347		U	125	81,0	●	–	-	–	-	●	●	●	-	-	-	-
9,350			125	81,0	●	–	-	–	-	-	-	-	-	-	-	-
9,400			125	81,0	●	●	-	●	●	●	●	●	●	-	-	●
9,450			125	81,0	●	–	-	–	-	-	-	-	-	-	-	-
9,500			125	81,0	●	●	●	●	●	●	●	●	●	●	●	●
9,525	3/8		133	87,0	●	–	-	–	-	●	●	●	-	-	-	●
9,550			133	87,0	●	–	-	–	-	-	-	-	-	-	-	-
9,576		V	133	87,0	●	–	-	–	-	●	●	●	-	-	-	-
9,600			133	87,0	●	●	-	●	●	●	●	●	●	-	-	●
9,650			133	87,0	●	–	-	–	-	-	-	-	-	-	-	-
9,700			133	87,0	●	●	-	●	●	●	●	●	●	-	-	●
9,750			133	87,0	●	–	-	●	●	-	-	-	●	-	-	-
9,800			133	87,0	●	●	-	●	●	●	●	●	●	-	-	●
9,804		W	133	87,0	●	–	-	–	-	●	●	●	-	-	-	-
9,850			133	87,0	●	–	-	-	-	-	-	-	-	-	-	-
9,900			133	87,0	●	●	-	●	●	●	●	●	●	-	-	●
9,921	25/64		133	87,0	●	–	-	-	-	●	●	●	-	-	-	-
9,950			133	87,0	●	–	-	–	-	-	-	-	-	-	-	-
10,000			133	87,0	●	●	●	●	●	●	●	●	●	■	●	●
10,084		X	133	87,0	●	–	-	–	-	●	●	●	-	-	-	-
10,100			133	87,0	●	–	-	–	-	-	-	-	●	-	-	-
10,200			133	87,0	●	●	-	–	●	●	●	●	●	-	-	●
10,250			133	87,0	●	–	-	–	-	-	-	-	●	-	-	-
10,262		Y	133	87,0	●	–	-	–	-	●	●	●	-	-	-	-
10,300			133	87,0	●	–	-	–	–	-	-	-	●	–	–	-
10,320	13/32		133	87,0	●	-	-	-	-	●	●	●	–	-	-	●
10,400			133	87,0	●	–	-	–	-	-	-	-	●	–	–	-
10,490		Z	133	87,0	●	–	-	–	–	●	●	●	–	–	–	-

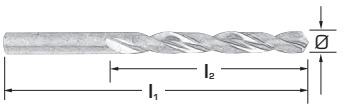
● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

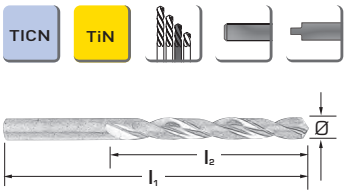
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
10,500			133	87,0	●	●	-	●	●	●	●	●	●	-	●	●
10,600			133	87,0	●	-	-	-	-	-	-	-	●	-	-	-
10,700			142	94,0	●	-	-	-	-	-	-	-	■	-	-	-
10,716	27/64		142	94,0	●	–	-	–	–	●	●	●	–	-	-	-
10,750			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
10,800			142	94,0	●	–	-	–	–	●	●	●	●	-	-	●
10,900			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
11,000			142	94,0	●	●	-	●	●	●	●	●	●	●	■	●
11,100			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
11,113	7/16		142	94,0	●	–	-	–	–	●	●	●	–	–	–	●
11,200			142	94,0	●	–	-	–	●	●	●	●	●	-	-	●
11,250			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
11,300			142	94,0	●	–	-	–	●	-	-	-	●	-	-	-
11,400			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
11,500			142	94,0	●	●	-	●	●	●	●	●	●	-	●	●
11,509	29/64		142	94,0	●	–	-	–	-	●	●	●	-	-	-	-
11,600			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
11,700			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
11,750			142	94,0	●	–	-	–	-	-	-	-	●	-	-	-
11,800			142	94,0	●	–	-	–	-	●	●	●	●	-	-	●
11,900			151	101,0	●	–	-	–	-	-	-	-	●	-	-	●
11,906	15/32		151	101,0	●	–	-	–	-	●	●	●	-	-	-	●
12,000			151	101,0	●	●	-	●	●	●	●	●	●	●	●	●
12,100			151	101,0	●	–	-	–	-	-	-	-	●	-	-	-
12,200			151	101,0	●	–	-	-	-	-	-	-	●	-	-	-
12,250			151	101,0	●	–	-	–	-	-	-	-	●	-	-	-
12,300			151	101,0	●	–	-	-	-	-	-	-	●	-	-	-
12,304	31/64		151	101,0	●	–	-	–	-	●	●	●	-	-	-	●
12,400			151	101,0	●	–	-	-	-	-	-	-	●	-	-	-
12,500			151	101,0	●	●	-	●	●	●	●	●	●	-	-	-
12,600			151	101,0	●	–	-	–	–	-	-	-	●	–	–	-
12,700			151	101,0	●	–	-	–	-	-	-	-	●	-	-	-
12,700	1/2		151	101,0	●	–	-	–	-	●	●	●	-	-	-	●
12,750			151	101,0	●	–	-	–	-	-	-	-	●	-	-	-
12,800			151	101,0	●	–	-	–	-	-	-	-	●	-	-	-
12,900			151	101,0	●	–	-	–	-	-	-	-	●	-	-	-
13,000			151	101,0	●	●	-	●	●	●	●	●	●	●	–	-
13,096	33/64		151	101,0	●	-	-	-	-	-	-	-	–	-	-	-
13,100			151	101,0	●	–	-	–	-	●	●	●	●	–	–	-
13,200			151	101,0	●	–	-	–	–	-	-	-	●	–	–	-

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
13,250			160	108,0	●	–	-	–	-	-	-	-	●	-	-	-
13,300			160	108,0	●	-	-	-	-	●	●	●	●	-	-	-
13,400			160	108,0	●	-	-	-	-	-	-	-	●	-	-	-
13,495	17/32		160	108,0	●	–	-	–	–	-	-	-	–	–	–	-
13,500			160	108,0	●	●	-	–	●	●	●	●	●	-	-	-
13,600			160	108,0	●	–	-	–	–	-	-	-	●	–	–	-
13,700			160	108,0	●	–	-	–	-	-	-	-	●	-	-	-
13,750			160	108,0	●	–	-	–	–	-	-	-	●	–	–	-
13,800			160	108,0	●	–	-	–	-	-	-	-	●	-	-	-
13,891	35/64		160	108,0	●	–	-	–	–	-	-	-	–	–	–	-
13,900			160	108,0	●	–	-	–	-	-	-	-	●	-	-	-
14,000			160	108,0	●	●	-	●	●	●	●	●	●	●	-	-
14,100			169	114,0	●	–	-	–	-	-	-	-	●	-	-	-
14,200			169	114,0	●	–	-	–	-	-	-	-	●	-	-	-
14,250			169	114,0	●	–	-	–	-	-	-	-	●	-	-	-
14,288	9/16		169	114,0	●	–	-	–	-	-	-	-	-	-	-	-
14,300			169	114,0	●	–	-	–	-	-	-	-	●	-	-	-
14,400			169	114,0	●	–	-	–	-	-	-	-	●	-	-	-
14,500			169	114,0	●	●	-	–	●	●	●	●	●	-	-	-
14,600			169	114,0	●	–	-	–	-	-	-	-	●	-	-	-
14,684	37/64		169	114,0	●	–	-	–	-	-	-	-	-	-	-	-
14,700			169	114,0	●	–	-	–	-	-	-	-	●	-	-	-
14,750			169	114,0	●	–	-	-	-	-	-	-	●	-	-	-
14,800			169	114,0	●	–	-	–	-	-	-	-	-	-	-	-
14,900			169	114,0	●	–	-	-	-	-	-	-	●	-	-	-
15,000			169	114,0	●	●	-	●	●	●	●	●	●	■	-	-
15,083	19/32		178	120,0	●	–	-	-	-	-	-	-	-	-	-	-
15,100			178	120,0	●	–	-	–	-	●	●	●	-	-	-	-
15,200			178	120,0	●	–	-	-	-	-	-	-	-	-	-	-
15,250			178	120,0	●	–	-	–	-	-	-	-	-	-	-	-
15,300			178	120,0	●	–	-	–	●	●	●	●	–	–	–	-
15,400			178	120,0	●	–	-	–	-	-	-	-	-	-	-	-
15,479	39/64		178	120,0	●	–	-	–	-	-	-	-	-	-	-	-
15,500			178	120,0	●	–	-	–	●	●	●	●	●	-	-	-
15,600			178	120,0	●	–	-	–	-	-	-	-	-	-	-	-
15,700			178	120,0	●	–	-	–	-	-	-	-	-	-	-	-
15,750			178	120,0	●	–	-	–	–	-	-	-	–	–	–	-
15,800			178	120,0	●	-	-	-	-	-	-	-	-	-	-	-
15,875	5/8		178	120,0	●	–	-	–	-	-	-	-	–	–	–	-
15,900			178	120,0	●	–	-	–	–	-	-	-	–	–	–	-

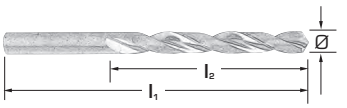
● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





Typ / Type			N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction														
Schneidstoff / Material			HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
16,000			178	120,0	●	●	-	●	●	●	●	●	●	●	-	-
16,100			184	125,0	●	-	-	-	-	-	-	-	-	-	-	-
16,200			184	125,0	●	-	-	-	-	-	-	-	-	-	-	-
16,250			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,271	41/64		184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,300			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,400			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,500			184	125,0	●	–	–	–	–	–	–	–	●	–	–	–
16,600			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,670	21/32		184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,700			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,750			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,800			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
16,900			184	125,0	●	–	–	–	–	–	–	–	–	–	–	–
17,000			184	125,0	●	–	–	–	–	–	–	–	●	–	–	–
17,066	43/64		191	130,0	●	–	–	–	–	–	–	–	–	–	–	–
17,250			191	130,0	●	–	–	–	–	–	–	–	–	–	–	–
17,463	11/16		191	130,0	●	–	–	–	–	–	–	–	–	–	–	–
17,500			191	130,0	●	–	–	–	–	–	–	–	●	–	–	–
17,750			191	130,0	●	–	–	–	–	–	–	–	–	–	–	–
17,859	45/64		191	130,0	●	–	–	–	–	–	–	–	–	–	–	–
18,000			191	130,0	●	–	–	–	–	–	–	–	●	–	–	–
18,250			198	135,0	●	–	–	–	–	–	–	–	–	–	–	–
18,258	23/32		198	135,0	●	–	–	–	–	–	–	–	–	–	–	–
18,500			198	135,0	●	–	–	–	–	–	–	–	●	–	–	–
18,654	47/64		198	135,0	●	–	–	–	–	–	–	–	–	–	–	–
18,750			198	135,0	●	–	–	–	–	–	–	–	–	–	–	–
19,000			198	135,0	●	–	–	–	–	–	–	–	●	–	–	–
19,050	3/4		205	140,0	●	–	–	–	–	–	–	–	–	–	–	–
19,250			205	140,0	●	–	–	–	–	–	–	–	–	–	–	–
19,446	49/64		205	140,0	●	–	–	–	–	–	–	–	–	–	–	–
19,500			205	140,0	●	–	–	–	–	–	–	–	●	–	–	–
19,750			205	140,0	●	–	–	–	–	–	–	–	–	–	–	–
19,845	25/32		205	140,0	●	–	–	–	–	–	–	–	–	–	–	–
20,000			205	140,0	●	–	–	–	–	–	–	–	●	–	–	–
20,241	51/64		213	145,0	●	–	–	–	–	–	–	–	–	–	–	–
20,638	13/16		213	145,0	●	–	–	–	–	–	–	–	–	–	–	–
21,000			213	145,0	●	-	-	-	-	-	-	-	–	-	-	-
21,034	53/64		213	145,0	●	–	–	–	–	–	–	–	–	–	–	–
21,433	27/32		221	150,0	●	–	–	–	–	–	–	–	–	–	–	–

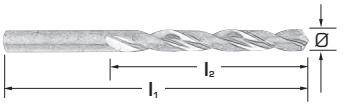
● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS

TICN TiN





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	H	W	STL
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6151	6151 TN	6106	6187	6197	6210	6210 TN	6210 TC	6158	6190	6199	6209
21,829	55/64		221	150,0	●	–	-	–	-	-	-	-	–	-	-	-
22,000			221	150,0	●	-	-	-	-	-	-	-	-	-	-	-
22,225	7/9		221	150,0	●	-	-	-	-	-	-	-	-	-	-	-
22,621	57/64		229	155,0	●	–	-	–	–	-	-	-	–	–	–	-
23,000			229	155,0	●	–	-	–	-	-	-	-	–	-	-	-
23,020	29/32		229	155,0	●	–	-	–	–	-	-	-	–	–	–	-
23,416	59/64		229	155,0	●	–	-	–	-	-	-	-	–	-	-	-
23,813	15/16		236	160,0	●	–	-	–	–	-	-	-	–	–	–	-
24,000			236	160,0	●	–	-	–	-	-	-	-	–	-	-	-
24,209	61/64		236	160,0	●	–	-	–	–	-	-	-	–	–	–	-
24,608	31/32		236	160,0	●	–	-	–	-	-	-	-	-	-	-	-
25,000			243	165,0	●	–	-	–	-	-	-	-	-	-	-	-
25,004	63/64		243	165,0	●	–	-	–	-	-	-	-	-	-	-	-
25,400	1		243	165,0	●	–	-	–	-	-	-	-	-	-	-	-

● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer Kat.-Nr. 6151 in Sätzen in Metallkassetten
Twist drills Cat.-no. 6151 in sets in metal cases



Schneidstoff/ Material		HSS
N. Cod / Item		**6172**
Ø Reihe mm **Ø Range mm**	**Stück** Pieces	**komplette Sätze** Complete sets
1,5 - 6,5 mm um / by steps of **0,5 mm** / 3,3 e 4,2 mm	13	●
1,0 - 6,0 mm um / by steps of **0,5 mm**	11	●
1,0 - 5,9 mm um / by steps of **0,1 mm**	50	●
5,1 - 10,0 mm um / by steps of **0,1 mm**	50	●
6,0 - 10,0 mm um / by steps of **0,1 mm**	41	●
1,0 - 10,0 mm um / by steps of **0,5 mm**	19	●
1,0 - 10,5 mm um / by steps of **0,5 mm** /3,3/4,2/6,8/10,2 mm	24	●
1,0 - 13,0 mm um / by steps of **0,5 mm**	25	●

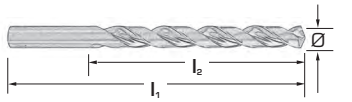
● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS-Co und HSS-Co8
Twist drills with straight shank made of HSS-Co and HSS-Co8

TiAlN Futura | TiCN | TiNOX | TiN





Typ / Type	N	N	N	VA	VA	Record VA	Record VA	Record GG	HD	HD	HD	NS
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co8	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6153*	6153 TN	6154	6234	6234 TX	6140	6140 TX	6110 TF	6111	6111 TN	6111 TC	6247
0,300			19	3	●	-	-	●	●	-	-	-	-	-	-	-
0,350			19	4	-	-	-	●	●	-	-	-	-	-	-	-
0,396	1/64		20	5	-	-	-	●	●	-	-	-	-	-	-	-
0,400			20	5	●	-	-	●	●	-	-	-	-	-	-	-
0,406		78	20	5	-	-	-	●	●	-	-	-	-	-	-	-
0,450			20	5	-	-	-	●	●	-	-	-	-	-	-	-
0,457		77	20	5	-	-	-	●	●	-	-	-	-	-	-	-
0,500			22	6	●	-	●	●	●	-	-	-	-	-	-	-
0,508		76	22	6	-	-	-	●	●	-	-	-	-	-	-	-
0,533		75	24	7	-	-	-	●	●	-	-	-	-	-	-	-
0,550			24	7	-	-	-	●	●	-	-	-	-	-	-	-
0,572		74	24	7	-	-	-	●	●	-	-	-	-	-	-	-
0,600			24	7	●	-	-	●	●	-	-	-	-	-	-	-
0,610		73	26	8	-	-	-	●	●	-	-	-	-	-	-	-
0,635		72	26	8	-	-	-	●	●	-	-	-	-	-	-	-
0,650			26	8	-	-	-	●	●	-	-	-	-	-	-	-
0,660		71	26	8	-	-	-	●	●	-	-	-	-	-	-	-
0,700			28	9	●	-	-	●	●	-	-	-	-	-	-	-
0,711		70	28	9	-	-	-	●	●	-	-	-	-	-	-	-
0,742		69	28	9	-	-	-	●	●	-	-	-	-	-	-	-
0,750			28	9	●	-	-	●	●	-	-	-	-	-	-	-
0,787		68	30	10	-	-	-	●	●	-	-	-	-	-	-	-
0,795	1/32		30	10	-	-	-	●	●	-	-	-	-	-	-	-
0,800			30	10	●	-	-	●	●	-	-	-	-	-	-	-
0,813		67	30	10	-	-	-	●	●	-	-	-	-	-	-	-
0,838		66	30	10	-	-	-	●	●	-	-	-	-	-	-	-
0,850			30	10	-	-	-	●	●	-	-	-	-	-	-	-
0,889		65	32	11	-	-	-	●	●	-	-	-	-	-	-	-
0,900			32	11	●	-	●	●	●	-	-	-	-	-	-	-
0,914		64	32	11	-	-	-	●	●	-	-	-	-	-	-	-
0,940		63	32	11	-	-	-	●	●	-	-	-	-	-	-	-
0,950			32	11	●	-	-	●	●	-	-	-	-	-	-	-
0,965		62	34	12	-	-	-	●	●	-	-	-	-	-	-	-
0,991		61	34	12	-	-	-	●	●	-	-	-	-	-	-	-
1,000			34	12	●	●	●	●	●	●	●	-	●	●	●	●
1,016		60	34	12	-	-	-	●	●	-	-	-	-	-	-	-
1,041		59	34	12	-	-	-	●	●	-	-	-	-	-	-	-
1,050			34	12	●	-	-	●	●	-	-	-	-	-	-	●
1,067		58	36	14	-	-	-	●	●	-	-	-	-	-	-	-
1,092		57	36	14	-	-	-	●	●	-	-	-	-	-	-	-

* Katalog Nr. 6153 ist blank bis Ø 2,36 / vaporisiert ab Ø 2,37 / Item 6153 is blank till Ø 2,36 / from Ø 2,37 is vaporised

● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS-Co und HSS-Co8
Twist drills with straight shank made of HSS-Co and HSS-Co8

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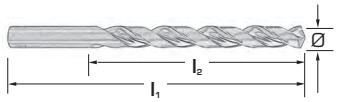



Typ / Type	N	N	N	VA	VA	Record VA	Record VA	Record GG	HD	HD	HD	NS
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co8	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6153*	6153 TN	6154	6234	6234 TX	6140	6140 TX	6110 TF	6111	6111 TN	6111 TC	6247
1,100			36	14	●	●	●	●	●	●	●	-	●	●	●	●
1,150			36	14	-	-	-	●	●	-	-	-	-	-	-	●
1,181		56	38	16	-	-	-	●	●	-	-	-	-	-	-	-
1,191	3/64		38	16	-	-	-	●	●	-	-	-	-	-	-	-
1,200			38	16	●	●	●	●	●	●	●	-	●	●	●	●
1,250			38	16	●	-	-	●	●	-	-	-	-	-	-	●
1,300			38	16	●	●	●	●	●	●	●	-	●	●	●	●
1,321		55	40	18	-	-	-	●	●	-	-	-	-	-	-	-
1,350			40	18	●	-	-	●	●	-	-	-	-	-	-	●
1,397		54	40	18	-	-	-	●	●	-	-	-	-	-	-	-
1,400			40	18	●	●	●	●	●	●	●	-	●	●	●	●
1,450			40	18	●	-	-	●	●	-	-	-	-	-	-	●
1,500			40	18	●	●	●	●	●	●	●	-	●	●	●	●
1,511		53	43	20	-	-	-	●	●	-	-	-	-	-	-	-
1,550			43	20	●	-	-	●	●	-	-	-	-	-	-	●
1,588	1/16		43	20	-	-	-	●	●	-	-	-	-	-	-	-
1,600			43	20	●	●	●	●	●	●	●	-	●	●	●	●
1,613		52	43	20	-	-	-	●	●	-	-	-	-	-	-	-
1,650			43	20	●	-	-	●	●	-	-	-	-	-	-	●
1,700			43	20	●	●	●	●	●	●	●	-	●	●	●	●
1,702		51	46	22	-	-	-	●	●	-	-	-	-	-	-	-
1,750			46	22	●	-	-	●	●	-	-	-	-	-	-	●
1,778		50	46	22	-	-	-	●	●	-	-	-	-	-	-	-
1,800			46	22	●	●	●	●	●	●	●	-	●	●	●	●
1,850			46	22	●	-	-	●	●	-	-	-	-	-	-	●
1,854		49	46	22	-	-	-	●	●	-	-	-	-	-	-	-
1,900			46	22	●	●	●	●	●	●	●	-	●	●	●	●
1,930		48	49	24	-	-	-	●	●	-	-	-	-	-	-	-
1,950			49	24	●	-	-	●	●	-	-	-	-	-	-	●
1,984	5/64		49	24	-	-	-	●	●	-	-	-	-	-	-	-
1,994		47	49	24	-	-	-	●	●	-	-	-	-	-	-	-
2,000			49	24	●	●	●	●	●	●	●	-	●	●	●	●
2,050			49	24	●	-	-	●	●	-	-	-	-	-	-	●
2,057		46	49	24	-	-	-	●	●	-	-	-	-	-	-	-
2,083		45	49	24	-	-	-	●	●	-	-	-	-	-	-	-
2,100			49	24	●	●	●	●	●	●	●	-	●	●	●	●
2,150			53	27	●	-	-	●	●	-	-	-	-	-	-	●
2,184		44	53	27	-	-	-	●	●	-	-	-	-	-	-	-
2,200			53	27	●	●	●	●	●	●	●	-	●	●	●	●
2,250			53	27	●	-	-	●	●	-	-	-	-	-	-	●

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● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS-Co und HSS-Co8
Twist drills with straight shank made of HSS-Co and HSS-Co8

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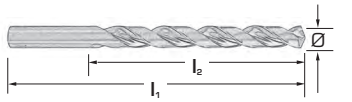



Typ / Type	N	N	N	VA	VA	Record VA	Record VA	Record GG	HD	HD	HD	NS
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co8	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm h8	Ø "	Ø No.	l_1 mm	l_2 mm	6153*	6153 TN	6154	6234	6234 TX	6140	6140 TX	6110 TF	6111	6111 TN	6111 TC	6247
2,261		43	53	27	-	-	-	●	●	-	-	-	-	-	-	-
2,300			53	27	●	●	●	●	●	●	●	-	●	●	●	●
2,350			53	27	●	-	-	●	●	-	-	-	-	-	-	●
2,375		42	57	30	-	-	-	●	●	-	-	-	-	-	-	-
2,383	3/32		57	30	-	-	-	●	●	-	-	-	-	-	-	-
2,400			57	30	●	●	●	●	●	●	●	-	●	●	●	●
2,438		41	57	30	-	-	-	●	●	-	-	-	-	-	-	-
2,450			57	30	●	-	-	●	●	-	-	-	-	-	-	●
2,489		40	57	30	-	-	-	●	●	-	-	-	-	-	-	-
2,500			57	30	●	●	●	●	●	●	●	-	●	●	●	●
2,527		39	57	30	-	-	-	●	●	-	-	-	-	-	-	-
2,550			57	30	●	-	-	●	●	-	-	-	-	-	-	●
2,578		38	57	30	-	-	-	●	●	-	-	-	-	-	-	-
2,600			57	30	●	●	●	●	●	●	●	-	●	●	●	●
2,642		37	57	30	-	-	-	●	●	-	-	-	-	-	-	-
2,650			57	30	●	-	-	●	●	-	-	-	-	-	-	●
2,700			61	33	●	●	●	●	●	●	●	-	●	●	●	●
2,705		36	61	33	-	-	-	●	●	-	-	-	-	-	-	-
2,750			61	33	●	-	-	●	●	-	-	-	-	-	-	●
2,779	7/64		61	33	-	-	-	●	●	-	-	-	-	-	-	-
2,794		35	61	33	-	-	-	●	●	-	-	-	-	-	-	-
2,800			61	33	●	●	●	●	●	●	●	-	●	●	●	●
2,819		34	61	33	-	-	-	●	●	-	-	-	-	-	-	-
2,850			61	33	●	-	-	●	●	-	-	-	-	-	-	●
2,870		33	61	33	-	-	-	●	●	-	-	-	-	-	-	-
2,900			61	33	●	●	●	●	●	●	●	-	●	●	●	●
2,946		32	61	33	-	-	-	●	●	-	-	-	-	-	-	-
2,950			61	33	●	-	-	●	●	-	-	-	-	-	-	●
3,000			61	33	●	●	●	●	●	●	●	-	●	●	●	●
3,048		31	65	36	-	-	-	●	●	-	-	-	-	-	-	-
3,100			65	36	●	●	●	●	●	●	●	-	●	●	●	●
3,150			65	36	●	-	-	-	-	-	-	-	-	-	-	●
3,175	1/8		65	36	-	-	-	●	●	-	-	-	-	-	-	-
3,200			65	36	●	●	●	●	●	●	●	-	●	●	●	●
3,264		30	65	36	-	-	-	●	●	-	-	-	-	-	-	-
3,300			65	36	●	●	●	●	●	●	●	-	●	●	●	●
3,400			70	39	●	●	●	●	●	●	●	-	●	●	●	●
3,454		29	70	39	-	-	-	●	●	-	-	-	-	-	-	-
3,500			70	39	●	●	●	●	●	●	●	-	●	●	●	●
3,569		28	70	39	-	-	-	●	●	-	-	-	-	-	-	-

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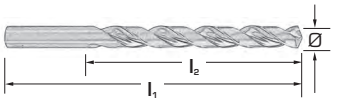
● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS-Co und HSS-Co8
Twist drills with straight shank made of HSS-Co and HSS-Co8

TiAlN Futura | TiCN | TiNOX | TiN





Typ / Type	N	N	N	VA	VA	Record VA	Record VA	Record GG	HD	HD	HD	NS
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co8	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	Ø No.	l_1 mm	l_2 mm	6153*	6153 TN	6154	6234	6234 TX	6140	6140 TX	6110 TF	6111	6111 TN	6111 TC	6247
3,571	9/64		70	39	-	-	-	●	●	-	-	-	-	-	-	-
3,600			70	39	●	●	●	●	●	●	●	-	●	●	●	●
3,650			70	39	-	-	-	●	●	-	-	-	-	-	-	-
3,658		27	70	39	-	-	-	●	●	-	-	-	-	-	-	-
3,700			70	39	●	●	●	●	●	●	●	-	●	●	●	●
3,734		26	70	39	-	-	-	●	●	-	-	-	-	-	-	-
3,797		25	75	43	-	-	-	●	●	-	-	-	-	-	-	-
3,800			75	43	●	●	●	●	●	●	●	-	●	●	●	●
3,861		24	75	43	-	-	-	●	●	-	-	-	-	-	-	-
3,900			75	43	●	●	●	●	●	●	●	-	●	●	●	●
3,912		23	75	43	-	-	-	●	●	-	-	-	-	-	-	-
3,970	5/32		75	43	-	-	-	●	●	-	-	-	-	-	-	-
3,988		22	75	43	-	-	-	●	●	-	-	-	-	-	-	-
4,000			75	43	●	●	●	●	●	●	●	■	●	●	●	●
4,039		21	75	43	-	-	-	●	●	-	-	-	-	-	-	-
4,089		20	75	43	-	-	-	●	●	-	-	-	-	-	-	-
4,100			75	43	●	●	●	●	●	●	●	■	●	●	●	●
4,200			75	43	●	●	●	●	●	●	●	-	●	●	●	●
4,216		19	75	43	-	-	-	●	●	-	-	-	-	-	-	-
4,300			80	47	●	●	●	●	●	●	●	■	●	●	●	●
4,305		18	80	47	-	-	-	●	●	-	-	-	-	-	-	-
4,366	11/64		80	47	-	-	-	●	●	-	-	-	-	-	-	-
4,394		17	80	47	-	-	-	●	●	-	-	-	-	-	-	-
4,400			80	47	●	●	●	●	●	●	●	■	●	●	●	●
4,496		16	80	47	-	-	-	●	●	-	-	-	-	-	-	-
4,500			80	47	●	●	●	●	●	●	●	■	●	●	●	●
4,572		15	80	47	-	-	-	●	●	-	-	-	-	-	-	-
4,600			80	47	●	●	●	●	●	●	●	■	●	●	●	●
4,623		14	80	47	-	-	-	●	●	-	-	-	-	-	-	-
4,699		13	80	47	-	-	-	●	●	-	-	-	●	-	-	-
4,700			80	47	●	●	●	●	●	●	●	■	●	●	●	●
4,763	3/16		86	52	-	-	-	●	●	-	-	-	-	-	-	-
4,800			86	52	●	●	●	●	●	●	●	■	●	●	●	●
4,801		12	86	52	-	-	-	●	●	-	-	-	-	-	-	-
4,851		11	86	52	-	-	-	●	●	-	-	-	-	-	-	-
4,900			86	52	●	●	●	●	●	●	●	■	●	●	●	●
4,915		10	86	52	-	-	-	●	●	-	-	-	-	-	-	-
4,978		9	86	52	-	-	-	●	●	-	-	-	-	-	-	-
5,000			86	52	●	●	●	●	●	●	●	-	●	●	●	●
5,055		8	86	52	-	-	-	●	●	-	-	-	-	-	-	-

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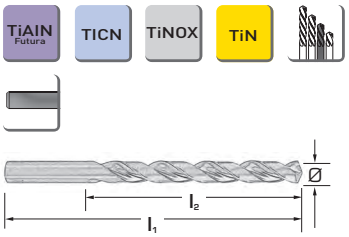
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel/discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS-Co und HSS-Co8
Twist drills with straight shank made of HSS-Co and HSS-Co8





Typ / Type	N	N	N	VA	VA	Record VA	Record VA	Record GG	HD	HD	HD	NS
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co8	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	Ø No.	l_1 mm	l_2 mm	6153*	6153 TN	6154	6234	6234 TX	6140	6140 TX	6110 TF	6111	6111 TN	6111 TC	6247
5,100			86	52	●	●	●	●	●	●	●	-	●	●	●	●
5,105		7	86	52	-	-	-	●	●	-	-	-	-	-	-	-
5,159	13/64		86	52	-	-	-	●	●	-	-	-	●	●	●	-
5,182		6	86	52	-	-	-	●	●	-	-	-	-	-	-	-
5,200			86	52	●	●	●	●	●	●	●	-	●	●	●	●
5,220		5	86	52	-	-	-	●	●	-	-	-	-	-	-	-
5,300			86	52	●	●	●	●	●	●	●	■	●	●	●	●
5,309		4	93	57	-	-	-	●	●	-	-	-	-	-	-	-
5,400			93	57	●	●	●	●	●	●	●	■	●	●	●	●
5,410		3	93	57	-	-	-	●	●	-	-	-	-	-	-	-
5,500			93	57	●	●	●	●	●	●	●	■	●	●	●	●
5,558	7/32		93	57	-	-	-	●	●	-	-	-	-	-	-	-
5,600			93	57	●	●	●	●	●	●	●	■	●	●	●	●
5,613		2	93	57	-	-	-	●	●	-	-	-	-	-	-	-
5,700			93	57	●	●	●	●	●	●	●	■	●	●	●	●
5,791		1	93	57	-	-	-	●	●	-	-	-	-	-	-	-
5,800			93	57	●	●	●	●	●	●	●	■	●	●	●	●
5,900			93	57	●	●	●	●	●	●	●	■	●	●	●	●
5,954	15/64		93	57	-	-	-	●	●	-	-	-	-	-	-	-
6,000			93	57	●	●	●	●	●	●	●	■	●	●	●	●
6,100			101	63	●	●	●	●	●	●	●	■	●	●	●	●
6,200			101	63	●	●	●	●	●	●	●	■	●	●	●	●
6,300			101	63	●	●	●	●	●	●	●	■	●	●	●	●
6,350	1/4		101	63	-	-	-	●	●	-	-	-	-	-	-	-
6,400			101	63	●	●	●	●	●	●	●	■	●	●	●	●
6,500			101	63	●	●	●	●	●	●	●	■	●	●	●	●
6,600			101	63	●	●	●	●	●	●	●	■	●	●	●	●
6,700			101	63	●	●	●	●	●	●	●	■	●	●	●	●
6,746	17/64		109	69	-	-	-	●	●	-	-	-	-	-	-	-
6,800			109	69	●	●	●	●	●	●	●	■	●	●	●	●
6,900			109	69	●	●	●	●	●	●	●	-	●	●	●	●
7,000			109	69	●	●	●	●	●	●	●	-	●	●	●	●
7,100			109	69	●	●	●	●	●	●	●	■	●	●	●	●
7,144	9/32		109	69	-	-	-	●	●	-	-	-	-	-	-	-
7,200			109	69	●	●	●	●	●	●	●	■	●	●	●	●
7,300			109	69	●	●	●	●	●	●	●	■	●	●	●	●
7,400			109	69	●	●	●	●	●	●	●	■	●	●	●	●
7,500			109	69	●	●	●	●	●	●	●	■	●	●	●	●
7,541	19/64		117	75	-	-	-	●	●	-	-	-	-	-	-	-
7,600			117	75	●	●	●	●	●	●	●	■	●	●	●	●

* Katalog Nr. 6153 ist blank bis Ø 2,36 / vaporisiert ab Ø 2,37 / Item 6153 is blank till Ø 2,36 / from Ø 2,37 is vaporised

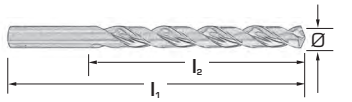
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel/discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS-Co und HSS-Co8
Twist drills with straight shank made of HSS-Co and HSS-Co8

TiAlN Futura | TiCN | TiNOX | TiN





Typ / Type	N	N	N	VA	VA	Record VA	Record VA	Record GG	HD	HD	HD	NS
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co8	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6153*	6153 TN	6154	6234	6234 TX	6140	6140 TX	6110 TF	6111	6111 TN	6111 TC	6247
7,700			117	75	●	●	●	●	●	●	●	■	●	●	●	●
7,800			117	75	●	●	●	●	●	●	●	■	●	●	●	●
7,900			117	75	●	●	●	●	●	●	●	■	●	●	●	●
7,938	5/16		117	75	-	-	-	●	●	-	-	-	-	-	-	-
8,000			117	75	●	●	●	●	●	●	●	■	●	●	●	●
8,100			117	75	●	●	●	●	●	●	●	■	●	●	●	●
8,200			117	75	●	●	●	●	●	●	●	■	●	●	●	●
8,300			117	75	●	●	●	●	●	●	●	■	●	●	●	●
8,334	21/64		117	75	-	-	-	●	●	-	-	-	●	-	-	-
8,400			117	75	●	●	●	●	●	●	●	■	●	●	●	●
8,500			117	75	●	●	●	●	●	●	●	■	●	●	●	●
8,600			125	81	●	●	●	●	●	●	●	■	●	●	●	●
8,700			125	81	●	●	●	●	●	●	●	■	●	●	●	●
8,733	11/32		125	81	-	-	-	●	●	-	-	-	●	●	●	-
8,800			125	81	●	●	●	●	●	●	●	■	●	●	●	●
8,900			125	81	●	●	●	●	●	●	●	■	●	●	●	●
9,000			125	81	●	●	●	●	●	●	●	-	●	●	●	●
9,100			125	81	●	●	●	●	●	●	●	■	●	●	●	●
9,129	23/64		125	81	-	-	-	●	●	-	-	-	-	-	-	-
9,200			125	81	●	●	●	●	●	●	●	■	●	●	●	●
9,300			125	81	●	●	●	●	●	●	●	■	●	●	●	●
9,400			125	81	●	●	●	●	●	●	●	■	●	●	●	●
9,500			125	81	●	●	●	●	●	●	●	■	●	●	●	●
9,525	3/8		133	87	-	-	-	●	●	-	-	-	-	-	-	-
9,600			133	87	●	●	●	●	●	●	●	■	●	●	●	●
9,700			133	87	●	●	●	●	●	●	●	■	●	●	●	●
9,800			133	87	●	●	●	●	●	●	●	■	●	●	●	●
9,900			133	87	●	●	●	●	●	●	●	■	●	●	●	●
9,921	25/64		133	87	-	-	-	●	●	-	-	-	-	-	-	-
10,000			133	87	●	●	●	●	●	●	●	■	●	●	●	●
10,100			133	87	●	●	-	-	-	-	-	-	-	-	-	-
10,200			133	87	●	●	●	●	●	●	●	■	●	●	●	●
10,300			133	87	●	●	-	-	-	-	-	-	-	-	-	-
10,320	13/32		133	87	-	-	-	●	●	-	-	-	-	-	-	-
10,400			133	87	●	●	-	-	-	-	-	-	-	-	-	-
10,500			133	87	●	●	●	●	●	●	●	-	●	●	●	●
10,600			133	87	●	-	-	-	-	-	-	-	-	-	-	-
10,700			142	94	●	-	-	-	-	-	-	-	-	-	-	-
10,716	27/64		142	94	-	-	-	●	●	-	-	-	-	-	-	-
10,800			142	94	●	●	-	-	-	-	-	-	●	●	●	●

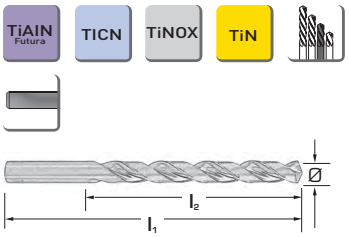
* Katalog Nr. 6153 ist blank bis Ø 2,36 / vaporisiert ab Ø 2,37 / Item 6153 is blank till Ø 2,36 / from Ø 2,37 is vaporised

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel/discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus HSS-Co und HSS-Co8
Twist drills with straight shank made of HSS-Co and HSS-Co8





Typ / Type	N	N	N	VA	VA	Record VA	Record VA	Record GG	HD	HD	HD	NS
Schneidrichtung Cutting direction												
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co8	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6153*	6153 TN	6154	6234	6234 TX	6140	6140 TX	6110 TF	6111	6111 TN	6111 TC	6247
10,900			142	94	●	-	-	-	-	-	-	-	-	-	-	-
11,000			142	94	●	●	●	●	●	●	●	■	●	●	●	●
11,100			142	94	●	-	-	-	-	-	-	-	-	-	-	-
11,113	7/16		142	94	-	-	-	●	●	-	-	-	-	-	-	-
11,200			142	94	●	●	-	●	●	●	●	■	●	●	●	-
11,300			142	94	●	-	-	-	-	-	-	-	-	-	-	-
11,400			142	94	●	-	-	-	-	-	-	-	-	-	-	-
11,500			142	94	●	●	●	●	●	●	●	-	●	●	●	●
11,509	29/64		142	94	-	-	-	●	●	-	-	-	-	-	-	-
11,600			142	94	●	-	-	-	-	-	-	-	-	-	-	-
11,700			142	94	●	-	-	-	-	-	-	-	-	-	-	-
11,800			142	94	●	-	-	-	-	-	-	-	●	●	●	●
11,900			151	101	●	-	-	-	-	-	-	-	-	-	-	-
11,906	15/32		151	101	-	-	-	●	●	-	-	-	-	-	-	-
12,000			151	101	●	●	●	●	●	●	●	-	●	●	●	●
12,100			151	101	●	●	-	-	-	-	-	-	-	-	-	-
12,200			151	101	●	-	-	-	-	-	-	-	-	-	-	●
12,300			151	101	●	-	-	-	-	-	-	-	-	-	-	-
12,304	31/64		151	101	-	-	-	●	●	-	-	-	-	-	-	-
12,400			151	101	●	-	-	-	-	-	-	-	-	-	-	-
12,500			151	101	●	●	●	●	●	●	●	-	●	●	●	●
12,600			151	101	●	-	-	-	-	-	-	-	-	-	-	-
12,700			151	101	-	-	-	-	-	-	-	-	-	-	-	-
12,700	1/2		151	101	●	●	●	●	●	-	-	-	-	-	-	-
12,800			151	101	●	-	-	-	-	-	-	-	-	-	-	●
12,900			151	101	●	-	-	-	-	-	-	-	-	-	-	-
13,000			151	101	●	●	●	●	●	●	●	-	●	●	●	●
13,100			151	101	-	-	-	-	-	-	-	-	●	●	●	
13,300			160	108	-	-	-	-	-	-	-	-	●	●	●	
13,500			160	108	●	●	●	●	●	●	●	■	●	●	●	●
13,800			160	108	●	-	-	-	-	-	-	■	-	-	-	-
14,000			160	108	●	●	●	●	●	●	●	-	●	●	●	●
14,500			169	114	●	●	-	●	●	●	●	■	●	●	●	●
14,800			169	114	-	-	-	-	-	-	-	-	-	-	-	-
15,000			169	114	●	●	●	●	●	●	●	■	●	●	●	●
15,100			178	120	-	-	-	-	-	-	-	-	●	●	●	-
15,300			178	120	-	-	-	-	-	-	-	-	●	●	●	-
15,500			178	120	●	●	●	-	-	●	●	■	●	●	●	-
15,800			178	120	-	-	-	-	-	-	-	-	-	-	-	-
16,000			178	120	●	●	●	-	-	●	●	■	●	●	●	-

* Katalog Nr. 6153 ist blank bis Ø 2,36 / vaporisiert ab Ø 2,37 / Item 6153 is blank till Ø 2,36 / from Ø 2,37 is vaporised

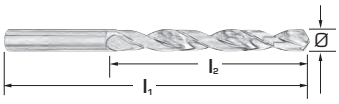
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel/discontinued items

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus VHM
Twist drills with straight shank made of solid carbide







Typ / Type			N	HM
Schneidrichtung Cutting direction				
Schneidstoff Material			K10/20	K10/20
Ø mm h8	l_1 mm	l_2 mm	6214	6120*
0,6	24	7	●	-
0,7	28	9	●	-
0,8	30	10	●	-
0,9	32	11	●	-
1,0	34	12	●	-
1,1	36	14	●	-
1,2	38	16	●	-
1,3	38	16	●	-
1,4	40	18	●	-
1,5	40	18	●	-
1,6	43	20	●	-
1,7	43	20	●	-
1,8	46	22	●	-
1,9	46	22	●	-
2,0	49	24	●	-
2,1	49	24	●	-
2,2	53	27	●	-
2,3	53	27	●	-
2,4	57	30	●	-
2,5	57	30	●	-
2,6	57	30	●	-
2,7	61	33	●	-
2,8	61	33	●	-
2,9	61	33	●	-
3,0	61	33	●	●
3,1	65	36	●	●
3,2	65	36	●	●
3,3	65	36	●	●
3,4	70	39	●	●
3,5	70	39	●	●
3,6	70	39	●	●
3,7	70	39	●	●
3,8	75	43	●	●
3,9	75	43	●	●
4,0	75	43	●	●
4,1	75	43	●	●
4,2	75	43	●	●
4,3	80	47	●	●
4,4	80	47	●	●
4,5	80	47	●	●

Typ / Type			N	HM
Schneidrichtung Cutting direction				
Schneidstoff Material			K10/20	K10/20
Ø mm h8	l_1 mm	l_2 mm	6214	6120*
4,6	80	47	●	●
4,7	80	47	●	●
4,8	86	52	●	●
4,9	86	52	●	●
5,0	86	52	●	●
5,1	86	52	●	●
5,2	86	52	●	●
5,3	86	52	●	●
5,4	93	57	●	●
5,5	93	57	●	●
5,6	93	57	●	●
5,7	93	57	●	●
5,8	93	57	●	●
5,9	93	57	●	●
6,0	93	57	●	●
6,1	101	63	●	●
6,2	101	63	●	●
6,3	101	63	●	●
6,4	101	63	●	●
6,5	101	63	●	●
6,6	101	63	●	●
6,7	101	63	●	●
6,8	109	69	●	●
6,9	109	69	●	●
7,0	109	69	●	●
7,1	109	69	●	●
7,2	109	69	●	●
7,3	109	69	●	●
7,4	109	69	●	●
7,5	109	69	●	●
7,6	117	75	●	●
7,7	117	75	●	●
7,8	117	75	●	●
7,9	117	75	●	●
8,0	117	75	●	●
8,1	117	75	●	●
8,2	117	75	●	●
8,3	117	75	●	●
8,4	117	75	●	●
8,5	117	75	●	●

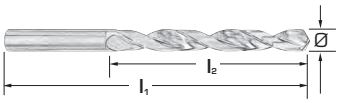
* Kat.-Nr. 6120 Hartmetall bestückt / Ref. 6120 carbide tipped
● Standardartikel / Items available ex stock

DIN 338

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Zylinderschaft aus VHM
Twist drills with straight shank made of solid carbide







Typ / Type			N	HM
Schneidrichtung Cutting direction				
Schneidstoff Material			K10/20	K10/20
Ø mm h8	l_1 mm	l_2 mm	6214	6120*
8,6	125	81	●	●
8,7	125	81	●	●
8,8	125	81	●	●
8,9	125	81	●	●
9,0	125	81	●	●
9,1	125	81	●	●
9,2	125	81	●	●
9,3	125	81	●	●
9,4	125	81	●	●
9,5	125	81	●	●
9,6	133	87	●	●
9,7	133	87	●	●
9,8	133	87	●	●
9,9	133	87	●	●
10,0	133	87	●	●
10,1	133	87	-	●
10,2	133	87	●	●
10,3	133	87	-	●
10,4	133	87	-	●
10,5	133	87	●	●
10,6	133	87	-	●
10,7	142	94	-	●
10,8	142	94	●	●
10,9	142	94	-	●
11,0	142	94	●	●
11,1	142	94	-	●
11,2	142	94	●	●
11,3	142	94	-	●
11,4	142	94	-	●
11,5	142	94	●	●
11,6	142	94	-	●
11,7	142	94	-	●
11,8	142	94	●	●
11,9	151	101	-	●
12,0	151	101	●	●
12,1	151	101	-	●
12,2	151	101	-	●
12,3	151	101	-	●
12,4	151	101	-	●
12,5	151	101	-	●

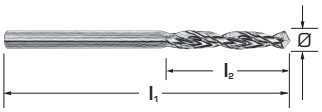
Typ / Type			N	HM
Schneidrichtung Cutting direction				
Schneidstoff Material			K10/20	K10/20
Ø mm h8	l_1 mm	l_2 mm	6214	6120*
12,6	151	101	-	●
12,7	151	101	-	●
12,8	151	101	-	●
12,9	151	101	-	●
13,0	151	101	-	●

* Kat.-Nr. 6120 Hartmetall bestückt / Ref. 6120 carbide tipped
● Standardartikel / Items available ex stock

ILIX NORM

Spiralbohrer mit Zylinderschaft aus VHM
mit gleichem Nenn- und Schaftdurchmesser
zum Bohren von glasfaserverstärkten Kunststoffen
Twist drills with straight shank made of solid carbide
identical nominal and shank diameter
for drilling printed circuit boards, hard plastics







Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm h8	l_1 mm	l_2 mm	6230
1,0	30	11,0	●
1,1	30	11,0	●
1,2	30	13,0	●
1,3	30	13,0	●
1,4	30	13,0	●
1,5	30	13,0	●
1,6	40	17,5	●
1,7	40	17,5	●
1,8	40	17,5	●
1,9	40	17,5	●
2,0	40	17,5	●
2,5	40	17,5	●
3,0	45	20,0	●

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

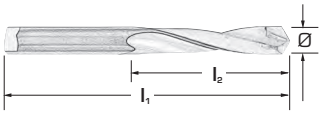
Ø mm h8	l_1 mm	l_2 mm	6230

● Standardartikel / Items available ex stock

DIN 8037

Spiralbohrer mit Zylinderschaft mit Schneiden aus Hartmetall mit Mitnehmer nach DIN 1809
Carbide tipped twist drills with straight shank with tang acc. to DIN 1809







Typ / Type	HM
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20
Ø mm h8	l_1 mm	l_2 mm	**6211**
---	---	---	---
3,0	50	20	●
3,5	56	25	●
3,8	56	25	●
4,0	56	25	●
4,2	63	28	●
4,5	63	28	●
4,8	63	28	●
5,0	63	28	●
5,2	71	32	●
5,5	71	32	●
5,8	71	32	●
6,0	71	32	●
6,5	71	32	●
6,8	80	40	●
7,0	80	40	●
7,5	80	40	●
8,0	80	40	●
8,5	90	50	●
9,0	90	50	●
9,5	90	50	●
10,0	100	56	●
10,5	100	56	●
11,0	100	56	●
11,5	112	63	●
12,0	112	63	●
13,0	112	63	●
14,0	125	71	●
15,0	125	71	●
16,0	140	80	●

Typ / Type	HM
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20
Ø mm h8	l_1 mm	l_2 mm	**6211**
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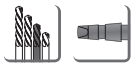
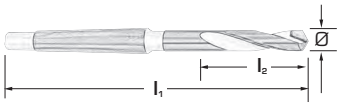
● Standardartikel / Items available ex stock

Unter 3,0 mm Ø Kat.-Nr. 6214 verwenden – Zwischenmaße – Preise auf Anfrage
For diameters below 3,0 mm Ø please see Ref. 6214 – intermediate sizes – prices upon request

DIN 8041

Spiralbohrer mit Morsekegel und Schneiden aus Hartmetall
Carbide tipped twist drills with taper shank







Typ / Type				HM
Schneidrichtung Cutting direction				
Schneidstoff Material				K10/20
Ø mm h8	l_1 mm	l_2 mm	CM/MT	6231
8,0	135	45	1	●
8,5	135	45	1	●
9,0	135	45	1	●
9,5	140	50	1	●
10,0	140	50	1	●
10,5	140	50	1	●
11,0	140	50	1	●
11,5	146	56	1	●
12,0	146	56	1	●
12,5	146	56	1	●
13,0	146	56	1	●
13,5	168	63	2	●
14,0	168	63	2	●
14,5	168	63	2	●
15,0	168	63	2	●
15,5	175	70	2	●
16,0	175	70	2	●
16,5	175	70	2	●
17,0	175	70	2	●
17,5	185	80	2	●
18,0	185	80	2	●
18,5	185	80	2	●
19,0	185	80	2	●
19,5	215	90	2	●
20,0	215	90	3	●
21,0	215	90	3	●
22,0	215	90	3	●
22,5	215	90	3	●
23,0	225	100	3	●
24,0	225	100	3	●
25,0	225	100	3	●
26,0	260	110	4	●
27,0	260	110	4	●
28,0	260	110	4	●
29,0	275	125	4	●
30,0	275	125	4	●
31,0	275	125	4	●
32,0	275	125	4	●

Typ / Type				HM
Schneidrichtung Cutting direction				
Schneidstoff Material				K10/20
Ø mm h8	l_1 mm	l_2 mm	CM/MT	6231

Zwischenmaße – Preise auf Anfrage / Intermediate sizes – prices upon request
● Standardartikel / Items available ex stock

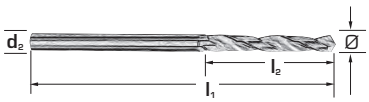
DIN 1899 A

KLEINSTBOHRER HSS-Co / MICRO DRILLS HSS-Co

Herstellungstoleranzen / Drill diameter tolerances

- **bis /** Until **– 1,00 mm:** **+0 / - 0,004 mm**
- **über /** Over **> 1,00 mm:** **+0 / - 0,005 mm**







Typ / Type				N	N
Schneidrichtung Cutting direction					
Schneidstoff Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2 mm	6511	6513
0,05	25	0,40	1	●	-
0,06	25	0,40	1	●	-
0,07	25	0,40	1	●	-
0,08	25	0,50	1	●	■
0,09	25	0,50	1	●	-
0,10	25	0,70	1	●	-
0,11	25	0,70	1	●	■
0,12	25	0,70	1	●	-
0,13	25	1,00	1	●	●
0,14	25	1,00	1	●	●
0,15	25	1,00	1	●	●
0,16	25	1,40	1	●	●
0,17	25	1,40	1	●	●
0,18	25	1,40	1	●	●
0,19	25	1,40	1	●	●
0,20	25	1,80	1	●	●
0,21	25	1,80	1	●	●
0,22	25	1,80	1	●	●
0,23	25	1,80	1	●	●
0,24	25	1,80	1	●	●
0,25	25	2,20	1	●	●
0,26	25	2,20	1	●	●
0,27	25	2,20	1	●	●
0,28	25	2,20	1	●	●
0,29	25	2,20	1	●	●
0,30	25	2,20	1	●	●
0,31	25	2,80	1	●	●
0,32	25	2,80	1	●	●
0,33	25	2,80	1	●	●
0,34	25	2,80	1	●	●
0,35	25	2,80	1	●	●
0,36	25	2,80	1	●	●
0,37	25	2,80	1	●	●
0,38	25	2,80	1	●	●
0,39	25	3,60	1	●	●
0,40	25	3,60	1	●	●
0,41	25	3,60	1	●	●
0,42	25	3,60	1	●	●
0,43	25	3,60	1	●	●
0,44	25	3,60	1	●	●

Typ / Type				N	N
Schneidrichtung Cutting direction					
Schneidstoff Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2 mm	6511	6513
0,45	25	3,60	1	●	●
0,46	25	3,60	1	●	●
0,47	25	3,60	1	●	●
0,48	25	3,60	1	●	●
0,49	25	4,00	1	●	●
0,50	25	4,00	1	●	●
0,51	25	4,00	1	●	●
0,52	25	4,00	1	●	●
0,53	25	4,00	1	●	●
0,54	25	4,50	1	●	●
0,55	25	4,50	1	●	●
0,56	25	4,50	1	●	●
0,57	25	4,50	1	●	●
0,58	25	4,50	1	●	●
0,59	25	4,50	1	●	●
0,60	25	4,50	1	●	●
0,61	25	5,00	1	●	●
0,62	25	5,00	1	●	●
0,63	25	5,00	1	●	●
0,64	25	5,00	1	●	●
0,65	25	5,00	1	●	●
0,66	25	5,00	1	●	●
0,67	25	5,00	1	●	●
0,68	25	5,60	1	●	●
0,69	25	5,60	1	●	●
0,70	25	5,60	1	●	●
0,71	25	5,60	1	●	●
0,72	25	5,60	1	●	●
0,73	25	5,60	1	●	●
0,74	25	5,60	1	●	●
0,75	25	5,60	1	●	●
0,76	25	6,30	1	●	●
0,77	25	6,30	1	●	●
0,78	25	6,30	1	●	●
0,79	25	6,30	1	●	●
0,80	25	6,30	1,5	●	●
0,81	25	6,30	1,5	●	●
0,82	25	6,30	1,5	●	●
0,83	25	6,30	1,5	●	●
0,84	25	6,30	1,5	●	●

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

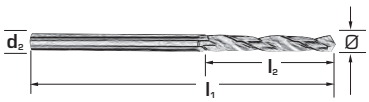
DIN 1899 A

KLEINSTBOHRER HSS-Co / MICRO DRILLS HSS-Co

Herstellungstoleranzen / Drill diameter tolerances

- **bis /** Until **– 1,00 mm:** **+0 - 0,004 mm**
- **über /** Over **> 1,00 mm:** **+0 - 0,005 mm**







Typ / Type				N	N
Schneidrichtung Cutting direction					
Schneidstoff Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2 mm	6511	6513
0,85	25	6,30	1,5	●	●
0,86	25	7,10	1,5	●	●
0,87	25	7,10	1,5	●	●
0,88	25	7,10	1,5	●	●
0,89	25	7,10	1,5	●	●
0,90	25	7,10	1,5	●	●
0,91	25	7,10	1,5	●	●
0,92	25	7,10	1,5	●	●
0,93	25	7,10	1,5	●	●
0,94	25	7,10	1,5	●	●
0,95	25	7,10	1,5	●	■
0,96	25	8,00	1,5	●	●
0,97	25	8,00	1,5	●	●
0,98	25	8,00	1,5	●	●
0,99	25	8,00	1,5	●	●
1,00	25	8,00	1,5	●	●
1,05	25	8,00	1,5	●	●
1,10	25	9,00	1,5	●	●
1,15	25	9,00	1,5	●	●
1,20	25	10,00	1,5	●	●
1,25	25	10,00	1,5	●	●
1,30	25	10,00	1,5	●	●
1,35	25	11,20	1,5	●	●
1,40	25	11,20	1,5	●	●
1,45	25	11,20	1,5	●	●

Typ / Type				N	N
Schneidrichtung Cutting direction					
Schneidstoff Material				HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	d_2 mm	6511	6513

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

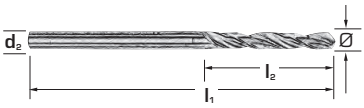
ILIX NORM

KLEINSTBOHRER VHM / MICRO DRILLS SC

Herstellungstoleranzen / Drill diameter tolerances

- **bis /** Until **– 1,00 mm:** **+0 / - 0,004 mm**
- **über /** Over **> 1,00 mm:** **+0 / - 0,005 mm**







Typ / Type				N
Schneidrichtung Cutting direction				
Schneidstoff Material				K10
Ø mm h5	**l_1 mm**	**l_2 mm**	**d_{2MM} h6**	**6516**
0,10	30	0,7	1	●
0,11	30	0,7	1	●
0,12	30	0,7	1	●
0,13	30	0,7	1	●
0,14	30	0,7	1	●
0,15	30	1,0	1	●
0,16	30	1,0	1	●
0,17	30	1,0	1	●
0,18	30	1,0	1	●
0,19	30	1,0	1	●
0,20	30	1,0	1	●
0,21	30	1,0	1	●
0,22	30	1,0	1	●
0,23	30	1,0	1	●
0,24	30	1,0	1	●
0,25	30	1,0	1	●
0,26	30	1,0	1	●
0,27	30	1,0	1	●
0,28	30	1,0	1	●
0,29	30	1,0	1	●
0,30	30	1,5	1	●
0,31	30	1,5	1	●
0,32	30	1,5	1	●
0,33	30	1,5	1	●
0,34	30	1,5	1	●
0,35	30	1,5	1	●
0,36	30	1,5	1	●
0,37	30	1,5	1	●
0,38	30	1,5	1	●
0,39	30	1,5	1	●
0,40	30	2,0	1	●
0,41	30	2,0	1	●
0,42	30	2,0	1	●
0,43	30	2,0	1	●
0,44	30	2,0	1	●
0,45	30	3,5	1	●
0,46	30	3,5	1	●
0,47	30	3,5	1	●
0,48	30	3,5	1	●
0,49	30	4,0	1	●

Typ / Type				N
Schneidrichtung Cutting direction				
Schneidstoff Material				K10
Ø mm h5	**l_1 mm**	**l_2 mm**	**d_{2MM} h6**	**6516**
0,50	30	4,0	1	●
0,51	30	4,0	1	●
0,52	30	4,0	1	●
0,53	30	4,0	1	●
0,54	30	4,5	1	●
0,55	30	4,5	1	●
0,56	30	4,5	1	●
0,57	30	4,5	1	●
0,58	30	4,5	1	●
0,59	30	4,5	1	●
0,60	30	4,5	1	●
0,61	30	5,0	1	●
0,62	30	5,0	1	●
0,63	30	5,0	1	●
0,64	30	5,0	1	●
0,65	30	5,0	1	●
0,66	30	5,0	1	●
0,67	30	5,0	1	●
0,68	30	5,5	1	●
0,69	30	5,6	1	●
0,70	30	5,6	1	●
0,71	30	5,6	1	●
0,72	30	5,6	1	●
0,73	30	5,6	1	●
0,74	30	5,6	1	●
0,75	30	5,6	1	●
0,76	30	6,5	1	●
0,77	30	6,5	1	●
0,78	30	6,5	1	●
0,79	30	6,5	1	●
0,80	30	6,5	1,5	●
0,81	30	6,5	1,5	●
0,82	30	6,5	1,5	●
0,83	30	6,5	1,5	●
0,84	30	6,5	1,5	●
0,85	30	6,5	1,5	●
0,86	30	7,0	1,5	●
0,87	30	7,0	1,5	●
0,88	30	7,0	1,5	●
0,89	30	7,0	1,5	●

● Standardartikel / Items available ex stock

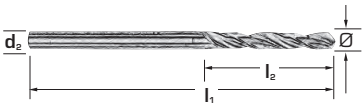
ILIX NORM

KLEINSTBOHRER VHM / MICRO DRILLS SC

Herstellungstoleranzen / Drill diameter tolerances

- **bis /** Until **– 1,00 mm:** **+0 / - 0,004 mm**
- **über /** Over **> 1,00 mm:** **+0 / - 0,005 mm**







Typ / Type				N
Schneidrichtung Cutting direction				
Schneidstoff Material				K10
Ø mm h5	l_1 mm	l_2 mm	d_{2MM} h6	6516
0,90	30	7,0	1,5	●
0,91	30	7,0	1,5	●
0,92	30	7,0	1,5	●
0,93	30	7,0	1,5	●
0,94	30	7,0	1,5	●
0,95	30	7,0	1,5	●
0,96	30	8,0	1,5	●
0,97	30	8,0	1,5	●
0,98	30	8,0	1,5	●
0,99	30	8,0	1,5	●
1,00	30	9,0	1,5	●
1,05	30	9,0	1,5	●
1,10	30	9,0	1,5	●
1,15	30	9,0	1,5	●
1,20	30	10,0	1,5	●
1,25	30	10,0	1,5	●
1,30	30	10,0	1,5	●
1,35	30	11,5	1,5	●
1,40	30	11,5	1,5	●
1,45	30	11,5	1,5	●
1,50	38	11,5	2	●
1,55	38	12,0	2	●
1,60	38	12,0	2	●
1,65	38	12,0	2	●
1,70	38	12,0	2	●
1,75	38	12,0	2	●
1,80	38	12,0	2	●
1,85	38	12,0	2	●
1,90	38	12,0	2	●
1,95	38	12,0	2	●
2,00	38	12,0	3	●
2,05	38	12,0	3	●
2,10	38	12,0	3	●
2,15	38	12,0	3	●
2,20	38	12,0	3	●
2,25	38	12,0	3	●
2,30	38	12,0	3	●
2,35	38	12,0	3	●
2,40	38	12,0	3	●
2,45	38	12,0	3	●

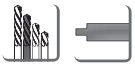
Typ / Type				N
Schneidrichtung Cutting direction				
Schneidstoff Material				K10
Ø mm h5	l_1 mm	l_2 mm	d_{2MM} h6	6516
2,50	38	12,0	3	●
2,55	38	12,0	3	●
2,60	38	12,0	3	●
2,65	38	12,0	3	●
2,70	38	12,0	3	●
2,75	38	12,0	3	●
2,80	38	12,0	3	●
2,85	38	12,0	3	●
2,90	38	12,0	3	●
2,95	38	12,0	3	●

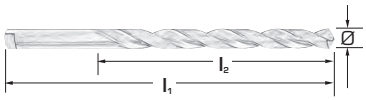
● Standardartikel / Items available ex stock

DIN 339

Lange Spiralbohrer mit Zylinderschaft aus HSS zum Bohren mit Vorrichtungen

Twist drills with straight shank made of HSS for drilling with jigs, bushings and tenon drive







Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm h8	l_1 mm	l_2 mm	6202
1,00	48	26	●
1,10	50	28	●
1,20	52	30	●
1,25	52	30	■
1,30	52	30	●
1,35	55	33	■
1,40	55	33	●
1,50	55	33	●
1,60	58	35	●
1,70	58	35	●
1,80	62	38	●
1,90	62	38	●
2,00	66	41	●
2,10	66	41	●
2,20	70	44	●
2,30	70	44	●
2,35	70	44	■
2,40	74	47	●
2,50	74	47	●
2,60	74	47	●
2,70	79	51	●
2,75	79	51	■
2,80	79	51	■
2,90	79	51	●
3,00	79	51	●
3,10	84	55	●
3,20	84	55	●
3,30	84	55	●
3,40	91	60	●
3,50	91	60	●
3,60	91	60	●
3,70	91	60	●
3,80	96	64	●
3,90	96	64	●
4,00	96	64	●
4,10	96	64	●
4,20	96	64	●
4,30	102	69	●
4,40	102	69	●
4,50	102	69	●

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm h8	l_1 mm	l_2 mm	6202
4,60	102	69	●
4,70	102	69	●
4,80	108	74	●
4,90	108	74	●
5,00	108	74	●
5,10	108	74	●
5,20	108	74	●
5,30	108	74	●
5,40	116	80	●
5,50	116	80	●
5,60	116	80	●
5,70	116	80	●
5,80	116	80	●
5,90	116	80	●
6,00	116	80	●
6,10	124	86	●
6,20	124	86	●
6,30	124	86	●
6,40	124	86	●
6,50	124	86	●
6,60	124	86	●
6,70	124	86	●
6,80	133	93	●
6,90	133	93	●
7,00	133	93	●
7,10	133	93	●
7,20	133	93	●
7,30	133	93	●
7,40	133	93	●
7,50	133	93	●
7,60	142	100	●
7,70	142	100	●
7,80	142	100	●
7,90	142	100	●
8,00	142	100	●
8,10	142	100	●
8,20	142	100	●
8,30	142	100	●
8,40	142	100	●
8,50	142	100	●

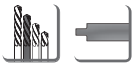
Katalog Nr. 6202 blank bis Ø 3,0 mm / Mitnehmer nach DIN 1809 ab Ø 3,0 mm / Item 6202 is blank till Ø 3, with tenon DIN 1809 from Ø 3

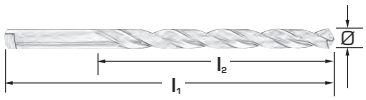
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel/discontinued items

DIN 339

Lange Spiralbohrer mit Zylinderschaft aus HSS zum Bohren mit Vorrichtungen

Twist drills with straight shank made of HSS for drilling with jigs, bushings and tenon drive







Typ / Type			N
Schneidrichtung Cutting direction			
Schneidstoff Material			HSS
Ø mm h8	l_1 mm	l_2 mm	6202
8,60	151	107	●
8,70	151	107	●
8,80	151	107	●
8,90	151	107	●
9,00	151	107	●
9,10	151	107	●
9,20	151	107	●
9,30	151	107	●
9,40	151	107	●
9,50	151	107	●
9,60	162	116	●
9,70	162	116	●
9,80	162	116	●
10,00	162	116	●
10,20	162	116	●
10,50	162	116	●
10,80	173	125	●
11,00	173	125	●
11,50	173	125	●
12,00	184	134	●
10,00	162	116	●
10,20	162	116	●
10,50	162	116	●
10,80	173	125	●
11,00	173	125	●
11,50	173	125	●
12,00	184	134	●

Typ / Type			N
Schneidrichtung Cutting direction			
Schneidstoff Material			HSS
Ø mm h8	l_1 mm	l_2 mm	6202

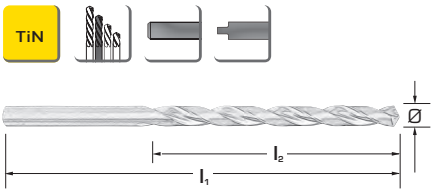
Katalog Nr. 6202 blank bis Ø 3,0 mm / Mitnehmer nach DIN 1809 ab Ø 3,0 mm / Item 6202 is blank till Ø 3, with tenon DIN 1809 from Ø 3

● Standardartikel / Items available ex stock

DIN 340

LANG / LONG SERIES

Spiralbohrer mit Zylinderschaft aus HSS und HSS-Co
Twist drills with straight shank made of HSS and HSS-Co





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	VA	HD
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co

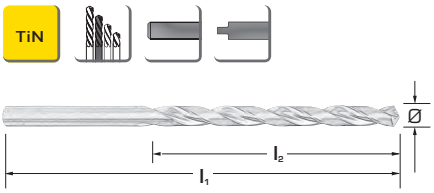
Ø mm h8	Ø "	l_1 mm	l_2 mm	6165	6165 TN	6108	6192	6200	6173	6173 TN	6184	6166	6112	6113
0,500		32	12	●	-	-	-	-	-	-	-	●	-	-
0,600		35	15	●	-	-	-	-	-	-	-	●	-	-
0,700		42	21	■	●	-	-	-	-	-	-	●	-	-
0,800		46	25	●	-	-	-	-	-	-	-	●	-	-
0,900		51	29	●	-	-	-	-	-	-	-	●	-	-
1,000		56	33	●	●	-	●	●	●	●	-	●	●	●
1,050		56	33	●	-	-	-	-	-	-	-	-	-	-
1,100		60	37	●	-	-	●	●	●	●	-	●	●	●
1,150		60	37	●	-	-	-	-	-	-	-	●	-	-
1,200		65	41	●	-	-	-	●	●	●	-	●	●	●
1,250		65	41	●	-	-	-	●	-	-	-	●	-	-
1,300		65	41	●	-	-	-	●	●	●	-	●	●	●
1,350		70	45	●	-	-	-	-	-	-	-	●	-	-
1,400		70	45	●	-	-	●	●	●	●	-	●	●	●
1,450		70	45	●	-	-	-	-	-	-	-	●	-	-
1,500		70	45	●	●	-	●	●	●	●	-	●	●	●
1,550		76	50	●	-	-	-	-	-	-	-	●	-	-
1,600		76	50	●	-	-	●	●	●	●	-	●	●	●
1,650		76	50	●	-	-	-	-	-	-	-	●	-	-
1,700		76	50	●	-	-	●	●	●	●	-	●	●	●
1,750		80	53	●	-	-	-	●	-	-	-	-	-	-
1,800		80	53	●	-	-	●	●	●	●	-	●	●	●
1,850		80	53	●	-	-	-	-	-	-	-	-	-	-
1,900		80	53	●	-	-	●	●	●	●	-	●	●	●
1,950		85	56	●	-	-	-	-	-	-	-	●	-	-
1,984	5/64	85	56	-	-	-	-	-	●	-	-	-	-	-
2,000		85	56	●	●	-	●	●	●	●	■	●	●	●
2,050		85	56	●	-	-	-	-	-	-	-	●	-	-
2,100		85	56	●	-	-	●	●	●	●	-	●	●	●
2,150		90	59	●	-	-	-	-	-	-	-	-	-	-
2,200		90	59	●	-	-	●	●	●	●	-	●	●	●
2,250		90	59	●	-	-	-	●	-	-	-	-	-	-
2,300		90	59	●	-	-	●	●	●	●	-	●	●	●
2,350		90	59	●	-	-	-	-	-	-	-	-	-	-
2,383	3/32	95	62	-	-	-	-	-	●	-	-	-	-	-
2,400		95	62	●	-	-	●	●	●	●	-	●	●	●
2,450		95	62	●	-	-	-	-	-	-	-	-	-	-
2,500		95	62	●	●	-	●	●	●	●	-	●	●	●
2,550		95	62	●	-	-	-	-	-	-	-	■	-	-
2,600		95	62	●	-	-	●	●	●	●	-	●	●	●

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 340

LANG / LONG SERIES

Spiralbohrer mit Zylinderschaft aus HSS und HSS-Co
Twist drills with straight shank made of HSS and HSS-Co





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	VA	HD
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	l_1 mm	l_2 mm	6165	6165 TN	6108	6192	6200	6173	6173 TN	6184	6166	6112	6113
2,650		95	62	●	-	-	-	-	-	-	-	-	-	-
2,700		100	66	●	-	-	●	●	●	●	-	■	●	●
2,750		100	66	●	-	-	-	●	-	-	-	-	-	-
2,779	7/64	100	66	-	-	-	-	-	●	-	-	-	-	-
2,800		100	66	●	-	-	●	●	●	●	-	●	●	●
2,850		100	66	●	-	-	-	-	-	-	-	-	-	-
2,900		100	66	●	-	-	●	●	●	●	-	●	●	●
2,950		100	66	●	-	-	-	-	-	-	-	-	-	-
3,000		100	66	●	●	●	●	●	●	●	■	●	●	●
3,050		106	69	●	-	-	-	-	-	-	-	-	-	-
3,100		106	69	●	-	-	●	●	●	●	-	●	●	●
3,150		106	69	●	-	-	-	-	-	-	-	●	-	-
3,175	1/8	106	69	■	-	-	-	-	●	-	-	-	-	-
3,200		106	69	●	●	●	●	●	●	●	-	●	●	●
3,250		106	69	●	-	-	-	●	-	-	-	-	-	-
3,300		106	69	●	●	-	●	●	●	●	-	●	●	●
3,350		106	69	●	-	-	-	-	-	-	-	-	-	-
3,400		112	73	●	-	-	●	●	●	●	-	●	●	●
3,450		112	73	●	-	-	-	-	-	-	-	-	-	-
3,500		112	73	●	●	●	●	●	●	●	■	●	●	●
3,550		112	73	●	-	-	-	-	-	-	-	-	-	-
3,571	9/64	112	73	-	-	-	-	-	●	-	-	-	-	-
3,600		112	73	●	-	-	-	●	●	●	-	■	●	●
3,650		112	73	●	-	-	-	-	-	-	-	-	-	-
3,700		112	73	●	-	-	-	●	●	●	-	●	●	●
3,750		112	73	●	-	-	-	●	-	-	-	-	-	-
3,800		119	78	●	-	●	-	●	●	●	-	●	●	●
3,850		119	78	●	-	-	-	-	-	-	-	-	-	-
3,900		119	78	●	-	-	-	●	●	●	-	●	●	●
3,950		119	78	●	-	-	-	-	-	-	-	-	-	-
3,970	5/32	119	78	-	-	-	-	-	●	-	-	-	-	-
4,000		119	78	●	●	●	●	●	●	●	-	●	●	●
4,050		119	78	●	-	-	-	-	-	-	-	-	-	-
4,100		119	78	●	-	-	-	●	●	●	-	●	●	●
4,150		119	78	●	-	-	-	-	-	-	-	-	-	-
4,200		119	78	●	●	●	-	●	●	●	-	●	●	●
4,250		119	78	●	-	-	-	●	-	-	-	-	-	-
4,300		126	82	●	-	-	-	●	●	●	-	●	●	●
4,350		126	82	●	-	-	-	-	-	-	-	-	-	-
4,366	11/64	126	82	-	-	-	-	-	●	-	-	-	-	-

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 340

LANG / LONG SERIES

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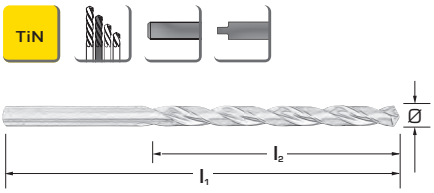



Typ / Type				N	N	N ML	H	W	STL	STL	STL	N	VA	HD
Schneidrichtung Cutting direction														
Schneidstoff / Material				HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co
Ø mm h8	Ø "	l_1 mm	l_2 mm	6165	6165 TN	6108	6192	6200	6173	6173 TN	6184	6166	6112	6113
4,400		126	82	●	-	-	-	●	●	●	-	●	●	●
4,450		126	82	●	-	-	-	-	-	-	-	-	-	-
4,500		126	82	●	●	●	●	●	●	●	-	●	●	●
4,550		126	82	●	-	-	-	-	-	-	-	-	-	-
4,600		126	82	●	-	-	-	●	●	●	-	●	●	●
4,650		126	82	●	-	-	-	-	-	-	-	-	-	-
4,700		126	82	●	-	-	-	●	●	●	-	●	●	●
4,750		126	82	●	-	-	-	●	-	-	-	-	-	-
4,763	3/16	132	87	■	-	-	-	-	●	-	-	-	-	-
4,800		132	87	●	-	●	-	●	●	●	-	●	●	●
4,850		132	87	●	-	-	-	-	-	-	-	-	-	-
4,900		132	87	●	-	-	-	●	●	●	-	●	●	●
4,950		132	87	●	-	-	-	-	-	-	-	-	-	-
5,000		132	87	●	●	●	●	●	●	●	-	●	●	●
5,100		132	87	●	-	-	-	●	●	●	-	●	●	●
5,159	13/64	132	87	-	-	-	-	-	●	-	-	-	-	-
5,200		132	87	●	-	●	-	●	●	●	-	●	●	●
5,250		132	87	●	-	-	-	-	-	-	-	-	-	-
5,300		132	87	●	-	-	-	●	●	●	-	●	●	●
5,400		139	91	●	-	-	-	●	●	●	-	●	●	●
5,500		139	91	●	●	●	●	●	●	●	-	●	●	●
5,558	7/62	139	91	-	-	-	-	-	●	-	-	-	-	-
5,600		139	91	●	-	-	-	●	●	●	-	●	●	●
5,700		139	91	●	-	-	-	●	●	●	-	●	●	●
5,750		139	91	●	-	-	-	-	-	-	-	-	-	-
5,800		139	91	●	-	●	-	●	●	●	-	●	●	●
5,900		139	91	●	-	-	-	●	●	●	-	●	●	●
5,954	15/64	139	91	-	-	-	-	-	●	-	-	-	-	-
6,000		139	91	●	●	●	●	●	●	●	-	●	●	●
6,100		148	97	●	-	-	-	●	●	●	-	●	●	●
6,200		148	97	●	-	●	-	●	●	●	-	●	●	●
6,250		148	97	●	-	-	-	-	-	-	-	-	-	-
6,300		148	97	●	-	-	-	●	●	●	-	●	●	●
6,350	1/4	148	97	-	-	-	-	-	●	-	-	-	-	-
6,400		148	97	●	-	-	-	●	●	●	-	●	●	●
6,500		148	97	●	●	●	●	●	●	●	-	●	●	●
6,600		148	97	●	-	-	-	●	●	●	-	●	●	●
6,700		148	97	●	-	-	-	●	●	●	-	●	●	●
6,746	17/64	156	102	-	-	-	-	-	●	-	-	-	-	-
6,750		156	102	●	-	-	-	-	-	-	-	-	-	-

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DIN 340

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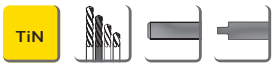

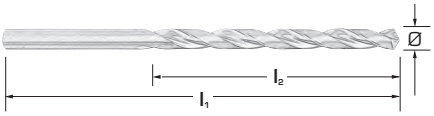



Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	VA	HD
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	l_1 mm	l_2 mm	6165	6165 TN	6108	6192	6200	6173	6173 TN	6184	6166	6112	6113
6,800		156	102	●	-	●	-	●	●	●	-	●	●	●
6,900		156	102	●	-	-	-	●	●	●	-	●	●	●
7,000		156	102	●	●	●	●	●	●	●	■	●	●	●
7,100		156	102	●	-	-	-	-	●	●	-	-	●	●
7,145	9/32	156	102	-	-	-	-	-	●	-	-	-	-	-
7,200		156	102	●	-	-	-	-	●	●	-	-	●	●
7,250		156	102	●	-	-	-	■	-	-	-	-	-	-
7,300		156	102	●	-	-	-	-	●	●	-	●	●	●
7,400		156	102	●	-	-	-	-	●	●	-	-	●	●
7,500		156	102	●	●	●	-	●	●	●	■	●	●	●
7,541	19/64	165	109	-	-	-	-	-	●	-	-	-	-	-
7,600		165	109	●	-	-	-	-	●	●	-	●	●	●
7,700		165	109	●	-	-	-	-	●	●	-	●	●	●
7,750		165	109	●	-	-	-	-	-	-	-	-	-	-
7,800		165	109	●	-	-	-	-	●	●	-	●	●	●
7,900		165	109	●	-	-	-	-	●	●	-	●	●	●
7,938	5/16	165	109	-	-	-	-	-	●	-	-	-	-	-
8,000		165	109	●	●	●	●	●	●	●	-	●	●	●
8,100		165	109	●	-	-	-	-	●	-	-	●	●	●
8,200		165	109	●	-	-	-	-	●	-	-	●	●	●
8,250		165	109	●	-	-	-	-	-	-	-	-	-	-
8,300		165	109	●	-	-	-	-	●	-	-	-	●	●
8,334	21/64	165	109	-	-	-	-	-	●	-	-	-	-	-
8,400		165	109	●	-	-	-	-	●	-	-	-	●	●
8,500		165	109	●	●	●	-	●	●	●	■	●	●	●
8,600		175	115	●	-	-	-	-	●	-	-	●	●	●
8,700		175	115	●	-	-	-	-	●	-	-	●	●	●
8,733	11/32	175	115	-	-	-	-	-	●	-	-	-	-	-
8,750		175	115	●	-	-	-	-	-	-	-	-	-	-
8,800		175	115	●	-	-	-	-	●	-	-	●	●	●
8,900		175	115	●	-	-	-	-	●	-	-	-	●	●
9,000		175	115	●	●	●	●	●	●	●	-	●	●	●
9,100		175	115	●	-	-	-	-	●	-	-	●	●	●
9,129	23/64	175	115	-	-	-	-	-	●	-	-	-	-	-
9,200		175	115	●	-	-	-	-	●	-	-	●	●	●
9,250		175	115	●	-	-	-	-	-	-	-	-	-	-
9,300		175	115	●	-	-	-	-	●	-	-	●	●	●
9,400		175	115	●	-	-	-	-	●	-	-	-	●	●
9,500		175	115	●	-	●	-	●	●	●	■	●	●	●
9,525	3/8	184	121	-	-	-	-	-	●	-	-	-	-	-

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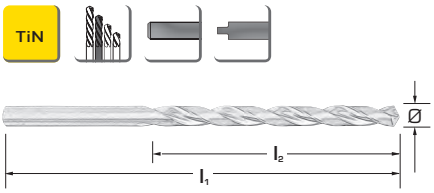




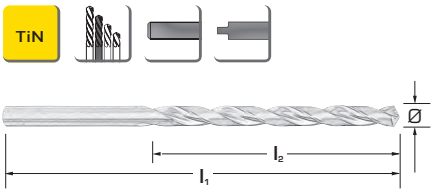
Typ / Type				N	N	N ML	H	W	STL	STL	STL	N	VA	HD
Schneidrichtung Cutting direction														
Schneidstoff / Material				HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co
Ø mm h8	Ø "	l_1 mm	l_2 mm	6165	6165 TN	6108	6192	6200	6173	6173 TN	6184	6166	6112	6113
9,600		184	121	●	-	-	-	-	●	-	-	●	●	●
9,700		184	121	●	-	-	-	-	●	-	-	●	●	●
9,750		184	121	●	-	-	-	-	-	-	-	-	-	-
9,800		184	121	●	-	-	-	-	●	-	-	●	●	●
9,900		184	121	●	-	-	-	-	●	-	-	●	●	●
9,921	25/64	184	121	-	-	-	-	-	●	-	-	-	-	-
10,000		184	121	●	●	●	●	●	●	●	-	●	●	●
10,100		184	121	●	-	-	-	-	-	-	-	●	-	-
10,200		184	121	●	-	-	-	-	●	●	-	●	●	●
10,300		184	121	●	-	-	-	-	-	-	-	●	-	-
10,320	13/32	184	121	-	-	-	-	-	●	-	-	-	-	-
10,400		184	121	●	-	-	-	-	-	-	-	-	-	-
10,500		184	121	●	-	-	-	●	●	●	-	●	●	●
10,600		184	121	●	-	-	-	-	-	-	-	-	-	-
10,700		195	128	●	-	-	-	-	-	-	-	-	-	-
10,716	27/64	195	128	-	-	-	-	-	●	-	-	-	-	-
10,800		195	128	●	-	-	-	-	●	●	-	-	●	●
10,900		195	128	●	-	-	-	-	-	-	-	-	-	-
11,000		195	128	●	-	-	-	●	●	●	■	●	●	●
11,113	7/16	195	128	-	-	-	-	-	●	-	-	-	-	-
11,200		195	128	●	-	-	-	-	●	●	-	●	●	●
11,500		195	128	●	-	-	-	●	●	●	-	●	●	●
11,509	29/64	195	128	-	-	-	-	-	●	-	-	-	-	-
11,800		195	128	●	-	-	-	-	●	●	-	■	●	●
11,908	15/32	205	134	■	-	-	-	-	●	-	-	-	-	-
12,000		205	134	●	-	-	-	●	●	●	-	●	●	●
12,200		205	134	●	-	-	-	-	-	-	-	-	-	-
12,304	31/64	205	134	-	-	-	-	-	●	-	-	-	-	-
12,500		205	134	●	-	-	-	-	-	-	-	●	-	-
12,700	1/14	205	134	-	-	-	-	-	●	-	-	●	-	-
12,800		205	134	●	-	-	-	-	-	-	-	■	-	-
13,000		205	134	●	-	-	-	-	-	-	-	●	-	-
13,200		205	134	●	-	-	-	-	-	-	-	-	-	-
13,500		214	140	●	-	-	-	-	-	-	-	●	-	-
13,800		214	140	●	-	-	-	-	-	-	-	-	-	-
14,000		214	140	●	-	-	-	-	-	-	-	●	-	-
14,500		220	144	●	-	-	-	-	-	-	-	-	-	-
15,000		220	144	●	-	-	-	-	-	-	-	●	-	-
15,500		227	149	●	-	-	-	-	-	-	-	-	-	-
16,000		227	149	●	-	-	-	-	-	-	-	●	-	-

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 340

LANG / LONG SERIES

Spiralbohrer mit Zylinderschaft aus HSS und HSS-Co
Twist drills with straight shank made of HSS and HSS-Co





Typ / Type	N	N	N ML	H	W	STL	STL	STL	N	VA	HD
Schneidrichtung Cutting direction											
Schneidstoff / Material	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS-Co	HSS-Co	HSS-Co

Ø mm h8	Ø "	l_1 mm	l_2 mm	6165	6165 TN	6108	6192	6200	6173	6173 TN	6184	6166	6112	6113
17,000		235	154	●	-	-	-	-	-	-	-	■	-	-
18,000		241	158	●	-	-	-	-	-	-	-	-	-	-
19,000		247	162	●	-	-	-	-	-	-	-	-	-	-
20,000		254	166	●	-	-	-	-	-	-	-	-	-	-
21,000		261	171	●	-	-	-	-	-	-	-	-	-	-
22,000		268	176	●	-	-	-	-	-	-	-	-	-	-
23,000		275	180	●	-	-	-	-	-	-	-	-	-	-
24,000		282	185	●	-	-	-	-	-	-	-	-	-	-
25,000		282	185	●	-	-	-	-	-	-	-	-	-	-

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

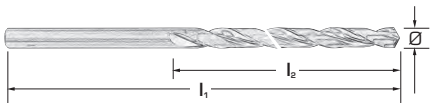
DIN 1869-1

ÜBERLANG / EXTRA LONG SERIES

Spiralbohrer mit Zylinderschaft aus HSS und HSS-Co
Twist drills with straight shank made of HSS and HSS-Co







Typ / Type					N	STL	STL
Schneidrichtung Cutting direction							
Schneidstoff Material					HSS	HSS	HSS-Co
Ø mm h8	Ø "	Ø No.	l_1 mm	l_2 mm	6217/1	6216/1	6218/1
2,000			125	85	●	●	●
2,100			125	85	●	●	●
2,200			135	90	●	●	●
2,300			135	90	●	●	●
2,383	3/32		140	95	-	●	-
2,400			140	95	●	●	●
2,489		40	140	95	-	●	-
2,500			140	95	●	●	●
2,527		39	140	95	-	●	-
2,578		38	140	95	-	●	-
2,600			140	95	●	●	●
2,642		37	140	95	-	●	-
2,700			150	100	●	●	●
2,705		36	150	100	-	●	-
2,779	7/64		150	100	-	●	-
2,794		35	150	100	-	●	-
2,800			150	100	●	●	●
2,819		34	150	100	-	●	-
2,870		33	150	100	-	●	-
2,900			150	100	●	●	●
2,946		32	150	100	-	●	-
3,000			150	100	●	●	●
3,048		31	155	105	-	●	-
3,100			155	105	●	●	●
3,175	1/8		155	105	-	●	-
3,200			155	105	●	●	●
3,264		30	155	105	-	●	-
3,300			155	105	●	●	●
3,400			165	115	●	●	●
3,454		29	165	115	-	●	-
3,500			165	115	●	●	●
3,569		28	165	115	-	●	-
3,571	9/64		165	115	-	●	-
3,600			165	115	●	●	●
3,658		27	165	115	-	●	-
3,700			165	115	●	●	●
3,734		26	165	115	-	●	-
3,797		25	175	120	-	●	-
3,800			175	120	●	●	●
3,861		24	175	120	-	●	-

Typ / Type					N	STL	STL
Schneidrichtung Cutting direction							
Schneidstoff Material					HSS	HSS	HSS-Co
Ø mm h8	Ø "	Ø No.	l_1 mm	l_2 mm	6217/1	6216/1	6218/1
3,900			175	120	●	●	●
3,912		23	175	120	-	●	-
3,970	5/32		175	120	-	●	-
3,988		22	175	120	-	●	-
4,000			175	120	●	●	●
4,039		21	175	120	-	●	-
4,089		20	175	120	-	●	-
4,100			175	120	●	●	●
4,200			175	120	●	●	●
4,216		19	175	120	-	●	-
4,300			185	125	●	●	●
4,305		18	185	125	-	●	-
4,366	11/64		185	125	-	●	-
4,394		17	185	125	-	●	-
4,400			185	125	●	●	●
4,496		16	185	125	-	●	-
4,500			185	125	●	●	●
4,572		15	185	125	-	●	-
4,600			185	125	●	●	●
4,623		14	185	125	-	●	-
4,699		13	185	125	-	●	-
4,700			185	125	●	●	●
4,763	3/16		195	135	-	●	-
4,800			195	135	●	●	●
4,801		12	195	135	-	●	-
4,851		11	195	135	-	●	-
4,900			195	135	●	●	●
4,915		10	195	135	-	●	-
4,978		9	195	135	-	●	-
5,000			195	135	●	●	●
5,055		8	195	135	-	●	-
5,100			195	135	●	●	●
5,105		7	195	135	-	●	-
5,159	13/64		195	135	-	●	-
5,182		6	195	135	-	●	-
5,200			195	135	●	●	●
5,220		5	195	135	-	●	-
5,300			195	135	●	●	●
5,309		4	205	140	-	●	-
5,400			205	140	●	●	●

● Standardartikel / Items available ex stock

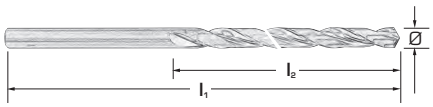
DIN 1869-1

ÜBERLANG / EXTRA LONG SERIES

Spiralbohrer mit Zylinderschaft aus HSS und HSS-Co
Twist drills with straight shank made of HSS and HSS-Co







Typ / Type					N	STL	STL
Schneidrichtung Cutting direction							
Schneidstoff Material					HSS	HSS	HSS-Co
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6217/1	6216/1	6218/1
5,410		3	205	140	-	●	-
5,500			205	140	●	●	●
5,558	7/32		205	140	-	●	-
5,600			205	140	●	●	●
5,613		2	205	140	-	●	-
5,700			205	140	●	●	●
5,791		1	205	140	-	●	-
5,800			205	140	●	●	●
5,900			205	140	●	●	●
5,954	15/64		205	140	-	●	-
6,000			205	140	●	●	●
6,100			215	150	●	●	●
6,200			215	150	●	●	●
6,300			215	150	●	●	●
6,350	1/4		215	150	-	●	-
6,400			215	150	●	●	●
6,500			215	150	●	●	●
6,600			215	150	●	●	●
6,700			215	150	●	●	●
6,746	17/64		225	155	-	●	-
6,800			225	155	●	●	●
6,900			225	155	●	●	●
7,000			225	155	●	●	●
7,100			225	155	●	●	●
7,145	9/32		225	155	-	●	-
7,200			225	155	●	●	●
7,300			225	155	●	●	●
7,400			225	155	●	●	●
7,500			225	155	●	●	●
7,541	19/64		240	165	-	●	-
7,600			240	165	●	●	●
7,700			240	165	●	●	●
7,800			240	165	●	●	●
7,900			240	165	●	●	●
7,938	5/16		240	165	-	●	-
8,000			240	165	●	●	●
8,100			240	165	●	●	●
8,200			240	165	●	●	●
8,300			240	165	●	●	●
8,334	21/64		240	165	-	●	-

Typ / Type					N	STL	STL
Schneidrichtung Cutting direction							
Schneidstoff Material					HSS	HSS	HSS-Co
Ø mm h8	Ø "	Ø No. mm	l_1 mm	l_2 mm	6217/1	6216/1	6218/1
8,400			240	165	●	●	●
8,500			240	165	●	●	●
8,600			250	175	●	●	●
8,700			250	175	●	●	●
8,733	11/32		250	175	-	●	-
8,800			250	175	●	●	●
8,900			250	175	●	●	●
9,000			250	175	●	●	●
9,100			250	175	●	●	●
9,129	23/64		250	175	-	●	-
9,200			250	175	●	●	●
9,300			250	175	●	●	●
9,400			250	175	●	●	●
9,500			250	175	●	●	●
9,525	3/8		265	185	-	●	-
9,600			265	185	●	●	●
9,700			265	185	●	●	●
9,800			265	185	●	●	●
9,900			265	185	●	●	●
9,921	25/64		265	185	-	●	-
10,000			265	185	●	●	●
10,320	13/32		265	185	-	●	-
10,500			265	185	-	●	●
10,716	27/64		280	195	-	●	-
11,000			280	195	-	●	●
11,113	7/16		280	195	-	●	-
11,500			280	195	-	●	●
11,509	29/64		280	195	-	●	-
11,908	15/32		295	205	-	●	-
12,000			295	205	-	●	●
12,304	31/64		295	205	-	●	-
12,700	1/2		295	205	-	●	-

● Standardartikel / Items available ex stock

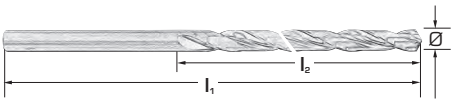
DIN 1869-2

ÜBERLANG / EXTRA LONG SERIES

Spiralbohrer mit Zylinderschaft aus HSS und HSS-Co
Twist drills with straight shank made of HSS and HSS-Co







Typ / Type			N	STL	STL
Schneidrichtung Cutting direction					
Schneidstoff Material			HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	6217/2	6216/2	6218/2
3,0	190	130	●	●	●
3,5	210	145	●	●	●
4,0	220	150	●	●	●
4,5	235	160	●	●	●
5,0	245	170	●	●	●
5,5	260	180	●	●	●
6,0	260	180	●	●	●
6,5	275	190	●	●	●
7,0	290	200	●	●	●
7,5	290	200	●	●	●
8,0	305	210	●	●	●
8,5	305	210	●	●	●
9,0	320	220	●	●	●
9,5	320	220	●	●	●
10,0	340	235	●	●	●
10,5	340	235	-	●	●
11,0	360	250	-	●	●
11,5	360	250	-	●	●
12,0	380	260	-	●	●

Typ / Type			N	STL	STL
Schneidrichtung Cutting direction					
Schneidstoff Material			HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	6217/2	6216/2	6218/2

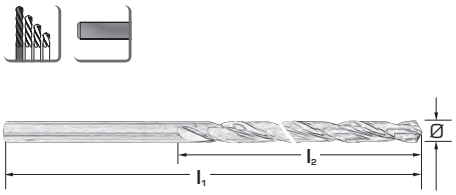
● Standardartikel / Items available ex stock

DIN 1869-3

ÜBERLANG / EXTRA LONG SERIES

Spiralbohrer mit Zylinderschaft aus HSS und HSS-Co
Twist drills with straight shank made of HSS and HSS-Co





Typ / Type			N	STL
Schneidrichtung Cutting direction				
Schneidstoff Material			HSS	HSS
Ø mm h8	l_1 mm	l_2 mm	6217/3	6216/3
3,5	265	180	●	●
4,0	280	190	●	●
4,5	295	200	●	●
5,0	315	210	●	●
5,5	330	225	●	●
6,0	330	225	●	●
6,5	350	235	●	●
7,0	370	250	●	●
7,5	370	250	●	●
8,0	390	265	●	●
8,5	390	265	●	●
9,0	410	280	●	●
9,5	410	280	●	●
10,0	430	295	●	●
10,5	430	295	-	●
11,0	450	305	-	●
11,5	450	305	-	●
12,0	480	305	-	●

Typ / Type			N	STL
Schneidrichtung Cutting direction				
Schneidstoff Material			HSS	HSS
Ø mm h8	l_1 mm	l_2 mm	6217/3	6216/3

● Standardartikel / Items available ex stock

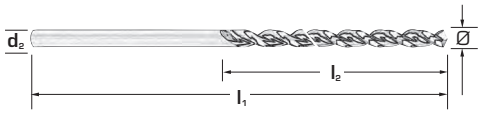
ILIX NORM

SUPERLANG / SUPERLONG

Spiralbohrer mit Zylinderschaft aus HSS
Twist drills with straight shank made of HSS







Typ / Type			STL
Schneidrichtung Cutting direction			
Schneidstoff Material			HSS
Ø mm h8	**l_1 mm**	**l_2 mm**	**6130**
6,0	500	400	●
6,5	500	400	●
7,0	500	400	●
8,0	650	550	●
8,0	800	700	●
9,0	650	550	●
10,0	800	700	●
10,0	1000	800	●
11,0	800	700	●
12,0	800	700	●
12,0	1000	800	●
13,0	800	700	●
13,5	800	700	■
13,5	1000	800	■
14,0	800	700	●

Typ / Type			STL
Schneidrichtung Cutting direction			
Schneidstoff Material			HSS
Ø mm h8	**l_1 mm**	**l_2 mm**	**6130**

Im Bestellfall bitte den Ø und die Gesamtlänge l1 angeben
When ordering, please state Ø and total length l1.

Für abweichende Ø und Längen siehe unsere Kat.-Nr. 6150 mit Morsekegel.
For different Ø and lengths please refer to our Cat.-No. 6150 with Morse taper shank.

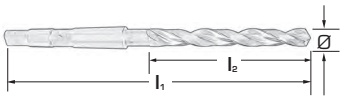
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
3,000		114	33	1	●	-	-	-
3,175	1/8	117	36	1	●	-	-	-
3,250		117	36	1	●	-	-	-
3,500		120	39	1	●	-	-	-
3,571	9/64	120	39	1	●	-	-	-
3,750		120	39	1	●	-	-	-
3,970	5/32	124	43	1	●	-	-	-
4,000		124	43	1	●	-	-	-
4,100		124	43	1	●	-	-	-
4,200		124	43	1	●	-	-	-
4,250		124	43	1	●	-	-	-
4,300		128	47	1	●	-	-	-
4,366	11/64	128	47	1	●	-	-	-
4,400		128	47	1	●	-	-	-
4,500		128	47	1	●	-	-	-
4,600		128	47	1	●	-	-	-
4,700		128	47	1	●	-	-	-
4,750		128	47	1	●	-	-	-
4,763	3/16	133	52	1	●	-	-	-
4,800		133	52	1	●	-	-	-
4,900		133	52	1	●	-	-	-
5,000		133	52	1	●	●	-	-
5,100		133	52	1	●	-	-	-
5,159	13/64	133	52	1	●	-	-	-
5,200		133	52	1	●	-	-	-
5,250		133	52	1	●	-	-	-
5,300		133	52	1	●	-	-	-
5,400		138	57	1	●	-	-	-
5,500		138	57	1	●	-	-	-
5,558	7/32	138	57	1	●	-	-	-
5,600		138	57	1	●	-	-	-
5,700		138	57	1	●	-	-	-
5,750		138	57	1	●	-	-	-
5,800		138	57	1	●	-	-	-
5,900		138	57	1	●	-	-	-
5,954	15/64	138	57	1	●	-	-	-
6,000		138	57	1	●	●	-	-
6,100		144	63	1	●	-	-	-
6,200		144	63	1	●	-	-	-
6,250		144	63	1	●	-	-	-

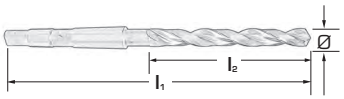
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
6,300		144	63	1	●	-	-	-
6,350	4/14	144	63	1	●	-	-	-
6,400		144	63	1	●	-	-	-
6,500		144	63	1	●	●	-	-
6,600		144	63	1	●	-	-	-
6,700		144	63	1	●	-	-	-
6,746	17/64	150	69	1	●	-	-	-
6,750		150	69	1	●	-	-	-
6,800		150	69	1	●	●	-	-
6,900		150	69	1	●	-	-	-
7,000		150	69	1	●	●	-	-
7,100		150	69	1	●	-	-	-
7,145	9/32	150	69	1	●	-	-	-
7,200		150	69	1	●	-	-	-
7,250		150	69	1	●	-	-	-
7,300		150	69	1	●	-	-	-
7,400		150	69	1	●	-	-	-
7,500		150	69	1	●	-	-	-
7,541	19/64	156	75	1	●	-	-	-
7,600		156	75	1	●	-	-	-
7,700		156	75	1	●	-	-	-
7,750		156	75	1	●	--	-	-
7,800		156	75	1	●	-	-	-
7,900		156	75	1	●	-	-	-
7,938	5/16	156	75	1	●	-	-	-
8,000		156	75	1	●	●	-	-
8,100		156	75	1	●	-	-	-
8,200		156	75	1	●	-	-	-
8,250		156	75	1	●	-	-	-
8,300		156	75	1	●	-	-	-
8,334	21/64	156	75	1	●	-	-	-
8,400		156	75	1	●	-	-	-
8,500		156	75	1	●	●	-	-
8,600		162	81	1	●	-	-	-
8,700		162	81	1	●	-	-	-
8,733	11/32	162	81	1	●	-	-	-
8,750		162	81	1	●	-	-	-
8,800		162	81	1	●	-	-	-
8,900		162	81	1	●	-	-	-
9,000		162	81	1	●	●	-	-

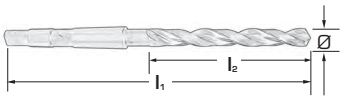
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS

TiN





Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
9,100		162	81	1	●	-	-	-
9,129	23/64	162	81	1	●	-	-	-
9,200		162	81	1	●	-	-	-
9,250		162	81	1	●	-	-	-
9,300		162	81	1	●	-	-	-
9,400		162	81	1	●	-	-	-
9,500		162	81	1	●	●	-	-
9,525	3/8	168	87	1	●	-	-	-
9,600		168	87	1	●	-	-	-
9,700		168	87	1	●	-	-	-
9,750		168	87	1	●	-	-	-
9,800		168	87	1	●	-	-	-
9,900		168	87	1	●	-	-	-
9,921	25/64	168	87	1	●	-	-	-
10,000		168	87	1	●	●	●	●
10,100		168	87	1	●	-	-	-
10,200		168	87	1	●	●	-	●
10,250		168	87	1	●	-	-	-
10,300		168	87	1	●	-	-	-
10,320	13/32	168	87	1	●	-	-	-
10,400		168	87	1	●	-	-	-
10,500		168	87	1	●	●	-	●
10,600		168	87	1	●	-	-	-
10,700		175	94	1	●	-	-	-
10,716	27/64	175	94	1	●	-	-	-
10,750		175	94	1	●	-	-	-
10,800		175	94	1	●	-	-	●
10,900		175	94	1	●	-	-	-
11,000		175	94	1	●	●	●	●
11,100		175	94	1	●	-	-	-
11,113	7/16	175	94	1	●	-	-	-
11,200		175	94	1	●	-	-	●
11,250		175	94	1	●	-	-	-
11,300		175	94	1	●	-	■	-
11,400		175	94	1	●	-	-	-
11,500		175	94	1	●	●	■	●
11,509	29/64	175	94	1	●	-	-	-
11,600		175	94	1	●	-	-	-
11,700		175	94	1	●	-	-	-
11,750		175	94	1	●	-	-	-

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS

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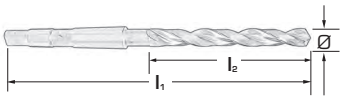




Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	**Ø "**	**l_1 mm**	**l_2 mm**	**CM MT**	**6168**	**6168 TN**	**6201**	**6212**
11,800		175	94	1	●	-	-	●
11,900		182	101	1	●	-	-	-
11,908	15/32	182	101	1	●	-	-	-
12,000		182	101	1	●	●	●	●
12,100		182	101	1	●	-	-	-
12,200		182	101	1	●	-	-	●
12,250		182	101	1	●	-	-	-
12,300		182	101	1	●	-	-	-
12,304	31/64	182	101	1	●	-	-	-
12,400		182	101	1	●	-	-	-
12,500		182	101	1	●	●	-	●
12,600		182	101	1	●	-	-	-
12,700		182	101	1	●	-	-	-
12,700	1/2	182	101	1	●	-	-	-
12,750		182	101	1	●	-	-	-
12,800		182	101	1	●	-	-	●
12,900		182	101	1	●	-	-	-
13,000		182	101	1	●	●	●	●
13,096	33/64	182	101	1	●	-	-	-
13,100		182	101	1	●	-	-	-
13,200		182	101	1	●	-	-	●
13,250		189	108	1	●	-	-	-
13,300		189	108	1	●	-	■	-
13,400		189	108	1	●	-	-	-
13,495	17/32	189	108	1	●	-	-	-
13,500		189	108	1	●	●	-	●
13,600		189	108	1	●	-	-	-
13,700		189	108	1	●	-	-	-
13,750		189	108	1	●	-	-	-
13,800		189	108	1	●	-	-	-
13,891	35/64	189	108	1	●	-	-	-
13,900		189	108	1	●	-	-	-
14,000		189	108	1	●	●	●	●
14,100		212	114	2	●	-	-	-
14,200		212	114	2	●	-	-	-
14,250		212	114	2	●	-	-	-
14,288	9/16	212	114	2	●	-	-	-
14,300		212	114	2	●	-	-	-
14,400		212	114	2	●	-	-	-
14,500		212	114	2	●	●	-	●

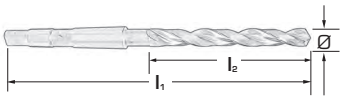
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
14,600		212	114	2	●	-	-	-
14,684	37/64	212	114	2	●	-	-	-
14,700		212	114	2	●	-	-	-
14,750		212	114	2	●	-	-	-
14,800		212	114	2	●	-	-	-
14,900		212	114	2	●	-	-	-
15,000		212	114	2	●	●	●	●
15,083	19/32	218	120	2	●	-	-	-
15,100		218	120	2	●	-	-	-
15,200		218	120	2	●	-	-	-
15,250		218	120	2	●	-	-	●
15,300		218	120	2	●	-	-	-
15,400		218	120	2	●	-	-	-
15,479	39/64	218	120	2	●	-	-	-
15,500		218	120	2	●	●	-	●
15,600		218	120	2	●	-	-	-
15,700		218	120	2	●	-	-	-
15,750		218	120	2	●	-	-	-
15,800		218	120	2	●	-	-	-
15,875	5/8	218	120	2	●	-	-	-
15,900		218	120	2	●	-	-	-
16,000		218	120	2	●	●	●	●
16,100		223	125	2	●	-	-	-
16,200		223	125	2	●	-	-	-
16,250		223	125	2	●	-	-	-
16,271	41/64	223	125	2	●	-	-	-
16,300		223	125	2	●	-	-	-
16,400		223	125	2	●	-	-	-
16,500		223	125	2	●	●	-	●
16,600		223	125	2	●	-	-	-
16,670	21/32	223	125	2	●	-	-	-
16,700		223	125	2	●	-	-	-
16,750		223	125	2	●	-	-	-
16,800		223	125	2	●	-	-	-
16,900		223	125	2	●	-	-	-
17,000		223	125	2	●	●	●	●
17,066	43/64	228	130	2	●	-	-	-
17,100		228	130	2	●	-	-	-
17,200		228	130	2	●	-	-	-
17,250		228	130	2	●	-	-	-

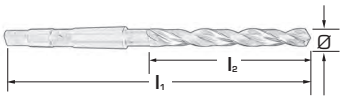
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
17,300		228	130	2	●	-	-	-
17,400		228	130	2	●	-	-	-
17,463	11/16	228	130	2	●	-	-	-
17,500		228	130	2	●	●	-	●
17,600		228	130	2	●	-	-	-
17,700		228	130	2	●	-	-	-
17,750		228	130	2	●	-	-	●
17,800		228	130	2	●	-	-	-
17,859	45/64	228	130	2	●	-	-	-
17,900		228	130	2	●	-	-	-
18,000		228	130	2	●	●	●	●
18,100		233	135	2	●	-	-	-
18,200		233	135	2	●	-	-	-
18,250		233	135	2	●	-	-	-
18,258	23/32	233	135	2	●	-	-	-
18,300		233	135	2	●	-	-	-
18,400		233	135	2	●	-	-	-
18,500		233	135	2	●	●	-	●
18,600		233	135	2	●	-	-	-
18,654	47/64	233	135	2	●	-	-	-
18,700		233	135	2	●	-	-	-
18,750		233	135	2	●	-	-	-
18,800		233	135	2	●	-	-	-
18,900		233	135	2	●	-	-	-
19,000		233	135	2	●	●	●	●
19,050	3/4	238	140	2	●	-	-	-
19,100		238	140	2	●	-	-	-
19,200		238	140	2	●	-	-	-
19,250		238	140	2	●	-	-	-
19,300		238	140	2	●	-	-	-
19,400		238	140	2	●	-	-	-
19,446	49/64	238	140	2	●	-	-	-
19,500		238	140	2	●	●	-	●
19,600		238	140	2	●	-	-	-
19,700		238	140	2	●	-	-	-
19,750		238	140	2	●	-	-	-
19,800		238	140	2	●	-	-	-
19,845	25/32	238	140	2	●	-	-	-
19,900		238	140	2	●	-	-	-
20,000		238	140	2	●	●	●	●

● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS

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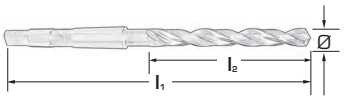




Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
20,100		243	145	2	●	-	-	-
20,200		243	145	2	●	-	-	-
20,241	51/64	243	145	2	●	-	-	-
20,250		243	145	2	●	-	-	-
20,300		243	145	2	●	-	-	-
20,400		243	145	2	●	-	-	-
20,500		243	145	2	●	●	-	●
20,600		243	145	2	●	-	-	-
20,638	13/16	243	145	2	●	-	-	-
20,700		243	145	2	●	-	-	-
20,750		243	145	2	●	-	-	-
20,800		243	145	2	●	-	-	-
20,900		243	145	2	●	-	-	-
21,000		243	145	2	●	●	●	●
21,034	53/64	243	145	2	●	-	-	-
21,100		243	145	2	●	-	-	-
21,200		243	145	2	●	-	-	-
21,250		248	150	2	●	-	-	-
21,300		248	150	2	●	-	-	-
21,400		248	150	2	●	-	-	-
21,433	27/32	248	150	2	●	-	-	-
21,500		248	150	2	●	●	-	-
21,600		248	150	2	●	-	-	-
21,700		248	150	2	●	-	-	-
21,750		248	150	2	●	-	-	-
21,800		248	150	2	●	-	-	-
21,829	55/64	248	150	2	●	-	-	-
21,900		248	150	2	●	-	-	-
22,000		248	150	2	●	●	●	●
22,100		248	150	2	●	-	-	-
22,200		248	150	2	●	-	-	-
22,225	7/8	248	150	2	●	-	-	-
22,250		248	150	2	●	-	-	-
22,300		248	150	2	●	-	-	-
22,400		248	150	2	●	-	-	-
22,500		253	155	2	●	●	-	●
22,600		253	155	2	●	-	-	-
22,621	57/64	253	155	2	●	-	-	-
22,700		253	155	2	●	-	-	-
22,750		253	155	2	●	-	-	-

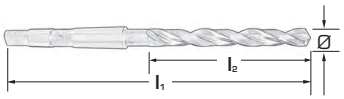
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS

TiN





Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
22,800		253	155	2	●	-	-	-
22,900		253	155	2	●	-	-	-
23,000		253	155	2	●	●	●	●
23,020	29/32	253	155	2	●	-	-	-
23,250		276	155	3	●	-	-	-
23,416	59/64	276	155	3	●	-	-	-
23,500		276	155	3	●	-	-	-
23,750		281	160	3	●	-	-	-
23,813	15/16	281	160	3	●	-	-	-
24,000		281	160	3	●	●	●	●
24,209	61/64	281	160	3	●	-	-	-
24,250		281	160	3	●	-	-	-
24,500		281	160	3	●	-	-	●
24,608	31/32	281	160	3	●	-	-	-
24,750		281	160	3	●	-	-	-
25,000		281	160	3	●	●	●	●
25,004	63/64	281	160	3	●	-	-	-
25,250		286	165	3	●	-	-	-
25,400	1	286	165	3	●	-	-	-
25,500		286	165	3	●	-	-	-
25,750		286	165	3	●	-	-	-
25,796	1 1/64	286	165	3	●	-	-	-
26,000		286	165	3	●	●	●	●
26,195	1 1/32	286	165	3	●	-	-	-
26,250		286	165	3	●	-	-	-
26,500		286	165	3	●	-	-	-
26,591	1 3/64	291	170	3	●	-	-	-
26,750		291	170	3	●	-	-	-
26,988	1 1/16	291	170	3	●	-	-	-
27,000		291	170	3	●	●	●	●
27,250		291	170	3	●	-	-	-
27,384	1 5/64	291	170	3	●	-	-	-
27,500		291	170	3	●	-	-	-
27,750		291	170	3	●	-	-	-
27,783	1 3/32	291	170	3	●	-	-	-
28,000		291	170	3	●	●	●	●
28,179	1 7/64	296	175	3	●	-	-	-
28,250		296	175	3	●	-	-	-
28,500		296	175	3	●	-	-	-
28,575	1 1/8	296	175	3	●	-	-	-

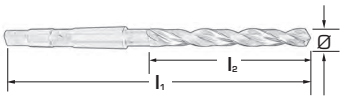
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS

TiN





Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
28,750		296	175	3	●	-	-	-
28,971	1 9/64	296	175	3	●	-	-	-
29,000		296	175	3	●	●	●	●
29,250		296	175	3	●	-	-	-
29,370	1 5/32	296	175	3	●	-	-	-
29,500		296	175	3	●	-	-	-
29,750		296	175	3	●	-	-	-
29,766	1 11/64	296	175	3	●	-	-	-
30,000		296	175	3	●	●	●	●
30,163	1 3/16	301	180	3	●	-	-	-
30,250		301	180	3	●	-	-	-
30,500		301	180	3	●	-	-	-
30,559	1 13/64	301	180	3	●	-	-	-
30,750		301	180	3	●	-	-	-
30,958	1 7/32	301	180	3	●	-	-	-
31,000		301	180	3	●	-	●	-
31,250		301	180	3	●	-	-	-
31,354	1 15/64	301	180	3	●	-	-	-
31,500		301	180	3	●	-	-	-
31,750		306	185	3	●	-	-	-
31,750	1 1/4	306	185	3	●	-	-	-
32,000		334	185	4	●	-	●	-
32,146	1 17/64	334	185	4	●	-	-	-
32,500		334	185	4	●	-	-	-
32,545	1 9/32	334	185	4	●	-	-	-
32,941	1 19/64	334	185	4	●	-	-	-
33,000		334	185	4	●	-	-	-
33,338	1 5/16	334	185	4	●	-	-	-
33,500		334	185	4	●	-	-	-
33,734	1 21/64	339	190	4	●	-	-	-
34,000		339	190	4	●	-	-	-
34,133	1 11/32	339	190	4	●	-	-	-
34,500		339	190	4	●	-	-	-
34,529	1 23/64	339	190	4	●	-	-	-
34,925	1 3/8	339	190	4	●	-	-	-
35,000		339	190	4	●	-	-	-
35,321	1 25/64	339	190	4	●	-	-	-
35,500		339	190	4	●	-	-	-
35,720	1 13/32	344	195	4	●	-	-	-
36,000		344	195	4	●	-	-	-

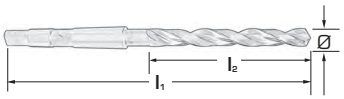
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS

TiN





Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
36,116	1 27/64	344	195	4	●	-	-	-
36,500		344	195	4	●	-	-	-
36,513	1 7/16	344	195	4	●	-	-	-
36,909	1 29/64	344	195	4	●	-	-	-
37,000		344	195	4	●	-	-	-
37,308	1 15/32	344	195	4	●	-	-	-
37,500		344	195	4	●	-	-	-
37,704	1 31/64	349	200	4	●	-	-	-
38,000		349	200	4	●	-	-	-
38,100	1 1/2	349	200	4	●	-	-	-
38,496	1 33/64	349	200	4	●	-	-	-
38,500		349	200	4	●	-	-	-
38,895	1 17/32	349	200	4	●	-	-	-
39,000		349	200	4	●	-	-	-
39,291	1 35/64	349	200	4	●	-	-	-
39,500		349	200	4	●	-	-	-
39,688	1 9/16	349	200	4	●	-	-	-
40,000		349	200	4	●	-	-	-
40,084	1 37/64	354	205	4	●	-	-	-
40,483	1 19/32	354	205	4	●	-	-	-
40,500		354	205	4	●	-	-	-
40,879	1 39/64	354	205	4	●	-	-	-
41,000		354	205	4	●	-	-	-
41,275	1 5/8	354	205	4	●	-	-	-
41,500		354	205	4	●	-	-	-
41,671	1 41/64	354	205	4	●	-	-	-
42,000		354	205	4	●	-	-	-
42,070	1 21/32	354	205	4	●	-	-	-
42,466	1 43/64	354	205	4	●	-	-	-
42,500		354	205	4	●	-	-	-
42,863	1 11/16	359	210	4	●	-	-	-
43,000		359	210	4	●	-	-	-
43,259	1 45/64	359	210	4	●	-	-	-
43,500		359	210	4	●	-	-	-
43,658	1 23/32	359	210	4	●	-	-	-
44,000		359	210	4	●	-	-	-
44,054	1 47/64	359	210	4	●	-	-	-
44,450	1 3/4	359	210	4	●	-	-	-
44,500		359	210	4	●	-	-	-
45,000		359	210	4	●	-	-	-

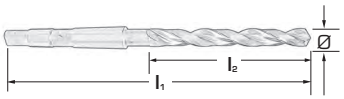
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	**Ø "**	**l_1 mm**	**l_2 mm**	**CM MT**	**6168**	**6168 TN**	**6201**	**6212**
45,245	1 25/32	364	215	4	●	-	-	-
45,500		364	215	4	●	-	-	-
46,000		364	215	4	●	-	-	-
46,038	1 13/16	364	215	4	●	-	-	-
46,500		364	215	4	●	-	-	-
46,833	1 27/32	364	215	4	●	-	-	-
47,000		364	215	4	●	-	-	-
47,500		364	215	4	●	-	-	-
47,625	1 7/8	369	220	4	●	-	-	-
48,000		369	220	4	●	-	-	-
48,420	1 29/32	369	220	4	●	-	-	-
48,500		369	220	4	●	-	-	-
49,000		369	220	4	●	-	-	-
49,213	1 15/16	369	220	4	●	-	-	-
49,500		369	220	4	●	-	-	-
50,000		369	220	4	●	-	-	-
50,008	1 31/32	374	225	4	●	-	-	-
50,500		374	225	4	●	-	-	-
50,800	2	374	225	4	●	-	-	-
51,000		412	225	5	●	-	-	-
51,500		412	225	5	●	-	-	-
51,595	2 1/32	412	225	5	●	-	-	-
52,000		412	225	5	●	-	-	-
52,388	2 1/16	412	225	5	●	-	-	-
52,500		412	225	5	●	-	-	-
53,000		412	225	5	●	-	-	-
53,183	2 3/32	417	230	5	●	-	-	-
53,500		417	230	5	●	-	-	-
53,975	2 1/8	417	230	5	●	-	-	-
54,000		417	230	5	●	-	-	-
54,500		417	230	5	●	-	-	-
54,770	2 5/32	417	230	5	●	-	-	-
55,000		417	230	5	●	-	-	-
55,500		417	230	5	●	-	-	-
55,563	2 3/16	417	230	5	●	-	-	-
56,000		417	230	5	●	-	-	-
56,358	2 7/32	422	235	5	●	-	-	-
56,500		422	235	5	●	-	-	-
57,000		422	235	5	●	-	-	-
57,150	2 1/4	422	235	5	●	-	-	-

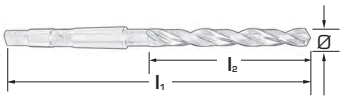
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	**Ø "**	**l_1 mm**	**l_2 mm**	**CM MT**	**6168**	**6168 TN**	**6201**	**6212**
57,500		422	235	5	●	-	-	-
58,000		422	235	5	●	-	-	-
58,500		422	235	5	●	-	-	-
58,738	2 5/16	422	235	5	●	-	-	-
59,000		422	235	5	●	-	-	-
59,500		422	235	5	●	-	-	-
60,000		422	235	5	●	-	-	-
60,325	2 3/8	427	240	5	●	-	-	-
61,000		427	240	5	●	-	-	-
61,913	2 7/16	427	240	5	●	-	-	-
62,000		427	240	5	●	-	-	-
63,000		427	240	5	●	-	-	-
63,500	2 1/2	432	245	5	●	-	-	-
64,000		432	245	5	●	-	-	-
65,000		432	245	5	●	-	-	-
65,088	2 9/16	432	245	5	●	-	-	-
66,000		432	245	5	●	-	-	-
66,675	2 5/8	432	245	5	●	-	-	-
67,000		432	245	5	●	-	-	-
68,000		437	250	5	●	-	-	-
68,263	2 11/16	437	250	5	●	-	-	-
69,000		437	250	5	●	-	-	-
69,850	2 3/4	437	250	5	●	-	-	-
70,000		437	250	5	●	-	-	-
71,000		437	250	5	●	-	-	-
72,000		442	255	5	●	-	-	-
73,000		442	255	5	●	-	-	-
74,000		442	255	5	●	-	-	-
75,000		442	255	5	●	-	-	-
76,000		447	260	5	●	-	-	-
77,000		514	260	6	●	-	-	-
78,000		514	260	6	●	-	-	-
79,000		514	260	6	●	-	-	-
80,000		514	260	6	●	-	-	-
81,000		519	265	6	●	-	-	-
82,000		519	265	6	●	-	-	-
83,000		519	265	6	●	-	-	-
84,000		519	265	6	●	-	-	-
85,000		519	265	6	●	-	-	-
86,000		524	270	6	●	-	-	-

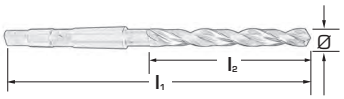
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







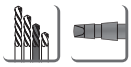
Typ / Type					N	N	W	STL
Schneidrichtung Cutting direction								
Schneidstoff/ Material					HSS	HSS	HSS	HSS
Ø mm h8	Ø "	l_1 mm	l_2 mm	CM MT	6168	6168 TN	6201	6212
90,000		524	270	6	●	-	-	-
95,000		529	275	6	●	-	-	-
100,000		534	280	6	●	-	-	-

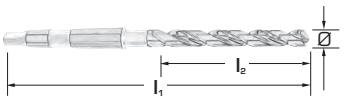
● Standardartikel / Items available ex stock

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS-Co
Twist drills with Morse taper shank
made of HSS







Typ / Type				VA	HD	NS
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS-Co	HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6114	6115	6204
10,00	168	87	1	●	●	●
10,20	168	87	1	●	●	●
10,50	168	87	1	●	●	●
10,80	175	94	1	●	●	●
11,00	175	94	1	●	●	●
11,20	175	94	1	●	●	●
11,50	175	94	1	●	●	●
11,80	175	94	1	●	●	●
12,00	182	101	1	●	●	●
12,20	182	101	1	●	●	●
12,50	182	101	1	●	●	●
12,80	182	101	1	●	●	●
13,00	182	101	1	●	●	●
13,20	182	101	1	●	●	●
13,50	189	108	1	●	●	●
13,80	189	108	1	●	●	●
14,00	189	108	1	●	●	●
14,25	212	114	2	●	●	●
14,50	212	114	2	●	●	●
14,75	212	114	2	●	●	●
15,00	212	114	2	●	●	●
15,25	218	120	2	●	●	●
15,50	218	120	2	●	●	●
15,75	218	120	2	●	●	●
16,00	218	120	2	●	●	●
16,25	223	125	2	●	●	●
16,50	223	125	2	●	●	●
16,75	223	125	2	●	●	●
17,00	223	125	2	●	●	●
17,25	228	130	2	●	●	●
17,50	228	130	2	●	●	●
17,75	228	130	2	●	●	●
18,00	228	130	2	●	●	●
18,25	233	135	2	●	●	●
18,50	233	135	2	●	●	●
18,75	233	135	2	●	●	●
19,00	233	135	2	●	●	●
19,25	238	140	2	●	●	●
19,50	238	140	2	●	●	●
19,75	238	140	2	●	●	●

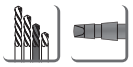
Typ / Type				VA	HD	NS
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS-Co	HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6114	6115	6204
20,00	238	140	2	●	●	●
20,25	243	145	2	●	●	●
20,50	243	145	2	●	●	●
20,75	243	145	2	●	●	●
21,00	243	145	2	●	●	●
21,25	248	150	2	●	●	●
21,50	248	150	2	●	●	●
21,75	248	150	2	●	●	●
22,00	248	150	2	●	●	●
22,25	248	150	2	●	●	●
22,50	253	155	2	●	●	●
22,75	253	155	2	●	●	●
23,00	253	155	2	●	●	●
23,50	276	155	3	●	●	●
24,00	281	160	3	●	●	●
24,50	281	160	3	●	●	●
25,00	281	160	3	●	●	●
25,50	286	165	3	●	●	●
26,00	286	165	3	●	●	●
26,50	286	165	3	●	●	●
27,00	291	170	3	●	●	●
27,50	291	170	3	●	●	●
28,00	291	170	3	●	●	●
28,25	296	175	3	■	-	-
28,50	296	175	3	●	●	●
29,00	296	175	3	●	●	●
29,50	296	175	3	●	●	●
30,00	296	175	3	●	●	●
30,50	301	180	3	●	●	●
30,75	301	180	3	■	●	●
31,00	301	180	3	●	●	●
31,50	301	180	3	●	●	●
32,00	334	185	4	●	●	●
32,50	334	185	4	-	●	-
33,00	334	185	4	-	●	-
33,50	334	185	4	-	●	-
34,00	339	190	4	-	●	-
34,50	339	190	4	-	●	-
35,00	339	190	4	-	●	-
36,00	344	195	4	-	●	-
37,00	344	195	4	-	●	-

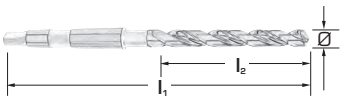
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 345

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS-Co
Twist drills with Morse taper shank
made of HSS







Typ / Type				VA	HD	NS
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS-Co	HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6114	6115	6204
37,50	344	195	4	-	■	-
38,00	349	200	4	-	●	-
39,00	349	200	4	-	●	-
40,00	349	200	4	-	●	-
45,00	359	210	4	-	■	-
48,00	369	220	4	-	■	-
50,00	369	220	4	-	■	-

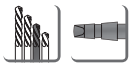
Typ / Type				VA	HD	NS
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS-Co	HSS-Co	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6114	6115	6204

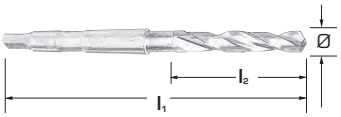
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

ILIX NORM

KURZ / JOBBER LENGTH SERIES

Spiralbohrer mit Morsekegel aus HSS-Co
Twist drills with Morse taper shank
made of HSS







Typ / Type				NS
Schneidrichtung Cutting direction				
Schneidstoff Material				HSS-Co
Ø mm h8	**l_1 mm**	**l_2 mm**	**CM MT**	**6240**
10,0	138	57	1	●
10,5	138	57	1	●
11,0	142	61	1	●
11,5	142	61	1	●
12,0	147	66	1	●
12,5	147	66	1	●
13,0	147	66	1	●
13,5	168	70	2	●
14,0	168	70	2	●
14,5	172	74	2	●
15,0	172	74	2	●
15,5	176	78	2	●
16,0	176	78	2	●
16,5	179	81	2	●
17,0	179	81	2	●
17,5	183	85	2	●
18,0	183	85	2	●
18,5	186	88	2	●
19,0	186	88	2	●
19,5	212	91	3	●
20,0	212	91	3	●
21,0	216	95	3	●
22,0	219	98	3	●
23,0	222	101	3	●
24,0	225	104	3	●
25,0	225	104	3	●
26,0	256	107	4	●
27,0	259	110	4	●
28,0	259	110	4	●
29,0	263	114	4	●
30,0	263	114	4	●

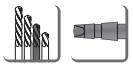
Typ / Type				NS
Schneidrichtung Cutting direction				
Schneidstoff Material				HSS-Co
Ø mm h8	**l_1 mm**	**l_2 mm**	**CM MT**	**6240**

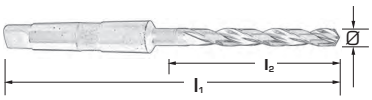
● Standardartikel / Items available ex stock

DIN 346

Spiralbohrer mit großem Morsekegel aus HSS und HSS-Co

Twist drills with oversize shank made of HSS and HSS-Co







Typ / Type				N	VA
Schneidrichtung Cutting direction					
Schneidstoff Material				HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6176	6116
10,00	185	87	2	●	-
10,50	185	87	2	●	-
11,00	192	94	2	●	-
11,50	192	94	2	●	-
11,80	192	94	2	●	-
12,00	199	101	2	●	●
12,20	199	101	2	●	-
12,50	199	101	2	●	●
12,80	199	101	2	●	■
13,00	199	101	2	●	●
13,20	199	101	2	●	-
13,50	206	108	2	●	●
13,75	206	108	2	●	-
13,80	206	108	2	●	-
14,00	206	108	2	●	●
17,00	246	125	3	●	-
17,50	251	130	3	●	-
18,00	251	130	3	●	-
18,50	256	135	3	●	-
18,75	256	135	3	●	-
19,00	256	135	3	●	-
19,25	261	140	3	●	-
19,50	261	140	3	●	-
19,75	261	140	3	●	-
20,00	261	140	3	●	●
20,25	266	145	3	●	-
20,50	266	145	3	●	-
20,75	266	145	3	●	-
21,00	266	145	3	●	●
21,25	271	150	3	●	-
21,50	271	150	3	●	-
21,75	271	150	3	●	-
22,00	271	150	3	●	●
22,25	271	150	3	●	-
22,50	276	155	3	●	-
22,75	276	155	3	●	-
23,00	276	155	3	●	●
26,00	314	165	4	●	-
26,50	314	165	4	●	-
27,00	319	170	4	●	-

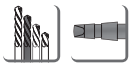
Typ / Type				N	VA
Schneidrichtung Cutting direction					
Schneidstoff Material				HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6176	6116
27,50	319	170	4	●	-
28,00	319	170	4	●	-
28,50	324	175	4	●	■
29,00	324	175	4	●	-
29,50	324	175	4	●	■
30,00	324	175	4	●	-
30,50	329	180	4	●	-
31,00	329	180	4	●	-
31,50	329	180	4	●	-
41,00	329	205	5	●	-
42,00	329	205	5	●	-
43,00	397	210	5	●	-
44,00	397	210	5	●	-
45,00	397	210	5	●	-
46,00	402	215	5	●	-
47,00	402	215	5	●	-
48,00	407	220	5	●	-
49,00	407	220	5	●	-
50,00	407	220	5	●	-

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 341

LANG / LONG SERIES

Spiralbohrer mit Morsekegel aus HSS e HSS-Co
Twist drills with Morse taper shank
made of HSS and HSS-Co







Typ / Type				N	STL	HD
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6233	6222	6119
5,00	155	74	1	●	-	-
5,50	161	80	1	●	-	-
6,00	161	80	1	●	-	-
6,50	167	86	1	●	-	-
6,80	174	93	1	●	-	-
7,00	174	93	1	●	-	-
7,50	174	93	1	●	-	-
8,00	181	100	1	●	-	-
8,10	181	100	1	●	-	-
8,20	181	100	1	●	-	-
8,25	181	100	1	●	-	-
8,30	181	100	1	●	-	-
8,40	181	100	1	●	-	-
8,50	181	100	1	●	-	-
8,60	188	107	1	●	-	-
8,70	188	107	1	●	-	-
8,75	188	107	1	●	-	-
8,80	188	107	1	●	-	-
8,90	188	107	1	●	-	-
9,00	188	107	1	●	-	-
9,10	188	107	1	●	-	-
9,20	188	107	1	●	-	-
9,25	188	107	1	●	-	-
9,30	188	107	1	●	-	-
9,40	188	107	1	●	-	-
9,50	188	107	1	●	-	-
9,60	197	116	1	●	-	-
9,70	197	116	1	●	-	-
9,75	197	116	1	●	-	-
9,80	197	116	1	●	-	-
9,90	197	116	1	●	-	-
10,00	197	116	1	●	●	●
10,10	197	116	1	●	-	-
10,20	197	116	1	●	●	-
10,25	197	116	1	●	-	-
10,30	197	116	1	●	-	-
10,40	197	116	1	●	-	-
10,50	197	116	1	●	●	●
10,60	197	116	1	●	-	-
10,70	206	125	1	●	-	-

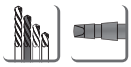
Typ / Type				N	STL	HD
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6233	6222	6119
10,75	206	125	1	●	-	-
10,80	206	125	1	●	●	-
10,90	206	125	1	●	-	-
11,00	206	125	1	●	●	●
11,10	206	125	1	●	-	-
11,20	206	125	1	●	●	-
11,25	206	125	1	●	-	-
11,30	206	125	1	●	-	-
11,40	206	125	1	●	-	-
11,50	206	125	1	●	●	●
11,60	206	125	1	●	-	-
11,70	206	125	1	●	-	-
11,75	206	125	1	●	-	-
11,80	206	125	1	●	●	-
11,90	215	134	1	●	-	-
12,00	215	134	1	●	●	●
12,10	215	134	1	●	-	-
12,20	215	134	1	●	●	-
12,25	215	134	1	●	-	-
12,30	215	134	1	●	-	-
12,40	215	134	1	●	-	-
12,50	215	134	1	●	●	●
12,60	215	134	1	●	-	-
12,70	215	134	1	●	-	-
12,75	215	134	1	●	■	-
12,80	215	134	1	●	●	-
12,90	215	134	1	●	-	-
13,00	215	134	1	●	●	●
13,10	215	134	1	●	-	-
13,20	215	134	1	●	●	-
13,25	223	142	1	●	-	-
13,50	223	142	1	●	●	●
13,75	223	142	1	●	-	-
13,80	223	142	1	●	●	-
13,90	223	142	1	●	-	-
14,00	223	142	1	●	●	●
14,25	245	147	2	●	●	-
14,50	245	147	2	●	●	-
14,75	245	147	2	●	●	-
15,00	245	147	2	●	●	●

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 341

LANG / LONG SERIES

Spiralbohrer mit Morsekegel aus HSS e HSS-Co
Twist drills with Morse taper shank
made of HSS and HSS-Co







Typ / Type				N	STL	HD
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6233	6222	6119
15,25	251	153	2	●	●	-
15,50	251	153	2	●	●	-
15,75	251	153	2	●	●	-
16,00	251	153	2	●	●	●
16,25	257	159	2	●	●	-
16,50	257	159	2	●	●	-
16,75	257	159	2	●	●	-
17,00	257	159	2	●	●	●
17,25	263	165	2	●	●	-
17,50	263	165	2	●	●	-
17,75	263	165	2	●	●	-
18,00	263	165	2	●	●	●
18,25	269	171	2	●	●	-
18,50	269	171	2	●	●	-
18,75	269	171	2	●	●	-
19,00	269	171	2	●	●	●
19,25	275	177	2	●	●	-
19,50	275	177	2	●	●	-
19,75	275	177	2	●	●	-
20,00	275	177	2	●	●	●
20,25	282	184	2	●	-	-
20,50	282	184	2	●	●	-
20,75	282	184	2	●	-	-
21,00	282	184	2	●	●	●
21,25	289	191	2	●	-	-
21,50	289	191	2	●	●	-
21,75	289	191	2	●	-	-
22,00	289	191	2	●	●	●
22,25	289	191	2	●	-	-
22,50	296	198	2	●	●	-
22,75	296	198	2	●	-	-
23,00	296	198	2	●	●	●
23,50	319	198	3	●	●	-
24,00	327	206	3	●	●	●
24,50	327	206	3	●	●	-
25,00	327	206	3	●	●	●
25,50	335	214	3	●	-	-
26,00	335	214	3	●	●	●
26,50	335	214	3	●	-	-
27,00	343	222	3	●	●	●

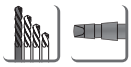
Typ / Type				N	STL	HD
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6233	6222	6119
27,50	343	222	3	●	-	-
28,00	343	222	3	●	●	●
28,50	351	230	3	●	■	-
29,00	351	230	3	●	●	●
29,50	351	230	3	●	-	-
30,00	351	230	3	●	●	●
30,50	360	239	3	●	-	-
31,00	360	239	3	●	●	●
31,50	360	239	3	●	-	-
32,00	397	248	4	●	-	-
32,50	397	248	4	●	-	-
33,00	397	248	4	●	-	-
33,50	397	248	4	●	-	-
34,00	406	257	4	●	-	-
34,50	406	257	4	●	-	-
35,00	406	257	4	●	-	-
35,50	406	257	4	●	-	-
36,00	416	267	4	●	-	-
36,50	416	267	4	●	-	-
37,00	416	267	4	●	-	-
37,50	416	267	4	●	-	-
38,00	426	277	4	●	-	-
38,50	426	277	4	●	-	-
39,00	426	277	4	●	-	-
39,50	426	277	4	●	-	-
40,00	426	277	4	●	-	-
41,00	436	287	4	●	-	-
42,00	436	287	4	●	-	-
43,00	447	298	4	●	-	-
44,00	447	298	4	●	-	-
45,00	447	298	4	●	-	-
46,00	459	310	4	●	-	-
47,00	459	310	4	●	-	-
48,00	470	321	4	●	-	-
49,00	470	321	4	●	-	-
50,00	470	321	4	●	-	-

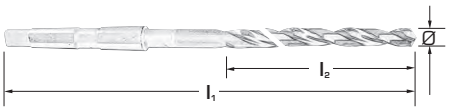
● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 1870-1

ÜBERLANG / EXTRA LONG SERIES

Spiralbohrer mit Morsekegel aus HSS e HSS-Co
Twist drills with Morse taper shank
made of HSS and HSS-Co







Typ / Type	N	STL	STL
Schneidrichtung Cutting direction			
Schneidstoff Material	HSS	HSS	HSS-Co

Ø mm h8	l_1 mm	l_2 mm	CM MT	6220/1	6221/1	6219/1
8,0	265	165	1	●	-	-
8,5	265	165	1	●	-	-
9,0	275	175	1	●	-	-
9,5	275	175	1	●	-	-
10,0	285	185	1	●	-	-
10,5	285	185	1	●	-	■
11,0	300	195	1	●	-	-
11,5	300	195	1	●	-	-
12,0	310	205	1	●	●	●
12,5	310	205	1	●	●	●
13,0	310	205	1	●	●	●
13,5	325	220	1	●	●	●
14,0	325	220	1	●	●	●
14,5	340	220	2	●	●	●
15,0	340	220	2	●	●	●
15,5	355	230	2	●	●	●
16,0	355	230	2	●	●	●
16,5	355	230	2	●	●	●
17,0	355	230	2	●	●	●
17,5	370	245	2	●	●	●
18,0	370	245	2	●	●	●
18,5	370	245	2	●	●	●
19,0	370	245	2	●	●	●
19,5	385	260	2	●	●	●
20,0	385	260	2	●	●	●
20,5	385	260	2	●	-	-
21,0	385	260	2	●	●	●
21,5	405	270	2	●	-	-
22,0	405	270	2	●	●	●
22,5	405	270	2	●	-	-
23,0	405	270	2	●	●	●
23,5	425	270	3	●	-	-
24,0	440	290	3	●	●	●
24,5	440	290	3	●	-	-
25,0	440	290	3	●	●	●
25,5	440	290	3	●	-	-
26,0	440	290	3	●	●	●
26,5	440	290	3	●	-	-
27,0	460	305	3	●	●	●
28,0	460	305	3	●	●	●

Typ / Type	N	STL	STL
Schneidrichtung Cutting direction			
Schneidstoff Material	HSS	HSS	HSS-Co

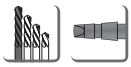
Ø mm h8	l_1 mm	l_2 mm	CM MT	6220/1	6221/1	6219/1
29,0	460	305	3	●	●	●
29,5	460	305	3	●	-	-
30,0	460	305	3	●	●	●
31,0	480	320	3	●	-	-
32,0	505	320	4	●	-	-
33,0	505	320	4	●	-	-
34,0	530	340	4	●	-	-
35,0	530	340	4	●	-	-
36,0	530	340	4	●	-	-
37,0	530	340	4	●	-	-
38,0	555	360	4	●	-	-
39,0	555	360	4	●	-	-
40,0	555	360	4	●	-	-
41,0	555	360	4	●	-	-
42,0	555	360	4	●	-	-
45,0	585	385	4	●	-	-
48,0	605	405	4	●	-	-
50,0	605	405	4	●	-	-

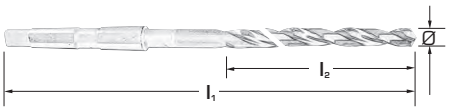
● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 1870-2

ÜBERLANG / EXTRA LONG SERIES

Spiralbohrer mit Morsekegel aus HSS e HSS-Co
Twist drills with Morse taper shank
made of HSS and HSS-Co







Typ / Type				N	STL	STL
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6220/2	6221/2	6219/2
8,0	330	210	1	●	●	-
8,5	330	210	1	●	●	-
9,0	345	220	1	●	●	-
9,5	345	220	1	●	-	-
10,0	360	235	1	●	●	●
10,5	360	235	1	●	●	●
11,0	375	250	1	●	●	●
11,5	375	250	1	●	●	●
12,0	395	260	1	●	●	●
12,5	395	260	1	●	●	●
13,0	395	260	1	●	●	●
13,5	410	275	1	●	●	●
14,0	410	275	1	●	●	●
14,5	425	275	2	●	●	●
15,0	425	275	2	●	●	●
15,5	445	295	2	●	●	●
16,0	445	295	2	●	●	●
16,5	445	295	2	●	●	●
17,0	445	295	2	●	●	●
17,5	465	310	2	●	●	●
18,0	465	310	2	●	●	●
18,5	465	310	2	●	●	●
19,0	465	310	2	●	●	●
19,5	490	325	2	●	●	●
20,0	490	325	2	●	●	●
20,5	490	325	2	●	-	■
21,0	490	325	2	●	●	●
21,5	515	345	2	●	-	-
22,0	515	345	2	●	●	●
22,5	515	345	2	●	-	-
23,0	515	345	2	●	●	●
23,5	535	345	3	●	-	-
24,0	555	365	3	●	●	●
24,5	555	365	3	●	-	-
25,0	555	365	3	●	●	●
25,5	555	365	3	●	-	-
26,0	555	365	3	●	●	●
26,5	555	365	3	●	-	-
27,0	580	385	3	●	●	●
27,5	580	385	3	■	-	-

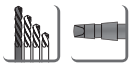
Typ / Type				N	STL	STL
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS	HSS	HSS-Co
Ø mm h8	l_1 mm	l_2 mm	CM MT	6220/2	6221/2	6219/2
28,0	580	385	3	●	●	●
28,5	580	385	3	■	-	-
29,0	580	385	3	●	●	●
29,5	580	385	3	●	-	-
30,0	580	385	3	●	●	●
31,0	610	410	3	●	●	-
32,0	635	410	4	●	●	-
33,0	635	410	4	●	●	-
34,0	665	430	4	●	●	-
35,0	665	430	4	●	●	-
36,0	665	430	4	●	-	-
37,0	665	430	4	●	-	-
38,0	695	460	4	●	●	-
39,0	695	460	4	●	-	-
40,0	695	460	4	●	●	-
41,0	695	460	4	●	-	-
42,0	695	460	4	●	-	-
45,0	735	490	4	●	-	-
48,0	765	510	4	●	-	-
50,0	765	510	4	●	-	-

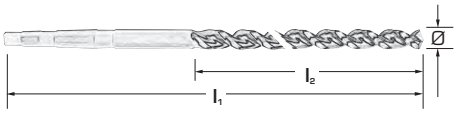
● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

ILIX NORM

SUPERLANG / SUPERLONG LENGTH

Spiralbohrer mit Morsekegel aus HSS
Twist drills with Morse taper shank
made of HSS







Typ / Type				STL
Schneidrichtung Cutting direction				
Schneidstoff Material				HSS
Ø mm h8	l_1 mm	l_2 mm	CM MT	6150
10,0	500	410	1	●
11,0	500	410	1	●
12,0	500	410	1	●
13,0	500	410	1	●
14,0	500	410	1	●
14,0	600	490	1	●
14,0	750	640	1	●
14,0	1000	840	2	●
15,0	600	490	2	●
15,0	750	640	2	●
15,0	1000	840	2	●
16,0	600	490	2	●
16,0	750	640	2	●
16,0	1000	840	2	●
18,0	600	490	2	●
18,0	750	640	2	●
18,0	1000	840	2	●
20,0	600	490	2	●
21,0	600	490	2	●
22,0	600	490	2	●

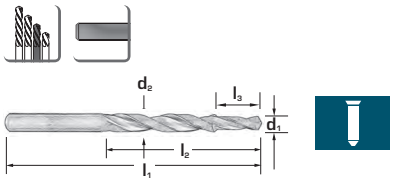
Typ / Type				STL
Schneidrichtung Cutting direction				
Schneidstoff Material				HSS
Ø mm h8	l_1 mm	l_2 mm	CM MT	6150

Im Bestellfall bitte den Ø und die Gesamtlänge l_1 angeben.
When ordering, please state Ø and total length l_1

● Standardartikel / Items available ex stock

DIN 8378

Mehrfasen-Stufenbohrer mit Zylinderschaft aus HSS
Senkwinkel 90°
Subland drills with straight shank made of HSS
Included angle 90°





Senkwinkel / Included angle	90°
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

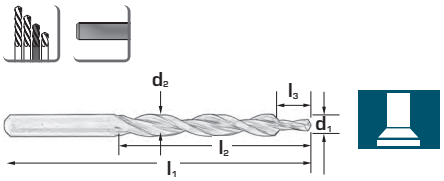
Ø mm für Gewinde for thread-Ø	d_2 mm	x	d_1 mm	l_1 mm	l_2 mm	l_3 mm	6282
M 3	3,4	X	2,5	70	39	8,8	●
M 4	4,5	X	3,3	80	47	11,4	●
M 5	5,5	X	4,2	93	57	13,6	●
M 6	6,6	X	5,0	101	63	16,5	●
M 8	9,0	X	6,8	125	81	21,0	●
M 10	11,0	X	8,5	142	94	25,5	●
M 12	13,5	X	10,2	160	108	30,0	●

Für Kernlochbohrungen nach **DIN 336, Teil 1** und Freisenkungen entsprechend den Durchgangslöchern nach **DIN–ISO 273**
For drilling tapping size holes acc. to **DIN 336, part 1** and counterbores corresponding to through holes acc. to **DIN-ISO 273**

● Standardartikel / Items available ex stock

DIN 8374

Mehrfasen-Stufenbohrer mit Zylinderschaft aus HSS
Senkwinkel 90°
Subland drills with straight shank made of HSS
Included angle 90°





Senkwinkel / Included angle	90°
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS

Ø mm für Gewinde for thread-Ø	d_2 mm	x	d_1 mm	l_1 mm	l_2 mm	l_3 mm	6281
M 3	6,0	X	3,2	93	57	9	●
M 4	8,0	X	4,3	117	75	11	●
M 5	10,0	X	5,3	133	87	13	●
M 6	11,5	X	6,4	142	94	15	●
M 8	15,0	X	8,4	169	114	19	●
M 10	19,0	X	10,5	198	135	23	●
Zusatzreihe / additional sizes							
M 3	6,6	X	3,4	101	63	9	●
M 4	9,0	X	4,5	125	81	11	●

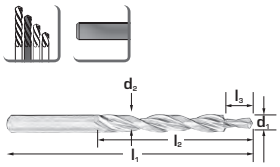
Form A, Ausführung „fein“
Für Durchgangslöcher nach **DIN-ISO 273** und Senkungen nach **DIN 74, Teil 1**
Für Schrauben nach **DIN 963 – 964 – 965 – 966 – 7513 (F und G) – 7516 (D und E)**
Form A, fine grade
For clearance holes acc. to **DIN-ISO 273** and counterisink holes acc. to **DIN 74, part 1.**
For screws acc. to **DIN 963 – 964 – 965 – 966 – 7513 (F and G) – 7516 (D and E)**

Form B, Ausführung „mittel“
Für Durchgangslöcher nach **DIN-ISO 273** und Senkungen nach **DIN 74, Teil 1**
Für Senkschrauben nach **DIN 7991**
Form B, medium grade
For clearance holes acc. to **DIN-ISO 273** and counterisink holes acc. to **DIN 74, part 1**. For screws acc. to **DIN 7991**

● Standardartikel / Items available ex stock

DIN 8376

Mehrfasen-Stufenbohrer mit Zylinderschaft aus HSS
Senkwinkel 180°
Subland drills with straight shank made of HSS
Included angle 180°





Senkwinkel / Included angle							180°
Schneidrichtung Cutting direction							
Schneidstoff/ Material							HSS
Ø mm für Gewinde for thread-Ø	d_2 mm	x	d_1 mm	l_1 mm	l_2 mm	l_3 mm	**6283**
M 3	6,0	X	3,4	93	57	9	●
M 4	8,0	X	4,5	117	75	11	●
M 5	10,0	X	5,5	133	87	13	●
M 6	11,0	X	6,6	142	94	15	●
M 8	15,0	X	9,0	169	114	19	●
M 10	18,0	X	11,0	191	130	23	●
Zusatzreihe / additional sizes							
M 3	6,0	X	3,2	93	57	9	●

Form H, J, K, H 3, J 3, K 3, Ausführung "mittel"
Für Durchgangslöcher nach **DIN-ISO 273** und Senkungen nach **DIN 74, Teil 2,**
für Schrauben nach **DIN 84 – 912 – 6912 – 7513 - 7984**

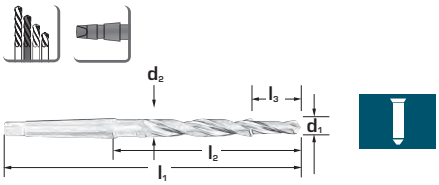
Form H, J, K, H 3, J 3, K 3, medium grade
For through holes acc. to **DIN-ISO 273** and socket screwheads countersinks acc. to **DIN 74, part 2**, for screws to
DIN 84 – 912 – 6912 – 7513 - 7984

Ausführung"fein" / Fine grade

● Standardartikel / Items available ex stock

DIN 8379

Mehrfasen-Stufenbohrer mit Morsekegel aus HSS
Senkwinkel 90°
Subland drills with straight shank made of HSS
Included angle 90°





Senkwinkel / Included angle	90°
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS

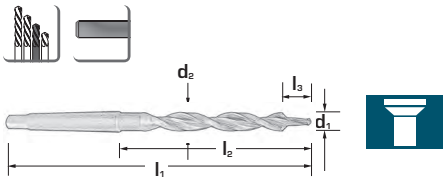
Ø mm für Gewinde for thread-Ø	d_2 mm	x	d_1 mm	l_1 mm	l_2 mm	l_3 mm	6285
M 8	9,0	X	6,8	162	81	21,0	●
M 10	11,0	X	8,5	175	94	25,5	●
M 12	13,5	X	10,2	189	108	30,0	●
M 14	15,5	X	12,0	218	120	34,5	●
M 16	17,5	X	14,0	228	130	38,5	●
M 18	20,0	X	15,5	238	140	43,5	●
M 20	22,0	X	17,5	248	150	47,5	●

Für Kernlochbohrungen nach **DIN 336, Teil 1** und Freisenkungen entsprechend den Durchgangslöchern nach **DIN-ISO 273**
For drilling tapping size holes acc. to **DIN 336, part 1** and counterbores corresponding to through holes acc. to **DIN-ISO 273**

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 8375

Mehrfasen-Stufenbohrer mit Morsekegel aus HSS
Senkwinkel 90°
Subland drills with Morse taper shank made of HSS
Included angle 90°





Senkwinkel / Included angle		90°
Schneidrichtung Cutting direction		
Schneidstoff/ Material		HSS

Ø mm für Gewinde for thread-Ø	d_2 mm	x	d_1 mm	l_1 mm	l_2 mm	l_3 mm	CM MT	6284
M 5	11,0	X	5,5	175	94	13	1	●
M6	13,0	X	6,6	182	101	15	1	●
M 8	17,2	X	9,0	228	130	19	2	●
M 10	21,5	X	11,0	248	150	23	2	●
Zusatzreihe / additional sizes								
M 12	26,0	X	14,0	286	165	27	3	●
M 14	29,0	X	16,0	296	175	31	3	●
Zusatzreihe / additional sizes								
M 6	11,0	X	6,4	175	94	15	1	●
M 6	11,5	X	6,4	175	94	15	1	●
M 8	15,0	X	8,4	212	114	19	2	●
M 10	19,0	X	10,5	233	135	23	2	●
M 12	23,0	X	13,0	253	155	27	2	●
M 14	26,0	X	15,0	286	165	31	3	●
M 16	30,0	X	17,0	296	175	35	3	●

Form A und B, Ausführung „mittel“
Für Durchgangslöcher nach **DIN-ISO 273** und Senkungen nach **DIN 74, Teil 1,**
für Schrauben nach **DIN 963 – 964 – 965 – 966 - 7513 (F und G) 7516 (D und E) – 7991**
Form A und B, medium grade
For through holes acc. to **DIN-ISO 273** and screwheads to **DIN 74, part 1,**
for screws to **DIN 963 – 964 – 965 – 966 - 7513 (F and G) 7516 (D and E) – 7991**

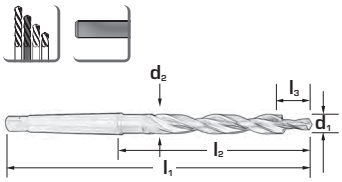
Form B, Ausführung “mittel”
Für Durchgangslöcher nach **DIN-ISO 273** und Senkungen nach **DIN 74, Teil 1,**
für Schrauben nach **DIN 7991**
Form B, medium grade
For through holes acc. to **DIN-ISO 273** and screwhead countersinks acc. to
DIN 74, part 1, for countersunk screws acc. to **DIN 7991**

Form A, Ausführung “fein”
Für Durchgangslöcher nach **DIN-ISO 273** und Senkungen nach **DIN 74, Teil 1,**
für Schrauben nach **DIN 963– 964–965–966–7513 (F und G)–7516 (D und E)**
Form A, fine grade
For through holes acc. to **DIN-ISO 273** and screwhead countersinks acc.
to **DIN 74, part 1**, for screws acc. to **DIN 963 – 964 – 965 – 966 – 7513**
(F and G) – 7516 (D und E)

● Standardartikel / Items available ex stock

DIN 8377

Mehrfasen-Stufenbohrer mit Morsekegel aus HSS
Senkwinkel180°
Subland drills with Morse taper shank made of HSS
Included angle 180°





Senkwinkel / Included angle								180°
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS
Ø mm für Gewinde for thread-Ø	d_2 mm	x	d_1 mm	l_1 mm	l_2 mm	l_3 mm	CM MT	6286
M 5	10	X	5,5	168	87	13	1	■
M 6	11	X	6,6	175	94	15	1	■
M 10	18	X	11,0	228	130	23	2	■
M 14	24	X	15,5	281	160	31	3	■
M 14*	24	X	16,0	281	160	31	3	■
M 18	30	X	20,0	296	175	39	3	■
M 20	33	X	22,0	334	185	43	4	■
Zusatzreihe / additional sizes								
M 5	10	X	5,3	168	87	13	1	■
M 6	11	X	6,4	175	94	15	1	■
M 10	18	X	10,5	228	130	23	2	■
M 14	24	X	15,0	281	160	31	3	■
M 16	26	X	17,0	186	165	35	3	■

Form H, J, K Ausführung "mittel"
für Durchgangslöcher nach **DIN–ISO 273** und Senkungen nach **DIN 74, Teil 2**
für Schrauben nach **DIN 84 – 7513 – 7984 – 6912 - 912**
Form H, J, K medium grade
for through holes acc. to **DIN–ISO 273** and socket screwhead countersinks acc. to **DIN 74, part 2** for screws to
DIN 84 – 7513 – 7984 – 6912 – 912

*nicht mehr genormt/ former standard

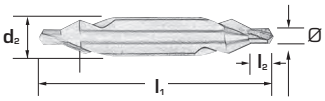
■ Auslaufender Artikel / discontinued items

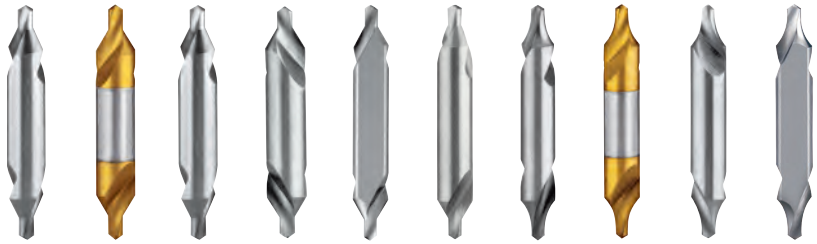
Din 333 A + 333 R

Zentrierbohrer spiralgenutet aus HSS, HSS-Co und VHM
Form A: Senkwinkel 60°
Form R: Radius

Centre drills
made of HSS, HSS-Co and VHM
Form A: included angle 60°
Form R: Radius

TiN





Typ / Type	A	A	A	A	A	A	R	R	R	R
Schneidrichtung Cutting direction					Abfl. / Flat					Abfl. / Flat
Schneidstoff / Material	HSS	HSS	HSS-Co	HSS	HSS-Co	K10/20	HSS	HSS	HSS	HSS-Co

Ø mm	d_1 mm	l_1 mm	l_2 mm	6290	6290 TN	6299	6294	6291	6296	6292	6292 TN	6295	6293
0,5*	3,15	20,0	0,6-0,9	●	-	-	●	-	●	●	-	-	-
0,8*	3,15	20,0	1,0-1,3	●	-	-	●	-	●	●	-	-	-
1,00	3,15	31,5	1,3-1,7	●	●	●	●	-	●	●	●	●	-
1,25	3,15	31,5	1,6-2,0	●	●	●	●	-	●	●	●	●	-
1,60	4,00	35,5	2,0-2,6	●	●	●	●	●	●	●	●	●	●
2,00	5,00	40,0	2,5-3,1	●	●	●	●	●	●	●	●	●	●
2,50	6,30	45,0	3,1-3,8	●	●	●	●	●	●	●	●	●	●
3,15	8,00	50,0	3,9-4,6	●	●	●	●	●	●	●	●	●	●
4,00	10,00	56,0	5,0-5,9	●	●	●	●	●	●	●	●	●	●
5,00	12,50	63,0	6,3-7,2	●	●	●	●	●	●	●	●	-	●
6,30	16,00	71,0	8,0-8,9	●	-	-	●	-	●	●	-	-	-
8,00	20,00	80,0	10,1-11,1	●	-	-	-	-	-	●	-	-	-
10,00	25,00	100,0	10,1-11,1	●	-	-	-	-	-	●	-	-	-
12,50	31,50	125,0	16,5-17,5	●	-	-	-	-	-	●	-	-	-

* Einseitig / single end

● Standardartikel / Items available ex stock

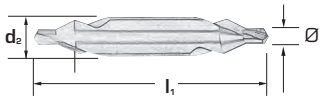
DIN 333 A + 333 R

ALTE NORM / FORMER STANDARD

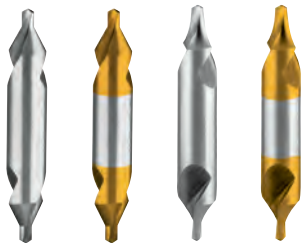
Zentrierbohrer spiralgenutet aus HSS
Form A: Senkwinkel 60° -Form R: Radius

Centre drills made of HSS
Form A: included angle 60° - Form R: Radius

TiN



alte Norm
Former standard



Typ / Type	A	A	R	R
Schneidrichtung Cutting direction				
Schneidstoff / Material	HSS	HSS	HSS	HSS
Ø mm / d_2 mm / l_1 mm	6162	6162 TN	6223	6223 TN
0,63 / 3,15 / 25,0	●	●	-	-
0,75 / 3,50 / 35,0	●	●	-	-
1,00 / 4,00 / 35,5	●	●	●	●
1,50 / 5,00 / 40,0	●	●	●	●
1,60 / 5,00 / 40,0	●	●	-	-
2,00 / 6,00 / 45,0	●	●	●	●
2,00 / 6,30 / 45,0	●	●	-	-
2,50 / 8,00 / 50,0	●	●	●	●
3,00 / 8,00 / 50,0	●	●	-	-
3,00 / 10,00 / 56,0	●	●	●	●
3,15 / 10,00 / 56,0	●	●	-	-
4,00 / 12,00 / 66,0	●	●	●	●
5,00 / 14,00 / 69,0	●	●	-	-
6,00 / 18,00 / 76,0	●	●	-	-

Typ / Type	A	A	R	R
Schneidrichtung Cutting direction				
Schneidstoff / Material	HSS	HSS	HSS	HSS
Ø mm / d_2 mm / l_1 mm	6162	6162 TN	6223	6223 TN

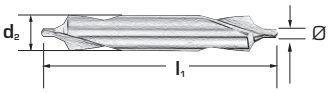
● Standardartikel / Items available ex stock

DIN 333 B

Zentrierbohrer für Schutzsenkung aus HSS
Form B: Senkwinkel 60°/120°

Centre drills
made of HSS
Form B: included angle 60°/120°







Typ / Type			B	B	B Abfl. / Flat
Schneidrichtung Cutting direction					
Schneidstoff / Material			HSS	HSS	HSS
Ø mm	d_2 mm	l_1 mm	6297	6298 B	6289
1,00	4,0	35,5	●	●	-
1,25	5,0	40,0	●	●	-
1,60	6,3	45,0	●	●	●
2,00	8,0	50,0	●	●	●
2,50	10,0	55,0	●	●	●
3,15	11,2	60,0	●	●	●
4,00	14,0	67,0	●	●	●
5,00	18,0	75,0	●	●	●
6,30	20,0	80,0	●	●	●
8,00	25,0	100,0	●	-	●
10,00	31,5	125,0	●	-	●

Typ / Type			B	B	B Abfl. / Flat
Schneidrichtung Cutting direction					
Schneidstoff / Material			HSS	HSS	HSS
Ø mm	d_2 mm	l_1 mm	6297	6298 B	6289

Im Bestellfall bitte den Ø d2 und die Länge l1 angeben
When ordering please state diameter d2 and l1

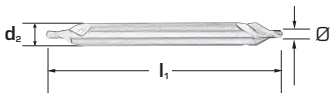
● Standardartikel / Items available ex stock

ILIX NORM

Überlange Zentrierbohrer aus HSS
Form A: Senkwinkel 60°

Extra long Centre drills
made of HSS
Form A: included angle 60°







Typ / Type			A
Schneidrichtung Cutting direction			
Schneidstoff/ Material			HSS-Co
Ø mm	**d_2 mm**	**l_1 mm**	**6144**
0,75	3,5	60	●
1,00	4,0	60	●
1,50	5,0	60	●
2,00	6,0	80	●
2,50	8,0	80	●
3,00	8,0	80	●
1,00	4,0	100	●
1,50	5,0	100	●
2,00	6,0	100	●
2,50	8,0	100	●
3,00	8,0	100	●
3,00	10,0	100	●
4,00	10,0	100	●
4,00	12,0	100	●
5,00	12,0	100	●
0,75	3,5	120	●
1,00	4,0	120	●
1,50	5,0	120	●
1,60	5,0	120	●
2,00	6,0	120	●
2,50	8,0	120	●
3,00	8,0	120	●
3,00	10,0	120	●
3,15	10,0	120	●
4,00	10,0	120	●
4,00	12,0	120	●
5,00	14,0	120	●
2,00	5,0	200	●
2,50	6,3	200	●
3,15	8,0	200	●
4,00	10,0	200	●

Typ / Type			A
Schneidrichtung Cutting direction			
Schneidstoff/ Material			HSS-Co
Ø mm	**d_2 mm**	**l_1 mm**	**6144**

Im Bestellfall bitte den Ø d2 und die Länge l1 angeben /
When ordering please state diameter d2 and l1

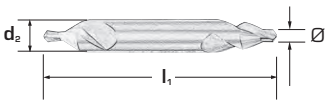
● Standardartikel / Items available ex stock

ANSI B 94.11 M-1979

Zentrierbohrer aus HSS
Form A: Senkwinkel 60°
Form R: Radius

Centre drills
made of HSS
Form A: included angle 60° - Form R: Radius







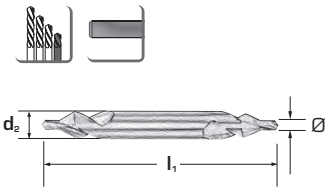
Typ / Type							A	R
Schneidrichtung Cutting direction								
Schneidstoff/ Material							HSS	HSS
Bezeichung size	**Ø** “	**mm**	**d_2** “	**mm**	**l_1** “	**mm**	**6164**	**6160**
00	.025	0,64	1/8	3,18	1 7/32	31	●	●
0	1/32	0,79	1/8	3,18	1 7/32	31	●	●
1	3/64	1,19	1/8	3,18	1 1/4	32	●	●
2	5/64	1,98	3/16	4,76	1 7/8	48	●	●
3	7/64	2,78	1/4	6,35	2	51	●	●
4	1/8	3,18	5/16	7,94	2 1/8	54	●	●
5	3/16	4,76	7/16	11,11	2 3/4	70	●	●
6	7/32	5,56	1/2	12,70	3	76	●	-
7	1/4	6,35	5/8	15,88	3 1/4	83	●	-
8	5/16	7,94	3/4	19,05	3 1/2	89	●	-

● Standardartikel / Items available ex stock

B.S. 328

Zentrierbohrer aus HSS
Form A: Senkwinkel 60°

Centre drills
made of HSS
Form A: included angle 60°





Typ / Type	A
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

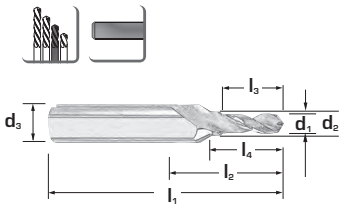
Bezeichung size	Ø "	Ø mm	d_2 "	d_2 mm	l_1 "	l_1 mm	**6142**
1	3/64	1,19	1/8	3,18	1 1/2	38	●
2	1/16	1,59	3/16	4,76	1 3/4	44,5	●
3	3/32	2,38	1/4	6,35	2 1/64	51,2	●
4	1/8	3,18	5/16	7,94	2 1/4	63,5	●
5	3/16	4,76	7/16	11,11	2 1/2	63,5	●
6	1/4	6,35	5/8	15,88	3	76	●
7	5/16	7,94	3/4	19,05	3 1/2	89	●

● Standardartikel / Items available ex stock

DIN 332

Stufenbohrer für Zentrierbohrungen nach DIN 332 aus HSS
Form D: Senkwinkel 60°
Form DR: Radius

Step drills for centre holes in shafts
Form D: included angle 60°
Form DR: Radius







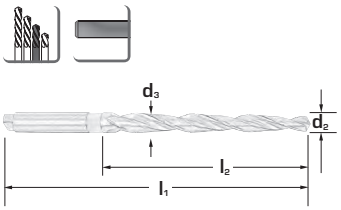
									D			DR
Senkwinkel / Included angle												
Schneidrichtung Cutting direction												
Schneidstoff/ Material									HSS			HSS
Ø mm für Gewinde for thread-Ø	**ø h 8** d_1	**ø h 8** d_2	**ø h 7** d_3	**Länge** Length l_1	**Länge** Length l_2	**Lungh.** Length l_3	**Flächenmaß** Flat size	**Länge** Length l_4	**6249**	**Länge** Length l_4	**Radius** Radius	**6250**
M 4	3,3	4,3	8,0	63	23	11,0	6,75	12,60	●	12,6	5,0	●
M 5	4,2	5,3	10,0	67	27	13,0	8,45	15,15	●	15,2	6,3	●
M 6	5,0	6,4	12,5	71	33	16,0	10,45	18,90	●	18,9	8,0	●
M 8	6,8	8,4	14,0	88	41	19,5	12,50	23,00	●	23,0	10,0	●
M 10	8,5	10,5	16,0	94	47	23,0	14,85	27,70	●	27,7	16,0	●
M 12	10,2	13,0	20,0	105	59	28,0	18,45	34,50	●	34,5	20,0	●
M 16	14,0	17,0	25,0	132	67	33,0	23,40	41,30	●	41,3	25,0	●
M 20	17,5	21,0	31,5	145	77	38,0	29,35	48,35	●	48,4	31,5	●
M 24	21,0	25,0	40,0	160	90	45,0	36,50	57,00	●	57,0	40,0	●

● Standardartikel / Items available ex stock

DIN 1898 A

Stiftlochbohrer mit Zylinderschaft aus HSS Kegel 1 : 50 zur Herstellung von Kegelbohrungen in einem Arbeitsgang, zu Kegelstiften nach DIN 1 und DIN 7978

Taper Pin drills with straight shank made of HSS
Taper 1 : 50 for drilling taper holes acc. to DIN 1 and DIN 7978





Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS

Ø mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	6501
1,25	1,23	1,87	50	32	●
2,00	1,98	2,84	65	43	●
3,00	2,98	4,14	100	60	●
4,00	3,98	5,38	115	72	●
5,00	4,98	6,62	135	86	●
5,50	5,47	7,47	155	103	■
6,00	5,97	8,25	170	117	●
8,00	7,97	10,69	205	143	●
10,00	9,96	13,12	230	165	●
12,00	11,96	15,70	275	198	●

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS

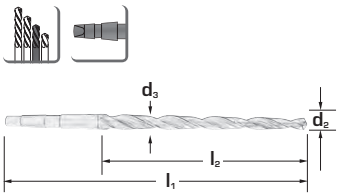
Ø mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	6501

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 1898 B

Stiftlochbohrer mit Morsekegel aus HSS Kegel 1 : 50 zur Herstellung von Kegelbohrungen in einem Arbeitsgang, zu Kegelstiften nach DIN 1 und DIN 7978

Taper Pin drills with morse taper shank made of HSS
Taper 1 : 50 for drilling taper holes acc. to DIN 1 and DIN 7978





Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS

Ø mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	CM MT	6502
5	4,98	6,62	164	86	1	■
6	5,97	8,25	196	117	1	■

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS

Ø mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	CM MT	6502

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items



Spiralbohrer
Twist Drills



▶ Technische Daten
Technical Guide

TECHNISCHE DATEN
TECHNICAL DATA



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	N	N - ML	H	W	STL	STL	STL	N	H	W	STL	N	N	N	VA	VA
	158	158	160	162	162	162	162	158	160	162	162	164	164	164	166	166
							338									
							8xd									
	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS-CO	HSS-CO	HSS-CO8	HSS-CO	HSS-CO
	120°	120°	130°	130°	130°	130°	130°	120°	130°	130°	130°	120°	120°	120°	130°	130°
	TN	VP	BL	BL	FASE NIT.	TN	TC	VP	BL	BL	FASE NIT.	BL	TN	BL	BL	TX
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6151 TN	**6106**	**6187**	**6197**	**6210**	**6210 TN**	**6210 TC**	**6158**	**6190**	**6199**	**6209**	**6153**	**6153 TN**	**6154**	**6234**	**6234 TX**
	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*
	25 9	25 9	- -	30 9	25 8	28 8	28 8	25 9	- -	30 10	30 8	30 9	32 9	32 9	33 9	35 9
	20 8	20 8	- -	- -	20 7	22 7	22 7	20 8	- -	- -	25 7	25 8	28 8	28 8	22 8	25 8
	10 7	10 7	- -	- -	10 6	12 6	12 6	10 7	- -	- -	15 6	15 7	17 7	17 7	- -	- -
	10 5	8 5	- -	- -	- -	- -	- -	8 5	- -	- -	8 5	10 5	13 5	13 5	13 5	15 5
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	10 4	12 4
	25 9	20 8	- -	- -	30 7	32 9	35 9	20 8	- -	- -	30 7	30 8	30 9	30 9	25 7	25 7
	12 7	10 7	- -	- -	15 6	18 7	20 7	10 7	- -	- -	15 6	15 7	15 8	15 8	- -	- -
	40 10	35 10	50 10	50 10	35 10	40 10	40 10	35 10	50 10	50 10	35 10	40 10	45 10	45 10	40 10	42 10
	35 8	30 8	40 10	40 10	30 8	35 8	35 8	30 8	40 10	40 10	30 8	33 8	38 8	38 8	33 8	35 8
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	8 4	8 4
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	5 3	5 3
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

TECHNISCHE DATEN
TECHNICAL DATA



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TECHNISCHE DATEN

TECHNICAL DATA



	H	W	STL	STL	STL	N	VA	HD	N	STL	STL	N	STL	STL	N	STL
	160	162	162	162	162	164	166	168	158	162	166	158	162	166	158	162
	340								1869-1			1869-2			1869-3	
	12xd								16xd			22xd			30xd	
	HSS	HSS	HSS	HSS	HSS	HSS-CO	HSS-CO	HSS-CO	HSS	HSS	HSS-CO	HSS	HSS	HSS-CO	HSS	HSS
	130°	130°	130°	130°	130°	120°	130°	130°	120°	130°	130°	120°	130°	130°	120°	130°
	BL	BL	FASE NIT.	TN	FASE NIT.	BL	BL	FASE NIT.	VP	FASE NIT.	FASE NIT.	VP	FASE NIT.	FASE NIT.	VP	FASE VAP.
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6192	6200	6173	6173 TN	6184	6166	6112	6113	6217/1	6216/1	6218/1	6217/2	6216/2	6218/2	6217/3	6216/3
	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*
	- -	25 9	25 8	30 8	25 8	28 8	29 8	30 9	20 7	22 7	23 8	19 7	21 7	21 8	18 7	20 8
	- -	- -	20 7	25 7	20 7	23 7	18 7	25 8	13 6	16 6	18 7	12 6	16 6	21 7	11 6	16 7
	- -	- -	12 6	15 6	12 6	13 6	- -	15 7	6 5	10 5	14 6	5 5	12 9	12 6	4 5	9 6
	- -	- -	- -	- -	- -	10 4	9 4	- -	4 4	- -	- -	3 4	- -	- -	3 3	- -
	- -	- -	- -	- -	- -	- -	6 3	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	25 7	27 7	25 7	30 7	20 7	30 9	13 6	20 7	25 7	12 6	20 6	23 -	11 7	20 5
	- -	- -	10 6	12 6	10 6	15 6	- -	15 7	7 5	10 5	15 6	6 5	10 4	20 6	5 5	10 3
	45 10	45 9	30 10	35 10	30 10	38 9	35 10	30 10	28 6	30 6	30 10	27 6	30 6	35 10	26 9	30 10
	35 10	35 9	25 7	30 7	25 7	34 7	29 7	25 8	21 5	25 5	25 7	20 5	22 5	30 7	19 5	25 7
	- -	- -	- -	- -	- -	- -	5 3	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	3 2	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
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TECHNISCHE DATEN
TECHNICAL DATA



Typ Type		STL	NS	HM	N	N	W	STL	NS	VA	HD	N	VA	
ILIX Typ-siehe Seite Ilix Type -See page		162	166	170	158	158	162	164	166	168	168	160	168	
DIN		Ilix Norm.	Ilix Norm.	8041	345							346		
Bohrtiefe Drilling depth		60/70 xd	3xd		8xd									
Schneidrichtung Cutting direction														
Schneidstoff Material		HSS	HSS-CO	Schneide VHM	HSS	HSS	HSS	HSS	HSS	HSS-CO	HSS-CO	HSS	HSS-CO	
Spitzenwinkel Point angle		130°	130°	130°	120°	120°	130°	130°	130°	130°	130°	120°	130°	
Beschichtung Coating		FASE NIT.	VAP	BL	VP	TN	BL	FASE NIT.	VAP	BL	FASE NIT.	VP	BL	
Innenliegende Kühlkanäle Internal coolant		-	-	-	-	-	-	-	-	-	-	-	-	
Verstärkter Schaft Reinforced shank		-	-	-	-	-	-	-	-	-	-	-	-	
		6130	**6240**	**6231**	**6168**	**6168 TN**	**6201**	**6212**	**6204**	**6114**	**6115**	**6176**	**6116**	
		VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	VC F*	
P	< 800 N/mm²	14 6	30 9	- -	25 8	28 9	30 9	28 9	30 9	33 9	30 9	25 8	33 8	
P	700-1000 N/mm²	9 5	25 8	- -	20 7	23 8	- -	23 8	25 8	22 8	25 8	20 7	22 7	
P	1000-1300 N/mm²	4 4	15 6	- -	10 6	- 7	- -	18 7	15 6	- -	20 7	10 6	- -	
M	Austenitisch	5 -	10 5	- -	8 4	10 5	- -	- -	10 5	13 5	10 -	8 4	13 5	
M	Austenitisch / ferritisch	- -	- -	- -	- -	- -	- -	- -	- -	10 4	8 -	- -	10 4	
K	GG	18 5	25 8	35 9	17 8	20 9	- -	25 8	25 7	25 8	35 10	17 8	25 8	
K	GGG	9 3	15 6	- -	10 7	12 8	- -	15 6	15 6	- -	20 8	10 7	- -	
N	Aluminium	20 6	40 10	- -	30 10	35 10	40 10	35 10	- -	40 10	40 10	30 10	40 10	
N	NE-Metalle	20 5	30 8	- -	25 7	28 8	35 8	25 8	30 8	33 8	30 8	25 7	33 7	
S	Titan	- -	- -	- -	- -	- -	- -	- -	- -	8 4	- -	- -	8 4	
S	Sonderlegierungen basiert auf Ni	- -	- -	- -	- -	- -	- -	- -	- -	5 3	- -	- -	5 3	
H	Gehärteter Stahl 38 / 48 HRC	- -	- -	10 3	- -	- -	- -	- -	- -	- -	- -	- -	- -	
H	Gehärteter Stahl 48 / 58 HRC	- -	- -	8 2	- -	- -	- -	- -	- -	- -	- -	- -	- -	
H	Gehärteter Stahl 58 / 68 HRC	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN

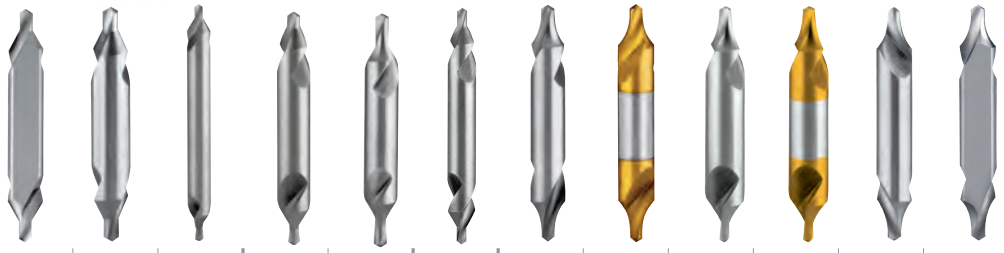
TECHNICAL DATA



N	W	HD	N	STL	STL	N	STL	STL	STL	A	A	A	A	A	A
160	164	168	160	164	166	160	164	166	164	172	172	172	172	172	172
341			1870-1			1870-2			Ilix Norm.	333 A					
12xd			16xd			22xd			40xd	-					
HSS	HSS	HSS-CO	HSS	HSS	HSS-CO	HSS	HSS	HSS-CO	HSS-CO	VHM	HSS	HSS	HSS	HSS	HSS
120°	130°	130°	120°	130°	130°	120°	130°	130°	130°	-	-	-	-	-	-
VP	FASE NIT.	FASE NIT.	VP	FASE NIT	FASE NIT.	VP	FASE NIT.	VAP	FASE NIT.	BL	BL	TN	BL	TN	BL
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6233	6222	6119	6220/ 1	6221/ 1	6219/ 1	6220/ 2	6221/ 2	6219/ 2	6150	6296	6290	6290 TN	6162	6162 TN	6294

VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
20	7	25	8	28	9	18	7	20	7	22	8	15	6	17	6	20	7	20	7	45	7	30	5	35	6	30	5	35	6	30	5
15	6	-	-	23	8	10	6	12	6	15	7	8	5	9	5	13	6	15	6	35	6	20	4	25	5	20	4	25	5	20	4
8	5	-	-	19	7	6	5	8	5	10	6	5	4	6	4	8	4	11	5	30	5	12	3	18	4	12	3	18	4	12	3
6	3	-	-	-	-	4	3	-	-	-	-	3	2	-	-	-	-	-	-	28	4	10	3	15	4	10	3	15	4	10	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	3	8	2	12	3	8	2	12	3	8	2
17	8	-	-	-	-	15	7	20	7	25	7	13	6	13	7	15	7	13	7	40	6	25	4	27	5	25	4	27	5	25	4
8	7	-	-	-	-	7	5	12	6	15	6	6	4	8	6	10	6	8	6	35	5	20	3	23	4	20	3	23	4	20	3
35	9	30	10	35	11	35	8	37	8	40	9	30	7	33	7	37	8	28	6	100	7	50	5	55	6	50	5	55	6	50	5
25	7	25	7	28	8	17	6	20	6	22	7	14	5	16	5	20	6	21	5	90	6	40	5	45	5	40	5	45	5	40	5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	3	4	3	5	3	4	3	5	3	4	3
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	2	2	2	3	2	2	2	3	2	2	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	2	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA



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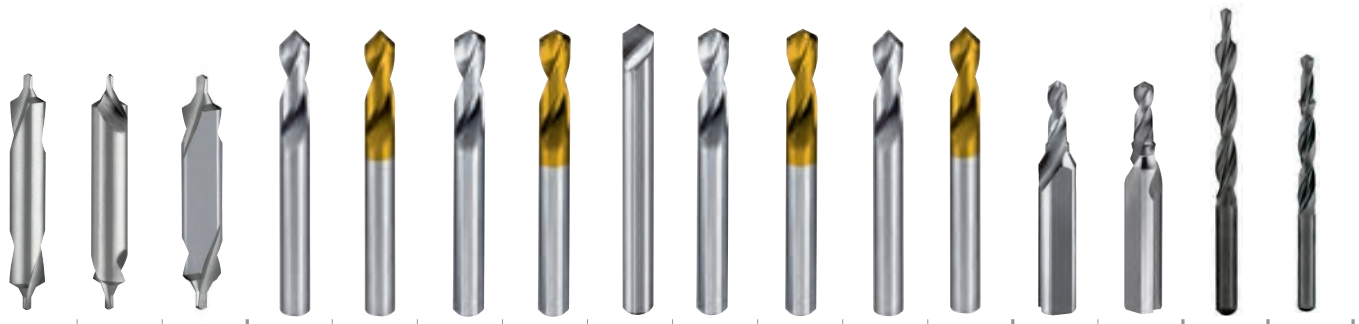
TECHNISCHE DATEN
TECHNICAL DATA



B	B	B	NC	NC	NC	NC	NC	NC	NC	R	NC	NC	NC	-	-
174	174	174	174	174	174	174	176	176	176	176	176	176	176	176	176
333 B			Ilix Norm.									332		8374	8378
-			-									-		-	-
HSS	HSS	HSS	HSS	HSS	HSS	HSS	HSS	VHM	VHM	VHM	VHM	HSS	HSS	HSS	HSS
-	-	-	90°	90°	120°	120°	120°	120°	120°	-	120°	60°	R	90°	90°
BL	BL	BL	BL	TN	BL	TN	BL	BL	NC	BL	NC	BL	BL	VP	VP
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6297	6298 B	6289	6148	6148 TN	6147	6147 TN	6100	6102	6102 TN	6103	6103 TN	6249	6250	6281	6282

VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
30	5	30	5	30	5	32	6	35	6	32	6	35	6	32	6	50	7	55	7	50	7	55	7	30	6	30	6	30	8	30	8
20	4	20	4	20	4	25	5	27	5	25	5	27	5	25	5	30	6	35	6	30	6	35	6	22	5	22	5	27	7	27	7
12	3	12	3	12	3	18	4	20	4	18	4	20	4	18	4	25	5	28	5	25	5	28	5	15	4	15	4	15	6	15	6
10	3	10	3	10	3	15	4	17	4	15	4	17	4	15	4	23	5	25	5	25	5	25	5	12	4	12	4	10	4	10	4
8	2	8	2	8	2	12	3	14	3	12	3	14	3	12	3	20	4	22	4	20	4	22	4	9	3	9	3	8	3	8	3
25	4	25	4	25	4	30	5	32	5	30	5	32	5	30	5	40	6	43	6	40	6	43	6	25	5	25	5	30	8	30	8
20	3	20	3	20	3	25	4	27	4	25	4	27	4	25	4	30	5	33	5	30	5	33	5	20	4	20	4	25	7	25	7
50	5	50	5	50	5	55	6	58	6	55	6	58	6	55	6	70	7	75	7	70	7	75	7	50	6	50	6	40	9	40	9
40	5	40	5	40	5	45	5	47	5	45	5	47	5	45	5	60	6	65	6	60	6	65	6	40	5	40	5	33	8	33	8
5	3	5	3	5	3	5	3	6	3	5	3	6	3	5	3	8	4	9	4	8	4	9	4	-	-	-	-	5	3	5	3
2	2	2	2	2	2	3	2	4	2	3	2	4	2	3	2	6	3	7	3	6	3	7	3	-	-	-	-	2	2	2	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA



Typ Type		-		-		-		-		-		-	
ILIX Typ-siehe Seite Ilix Type -See page		176		176		178		178		178		178	
DIN		**8376**		**8376**		**8375**		**8377**		**1898 A**			
Bohrtiefe Drilling depth		-		-		-		-		-		-	
Schneidrichtung Cutting direction													
Schneidstoff Material		HSS		HSS		HSS		HSS		HSS		HSS	
Spitzenwinkel Point angle		180°		90°		90°		180°		120°		120°	
Beschichtung Coating		VP		VP		VP		VP		VP		VP	
Innenliegende Kühlkanäle Internal coolant		-		-		-		-		-		-	
Verstärkter Schaft Reinforced shank		-		-		-		-		-		-	
		6283		**6284**		**6285**		**6286**		**6501**		**6502**	
		VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
P	< 800 N/mm²	30	8	30	8	30	8	30	8	30	8	30	8
P	700-1000 N/mm²	27	7	27	7	27	7	27	7	27	7	27	7
P	1000-1300 N/mm²	15	6	15	6	15	6	15	6	15	6	15	6
M	Austenitisch	10	4	10	4	10	4	10	4	10	4	10	4
M	Austenitisch / ferritisch	8	3	8	3	8	3	8	3	8	3	8	3
K	GG	30	8	30	8	30	8	30	8	30	8	30	8
K	GGG	25	7	25	7	25	7	25	7	25	7	25	7
N	Aluminium	40	9	40	9	40	9	40	9	40	9	40	9
N	NE-Metalle	33	8	33	8	33	8	33	8	33	8	33	8
S	Titan	5	3	5	3	5	3	5	3	5	3	5	3
S	Sonderlegierungen basiert auf Ni	2	2	2	2	2	2	2	2	2	2	2	2
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

ILIX Präzisionswerkzeuge GmbH

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PRECISION



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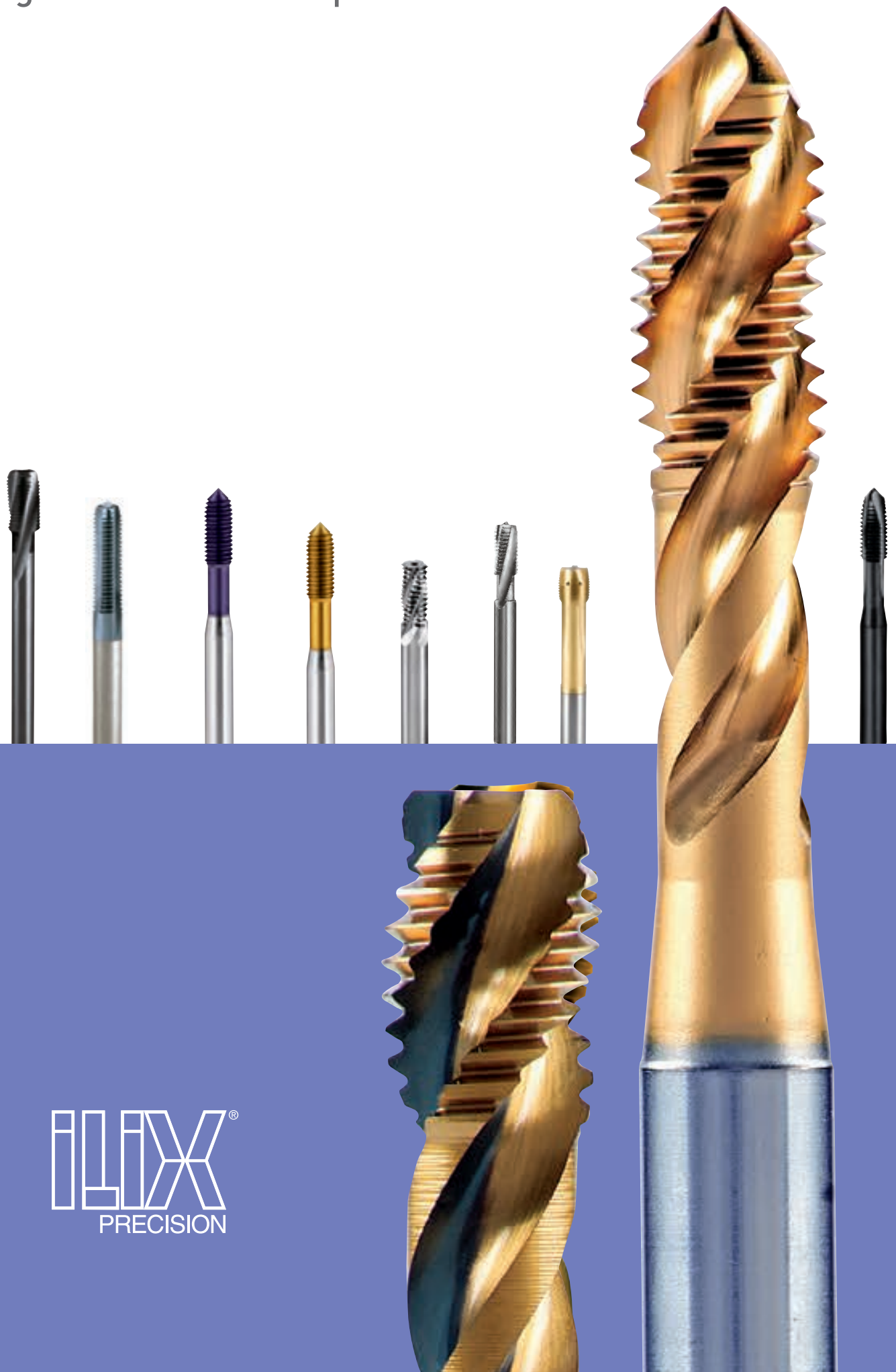
Hochleistungs-Gewindebohrer

High Performance Taps



ILIX® PRECISION



Hochleistungs-Gewindebohrer
High Performance Taps

▶ Zeichenerklärung
Key to symbols

SCHNEIDSTOFF / TOOL MATERIAL

- HSS-Co
- HSS-Co-8
- HSS
- K 20 — VHM / Feinstkorn — Solid carbide / Micro grain

BESCHICHTUNG / COATING

- Unbeschichtet — Blank
- TN — TiN
- TF — TiAlN Futura
- TC — TiCN
- HL — Hard Lube
- XB — TiCN Top

OBERFLÄCHENBEHANDLUNGEN / SURFACE TREATMENT

- Nitriert — Nitrided

▶ Werkzeug-Auswahlhilfe
Tool selection guide

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Multi Rapid VA - Multi VA							
6773 	**M**	3 ÷ 10	**371**		6HX	0°	B
6774 	**M**	3 ÷ 10	**371**		6HX	50°	C
6778 	**M**	12 ÷ 20	**376**		6HX	0°	B
6779 	**M**	12 ÷ 20	**376**		6HX	50°	C
6984 NEW 	**MF**	8 ÷ 20	**374**		6HX	0°	B
6985 NEW 	**MF**	8 ÷ 20	**374**		6HX	50°	C
6986 NEW 	**UNC**	nr. 6 ÷ 3/8	**2184/1**		2BX	0°	B
6987 NEW 	**UNC**	nr. 6 ÷ 3/8	**2184/1**		2BX	50°	C
6988 NEW 	**UNF**	6 ÷ 3/8	**2184/1**		2BX	0°	B
6989 NEW 	**UNF**	6 ÷ 3/8	**2184/1**		2BX	50°	C
Multi Rapid HD - Multi HD							
6750 	**M**	3 ÷ 10	**371**		6H	0°	B
6755 	**M**	3 ÷ 10	**371**		6H	40°	C
6751 	**M**	12 ÷ 20	**376**		6H	0°	B
6756 	**M**	12 ÷ 20	**376**		6H	40°	C
6752 	**MF**	8 ÷ 20	**374**		6H	0°	B
6757 	**MF**	8 ÷ 20	**374**		6H	40°	C

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	313
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	313
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	314
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	314
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	315
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	315
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	316
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	316
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	317
TC	-		HSS-Co-PM	●	●	-	❍	❍	-	317
TN	-		HSS-Co-PM	●	❍	●	-	-	-	319
TN	-		HSS-Co-PM	●	❍	●	-	-	-	319
TN	-		HSS-Co-PM	●	❍	●	-	-	-	320
TN	-		HSS-Co-PM	●	❍	●	-	-	-	320
TN	-		HSS-Co-PM	●	❍	●	-	-	-	321
TN	-		HSS-Co-PM	●	❍	●	-	-	-	321

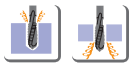
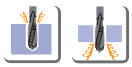
MASCHINEN-GEWINDEBOHRER MIT INNERER KÜHLMITTELZUFUHR
MACHINE TAPS WITH AXIAL INTERNAL COOLING

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Multi Rapid HD - Multi HD							
6993 NEW 	**UNC**	nr. 6 ÷ 3/8	**2184/1**		2B	0°	B
6994 NEW 	**UNC**	nr. 6 ÷ 3/8	**2184/1**		2B	40°	C
6995 NEW 	**UNF**	nr. 6 ÷ 3/8	**2184/1**		2B	0°	B
6996 NEW 	**UNF**	nr. 6 ÷ 3/8	**2184/1**		2B	40°	C
Multi Rapid HD i - Multi HD i							
6753 	**M**	6 ÷ 10	**371**		6H	0°	B
6772 	**M**	6 ÷ 10	**371**		6H	40°	C
6758 	**M**	12 ÷ 20	**376**		6H	0°	B
6777 	**M**	12 ÷ 20	**376**		6H	40°	C
Sincro Ilix i							
6975 	**M**	5 ÷ 10	**371**		6HX	0°	B
6971 	**M**	5 ÷ 10	**371**		6HX	15°	C
6973 	**M**	5 ÷ 10	**371**		6HX	40°	C
6972 	**M**	12 ÷ 20	**376**		6HX	15°	C
6974 	**M**	12 ÷ 20	**376**		6HX	40°	C
6978 	**MF**	8 ÷ 20	**374**		6HX	0°	B
6977 	**MF**	8 ÷ 20	**374**		6HX	40°	C

MASCHINEN-GEWINDEBOHRER MIT INNERER KÜHLMITTELZUFUHR
MACHINE TAPS WITH AXIAL INTERNAL COOLING

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN	-		HSS-Co-PM	●	❍	●	-	-	-	322
TN	-		HSS-Co-PM	●	❍	●	-	-	-	322
TN	-		HSS-Co-PM	●	❍	●	-	-	-	323
TN	-		HSS-Co-PM	●	❍	●	-	-	-	323
TC TN			HSS-Co-PM	●	●	●	-	-	-	325
TC TN			HSS-Co-PM	●	●	●	-	-	-	326
TC TN			HSS-Co-PM	●	●	●	-	-	-	327
TC TN			HSS-Co-PM	●	●	●	-	-	-	328
TN			HSS-Co-PM	●	❍	●	●	❍	-	330
TN			HSS-Co-PM	●	❍	●	●	❍	-	330
TN			HSS-Co-PM	●	❍	●	●	❍	-	330
TN			HSS-Co-PM	●	❍	●	●	❍	-	331
TN			HSS-Co-PM	●	❍	●	●	❍	-	331
TN			HSS-Co-PM	●	❍	●	●	❍	-	332
TN			HSS-Co-PM	●	❍	●	●	❍	-	332

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Multi GG							
6964 	**M**	3 ÷ 10	**371**		6HX	0°	C
6965 	**M**	12 ÷ 30	**376**		6HX	0°	C
6966 	**MF**	8 ÷ 30	**374**		6HX	0°	C
Multi GG i ■ **Maschinen-Gewindebohrer mit radialem Kühlmittelaustritt /** Machine taps							
6967 	**M**	6 ÷ 10	**371**		6HX	0°	C
T-Black ■ **Mit Abschrägung TiCN TOP /** Back tapered TiCN TOP							
6668 	**M**	4 ÷ 10	**371**		6H	40°	C
6669 	**M**	12 ÷ 24	**376**		6H	40°	C
6830 	**MF**	6 ÷ 20	**374**		6H	40°	C
6831 	**UNC**	nr. 6 ÷ 3/8	**2184/1**		2B	40°	C
6832 	**UNC**	7/16 ÷ 2	**2184/1**		2B	40°	C
6833 	**UNF**	nr. 6 ÷ 3/8	**2184/1**		2B	40°	C
6834 	**UNF**	7/16 ÷ 1	**2184/1**		2B	40°	C
6835 	**BSP-G**	1/16 ÷ 1	**5156**		-	40°	C
VR i 15° ■ **Mit Innen Kühlung /** Internal Coolant							
6601 	**M**	6 ÷ 10	**371**		6HX	15°	C

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co-PM	-	-	●	❍	-	-	334
-	-		HSS-Co-PM	-	-	●	❍	-	-	335
-	-		HSS-Co-PM	-	-	●	❍	-	-	336
with radial coolant										
HL			HSS-Co-PM	-	-	●	❍	-	-	338
XB	-		HSS-Co-PM	●	●	●	●	❍	-	340
XB	-		HSS-Co-PM	●	●	●	●	❍	-	341
XB	-		HSS-Co-PM	●	●	●	●	❍	-	342
XB	-		HSS-Co-PM	●	●	●	●	❍	-	343
XB	-		HSS-Co-PM	●	●	●	●	❍	-	344
XB	-		HSS-Co-PM	●	●	●	●	❍	-	345
XB	-		HSS-Co-PM	●	●	●	●	❍	-	346
XB	-		HSS-Co-PM	●	●	●	●	❍	-	347
TN			HSS-Co-PM	●	●	●	●	❍	-	348

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Ti							
6683	**M**	3 ÷ 10	**371**		6HX	0°	B
6684	**M**	3 ÷ 10	**371**		6HX	15°	C
6825	**M**	12 ÷ 20	**376**		6HX	0°	B
6826	**M**	12 ÷ 20	**376**		6HX	15°	C
6828	**MF**	8 ÷ 20	**374**		6HX	0°	B
6829	**MF**	8 ÷ 20	**374**		6HX	15°	C
Ni							
6892	**M**	2 ÷ 10	**371**		6HX	0°	B
6894	**M**	3 ÷ 10	**371**		6HX	10°	C
6895	**M**	2 ÷ 10	**371**		6HX	22°	C
6893	**M**	12 ÷ 20	**376**		6HX	0°	B
6948 NEW	**M**	12	**376**		6HX	10°	C
6896	**M**	12 ÷ 20	**376**		6HX	22°	C
6906	**MJ**	3 ÷ 10	**371**		4HX	10°	C
6869	**UNC**	nr. 2 ÷ 3/8	**2184/1**		2BX	0°	B
6990 NEW	**UNC**	nr. 4 ÷ 3/8	**2184/1**		2BX	10°	C
6900	**UNC**	nr. 6 ÷ 3/8	**2184/1**		2BX	22°	C

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co-PM	❍	-	-	-	●	-	350
-	-		HSS-Co-PM	❍	-	-	-	●	-	351
-	-		HSS-Co-PM	❍	-	-	-	●	-	352
-	-		HSS-Co-PM	❍	-	-	-	●	-	353
-	-		HSS-Co-PM	❍	-	-	-	●	-	354
-	-		HSS-Co-PM	❍	-	-	-	●	-	355
-	-		HSS-Co-PM	❍	-	-	-	●	-	357
-	-		HSS-Co-PM	❍	-	-	-	●	-	358
-	-		HSS-Co-PM	❍	-	-	-	●	-	359
-	-		HSS-Co-PM	❍	-	-	-	●	-	360
-	-		HSS-Co-PM	❍	-	-	-	●	-	361
-	-		HSS-Co-PM	❍	-	-	-	●	-	362
-	-		HSS-Co-PM	❍	-	-	-	●	-	363
-	-		HSS-Co-PM	❍	-	-	-	●	-	364
-	-		HSS-Co-PM	❍	-	-	-	●	-	365
-	-		HSS-Co-PM	❍	-	-	-	●	-	366

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Ni							
6897	**UNC**	1/2 ÷ 3/4	**2184/1**		2BX	0°	B
6997 NEW	**UNC**	7/16 ÷ 5/8	**2184/1**		2BX	10°	C
6998 NEW	**UNJC**	nr. 6 ÷ 3/8	**2184/1**		3BX	10°	C
6844	**UNF**	nr. 2 ÷ 3/8	**2184/1**		2BX	0°	B
6928 NEW	**UNF**	nr. 6 ÷ 3/8	**2184/1**		2BX	10°	C
6846	**UNF**	nr. 10 ÷ 3/8	**2184/1**		2BX	22°	C
6845	**UNF**	7/16 ÷ 3/4	**2184/1**		2BX	0°	B
6929 NEW	**UNF**	7/16 ÷ 5/8	**2184/1**		2BX	10°	C
6907	**UNJF**	nr. 6 ÷ 3/8	**2184/1**		3BX	10°	C
Multi TP							
6770	**M**	4 ÷ 12	**371**		6HX	0°	C

HSS-Co-PM
FORMER / COLD FORMING TAPS

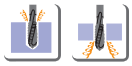
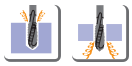
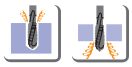
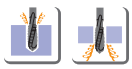
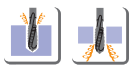
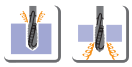
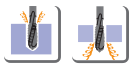
KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Former PM							
6800	**M**	3 ÷ 10	**371**		6HX	-	C
6801	**M**	6 ÷ 10	**371**		6HX	-	C
6969	**M**	5 ÷ 10	**371**		6HX	-	C

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co-PM	❍	-	-	-	●	-	367
-	-		HSS-Co-PM	❍	-	-	-	●	-	368
-	-		HSS-Co-PM	❍	-	-	-	●	-	369
-	-		HSS-Co-PM	❍	-	-	-	●	-	370
-	-		HSS-Co-PM	❍	-	-	-	●	-	371
-	-		HSS-Co-PM	❍	-	-	-	●	-	372
-	-		HSS-Co-PM	❍	-	-	-	●	-	373
-	-		HSS-Co-PM	❍	-	-	-	●	-	374
-	-		HSS-Co-PM	❍	-	-	-	●	-	375
TC	-		K10-K20	-	-	❍	-	-	●	377

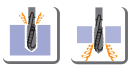
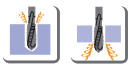
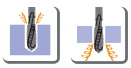
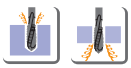
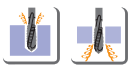
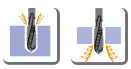
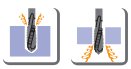
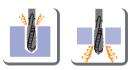
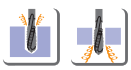
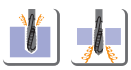
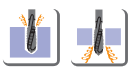
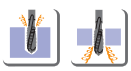
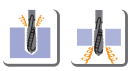
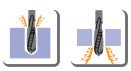
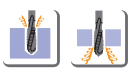
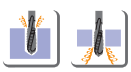
HSS-Co-PM
FORMER / COLD FORMING TAPS

TF	-		HSS-Co-PM	●	●	-	●	-	-	379
TN			HSS-Co-PM	●	●	-	●	-	-	380
TN			HSS-Co-PM	●	●	-	●	-	-	381

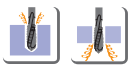
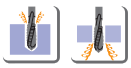
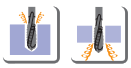
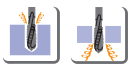
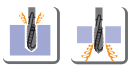
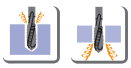
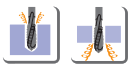
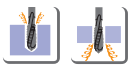
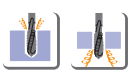
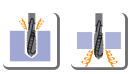
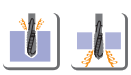
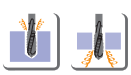
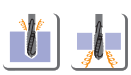
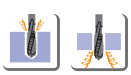
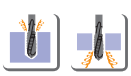
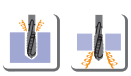
KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Former ■ **Former /** Cold forming taps							
6788 	**M**	4 ÷ 10	**371**		6HX	-	C
N ■ **Gerade genutet /** Straight flutes							
6771 	**M**	3 ÷ 10	**371***		6HX	0°	C
6792 	**M**	12	**376***		6HX	0°	C
N ■ **15° rechtsdrall /** 15° Spiral flutes							
6736 	**M**	3 ÷ 10	**371***		6HX	15°	C
6759 	**M**	12	**376***		6HX	15°	C
6714 	**M**	12	**376***		6HX	15°	C
GG i ■ **Gerade genutet mit Kühlmittelaustritt Austritt axial /** Straight flutes with axial							
6760 	**M**	5 ÷ 10	**371***		6HX	0°	C
6763 	**M**	12	**376***		6HX	0°	C
6766 	**M**	8 ÷ 10	**374***		6HX	0°	C
6768 	**M**	12	**374***		6HX	0°	C
N i ■ **15° Rechtsdrall mit Kühlmittelaustritt Austritt axial /** 15° Spiral flutes with axial							
6762 	**M**	5 ÷ 10	**371***		6HX	15°	C
6765 	**M**	12	**376***		6HX	15°	C
6767 	**M**	8 ÷ 10	**374***		6HX	15°	C
6769 	**M**	12	**374***		6HX	15°	C

* Baumaße ähnlich DIN 371 - 374 (Innenkühlung ab M 6) / Dimensions similar to DIN 371/374/376 / Oil feed holes onwards from M 6)

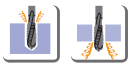
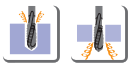
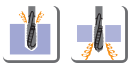
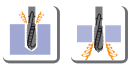
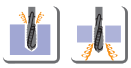
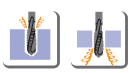
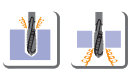
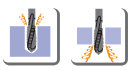
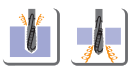
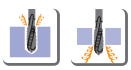
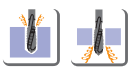
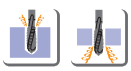
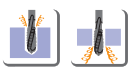
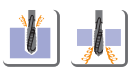
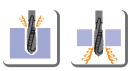
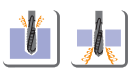
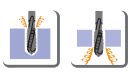
BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		K 20	●	●	-	●	-	-	382
-	-		K 20	-	-	●	●	-	-	384
-	-		K 20	-	-	●	●	-	-	385
-	-		K 20	-	-	●	-	-	-	384
-	-		K 20	-	-	●	-	-	-	385
-	-		K 20	-	-	●	-	-	-	385
internal coolant										
-			K 20	-	-	●	●	-	-	386
-			K 20	-	-	●	●	-	-	387
-			K 20	-	-	●	●	-	-	388
-			K 20	-	-	●	●	-	-	389
internal coolant										
-			K 20	-	-	●	●	-	-	386
-			K 20	-	-	●	●	-	-	387
-			K 20	-	-	●	●	-	-	388
-			K 20	-	-	●	●	-	-	389

KAT.-NR. ITEM		SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
TP ■ **Gehärteter Stahl /** Hardened steels 54 - 63 HRC								
7015		**M**	4 ÷ 12	-		4H-6H 6G-7G	0°	-
7016		**M**	4 ÷ 12	-		4H-6H 6G-7G	0°	-
Micro ■ **Gewindefräser mit einer Reihe Gewindeprofil /** thread milling cutters with single								
7081		**M**	1 ÷ 3,5	-		4H-6H 6G-7G	0°	-
7082		**M**	1 ÷ 3,5	-		4H-6H 6G-7G	0°	-
7083 NEW		**M**	1,2 ÷ 6	-		4H-6H 6G-7G	0°	-
Multi TM 27° ■ **Gewindefräser mit Innerer Kühlmittelzufuhr /** Thread milling with								
7000		**M**	2 ÷ 10	-		6H 6G-7G	27°	-
7001		**M**	6 ÷ 20	-		4H-6H 6G-7G	27°	-
7013 NEW		**MJ**	4 ÷ 12	-		4H	27°	-
7002		**MF**	4 ÷ 10	-		6H-6G	27°	-
7003		**MF**	6 ÷ 12	-		6H-6G	27°	-
7007		**UNC**	1/4 ÷ 1/2	-		2B-3B	27°	-
7009		**UNF**	1/4 ÷ 1/2	-		2B-3B	27°	-
7014 NEW		**UNJF**	10 ÷ 1/2	-		3B	27°	-
7005		**BSP/G**	1/8 ÷ 3/8	-		-	27°	-
7010		**NPT**	1/8 ÷ 1/2	-		-	27°	-
7012		**NPTF**	1/8 ÷ 1/2	-		-	27°	-

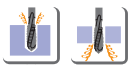
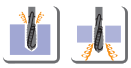
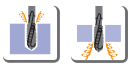
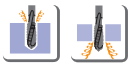
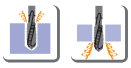
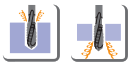
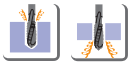
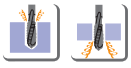
BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TF	-		K 20	●	-	-	-	-	●	391
TF	-		K 20	●	-	-	-	-	●	392
ring of theeth										
TC	-		K 20	●	●	-	-	-	●	393
TC	-		K 20	●	●	-	-	-	●	394
TC	-		K 20	●	●	-	-	-	●	395
internal coolant										
-			K 20	●	●	●	●	●	●	396
TF			K 20	●	●	●	●	●	●	397
TF			K 20	●	●	●	●	●	●	398
TF			K 20	●	●	●	●	●	●	399
TF			K 20	●	●	●	●	●	●	400
TF			K 20	●	●	●	●	●	●	401
TF			K 20	●	●	●	●	●	●	402
TF			K 20	●	●	●	●	●	●	403
TF			K 20	●	●	●	●	●	●	404
TF			K 20	●	●	●	●	●	●	405
TF			K 20	●	●	●	●	●	●	406

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Multi TM 15° ■ Gewindefräser mit Innerer Kühlmittelzufuhr / Thread milling with							
7020 	**M**	M 8 ÷ M 20	-		4H-6H 6G-7G	15°	-
7027 	**UN**	1/2 ÷ 1	-		2B-3B	15°	-
7024 	**BPS/G**	1/4 ÷ 2"	-		-	15°	-
7030 	**NPT**	1/2 ÷ 2"	-		-	15°	-
7032 	**NPTF**	1/2 ÷ 2"	-		-	15°	-
Multi TM ■ Gewindefräser mit Innerer Kühlmittelzufuhr / Thread milling with							
6930 	**M**	16 ÷ 20	-		-	0°	-
6931 	**M**	12 ÷ 20	-		-	0°	-
6932 	**G**	1/2	-		-	0°	-
Multi CTM ■ Gewindefräser mit Senkfase und innerer Kühlmittelzufuhr / Thread							
7040 	**M**	2 ÷ 20	-		4H-6H 6G-7G	27°	-
7041 	**M**	2 ÷ 20	-		4H-6H 6G-7G	27°	-
7042 	**MF**	4 ÷ 16	-		6H-6G	27°	-
7043 	**MF**	4 ÷ 10	-		6H-6G	27°	-
7046 	**UNC**	nr. 8 ÷ 5/8	-		2B-3B	27°	-
7048 	**UNF**	nr. 10 ÷ 5/8	-		2B-3B	27°	-
7044 	**BSP/G**	1/8 ÷ 3/8	-		-	27°	-
7050 	**NPT**	1/8 ÷ 3/8	-		-	27°	-

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
internal coolant										
TF			K 20	●	●	●	●	●	●	407
TF			K 20	●	●	●	●	●	●	408
TF			K 20	●	●	●	●	●	●	409
TF			K 20	●	●	●	●	●	●	410
TF			K 20	●	●	●	●	●	●	411
internal coolant										
TF			K 20	●	●	●	●	●	●	412
TF			K 20	●	●	●	●	●	●	413
TF			K 20	●	●	●	●	●	●	414
milling and countersinking with internal coolant										
TF			K 20	●	●	●	●	●	●	415
TF			K 20	●	●	●	●	●	●	416
TF			K 20	●	●	●	●	●	●	417
TF			K 20	●	●	●	●	●	●	418
TF			K 20	●	●	●	●	●	●	419
TF			K 20	●	●	●	●	●	●	420
TF			K 20	●	●	●	●	●	●	421
TF			K 20	●	●	●	●	●	●	422

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Multi CTM ■ Gewindefräser mit Senkfase und innerer Kühlmittelzufuhr / Thread							
7052 	**NPTF**	1/8 ÷ 3/8	-		-	27°	-
6933 	**M**	5 ÷ 16	-		-	27°	-
6935 	**M**	5 ÷ 16	-		-	27°	-
6934 	**MF**	6 ÷ 16	-		-	27°	-
6936 	**MF**	6 ÷ 16	-		-	27°	-
Multi DTM ■ 2 Schneiden zum Bohren Gewindefräsen und Senken mit innerer							
6940 	**M**	3 ÷ 16	-		4H-6H 6G	-	-
6942 	**M**	3 ÷ 16	-		4H-6H 6G	-	-
6947 	**M**	6 ÷ 16	-		4H-6H 6G	-	-
6944 	**MF**	5 ÷ 16	-		6H-6G	-	-
6946 	**MF**	5 ÷ 16	-		6H-6G	-	-
6943 	**MF**	8 ÷ 16	-		6H-6G	-	-
7068 	**UNC**	10 ÷ 5/8	-		2B-3B	-	-
7070 	**UNC**	10 ÷ 5/8	-		2B-3B	-	-
7064 	**UNF**	10 ÷ 5/8	-		2B-3B	-	-
7066 	**UNF**	10 ÷ 5/8	-		2B-3B	-	-
7060 	**BSP/G**	1/8 ÷ 3/8	-		-	-	-
7062 	**BSP/G**	1/8 ÷ 3/8	-		-	-	-

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
milling and countersinking with internal coolant										
TF			K 20	●	●	●	●	●	●	423
TF			K 20	●	●	●	●	●	●	424
TF			K 20	●	●	●	●	●	●	425
TF			K 20	●	●	●	●	●	●	426
TF			K 20	●	●	●	●	●	●	427
Kühlmittelzufuhr / 2 flutes - Thread milling and countersinking with internal coolant										
TF			K 20	-	-	❍	●	-	-	428
TF			K 20	-	-	❍	●	-	-	429
TF			K 20	-	-	❍	●	-	-	430
TF			K 20	-	-	❍	●	-	-	431
TF			K 20	-	-	❍	●	-	-	432
TF			K 20	-	-	❍	●	-	-	433
TF			K 20	-	-	❍	●	-	-	434
TF			K 20	-	-	❍	●	-	-	435
TF			K 20	-	-	❍	●	-	-	436
TF			K 20	-	-	❍	●	-	-	437
TF			K 20	-	-	❍	●	-	-	438
TF			K 20	-	-	❍	●	-	-	439

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Multi DTM ■ 3 Schneiden zum Bohren Gewindefräsen und Senken mit innerer							
7071 	**M**	6 ÷ 16	-		4H-6H 6G	-	-
7073 	**M**	3 ÷ 16	-		4H-6H 6G	-	-
7075 	**M**	3 ÷ 16	-		4H-6H 6G	-	-
7077 	**M**	6 ÷ 16	-		4H-6H 6G	-	-
7072 	**MF**	10 ÷ 14	-		4H-6H 6G	-	-
7074 	**MF**	6 ÷ 16	-		6H-6G	-	-
7076 	**MF**	8 ÷ 16	-		6H-6G	-	-
7078 	**MF**	8 ÷ 16	-		6H-6G	-	-
Multi TMI ■ Stahlkörper für Gewindefräsplatten / Steel body for thread inserts							
6960 	**M-MF BSP-UN**	16 25	-	-	**A B**	1 2	0°
6961 	**M-MF BSP-UN**	16 20 25	-	-	**A A B**	1 1 2	0°
6963 	**M-MF BSP-UN**	22 27	-	-	**A B**	1 2	0°
6962 	**M-MF BSP-UN**	25	-	-	**A**	1	0°
6950 	**M-MF**	-	**0,50 - 3,50**	6H-6G 7G	-	-	-
6956 	**M-MF**	-	**1,0 - 4,0**	6H-6G 7G	-	-	-
6954 	**UN**	-	**12 - 16**	2B-3B	-	-	-
6952 	**BSF BSP/G**	-	**11 - 14**	-	-	-	-

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
Kühlmittelzufuhr / 3 flutes - Thread milling and countersinking with internal coolant										
TF			K 20	-	-	❍	●	-	-	440
TF			K 20	-	-	❍	●	-	-	441
TF			K 20	-	-	❍	●	-	-	442
TF			K 20	-	-	❍	●	-	-	443
TF			K 20	-	-	❍	●	-	-	444
TF			K 20	-	-	❍	●	-	-	445
TF			K 20	-	-	❍	●	-	-	446
TF			K 20	-	-	❍	●	-	-	447
■ VHM Gewindefräsplatten / Solid carbide inserts										
-		-	-	-	-	-	-	-	-	448
-		-	-	-	-	-	-	-	-	448
-		-	-	-	-	-	-	-	-	448
-		-	-	-	-	-	-	-	-	448
TN	-	-	❍	❍	●	●	❍	-	-	449
TN	-	-	❍	❍	●	●	❍	-	-	450
TN	-	-	❍	❍	●	●	❍	-	-	451
TN	-	-	❍	❍	●	●	❍	-	-	452

KAT.-NR. ITEM		SIMBOL SYMBOL	Ø mm	STEIGUNG PITCH	TOLERANZ TOLERANCE	TYP TYPE	SCHNEIDEN CUTTING EDGE	DRALLWINKEL HELIX ANGLE
Multi TMI ■ **Stahlkörper für Gewindefräsplatten /** Steel bodyfor thread inserts								
6958		**BSF BSP/G**	-	**11 - 14**	-	**-**	-	-
Multi TMI EVOLUTION ■ **Stahlkörper für Gewindefräsplatten /** Steel body for								
6981	**NEW** 	**M-MF**	26		-	-	3	0°
6982	**NEW** 	**M-MF**	33		-	-	3	0°
6983	**NEW** 	**M-MF**	41		-	-	4	0°
6953	**NEW** 	**M-MF**	-	**1,0 - 4,0**	6H-6G 7G	-	-	-
6955	**NEW** 	**M-MF**	-	**1,0 - 5,0**	6H-6G 7G	-	-	-
6957	**NEW** 	**M-MF**	-	**2,0 - 6,0**	6H-6G 7G	-	-	-

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
■ VHM Gewindefräsplatten / Solid carbide inserts									
TN	-	-	❍	❍	●	●	❍	-	**453**
thread inserts **■ VHM Gewindefräsplatten /** Solid carbide inserts									
-		-	-	-	-	-	-	-	**454**
-		-	-	-	-	-	-	-	**454**
-		-	-	-	-	-	-	-	**454**
TICN	-		●	●	●	●	●	-	**455**
TICN	-		●	●	●	●	●	-	**456**
TICN	-		●	●	●	●	●	-	**457**

Multi Rapid **VA** & Multi **VA**

Multi Rapid VA und Multi VA HSS Co-PM bieten eine bessere Stabilität und Zuverlässigkeit zur Bearbeitung von rostfreien Stählen.
Neue Geometrie sichert eine bessere Spankontrolle.

Multi Rapid VA and Multi VA HSS Co-PM taps offer better stability and reliability on stainless steel material.
New geometries ensure better chip control.





ANSCHNITT FORM B IST FÜR DUCHGANGSLOCH UND ANSCHNITT FORM C IST FÜR SACKLOCH GEWINDE
Form-B chamfer for through hole and Form-C chamfer for blind hole tapping

SPANWINKEL SPEZIELL KONSTRUIERT FÜR HOCHLEGIERTE CHROM STÄHLE
Rake angle specifically designed for high Chrome materials

SPANNUTENWINKEL 0 ° UND 50 ° FÜHRT ZU GERINGEREN SCHNITTKRÄFTEN, GERINGER SCHNITT TEMPERATUREN, SICHERE UND SCHNELLE SPANABFUHR.
Flute angle 0° and 50° results in lower cutting forces and reduced cutting temperatures and ensures a fast and efficient chip evacuation rate

QUALITÄT HSS CO-PM
Quality HSS Co-PM

TICN-BASIERTE PVD-BESCHICHTUNG MIT HOHER VERSCHLEISSFESTIGKEIT UND GERINGE HAFTUNG ZUR AUFSCHWEISSUNGEN DES ZU BEARBEITENDEN MATERIAL.
TiCN-based PVD coating with high wear resistance and low adhesion to abrasive steels

GEEIGNETE ZUM ARBEITEN MIT STARREN SPANNSYSTEMEN
Suitable for rigid tapping machining

ILIX® PRECISION

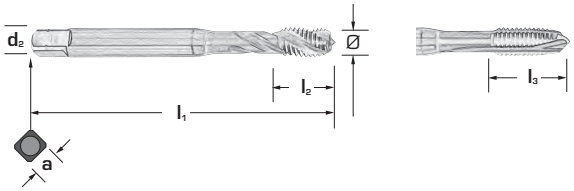
DIN 371



Maschinen-Gewindebohrer mit verstärktem Schaft für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank for ISO metric coarse thread acc. to DIN 13 - New Geometry

Multi VA, Multi Rapid VA

M TICN





Typ / Type	Multi Rapid VA	Multi VA 50°
Toleranz Tolerance	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6773 TC	6774 TC
M 3	0,50	2,5	56	5	11	3,5	2,7	●	●
M 4	0,70	3,3	63	7	13	4,5	3,4	●	●
M 5	0,80	4,2	70	8	16	6,0	4,9	●	●
M 6	1,00	5,0	80	10	19	6,0	4,9	●	●
M 8	1,25	6,8	90	12	22	8,0	6,2	●	●
M 10	1,50	8,5	100	14	24	10,0	8,0	●	●

● Standardartikel / Items available ex stock

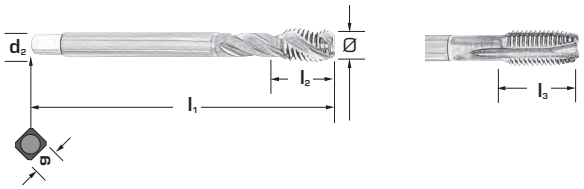
DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread acc. to DIN 13

MULTI VA - MULTI RAPID VA

Multi VA, Multi Rapid VA

M TICN





Typ / Type	Multi Rapid VA	Multi VA 50°
Toleranz Tolerance	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6778 TC	6779 TC
M 12	1,75	10,2	110	16	29	9,0	7,0	●	●
M 14	2,00	12,0	110	20	30	11,0	9,0	●	●
M 16	2,00	14,0	110	20	32	12,0	9,0	●	●
M 20	2,00	14,0	110	20	32	12,0	9,0	●	●

● Standardartikel / Items available ex stock

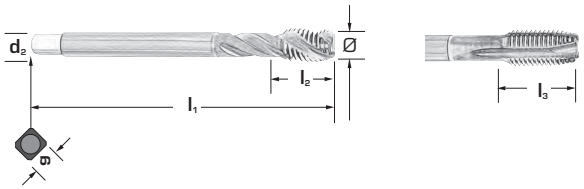
DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread acc. to DIN 13

Multi VA, Multi Rapid VA

MF TICN

NEW





Typ / Type	Multi Rapid VA	Multi VA 50°
Toleranz Tolerance	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6984 TC	6985 TC
MF 8	1,0	7,0	90	12	22	6	4,9	●	●
MF 10	1,0	9,0	90	14	20	7	5,5	●	●
MF 12	1,5	10,5	100	16	22	9	7,0	●	●
MF 16	1,5	14,5	100	20	22	12	9,0	●	●
MF 20	1,5	18,5	125	25	25	16	12,0	●	●

● Standardartikel / Items available ex stock

DIN 2184/1

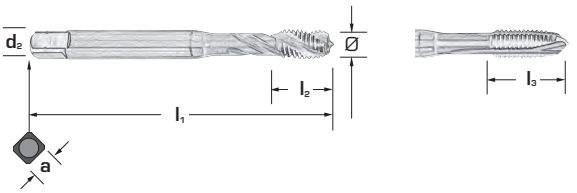
MULTI VA - MULTI RAPID VA

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

Multi VA, Multi Rapid VA

UNC TICN

NEW





Typ / Type	Multi Rapid VA	Multi VA 50°
Toleranz Tolerance	2 BX	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6986 TC	6987 TC
UNC nr. 6	- 32	2,85	56	6	13	4,0	3,0	●	●
UNC nr. 8	- 32	3,50	63	7	13	4,5	3,4	●	●
UNC nr. 10	- 24	3,90	70	8	16	6,0	4,9	●	●
UNC 1/4	- 20	5,10	80	10	17	7,0	5,5	●	●
UNC 5/16	- 18	6,60	90	12	20	8,0	6,2	●	●
UNC 3/8	- 16	8,00	90	12	20	10,0	8,0	●	●

● Standardartikel / Items available ex stock

DIN 2184/1

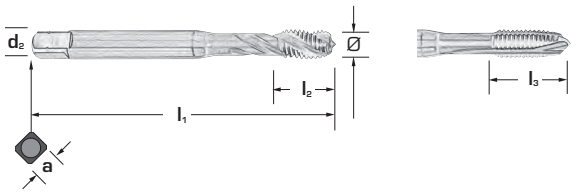
MULTI VA - MULTI RAPID VA

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 371

Multi VA, Multi Rapid VA

UNF TICN

NEW





Typ / Type	Multi Rapid VA	Multi VA 50°
Toleranz Tolerance	2 BX	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6988 TC	6989 TC
UNF nr. 6	- 40	2,95	56	6	12	4,0	2,1	●	●
UNF nr. 8	- 36	3,50	63	7	14	4,5	2,1	●	●
UNF nr. 10	- 32	4,10	70	8	14	6,0	2,7	●	●
UNF 1/4	- 28	5,50	80	10	16	7,0	3,4	●	●
UNF 5/16	- 24	6,90	90	12	18	8,0	4,9	●	●
UNF 3/8	- 24	8,50	90	12	20	10,0	7,0	●	●

● Standardartikel / Items available ex stock

Multi Rapid **HD** & Multi **HD**

Multi Rapid und Multi HD HSS Co-PM bietet bessere Stabilität und Zuverlässigkeit zur Bearbeitung von Material bis zu 800 N/mm².

Multi Rapid HD and Multi HD HSS Co-PM taps offer better stability and reliability on materials with tensile strength up to 800 N/mm².





ANSCHNITT FORM B IST FÜR DUCHGANGSLOCH UND ANSCHNITT FORM C IST FÜR SACKLOCH GEWINDE
Form-B chamfer for through hole and Form-C chamfer for blind hole tapping

SPANWINKEL SPEZIELL KONSTRUIERT FÜR MATERIAL MIT NIEDRIGER BIS MITTLERER FESTIGKEIT.
Rake angle specifically designed for medium to high mechanical strength materials

SPANNUTENWINKEL 0 ° UND 40 ° FÜHRT ZU GERINGEREN SCHNITTKRÄFTEN UND SICHERE SCHNELLE UND LEISTUNGSFÄHIGE SPANABFUHR
Flute angle 0° and 40° results in lower cutting forces and ensures a fast and efficient chip evacuation rate

QUALITÄT HSS CO-PM
Quality HSS Co-PM

TIN-BASIS PVD-BESCHICHTUNG HAT EINE SEHR GUTE VERSCHLEISSFESTIGKEIT UND SPANABFUHR.
TiN-based PVD coating provides very good wear resistance and chip flow

GEEIGNETE ZUM ARBEITEN MIT STARREN SPANNSYSTEMEN
Suitable for rigid tapping machining

ILIX® PRECISION

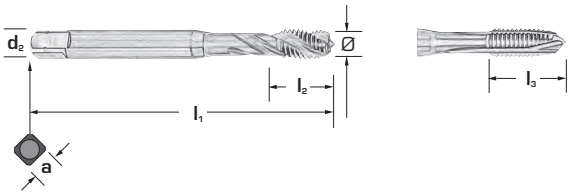
DIN 371

MULTI HD - MULTI RAPID HD

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread acc. to DIN 13

Multi HD, Multi Rapid HD

M TiN





Typ / Type	Multi Rapid HD	Multi HD 40°
Toleranz Tolerance	6 H	6 H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6750 TN	6755 TN
M 3	0,5	2,5	56	5	11	3,5	2,7	●	●
M 4	0,7	3,3	63	7	13	4,5	3,4	●	●
M 5	0,8	4,2	70	8	16	6,0	4,9	●	●
M 6	1,0	5,0	80	10	19	6,0	4,9	●	●
M 8	1,3	6,8	90	12	22	8,0	6,2	●	●
M 10	1,5	8,5	100	14	24	10,0	8,0	●	●

● Standardartikel / Items available ex stock

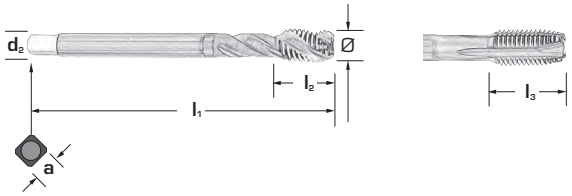
DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread acc. to DIN 13

MULTI HD - MULTI RAPID HD

Multi HD, Multi Rapid HD

M TiN





Typ / Type	Multi Rapid HD	Multi HD 40°
Toleranz Tolerance	6 H	6 H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6751 TN	6756 TN
M 12	1,8	10,2	110	16	29	9	7	●	●
M 14	2,0	12,0	110	20	30	11	9	●	●
M 16	2,0	14,0	110	20	32	12	9	●	●
M 18	2,5	15,5	125	24	34	14	11	●	●
M 20	2,5	17,5	140	25	34	16	12	●	●

● Standardartikel / Items available ex stock

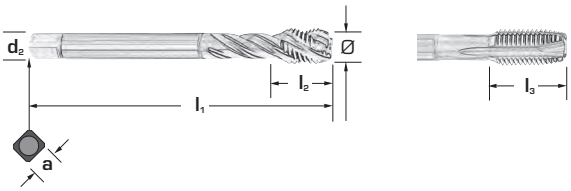
DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread acc. to DIN 13

MULTI HD - MULTI RAPID HD

Multi HD, Multi Rapid HD

MF TiN





Typ / Type	Multi Rapid HD	Multi HD 40°
Toleranz Tolerance	6 H	6 H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6752 TN	6757 TN
MF 8	1,0	7,0	90	12	22	6	4,9	●	●
MF 10	1,0	9,0	90	14	20	7	5,5	●	●
MF 12	1,5	10,5	100	16	22	9	7,0	●	●
MF 14	1,5	12,5	100	20	22	11	9,0	●	●
MF 16	1,5	14,5	100	20	22	12	9,0	●	●
MF 18	1,5	16,5	110	25	25	14	11,0	●	●
MF 20	1,5	18,5	125	25	25	16	12,0	●	●

● Standardartikel / Items available ex stock

DIN 2184/1

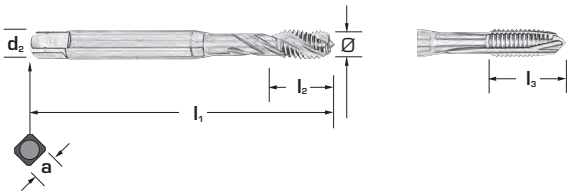
MULTI HD - MULTI RAPID HD

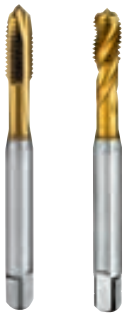
Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

Multi HD, Multi Rapid HD

UNC TiN

NEW





	Multi Rapid HD	Multi HD 40°
Typ / Type		
Toleranz Tolerance	2 B	2 B
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a mm h12	6993 TN	6994 TN
UNC nr. 6	- 32	2,85	56	6	13	4,0	3,0	●	●
UNC nr. 8	- 32	3,50	63	7	13	4,5	3,4	●	●
UNC nr. 10	- 24	3,90	70	8	16	6,0	4,9	●	●
UNC 1/4	- 20	5,10	80	10	17	7,0	5,5	●	●
UNC 5/16	- 18	6,60	90	12	20	8,0	6,2	●	●
UNC 3/8	- 16	8,00	90	12	20	10,0	8,0	●	●

● Standardartikel / Items available ex stock

DIN 2184/1

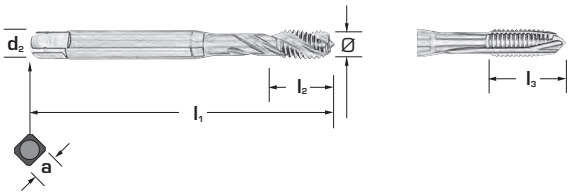
MULTI HD - MULTI RAPID HD

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNF – ASME – B 1.1
Baumaße an DIN 371 fein
Machine taps with reinforced shank
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 371

Multi HD, Multi Rapid HD

UNF TiN

NEW





Typ / Type	Multi Rapid HD	Multi HD 40°
Toleranz Tolerance	2 B	2 B
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co-PM	HSS-Co-PM

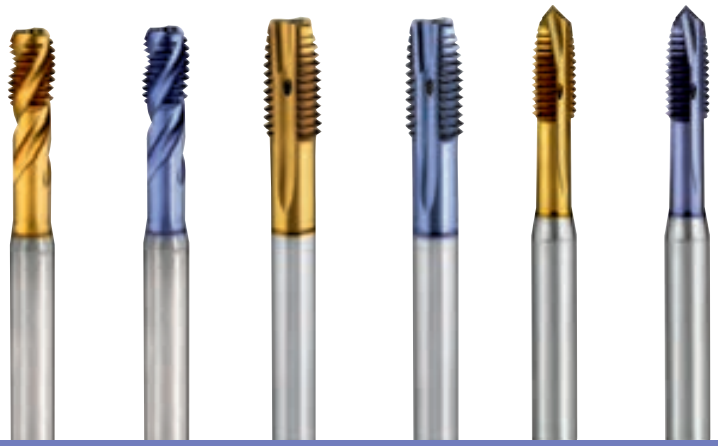
Ø mm			Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6995 TN	6996 TN
UNF	nr. 6	-	40	2,95	56	6	4,0	2,1	●	●
UNF	nr. 8	-	36	3,50	63	7	4,5	2,1	●	●
UNF	nr. 10	-	32	4,10	70	8	6,0	2,7	●	●
UNF	1/4	-	28	5,50	80	10	7,0	3,4	●	●
UNF	5/16	-	24	6,90	90	12	8,0	4,9	●	●
UNF	3/8	-	24	8,50	90	12	10,0	7,0	●	●

● Standardartikel / Items available ex stock

Multi **RAPID HDi** & Multi **HDi**

HSS Co-PM Multi Rapid HDi und Multi HDi Gewindebohrer entwickelt für höhere Sicherheit bei höherer Schnittgeschwindigkeit, dank der Innenkühlung eine bessere Spanabfuhr und Temperaturkontrolle an der Schneide.

HSS Co-PM Multi Rapid HDi and Multi HDi taps are engineered for ensuring a better reliability when tapping at higher cutting speeds, thanks to coolant channels that ensure better chip evacuation and temperature control in the cutting zone.





ANSCHNITT FORM B IST FÜR DUCHGANGSLOCH UND ANSCHNITT FORM C IST FÜR SACKLOCH GEWINDE
Form-B chamfer for through hole and Form-C chamfer for blind hole tapping

SPANWINKEL SPEZIELL ENTWICKELT FÜR MATERIALIEN MIT MITTLERE UND HOHE MECHANISCHE FESTIGKEIT.
Rake angle specifically designed for medium high mechanical strength materials

DRALLWINKEL 0 ° UND 40 ° FÜHRT ZU GERINGEREN SCHNITTKRÄFTEN UND SICHERE SCHNELLE UND LEISTUNGSFÄHIGE SPANABFUHR
Flute angle 0° and 40° results in lower cutting forces and ensures a fast and efficient chip evacuation rate

METRISCHE GEWINDEABMESSUNGEN
Metric fine threading range

QUALITÄT HSS-CO-PM
Quality HSS Co-PM

TIN-AND TICN-BASIS PVD-BESCHICHTUNG HAT EINE SEHR GUTE VERSCHLEISSFESTIGKEIT UND SPANABFUHR.
TiN-and TiCN-based PVD coatings provide very good wear resistance and chip flow

IDEAL FÜR NIEDRIGE BIS HOHE FESTIGKEITEN IN MATERIALIEN WIE STAHL UND GRAU.- SPHÄROGUSS.
Ideal for medium to high resistance steel and grey and spheroidal cast iron materials

GEEIGNETE ZUM ARBEITEN MIT STARREN SPANNSYSTEMEN
Suitable for rigid tapping machining

ILIX® PRECISION

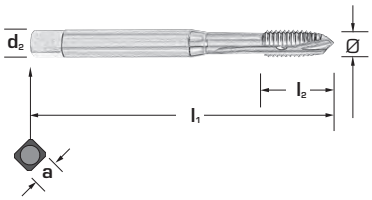
DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft und innenliegenden Kühlkanälen für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank and internal cooling for ISO metric coarse thread acc. to DIN 13

Multi Rapid HDi

M | TICN | TiN

Radialer Kühlmittelaustritt
radial cooling





Typ / Type	Multi Rapid HDi	Multi Rapid HDi
Toleranz Tolerance	6 H	6 H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	B/4-5
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6753 TN	6753 TC
M 6	1,00	5,0	80	19	6	4,9	●	●
M 8	1,25	6,8	90	22	8	6,2	●	●
M 10	1,50	8,5	100	24	10	8,0	●	●

● Standardartikel / Items available ex stock

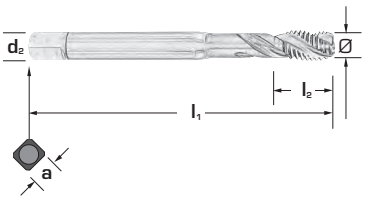
DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft und innenliegenden Kühlkanälen für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank and internal cooling for ISO metric coarse thread acc. to DIN 13

Multi HDi

M | TICN | TiN

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type	Multi HDi 40°	Multi HDi 40°
Toleranz Tolerance	6 H	6 H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6772 TN	6772 TC
M 6	1,00	5,0	80	10	6	4,9	●	●
M 8	1,25	6,8	90	12	8	6,2	●	●
M 10	1,50	8,5	100	14	10	8,0	●	●

● Standardartikel / Items available ex stock

DIN 376

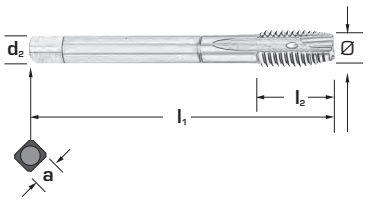
Maschinen-Gewindebohrer mit Überlaufschaft und innenliegenden Kühlkanälen für Metrisches ISO-Regelgewinde nach DIN 13

Machine taps with reduced shank and internal cooling for ISO metric coarse thread acc. to DIN 13

Multi Rapid HDi

M | TICN | TiN

Radialer Kühlmittelaustritt
radial cooling





Typ / Type	Multi Rapid HDi	Multi Rapid HDi
Toleranz Tolerance	6 H	6 H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5	B/4-5
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6758 TN	6758 TC
M 12	1,75	10,2	110	29	9	7	●	●
M 14	2,00	12,0	110	30	11	9	●	●
M 16	2,00	14,0	110	32	12	9	●	●
M 18	2,50	15,5	125	34	14	11	●	●
M 20	2,50	17,5	140	34	16	12	●	●

● Standardartikel / Items available ex stock

DIN 376

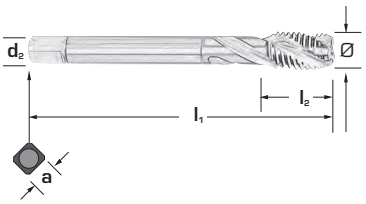
Maschinen-Gewindebohrer mit Überlaufschaft und innenliegenden Kühlkanälen für Metrisches ISO-Regelgewinde nach DIN 13

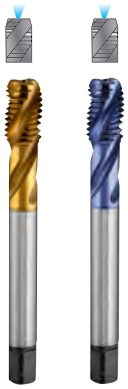
Machine taps with reduced shank and internal cooling for ISO metric coarse thread acc. to DIN 13

Multi HDi

M | TICN | TiN

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type	Multi HDi 40°	Multi HDi 40°
Toleranz Tolerance	6 H	6 H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6777 TN	6777 TC
M 12	1,75	10,2	110	16	9	7	●	●
M 14	2,00	12,0	110	20	11	9	●	●
M 16	2,00	14,0	110	20	12	9	●	●
M 18	2,50	15,5	125	24	14	11	●	●
M 20	2,50	17,5	140	25	16	12	●	●

● Standardartikel / Items available ex stock

SINCRO ILIX i

Sincro Ilix HSS Co-PM Gewindebohrer wurden entwickelt mit einer Schafttoleranz h6 und Kühlkanälen mit axialen u. radialen Austritt.
Geeignet für Synchron Werkzeugspannsystem.

Sincro Ilix I HSS-Co-PM taps are engineered with shank tolerance h6, suitable for Sincro tool clamping system and are provided with both axial and radial internal coolant.





ANSCHNITT FORM B IST FÜR DUCHGANGSLOCH UND ANSCHNITT FORM C IST FÜR SACKLOCH GEWINDE.
Form-B chamfer for through hole and Form-C chamfer for blind hole tapping.

DRALLWINKEL 0 °, 15 ° UND 40 ° FÜR EINE OPTIMALE WAHL IN ABHÄNGIGKEIT VON DEN MATERIALEIGENSCHAFTEN.
Flute angle 0°, 15° and 40° for an optimal choice depending on the material features.

METRISCHE UND METRISCHFEIN - GEWINDEABMESSUNGEN.
Metric and Metric fine threading range.

QUALITÄT HSS-CO-PM
Quality HSS Co-PM

TIN-BASIS PVD-BESCHICHTUNG HAT EINE SEHR GUTE VERSCHLEISSFESTIGKEIT UND SPANABFUHR.
TiN-based PVD coatings provide very good wear resistance and chip flow.

IDEAL FÜR NIEDRIGE BIS HOHE FESTIGKEITEN IN MATERIALIEN WIE STAHL UND GRAU.- SPHÄROGUSS.
Ideal for low to high resistance steel and grey and spheroidal cast iron materials.

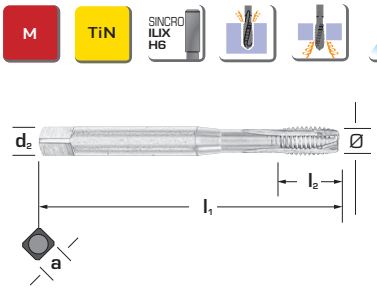
GEEIGNETE FÜR SYNCHRON SCHNEIDEN.
Suitable for synchronous tapping

ILIX® PRECISION

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
und innenliegenden Kühlkanälen
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
and internal cooling for ISO metric coarse thread acc. to DIN 13

Sincro Ilix i





Typ / Type	SINCRO	15° SINCRO	40° SINCRO
Toleranz Tolerance	6 HX	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/3,5-5	C/2-3	C/2-3
Schneidrichtung Cutting direction			
Schneidstoff/ Material	HSS-Co-PM	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h6	a mm h12	6975 TN	6971 TN	6973 TN
M 5	0,80	4,2	70	10	6	4,9	●	●	●
M 6	1,00	5,0	80	11	6	4,9	●	●	●
M 8	1,25	6,8	90	13	8	6,2	●	●	●
M 10	1,50	8,5	100	15	10	8,0	●	●	●

● Standardartikel / Items available ex stock

DIN 376

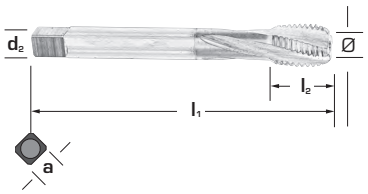
SINCRO ILIX i

Maschinen-Gewindebohrer mit Überlaufschaft
und innenliegenden Kühlkanälen
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank and internal cooling
for ISO metric coarse thread acc. to DIN 13

Sincro Ilix i

M | TiN | SINCRO ILIX H6

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type	**15° SINCRO**	**40° SINCRO**
Toleranz Tolerance	**6 HX**	**6 HX**
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	**C/2-3**	**C/2-3**
Schneidrichtung Cutting direction		
Schneidstoff/ Material	**HSS-Co-PM**	**HSS-Co-PM**

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h6	a mm h12	6972 TN	6974 TN
M 12	1,75	10,2	110	21	9	7	●	●
M 16	2,00	14,0	110	24	12	9	●	●
M 20	2,50	17,5	140	30	16	12	●	●

● Standardartikel / Items available ex stock

DIN 374

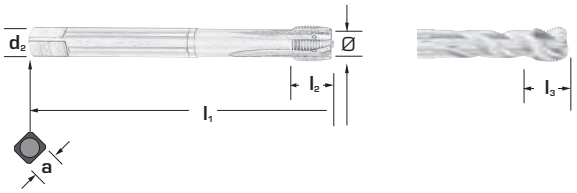
Maschinen-Gewindebohrer mit Überlaufschaft
und innenliegenden Kühlkanälen
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank and internal cooling
for ISO metric fine thread as to DIN 13

Sincro Ilix i

MF TiN SINCRO ILIX H6

Radialer Kühlmittelaustritt
radial cooling

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type	SINCRO	40° SINCRO
Toleranz Tolerance	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/3,5-5	C/2-3
Schneidrichtung Cutting direction		
Schneidstoff / Material	HSS-Co-PM	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h6	a mm h12	6978 TN	6977 TN
MF 8	1,00	7,0	90	12	10	6	4,9	●	●
MF 10	1,00	9,0	90	12	10	8	6,2	●	●
MF 10	1,25	8,8	100	15	13	8	6,2	●	●
MF 12	1,00	10,8	100	12	10	10	8,0	●	●
MF 12	1,50	10,5	100	18	15	10	8,0	●	●
MF 14	1,00	13,0	100	12	10	12	9,0	●	●
MF 14	1,50	12,5	100	18	15	12	9,0	●	●
MF 16	1,00	15,0	100	12	10	12	9,0	●	●
MF 16	1,50	14,5	100	18	15	12	9,0	●	●
MF 18	1,50	16,5	110	18	15	14	11,0	●	●
MF 20	1,50	18,5	125	18	15	16	12,0	●	●

● Standardartikel / Items available ex stock

MULTI **GG**

HSS-Co-PM Gewindebohrer Multi GG Serie sind speziell für hohe Schnittgeschwindigkeit in allen Gusseisenwerkstoffe entwickelt.
Die geraden Nuten bieten ein besseren Drehwiderstand während des Schneidprozesses.

HSS-Co-PM taps Multi GG series are specifically engineered for high speed tapping on all cast iron types, the straight flutes offer a better torsional-resistance during the cutting process.





ANSCHNITT FORM C FÜR DURCHGANGS.- UND SACKLOCH GEWINDE
Form-C chamfer for both through and blind holes

METRISCHE UND METRISCHFEIN GEWINDEABMESSUNG
Metric and Metric fine threading range

QUALITÄT HSS-CO-PM
Quality HSS Co-PM

DIE NITRIERTE OBERFLÄCHENBEHANDLUNG BIETET AUSGEZEICHNETE VERSCHLEISSFESTIGKEIT IN DER TROCKENEN UND NASSEN ANWENDUNG
Nitriding surface treatment offers excellent wear resistance in dry and wet tapping

IDEAL FÜR GRAU.- UND KUGELGRAPHITGUSSEISENWERKSTOFFE
Ideal for grey and spheroidal cast iron materials

ILIX® PRECISION

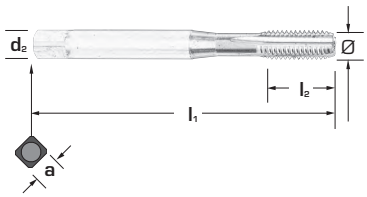
DIN 371

MULTI GG

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Multi GG







Typ / Type	MULTI GG
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6964
M 3,0	0,50	2,5	56	11	3,5	2,7	●
M 3,5	0,60	2,9	56	13	4,0	3,0	●
M 4,0	0,70	3,3	63	13	4,5	3,4	●
M 5,0	0,80	4,2	70	15	6,0	4,9	●
M 6,0	1,00	5,0	80	16	6,0	4,9	●
M 7,0	1,00	6,0	80	17	7,0	5,5	●
M 8,0	1,25	6,8	90	18	8,0	6,2	●
M 10,0	1,50	8,5	100	20	10,0	8,0	●

● Standardartikel / Items available ex stock

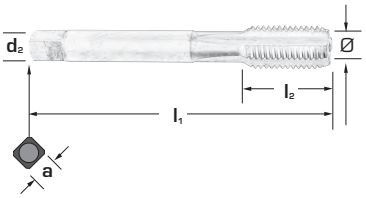
DIN 376

MULTI GG

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

Multi GG







Typ / Type								MULTI GG
Toleranz Tolerance								6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								C/2-3
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co-PM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** mm h12	**6965**
M	12	1,75	10,2	110	24	9	7,0	●
M	14	2,00	12,0	110	26	11	9,0	●
M	16	2,00	14,0	110	28	12	9,0	●
M	18	2,50	15,5	125	34	14	11,0	●
M	20	2,50	17,5	140	32	16	12,0	●
M	22	2,50	19,5	140	34	18	14,5	●
M	24	3,00	21,0	160	38	18	14,5	●
M	27	3,00	24,0	160	38	20	16,0	●
M	30	3,50	26,5	180	45	22	18,0	●

● Standardartikel / Items available ex stock

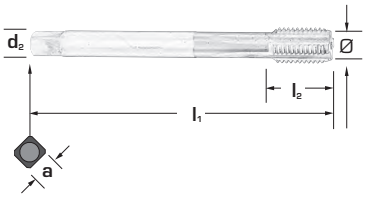
DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as to DIN 13

MULTI GG

Multi GG







Typ / Type								MULTI GG
Toleranz Tolerance								6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								C/2-3
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co-PM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**d_2 mm h9**	**a mm h12**	**6966**
MF	**8**	1,00	7,0	90	18	6	4,9	●
MF	**9**	1,00	8,0	90	18	7	5,5	●
MF	**10**	1,00	9,0	90	15	7	5,5	●
MF	**10**	1,25	8,8	100	20	7	5,5	●
MF	**12**	1,50	10,5	100	18	9	7,0	●
MF	**14**	1,50	12,5	100	20	11	9,0	●
MF	**16**	1,50	14,5	100	20	12	9,0	●
MF	**18**	1,50	16,5	110	22	14	11,0	●
MF	**20**	1,50	18,5	125	22	16	12,0	●
MF	**22**	1,50	20,5	125	25	18	14,5	●
MF	**24**	1,50	22,5	140	25	18	14,5	●
MF	**30**	1,50	28,5	150	28	22	18,0	●

● Standardartikel / Items available ex stock

MULTI **GGi**

HSS Co-PM Gewindebohrer Multi GGi Serie sind speziell für hohe Schnittgeschwindigkeit in allen Gusseisenwerkstoffe, die geraden Nuten bieten ein besseren Drehwiderstand während des Schneidprozesses, ferner hilft die Innenkühlung den Span besser zu evakuieren und regelt Temperatur in der Schneidzone.

HSS Co-PM taps Multi GGi series are specifically engineered for high speed tapping on all cast iron types, the straight flutes offer a better torsional-resistance during the cutting process, furthermore the internal coolant helps along the chip evacuation and controls temperature in the cutting zone.



ANSCHNITT FORM C FÜR DURCHGANGS.- UND SACKLOCH GEWINDE
Form-C chamfer for both through and blind holes

METRISCHE GEWINDEABMESSUNG
Metric threading range

QUALITÄT HSS-CO-PM
Quality HSS Co-PM

HL BASIERTE PVD-BESCHICHTUNGEN BIETEN EINE SEHR GUTE VERSCHLEISSFESTIGKEIT BEI SEHR ABRASIVEN GUSSEISEN.
HL coating with pvd technology for a higher wear resistance on very abrasive cast iron

IDEAL FÜR GRAU.- UND KUGELGRAPHITGUSSEISENWERKSTOFFE
Ideal for grey and spheroidal cast iron materials

ILIX® PRECISION

DIN 371

MULTI GGi

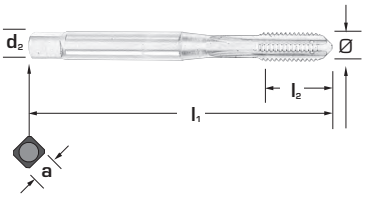
Maschinen-Gewindebohrer mit verstärktem Schaft und innenliegenden Kühlkanälen für Metrisches ISO-Regelgewinde nach DIN 13

Machine taps with reinforced shank and internal cooling for ISO metric coarse thread as per DIN 13

Multi GGi



Radialer Kühlmittelaustritt
radial cooling





Typ / Type									**MULTI GGi**
Toleranz Tolerance									**6 HX**
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads									**C/2,5-3**
Schneidrichtung Cutting direction									
Schneidstoff/ Material									**HSS-Co-PM**
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** mm h12		**6967 HL**
M	**6**	1,00	5,0	80	19	6	4,9		●
M	**8**	1,25	6,8	90	22	8	6,2		●
M	**10**	1,50	8,5	100	24	10	8,0		●

● Standardartikel / Items available ex stock

T-BLACK

T-Black HSS Co-PM Gewindebohrer sorgen für eine optimale Spankontrolle bei geringen Schnittkräften

T-Black HSS-Co-PM taps ensure an optimal chip control at low cutting forces.



ANSCHNITT FORM-C FÜR SACKLÖCHER BIS ZU 3 X D, MIT GEWINDEABSCHRÄGUNG
Form-C chamfer for blind holes up to 3xD back tapered

DRALLWINKEL 40 ° REDUZIERT DIE SCHNITTKRÄFTE UND BIETET EINE SCHNELLE UND EFFIZIENTE SPANABFUHR
Flute angle 40° reduces cutting forces and provides a fast and efficient chip evacuation

BREITE PALETTE VON GEWINDEARTEN
Wide range of threading types

QUALITÄT HSS-CO-PM
Quality HSS Co-PM

TIN-BASIERTE PVD BESCHICHTUNG BIETET EINE HOHE VERSCHLEISSFESTIGKEIT UND GUTEN SPANFLUSS
TiCN-based PVD offers a very gool wear resistance and chip flow

IDEAL FÜR NIEDRIG BIS MITTLERE ZUGFESTIGKEIT VON STAHL UND EDELSTAHL
Ideal for low to medium resistance steels and stainless steel materials

ILIX® PRECISION

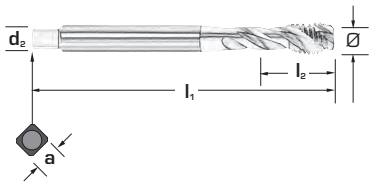
DIN 371

T-BLACK

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

T-BLACK







Typ / Type	TB 40°
Toleranz Tolerance	6H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6668 TB
M 4,0	0,70	3,3	63	7	4,5	3,4	●
M 5,0	0,80	4,2	70	8	6,0	4,9	●
M 6,0	1,00	5,0	80	10	6,0	4,9	●
M 8,0	1,25	6,8	90	12	8,0	6,2	●
M 10,0	1,50	8,5	100	14	10,0	8,0	●

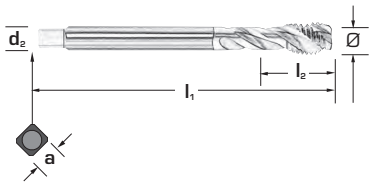
● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

T-BLACK







Typ / Type	TB 40°
Toleranz Tolerance	6H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6669 TB
M 12	1,75	10,2	110	16	9	7,0	●
M 14	2,00	12,0	110	20	11	9,0	●
M 16	2,00	14,0	110	20	12	9,0	●
M 18	2,50	15,5	125	24	14	11,0	●
M 20	2,50	17,5	140	25	16	12,0	●
M 24	3,00	21,0	160	30	18	14,5	●

● Standardartikel / Items available ex stock

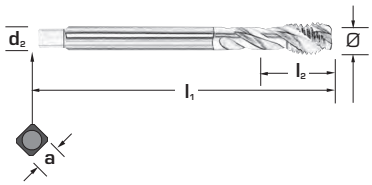
DIN 374

T-BLACK

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

T-BLACK

MF | TiCN Top





Typ / Type								TB 40°
Toleranz Tolerance								6H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								C/2,5-3
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co-PM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**d_2 mm h9**	**a mm h12**	**6830 TB**
MF	**6**	0,75	5,2	80	10	4,5	3,4	●
MF	**8**	1,00	7,0	90	12	6,0	4,9	●
MF	**9**	1,00	8,0	90	12	7,0	5,5	●
MF	**10**	1,00	9,0	90	14	7,0	5,5	●
MF	**10**	1,25	8,8	100	14	7,0	5,5	●
MF	**11**	1,00	10,0	90	14	8,0	6,2	●
MF	**12**	1,00	11,0	100	16	9,0	7,0	●
MF	**12**	1,25	10,8	100	16	9,0	7,0	●
MF	**12**	1,50	10,5	100	16	9,0	7,0	●
MF	**14**	1,50	12,5	100	20	11,0	9,0	●
MF	**16**	1,50	14,5	100	20	12,0	9,0	●
MF	**18**	1,50	16,5	110	25	14,0	11,0	●
MF	**20**	1,50	19,0	125	25	16,0	12,0	●

● Standardartikel / Items available ex stock

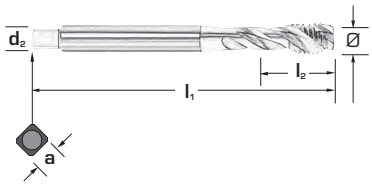
DIN 2184/1

T-BLACK

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

T-BLACK

UNC | TiCN Top





Typ / Type	TB 40°
Toleranz Tolerance	2B
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

Ø mm			Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6831 TB
UNC	nr. 6	-	32	2,85	56	6	4,0	3,0	●
UNC	nr. 8	-	32	3,50	63	7	4,5	3,4	●
UNC	nr. 10	-	24	3,90	70	8	6,0	4,9	●
UNC	nr. 12	-	24	4,50	80	10	6,0	4,9	●
UNC	1/4		20	5,10	80	10	7,0	5,5	●
UNC	5/16		18	6,60	90	12	8,0	6,2	●
UNC	3/8		16	8,00	90	12	10,0	8,0	●

● Standardartikel / Items available ex stock

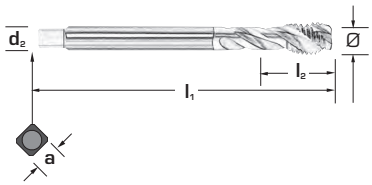
DIN 2184/1

T-BLACK

Maschinen-Gewindebohrer mit Überlaufschaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reduced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 376

T-BLACK

UNC | TiCN Top





Typ / Type	TB 40°
Toleranz Tolerance	2B
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6832 TB
UNC 7/16	-	14	9,40	100	24	8	6,2	●
UNC 1/2	-	13	10,80	110	29	9	7,0	●
UNC 9/16	-	12	12,20	110	30	11	9,0	●
UNC 5/8	-	11	13,50	110	32	12	9,0	●
UNC 3/4	-	10	16,50	125	34	14	11,0	●
UNC 7/8	-	9	19,50	140	34	18	14,5	●
UNC 1	-	8	22,25	160	38	18	14,5	●
UNC 1 1/4	-	7	28,00	180	36	22	18,0	●
UNC 1 1/2	-	6	34,00	200	42	32	24,0	●
UNC 2	-	4 1/2	45,00	250	56	40	32,0	●

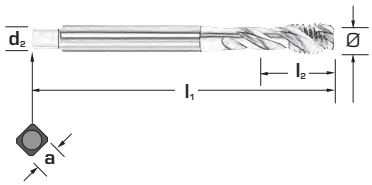
● Standardartikel / Items available ex stock

DIN 2184/1

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 371

T-BLACK

UNF | TiCN Top





Typ / Type	TB 40°
Toleranz Tolerance	2B
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

Ø mm			Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6833 TB
UNF	nr. 6	-	40	2,95	56	6	4,0	2,1	●
UNF	nr. 8	-	36	3,50	63	7	4,5	2,1	●
UNF	nr. 10	-	32	4,10	70	8	6,0	2,7	●
UNF	nr. 12	-	28	4,70	80	10	6,0	3,0	●
UNF	nr. 1/4	-	28	5,50	80	10	7,0	3,4	●
UNF	nr. 5/16	-	24	6,90	90	12	8,0	4,9	●
UNF	nr. 3/8	-	24	8,50	90	12	10,0	7,0	●

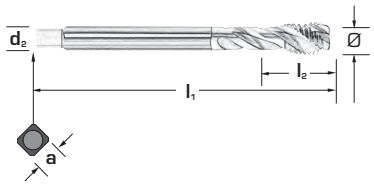
● Standardartikel / Items available ex stock

DIN 2184/1

Maschinen-Gewindebohrer mit Überlaufschaft
für unified-Gewinde (grob) UNF – ASME – B 1.1
Baumaße an DIN 371 fein
Machine taps with reduced shank
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 376

T-BLACK

UNF | TiCN Top





Typ / Type	TB 40°
Toleranz Tolerance	2B
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	$d_2$mm h9	a mm h12	6834 TB
UNF 7/16	-	20	9,90	90	14,0	8,0	6,2	●
UNF 1/2	-	20	11,50	100	16,0	9,0	7,0	●
UNF 9/16	-	18	12,90	100	20,0	11,0	9,0	●
UNF 5/8	-	18	14,50	100	20,0	12,0	9,0	●
UNF 3/4	-	16	17,50	110	25,0	14,0	11,0	●
UNF 7/8	-	14	20,40	125	25,0	18,0	14,5	●
UNF 1	-	12	23,25	140	25,0	18,0	14,5	●

● Standardartikel / Items available ex stock

DIN 5156

T-BLACK

Maschinen-Gewindebohrer mit Überlaufschaft für Rohrgewinde nach DIN 259 und DIN-ISO 228
Machine taps with reduced shank for British standard Pipe thread as per DIN 259 and DIN-ISO 228

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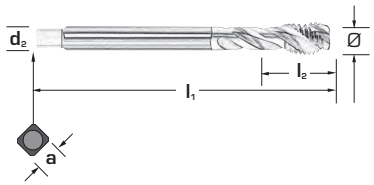




Typ / Type	TB 40°
Toleranz Tolerance	-
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	$d_2$mm h9	a mm h12	6835 TB
G 1/16	- 28		6,80	90	12	6	4,9	●
G 1/8	- 28		8,80	90	14	7	5,5	●
G 1/4	- 19		11,80	100	20	11	9,0	●
G 3/8	- 19		15,25	100	20	12	9,0	●
G 1/2	- 14		19,00	125	25	16	12,0	●
G 5/8	- 14		21,00	125	25	18	14,5	●
G 3/4	- 14		24,50	140	28	20	16,0	●
G 7/8	- 14		28,25	150	28	22	18,0	●
G 1	- 11		30,75	160	30	25	20,0	●

● Standardartikel / Items available ex stock

DIN 371



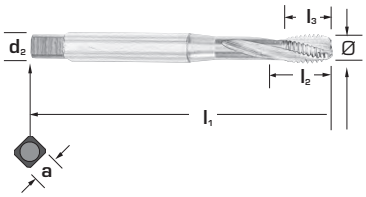
Maschinen-Gewindebohrer mit verstärktem Schaft und innenliegenden Kühlkanälen für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank for ISO metric coarse thread as per DIN 13

VR i





Axialer Kühlmittelaustritt
Axial internal cooling



Typ / Type	VR i 15°
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h6	a mm h12	6601 TN
M 6	1,00	5,0	80	19	10	6	4,9	●
M 8	1,25	6,8	90	22	12	8	6,2	●
M 10	1,50	8,5	100	24	14	10	8,0	●

● Standardartikel / Items available ex stock

Ti

Ti HSS-Co-PM Gewindebohrer speziell für hitzebeständige Materialien in der Luftfahrt und der biomedizinischen Industrie entwickelt.

Ti HSS-Co-PM taps are specifically engineered for tapping heat resistance materials in aerospace and biomedical industry.





SPANWINKEL 15° FÜR LEICHTES SCHNEIDEN UND NIEDRIGER SCHNITTTEMPERATUR AN DEN SCHNEIDKANTEN
Rake angle 15° for a soft cut lows temperature at the cutting edge

TYPISCH FÜR DIE LUFTFAHRTINDUSTRIE SEHR GENAUE TOLERANZEN
Very precise tolerances typical of the aerospace industry

QUALITÄT HSS-CO-PM
Quality HSS-Co-PM

NITRID-OBERFLÄCHENBEHANDLUNG, UM DIE REIBUNG ZU REDUZIEREN
Nitrated surface treatment in order to reduce the friction rates

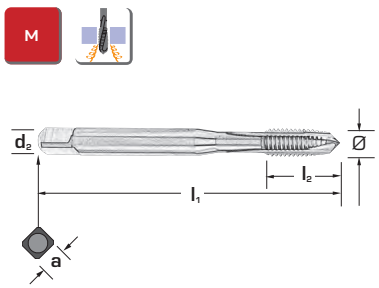
IDEAL FÜR TITAN UND TITANLEGIERUNGEN
Ideal for Titanium and Titanium alloys materials

ILIX® PRECISION

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ti





	Ti
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6683
M 3	0,50	2,50	56	11	3,50	2,70	●
M 3,5	0,60	2,90	56	13	4,00	3,00	●
M 4	0,70	3,30	63	13	4,50	3,40	●
M 5	0,80	4,20	70	16	6,00	4,90	●
M 6	1,00	5,00	80	19	6,00	4,90	●
M 7	1,00	6,00	80	19	7,00	5,50	●
M 8	1,25	6,80	90	22	8,00	6,20	●
M 10	1,50	8,50	100	24	10,00	8,00	●

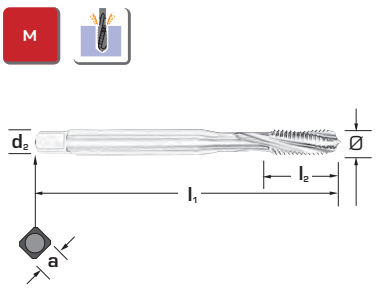
Ti:
für Titanlegierung
for Titanium alloys

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ti





Typ / Type	Ti 15°
Toleranz Tolerance	6H
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6684
M 3	0,50	2,50	56	5	3,5	2,7	●
M 3,5	0,60	2,90	56	6	4,0	3,0	●
M 4	0,70	3,30	63	7	4,5	3,4	●
M 5	0,80	4,20	70	8	6,0	4,9	●
M 6	1,00	5,00	80	10	6,0	4,9	●
M 7	1,00	6,00	80	10	7,0	5,5	●
M 8	1,25	6,80	90	12	8,0	6,2	●
M 10	1,50	8,50	100	14	10,0	8,0	●

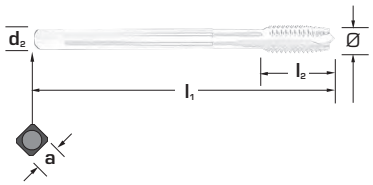
● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

Ti







	Ti
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

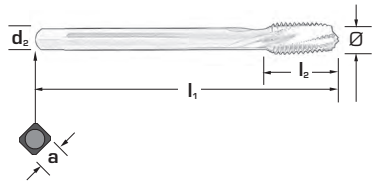
Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6825
M 12	1,75	10,2	110	29	9	7	●
M 16	2,00	14,0	110	32	12	9	●
M 20	2,50	17,5	140	34	16	12	●

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

Ti





Typ / Type	Ti 15°
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C 2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6826
M 12	1,75	10,2	110	29	9	7	●
M 16	2,00	14,0	110	32	12	9	●
M 20	2,50	17,5	140	34	16	12	●

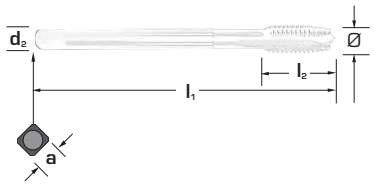
● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

Ti

MF





	Ti
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6828
MF	8	1,00	7,0	90	22	6	4,9	●
MF	10	1,00	9,0	90	20	7	5,5	●
MF	12	1,00	11,0	100	22	9	7,0	●
MF	12	1,50	10,5	100	22	9	7,0	●
MF	14	1,50	12,5	100	22	11	9,0	●
MF	16	1,50	14,5	100	22	12	9,0	●
MF	18	1,50	16,5	110	25	14	11,0	●
MF	20	1,50	18,5	125	25	16	12,0	●

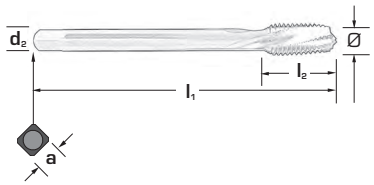
● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

Ti

MF





Typ / Type	Ti 15°
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6829
MF 8	1,00	7,0	90	22	6	4,9	●
MF 10	1,00	9,0	90	20	7	5,5	●
MF 12	1,00	11,0	100	22	9	7,0	●
MF 12	1,50	10,5	100	22	9	7,0	●
MF 14	1,50	12,5	100	22	11	9,0	●
MF 16	1,50	14,5	100	22	12	9,0	●
MF 18	1,50	16,5	110	25	14	11,0	●
MF 20	1,50	18,5	125	25	16	12,0	●

● Standardartikel / Items available ex stock

Ni

Ni HSS-Co-PM Gewindebohrer speziell für hitzebeständige Materialien in der Luftfahrt Industrie entwickelt.
ILIX 10 Grad spiral getutet Gewindebohrer aus dieser Reihe sind mit Spanbrecher zur Verbesserung der Spankontrolle, dieses ermöglicht die Anwendung der Gewindebohrer in Sack.- u. Durchgangslöcher.

Ni HSS-Co-PM taps are specifically engineered for tapping heat resistance materials in aerospace and energy industry.
ILIX 10 degrees taps from our range are provided with chipbreaker for improving the chip control, this allows the use of these taps for both blind and through holes applications.





TYPISCH FÜR DIE LUFTFAHRTINDUSTRIE SEHR GENAUE TOLERANZEN.
Very precise tolerances typical of the aerospace industry.

QUALITÄT HSS-CO-PM
Quality HSS-Co-PM

GELÄPPTE OBERFLÄCHE REDUZIERT DIE REIBUNG.
Lapping surface treatment reduces the friction rates.

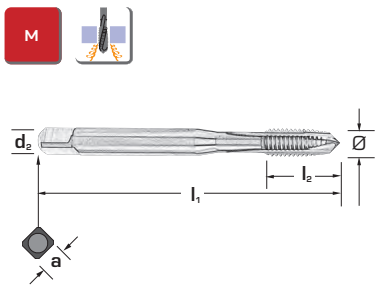
IDEAL FÜR NICKEL UND TITAN BASIS LEGIERUNGEN.
Ideal for Nichel.

ILIX® PRECISION

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ni





	Ni
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6892
M 2	0,40	1,60	45	8	2,8	2,1	●
M 2,5	0,45	2,05	50	9	2,8	2,1	●
M 3	0,50	2,50	56	11	3,5	2,7	●
M 4	0,70	3,30	63	13	4,5	3,4	●
M 5	0,80	4,20	70	16	6,0	4,9	●
M 6	1,00	5,00	80	19	6,0	4,9	●
M 8	1,25	6,80	90	22	8,0	6,2	●
M 10	1,50	8,50	100	24	10,0	8,0	●

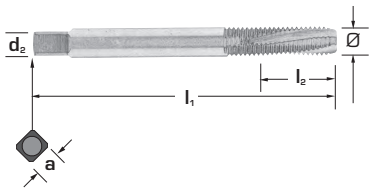
● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ni







Typ / Type	Ni 10°
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

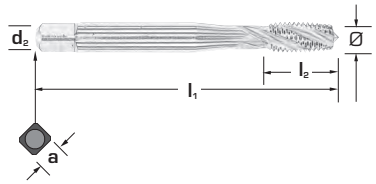
Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6894
M 3	0,50	2,50	56	11	3,5	2,7	●
M 4	0,70	3,30	63	13	4,5	3,4	●
M 5	0,80	4,20	70	16	6,0	4,9	●
M 6	1,00	5,00	80	19	6,0	4,9	●
M 8	1,25	6,80	90	22	8,0	6,2	●
M 10	1,50	8,50	100	24	10,0	8,0	●

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ni





Typ / Type	Ni 22°
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

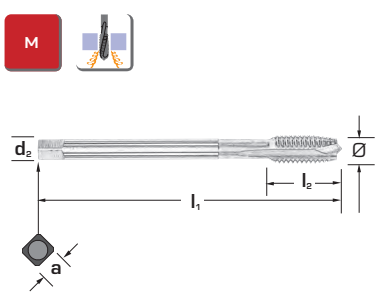
Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6895
M	2	0,40	1,60	45	8	2,8	2,1	●
M	3	0,50	2,50	56	11	3,5	2,7	●
M	3,5	0,60	2,90	56	13	4,0	3,0	●
M	4	0,70	3,30	63	13	4,5	3,4	●
M	5	0,80	4,20	70	16	6,0	4,9	●
M	6	1,00	5,00	80	19	6,0	4,9	●
M	8	1,25	6,80	90	22	8,0	6,2	●
M	10	1,50	8,50	100	24	10,0	8,0	●

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

Ni





Typ / Type								Ni
Toleranz Tolerance								6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								B/4-5
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co-PM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** mm h12	**6893**
M	**12**	1,75	10,20	110	29	9,0	7,0	●
M	**16**	2,00	14,00	110	32	12,0	9,0	●
M	**20**	2,50	17,50	140	34	16,0	12,0	●

● Standardartikel / Items available ex stock

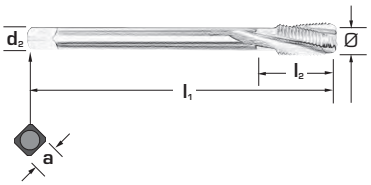
DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

Ni



NEW





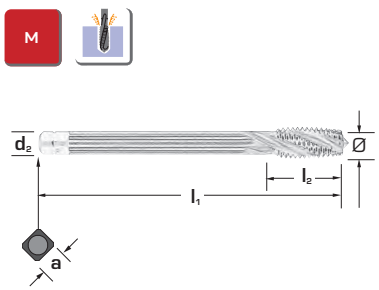
Typ / Type								Ni 10°
Toleranz Tolerance								6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								C/2,5-3
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co-PM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** mm h12	**6948**
M	**12**	1,75	10,20	110	29	9,0	7,0	●
M	**16**	2,00	14,00	110	32	12,0	9,0	●
M	**20**	4,50	17,50	140	34	16,0	12,0	●

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reduced shank
for ISO-metric coarse thread as per DIN 13

Ni





Typ / Type	Ni 22°
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6896
M 12	1,75	10,20	110	29	9,0	7,0	●
M 16	2,00	14,00	110	32	12,0	9,0	●
M 20	2,50	17,50	140	34	16,0	12,0	●

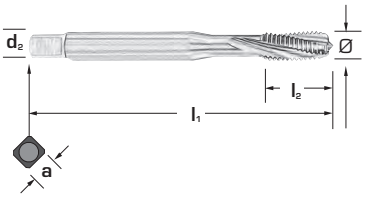
● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft für MJ Gewinde
Machine taps with reinforced shank for MJ thread

Ni







Typ / Type	**Ni 10°**
Toleranz Tolerance	**4 HX**
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	**C/2,5-3**
Schneidrichtung Cutting direction	
Schneidstoff/ Material	**HSS-Co-PM**

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6906
MJ	3	0,50	2,60	56	11	3,5	2,7	●
MJ	4	0,70	3,40	63	13	4,5	3,4	●
MJ	5	0,80	4,30	70	15	6,0	4,9	●
MJ	6	1,00	5,10	80	17	6,0	4,9	●
*MJ	8	1,00	7,10	90	17	8,0	6,2	●
MJ	8	1,25	6,90	90	20	8,0	6,2	●
*MJ	10	1,25	8,90	100	18	10,0	8,0	●
MJ	10	1,50	8,60	100	22	10,0	8,0	●

* Metrischfein / Metric Fine

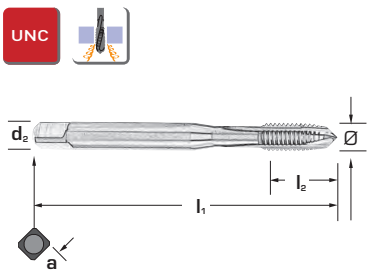
● Standardartikel / Items available ex stock

DIN 2184/1

Maschinen-Gewindebohrer mit verstärktem Schaft für Unified Grobgewinde UNC - ASME - B 1.1 Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

Ni





Typ / Type	Ni
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6869
UNC nr.	2	- 56	1,85	45	9	2,8	2,1	●
UNC nr.	3	- 48	2,10	50	9	2,8	2,1	●
UNC nr.	4	- 40	2,35	56	11	3,5	2,7	●
UNC nr.	5	- 40	2,65	56	11	3,5	2,7	●
UNC nr.	6	- 32	2,85	56	13	4,0	3,0	●
UNC nr.	8	- 32	3,50	63	13	4,5	3,4	●
UNC nr.	10	- 24	3,90	70	16	6,0	4,9	●
UNC nr.	12	- 24	4,50	80	17	6,0	4,9	●
UNC	1/4	- 20	5,10	80	17	7,0	5,5	●
UNC	5/16	- 18	6,60	90	20	8,0	6,2	●
UNC	3/8	16	8,00	100	20	10,0	8,0	●

DIN 2184/1

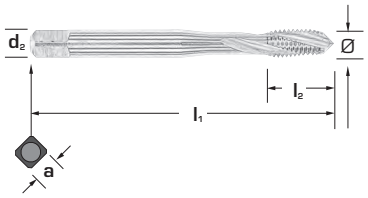
Maschinen-Gewindebohrer mit verstärktem Schaft für Unified Grobgewinde UNC - ASME - B 1.1 Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

Ni

UNC

NEW





Typ / Type	Ni 10°
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5/3
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS-Co-PM

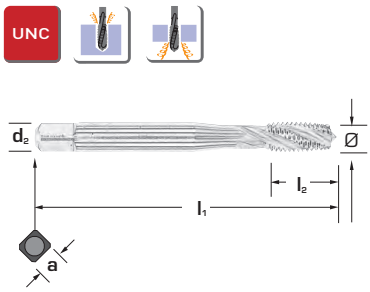
Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6990
UNC nr.	4	- 40	2,35	56	11	3,5	2,7	●
UNC nr.	6	- 32	2,85	56	13	4,0	3,0	●
UNC nr.	8	- 32	3,50	63	13	4,5	3,4	●
UNC nr.	10	- 24	3,90	70	16	6,0	4,9	●
UNC nr.	12	- 24	4,50	80	17	6,0	4,9	●
UNC	1/4	- 20	5,10	80	17	7,0	5,5	●
UNC	5/16	- 18	6,60	90	20	8,0	6,2	●
UNC	3/8	- 16	8,00	100	20	10,0	8,0	●

ILIX NORM

Maschinen-Gewindebohrer mit verstärktem Schaft für Unified Grobgewinde UNC - ASME - B 1.1 Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

Ni





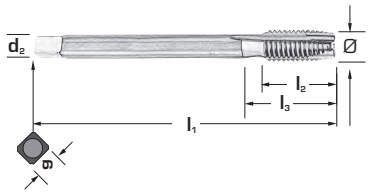
Typ / Type									Ni 22°
Toleranz Tolerance									2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads									C/2,5/3
Schneidrichtung Cutting direction									
Schneidstoff/ Material									HSS-Co-PM
Ø mm			**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**d_2 mm h9**	**a mm h12**	**6900**
UNC nr.	**6**	-	32	2,85	56	13	4,0	3,0	●
UNC nr.	**8**	-	32	3,50	63	13	4,5	3,4	●
UNC nr.	**10**	-	24	3,90	70	16	6,0	4,9	●
UNC nr.	**12**	-	24	4,50	80	17	6,0	4,9	●
UNC	**1/4**	-	20	5,10	80	17	7,0	5,5	●
UNC	**5/16**	-	18	6,60	90	20	8,0	6,2	●
UNC	**3/8**	-	16	8,00	100	20	10,0	8,0	●
		-							

DIN 2184/1

Maschinengewindebohrer mit reduziertem Schaft für Unified Grobgewinde UNC - ASME - B 1.1 Baumaße an DIN 376 angelehnt

Machine taps with reduced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 376

Ni





Typ / Type	Ni
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm			Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6897
UNC	1/2	-	13	10,80	110	16	29	9	7,0	●
UNC	5/8	-	11	13,50	110	20	32	12	9,0	●
UNC	3/4	-	10	16,50	125	25	34	14	11,0	●

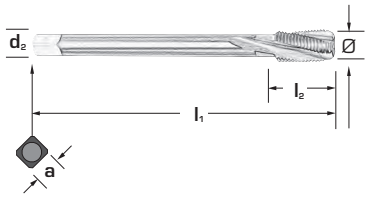
DIN 2184/1

Maschinengewindebohrer mit reduziertem Schaft für Unified Grobgewinde
UNC - ASME - B 1.1 Baumaße an DIN 376 angelehnt
Machine taps with reduced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 376

Ni

UNC

NEW





Typ / Type	Ni 10°
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm			Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6997
UNC	7/16	-	14	6,50	100	18	6	4,9	●
UNC	1/2	-	13	10,80	110	22	9	7,0	●
UNC	5/8	-	11	13,50	110	28	12	9,0	●

DIN 2184/1

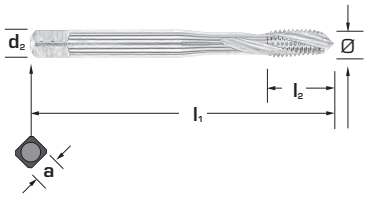
Maschinen-Gewindebohrer mit verstärktem Schaft für Unified Grobgewinde UNC - ASME - B 1.1 Baumaße an DIN 371 angelehnt

Machine taps with renforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

Ni

UNJC

NEW





Typ / Type	Ni 10°
Toleranz Tolerance	3 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6998
UNJC nr. 4	- 40	2,3	56	10	3,5	2,7	●
UNJC nr. 6	- 32	2,75	56	11	4,0	3,0	●
UNJC nr. 8	- 32	3,50	63	12	4,5	3,4	●
UNJC nr. 10	- 24	3,80	70	14	6,0	4,9	●
UNJC nr. 12	- 24	3,80	70	14	6,0	4,9	●
UNJC 1/4	- 20	5,10	80	16	6,0	4,9	●
UNJC 5/16	- 18	6,50	90	18	8,0	6,2	●
UNJC 3/8	- 16	7,90	100	20	10,0	8,0	●

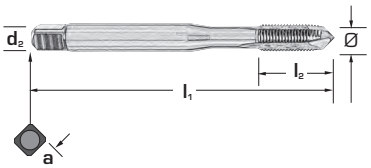
DIN 2184/1

Maschinengewindebohrer mit verstärktem Schaft für Unified-Feingewinde UNF Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank for unified fine thread UNF - ASME – B 1.1 dimensions generally as per DIN 371

Ni







	Ni
Typ / Type	
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6844
UNF	nr. 2	- 64	1,90	45	9	2,8	2,1	●
UNF	nr. 3	- 56	2,15	50	9	2,8	2,1	●
UNF	nr. 4	- 48	2,40	56	11	3,5	2,7	●
UNF	nr. 5	- 44	2,70	56	11	3,5	2,7	●
UNF	nr. 6	- 40	2,95	56	13	4,0	3,0	●
UNF	nr. 8	- 36	3,50	63	13	4,5	3,4	●
UNF	nr. 10	- 32	4,10	70	14	6,0	4,9	●
UNF	nr. 12	- 28	4,70	80	17	6,0	4,9	●
UNF	1/4	28	5,50	80	18	7,0	5,5	●
UNF	5/16	24	6,90	90	22	8,0	6,2	●
UNF	3/8	24	8,50	100	22	10,0	7,0	●

DIN 2184/1

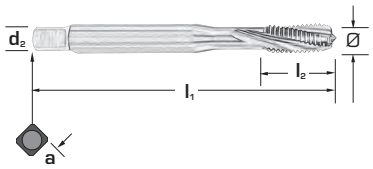
Maschinengewindebohrer mit verstärktem Schaft für Unified-Feingewinde UNF Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank for unified fine thread UNF - ASME – B 1.1 dimensions generally as per DIN 371

Ni

UNF

NEW





Typ / Type	Ni 10°
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

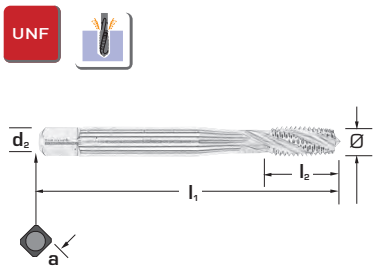
Ø mm			Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6928
UNF	nr. 6	-	40	2,95	56	13	4,0	3,0	●
UNF	nr. 8	-	36	3,50	63	13	4,5	3,4	●
UNF	nr. 10	-	32	4,10	70	14	6,0	4,9	●
UNF	nr. 12	-	28	4,70	80	14	6,0	4,9	●
UNF	1/4	-	28	5,50	80	16	7,0	5,5	●
UNF	5/16	-	24	6,90	90	22	8,0	6,2	●
UNF	3/8	-	24	8,50	100	22	10,0	8,0	●

DIN 2184/1

Maschinengewindebohrer mit verstärktem Schaft für Unified-Feingewinde UNF Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank for unified fine thread UNF - ASME – B 1.1 dimensions generally as per DIN 371

Ni





Typ / Type	Ni 22°
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm			Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	$d_2$mm h9	a mm h12	6846
UNF	nr. 10	-	32	4,10	70	12	6,0	2,7	●
UNF	1/4	-	28	5,50	80	14	7,0	3,4	●
UNF	5/16	-	24	6,90	90	22	8,0	4,9	●
UNF	3/8	-	24	8,50	90	22	10,0	7,0	●

DIN 2184/1



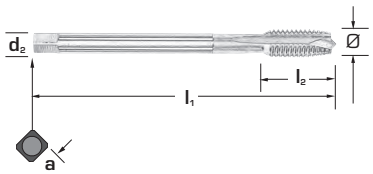
Maschinengewindebohrer mit überlauf Schaft für Unified-Feingewinde UNF Baumaße an DIN 371 angelehnt

Machine taps with reduced shank
for unified fine thread UNF - ASME – B 1.1
dimensions generally as per DIN 374

Ni

UNF







	Ni
Typ / Type	
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm			Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6845
UNF	7/16	-	20	9,90	90	20	8,0	6,2	●
UNF	1/2	-	20	11,50	100	22	9,0	7,0	●
UNF	5/8	-	18	14,50	100	22	12,0	9,0	●
UNF	3/4	-	16	17,50	110	25	14,0	11,0	●

DIN 2184/1

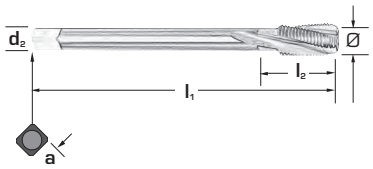
Maschinengewindebohrer mit überlauf Schaft für Unified-Feingewinde UNF Baumaße an DIN 371 angelehnt

Machine taps with reduced shank for unified fine thread UNF - ASME – B 1.1 dimensions generally as per DIN 374

Ni

UNF

NEW





Typ / Type	Ni 10°
Toleranz Tolerance	2 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6929
UNF 7/16	- 20		9,90	100	14	8,0	6,2	●
UNF 1/2	- 20		11,50	110	18	9,0	7,0	●
UNF 5/8	- 18		14,50	110	20	12,0	9,0	●

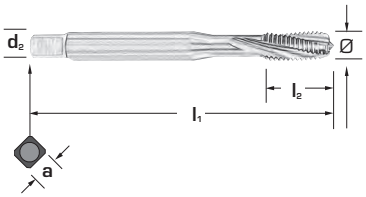
DIN 2184/1

MULTI Aero

Maschinengewindebohrer mit verstärktem Schaft für Unified-Feingewinde UNJF
Machine taps with reinforced shank for Unified fine thread UNJF ASME B1.1

Multi Aero

UNJF





Typ / Type	Ni 10°
Toleranz Tolerance	3 BX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6907
UNJF nr. 6	40	3,00	56	12	4,0	3,0	●
UNJF nr. 8	36	3,55	63	13	4,5	3,4	●
UNJF nr. 10	32	4,15	70	15	6,0	4,9	●
UNJF 1/4	28	5,55	80	17	7,0	5,5	●
UNJF 5/16	24	7,00	90	17	8,0	6,2	●
UNJF 3/8	24	8,60	90	18	10,0	8,0	●

● Standardartikel / Items available ex stock

MULTI **TP**

Multi TP VHM Gewindebohrer in besonders fester Ausführung zur Bearbeitung von Materialien mit einer Härte über 50 HRc.

Solid carbide taps for tapping in materials with a hardness over 50 HRC.



QUALITÄT VHM
Quality Solid Carbide

DIE NEUE GENERATION VON VHM SORTEN ULTA - FEINSTKORN VERLEIHEN DEM GEWINDEBOHRER EINE GUTE STABILITÄT UND LANGE STANDZEIT.
Latest generation SINTERED STEEL. Very good stability and longer tool life, thanks to the ultra-fine granulometry.

OBERFLÄCHEN BESCHICHTUNG:
DIE ANWENDUNG NEUER FERTIGUNGSTECHNOLOGIEN FÜHREN ZU BESCHLEUNIGTEN PRODUKTIONSPROZESSEN. DIE TICN BESCHICHTUNG GIBT DEM WERKZEUG EINE BESSERE FESTIGKEIT UND HÖHERE STANDZEITEN BEIM EINSATZ IN HOCHLEISTUNGSMASCHINEN.
Surface coating:
New production technologies have sped up production cycles. The TiCN coating gives higher tenacity and wear resistance to the tool when used in high performance machines.

ILIX® PRECISION

ILIX NORM

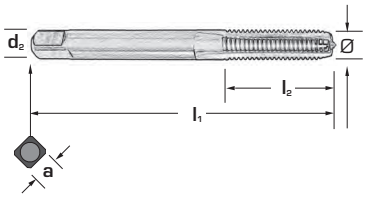
ÄHNLICH / SIMILAR DIN 371

MULTI TP

Maschinen-Gewindebohrer mit verstärktem Schaft* für Metrisches ISO-Regelgewinde nach DIN 13
Machine taps with reinforced shank* for ISO metric coarse thread as per DIN 13

Multi TP HRC 52-58

M TICN





Typ / Type								**MULTI TP**
Toleranz Tolerance								**6 HX**
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								**C/2,5-3**
Schneidrichtung Cutting direction								
Schneidstoff/ Material								**K10/K20**
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**d_2 mm h9**	**a mm h12**	**6770 TC**
M	**4**	0,70	3,4	63	13	4,5	3,4	●
M	**5**	0,80	4,3	70	16	6,0	4,9	●
M	**6**	1,00	5,1	80	19	6,0	4,9	●
M	**8**	1,25	6,9	90	22	8,0	6,2	●
M	**10**	1,50	8,6	100	24	10,0	8,0	●
M	**12**	1,75	10,4	110	32	12,0	9,0	●

* Der Spiralbohrer 6014TF auf Seite 73 ist zum Bohren in genannten Materialien geeignet. / The twist drill 6014TF of page 73 is adequate for drilling in listed materials.

● Standardartikel / Items available ex stock

FORMER **PM - PM i**

Maschinen-Gewindeformer HSS Co-PM (gesintert) sind entwickelt für den Einsatz hoher Schnittgeschwindigkeit, eine hohe Produktivität und zuverlässige Qualität der Gewinde zu erzeugen. Haben eine hohe Beständigkeit gegen Verschleiß und Hitze. Die HSS-Co-PM Gewindeformer können auch auf CNC-Maschinen für das synchron Formen verwendet werden.

Machine thread former HSS co-PM (sintered) are developed for the use of high cutting speed, high productivity and reliable quality of thread to produce. Have a high resistance to wear and heat. The HSS-Co PM Thread formers can also be used on CNC machines for the synchronous forms.





GEWINDE HERSTELLUNG DURCH PLASTISCHE VERFORMUNG STATT MATERIALABTRAG. KEINE SPANBILDUNG.
Thread obtained by plastic deformation instead of material removal. No chip formation, therefore:

- SICHERE UND ZUVERLÄSSIGE GEWINDEPROZESS
- Secure and reliable tapping process
- DIE MÖGLICHKEIT, BEIDE GEWINDE SACK.- U. DURCHGAGSGEWINDE MIT DEM GLEICHEN FORMER ZU ERSTELLEN.
- Possibility to thread both blind and through holes with the same tap
- GROSSE AUSWAHL AN MATERIALIEN: STAHL <1000 N / MM2, ALUMINIUM, NICHT - EISEN METALLE-
Wide range of working materials: Steel <1000 N/mm2, Aluminium, Non Ferrous materials
- GROSSE GEWINDETIEFE AUCH FÜR SACHLÖCHER
- High tapping depth also on blind holes
- HOHE STANDZEIT
-High tool life

HÖHERE SCHNITTGESCHWINDIGKEIT IM VERGLEICH ZUM GEWINDESCHNEIDEN
Higher cutting speed compared to cutting taps

BESSERE OBERFLÄCHENQUALITÄT AM GEWINDE
Better surface quality on thread

DIE GEWINDEFORMER MIT TIN ODER TIALN BESCHICHTUNG HILFE DIE STANDZEIT ZU ERHÖHEN.
The forming taps TIN or TiAlN coated help to increase the tool life

GERINGE BRUCHGEFAHR DANK GRÖSSEREN KERNDURCHMESSER
Low risk of breakage , thanks to larger core diameter

ILIX® PRECISION

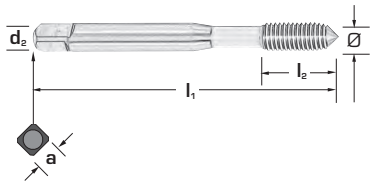
DIN 371

FORMER PM

Innengewinde-Former mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Cold forming taps with reinforced shank
for ISO metric coarse thread as per DIN 13

FORMER PM

M | TiAlN Futura





	Former
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6800 TF
M 3,0	0,5	2,75	56	11	3,5	2,7	●
M 4,0	0,7	3,65	63	13	4,5	3,4	●
M 5,0	0,8	4,60	70	16	6,0	4,9	●
M 6,0	1,0	5,50	80	19	6,0	4,9	●
M 8,0	1,25	7,40	90	22	8,0	6,2	●
M 10,0	1,5	9,30	100	24	10,0	8,0	●

● Standardartikel / Items available ex stock

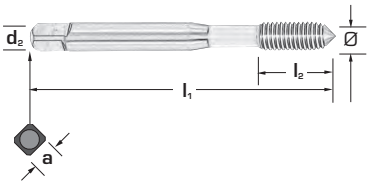
DIN 371

FORMER PM i

Innengewinde-Former mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Cold forming taps with reinforced shank
for ISO metric coarse thread as per DIN 13

FORMER PM i

M TiN **Axialer Kühlmittelaustritt**
Axial internal cooling





	Former i
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C 2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6801 TN
M 6,0	1,0	5,50	80	19	6,0	4,9	●
M 8,0	1,25	7,40	90	22	8,0	6,2	●
M 10,0	1,5	9,30	100	24	10,0	8,0	●

● Standardartikel / Items available ex stock

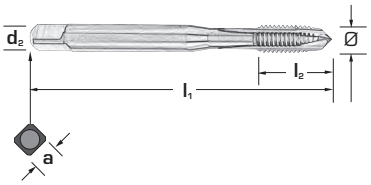
DIN 371



Innengewinde-Former mit verstärktem Schaft
für Metrisches ISO-Regelgewinde nach DIN 13
Cold forming taps with reinforced shank
for ISO metric coarse thread as per DIN 13

FORMER PM i

M TiN  **Radialer Kühlmittelaustritt**
radial cooling





	Former i
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C 2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co-PM

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a mm h12	6969 TN
M	5,0	0,80	4,60	70	16	6,0	4,9	●
M	6,0	1,00	5,50	80	19	6,0	4,9	●
M	8,0	1,25	7,40	90	22	8,0	6,2	●
M	10,0	1,50	9,30	100	24	10,0	8,0	●

● Standardartikel / Items available ex stock

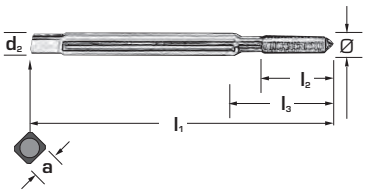
DIN 371

FORMER

Innengewinde-Former mit verstärktem Schaft aus Vollhartmetall
für Metrisches ISO-Regelgewinde nach DIN 13 Baumaße an DIN 371 angelehnt
Solid carbide forming taps with reinforced shank made of
for ISO metric coarse thread as per DIN 13 dimensions similar to DIN 371

FORMER

M





	FORMER
Typ / Type	
Toleranz Tolerance	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2-2,5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	K20

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_2 mm	d_2 mm h9	a mm h12	6788
M	4	0,70	3,65	63	13	-	4,5	3,4	●
M	5	0,80	4,60	70	16	-	6,0	4,9	●
M	6	1,00	5,50	80	19	-	6,0	4,9	●
M	8	1,25	7,40	90	18	30	8,0	6,2	●
M	10	1,50	9,30	100	20	32	10,0	8,0	●

● Standardartikel / Items available ex stock

GEWINDEBOHRER **VHM - SOLID CARBIDE** TAPS

Mit dem Ziel unter schnell wechselnder mechanischer und thermischer Beanspruchung Bearbeitungszeiten und Leistung zu optimieren, hat ILIX eine neue Generation von Gewindewerkzeugen aus fortschrittlichen Materialien entwickelt.
Die Eigenschaften sind auf Leistungssteigerung und somit auf Minimierung der Maschinenbelegungszeiten ausgerichtet.

To optimize all aspects of machining under rapidly changing mechanical and thermal stress.
ILIX has pioneered a new generation of threading tools from advanced materials.
Their characteristics aim towards higher performance and hereby reduction of machine assignment time.





DIE NEUEN HOCHLEISTUNGSGEWINDEBOHRER AUS VHM K20 ERMÖGLICHEN STABILE UND KONTROLLIERTE GEWINDEBEARBEITUNG IN PRÄZISIONSANWENDUNGEN.
The new high performance taps produced from ultrafine K20 allow stable and controlled threading processes in high precision applications.

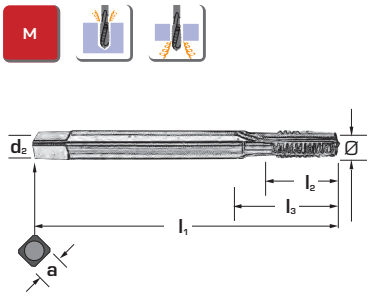
ILIX® PRECISION

ILIX NORM

Maschinen-Gewindebohrer mit verstärktem Schaft aus Vollhartmetall für Metrisches ISO-Regelgewinde nach DIN 13 Baumaße an DIN 371 angelehnt

Ground thread machine taps with reinforced shank made of solid carbide for ISO metric coarse thread as per DIN 13 dimensions similar to DIN 371

N





Typ / Type									**N**	**N R/15°**
Toleranz Tolerance									**6 HX**	**6 HX**
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads									**C/2,5-3**	**C/2,5-3**
Schneidrichtung Cutting direction										
Schneidstoff / Material									**K20**	**K20**
Ø mm		**Steigung** Pitch	**Kernloch** Tap drill	**l_1 mm**	**l_2 mm**	**l_3 mm**	**d_2 mm h6**	**a mm h12**	**6771**	**6736**
M	3	0,50	2,50	56	10	-	3,5	2,7	●	●
M	4	0,70	3,30	63	13	-	4,5	3,4	●	●
M	5	0,80	4,20	70	16	-	6,0	4,9	●	●
M	6	1,00	5,00	80	19	-	6,0	4,9	●	●
M	8	1,25	6,80	90	22	30	8,0	6,2	●	●
M	10	1,50	8,50	100	24	32	10,0	8,0	●	●

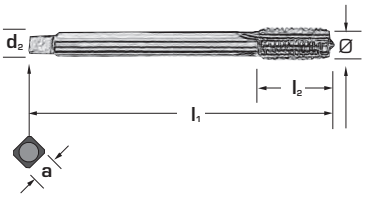
● Standardartikel / Items available ex stock

ILIX NORM

Maschinen-Gewindebohrer mit überlauf Schaft aus Vollhartmetall
für Metrisches ISO-Regelgewinde nach DIN 13 Baumaße an DIN 376 angelehnt
Ground thread machine taps with reduced shank made of solid carbide
with internal cooling for ISO metric fine thread as per DIN 13 dimensions similar to DIN 376

N







								N	N R/15°	N L/15°
Typ / Type										
Toleranz Tolerance								6 HX	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction										
Schneidstoff/ Material								K20	K20	K20
Ø mm		**Steigung** Pitch	**Kernloch** Tap drill	**l_1 mm**	**l_2 mm**	**d_2 mm h9**	**a mm h12**	**6792**	**6759**	**6714**
M	**12**	1,75	10,2	110	23	9	7	●	●	●

● **Standardartikel** / Items available ex stock

ILIX NORM

GG i - N

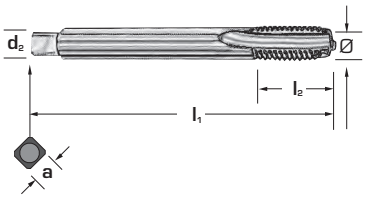
Maschinen-Gewindebohrer mit verstärktem Schaft aus Vollhartmetall
mit innenliegenden Kühlkanälen ab M 6
für Metrisches ISO-Regelgewinde nach DIN 13 Baumaße an DIN 371 angelehnt

Solid carbide machine taps with reinforced shank with internal cooling
from M 6 onwards for ISO metric coarse thread
as per DIN 13 dimensions similar to DIN 371

GG i - N i

M

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type								**GG i**	**N 15° i**
Toleranz Tolerance								**6 HX**	**6 HX**
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								**C/2-3**	**C/2-3**
Schneidrichtung Cutting direction									
Schneidstoff / Material								**K20**	**K20**
Ø mm		**Steigung** Pitch	**Kernloch** Tap drill	**l_1 mm**	**l_2 mm**	**d_2 mm h6**	**a mm h12**	**6760**	**6762**
M	5	0,80	4,2	70	16	6	4,9	●	●
M	6	1,00	5,0	80	19	6	4,9	●	●
M	8	1,25	6,8	90	22	8	6,2	●	●
M	10	1,50	8,5	100	24	10	8,0	●	●

● Standardartikel / Items available ex stock

ILIX NORM

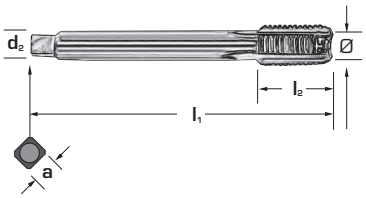


Maschinen-Gewindebohrer mit überlauf Schaft aus Vollhartmetall
mit innenliegenden Kühlkanälen
für Metrisches ISO-Regelgewinde nach DIN 13 Baumaße an DIN 376 angelehnt
Solid carbide machine taps with reinforced shank with internal cooling
for ISO metric coarse thread as per DIN 13
dimensions similar to DIN 376

GG i - N i



Axialer Kühlmittelaustritt
Axial internal cooling





	GG i	N 15° i
Typ / Type		
Toleranz Tolerance	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2-3	C/2-3
Schneidrichtung Cutting direction		
Schneidstoff / Material	K20	K20

Ø mm		Steigung Pitch	Kernloch Tap drill	l_1 mm	l_2 mm	d_2 mm h6	a mm h12	6763	6765
M	12	1,75	10,2	110	29	9	7	●	●

● Standardartikel / Items available ex stock

ILIX NORM

GG i - N

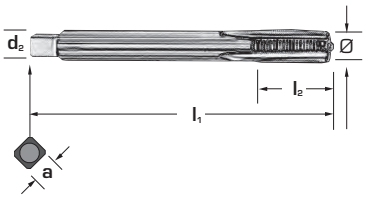
Maschinen-Gewindebohrer mit verstärktem Schaft aus Vollhartmetall
mit innenliegenden Kühlkanälen ab M6
für Metrisches ISO-Regelgewinde nach DIN 13 Baumaße an DIN 376 angelehnt

Solid carbide machine taps with reinforced shank with internal cooling
from M 6 onwards for ISO metric coarse thread
as per DIN 13 dimensions similar to DIN 374

GG i - N i

M

Axialer Kühlmittelaustritt
Axial internal cooling





	GG i	N 15° i
Typ / Type	GG i	N 15° i
Toleranz Tolerance	6 HX	6 HX
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads	C/2-3	C/2-3
Schneidrichtung Cutting direction		
Schneidstoff / Material	K20	K20

Ø mm		Steigung Pitch	Kernloch Tap drill	l_1 mm	l_2 mm	d_2 mm h6	a mm h12	6766	6767
M	8	1	7	90	18	8	6,2	●	●
M	10	1	9	100	18	10	7,0	●	●

● Standardartikel / Items available ex stock

ILIX NORM



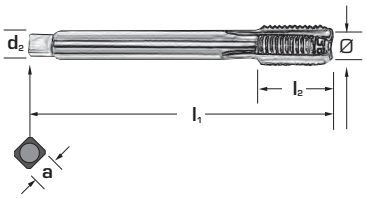
Maschinen-Gewindebohrer mit überlauf Schaft aus Vollhartmetall mit innenliegenden Kühlkanälen für Metrisches ISO-Regelgewinde nach DIN 13 Baumaße an DIN 374 angelehnt

Solid carbide machine taps with reinforced shank with internal cooling from M 6 onwards for ISO metric coarse thread as per DIN 13 dimensions similar to DIN 374

GG i - N i

M

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type								**GG i**	**N 15° i**
Toleranz Tolerance								**6 HX**	**6 HX**
Anschnittform / Anzahl der Gänge Chamfer form / No. of threads								**C/2-3**	**C/2-3**
Schneidrichtung Cutting direction									
Schneidstoff / Material								**K20**	**K20**
Ø mm		**Steigung** Pitch	**Kernloch** Tap drill	**l_1 mm**	**l_2 mm**	**d_2 mm h6**	**a mm h12**	**6768**	**6769**
M	**12**	1,5	10,5	100	22	9	7	●	●

● Standardartikel / Items available ex stock

GEWINDEFRÄSER / THREAD MILLING CUTTERS

MULTI TM, TM AERO, CTM, DTM, TP e MICRO

VHM-Gewindefräser ausgelegt zur Herstellung guter Gewindequalität und präziser Toleranzen bei niedrigen Schnittgeschwindigkeiten. Gute Prozess Wiederholbarkeit und sehr hohe Zuverlässigkeit. Ideal für die Bearbeitung aller Materialien, aus Stahl, Gusseisen, speziell für hitzebeständige Legierungen und Aluminium.

Solid carbide thread milling cutters designed for reducing cutting speeds, producing short chips, obtaining very precise threading qualities and tolerances. These end mills are suitable in working conditions demanding reliability and process repeatability.
Ideal for machining all materials, from steel to cast iron and specifically for heat resistance alloys and aluminium.





ILIX® PRECISION

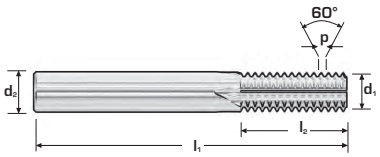
GEHÄRTETE STÄHLE / FOR HARDNED STEEL 54 - 63 HRC

Gewindefräser mit Zylinderschaft aus Vollhartmetall für Metrisches ISO-Regelgewinde nach DIN 13 (Einschraubtiefe von max. 1,5 x d1)
Solid carbide Thread milling cutters with straight shank for ISO metric coarse thread as per DIN 13 (depth max. 1,5 x d_1)

Für Innegewinde
For internal threads

M

TiAlN Futura





1,5 x d_1

Typ / Type								TF
Schneidstoff/ Material								VHM
Ø mm	**Steigung** Pitch	**Kernloch Ø** Tap-drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1** (nominal)	**d_2 mm**	**Z**	**7015 TF**
M 4	0,70	3,3	48	7,3	3,1	6	4	●
M 5	0,80	4,2	54	9,2	4,0	6	4	●
M 6	1,00	5,0	64	10,5	4,5	8	4	●
M 8	1,25	6,8	64	14,3	6,4	8	5	●
M 10	1,50	8,5	80	17,2	8,1	12	5	●
M 12	1,75	10,2	80	21,8	9,6	12	5	●

● Standardartikel / Items available ex stock

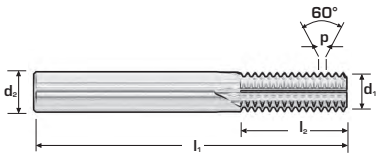
GEHÄRTETE STÄHLE / FOR HARDNED STEEL 54 - 63 HRC

Gewindefräser mit Zylinderschaft aus Vollhartmetall für Metrisches ISO-Regelgewinde nach DIN 13 (Einschraubtiefe von max. 2.0 x d_1)
Solid carbide thread milling cutters with straight shank for ISO metric coarse thread as per DIN 13 (depth max. 2,0 x d_1)

Für Innegewinde
For internal threads



M TiAlN Futura



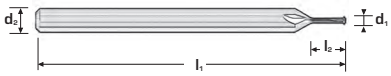
Typ / Type								**TF**
Schneidstoff/ Material								**VHM**
Ø mm	**Steigung** Pitch	**Kernloch Ø** Tap-drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1** (nominal)	**d_2 mm**	**Z**	**7016 TF**
M 4	0,70	3,3	48	8,7	3,1	6	4	●
M 5	0,80	4,2	54	11,6	4,0	6	4	●
M 6	1,00	5,0	64	13,5	4,5	8	4	●
M 8	1,25	6,8	64	18,1	6,4	8	5	●
M 10	1,50	8,5	80	21,7	8,1	12	5	●
M 12	1,75	10,2	80	27,1	9,6	12	5	●

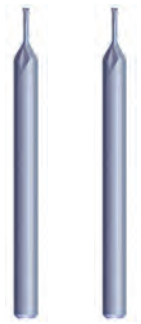
● Standardartikel / Items available ex stock

Gewindefräser mit Zylinderschaft aus Vollhartmetall für Metrisches ISO-Gewinde nach DIN 13 (Einschraubtiefe von max. 2,0 x d_1)
Solid carbide thread milling cutters with single ring of theeth for ISO metric coarse thread as per DIN 13 (depth of withdraw max. 2,0 x d_1)

Für Innegewinde
For internal threads

M TICN





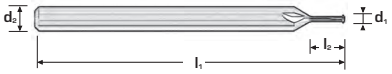
Typ / Type									MICRO	MICRO
Schneidstoff/ Material									VHM	VHM
Ø mm	**Bereich** Range	**Steigung** Pitch	**Kernloch Ø** Tap-drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1** (nominal)	**d_2 mm**	**Z**	**7081**	**7081 TC**
M 1,0	M 1 - M 1,1	0,25	0,75	39	2,3	0,7	3	3	✓	✓
M 1,2		0,25	0,95	39	2,5	0,9	3	3	✓	✓
M 1,4		0,30	1,10	39	2,9	1,0	3	3	✓	✓
M 1,6	M 1,6 - M 1,7	0,35	1,25	39	3,5	1,2	3	3	✓	✓
M 1,8		0,35	1,45	39	3,7	1,4	3	3	✓	✓
M 2,0		0,40	1,60	39	4,1	1,5	3	4	✓	✓
M 2,2		0,45	1,75	39	4,5	1,7	3	4	✓	✓
M 2,3		0,40	1,90	39	4,7	1,8	3	4	✓	✓
M 2,5	M 2,5 - M 2,6	0,45	2,10	39	5,3	1,9	3	4	✓	✓
M 3,0		0,50	2,50	39	6,2	2,4	3	4	✓	✓
M 3,5		0,60	2,90	39	7,2	2,8	3	4	✓	✓

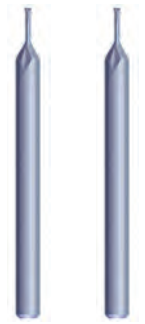
✓ Auf Anfrage / Upon request

Gewindefräser mit Zylinderschaft aus Vollhartmetall für Metrisches ISO-Gewinde nach DIN 13 (Einschraubtiefe von max. 3.0 x d_1)
Solid carbide thread milling cutters with single ring of theeth for ISO metric coarse thread as per DIN 13 (depth of withdraw max. 3,0 x d_1)

Für Innegewinde
For internal threads

M TICN





Typ / Type									MICRO	MICRO
Schneidstoff/ Material									VHM	VHM
Ø mm	**Bereich** Range	**Steigung** Pitch	**Kernloch Ø** Tap-drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1** (nominal)	**d_2 mm**	**Z**	**7082**	**7082 TC**
M 1,0	M 1 - M 1,1	0,25	0,75	39	3,4	0,7	3	3	✓	✓
M 1,2		0,25	0,95	39	3,7	0,9	3	3	✓	✓
M 1,4		0,30	1,10	39	4,3	1,0	3	3	✓	✓
M 1,6	M 1,6 - M 1,7	0,35	1,25	39	5,2	1,2	3	3	✓	✓
M 1,8		0,35	1,45	39	5,5	1,4	3	3	✓	✓
M 2,0		0,40	1,60	39	6,1	1,5	3	4	✓	✓
M 2,2		0,45	1,75	39	6,7	1,7	3	4	✓	✓
M 2,3		0,40	1,90	39	7,0	1,8	3	4	✓	✓
M 2,5	M 2,5 - M 2,6	0,45	2,10	39	7,9	1,9	3	4	✓	✓
M 3,0		0,50	2,50	39	9,2	2,4	3	4	✓	✓
M 3,5		0,60	2,90	39	10,7	2,8	3	4	✓	✓

✓ Auf Anfrage / Upon request

VHM-Gewindefräser mit drei Zahnringe für metrische ISO Regelgewinde nach DIN 13 (Einschraubtiefe max. 3 x d_1)

Solid carbide thread milling cutters with three rings of teeth for ISO metric coarse thread as per DIN 13 (depth of thread max. 3 x d_1)

Für Innegewinde

For internal threads

M TiAlN Futura **NEW**





3,0 x d_1 3,0 x d_1

Typ / Type									MICRO	MICRO
Schneidstoff / Material									VHM	VHM
Ø mm		Steigung Pitch	Kernloch Ø Tap-drill Ø	l_1 mm	l_2 mm	Ø d_1 (nominal)	d_2 mm	Z	7083	7083 TF
M	1,2	0,25	0,95	39	3,7	0,9	3	3	●	●
M	1,4	0,30	1,10	39	4,3	1,0	3	3	●	●
M	1,6	0,35	1,25	39	5,2	1,2	3	3	●	●
M	1,8	0,35	1,45	39	5,5	1,4	3	3	●	●
M	2,0	0,40	1,60	39	6,1	1,5	3	4	●	●
M	2,2	0,45	1,75	39	6,7	1,7	3	4	●	●
M	2,5	0,45	2,10	39	7,9	1,9	3	4	●	●
M	3,0	0,50	2,50	39	9,2	2,4	3	4	●	●
M	3,5	0,60	2,90	39	10,7	2,8	3	4	●	●
M	4,0	0,70	-	54	12,7	-	6	4	●	●
M	5,0	0,80	-	54	15,8	-	6	4	●	●
M	6,0	1,00	-	54	19,0	-	4	4	●	●

● Standardartikel / Items available ex stock

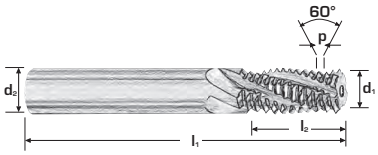
MULTI **TM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO-Regelgewinde nach DIN 13(Einschraubtiefe max. 1,5 x d_1)
Solid carbide thread milling cutters with straight shank and internal cooling, for ISO metric coarse thread as per DIN 13 (depth of withdraw max. 1,5 x d_1)

Für Innegewinde
For internal threads

M | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type									**Multi TM**
Schneidstoff / Material									VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1 (nominal)**	**d_2 mm**	**Z**	**7000**
M	2	0,40	1,6	48	4,00	1,50	6	2	■
M	6	1,00	5,0	54	11,00	4,50	6	3	■
M	8	1,25	6,8	54	14,00	5,95	6	3	■
M	10	1,50	8,5	64	17,00	7,95	8	4	■

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

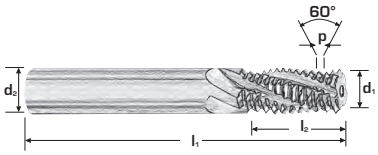
MULTI **TM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO-Regelgewinde nach DIN 13 (Einschraubtiefe max. 2.0 x d_1)
Solid carbide thread milling cutters with straight shank and internal cooling, for ISO metric coarse thread as per DIN 13 (depth of withdraw max. 2,0 x d_1)

Für Innegewinde
For internal threads

M | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type								Multi TM	Multi TM
Schneidstoff / Material								VHM	VHM
Ø mm	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1 (nominal)**	**d_2 mm**	**Z**	**7001**	**7001 TF**
M 6	1,00	5,0	54	13,5	4,50	6	3	●	●
M 8	1,25	6,8	54	18,1	5,95	6	3	●	●
M 10	1,50	8,5	64	21,7	7,95	8	4	●	●
M 12	1,75	10,2	74	27,1	9,95	10	4	●	●
M 14	2,00	12,0	74	30,9	11,95	10	4	●	●
M 16	2,00	14,0	80	34,9	13,95	12	4	●	●
M 18	2,50	15,5	90	41,1	15,40	14	4	●	●
M 20	2,50	17,5	90	41,1	17,40	14	4	●	●

● **Standardartikel /** Items available ex stock

MULTI **TM-AERO**

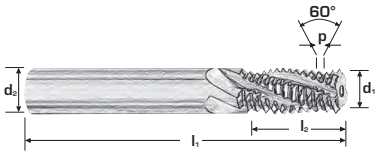
27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Gewinde MJ (Einschraubtiefe max. 2 x d_1)
Solid carbide thread milling cutters with straight shank and internal coolant, for MJ thread (depth of thread max. 2 x d_1)

Für Innegewinde
For internal threads

MJ | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling

NEW





Typ / Type									Multi TM	Multi TM
Schneidstoff/ Material									VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1 (nominal)**	**d_2 mm**	**Z**	**7013**	**7013 TF**
MJ	**4**	0,70	3,3	48	8,75	3,10	6	3	●	●
MJ	**5**	0,80	4,2	54	10,75	3,90	6	3	●	●
MJ	**6**	1,00	5	54	13,50	4,80	6	3	●	●
MJ	**8**	1,25	6,8	54	18,10	5,95	6	3	●	●
MJ	**10**	1,50	8,5	64	21,70	7,95	8	4	●	●
MJ	**12**	1,75	10,3	74	27,10	9,95	10	4	●	●

● Standardartikel / Items available ex stock

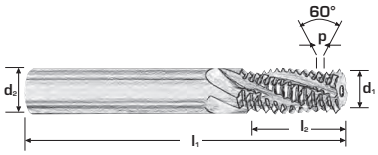
MULTI **TM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO-Feingewinde nach DIN 13 (Einschraubtiefe max. 1,5 x d_1)
Solid carbide thread milling cutters with straight shank and internal cooling, for ISO metric fine thread as per DIN 13 (depth of withdraw max. 1,5 x d_1)

Für Innegewinde
For internal threads

MF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type									Multi TM	Multi TM
Schneidstoff / Material									VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**Ø d_1** (nominal)	**l_1** mm	**l_2** mm	**d_2** mm	**Z**	**7002**	**7002 TF**
MF	4	0,50	3,5	3,00	48	7,2	6	3	■	■
MF	8	0,75	7,2	5,95	54	13,1	6	3	■	-
MF	10	1,00	9,0	7,95	64	16,5	8	4	■	-

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

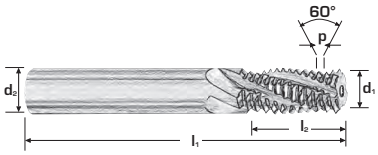
MULTI **TM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO-Feingewinde nach DIN 13 (Einschraubtiefe max. 2,0 x d1)
Solid carbide thread milling cutters with straight shank and internal cooling, for ISO metric fine thread as per DIN 13 (depth of withdraw max. 2,0 x d_1)

Für Innegewinde
For internal threads

MF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type									Multi TM	Multi TM
Schneidstoff / Material									VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1 (nominal)**	**d_2 mm**	**Z**	**7003**	**7003 TF**
MF	**6**	0,50	5,5	54	12,7	4,50	6	3	●	●
MF	**6**	0,75	5,2	54	13,1	4,50	6	3	●	●
MF	**8**	0,50	7,5	54	17,7	5,95	6	3	●	●
MF	**8**	0,75	7,2	54	16,8	5,95	6	3	●	●
MF	**8**	1,00	7,0	54	17,5	5,95	6	3	●	●
MF	**10**	1,00	9,0	64	21,5	7,95	8	4	●	●
MF	**10**	1,25	8,7	64	21,8	7,95	8	4	●	●
MF	**12**	1,00	11,0	74	25,5	9,95	10	4	●	●
MF	**12**	1,50	10,4	74	26,2	9,95	10	4	●	●

● Standardartikel / Items available ex stock

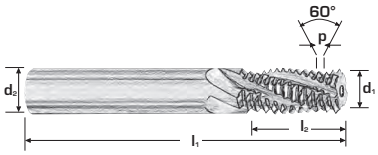
MULTI **TM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Unified Gewinde UNC ANSI B 1.1 (Einschraubtiefe max. 2 x d_1)
Solid carbide thread milling cutters with straight shank and internal cooling, for Unified thread UNC ANSI B 1.1 (depth of withdraw max. 2,0 x d_1)

Für Innegewinde
For internal threads

UNC | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type										Multi TM	Multi TM
Schneidstoff / Material										VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**7007**	**7007 TF**
UNC	**1/4**	20	1,270	5,2	54	14,5	4,80	6	3	●	●
UNC	**5/16**	18	1,411	6,5	54	17,6	5,95	6	3	●	●
UNC	**3/8**	16	1,587	8,0	64	21,4	7,10	8	4	●	●
UNC	**7/16**	14	1,814	9,3	64	24,4	7,95	8	4	●	●
UNC	**1/2**	13	1,953	10,8	74	28,3	9,95	10	4	●	●

● Standardartikel / Items available ex stock

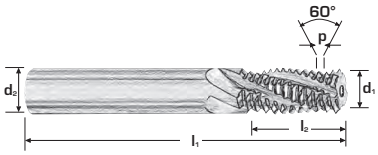
MULTI **TM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Unified Gewinde UNF ANSI B 1.1 (Einschraubtiefe max. 2 x d_1)
Solid carbide thread milling cutters with straight shank and internal cooling, for Unified thread UNF ANSI B 1.1 (depth of withdraw max. 2,0 x d_1)

Für Innegewinde
For internal threads

UNF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type									Multi TM	Multi TM
Schneidstoff / Material									VHM	VHM
Ø mm	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**7009**	**7009 TF**
UNF 1/4	28	0,907	5,5	54	14,0	4,80	6	3	●	●
UNF 5/16	24	1,058	6,8	54	17,4	5,95	6	3	●	●
UNF 3/8	24	1,058	8,5	64	20,6	7,95	8	4	●	●
UNF 7/16	20	1,270	9,8	64	24,7	7,95	8	4	●	●
UNF 1/2	20	1,270	11,5	74	27,3	9,95	10	4	●	●

● Standardartikel / Items available ex stock

MULTI **TM-AERO**

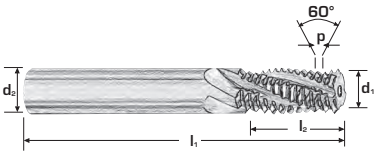
27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für UNJF Gewinde (Einschraubtiefe max. 2 x d_1)
Solid carbide thread milling cutters with straight shank and internal coolant, for UNJF thread (depth of thread max. 2,0 x d_1)

Für Innegewinde
For internal threads

UNJF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling

NEW





Typ / Type								Multi TM	Multi TM
Schneidstoff/ Material								VHM	VHM
Ø mm	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**Ø d_1** (nominal)	**d_2 mm**	**Z**	**7014**	**7014 TF**
UNJF nr. 10	32	4,83	54	11,5	3,90	6	3	●	●
UNJF 1/4	29	6,35	54	14,0	5,50	6	3	●	●
UNJF 5/16	24	7,94	54	17,4	5,95	6	3	●	●
UNJF 3/8	24	9,53	64	20,6	7,95	8	4	●	●
UNJF 7/16	20	11,11	64	24,7	7,95	8	4	●	●
UNJF 1/2	20	12,70	74	27,3	9,95	10	4	●	●

● Standardartikel / Items available ex stock

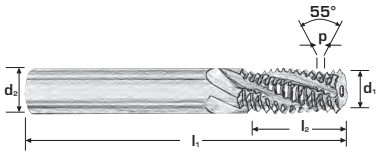
MULTI **TM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Whitworth-Rohrgewinde DIN – ISO 228 (Einschraubtiefe max. 2 x d_1)
Solid carbide thread milling cutters with straight shank and internal cooling, for British standard pipe thread DIN – ISO 228 (depth of withdraw max. 2,0 x d_1)

Für Innen- und Außengewinde
For internal and external threads

G | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type									Multi TM	Multi TM
Schneidstoff/ Material									VHM	VHM
Ø mm	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**7005**	**7005 TF**
G 1/8	28	0,907	8,7	64	21,3	7,95	8	4	●	●
G 1/4	19	1,336	11,8	74	28,7	9,95	10	4	●	●
G 3/8	19	1,336	15,2	90	35,5	13,60	14	4	●	●

● Standardartikel / Items available ex stock

MULTI **TM**

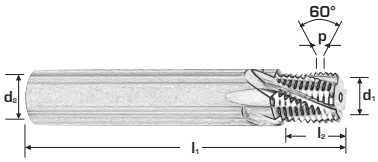
27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall, für NPT Gewinde ANSI B 1.20.1 - Kegel 1 : 16
Solid carbide thread milling cutters with straight shank and internal cooling, for American standard taper pipe thread ANSI B 1.20.1 - taper 1 : 16

Für Innegewinde
For internal threads



NPT | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling



Typ / Type										Multi TM	Multi TM
Schneidstoff / Material										VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**7010**	**7010 TF**
NPT	**1/8**	27	0,940	8,4	64	9,9	7,30	8	4	●	●
NPT	**1/4**	18	1,411	10,8	72	19,0	9,95	12	4	●	●
NPT	**3/8**	18	1,411	14,2	80	14,8	12,50	14	4	●	●
NPT	**1/2**	14	1,810	16,3	80	19,1	14,50	14	4	●	●

● Standardartikel / Items available ex stock

MULTI **TM**

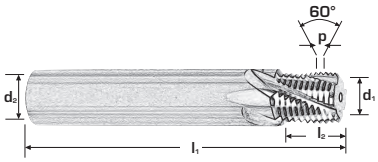
27° RECHTSDRALL **/** RIGHT HAND HELIX 15°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall, für NPT Gewinde ANSI B 1.20.3 - Kegel 1 : 16
Solid carbide thread milling cutters with straight shank and internal cooling, for American standard taper pipe thread ANSI B 1.20.1 - taper 1 : 16

Für Innegewinde
For internal threads



NPTF TiAlN Futura **Axialer Kühlmittelaustritt**
Axial internal cooling



Typ / Type										**Multi TM**	**Multi TM**
Schneidstoff / Material										VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**7012**	**7012 TF**
NPT	**1/8**	27	0,940	8,4	64	9,9	7,30	8	4	●	●
NPT	**1/4**	18	1,411	10,8	72	19,0	9,95	12	4	●	●
NPT	**3/8**	18	1,411	14,2	80	14,8	12,50	14	4	●	●
NPT	**1/2**	14	1,810	16,3	80	19,1	14,50	14	4	●	●

● Standardartikel / Items available ex stock

MULTI **TM**

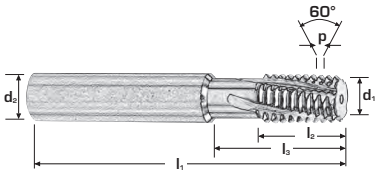
15° RECHTSDRALL **/** RIGHT HAND HELIX 15°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO Gewinde nach DIN 13
Solid carbide thread milling cutters with straight shank and internal cooling, for ISO metric thread as per DIN 13

Für Innegewinde
For internal threads



M MF **Axialer Kühlmittelaustritt**
Axial internal cooling



Typ / Type							Multi TM	Multi TM
Schneidstoff / Material							VHM	VHM
Ø d_1 (nominal)	**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_3** mm	**d_2** mm	**Z**	**7020**	**7020 TF**
8	0,50	64	16	16	8	4	●	●
8	0,75	64	16	16	8	4	●	●
10	0,75	70	16	25	10	4	●	●
10	1,00	70	16	25	10	4	●	●
10	1,25	70	16	25	10	4	●	●
10	1,50	70	16	25	10	4	●	●
12	0,50	80	20	31	12	4	●	●
12	1,00	80	20	31	12	4	●	●
12	1,25	80	20	31	12	4	●	●
12	1,50	80	20	31	12	4	●	●
12	2,00	80	20	31	12	4	●	●
16	1,00	90	25	40	16	5	●	●
16	1,50	90	25	40	16	5	●	●
16	2,00	90	25	40	16	5	●	●
16	2,50	90	25	40	16	5	●	●
20	1,00	105	33	50	20	5	●	●
20	1,50	105	33	50	20	5	●	●
20	2,00	105	33	50	20	5	●	●
20	2,50	105	33	50	20	5	●	●
20	3,00	105	33	50	20	5	●	●

Um größere Profilüberfräsungen zu vermeiden, darf der Fräser-Ø für Feingewinde nicht größer als 2/3 des zu fräsenden Gewinde-Ø sein.
To avoid too deeply milled profiles, the thread mill Ø must not exceed 2/3 of the Ø of thread to be milled.

● Standardartikel / Items available ex stock

MULTI **TM**

15° RECHTSDRALL **/** RIGHT HAND HELIX 15°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Unified Gewinde UN ANSI B 1.1

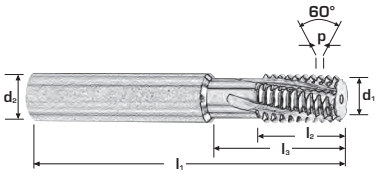
Solid carbide thread milling cutters with straight shank and internal cooling, for Unified national thread UN ANSI B 1.1

Für Innegewinde

For internal threads



UN | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling



Typ / Type										Multi TM	Multi TM
Schneidstoff/ Material										VHM	VHM
Ø mm	**Ø d_1 (nominal)**	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_3 mm**	**d_2 mm**	**Z**	**7027**	**7027 TF**
UN 1/2	**10**	**24**	1,06	11,7	70	16	25	10	4	●	●
UN 5/8	**12**	**24**	1,06	18,1	80	20	31	12	4	●	●
UN 11/16	**12**	**20**	1,28	17,9	80	20	31	12	4	●	●
UN 5/8	**12**	**18**	1,42	17,7	80	20	31	12	4	●	●
UN 5/8	**12**	**16**	1,60	17,5	80	20	31	12	4	●	●
UN 13/16	**16**	**24**	1,06	24,5	90	25	40	16	4	●	●
UN 13/16	**16**	**20**	1,28	24,2	90	25	40	16	4	●	●
UN 7/8	**16**	**18**	1,42	24,1	90	25	40	16	4	●	●
UN 7/8	**16**	**16**	1,60	23,9	90	25	40	16	4	●	●
UN 7/8	**16**	**14**	1,82	23,7	90	25	40	16	4	●	●
UN 7/8	**16**	**12**	2,12	23,4	90	25	40	16	4	●	●
UN 1	**20**	**24**	1,06	30,8	105	33	50	20	5	●	●
UN 1	**20**	**20**	1,28	30,6	105	33	50	20	5	●	●
UN 1	**20**	**18**	1,42	30,5	105	33	50	20	5	●	●
UN 1	**20**	**16**	1,60	30,3	105	33	50	20	5	●	●
UN 1	**20**	**14**	1,82	30,1	105	33	50	20	5	●	●
UN 1	**20**	**12**	2,12	29,8	105	33	50	20	5	●	●
UN 1	**20**	**8**	3,19	28,7	105	33	50	20	5	●	●

Um größere Profilüberfräsungen zu vermeiden, darf der Fräser-Ø für Feingewinde nicht größer als 2/3 des zu fräsenden Gewinde-Ø sein.
To avoid too deeply milled profiles, the thread mill Ø must not exceed 2/3 of the Ø of thread to be milled.

● Standardartikel / Items available ex stock

MULTI **TM**

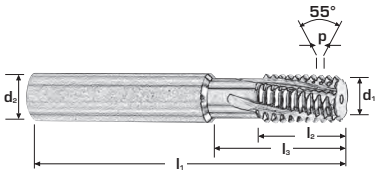
15° RECHTSDRALL **/** RIGHT HAND HELIX 15°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Whitworth-Rohrgewinde DIN – ISO 228
Solid carbide thread milling cutters with straight shank and internal cooling, for British standard pipe thread DIN – ISO 228

Für Innen- und Außengewinde
For internal and external threads



G TiAlN Futura **Axialer Kühlmittelaustritt**
Axial internal cooling



Typ / Type										Multi TM	Multi TM
Schneidstoff / Material										VHM	VHM
Ø mm	**Ø d_1 (nominal)**	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_3 mm**	**d_2 mm**	**Z**	**7024**	**7024 TF**
G 1/4 - 3/8	**10**	**19**	1,336	11,80	70	16	25	10	4	●	●
G 1/2 - 5/8 - 3/4 - 7/8	**16**	**14**	1,814	19,00	90	25	40	16	5	●	●
G 1-11/8 -11/4 -13/8 -11/2 -13/4 - 2	**20**	**11**	2,309	30,75	105	33	50	20	5	●	●

Um größere Profilüberfräsungen zu vermeiden, darf der Fräser-Ø für Feingewinde nicht größer als 2/3 des zu fräsenden Gewinde-Ø sein.
To avoid too deeply milled profiles, the thread mill Ø must not exceed 2/3 of the Ø of thread to be milled.

● Standardartikel / Items available ex stock

MULTI **TM**

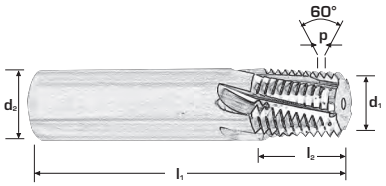
15° RECHTSDRALL **/** RIGHT HAND HELIX 15°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für NPT Gewinde ANSI B 1.20.1 Kegel 1 : 16
Solid carbide thread milling cutters with straight shank and internal cooling, for American standard taper pipe thread ANSI B 1.20.1 - taper 1 : 16

Für Innegewinde
For internal threads



NPT | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling



Typ / Type									Multi TM	Multi TM
Schneidstoff / Material									VHM	VHM
Ø mm	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**7030**	**7030 TF**
NPT 1/2 ÷ 3/4	14,0	1,81	18 - 23	90	19,05	14,5	16	5	●	●
NPT 1" ÷ 2"	11,5	2,21	29 - 56	90	23,19	18,5	20	5	●	●

Um größere Profilüberfräsungen zu vermeiden, darf der Fräser-Ø für Feingewinde nicht größer als 2/3 des zu fräsenden Gewinde-Ø sein.
To avoid too deeply milled profiles, the thread mill Ø must not exceed 2/3 of the Ø of thread to be milled.

● Standardartikel / Items available ex stock

MULTI **TM**

15° RECHTSDRALL **/** RIGHT HAND HELIX 15°

Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für NPTF Gewinde ANSI B 1.20.3 Kegel 1 : 16

Solid carbide thread milling cutters with straight shank and internal cooling, for dryseal American standard taper pipe thread ANSI B 1.20.3 - taper 1 : 16

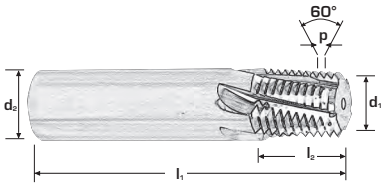
Für Innegewinde

For internal threads



NPTF TiAlN Futura

Axialer Kühlmittelaustritt
Axial internal cooling



Typ / Type									Multi TM	Multi TM
Schneidstoff / Material									VHM	VHM
Ø mm	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**7032**	**7032 TF**
NPTF 1/2 ÷ 3/4	14,0	1,81	18 - 23	90	19,05	14,5	16	5	●	●
NPTF 1" ÷ 2"	11,5	2,21	29 - 56	90	23,19	18,5	20	5	●	●

Um größere Profilüberfräsungen zu vermeiden, darf der Fräser-Ø für Feingewinde nicht größer als 2/3 des zu fräsenden Gewinde-Ø sein.
To avoid too deeply milled profiles, the thread mill Ø must not exceed 2/3 of the Ø of thread to be milled.

● Standardartikel / Items available ex stock

Gewindefräser mit Einheitsschaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Metrisches ISO Gewinde nach DIN 13

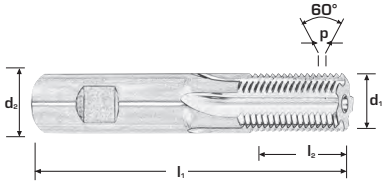
Thread milling cutters with Unified shank acc. to DIN 6535 HB and internal coolingmade of solid carbide, for ISO metric thread as per DIN 13

Für Innegewinde

For internal threads



M TiAlN Futura **Axialer Kühlmittelaustritt**
Axial internal cooling



Typ / Type						Multi TM	Multi TM
Schneidstoff/ Material						VHM	VHM
Ø d_1 (nominal)	**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**d_2 mm**	**Z**	**6930**	**6930 TF**
20	1,0	105	32	20	5	■	■
16	1,5	90	25	16	5	■	■
20	1,5	105	32	20	5	■	■
16	2,0	90	25	16	5	■	■
20	2,0	105	32	20	5	■	■
20	2,5	105	32	20	5	■	■
20	3,0	105	32	20	5	■	-

Um größere Profilüberfräsungen zu vermeiden, darf der Fräser-Ø für Feingewinde nicht größer als 2/3 des zu fräsenden Gewinde-Ø sein.
To avoid too deeply milled profiles, the thread mill Ø must not exceed 2/3 of the Ø of thread to be milled.

■ Auslaufender Artikel / discontinued items

Gewindefräser mit Einheitsschaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Metrisches ISO Gewinde nach DIN 13

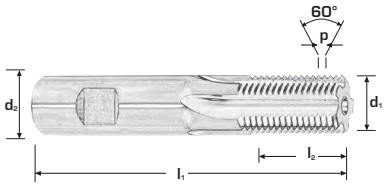
Thread milling cutters with Unified shank acc. to DIN 6535 HB and internal coolingmade of solid carbide, for ISO metric thread as per DIN 13

Für Außengewinde

For external threads



M | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling



Typ / Type						Multi TM	Multi TM
Schneidstoff/ Material						VHM	VHM
Ø d_1 (nominal)	**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**d_2 mm**	**Z**	**6931**	**6931 TF**
12	1,0	80	20	12	4	■	■
12	1,5	80	20	12	4	■	-
16	1,5	90	25	16	5	■	-
16	2,0	90	25	16	5	■	■
20	2,0	105	32	20	5	■	■
20	3,0	105	32	20	5	-	■

Um größere Profilüberfräsungen zu vermeiden, darf der Fräser-Ø für Feingewinde nicht größer als 2/3 des zu fräsenden Gewinde-Ø sein.
To avoid too deeply milled profiles, the thread mill Ø must not exceed 2/3 of the Ø of thread to be milled.

■ Auslaufender Artikel / discontinued items

Gewindefräser mit Einheitsschaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Whitworth-Rohrgewinde DIN – ISO 228

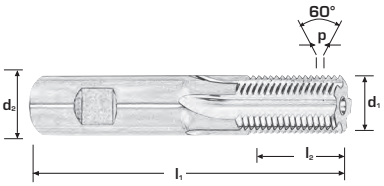
Thread milling cutters with unified shankacc. to DIN 6535 HB and internal cooling made of solid carbide, for British standard pipe thread DIN – ISO 228

Für Innen- und Außengewinde

For internal and external threads



G TiAlN Futura **Axialer Kühlmittelaustritt**
Axial internal cooling



Typ / Type									Multi TM	Multi TM
Schneidstoff/ Material									VHM	VHM
Ø mm	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**Ø d_1** (nominal)	**d_2** mm	**Z**	**6932**	**6932 TF**
G 1/2	14	1,814	30,75	105	32	20	20	5	■	■

■ Auslaufender Artikel / discontinued items

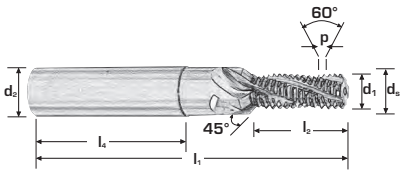
MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Regelgewinde nach DIN 13
Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for ISO metric coarse thread as per DIN 13

Für Innegewinde
For internal threads

M | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type											**Multi CTM**	**Multi CTM**
Schneidstoff/ Material											VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø $d_2$mm** h6	**Ø ds**	**Z**	**7040**	**7040 TF**
M	**2,0**	0,40	1,60	48	3,40	36	1,5	6	2,1	2	●	●
M	**2,5**	0,45	2,05	48	4,25	36	1,9	6	2,6	3	●	●
M	**3,0**	0,50	2,50	48	5,25	36	2,3	6	3,2	3	●	●
M	**3,5**	0,60	2,75	48	6,30	36	2,7	6	3,7	3	●	●
M	**4,0**	0,70	3,30	48	7,35	36	3,0	6	4,2	3	●	●
M	**5,0**	0,80	4,20	54	9,15	36	3,8	6	5,3	3	●	●
M	**6,0**	1,00	5,00	62	10,50	36	4,5	8	6,3	3	●	●
M	**8,0**	1,25	6,80	74	13,10	40	6,0	10	8,4	3	●	●
M	**10,0**	1,50	8,50	80	17,20	45	8,0	12	10,5	4	●	●
M	**12,0**	1,75	10,20	90	20,05	45	10,0	14	12,6	4	●	●
M	**14,0**	2,00	12,00	102	25,00	48	10,8	16	14,7	4	●	●
M	**16,0**	2,00	14,00	102	27,00	48	12,8	18	16,8	4	●	●
M	**18,0**	2,50	15,50	125	33,70	50	13,9	20	21,0	4	●	●
M	**20,0**	2,50	17,50	125	33,70	50	13,9	20	21,0	4	●	●

● Standardartikel / Items available ex stock

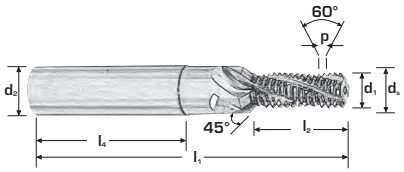
MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Regelgewinde nach DIN 13
Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for ISO metric coarse thread as per DIN 13

Für Innegewinde
For internal threads

M | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type											Multi CTM	Multi CTM
Schneidstoff / Material											VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø $d_2$mm** h6	**Ø ds**	**Z**	**7041**	**7041 TF**
M	**2,0**	0,40	1,60	48	4,6	36	1,50	6	2,1	2	●	●
M	**2,5**	0,45	2,05	48	6,1	36	1,90	6	2,6	3	●	●
M	**3,0**	0,50	2,50	48	6,7	36	2,30	6	3,2	3	●	●
M	**3,5**	0,60	2,75	48	8,1	36	2,70	6	3,7	3	●	●
M	**4,0**	0,70	3,30	48	8,7	36	3,00	6	4,2	3	●	●
M	**5,0**	0,80	4,20	54	10,8	36	3,80	6	5,3	3	●	●
M	**6,0**	1,00	5,00	62	13,5	36	4,50	8	6,3	3	●	●
M	**8,0**	1,25	6,80	74	18,1	40	5,95	10	8,4	3	●	●
M	**10,0**	1,50	8,50	80	21,7	45	7,95	12	10,5	4	●	●
M	**12,0**	1,75	10,20	90	25,3	45	9,95	14	12,6	4	●	●
M	**14,0**	2,00	12,00	102	31,0	48	10,80	16	14,7	4	●	●
M	**16,0**	2,00	14,00	102	35,0	48	12,80	18	16,8	4	●	●
M	**18,0**	2,50	15,50	125	41,2	50	13,90	20	21,5	4	●	●
M	**20,0**	2,50	17,50	125	41,2	50	13,90	20	21,5	4	●	●

● Standardartikel / Items available ex stock

MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

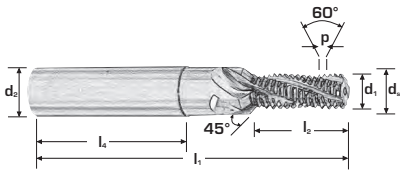
Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for ISO metric coarse thread as per DIN 13

Für Innegewinde

For internal threads

MF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type											Multi CTM	Multi CTM
Schneidstoff / Material											VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø $d_2$mm** h6	**Ø ds**	**Z**	**7042**	**7042 TF**
MF	**4**	0,50	3,3	48	7,25	36	3,00	6	4,2	3	●	●
MF	**5**	0,50	4,2	54	8,75	36	3,80	6	5,3	3	●	●
MF	**6**	0,50	5,0	62	9,75	36	4,50	8	6,3	3	●	●
MF	**6**	0,75	5,0	62	10,13	36	4,50	8	6,3	3	●	●
MF	**8**	0,50	6,8	74	12,75	40	5,95	10	8,4	3	●	●
MF	**8**	0,75	6,8	74	13,13	40	5,95	10	8,4	3	●	●
MF	**8**	1,00	6,8	74	13,50	40	5,95	10	8,4	3	●	●
MF	**10**	1,00	8,5	80	16,50	45	7,95	12	10,5	4	●	●
MF	**10**	1,25	8,5	80	16,90	45	7,95	12	10,5	4	●	●
MF	**12**	1,00	10,2	90	19,50	45	9,95	14	12,6	4	●	●
MF	**12**	1,50	10,2	90	20,25	45	9,95	14	12,6	4	●	●
MF	**14**	1,50	12,0	102	23,25	48	10,80	16	14,7	4	●	●
MF	**16**	1,50	14,0	102	26,25	48	12,80	18	16,8	4	●	●

● Standardartikel / Items available ex stock

MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

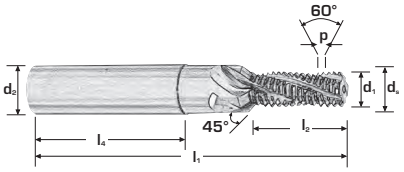
Gewindefräser mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO-Feingewinde nach DIN 13 (Einschraubtiefe max. 2.0 x d1)

Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for ISO metric coarse thread as per DIN 13

Für Innegewinde

For internal threads

MF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type											Multi CTM	Multi CTM
Schneidstoff / Material											VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø $d_2$mm** h6	**Ø ds**	**Z**	**7043**	**7043 TF**
MF	**4**	0,50	3,3	48	8,7	36	3,00	6	4,2	3	●	●
MF	**5**	0,50	4,2	54	10,7	36	3,80	6	5,3	3	●	●
MF	**6**	0,50	5,0	62	12,7	36	4,50	8	6,3	3	●	●
MF	**6**	0,75	5,0	62	13,1	36	4,50	8	6,3	3	●	●
MF	**8**	0,50	6,8	74	17,7	40	5,95	10	8,4	3	●	●
MF	**8**	0,75	6,8	74	16,9	40	5,95	10	8,4	3	●	●
MF	**8**	1,00	6,8	74	17,5	40	5,95	10	8,4	3	●	●
MF	**10**	1,00	8,5	80	21,5	45	7,95	12	10,5	4	●	●
MF	**10**	1,25	8,5	80	21,9	45	7,95	12	10,5	4	●	●
MF	**12**	1,00	10,2	90	25,5	45	9,95	14	12,6	4	●	●
MF	**12**	1,50	10,2	90	26,2	45	9,95	14	12,6	4	●	●
MF	**14**	1,50	12,0	102	30,8	48	10,80	16	14,7	4	●	●
MF	**16**	1,50	14,0	102	33,8	48	12,80	18	16,8	4	●	●

● Standardartikel / Items available ex stock

MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

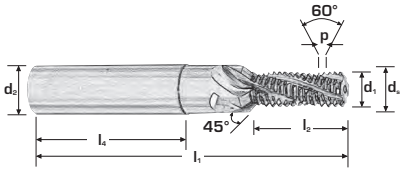
Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Unified Gewinde UNC ANSI B 1.1

Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for unified thread UNC ANSI B 1.1

Für Innegewinde

For internal threads

UNC | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type												**Multi CTM**	**Multi CTM**
Schneidstoff/ Material												VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2**mm h6	**Ø ds**	**Z**	**7046**	**7046 TF**
UNC	nr. 8	32	0,79	3,5	48	9,1	36	3,10	6	4,4	3	●	●
UNC	nr. 10	24	1,06	3,8	54	11,1	36	3,60	6	5,1	3	●	●
UNC	nr. 12	24	1,06	4,5	54	12,2	36	4,10	6	5,8	3	●	●
UNC	1/4	20	1,27	5,2	62	14,6	36	4,80	8	6,7	3	●	●
UNC	5/16	18	1,41	6,5	74	17,6	40	5,95	10	8,3	3	●	●
UNC	3/8	16	1,59	8,0	80	21,4	45	7,10	12	10,0	4	●	●
UNC	7/16	14	1,81	9,3	80	24,5	45	7,95	12	11,7	4	●	●
UNC	1/2	13	1,95	10,8	90	28,3	45	9,95	14	13,3	4	●	●
UNC	9/16	12	2,12	12,3	102	30,7	48	10,80	16	15,0	4	●	●
UNC	5/8	11	2,31	13,5	102	30,7	48	11,90	18	16,7	4	●	●

● Standardartikel / Items available ex stock

MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

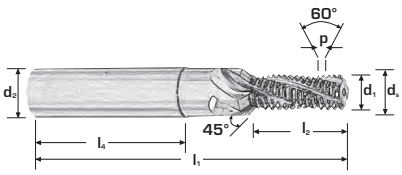
Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Unified Gewinde UNF ANSI B 1.1

Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for unified thread UNF ANSI B 1.1

Für Innegewinde

For internal threads

UNF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type												Multi CTM	Multi CTM
Schneidstoff/ Material												VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø $d_2$mm** h6	**Ø ds**	**Z**	**7048**	**7048 TF**
UNF	**nr. 10**	32	0,79	4,0	54	11,5	36	3,6	6	5,1	3	●	●
UNF	**nr. 12**	28	0,91	4,6	54	12,2	36	4,1	6	5,8	3	●	●
UNF	**1/4**	28	0,91	5,5	62	14,1	36	4,8	8	6,3	3	●	●
UNF	**5/16**	24	1,06	6,8	74	17,4	40	5,95	10	8,3	3	●	●
UNF	**3/8**	24	1,06	8,5	80	20,7	45	7,95	12	10,0	4	●	●
UNF	**7/16**	20	1,27	9,8	80	24,7	45	7,95	12	11,7	4	●	●
UNF	**1/2**	20	1,27	11,5	90	27,3	45	9,95	14	13,3	4	●	●
UNF	**9/16**	18	1,41	12,8	102	30,3	48	10,8	16	15,0	4	●	●
UNF	**5/8**	18	1,41	14,5	102	33,1	48	11,9	18	16,7	4	●	●

● Standardartikel / Items available ex stock

MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

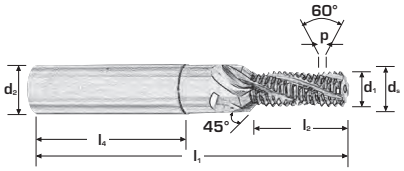
Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr, aus Vollhartmetall für Whitworth – Rohrgewinde DIN ISO 228

Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for British standard pipe thread DIN – ISO 228

Für Innen- und Außengewinde

For internal and external threads

G TiAlN Futura **Axialer Kühlmittelaustritt**
Axial internal cooling





Typ / Type											Multi CTM	Multi CTM
Schneidstoff/ Material											VHM	VHM
Ø mm	**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2** mm h6	**Ø ds**	**Z**	**7044**	**7044 TF**
G 1/8	28	0,88	8,7	80	21,25	45	7,95	12	10,2	4	●	●
G 1/4	19	1,29	11,8	90	28,65	45	9,95	14	13,8	4	●	●
G 3/8	19	1,29	15,2	102	35,35	48	13,6	18	17,5	4	●	●

● Standardartikel / Items available ex stock

MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

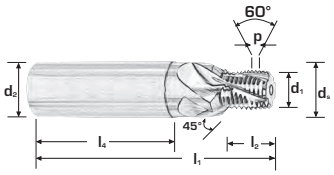
Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr aus Vollhartmetall, für NPT Gewinde ANSI B 1.20.1
Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for American standard taper pipe thread ANSI B 1.20.1

Für Innegewinde
For internal threads



NPT TiAlN Futura

Axialer Kühlmittelaustritt
Axial internal cooling



Typ / Type											Multi CTM	Multi CTM
Schneidstoff/ Material											VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_{2mm}** h6	**Ø ds**	**Z**	**7050**	**7050 TF**
NPT	**1/8**	27	0,94	8,4	70	9,86	45	7,30	12	10,0	4	●	●
NPT	**1/4**	18	1,41	10,8	80	14,8	48	9,95	16	13,1	4	●	●
NPT	**3/8**	18	1,41	12,4	80	14,8	48	12,50	18	16,7	4	●	●

● Standardartikel / Items available ex stock

MULTI **CTM**

27° RECHTSDRALL **/** RIGHT HAND HELIX 27°

Gewindefräser mit Senkfase, mit Zylinderschaft und innerer Kühlmittelzufuhr aus Vollhartmetall, für NPT Gewinde ANSI B 1.20.3

Solid carbide thread milling cutters with chamfer, with straight shank and internal cooling, for dryseal American standard taper pipe thread ANSI B 1.20.3

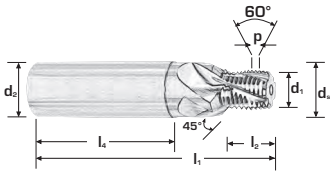
Für Innegewinde

For internal threads



NPTF | TiAlN Futura

Axialer Kühlmittelaustritt
Axial internal cooling



Typ / Type											Multi CTM	Multi CTM
Schneidstoff / Material											VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø $d_2$mm** h6	**Ø ds**	**Z**	**7052**	**7052 TF**
NPTF	**1/8**	27	0,94	8,4	70	9,83	45	7,30	12	10,0	4	●	●
NPTF	**1/4**	18	1,41	10,8	80	14,77	48	9,95	16	13,1	4	●	●
NPTF	**3/8**	18	1,41	14,2	80	14,77	48	12,50	18	16,7	4	●	●

● Standardartikel / Items available ex stock

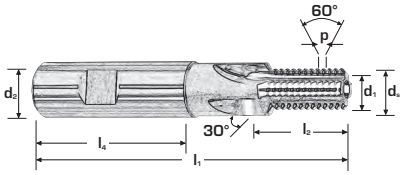
Gewindefräser mit Senkfase, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Regelgewinde nach DIN 13

Thread milling cutters with chamfer, with shank acc. to DIN 6535 HB and internal cooling, made of solid carbide for ISO metric coarse thread as per DIN 13

Für Innegewinde

For internal threads

M | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling





Typ / Type												Multi CTM	Multi CTM
Schneidstoff/ Material												VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø d_1 mm**	**Ø d_2 mm** h6	**Ø ds**	**Z**	**6933**	**6933 TF**
M	5	0,80	4,2	55	7,6	36	4,00	6	4,0	5,3	3	-	■
M	6	1,00	5,0	62	9,5	36	4,80	8	4,8	6,3	3	■	■
M	8	1,25	6,8	74	13,1	40	6,50	10	6,5	8,3	3	■	■
M	10	1,50	8,5	80	15,8	45	8,20	12	8,2	10,3	3	■	■
M	12	1,75	10,2	90	17,9	45	9,95	14	9,9	12,3	4	■	■
M	14	2,00	12,0	100	23,0	48	11,60	16	11,6	14,3	4	■	■
M	16	2,00	14,0	102	25,0	48	13,60	18	13,6	16,3	4	■	■

■ Auslaufender Artikel / discontinued items

Gewindefräser mit Senkfase, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Regelgewinde nach DIN 13

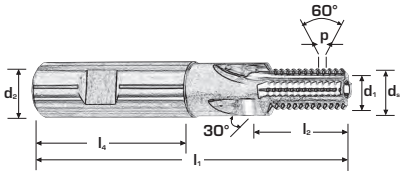
Thread milling cutters with chamfer, with shank acc. to DIN 6535 HB and internal cooling, made of solid carbide for ISO metric coarse thread as per DIN 13

Für Innegewinde

For internal threads



M | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling



Typ / Type												Multi CTM	Multi CTM
Schneidstoff/ Material												VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1 (nominal)**	**Ø d_1 mm**	**Ø d_2 mm h6**	**Ø ds**	**Z**	**6935**	**6935 TF**
M	5	0,80	4,2	55	10,8	32	4,00	6	4,0	5,3	3	■	-
M	6	1,00	5,0	62	12,5	36	4,80	8	4,8	6,3	3	■	■
M	12	1,75	10,2	90	25,4	45	9,95	14	9,9	12,3	4	■	■
M	16	2,00	14,0	102	33	48	13,60	18	13,6	16,3	4	■	■

■ Auslaufender Artikel / discontinued items

Gewindefräser mit Senkfase, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

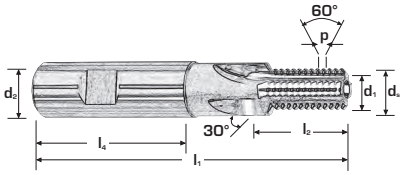
Thread milling cutters with chamfer, with shank acc. to DIN 6535 HB and internal cooling made of solid carbide for ISO metric fine thread as per DIN 13



Für Innegewinde

For internal threads

MF | TiAlN Futura | **Axialer Kühlmittelaustritt** Axial internal cooling



Typ / Type												Multi CTM	Multi CTM
Schneidstoff/ Material												VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø d_1 mm**	**Ø d_2 mm** h6	**Ø ds**	**Z**	**6934**	**6934 TF**
M	**6**	0,75	5,0	62	9,40	36	4,50	5,0	8	6,3	3	■	■
M	**8**	1,00	6,8	74	12,50	40	5,95	6,7	10	8,3	3	■	■
M	**10**	1,00	8,5	80	15,50	45	7,95	8,7	12	10,3	3	■	■
M	**12**	1,00	10,2	90	18,50	45	9,95	10,6	14	12,3	4	■	■
M	**12**	1,50	10,2	90	18,75	45	9,95	10,1	14	12,3	4	■	■
M	**14**	1,50	12,0	100	21,75	48	11,60	12,1	16	14,3	4	■	■
M	**16**	1,50	14,0	102	24,80	48	13,60	14,0	18	16,3	4	-	■

■ Auslaufender Artikel / discontinued items

Gewindefräser mit Senkfase, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

Thread milling cutters with chamfer, with shank acc. to DIN 6535 HB and internal cooling made of solid carbide for ISO metric fine thread as per DIN 13

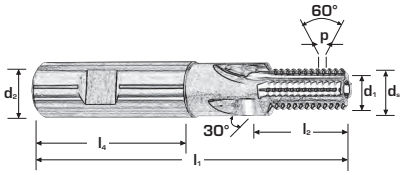


Für Innegewinde

For internal threads

MF | TiAlN Futura

Axialer Kühlmittelaustritt
Axial internal cooling



Typ / Type												Multi CTM	Multi CTM
Schneidstoff/ Material												VHM	VHM
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø d_1 mm**	**Ø d_2 mm** h6	**Ø ds**	**Z**	**6936**	**6936 TF**
M	6	0,75	5,0	62	12,40	36	4,50	5,0	8	6,3	3	■	■
M	8	1,00	6,8	74	16,50	40	5,95	6,7	10	8,3	3	■	■
M	10	1,00	8,5	80	20,50	45	7,95	8,7	12	10,3	3	■	■
M	12	1,00	10,2	90	24,50	45	9,95	10,6	14	12,3	4	■	■
M	12	1,50	10,2	90	24,75	45	9,95	10,1	14	12,3	4	■	■
M	14	1,50	12,0	100	29,25	48	11,60	12,1	16	14,3	4	■	■
M	16	1,50	14,0	102	32,25	48	13,60	14,0	18	16,3	4	■	■

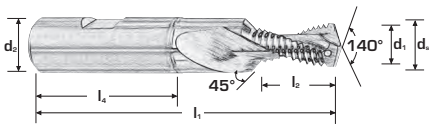
■ Auslaufender Artikel / discontinued items

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetallfür Metrisches ISO – Regelgewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric coarse thread as per DIN 13



M | TiAlN Futura | **Kühlmittelaustritt** internal cooling



Typ / Type										Multi DTM	Multi DTM
Schneidstoff / Material										VHM	VHM
Ø mm		**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1 (nominal)**	**Ø $d_2$mm h6**	**Ø ds mm**	**Z**	**6940**	**6940 TF**
***M**	**3**	0,50	48	5,40	36	2,40	6	3,2	2	●	●
***M**	**4**	0,70	48	6,85	36	3,20	6	4,2	2	●	●
***M**	**5**	0,80	54	8,70	36	4,00	6	5,3	2	●	●
M	**6**	1,00	62	10,85	36	4,75	8	6,3	2	●	●
M	**8**	1,25	74	13,65	40	6,35	10	8,4	2	●	●
M	**10**	1,50	80	17,95	45	7,95	12	10,5	2	●	●
M	**12**	1,75	90	20,75	45	9,95	14	12,6	2	●	●
M	**14**	2,00	102	23,55	48	11,20	16	14,7	2	●	●
M	**16**	2,00	102	25,90	48	13,20	18	16,8	2	●	●

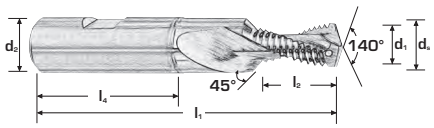
*Alle Abmessungen ← M 6 ohne Kühlkanäle / / All diameters < M 6 without internal cooling

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetallfür Metrisches ISO – Regelgewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric coarse thread as per DIN 13

M | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type										Multi DTM	Multi DTM
Schneidstoff/ Material										VHM	VHM
Ø mm		**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø $d_2$mm** h6	**Ø ds mm**	**Z**	**6942**	**6942 TF**
*M	3	0,50	48	6,90	36	2,40	6	3,2	2	●	●
*M	4	0,70	48	8,95	36	3,20	6	4,2	2	●	●
*M	5	0,80	54	11,10	36	4,00	6	5,3	2	●	●
M	6	1,00	62	13,85	36	4,75	8	6,3	2	●	●
M	8	1,25	74	18,65	40	6,35	10	8,4	2	●	●
M	10	1,50	80	22,45	45	7,95	12	10,5	2	●	●
M	12	1,75	90	26,00	45	9,95	14	12,6	2	●	●
M	14	2,00	102	31,55	48	11,20	16	14,7	2	●	●
M	16	2,00	102	35,90	48	13,20	18	16,8	2	●	●

*Alle Abmessungen ← M 6 ohne Kühlkanäle / / All diameters < M 6 without internal cooling

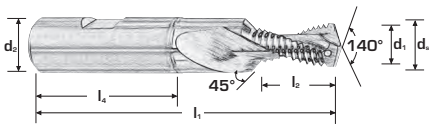
● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetallfür Metrisches ISO – Regelgewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric coarse thread as per DIN 13



M | TiAlN Futura | **Kühlmittelaustritt** internal cooling



Typ / Type									Multi DTM	Multi DTM
Schneidstoff / Material									VHM	VHM
Ø mm	**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1 (nominal)**	**Ø d_2 mm h6**	**Ø ds mm**	**Z**	**6947**	**6947 TF**
M 6	1,00	62	16,85	36	4,75	8	6,3	2	●	●
M 8	1,25	74	22,40	40	6,35	10	8,4	2	●	●
M 10	1,50	80	26,95	45	7,95	12	10,5	2	●	●
M 12	1,75	90	31,25	45	9,95	14	12,6	2	●	●
M 14	2,00	102	39,55	48	11,20	16	14,7	2	●	●
M 16	2,00	102	45,90	48	13,20	18	16,8	2	●	●

● Standardartikel / Items available ex stock

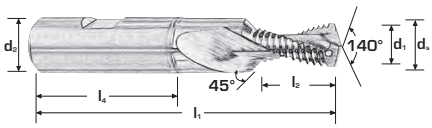
Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Metrisches ISO – Regelgewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric fine coarse thread as per DIN 13

Für Innegewinde

For internal threads

MF | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type										**Multi DTM**	**Multi DTM**
Schneidstoff/ Material										VHM	VHM
Ø mm		**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2** mm h6	**Ø ds** mm	**Z**	**6944**	**6944 TF**
*MF	5	0,50	54	8,30	36	4,00	6	5,3	2	●	●
MF	6	0,75	62	9,90	36	4,75	8	6,3	2	●	●
MF	8	1,00	74	14,20	40	6,35	10	8,4	2	●	●
MF	10	1,00	80	16,55	45	7,95	12	10,5	2	●	●
MF	10	1,25	80	16,55	45	7,95	12	10,5	2	●	●
MF	12	1,00	90	19,95	45	9,95	14	12,6	2	●	●
MF	12	1,50	90	21,30	45	9,95	14	12,6	2	●	●
MF	14	1,50	102	23,20	48	11,20	16	14,7	2	●	●
MF	16	1,50	102	26,55	48	13,20	18	16,8	2	●	●

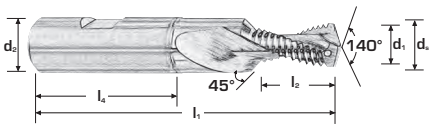
*Alle Abmessungen ← M 6 ohne Kühlkanäle / / All diameters < M 6 without internal cooling

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetallfür Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric fine coarse thread as per DIN 13

MF | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type										**Multi DTM**	**Multi DTM**
Schneidstoff/ Material										VHM	VHM
Ø mm		**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2** mm h6	**Ø ds** mm	**Z**	**6946**	**6946 TF**
*MF	5	0,50	54	10,80	36	4,00	6	5,3	2	●	●
MF	6	0,75	62	12,90	36	4,75	8	6,3	2	●	●
MF	8	1,00	74	17,20	40	6,35	10	8,4	2	●	●
MF	10	1,00	80	21,55	45	7,95	12	10,5	2	●	●
MF	10	1,25	80	21,55	45	7,95	12	10,5	2	●	●
MF	12	1,00	90	25,95	45	9,95	14	12,6	2	●	●
MF	12	1,50	90	27,30	45	9,95	14	12,6	2	●	●
MF	14	1,50	102	30,70	48	11,20	16	14,7	2	●	●
MF	16	1,50	102	34,05	48	13,20	18	16,8	2	●	●

*Alle Abmessungen ← M 6 ohne Kühlkanäle / / All diameters < M 6 without internal cooling

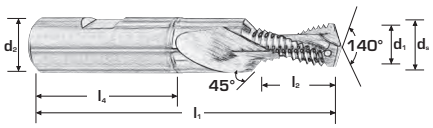
● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetallfür Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric fine coarse thread as per DIN 13



MF | TiAlN Futura | **Kühlmittelaustritt** internal cooling



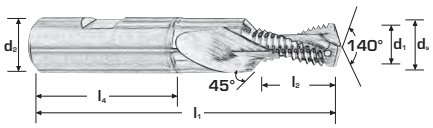
Typ / Type										Multi DTM	Multi DTM
Schneidstoff / Material										VHM	VHM
Ø mm		**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø d_2 mm** h6	**Ø ds mm**	**Z**	**6943**	**6943 TF**
MF	**8**	1,00	74	21,20	40	6,35	10	8,4	2	●	●
MF	**10**	1,00	80	26,55	45	7,95	12	10,5	2	●	●
MF	**10**	1,25	80	26,55	45	7,95	12	10,5	2	●	●
MF	**12**	1,00	90	30,95	45	9,95	14	12,6	2	●	●
MF	**12**	1,50	90	31,80	45	9,95	14	12,6	2	●	●
MF	**14**	1,50	102	35,20	48	11,20	16	14,7	2	●	●
MF	**16**	1,50	102	45,55	48	13,20	18	16,8	2	●	●

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Unified Gewinde UNC ANSI B 1.1

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for unified thread UNC ANSI B 1.1

UNC | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type											Multi DTM	Multi DTM
Schneidstoff / Material											VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2** mm h6	**Ø ds** mm	**Z**	**7068**	**7068 TF**
*UNC	nr.10	24	1,06	54	9,10	36	3,60	6	5,1	2	●	●
*UNC	nr.12	24	1,06	54	9,25	36	4,10	6	5,8	2	●	●
UNC	1/4	20	1,27	62	11,00	36	5,00	8	6,7	2	●	●
UNC	5/16	18	1,41	74	13,80	36	6,25	10	8,3	2	●	●
UNC	3/8	16	1,59	80	17,15	40	7,50	12	10,0	2	●	●
UNC	7/16	14	1,81	80	19,40	45	8,80	12	11,7	2	●	●
UNC	1/2	13	1,95	90	21,90	45	10,20	14	13,3	2	●	●
UNC	9/16	12	2,12	102	24,75	48	11,80	16	15,0	2	●	●
UNC	5/8	11	2,31	102	26,90	48	13,10	18	16,5	2	●	●

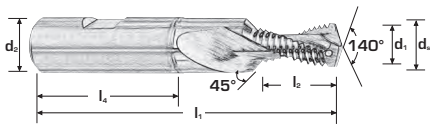
Nr. 10 und Nr. 12 ohne Kühlkanäle / No. 10 and No. 12 without internal cooling

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Unified Gewinde UNC ANSI B 1.1

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for unified thread UNC ANSI B 1.1

UNC | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type											**Multi DTM**	**Multi DTM**
Schneidstoff / Material											VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_{2mm}** h6	**Ø ds** mm	**Z**	**7070**	**7070 TF**
*UNC	nr.10	24	1,06	54	11,25	36	3,60	6	5,1	2	●	●
*UNC	nr.12	24	1,06	54	12,40	36	4,10	6	5,8	2	●	●
UNC	1/4	20	1,27	62	14,85	36	5,00	8	6,7	2	●	●
UNC	5/16	18	1,41	74	18,00	36	6,25	10	8,3	2	●	●
UNC	3/8	16	1,59	80	21,90	40	7,50	12	10,0	2	●	●
UNC	7/16	14	1,81	80	24,85	45	8,80	12	11,7	2	●	●
UNC	1/2	13	1,95	90	26,80	45	10,20	14	13,3	2	●	●
UNC	9/16	12	2,12	102	31,10	48	11,80	16	15,0	2	●	●
UNC	5/8	11	2,31	102	36,15	48	13,10	18	16,5	2	●	●

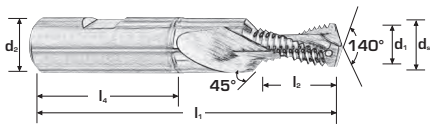
Nr. 10 und Nr. 12 ohne Kühlkanäle / No. 10 and No. 12 without internal cooling

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Unified Gewinde UNF ANSI B 1.1

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for unified thread UNF ANSI B 1.1

UNF | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type											**Multi DTM**	**Multi DTM**
Schneidstoff / Material											VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2** mm h6	**Ø ds** mm	**Z**	**7064**	**7064 TF**
*UNF	nr.10	32	0,79	54	7,85	36	3,80	6	5,1	2	●	●
*UNF	nr.12	28	0,91	54	9,85	36	4,50	6	5,8	2	●	●
UNF	1/4	28	0,91	62	10,90	36	5,00	8	6,7	2	●	●
UNF	5/16	24	1,06	74	13,90	36	5,95	10	8,3	2	●	●
UNF	3/8	24	1,06	80	16,30	40	7,95	12	10,0	2	●	●
UNF	7/16	20	1,27	80	18,25	45	7,95	12	11,7	2	●	●
UNF	1/2	20	1,27	90	21,10	45	9,95	14	13,3	2	●	●
UNF	9/16	18	1,41	102	23,40	48	15,50	16	15,0	2	●	●
UNF	5/8	18	1,41	102	26,50	48	17,50	18	16,7	2	●	●

Nr. 10 und Nr. 12 ohne Kühlkanäle / No. 10 and No. 12 without internal cooling

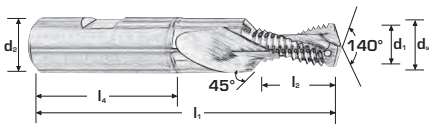
● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Unified Gewinde UNF ANSI B 1.1

Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for unified thread UNF ANSI B 1.1



UNF | TiAlN Futura | **Kühlmittelaustritt** internal cooling



Typ / Type										Multi DTM	Multi DTM
Schneidstoff / Material										VHM	VHM
Ø mm		**Gg/1"** Tpi	**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2** mm h6	**Ø ds** mm	**Z**	**7066**	**7066 TF**
*UNF	nr.10	32	0,79	54	10,20	36	3,80	6	5,1	2	●	●
*UNF	nr.12	28	0,91	54	12,55	36	4,50	6	5,8	2	●	●
UNF	1/4	28	0,91	62	12,70	36	5,00	8	6,7	2	●	●
UNF	5/16	24	1,06	74	18,15	36	5,95	10	8,3	2	●	●
UNF	3/8	24	1,06	80	20,55	40	7,95	12	10,0	2	●	●
UNF	7/16	20	1,27	80	24,60	45	7,95	12	11,7	2	●	●
UNF	1/2	20	1,27	90	27,40	45	9,95	14	13,3	2	●	●
UNF	9/16	18	1,41	102	30,45	48	15,50	16	15,0	2	●	●
UNF	5/8	18	1,41	102	33,55	48	17,50	18	16,7	2	●	●

Nr. 10 und Nr. 12 ohne Kühlkanäle / No. 10 and No. 12 without internal cooling

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Whitworth - Rohrgewinde DIN ISO 228

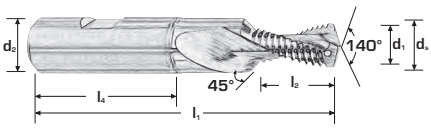
Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for British standard pipe thread DIN ISO 228



G

TiAlN Futura

Kühlmittelaustritt
internal cooling



Typ / Type										Multi DTM	Multi DTM
Schneidstoff/ Material										VHM	VHM
Ø mm	Gg/1" Tpi	Steigung Pitch	l_1 mm	l_2 mm	l_4 mm	Ø d_1 (nominal)	Ø d_2 mm h6	Ø ds mm	Z	7060	7060 TF
G 1/8	28	0,91	80	16	45	7,95	12	10,2	2	●	●
G 1/4	19	1,34	90	22	45	11,00	14	13,8	2	●	●
G 3/8	19	1,34	102	28	48	13,80	18	17,5	2	●	●

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 2 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr aus Vollhartmetall, für Whitworth - Rohrgewinde DIN ISO 228

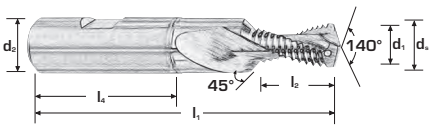
Solid carbide thread milling cutters with chamfer and 2 flutes, with shank acc. to DIN 6535 HB and internal cooling for British standard pipe thread DIN ISO 228



G

TiAlN Futura

Kühlmittelaustritt
internal cooling



Typ / Type										Multi DTM	Multi DTM
Schneidstoff/ Material										VHM	VHM
Ø mm	Gg/1" Tpi	Steigung Pitch	l_1 mm	l_2 mm	l_4 mm	Ø d_1 (nominal)	Ø d_2 mm h6	Ø ds mm	Z	7062	7062 TF
G 1/8	28	0,91	80	21,45	45	7,95	12	10,2	2	●	●
G 1/4	19	1,34	90	28,70	45	11,00	14	13,8	2	●	●
G 3/8	19	1,34	102	36,00	48	13,80	18	17,5	2	●	●

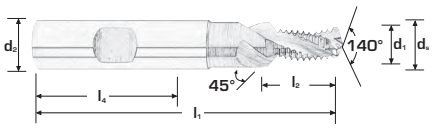
● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric coarse thread as per DIN 13



M | TiAlN Futura | **Kühlmittelaustritt** internal cooling



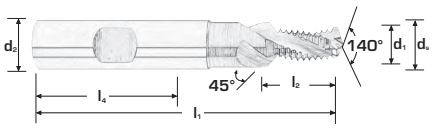
Typ / Type										Multi DTM	Multi DTM
Schneidstoff / Material										VHM	VHM
Ø mm		**Steigung** Pitch	**l_1** mm	**l_2** mm	**l_4** mm	**Ø d_1** (nominal)	**Ø d_2** mm h6	**Ø ds** mm	**Z**	**7071**	**7071 TF**
M	6	1,00	62	10,85	36	4,75	8	6,3	3	●	●
M	8	1,25	74	13,65	40	6,35	10	8,4	3	●	●
M	10	1,50	80	17,95	45	7,95	12	10,5	3	●	●
M	12	1,75	90	20,75	45	9,95	14	12,6	3	●	●
M	14	2,00	102	23,55	48	11,20	16	14,7	3	●	●
M	16	2,00	102	25,90	48	13,20	18	16,8	3	●	●

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Regelgewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric coarse thread as per DIN 13

M | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type — Multi DTM | Multi DTM

Schneidstoff / Material — VHM | VHM

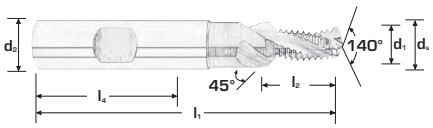
Ø mm		Steigung Pitch	l_1 mm	l_2 mm	l_4 mm	Ø d_1 (nominal)	Ø d_2 mm h6	Ø ds mm	Z	7073	7073 TF
M	3	0,50	48	6,90	36	2,40	6	3,2	3	●	●
M	4	0,70	48	8,95	36	3,20	6	4,2	3	●	●
M	5	0,80	54	11,10	36	4,00	6	5,3	3	●	●
M	6	1,00	62	13,85	36	4,75	8	6,3	3	●	●
M	8	1,25	74	18,65	40	6,35	10	8,4	3	●	●
M	10	1,50	80	22,45	45	7,95	12	10,5	3	●	●
M	12	1,75	90	26,00	45	9,95	14	12,6	3	●	●
M	14	2,00	102	31,55	48	11,20	16	14,7	3	●	●
M	16	2,00	102	35,90	48	13,20	18	16,8	3	●	●

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Regelgewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric coarse thread as per DIN 13

M | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type — Multi DTM | Multi DTM

Schneidstoff / Material — VHM | VHM

Ø mm		Steigung Pitch	l_1 mm	l_2 mm	l_4 mm	Ø d_1 (nominal)	Ø d_2 mm h6	Ø ds mm	Z	7075	7075 TF
*M	3	0,50	48	8,40	36	2,40	6	3,2	3	●	●
*M	4	0,70	48	11,05	36	3,20	6	4,2	3	●	●
*M	5	0,80	54	13,50	36	4,00	6	5,3	3	●	●
M	6	1,00	62	16,85	36	4,75	8	6,3	3	●	●
M	8	1,25	74	22,40	40	6,35	10	8,4	3	●	●
M	10	1,50	80	26,95	45	7,95	12	10,5	3	●	●
M	12	1,75	90	31,25	45	9,95	14	12,6	3	●	●
M	14	2,00	102	39,55	48	11,20	16	14,7	3	●	●
M	16	2,00	102	45,90	48	13,20	18	16,8	3	●	●

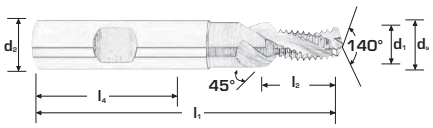
*Ohne Innenkühlung / Without internal cooling

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Regelgewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric coarse thread as per DIN 13

M | TiAlN Futura | **Kühlmittelaustritt** internal cooling





Typ / Type — Multi DTM | Multi DTM

Schneidstoff / Material — VHM | VHM

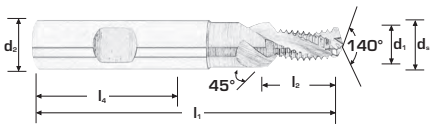
Ø mm	Steigung Pitch	l_1 mm	l_2 mm	l_4 mm	Ø d_1 (nominal)	Ø d_2 mm h6	Ø ds mm	Z	7077	7077 TF
M 6	1,0	62	18,90	36	4,75	8	6,3	3	●	●
M 8	1,25	74	25,00	40	6,35	10	8,4	3	●	●
M 10	1,5	80	31,50	45	7,95	12	10,5	3	●	●
M 12	1,75	90	38,30	45	9,95	14	12,6	3	●	●
M 14	2,0	102	43,70	48	11,20	16	14,7	3	●	●
M 16	2,0	102	50,00	48	13,20	18	16,8	3	●	●

● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric fine thread as per DIN 13

MF | TiAlN Futura | **Kühlmittelaustritt** internal cooling





1,5 x d_1

Typ / Type	**Multi DTM**
Schneidstoff/ Material	**VHM**

Ø mm		Steigung Pitch	l_1 mm	l_2 mm	l_4 mm	Ø d_1 (nominal)	Ø $d_2$mm h6	Ø ds mm	Z	7072 TF
MF	10	1,25	80	18,0	45	7,95	12	10,5	3	■
MF	14	1,50	102	23,0	48	11,20	16	14,7	3	■

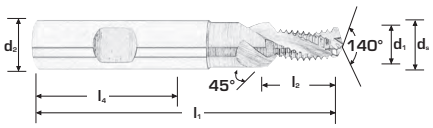
■ Auslaufender Artikel / discontinued items

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric fine thread as per DIN 13



MF | TiAlN Futura | **Kühlmittelaustritt** internal cooling



Typ / Type									Multi DTM	Multi DTM
Schneidstoff / Material									VHM	VHM
Ø mm	**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø d_2 mm** h6	**Ø ds mm**	**Z**	**7074**	**7074 TF**
MF 6	0,75	62	12,90	36	4,75	8	6,3	3	●	●
MF 8	1,00	74	17,20	40	6,35	10	8,4	3	●	●
MF 10	1,00	80	21,55	45	7,95	12	10,5	3	●	●
MF 10	1,25	80	21,55	45	7,95	12	10,5	3	●	●
MF 12	1,00	90	25,95	45	9,95	14	12,6	3	●	●
MF 12	1,50	90	27,30	45	9,95	14	12,6	3	●	●
MF 14	1,50	102	30,70	48	11,20	16	14,7	3	●	●
MF 16	1,50	102	34,05	48	13,20	18	16,8	3	●	●

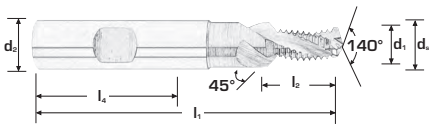
● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric fine thread as per DIN 13



MF | TiAlN Futura | **Kühlmittelaustritt** internal cooling



Typ / Type									Multi DTM	Multi DTM
Schneidstoff / Material									VHM	VHM
Ø mm	**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø d_2 mm** h6	**Ø ds mm**	**Z**	**7076**	**7076 TF**
MF 8	1,00	74	21,20	40	6,35	10	8,4	3	●	●
MF 10	1,00	80	26,55	45	7,95	12	10,5	3	●	●
MF 10	1,25	80	26,55	45	7,95	12	10,5	3	●	●
MF 12	1,00	90	30,95	45	9,95	14	12,6	3	●	●
MF 12	1,50	90	31,80	45	9,95	14	12,6	3	●	●
MF 14	1,50	102	35,20	48	11,20	16	14,7	3	●	●
MF 16	1,50	102	41,55	48	13,20	18	16,8	3	●	●

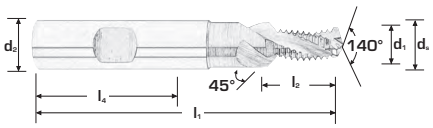
● Standardartikel / Items available ex stock

Bohrgewindefräser mit Senkfase und 3 Nuten, mit Schaft nach DIN 6535 HB und innerer Kühlmittelzufuhr, aus Vollhartmetall für Metrisches ISO – Feingewinde nach DIN 13

Solid carbide thread milling cutters with chamfer and 3 flutes, with shank acc. to DIN 6535 HB and internal cooling for ISO metric fine thread as per DIN 13



MF | TiAlN Futura | **Kühlmittelaustritt** internal cooling



Typ / Type									Multi DTM	Multi DTM
Schneidstoff / Material									VHM	VHM
Ø mm	**Steigung** Pitch	**l_1 mm**	**l_2 mm**	**l_4 mm**	**Ø d_1** (nominal)	**Ø d_2 mm** h6	**Ø ds mm**	**Z**	**7078**	**7078 TF**
MF 8	1,00	74	25,10	40	6,35	10	8,4	3	●	●
MF 10	1,00	80	31,50	45	7,95	12	10,5	3	●	●
MF 10	1,25	80	31,50	45	7,95	12	10,5	3	●	●
MF 12	1,00	90	38,30	45	9,95	14	12,6	3	●	●
MF 12	1,50	90	38,30	45	9,95	14	12,6	3	●	●
MF 14	1,50	102	43,70	48	11,20	16	14,7	3	●	●
MF 16	1,50	102	50,00	48	13,20	18	16,8	3	●	●

● Standardartikel / Items available ex stock

MULTI TMI

Gewindefräskörper mit auswechselbaren Gewindefräsplatten aus Hartmetall, Zylinderschaft mit WELDON – Fläche, mit innerer Kühlmittelzufuhr

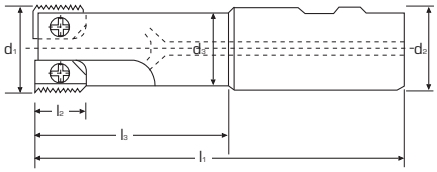
Thread milling cutter bodies with inserts indexable weldon shank, with internal cooling

UNF UN G M-MF

Kühlmittelaustritt
internal cooling







Typ / Type A
(1 Gewindefräsplatten/insert)

Typ / Type B
(2 Gewindefräsplatten/insert)

Kat. Nr. Cat. No.	Typ Type	d_1 mm	Steigung Pitch	Ausführung Esecution	l_1 mm	l_2 mm	l_3 mm	Ø d2h6	Ø d3	Gesamtlänge Fräsplatte total length insert	
6960	A	16	0,5 - 2,5	kurz/short	78	15	30	16	13	15 mm	✓
	B	25	0,5 - 2,5	kurz/short	106	15	50	25	21	15 mm	✓
6961	A	16	0,5 - 2,5	lang/long	98	15	50	16	13	15 mm	✓
	A	20	0,5 - 2,5	lang/long	110	15	60	20	17	15 mm	✓
	B	25	0,5 - 2,5	lang/long	150	15	94	25	21	15 mm	✓
6963	A	22	3,0 - 3,5	lang/long	110	15	60	20	17	15 mm	✓
	B	27	3,0 - 3,5	kurz/short	106	15	50	25	21	15 mm	✓
6962	A	25	1,0 - 4,0	kurz/short	107	26	48	25	21	26 mm	✓

Anwendungsbereich:
für Feingewinde = Fräser-Ø d1 < 2/3 des Gewinde-Ø
für Feingewinde = Fräser-Ø d1 < 3/4 des Gewinde-Ø
Kat. Nr. 6970 - Schraube
Kat. Nr. 6980 - Torx-Schraubendreher
Bei Bestellung bitte Kat. Nr. des Werkzeughalters

Application area:
for metric coarse threads = cutter Ø d_1 2/3 of thread Ø
per filettatura fine = fresa Ø d_1 3/4 of thread Ø
Cat. No. 6970 - Screw
Cat. No. 6980 - Torx screw driver
When ordering please state Cat. No. of the tool holder

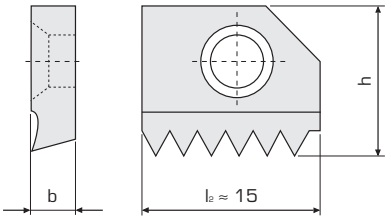
✓ Auf Anfrage / Upon request

MULTI TMI

Gewindefräsplatten aus Hartmetall für Metrisches ISO – Gewinde
Indexable inserts for ISO metric thread

Für Innegewinde
For internal threads

M MF TiN



Typ / Type					Multi TMI	Multi TMI
Schneidstoff / Material					VHM	VHM
l_2 **mm**	**Steigung** Pitch	**b mm**	**h mm**	**Standard Fräsplatte** Standard insert	**6950**	**6950 TN**
15	0,50	3,18	10	15 mm	●	●
15	0,75	3,18	10	15 mm	●	●
15	1,00	3,18	10	15 mm	●	●
15	1,25	3,18	10	15 mm	●	●
15	1,50	3,18	10	15 mm	●	●
15	1,75	3,18	10	15 mm	●	●
15	2,00	3,18	10	15 mm	●	●
15	2,50	3,18	10	15 mm	●	●
15	3,00	3,18	10	15 mm	●	●
15	3,50	3,18	10	15 mm	●	●

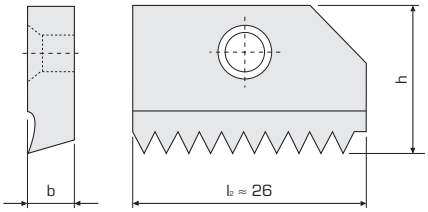
● Standardartikel / Items available ex stock

MULTI TMI

Gewindefräsplatten aus Hartmetall für Metrisches ISO – Gewinde
Indexable inserts for ISO metric thread

Für Innegewinde
For internal threads

MF F TiN



Typ / Type					**Multi TMI**	**Multi TMI**
Schneidstoff/ Material					**VHM**	**VHM**
l_2 mm	**Steigung** Pitch	**b mm**	**h mm**	**Standard Fräsplatte** Standard insert	**6956**	**6956 TN**
26	1,0	4,95	15	26 mm	●	●
26	1,5	4,95	15	26 mm	●	●
26	2,0	4,95	15	26 mm	●	●
26	2,5	4,95	15	26 mm	●	●
26	3,0	4,95	15	26 mm	●	●
26	3,5	4,95	15	26 mm	●	●
26	4,0	4,95	15	26 mm	●	●

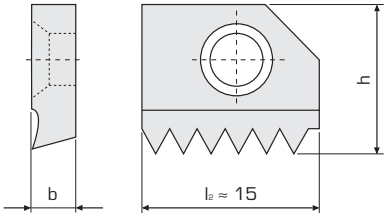
● Standardartikel / Items available ex stock

MULTI TMI

Gewindefräsplatten aus Hartmetall für Unified Gewinde ANSI B 1.1
Indexable inserts for unified thread UN ANSI B 1.1

Per filetti interni ed esterni / For internal and external threads

UN TiN



Typ / Type					Multi TMI	Multi TMI
Schneidstoff/ Material					VHM	VHM
l_2 **mm**	**Gg/1"** Tpi	**b mm**	**h mm**	**Standard Fräsplatte** Standard insert	**6954**	**6954 TN**
15	12	3,18	10	15 mm	●	●
15	14	3,18	10	15 mm	●	●
15	16	3,18	10	15 mm	●	●

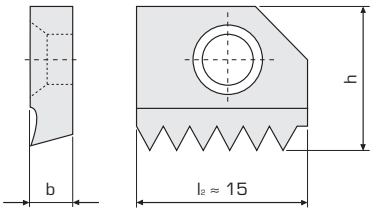
● **Standardartikel /** Items available ex stock

MULTI TMI

Gewindefräsplatten aus Hartmetall für Whitworth (BSF-BSP/G)
Indexable inserts for for Whitworth fine thread (BSF) and Whitworth pipe thread

Per filetti interni ed esterni / For internal and external threads

BSF BSP G TiN



Typ / Type					Multi TMI	Multi TMI
Schneidstoff/ Material					VHM	VHM
l_2 mm	**Gg/1"** Tpi	**b mm**	**h mm**	**Standard Fräsplatte** Standard insert	**6952**	**6952 TN**
15	11	3,18	10	15 mm	●	●
15	14	3,18	10	15 mm	●	●

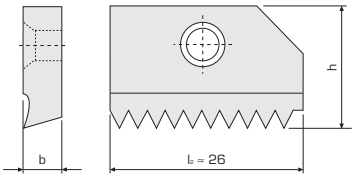
● Standardartikel / Items available ex stock

MULTI TMI

Gewindefräsplatten aus Hartmetall für Whitworth (BSF-BSP/G)
Indexable inserts for for Whitworth fine thread (BSF) and Whitworth pipe thread

Per filetti interni ed esterni / For internal and external threads

BSF BSP G TiN



Typ / Type					**Multi TMI**	**Multi TMI**
Schneidstoff/ Material					VHM	VHM
l_2 mm	**Gg/1"** Tpi	**b mm**	**h mm**	**Standard Fräsplatte** Standard insert	**6958**	**6958 TN**
26	11	4,95	15	26 mm	●	●

● Standardartikel / Items available ex stock

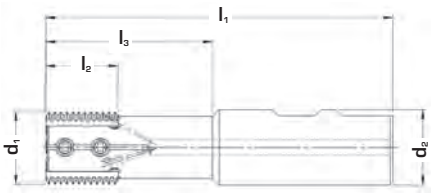
MULTI TMI

Gewindefräser mit unterschiedlichen Nuten, Wendeschneidplatten aus VHM, Weldon Schaft und Innenkühlung
Thread milling cutters multi flutes, indexable inserts, WELDON shank and internal coolant

M

Kühlmittelaustritt
internal cooling

NEW





Typ / Type

Schneidstoff/ Material

Kat. Nr. Cat. No.	d_1 mm	l_1 mm	l_2 mm	l_3 mm	Ø d2 h6	Z	Wendeplatte Standard	Schraube Screw	
6981	26	115	23	50	25	3	**6953**	**6991** M3,5	●
6982	33	115	40	85	32	3	**6955**	**6991** M3,5	●
6983	41	115	48	100	40	4	**6957**	**6991** M4	●

Kat. Nr./Cat.-No. **6991**	Schraube/Screw M3,5	Grundkörper/locking bodies **6981/6982**
Kat. Nr./Cat.-No. **6991**	Schraube/Screw M4	Grundkörper/locking body **6983**
Kat. Nr./Cat.-No. **KY T 15**		Torx Schraubendreher/Torx key

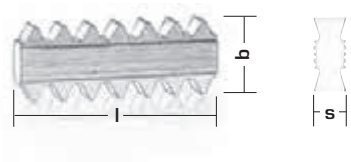
● Standardartikel / Items available ex stock

MULTI TMI

Vollhartmetallwendeplatte für ISO metrisches Gewinde
indexable inserts for ISO metric thread

Für Innegewinde
For internal threads

M TICN NEW





Typ / Type						Multi TMI	Multi TMI
Schneidstoff / Material						VHM	VHM
Ø mm	**Steigung** Pitch	**Grundkörper** Bodies	**l mm**	**b mm**	**S mm**	**6953**	**6953 TC**
26	1,0	**6981**	24	9	4	●	●
26	1,5	**6981**	24	9	4	●	●
26	2,0	**6981**	24	9	4	●	●
26	3,0	**6981**	24	9	4	●	●
26	3,5	**6981**	24	9	4	●	●
26	4,0	**6981**	24	9	4	●	●

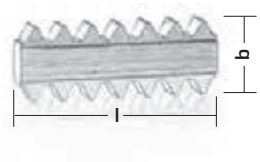
● Standardartikel / Items available ex stock

MULTI TMI

Vollhartmetallwendeplatte für ISO metrisches Gewinde
Indexable inserts for ISO metric thread

Für Innegewinde
For internal threads

M TICN NEW





Typ / Type						Multi TMI	Multi TMI
Schneidstoff / Material						VHM	VHM
Ø mm	**Steigung** Pitch	**Grundkörper** Bodies	**l mm**	**b mm**	**S mm**	**6955**	**6955 TC**
33	1,0	**6982**	40	11	5	●	●
33	2,0	**6982**	40	11	5	●	●
33	3,0	**6982**	40	11	5	●	●
33	4,0	**6982**	40	11	5	●	●
33	4,5	**6982**	40	11	5	●	●
33	5,0	**6982**	40	11	5	●	●

● Standardartikel / Items available ex stock

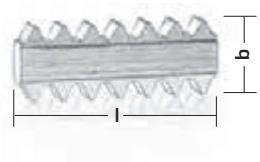
MULTI TMI

Vollhartmetallwendeplatte für ISO metrisches Gewinde
Indexable inserts for ISO metric thread

Für Innegewinde
For internal threads

M TICN

NEW





Typ / Type						Multi TMI	Multi TMI
Schneidstoff / Material						VHM	VHM
Ø mm	**Steigung** Pitch	**Grundkörper** Bodies	**l mm**	**b mm**	**S mm**	**6957**	**6957 TC**
41	2,0	**6983**	48	13	6	●	●
41	3,0	**6983**	48	13	6	●	●
41	4,0	**6983**	48	13	6	●	●
41	5,5	**6983**	48	13	6	●	●
41	6,0	**6983**	48	13	6	●	●

● Standardartikel / Items available ex stock



Hochleistungs-Gewindebohrer
High Performance Taps



▶ Technische Daten
Technical Guide

TECHNISCHE DATEN
TECHNICAL DATA



	Typ / Type	**MULTI RAPID VA / MULTI VA**		**MULTI RAPID HD / MULTI HD**	
	ILIX Typ-siehe Seite / ILIX type - see page	290		290	
	Werkstoff / Material	**HSS-Co-PM**		**HSS-Co-PM**	
	Anwendung / Application	Durchgangsloch Through Hole	Sackloch Blind Hole	Durchgangsloch Through Hole	Sackloch Blind Hole
	Anschnitt - Drallwinkel / Chamfer - Flute angle	B 0°	C 50°	B 0°	C 40°
	Gewindetiefe / Threding deep	3xD	3xD	3xD	3xD
	Beschichtung / Coating	TC	TC	TN	-
	Innenliegende Kühlkanäle / Internal Coolant	-	-	-	-
M	**4H**	-	-	-	-
	6H/6HX	6773/6778	6774/6779	6750/6751	6755/6756
	6G/6GX	-	-	-	-
	7G	-	-	-	-
	6H+0,1	-	-	-	-
MF	**6H/6HX**	6984	6985	6752	6757
	6G/6GX	-	-	-	-
	6H+0,1	-	-	-	-
UNC	**2B/2BX**	6986	6987	6993	6994
	3B/3BX	-	-	-	-
UNF	**2B/2BX**	6988	6989	6995	6996
	3B/3BX	-	-	-	-
8-UN	**2B**	-	-	-	-
BSP/G	**G**	-	-	-	-
RP (BSPP)	**Rp**	-	-	-	-
RC (BSPT)	**Rc**	-	-	-	-
BSW-W	**BSW**	-	-	-	-
NPT	**NPT**	-	-	-	-
NPTF	**NPTF**	-	-	-	-
		vc	**vc**	**vc**	**vc**
P	**< 800 N/mm²**	30	30	-	-
	700-1000 N/mm²	25	25	25	25
	1000-1300 N/mm²	-	-	15	15
M	**Austenitisch**	15	15	-	-
	Austenitisch / ferritisch	10	10	8	8
K	**GG**	-	-	30	30
	GGG	-	-	20	20
N	**Aluminium**	40	40	-	-
	NE-Metalle	-	-	-	-
S	**Titan**	3	3	-	-
	Sonderlegierungen	-	-	-	-
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-	-
	Gehärteter Stahl 48 / 58 HRC	-	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA



MULTI RAPID HD i / MULTI HD i		SINCRO ILIX i			MULTI GG	MULTI GG i	VR i 15°
292		292			294	294	294
HSS-Co-PM		HSS-Co-PM			HSS-Co-PM	HSS-Co-PM	HSS-Co-PM
Durchgangsloch Through Hole	Sackloch Blind Hole	Durchgangsloch Through Hole	Sackloch Blind Hole		Sackloch / Blind Hole Durchgangsloch / Through Hole	Sackloch / Blind Hole Durchgangsloch / Through Hole	Sackloch Blind Hole
B 0°	C 40°	B 0°	C 15°	C 40°	C 0°	C 0°	C 15°
3XD	3XD	3XD	2xD	3xD	3xD	3xD	2xD
TN/TC	TN/TC	TN	TN	TN	VP	VP	TN
					-		
-	-	-	-	-	-	-	-
6753/6758	6772/6777	6975	6971/6972	6973/6974	6964/6965	6967	6601
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	6978	-	6977	6966	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
VC	VC	VC	VC	VC	VC	VC	VC
-	-	40	40	40	-	-	40
30	30	35	35	35	-	-	30
25	25	25	25	25	-	-	25
15	15	15	15	15	-	-	15
10	10	10	10	10	-	-	10
35	35	-	-	-	35	40	-
35	35	40	40	40	25	30	-
-	-	50	50	50	40	40	40
-	-	35	35	35	-	-	25
-	-	3	3	3	-	-	3
-	-	2	2	2	-	-	2
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA






	Typ / Type	**T-BLACK**	**TI**		**NI**
	ILIX Typ-siehe Seite / ILIX type - see page	294	296		296
	Werkstoff / Material	HSS-Co-PM	HSS-Co-PM		HSS-Co-PM
	Anwendung / Application	Sackloch Blind Hole	Durchgangsloch Through Hole	Sackloch Blind Hole	Durchgangsloch Through Hole
	Anschnitt - Drallwinkel / Chamfer - Flute angle	C 40°	B 0°	C 15°	B 0°
	Gewindetiefe / Threding deep	3xD	2xD	2xD	2xD
	Beschichtung / Coating	TB	VP	VP	BL
	Innenliegende Kühlkanäle / Internal Coolant	-	-	-	-
M	**4H**	-	-	-	-
	6H/6HX	6668/6669	6683/6825	6684/6826	6892/6893
	6G/6GX	-	-	-	-
	7G	-	-	-	-
	6H+0,1	-	-	-	-
MF	**6H/6HX**	6830	6828	6829	-
	6G/6GX	-	-	-	-
	6H+0,1	-	-	-	-
UNC	**2B/2BX**	6831/6832	-	-	6869/6897
	3B/3BX	-	-	-	-
UNF	**2B/2BX**	6833/6834	-	-	6844/6845
	3B/3BX	-	-	-	-
8-UN	**2B**	-	-	-	-
BSP/G	**G**	6835	-	-	-
RP (BSPP)	**Rp**	-	-	-	-
RC (BSPT)	**Rc**	-	-	-	-
BSW-W	**BSW**	-	-	-	-
NPT	**NPT**	-	-	-	-
NPTF	**NPTF**	-	-	-	-
		VC	**VC**	**VC**	**VC**
P	**< 800 N/mm²**	35	-	-	-
	700-1000 N/mm²	30	-	-	-
	1000-1300 N/mm²	20	7	7	-
M	**Austenitisch**	10	-	-	-
	Austenitisch / ferritisch	7	6	6	6
K	**GG**	-	-	-	-
	GGG	30	-	-	-
N	**Aluminium**	30	-	-	-
	NE-Metalle	20	-	-	-
S	**Titan**	2	3	3	3
	Sonderlegierungen	2	-	-	2
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-	-
	Gehärteter Stahl 48 / 58 HRC	-	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA









NI			MULTI TP	N	N 15°	GG i	N
296			298	300	300	300	300
HSS-Co-PM			VHM	VHM	VHM	VHM	VHM
Sackloch / Blind Hole			Sackloch / Blind Hole Durchgangsloch / Through Hole	Sackloch / Blind Hole	Sackloch / Blind Hole	Sackloch / Blind Hole Durchgangsloch / Through Hole	Sackloch / Blind Hole
C 10°	C 22°		C 0°	C 0°	C 15°	C 0°	C 15°
2XD	2XD		1,5xD	2xD	1,5xD	3xD	2xD
BL	BL		TC	BL	BL	VP	TN
-	-		-	-	-		
6906	-		-	-	-	-	-
6894/6948	6895/6896		6770	6771/6792	6736/6759	6760/6763	6762/6765
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	6766/6768	6767/6769
-	-		-	-	-	-	-
-	-		-	-	-	-	-
6990/6997	-		-	-	-	-	-
6998	-		-	-	-	-	-
6928/6929	-		-	-	-	-	-
6907	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
VC	VC		VC	VC	VC	VC	VC
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
-	-		-	-	-	-	-
6	6		-	-	-	-	-
-	-		35	35	35	40	40
-	-		-	-	-	-	-
-	-		-	40	40	50	50
-	-		-	40	40	50	50
3	3		-	-	-	-	-
2	2		-	-	-	-	-
-	-		6	6	6	6	6
-	-		4	-	-	-	-
-	-		2	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA




	Typ / Type	**TP**		**MICRO**	
	ILIX Typ-siehe Seite / ILIX type - see page	302		302	
	Werkstoff / Material	**VHM**		**VHM**	
	Anwendung / Application	Sackloch / Blind Hole Durchgangsloch / Through Hole		Sackloch / Blind Hole Durchgangsloch / Through Hole	
	Anschnitt - Drallwinkel / Chamfer - Flute angle	-		-	
	Gewindetiefe / Threding deep	1,5/2xD		2/3xD	
	Beschichtung / Coating	TF		TC	
	Innenliegende Kühlkanäle / Internal Coolant	-		-	
M	**4H**	7015/7016		7081/7082/7083	
	6H/6HX	7015/7016		7081/7082/7083	
	6G/6GX	7015/7016		7081/7082/7083	
	7G	7015/7016		7081/7082/7083	
	6H+0,1	7015/7016		7081/7082/7083	
MF	**6H/6HX**	-		-	
	6G/6GX	-		-	
	6H+0,1	-		-	
UNC	**2B/2BX**	-		-	
	3B/3BX	-		-	
UNF	**2B/2BX**	-		-	
	3B/3BX	-		-	
8-UN	**2B**	-		-	
BSP/G	**G**	-		-	
RP (BSPP)	**Rp**	-		-	
RC (BSPT)	**Rc**	-		-	
BSW-W	**BSW**	-		-	
NPT	**NPT**	-		-	
NPTF	**NPTF**	-		-	
		Vc	**Fz**	**Vc**	**Fz**
P	**< 800 N/mm²**	-	-	120	0,005-0,02
	700-1000 N/mm²	-	-	100	0,005-0,02
	1000-1300 N/mm²	-	-	80	0,005-0,02
M	**Austenitisch**	-	-	40	0,005-0,02
	Austenitisch / ferritisch	-	-	35	0,005-0,02
K	**GG**	80	0,04-0,12	100	0,005-0,02
	GGG	-	-	80	0,005-0,02
N	**Aluminium**	-	-	250	0,01-0,06
	NE-Metalle	-	-	200	0,01-0,06
S	**Titan**	-	-	35	0,005-0,02
	Sonderlegierungen	-	-	30	0,005-0,02
H	**Gehärteter Stahl 38 / 48 HRC**	55	0,02-0,06	-	-
	Gehärteter Stahl 48 / 58 HRC	45	0,02-0,06	-	-
	Gehärteter Stahl 58 / 68 HRC	40	0,02-0,06	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA






	MULTI TM 27°	MULTI TM 15°	MULTI TM 0°	MULTI CTM 27°
	302	304	304	304
	VHM	VHM	VHM	VHM
	Sackloch / Blind Hole Durchgangsloch / Through Hole	Sackloch / Blind Hole Durchgangsloch / Through Hole	Sackloch / Blind Hole Durchgangsloch / Through Hole	Sackloch / Blind Hole Durchgangsloch / Through Hole
	-	-	-	-
	2/3xD	2/3xD	2/3xD	2/3xD
	BL TF	BL TF	BL TF	BL TF
	7000/7001/7013	7020	6930/6931	7040/7041
	7000/7001/7013	7020	6930/6931	7040/7041
	7000/7001/7013	7020	6930/6931	7040/7041
	7000/7001/7013	7020	6930/6931	7040/7041
	7000/7001/7013	7020	6930/6931	7040/7041
	7002/7003	7020	-	7042/7043
	7002/7003	7020	-	7042/7043
	7002/7003	7020	-	7042/7043
	7007/7014	7027	-	7046
	7007/7014	7027	-	7046
	7009	7027	-	7048
	7009	7027	-	7048
	-	7027	-	-
	7004/7005	7024	6932	7044
	-	-	-	-
	-	-	-	-
	-	-	-	-
	7010	7030	-	7050
	7012	7032	-	7052

Vc	Fz	Vc	Fz	Vc	Fz	Vc	Fz
120	0,06-0,12	120	0,06-0,12	120	0,06-0,12	120	0,06-0,12
100	0,05-0,1	100	0,05-0,1	100	0,05-0,1	100	0,05-0,1
80	0,05-0,1	80	0,05-0,1	80	0,05-0,1	80	0,05-0,1
40	0,06-0,12	40	0,06-0,12	40	0,06-0,12	40	0,06-0,12
35	0,05-0,1	35	0,05-0,1	35	0,05-0,1	35	0,05-0,1
100	0,07-0,14	100	0,07-0,14	100	0,07-0,14	100	0,07-0,14
80	0,05-0,1	80	0,05-0,1	80	0,05-0,1	80	0,05-0,1
250	0,07-0,15	250	0,07-0,15	250	0,07-0,15	250	0,07-0,15
200	0,07-0,15	200	0,07-0,15	200	0,07-0,15	200	0,07-0,15
35	0,02-0,08	35	0,02-0,08	35	0,02-0,08	35	0,02-0,08
30	0,02-0,08	30	0,02-0,08	30	0,02-0,08	30	0,02-0,08
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA




	Typ / Type	**MULTI DTM 2tg**		**MULTI DTM 3tg**	
	ILIX Typ-siehe Seite / ILIX type - see page	306		308	
	Werkstoff / Material	**Wechselplatte VHM**		**Wechselplatte VHM**	
	Anwendung / Application	Sackloch / Blind Hole Durchgangsloch / Through Hole		Sackloch / Blind Hole Durchgangsloch / Through Hole	
	Anschnitt - Drallwinkel / Chamfer - Flute angle	-		-	
	Gewindetiefe / Threding deep	-		-	
	Beschichtung / Coating	BL	TF	BL	TF
	Innenliegende Kühlkanäle / Internal Coolant				
M	**4H**	6940/6942/6947		7071/7073//7075/7077	
	6H/6HX	6940/6942/6947		7071/7073//7075/7077	
	6G/6GX	6940/6942/6947		7071/7073//7075/7077	
	7G	6940/6942/6947		7071/7073//7075/7077	
	6H+0,1	6940/6942/6947		7071/7073//7075/7077	
MF	**6H/6HX**	6944/6946/6943		7072/7074/7076/7078	
	6G/6GX	6944/6946/6943		7072/7074/7076/7078	
	6H+0,1	6944/6946/6943		7072/7074/7076/7078	
UNC	**2B/2BX**	7068-7070		-	
	3B/3BX	7068-7070		-	
UNF	**2B/2BX**	7064-7066		-	
	3B/3BX	7064-7066		-	
8-UN	**2B**	-		-	
BSP/G	**G**	-		-	
RP (BSPP)	**Rp**	-		-	
RC (BSPT)	**Rc**	-		-	
BSW-W	**BSW**	-		-	
NPT	**NPT**	-		-	
NPTF	**NPTF**	-		-	
		Vc	**Fz**	**Vc**	**Fz**
P	**< 800 N/mm²**	-	-	-	-
	700-1000 N/mm²	-	-	-	-
	1000-1300 N/mm²	-	-	-	-
M	**Austenitisch**	-	-	-	-
	Austenitisch / ferritisch	-	-	-	-
K	**GG**	100	0,06-0,12	100	0,06-0,12
	GGG	-	-	-	-
N	**Aluminium**	250	0,07-0,15	250	0,07-0,15
	NE-Metalle	200	0,07-0,15	200	0,07-0,15
S	**Titan**	-	-	-	-
	Sonderlegierungen	-	-	-	-
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-	-
	Gehärteter Stahl 48 / 58 HRC	-	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA





TMI		TMI EVO	
308		310	
Wechselplatte VHM		**Wechselplatte VHM**	
Sackloch / Blind Hole Durchgangsloch / Through Hole		Sackloch / Blind Hole Durchgangsloch / Through Hole	
-		-	
-		-	
BL	TN	BL	TC
-		-	
6950/6956		6953/6955/6957	
6950/6956		6953/6955/6957	
6950/6956		6953/6955/6957	
6950/6956		6953/6955/6957	
6950/6956		6953/6955/6957	
6950/6956		-	
6950/6956		-	
6950/6956		-	
6954		-	
6954		-	
6954		-	
6954		-	
6952		-	
-		-	
-		-	
-		-	
-		-	
-		-	
-		-	
Vc	**Fz**	**Vc**	**Fz**
120	0.05-0.30	120	0.05-0.30
100	0.05-0.25	100	0.05-0.25
80	0.05-0.15	80	0.05-0.15
80	0.05-0.15	80	0.05-0.20
70	0.05-0.10	70	0.05-0.15
100	0.05-0.30	90	0.05-0.30
80	0.05-0.20	80	0.05-0.20
250	0.05-0.35	250	0.10-0.40
150	0.05-0.25	150	0.10-0.35
35	0.02-0.08	35	0.04-0.15
25	0.02-0.08	30	0.04-0.15
-	-	-	-
-	-	-	-
-	-	-	-



Gewindebohrer

Taps





ILIX PRECISION



Gewindebohrer
Taps

▶ Zeichenerklärung
Key to symbols

SCHNEIDSTOFF / TOOL MATERIAL

- HSS-Co
- HSS-Co PM
- HSS

BESCHICHTUNG / COATING

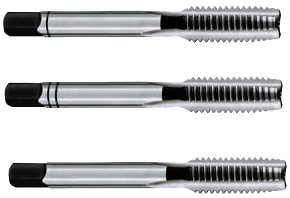
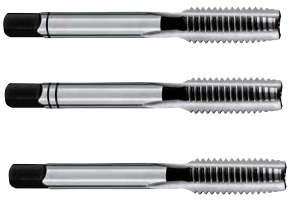
- Unbeschichtet / Blank
- TN — TiN
- TF — TiAlN Futura
- TC — TiCN
- HL — Hard Lube
- XP — XP TOP
- TX — TiNOX

OBERFLÄCHENBEHANDLUNGEN / SURFACE TREATMENT

- VP — Vaporizzato / Vaporized
- Nitrurato / Nitrided

▶ Werkzeug-Auswahlhilfe
Tool selection guide

HAND-GEWINDEBOHRER / HAND TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
N							
6615 	**M**	1 ÷ 68	**352**		6H	0°	C
6608 Sätze in Metallkassetten / Sets in metal cases with tap drills 	**M**	3 ÷ 12	**352**		6H	0°	C
6609 Sätze in Metallkassetten / Sets in metal cases with tap drills 	**M**	3 ÷ 12	**352**		6H	0°	C
6618 	**M**	3 ÷ 20	**352**		6H	0°	C
6633 	**MF**	2 ÷ 52	**2181**		6H	0°	C
6775 	**UNC**	1 ÷ 2	**352***		2B	0°	C
6776 	**UNF**	3 ÷ 7/16	**2181***		2B	0°	C
6603 	**BSW/W**	1/16 ÷ 2	**352***		-	0°	C
6627 	**BSP/G**	1/16 ÷ 2	**5157**		-	0°	C

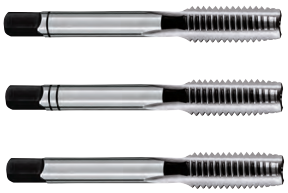
* **Abmessungen ähnlich DIN 352/2181** - Dimension similar to DIN 352/2181

HAND-GEWINDEBOHRER / HAND TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS	●	●	●	●	❍	-	504
-	-		HSS	●	●	●	●	❍	-	508
-	-		HSS	●	●	●	●	❍	-	509
-	-		HSS	●	●	●	●	❍	-	504
-	-		HSS	●	●	●	●	❍	-	552
-	-		HSS	●	●	●	●	❍	-	569
-	-		HSS	●	●	●	●	❍	-	581
-	-		HSS	●	●	●	●	❍	-	594
-	-		HSS	●	●	●	●	❍	-	598

HSS-CO

HAND-GEWINDEBOHRER / HAND TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
VA							
6614 	**M**	2 ÷ 20	**352**		6HX	0°	C
Ti							
6625 	**M**	2 ÷ 20	**352**		6HX	0°	C

HSS-CO

KURZE MASCHINEN-GEWINDEBOHRER / SHORT MACHINE TAPS

N							
6678 	**M**	2 ÷ 20	**352**		6H	0°	C
6659 	**M**	3 ÷ 20	**352**		6H	15°	C
6639 	**M**	3 ÷ 20	**352**		6H	40°	C
6604 	**M**	3 ÷ 24	**352**		6H-6G	40°	C
6899 	**MF**	6 ÷ 20	**2181**		6H	0°	C
6656 	**MF**	4 ÷ 24	**2181**		6H	15°	C
6858 	**BSP/G**	1/16 ÷ 1-1/2	**5157**		-	0°	C
6905 	**BSP/G**	1/8 ÷ 3/4	**5157**		+0,1	15°	C

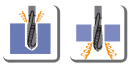
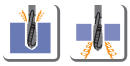
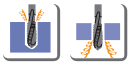
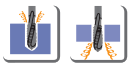
HAND-GEWINDEBOHRER / HAND TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-CO	❍	●	-	●	●	-	505
-	-		HSS-CO	-	●	-	-	●	-	505

HSS-CO
KURZE MASCHINEN-GEWINDEBOHRER / SHORT MACHINE TAPS

-	-		HSS-Co	●	-	●	-	-	-	510
-	-		HSS-Co	●	-	●	-	-	-	510
-	-		HSS-Co	●	-	●	-	-	-	510
-	-		HSS-Co	●	-	●	-	-	-	510
-	-		HSS-Co	●	-	●	-	-	-	554
-	-		HSS-Co	●	-	●	-	-	-	554
-	-		HSS-Co	●	-	●	-	-	-	599
-	-		HSS-Co	●	❍	●	●	-	-	599

KURZE MASCHINEN-GEWINDEBOHRER / SHORT MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
RAPID							
6679 	**M**	2 ÷ 20	**352**		6H	0°	B
VA							
6648 	**M**	3 ÷ 16	**352**		6HX	15°	C
6612 	**M**	3 ÷ 16	**352**		6HX	15°	C
6857 	**BSP/G**	1/16 ÷ 1/2	**5157**		-	0°	B
6951 	**BSP/G**	1/16 ÷ 1	**5157**		-	15°	**E**
MS							
6624 	**M**	2 ÷ 12	**352**		6H	0°	C
6724 	**MF**	4 ÷ 12	**2181**		6H	0°	C
6913 	**BSP/G**	1/16 ÷ 1" 1/2	**5157**		-	0°	**E**
AZ							
6621 	**M**	3 ÷ 16	**352**		6H	0°	C
6613 	**M**	3 ÷ 16	**352**		6H	0°	B

HSS-CO
MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

RAPID							
6707 	**M**	2 ÷ 10	**371**		6H-6G 4H-**7G**	0°	B
6711 	**M**	2 ÷ 52	**376**		6H-6G **7G**	0°	B

HSS-CO

KURZE MASCHINEN-GEWINDEBOHRER / SHORT MACHINE TAPS

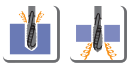
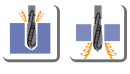
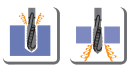
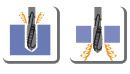
BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	●	-	●	-	-	-	510
-	-		HSS-Co	❍	●	❍	-	❍	-	511
-	-		HSS-Co	❍	●	❍	-	❍	-	511
-	-		HSS-Co	❍	●	❍	-	❍	-	600
-	-		HSS-Co	❍	●	❍	-	❍	-	599
-	-		HSS-Co	-	-	❍	●	-	-	511
-	-		HSS-Co	-	-	❍	●	-	-	554
-	-		HSS-Co	-	-	❍	●	-	-	599
-	-		HSS-Co	-	❍	-	●	-	-	510
-	-		HSS-Co	-	❍	-	●	-	-	510

HSS-CO

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

TN TC	-		HSS-Co	●	❍	❍	●	-	-	520
TN TC	-		HSS-Co	●	❍	❍	●	-	-	536

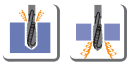
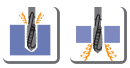
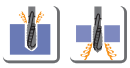
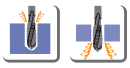
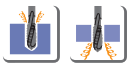
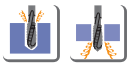
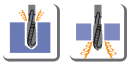
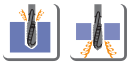
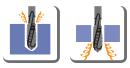
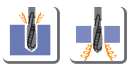
MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
RAPID							
6730 	**MF**	3 ÷ 52	**374**		6H	0°	B
6690 	**UNC**	1 ÷ 3/8	**2184/1**		2B-3B	0°	B
6693 	**UNC**	7/16 ÷ 2	**2184/1**		2B-3B	0°	B
6607 	**UNF**	1 ÷ 3/8	**2184/1**		2B-3B	0°	B
6687 	**UNF**	7/16 ÷ 1 1/2	**2184/1**		2B-3B	0°	B
6697 	**BSW/W**	1/8 ÷ 3/8	**371***		-	0°	B
6636 	**BSW/W**	7/16 ÷ 1x8	**376***		-	0°	B
6704 	**BSP/G**	1/16 ÷ 2X11	**5156**		-	0°	B
6673 	**RP**	1/16 ÷ 2	**5156**		-	0°	B
6710 	**PG**	7 ÷ 48	**40 432**		-	0°	B
RAPID 2							
6640 	**M**	2 ÷ 10	**371**		6H-6G	0°	B
N ■ **Gerade genutet /** Straight Flutes							
6706 	**M**	1 ÷ 10	**371**		6H	0°	C
6705 	**M**	2 ÷ 52	**376**		6H	0°	C
6726 	**MF**	3 ÷ 52	**374**		6H	0°	C
6823 	**UNC**	3 ÷ 3/8	**2184/1**		2B	0°	C

* **Abmessungen ähnlich DIN 352/2181** - Dimension similar to DIN 352/2181

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN TC	-		HSS-Co	●	❍	❍	●	-	-	564
TN	-		HSS-Co	●	❍	❍	●	-	-	572
-	-		HSS-Co	●	❍	❍	●	-	-	578
TN	-		HSS-Co	●	❍	❍	●	-	-	584
-	-		HSS-Co	●	❍	❍	●	-	-	592
-	-		HSS-Co	●	❍	❍	●	-	-	595
-	-		HSS-Co	●	❍	❍	●	-	-	596
TN	-		HSS-Co	●	❍	❍	●	-	-	604
-	-		HSS-Co	●	❍	❍	●	-	-	597
-	-		HSS-Co	●	❍	❍	●	-	-	610
-	-		HSS-Co	●	❍	❍	●	-	-	521
TN TC	-		HSS-Co	●	-	❍	●	-	-	512
TN TC	-		HSS-Co	●	-	❍	●	-	-	530
TN TC	-		HSS-Co	●	-	❍	●	-	-	556
-	-		HSS-Co	●	-	❍	●	-	-	570

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
N ■ Gerade genutet / Straight Flutes							
6824 	**UNC**	7/16 ÷ 1	**2184/1**		2B	0°	C
6838 	**UNF**	1 ÷ 3/8	**2184/1**		2B	0°	C
6839 	**UNF**	7/16 ÷ 1 1/2	**2184/1**		2B	0°	C
6699 	**BSW/W**	1/8 ÷ 3/8	**371***		-	0°	C
6610 	**NPT**	1/16 ÷ 2x1	**2181***		-	0°	C
6611 	**NPTF**	1/16 ÷ 1 1/2	**2181***		-	0°	C
6915 	**PG**	7 ÷ 48	**40 432**		-	0°	C
6914 	**PG**	7 ÷ 36	**40 432**		-	0°	D
6790 	**RC**	1/8 ÷ 1	**5156***		-	0°	C
N SX ■ Linksschneidend / Left hand thread							
6712 	**M**	3 ÷ 10	**371**		6H	0°	C
6859 	**M**	3 ÷ 10	**371**		6H	0°	B
6861 	**M**	3 ÷ 10	**371**		6H	40°	C
6715 	**M**	12 ÷ 24	**376**		6H	0°	C
6860 	**M**	12 ÷ 20	**376**		6H	0°	B
6862 	**M**	12 ÷ 20	**376**		6H	40°	C
6863 	**MF**	8 ÷ 20	**374**		6H	0°	B

* **Abmessungen ähnlich DIN 352/2181** - Dimension similar to DIN 352/2181

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	●	-	❍	●	-	-	576
-	-		HSS-Co	●	-	❍	●	-	-	582
-	-		HSS-Co	●	-	❍	●	-	-	588
-	-		HSS-Co	●	-	❍	●	-	-	595
-	-		HSS-Co	●	-	❍	●	-	-	607
-	-		HSS-Co	●	-	❍	●	-	-	607
-	-		HSS-Co	●	-	❍	●	-	-	610
-	-		HSS-Co	●	-	❍	●	-	-	611
-	-		HSS-Co	●	-	❍	●	-	-	606
-	-		HSS-Co	●	❍	❍	●	-	-	512
-	-		HSS-Co	●	❍	❍	●	-	-	521
-	-		HSS-Co	●	❍	❍	●	-	-	515
-	-		HSS-Co	●	❍	❍	●	-	-	530
-	-		HSS-Co	●	❍	❍	●	-	-	537
-	-		HSS-Co	●	❍	❍	●	-	-	531
-	-		HSS-Co	●	❍	❍	●	-	-	564

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
N SX ■ Linksschneidend / Left hand thread							
6864 	**MF**	8 ÷ 20	**374**		6H	40°	C
NL ■ 15° Linksdrall, rechtsschneidend / 15° left flute right hand thread							
6727 	**M**	3 ÷ 10	**371**		6H	15°	D
6740 	**M**	12 ÷ 20	**376**		6H	15°	B
6741 	**MF**	8 ÷ 20	**374**		6H	15°	B
N 15°							
6657 	**M**	2 ÷ 10	**371**		6H-6G	15°	C
6902 	**M**	3 ÷ 10	**371**		6H+**0,1**	15°	C
6658 	**M**	8 ÷ 30	**376**		6H	15°	C
6903 	**M**	12 ÷ 20	**376**		6H+**0,1**	15°	C
6664 	**MF**	8 ÷ 30	**374**		6H	15°	C
6904 	**MF**	16 ÷ 24	**374**		6H+**0,1**	15°	**E**
6696 	**UNC**	nr. 3 ÷ 3/8	**2184/1**		2B	15°	C
6728 	**UNC**	7/16 ÷ 1x8	**2184/1**		2B	15°	C
6719 	**UNF**	nr. 5 ÷ 3/8	**2184/1**		2B	15°	C
6729 	**UNF**	7/16 ÷ 1x12	**2184/1**		2B	15°	C
6665 	**BSP/G**	1/16 ÷ 1x11	**5156**		-	15°	C

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	●	❍	❍	●	-	-	557
-	-		HSS-Co	●	❍	❍	●	-	-	523
-	-		HSS-Co	●	❍	❍	●	-	-	538
-	-		HSS-Co	●	❍	❍	●	-	-	564
TN TC	-		HSS-Co	●	❍	●	●	-	-	513
-	-		HSS-Co	●	❍	●	●	-	-	513
TN TC	-		HSS-Co	●	❍	●	●	-	-	530
-	-		HSS-Co	●	❍	●	●	-	-	530
TN TC	-		HSS-Co	●	❍	●	●	-	-	556
-	-		HSS-Co	●	❍	●	●	-	-	557
-	-		HSS-Co	●	❍	●	●	-	-	570
-	-		HSS-Co	●	❍	●	●	-	-	576
-	-		HSS-Co	●	❍	●	●	-	-	582
-	-		HSS-Co	●	❍	●	●	-	-	588
-	-		HSS-Co	●	❍	●	●	-	-	601

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
N 15°							
6675 	**RP**	1/8 ÷ 1	**5156**		-	15°	C
N 40°							
6644 	**M**	2 ÷ 10	**371**		6H-6G 7G	40°	C
6867 	**M**	3 ÷ 10	**371**		6H	40°	E
6638 	**M**	3 ÷ 36	**376**		6H-6G 7G	40°	C
6868 	**M**	12 ÷ 20	**376**		6H	40°	E
6652 	**MF**	3 ÷ 30	**374**		6H	40°	C
6877 	**MF**	6 ÷ 20	**374**		6H	40°	E
6691 	**UNC**	2 ÷ 3/8	**2184/1**		2B-3B	40°	C
6694 	**UNC**	7/16 ÷ 1x8	**2184/1**		2B-3B	40°	C
6680 	**UNF**	5 ÷ 3/8	**2184/1**		2B-3B	40°	C
6688 	**UNF**	7/16 ÷ 1	**2184/1**		2B-3B	40°	C
6836 	**BSW/W**	1/8 ÷ 1 3/8	**371***		-	40°	C
6837 	**BSW/W**	7/16 ÷ 1	**376***		-	40°	C
6703 	**BSP/G**	1/16 ÷ 1	**5156**		-	40°	C

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	●	❍	●	●	-	-	597
TN TC	-		HSS-Co	●	❍	●	●	-	-	514
-	-		HSS-Co	●	❍	●	●	-	-	515
TN TC	-		HSS-Co	●	❍	●	●	-	-	531
-	-		HSS-Co	●	❍	●	●	-	-	531
TN TC	-		HSS-Co	●	❍	●	●	-	-	557
-	-		HSS-Co	●	❍	●	●	-	-	557
TN	-		HSS-Co	●	❍	●	●	-	-	570
-	-		HSS-Co	●	❍	●	●	-	-	576
TN	-		HSS-Co	●	❍	●	●	-	-	582
-	-		HSS-Co	●	❍	●	●	-	-	588
-	-		HSS-Co	●	❍	●	●	-	-	595
-	-		HSS-Co	●	❍	●	●	-	-	596
TN	-		HSS-Co	●	❍	●	●	-	-	601

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
VA							
6646 NEW XP	M	2 ÷ 10	371		6HX-6GX	0°	B
6654 NEW XP	M	2 ÷ 10	371		6HX	15°	C
6661 NEW XP	M	2 ÷ 10	371		6HX-6GX	35°	C
6647 NEW XP	M	12 ÷ 24	376		6HX-6GX	0°	B
6634	M	12 ÷ 24	376		6HX	15°	C
6662 NEW XP	M	12 ÷ 24	376		6HX-6GX	35°	C
6663 NEW XP	MF	8 ÷ 30	374		6HX-6GX	0°	B
6671	MF	8 ÷ 30	374		6HX	15°	C
6655 NEW XP	MF	8 ÷ 30	374		6HX-6GX	35°	C
6739 NEW XP	UNC	nr. 2 ÷ 3/8	2184/1		2BX	0°	B
6735 NEW XP	UNC	nr. 6 ÷ 3/8	2184/1		2BX	35°	C
6749	UNC	1/2 ÷ 1	2184/1		2BX	0°	B
6754	UNC	1/2 ÷ 1	2184/1		2BX	35°	C
6718	UNF	nr. 2 ÷ 3/8	2184/1		2BX	0°	B
6794	UNF	10x32 ÷ 3/8	2184/1		2BX	35°	C
6797	UNF	7/16 ÷ 3/4	2184/1		2BX	0°	B
6796	UNF	7/16 ÷ 3/4	2184/1		2BX	35°	C
6945 NEW	UN-8	1 1/8 ÷ 1 1/2	2184/1		2BX	35°	C

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN TX XP	-		HSS-Co	❍	●	❍	●	❍	-	524
XP	-		HSS-Co	❍	●	❍	●	❍	-	516
TN TX XP	-		HSS-Co	❍	●	❍	●	❍	-	517
XP	-		HSS-Co	❍	●	❍	●	❍	-	538
-	-		HSS-Co	❍	●	❍	●	❍	-	532
TX XP	-		HSS-Co	❍	●	❍	●	❍	-	533
TN XP	-		HSS-Co	❍	●	❍	●	❍	-	565
-	-		HSS-Co	❍	●	❍	●	❍	-	560
XP	-		HSS-Co	❍	●	❍	●	❍	-	560
XP	-		HSS-Co	❍	●	❍	●	❍	-	573
XP	-		HSS-Co	❍	●	❍	●	❍	-	571
-	-		HSS-Co	❍	●	❍	●	❍	-	578
-	-		HSS-Co	❍	●	❍	●	❍	-	577
-	-		HSS-Co	❍	●	❍	●	❍	-	585
-	-		HSS-Co	❍	●	❍	●	❍	-	583
-	-		HSS-Co	❍	●	❍	●	❍	-	592
-	-		HSS-Co	❍	●	❍	●	❍	-	589
-	-		HSS-Co	❍	●	❍	●	❍	-	590

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM		SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
VA								
6700	NEW XP	**BSP/G**	1/16 ÷ 1	**5156**		-	0°	B
6716		**BSP/G**	1/16 ÷ 1	**5156**		-	15°	C
6701	NEW XP	**BSP/G**	1/16 ÷ 1	**5156**		-	35°	C
VA i 15° ■ Mit Innenkühlung / With internal coolant								
6620	NEW XP	**M**	6 ÷ 10	**371**		6HX	15°	C
6605	NEW XP	**M**	12 ÷ 20	**376**		6HX	15°	C
6626	NEW XP	**M**	8 ÷ 20	**374**		6HX	15°	C
VR 50°								
6850		**M**	2 ÷ 10	**371**		6HX	50°	C
6851		**M**	12 ÷ 24	**376**		6HX	50°	C
6852		**UNC**	nr. 6 ÷ 3/8	**2181-1**		2BX	50°	C
6853		**UNC**	1/2 ÷ 1	**2181-1**		2BX	50°	C
6854		**UNF**	nr. 10 ÷ 3/8	**2181-1**		2BX	50°	C
6855		**UNF**	7/16 ÷ 3/4	**2181-1**		2BX	50°	C
6856		**BSP/G**	1/16 ÷ 1	**5156**		-	50°	C

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
XP	-		HSS-Co	❍	●	❍	●	❍	-	605
-	-		HSS-Co	❍	●	❍	●	❍	-	602
XP	-		HSS-Co	❍	●	❍	●	❍	-	602
XP	-		HSS-Co	❍	●	❍	●	❍	-	516
XP	-		HSS-Co	❍	●	❍	●	❍	-	532
XP	-		HSS-Co	❍	●	❍	●	❍	-	560
TN	-		HSS-Co	❍	●	-	❍	-	-	517
TN	-		HSS-Co	❍	●	-	❍	-	-	533
-	-		HSS-Co	❍	●	-	❍	-	-	571
-	-		HSS-Co	❍	●	-	❍	-	-	577
-	-		HSS-Co	❍	●	-	❍	-	-	583
-	-		HSS-Co	❍	●	-	❍	-	-	589
-	-		HSS-Co	❍	●	-	❍	-	-	602

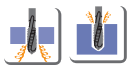
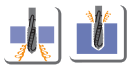
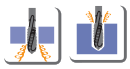
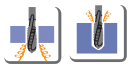
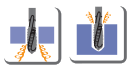
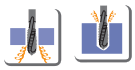
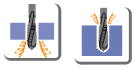
MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

HD

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
6870 	**M**	2 ÷ 10	**371**		6H	0°	B
6878 	**M**	3 ÷ 10	**371**		6H	15°	C
6666 	**M**	3 ÷ 10	**371**		4H-6H-6G	40°	C
6871 	**M**	12 ÷ 30	**376**		6H	0°	B
6879 	**M**	12 ÷ 30	**376**		6H	15°	C
6667 	**M**	3 ÷ 20	**376**		6H	40°	C
6872 	**MF**	6 ÷ 24	**374**		6H	0°	B
6880 	**MF**	6 ÷ 24	**374**		6H	15°	C
6873 	**UNC**	nr. 2 ÷ 3/8	**2184/1**		2B	0°	B
6865 	**UNC**	nr. 3 ÷ 3/8	**2184/1**		2B	15°	C
6874 	**UNC**	7/16 ÷ 1x8	**2184/1**		2B	0°	B
6866 	**UNC**	7/16 ÷ 1x8	**2184/1**		2B	15°	C
6875 	**UNF**	nr. 2 ÷ 3/8	**2184/1**		2B	0°	B
6848 	**UNF**	nr. 5 ÷ 3/8	**2184/1**		2B	15°	C
6876 	**UNF**	7/16 ÷ 1	**2184/1**		2B	0°	B
6849 	**UNF**	7/16 ÷ 1	**2184/1**		2B	15°	C
6912 	**BSP/G**	1/16 ÷ 2	**5156**		-	0°	C

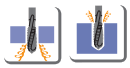
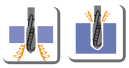
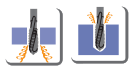
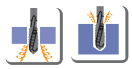
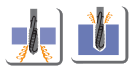
BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN TF	-		HSS-Co	●	-	●	-	-	-	525
HL	-		HSS-Co	●	-	●	-	-	❍	513
TN TF	-		HSS-Co	●	-	●	-	-	-	519
TN TF	-		HSS-Co	●	-	●	-	-	-	539
HL	-		HSS-Co	●	-	●	-	-	❍	535
TN TF	-		HSS-Co	●	-	●	-	-	-	535
TN	-		HSS-Co	●	-	●	-	-	-	565
HL	-		HSS-Co	●	-	●	-	-	❍	561
-	-		HSS-Co	●	-	●	-	-	-	572
-	-		HSS-Co	●	-	●	-	-	-	571
-	-		HSS-Co	●	-	●	-	-	-	578
-	-		HSS-Co	●	-	●	-	-	-	577
-	-		HSS-Co	●	-	●	-	-	-	585
-	-		HSS-Co	●	-	●	-	-	-	583
-	-		HSS-Co	●	-	●	-	-	-	592
-	-		HSS-Co	●	-	●	-	-	-	589
TN	-		HSS-Co	●	-	●	-	-	-	601

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
HD							
6917 	**NPT**	1/16 ÷ 1/4	**371**		-	0°	C
6918 	**NPT**	3/8 ÷ 1 1/2	**376**		-	0°	C
6923 	**NPTF**	1/16 ÷ 1/4	**371**		-	0°	C
6924 	**NPTF**	3/8 ÷ 1 1/2	**374**		-	0°	C
HR							
6681 	**M**	3 ÷ 10	**371**		6H	40°	C
6689 	**M**	12 ÷ 20	**376**		6H	40°	C
GG							
6631 	**M**	3 ÷ 10	**371**		6HX	0°	C
6632 	**M**	6 ÷ 30	**376**		6HX	0°	C
6653 	**MF**	8 ÷ 30	**374**		6HX	0°	C
6708 	**BSP/G**	1/16 ÷ 2	**5157**		-	0°	C
6674 	**RP**	1/8 ÷ 2	**5156**		-	0°	C
GG i							
6629 	**M**	5 ÷ 10	**371**		6HX	0°	C
6637 	**M**	12 ÷ 20	**376**		6HX	0°	C

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN	-		HSS-Co	●	-	●	-	-	-	608
-	-		HSS-Co	●	-	●	-	-	-	609
-	-		HSS-Co	●	-	●	-	-	-	608
-	-		HSS-Co	●	-	●	-	-	-	609
TF	-		HSS-Co	●	-	❍	-	-	-	519
TF	-		HSS-Co	●	-	❍	-	-	-	535
TF	-		HSS-Co	-	-	●	❍	-	-	518
TF	-		HSS-Co	-	-	●	❍	-	-	534
-	-		HSS-Co	-	-	●	❍	-	-	561
TF	-		HSS-Co	-	-	●	❍	-	-	603
-	-		HSS-Co	-	-	●	❍	-	-	597
TC			HSS-Co	-	-	●	❍	-	-	518
TC			HSS-Co	-	-	●	❍	-	-	534

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
AZ							
6820 	**M**	2 ÷ 10	**371**		6H	0°	C
6616 	**M**	2 ÷ 10	**371**		6H	0°	B
6821 	**M**	6 ÷ 24	**376**		6H	0°	C
6617 	**M**	12 ÷ 20	**376**		6H	0°	B
6916 	**NPT**	1/16 ÷ 2	**371**		-	0°	C
6919 	**NPT**	1/16 ÷ 1/4	**371**		-	0°	C
6920 	**NPT**	3/8 ÷ 1 1/2	**376**		-	0°	C
6921 	**NPT**	1/16 ÷ 1/4	**371**		-	35°	C
6922 	**NPT**	3/8 ÷ 1 1/2	**376**		-	35°	C
6925 	**NPTF**	1/16 ÷ 1/4	**374**		-	35°	C
6926 	**NPTF**	3/8 ÷ 1 1/2	**374**		-	35°	C
ALU							
6641 	**M**	2 ÷ 10	**371**		6H	0°	B
6643 	**M**	2 ÷ 10	**371**		6H	45°	C
6642 	**M**	12 ÷ 20	**376**		6H	0°	B
6651 	**M**	12 ÷ 20	**376**		6HX	45°	C
6731 	**MF**	8 ÷ 20	**374**		6H	45°	C

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	❍	-	-	●	-	-	513
-	-		HSS-Co	❍	-	-	●	-	-	523
-	-		HSS-Co	❍	-	-	●	-	-	530
-	-		HSS-Co	❍	-	-	●	-	-	538
-	-		HSS-Co	❍	-	-	●	-	-	607
-	-		HSS-Co	❍	-	-	●	-	-	608
-	-		HSS-Co	❍	-	-	●	-	-	609
TN	-		HSS-Co	❍	-	-	●	-	-	608
-	-		HSS-Co	❍	-	-	●	-	-	609
-	-		HSS-Co	❍	-	-	●	-	-	608
-	-		HSS-Co	❍	-	-	●	-	-	609
-	-		HSS-Co	-	-	-	●	-	-	525
-	-		HSS-Co	-	-	-	●	-	-	518
-	-		HSS-Co	-	-	-	●	-	-	539
-	-		HSS-Co	-	-	-	●	-	-	534
-	-		HSS-Co	-	-	-	●	-	-	561

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
ALU							
6732 	**UNC**	nr. 4 ÷ 3/8	**2184/1**		2B	45°	C
6733 	**UNC**	1/2	**2184/1**		2B	45°	C
6628 	**UNF**	nr. 10 ÷ 3/8	**2184/1**		2B	45°	C
6734 	**UNF**	1/2	**2184/1**		2B	45°	C
BAK							
6670 	**M**	2 ÷ 10	**371**		6HX	0°	E
ULTRA							
6606 	**M**	1 ÷ 10	**371**		6HX-6GX	0°	B
6737 	**UNC**	nr. 1 ÷ 3/8	**2184/1**		2B	0°	B
ULTRA S							
6649 	**M**	2 ÷ 10	**371**		6HX-6GX	0°	B
EGM							
6908 	**M**	3 ÷ 8	**8140/371**		6H	0°	B
6910 	**M**	3 ÷ 8	**8140/371**		6H	40°	C
6909 	**M**	10 ÷ 16	**8140/376**		6H	0°	B
6911 	**M**	10 ÷ 16	**8140/376**		6H	40°	C

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	-	-	-	●	-	-	571
-	-		HSS-Co	-	-	-	●	-	-	577
-	-		HSS-Co	-	-	-	●	-	-	583
-	-		HSS-Co	-	-	-	●	-	-	589
-	-		HSS-Co	-	-	-	●	-	-	518
-	-		HSS-Co	❍	-	-	●	-	-	522
-	-		HSS-Co	❍	-	-	●	-	-	572
TN	-		HSS-Co	❍	-	-	●	-	-	522
-	-		HSS-Co	●	❍	❍	●	-	-	613
-	-		HSS-Co	●	❍	❍	●	-	-	612
-	-		HSS-Co	●	❍	❍	●	-	-	615
-	-		HSS-Co	●	❍	❍	●	-	-	614

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
FORMER							
6722	**M**	1 ÷ 10	**371**		6HX	-	C
6622	**M**	2 ÷ 10	**371**		6GX	-	C
6723	**M**	12 ÷ 16	**376**		6HX	-	C
6623	**M**	12 ÷ 16	**376**		6GX	-	C
6721	**MF**	8 ÷ 16	**374**		6HX-6GX	-	C
6738	**UNC**	nr. 2 ÷ 3/8	**2184/1**		2BX	-	C
6747	**UNF**	nr. 4 ÷ 3/8	**2184/1**		2BX	-	C
6702	**BSP/G**	1/16 ÷ 1/2	**5156**		-	-	B
FORMER S ■ **Mit Schmiernuten/** Coolant groove							
6709	**M**	3 ÷ 10	**371**		6HX	-	C
6808	**M**	3 ÷ 10	**371**		6GX	-	C
6819	**M**	6 ÷ 10	**371**		**7GX**	-	C
6725	**M**	12 ÷ 16	**376**		6HX	-	C
6809	**M**	12 ÷ 16	**376**		6GX	-	C
6720	**MF**	8 ÷ 16	**374**		6HX-6GX	-	C
6802	**UNC**	nr. 5 ÷ 3/8	**2184/1**		2BX	-	C
6811	**UNC**	7/16 ÷ 1/2	**2184/1**		2BX	-	C

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

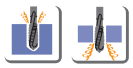
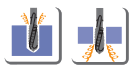
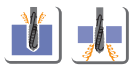
BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	526
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	526
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	540
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	540
-	-		HSS-Co	●	❍	-	●	-	-	568
-	-		HSS-Co	●	❍	-	●	-	-	575
-	-		HSS-Co	●	❍	-	●	-	-	587
-	-		HSS-Co	●	❍	-	●	-	-	605
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	528
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	528
-	-		HSS-Co	●	❍	-	●	-	-	529
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	542
TN TF TX	-		HSS-Co	●	❍	-	●	-	-	542
-	-		HSS-Co	●	❍	-	●	-	-	568
-	-		HSS-Co	●	❍	-	●	-	-	575
-	-		HSS-Co	●	❍	-	●	-	-	579

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
FORMER S ■ Mit Schmiernuten/ Coolant groove							
6815 	**UNF**	nr. 4 ÷ 3/8	**2184/1**		2BX	-	C
6816 	**UNF**	7/16 ÷ 5/8	**2184/1**		2BX	-	C
6818 	**BSP/G**	1/16 ÷ 1/2	**5156**		-	-	C
Langer Schaft / Long shank							
6672 	**M**	3 ÷ 14	**ILIX NORM**		6H	0°	B
Extra langer Schaft / Extra long shank							
6692 	**M**	3 ÷ 6	**ILIX NORM**		6H	0°	B
6695 	**M**	8 ÷ 20	**ILIX NORM**		6H	0°	B
Muttergewindebohrer / Nut Tap							
6660 	**M**	3 ÷ 30	**357**		6H	0°	A

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	●	❍	-	●	-	-	587
-	-		HSS-Co	●	❍	-	●	-	-	593
-	-		HSS-Co	●	❍	-	●	-	-	605
-	-		HSS-Co	●	❍	❍	●	-	-	544
-	-		HSS-Co	●	❍	❍	●	-	-	546
-	-		HSS-Co	●	❍	❍	●	-	-	547
-	-		HSS-Co	●	❍	❍	●	-	-	545

MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

KAT.-NR. ITEM	SIMBOL SYMBOL	Ø mm	DIN	SACKLOCH / DURCHGANGSLOCH Blind hole/ Through hole	TOLERANZ TOLERANCE	DRALLWINKEL HELIX ANGLE	ANSCHNITT FORM CHAMFER FORM
Extra langer Schaft / Extra long shank							
6842	**M**	3 ÷ 6	**ILIX NORM**		6H	0°	B
6840	**M**	3 ÷ 6	**ILIX NORM**		6H	40°	C
6843 	**M**	8 ÷ 20	**ILIX NORM**		6H	0°	B
6841 	**M**	8 ÷ 20	**ILIX NORM**		6H	40°	C
TR ■ Trapez / Trapezoidal							
6938 	**TR**	10 ÷ 36	**ILIX NORM**		7H	0°	-
6939 	**TR**	10 ÷ 36	**ILIX NORM**		7H	0°	-
6937 	**TR**	10 ÷ 30	**ILIX NORM**		7H	0°	C

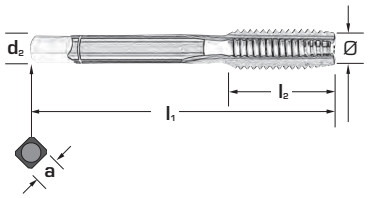
MASCHINEN-GEWINDEBOHRER / MACHINE TAPS

BESCHICHTUNG COATING	KÜHLUNG INTERNAL COOLANT	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-	-		HSS-Co	●	❍	❍	●	-	-	549
-	-		HSS-Co	●	❍	❍	●	-	-	548
-	-		HSS-Co	●	❍	❍	●	-	-	551
-	-		HSS-Co	●	❍	❍	●	-	-	550
-	-		HSS-Co	●	❍	❍	●	-	-	617
-	-		HSS-Co	●	❍	❍	●	-	-	618
-	-		HSS-Co	●	❍	❍	●	-	-	616

DIN 352

Hand-Gewindebohrer, dreiteiliger Satz
für Metrisches ISO-Gewinde nach DIN 13
Hand taps, serial in set of 3 pieces
for ISO metric coarse thread as per DIN 13

M





Typ / Type							N	N	N	N	N	N
Toleranz Tolerance							6 H	6 H	6 H	6 H	6 H	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads							A/5-6	D/3-4	C/2,5-3	A/5-6	D/3-4	C/2,5-3
Schneidrichtung Cutting direction												
Schneidstoff/ Material							HSS	HSS	HSS	HSS	HSS	HSS
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap-drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9**	**a** h12	**6615 V**	**6615 M**	**6615 F**	**6618 V**	**6618 M**	**6618 F**
								Einzel single tap		**Satz** set	**Einzel** single tap		**Satz** set
M	1,0	0,25	0,75	32	5,5	2,5	2,1	●		●	-		-
M	1,1	0,25	0,85	32	5,5	2,5	2,1	●		●	-		-
M	1,2	0,25	0,95	32	5,5	2,5	2,1	●		●	-		-
M	1,4	0,30	1,10	32	7,0	2,5	2,1	●		●	-		-
M	1,6	0,35	1,25	32	8,0	2,5	2,1	●		●	-		-
M	1,7*	0,35	1,30	32	8,0	2,5	2,1	●		●	-		-
M	1,8	0,35	1,45	32	8,0	2,5	2,1	●		●	-		-
M	2,0	0,40	1,60	36	8,0	2,8	2,1	●		●	-		-
M	2,2	0,45	1,75	36	9,0	2,8	2,1	●		●	-		-
M	2,3*	0,40	1,90	36	9,0	2,8	2,1	●		●	-		-
M	2,5	0,45	2,05	40	9,0	2,8	2,1	●		●	-		-
M	2,6*	0,45	2,10	40	9,0	2,8	2,1	●		●	-		-
M	3,0	0,50	2,50	40	11,0	3,5	2,7	●		●	●		●
M	3,0*	0,60	2,40	40	11,0	3,5	2,7	●		●	-		-
M	3,5	0,60	2,90	45	13,0	4,0	3,0	●		●	●		●
M	4,0	0,70	3,30	45	13,0	4,5	3,4	●		●	●		●
M	4*	0,75	3,25	45	13,0	4,5	3,4	●		-	-		-
M	4,5	0,75	3,70	50	16,0	6,0	4,9	●		●	-		-
M	5,0	0,80	4,20	50	16,0	6,0	4,9	●		-	●		●
M	5*	0,90	4,10	50	16,0	6,0	4,9	●		●	-		-
M	6,0	1,00	5,00	50	19,0	6,0	4,9	●		●	●		●
M	7,0	1,00	6,00	50	19,0	6,0	4,9	●		●	●		●
M	8,0	1,25	6,80	56	22,0	6,0	4,9	●		●	●		●

N: **Herkömmliche Anwendung**
universal application

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.
** Schafttoleranz der Vor- und Mittelschneider h 12 / Shank tolerance of 1st and 2nd tap h 12

● Standardartikel / Items available ex stock

DIN 352

Hand-Gewindebohrer, dreiteiliger Satz
für Metrisches ISO-Gewinde nach DIN 13
Hand taps, serial in set of 3 pieces
for ISO metric coarse thread as per DIN 13



VA	VA	VA	Ti	Ti	Ti	**Typ /** Type
6 HX	6 HX	6 HX	HX	HX	6 HX	**Toleranz** Tolerance
A/5-6	D/3-4	C/2,5-3	A/5-6	D/3-4	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
						Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6614 V	6614 M	6614 F	6625 V	6625 M	6625 F	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
Einzel single tap	Satz set		Einzel single tap	Satz set					
-	-	-	-		M	1,0	0,25	0,75
-	-	-	-		M	1,1	0,25	0,85
-	-	-	-		M	1,2	0,25	0,95
-	-	-	-		M	1,4	0,30	1,10
-	-	-	-		M	1,6	0,35	1,25
-	-	-	-		M	1,7*	0,35	1,30
-	-	-	-		M	1,8	0,35	1,45
●	●	●	●		M	2,0	0,40	1,60
●	●	●	●		M	2,2	0,45	1,75
●	●	●	●		M	2,3*	0,40	1,90
●	●	●	●		M	2,5	0,45	2,05
●	●	■	■		M	2,6*	0,45	2,10
●	●	●	●		M	3,0	0,50	2,50
-	■	●	-		M	3*	0,60	2,40
●	●	●	●		M	3,5	0,60	2,90
●	●	●	●		M	4,0	0,70	3,30
-	-	-	-		M	4*	0,75	3,25
-	-	-	-		M	4,5	0,75	3,70
●	●	●	●		M	5,0	0,80	4,20
■	-	●	●		M	5*	0,90	4,10
●	●	-	●		M	6,0	1,00	5,00
●	●	●	●		M	7,0	1,00	6,00
●	●	●	●		M	8,0	1,25	6,80

VA: **für rostfreien Stahl**
for stainless steel

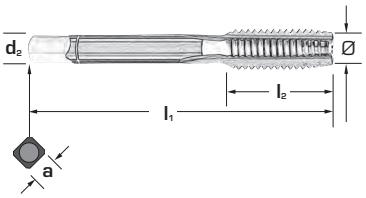
Ti: **für Titanlegierung**
for titanium alloys

● Standardartikel / Items available ex stock - ■ Auslaufender Artikel / discontinued items

DIN 352

Hand-Gewindebohrer, dreiteiliger Satz
für Metrisches ISO-Gewinde nach DIN 133
Hand taps, serial in set of 3 pieces
for ISO metric coarse thread as per DIN 13

M





Typ / Type								N	N	N	N	N	N
Toleranz Tolerance								6 H	6 H	6 H	6 H	6 H	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads								A/5-6	D/3-4	C/2,5-3	A/5-6	D/3-4	C/2,5-3
Schneidrichtung Cutting direction													
Schneidstoff/ Material								HSS	HSS	HSS	HSS	HSS	HSS
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9**	**a** h12	**6615 V**	**6615 M**	**6615 F**	**6618 V**	**6618 M**	**6618 F**
								Einzel single tap		**Satz** set	**Einzel** single tap		**Satz** set
M	9	1,25	7,8	63	22	7	5,5	●		●	-		-
M	10	1,50	8,5	70	24	7	6,2	●		●	●		●
M	11	1,50	9,5	70	24	8	5,5	●		●	-		-
M	12	1,75	10,2	75	29	9	7,0	●		●	●		●
M	14	2,00	12,0	80	30	11	9,0	●		●	●		●
M	16	2,00	14,0	80	32	12	9,0	●		●	●		●
M	18	2,50	15,5	95	40	14	11,0	●		●	●		●
M	20	2,50	17,5	95	40	16	12,0	●		●	●		●
M	22	2,50	19,5	100	40	18	14,5	●		●	-		-
M	24	3,00	21,0	110	50	18	14,5	●		●	-		-
M	27	3,00	24,0	110	50	20	16,0	●		●	-		-
M	30	3,50	26,5	125	56	22	18,0	●		●	-		-
M	33	3,50	29,5	125	56	25	20,0	●		●	-		-
M	36	4,00	32,0	150	63	28	22,0	●		●	-		-
M	39	4,00	35,0	150	63	32	24,0	●		●	-		-
M	42	4,50	37,5	150	63	32	24,0	●		●	-		-
M	45	4,50	40,5	160	70	36	29,0	●		●	-		-
M	48	5,00	43,0	180	75	36	29,0	●		●	-		-
M	52	5,00	47,0	180	75	40	32,0	●		●	-		-
M	56	5,50	50,5	200	85	45	35,0	●		●	-		-
M	60	5,50	54,5	200	85	45	35,0	●		●	-		-
M	64	6,00	58,0	220	90	50	39,0	●		●	-		-
M	68	6,00	62,0	220	90	50	29,0	●		●	-		-

N: **Herkömmliche Anwendung**
universal application

** Schafttoleranz der Vor- und Mittelschneider h 12 / Shank tolerance of 1st and 2nd tap h 12

● Standardartikel / Items available ex stock

DIN 352

Hand-Gewindebohrer, dreiteiliger Satz
für Metrisches ISO-Gewinde nach DIN 13
Hand taps, serial in set of 3 pieces
for ISO metric coarse thread as per DIN 13



6614 V	6614 M	6614 F	6625 V	6625 M	6625 F	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
VA	VA	VA	Ti	Ti	Ti				**Typ /** Type
6 HX	6 HX	6 HX	HX	HX	6 HX				**Toleranz** Tolerance
A/5-6	D/3-4	C/2,5-3	A/5-6	D/3-4	C/2,5-3				**Anschnitt / Gangzahl** Chamfer form / No. of threads
									Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co				**Schneidstoff/** Material
Einzel single tap	Satz set		Einzel single tap	Satz set					
-	-		-	-		M	9	1,25	7,8
●	●		●	●		M	10	1,50	8,5
-	-		-	-		M	11	1,50	9,5
●	●		●	●		M	12	1,75	10,2
●	●		●	●		M	14	2,00	12,0
●	●		●	●		M	16	2,00	14,0
●	●		●	●		M	18	2,50	15,5
●	●		●	●		M	20	2,50	17,5
-	-		-	-		M	22	2,50	19,5
-	-		-	-		M	24	3,00	21,0
-	-		-	-		M	27	3,00	24,0
-	-		-	-		M	30	3,50	26,5
-	-		-	-		M	33	3,50	29,5
-	-		-	-		M	36	4,00	32,0
-	-		-	-		M	39	4,00	35,0
-	-		-	-		M	42	4,50	37,5
-	-		-	-		M	45	4,50	40,5
-	-		-	-		M	48	5,00	43,0
-	-		-	-		M	52	5,00	47,0
-	-		-	-		M	56	5,50	50,5
-	-		-	-		M	60	5,50	54,5
-	-		-	-		M	64	6,00	58,0
-	-		-	-		M	68	6,00	62,0

VA: **für rostfreien Stahl** for stainless steel

Ti: **für Titanlegierung** for titanium alloys

● Standardartikel / Items available ex stock

DIN 352

Hand-Gewindebohrer, dreiteilige Sätze, in Metallkassetten für Metrisches ISO-Gewinde nach DIN 13
Hand taps, serial, in set of 3 pieces in metal cases for ISO metric coarse thread as per DIN 13



M

Ø mm		Steigung Pitch	Satz in Kassette set in metal case	6608
		Typ / Type		-
		Toleranz Tolerance		-
		Anschnitt / Gangzahl Chamfer form / No. of threads		-
		Schneidrichtung Cutting direction		-
		Schneidstoff/ Material		HSS
M	3	0,50		●
M	4	0,70		●
M	5	0,80		●
M	6	1,00		●
M	8	1,25		●
M	10	1,50		●
M	12	1,75		●

Die Kassette enthält Gewindebohrer nach Kat.-Nr. 6615 / The metal case contains hand taps Cat.-No. 6615

● Standardartikel / Items available ex stock

DIN 352

Hand-Gewindebohrer, dreiteilige Sätze und Kernlochbohrer nach DIN 338, in Metallkassetten für Metrisches ISO-Gewinde nach DIN 13

Hand taps, serial, in set of 3 pieces and drills for Tap drill Ø hole acc. to DIN 338, in metal cases for ISO metric coarse thread as per DIN 13



M

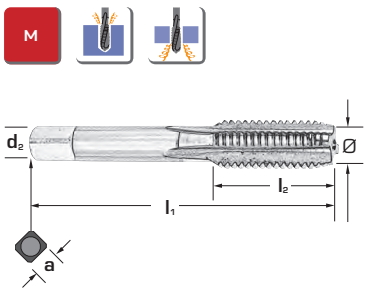
Typ / Type					-
Toleranz Tolerance					-
Anschnitt / Gangzahl Chamfer form / No. of threads					-
Schneidrichtung Cutting direction					-
Schneidstoff/ Material					HSS
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø		**6609**
				Satz in Kassette set in metal case	
M	3	0,50	2,5		✔
M	4	0,70	3,3		✔
M	5	0,80	4,2		✔
M	6	1,00	5,0		✔
M	8	1,25	6,8		✔
M	10	1,50	8,5		✔
M	12	1,75	10,2		✔

Die Kassette enthält Gewindebohrer Kat.-Nr. 6615 und Spiralbohrer nach DIN 338
The metal case contains hand taps Cat.-No. 6615 and twist drills Cat.-No. 6151 DIN 338

✔ Auf Anfrage / Upon request

DIN 352

Kurze Maschinen-Gewindebohrer
für Metrisches ISO-Gewinde nach DIN 13
Short machine taps
for ISO metric coarse thread as per DIN 13





Typ / Type	N	N 15°	N 40°	N 40°	N 40°	Rapid	AZ	AZ
Toleranz / Tolerance	6 H	6 H	6 H	6 H	6 G	6 H	6 H	6 H
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	E/1,5-2	E/1,5-2	B/4-5	B/4-5	C/2,5-3
Schneidrichtung / Cutting direction								
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6678	6659	6639	6604	6604 6G	6679	6613	6621
M	2,0	0,40	1,60	36	8	-	2,8	2,1	●	-	-	-	-	●	-	-
M	2,2	0,45	1,75	36	9	-	2,8	2,1	●	-	-	-	-	●	-	-
M	2,3*	0,40	1,90	36	9	-	2,8	2,1	●	-	-	-	-	●	-	-
M	2,5	0,45	2,05	40	9	-	2,8	2,1	●	-	-	-	-	●	-	-
M	2,6*	0,45	2,10	40	9	-	2,8	2,1	●	-	-	-	-	●	-	-
M	3,0	0,50	2,50	40	11	5	3,5	2,7	●	●	●	●	●	●	●	●
M	3,5	0,60	2,90	45	13	6	4,0	3,0	●	●	●	-	-	●	-	-
M	4,0	0,70	3,30	45	13	7	4,5	3,4	●	●	●	●	●	●	●	●
M	5,0	0,80	4,20	50	16	8	6,0	4,9	●	●	●	●	●	●	●	●
M	6,0	1,00	5,00	50	19	10	6,0	4,9	●	●	●	●	●	●	●	●
M	7,0	1,00	6,00	50	19	10	6,0	4,9	-	●	●	-	-	●	-	-
M	8,0	1,25	6,80	56	22	12	6,0	4,9	●	●	●	●	●	●	●	●
M	10,0	1,50	8,50	70	24	14	7,0	5,5	●	●	●	●	●	●	●	●
M	12,0	1,75	10,20	75	29	16	9,0	7,0	●	●	●	●	●	●	●	●
M	14,0	2,00	12,00	80	30	20	11,0	9,0	●	●	●	-	-	●	-	-
M	16,0	2,00	14,00	80	32	20	12,0	9,0	●	●	●	●	●	●	●	●
M	18,0	2,50	15,50	95	40	25	14,0	11,0	●	●	●	-	-	●	-	-
M	20,0	2,50	17,50	95	40	25	16,0	12,0	●	●	●	●	●	●	-	-
M	24,0	3,00	21,00	110	38	30	18,0	14,5	-	-	-	●	●	-	-	-

N: herkömmliche Anwendunng
universal application

N15/40°: 15°/40° Rechtsrall
15°/40° right hand helix

Rapid: Herkömmliche Anwendung
universal application

AZ: Ausgesetzte Zähne
interrupted threads

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 352

Kurze Maschinen-Gewindebohrer
für Metrisches ISO-Gewinde nach DIN 13
Short machine taps
for ISO metric coarse thread as per DIN 13



VA 15°	VA 15°	MS	**Typ /** Type
6 HX	6 HX	6H	**Toleranz** Tolerance
C/2,5-3	E/1,5-2	E/1,5-2	**Anschnitt / Gangzahl** Chamfer form / No. of threads
			Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6648	6612	6624	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
-	-	●	M	2,0	0,40	1,60
-	-	●	M	2,2	0,45	1,75
-	-	●	M	2,3*	0,40	1,90
-	-	●	M	2,5	0,45	2,05
-	-	●	M	2,6*	0,45	2,10
●	●	●	M	3,0	0,50	2,50
●	-	●	M	3,5	0,60	2,90
●	●	●	M	4,0	0,70	3,30
●	●	●	M	5,0	0,80	4,20
●	●	●	M	6,0	1,00	5,00
-	-	●	M	7,0	1,00	6,00
●	●	●	M	8,0	1,25	6,80
●	●	●	M	10,0	1,50	8,50
●	●	●	M	12,0	1,75	10,20
●	-	-	M	14,0	2,00	12,00
●	●	-	M	16,0	2,00	14,00
-	-	-	M	18,0	2,50	15,50
-	-	-	M	20,0	2,50	17,50
-	-	-	M	24,0	3,00	21,00

VA: für rostfreien Stahl
for stainless steel

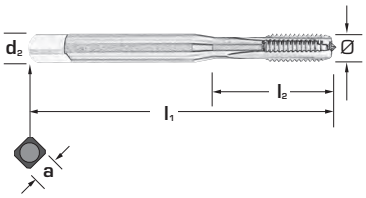
MS: für Messing
for brass

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

M | HARD LUBE | TICN | TiN





Typ / Type	N	N	N	N
Toleranz Tolerance	6 H	6 H	6 H	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction				
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6706	6706 TN	6706 TC	6712
M	1	0,25	0,75	40	5,5	-	2,5	2,1	●	●	●	-
M	1,1	0,25	0,85	40	5,5	-	2,5	2,1	●	●	●	-
M	1,2	0,25	0,95	40	5,5	-	2,5	2,1	●	●	●	-
M	1,4	0,30	1,10	40	7	-	2,5	2,1	●	●	●	-
M	1,6	0,35	1,25	40	8	-	2,5	2,1	●	●	●	-
M	1,7*	0,35	1,30	40	8	-	2,5	2,1	●	●	●	-
M	1,8	0,35	1,45	40	8	-	2,5	2,1	●	●	●	-
M	2	0,40	1,60	45	8	4	2,8	2,1	●	●	●	-
M	2,2	0,45	1,75	45	9	4	2,8	2,1	●	●	●	-
M	2,3*	0,40	1,90	45	9	4	2,8	2,1	●	●	●	-
M	2,5	0,45	2,05	50	9	4	2,8	2,1	●	●	●	-
M	2,6*	0,45	2,10	50	9	4	2,8	2,1	●	●	●	-
M	3	0,50	2,50	56	11	5	3,5	2,7	●	●	●	●
M	3*	0,60	2,40	56	11	5	3,5	2,7	●	●	●	-
M	3,5	0,60	2,90	56	13	6	4,0	3,0	●	●	●	-
M	4	0,70	3,30	63	13	7	4,5	3,4	●	●	●	●
M	4*	0,75	3,25	63	13	7	4,5	3,4	●	●	●	-
M	5	0,80	4,20	70	16	8	6,0	4,9	●	●	●	●
M	5*	0,90	4,10	70	16	8	6,0	4,9	■	●	●	-
M	6	1,00	5,00	80	19	10	6,0	4,9	●	●	●	●
M	7	1,00	6,00	80	19	10	7,0	5,5	●	●	●	-
M	8	1,25	6,80	90	22	12	8,0	6,2	●	●	●	●
M	9	1,25	7,80	90	22	12	9,0	7,0	●	●	●	-
M	10	1,50	8,50	100	24	14	10,0	8,0	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.									6705	6705TN	6706TC	6715

N: Herkömmliche Anwendung
universal application

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued item

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13



AZ	N 15°	N 15°	N 15°	N 15°	N 15°	HD 15°	HD 15°	**Typ /** Type
6 H	6 H	6 G	6 H	6 H	6 H+0,1	6H	6H	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
								Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6820	**6657**	**6657 6G**	**6657 TN**	**6657 TC**	**6902**	**6878**	**6878 HL**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
-	-	-	-	-	-	-	-	M 1	0,25	0,75
-	-	-	-	-	-	-	-	M 1,1	0,25	0,85
-	-	-	-	-	-	-	-	M 1,2	0,25	0,95
-	-	-	-	-	-	-	-	M 1,4	0,30	1,10
-	-	-	-	-	-	-	-	M 1,6	0,35	1,25
-	-	-	-	-	-	-	-	M 1,7*	0,35	1,30
-	-	-	-	-	-	-	-	M 1,8	0,35	1,45
●	●	●	●	●	-	-	-	M 2	0,40	1,60
-	●	-	●	●	-	-	-	M 2,2	0,45	1,75
-	●	-	●	●	-	-	-	M 2,3*	0,40	1,90
-	●	●	●	●	-	-	-	M 2,5	0,45	2,05
-	●	-	●	●	-	-	-	M 2,6*	0,45	2,10
●	●	●	●	●	●	●	●	M 3	0,50	2,50
-	-	-	-	-	-	-	-	M 3*	0,60	2,40
-	●	●	●	●	-	-	-	M 3,5	0,60	2,90
●	●	●	●	●	●	●	●	M 4	0,70	3,30
-	-	-	-	-	-	-	-	M 4*	0,75	3,25
●	●	●	●	●	●	●	●	M 5	0,80	4,20
-	-	-	-	-	-	-	-	M 5*	0,90	4,10
●	●	●	●	●	●	●	●	M 6	1,00	5,00
-	●	●	●	●	-	-	-	M 7	1,00	6,00
●	●	●	●	●	●	●	●	M 8	1,25	6,80
-	-	-	-	-	-	-	-	M 9	1,25	7,80
●	●	●	●	●	●	●	●	M 10	1,50	8,50
	6658					6879	6679HL			

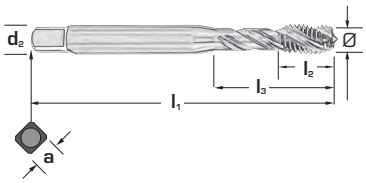
AZ: Ausgesetzte Zähne/ interrupted threads
N15°: 15° Rechtsdrall / 15°right hand helix
HD: für zähe Werkstoffe / for tough materials

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

M TICN TiN





Typ / Type									N 40°	N/VAP 40°	N 40°	N 40°
Toleranz Tolerance									6 H	6 H	6 G	6 G*
Anschnitt / Gangzahl Chamfer form / No. of threads									C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction												
Schneidstoff/ Material									HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**l_3** mm	**d_2** mm h9	**a** h12	**6644**	**6644 VP**	**6644 6G**	**6644 TN**
M	1	0,25	0,75	40	-	5,5	2,5	2,1	-	-	-	-
M	1,1	0,25	0,85	40	-	5,5	2,5	2,1	-	-	-	-
M	1,2	0,25	0,95	40	-	5,5	2,5	2,1	-	-	-	-
M	1,4	0,30	1,10	40	-	7,0	2,5	2,1	-	-	-	-
M	1,6	0,35	1,25	40	-	8,0	2,5	2,1	-	-	-	-
M	1,7*	0,35	1,30	40	-	8,0	2,5	2,1	-	-	-	-
M	1,8	0,35	1,45	40	-	8,0	2,5	2,1	-	-	-	-
M	2	0,40	1,60	45	4	8,0	2,8	2,1	●	●	●	●
M	2,2	0,45	1,75	45	4	9,0	2,8	2,1	●	●	-	-
M	2,3*	0,40	1,90	45	4	9,0	2,8	2,1	●	●	-	-
M	2,5	0,45	2,05	50	4	9,0	2,8	2,1	●	●	●	●
M	2,6*	0,45	2,10	50	4	9,0	2,8	2,1	●	●	-	-
M	3	0,50	2,50	56	5	11,0	3,5	2,7	●	●	●	●
M	3*	0,60	2,40	56	5	11,0	3,5	2,7	-	-	-	-
M	3,5	0,60	2,90	56	6	13,0	4,0	3,0	●	●	●	●
M	4	0,70	3,30	63	7	13,0	4,5	3,4	●	●	●	●
M	4*	0,75	3,25	63	7	13,0	4,5	3,4	-	-	-	-
M	5	0,80	4,20	70	8	16,0	6,0	4,9	●	●	●	●
M	5*	0,90	4,10	70	8	16,0	6,0	4,9	-	-	-	-
M	6	1,00	5,00	80	10	19,0	6,0	4,9	●	●	●	●
M	7	1,00	6,00	80	10	19,0	7,0	5,5	●	●	●	●
M	8	1,25	6,80	90	12	22,0	8,0	6,2	●	●	●	●
M	9	1,25	7,80	90	12	22,0	9,0	7,0	●	●	-	-
M	10	1,50	8,50	100	14	24,0	10,0	8,0	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.									6638	6638VP	66386G	6638TN

N 40°: Rechtsrall a 40° / 40° right hand helix **VAP: vaporisiert /** 40° vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard. - **6 G*** Bei Bestellung bitte 6G angeben / when ordering please state 6G

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13



N 40°	N 40°	N 40°	N 40°	N Sx 40°	**Typ /** Type
7 G	6 H	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	E/1,5-2	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
					Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6644 7G	**6644 TN**	**6644 TC**	**6867**	**6861**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
---	---	---	---	---	---	---	---
-	-	-	-	-	M 1	0,25	0,75
-	-	-	-	-	M 1,1	0,25	0,85
-	-	-	-	-	M 1,2	0,25	0,95
-	-	-	-	-	M 1,4	0,30	1,10
-	-	-	-	-	M 1,6	0,35	1,25
-	-	-	-	-	M 1,7*	0,35	1,30
-	-	-	-	-	M 1,8	0,35	1,45
●	●	●	-	-	M 2	0,40	1,60
-	-	-	-	-	M 2,2	0,45	1,75
-	-	-	-	-	M 2,3*	0,40	1,90
●	●	●	-	-	M 2,5	0,45	2,05
-	-	-	-	-	M 2,6*	0,45	2,10
●	●	●	●	●	M 3	0,50	2,50
-	-	-	-	-	M 3*	0,60	2,40
-	●	●	-	-	M 3,5	0,60	2,90
●	●	●	●	●	M 4	0,70	3,30
-	-	-	-	-	M 4*	0,75	3,25
●	●	●	●	●	M 5	0,80	4,20
-	-	-	-	-	M 5*	0,90	4,10
●	●	●	●	●	M 6	1,00	5,00
-	●	-	-	-	M 7	1,00	6,00
●	●	●	●	●	M 8	1,25	6,80
-	-	-	-	-	M 9	1,25	7,80
●	●	●	●	●	M 10	1,50	8,50
66387G	6638TN	6638TC	6868	6862			

N 40°: Rechtsrall a 40° / 40° right hand helix

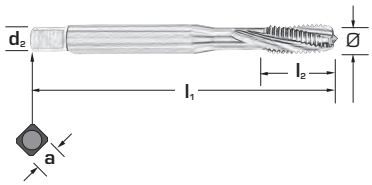
● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

M | TICN | TiN | TINOX | XP TOP

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type									VA 15°	VAP 15°	VA 15°	VA 15°	VA i 15°
Toleranz / Tolerance									6 HX	6 HX	6 HX	6 HX	6 HX
Anschnitt / Gangzahl / Chamfer form / No. of threads									C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction													
Schneidstoff / Material									HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	$d_2$mm h9	a h12	6654	6654 VP	6654 XP	6620	6620 XP
M	2	0,40	1,60	45	8	4	2,8	2,1	●	●	●	-	-
M	2,2	0,45	1,75	45	9	4	2,8	2,1	●	●	●	-	-
M	2,3*	0,40	1,90	45	9	4	2,8	2,1	●	●	●	-	-
M	2,5	0,45	2,05	50	9	4	2,8	2,1	●	●	●	-	-
M	2,6*	0,45	2,10	50	9	4	2,8	2,1	●	●	●	-	-
M	3	0,50	2,50	56	11	5	3,5	2,7	●	●	●	-	-
M	3,5	0,60	2,90	56	13	6	4,0	3,0	●	●	●	-	-
M	4	0,70	3,30	63	13	7	4,5	3,4	●	●	●	-	-
M	5	0,80	4,20	70	16	8	6,0	4,9	●	●	●	-	-
M	6	1,00	5,00	80	19	10	6,0	4,9	●	●	●	●	●
M	7	1,00	6,00	80	19	10	7,0	5,5	●	●	●	-	-
M	8	1,25	6,80	90	22	12	8,0	6,2	●	●	●	●	●
M	10	1,50	8,50	100	24	14	10,0	8,0	●	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.									6634	6634VP	6634XP	6605	6605XP

VA: **Für rostfreien Stahl**
for stainless steel

VA i: **Für rostfreien Stahl, con fori di lubruficazione**
for stainless steel, with internal cooling

VAP: vaporisiert / 40° vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.
Kat.Nr.6661 mit Abschrägung ab M 3, ausgenommen M 7 / Cat.-No. 6661 with back tapered from M 3 onwards, except M 7

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13



VR 35°	VRP 35°	VR 35°	VR 35°	VR 35°	VR 35°	VRP 50°	VR 50°	**Typ /** Type
6 HX	6 HX	6 G	6 HX	6 HX	6 HX	6 HX	6 HX	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
								Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6661	**6661 VP**	**6661 6G**	**6661 TN**	**6661 TX**	**6661 XP**	**6850 VP**	**6850 TN**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
●	●	●	●	●	●	●	●	M 2	0,40	1,60
●	●	●	●	●	●	-	-	M 2,2	0,45	1,75
●	●	-	●	●	●	-	-	M 2,3*	0,40	1,90
●	●	●	●	●	●	-	-	M 2,5	0,45	2,05
●	●	-	●	●	●	-	-	M 2,6*	0,45	2,10
●	●	●	●	●	●	●	●	M 3	0,50	2,50
●	●	-	●	●	●	-	-	M 3,5	0,60	2,90
●	●	●	●	●	●	●	●	M 4	0,70	3,30
●	●	●	●	●	●	●	●	M 5	0,80	4,20
●	●	●	●	●	●	●	●	M 6	1,00	5,00
●	●	-	●	●	●	-	-	M 7	1,00	6,00
●	●	●	●	●	●	●	●	M 8	1,25	6,80
●	●	●	●	●	●	●	●	M 10	1,50	8,50
6662	6662VP	66626G	6662	6662TX	6662XB	6851VP	6851TN			

VR: **für rostfreien Stahl, mit Abschrägung**
for stainless steel, back tapered
VRP: für rostfreien Stahl, mit Abschrägung und vaporisiert
for stainless steel, back tapered and vaporized

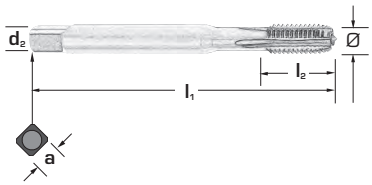
● **Standardartikel /** Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

M | TICN | TiN | TiAlN Futura

Axialer Kühlmittelaustritt
Axial internal cooling







Typ / Type	GG	GG	Multi GG i	Multi GG i	Alu 45°	BAK
Toleranz Tolerance	6 HX	6 HX	6 HX	6 HX	6 H	6 HX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	E/1,5-2
Schneidrichtung Cutting direction						
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6631	6631 TF	6629	6629 TC	6643	6670
M 2	0,40	1,60	45	8	4	2,8	2,1	-	-	-	-	●	●
M 2,2	0,45	1,75	45	9	4	2,8	2,1	-	-	-	-	●	-
M 2,3*	0,40	1,90	45	9	4	2,8	2,1	-	-	-	-	●	■
M 2,5	0,45	2,05	50	9	4	2,8	2,1	-	-	-	-	●	●
M 2,6*	0,45	2,10	50	9	4	2,8	2,1	-	-	-	-	●	-
M 3	0,50	2,50	56	11	5	3,5	2,7	●	●	-	-	●	●
M 3,5	0,60	2,90	56	13	6	4,0	3,0	●	●	-	-	●	●
M 4	0,70	3,30	63	13	7	4,5	3,4	●	●	-	-	●	●
M 5	0,80	4,20	70	16	8	6,0	4,9	●	●	●	●	●	●
M 6	1,00	5,00	80	19	10	6,0	4,9	●	●	●	●	●	●
M 7	1,00	6,00	80	19	10	7,0	5,5	●	●	-	-	●	■
M 8	1,25	6,80	90	22	12	8,0	6,2	●	●	●	●	●	●
M 10	1,50	8,50	100	24	14	10,0	8,0	●	●	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.								6632	6632TF	6637	6637TC	6651	-

Alu: **für Aluminium** for Aluminium
GG: **für Guss** for cast iron
BAK: **für Bakelit** for bakelite

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13



HD 40°	HD 40°	HD 40°	HD 40°	HD 40°	HR 40°	HR 40°	**Typ /** Type
6 H	6 G	4 H	6 H	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
							Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6666	**6666 6G**	**6666 4H**	**6666 TN**	**6666 TF**	**6681**	**6681 TF**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
-	-	-	-	-	-	-	M 2	0,40	1,60
-	-	-	-	-	-	-	M 2,2	0,45	1,75
-	-	-	-	-	-	-	M 2,3*	0,40	1,90
-	-	-	-	-	-	-	M 2,5	0,45	2,05
-	-	-	-	-	-	-	M 2,6*	0,45	2,10
●	●	●	●	●	●	●	M 3	0,50	2,50
●	●	●	●	●	-	-	M 3,5	0,60	2,90
●	●	●	●	●	●	●	M 4	0,70	3,30
●	●	●	●	●	●	●	M 5	0,80	4,20
●	●	●	●	●	●	●	M 6	1,00	5,00
●	●	●	●	●	-	-	M 7	1,00	6,00
●	●	●	●	●	●	●	M 8	1,25	6,80
●	●	●	●	●	●	●	M 10	1,50	8,50
6667	-	-	6667TN	6667TF	6689	6689TF			

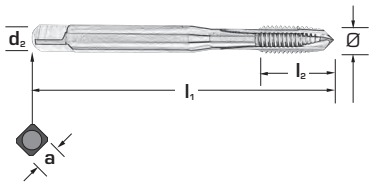
HD: **für zähe Werkstoffe**
for tough materials
HR: **für zähe Werkstoffe, mit Abschrägung**
for tough materials, back tapered

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

M TICN TiN





Typ / Type								Rapid	VAP Rapid	Rapid	Rapid	Rapid	Rapid
Toleranz Tolerance								6 H	6 H	6 G	6 G*	4 H	7 G
Anschnitt / Gangzahl Chamfer form / No. of threads								B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung Cutting direction													
Schneidstoff/ Material								HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12	**6707**	**6707 VP**	**6707 6G**	**6707 TN**	**6707 4H**	**6707 7G**
M	2	0,40	1,60	45	8	2,8	2,1	●	●	●	●	●	●
M	2,2	0,45	1,75	45	9	2,8	2,1	●	●	●	●	●	●
M	2,3*	0,40	1,90	45	9	2,8	2,1	●	●	-	-	-	-
M	2,5	0,45	2,05	50	9	2,8	2,1	●	●	●	●	●	●
M	2,6*	0,45	2,10	50	9	2,8	2,1	●	●	-	-	-	-
M	3	0,50	2,50	56	11	3,5	2,7	●	●	●	●	●	●
M	3*	0,60	2,40	56	11	3,5	2,7	■	-	■	-	-	-
M	3,5	0,60	2,90	56	13	4,0	3,0	●	●	●	●	●	-
M	4	0,70	3,30	63	13	4,5	3,4	●	●	●	●	●	●
M	4*	0,75	3,25	63	13	4,5	3,4	■	-	-	-	-	-
M	5	0,80	4,20	70	16	6,0	4,9	●	●	●	●	●	●
M	6	1,00	5,00	80	19	6,0	4,9	●	●	●	●	●	●
M	7	1,00	6,00	80	19	7,0	5,5	●	●	●	●	●	-
M	8	1,25	6,80	90	22	8,0	6,2	●	●	●	●	●	●
M	9	1,25	7,80	90	22	9,0	7,0	●	●	-	-	-	-
M	10	1,50	8,50	100	24	10,0	8,0	●	●	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.								6711	6711VP	67116G	6711TN	-	67117G

Rapid: **Herkömmliche Anwendung**
universal application
VAP: **vaporisiert**
vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items- **6 G*** Bei Bestellung bitte 6G angeben / when ordering please state 6G

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13



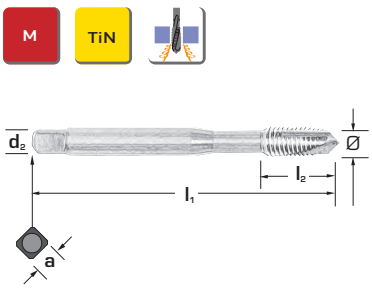
Rapid	Rapid	N sx	Rapid 2	Rapid 2	**Typ /** Type
6 H	6 H	6 H	6 H	6 G	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads
					Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6707 TN	**6707 TC**	**6859**	**6640**	**6640 6G**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
---	---	---	---	---	---	---	---
●	●	-	●	●	M 2	0,40	1,60
-	-	-	●	●	M 2,2	0,45	1,75
-	-	-	●	-	M 2,3*	0,40	1,90
●	●	-	●	●	M 2,5	0,45	2,05
-	-	-	●	-	M 2,6*	0,45	2,10
●	●	●	●	●	M 3	0,50	2,50
-	-	-	-	-	M 3*	0,60	2,40
●	●	-	●	●	M 3,5	0,60	2,90
●	●	●	●	●	M 4	0,70	3,30
-	-	-	-	-	M 4*	0,75	3,25
●	●	●	●	●	M 5	0,80	4,20
●	●	●	●	●	M 6	1,00	5,00
●	-	-	●	●	M 7	1,00	6,00
●	●	●	●	●	M 8	1,25	6,80
-	-	-	-	-	M 9	1,25	7,80
●	●	●	●	●	M 10	1,50	8,50
6711TN	6711TC	6860	-	-			

Rapid 2: **Herkömmliche Anwendung (2 Nuten)**
universal application (2 flutes)

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13





Typ / Type	Ultra	Ultra	Ultra-S
Toleranz Tolerance	6 HX	6 GX	6 HX
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5
Schneidrichtung Cutting direction			
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6606	6606 6G	6649
M	1	0,25	0,75	40	5,5	2,5	2,1	●	-	-
M	1,2	0,25	0,95	40	5,5	2,5	2,1	●	-	-
M	1,4	0,30	1,10	40	7,0	2,5	2,1	●	-	-
M	1,6	0,35	1,25	40	8,0	2,5	2,1	●	-	-
M	1,7*	0,35	1,30	40	8,0	2,5	2,1	●	-	-
M	1,8	0,35	1,45	40	8,0	2,5	2,1	●	-	-
M	2	0,40	1,60	45	8,0	2,8	2,1	●	●	●
M	2,2	0,45	1,75	45	9,0	2,8	2,1	●	●	●
M	2,3*	0,40	1,90	45	9,0	2,8	2,1	●	-	●
M	2,5	0,45	2,05	50	9,0	2,8	2,1	●	●	●
M	2,6*	0,45	2,10	50	9,0	2,8	2,1	●	-	●
M	3	0,50	2,50	56	11,0	3,5	2,7	●	●	●
M	3,5	0,60	2,90	56	13,0	4,0	3,0	●	●	●
M	4	0,70	3,30	63	13,0	4,5	3,4	●	●	●
M	4*	0,75	3,25	63	13,0	4,5	3,4	■	-	-
M	5	0,80	4,20	70	16,0	6,0	4,9	●	●	●
M	6	1,00	5,00	80	19,0	6,0	4,9	●	●	●
M	7	1,00	6,00	80	19,0	7,0	5,5	●	●	●
M	8	1,25	6,80	90	22,0	8,0	6,2	●	●	●
M	9	1,25	7,80	90	22,0	9,0	7,0	●	-	●
M	10	1,50	8,50	100	24,0	10,0	8,0	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.								-	-	-

Ultra: **für Bleche**
for sheet metals
Ultra-s: **mit Schmiernuten für Bleche**
with coolant grooves for sheet metals

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13



Ultra-S	Ultra-S	AZ	NL15°	**Typ /** Type
6 GX	6 HX	6 H	6 H	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	D/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads
				Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6649 6G	6649 TN	6616	6727	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
-	-	-	-	M	1	0,25	0,75
-	-	-	-	M	1,2	0,25	0,95
-	-	-	-	M	1,4	0,30	1,10
-	-	-	-	M	1,6	0,35	1,25
-	-	-	-	M	1,7*	0,35	1,30
-	-	-	-	M	1,8	0,35	1,45
-	●	●	-	M	2	0,40	1,60
●	-	●	-	M	2,2	0,45	1,75
-	-	●	-	M	2,3*	0,40	1,90
●	-	●	-	M	2,5	0,45	2,05
-	-	●	-	M	2,6*	0,45	2,10
●	●	●	●	M	3	0,50	2,50
●	-	●	●	M	3,5	0,60	2,90
●	●	●	●	M	4	0,70	3,30
-	-	-	-	M	4*	0,75	3,25
●	●	●	●	M	5	0,80	4,20
●	●	●	●	M	6	1,00	5,00
■	●	●	-	M	7	1,00	6,00
●	-	●	●	M	8	1,25	6,80
-	-	-	-	M	9	1,25	7,80
●	-	●	●	M	10	1,50	8,50
-	-	6617	6740				

Ultra-s: **mit Schmiernuten für Bleche**
with coolant grooves for sheet metals

AZ: **mit Schmiernuten für Bleche**
interrupted threads

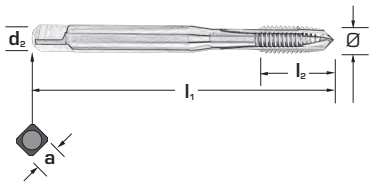
NL15°: **15° Linksdrall**
15° left hand helix

● **Standardartikel /** Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13

M | TiN | TINOX | XP TOP | TiAlN Futura





Typ / Type								VA	VA	VAP	VA	VA	VA
Toleranz Tolerance								6 HX	6 HX	6 HX	6 HX	6 HX	6 GX
Anschnitt / Gangzahl Chamfer form / No. of threads								B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung Cutting direction													
Schneidstoff/ Material								HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12	**6646**	**6646 XP**	**6646 VP**	**6646 TN**	**6646 TX**	**6646 6G**
M	1	0,25	0,75	40	5,5	2,5	2,1	-	-	-	-	-	-
M	1,2	0,25	0,95	40	5,5	2,5	2,1	-	-	-	-	-	-
M	1,4	0,30	1,10	40	7,0	2,5	2,1	-	-	-	-	-	-
M	1,6	0,35	1,25	40	8,0	2,5	2,1	-	-	-	-	-	-
M	1,7*	0,35	1,30	40	8,0	2,5	2,1	-	-	-	-	-	-
M	1,8	0,35	1,45	40	8,0	2,5	2,1	-	-	-	-	-	-
M	2	0,40	1,60	45	8,0	2,8	2,1	●	●	●	●	●	●
M	2,2	0,45	1,75	45	9,0	2,8	2,1	●	●	●	●	●	●
M	2,3*	0,40	1,90	45	9,0	2,8	2,1	●	-	●	●	●	-
M	2,5	0,45	2,05	50	9,0	2,8	2,1	●	●	●	●	●	●
M	2,6*	0,45	2,10	50	9,0	2,8	2,1	●	-	●	●	●	-
M	3	0,50	2,50	56	11,0	3,5	2,7	●	●	●	●	●	●
M	3,5	0,60	2,90	56	13,0	4,0	3,0	●	-	●	●	●	-
M	4	0,70	3,30	63	13,0	4,5	3,4	●	●	●	●	●	●
M	4*	0,75	3,25	63	13,0	4,5	3,4	-	-	-	-	-	-
M	5	0,80	4,20	70	16,0	6,0	4,9	●	●	●	●	●	●
M	6	1,00	5,00	80	19,0	6,0	4,9	●	●	●	●	●	●
M	7	1,00	6,00	80	19,0	7,0	5,5	●	-	●	●	●	-
M	8	1,25	6,80	90	22,0	8,0	6,2	●	●	●	●	●	●
M	9	1,25	7,80	90	22,0	9,0	7,0	-	-	-	-	-	-
M	10	1,50	8,50	100	24,0	10,0	8,0	●	●	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.								6647	6647XP	6647VP	-	6647XP	66476G

VA: **Für rostfreien Stahl**
for stainless steel
VAP: **vaporisiert**
vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 371

Maschinen-Gewindebohrer mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reinforced shank
for ISO metric coarse thread as per DIN 13



Alu	HD	HD	HD	**Typ /** Type
6 H	6 H	6 H	6 H	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	B/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads
				Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6641	**6870**	**6870 TN**	**6870 TF**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
---	---	---	---	---	---	---
-	-	-	-	**M 1**	0,25	0,75
-	-	-	-	**M 1,2**	0,25	0,95
-	-	-	-	**M 1,4**	0,30	1,10
-	-	-	-	**M 1,6**	0,35	1,25
-	-	-	-	**M 1,7***	0,35	1,30
-	-	-	-	**M 1,8**	0,35	1,45
●	●	●	●	**M 2**	0,40	1,60
●	●	●	●	**M 2,2**	0,45	1,75
●	-	-	-	**M 2,3***	0,40	1,90
●	●	●	●	**M 2,5**	0,45	2,05
●	-	-	-	**M 2,6***	0,45	2,10
●	●	●	●	**M 3**	0,50	2,50
●	-	-	-	**M 3,5**	0,60	2,90
●	●	●	●	**M 4**	0,70	3,30
-	-	-	-	**M 4***	0,75	3,25
●	●	●	●	**M 5**	0,80	4,20
●	●	●	●	**M 6**	1,00	5,00
●	●	●	●	**M 7**	1,00	6,00
●	●	●	●	**M 8**	1,25	6,80
-	-	-	-	**M 9**	1,25	7,80
●	●	●	●	**M 10**	1,50	8,50
6642	**6871**	**6871TN**	**6871TF**			

HD: **für zähe Werkstoffe**
for tough materials
Alu: **für Aluminium**
for Aluminium

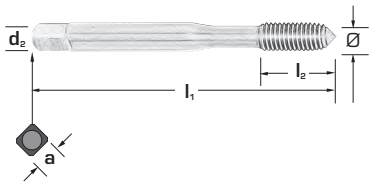
● Standardartikel / Items available ex stock

DIN 371

Innengewinde-Former mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Cold forming taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ref. **6722 – 6622** mit Schmiernuten / with coolant grooves

M | TiN | TINOX | TiAlN Futura





Typ / Type	Former	Former	Former	Former
Toleranz Tolerance	6 HX	6 GX	6 HX	6 GX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction				
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6722	6622	6722 BL	6622 BL
M 1**	0,25	0,88	40	5,5	2,5	2,1	●	-	●	-
M 1,1**	0,25	0,98	40	5,5	2,5	2,1	●	-	●	-
M 1,2**	0,25	1,08	40	5,5	2,5	2,1	●	-	●	-
M 1,4**	0,30	1,25	40	7,0	2,5	2,1	●	-	●	-
M 1,6	0,35	1,45	40	8,0	2,5	2,1	●	-	●	-
M 1,7*	0,35	1,55	40	8,0	2,5	2,1	●	-	●	-
M 1,8	0,35	1,65	40	8,0	2,5	2,1	●	-	●	-
M 2	0,40	1,80	45	8,0	2,8	2,1	●	●	●	●
M 2,2	0,45	2,00	45	9,0	2,8	2,1	●	-	●	-
M 2,3*	0,40	2,10	45	9,0	2,8	2,1	●	-	●	-
M 2,5	0,45	2,30	50	9,0	2,8	2,1	●	●	●	●
M 2,6*	0,45	2,40	50	9,0	2,8	2,1	●	-	●	-
M 3	0,50	2,75	56	11,0	3,5	2,7	●	●	●	●
M 3,5	0,60	3,20	56	13,0	4,0	3,0	●	●	●	●
M 4	0,70	3,65	63	13,0	4,5	3,4	●	●	●	●
M 5	0,80	4,60	70	16,0	6,0	4,9	●	●	●	●
M 6	1,00	5,50	80	19,0	6,0	4,9	●	●	●	●
M 7	1,00	6,50	80	19,0	7,0	5,5	●	-	●	-
M 8	1,25	7,40	90	22,0	8,0	6,2	●	●	●	●
M 10	1,50	9,30	100	24,0	10,0	8,0	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.							6723	6623	6723	6623

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.
** Toleranz 5H / Tolerance 5H

● Standardartikel / Items available ex stock

DIN 371

Innengewinde-Former mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Cold forming taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ref. **6722 – 6622** mit Schmiernuten / with coolant grooves



Former	Former	Former	Former	Former	Former	**Typ /** Type
6 HX	6 GX	6 HX	6 GX	6 HX	6 GX	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
						Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6722 TN	6622 TN	6722 TF	6622 TF	6722 TX	6622 TX	Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø
●	-	●	-	●	-	M 1**	0,25	0,88
●	-	●	-	●	-	M 1,1**	0,25	0,98
●	-	●	-	●	-	M 1,2**	0,25	1,08
●	-	●	-	●	-	M 1,4**	0,30	1,25
●	-	●	-	●	-	M 1,6	0,35	1,45
●	-	●	-	●	-	M 1,7*	0,35	1,55
●	-	●	-	●	-	M 1,8	0,35	1,65
●	●	●	●	●	●	M 2	0,40	1,80
●	-	●	-	●	-	M 2,2	0,45	2,00
●	-	●	-	●	-	M 2,3*	0,40	2,10
●	●	●	●	●	●	M 2,5	0,45	2,30
●	-	●	-	●	-	M 2,6*	0,45	2,40
●	●	●	●	●	●	M 3	0,50	2,75
●	●	●	●	●	●	M 3,5	0,60	3,20
●	●	●	●	●	●	M 4	0,70	3,65
●	●	●	●	●	●	M 5	0,80	4,60
●	●	●	●	●	●	M 6	1,00	5,50
●	-	●	-	●	-	M 7	1,00	6,50
●	●	●	●	●	●	M 8	1,25	7,40
●	●	●	●	●	●	M 10	1,50	9,30
6723TN	6623TN	6723TF	6623TF	6723TX	6623TX			

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.
** Toleranz 5H / Tolerance 5H

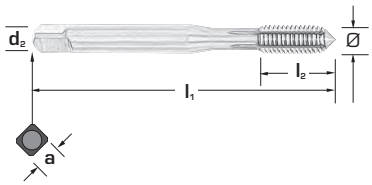
● Standardartikel / Items available ex stock

DIN 371

Innengewinde-Former mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Cold forming taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ref. **6709 – 6819** mit Schmiernuten / with coolant grooves

M | TiN | TINOX | TiAlN Futura





Typ / Type	Former s	Former s	Former s	Former s
Toleranz Tolerance	6 HX	6 GX	6 HX	6 GX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction				
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6709	6808	6709 BL	6808 BL
M 3,0	0,50	2,75	56	11	3,5	2,7	●	●	●	●
M 3,5	0,60	3,20	56	13	4,0	3,0	●	●	●	●
M 4,0	0,70	3,65	63	13	4,5	3,4	●	●	●	●
M 5,0	0,80	4,60	70	16	6,0	4,9	●	●	●	●
M 6,0	1,00	5,50	80	19	6,0	4,9	●	●	●	●
M 7,0	1,00	6,50	80	19	7,0	5,5	●	-	●	-
M 8,0	1,25	7,40	90	22	8,0	6,2	●	●	●	●
M 10,0	1,50	9,30	100	24	10,0	8,0	●	●	●	●
Abmessungen mit Überlaufschaft über M 10 siehe Kat.-Nr / above M 10 refer to Cat.-No.							6725	6809	6725	6809

Former s: mit Schmiernuten
with coolant grooves

● Standardartikel / Items available ex stock

DIN 371

Innengewinde-Former mit verstärktem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Cold forming taps with reinforced shank
for ISO metric coarse thread as per DIN 13

Ref. **6709 – 6819** mit Schmiernuten / with coolant grooves



Former s	Former s	Former s	Former s	Former s	Former s	Former s	**Typ /** Type
6 HX	6 GX	6 HX	6 GX	6 HX	6 GX	7 GX	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
							Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6709 TN	6808 TN	6709 TF	6808 TF	6709 TX	6808 TX	6819	Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø
●	●	●	●	●	●	-	M 3,0	0,50	2,75
●	●	●	●	●	●	-	M 3,5	0,60	3,20
●	●	●	●	●	●	-	M 4,0	0,70	3,65
●	●	●	●	●	●	-	M 5,0	0,80	4,60
●	●	●	●	●	●	●	M 6,0	1,00	5,50
●	-	●	-	●	-	-	M 7,0	1,00	6,50
●	●	●	●	●	●	●	M 8,0	1,25	7,40
●	●	●	●	●	●	●	M 10,0	1,50	9,30
6725TN	6809TN	6725TF	6809TF	6725TX	6809TX	-			

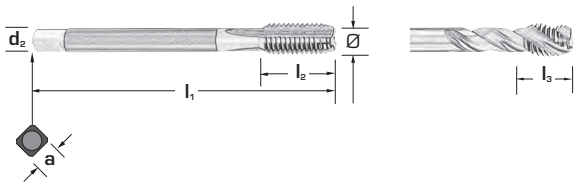
Former s: mit Schmiernuten
with coolant grooves

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO-metric coarse thread as per DIN 13

M TiN TICN





Typ / Type	N	N	N	N	AZ	N 15°	N 15°	N 15°	N 15°
Toleranz / Tolerance	6 H	6 H	6 H	6 H	6 H	6 H	6 H	6 H	6 H+0,1
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction									
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6705	6705 TN	6705 TC	6715	6821	6658	6658 TN	6658 TC	6903
M	2	0,40	1,60	45	8	-	1,4	-	●	●	●	-	-	-	-	-	-
M	2,2	0,45	1,75	45	9	-	1,6	-	■	-	-	-	-	-	-	-	-
M	2,3*	0,40	1,90	45	9	-	1,6	-	●	●	●	-	-	-	-	-	-
M	2,5	0,45	2,05	50	9	-	1,8	-	●	●	●	-	-	-	-	-	-
M	2,6*	0,45	2,10	50	9	4	1,8	-	●	●	●	-	-	-	-	-	-
M	3	0,50	2,50	56	11	5	2,2	-	●	●	●	-	-	-	-	-	-
M	3,5	0,60	2,90	56	13	6	2,5	2,1	●	●	●	-	-	-	-	-	-
M	4	0,70	3,30	63	13	7	2,8	2,1	●	●	●	-	-	-	-	-	-
M	5	0,80	4,20	70	16	8	3,5	2,7	●	●	●	-	-	-	-	-	-
M	6	1,00	5,00	80	19	10	4,5	3,4	●	●	●	-	●	-	-	-	-
M	7	1,00	6,00	80	19	10	5,5	4,3	●	●	●	-	-	-	-	-	-
M	8	1,25	6,80	90	22	12	6,0	4,9	●	●	●	-	●	●	●	●	-
M	9	1,25	7,80	90	22	19	7,0	5,5	●	●	●	-	-	-	-	-	-
M	10	1,50	8,50	100	24	14	7,0	5,5	●	●	●	-	●	●	●	●	-
M	12	1,75	10,20	110	29	16	9,0	7,0	●	●	●	●	●	●	●	●	●
M	14	2,00	12,00	110	30	20	11,0	9,0	●	●	●	●	-	●	●	●	●
M	16	2,00	14,00	110	32	20	12,0	9,0	●	●	●	●	●	●	●	●	●
M	18	2,50	15,50	125	34	24	14,0	11,0	●	●	●	●	-	●	●	●	-
M	20	2,50	17,50	140	34	25	16,0	12,0	●	●	●	●	●	●	●	●	●
M	22	2,50	19,50	140	34	25	18,0	14,5	●	●	●	●	-	●	●	●	-
M	24	3,00	21,00	160	38	30	18,0	14,5	●	●	●	●	●	●	●	●	-
M	27	3,00	24,00	160	38	30	20,0	16,0	●	●	●	-	-	●	●	●	-
M	30	3,50	26,50	180	45	35	22,0	18,0	●	●	●	-	-	●	●	●	-
M	33	3,50	29,50	180	50	-	25,0	20,0	●	●	●	-	-	-	-	-	-
M	36	4,00	32,00	200	56	-	28,0	22,0	●	●	●	-	-	-	-	-	-
M	39	4,00	35,00	200	60	-	32,0	24,0	●	●	●	-	-	-	-	-	-
M	42	4,50	37,50	200	60	-	32,0	24,0	●	●	●	-	-	-	-	-	-
M	45	4,50	40,50	220	65	-	36,0	29,0	●	●	●	-	-	-	-	-	-
M	48	5,00	43,00	250	70	-	36,0	29,0	●	●	●	-	-	-	-	-	-
M	52	5,00	47,00	250	70	-	40,0	32,0	●	●	●	-	-	-	-	-	-

N: Herkömmliche Anwendung
universal application

N 15°: 15° Rechtsdrall
15° right hand helix

AZ : Ausgesetzte Zähne
interrupted threads

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO-metric coarse thread as per DIN 13



N 40°	N VAP 40°	N 40°	N 40°	N 40°	N 40°	N 40°	N Sx 40°	**Typ /** Type
6 H	6 H	6 G	7 G	6 H	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	E/1,5-2	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
								Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6638	6638 VP	6638 6G	6638 7G	6638 TN	6638 TC	6868	6862	Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø
-	-	-	-	-	-	-	-	M 2	0,40	1,60
-	-	-	-	-	-	-	-	M 2,2	0,45	1,75
-	-	-	-	-	-	-	-	M 2,3*	0,40	1,90
-	-	-	-	-	-	-	-	M 2,5	0,45	2,05
-	-	-	-	-	-	-	-	M 2,6*	0,45	2,10
●	●	●	-	-	-	-	-	M 3	0,50	2,50
●	●	●	-	-	-	-	-	M 3,5	0,60	2,90
●	●	●	-	-	-	-	-	M 4	0,70	3,30
●	●	●	-	-	-	-	-	M 5	0,80	4,20
●	●	●	-	-	-	-	-	M 6	1,00	5,00
●	●	-	-	-	-	-	-	M 7	1,00	6,00
●	●	●	●	-	-	-	-	M 8	1,25	6,80
●	●	-	-	-	-	-	-	M 9	1,25	7,80
●	●	●	●	-	-	-	-	M 10	1,50	8,50
●	●	●	●	●	●	●	●	M 12	1,75	10,20
●	●	●	-	●	●	●	●	M 14	2,00	12,00
●	●	●	●	●	●	●	●	M 16	2,00	14,00
●	●	●	-	●	●	●	●	M 18	2,50	15,50
●	●	●	●	●	●	●	●	M 20	2,50	17,50
●	●	●	-	-	-	-	-	M 22	2,50	19,50
●	●	●	●	-	-	-	-	M 24	3,00	21,00
●	●	-	-	-	-	-	-	M 27	3,00	24,00
●	●	●	-	-	-	-	-	M 30	3,50	26,50
●	●	-	-	-	-	-	-	M 33	3,50	29,50
●	●	-	-	-	-	-	-	M 36	4,00	32,00
-	-	-	-	-	-	-	-	M 39	4,00	35,00
-	-	-	-	-	-	-	-	M 42	4,50	37,50
-	-	-	-	-	-	-	-	M 45	4,50	40,50
-	-	-	-	-	-	-	-	M 48	5,00	43,00
-	-	-	-	-	-	-	-	M 52	5,00	47,00

N 40°: **Rechtsrall a 40°**
40° right hand helix

VAP: **vaporisiert**
vaporized

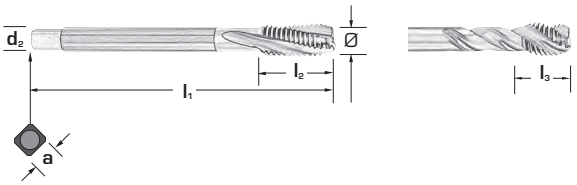
● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO-metric coarse thread as per DIN 13

M | TiN | TINOX | XP TOP

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type									VA 15°	VA i 15°	VA i 15°
Toleranz / Tolerance									6 HX	6 HX	6 HX
Anschnitt / Gangzahl / Chamfer form / No. of threads									C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction											
Schneidstoff / Material									HSS-Co	HSS-Co	HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**l_3** mm	**d_2** mm h9	**a** h12	**6634**	**6605**	**6605 XP**
M	12	1,75	10,2	110	29	16	9	7,0	●	●	●
M	14	2,00	12,0	110	30	20	11	9,0	●	-	-
M	16	2,00	14,0	110	32	20	12	9,0	●	●	●
M	18	2,50	15,5	125	34	24	14	11,0	●	-	-
M	20	2,50	17,5	140	34	25	16	12,0	●	●	●
M	22	2,50	19,5	140	34	25	18	14,5	●	-	-
M	24	3,00	21,0	160	38	30	18	14,5	●	-	-

VA: **Für rostfreien Stahl**
for stainless steel

VA i: **Für rostfreien Stahl mit Innenkühlung**
for stainless steel, with internal cooling

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO-metric coarse thread as per DIN 13



VR 35°	VRP 35°	VR 35°	VR 35°	VR 35°	VRP 50°	VR 50°	**Typ /** Type
6 HX	6 HX	6 HX	6 HX	6 GX	6 HX	6 HX	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
							Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6662	**6662 VP**	**6662 TX**	**6662 XP**	**6662 6G**	**6851 VP**	**6851 TN**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
●	●	●	●	●	●	●	**M 12**	1,75	10,2
●	●	●	●	●	●	●	**M 14**	2,00	12,0
●	●	●	●	●	●	●	**M 16**	2,00	14,0
●	●	●	●	-	●	●	**M 18**	2,50	15,5
●	●	●	●	-	●	●	**M 20**	2,50	17,5
●	●	●	●	-	-	-	**M 22**	2,50	19,5
●	●	●	●	-	●	●	**M 24**	3,00	21,0

VR: **Für rostfreien Stahl, mit Abschrägung**
for stainless steel, back tapered
VRP: **Für rostfreien Stahl mit Abschrägung und vaporisiert**
for stainless steel, back tapered and vaporized

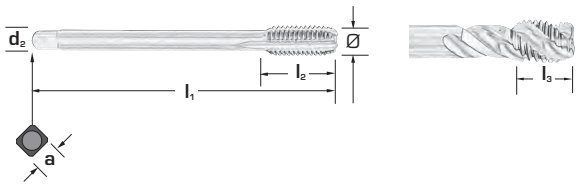
● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO-metric coarse thread as per DIN 13

M | TICN | TiN | HARD LUBE | TiAlN Futura

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type									GG	GG	Multi GGi	Multi GGi	Alu 45°
Toleranz Tolerance									6 HX	6 HX	6 HX	6 HX	6 HX
Anschnitt / Gangzahl Chamfer form / No. of threads									C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction													
Schneidstoff/ Material									HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**l_3** mm	**d_2** mm h9	**a** h12	**6632**	**6632 TF**	**6637**	**6637 TC**	**6651**
M	3	0,50	2,5	56	11	5	2,2	-	-	-	-	-	-
M	3,5	0,60	2,9	56	13	6	2,5	2,1	-	-	-	-	-
M	4	0,70	3,3	63	13	7	2,8	2,1	-	-	-	-	-
M	5	0,80	4,2	70	16	8	3,5	2,7	-	-	-	-	-
M	6	1,00	5,0	80	19	10	4,5	3,4	●	●	-	-	-
M	7	1,00	6,0	80	19	10	5,5	4,3	●	●	-	-	-
M	8	1,25	6,8	90	22	12	6,0	4,9	●	●	-	-	-
M	10	1,50	8,5	100	24	14	7,0	5,5	●	●	-	-	-
M	12	1,75	10,2	110	29	16	9,0	7,0	●	●	●	●	●
M	14	2,00	12,0	110	30	20	11,0	9,0	●	●	-	-	●
M	16	2,00	14,0	110	32	20	12,0	9,0	●	●	●	●	●
M	18	2,50	15,5	125	34	24	14,0	11,0	●	●	●	●	●
M	20	2,50	17,5	140	34	25	16,0	12,0	●	●	●	●	●
M	22	2,50	19,5	140	34	25	18,0	14,5	●	●	-	-	-
M	24	3,00	21,0	160	38	30	18,0	14,5	●	●	-	-	-
M	27	3,00	24,0	160	38	30	20,0	16,0	●	●	-	-	-
M	30	3,50	26,5	180	45	35	22,0	18,0	●	●	-	-	-

GG: **für Guss**
for cast iron
Alu: **für Aluminium**
for Aluminium

MULTI GG i: **Hochleistungs - Gewindebohrer mit Kühlkanälen für Guß**
High performance taps with internal cooling for cast iron

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO-metric coarse thread as per DIN 13



HD 15°	HD 15°	HD 40°	HD 40°	HD 40°	HR 40°	HR 40°	**Typ /** Type
6 H	6 H	6 H	6 H	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
							Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6879	**6879 HL**	**6667**	**6667 TN**	**6667 TF**	**6689**	**6689 TF**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
-	-	●	●	●	-	-	**M 3**	0,50	2,5
-	-	●	●	●	-	-	**M 3,5**	0,60	2,9
-	-	●	●	●	-	-	**M 4**	0,70	3,3
-	-	●	●	●	-	-	**M 5**	0,80	4,2
-	-	●	●	●	-	-	**M 6**	1,00	5,0
-	-	●	●	●	-	-	**M 7**	1,00	6,0
-	-	●	●	●	-	-	**M 8**	1,25	6,8
-	-	●	●	●	-	-	**M 10**	1,50	8,5
●	●	●	●	●	●	●	**M 12**	1,75	10,2
●	●	●	●	●	●	●	**M 14**	2,00	12,0
●	●	●	●	●	●	●	**M 16**	2,00	14,0
●	●	●	●	●	●	●	**M 18**	2,50	15,5
●	●	●	●	●	●	●	**M 20**	2,50	17,5
●	●	-	-	-	-	-	**M 22**	2,50	19,5
●	●	-	-	-	-	-	**M 24**	3,00	21,0
●	●	-	-	-	-	-	**M 27**	3,00	24,0
●	●	-	-	-	-	-	**M 30**	3,50	26,5

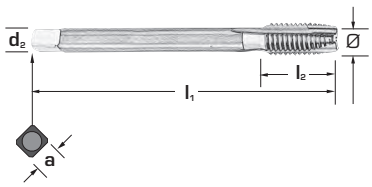
HD: **für zähe Werkstoffe**
for tough materials
HR: **für zähe Werkstoffe Abschrägung**
for tough materials, back tapered

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

M TiN TICN





Typ / Type	Rapid	Rapid VAP	Rapid	Rapid	Rapid
Toleranz / Tolerance	6 H	6 H	6 G	6 H	6 H
Anschnitt / Gangzahl / Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung / Cutting direction					
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6711	6711 VP	6711 6G	6711 TN	6711 TC
M	2	0,40	1,60	45	8	1,4	-	●	●	●	-	-
M	2,2	0,45	1,75	45	9	1,6	-	●	●	-	-	-
M	2,3*	0,40	1,90	45	9	1,6	-	●	●	-	-	-
M	2,5	0,45	2,05	50	9	1,8	-	●	●	●	-	-
M	2,6*	0,45	2,10	50	9	1,8	-	●	●	-	-	-
M	3	0,50	2,50	56	11	2,2	-	●	●	●	-	-
M	3,5	0,60	2,90	56	13	2,5	2,1	●	●	●	-	-
M	4	0,70	3,30	63	13	2,8	2,1	●	●	●	-	-
M	5	0,80	4,20	70	16	3,5	2,7	●	●	●	-	-
M	6	1,00	5,00	80	19	4,5	3,4	●	●	●	-	-
M	7	1,00	6,00	80	19	5,5	4,3	●	●	-	-	-
M	8	1,25	6,80	90	22	6,0	4,9	●	●	●	-	-
M	9	1,25	7,80	90	22	7,0	5,5	●	●	-	-	-
M	10	1,50	8,50	100	24	7,0	5,5	●	●	●	-	-
M	12	1,75	10,20	110	29	9,0	7,0	●	●	●	●	●
M	14	2,00	12,00	110	30	11,0	9,0	●	●	●	●	●
M	16	2,00	14,00	110	32	12,0	9,0	●	●	●	●	●
M	18	2,50	15,50	125	34	14,0	11,0	●	●	●	●	●
M	20	2,50	17,50	140	34	16,0	12,0	●	●	●	●	●
M	22	2,50	19,50	140	34	18,0	14,5	●	●	●	-	-
M	24	3,00	21,00	160	38	18,0	14,5	●	●	●	-	-
M	27	3,00	24,00	160	38	20,0	16,0	●	●	●	-	-
M	30	3,50	26,50	180	45	22,0	18,0	●	●	-	-	-
M	33	3,50	29,50	180	50	25,0	20,0	●	●	●	-	-
M	36	4,00	32,00	200	56	28,0	22,0	●	●	●	-	-
M	39	4,00	35,00	200	60	32,0	24,0	●	●	●	-	-
M	42	4,50	37,50	200	60	32,0	24,0	●	●	●	-	-
M	45	4,50	40,50	220	65	36,0	29,0	●	●	-	-	-
M	48	5,00	43,00	250	70	36,0	29,0	●	●	●	-	-
M	52	5,00	47,00	250	70	40,0	32,0	●	●	-	-	-

Rapid: Herkömmliche Anwendung universal application **VAP:** vaporisiert vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13



Rapid	N Sx					**Typ /** Type
7 G	6 H					**Toleranz** Tolerance
B/4-5	B/4-5					**Anschnitt / Gangzahl** Chamfer form / No. of threads
						Schneidrichtung Cutting direction
HSS-Co	HSS-Co					**Schneidstoff/** Material
6711 7G	**6860**		**Ø mm**		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
-	-		**M**	**2**	0,40	1,60
-	-		**M**	**2,2**	0,45	1,75
-	-		**M**	**2,3***	0,40	1,90
-	-		**M**	**2,5**	0,45	2,05
-	-		**M**	**2,6***	0,45	2,10
-	-		**M**	**3**	0,50	2,50
-	-		**M**	**3,5**	0,60	2,90
-	-		**M**	**4**	0,70	3,30
-	-		**M**	**5**	0,80	4,20
-	-		**M**	**6**	1,00	5,00
-	-		**M**	**7**	1,00	6,00
●	-		**M**	**8**	1,25	6,80
-	-		**M**	**9**	1,25	7,80
●	-		**M**	**10**	1,50	8,50
●	●		**M**	**12**	1,75	10,20
-	●		**M**	**14**	2,00	12,00
●	●		**M**	**16**	2,00	14,00
-	●		**M**	**18**	2,50	15,50
●	●		**M**	**20**	2,50	17,50
-	-		**M**	**22**	2,50	19,50
●	-		**M**	**24**	3,00	21,00
-	-		**M**	**27**	3,00	24,00
-	-		**M**	**30**	3,50	26,50
-	-		**M**	**33**	3,50	29,50
-	-		**M**	**36**	4,00	32,00
-	-		**M**	**39**	4,00	35,00
-	-		**M**	**42**	4,50	37,50
-	-		**M**	**45**	4,50	40,50
-	-		**M**	**48**	5,00	43,00
-	-		**M**	**52**	5,00	47,00

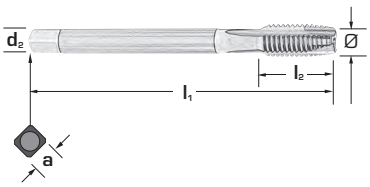
Rapid: **Herkömmliche Anwendung**
universal application

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13

M | TiN | TiAlN Futura | XP TOP





Typ / Type	AZ	NL 15°	VA	VAP	VA	VA
Toleranz / Tolerance	6 H	6 H	6 HX	6 HX	6 HX	6 GX
Anschnitt / Gangzahl / Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung / Cutting direction						
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6617	6740	6647	6647 VP	6647 XP	6647 6G
M 2	0,40	1,60	45	8	1,4	-	-	-	-	-	-	-
M 2,2	0,45	1,75	45	9	1,6	-	-	-	-	-	-	-
M 2,3*	0,40	1,90	45	9	1,6	-	-	-	-	-	-	-
M 2,5	0,45	2,05	50	9	1,8	-	-	-	-	-	-	-
M 2,6*	0,45	2,10	50	9	1,8	-	-	-	-	-	-	-
M 3	0,50	2,50	56	11	2,2	-	-	-	-	-	-	-
M 3,5	0,60	2,90	56	13	2,5	2,1	-	-	-	-	-	-
M 4	0,70	3,30	63	13	2,8	2,1	-	-	-	-	-	-
M 5	0,80	4,20	70	16	3,5	2,7	-	-	-	-	-	-
M 6	1,00	5,00	80	19	4,5	3,4	-	-	-	-	-	-
M 7	1,00	6,00	80	19	5,5	4,3	-	-	-	-	-	-
M 8	1,25	6,80	90	22	6,0	4,9	-	-	-	-	-	-
M 9	1,25	7,80	90	22	7,0	5,5	-	-	-	-	-	-
M 10	1,50	8,50	100	24	7,0	5,5	-	-	-	-	-	-
M 12	1,75	10,20	110	29	9,0	7,0	●	●	●	●	●	●
M 14	2,00	12,00	110	30	11,0	9,0	●	●	●	●	●	●
M 16	2,00	14,00	110	32	12,0	9,0	●	●	●	●	●	●
M 18	2,50	15,50	125	34	14,0	11,0	●	●	●	●	●	-
M 20	2,50	17,50	140	34	16,0	12,0	●	●	●	●	●	-
M 22	2,50	19,50	140	34	18,0	14,5	-	-	●	●	●	-
M 24	3,00	21,00	160	38	18,0	14,5	-	-	●	●	●	-
M 27	3,00	24,00	160	38	20,0	16,0	-	-	-	-	-	-
M 30	3,50	26,50	180	45	22,0	18,0	-	-	-	-	-	-

AZ: **Ausgesetzte Zähne**
interrupted threads

NL15°: **15° Linksdrall**
left hand helix

VAP: **vaporisiert**
vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Machine taps with reduced shank
for ISO metric coarse thread as per DIN 13



HD	HD	HD	Alu	**Typ /** Type
6 H	6 H	6 H	6 H	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	B/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads
				Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6871	6871 TN	6871 TF	6642	Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø
-	-	-	-	M 2	0,40	1,60
-	-	-	-	M 2,2	0,45	1,75
-	-	-	-	M 2,3*	0,40	1,90
-	-	-	-	M 2,5	0,45	2,05
-	-	-	-	M 2,6*	0,45	2,10
-	-	-	-	M 3	0,50	2,50
-	-	-	-	M 3,5	0,60	2,90
-	-	-	-	M 4	0,70	3,30
-	-	-	-	M 5	0,80	4,20
-	-	-	-	M 6	1,00	5,00
-	-	-	-	M 7	1,00	6,00
-	-	-	-	M 8	1,25	6,80
-	-	-	-	M 9	1,25	7,80
-	-	-	-	M 10	1,50	8,50
●	●	●	●	M 12	1,75	10,20
●	●	●	●	M 14	2,00	12,00
●	●	●	●	M 16	2,00	14,00
●	●	●	●	M 18	2,50	15,50
●	●	●	●	M 20	2,50	17,50
-	-	-	-	M 22	2,50	19,50
●	●	●	-	M 24	3,00	21,00
●	●	●	-	M 27	3,00	24,00
●	●	●	-	M 30	3,50	26,50

HD : **für zähe Werkstoffe**
for tough materials
Alu : **für Aluminium**
for Aluminium

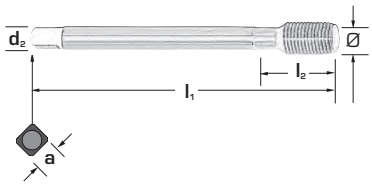
● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindeformer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Cold forming taps with reduced shank
for ISO metric coarse thread as per DIN

Ref. **6723 – 6623** ohne Schmiernuten / without coolant grooves

M TiN TINOX TiAlN Futura





Typ / Type								Former	Former	Former	Former
Toleranz / Tolerance								6 HX	6 GX	6 HX	6 GX
Anschnitt / Gangzahl / Chamfer form / No. of threads								C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction											
Schneidstoff / Material								HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6723	6623	6723 BL	6623 BL
M	12	1,75	11,2	110	29	9	7	●	●	●	●
M	14	2,00	13,0	110	30	11	9	●	●	●	●
M	16	2,00	15,0	110	32	12	9	●	●	●	●

Former: **ohne Schmiernuten**
without coolant grooves

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindeformer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Cold forming taps with reduced shank
for ISO metric coarse thread as per DIN

Ref. **6723 – 6623** ohne Schmiernuten / without coolant grooves



Former	Former	Former	Former	Former	Former	**Typ /** Type
6 HX	6 GX	6 HX	6 GX	6 HX	6 GX	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
						Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6723 TN	**6623 TN**	**6723 TF**	**6623 TF**	**6723 TX**	**6623 TX**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
●	●	●	●	●	●	**M 12**	1,75	11,2
●	●	●	●	●	●	**M 14**	2,00	13,0
●	●	●	●	●	●	**M 16**	2,00	15,0

Former: **ohne Schmiernuten**
without coolant grooves

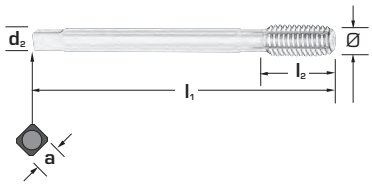
● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindeformer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Cold forming taps with reduced shank
for ISO metric coarse thread as per DIN

Ref. **6725 – 6809** mit Schmiernuten / with coolant grooves

M | TiN | TINOX | TiAlN Futura





Typ / Type								Former-S	Former-S	Former-S	Former-S
Toleranz / Tolerance								6 HX	6 GX	6 HX	6 GX
Anschnitt / Gangzahl / Chamfer form / No. of threads								C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction											
Schneidstoff / Material								HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6725	6809	6725 BL	6809 BL
M	12	1,75	11,2	110	29	9	7	●	●	●	●
M	14	2,00	13,0	110	30	11	9	●	●	●	●
M	16	2,00	15,0	110	32	12	9	●	●	●	●

Former S: **mit Schmiernuten**
with coolant grooves

● Standardartikel / Items available ex stock

DIN 376

Maschinen-Gewindeformer mit Überlaufschaft
für Metrisches IOS-Gewinde nach DIN 13
Cold forming taps with reduced shank
for ISO metric coarse thread as per DIN

Ref. **6725 – 6809** mit Schmiernuten / with coolant grooves



Former-S	Former-S	Former-S	Former-S	Former-S	Former-S	**Typ /** Type
6 HX	6 GX	6 HX	6 GX	6 HX	6 GX	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
						Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6725 TN	**6809 TN**	**6725 TF**	**6809 TF**	**6725 TX**	**6809 TX**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
●	●	●	●	●	●	**M 12**	1,75	11,2
●	●	●	●	●	●	**M 14**	2,00	13,0
●	●	●	●	●	●	**M 16**	2,00	15,0

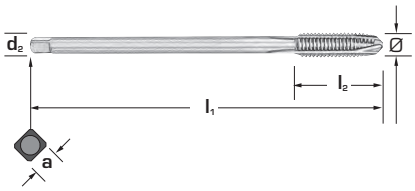
Former S: **mit Schmiernuten**
with coolant grooves

● Standardartikel / Items available ex stock

DIN 357

Maschinen-Gewindebohrer mit langem Schaft
für Metrisches ISO-Gewinde nach DIN 13
Machine taps with long shank
for ISO metric coarse thread as per DIN 13





	N
Typ / Type	
Toleranz Tolerance	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6672
M	3	0,50	2,5	70	18	2,2	-	●
M	4	0,70	3,3	90	22	2,8	2,1	●
M	5	0,80	4,2	100	24	3,5	2,7	●
M	6	1,00	5,0	110	25	4,5	3,4	●
M	7	1,00	6,0	110	25	5,5	4,3	●
M	8	1,25	6,8	125	28	6,0	4,9	●
M	10	1,50	8,5	140	30	7,0	5,5	●
M	12	1,75	10,2	180	35	9,0	7,0	●
M	14	2,00	12,0	200	35	11,0	9,0	●

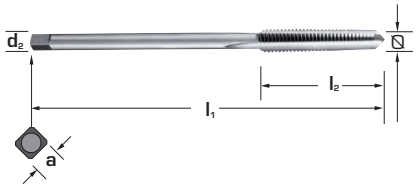
N: Herkömmliche Anwendung
universal application

● Standardartikel / Items available ex stock

DIN 357

Maschinen-Muttergewindebohrer mit langem Schaft für Metrisches ISO-Gewinde nach DIN 13

Machine nut taps with extra long lead, straight shank for ISO metric coarse thread as per DIN 13





| | | |

ILIX NORM

Maschinen-Gewindebohrer mit extra langem Schaft
für Metrisches ISO-Gewinde nach DIN 13
ca. doppelte Gesamtlänge wie DIN 371

Machine taps with extra long shank
for ISO metric coarse thread as per DIN 13
approx. double length of DIN 371





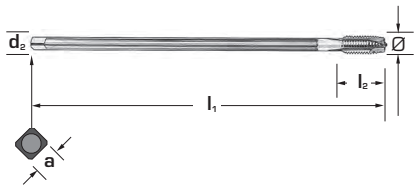
Typ / Type								N
Toleranz Tolerance								6 H
Anschnitt / Gangzahl Chamfer form / No. of threads								B/4-5
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**d_2 mm h9**	**a h12**	**6692**
M	**3**	0,5	2,5	100	11	3,5	2,7	●
M	**4**	0,7	3,3	120	13	4,5	3,4	●
M	**5**	0,8	4,2	140	15	6,0	4,9	●
M	**6**	1,0	5,0	160	17	6,0	4,9	●

● Standardartikel / Items available ex stock

ILIX NORM

Maschinen-Gewindebohrer mit extra langem Schaft
für Metrisches ISO-Gewinde nach DIN 13
ca. doppelte Gesamtlänge wie DIN 376

Machine taps with extra long shank
for ISO metric coarse thread as per DIN 13
approx. double length of DIN 3716





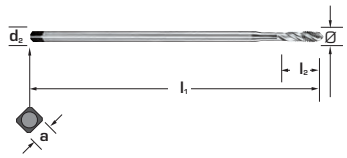
Typ / Type									N
Toleranz Tolerance									6 H
Anschnitt / Gangzahl Chamfer form / No. of threads									B/4-5
Schneidrichtung Cutting direction									
Schneidstoff/ Material									HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12		**6695**
M	**8**	1,25	6,8	180	20	6,0	4,9		●
M	**10**	1,50	8,5	200	22	7,0	5,5		●
M	**12**	1,75	10,2	224	24	9,0	7,0		●
M	**14**	2,00	12,0	224	26	11,0	9,0		●
M	**16**	2,00	14,0	224	27	12,0	9,0		●
M	**18**	2,50	15,5	250	30	14,0	11,0		●
M	**20**	2,50	17,5	280	32	16,0	12,0		●

● **Standardartikel** / Items available ex stock

ILIX NORM

Maschinen-Gewindebohrer, extra lang, 40° Rechtsdrall
für Metrisches ISO-Gewinde nach DIN 13
ca. doppelte Gesamtlänge wie DIN 371

Machine taps, extra long, 40° right hand helix
for ISO metric coarse thread as per DIN 13
approx. double length of DIN 371





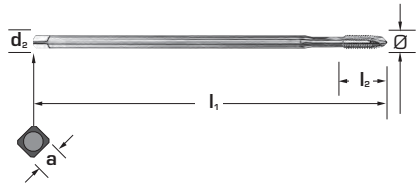
Typ / Type								N 40°
Toleranz Tolerance								6 H
Anschnitt / Gangzahl Chamfer form / No. of threads								C/2,5-3
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**$d_2$mm h9**	**a h12**	**6840**
M	**3**	0,5	2,5	100	11	3,5	2,7	●
M	**4**	0,7	3,3	120	13	4,5	3,4	●
M	**5**	0,8	4,2	140	15	6,0	4,9	●
M	**6**	1,0	5,0	160	17	6,0	4,9	●

● Standardartikel / Items available ex stock

ILIX NORM

Maschinen-Gewindebohrer, extra lang, 40° Rechtsdrall
für Metrisches ISO-Gewinde nach DIN 13
ca. doppelte Gesamtlänge wie DIN 371

Machine taps, extra long
for ISO metric coarse thread as per DIN 13
approx. double total length of DIN 371





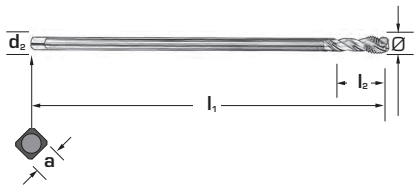
Typ / Type								N
Toleranz Tolerance								6 H
Anschnitt / Gangzahl Chamfer form / No. of threads								B/4-5
Schneidrichtung Cutting direction								
Schneidstoff/ Material								HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12	**6842**
M	**3**	0,5	2,5	100	11	3,5	2,7	●
M	**4**	0,7	3,3	120	13	4,5	3,4	●
M	**5**	0,8	4,2	140	15	6,0	4,9	●
M	**6**	1,0	5,0	160	17	6,0	4,9	●

● Standardartikel / Items available ex stock

ILIX NORM

Maschinen-Gewindebohrer, extra lang, 40°
Rechtsdrall für Metrisches ISO-Gewinde nach DIN 13
ca. doppelte Gesamtlänge wie DIN 376

Machine taps, extra long, 40° right hand helix
for ISO metric coarse thread as per DIN 13
approx. double length of DIN 376





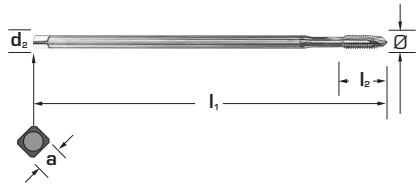
Typ / Type									N 40°
Toleranz Tolerance									6 H
Anschnitt / Gangzahl Chamfer form / No. of threads									C/2,5-3
Schneidrichtung Cutting direction									
Schneidstoff/ Material									HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**$d_2$mm h9**	**a h12**		**6841**
M	**8**	1,25	6,8	180	20	6	4,9		●
M	**10**	1,50	8,5	200	22	7	4,9		●
M	**12**	1,75	10,2	224	24	9	7,0		●
M	**14**	2,00	12,0	224	26	11	9,0		●
M	**16**	2,00	14,0	224	27	12	9,0		●
M	**18**	2,50	15,5	250	30	14	11,0		●
M	**20**	2,50	17,5	280	32	16	12,0		●

● Standardartikel / Items available ex stock

ILIX NORM

Maschinen-Gewindebohrer, extra lang, 40° Rechtsdrall
für Metrisches ISO-Gewinde nach DIN 13
ca. doppelte Gesamtlänge wie DIN 376

Machine taps, extra long
for ISO metric coarse thread as per DIN 13
approx. double total length of DIN 376





Typ / Type	N
Toleranz Tolerance	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

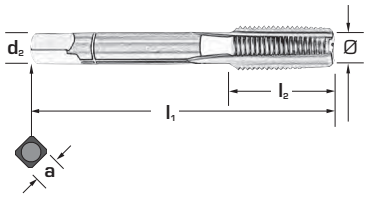
Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6843
M	8	1,25	6,8	180	20	6	4,9	●
M	10	1,50	8,5	200	22	7	4,9	●
M	12	1,75	10,2	224	24	9	7,0	●
M	14	2,00	12,0	224	26	11	9,0	●
M	16	2,00	14,0	224	27	12	9,0	●
M	18	2,50	15,5	250	30	14	11,0	●
M	20	2,50	17,5	280	32	16	12,0	●

● Standardartikel / Items available ex stock

DIN 2181

Hand-Gewindebohrer, zweiteiliger Satz
für Metrisches ISO-Feingewinde nach DIN 13
Hand taps, serial, in set of 2 pieces
for ISO metric fine threads as per DIN 13

MF **Satz 6633**





Typ / Type	N	N
Toleranz Tolerance	6 H	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads	A/5-6	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS	HSS

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6633 V	6633 F
MF	2	0,25	1,8	36	8	2,8	2,1	●	●
MF	2,2	0,25	2,0	36	9	2,8	2,1	●	●
MF	2,3	0,25*	2,1	36	9	2,8	2,1	●	●
MF	2,5	0,35	2,2	40	9	2,8	2,1	●	●
MF	2,6	0,35	2,3	40	9	2,8	2,1	●	●
MF	3	0,35	2,7	40	9	3,5	2,7	●	●
MF	3,5	0,35	3,2	45	10	4,0	3,0	●	●
MF	4	0,50	3,5	45	10	4,5	3,4	●	●
MF	5	0,50	4,5	50	12	6,0	4,9	●	●
MF	6	0,50	5,5	50	14	6,0	4,9	●	●
MF	6	0,75	5,2	50	14	6,0	4,9	●	●
MF	7	0,75	6,2	50	14	6,0	4,9	●	●
MF	8	0,50	7,5	50	19	6,0	4,9	●	●
MF	8	0,75	7,2	50	19	6,0	4,9	●	●
MF	8	1,00	7,0	56	22	6,0	4,9	●	●
MF	9	1,00	8,0	63	22	7,0	5,5	●	●
MF	10	0,75	9,2	63	20	7,0	5,5	●	●
MF	10	1,00	9,0	63	20	7,0	5,5	●	●
MF	10	1,25	8,8	70	24	7,0	5,5	●	●
MF	11	1,00	10,0	63	20	8,0	6,2	●	●
MF	12	1,00	11,0	70	22	9,0	7,0	●	●
MF	12	1,25	10,8	70	22	9,0	7,0	●	●
MF	12	1,50	10,5	70	22	9,0	7,0	●	●
MF	14	1,00	13,0	70	22	11,0	9,0	●	●
MF	14	1,25*	12,8	70	22	11,0	9,0	●	●
MF	14	1,50	12,5	70	22	11,0	9,0	●	●
MF	15	1,00	14,0	70	22	12,0	9,0	●	●
MF	15	1,50	13,5	70	22	12,0	9,0	●	●
MF	16	1,00	15,0	70	22	12,0	9,0	●	●
MF	16	1,50	14,5	70	22	12,0	9,0	●	●
MF	18	1,00	17,0	80	22	14,0	11,0	●	●
MF	18	1,50	16,5	80	22	14,0	11,0	●	●

N: Herkömmliche Anwendung
universal application

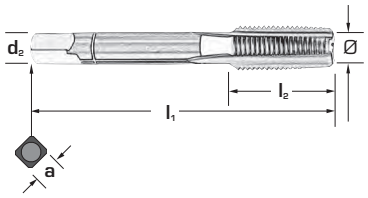
* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard. - Nur im Satz lieferbar. Nur Vorschneider auf Anfrage / Only available as set. Only taper Tap (No. 1) upon request.

● Standardartikel / Items available ex stock

DIN 2181

Hand-Gewindebohrer, zweiteiliger Satz
für Metrisches ISO-Feingewinde nach DIN 13
Hand taps, serial, in set of 2 pieces
for ISO metric fine threads as per DIN 13

MF **Satz 6633**





										N	N
Typ / Type											
Toleranz Tolerance										6 H	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads										A/5-6	A/5-6
Schneidrichtung Cutting direction											
Schneidstoff/ Material										HSS	HSS
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12			**6633 V**	**6633 F**
MF	18	2,0	16,00	80	22	14	11,0			●	●
MF	20	1,0	19,00	80	22	16	12,0			●	●
MF	20	1,5	18,50	80	22	16	12,0			●	●
MF	20	2,0	18,00	80	22	16	12,0			●	●
MF	22	1,0	21,00	80	22	18	14,5			●	●
MF	22	1,5	20,50	80	22	18	14,5			●	●
MF	22	2,0	20,00	80	22	18	14,5			●	●
MF	24	1,0	23,00	90	22	18	14,5			●	●
MF	24	1,5	22,50	90	22	18	14,5			●	●
MF	24	2,0	22,00	90	22	18	14,5			●	●
MF	26	1,5	24,50	90	22	18	14,5			●	●
MF	27	1,5	25,50	90	22	20	16,0			●	●
MF	27	2,0	25,00	90	22	20	16,0			●	●
MF	28	1,5	26,50	90	22	20	16,0			●	●
MF	30	1,0	29,00	90	22	22	18,0			●	●
MF	30	1,5	28,50	90	22	22	18,0			●	●
MF	30	2,0	28,00	90	22	22	18,0			●	●
MF	32	1,5	30,50	90	22	22	18,0			●	●
MF	33	1,5	31,50	100	25	25	20,0			●	●
MF	34	1,5	32,50	100	25	28	22,0			●	●
MF	35	1,5	33,50	100	25	25	20,0			●	●
MF	36	1,5	34,50	100	25	28	22,0			●	●
MF	36	3,0	33,00	125	40	28	22,0			●	●
MF	38	1,5	36,50	100	25	28	22,0			●	●
MF	40	1,5	38,50	110	25	32	24,0			●	●
MF	42	1,5	40,50	110	25	32	24,0			●	●
MF	45	1,5	43,50	110	25	36	29,0			●	●
MF	48	1,5	46,50	140	40	36	29,0			●	●
MF	48	2,0	46,00	140	40	36	29,0			●	●
MF	48	3,0	45,00	140	40	36	29,0			●	●
MF	50	1,5	48,50	140	40	36	29,0			●	●
MF	52	1,5	50,50	140	40	40	32,0			●	●

N: Herkömmliche Anwendung
universal application

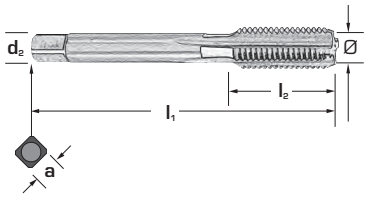
* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard. - Nur im Satz lieferbar. Nur Vorschneider auf Anfrage / Only available as set. Only taper Tap (No. 1) upon request.

● Standardartikel / Items available ex stock

DIN 2181

Kurze Maschinen-Gewindebohrer
für Metrisches ISO-Feingewinde nach DIN 13
Short machine taps
for ISO metric fine thread as per DIN 13

MF





Typ / Type	N	N 15°	MS
Toleranz Tolerance	6 H	6 H	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction			
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6899	6656	6724
MF	4	0,50	3,5	45	10	4,5	3,4	-	●	●
MF	5	0,50	4,5	50	12	6,0	4,9	-	●	●
MF	6	0,50	5,5	50	14	6,0	4,9	●	●	●
MF	6	0,75	5,2	50	14	6,0	4,9	●	-	●
MF	7	0,75	6,2	50	14	6,0	4,9	-	-	●
MF	8	0,50	7,5	50	19	6,0	4,9	●	●	●
MF	8	0,75	7,2	50	19	6,0	4,9	●	●	●
MF	8	1,00	7,0	56	22	6,0	4,9	●	-	●
MF	9	1,00	8,0	63	22	7,0	5,5	●	-	●
MF	10	0,75	9,2	63	20	7,0	5,5	●	-	●
MF	10	1,00	9,0	63	20	7,0	5,5	●	●	●
MF	10	1,25	8,8	70	24	7,0	5,5	●	-	●
MF	11	1,00	10,0	63	20	8,0	6,2	-	-	●
MF	12	1,00	11,0	70	22	9,0	7,0	●	●	●
MF	12	1,25	10,8	70	22	9,0	7,0	●	-	●
MF	12	1,50	10,5	70	22	9,0	7,0	●	●	●
MF	14	1,00	10,5	70	22	9,0	7,0	●	-	-
MF	14	1,25	10,5	70	22	9,0	7,0	●	-	-
MF	14	1,50	12,5	70	22	11,0	9,0	●	●	-
MF	16	1,00	12,5	70	22	11,0	9,0	●	-	-
MF	16	1,50	14,5	70	22	12,0	9,0	●	●	-
MF	18	1,00	14,5	70	22	12,0	9,0	●	-	-
MF	18	1,50	16,5	80	22	14,0	11,0	●	●	-
MF	18	2,00	16,5	80	22	14,0	11,0	●	-	-
MF	20	1,00	16,5	80	22	14,0	11,0	●	-	-
MF	20	1,50	18,5	80	22	16,0	12,0	●	●	-
MF	20	2,00	18,5	80	22	16,0	12,0	●	-	-
MF	22	1,50	20,5	80	22	18,0	14,5	-	●	-
MF	24	1,50	22,5	90	22	18,0	14,5	-	●	-

N: **Herkömmliche Anwendung** universal application
N 15°: **15° Rechtsdrall** right hand helix
MS: **für Messing** for brass

● Standardartikel / Items available ex stock

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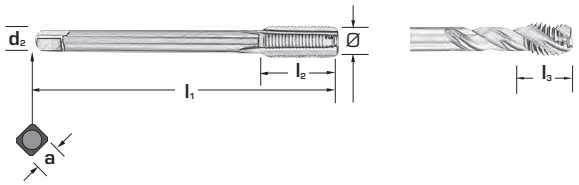
DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

MF TiN TICN





Typ / Type	N	N	N	N 15°	N 15°
Toleranz / Tolerance	6 H	6 H	6 H	6 H	6 H
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction					
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	$l_{2\,MAX}$ mm	l_3 mm	d_2 mm h9	a h12	6726	6726 TN	6726 TC	6664	6664 TN
MF	3	0,35	2,65	56	9	5	2,2	-	●	●	●	-	-
MF	3,5	0,35	3,15	56	10	6	2,5	2,1	●	●	●	-	-
MF	4	0,50	3,50	63	10	7	2,8	2,1	●	●	●	-	-
MF	5	0,50	4,50	70	12	8	3,5	2,7	●	●	●	-	-
MF	6	0,50	5,50	80	14	10	4,5	3,4	●	●	●	-	-
MF	6	0,75	5,20	80	14	10	4,5	3,4	●	●	●	-	-
MF	7	0,75	6,20	80	14	10	5,5	4,3	●	●	●	-	-
MF	8	0,50	7,50	80	19	12	6,0	4,9	●	●	●	-	-
MF	8	0,75	7,20	80	19	12	6,0	4,9	●	●	●	●	●
MF	8	1,00	7,00	90	22	12	6,0	4,9	●	●	●	●	●
MF	9	1,00	8,00	90	22	12	7,0	5,5	●	●	●	-	-
MF	10	0,75	9,20	90	20	14	7,0	5,5	●	●	●	-	-
MF	10	1,00	9,00	90	20	14	7,0	5,5	●	●	●	●	●
MF	10	1,25	8,80	100	24	14	7,0	5,5	●	●	●	●	●
MF	11	1,00	10,00	90	20	14	8,0	6,2	●	●	●	-	-
MF	12	1,00	11,00	100	22	16	9,0	7,0	●	●	●	●	●
MF	12	1,25	10,80	100	22	16	9,0	7,0	●	●	●	-	-
MF	12	1,50	10,50	100	22	16	9,0	7,0	●	●	●	●	●
MF	14	1,00	13,00	100	22	20	11,0	9,0	●	●	●	-	-
MF	14	1,25*	12,80	100	22	20	11,0	9,0	●	●	●	-	-
MF	14	1,50	12,50	100	22	20	11,0	9,0	●	●	●	●	●
MF	15	1,00	14,00	100	22	20	12,0	9,0	●	●	●	-	-
MF	15	1,50	13,50	100	22	20	12,0	9,0	●	●	●	-	-
MF	16	1,00	15,00	100	22	20	12,0	9,0	●	●	●	-	-
MF	16	1,50	14,50	100	22	20	12,0	9,0	●	●	●	●	●
MF	18	1,00	17,00	110	25	25	14,0	11,0	●	●	●	-	-
MF	18	1,50	16,50	110	25	25	14,0	11,0	●	●	●	●	●
MF	18	2,00	16,00	125	34	25	14,0	11,0	●	●	●	-	-
MF	20	1,00	19,00	125	25	25	16,0	12,0	●	●	●	-	-
MF	20	1,50	18,50	125	25	25	16,0	12,0	●	●	●	●	●
MF	20	2,00	18,00	140	34	25	16,0	12,0	●	●	●	-	-
MF	22	1,00	21,00	125	25	25	18,0	14,5	●	●	●	-	-

N: Herkömmliche Anwendung universal application
N 15°: 15° Rechtsdrall right hand helix

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13



N 15°	N 15°	N Sx 40°	N 40°	VAP 40°	N 40°	N 40°	N 40°	**Typ /** Type
6 H	6 H+0,1	6 H	6 H	6 H	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	E/1-2	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	E/1-2	**Anschnitt / Gangzahl** Chamfer form / No. of threads
								Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6664 TC	6904	6864	6652	6652 VP	6652 TN	6652 TC	6877	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
-	-	-	●	●	●	●	-	MF	3	0,35	2,65
-	-	-	●	●	●	●	-	MF	3,5	0,35	3,15
-	-	-	●	●	●	●	-	MF	4	0,50	3,50
-	-	-	●	●	●	●	-	MF	5	0,50	4,50
-	-	-	●	●	●	●	●	MF	6	0,50	5,50
-	-	-	●	●	●	●	●	MF	6	0,75	5,20
-	-	-	-	-	-	-	-	MF	7	0,75	6,20
-	-	-	-	-	-	-	-	MF	8	0,50	7,50
●	-	-	●	●	●	●	●	MF	8	0,75	7,20
●	-	●	●	●	●	●	●	MF	8	1,00	7,00
-	-	-	-	-	-	-	-	MF	9	1,00	8,00
-	-	-	-	-	-	-	-	MF	10	0,75	9,20
●	-	●	●	●	●	●	●	MF	10	1,00	9,00
●	-	-	●	●	●	●	●	MF	10	1,25	8,80
-	-	-	-	-	-	-	-	MF	11	1,00	10,00
●	-	●	●	●	●	●	●	MF	12	1,00	11,00
-	-	-	-	-	-	-	●	MF	12	1,25	10,80
●	-	●	●	●	●	●	●	MF	12	1,50	10,50
-	-	-	-	-	-	-	-	MF	14	1,00	13,00
-	-	-	-	-	-	-	-	MF	14	1,25*	12,80
●	-	●	●	●	●	●	●	MF	14	1,50	12,50
-	-	-	-	-	-	-	-	MF	15	1,00	14,00
-	-	-	-	-	-	-	-	MF	15	1,50	13,50
-	●	-	-	-	-	-	-	MF	16	1,00	15,00
●	-	●	●	●	●	●	●	MF	16	1,50	14,50
-	●	-	-	-	-	-	-	MF	18	1,00	17,00
●	-	●	●	●	●	●	●	MF	18	1,50	16,50
-	-	-	-	-	-	-	-	MF	18	2,00	16,00
-	●	-	-	-	-	-	-	MF	20	1,00	19,00
●	-	●	●	●	●	●	●	MF	20	1,50	18,50
-	-	-	-	-	-	-	-	MF	20	2,00	18,00
-	●	-	-	-	-	-	-	MF	22	1,00	21,00

N 15°: 15° Rechtsdrall
right hand helix

N 40°: Rechtsrall a 40°
right hand helix

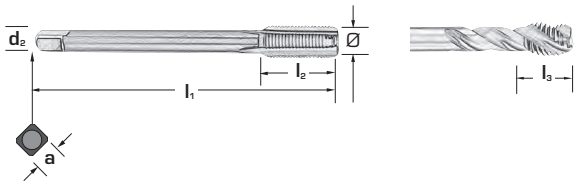
VAP: vaporisiert
vaporized

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

MF TiN TICN





Typ / Type	N	N	N	N 15°	N 15°
Toleranz / Tolerance	6 H	6 H	6 H	6 H	6 H
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction					
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	$l_{2\,MAX}$ mm	l_3 mm	d_2 mm h9	a h12	6726	6726 TN	6726 TC	6664	6664 TN
MF	22	1,50	20,50	125	25	25	18,0	14,5	●	●	●	●	●
MF	22	2,00	20,00	140	34	25	18,0	14,5	●	●	●	-	-
MF	24	1,00	23,00	140	28	28	18,0	14,5	●	●	●	-	-
MF	24	1,50	22,50	140	28	28	18,0	14,5	●	●	●	●	●
MF	24	2,00	22,00	140	28	28	18,0	14,5	●	●	●	-	-
MF	26	1,50	24,50	140	28	28	18,0	14,5	●	●	●	●	●
MF	27	1,50	25,50	140	28	28	20,0	16,0	●	●	●	●	●
MF	27	2,00	25,00	140	28	28	20,0	16,0	●	●	●	●	●
MF	28	1,50	26,50	140	28	28	20,0	16,0	●	●	●	●	●
MF	30	1,00	29,00	150	28	28	22,0	18,0	●	●	●	-	-
MF	30	1,50	28,50	150	28	28	22,0	18,0	●	●	●	●	●
MF	30	2,00	28,00	150	28	28	22,0	18,0	●	●	●	●	●
MF	32	1,50	30,50	150	28	-	22,0	18,0	●	●	●	-	-
MF	33	1,50	31,50	160	30	-	25,0	20,0	●	●	●	-	-
MF	34	1,50	32,50	170	30	-	28,0	22,0	●	●	●	-	-
MF	35	1,50	33,50	170	30	-	28,0	22,0	●	●	●	-	-
MF	36	1,50	34,50	170	30	-	28,0	22,0	●	●	●	-	-
MF	38	1,50	36,50	170	30	-	28,0	22,0	●	●	●	-	-
MF	40	1,50	38,50	170	30	-	32,0	24,0	●	●	●	-	-
MF	42	1,50	40,50	170	30	-	32,0	24,0	●	●	●	-	-
MF	45	1,50	43,50	180	32	-	36,0	29,0	●	●	●	-	-
MF	48	1,50	46,50	190	32	-	36,0	29,0	●	●	●	-	-
MF	50	1,50	48,50	190	32	-	36,0	29,0	●	●	●	-	-
MF	52	1,50	50,50	190	32	-	40,0	32,0	●	●	●	-	-

N: Herkömmliche Anwendung universal application
N 15°: 15° Rechtsdrall right hand helix

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13



N 15°	N 15°	N Sx 40°	N 40°	VAP 40°	N 40°	N 40°	N 40°	**Typ /** Type
6 H	6 H+0,1	6 H	6 H	6 H	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	E/1-2	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	E/1-2	**Anschnitt / Gangzahl** Chamfer form / No. of threads
								Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6664 TC	6904	6864	6652	6652 VP	6652 TN	6652 TC	6877	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
●	-	-	●	●	●	●	-	MF	22	1,50	20,50
-	-	-	-	-	-	-	-	MF	22	2,00	20,00
-	●	-	-	-	-	-	-	MF	24	1,00	23,00
●	-	-	●	●	●	●	-	MF	24	1,50	22,50
●	-	-	-	-	-	-	-	MF	24	2,00	22,00
●	-	-	●	●	●	●	-	MF	26	1,50	24,50
●	-	-	●	●	●	●	-	MF	27	1,50	25,50
●	-	-	●	●	●	●	-	MF	27	2,00	25,00
●	-	-	●	●	●	●	-	MF	28	1,50	26,50
●	-	-	-	-	-	-	-	MF	30	1,00	29,00
-	-	-	●	●	●	●	-	MF	30	1,50	28,50
-	-	-	●	●	●	●	-	MF	30	2,00	28,00
-	-	-	-	-	-	-	-	MF	32	1,50	30,50
-	-	-	-	-	-	-	-	MF	33	1,50	31,50
-	-	-	-	-	-	-	-	MF	34	1,50	32,50
-	-	-	-	-	-	-	-	MF	35	1,50	33,50
-	-	-	-	-	-	-	-	MF	36	1,50	34,50
-	-	-	-	-	-	-	-	MF	38	1,50	36,50
-	-	-	-	-	-	-	-	MF	40	1,50	38,50
-	-	-	-	-	-	-	-	MF	42	1,50	40,50
-	-	-	-	-	-	-	-	MF	45	1,50	43,50
-	-	-	-	-	-	-	-	MF	48	1,50	46,50
-	-	-	-	-	-	-	-	MF	50	1,50	48,50
-	-	-	-	-	-	-	-	MF	52	1,50	50,50

N 15°: **15° Rechtsdrall** right hand helix
N 40°: **Rechtsrall a 40°** right hand helix
VAP: **vaporisiert** vaporized

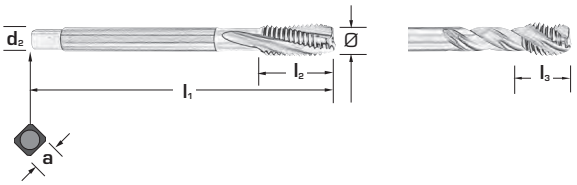
● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

MF | HARD LUBE | XP TOP

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type									VA 15°	VA i 15°	VA i 15°	VA 35°	VAP 35°	VA 35°	VA 35°
Toleranz Tolerance									6 HX	6 HX	6 HX	6 HX	6 HX	6 HX	6 GX
Anschnitt / Gangzahl Chamfer form / No. of threads									C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction															
Schneidstoff/ Material									HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		**Steigung** Pitch	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**l_3** mm	**d_2** mm h9	**a** h12	**6671**	**6626**	**6626 XP**	**6655**	**6655 VP**	**6655 XP**	**6655 6G**
MF	3	0,35	2,65	56	9	5	2,2	-	-	-	-	-	-	-	-
MF	3,5	0,35	3,15	56	10	6	2,5	2,1	-	-	-	-	-	-	-
MF	4	0,50	3,50	63	10	7	2,8	2,1	-	-	-	-	-	-	-
MF	5	0,50	4,50	70	12	8	3,5	2,7	-	-	-	-	-	-	-
MF	6	0,50	5,50	80	14	10	4,5	3,4	-	-	-	-	-	-	-
MF	6	0,75	5,20	80	14	10	4,5	3,4	-	-	-	-	-	-	-
MF	7	0,75	6,20	80	14	10	5,5	4,3	-	-	-	-	-	-	-
MF	8	0,50	7,50	80	19	12	6,0	4,9	-	-	-	-	-	-	-
MF	8	0,75	7,20	80	19	12	6,0	4,9	-	-	-	-	-	-	-
MF	8	1,00	7,00	90	22	12	6,0	4,9	●	●	●	●	●	●	●
MF	9	1,00	8,00	90	22	12	7,0	5,5	-	-	-	-	-	-	-
MF	10	0,75	9,20	90	20	14	7,0	5,5	-	-	-	-	-	-	-
MF	10	1,00	9,00	90	20	14	7,0	5,5	●	●	●	●	●	●	●
MF	10	1,25	8,80	100	24	14	7,0	5,5	●	●	●	●	●	●	-
MF	11	1,00	10,00	90	20	14	8,0	6,2	-	-	-	-	-	-	-
MF	12	1,00	11,00	100	22	16	9,0	7,0	●	●	●	●	●	●	●
MF	12	1,25	10,80	100	22	16	9,0	7,0	-	●	●	-	-	-	-
MF	12	1,50	10,50	100	22	16	9,0	7,0	●	●	●	●	●	●	●
MF	14	1,00	13,00	100	22	20	11,0	9,0	-	-	-	-	-	-	-
MF	14	1,25*	12,80	100	22	20	11,0	9,0	-	-	-	-	-	-	-
MF	14	1,50	12,50	100	22	20	11,0	9,0	●	●	●	●	●	●	●
MF	15	1,00	14,00	100	22	20	12,0	9,0	-	-	-	-	-	-	-
MF	15	1,50	13,50	100	22	20	12,0	9,0	-	-	-	-	-	-	-
MF	16	1,00	15,00	100	22	20	12,0	9,0	-	-	-	-	-	-	-
MF	16	1,50	14,50	100	22	20	12,0	9,0	●	●	●	●	●	●	●
MF	18	1,00	17,00	110	25	25	14,0	11,0	-	-	-	-	-	-	-
MF	18	1,50	16,50	110	25	25	14,0	11,0	●	●	●	●	●	●	●

VA: **Für rostfreien Stahl**
for stainless steel

VA i: **Für rostfreien Stahl mit Innenkühlung**
for stainless steel, with internal cooling

VAP: **vaporisiert**
vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13



GG	HD 15°	HD 15°	Alu 45°	**Typ /** Type
6 HX	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
				Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6653	6880	6880 HL	6731	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
-	-	-	-	MF	3	0,35	2,65
-	-	-	-	MF	3,5	0,35	3,15
-	-	-	-	MF	4	0,50	3,50
-	-	-	-	MF	5	0,50	4,50
-	-	-	-	MF	6	0,50	5,50
-	●	●	-	MF	6	0,75	5,20
-	-	-	-	MF	7	0,75	6,20
-	-	-	-	MF	8	0,50	7,50
-	●	●	-	MF	8	0,75	7,20
●	●	●	●	MF	8	1,00	7,00
●	-	-	-	MF	9	1,00	8,00
-	-	-	-	MF	10	0,75	9,20
●	●	●	●	MF	10	1,00	9,00
●	-	-	●	MF	10	1,25	8,80
-	-	-	-	MF	11	1,00	10,00
-	●	●	●	MF	12	1,00	11,00
-	-	-	-	MF	12	1,25	10,80
●	●	●	●	MF	12	1,50	10,50
-	-	-	-	MF	14	1,00	13,00
-	-	-	-	MF	14	1,25*	12,80
●	●	●	●	MF	14	1,50	12,50
-	-	-	-	MF	15	1,00	14,00
-	-	-	-	MF	15	1,50	13,50
-	-	-	-	MF	16	1,00	15,00
●	●	●	●	MF	16	1,50	14,50
-	-	-	-	MF	18	1,00	17,00
●	●	●	●	MF	18	1,50	16,50

HD : **für zähe Werkstoffe**
for tough materials

GG: **für Guss**
for cast iron

Alu: **für Aluminium**
for Aluminium

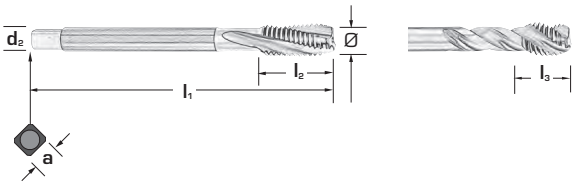
● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

MF | HARD LUBE | XP TOP

Axialer Kühlmittelaustritt
Axial internal cooling





Typ / Type	VA 15°	VA i 15°	VA i 15°	VA 35°	VAP 35°	VA 35°	VA 35°
Toleranz Tolerance	6 HX	6 HX	6 HX	6 HX	6 HX	6 HX	6 GX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction							
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6671	6626	6626 XP	6655	6655 VP	6655 XP	6655 6G
MF	20	1,50	18,50	125	25	25	16,0	12,0	●	●	●	●	●	●	●
MF	20	2,00	18,00	140	34	25	16,0	12,0	-	-	-	-	-	-	-
MF	22	1,00	21,00	125	25	25	18,0	14,5	-	-	-	-	-	-	-
MF	22	1,50	20,50	125	25	25	18,0	14,5	●	-	-	●	●	●	-
MF	22	2,00	20,00	140	34	25	18,0	14,5	-	-	-	-	-	-	-
MF	24	1,00	23,00	140	28	28	18,0	14,5	-	-	-	-	-	-	-
MF	24	1,50	22,50	140	28	28	18,0	14,5	●	-	-	●	●	●	●
MF	24	2,00	22,00	140	28	28	18,0	14,5	-	-	-	-	-	-	-
MF	26	1,50	24,50	140	28	28	18,0	14,5	●	-	-	●	●	●	-
MF	27	1,50	25,50	140	28	28	20,0	16,0	●	-	-	●	●	●	-
MF	27	2,00	25,00	140	28	28	20,0	16,0	●	-	-	●	●	●	-
MF	28	1,50	26,50	140	28	28	20,0	16,0	●	-	-	●	●	●	-
MF	30	1,00	29,00	150	28	28	22,0	18,0	-	-	-	-	-	-	-
MF	30	1,50	28,50	150	28	28	22,0	18,0	●	-	-	●	●	●	-
MF	30	2,00	28,00	150	28	28	22,0	18,0	●	-	-	●	●	●	-

VA: **Für rostfreien Stahl**
for stainless steel

VA i: **Für rostfreien Stahl mit Innenkühlung**
for stainless steel, with internal cooling

VAP: **vaporisiert**
vaporized

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13



GG	HD 15°	HD 15°	Alu 45°	**Typ /** Type
6 HX	6 H	6 H	6 H	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
				Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6653	6880	6880 HL	6731	Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø
●	●	●	●	MF	20	1,50	18,50
-	-	-	-	MF	20	2,00	18,00
-	-	-	-	MF	22	1,00	21,00
●	●	●	-	MF	22	1,50	20,50
-	-	-	-	MF	22	2,00	20,00
-	-	-	-	MF	24	1,00	23,00
●	●	●	-	MF	24	1,50	22,50
-	-	-	-	MF	24	2,00	22,00
-	-	-	-	MF	26	1,50	24,50
-	-	-	-	MF	27	1,50	25,50
-	-	-	-	MF	27	2,00	25,00
-	-	-	-	MF	28	1,50	26,50
-	-	-	-	MF	30	1,00	29,00
●	-	-	-	MF	30	1,50	28,50
-	-	-	-	MF	30	2,00	28,00

HD : **für zähe Werkstoffe**
for tough materials

GG: **für Guss**
for cast iron

Alu: **für Aluminium**
for Aluminium

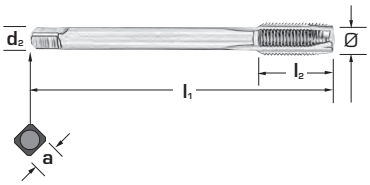
MULTI HD: **Hochleistungs - Gewindebohrer für zähe Werkstoffe**
High performance taps
for tough materials

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

MF | TiN | TICN | XP TOP





Typ / Type	Rapid	Rapid VAP	Rapid	Rapid	N Sx	NL 15°
Toleranz Tolerance	6 H	6 H	6 H	6 H	6 H	6 H
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung Cutting direction						
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6730	6730 VP	6730 TN	6730 TC	6863	6741
MF	3	0,35	2,65	56	9	2,2	-	●	●	●	●	-	-
MF	3,5	0,35	3,15	56	10	2,5	2,1	●	●	●	●	-	-
MF	4	0,50	3,50	63	10	2,8	2,1	●	●	●	●	-	-
MF	5	0,50	4,50	70	12	3,5	2,7	●	●	●	●	-	-
MF	6	0,50	5,50	80	14	4,5	3,4	●	●	●	●	-	-
MF	6	0,75	5,20	80	14	4,5	3,4	●	●	●	●	-	-
MF	7	0,75	6,20	80	14	5,5	4,3	●	●	●	●	-	-
MF	8	0,50	7,50	80	19	6,0	4,9	●	●	●	●	-	-
MF	8	0,75	7,20	80	19	6,0	4,9	●	●	●	●	-	●
MF	8	1,00	7,00	90	22	6,0	4,9	●	●	●	●	●	●
MF	9	1,00	8,00	90	22	7,0	5,5	●	●	●	●	-	-
MF	10	0,75	9,20	90	20	7,0	5,5	●	●	●	●	-	-
MF	10	1,00	9,00	90	20	7,0	5,5	●	●	●	●	●	●
MF	10	1,25	8,80	100	24	7,0	5,5	●	●	●	●	-	-
MF	11	1,00	10,00	90	20	8,0	6,2	●	●	●	●	-	-
MF	12	1,00	11,00	100	22	9,0	7,0	●	●	●	●	●	●
MF	12	1,25	10,80	100	22	9,0	7,0	●	●	●	●	-	-
MF	12	1,50	10,50	100	22	9,0	7,0	●	●	●	●	●	●
MF	14	1,00	13,00	100	22	11,0	9,0	●	●	●	●	-	-
MF	14	1,25*	12,80	100	22	11,0	9,0	●	●	●	●	-	-
MF	14	1,50	12,50	100	22	11,0	9,0	●	●	●	●	●	●
MF	15	1,00	14,00	100	22	12,0	9,0	●	●	●	●	-	-
MF	15	1,50	13,50	100	22	12,0	9,0	●	●	●	●	-	-
MF	16	1,00	15,00	100	22	12,0	9,0	●	●	●	●	-	-
MF	16	1,50	14,50	100	22	12,0	9,0	●	●	●	●	●	●
MF	18	1,00	16,50	110	25	14,0	11,0	●	●	●	●	-	-
MF	18	1,50	16,50	110	25	14,0	11,0	●	●	●	●	●	●
MF	18	2,00	16,00	125	34	14,0	11,0	●	●	●	●	-	-

Rapid: **Herkömmliche Anwendung**
universal application

VAP: **vaporisiert**
vaporized

NL15°: **15° Linksdrall**
left hand helix

N: **Herkömmliche Anwendung**
universal application

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13



VA	VAP	VA	VA	VA	HD	HD	**Typ /** Type
6 HX	6 HX	6 GX	6 HX	6 HX	6 H	6 H	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads
							Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6663	**6663 VP**	**6663 6G**	**6663 TN**	**6663 XP**	**6872**	**6872 TN**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
-	-	-	-	-	-	-	MF 3	0,35	2,65
-	-	-	-	-	-	-	MF 3,5	0,35	3,15
-	-	-	-	-	-	-	MF 4	0,50	3,50
-	-	-	-	-	-	-	MF 5	0,50	4,50
-	-	-	-	-	-	-	MF 6	0,50	5,50
-	-	-	-	-	●	●	MF 6	0,75	5,20
-	-	-	-	-	-	-	MF 7	0,75	6,20
-	-	-	-	-	-	-	MF 8	0,50	7,50
-	-	-	-	-	●	●	MF 8	0,75	7,20
●	●	●	●	●	●	●	MF 8	1,00	7,00
-	-	-	-	-	-	-	MF 9	1,00	8,00
-	-	-	-	-	-	-	MF 10	0,75	9,20
●	●	●	●	●	●	●	MF 10	1,00	9,00
●	●	-	●	●	-	-	MF 10	1,25	8,80
-	-	-	-	-	-	-	MF 11	1,00	10,00
●	●	●	●	●	●	●	MF 12	1,00	11,00
-	-	-	-	-	-	-	MF 12	1,25	10,80
●	●	●	●	●	●	●	MF 12	1,50	10,50
-	-	-	-	-	-	-	MF 14	1,00	13,00
-	-	-	-	-	-	-	MF 14	1,25*	12,80
●	●	●	●	●	●	●	MF 14	1,50	12,50
-	-	-	-	-	-	-	MF 15	1,00	14,00
-	-	-	-	-	-	-	MF 15	1,50	13,50
-	-	-	-	-	-	-	MF 16	1,00	15,00
●	●	●	●	●	●	●	MF 16	1,50	14,50
-	-	-	-	-	-	-	MF 18	1,00	16,50
●	●	●	●	●	●	●	MF 18	1,50	16,50
-	-	-	-	-	-	-	MF 18	2,00	16,00

VA: **Für rostfreien Stahl**
for stainless steel

VAP: **vaporisiert**
vaporized

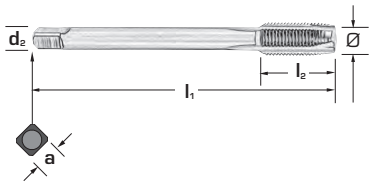
HD : **für zähe Werkstoffe**
for tough materials

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13

MF TiN TICN XP TOP





Typ / Type	Rapid	Rapid VAP	Rapid	Rapid	N Sx	NL 15°
Toleranz / Tolerance	6 H	6 H	6 H	6 H	6 H	6 H
Anschnitt / Gangzahl / Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung / Cutting direction						
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6730	6730 VP	6730 TN	6730 TC	6863	6741
MF	20	1,00	19,00	125	25	16,0	12,0	●	●	●	●	-	-
MF	20	1,50	18,50	125	25	16,0	12,0	●	●	●	●	●	●
MF	20	2,00	18,00	140	34	16,0	12,0	●	●	●	●	-	-
MF	22	1,00	21,00	125	25	18,0	14,5	●	●	●	●	-	-
MF	22	1,50	20,50	125	25	18,0	14,5	●	●	●	●	-	-
MF	22	2,00	20,00	140	34	18,0	14,5	●	●	●	●	-	-
MF	24	1,00	23,00	140	28	18,0	14,5	●	●	●	●	-	-
MF	24	1,50	22,50	140	28	18,0	14,5	●	●	●	●	-	-
MF	24	2,00	22,00	140	28	18,0	14,5	●	●	●	●	-	-
MF	26	1,50	24,50	140	28	18,0	14,5	●	●	●	●	-	-
MF	27	1,50	25,50	140	28	20,0	16,0	●	●	●	●	-	-
MF	27	2,00	25,00	140	28	20,0	16,0	●	●	●	●	-	-
MF	28	1,50	26,50	140	28	20,0	16,0	●	●	●	●	-	-
MF	30	1,00	29,00	150	28	22,0	18,0	●	●	●	●	-	-
MF	30	1,50	28,50	150	28	22,0	18,0	●	●	●	●	-	-
MF	30	2,00	28,00	150	28	22,0	18,0	●	●	●	●	-	-
MF	32	1,50	30,50	150	28	22,0	18,0	●	●	●	●	-	-
MF	33	1,50	31,50	160	30	25,0	20,0	●	●	●	●	-	-
MF	34	1,50	32,50	170	30	28,0	22,0	●	●	●	●	-	-
MF	35	1,50	33,50	170	30	28,0	22,0	●	●	●	●	-	-
MF	36	1,50	34,50	170	30	28,0	22,0	●	●	●	●	-	-
MF	38	1,50	36,50	170	30	28,0	22,0	●	●	●	●	-	-
MF	40	1,50	38,50	170	30	32,0	24,0	●	●	●	●	-	-
MF	42	1,50	40,50	170	30	32,0	24,0	●	●	●	●	-	-
MF	45	1,50	43,50	180	32	36,0	29,0	●	●	●	●	-	-
MF	48	1,50	46,50	190	32	36,0	29,0	●	●	●	●	-	-
MF	50	1,50	48,50	190	32	36,0	29,0	●	●	●	●	-	-
MF	52	1,50	50,50	190	32	40,0	32,0	●	●	●	●	-	-

Rapid: **Herkömmliche Anwendung**
universal application

VAP: **vaporisiert**
vaporized

NL15°: **15° Linksdrall**
left hand helix

N: **Herkömmliche Anwendung**
universal application

* Diese Gewinde sind im Metrischen ISO-Gewinde nicht enthalten / These sizes are not ISO standard.

● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindebohrer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Machine taps with reduced shank
for ISO metric fine thread as per DIN 13



VA	VAP	VA	VA	VA	HD	HD	**Typ /** Type
6 HX	6 HX	6 GX	6 HX	6 HX	6 H	6 H	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads
							Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6663	**6663 VP**	**6663 6G**	**6663 TN**	**6663 XP**	**6872**	**6872 TN**	**Ø mm**	**Steigung** Pitch	**Kernloch Ø** Tap drill Ø
-	-	-	-	-	-	-	MF 20	1,00	19,00
●	●	●	●	●	●	●	MF 20	1,50	18,50
●	●	-	●	-	-	-	MF 20	2,00	18,00
-	-	-	-	-	-	-	MF 22	1,00	21,00
●	●	-	●	-	●	●	MF 22	1,50	20,50
●	●	-	●	-	-	-	MF 22	2,00	20,00
-	-	-	-	-	-	-	MF 24	1,00	23,00
●	●	●	●	●	●	●	MF 24	1,50	22,50
●	●	-	●	-	-	-	MF 24	2,00	22,00
●	●	-	●	-	-	-	MF 26	1,50	24,50
●	●	-	●	-	-	-	MF 27	1,50	25,50
●	●	-	●	-	-	-	MF 27	2,00	25,00
-	-	-	-	-	-	-	MF 28	1,50	26,50
-	-	-	-	-	-	-	MF 30	1,00	29,00
●	●	-	●	-	-	-	MF 30	1,50	28,50
●	●	-	●	-	-	-	MF 30	2,00	28,00
-	-	-	-	-	-	-	MF 32	1,50	30,50
-	-	-	-	-	-	-	MF 33	1,50	31,50
-	-	-	-	-	-	-	MF 34	1,50	32,50
-	-	-	-	-	-	-	MF 35	1,50	33,50
-	-	-	-	-	-	-	MF 36	1,50	34,50
-	-	-	-	-	-	-	MF 38	1,50	36,50
-	-	-	-	-	-	-	MF 40	1,50	38,50
-	-	-	-	-	-	-	MF 42	1,50	40,50
-	-	-	-	-	-	-	MF 45	1,50	43,50
-	-	-	-	-	-	-	MF 48	1,50	46,50
-	-	-	-	-	-	-	MF 50	1,50	48,50
-	-	-	-	-	-	-	MF 52	1,50	50,50

VA: **Für rostfreien Stahl**
for stainless steel

VAP: **vaporisiert**
vaporized

HD : **für zähe Werkstoffe**
for tough materials

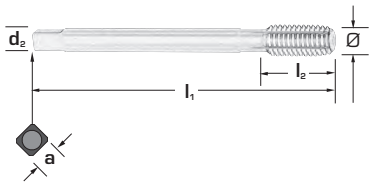
● Standardartikel / Items available ex stock

DIN 374

Maschinen-Gewindeformer mit Überlaufschaft
für Metrisches ISO-Feingewinde nach DIN 13
Cold forming taps with reduced shank
for ISO metric fine thread as per DIN 13

Ref. **6721** ohne Schmiernuten / without coolant grooves
Ref. **6720** mit Schmiernuten / with coolant grooves

M





Typ / Type	Former	Former	Former-S	Former-S
Toleranz Tolerance	6 HX	6 GX	6 HX	6 GX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction				
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6721	6721 6G	6720	6720 6G
M	8	1,00	7,50	90	22	6	4,9	●	●	●	●
M	10	1,00	9,50	90	20	7	5,5	●	●	●	●
M	10	1,25	9,40	100	24	7	5,5	●	●	●	●
M	12	1,00	11,50	100	22	9	7,0	●	●	●	●
M	12	1,50	11,30	100	22	9	7,0	●	●	●	●
M	14	1,50	13,30	100	22	11	9,0	●	●	●	●
M	16	1,00	15,50	100	22	12	9,0	●	●	●	●
M	16	1,50	15,30	100	22	12	9,0	●	●	●	●

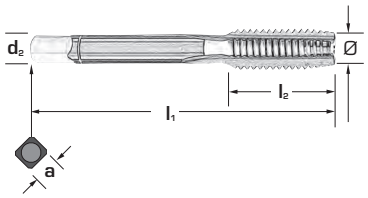
Former S: **mit Schmiernuten** with coolant grooves
Former : **ohne Schmiernuten** without coolant grooves

● Standardartikel / Items available ex stock

ILIX NORM - UNC

Hand-Gewindebohrer, dreiteiliger Satz
für unified-Gewinde (grob) UNC
Baumaße an DIN 352 angelehnt
Hand taps, serial, in set of 3 pieces
for unified coarse thread UNC
dimensions generally as per DIN 352

UNC





Typ / Type							N	N	N
Toleranz Tolerance							2 B	2 B	2 B
Anschnitt / Gangzahl Chamfer form / No. of threads							A/5-6	D/3-4	C/2,5-3
Schneidrichtung Cutting direction									
Schneidstoff/ Material							HSS	HSS	HSS
Ø mm	**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1 mm**	**l_2 mm**	**d_2 mm h9***	**a h12**	**6775 V**	**6775 M**	**6775 F**
							Einzel single tap		**Satz** set
UNC nr.	1 - 64	1,55	36	8	2,8	2,1	●		●
UNC nr.	2 - 56	1,85	36	9	2,8	2,1	●		●
UNC nr.	3 - 48	2,10	40	9	2,8	2,1	●		●
UNC nr.	4 - 40	2,35	40	11	3,5	2,7	●		●
UNC nr.	5 - 40	2,65	40	11	3,5	2,7	●		●
UNC nr.	6 - 32	2,85	45	13	4,0	3,0	●		●
UNC nr.	8 - 32	3,50	45	13	4,5	3,4	●		●
UNC nr.	10 - 24	3,90	50	16	6,0	4,9	●		●
UNC nr.	12 - 24	4,50	50	17	6,0	4,9	●		●
UNC	1/4 - 20	5,10	50	19	6,0	4,9	●		●
UNC	5/16 - 18	6,60	56	22	6,0	4,9	●		●
UNC	3/8 - 16	8,00	63	22	7,0	5,5	●		●
UNC	7/16 - 14	9,40	70	24	8,0	6,2	●		●
UNC	1/2 - 13	10,80	75	29	9,0	7,0	●		●
UNC	9/16 - 12	12,20	80	30	11,0	9,0	●		●
UNC	5/8 - 11	13,50	80	32	12,0	9,0	●		●
UNC	3/4 - 10	16,50	95	40	14,0	11,0	●		●
UNC	7/8 - 9	19,50	100	40	18,0	14,5	●		●
UNC	1 - 8	22,25	110	50	18,0	14,5	●		●
UNC	1/8 - 7	25,00	125	56	22,0	18,0	●		●
UNC	1/4 - 7	28,00	125	56	22,0	18,0	●		●
UNC	3/8 - 6	30,75	150	63	28,0	22,0	●		●
UNC	1/2 - 6	34,00	150	63	32,0	24,0	●		●
UNC	3/4 - 5	39,50	160	70	36,0	29,0	●		●
UNC nr.	2 - 4 1/2	45,00	180	75	40,0	32,0	●		●

N: Herkömmliche Anwendung
universal application

** Schafttoleranz der Vor- und Mittelschneider h 12 / Shank tolerance of 1st and 2nd tap h 12

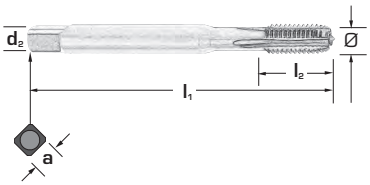
● Standardartikel / Items available ex stock

DIN 2184/1 - UNC

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

UNC | XP TOP | TiN





Typ / Type	N	N 15°	N 40°	N 40°	N 40°
Toleranz / Tolerance	2 B	2 B	2 B	3 B	2 B
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction					
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6823	6696	6691	6691 3B	6691 TN
UNC nr.	2 - 56	1,85	45	9	4	2,8	2,1	-	-	●	●	●
UNC nr.	3 - 48	2,10	50	9	4	2,8	2,1	●	●	●	●	●
UNC nr.	4 - 40	2,35	56	11	5	3,5	2,7	●	●	●	●	●
UNC nr.	5 - 40	2,65	56	11	5	3,5	2,7	●	●	●	●	●
UNC nr.	6 - 32	2,85	56	13	6	4,0	3,0	●	●	●	●	●
UNC nr.	8 - 32	3,50	63	13	7	4,5	3,4	●	●	●	●	●
UNC nr.	10 - 24	3,90	70	16	8	6,0	4,9	●	●	●	●	●
UNC nr.	12 - 24	4,50	80	17	10	6,0	4,9	●	●	●	●	●
UNC	1/4 - 20	5,10	80	17	10	7,0	5,5	●	●	●	●	●
UNC	5/16 - 18	6,60	90	20	12	8,0	6,2	●	●	●	●	●
UNC	3/8 - 16	8,00	90	20	12	10,0	8,0	●	●	●	●	●
Abmessungen mit Überlaufschaft über M 3/8 siehe Kat.-Nr. / above M 3/8 refer to Cat.-No.								6824	6728	66942B	66943B	-

N 15°/40°: 15° Rechtsdrall/40°
15°/40° right hand helix

N: Herkömmliche Anwendung
universal application

● Standardartikel / Items available ex stock

DIN 2184/1 - UNC

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371



VA 35°	VAP 35°	VA 35°	VRP 50°	Alu 45°	HD 15°	**Typ /** Type
2 BX	2 BX	2 BX	2 BX	2 B	2 B	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
						Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6735	**6735 VP**	**6735 XP**	**6852 VP**	**6732**	**6865**	**Ø mm**	**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø
-	-	-	-	-	-	UNC nr.	2 - 56	1,85
-	-	-	-	-	●	UNC nr.	3 - 48	2,10
-	-	-	-	●	●	UNC nr.	4 - 40	2,35
-	-	-	-	●	●	UNC nr.	5 - 40	2,65
●	●	●	●	●	●	UNC nr.	6 - 32	2,85
●	●	●	●	●	●	UNC nr.	8 - 32	3,50
●	●	●	●	●	●	UNC nr.	10 - 24	3,90
●	●	●	●	●	●	UNC nr.	12 - 24	4,50
●	●	●	●	●	●	UNC	1/4 - 20	5,10
●	●	●	●	●	●	UNC	5/16 - 18	6,60
●	●	●	●	●	●	UNC	3/8 - 16	8,00
6754	6754VP	-	6853VP	6733	6866	

VA: **Für rostfreien Stahl**
for stainless steel
VAP: **vaporisiert**
vaporized
VRP: **Für rostfreien Stahl mit Abschrägung und vaporisiert**
for stainless steel, back tapered and vaporized

Alu: **für Aluminium**
for Aluminium
HD: **für zähe Werkstoffe**
for tough materials

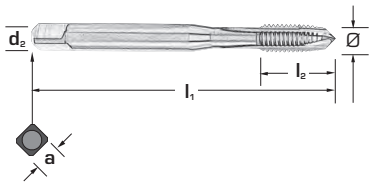
● Standardartikel / Items available ex stock

DIN 2184/1 - UNC

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

UNC TiN XP TOP





Typ / Type	HD	Rapid	Rapid	Rapid	Ultra
Toleranz / Tolerance	2 B	2 B	3 B	2 B	2 B
Anschnitt / Gangzahl / Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung / Cutting direction					
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6873	6690	6690 3B	6690 TN	6737
UNC nr.	1 - 64	1,55	45	8	2,8	2,1	-	●	-	●	●
UNC nr.	2 - 56	1,85	45	9	2,8	2,1	●	●	-	●	●
UNC nr.	3 - 48	2,10	50	9	2,8	2,1	●	●	-	●	●
UNC nr.	4 - 40	2,35	56	11	3,5	2,7	●	●	●	●	●
UNC nr.	5 - 40	2,65	56	11	3,5	2,7	●	●	-	●	●
UNC nr.	6 - 32	2,85	56	13	4,0	3,0	●	●	●	●	●
UNC nr.	8 - 32	3,50	63	13	4,5	3,4	●	●	●	●	●
UNC nr.	10 - 24	3,90	70	16	6,0	4,9	●	●	●	●	●
UNC nr.	12 - 24	4,50	80	17	6,0	4,9	●	●	-	●	●
UNC	1/4 - 20	5,10	80	17	7,0	5,5	●	●	●	●	●
UNC	5/16 - 18	6,60	90	20	8,0	6,2	●	●	-	●	●
UNC	3/8 - 16	8,00	90	20	10,0	8,0	●	●	●	●	●
Abmessungen mit Überlaufschaft über M 3/8 siehe Kat.-Nr. / above M 3/8 refer to Cat.-No.							6874	66932B	66933B	-	-

HD: für zähe Werkstoffe / for tough materials
Rapid: Herkömmliche Anwendung / universal application
Ultra: für Bleche / for sheet metals

● Standartartikel / Items available ex stock

DIN 2184/1 - UNC

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371



VA	VA VAP	VA	**Typ /** Type
2 BX	2 BX	2 BX	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads
			Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6739	6739 VP	6739 XP	Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø
-	-	-	UNC	nr.	1 - 64	1,55
●	●	●	UNC	nr.	2 - 56	1,85
●	●	●	UNC	nr.	3 - 48	2,10
●	●	●	UNC	nr.	4 - 40	2,35
●	●	●	UNC	nr.	5 - 40	2,65
●	●	●	UNC	nr.	6 - 32	2,85
●	●	●	UNC	nr.	8 - 32	3,50
●	●	●	UNC	nr.	10 - 24	3,90
●	●	●	UNC	nr.	12 - 24	4,50
●	●	●	UNC		1/4 - 20	5,10
●	●	●	UNC		5/16 - 18	6,60
●	●	●	UNC		3/8 - 16	8,00
6749	6749VP	-				

VA: **Für rostfreien Stahl**
for stainless steel

VAP: **vaporisiert**
vaporized

● Standardartikel / Items available ex stock

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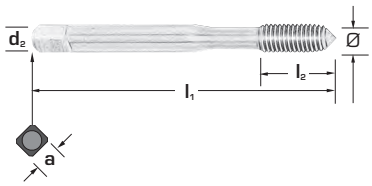
DIN 2184/1 - UNC

Innengewinde-Former mit verstärktem Schaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Cold forming taps with reinforced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 371

Ref. **6738** ohne Schmiernuten / without coolant grooves
Ref. **6802** mit Schmiernuten / with coolant grooves

UNC





Typ / Type	**Former**	**Former S**
Toleranz Tolerance	**2 BX**	**2 BX**
Anschnitt / Gangzahl Chamfer form / No. of threads	**C/2,5-3**	**C/2,5-3**
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co	HSS-Co

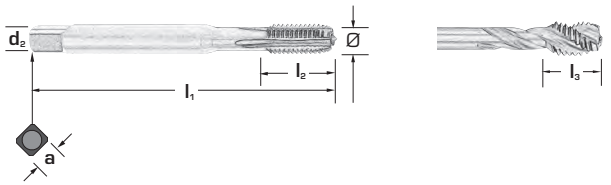
Ø mm	**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12	**6738**	**6802**
UNC nr.	2 - 56	1,95	45	9	2,8	2,1	●	-
UNC nr.	3 - 48	2,30	50	9	2,8	2,1	●	-
UNC nr.	4 - 40	2,55	56	11	3,5	2,7	●	-
UNC nr.	5 - 40	2,85	56	11	3,5	2,7	●	●
UNC nr.	6 - 32	3,10	63	13	4,0	3,0	●	●
UNC nr.	8 - 32	3,80	70	13	4,5	3,4	●	●
UNC nr.	10 - 24	4,30	70	16	6,0	4,9	●	●
UNC nr.	12 - 24	5,00	80	19	6,0	4,9	●	●
UNC	1/4 - 20	5,75	80	19	7,0	5,5	●	●
UNC	5/16 - 18	7,25	90	22	8,0	6,2	●	●
UNC	3/8 - 16	8,70	90	22	10,0	8,0	●	●
Abmessungen mit Überlaufschaft über M 3/8 siehe Kat.-Nr. / above M 3/8 refer to Cat.-No.							-	6811

Former S: **mit Schmiernuten** with coolant grooves
Former : **ohne Schmiernuten** without coolant grooves

● Standardartikel / Items available ex stock

DIN 2184/1 - UNC

Maschinen-Gewindebohrer mit Überlaufschaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 376 angelehnt
Machine taps with reduced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 376





Typ / Type	N	N 15°	N 40°	N 40°
Toleranz / Tolerance	2 B	2 B	2 B	3 B
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction				
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6824	6728	6694	6694 3B
UNC	7/16 - 14	9,40	100	14	24	8	6,2	●	●	●	●
UNC	1/2 - 13	10,80	110	16	29	9	7,0	●	●	●	●
UNC	9/16 - 12	12,20	110	20	30	11	9,0	-	-	●	●
UNC	5/8 - 11	13,50	110	20	32	12	9,0	●	●	●	●
UNC	3/4 - 10	16,50	125	25	34	14	11,0	●	●	●	●
UNC	7/8 - 9	19,50	140	25	34	18	14,5	●	●	●	●
UNC	1 - 8	22,25	160	30	38	18	14,5	●	●	●	●

N 15°/40°: **15° Rechtsdrall/40°**
15°/40°right hand helix

N: **Herkömmliche Anwendung**
universal application

● Standardartikel / Items available ex stock

DIN 2184/1 - UNC

Maschinen-Gewindebohrer mit Überlaufschaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 376 angelehnt
Machine taps with reduced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 376



VA 35°	VAP 35°	VRP 50°	HD 15°	Alu 45°	**Typ /** Type
2 BX	2 BX	2 BX	2 B	2 B	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
					Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6754	**6754 VP**	**6853 VP**	**6866**	**6733**	**Ø mm**	**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø
-	-	-	●	-	UNC	7/16 - 14	1,55
●	●	●	●	●	UNC	1/2 - 13	1,85
-	-	-	-	-	UNC	9/16 - 12	2,10
●	●	●	●	-	UNC	5/8 - 11	2,35
●	●	●	●	-	UNC	3/4 - 10	2,65
-	-	-	●	-	UNC	7/8 - 9	2,85
●	●	●	●	-	UNC	1 - 8	3,50

VA: **Für rostfreien Stahl**
for stainless steel
VAP: **vaporisiert**
vaporized
VRP: **Für rostfreien Stahl mit Abschrägung und vaporisiert**
for stainless steel, back tapered and vaporized

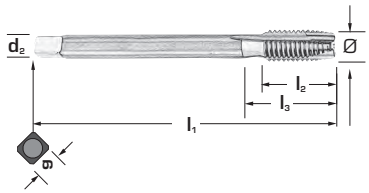
Alu: **für Aluminium**
for Aluminium
HD: **für zähe Werkstoffe**
for tough materials

● Standardartikel / Items available ex stock

DIN 2184/1 - UNC

Maschinen-Gewindebohrer mit Überlaufschaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 376 angelehnt

Machine taps with reduced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 376





	HD	Rapid	Rapid	VA	VA
Typ / Type					
Toleranz Tolerance	2 B	2 B	3 B	2 BX	2 BX
Anschnitt / Gangzahl Chamfer form / No. of threads	B 4/5	B 4/5	B 4/5	B 4/5	B 4/5
Schneidrichtung Cutting direction					
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6874	6693	6693 3B	6749	6749 VP
UNC 7/16 -	14	9,40	100	14	24	8	6,2	●	●	●	-	-
UNC 1/2 -	13	10,80	110	16	29	9	7,0	●	●	●	●	●
UNC 9/16 -	12	12,20	110	20	30	11	9,0	●	●	●	-	-
UNC 5/8 -	11	13,50	110	20	32	12	9,0	●	●	●	●	●
UNC 3/4 -	10	16,50	125	25	34	14	11,0	●	●	●	●	●
UNC 7/8 -	9	19,50	140	25	34	18	14,5	●	●	●	●	●
UNC 1 -	8	22,25	160	30	38	18	14,5	●	●	●	●	●
UNC 1 1/8 -	7	25,00	180	-	45	22	18,0	-	●	●	-	-
UNC 1 1/4 -	7	28,00	180	-	50	22	18,0	-	●	●	-	-
UNC 1 3/8 -	6	30,75	200	-	56	28	22,0	-	●	●	-	-
UNC 1 1/2 -	6	34,00	200	-	60	32	24,0	-	●	●	-	-
UNC 1 3/4 -	5	39,50	220	-	65	36	29,0	-	●	●	-	-
UNC 2 -	4 1/2	45,00	250	-	70	40	32,0	-	●	●	-	-

Rapid: **Herkömmliche Anwendung**
universal application

HD: **für zähe Werkstoffe**
for tough materials

VA: **Für rostfreien Stahl**
for stainless steel

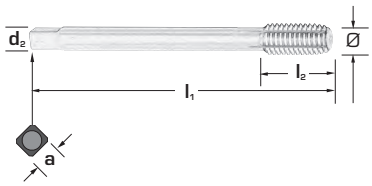
● Standardartikel / Items available ex stock

DIN 2184/1 - UNC

Innengewinde-Former mit Überlaufschaft
für unified-Gewinde (grob) UNC – ASME – B 1.1
Baumaße an DIN 376 angelehnt
Cold forming taps with reduced shank
for unified coarse thread UNC - ASME – B 1.1
dimensions generally as per DIN 376

mit Schmiernuten / with coolant grooves

UNC





	Former S
Typ / Type	
Toleranz Tolerance	2 BX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6811
UNC 7/16 -	14	10,2	100	22	8	6,2	●
UNC 1/2 -	13	11,7	110	25	9	7,0	●

Former S: **mit Schmiernuten**
with coolant grooves

● Standardartikel / Items available ex stock

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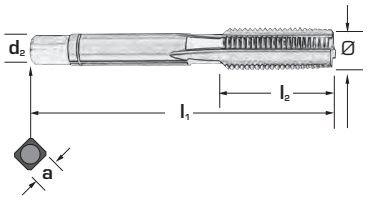
DIN 2184/1 - UNF

Hand-Gewindebohrer, zweiteiliger Satz
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 2181 angelehnt

Hand taps, serial, in sets of 2 pieces
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 2181

UNF





Typ / Type	N	N
Toleranz Tolerance	2 B	2 B
Anschnitt / Gangzahl Chamfer form / No. of threads	A/5-6	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS	HSS

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9*	a h12	6776 V	6776 F
UNF nr. 1 -	72	1,55	45	8	-	2,1	●	●
UNF nr. 2 -	72	1,90	45	9	-	2,1	●	●
UNF nr. 3 -	56	2,15	40	9	2,8	2,1	●	●
UNF nr. 4 -	48	2,40	40	11	3,5	2,7	●	●
UNF nr. 5 -	44	2,70	40	11	3,5	2,7	●	●
UNF nr. 6 -	40	2,95	45	13	4,0	3,0	●	●
UNF nr. 8 -	36	3,50	45	13	4,5	3,4	●	●
UNF nr. 10 -	32	4,10	50	12	6,0	4,9	●	●
UNF nr. 12 -	28	4,70	50	17	6,0	4,9	●	●
UNF 1/4 -	28	5,50	50	14	6,0	4,9	●	●
UNF 5/16 -	24	6,90	56	22	6,0	4,9	●	●
UNF 3/8 -	24	8,50	63	22	7,0	5,5	●	●
UNF 7/16 -	20	9,90	63	20	8,0	6,2	●	●
UNF 1/2 -	20	11,50	70	22	9,0	7,0	●	●
UNF 9/16 -	18	12,90	70	22	11,0	9,0	●	●
UNF 5/8 -	18	14,50	70	22	12,0	9,0	●	●
UNF 3/4 -	16	17,50	80	22	14,0	11,0	●	●
UNF 7/8 -	14	20,40	80	22	18,0	14,5	●	●
UNF 1 -	12	23,25	90	22	18,0	14,5	●	●
UNF 1 1/8 -	12	26,50	90	22	22,0	18,0	●	●
UNF 1 1/4 -	12	29,50	90	22	22,0	18,0	●	●
UNF 1 3/8 -	12	32,75	125	40	28,0	22,0	●	●
UNF 1 1/2 -	12	36,00	125	40	32,0	24,0	●	●

N: Herkömmliche Anwendung
universal application

* Schafttoleranz der Vorschneider h12 / shank tolerance of 1st Tap: h12

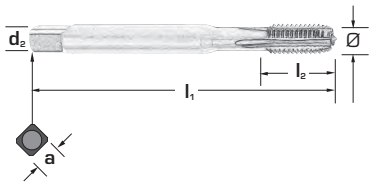
● Standardartikel / Items available ex stock

DIN 2184/1 - UNF

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 371

UNF | TiCN Top | TiN





Typ / Type	N	N 15°	N 40°	N 40°	N 40°
Toleranz / Tolerance	2 B	2 B	2 B	3 B	2 B
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction					
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6838	6719	6680	6680 3B	6680 TN
UNF nr. 1	72	1,55	45	8	-	2,8	2,1	●	-	-	-	-
UNF nr. 2	64	1,90	45	9	-	2,8	2,1	●	-	-	-	-
UNF nr. 3	56	2,15	50	9	-	2,8	2,1	●	-	-	-	-
UNF nr. 4	48	2,40	56	11	-	3,5	2,7	●	-	-	-	-
UNF nr. 5	44	2,70	56	11	5	3,5	-	●	●	●	●	●
UNF nr. 6	40	2,95	56	13	6	4,0	2,1	●	●	●	●	●
UNF nr. 8	36	3,50	63	13	7	4,5	2,1	●	●	●	●	●
UNF nr. 10	32	4,10	70	12	8	6,0	2,7	●	●	●	●	●
UNF nr. 12	28	4,70	80	17	10	6,0	3,0	●	●	●	●	●
UNF 1/4	28	5,50	80	14	10	7,0	3,4	●	●	●	●	●
UNF 5/16	24	6,90	90	22	12	8,0	4,9	●	●	●	●	●
UNF 3/8	24	8,50	90	22	12	10,0	7,0	●	●	●	●	●
Abmessungen mit Überlaufschaft über M 3/8 siehe Kat.-Nr. / above M 3/8 refer to Cat.-No.								6839	6729	66882B	66883B	-

N 15°/40°: 15° Rechtsdrall/40°
15°/40°right hand helix

N: Herkömmliche Anwendung
universal application

● Standardartikel / Items available ex stock

DIN 2184/1 - UNF

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 371



VA 35°	VAP 35°	VRP 50°	HD 15°	Alu 45°	**Typ /** Type
2 BX	2 BX	2 BX	2 B	2 B	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
					Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6794	**6794 VP**	**6854 VP**	**6848**	**6628**	**Ø mm**	**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø
-	-	-	-	-	**UNF nr. 1**	72	1,55
-	-	-	-	-	**UNF nr. 2**	64	1,90
-	-	-	-	-	**UNF nr. 3**	56	2,15
-	-	-	-	-	**UNF nr. 4**	48	2,40
-	-	-	●	-	**UNF nr. 5**	44	2,70
-	-	-	●	-	**UNF nr. 6**	40	2,95
-	-	-	●	-	**UNF nr. 8**	36	3,50
●	●	●	●	●	**UNF nr. 10**	32	4,10
-	-	-	●	-	**UNF nr. 12**	28	4,70
●	●	●	●	●	**UNF 1/4**	28	5,50
●	●	●	●	●	**UNF 5/16**	24	6,90
●	●	●	●	●	**UNF 3/8**	24	8,50
6796	6796VP	6855VP	6849	6734			

VA: **Für rostfreien Stahl**
for stainless steel
VAP: **vaporisiert**
vaporized
VRP: **Für rostfreien Stahl mit Abschrägung und vaporisiert**
for stainless steel, back tapered and vaporized

Alu: **für Aluminium**
for Aluminium
HD: **für zähe Werkstoffe**
for tough materials

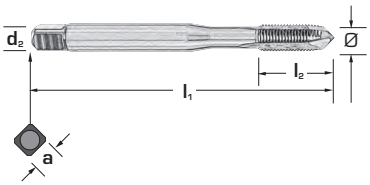
● Standardartikel / Items available ex stock

DIN 2184/1 - UNF

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for unified fine thread UNF - ASME – B 1.1
dimensions generally as per DIN 371

UNF TiN





Typ / Type	Rapid	Rapid	Rapid
Toleranz Tolerance	2 B	3 B	2 B
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5
Schneidrichtung Cutting direction			
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6607	6607 3B	6607 TN
UNF nr. 1 -	72	1,55	45	8	2,8	2,1	●	●	●
UNF nr. 2 -	64	1,90	45	9	2,8	2,1	●	●	●
UNF nr. 3 -	56	2,15	50	9	2,8	2,1	●	●	●
UNF nr. 4 -	48	2,40	56	11	3,5	2,7	●	●	●
UNF nr. 5 -	44	2,70	56	11	3,5	2,7	●	●	●
UNF nr. 6 -	40	2,95	56	13	4,0	3,0	●	●	●
UNF nr. 8 -	36	3,50	63	13	4,5	3,4	●	●	●
UNF nr. 10 -	32	4,10	70	12	6,0	4,9	●	●	●
UNF nr. 12 -	28	4,70	80	17	6,0	4,9	●	●	●
UNF 1/4 -	28	5,50	80	14	7,0	5,5	●	●	●
UNF 5/16 -	24	6,90	90	22	8,0	6,2	●	●	●
UNF 3/8 -	24	8,50	90	22	10,0	7,0	●	●	●
Abmessungen mit Überlaufschaft über M 3/8 siehe Kat.-Nr. / above M 3/8 refer to Cat.-No.							66872B	66873B	-

Rapid: Herkömmliche Anwendung
universal application

● Standardartikel / Items available ex stock

DIN 2184/1 - UNF

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified fine thread UNF - ASME – B 1.1
dimensions generally as per DIN 371



VA	VAP	HD					
			Typ / Type				
2 BX	2 BX	2 BX	**Toleranz** Tolerance				
B/4-5	B/4-5	B/4-5	**Anschnitt / Gangzahl** Chamfer form / No. of threads				
			Schneidrichtung Cutting direction				
HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material				
6718	**6718 VP**	**6875**		**Ø mm**		**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø
-	-	-		**UNF**	**nr. 1** -	72	1,55
●	●	●		**UNF**	**nr. 2** -	64	1,90
●	●	●		**UNF**	**nr. 3** -	56	2,15
●	●	●		**UNF**	**nr. 4** -	48	2,40
●	●	●		**UNF**	**nr. 5** -	44	2,70
●	●	●		**UNF**	**nr. 6** -	40	2,95
●	●	●		**UNF**	**nr. 8** -	36	3,50
●	●	●		**UNF**	**nr. 10** -	32	4,10
●	●	●		**UNF**	**nr. 12** -	28	4,70
●	●	●		**UNF**	**1/4** -	28	5,50
●	●	●		**UNF**	**5/16** -	24	6,90
●	●	●		**UNF**	**3/8** -	24	8,50
6797	-	6876					

VA: **Für rostfreien Stahl**
for stainless steel

VAP: **vaporisiert**
vaporized

HD: **für zähe Werkstoffe**
for tough materials

● Standardartikel / Items available ex stock

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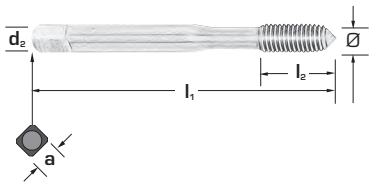
DIN 2184/1 - UNF

Innengewinde-Former mit verstärktem Schaft für unified-Gewinde (fein) UNF – ASME – B 1.1 Baumaße an DIN 371 angelehnt

Cold forming taps with reinforced shank for unified fine thread UNF - ASME – B 1.1 dimensions generally as per DIN 371

Ref. **6747** ohne Schmiernuten / without coolant grooves
Ref. **6815** mit Schmiernuten / with coolant grooves

UNF





	Former	Former S
Typ / Type		
Toleranz Tolerance	2 BX	2 BX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6747	6815
UNF nr. 4 -	48	2,60	56	11	3,5	2,7	●	●
UNF nr. 5 -	44	2,90	56	11	3,5	2,7	●	●
UNF nr. 6 -	40	3,20	56	13	4,0	2,1	-	●
UNF nr. 8 -	36	3,80	63	13	4,5	3,4	●	●
UNF nr. 10 -	32	4,45	70	16	6,0	4,9	●	●
UNF nr. 12 -	28	5,05	80	19	6,0	4,9	●	●
UNF 1/4 -	28	5,90	80	19	7,0	5,5	●	●
UNF 5/16 -	24	7,40	90	22	8,0	6,2	●	●
UNF 3/8 -	24	9,00	90	22	10,0	7,0	●	●
Abmessungen mit Überlaufschaft über M 3/8 siehe Kat.-Nr. / above M 3/8 refer to Cat.-No.							-	6816

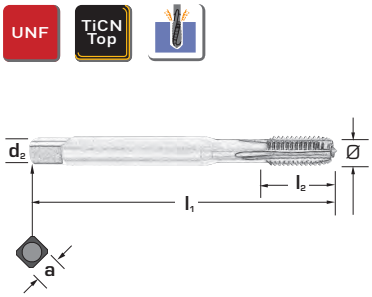
Former S: **mit Schmiernuten** with coolant grooves
Former : **ohne Schmiernuten** without coolant grooves

● Standardartikel / Items available ex stock

DIN 2184/1 - UNF

Maschinen-Gewindebohrer mit Überlaufschaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 374 angelehnt

Machine taps with reduced shank
for unified fine thread UNF - ASME – B 1.1
dimensions generally as per DIN 374





Typ / Type	N	N 15°	N 40°	N 40°
Toleranz / Tolerance	2 B	2 B	2 B	3 B
Anschnitt / Gangzahl / Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction				
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6839	6729	6688	6688 3B
UNF 7/16 -	20	9,90	90	20	14	8	6,2	●	●	●	●
UNF 1/2 -	20	11,50	100	22	16	9	7,0	●	●	●	●
UNF 9/16 -	18	12,90	100	22	20	11	9,0	●	●	●	●
UNF 5/8 -	18	14,50	100	22	20	12	9,0	●	●	●	●
UNF 3/4 -	16	17,50	110	25	25	14	11,0	●	●	●	●
UNF 7/8 -	14	20,40	125	25	25	18	14,5	●	●	●	●
UNF 1 -	12	23,25	140	28	25	18	14,5	●	●	●	●
UNF 1 1/8 -	12	26,50	150	28	26	22	15,0	●	-	-	-
UNF 1 1/4 -	12	29,50	150	28	27	22	15,5	●	-	-	-
UNF 1 3/8 -	12	32,75	170	30	27	28	16,0	●	-	-	-
UNF 1 1/2 -	12	30,60	170	30	28	28	16,5	●	-	-	-

N 15°/40°: **15° Rechtsdrall/40°**
15°/40°right hand helix

N: **Herkömmliche Anwendung**
universal application

● Standardartikel / Items available ex stock

DIN 2184/1 - UNF

Maschinen-Gewindebohrer mit verstärktem Schaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 371 angelehnt
Machine taps with reinforced shank
for unified fine thread UNF – ASME – B 1.1
dimensions generally as per DIN 371



VA 35°	VRP 50°	HD 15°	ALU 45°	
				Typ / Type
2 B	2 BX	2 B	2 B	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
				Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material
6796	**6855 VP**	**6849**	**6734**	**Ø mm** / **Gg/1"** Tpi / **Kernloch Ø** Tap drill Ø
●	●	●	-	UNF 7/16 - 20 — 9,90
●	●	●	●	UNF 1/2 - 20 — 11,50
●	●	●	-	UNF 9/16 - 18 — 12,90
●	●	●	-	UNF 5/8 - 18 — 14,50
●	●	●	-	UNF 3/4 - 16 — 17,50
-	-	●	-	UNF 7/8 - 14 — 20,40
-	-	●	-	UNF 1 - 12 — 23,25
-	-	-	-	UNF 1 1/8 - 12 — 26,50
-	-	-	-	UNF 1 1/4 - 12 — 29,50
-	-	-	-	UNF 1 3/8 - 12 — 32,75
-	-	-	-	UNF 1 1/2 - 12 — 30,60

VA: **Für rostfreien Stahl**
for stainless steel
VRP: **Für rostfreien Stahl mit Abschrägung und vaporisiert**
for stainless steel, back tapered and vaporized
HD: **für zähe Werkstoffe**
for tough materials
Alu: **für Aluminium**
for Aluminium

● Standartartikel / Items available ex stock

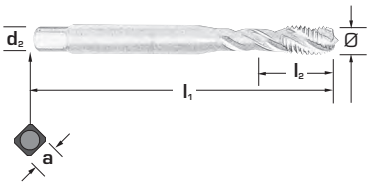
DIN 376 UN-8

Maschinen-Gewindebohrer mit Überlaufschaft
für unified fein Gewinde UN – 8
Baumaße DIN 376

Machine taps with reduced shank
for unified fine thread UN-8
dimensions generally as per DIN 376

UN-8

NEW





Typ / Type									VA 35°
Toleranz Tolerance									2 BX
Anschnitt / Gangzahl Chamfer form / No. of threads									C/2,5-3
Schneidrichtung Cutting direction									
Schneidstoff/ Material									HSS-Co
Ø mm		**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12		**6945 VP**
UN-8	1 1/8	- 8	9,90	180	28	22	18		●
UN-8	1 1/4	- 8	11,50	180	40	22	18		●
UN-8	1 3/8	- 8	12,90	200	32	28	22		●
UN-8	1 1/2	- 8	14,50	200	32	28	22		●

VA: **Für rostfreien Stahl**
for stainless steel

● Standardartikel / Items available ex stock

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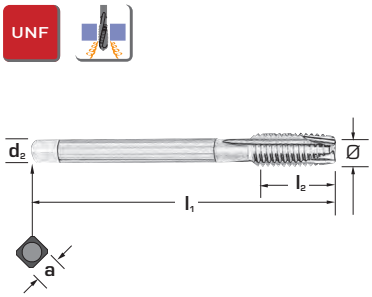
DIN 2184/1 - UNF

Maschinen-Gewindebohrer mit Überlaufschaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 374 angelehnt

Machine taps with reduced shank
for unified fine thread UNF - ASME – B 1.1
dimensions generally as per DIN 374





Typ / Type	Rapid	Rapid	VA	HD
Toleranz / Tolerance	2 B	3 B	2 BX	2 B
Anschnitt / Gangzahl / Chamfer form / No. of threads	B/4-5	B/4-5	B/4-5	B/4-5
Schneidrichtung / Cutting direction				
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6687	6687 3B	6797	6876
UNF 7/16	- 20	9,90	90	20	8	6,2	●	●	●	●
UNF 1/2	- 20	11,50	100	22	9	7,0	●	●	●	●
UNF 9/16	- 18	12,90	100	22	11	9,0	●	●	-	●
UNF 5/8	- 18	14,50	100	22	12	9,0	●	●	●	●
UNF 3/4	- 16	17,50	110	25	14	11,0	●	●	●	●
UNF 7/8	- 14	20,40	125	25	18	14,5	●	●	-	●
UNF 1	- 12	23,25	140	28	18	14,5	●	●	-	●
UNF 1 1/8	- 12	26,50	150	28	22	18,0	●	●	-	
UNF 1 1/4	- 12	29,50	150	28	22	18,0	●	●	-	
UNF 1 3/8	- 12	32,75	170	30	28	22,0	●	●	-	
UNF 1 1/2	- 12	36,00	170	30	32	24,0	●	●	-	

Rapid: **Herkömmliche Anwendung**
universal application

VA: **Für rostfreien Stahl**
for stainless steel

HD : **für zähe Werkstoffe**
for tough materials

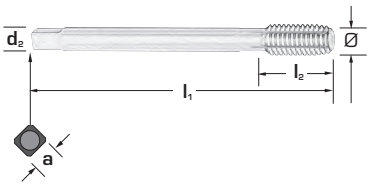
● Standartartikel / Items available ex stock

DIN 2184/1 - UNF

Innengewinde-Former mit Überlaufschaft
für unified-Gewinde (fein) UNF – ASME – B 1.1
Baumaße an DIN 374 angelehnt
Cold forming taps with reduced shank
for unified fine thread UNF - ASME – B 1.1
dimensions generally as per DIN 374

mit Schmiernuten / with coolant grooves

UNF





	Former S
Typ / Type	
Toleranz Tolerance	2 BX
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6816
UNF 7/16 -	20	10,5	90	20	8	6,2	●
UNF 1/2 -	20	12,1	100	22	9	7,0	●
UNF 5/8 -	18	15,2	100	22	12	9,0	●

Former S: **mit Schmiernuten**
with coolant grooves

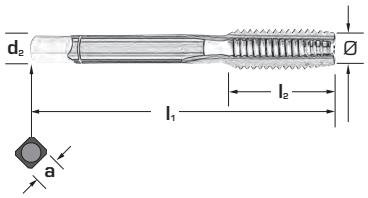
● Standardartikel / Items available ex stock

ILIX NORM - BSW

Hand-Gewindebohrer, dreiteiliger Satz
für Whitworth-Gewinde BSW
Baumaße an DIN 352 angelehnt

Hand taps, serial, in sets of 3 pieces
for British standard Whitworth thread BSW
dimensions generally as per DIN 352

W





Typ / Type							N	N	N
Toleranz Tolerance							-	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads							A/5-6	D/3-4	C/2,5-3
Schneidrichtung Cutting direction									
Schneidstoff/ Material							HSS	HSS	HSS
Ø mm	**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9*	**a** h12	**6603 V**	**6603 M**	**6603 F**
							Einzel single tap		**Satz** set
W 1/16	60	1,20	32	8	2,5	2,1	●		●
W 3/32	48	1,90	40	9	2,8	2,1	●		●
W 1/8	40	2,50	40	11	3,5	2,7	●		●
W 5/32	32	3,20	45	13	4,5	3,4	●		●
W 3/16	24	3,60	50	16	6,0	4,9	●		●
W 7/32	24	4,50	50	17	6,0	4,9	●		●
W 1/4	20	5,10	50	19	6,0	4,9	●		●
W 5/16	18	6,50	56	22	6,0	4,9	●		●
W 3/8	16	7,90	63	22	7,0	5,5	●		●
W 7/16	14	9,30	70	24	8,0	6,2	●		●
W 1/2	12	10,50	75	29	9,0	7,0	●		●
W 9/16	12	12,00	80	30	11,0	9,0	●		●
W 5/8	11	13,50	80	32	12,0	9,0	●		●
W 3/4	10	16,50	95	40	14,0	11,0	●		●
W 7/8	9	19,25	100	40	18,0	14,5	●		●
W 1	8	22,00	110	50	18,0	14,5	●		●
W 1 1/8	7	24,75	125	56	22,0	18,0	●		●
W 1 1/4	7	28,00	125	56	22,0	18,0	●		●
W 1 3/8	6	30,50	150	63	28,0	22,0	●		●
W 1 1/2	6	33,50	150	63	32,0	24,0	●		●
W 1 5/8	5	35,50	150	63	32,0	24,0	●		●
W 1 3/4	5	39,00	160	70	36,0	29,0	●		●
W 2	4,5	44,50	180	75	40,0	32,0	●		●

N: **Herkömmliche Anwendung**
universal application

* Schafttoleranz der Vorschneider h 12 / Shank tolerance of 1st tap: h 12

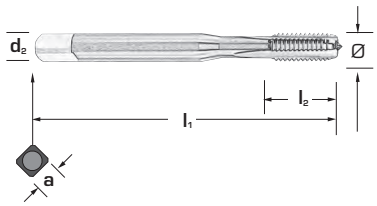
● Standardartikel / Items available ex stock

ILIX NORM - BSW

Maschinen-Gewindebohrer mit verstärktem Schaft
für Whitworth-Gewinde BSW
Baumaße an DIN 371 angelehnt

Machine taps with reinforced shank
for British standard Whitworth thread BSW
dimensions generally as per DIN 371







Typ / Type	N	N 40°	Rapid
Toleranz Tolerance	-	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	B/4-5
Schneidrichtung Cutting direction			
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6699	6836	6697
W 1/8	40	2,5	56	11	3,5	2,7	●	●	●
W 5/32	32	3,2	63	13	4,5	3,4	●	●	●
W 3/16	24	3,6	70	16	6,0	4,9	●	●	●
W 1/4	20	5,1	80	17	7,0	5,5	●	●	●
W 5/16	18	6,5	90	20	8,0	6,2	●	●	●
W 3/8	16	7,9	90	20	9,0	7,0	●	●	●

N: **Herkömmliche Anwendung**
universal application

Rapid: **Herkömmliche Anwendung**
universal application

N 40°: **Rechtsrall a 40°**
40° right hand helix

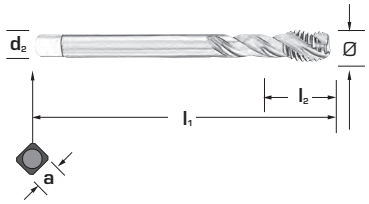
● Standardartikel / Items available ex stock

ILIX NORM - BSW

Maschinen-Gewindebohrer mit Überlaufschaft
für Whitworth-Gewinde BSW
Baumaße an DIN 376 angelehnt

Machine taps with reduced shank
for British standard Whitworth thread BSW
dimensions generally as per DIN 376

W





Typ / Type	N 40°	Rapid
Toleranz Tolerance	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	B/4-5
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6837	6636
W 7/16	14	9,30	100	24	8	6,2	●	●
W 1/2	12	10,50	110	29	9	7,0	●	●
W 9/16	12	12,00	110	30	11	9,0	●	●
W 5/8	11	13,50	110	32	12	9,0	●	●
W 3/4	10	16,50	125	34	14	11,0	●	●
W 7/8	9	19,25	140	34	18	14,5	●	●
W 1	8	22,00	160	38	18	14,5	●	●

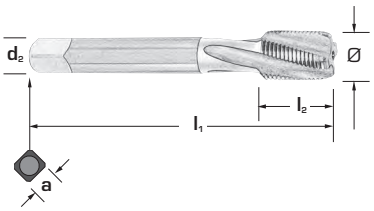
N 40°: Rechtsrall a 40°
40° right hand helix
Rapid: Herkömmliche Anwendung
universal application

● Standardartikel / Items available ex stock

DIN 5156 - (Rp)

Maschinen-Gewindebohrer mit Überlaufschaft
für zylindrisches Whitworth-Rohr-Innengewinde nach DIN 2999
Machine taps with reduced shank
for cylindrical Whitworth-Pipe internal thread
as per DIN 2999

Rp





Typ / Type	N 15°	GG	Rapid
Toleranz Tolerance	-	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	B/4-5
Schneidrichtung Cutting direction			
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6675	6674	6673
Rp 1/16	28	6,60	90	22	6	4,9	-	-	●
Rp 1/8	28	8,60	90	20	7	5,5	●	●	●
Rp 1/4	19	11,50	100	22	11	9,0	●	●	●
Rp 3/8	19	15,00	100	22	12	9,0	●	●	●
Rp 1/2	14	18,75	125	25	16	12,0	●	●	●
Rp 3/4	14	24,25	140	28	20	16,0	●	●	●
Rp 1	11	30,25	160	30	25	20,0	●	●	●
Rp 1 1/4	11	39,00	170	30	32	24,0	-	●	●
Rp 1 1/2	11	45,00	190	32	36	29,0	-	●	●
Rp 2	11	56,50	190	32	45	35,0	-	●	●

GG: **für Guss**
for cast iron

N 15°: **15° Rechtsdrall**
15° right hand helix

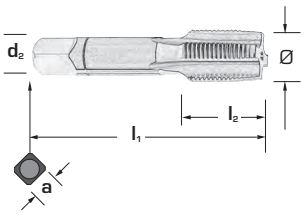
Rapid: **Herkömmliche Anwendung**
universal application

● Standardartikel / Items available ex stock

DIN 5157 - BSP

Hand-Gewindebohrer, zweiteiliger Satz
für Rohrgewinde nach DIN 259 und DIN-ISO 228
Hand taps, serial, in set of 2 pieces for British standard Pipe thread
as per DIN 259 and DIN-ISO 228

G





Typ / Type	N	N
Toleranz Tolerance	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads	A/5-6	C/2,5-3
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS	HSS

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	$d_2$mm h9*	a h12	6627 V	6627 F
							Einzel single tap	**Satz** set
G 1/16	28	6,80	56	22	6	4,9	●	●
G 1/8	28	8,80	63	20	7	5,5	●	●
G 1/4	19	11,80	70	22	11	9,0	●	●
G 3/8	19	15,25	70	22	12	9,0	●	●
G 1/2	14	19,00	80	22	16	12,0	●	●
G 5/8	14	21,00	80	22	18	14,5	●	●
G 3/4	14	24,50	90	22	20	16,0	●	●
G 7/8	14	28,25	90	22	22	18,0	●	●
G 1	11	30,75	100	25	25	20,0	●	●
G 1 1/8	11	35,50	125	40	28	22,0	●	●
G 1 1/4	11	39,50	125	40	32	24,0	●	●
G 1 3/8	11	42,00	125	40	36	29,0	●	●
G 1 1/2	11	45,00	140	40	36	29,0	●	●
G 1 3/4	11	51,00	140	40	40	32,0	●	●
G 2	11	57,00	160	40	45	35,0	●	●

N: **Herkömmliche Anwendung**
universal application

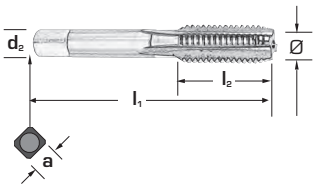
* Schafttoleranz der Vorschneider h 12 / Shank tolerance of 1st tap: h 12

● Standardartikel / Items available ex stock

DIN 5157 - BSP

Kurze Maschinen-Gewindebohrer
mit Überlaufschaft für Rohrgewinde nach DIN 259 und DIN-ISO 228
Short machine taps with reduced shank for British standard Pipe thread
as per DIN 259 and DIN-ISO 228

G





Typ / Type	N	N 15°	MS	VA 15°
Toleranz Tolerance	-	ISO 228 +0,1	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	E/1-2	E/1,5-2	E/1-2
Schneidrichtung Cutting direction				
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6858	6905	6913	6951
G 1/16	28	6,80	56	22	6	4,9	●	-	●	●
G 1/8	28	8,80	63	20	7	5,5	●	●	●	●
G 1/4	19	11,80	70	22	11	9,0	●	●	●	●
G 3/8	19	15,25	70	22	12	9,0	●	●	●	●
G 1/2	14	19,00	80	22	16	12,0	●	●	●	●
G 5/8	14	21,00	80	22	18	14,5	●	-	●	●
G 3/4	14	24,50	90	22	20	16,0	●	●	●	●
G 7/8	14	28,25	90	22	22	18,0	●	-	●	●
G 1	11	30,75	100	25	25	20,0	●	-	●	●
G 1 1/8	11	35,50	125	40	28	22,0	●	-	●	-
G 1 1/4	11	39,50	125	40	32	24,0	●	-	●	-
G 1 3/8	11	42,00	125	40	36	29,0	●	-	●	-
G 1 1/2	11	45,00	140	40	36	29,0	●	-	●	-

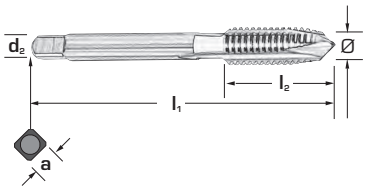
N 15°: **15° Rechtsdrall**
15° right hand helix
N: **Herkömmliche Anwendung**
universal application
MS: **für Messing**
for brass
VA: **Für rostfreien Stahl**
for stainless steel

● Standardartikel / Items available ex stock

DIN 5157 - BSP

Kurze Maschinen-Gewindebohrer
mit Überlaufschaft für Rohrgewinde nach DIN 259 und DIN-ISO 228
Short machine taps with reduced shank for British standard Pipe thread
as per DIN 259 and DIN-ISO 228

G





	VA
Typ / Type	
Toleranz Tolerance	-
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6857
G 1/16	28	6,80	56	22	6	4,9	●
G 1/8	28	8,80	63	20	7	5,5	●
G 1/4	19	11,80	70	22	11	9,0	●
G 3/8	19	15,25	70	22	12	9,0	●
G 1/2	14	19,00	80	22	16	12,0	●
G 5/8	14	21,00	80	22	18	14,5	●
G 3/4	14	24,50	90	22	20	16,0	●
G 7/8	14	28,25	90	22	22	18,0	●
G 1	11	30,75	100	25	25	20,0	●
G 1 1/8	11	35,50	125	40	28	22,0	●
G 1 1/4	11	39,50	125	40	32	24,0	●
G 1 3/8	11	42,00	125	40	36	29,0	●
G 1 1/2	11	45,00	140	40	36	29,0	●

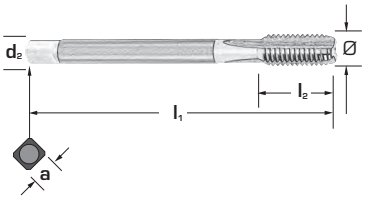
VA: **Für rostfreien Stahl**
for stainless steel

● Standardartikel / Items available ex stock

DIN 5156 - BSP

Maschinen-Gewindebohrer
mit Überlaufschaft für Rohrgewinde nach DIN 259 und DIN-ISO 228
Machine taps with reduced shank for British standard Pipe thread as per DIN 259 and DIN-ISO 228

G TiN







Typ / Type	HD	HD	N 15°	N 40°	N VAP 15°	N 40°
Toleranz Tolerance	-	-	-	-	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction						
Schneidstoff/ Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6912	6912 TN	6665	6703	6703 VP	6703 TN
G 1/16	28	6,80	90	22	12	6	4,9	●	●	●	●	●	●
G 1/8	28	8,80	90	20	14	7	5,5	●	●	●	●	●	●
G 1/4	19	11,80	100	22	20	11	9,0	●	●	●	●	●	●
G 3/8	19	15,25	100	22	20	12	9,0	●	●	●	●	●	●
G 1/2	14	19,00	125	25	25	16	12,0	●	●	●	●	●	●
G 5/8	14	21,00	125	25	25	18	14,5	●	●	●	●	●	●
G 3/4	14	24,50	140	28	28	20	16,0	●	●	●	●	●	●
G 7/8	14	28,25	150	28	28	22	18,0	●	●	●	●	●	●
G 1	11	30,75	160	30	30	25	20,0	●	●	●	●	●	●
G 1 1/8	11	35,50	170	30	-	28	22,0	●	●	-	-	-	-
G 1 1/4	11	39,50	170	30	-	32	24,0	●	●	-	-	-	-
G 1 3/8	11	42,00	180	32	-	36	29,0	●	●	-	-	-	-
G 1 1/2	11	45,00	190	32	-	36	29,0	●	●	-	-	-	-
G 1 3/4	11	51,00	190	32	-	40	32,0	●	●	-	-	-	-
G 2	11	57,00	220	40	-	45	35,0	●	●	-	-	-	-

HD : **für zähe Werkstoffe** for tough materials
N 15°/40°: **15° Rechtsdrall/40°** 15°/40°right hand helix
VAP: **vaporisiert** vaporized
N: **Herkömmliche Anwendung** universal application

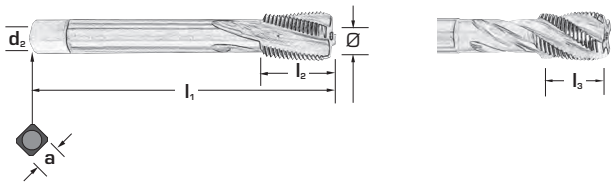
● Standardartikel / Items available ex stock

DIN 5156 - BSP

Maschinen-Gewindebohrer
mit Überlaufschaft für Rohrgewinde nach DIN 259
und DIN-ISO 228

Machine taps with reduced shank
for British standard Pipe thread
as per DIN 259 and DIN-ISO 228







Typ / Type									VA 15°	VA 35°	VAP 35°	VA 35°	VRP 50°
Toleranz / Tolerance									-	-	-	-	-
Anschnitt / Gangzahl / Chamfer form / No. of threads									C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung / Cutting direction													
Schneidstoff / Material									HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm		Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	l_3 mm	d_2 mm h9	a h12	6716	6701	6701 VP	6701 XP	6856 VP
G	1/16	28	6,80	90	22	12	6	4,9	●	●	●	●	●
G	1/8	28	8,80	90	20	14	7	5,5	●	●	●	●	●
G	1/4	19	11,80	100	22	20	11	9,0	●	●	●	●	●
G	3/8	19	15,25	100	22	20	12	9,0	●	●	●	●	●
G	1/2	14	19,00	125	25	25	16	12,0	●	●	●	●	●
G	5/8	14	21,00	125	25	25	18	14,5	●	●	●	●	●
G	3/4	14	24,50	140	28	28	20	16,0	●	●	●	●	●
G	7/8	14	28,25	150	28	28	22	18,0	●	●	●	●	●
G	1	11	30,75	160	30	30	25	20,0	●	●	●	●	●
G	1 1/8	11	35,50	170	30	-	28	22,0	-	-	-	-	-
G	1 1/4	11	39,50	170	30	-	32	24,0	-	-	-	-	-
G	1 3/8	11	42,00	180	32	-	36	29,0	-	-	-	-	-
G	1 1/2	11	45,00	190	32	-	36	29,0	-	-	-	-	-
G	1 3/4	11	51,00	190	32	-	40	32,0	-	-	-	-	-
G	2	11	57,00	220	40	-	45	35,0	-	-	-	-	-

VA: **Für rostfreien Stahl**
for stainless steel

VAP: **vaporisiert**
vaporized

VRP: **Für rostfreien Stahl mit Abschrägung und vaporisiert**
for stainless steel, back tapered and vaporized

● Standardartikel / Items available ex stock

DIN 5156 - BSP

Maschinen-Gewindebohrer
mit Überlaufschaft für Rohrgewinde nach DIN 259
und DIN-ISO 228
Machine taps with reduced shank
for British standard Pipe thread
as per DIN 259 and DIN-ISO 228



GG	GG	**Typ /** Type
-	-	**Toleranz** Tolerance
C/2,5-3	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
		Schneidrichtung Cutting direction
HSS-Co	HSS-Co	**Schneidstoff/** Material

6708	6708 TF	Ø mm		Gg/1" Tpi		Kernloch Ø Tap drill Ø
●	●	G		1/16	28	6,80
●	●	G		1/8	28	8,80
●	●	G		1/4	19	11,80
●	●	G		3/8	19	15,25
●	●	G		1/2	14	19,00
●	●	G		5/8	14	21,00
●	●	G		3/4	14	24,50
●	●	G		7/8	14	28,25
●	●	G		1	11	30,75
●	●	G	1	1/8	11	35,50
●	●	G	1	1/4	11	39,50
●	●	G	1	3/8	11	42,00
●	●	G	1	1/2	11	45,00
●	●	G	1	3/4	11	51,00
●	●	G		2	11	57,00

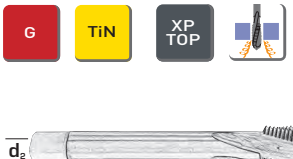
GG: für Guss
for cast iron

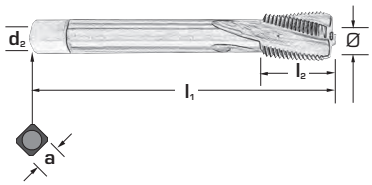
● Standardartikel / Items available ex stock

DIN 5156 - BSP

Maschinen-Gewindebohrer
mit Überlaufschaft für Rohrgewinde nach DIN 259
und DIN-ISO 228

Machine taps with reduced shank
for British standard Pipe thread
as per DIN 259 and DIN-ISO 228







Typ / Type									Rapid	VAP Rapid	Rapid
Toleranz / Tolerance									-	-	-
Anschnitt / Gangzahl / Chamfer form / No. of threads									B/4-5	B/4-5	B/4-5
Schneidrichtung / Cutting direction											
Schneidstoff / Material									HSS-Co	HSS-Co	HSS-Co
Ø mm		**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12		**6704**	**6704 VP**	**6704 TN**
G	1/16	28	6,80	7,3	90	22	6	4,9		●	●	●
G	1/8	28	8,80	9,3	90	20	7	5,5		●	●	●
G	1/4	19	11,80	12,5	100	22	11	9,0		●	●	●
G	3/8	19	15,25	16,0	100	22	12	9,0		●	●	●
G	1/2	14	20,10	20,1	125	25	16	12,0		●	●	●
G	5/8	14	21,00	-	125	25	18	14,5		●	●	●
G	3/4	14	24,50	-	140	28	20	16,0		●	●	●
G	7/8	14	28,25	-	150	28	22	18,0		●	●	●
G	1	11	30,75	-	160	30	25	20,0		●	●	●
G	1 1/8	11	35,50	-	170	30	28	22,0		●	●	●
G	1 1/4	11	39,50	-	170	30	32	24,0		●	●	●
G	1 1/2	11	45,00	-	190	32	36	29,0		●	●	●
G	1 3/4	11	51,00	-	190	32	40	32,0		●	●	●
G	2	11	57,00	-	220	40	45	35,0		●	●	●

Rapid: **Herkömmliche Anwendung**
universal application
VAP: **vaporisiert**
vaporized

● Standardartikel / Items available ex stock

DIN 5156 - BSP

Maschinen-Gewindebohrer
mit Überlaufschaft für Rohrgewinde nach DIN 259
und DIN-ISO 228
Machine taps with reduced shank
for British standard Pipe thread
as per DIN 259 and DIN-ISO 228



VA	VAP	VA	Former	Former S	**Typ /** Type
-	-	-	-	-	**Toleranz** Tolerance
B/4-5	B/4-5	B/4-5	B/4-5	C/2,5-3	**Anschnitt / Gangzahl** Chamfer form / No. of threads
					Schneidrichtung Cutting direction
HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	**Schneidstoff/** Material

6700	6700 VP	6700 XP	6702	6818	Ø mm	Gg/1" Tpi	Gg/1" Tpi	Kernloch Ø Tap drill Ø
●	●	●	●	●	G 1/16	28	6,80	7,3
●	●	●	●	●	G 1/8	28	8,80	9,3
●	●	●	●	●	G 1/4	19	11,80	12,5
●	●	●	●	●	G 3/8	19	15,25	16,0
●	●	●	●	●	G 1/2	14	20,10	20,1
●	●	●	-	-	G 5/8	14	21,00	-
●	●	●	-	-	G 3/4	14	24,50	-
●	●	●	-	-	G 7/8	14	28,25	-
●	●	●	-	-	G 1	11	30,75	-
-	-	-	-	-	G 1 1/8	11	35,50	-
-	-	-	-	-	G 1 1/4	11	39,50	-
-	-	-	-	-	G 1 1/2	11	45,00	-
-	-	-	-	-	G 1 3/4	11	51,00	-
-	-	-	-	-	G 2	11	57,00	-

VAP: **vaporisiert**
vaporized

VA: **Für rostfreien Stahl**
for stainless steel

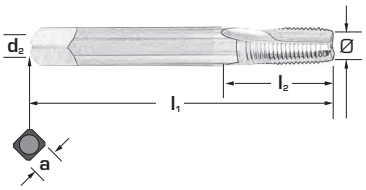
Former S: **mit Schmiernuten**
with coolant grooves

● Standardartikel / Items available ex stock

DIN 5156 - BSPT (Rc)

Maschinen-Gewindebohrer mit Überlaufschaft
für konisches Rohrgewinde BSPT (Rc), Kegel 1 : 16
Machine taps with reduced shank
for British standard Pipe thread BSPT (Rc), taper 1:16

RC





Typ / Type								N 0°	
Toleranz Tolerance								-	
Anschnitt / Gangzahl Chamfer form / No. of threads								C/2,5-3	
Schneidrichtung Cutting direction									
Schneidstoff/ Material								HSS-Co	
Ø mm		**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12	**6790**	
RC	1/8	28	8,2	90	13	10	8,0	●	
RC	1/4	19	11,0	100	20	14	11,0	●	
RC	3/8	19	14,0	110	20	14	11,0	●	
RC	1/2	14	18,0	140	25	16	12,0	●	
RC	3/4	14	23,5	150	26	20	16,0	●	
RC	1	11	29,5	170	32	25	20,0	●	

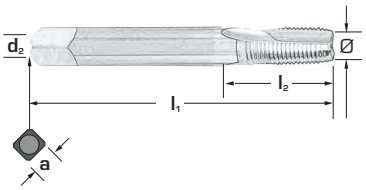
N: **Herkömmliche Anwendung**
universal application

● Standardartikel / Items available ex stock

ILIX NORM - NPT, NPTF

NPT (National Pipe Taper USA, Normalausführung)
NPTF (Dryseal National Pipe Taper USA)
kegeliges Rohrgewinde 1 : 16 – Flankenwinkel 60°
NPT thread (National Pipe Taper USA, standard range)
NPTF thread (Dryseal National Pipe Taper USA)
tapered pipe thread 1 : 16 – included angle 60°
dimensions generally as per DIN 371

NPT NPTF





Typ / Type								N NPT	N NPTF	VA/AZ NPT
Toleranz Tolerance								-	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads								C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction										
Schneidstoff/ Material								HSS-Co	HSS-Co	HSS-Co
Nennweite des Rohres in Zoll Size of pipe in inch		**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12	**6610**	**6611**	**6916**
NPT/NPTF	1/16	27	6,30	56	14	7	5,5	●	●	●
NPT/NPTF	1/8	27	8,50	63	15	8	6,2	●	●	●
NPT/NPTF	1/4	18	11,10	70	21	11	9,0	●	●	●
NPT/NPTF	3/8	18	14,50	70	21	12	9,0	●	●	●
NPT/NPTF	1/2	14	17,75	80	27	16	12,0	●	●	●
NPT/NPTF	3/4	14	23,00	100	27	20	16,0	●	●	●
NPT/NPTF	1	11,5	29,00	125	32	25	20,0	●	●	●
NPT/NPTF	1 1/4	11,5	38,00	125	33	32	24,0	●	●	●
NPT/NPTF	1 1/2	11,5	44,00	140	33	36	29,0	●	●	●
NPT/NPTF	2	11,5	56,00	140	44	36	29,0	●	-	●

NPT: **für Gewinde mit Dichtmittel**
for threads with dryseal

NPTF: **für Gewinde ohne Dichtmittel**
for threads without dryseal

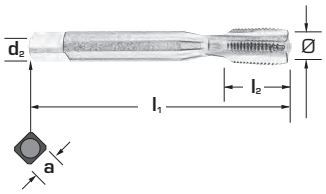
Kegelreibhale für NPT/NPTF Gewinde auf der Seite 699
Taper pin reamer for NPT/NPTF thread on the page 699

● Standardartikel / Items available ex stock

ILIX NORM - NPT, NPTF

NPT (National Pipe Taper USA, Normalausführung)
NPTF (Dryseal National Pipe Taper USA)
kegeliges Rohrgewinde 1 : 16 – Flankenwinkel 60°
NPT thread (National Pipe Taper USA, standard range)
NPTF thread (Dryseal National Pipe Taper USA)
tapered pipe thread 1 : 16 – included angle 60°
dimensions generally as per DIN 371

NPT NPTF TiN





								6917	6917 TN	6923	6919	6921	6921 TN	6925
Typ / Type								HD NPT 0°	HD NPT 0°	HD NPTF 0°	VA/AZ NPT 0°	VA/AZ NPT 35°	VA/AZ NPT 35°	VA NPTF 35°
Toleranz Tolerance								-	-	-	-	-	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads								C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3	C/2,5-3
Schneidrichtung Cutting direction														
Schneidstoff/ Material								HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Nennweite des Rohres in Zoll Size of pipe in inch		**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12							
NPT/NPTF	**1/16**	27	6,3	90	13	8	6,2	●	●	●	●	●	●	●
NPT/NPTF	**1/8**	27	8,5	90	13	10	8,0	●	●	●	●	●	●	●
NPT/NPTF	**1/4**	18	11,1	100	20	14	11,0	●	●	●	●	●	●	●

NPT: **für Gewinde mit Dichtmittel**
for threads with dryseal

NPTF: **für Gewinde ohne Dichtmittel**
for threads without dryseal

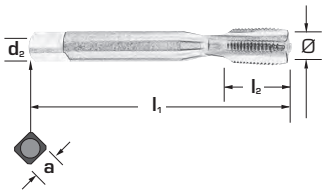
Kegelreibhale für NPT/NPTF Gewinde auf der Seite 699
Taper pin reamer for NPT/NPTF thread on the page 699

● Standardartikel / Items available ex stock

ILIX NORM - NPT, NPTF

NPT (National Pipe Taper USA, Normalausführung)
NPTF (Dryseal National Pipe Taper USA)
kegeliges Rohrgewinde 1 : 16 – Flankenwinkel 60°
NPT thread (National Pipe Taper USA, standard range)
NPTF thread (Dryseal National Pipe Taper USA)
tapered pipe thread 1 : 16 – included angle 60°
dimensions generally as per DIN 371

NPT NPTF





Typ / Type							
Toleranz Tolerance							
Anschnitt / Gangzahl Chamfer form / No. of threads							
Schneidrichtung Cutting direction							
Schneidstoff/ Material							
Nennweite des Rohres in Zoll Size of pipe in inch	**Gg/1"** Tpi	**Kernloch Ø** Tap drill Ø	**l_1** mm	**l_2** mm	**d_2** mm h9	**a** h12	
							6918 HD NPT 0° - C/2,5-3 HSS-Co
							6924 HD NPTF 0° - C/2,5-3 HSS-Co
							6920 VA/AZ NPT 0° - C/2,5-3 HSS-Co
							6922 VA/AZ NPT 35° - C/2,5-3 HSS-Co
							6926 VA NPTF 35° - C/2,5-3 HSS-Co
NPT/NPTF	**3/8**	18,0	14,50	110	20	14	11,0	●	●	●	●	●
NPT/NPTF	**1/2**	14,0	17,75	140	25	16	12,0	●	●	●	●	●
NPT/NPTF	**3/4**	14,0	23,00	150	26	20	16,0	●	●	●	●	●
NPT/NPTF	**1**	11,5	29,00	170	32	25	20,0	●	●	●	●	●
NPT/NPTF	**1 1/4**	11,5	38,00	190	34	32	24,0	●	●	●	●	●
NPT/NPTF	**1 1/2**	11,5	44,00	200	34	36	29,0	●	●	●	●	●

NPT: **für Gewinde mit Dichtmittel**
for threads with dryseal

NPTF: **für Gewinde ohne Dichtmittel**
for threads without dryseal

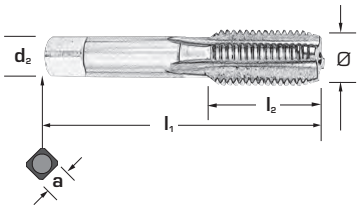
Kegelreibhale für NPT/NPTF Gewinde auf der Seite 699
Taper pin reamer for NPT/NPTF thread on the page 699

● Standardartikel / Items available ex stock

DIN 40432 - (Pg)

Gewindebohrer für Stahlpanzerrohr-Gewinde nach DIN 40430
Flankenwinkel 80° - Einzelschneider für Hand- und Maschinengebrauc
Machine taps for steel conduit pipe thread as per DIN 40430
included angle 80° - on machine and power tools

PG





Typ / Type	N Pg	N Pg
Toleranz Tolerance	-	-
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3	B/4-5
Schneidrichtung Cutting direction		
Schneidstoff/ Material	HSS-Co	HSS-Co

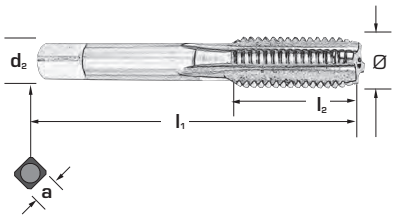
Gewinde-bezeichnung Size		Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6915	6710
PG	**7,0**	12,5	20	11,50	70	22	9	7,0	●	●
PG	**9,0**	15,2	18	14,00	70	22	12	9,0	●	●
PG	**11,0**	18,6	18	17,25	80	22	14	11,0	●	●
PG	**13,5**	20,4	18	19,00	80	22	16	12,0	●	●
PG	**16,0**	22,5	18	21,25	80	22	18	14,5	●	●
PG	**21,0**	28,3	16	27,00	90	22	22	18,0	●	●
PG	**29,0**	37,0	16	35,50	100	25	28	22,0	●	●
PG	**36,0**	47,0	16	45,50	140	40	36	29,0	●	●
PG	**42,0**	54,0	16	52,50	140	40	40	32,0	●	●
PG	**48,0**	59,3	16	58,00	160	40	45	35,0	●	●

● Standardartikel / Items available ex stock

DIN 40433 - (Pg)

Gewindebohrer für Stahlpanzerrohr-Gewinde nach DIN 40430
Flankenwinkel 80° - Einzelschneider für Hand- und Maschinengebrauc
Machine taps for steel conduit pipe thread as per DIN 40430
included angle 80° - on machine and power tools

PG





	N
Typ / Type	Pg
Toleranz Tolerance	-
Anschnitt / Gangzahl Chamfer form / No. of threads	D/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

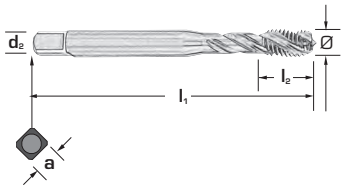
Gewinde-bezeichnung Size		Ø mm	Gg/1" Tpi	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	$d_2$mm h9	a h12	6914
PG	**7,0**	12,5	20	11,50	100	20	9	7,0	●
PG	**9,0**	15,2	18	14,00	100	20	12	9,0	●
PG	**11,0**	18,6	18	17,25	110	22	14	11,0	●
PG	**13,5**	20,4	18	19,00	125	22	16	12,0	●
PG	**16,0**	22,5	18	21,25	125	25	18	14,5	●
PG	**21,0**	28,3	16	27,00	150	28	22	18,0	●
PG	**29,0**	37,0	16	35,50	170	28	28	22,0	●
PG	**36,0**	47,0	16	45,50	190	32	36	29,0	●

● Standardartikel / Items available ex stock

DIN 8140 - EGM

Maschinen-Gewindebohrer
für Gewindedrahteinsätze
für Metrisches ISO-Gewinde
Machine taps for wire thread inserts
for metric ISO thread

EGM





Typ / Type	N 40°
Toleranz Tolerance	6 H Mod
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

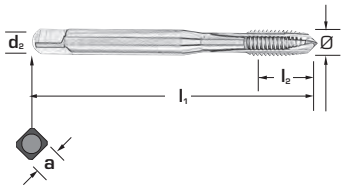
Gewinde-bezeichnung Size		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6910
EG M	3	0,50	3,2	63	5	4,5	3,4	●
EG M	4	0,70	4,2	70	7	6,0	4,9	●
EG M	5	0,80	5,2	80	8	6,0	4,9	●
EG M	6	1,00	6,3	90	10	8,0	6,2	●
EG M	8	1,25	8,4	100	12	10,0	8,0	●

● Standardartikel / Items available ex stock

DIN 8140 - EGM

Maschinen-Gewindebohrer
für Gewindedrahteinsätze
für Metrisches ISO-Gewinde
Machine taps for wire thread inserts
for metric ISO thread

EGM





Typ / Type	N
Toleranz Tolerance	6 H Mod
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

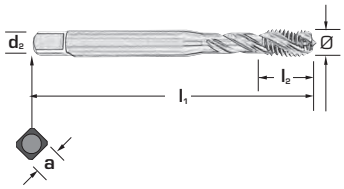
Gewinde-bezeichnung Size		Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6908
EG M	3	0,50	3,2	63	5	4,5	3,4	●
EG M	4	0,70	4,2	70	7	6,0	4,9	●
EG M	5	0,80	5,2	80	8	6,0	4,9	●
EG M	6	1,00	6,3	90	10	8,0	6,2	●
EG M	8	1,25	8,4	100	12	10,0	8,0	●

● Standardartikel / Items available ex stock

DIN 8140 - EGM

Maschinen-Gewindebohrer
für Gewindedrahteinsätze
für Metrisches ISO-Gewinde DIN 376
Machine taps for wire thread inserts
for metric ISO thread

EGM





Typ / Type	N 40°
Toleranz Tolerance	6 H Mod
Anschnitt / Gangzahl Chamfer form / No. of threads	C/2,5-3
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

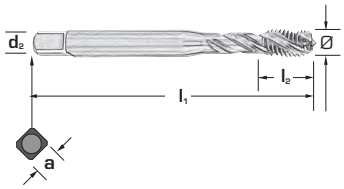
Gewinde-bezeichnung Size	Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6911
EG M	10	1,50	10,5	110	14	9	7	●
EG M	12	1,75	12,5	110	16	11	9	●
EG M	16	2,00	16,5	125	20	14	11	●

● Standardartikel / Items available ex stock

DIN 8140 - EGM

Maschinen-Gewindebohrer
für Gewindedrahteinsätze
für Metrisches ISO-Gewinde DIN 376
Machine taps for wire thread inserts
for metric ISO thread

EGM





Typ / Type	N 40°
Toleranz Tolerance	6 H Mod
Anschnitt / Gangzahl Chamfer form / No. of threads	B/4-5
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

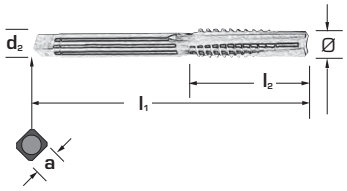
Gewinde-bezeichnung Size	Ø mm	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6909
EG M	10	1,50	10,5	110	14	9	7	●
EG M	12	1,75	12,5	110	16	11	9	●
EG M	16	2,00	16,5	125	20	14	11	●

● Standardartikel / Items available ex stock

ILIX NORM - TR

Hand-Gewindebohrer, dreiteiliger Satz
für Metrisches ISO-Trapez-Regelgewinde
Hand taps, serial, in sets of 2/3 pieces
for ISO metric trapezoidal coarse thread

TR





Typ / Type	N	N	N
Toleranz / Tolerance	7 H	7 H	7 H
Anschnitt / Gangzahl / Chamfer form / No. of threads	A/5-6	D/3-4	C/2,5-3
Schneidrichtung / Cutting direction			
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co

Gewinde-bezeichnung Size	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6937 V	6937 M	6937 F
							Einzel single tap		Satz set
TR 10*	2	8,20	110	70	7,1	5,6	●		●
TR 12	3	9,25	160	102	8,0	6,3	●		●
TR 14	3	11,25	160	102	9,0	7,1	●		●
TR 16	4	12,25	220	136	11,2	9,0	●		●
TR 18	4	14,25	220	136	12,5	10,0	●		●
TR 20	4	16,25	220	136	14,0	11,2	●		●
TR 22	5	17,25	275	166	16,0	12,5	●		●
TR 24	5	19,25	275	166	16,0	12,5	●		●
TR 26	5	21,25	290	170	18,0	14,0	●		●
TR 28	5	23,25	290	170	18,0	14,0	●		●
TR 30	6	24,25	345	200	22,4	18,0	●		●

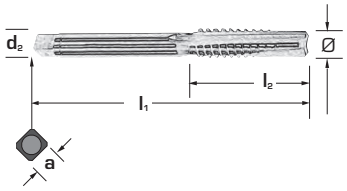
TR: für Trapezgewinde
for trapezoidal thread

● Standardartikel / Items available ex stock - * 2 pezzi / 2 Pieces

ILIX NORM - TR

Maschinen-Gewindebohrer
für Metrisches ISO-Trapez-Regelgewinde
Machine taps
for ISO metric trapezoidal coarse thread

TR





Typ / Type	N
Toleranz Tolerance	7 H
Anschnitt / Gangzahl Chamfer form / No. of threads	-
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

Gewinde-bezeichnung Size	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6938
TR 10	2	8,20	116	76	7,1	5,6	●
TR 12	2	10,20	126	76	8,0	6,3	●
TR 12	3	9,25	175	115	8,0	6,3	●
TR 14	2	12,20	126	76	9,0	7,1	●
TR 14	3	11,25	175	115	9,0	7,1	●
TR 16	4	12,25	235	150	11,2	9,0	●
TR 18	4	14,25	235	150	12,5	10,0	●
TR 20	4	16,25	235	150	14,0	11,2	●
TR 22	5	17,25	290	180	16,0	12,5	●
TR 24	5	19,25	290	180	16,0	12,5	●
TR 26	5	21,25	300	180	18,0	14,0	●
TR 28	5	23,25	300	180	18,0	14,0	●
TR 30	6	24,25	380	235	22,4	18,0	●
TR 32	6	26,25	380	235	22,4	18,0	●
TR 34	6	28,25	390	240	25,0	20,0	●
TR 36	6	30,25	390	240	25,0	20,0	●

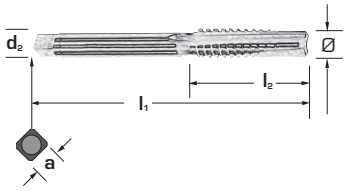
TR: für Trapezgewinde
for trapezoidal thread

● Standardartikel / Items available ex stock

ILIX NORM - TR

Maschinen-Gewindebohrer
für Metrisches ISO-Trapez-Regelgewinde
Machine taps
for ISO metric trapezoidal coarse thread

TR





Typ / Type	N Sx
Toleranz Tolerance	7 H
Anschnitt / Gangzahl Chamfer form / No. of threads	-
Schneidrichtung Cutting direction	
Schneidstoff/ Material	HSS-Co

Gewinde-bezeichnung Size	Steigung Pitch	Kernloch Ø Tap drill Ø	l_1 mm	l_2 mm	d_2 mm h9	a h12	6939
TR 10	2	8,20	116	76	7,1	5,6	●
TR 12	2	10,20	126	76	8,0	6,3	●
TR 12	3	9,25	175	115	8,0	6,3	●
TR 14	2	12,20	126	76	9,0	7,1	●
TR 14	3	11,25	175	115	9,0	7,1	●
TR 16	4	12,25	235	150	11,2	9,0	●
TR 18	4	14,25	235	150	12,5	10,0	●
TR 20	4	16,25	235	150	14,0	11,2	●
TR 22	5	17,25	290	180	16,0	12,5	●
TR 24	5	19,25	290	180	16,0	12,5	●
TR 26	5	21,25	300	180	18,0	14,0	●
TR 28	5	23,25	300	180	18,0	14,0	●
TR 30	6	24,25	380	235	22,4	18,0	●
TR 32	6	26,25	380	235	22,4	18,0	●
TR 34	6	28,25	390	240	25,0	20,0	●
TR 36	6	30,25	390	240	25,0	20,0	●

TR: für Trapezgewinde
for trapezoidal thread

● Standardartikel / Items available ex stock

ILIX Präzisionswerkzeuge GmbH

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Gewindebohrer
Taps



▶ Technische Daten
Technical Guide

TECHNISCHE DATEN
TECHNICAL DATA




	Typ / Type	**RAPID**		**RAPID 2**
	ILIX Typ-siehe Seite / ILIX type - see page	476		478
	Werkstoff / Material	HSS-Co		HSS-Co
	Anwendung / Application	Durchgangsloch Through Hole		Durchgangsloch Through Hole
	Anschnitt - Drallwinkel / Chamfer - Flute angle	B 0°		B 0°
	Gewindetiefe / Threding deep	2xD		2xD
	Beschichtung / Coating	BL/VP	TN / TC	BL
	Innenliegende Kühlkanäle / Internal Coolant	-		-
M	**4H**	6707/6711		-
	6H/6HX	6707/6711		6640
	6G/6GX	6707/6711		6640
	7G	6707/6711		-
	6H+0,1	-		-
MF	**6H/6HX**	6730		-
	6G/6GX	-		-
	6H+0,1	-		-
UNC	**2B/2BX**	6690/6693		-
	3B/3BX	6690/6693		-
UNF	**2B/2BX**	6607/6687		-
	3B/3BX	6607/6687		-
8-UN	**2B**	-		-
BSP/G	**G**	6704		-
RP (BSPP)	**Rp**	6673		-
RC (BSPT)	**Rc**	-		-
BSW-W	**BSW**	6697/6636		-
NPT	**NPT**	-		-
NPTF	**NPTF**	-		-
		Vc	**Vc**	**Vc**
P	**< 800 N/mm²**	15	18	-
	700-1000 N/mm²	10	13	-
	1000-1300 N/mm²	6	8	-
M	**Austenitisch**	6	10	-
	Austenitisch / ferritisch	-	7	-
K	**GG**	10	13	-
	GGG	5	8	-
N	**Aluminium**	15	20	15
	NE-Metalle	10	15	13
S	**Titan**	-	-	-
	Sonderlegierungen	-	-	-
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-
	Gehärteter Stahl 48 / 58 HRC	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA

							
N		**N 15°**		**N 40°**		**MULTI GG i**	
478		482		484		492	
HSS-Co		HSS-Co		HSS-Co		HSS Co	
Sackloch / Blind Hole Durchgangsloch / Through Hole		Sackloch Blind Hole		Sackloch Blind Hole		Sackloch / Blind Hole Durchgangsloch / Through Hole	
C 0°		C 15°		C 40°		C 0°	
2xD		1,5xD		2,5xD		2,5xD	
BL	TN / TC	BL	TN / TC	BL/VP	TN / TC	VP	
-		-		-			
-		-		-		-	
6706/6705		6657/6658		6644/6638/6867/6868		6629/6637	
-		6657/6658		6644/6638		-	
-		-		6644/6638		-	
-		6903		-		-	
6726		6664		6652/6877		-	
-		-		-		-	
-		6904		-		-	
6823/6824		6696		6691/6694		-	
-		6728		6691/6694		-	
6838/6839		6719		6680/6688		-	
-		6729		6680/6688		-	
-		-		-		-	
-		6665		6703		-	
-		6675		-		-	
6790		-		-		-	
6699		-		6836/6837		-	
6610		-		-		-	
-		-		-		-	
Vc	**Vc**	**Vc**	**Vc**	**Vc**	**Vc**	**Vc**	
-	-	15	18	15	18	-	
10	13	10	13	10	13	-	
6	8	6	8	6	8	-	
-	-	-	8	-	8	-	
-	-	-	5	-	5	-	
10	13	10	13	10	13	30	
-	-	5	8	5	8	35	
15	20	15	20	15	20	30	
10	15	10	15	10	15	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	

TECHNISCHE DATEN
TECHNICAL DATA




	Typ / Type	**VA**		**VA**	
	ILIX Typ-siehe Seite / ILIX type - see page	486		486	
	Werkstoff / Material	HSS-Co		HSS-Co	
	Anwendung / Application	Durchgangsloch Through Hole		Sackloch Blind Hole	
	Anschnitt - Drallwinkel / Chamfer - Flute angle	B		C 15°	
	Gewindetiefe / Threding deep	2xD		1,5xD	
	Beschichtung / Coating	BL/VP	TN / XT/XTP	BL/VP	TN / XT/XTP
	Innenliegende Kühlkanäle / Internal Coolant	-		-	
M	**4H**	-		-	
	6H/6HX	6646/6647		6654/6634	
	6G/6GX	6646/6647		-	
	7G	-		-	
	6H+0,1	-		-	
MF	**6H/6HX**	6663		6671	
	6G/6GX	6663		-	
	6H+0,1	-		-	
UNC	**2B/2BX**	6739/6749		-	
	3B/3BX	–		-	
UNF	**2B/2BX**	6718/6797		-	
	3B/3BX	–		-	
8-UN	**2B**	-		-	
BSP/G	**G**	6700		6716	
RP (BSPP)	**Rp**	–		-	
RC (BSPT)	**Rc**	-		-	
BSW-W	**BSW**	-		-	
NPT	**NPT**	-		-	
NPTF	**NPTF**	-		-	
		Vc	**Vc**	**Vc**	**Vc**
P	**< 800 N/mm²**	15	18	13	15
	700-1000 N/mm²	-	-	-	-
	1000-1300 N/mm²	-	-	-	-
M	**Austenitisch**	6	10	10	12
	Austenitisch / ferritisch	5	7	8	10
K	**GG**	-	-	-	-
	GGG	-	-	-	-
N	**Aluminium**	-	-	-	-
	NE-Metalle	10	15	11	13
S	**Titan**	3	5	3	5
	Sonderlegierungen	2	4	2	4
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-	-
	Gehärteter Stahl 48 / 58 HRC	-	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA




VA		VA i			
486		488			
HSS-Co		HSS-Co			
Sackloch Blind Hole		Sackloch Blind Hole			
C 40°		C 15°			
2xD		2,5xD			
BL / VP	TN / XT/XTP	BL	XTP		
-		-			
-		-			
6661/6662		6620/6605			
6661/6662		–			
-		-			
-		-			
6655		6626			
6655		-			
-		–			
6735/6754		–			
-		–			
6794/6796		–			
-		–			
6945		-			
6701		–			
-		–			
–		–			
–		–			
–		–			
–		–			
Vc	**Vc**	**Vc**	**Vc**		
13	15	15	17		
-	-	12	15		
-	-	-	-		
10	12	15	15		
8	8	8	10		
-	-	-	-		
-	-	-	-		
-	-	-	-		
11	13	13	15		
3	5	4	6		
2	4	3	5		
-	-	-	-		
-	-	-	-		
-	-	-	-		

TECHNISCHE DATEN
TECHNICAL DATA




	Typ / Type	**HD**		**HD**	
	ILIX Typ-siehe Seite / ILIX type - see page	490		490	
	Werkstoff / Material	HSS-Co		HSS-Co	
	Anwendung / Application	Durchgangsloch Through Hole		Sackloch Blind Hole	
	Anschnitt - Drallwinkel / Chamfer - Flute angle	B		C 15°	
	Gewindetiefe / Threding deep	2xD		1,5xD	
	Beschichtung / Coating	BL/VP	TN / TF	BL	HL
	Innenliegende Kühlkanäle / Internal Coolant	-		-	
M	**4H**	-		-	
	6H/6HX	6870/6871		6878/6879	
	6G/6GX	–		-	
	7G	-		-	
	6H+0,1	-		-	
MF	**6H/6HX**	6872		6880	
	6G/6GX	–		-	
	6H+0,1	-		-	
UNC	**2B/2BX**	6873/6874		6865/6866	
	3B/3BX	–		-	
UNF	**2B/2BX**	6875/6876		6848/6849	
	3B/3BX	–		-	
8-UN	**2B**	-		-	
BSP/G	**G**	6912		–	
RP (BSPP)	**Rp**	–		-	
RC (BSPT)	**Rc**	-		-	
BSW-W	**BSW**	-		-	
NPT	**NPT**	6917/6918		6917/6918	
NPTF	**NPTF**	6923/6924		6923/6924	
		Vc	**Vc**	**Vc**	**Vc**
P	**< 800 N/mm²**	15	18	13	15
	700-1000 N/mm²	10	13	10	12
	1000-1300 N/mm²	6	8	6	8
M	**Austenitisch**	-	-	-	-
	Austenitisch / ferritisch	-	-	-	-
K	**GG**	-	-	-	-
	GGG	10	10	10	10
N	**Aluminium**	-	-	-	-
	NE-Metalle	-	-	-	-
S	**Titan**	-	-	-	-
	Sonderlegierungen	-	-	-	-
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-	3
	Gehärteter Stahl 48 / 58 HRC	-	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA






	HD		HR		VR 50°		GG	
	490		492		488		492	
	HSS-Co		HSS-Co		HSS-Co		HSS-Co	
	Sackloch Blind Hole		Sackloch Blind Hole		Sackloch Blind Hole		Sackloch / Blind Hole Durchgangsloch / Through Hole	
	C 40°		C 40°		C 50°		C 0°	
	2,5xD		2,5xD		3xD		2,5xD	
	BL	TN / TF	BL	TF	VP	TN	VP	TF
	-		-		-		-	
	-				-		-	
	6666/6667		6681/6689		6850/6851		6631/6632	
	–				-		-	
	-		-		-		-	
	-		-		-		-	
	–		–		-		6653	
	–		-		-		-	
	-		–		-		-	
	–		–		6852/6853		-	
	-		–		-		-	
	–		–		6854/6855		-	
	-		–		-		-	
	–		-		-		-	
	–		–		6856		6708	
	-		–		-		6674	
	–		–		-		-	
	–		–		-		-	
	–		–		-		-	
	–		–				-	
	Vc	Vc	Vc	Vc	Vc	Vc	Vc	Vc
	13	15	13	15	13	15	-	-
	10	12	10	12	-	-	-	-
	6	8	8	10	-	-	-	-
	-	-	-	-	10	12	-	-
	-	-	-	-	8	10	-	-
	-	-	-	-	-	-	25	30
	10	10	-	-	-	-	20	25
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA




	Typ / Type	**AZ**		
	ILIX Typ-siehe Seite / ILIX type - see page	494		
	Werkstoff / Material	HSS-Co		
	Anwendung / Application	Durchgangsloch Through Hole	Sackloch Blind Hole	
	Anschnitt - Drallwinkel / Chamfer - Flute angle	B 0°	C 0°	
	Gewindetiefe / Threding deep	2,5xD	2,5xD	
	Beschichtung / Coating	BL	BL	
	Innenliegende Kühlkanäle / Internal Coolant	-	-	
M	**4H**	-	-	
	6H/6HX	6616/6617	6820/6821	
	6G/6GX	-	-	
	7G	-	-	
	6H+0,1	-	-	
MF	**6H/6HX**	-	-	
	6G/6GX	-	-	
	6H+0,1	-	-	
UNC	**2B/2BX**	-	-	
	3B/3BX	-	-	
UNF	**2B/2BX**	-	-	
	3B/3BX	-	-	
8-UN	**2B**	-	-	
BSP/G	**G**	-	-	
RP (BSPP)	**Rp**	-	-	
RC (BSPT)	**Rc**	-	-	
BSW-W	**BSW**	-	-	
NPT	**NPT**	-	6916/6919/6920	
NPTF	**NPTF**	-	-	
		Vc	**Vc**	**Vc**
P	**< 800 N/mm²**	15	15	18
	700-1000 N/mm²	-	-	-
	1000-1300 N/mm²	-	-	-
M	**Austenitisch**	6	6	10
	Austenitisch / ferritisch	-	-	-
K	**GG**	-	-	-
	GGG	-	-	-
N	**Aluminium**	15	15	20
	NE-Metalle	10	10	15
S	**Titan**	-	-	-
	Sonderlegierungen	-	-	-
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-
	Gehärteter Stahl 48 / 58 HRC	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA






	AZ		ALU		BAK
	494		494		496
	HSS-Co		HSS-Co		HSS-Co
	Sackloch Blind Hole		Durchgangsloch Through Hole	Sackloch Blind Hole	Sackloch / Blind Hole Durchgangsloch / Through Hole
	C 40°		B 0°	C 40°	E 0°
	2,5xD		2,5xD	2,5xD	2,5xD
	BL	TN	BL	BL	VP
	-		-	-	-
	-		-	-	-
	-		6641/6642	6643/6651	6770
	-		-	-	-
	-		-	-	-
	-		-	-	-
	-		-	6731	-
	-		-	-	-
	-		-	-	-
	-		-	6732/6733	-
	-		-	-	-
	-		-	6628/6734	-
	-		-	-	-
	-		-	-	-
	-		-	-	-
	-		-	-	-
	-		-	-	-
	-		-	-	-
	6921/6922		-	-	-
	6925/6926		-	-	-
	Vc	Vc	Vc	Vc	Vc
	15	18	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	6	10	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	15	20	25	25	-
	10	15	15	15	15
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA




	Typ / Type	**FORMER**		**FORMER S**	
	ILIX Typ-siehe Seite / ILIX type - see page	498		498	
	Werkstoff / Material	HSS-Co		HSS-Co	
	Anwendung / Application	Sackloch / Blind Hole Durchgangsloch / Through Hole		Sackloch / Blind Hole Durchgangsloch / Through Hole	
	Anschnitt - Drallwinkel / Chamfer - Flute angle	C		C	
	Gewindetiefe / Threding deep	2xD		2xD	
	Beschichtung / Coating	BL/VP	TN / TC	BL/VP	TN / TC
	Innenliegende Kühlkanäle / Internal Coolant	-		-	
M	**4H**	-		-	
	6H/6HX	6722/6723		6709/6725	
	6G/6GX	6622/6623		6808/6809	
	7G	-		6819	
	6H+0,1	-		-	
MF	**6H/6HX**	6721		6720	
	6G/6GX	-		-	
	6H+0,1	-		-	
UNC	**2B/2BX**	6738		6802/6811	
	3B/3BX	-		-	
UNF	**2B/2BX**	6747		6815/6816	
	3B/3BX	-		-	
8-UN	**2B**	-		-	
BSP/G	**G**	6702		6818	
RP (BSPP)	**Rp**	-		-	
RC (BSPT)	**Rc**	-		-	
BSW-W	**BSW**	-		-	
NPT	**NPT**	-		-	
NPTF	**NPTF**	-		-	
		Vc	**Fz**	**Vc**	**Fz**
P	**< 800 N/mm²**	13	15	15	17
	700-1000 N/mm²	11	13	13	15
	1000-1300 N/mm²	-	-	-	-
M	**Austenitisch**	8	10	10	12
	Austenitisch / ferritisch	-	-	-	-
K	**GG**	-	-	-	-
	GGG	-	-	-	-
N	**Aluminium**	20	25	25	30
	NE-Metalle	18	22	22	25
S	**Titan**	-	-	-	-
	Sonderlegierungen	-	-	-	-
H	**Gehärteter Stahl 38 / 48 HRC**	-	-	-	-
	Gehärteter Stahl 48 / 58 HRC	-	-	-	-
	Gehärteter Stahl 58 / 68 HRC	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

ILIX Präzisionswerkzeuge GmbH

ILIX PRECISION



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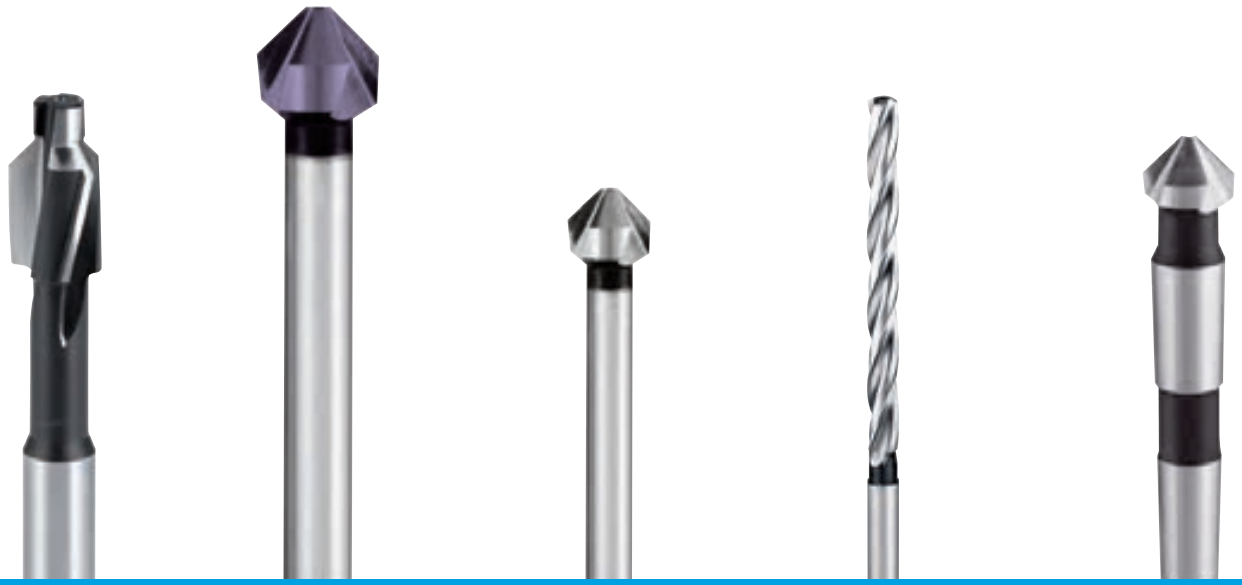


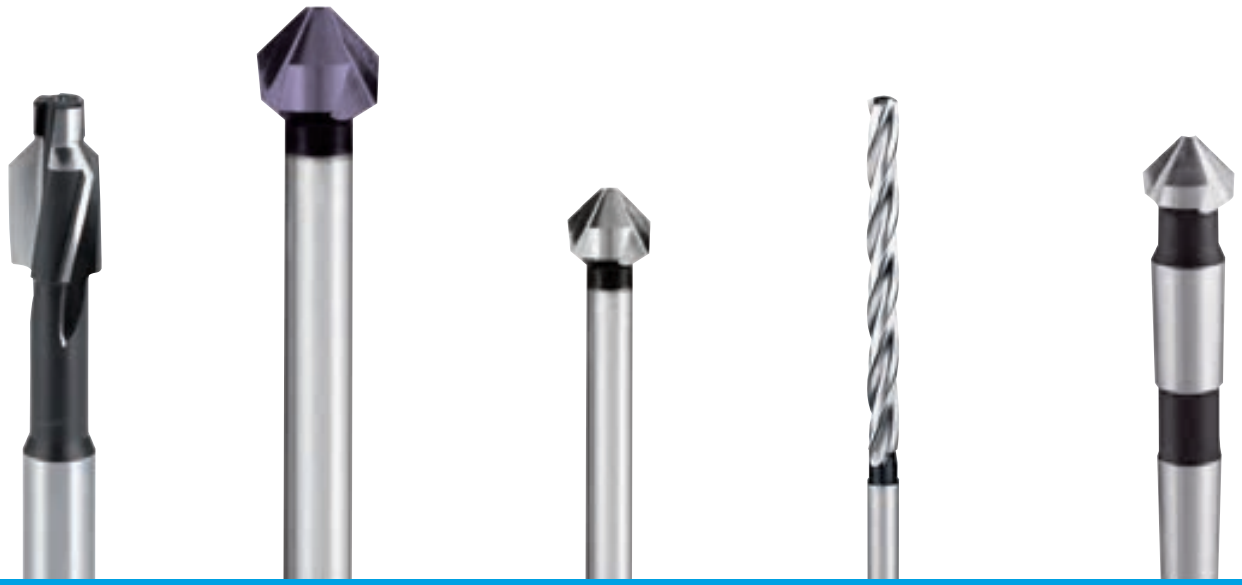
Aufbohrer ▪ Kegelsenker

Core Drills ▪ Countersinks





ILIX PRECISION



Aufbohrer ▪ Kegelsenker
Core Drills ▪ Countersinks

▶ Zeichenerklärung
Key to symbols

SCHNEIDSTOFF / TOOL MATERIAL

HSS

VHM
VHM / Feinstkorn
Solid carbide / Micro grain

BESCHICHTUNG / COATING

TN
TiN

TF
TiAlN
Futura

▶ Werkzeug-Auswahlhilfe
Tool selection guide

AUFBOHRER / CORE DRILLS

KAT.-NR. ITEM		LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
AUFBOHRER / Core Drills								
6253			**344**	4,8 ÷ 16,0	h8	-		-
6251			**343**	7,8 ÷ 50,0	h8			-
6255			**222**	27,7 ÷ 100,0	h8		-	-
FLACHSENKER / Core Drills ■ mit festem Führungszapfen 180° / Counterbores								
6260		**Für Kernloch** For tap drill	**373**	M2 ÷ M12	z9			-
6261		**Gütegrad fein für Durchgangsloch** For through hole fine	**373**	M2 ÷ M12	z9			-
6262		**Für Kernloch** For tap drill	**373**	M2 ÷ M12	z9			-
FLACHSENKER / Core Drills ■ mit festem Führungszapfen 90° / Counterbores								
6263		**Für Kernloch** For tap drill	**1866**	M2 ÷ M10	z9			-
6264		**Gütegrad fein für Durchgangsloch** For through hole fine	**1866**	M2 ÷ M10	z9			-
6265		**Für Kernloch** For tap drill	**1866**	M2 ÷ M10	z9			-

AUFBOHRER / CORE DRILLS

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
		HSS	●	●	●	●	-	-	640
		HSS	●	●	●	●	-	-	641
		HSS	●	●	●	●	-	-	643
with solid pilot 180°									
		HSS	●	●	●	●	-	-	644
		HSS	●	●	●	●	-	-	644
		HSS	●	●	●	●	-	-	644
with solid pilot 90°									
		HSS	●	●	●	●	-	-	645
		HSS	●	●	●	●	-	-	645
		HSS	●	●	●	●	-	-	645

KEGELSENKER / COUNTERSINKS

KAT.-NR. ITEM	LÄNGE LENGTH	DIN	Ø mm	TOLERANZ TOLERANCE	SPITZENWINKEL POINT ANGLE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
KEGELSENKER 90° VHM / Countersinks 90° VHM							
6275 		**335C**	6,0 ÷ 31,0	-			-
KEGELSENKER 90° HSS / Countersinks 90° HSS							
6277 		**335C**	4,3 ÷ 30,0	-			-
6927 	**Sätze in Metallkassettten** sets in metal cases	**335C**	6,0 ÷ 20,5	-			-
6279 		**335D**	15,0 ÷ 80,0	-			-
KEGELSENKER 60° HSS / Countersinks 60° HSS							
6276 		**334C**	6,3 ÷ 25,0	-			-
6278 		**334D**	16,0 ÷ 80,0	-			-

KEGELSENKER / COUNTERSINKS

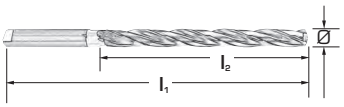
BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TF		VHM	●	●	●	●	❍	❍	648
TN TF		HSS	●	●	●	●	-	-	649
-		HSS	●	●	●	●	-	-	650
-		HSS	●	●	●	●	-	-	651
TN		HSS	●	●	●	●	-	-	646
-		HSS	●	●	●	●	-	-	647

DIN 344

Aufbohrer mit 3 Schneiden und Zylinderschaft, aus HSS

Core drills with 3 flutes and straight shank made of HSS







Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	l_1 mm	l_2 mm	Kleinster vorgebohrter Ø Min. hole size	6253
4,80	108	74	3,5	●
5,00	108	74	3,5	●
5,80	116	80	4,2	●
6,00	116	80	4,2	●
6,80	133	93	4,9	●
7,00	133	93	4,9	●
7,80	142	100	5,6	●
8,00	142	100	5,6	●
8,80	151	107	6,3	●
9,00	151	107	6,3	●
9,80	162	116	7,0	●
10,00	162	116	7,0	●
10,75	173	125	7,7	●
11,00	173	125	7,7	●
11,75	173	125	8,4	●
12,00	184	134	8,4	●
12,75	184	134	9,1	●
13,00	184	134	9,1	●
13,75	194	142	9,8	●
14,00	194	142	9,8	●
14,75	202	147	10,5	●
15,00	202	147	10,5	●
15,75	211	153	11,2	●
16,00	211	153	11,2	●

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	l_1 mm	l_2 mm	Kleinster vorgebohrter Ø Min. hole size	6253

Abweichende Untermaße und → 16 mm Ø auf Anfrage - Deviating sizes and sizes > 16 mm Ø upon request

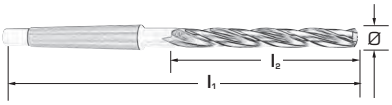
● Standardartikel / Items available ex stock

DIN 343

Aufbohrer mit 3 Schneiden und Morsekegel aus HSS

Core drills with 3 flutes and morse taper shank made of HSS







Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	l_1 mm	l_2 mm	Kleinster vorgebohrter Ø Min. hole size	MK MT	6251
7,80	156	75	5,6	1	●
8,00	156	75	5,6	1	●
8,80	162	81	6,3	1	●
9,00	162	81	6,3	1	●
9,80	168	87	7,0	1	●
10,00	168	87	7,0	1	●
10,75	175	94	7,7	1	●
11,00	175	94	7,7	1	●
11,75	175	94	8,4	1	●
12,00	182	101	8,4	1	●
12,75	182	101	9,1	1	●
13,00	182	101	9,1	1	●
13,75	189	108	9,8	1	●
14,00	189	108	9,8	1	●
14,75	212	114	10,5	2	●
15,00	212	114	10,5	2	●
15,75	218	120	11,2	2	●
16,00	218	120	11,2	2	●
16,75	223	125	11,9	2	●
17,00	223	125	11,9	2	●
17,75	228	130	12,6	2	●
18,00	228	130	12,6	2	●
18,70	233	135	13,3	2	●
19,00	233	135	13,3	2	●
19,70	238	140	14,0	2	●
20,00	238	140	14,0	2	●
20,70	243	145	14,6	2	●
21,00	243	145	14,6	2	●
21,70	248	150	15,3	2	●
22,00	248	150	15,3	2	●
22,70	253	155	16,0	2	●
23,00	253	155	16,0	2	●
23,70	281	160	16,6	3	●
24,00	281	160	16,6	3	●
24,70	281	160	17,3	3	●
25,00	281	160	17,3	3	●
25,70	286	165	18,0	3	●
26,00	286	165	18,0	3	●
26,70	291	170	18,6	3	●
27,00	291	170	18,6	3	●

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	l_1 mm	l_2 mm	Kleinster vorgebohrter Ø Min. hole size	MK MT	6251
27,70	291	170	19,3	3	●
28,00	291	170	19,3	3	●
28,70	296	175	20,0	3	●
29,00	296	175	20,0	3	●
29,70	296	175	20,5	3	●
30,00	296	175	20,5	3	●
30,60	301	180	21,0	3	●
31,00	301	180	21,0	3	●
31,60	306	185	22,0	3	●
32,00	334	185	22,0	4	●
32,60	334	185	23,0	4	●
33,00	334	185	23,0	4	●
33,60	339	190	24,0	4	●
34,00	339	190	24,0	4	●
34,60	339	190	25,0	4	●
35,00	339	190	25,0	4	●
35,60	344	195	25,5	4	●
36,00	344	195	25,5	4	●
36,60	344	195	26,0	4	●
37,00	344	195	26,0	4	●
37,60	349	200	26,5	4	●
38,00	349	200	26,5	4	●
38,60	349	200	27,0	4	●
39,00	349	200	27,0	4	●
39,60	349	200	28,0	4	●
40,00	349	200	28,0	4	●
40,60	354	205	28,5	4	●
41,00	354	205	28,5	4	●
41,60	354	205	29,0	4	●
42,00	354	205	29,0	4	●
42,60	359	210	30,0	4	●
43,00	359	210	30,0	4	●
43,60	359	210	30,5	4	●
44,00	359	210	30,5	4	●
44,60	359	210	31,0	4	●
45,00	359	210	31,0	4	●
45,60	364	215	32,0	4	●
46,00	364	215	32,0	4	●
46,60	364	215	32,5	4	●
47,00	364	215	32,5	4	●

Abweichende Abmessungen Preise auf Anfrage / Deviating sizes prices upon request

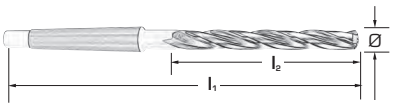
● Standardartikel / Items available ex stock

DIN 343

Aufbohrer mit 3 Schneiden und Morsekegel aus HSS

Core drills with 3 flutes and morse taper shank made of HSS







Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	l_1 mm	l_2 mm	Kleinster vorgebohrter Ø Min. hole size	MK MT	6251
47,60	369	220	33,0	4	●
48,00	369	220	33,0	4	●
48,60	369	220	34,0	4	●
49,00	369	220	34,0	4	●
49,60	369	220	34,5	4	●
50,00	369	220	34,5	4	●

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	l_1 mm	l_2 mm	Kleinster vorgebohrter Ø Min. hole size	MK MT	6251

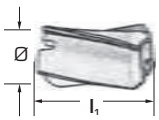
Abweichende Abmessungen Preise auf Anfrage / Deviating sizes prices upon request

● Standardartikel / Items available ex stock

DIN 222

Aufsteck-Aufbohrer aus HSS mit kegeliger Bohrung 1 : 30
Shell core drills, made of HSS with taper bore 1 : 30

bis Ø 75,00 mm: **4 Schneiden**
until Ø 75,00 mm: **4 flutes**
bis Ø 75,00 mm: **6 Schneiden**
above Ø 75,00 mm: **6 flutes**





Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	**Größter Ø der Kegelbohrung** Taper bore large end	**l_1 mm**	**Ø Kleinster vorgebohrter** Min. hole size	**6255**
23,7	13	45	20	✓
24,0	13	45	20	✓
24,7	13	45	21	✓
25,0	13	45	21	✓
25,7	13	45	22	✓
26,0	13	45	22	✓
26,7	13	45	23	✓
27,0	13	45	23	✓
27,7	13	45	24	✓
28,0	13	45	24	✓
29,7	13	45	26	✓
30,0	13	45	26	✓
31,6	13	45	28	✓
32,0	13	45	28	✓
32,6	13	45	29	✓
33,0	13	45	29	✓
33,6	13	45	30	✓
34,0	13	45	30	✓
34,6	13	45	31	✓
35,0	13	45	31	✓
35,6	16	50	32	✓
36,0	16	50	32	✓
36,6	16	50	33	✓
37,0	16	50	33	✓
37,6	16	50	34	✓
38,0	16	50	34	✓
39,6	16	50	36	✓
40,0	16	50	36	✓
41,6	16	50	38	✓
42,0	16	50	38	✓
43,6	16	50	40	✓
44,0	16	50	40	✓
44,6	16	50	41	✓
45,0	16	50	41	✓
45,6	19	56	41	✓
46,0	19	56	41	✓
46,6	19	56	41	✓
47,0	19	56	41	✓
47,6	19	56	42	✓
48,0	19	56	42	✓

Typ / Type	N
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm h8	**Größter Ø der Kegelbohrung** Taper bore large end	**l_1 mm**	**Ø Kleinster vorgebohrter** Min. hole size	**6255**
49,6	19	56	44	✓
50,0	19	56	44	✓
51,5	19	56	46	✓
52,0	19	56	46	✓
54,5	22	63	48	✓
55,0	22	63	48	✓
57,5	22	63	51	✓
58,0	22	63	51	✓
60,0	22	63	53	✓
62,0	22	63	55	✓
65,0	27	71	56	✓
68,0	27	71	58	✓
70,0	27	71	61	✓
72,0	27	71	63	✓
75,0	27	71	66	✓
78,0	32	80	68	✓
80,0	32	80	70	✓
82,0	32	80	72	✓
85,0	32	80	75	✓
88,0	32	80	78	✓
90,0	32	80	80	✓
92,0	40	90	80	✓
95,0	40	90	83	✓
98,0	40	90	86	✓
100,0	40	90	88	✓

Abweichende Abmessungen Preise auf Anfrage / Deviating sizes prices upon request

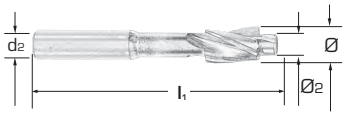
● Standardartikel / Items available ex stock - ✓ Auf Anfrage/ Upon request

DIN 373

Flachsenker mit festem Führungszapfen 180°
Counterbores with solid pilot 180°

6260 Für Kernloch / For tap drill
6261 Gütegrad fein für Durchgangsloch / for through hole fine
6262 Gütegrad mittel für Durchgangsloch / for through hole middle







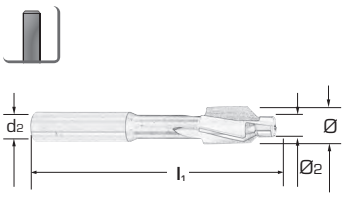
Typ / Type							180°	180°	180°
Schneidrichtung Cutting direction									
Schneidstoff / Material							HSS	HSS	HSS
für Gewinde For thread	**l_1 mm**	**Ø z9**	**$Ø_2$ e8 6260**	**$Ø_2$ e8 6261**	**$Ø_2$ e8 6262**	**d_2 h9**	**6260**	**6261**	**6262**
M 2	56	4,3	1,6	2,2	2,4	4,3	●	●	●
M 3	71	6	2,5	3,2	3,4	6,0	●	●	●
M 4	71	8	3,3	4,3	4,5	8,0	●	●	●
M 5	80	10	4,2	5,3	5,5	10,0	●	●	●
M 6	80	11	5,0	6,4	6,6	11,0	●	●	●
M 8	100	15	6,8	8,4	9,0	12,5	●	●	●
M 10	100	18	8,5	10,5	11,0	12,5	●	●	●
M 12	100	20	10,2	13,0	14,0	12,5	●	●	●

● Standardartikel / Items available ex stock

DIN 1866

Flachsenker mit festem Führungszapfen 90°
Counterbores with solid pilot 90°

6263 Für Kernloch / For tap drill
6264 Gütegrad fein für Durchgangsloch / for through hole fine
6265 Gütegrad mittel für Durchgangsloch / for through hole middle





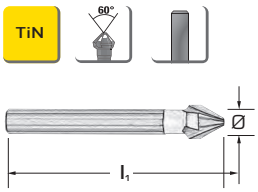
Typ / Type							90°	90°	90°
Schneidrichtung Cutting direction									
Schneidstoff / Material							HSS	HSS	HSS
für Gewinde For thread	**l_1 mm**	**Ø z9**	**$Ø_2$ e8 6263**	**$Ø_2$ e8 6264**	**$Ø_2$ e8 6265**	**d_2 h9**	**6263**	**6264**	**6265**
M 2	56	4,3	1,6	2,2	2,4	4,3	●	●	●
M 3	71	6	2,5	3,2	3,4	6,0	●	●	●
M 4	80	8	3,3	4,3	4,5	8,0	●	●	●
M 5	80	10	4,2	5,3	5,5	10,0	●	●	●
M 6	80	11,5	5,0	6,4	6,6	11,5,0	●	●	●
M 8	100	15	6,8	8,4	9,0	12,5	●	●	●
M 10	100	19	8,5	10,5	11,0	12,5	●	●	●

● Standardartikel / Items available ex stock

DIN 334 C

Kegelsenker 60°, mit 3 Schneiden, aus HSS hinterschliffen, für riefenfreies Arbeiten
Countersinks 60°, with 3 flutes,
made of HSS relieved, for chatter free operation

Form C / Form C: **mit Zylinderschaft** with straight shank





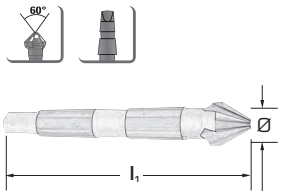
Form / Form					C	C
Senkwinkel Included angle					60°	60°
Schneidrichtung Cutting direction						
Schneidstoff / Material					HSS	HSS
größter Ø large Ø	**kleinster Ø** small Ø	**l_1 mm**	**Schaft Ø** shank Ø h9		**6276**	**6276 TN**
6,3	1,6	45	5		●	●
8,0	2,0	50	6		●	●
12,5	3,2	56	8		●	●
16,0	4,0	63	10		●	●
20,0	5,0	67	10		●	●
25,0	6,3	71	10		●	●

● Standardartikel / Items available ex stock

DIN 334 D

Kegelsenker 60°, mit 3 Schneiden, aus HSS hinterschliffen, für riefenfreies Arbeiten
Countersinks 60°, with 3 flutes,
made of HSS relieved, for chatter free operation

Form D / Form D: **mit Morsekegel** with morse taper shank





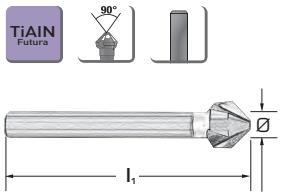
Form / Form					D
Senkwinkel Included angle					60°
Schneidrichtung Cutting direction					
Schneidstoff / Material					HSS
größter Ø large Ø	**kleinster Ø** small Ø	**l_1 mm**	**MK** MT		**6278**
16,0	4,0	90	1		●
20,0	5,0	106	2		●
25,0	6,3	112	2		●
31,5	10,0	118	2		●
40,0	12,5	150	3		●
50,0	16,0	160	3		●
63,0	20,0	190	4		●
80,0	25,0	200	4		●

● Standardartikel / Items available ex stock

DIN 335 C

Kegelsenker 90° mit 3 Schneiden und Zylinderschaft, aus VHM für riefenfreies Arbeiten

Countersinks 90° with 3 flutes and straight shank, made of VHM for chatter free operation





Form / Form	C	C
Senkwinkel Included angle	90°	90°
Schneidrichtung Cutting direction		
Schneidstoff / Material	VHM	VHM

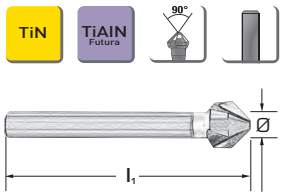
Ø mm	Form C Ausführung fein Form C fine	Form C Ausführung mittel Form C medium	l_1 mm	minimum Ø small Ø	Schaft Ø shank Ø	6275	6275 TF
6,0	M 3	-	40	2,0	5	●	●
6,3	-	-	45	2,0	5	●	●
8,0	M 4	M 3,5	45	2,0	6	●	●
8,3	-	-	50	2,0	6	●	●
10,0	M 5	M 4	46	2,5	8	●	●
10,4	-	-	50	2,5	8	●	●
11,5	M 6	M 5	56	2,8	8	●	●
12,4	-	-	56	2,8	8	●	●
15,0	M 8	M 6	60	3,2	10	●	●
16,5	-	-	60	3,2	10	●	●
20,5	-	-	63	3,5	10	●	●
25,0	-	-	67	3,8	10	●	●
31,0	-	-	71	4,2	12	●	●

● Standardartikel / Items available ex stock

DIN 335 C

Kegelsenker 90° mit 3 Schneiden und Zylinderschaft, aus VHM für riefenfreies Arbeiten

Countersinks 90° with 3 flutes and straight shank, made of HSS relieved, for chatter free operation





Form / Form	C	C	C
Senkwinkel Included angle	90°	90°	90°
Schneidrichtung Cutting direction			
Schneidstoff / Material	HSS	HSS	HSS

Ø mm	Form C Ausführung fein Form C fine	Form C Ausführung mittel Form C medium	l_1 mm	minimum Ø small Ø	Schaft Ø shank Ø	6277	6277 TN	6277 TF
4,3	M	2 ,8	40	1,3	4	●		
5,0	M	2,5	40	1,5	4	●		
5,3	-	-	40	1,5	4	●		
5,8	-	-	45	1,5	5	●		
6,0	M	3 ,5	45	1,5	5	●		
6,0	M 3	M 2,5	45	1,5	5	●	●	●
6,3	-	-	45	1,5	5	●	-	-
7,0	M 3,5	M 3	50	1,8	6	●	●	●
7,3	-	-	50	1,8	6	●	-	-
8,0	M 4	M 3,5	50	2,0	6	●	●	●
8,3	-	-	50	2,0	6	●	●	●
9,4	-	-	50	2,2	6	●	-	-
10,0	M 5	M 4	50	2,5	6	●	●	●
10,4	-	-	50	2,5	6	●	●	●
11,5	M 6	M 5	56	2,8	8	●	●	●
12,4	-	-	56	2,8	8	●	●	●
13,4	-	-	56	2,9	8	●	-	-
15,0	M 8	M 6	60	3,2	10	●	●	●
16,5	-	-	60	3,2	10	●	●	●
19,0	M 10	M 8	63	3,5	10	●	●	●
20,5	-	-	63	3,5	10	●	●	●
23,0	M 12	M 10	67	3,8	10	●	●	●
25,0	-	-	67	3,8	10	●	●	●
30,0	-	-	71	4,2	12	●	●	●

● Standardartikel / Items available ex stock

DIN 335 C

Kegelsenker 90° mit Zylinderschaftaus HSS
Countersinks 90° with straight shank made of HSS

Sätze in Metallkassettten
Set in metal cases



Form / Form			C
Senkwinkel Included angle			90°
Schneidrichtung Cutting direction			
Schneidstoff / Material			HSS
Kegelsenker pro Satz No. of countersinks per set	**Inhalt 1 Stück pro Ø mm** set consists 1 piece per Ø mm **6927 A**	**Inhaltt 1 Stück pro Ø mm** set consists 1 piece per Ø mm **6927 B**	**6927***
	6,0 - 8,0	6,3 - 8,3	●
6	10,0 - 11,5	10,4 - 12,4	●
	15,0 - 19,0	16,5 - 20,5	●

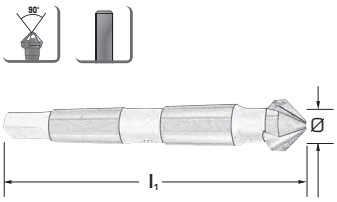
*Bei Bestellung bitte Kat. Nr. 6927A oder 6927B / When ordering please state cat. no 6927A or 6927B

● Standardartikel / Items available ex stock

DIN 335 D

Kegelsenker 90° mit 3 Schneiden und Morsekegel, aus HSS hinterschliffen, für riefenfreies Arbeiten

Countersinks 90° with 3 flutes and Morse taper shank, made of HSS relieved, for chatter free operation

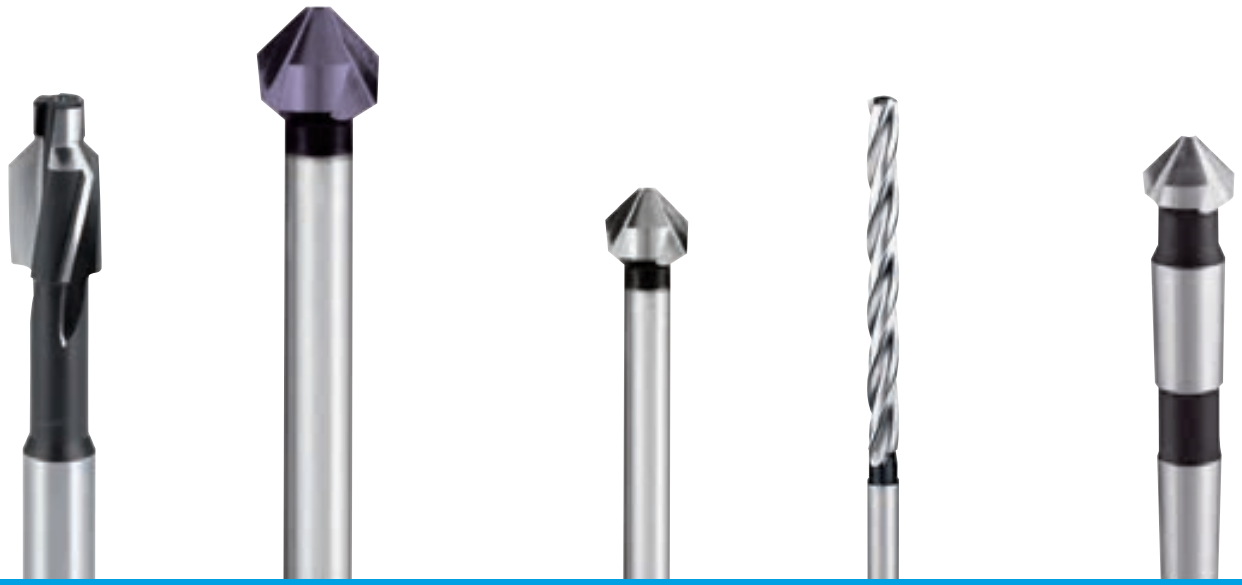




Form / Form	D
Senkwinkel Included angle	90°
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

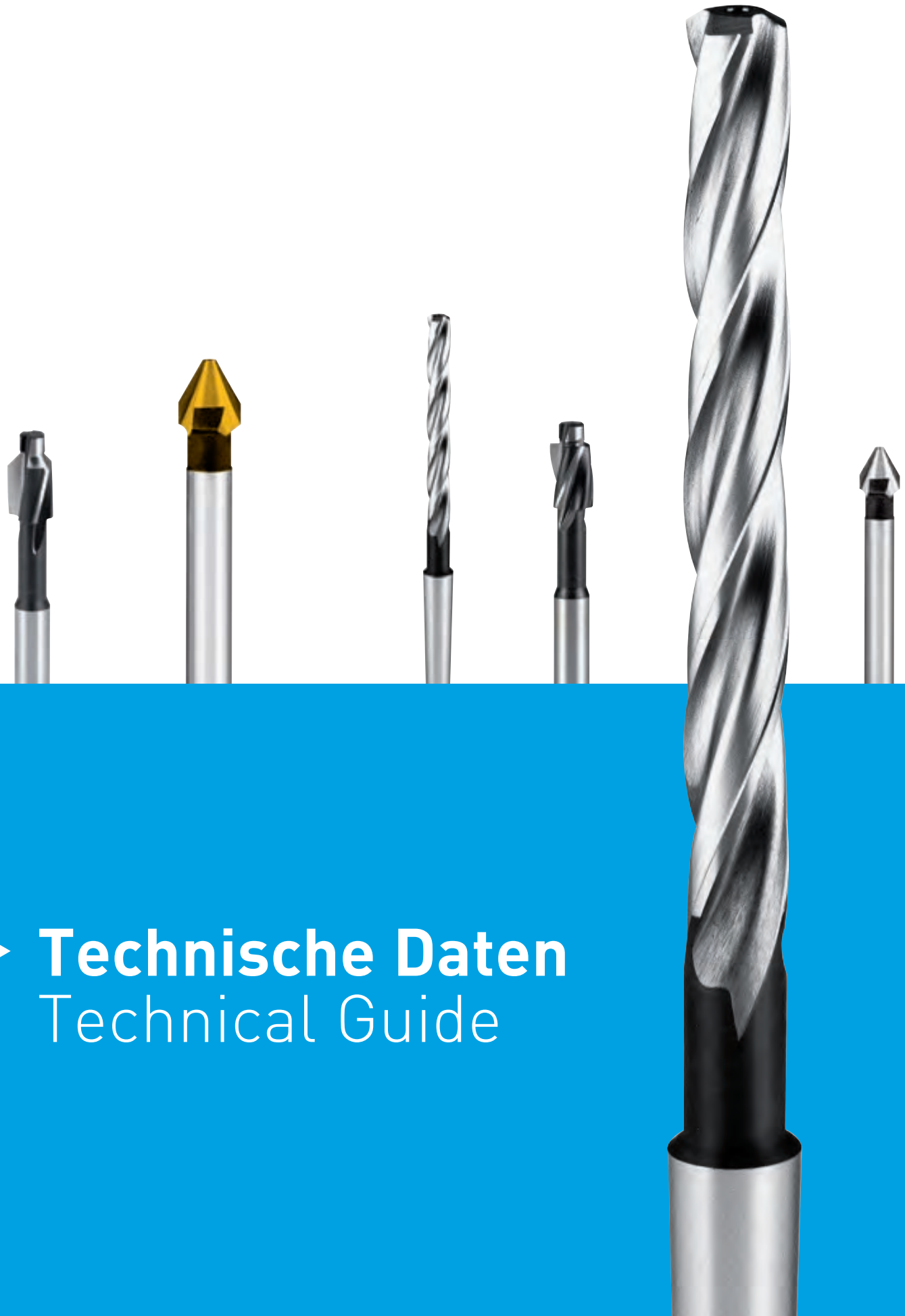
Ø mm	Form D Ausführung fein Form D fine	Form D Ausführung mittel Form D medium	l_1 mm	minimum Ø small Ø	MK MT	6279
15	M 8	M 6	85	3,2	1	●
16,5	-	-	85	3,2	1	●
19	M 10	M 8	100	3,5	2	●
20,5	-	-	100	3,5	2	●
23	M 12	M 10	106	3,8	2	●
25	-	-	106	3,8	2	●
26	M 14	M 12	106	3,8	2	●
28	-	-	112	4,0	2	●
30	M 16	M 14	112	4,2	2	●
31	-	-	112	4,2	2	●
34	M 18	M 16	118	4,5	2	●
37	M 20	M 18	118	4,8	2	●
40	-	-	140	10,0	3	●
50	-	-	150	14,0	3	●
63	-	-	180	16,0	4	●
80	-	-	190	22,0	4	●

● Standardartikel / Items available ex stock



Aufbohrer ▪ Kegelsenker

Core Drills ▪ Countersinks



▶ Technische Daten
Technical Guide

TECHNISCHE DATEN
TECHNICAL DATA



Typ Type					N						
ILIX Typ-siehe Seite Ilix Type -See page			636		636		636		636		636
DIN			**344**		**343**		**222**		**373**		**1866**
Schneidrichtung Cutting direction											
Schneidstoff Material			HSS		HSS		HSS		HSS		HSS
Spitzenwinkel Point angle			-		-		-		180°		90°
Beschichtung Coating			BL		BL		BL		BL		BL
			6253		**6251**		**6255**		**6260 6261 6262**		**6263 6264 6265**
			VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
P	**< 800 N/mm²**		25	8	25	8	25	8	25	8	25	8
P	**700-1000 N/mm²**		20	7	20	7	20	7	20	7	20	7
P	**1000-1300 N/mm²**		15	6	15	6	15	6	15	6	15	6
M	**Austenitisch**		6	3	6	3	6	3	6	3	6	3
M	**Austenitisch / ferritisch**		5	4	5	4	5	4	5	4	5	4
K	**GG**		13	9	13	9	13	9	13	9	13	9
K	**GGG**		10	8	10	8	10	8	10	8	10	8
N	**Aluminium**		45	10	45	10	45	10	45	10	45	10
N	**NE-Metalle**		35	10	35	10	35	10	35	10	35	10
S	**Titan**		4	3	4	3	4	3	4	3	4	3
S	**Sonderlegierungen basiert auf Ni**		4	2	4	2	4	2	4	2	4	2
H	**Gehärteter Stahl 38 / 48 HRC**		8	2	8	2	8	2	8	2	8	2
H	**Gehärteter Stahl 48 / 58 HRC**		-	-	-	-	-	-	-	-	-	-
H	**Gehärteter Stahl 58 / 68 HRC**		-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA



| | | |



Reibahlen
Reamers





ILIX PRECISION



Reibahlen
Reamers

▶ Zeichenerklärung
Key to symbols

SCHNEIDSTOFF / TOOL MATERIAL

HSS

HSS-CO

PKD

CERMET

K 10/20
Metallo duro / Micrograna
Solid carbide / Micro grain

BESCHICHTUNG / COATING

TN
TiN

▶ Werkzeug-Auswahlhilfe
Tool selection guide

HAND - REIBAHLEN / HAND REAMERS

KAT.-NR. ITEM	DIN	FORM FORM	Ø mm	TOLERANZ TOLERANCE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
REIBAHLEN ■ Gerade genutet und 7-8° linksdrall - straight and 7-8° Helix						
6301 	**206**	A	1,0 ÷ 50,0	H7		-
6302 	**206**	B	1,0 ÷ 50,0	H7		-
REIBAHLEN ■ Nachstellbar – Nachstellbereich max. 1 % über dem Nenndurchmesser						
6306 	**859**	A	4,0 ÷ 30,0	-		-
6309 	**859**	B	8,0 ÷ 30,0	-		-
REIBAHLEN ■ Hand-Kegelreibahlen – Kegel 1 : 50 - Hand taper pin reamers, taper 1 : 50						
6315 	**9**	A	0,8 ÷ 30,0	-		-
6304 	**9**	B	1,5 ÷ 50,0	-		-
REIBAHLEN ■ Hand-Kegelreibahlen für Morsekegel nach DIN 228 - taper socket						
6317 	**204**	C	MK/MT 0 ÷ MK/MT 6	-		-
6312 	**204**	-	MK/MT 0 ÷ MK/MT 6	-		-

HAND - REIBAHLEN / HAND REAMERS

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS	●	●	●	●	-	-	670
-		HSS	●	●	●	●	-	-	670
- Adjustable range		of expansion max. 1 % Over nominal size							
-		HSS	●	●	●	●	-	-	673
-		HSS	●	●	●	●	-	-	673
-		HSS	●	●	●	●	-	-	695
-		HSS	●	●	●	●	-	-	695
reamer – finishing for		taper sleeves acc. To Din 228							
-		HSS	●	●	●	●	-	-	702
-		HSS	●	●	●	●	-	-	702

MASCHINEN - REIBAHLEN / MACHINE CHUCKING REAMERS

KAT.-NR. ITEM	DIN	FORM FORM	Ø mm	TOLERANZ TOLERANCE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
REIBAHLEN ■ Kurz für automaten – 7-8° linksdrall - short for automatic machines						
6324 	**8089**	B/D	1,5 ÷ 20,0	H7		-
REIBAHLEN ■ Gerade genutet - straight flutes						
6321 	**212**	A/C	1,5 ÷ 20,0	H7		-
6333 	**208**	A	5,0 ÷ 32,0	H7		-
6361 	**219**	A	25,0 ÷ 100,0	H7	-	-
REIBAHLEN ■ 7 – 8° Linksdrall (1/100 Abstufung) - Helix 7-8° (progression of 0,01 mm)						
6326 	**212**	B/D	1,0 ÷ 20,0	H7		-
6326C 	**212**	B/D	0,95 ÷ 16,10	-		-
6337 	**208**	B	5,0 ÷ 40,0	H7		-
6360 	**219**	B	25,0 ÷ 100,0	H7	-	-

MASCHINEN - REIBAHLEN / MACHINE CHUCKING REAMERS

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
– 7-8° Helix									
-		HSS-CO	●	●	●	●	●	-	674
-		HSS-CO	●	●	●	●	●	-	675
-		HSS-CO	●	●	●	●	●	-	688
-		HSS	●	●	●	●	●	-	693
TN		HSS-CO	●	●	●	●	●	-	675
-		HSS-CO	●	●	●	●	●	-	683
-		HSS-CO	●	●	●	●	●	-	688
-		HSS	●	●	●	●	●	-	693

MASCHINEN - REIBAHLEN / MACHINE CHUCKING REAMERS

KAT.-NR. ITEM	DIN	FORM FORM	Ø mm	TOLERANZ TOLERANCE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
REIBAHLEN ■ 45° Schäldrall - 45° Helix						
6325 	**212**	E	1,0 ÷ 20,0	H7		-
6335 	**208**	C	5,0 ÷ 32,0	H7		-
6362 	**219**	C	25,0 ÷ 100,0	H7	-	-
REIBAHLEN ■ Spreizreibahlen für Fertigungs und Reparaturarbeiten zum erreichen applications to obtain narrower tolerances)						
6307 	**ILIX NORM**	-	8,0 ÷ 20,0	-		-
REIBAHLEN ■ Kegel-schälreibahlen - kegel 1 : 50 - Taper pin reamers - taper 1:50						
6313	**2179**		1,0 ÷ 12,0	-		-
6314 	**2180**		5,0 ÷ 20,0	-		-

HSS

MASCHINEN KEGEL REIBAHLEN / MACHINE TAPER REAMERS

REIBAHLEN

6308 	**ILIX NORM**	-	3,0 ÷ 45,0	-		-

MASCHINEN - REIBAHLEN / MACHINE CHUCKING REAMERS

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
-		HSS-CO	●	●	●	●	●	-	675
-		HSS-CO	●	●	●	●	●	-	688
-		HSS	●	●	●	●	●	-	693

von engeren Toleranzen - Taper shank expansion reamers for maintenance and rework

-		HSS-CO	●	●	●	●	-	-	692
-		HSS	●	●	●	●	-	-	697
-		HSS	●	●	●	●	-	-	698

HSS

MASCHINEN KEGEL REIBAHLEN / MACHINE TAPER REAMERS

-		HSS	●	●	●	●	-	-	701

MASCHINEN KEGEL REIBAHLEN / MACHINE TAPER REAMERS

KAT.-NR. ITEM	DIN	FORM FORM	Ø mm	TOLERANZ TOLERANCE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
REIBAHLEN ■ Kegelreibahle für NPT/NPTF Gewinde - Taper pin reamer for						
6310 	**ILIX NORM**	-	1/16" ÷ 2''	-		-
6311 	**ILIX NORM**	-	1/16" ÷ 2''	-		-
REIBAHLEN ■ Kegel-Schälreibahlen (nf: französische norm) – Kegel 1 : 50 -						
6319 	**E 60-011**	NF	1,00 ÷ 4,5	-		-
REIBAHLEN ■ Nietloch-Reibahlen mit Morsekegel - Bridge reamers with morse taper						
6355 	**331**	-	6,4 ÷ 32,0	-		-
REIBAHLEN ■ Kegel-Reibahlen, Kegel 1 : 100 (Kleinstreibahlen mit 3 Schneiden Kat.						
6318 	**ILIX NORM**	-	1,2 ÷ 1,9	-		-
6303 	**ILIX NORM**	-	1,5 ÷ 20,0	-		-

VHM / SOLID CARBIDE
MASCHINEN - REIBAHLEN / MACHINE TAPER

REIBAHLEN ■ Vollhartmetall-Reibahlen Hartmetall K 10 / 20 - solid carbide machine						
6369 	**ILIX NORM**	-	5,0 ÷ 20,0	H7		-

* Bis zu 20 mm Durchmesser aus Vollhartmetall, über Hartmetall bestückt / up to Ø 20 mm made of solid carbide, above carbide tipped

MASCHINEN KEGEL REIBAHLEN / MACHINE TAPER REAMERS

BESCHICHTUNG COATING	SCHNEIDRICHTUNG CUTTING DIRECT.	SCHNEIDSTOFF TOOL MATERIAL	P	M	K	N	S	H	Seite Page
NPT/NPTF thread									
-		HSS	●	●	●	●	-	-	**699**
-		HSS	●	●	●	●	-	-	**700**
Taper pin reamers (nf: french standard) – taper 1 : 50									
-		HSS	●	●	●	●	-	-	**696**
-		HSS	●	●	●	●	-	-	**703**
-Nr.6318) - Taper pin reamers, taper 1 : 100 (3 fluted micro reamers, cat.-No.6318)									
-		HSS	●	●	●	●	-	-	**694**
-		HSS	●	●	●	●	-	-	**694**

VHM / SOLID CARBIDE
MASCHINEN - REIBAHLEN / MACHINE TAPER

reamers* - carbide grade k 10/20									
-		VHM	●	●	●	●	●	-	**690**

MASCHINEN - REIBAHLEN / MACHINE TAPER

KAT.-NR. ITEM	DIN	FORM FORM	Ø mm	TOLERANZ TOLERANCE	SCHAFT SHANK	KÜHLUNG INTERNAL COOLANT
REIBAHLEN ■ VHM-** solid carbide machine reamers**						
6372 	**ILIX NORM**	-	1,0 ÷ 20,0	H7		-
6372C 	**ILIX NORM**	-	0,98 ÷ 12,05	-		-
6370 	**ILIX NORM**	-	4,0 ÷ 20,0	H7		
6371 	**ILIX NORM**	-	4,0 ÷ 20,0	H7		
6376 	**ILIX NORM**	-	5,0 ÷ 20,0	H7		-
REIBAHLEN ■ in Cermet - Cermet						
6323 	**ILIX NORM**	-	3,5 ÷ 20,00	H7		-
REIBAHLEN ■ in PKD - PKD						
6373 	**ILIX NORM**	-	6,0 ÷ 20,00	H7		

** Bis zu 12.20 mm Durchmesser aus Vollhartmetall, über Hartmetall bestück / up to Ø 12,20 mm made of solid carbide, above carbide tipped

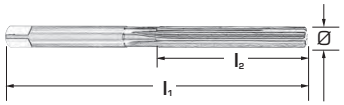
MASCHINEN - REIBAHLEN / MACHINE TAPER

BESCHICHTUNG COATING	**SCHNEIDRICHTUNG** CUTTING DIRECT.	**SCHNEIDSTOFF** TOOL MATERIAL	P	M	K	N	S	H	Seite Page
TN		VHM	●	●	●	●	-	-	**679**
-		VHM	●	●	●	●	-	-	**684**
-		VHM	●	●	●	●	-	-	**681**
-		VHM	●	●	●	●	-	-	**682**
-		VHM	●	●	●	●	-	-	**691**
-		CERMET	●	●	●	●	-	-	**686**
-		PKD	-	-	-	●	-	-	**687**

DIN 206 A/B

Hand-Reibahlen aus HSS
für Bohrungen mit Passung H7
Hand reamers made of HSS
to produce holes with H7 tolerances







Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS

Ø mm	l_1 mm	l_2 mm	6301	6302
1,0**	37	12	●	●
1,1**	40	15	●	●
1,2**	40	15	●	●
1,3**	40	15	●	●
1,4	41	20	●	●
1,5	41	20	●	●
1,6	44	21	●	●
1,7	44	21	●	●
1,8	47	23	●	●
1,9	47	23	●	●
2,0	50	25	●	●
2,1	50	25	●	●
2,2	54	27	●	●
2,3	54	27	●	●
2,4	58	29	●	●
2,5	58	29	●	●
2,6	58	29	●	●
2,7	62	31	●	●
2,8	62	31	●	●
2,9	62	31	●	●
3,0	62	31	●	●
3,1	66	33	●	●
3,2	66	33	●	●
3,3	66	33	●	●
3,4	71	35	●	●
3,5	71	35	●	●
3,6	71	35	●	●
3,7	71	35	●	●
3,8	76	38	●	●
3,9	76	38	●	●
4,0	76	38	●	●
4,1	76	38	●	●
4,2	76	38	●	●
4,3	81	41	●	●
4,4	81	41	●	●
4,5	81	41	●	●
4,6	81	41	●	●
4,7	81	41	●	●

Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS

Ø mm	l_1 mm	l_2 mm	6301	6302
4,8	87	44	●	●
4,9	87	44	●	●
5,0	87	44	●	●
5,1	87	44	●	●
5,2	87	44	●	●
5,3	87	44	●	●
5,4	93	47	●	●
5,5	93	47	●	●
5,6	93	47	●	●
5,7	93	47	●	●
5,8	93	47	●	●
5,9	93	47	●	●
6,0	93	47	●	●
6,1	100	50	●	●
6,2	100	50	●	●
6,3	100	50	●	●
6,4	100	50	●	●
6,5	100	50	●	●
6,6	100	50	●	●
6,7	100	50	●	●
6,8	107	54	●	●
6,9	107	54	●	●
7,0	107	54	●	●
7,1	107	54	●	●
7,2	107	54	●	●
7,3	107	54	●	●
7,4	107	54	●	●
7,5	107	54	●	●
7,6	115	58	●	●
7,7	115	58	●	●
7,8	115	58	●	●
7,9	115	58	●	●
8,0	115	58	●	●
8,1	115	58	●	●
8,2	115	58	●	●
8,3	115	58	●	●
8,4	115	58	●	●
8,5	115	58	●	●

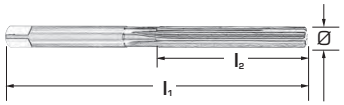
**ILIX Norm

● Standardartikel / Items available ex stock

DIN 206 A/B

Hand-Reibahlen aus HSS
für Bohrungen mit Passung H7
Hand reamers made of HSS
to produce holes with H7 tolerances







Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
Ø mm / l_1 mm / l_2 mm	**6301**	**6302**
8,6 / 124 / 62	●	●
8,7 / 124 / 62	●	●
8,8 / 124 / 62	●	●
8,9 / 124 / 62	●	●
9,0 / 124 / 62	●	●
9,1 / 124 / 62	●	●
9,2 / 124 / 62	●	●
9,3 / 124 / 62	●	●
9,4 / 124 / 62	●	●
9,5 / 124 / 62	●	●
9,6 / 133 / 66	●	●
9,7 / 133 / 66	●	●
9,8 / 133 / 66	●	●
9,9 / 133 / 66	●	●
10,0 / 133 / 66	●	●
10,1 / 133 / 66	●	-
10,2 / 133 / 66	●	-
10,3 / 133 / 66	●	-
10,4 / 133 / 66	●	-
10,5 / 133 / 66	●	●
10,6 / 133 / 66	●	-
10,7 / 142 / 71	●	-
10,8 / 142 / 71	●	-
10,9 / 142 / 71	●	-
11,0 / 142 / 71	●	●
11,1 / 142 / 71	●	-
11,2 / 142 / 71	●	-
11,3 / 142 / 71	●	-
11,4 / 142 / 71	●	-
11,5 / 142 / 71	●	●
11,6 / 142 / 71	●	-
11,7 / 142 / 71	●	-
11,8 / 142 / 71	●	-
11,9 / 152 / 76	●	-
12,0 / 152 / 76	●	●
12,5 / 152 / 76	●	-
13,0 / 152 / 76	●	-
13,5 / 163 / 81	●	-

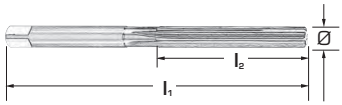
Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
Ø mm / l_1 mm / l_2 mm	**6301**	**6302**
14,0 / 163 / 81	●	●
14,5 / 163 / 81	●	●
15,0 / 163 / 81	●	●
15,5 / 175 / 87	●	●
16,0 / 175 / 87	●	●
16,5 / 175 / 87	●	●
17,0 / 175 / 87	●	●
17,5 / 188 / 93	●	●
18,0 / 188 / 93	●	●
18,5 / 188 / 93	●	●
19,0 / 188 / 93	●	●
19,5 / 201 / 100	●	●
20,0 / 201 / 100	●	●
20,5 / 201 / 100	●	●
21,0 / 201 / 100	●	●
21,5 / 201 / 100	●	●
22,0 / 215 / 107	●	●
22,5 / 215 / 107	●	●
23,0 / 215 / 107	●	●
23,5 / 215 / 107	●	●
24,0 / 231 / 115	●	●
24,5 / 231 / 115	-	●
25,0 / 231 / 115	●	●
25,5 / 231 / 115	●	●
26,0 / 231 / 115	●	●
26,5 / 231 / 115	●	●
27,0 / 247 / 124	●	●
27,5 / 247 / 124	-	●
28,0 / 247 / 124	●	●
28,5 / 247 / 124	●	●
29,0 / 247 / 124	●	●
29,5 / 247 / 124	●	●
30,0 / 247 / 124	●	■
31,0 / 265 / 133	●	●
32,0 / 265 / 133	●	●
33,0 / 265 / 133	●	●
34,0 / 284 / 142	●	●
35,0 / 284 / 142	●	●

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 206 A/B

Hand-Reibahlen aus HSS
für Bohrungen mit Passung H7
Hand reamers made of HSS
to produce holes with H7 tolerances







Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
Ø mm / l_1 mm / l_2 mm	6301	6302
36,0 / 284 / 142	●	●
37,0 / 284 / 142	●	●
38,0 / 305 / 152	●	●
39,0 / 305 / 152	●	●
40,0 / 305 / 152	●	●
41,0 / 305 / 152	●	●
42,0 / 305 / 152	●	●
43,0 / 326 / 163	●	●
44,0 / 326 / 163	●	●
45,0 / 326 / 163	●	●
46,0 / 326 / 163	●	●
47,0 / 326 / 163	●	●
48,0 / 347 / 174	●	●
49,0 / 347 / 174	●	●
50,0 / 347 / 174	●	●

Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
Ø mm / l_1 mm / l_2 mm	6301	6302

Durchmesser Diameter range	6301 Anzahl der Schneiden No. of cutting lips	6302 Anzahl der Schneiden No. of cutting lips
2,40 mm	3	3
2,50 mm - 3,90 mm	5	5
4,00 mm - 12,90 mm	6	6
13,00 mm - 23,50 mm	8	8
24,00 mm - 33,00 mm	10	10
34,00 mm - 45,00 mm	12	12
>46,00 mm	14	14

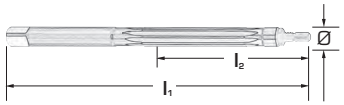
**ILIX Norm

● Standardartikel / Items available ex stock

DIN 859 A/B

Nachstellbare Hand-Reibahlen aus HSS
Nachstellbereich max. 1 % über dem Nenndurchmesser
Adjustable hand reamers made of HSS
range of expansion max. 1 % over nominal size







Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
Ø mm / l_1 mm / l_2 mm	6306	6309
4 / 76 / 38	●	-
5 / 87 / 44	●	-
6 / 93 / 47	●	-
7 / 107 / 54	●	-
8 / 115 / 58	●	●
9 / 124 / 62	●	●
10 / 133 / 66	●	●
11 / 142 / 71	●	●
12 / 152 / 76	●	●
13 / 152 / 76	●	●
14 / 163 / 81	●	●
15 / 163 / 81	●	●
16 / 175 / 87	●	●
17 / 175 / 87	●	●
18 / 188 / 93	●	●
19 / 188 / 93	●	●
20 / 201 / 100	●	●
21 / 201 / 100	●	●
22 / 215 / 107	●	●
23 / 215 / 107	●	●
24 / 231 / 115	●	●
25 / 231 / 115	●	●
26 / 231 / 115	●	●
28 / 247 / 124	●	●
30 / 247 / 124	●	●

Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
Ø mm / l_1 mm / l_2 mm	6306	6309

Vierkant nach DIN 10 / square acc. to DIN 10

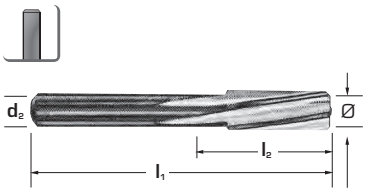
Alle nicht aufgeführten Durchmesser sind Zwischenmaße. Preise auf Anfrage
All items not listed herein are intermediate sizes. Prices upon request.

● Standardartikel / Items available ex stock

DIN 8089 B/D

Kurze Maschinen-Reibahlen mit Zylinderschaft aus HSS-Co für Bohrungen mit Passung H7, für Automaten

Short machine chucking reamers with straight shank, made of HSS-Co to produce holes with H7 tolerance, for automatic machines





Form / Form	B/D
Typ / Type	Schneiden 7/8° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS-Co

Ø mm	l_1 mm	l_2 mm	d_2 h9	6324
1,5	45	12	2,00	●
2,0	50	16	2,00	●
2,5	56	18	3,00	●
3,0	56	18	3,00	●
3,5	63	22	4,00	●
4,0	56	20	3,55	●
4,5	63	22	4,00	●
5,0	63	22	4,00	●
5,5	63	22	5,00	●
6,0	63	22	5,00	●
6,5	63	22	5,00	●
7,0	71	25	6,30	●
7,5	71	25	6,30	●
8,0	71	25	6,30	●
8,5	71	25	6,30	●
9,0	71	25	8,00	●
9,5	71	25	8,00	●
10,0	71	25	8,00	●
11,0	80	28	10,00	●
12,0	80	28	10,00	●
13,0	80	28	10,00	●
14,0	90	32	12,50	●
15,0	90	32	12,50	●
16,0	90	32	12,50	●
17,0	90	32	12,50	●
18,0	100	36	16,00	●
19,0	100	36	16,00	●
20,0	100	36	16,00	●

Form / Form	B/D
Typ / Type	Schneiden 7/8° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS-Co

Ø mm	l_1 mm	l_2 mm	d_2 h9	6324

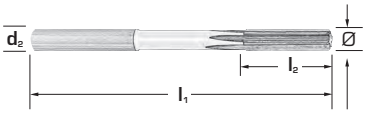
● Standardartikel / Items available ex stock

DIN 212 A/C-B/D-E

Maschinen-Reibahlen mit Zylinderschaft aus HSS-Co
für Bohrungen mit Passung H7

Machine chucking reamers with straight shank, made of HSS-Co
to produce holes with H7 tolerance

TiN





Form / Form				A/C	E	B/D	B/D
Typ / Type				Schneiden gerade straight	Schneiden 45° LH	Schneiden 7/8° LH	Schneiden 7/8° LH
Schneidrichtung Cutting direction							
Schneidstoff Material				HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm	**l_1 mm**	**l_2 mm**	**d_2 h9**	**6321**	**6325**	**6326**	**6326 TN**
1,0•	37	5	1,0	●	●	●	●
1,1•	40	7	1,1	●	●	●	●
1,2•	40	7	1,2	●	●	●	●
1,3•	40	7	1,3	●	●	●	●
1,4	40	8	1,4	●	●	●	●
1,5	40	8	1,5	●	●	●	●
1/16"	43	9	1,588	-	-	●	●
1,6	43	9	1,6	●	●	●	●
1,7	43	9	1,7	●	●	●	●
1,8	46	10	1,8	●	●	●	●
1,9	46	10	1,9	●	●	●	●
2,0	49	11	2,0	●	●	●	●
2,1	49	11	2,1	●	●	●	●
2,2	53	12	2,2	●	●	●	●
2,3	53	12	2,3	●	●	●	●
3/32"	57	14	2,382	-	-	●	●
2,4	57	14	2,4	●	●	●	●
2,5	57	14	2,5	●	●	●	●
2,6	57	14	2,6	●	●	●	●
2,7	61	15	2,7	●	●	●	●
7/64"	61	15	2,779	-	-	●	●
2,8	61	15	2,8	●	●	●	●
2,9	61	15	2,9	●	●	●	●
3,0	61	15	3,0	●	●	●	●
3,1	65	16	3,1	●	●	●	●
1/8"	65	16	3,175	-	-	●	●
3,2	65	16	3,2	●	●	●	●
3,3	65	18	3,3	●	●	●	●
3,4	70	18	3,4	●	●	●	●
3,5	70	18	3,5	●	●	●	●
3,6	70	18	3,6	●	●	●	●
3,7	70	18	3,7	●	●	●	●
3,8	75	19	4,0	●	●	●	●
3,9	75	19	4,0	●	●	●	●
4,0	75	19	4,0	●	●	●	●
4,1	75	19	4,0	●	●	●	●
4,2	75	19	4,0	●	●	●	●
4,3	80	21	4,5	●	●	●	●

*ILIX Standard

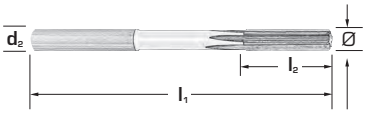
● Standardartikel / Items available ex stock

DIN 212 A/C-B/D-E

Maschinen-Reibahlen mit Zylinderschaft aus HSS-Co
für Bohrungen mit Passung H7

Machine chucking reamers with straight shank, made of HSS-Co
to produce holes with H7 tolerance

TiN





Form / Form	A/C	E	B/D	B/D
Typ / Type	Schneiden gerade straight	Schneiden 45° LH	Schneiden 7/8° LH	Schneiden 7/8° LH
Schneidrichtung Cutting direction				
Schneidstoff Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	l_1 mm	l_2 mm	d_2 h9	6321	6325	6326	6326 TN
4,4	80	21	4,5	●	●	●	●
4,5	80	21	4,5	●	●	●	●
4,6	80	21	4,5	●	●	●	●
4,7	80	21	4,5	●	●	●	●
3/16"	86	23	5,0	-	-	●	●
4,8	86	23	5,0	●	●	●	●
4,9	86	23	5,0	●	●	●	●
5,0	86	23	5,0	●	●	●	●
5,1	86	23	5,0	●	●	●	●
5,2	86	23	5,0	●	●	●	●
5,3	86	23	5,0	●	●	●	●
5,4	93	26	5,6	●	●	●	●
5,5	93	26	5,6	●	●	●	●
5,6	93	26	5,6	●	●	●	●
5,7	93	26	5,6	●	●	●	●
5,8	93	26	5,6	●	●	●	●
5,9	93	26	5,6	●	●	●	●
6,0	93	26	5,6	●	●	●	●
6,1	101	28	6,3	●	●	●	●
6,2	101	28	6,3	●	●	●	●
6,3	101	28	6,3	●	●	●	●
1/4"	101	28	6,3	-	-	●	●
6,4	101	28	6,3	●	●	●	●
6,5	101	28	6,300	●	●	●	●
6,6	101	28	6,300	●	●	●	●
6,7	101	28	6,300	●	●	●	●
6,8	109	31	7,1	●	●	●	●
6,9	109	31	7,1	●	●	●	●
7,0	109	31	7,1	●	●	●	●
7,1	109	31	7,1	●	●	●	●
7,2	109	31	7,1	●	●	●	●
7,3	109	31	7,1	●	●	●	●
7,4	109	31	7,1	●	●	●	●
7,5	109	31	7,1	●	●	●	●
7,6	117	33	8,0	●	●	●	●
7,7	117	33	8,0	●	●	●	●
7,8	117	33	8,0	●	●	●	●
7,9	117	33	8,0	●	●	●	●

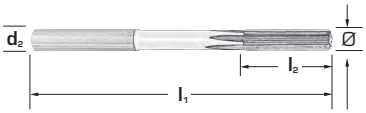
● Standardartikel / Items available ex stock

DIN 212 A/C-B/D-E

Maschinen-Reibahlen mit Zylinderschaft aus HSS-Co
für Bohrungen mit Passung H7

Machine chucking reamers with straight shank, made of HSS-Co
to produce holes with H7 tolerance

TiN





Form / Form	A/C	E	B/D	B/D
Typ / Type	Schneiden gerade straight	Schneiden 45° LH	Schneiden 7/8° LH	Schneiden 7/8° LH
Schneidrichtung Cutting direction				
Schneidstoff Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co
Ø mm	l_1 mm	l_2 mm	d_2 h9	**6321**	**6325**	**6326**	**6326 TN**
5/16''	117	33	8,0	-	-	●	●
8,0	117	33	8,0	●	●	●	●
8,1	117	33	8,0	●	●	●	●
8,2	117	33	8,0	●	●	●	●
8,3	117	33	8,0	●	●	●	●
8,4	117	33	8,0	●	●	●	●
8,5	117	33	8,0	●	●	●	●
8,6	125	36	9,0	●	●	●	●
8,7	125	36	9,0	●	●	●	●
8,8	125	36	9,0	●	●	●	●
8,9	125	36	9,0	●	●	●	●
9,0	125	36	9,0	●	●	●	●
9,1	125	36	9,0	●	●	●	●
9,2	125	36	9,0	●	●	●	●
9,3	125	36	9,0	●	●	●	●
9,4	125	36	9,0	●	●	●	●
9,5	125	36	9,0	●	●	●	●
3/8''	133	38	10,0	-	-	●	●
9,6	133	38	10,0	●	●	●	●
9,7	133	38	10,0	●	●	●	●
9,8	133	38	10,0	●	●	●	●
9,9	133	38	10,0	●	●	●	●
10,0	133	38	10,0	●	●	●	●
10,1	133	38	10,0	●	●	●	●
10,2	133	38	10,0	●	●	●	●
10,3	133	38	10,0	●	●	●	●
10,4	133	38	10,0	●	●	●	●
10,5	133	38	10,0	●	●	●	●
10,6	133	38	10,0	●	●	●	●
10,7	142	41	10,0	●	●	●	●
10,8	142	41	10,0	●	●	●	●
10,9	142	41	10,0	●	●	●	●
11,0	142	41	10,0	●	●	●	●
11,5	142	41	10,0	●	●	●	●
12,0	151	44	10,0	●	●	●	●
12,5	151	44	10,0	●	●	●	●
1/2''	151	44	10,0	-	-	●	●
13,0	151	44	10,0	●	●	●	●

● Standardartikel / Items available ex stock

DIN 212 A/C-B/D-E

Maschinen-Reibahlen mit Zylinderschaft aus HSS-Co
für Bohrungen mit Passung H7

Machine chucking reamers with straight shank, made of HSS-Co
to produce holes with H7 tolerance



TiN

Form / Form	A/C	E	B/D	B/D
Typ / Type	Schneiden gerade straight	Schneiden 45° LH	Schneiden 7/8° LH	Schneiden 7/8° LH
Schneidrichtung Cutting direction				
Schneidstoff / Material	HSS-Co	HSS-Co	HSS-Co	HSS-Co

Ø mm	l_1 mm	l_2 mm	d_2 h9	6321	6325	6326	6326 TN
13,5	160	47	12,5	●	●	●	●
14,0	160	47	12,5	●	●	●	●
14,5	162	50	12,5	●	●	●	●
15,0	162	50	12,5	●	●	●	●
15,5	170	52	12,5	●	●	●	●
5/8''	170	52	12,5	-	-	●	●
16,0	170	52	12,5	●	●	●	●
16,5	175	54	14,0	●	●	●	●
17,0	175	54	14,0	●	●	●	●
17,5	182	56	14,0	●	●	●	●
18,0	182	56	14,0	●	●	●	●
18,5	189	58	16,0	●	●	●	●
19,0	189	58	16,0	●	●	●	●
3/4''	195	60	16,0	-	-	●	●
19,5	195	60	16,0	●	●	●	●
20,0	195	60	16,0	●	●	●	●

Durchmesser Diameter range	6321 Anzahl der Schneiden No. of cutting lips	6325 Anzahl der Schneiden No. of cutting lips	6326 Anzahl der Schneiden No. of cutting lips	6326TN Anzahl der Schneiden No. of cutting lips
0,6 mm - 2,4 mm	3	2	3	3
2,5 mm - 3,9 mm	5	3	5	5
4,0 mm - 13,5 mm	6	3	6	6
13,5 mm - 14,5 mm	8	3	8	8
15,0 mm - 20,0 mm	8	4	8	8

**ILIX Standard

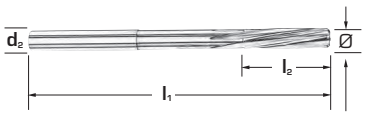
● Standardartikel / Items available ex stock

ILIX NORM

Ähnlich / similar **DIN 8093**

Maschinen-Reibahlen mit Zylinderschaft aus VHM für Bohrungen mit Passung H7
Machine chucking reamers with straight shank, made of solid carbide to produce holes with H7 tolerance







Form / Form	B	B
Typ / Type	Schneiden 12° LH	Schneiden 12° LH
Schneidrichtung Cutting direction		
Schneidstoff / Material	K10/20	K10/20

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6372*	6372* TN
1,0	34	6	1	3	●	●
1,1	34	6	1	3	●	●
1,2	34	6	1	3	●	●
1,3	40	8	2	3	●	●
1,4	40	8	2	3	●	●
1,5	40	8	2	3	●	●
1,6	43	9	2	3	●	●
1,7	43	9	2	4	●	●
1,8	46	10	2	4	●	●
1,9	46	10	2	4	●	●
2,0	49	11	2	4	●	●
2,1	49	11	2	4	●	●
2,2	53	12	3	4	●	●
2,3	53	12	3	4	●	●
2,4	57	14	3	4	●	●
2,5	57	14	3	4	●	●
2,6	57	14	3	4	●	●
2,7	61	15	3	4	●	●
2,8	61	15	3	6	●	●
2,9	61	15	3	6	●	●
3,0	61	15	3	6	●	●
3,1	65	16	4	6	●	●
3,2	65	16	4	6	●	●
3,3	65	16	4	6	●	●
3,4	70	18	4	6	●	●
3,5	70	18	4	6	●	●
3,6	70	18	4	6	●	●
3,7	70	18	4	6	●	●
3,8	75	19	4	6	●	●
3,9	75	19	4	6	●	●
4,0	75	19	4	6	●	●
4,1	75	19	4	6	●	●
4,2	80	21	4	6	●	●
4,3	80	21	5	6	●	●
4,4	80	21	5	6	●	●
4,5	80	21	5	6	●	●
4,6	80	21	5	6	●	●
4,7	80	21	5	6	●	●

Form / Form	B	B
Typ / Type	Schneiden 12° LH	Schneiden 12° LH
Schneidrichtung Cutting direction		
Schneidstoff / Material	K10/20	K10/20

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6372*	6372* TN
4,8	86	23	5	6	●	●
4,9	86	23	5	6	●	●
5,0	86	23	5	6	●	●
5,1	86	23	5	6	●	●
5,2	86	23	5	6	●	●
5,3	93	26	6	6	●	●
5,4	93	26	6	6	●	●
5,5	93	26	6	6	●	●
5,6	93	26	6	6	●	●
5,7	93	26	6	6	●	●
5,8	93	26	6	6	●	●
5,9	93	26	6	6	●	●
6,0	93	26	6	6	●	●
6,1	101	28	6	6	●	●
6,2	101	28	6	6	●	●
6,3	101	28	6	6	●	●
6,4	101	28	6	6	●	●
6,5	101	28	6	6	●	●
6,6	101	28	6	6	●	●
6,7	109	31	6	6	●	●
6,8	109	31	8	6	●	●
6,9	109	31	8	6	●	●
7,0	109	31	8	6	●	●
7,1	109	31	8	6	●	●
7,2	117	33	8	6	●	●
7,3	117	33	8	6	●	●
7,4	117	33	8	6	●	●
7,5	117	33	8	6	●	●
7,6	117	33	8	6	●	●
7,7	117	33	8	6	●	●
7,8	117	33	8	6	●	●
7,9	117	33	8	6	●	●
8,0	117	33	8	6	●	●
8,1	117	33	8	6	●	●
8,2	117	33	8	6	●	●
8,3	117	33	8	6	●	●
8,4	117	33	8	6	●	●
8,5	117	33	8	6	●	●

Bis zu 12.20 mm Durchmesser aus Vollhartmetall, über Hartmetall bestück / up to Ø 12,20 mm made of solid carbide, above carbide tipped

* ab 8,1 mm Ø mit Vollhartmetallkopf / from 8,1 mm Ø onwards with solid carbide head

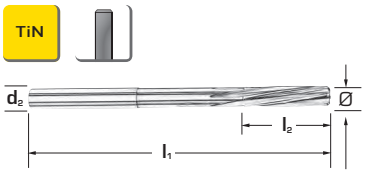
● Standardartikel / Items available ex stock

ILIX NORM

Ähnlich / similar **DIN 8093**

Maschinen-Reibahlen mit Zylinderschaft aus VHM für Bohrungen mit Passung H7

Machine chucking reamers with straight shank, made of solid carbide to produce holes with H7 tolerance





Form / Form	B	B
Typ / Type	Schneiden 12° LH	Schneiden 12° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	K10/20	K10/20
Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6372*	6372* TN
8,6	125	36	10	6	●	●
8,7	125	36	10	6	●	●
8,8	125	36	10	6	●	●
8,9	125	36	10	6	●	●
9,0	125	36	10	6	●	●
9,1	125	36	10	6	●	●
9,2	125	36	10	6	●	●
9,3	125	36	10	6	●	●
9,4	125	36	10	6	●	●
9,5	125	36	10	6	●	●
9,6	133	38	10	6	●	●
9,7	133	38	10	6	●	●
9,8	133	38	10	6	●	●
9,9	133	38	10	6	●	●
10,0	133	38	10	6	●	●
10,1	133	38	10	6	●	●
10,2	133	38	10	6	●	●
10,3	133	38	10	6	●	●
10,4	133	38	10	6	●	●
10,5	133	38	10	6	●	●
10,6	133	38	10	6	●	●
10,7	142	41	10	6	●	●
10,8	142	41	10	6	●	●
10,9	142	41	10	6	●	●
11,0	142	41	10	6	●	●
11,5	142	41	10	6	●	●
12,0	151	44	10	6	●	●
12,5	151	44	10	8	●	●
13,0	151	44	10	8	●	●
13,5	160	47	14	8	●	●
14,0	160	47	14	8	●	●
14,5	162	50	14	8	●	●
15,0	162	50	14	8	●	●
15,5	170	52	14	8	●	●
16,0	170	52	14	8	●	●
16,5	175	54	14	8	●	●
17,0	175	54	14	8	●	●
17,5	182	56	14	8	●	●

Form / Form	B	B
Typ / Type	Schneiden 12° LH	Schneiden 12° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	K10/20	K10/20
Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6372*	6372* TN
18,0	182	56	14	8	●	●
18,5	189	58	16	8	●	●
19,0	189	58	16	8	●	●
19,5	195	60	16	8	●	●
20,0	195	60	16	8	●	●

* ab 8,1 mm Ø mit Vollhartmetallkopf / from 8,1 mm Ø onwards with solid carbide head

● Standardartikel / Items available ex stock

ILIX NORM

Ähnlich / similar **DIN 8093**



Maschinen-Reibahlen mit Zylinderschaft aus VHM mit Innenkühlung für Sacklochbohrungen für Bohrungen mit Passung H7

Machine chucking reamers with straight shank, made of solid carbide to produce holes with H7 tolerance



Axiale Innenkühlung
Axial internal cooling



Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6370
4,0	75	19	4	6	●
4,5	80	21	5	6	●
5,0	86	23	5	6	●
5,5	93	26	6	6	●
6,0	93	26	6	6	●
6,5	101	28	6	6	●
7,0	109	31	8	6	●
7,5	117	33	8	6	●
8,0	117	33	8	6	●
8,5	125	36	10	6	●
9,0	125	36	10	6	●
9,5	133	38	10	6	●
10,0	133	38	10	6	●
11,0	142	41	10	6	●
12,0	151	41	10	6	●
13,0	151	44	10	8	●
14,0	160	47	14	8	●
15,0	162	50	14	8	●
16,0	170	52	14	8	●
17,0	175	54	14	8	●
18,0	182	56	14	8	●
19,0	189	58	16	8	●
20,0	195	60	16	8	●

Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6370

● Standardartikel / Items available ex stock

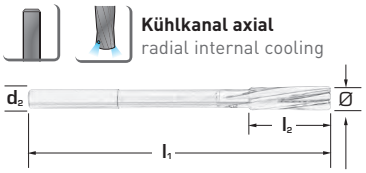
ILIX NORM

Ähnlich / similar **DIN 8093**



Maschinen-Reibahlen mit Zylinderschaft aus VHM mit Innenkühlung für Durchgangsbohrungen für Bohrungen mit Passung H7

Machine chucking reamers with straight shank, made of solid carbide with radial cooling for through holes to produce holes with H7 tolerance



Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6371
4,0	75	19	4	6	●
4,5	80	21	5	6	●
5,0	86	23	5	6	●
5,5	93	26	6	6	●
6,0	93	26	6	6	●
6,5	101	28	6	6	●
7,0	109	31	8	6	●
7,5	117	33	8	6	●
8,0	117	33	8	6	●
8,5	125	36	10	6	●
9,0	125	36	10	6	●
9,5	133	38	10	6	●
10,0	133	38	10	6	●
11,0	142	41	10	6	●
12,0	151	41	10	6	●
13,0	151	44	10	8	●
14,0	160	47	14	8	●
15,0	162	50	14	8	●
16,0	170	52	14	8	●
17,0	175	54	14	8	●
18,0	182	56	14	8	●
19,0	189	58	16	8	●
20,0	195	60	16	8	●

Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

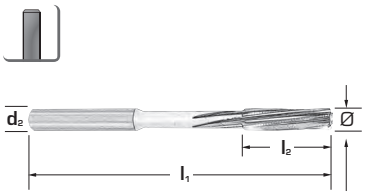
Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6371

● Standardartikel / Items available ex stock

DIN 212 B/D

Maschinen-Reibahlen mit Zylinderschaft aus HSS-Co
in 1/100 Abstufung

Machine chucking reamers with straight shank, made of HSS-Co
centesimal





Herstellungstoleranzen
Reamer tolerances

- 5,5 mm	+0,004 0
> 5,5 mm	+0,005 0

Form / Form	B/D
Typ / Type	Schneiden 7-8° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS-Co

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6326 C
0,95 - 0,96	37	5	-	3	●
0,97 - 1,00	37	5	-	3	●
1,01 - 1,32	40	7	-	3	●
1,33 - 1,39	40	8	-	3	●
1,40 - 1,49	40	8	-	3	●
1,50	40	8	-	3	●
1,51 - 1,70	43	9	-	3	●
1,71 - 1,90	46	10	-	3	●
1,91 - 1,99	49	11	-	3	●
2,00 - 2,09	49	11	-	3	●
2,10 - 2,12	49	11	-	3	●
2,13 - 2,36	53	12	-	3	●
2,37 - 2,49	57	14	-	3	●
2,50 - 2,59	57	14	-	5	●
2,60 - 2,65	57	14	-	5	●
2,66 - 2,99	61	15	-	5	●
3,00	61	15	-	5	●
3,01 - 3,09	65	16	-	5	●
3,10 - 3,35	65	16	-	5	●
3,36 - 3,49	70	18	-	5	●
3,50 - 3,59	70	18	-	5	●
3,60 - 3,75	70	18	-	5	●
3,76 - 3,81	75	19	4,0	5	●
3,82 - 3,99	75	19	4,0	5	●
4,00 - 4,20	75	19	4,0	6	●
4,21 - 4,25	75	19	4,0	6	●
4,26 - 4,75	80	21	4,5	6	●
4,76 - 5,20	86	23	5,0	6	●
5,21 - 5,30	86	23	5,0	6	●
5,31 - 6,00	93	26	5,6	6	●
6,01 - 6,11	101	28	6,3	6	●
6,12 - 6,70	101	28	6,3	6	●
6,71 - 7,50	109	31	7,1	6	●
7,51 - 8,20	117	33	8,0	6	●
8,21 - 8,50	117	33	8,0	6	●
8,51 - 9,50	125	36	9,0	6	●
9,51 - 10,20	133	38	10,0	6	●
10,21 - 10,60	133	38	10,0	6	●

Form / Form	B/D
Typ / Type	Schneiden 7-8° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS-Co

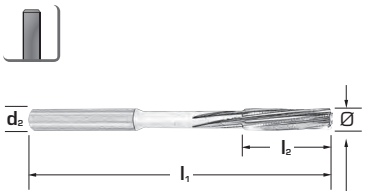
Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6326 C
10,61 - 11,20	142	41	10,0	6	●
11,21 - 11,80	142	41	10,0	6	●
11,81 - 12,02	151	44	10,0	6	●
12,03 - 12,40	151	44	10,0	6	●
12,41 - 12,50	151	44	10,0	6	●
12,51 - 12,60	151	44	10,0	6	●
12,61 - 12,70	151	44	10,0	6	●
12,71 - 12,80	151	44	10,0	6	●
12,81 - 13,00	151	44	10,0	6	●
13,01 - 13,20	151	44	10,0	6	●
13,21 - 14,00	160	47	12,5	8	●
14,01 - 15,00	162	50	12,5	8	●
15,01 - 16,00	170	52	12,5	8	●
16,01 - 16,10	175	54	14,0	8	●

● Standardartikel / Items available ex stock

ILIX NORM

Ähnlich / similar **DIN 8093**

Maschinen-Reibahle mit Zylinderschaft aus VHM in 1/100 Abgestuft
Machine chucking reamers with straight shank,
made of solid carbide centesimal





Herstellungstoleranzen Reamer tolerances
+0,004 0 mm

Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6372* C
0,98 - 1,30	34	6	1	3	●
1,31 - 1,50	40	8	2	3	●
1,51 - 1,61	43	9	2	3	●
1,62 - 1,70	43	9	2	4	●
1,71 - 1,90	46	10	2	4	●
1,91 - 2,12	49	11	2	4	●
2,13 - 2,36	53	12	3	4	●
2,37 - 2,65	57	14	3	4	●
2,66 - 2,79	61	15	3	4	●
2,80 - 3,09	61	15	3	6	●
3,10 - 3,35	65	16	4	6	●
3,36 - 3,75	70	18	4	6	●
3,76 - 4,10	75	19	4	6	●
4,11 - 4,25	80	21	4	6	●
4,26 - 4,75	80	21	5	6	●
4,76 - 5,20	86	23	5	6	●
5,21 - 6,00	93	26	6	6	●
6,01 - 6,60	101	28	6	6	●
6,61 - 6,70	109	31	6	6	●
6,71 - 7,10	109	31	8	6	●
7,11 - 8,50	117	33	8	6	●
8,51 - 9,50	125	36	10	6	●
9,51 - 10,60	133	38	10	6	●
10,61 - 11,80	142	41	10	6	●
11,81 - 12,05	151	44	10	6	●

Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	d_2 h9	Anzahl der Schneiden Cutting lips	6372* C

Bis Ø 12,20 mm aus Vollhartmetall, über Hartmetall bestückt / up to Ø 12,20 mm made of solid carbide, above carbide tipped

● Standardartikel / Items available ex stock

MASCHINEN-REIBAHLEN IN 1/100 ABSTUFUNG

CENTESIMAL MACHINE REAMERS

Durchmesserbestimmung auf Basis Nenndurchmesser und Toleranzfeld / Tool diameter based on nominal diameter and tolerance

BEISPIEL / EXAMPLE

Anfrage / Required fit	d = 4,25 mm F8
Lösung / Solution:	1. aus Spalte Nenn-Ø den Durchmesserbereich wählen 3 - 6 choose from column nominal-Ø the diameter range = 3 - 6 2. Passung F8 suchen / search fit F8 Zuschlagswert / surcharge = + 0,02 4,25 mm + 0,02 mm = d = 4,27 mm

Nenn/nominal Ø (mm) oltre/above – fino a/up to	Zuschlagswerte in mm bezogen auf die Passung / Table values for required fit in mm													
	A9	A11	B8	B9	B10	B11	C8	C9	C10	C11	D7	D8	D9	D10	D11
1 - 3	+ 0,28	+ 0,31	-	+ 0,15	+ 0,17	+ 0,18	-	+ 0,07	+ 0,09	+ 0,10	-	-	+ 0,03	+ 0,05	+ 0,06
3 - 6	+ 0,29	+ 0,32	+ 0,15	+ 0,16	+ 0,17	+ 0,19	+ 0,08	+ 0,09	+ 0,10	+ 0,12	-	+ 0,04	+ 0,05	+ 0,06	+ 0,08
6 - 10	+ 0,30	+ 0,35	+ 0,16	+ 0,17	+ 0,19	+ 0,22	+ 0,09	+ 0,10	+ 0,12	+ 0,15	-	+ 0,05	+ 0,06	+ 0,08	+ 0,11
10 - 18	+ 0,32	+ 0,37	+ 0,16	+ 0,18	+ 0,20	+ 0,23	+ 0,11	+ 0,12	+ 0,14	+ 0,18	+ 0,06	+ 0,06	+ 0,08	+ 0,10	+ 0,13
	E7	E8	E9	F7	F8	F9	F10	G6	G7	H6	H7	H8	H9	H10	H11
1 - 3	-	+ 0,02	+ 0,03	+ 0,01	+ 0,01	+ 0,02	-	-	-	-	-	-	+ 0,01	+ 0,03	+ 0,04
3 - 6	-	+ 0,03	+ 0,04	-	+ 0,02	+ 0,03	+ 0,04	-	+ 0,01	-	-	+ 0,01	+ 0,02	+ 0,03	+ 0,05
6 - 10	+ 0,03	+ 0,03	+ 0,05	+ 0,02	+ 0,02	+ 0,03	+ 0,05	-	+ 0,01	-	-	+ 0,01	+ 0,02	+ 0,04	+ 0,07
10 - 18	+ 0,04	+ 0,04	+ 0,06	+ 0,02	+ 0,03	+ 0,04	+ 0,07	+ 0,01	-	-	+ 0,01	+ 0,01	+ 0,03	+ 0,05	+ 0,08
	H12	H13	J6	J7	J8	JS6	JS7	JS8	JS9	K7	K8	M6	M7	M8	N6
1 - 3	+ 0,08	+ 0,11	-	-	-	-	-	+ 0,00	+ 0,00	-	- 0,01	-	-	-	-
3 - 6	+ 0,09	+ 0,14	-	+ 0,00	+ 0,00	-	+ 0,00	+ 0,00	+ 0,00	-	-	-	-	- 0,01	-
6 - 10	+ 0,12	+ 0,18	-	+ 0,00	+ 0,00	-	+ 0,00	+ 0,00	+ 0,00	-	- 0,01	- 0,01	- 0,01	- 0,01	-
10 - 18	+ 0,14	+ 0,22	-	+ 0,00	+ 0,00	-	+ 0,00	+ 0,00	+ 0,00	-	- 0,01	- 0,01	- 0,01	- 0,01	-
	N7	N8	N9	N10	N11	P6	P7	R6	R7	S6	S7	U6	U7	U10	Z10
1 - 3	- 0,01	- 0,01	- 0,02	- 0,02	- 0,02	-	-	-	-	-	- 0,02	-	-	-	- 0,04
3 - 6	- 0,01	- 0,01	- 0,01	- 0,02	- 0,02	-	-	-	- 0,02	-	-	-	- 0,03	- 0,04	- 0,05
6 - 10	-	- 0,02	- 0,01	- 0,02	- 0,02	-	- 0,02	-	- 0,02	-	- 0,03	-	- 0,03	- 0,05	- 0,06
10 - 18	- 0,01	- 0,02	- 0,02	- 0,02	- 0,03	-	- 0,02	-	- 0,03	-	- 0,03	-	-	- 0,05	- 0,07

Anwendungshinweis

- Die Tabelle wurde so aufgebaut, dass jeder Reibahlendurchmesser mit einem 1/100 mm Stufensprung bestimmt werden kann. In den Zuschlagswerten wurden die Herstellungstoleranzen berücksichtigt
  - Ø 5,5 mm + 0,004 / + 0,0
  - > Ø 5,5 mm + 0,005 / + 0,0

Notes for use of above table

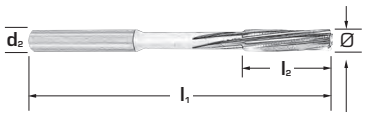
- This table allows the selection of chucking reamers with diameters within steps of 0,01mm. The given values take the basic manufacturing tolerances as standard into consideration.
  - Ø 5,5 mm + 0,004 / + 0,0
  - > Ø 5,5 mm + 0,005 / + 0,0

ILIX NORM

Ähnlich / similar **DIN 212**

Maschinen-Reibahlen mit Zylinderschaft aus CERMET
für Bohrungen mit Passung H7
Machine chucking reamers with straight shank, made of CERMET
to produce holes with H7 tolerance







Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	CERMET

Ø mm	l_1 mm	l_2 mm	d_2	Anzahl der Schneiden Cutting lips	6323
3,5	60	18	4	6	■
4,0	75	19	4	6	■
4,5	75	21	5	6	■
6,0	93	26	6	6	■
6,5	101	28	6	6	■
7,0	109	31	8	6	■
7,5	109	33	8	6	■
9,5	125	38	10	6	■
11,0	142	41	10	6	■
12,0	151	44	10	6	■
13,0	151	44	10	8	■
16,0	170	53	14	8	■
20,0	195	60	16	8	■

Form / Form	B
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	CERMET

Ø mm	l_1 mm	l_2 mm	d_2	Anzahl der Schneiden Cutting lips	6323

■ Auslaufender Artikel / discontinued items

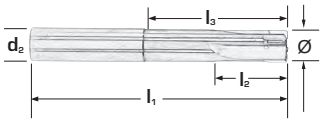
ILIX NORM

PKD

VHM maschinen Reibahlen mit Zylinderschaft
und Diamant Beschichtung, Radialer Kühlmittelaustritt
Machine reamers with straight shank in solid carbide with polycrystalline diamond and internal cooling



PKD | ILIX NORM | **Kühlkanal axial**
radial internal cooling



Form / Form	ILIX NORM
Typ / Type	Schneiden Dritto straight flutes
Schneidrichtung Cutting direction	
Schneidstoff Material	PKD

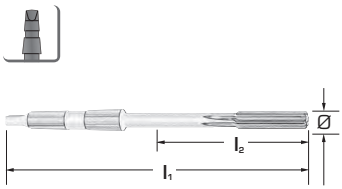
Ø mm h7	l_1 mm	l_2 mm	l_3 mm	d_2 h6	Anzahl der Schneiden Cutting lips	6373
6	89	12	52	6	4	●
8	103	19	60	8	4	●
10	103	19	60	10	4	●
12	105	19	60	12	4	●
14	105	19	60	14	4	●
16	130	22	82	16	4	●
18	130	22	82	18	4	●
20	150	25	100	20	4	●

● Standardartikel / Items available ex stock

DIN 208 A/B/C

Maschinen-Reibahlen mit Morsekgel, aus HSS-Co für Bohrungen mit Passung H7

Machine chucking reamers with Morse taper shank, made of HSS-Co to produce holes with H7 tolerance





Form / Form	A	B	C
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH	Schneiden 45° LH
Schneidrichtung Cutting direction			
Schneidstoff Material	HSS-Co	HSS-Co	HSS-Co

Ø mm	l_1 mm	l_2 mm	MK MT	6333	6337	6335
5,0	133	23	1	●	●	●
5,5	138	26	1	●	●	-
6,0	138	26	1	●	●	●
6,5	144	28	1	●	●	-
7,0	150	31	1	●	●	●
7,5	150	31	1	●	●	-
8,0	156	33	1	●	●	●
8,5	156	33	1	●	●	-
9,0	162	36	1	●	●	●
9,5	162	36	1	●	●	-
10,0	168	38	1	●	●	●
10,5	168	38	1	●	●	-
11,0	175	41	1	●	●	●
11,5	175	41	1	●	●	-
12,0	182	41	1	●	●	●
12,5	182	44	1	●	●	-
13,0	182	44	1	●	●	●
13,5	189	47	1	●	●	-
14,0	189	47	1	●	●	●
14,5	204	50	2	●	●	-

Form / Form	A	B	C
Typ / Type	Schneiden gerade straight	Schneiden 7/8° LH	Schneiden 45° LH
Schneidrichtung Cutting direction			
Schneidstoff Material	HSS-Co	HSS-Co	HSS-Co

Ø mm	l_1 mm	l_2 mm	MK MT	6333	6337	6335
15,0	204	50	2	●	●	●
15,5	210	52	2	●	●	-
16,0	210	52	2	●	●	●
16,5	214	54	2	●	●	-
17,0	214	54	2	●	●	●
17,5	219	56	2	●	●	-
18,0	219	56	2	●	●	●
18,5	223	58	2	●	●	-
19,0	223	58	2	●	●	●
19,5	228	60	2	●	●	-
20,0	228	60	2	●	●	●
20,5	232	62	2	●	●	-
21,0	232	62	2	●	●	●
21,5	237	64	2	●	●	-
22,0	237	64	2	●	●	●
22,5	241	66	2	●	●	-
23,0	241	66	2	●	●	●
23,5	241	66	2	●	●	-
24,0	268	68	3	●	●	●
24,5	268	68	3	●	●	-

Durchmesser Diameter range	6333 Anzahl der Schneiden No. of cutting lips	6337 Anzahl der Schneiden No. of cutting lips	6335 Anzahl der Schneiden No. of cutting lips
5,0 mm - 14,0 mm	6	6	3
14,5 mm - 15,0 mm	8	8	3
15,5 mm - 24,5 mm	8	8	4
25,0 mm - 35,0 mm	10	10	4
36,0 mm - 40,0 mm	-	12	-

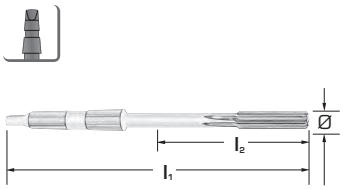
Zwischenmaße Preise auf Anfrage / Deviating sizes prices upon request

● Standardartikel / Items available ex stock

DIN 208 A/B/C

Maschinen-Reibahlen mit Morsekgel, aus HSS-Co für Bohrungen mit Passung H7

Machine chucking reamers with Morse taper shank, made of HSS-Co to produce holes with H7 tolerance





Form / Form				A	B	C
Typ / Type				Schneiden gerade straight	Schneiden 7/8° LH	Schneiden 45° LH
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS-Co	HSS-Co	HSS-Co
Ø mm	l_1 mm	l_2 mm	MK MT	6333	6337	6335
25,0	268	68	3	●	●	●
25,5	273	70	3	●	●	-
26,0	273	70	3	●	●	●
26,5	273	70	3	●	●	-
27,0	277	71	3	●	●	●
27,5	277	71	3	●	●	-
28,0	277	71	3	●	●	●
28,5	281	73	3	●	●	-
29,0	281	73	3	●	●	●
29,5	281	73	3	●	●	-
30,0	281	73	3	●	●	●
30,5	285	75	3	●	●	-
31,0	285	75	3	●	●	●
31,5	285	75	3	●	●	-
32,0	317	77	4	●	●	●
33,0	317	77	4	-	●	-
34,0	321	78	4	-	●	-
35,0	321	78	4	-	●	-
36,0	325	79	4	-	●	-
37,0	325	79	4	-	●	-

Form / Form				A	B	C
Typ / Type				Schneiden gerade straight	Schneiden 7/8° LH	Schneiden 45° LH
Schneidrichtung Cutting direction						
Schneidstoff Material				HSS-Co	HSS-Co	HSS-Co
Ø mm	l_1 mm	l_2 mm	MK MT	6333	6337	6335
38,0	329	81	4	-	●	-
39,0	329	81	4	-	●	-
40,0	329	81	4	-	●	-

Durchmesser Diameter range	6333 Anzahl der Schneiden No. of cutting lips	6337 Anzahl der Schneiden No. of cutting lips	6335 Anzahl der Schneiden No. of cutting lips
5,0 mm - 14,0 mm	6	6	3
14,5 mm - 15,0 mm	8	8	3
15,5 mm - 24,5 mm	8	8	4
25,0 mm - 35,0 mm	10	10	4
36,0 mm - 40,0 mm	-	12	-

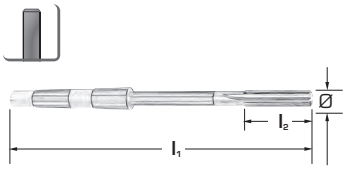
Zwischenmaße Preise auf Anfrage / Deviating sizes prices upon request

● Standardartikel / Items available ex stock

ILIX NORM

Maschinen-Reibahlen mit Morsekgel, aus HSS-Co
für Bohrungen mit Passung H7

Machine chucking reamers with Morse taper shank, made of solid carbide
to produce holes with H7 tolerance





Form / Form	ILIX NORM
Typ / Type	Schneiden gerade straight
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	MK MT	Anzahl der Schneiden Cutting lips	6369
5	133	23	1	6	●
6	138	26	1	6	●
7	150	31	1	6	●
8	156	33	1	6	●
9	162	36	1	6	●
10	168	38	1	6	●
11	175	41	1	6	●
12	182	44	1	6	●
13	182	44	1	6	●
14	189	47	1	6	●
15	204	50	2	6	●
16	210	52	2	6	●
17	214	54	2	6	●
18	219	56	2	6	●
19	223	58	2	6	●
20	228	60	2	6	●

Form / Form	ILIX NORM
Typ / Type	Schneiden gerade straight
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	MK MT	Anzahl der Schneiden Cutting lips	6369

* Bis Ø 20 mm VHM über Hartmetall bestückt / up to Ø 20 mm made of solid carbide, above carbide tipped

Zwischenmaße Preise auf Anfrage/ for intermediate sizes prices upon request

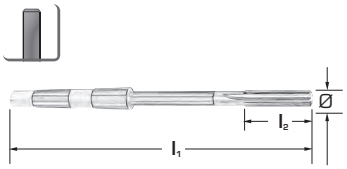
- bis 7,0 mm Ø Baumaße nach / up to 7,0 mm Ø dimensions acc. to DIN 208 FORM A / up to 7,0 mm Ø dimensions acc. to DIN 208 FORM A
- über 7,0 mm Ø Baumaße nach / above 7,0 mm Ø dimensions acc. to DIN 8094 FORM A / above 7,0 mm Ø dimensions acc. to DIN 8094 FORM A

● Standardartikel / Items available ex stock

ILIX NORM

Maschinen-Reibahlen mit Morsekgel, aus HSS-Co
für Bohrungen mit Passung H7

Machine chucking reamers with Morse taper shank, made of solid carbide
to produce holes with H7 tolerance





Form / Form	ILIX NORM
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	MK MT	Anzahl der Schneiden Cutting lips	6376
5	133	23	1	6	●
6	138	26	1	6	●
7	150	31	1	6	●
8	156	33	1	6	●
9	162	36	1	6	●
10	168	38	1	6	●
11	175	41	1	6	●
12	182	44	1	6	●
13	182	44	1	6	●
14	189	47	1	6	●
15	204	50	2	6	●
16	210	52	2	6	●
17	214	54	2	6	●
18	219	56	2	6	●
19	223	58	2	6	●
20	228	60	2	6	●

Form / Form	ILIX NORM
Typ / Type	Schneiden 12° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	K10/20

Ø mm	l_1 mm	l_2 mm	MK MT	Anzahl der Schneiden Cutting lips	6376

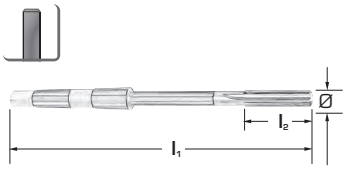
Zwischenmaße Preise auf Anfrage/ for intermediate sizes prices upon request

- bis 7,0 mm Ø Baumaße nach / up to 7,0 mm Ø dimensions acc. to DIN 208 FORM A / up to 7,0 mm Ø dimensions acc. to DIN 208 FORM A
- über 7,0 mm Ø Baumaße nach / above 7,0 mm Ø dimensions acc. to DIN 8094 FORM A / above 7,0 mm Ø dimensions acc. to DIN 8094 FORM A

● Standardartikel / Items available ex stock

ILIX NORM

Spreiz-Reibahlen mit Morsekegel, aus HSS-CO
Nachstellbarkeit max. 0,01 mm des Ø
Expansion reamers with Morse taper shank
expandable up to max. 0,01 mm Ø





Form / Form	ILIX NORM
Typ / Type	Schneiden gerade straight
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS-Co

Ø mm	l_1 mm	l_2 mm	MK MT	6307
8	156	33	1	■
11	175	41	1	■
12	182	44	1	■
14	189	44	1	■
15	204	50	2	■
16	210	52	2	■
17	214	54	2	■
18	219	56	2	■
20	228	60	2	■

Form / Form	ILIX NORM
Typ / Type	Schneiden gerade straight
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS-Co

Ø mm	l_1 mm	l_2 mm	MK MT	6307

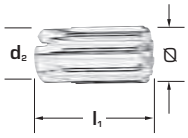
Zwischenmaße Preise auf Anfrage/ for intermediate sizes prices upon request

■ Auslaufender Artikel / discontinued items

DIN 219 A/B/C

Aufsteck-Reibahlen, aus HSS mit kegeliger Bohrung 1 : 30 für Bohrungen mit Passung H7

Shell reamers, made of HSS
taper hole 1 : 30 to produce holes with H7 tolerance





Form / Form			A	B	C
Typ / Type			Schneiden gerade straight	Schneiden 7/8° LH	Schneiden 45° LH
Schneidrichtung Cutting direction					
Schneidstoff Material			HSS	HSS	HSS
Ø mm	l_1 mm	Bohrungs-Ø / bore Ø d_2	6361	6360	6362
25	45	13	●	●	●
26	45	13	●	●	●
27	45	13	●	●	●
28	45	13	●	●	●
29	45	13	●	●	●
30	45	13	●	●	●
31	50	16	●	●	●
32	50	16	●	●	●
33	50	16	●	●	●
34	50	16	●	●	●
35	50	16	●	●	●
36	56	19	●	●	●
37	56	19	●	●	●
38	56	19	●	●	●
39	56	19	●	●	●
40	56	19	●	●	●
42	56	19	●	●	●
44	63	22	●	●	●
45	63	22	●	●	●
46	63	22	●	●	●
47	63	22	●	●	●
48	63	22	●	●	●

Form / Form			A	B	C
Typ / Type			Schneiden gerade straight	Schneiden 7/8° LH	Schneiden 45° LH
Schneidrichtung Cutting direction					
Schneidstoff Material			HSS	HSS	HSS
Ø mm	l_1 mm	Bohrungs-Ø / bore Ø d_2	6361	6360	6362
50	63	22	●	●	●
52	71	27	●	●	●
55	71	27	●	●	●
58	71	27	●	●	●
60	71	27	●	●	●
62	80	32	●	●	●
65	80	32	●	●	●
68	80	32	●	●	●
70	80	32	●	●	●
72	90	40	●	●	●
75	90	40	●	●	●
78	90	40	●	●	●
80	90	40	●	●	●
82	90	40	●	●	●
85	90	40	●	●	●
88	100	50	●	●	●
90	100	50	●	●	●
92	100	50	●	●	●
95	100	50	●	●	●
98	100	50	●	●	●
100	100	50	●	●	●

Durchmesser Diameter range	6361 Anzahl der Schneiden No. of cutting lips	6360 Anzahl der Schneiden No. of cutting lips	6362 Anzahl der Schneiden No. of cutting lips
25,0 mm - 32,0 mm	10	10	6
33,0 mm - 44,0 mm	12	12	6
45,0 mm - 58,0 mm	14	14	6
60,0 mm	16	16	6
62,0 mm - 78,0 mm	16	16	8
80,0 mm - 98,0 mm	18	18	8
100,0 mm	18	18	10

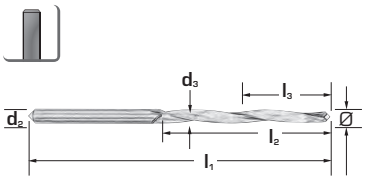
Zwischenmaße Preise auf Anfrage / Deviating sizes prices upon request

● Standardartikel / Items available ex stock

ILIX NORM

Kegel-Reibahlen mit Zylinderschaft, aus HSS Kegel 1 : 100
Kleinst-Reibahlen mit Zylinderschaft zum Aufreiben und Justieren von Bohrungen geringer Tiefe (Kat.-Nr. 6318)

Taper pin reames with straight shank, made of HSS taper 1 : 100
Micro reamers with straight shank for fast smooth reaming of shallow holes (Cat.-No. 6318)





Form / Form	ILIX NORM	ILIX NORM
Typ / Type	Schneiden 12° LH	Schneiden gerade straight
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS

Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	6318	6303
1,20	58	35	1,7	1,65	■	-
1,50	62	37	2,7	1,77	-	●
1,75	68	43	2,7	2,08	-	●
1,90	85	55	2,5	2,45	■	-
2,00	73	48	2,7	2,38	-	●
2,25	77	51	2,7	2,66	-	●
2,50	80	53	2,7	2,93	-	●
3,00	91	63	2,7	3,53	-	●
3,50	96	69	3,0	4,09	-	●
4,00	100	75	3,8	4,65	-	●
4,50	108	81	3,8	5,21	-	●
5,00	115	87	4,9	5,77	-	●
5,50	133	103	4,9	6,43	-	●
6,00	150	119	5,5	7,09	-	●
7,00	164	130	6,2	8,20	-	●
8,00	177	141	7,0	9,31	-	●
9,00	190	152	8,0	10,42	-	●
10,00	205	163	9,0	11,53	-	●
11,00	216	173	9,0	12,63	-	●
12,50	234	189	10,0	14,29	-	●
14,00	257	207	12,0	15,97	-	●
16,00	290	234	13,0	18,24	-	●
18,00	325	252	16,0	20,42	-	●
20,00	340	270	18,0	22,50	-	●

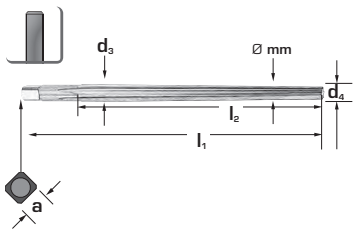
Form / Form	ILIX NORM	ILIX NORM
Typ / Type	Schneiden 12° LH	Schneiden gerade straight
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS

Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	6318	6303

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 9 A/B

Kegel-Reibahlen mit Zylinderschaft, aus HSS
Kegel 1 : 50, Vierkant nach DIN 10, für Kegelstifte nach DIN 1
Taper pin reamers with straight shank, made of HSS
taper 1 : 50, square acc. to DIN 10, to produce holes for taper pins acc. to DIN 1





Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7-8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS

Ø mm	l_1 mm	l_2 mm	d_4 mm	d_3 mm	a	6315	6304
0,8	46	28	0,90	1,46	3,15	●	-
1,0	46	28	0,90	1,46	3,15	●	-
1,2	50	32	1,10	1,74	3,15	●	-
1,5	57	37	1,40	2,14	2,50	●	●
1,6	57	37	1,50	2,24	2,50	■	●
2,0	68	48	1,90	2,86	2,50	●	●
2,5	68	48	2,40	3,36	2,50	●	●
3,0	80	58	2,90	4,06	3,15	●	●
3,5	100	75	3,40	4,90	3,80	●	●
4,0	93	68	3,90	5,26	4,00	●	●
4,5	115	87	4,40	6,14	4,90	-	●
5,0	100	73	4,90	6,36	5,00	●	●
5,5	150	119	5,40	7,78	7,00	-	●
6,0	135	105	5,90	8,00	6,30	●	●
6,5	150	119	6,40	8,78	7,00	-	●
7,0	177	141	6,90	9,72	8,00	-	●
8,0	180	145	7,90	10,80	8,00	●	●
9,0	205	163	8,90	12,16	11,00	-	●
10,0	215	175	9,90	13,40	10,00	●	●
12,0	255	210	11,80	16,00	11,20	●	●
13,0	240	194	12,86	16,74	14,50	-	●
14,0	240	194	13,86	17,74	14,50	-	●
16,0	280	230	15,80	20,40	14,00	●	●
20,0	310	250	19,80	24,80	18,00	●	●
25,0	370	300	24,70	30,70	22,40	●	●
30,0	400	320	29,70	36,10	25,00	●	●
40,0	430	340	39,70	46,50	31,50	-	●
50,0	460	360	49,70	56,90	40,00	-	●

Form / Form	A	B
Typ / Type	Schneiden gerade straight	Schneiden 7-8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS

Ø mm	l_1 mm	l_2 mm	d_4 mm	d_3 mm	a	6315	6304

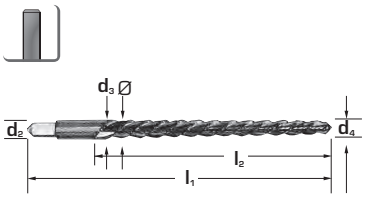
Für Kegelstifte nach DIN 1 - 258 - 1447 - 7977 - 7978
For taper pin according to DIN 1 – 258 –1447 – 7977 – 7978

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

NF E 66-011

Frz.-Norm / French standard

Kegel-Schälreibahlen mit Zylinderschaft, aus HSS
nur für Maschinengebrauch
High spiral fluted taper pin reamers with straight shank, made of HSS
for machine use only





Form / Form	NF
Typ / Type	Schneiden 45° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm	l_1 mm	l_2 mm	d_3 mm	d_2 mm	d_4 mm	6319
1,0	45	20	1,1	1,1	0,7	■
3,5	65	45	3,6	3,6	2,7	●
4,0	70	50	4,1	4,1	3,1	●
4,5	80	55	4,6	4,6	3,5	■

Form / Form	NF
Typ / Type	Schneiden 45° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm	l_1 mm	l_2 mm	d_3 mm	d_2 mm	d_4 mm	6319

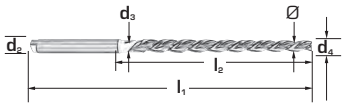
Durchmesser Diameter range	6319 **Anzahl der Schneiden** No. of cutting lips
1,0 mm - 5,0 mm	2
5,0 mm - 10,0 mm	3

● Standardartikel / Items available ex stock ■ Auslaufender Artikel / discontinued items

DIN 2179

Kegel-Schälreibahlen mit Zylinderschaft, aus HSS
Kegel 1 : 50, für Kegelstifte nach DIN 1, nur für Maschinengebrauch
High spiral fluted taper pin reamers with straight shank, made of HSS
taper 1 : 50, to produce holes for taper pins acc. to DIN 1, for machine use only







Form / Form	-	
Typ / Type	Schneiden 45° LH	
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	

Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	d_4 mm	6313
1,0	60	33	1,40	1,52	0,8	●
1,25	70	42	1,80	1,97	1,05	●
1,5	70	42	2,10	2,22	1,3	●
1,6	70	42	2,10	2,22	1,3	●
2,0	86	48	3,15	2,86	1,9	●
2,5	86	48	3,15	3,36	2,4	●
3,0	100	58	4,00	4,06	2,9	●
4,0	112	68	5,00	5,26	3,9	●
5,0	122	73	6,30	6,36	4,9	●
6,0	160	105	8,00	8,00	5,9	●
8,0	207	145	10,00	10,80	7,9	●
10,0	245	175	12,50	13,40	9,9	●
12,0	290	210	16,00	16,00	11,8	●

Form / Form	-	
Typ / Type	Schneiden 45° LH	
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	

Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	d_4 mm	6313

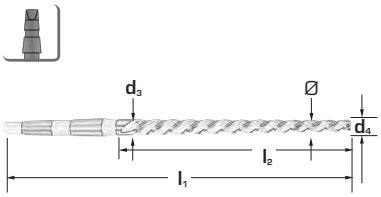
Für Kegelstifte nach DIN 1 - 258 - 1447 - 7977 - 7978
For taper pin according to DIN 1 – 258 –1447 – 7977 – 7978

Diametri Diameter range	**6313 Anzahl der Schneiden** No. of cutting lips
1,0 mm - 5,0 mm	2
6,0 mm - 10,0 mm	3
12,0 mm	4

● Standardartikel

DIN 2180

Kegel-Schälreibahlen mit Zylinderschaft, aus HSS
Kegel 1 : 50, für Kegelstifte nach DIN 1, nur für Maschinengebrauch
High spiral fluted taper pin reamers with Morse taper shank, made of HSS
taper 1 : 50, to produce holes for taper pins acc. to DIN 1, for machine use only





Form / Form	-
Typ / Type	Schneiden 45° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm	l_1 mm	l_2 mm	d_4 mm	d_3 mm	MK MT	6314
5	155	73	4,9	6,36	1	●
6	187	105	5,9	8,00	1	●
8	227	145	7,9	10,80	1	●
10	257	175	9,9	13,40	1	●
12	315	210	11,8	16,00	2	●
16	335	230	15,8	20,40	2	●
20	377	250	19,8	24,80	3	●

Form / Form	-
Typ / Type	Schneiden 45° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm	l_1 mm	l_2 mm	d_4 mm	d_3 mm	MK MT	6314

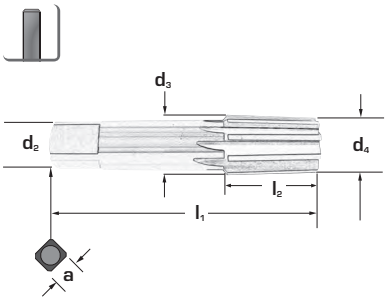
Durchmesser Diameter range	6314 **Anzahl der Schneiden** No. of cutting lips
3,0 mm - 6,0 mm	2
6,0 mm - 10,0 mm	3
12,0 mm - 20,0 mm	4

● Standardartikel

ILIX NORM

Kegel-Reibahlen mit Zylinderschaft, aus HSS Kegel 1 : 16
Taper reamers with straight shank, made of HSS taper 1 : 16

Kernloch **NPT - NPTF**
Geradegenutet / Straight Flutes





Form / Form	-
Typ / Type	Schneiden gerade straight
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

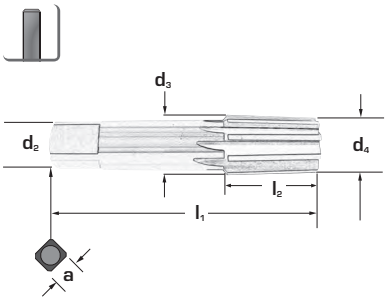
Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	d_4 mm	a h11	Z	6310
1/16"	70	17	6	6,998	5,935	4,5	6	●
1/8"	70	17	8	9,105	8,042	6,3	6	●
1/4"	80	27	11	11,996	10,308	9,0	6	●
3/8"	85	27	12	15,416	13,728	10,0	8	●
1/2"	95	35	16	19,126	16,938	12,5	8	●
3/4"	105	35	20	24,411	22,253	16,0	10	●
1"	130	43	25	30,684	27,996	20,0	10	●
1 1/4"	140	44	32	39,471	36,721	25,0	12	●
1 1/2"	150	45	36	45,604	42,791	28,0	12	●
2"	160	46	48	57,678	54,803	35,5	14	●

● Standardartikel / Items available ex stock

ILIX NORM

Kegel-Reibahlen mit Zylinderschaft, aus HSS Kegel 1 : 16
Taper reamers with straight shank, made of HSS taper 1 : 16

Kernloch **NPT - NPTF**
Geradegenutet / Straight Flutes





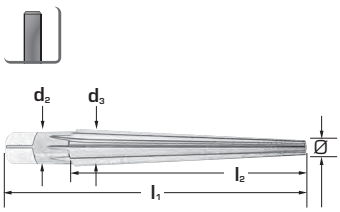
Form / Form	-
Typ / Type	Schneiden 7-8° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	d_4 mm	a h11	Z	6311
1/16"	70	17	6	6,998	5,935	4,5	6	●
1/8"	70	17	8	9,105	8,042	6,3	6	●
1/4"	80	27	11	11,996	10,308	9,0	6	●
3/8"	85	27	12	15,416	13,728	10,0	8	●
1/2"	95	35	16	19,126	16,938	12,5	8	●
3/4"	105	35	20	24,411	22,253	16,0	10	●
1"	130	43	25	30,684	27,996	20,0	10	●
1 1/4"	140	44	32	39,471	36,721	25,0	12	●
1 1/2"	150	45	36	45,604	42,791	28,0	12	●
2"	160	46	48	57,678	54,803	35,5	14	●

● Standardartikel / Items available ex stock

ILIX NORM

Kegel-Reibahlen mit Zylinderschaft, aus HSS
Kegel 1 : 10
Taper reamers with straight shank, made of HSS
taper 1 : 10





Form / Form	-
Typ / Type	Schneiden gerade straight
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	6308
3	100	70	6,3	10	✓
5	140	100	10,0	15	✓
10	195	150	16,0	25	✓
15	250	200	22,4	35	✓
23	275	220	31,5	45	✓
30	310	250	40,0	55	✓
37	345	280	45,0	65	✓
45	370	300	45,0	75	✓

Form / Form	-
Typ / Type	Schneiden gerade straight
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

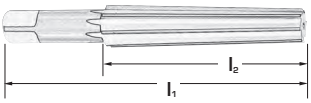
Ø mm	l_1 mm	l_2 mm	d_2 mm	d_3 mm	6308

✓ Su richiesta / Upon request

DIN 204/C

Kegel-Reibahlen mit Zylinderschaft, aus HSS
Fertigreibahlen für Morsekegel nach DIN 228
Morse taper socket reamers, made of HSS
finishing for taper sleeves acc. to DIN 228







Form / Form	C	-
Typ / Type	Schneiden gerade straight	Schneiden 7-8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
MK MT / l_1 mm / l_2 mm	**6317**	**6312**
0 / 93 / 61	●	●
1 / 102 / 66	●	●
2 / 121 / 79	●	●
3 / 146 / 96	●	●
4 / 146 / 119	●	●
5 / 222 / 150	●	●
6 / 300 / 208	●	●

Form / Form	C	-
Typ / Type	Schneiden gerade straight	Schneiden 7-8° LH
Schneidrichtung Cutting direction		
Schneidstoff Material	HSS	HSS
MK MT / l_1 mm / l_2 mm	**6317**	**6312**

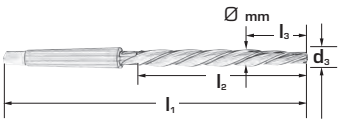
Durchmesser Diameter range	**6317** Anzahl der Schneiden No. of cutting lips	**6312** Anzahl der Schneiden No. of cutting lips
MK/MT **0 ÷ 1**	6	6
CM/MT **2**	8	8
CM/MT **3**	10	10
CM/MT **4**	12	12
CM/MT **5**	14	14
CM/MT **6**	16	16

● Standardartikel / Items available ex stock

DIN 311

Nietloch-Reibahlen mit Morsekegel, aus HSS
Anschnittlänge etwa 1/3 der Schneidlänge, kurzer Drall
Helicoidal fluted bridge reamers with Morse taper shank, made of HSS
tapered over 1/3 of cutting length, quick spiral flutes







Form / Form	-
Typ / Type	Schneiden 25° LH
Schneidrichtung Cutting direction	
Schneidstoff Material	HSS

Ø mm	l_1 mm	l_2 mm	l_3 mm	d_3 mm	MK MT	6355
6,4	151	75	19	4,6	1	●
7,4	156	80	22	5,3	1	●
8,4	161	85	25	6,0	1	●
9,5	166	90	27	6,9	1	●
10,0	171	95	30	7,1	1	●
11,0	176	100	33	7,8	1	●
12,0	199	105	39	8,2	2	●
13,0	199	105	39	9,2	2	●
14,0	209	115	42	9,9	2	●
15,0	219	125	45	10,6	2	●
16,0	229	135	48	11,4	2	●
17,0	251	135	51	12,1	3	●
18,0	261	145	58	12,4	3	●
19,0	261	145	58	13,4	3	●
20,0	271	155	62	14,0	3	●
21,0	271	155	62	15,0	3	●
22,0	281	165	66	15,6	3	●
23,0	281	165	66	16,6	3	●
24,0	296	180	72	17,0	3	●
25,0	296	180	72	18,0	3	●

Form / Form	-
Typ / Type	Schneiden 25° LH
Schneidrichtung Cutting direction	
Schneidstoff / Material	HSS

Ø mm	l_1 mm	l_2 mm	l_3 mm	d_3 mm	MK MT	6355
26,0	296	180	72	19,0	3	●
27,0	311	195	78	19,4	3	●
28,0	311	195	78	20,4	3	●
29,0	311	195	78	21,4	3	●
30,0	311	195	78	22,4	3	●
31,0	326	210	84	22,8	3	●
32,0	354	210	84	23,8	4	●

Durchmesser Diameter range	6355 **Anzahl der Schneiden** No. of cutting lips
6,4 mm - 24,0 mm	4
25,0 mm - 32,0 mm	5

Zwischenmaße Preise auf Anfrage / Deviating sizes prices upon request

● Standardartikel / Items available ex stock



Reibahlen
Reamers



▶ Technische Daten
Technical Guide

TECHNISCHE DATEN
TECHNICAL DATA



Typ Type												
ILIX Typ-siehe Seite Ilix Type -See page		660		660		660		660		660		660
DIN		**206**				**859**				**9**		
Form Form		A		B		A		B		A		B
Schneidrichtung Cutting direction												
Schneidstoff Material		HSS		HSS		HSS		HSS		HSS		HSS
Spitzenwinkel Point angle		0°		7/8° SX		0		7/8°		0°		7/8°
Beschichtung Coating		BL		BL		BL		BL		BL		TF
Innenliegende Kühlkanäle Internal Coolant		-		-		-		-		-		-
		6301		**6302**		**6306**		**6309**		**6315**		**6304**
		VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
P	< 800 N/mm²	10	1.0	10	1.0	10	1.0	10	1.0	10	1.0	10	1.0
P	700-1000 N/mm²	6	0.8	6	0.8	6	0.8	6	0.8	6	0.8	6	0.8
P	1000-1300 N/mm²	4	0.6	4	0.6	4	0.6	4	0.6	4	0.6	4	0.6
M	Austenitisch	3	0.8	3	0.8	3	0.8	3	0.8	3	0.8	3	0.8
M	Austenitisch / ferritisch	2	0.6	2	0.6	2	0.6	2	0.6	2	0.6	2	0.6
K	GG	10	1.1	10	1.1	10	1.1	10	1.1	10	1.1	10	1.1
K	GGG	6	1.2	6	1.2	6	1.2	6	1.2	6	1.2	6	1.2
N	Aluminium	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6
N	NE-Metalle	8	1.4	8	1.4	8	1.4	8	1.4	8	1.4	8	1.4
S	Titan	-	-	-	-	-	-	-	-	-	-	-	-
S	Sonderlegierungen basiert auf Ni	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA










660		660		662		662		662		662		662		662	
204				**8089**		**212**		**208**		**219**		**212**			
C				B/D		A/C		A		A		B/D		B/D	
HSS		HSS		HSS-CO		HSS-CO		HSS-CO		HSS		HSS-CO		HSS-CO	
0°		7/8°		7/8°		0°		0°		0°		7/8°		7/8°	
TX		BL		BL		BL		BL		BL		BL		TN	
-		-		-		-		-		-		-		-	
6317		**6312**		**6324**		**6321**		**6333**		**6361**		**6326 6226C**		**6326 TN**	
VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
10	1.0	10	1.0	12	1.0	12	1.0	12	1.0	10	1.0	12	1.0	12	1.0
6	0.8	6	0.8	8	0.8	8	0.8	8	0.8	6	0.8	8	0.8	8	0.8
4	0.6	4	0.6	6	0.6	6	0.6	6	0.6	4	0.6	6	0.6	6	0.6
3	0.8	3	0.8	5	0.8	5	0.8	5	0.8	3	0.8	5	0.8	5	0.8
2	0.6	2	0.6	3	0.6	3	0.6	3	0.6	2	0.6	3	0.6	3	0.6
10	1.1	10	1.1	12	1.1	12	1.1	12	1.1	10	1.1	12	1.1	12	1.1
6	1.2	6	1.2	8	1.2	8	1.2	8	1.2	6	1.2	8	1.2	8	1.2
13	1.6	13	1.6	15	1.6	15	1.6	15	1.6	13	1.6	15	1.6	15	1.6
8	1.4	8	1.4	10	1.4	10	1.4	10	1.4	8	1.4	10	1.4	10	1.4
-	-	-	-	2	0.6	2	0.6	2	-	-	-	2	0.6	2	0.6
-	-	-	-	2	0.6	2	0.6	2	-	-	-	2	0.6	2	0.6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA








	Typ Type												
	ILIX Typ-siehe Seite Ilix Type -See page	662		662		664		664		664		664	
	DIN	**208**		**219**		**212**		**208**		**219**		**ILIX NORM.**	
	Form Form	B		B		E		C		C		A	
	Schneidrichtung Cutting direction												
	Schneidstoff Material	HSS-CO		HSS		HSS-CO		HSS-CO		HSS		HSS	
	Spitzenwinkel Point angle	7/8°		7/8°		45°		45°		45°		0°	
	Beschichtung Coating	BL		BL		BL		BL		BL		BL	
	Innenliegende Kühlkanäle Internal Coolant	-		-		-		-		-		-	
		6337		**6360**		**6325**		**6335**		**6362**		**6307**	
		VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
P	< 800 N/mm²	12	1.0	10	1.0	12	1.0	12	1.0	10	1.0	10	1.0
P	700-1000 N/mm²	8	0.8	6	0.8	8	0.8	8	0.8	6	0.8	6	0.8
P	1000-1300 N/mm²	6	0.6	4	0.6	6	0.6	6	0.6	4	0.6	4	0.6
M	Austenitisch	5	0.8	3	0.8	5	0.8	5	0.8	3	0.8	3	0.8
M	Austenitisch / ferritisch	3	0.6	2	0.6	3	0.6	3	0.6	2	0.6	2	0.6
K	GG	12	1.1	10	1.1	12	1.1	12	1.1	10	1.1	10	1.1
K	GGG	8	1.2	6	1.2	8	1.2	8	1.2	6	1.2	6	1.2
N	Aluminium	15	1.6	13	1.6	15	1.6	15	1.6	13	1.6	13	1.6
N	NE-Metalle	10	1.4	8	1.4	10	1.4	10	1.4	8	1.4	8	1.4
S	Titan	2	0.6	-	-	2	0.6	2	0.6	-	-	-	-
S	Sonderlegierungen basiert auf Ni	2	0.6	-	-	2	0.6	2	0.6	-	-	-	-
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA









664		664		664		666		666		666		666	
2179		**2180**		**ILIX NORM.**						**60-011**		**331**	
										E		B	
HSS		HSS		HSS		HSS		HSS		HSS		HSS	
45°		45°		0°		0°		7/8°		45°		25°	
BL		BL		BL		BL		BL		BL		BL	
-		-		-		-		-		-		-	
6313		**6314**		**6308**		**6310**		**6311**		**6319**		**6355**	
VC	**F***	**VC**	**F***	**VC**	**F***	**VC**	**F***	**VC**	**F***	**VC**	**F***	**VC**	**F***
10	1.0	10	1.0	10	1.0	10	1.0	10	1.0	10	1.0	10	1.0
6	0.8	6	0.8	6	0.8	6	0.8	6	0.8	6	0.8	6	0.8
4	0.6	4	0.6	4	0.6	4	0.6	4	0.6	4	0.6	4	0.6
3	0.8	3	0.8	3	0.8	3	0.8	3	0.8	3	0.8	3	0.8
2	0.6	2	0.6	2	0.6	2	0.6	2	0.6	2	0.6	2	0.6
10	1.1	10	1.1	10	1.1	10	1.1	10	1.1	10	1.1	10	1.1
6	1.2	6	1.2	6	1.2	6	1.2	6	1.2	6	1.2	6	1.2
13	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6	13	1.6
8	1.4	8	1.4	8	1.4	8	1.4	8	1.4	8	1.4	8	1.4
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

TECHNISCHE DATEN
TECHNICAL DATA



Typ Type													
ILIX Typ-siehe Seite Ilix Type -See page		666		666		666		668		668		668	
DIN		ILIX NORM.											
Form Form		-		-		-		-		-		-	
Schneidrichtung Cutting direction													
Schneidstoff Material		HSS		HSS		VHM		VHM		VHM		VHM	
Spitzenwinkel Point angle		12°		0°		0°		12°		12°		12°	
Beschichtung Coating		BL		BL		BL		TN		TN		BL	
Innenliegende Kühlkanäle Internal Coolant		-		-		-		-		-			
		6318		**6303**		**6369**		**6372 6372C**		**6372TN**		**6370 6371**	
		VC	F*	VC	F*	VC	F*	VC	F*	VC	F*	VC	F*
P	< 800 N/mm²	10	1.0	10	1.0	20	1.2	20	1.2	20	1.2	20	1.2
P	700-1000 N/mm²	6	0.8	6	0.8	15	1.0	15	1.0	15	1.0	15	1.0
P	1000-1300 N/mm²	4	0.6	4	0.6	10	0.8	10	0.8	10	0.8	10	0.8
M	Austenitisch	3	0.8	3	0.8	10	1.0	10	1.0	10	1.0	10	1.0
M	Austenitisch / ferritisch	2	0.6	2	0.6	7	0.8	7	0.8	7	0.8	7	0.8
K	GG	10	1.1	10	1.1	20	1.4	20	1.4	20	1.4	20	1.4
K	GGG	6	1.2	6	1.2	15	1.2	15	1.2	15	1.2	15	1.2
N	Aluminium	13	1.6	13	1.6	30	1.8	30	1.8	30	1.8	30	1.8
N	NE-Metalle	8	1.4	8	1.4	25	1.6	25	1.6	25	1.6	25	1.6
S	Titan	-	-	-	-	5	0.8	5	0.8	5	0.8	5	0.8
S	Sonderlegierungen basiert auf Ni	-	-	-	-	5	0.8	5	0.8	5	0.8	5	0.8
H	Gehärteter Stahl 38 / 48 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 48 / 58 HRC	-	-	-	-	-	-	-	-	-	-	-	-
H	Gehärteter Stahl 58 / 68 HRC	-	-	-	-	-	-	-	-	-	-	-	-

Die in der Tabelle dargestellten Schnittdaten sind nur gültig für optimale Maschine / Werkstück Bedingungen.
The cutting parameters shown in the table have to be considered valid in optimal machine/workpiece conditions

TECHNISCHE DATEN
TECHNICAL DATA





	Cermet	Pkd
668	668	668
	ILIX NORM.	
-	-	-
VHM	CERMET	PKD
12°	12°	0°
BL	BL	BL
-	-	
6376	**6323**	**6373**

VC	F*	VC	F*	VC	F*
20	1.2	50	1.2	-	-
15	1.0	40	1.0	-	-
10	0.8	30	0.8	-	-
10	1.0	20	1.0	-	-
7	0.8	15	0.8	-	-
20	1.4	80	1.4	-	-
15	1.2	40	1.2	-	-
30	1.8	150	1.8	800	2.0
25	1.6	100	1.6	200	1.8
5	0.8	-	-	-	-
5	0.8	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Kerndurchmesser
Core diameter

Schnittdarstellung des Fräsers
Vertical cut thread mill

Innengewinde

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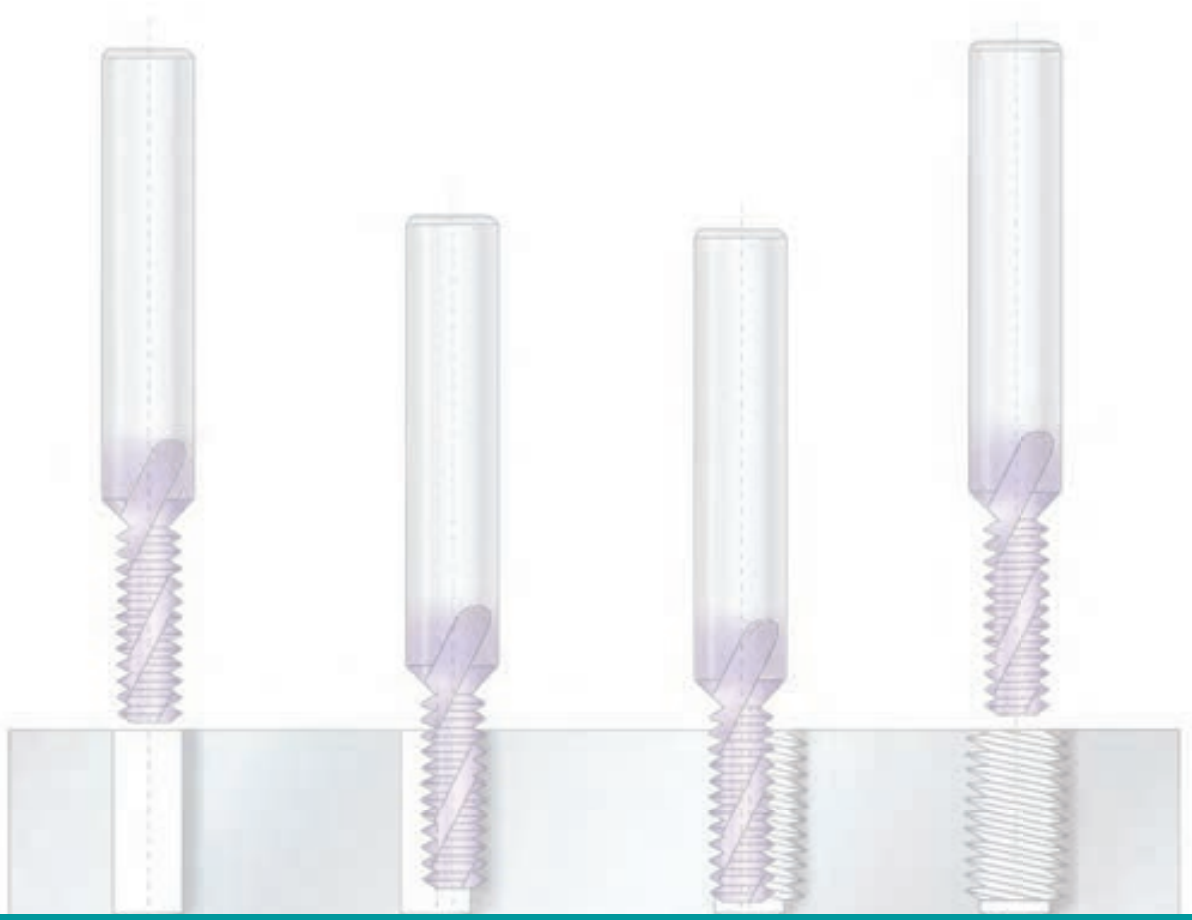
Technische Daten
Technical Guide



VORSCHUBTABELLE / FEED TABLE

Bohrer-Kegelsenker-Aufbohrer / Drills-Countersinking-Core Drilling

Vorschub F (mm/U x Bohrerdurchmesser (mm) in HSS - VHM - HM bestückt
feed f (mm/rev) for HSS - solid carbide drills - solid carbide inserts

Vorschub-Kennzahl Nr. Feed	Ø 1	Ø 1,5	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 15	Ø 20	Ø 25	Ø 30	Ø 40	Ø 50
1	0,005	0,006	0,006	0,007	0,008	0,009	0,010	0,012	0,013	0,015	0,017	0,019	0,022	0,024	0,028	0,031
2	0,008	0,009	0,011	0,013	0,015	0,018	0,021	0,024	0,028	0,033	0,038	0,045	0,053	0,062	0,072	0,084
3	0,010	0,012	0,014	0,016	0,019	0,023	0,027	0,032	0,038	0,044	0,052	0,062	0,073	0,086	0,101	0,120
4	0,013	0,015	0,018	0,022	0,026	0,031	0,037	0,044	0,052	0,062	0,074	0,088	0,105	0,125	0,148	0,177
5	0,017	0,020	0,024	0,029	0,035	0,042	0,051	0,061	0,073	0,088	0,105	0,126	0,152	0,182	0,218	0,262
6	0,020	0,024	0,029	0,035	0,043	0,052	0,063	0,076	0,092	0,111	0,135	0,163	0,197	0,238	0,288	0,349
7	0,023	0,028	0,034	0,042	0,051	0,062	0,076	0,093	0,113	0,138	0,168	0,205	0,250	0,305	0,372	0,454
8	0,027	0,033	0,041	0,050	0,062	0,076	0,093	0,115	0,141	0,174	0,214	0,263	0,324	0,398	0,490	0,602
9	0,030	0,037	0,046	0,057	0,070	0,086	0,106	0,131	0,162	0,201	0,248	0,306	0,378	0,466	0,576	0,711
10	0,033	0,041	0,050	0,061	0,076	0,093	0,114	0,141	0,173	0,213	0,262	0,322	0,396	0,487	0,599	0,736
12	0,037	0,045	0,055	0,067	0,082	0,100	0,122	0,149	0,182	0,222	0,270	0,330	0,402	0,491	0,599	0,730
16	0,043	0,052	0,063	0,076	0,092	0,112	0,135	0,163	0,198	0,239	0,289	0,350	0,424	0,512	0,620	0,750
20	0,050	0,061	0,073	0,089	0,107	0,130	0,157	0,190	0,230	0,278	0,336	0,407	0,492	0,596	0,721	0,872

VORSCHUBTABELLE / FEED TABLE

Reibahle / Reamer

Vorschub F (mm/U x Reibahlendurchmesser (mm) in HSS - VHM
feed f (mm/rev) for HSS - solid carbide drills

Vorschub-Kennzahl Nr. Feed	Ø 1	Ø 1,5	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	Ø 15	Ø 20	Ø 25	Ø 30	Ø 40	Ø 50
0.6	0,030	0,040	0,050	0,060	0,080	0,090	0,100	0,120	0,140	0,150	0,160	0,200	0,230	0,260	0,300	0,350
0.8	0,045	0,060	0,075	0,090	0,110	0,120	0,140	0,160	0,180	0,220	0,240	0,270	0,320	0,350	0,420	0,480
1.0	0,060	0,075	0,090	0,120	0,140	0,160	0,180	0,210	0,240	0,270	0,300	0,350	0,400	0,450	0,520	0,600
1.2	0,075	0,090	0,110	0,140	0,170	0,190	0,210	0,250	0,280	0,330	0,360	0,430	0,480	0,550	0,650	0,720
1.4	0,085	0,110	0,130	0,160	0,190	0,220	0,240	0,290	0,340	0,380	0,410	0,500	0,550	0,640	0,750	0,820
1.6	0,098	0,120	0,140	0,190	0,220	0,250	0,270	0,320	0,380	0,420	0,480	0,560	0,650	0,710	0,850	0,950
1.8	0,110	0,130	0,160	0,210	0,250	0,280	0,310	0,360	0,420	0,480	0,530	0,620	0,720	0,800	0,950	1,100
2.0	0,120	0,150	0,180	0,230	0,280	0,310	0,340	0,410	0,480	0,530	0,600	0,700	0,800	0,900	1,200	1,400
2.5	0,150	0,180	0,210	0,280	0,330	0,380	0,420	0,500	0,580	0,650	0,730	0,880	1,000	1,200	1,400	1,600

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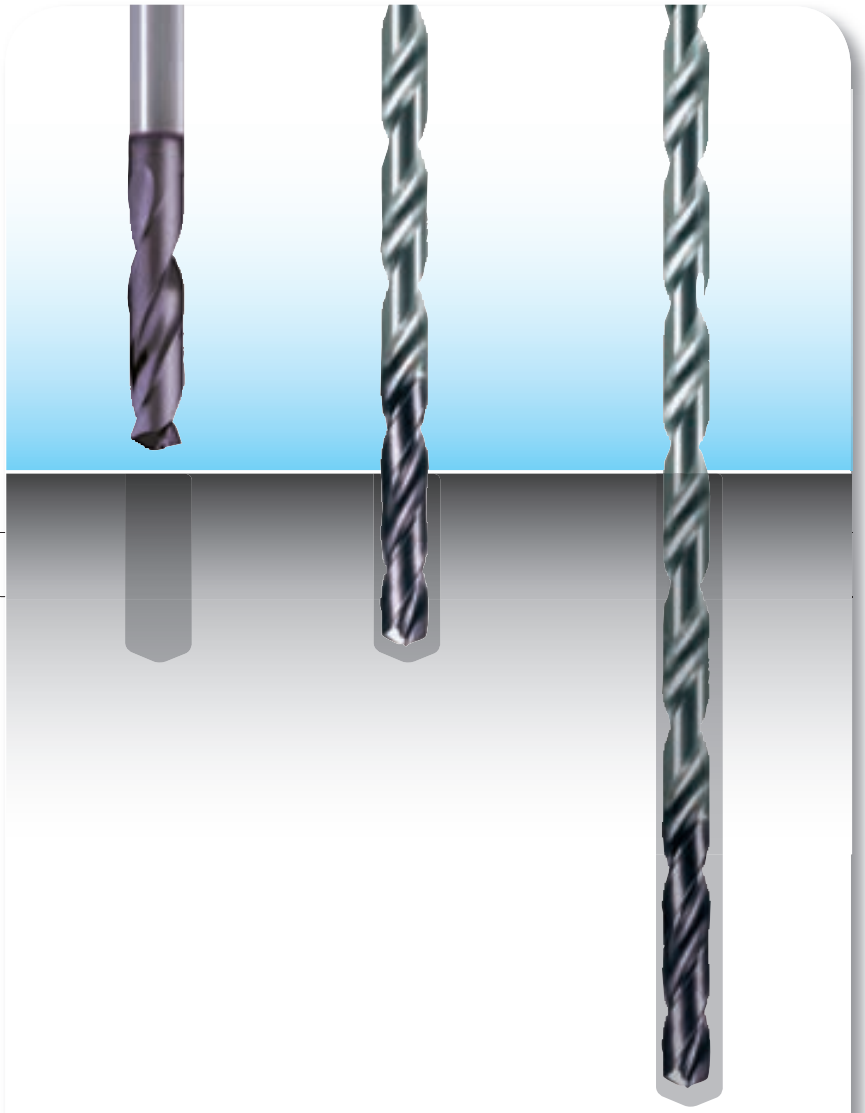
TECHNISCHE ANWENDUNG / TECHNICAL SUGGESTIONS RECORD DHi

ANWENDUNGSEMPFEHLUNG ZUM BOHREN VON TIEFEN BOHRUNGEN BIS 40 X D MIT DH I

- Erforderlich ist eine Rundlaufgenauigkeit der Spindel und genügender Kühlmitteldruck
- Ein 3XD Bohrer ist für eine Pilotbohrung von 1-1,5xd geeignet
- Einsatz von 20XD, 30XD oder 40XD Bohrer anfang mit niedriger Drehzahl u. Vorschub, normalerweise bohren ohne entspänen, vorausgesetzt die Späne kommen gut aus dem Werkzeug.

SUGGESTIONS TO PERFORM DEEP HOLES UP TO 40XD WITH **DHi**

- It is required a high concentricity of the spindle and enough pressure of the internal coolant.
- A Drill 3xD is recommended to create a pilot hole from 1-1,5xD.
- Using drills 20xD, 30xD or 40xDz start up with cow speed and feed. Usually drilling without interruption, a good chipremaval is guaranteed.
  Let the internal coolant flow when inside the hole.



Die Parameter gelten für Durchgangsbohrungen. Bei Querbohrungen oder Ein- und Austritt auf schräger Fläche müssen diese Werte mit dem Reduzierfaktor 0,5 multipliziert werden. Mindestkühlmitteldruck 10 bar.

The parameters are valid for through holes. When crossing holes or entering and leaving on angled surfaces, reduce by 50%. Minimum coolant pressure 10 bar.

VORAUSSETZUNG ZUM GEWINDEFRÄSEN
REQUIREMENTS FOR THREAD MILLING

MASCHINE / MACHINE

- **3 achsige CNC Maschine /** CNC machine with 3 axis control
- **Hohe Drehzahl bis 15.000 U/min /** High speed up to 15.000 r/min
- **Konzentrizität <–= 0,015 mm, je höher die Abweichung der Konzentrizität, desto kürzer die Standzeit des Werkzeugs**
  Concentricity < = 0,015 mm, the bigger the error, the shorter the tool life
- **Kühlmittelzufuhr durch die Spindel /** Coolant supply through spindle

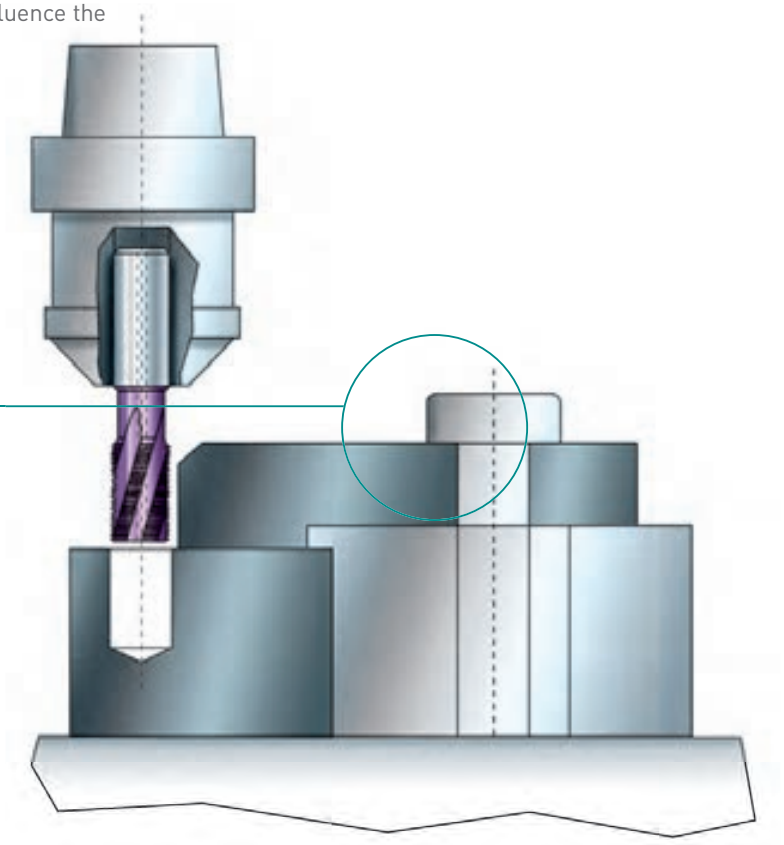
WERKSTÜCK / WORKPIECE

- **Möglichst stabile Werkstückaufspannung /** Workpiece clamping as stable as possible
- **Störung der Werkzeugbewegung vermeiden**
  Avoid interference with the movement of the tool

BEISPIEL SCHLECHTER WERKSTÜCKAUFSPANNUNG
EXAMPLE FOR BAD WORKPIECE CLAMPING

In einer solchen Situation kann die Interferenz zwischen Werkzeug und Werkstück lediglich durch einen verlängerten Schaft vermieden werden. Die Stabilität des Prozesses wird negativ beeinflusst.

In such a situation the interference of the tool with the workpiece can only be avoided by using a prolonged shank. This will influence the stability of the process negatively.

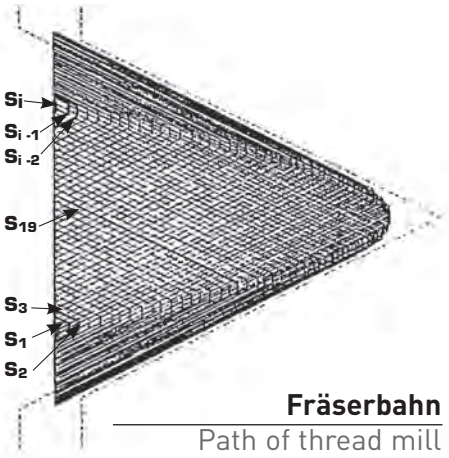


TEORETISCHE GRUNDLAGEN DES GEWINDEFRÄSENS

THEORETICAL BASIS OF THREAD MILLING

Ein konventionell hergestelltes Gewinde entsteht durch die Abbildung des Gewindebohrer- oder Formerprofils im Werkstück.
During conventional tapping the form of the tap is reproduced within the workpiece.

Beim Gewindefräsen erzeugt die Aneinanderreihung der Schnittlinien des Fräsers das Gewinde. Die Kontur des Gewindeganges wird erstellt, indem das Fräserprofil den Achsschnitt des Gewindegangs wiederholt auf der Spiralbewegung in axialer Werkzeug- und Werkstückrichtung durchfährt.
When treadmilling, the thread is created by using the form of the cutter and the ability of the CNC programme to move both axially and radia



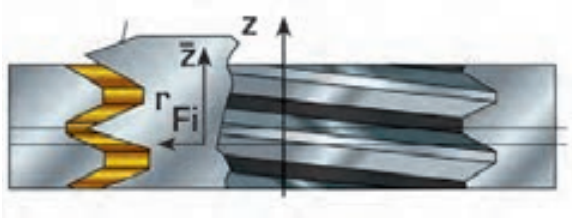
Fräserbahn
Path of thread mill

ENTWURF DES FRÄSERPROFILS
THREAD MILL PROFILE DESIGN

Zur Optimierung des Werkzeugprofils wird die Fräserbahn im zu erzeugenden Gewinde vektoriell mit Hilfe entsprechend ausgelegter CAD/CAM Programme beschrieben.
In order to ensure the threadform is correct, the path of the threadmill is broken down into small vectors which are written into the canned cycle of the CNC programme.

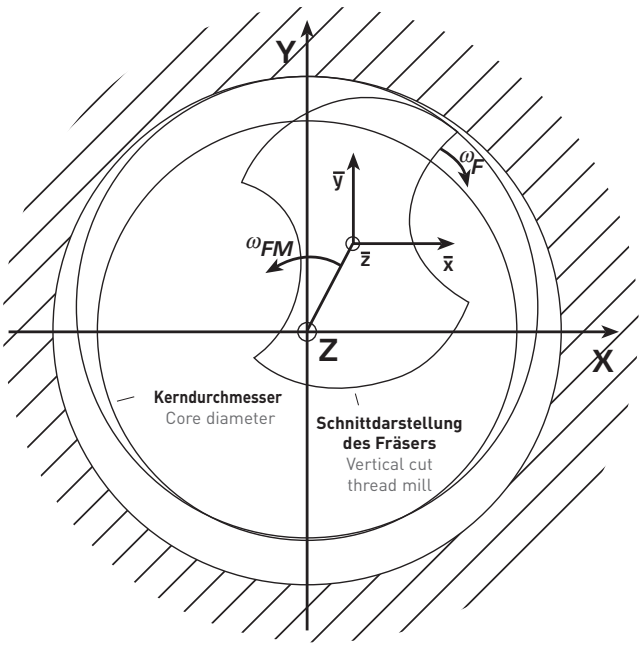
Das Resultat ist das korrigierte Fräserprofil, das durch simuliertes Abfahren der Fräserbahn auf Maßhaltigkeit und Profilexaktheit überprüft wird.
The result is a correct thread profile, however before the threadmilling cycle is run, it is always recommended that a simulation is proved with cutter above the workpiece.

Fräserkontur im Gewinde
Thread mill outline within thread



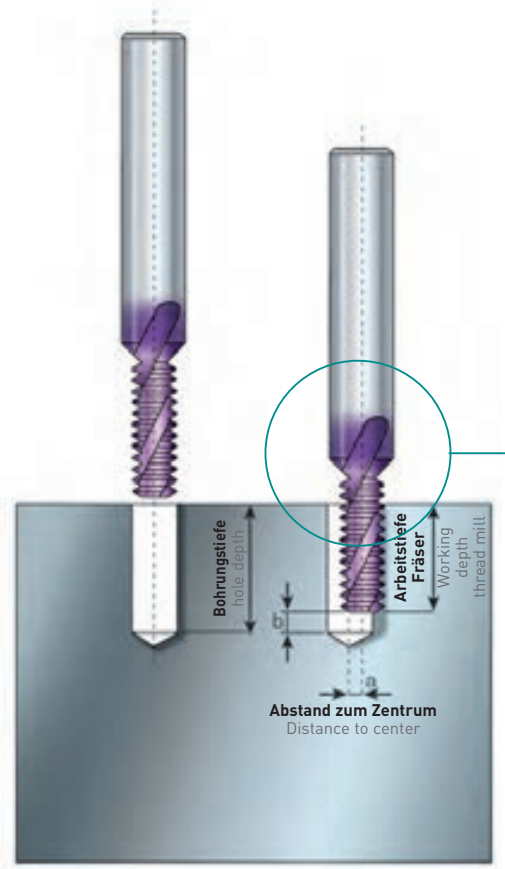
Fräserquerschnitt
Horizontal cut thread mill

Horizontaler Schnitt
Horizontal cut



DATEN FÜR DIE PROGRAMMIERUNG ZUM INNENGEWINDEFRÄSEN
PROGRAMMING DATA FOR INTERNAL THREAD MILLING

Um beim Gewindefräsen genaue Ergebnisse betreffend Maßhaltigkeit und Gewindetiefe zu erhalten, müssen verschiedene Daten bei der Maschinenprogrammierung berücksichtigt werden.
In order to achieve exact thread dimensions and depths when thread milling, a variety of data must be considered while programming the machine.

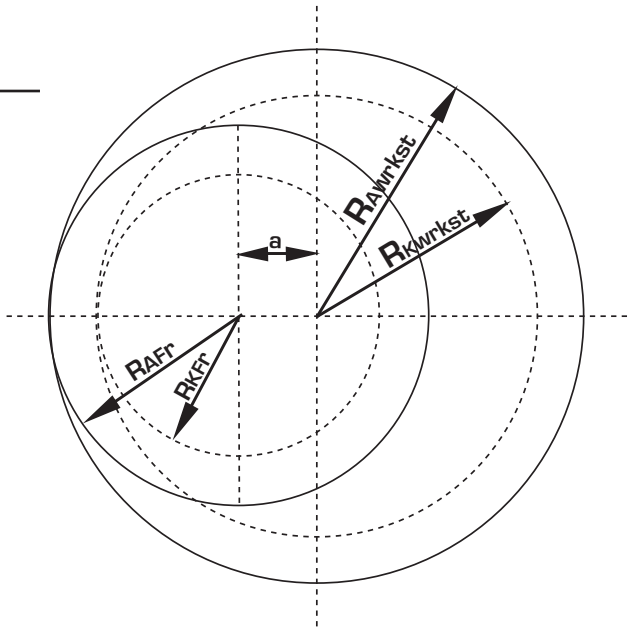


Distanz zum Mittelpunkt a = Werkstückradius
Distance to center a = workpiece radius Rawkrst
Fräserradius / tool radius RaFr
Werkstückradius Rawrkst = Nenn-Ø / 2 + Korrekturfaktor X
workpiece radius Rawrkst = nom. Ø / 2 + correction factor X
Rawkrst = d1 / 2 x fc
Der Fräserdurchmesser ist auf dem Werkzeugschaft zu finden.
The diameter of the thread mill can be found on the shank
Der Korrekturfaktor ist bereits in der CNC Programmierung berücksichtigt.
The correction factor is already considered in the CNC programming.

Gewindetiefe = Bohrungstiefe
Thread depth = hole depth

0,15xSteigung + 1xSteigung + 0,15xSteigung + Abstand b
0,15 x pitch + 1 x pitch + 0,15 x pitch + distance b

0,15xSteigung = 180° Einfahrschleife
0,15 x pitch = 180° immersion loop
1xSteigung = Arbeitsgang 360°
1 x pitch = Machining cycle 360°
0,15xSteigung = 180° Ausfahrschleife
0,15 x pitch = 180° exit loop
Abstand b = Sicherheitsabstand zum Bohrungsgrund
Distance b = Security distance to hole ground

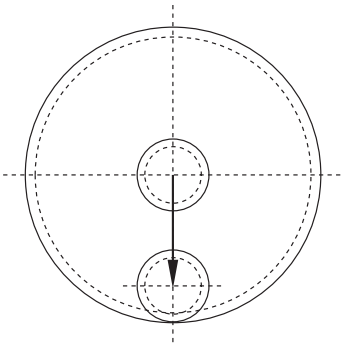


RADIALE ZUSTELLUNG AUF DEN NENNDURCHMESSER ÜBER EINE EINFAHRSCHLEIFE
RADIAL INFEED TO THE NOMINAL DIAMETER VIA ENTRY LOOP

Die radiale Zustellung des Werkzeugs auf den Gewindenenndurchmesser erfolgt über eine sogenannte Einfahrschleife. Dabei wird der Fräser in einem Kreisbogen an den Nenndurchmesser bewegt. Die Bewegung nach der Bearbeitung vom Nenndurchmesser auf Bohrungsmitte erfolgt in der Regel mit einer entsprechenden Ausfahrschleife. / The radial infeed of the tool to the nominal thread diameter is done through an entry loop. The thread mill approaches the nominal diameter through a circular arc. After machining the nominal diameter in the center of the hole the tool leaves through an exit loop.

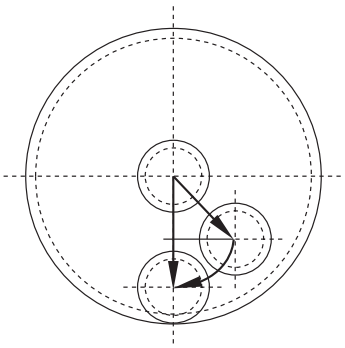
GERADLINIGES EINTAUCHEN / STRAIGHT IMMERSION

Beim geradlinigen Eintauchen des Gewindefräsers in den Werkstoff entsteht ein sehr großer Umschlingungswinkel am Fräser, der zu langen Spänen und einer hohen Werkzeugbelastung führt. Dies ist insbesondere bei einer geringen Durchmesserdifferenz zwischen dem Bohrungsmaß und dem Fräser der Fall. Zudem entsteht mit dieser Methode eine kleine Verweilmarke. Für präzise und auch kleine Gewinde ist diese Methode nicht geeignet. / Straight immersion of the thread mill into the material leads to a high looping angle at the tool resulting in long chips and stress on the tool, especially if the difference between tool and hole diameter is small. This method also leads to a small mark on the thread and is not adequate for small and exact threads.



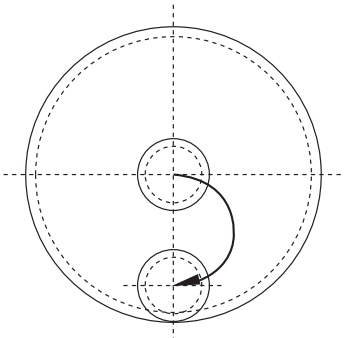
VIERTELKREISEINFAHRSCHLEIFE 90° / 90° ENTRY LOOP

Bei der 90°-Einfahrschleife wird bei einer geringen Durchmesserdifferenz zwischen Werkzeug und Gewinde der größte Teil des Spanvolumens auf dem geraden Teil der Einfahrschleife entfernt. Diese Methode wird deshalb nur für eine verhältnismäßig große Durchmesserdifferenz zwischen Bohrungsmaß und dem Fräser Multi TM empfohlen. Vorteile: einfache Programmierung und relativ kurze Einfahrwege. / Most material is removed on the straight section of the entry loop. This method can only be recommended for relatively big diameter differences of hole and thread mill Multi TM. Advantages: easy programming and short entry loop.



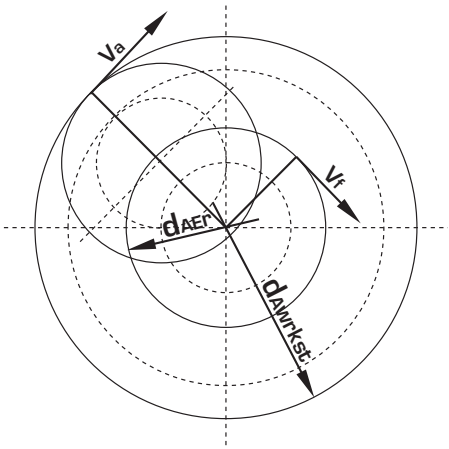
HALBKREISEINFAHRSCHLEIFE 180° / 180° ENTRY LOOP

Bei der 180°-Einfahrschleife ist die Werkzeugbelastung beim Eintauchen am niedrigsten, da der Umschlingungswinkel auf der gesamten Einfahrschleife relativ klein ist. Diese Methode ist programmtechnisch etwas aufwendiger, hat sich aber beim Gewindefräsen mit Gewindefräser TM „RS“ und CTM als am günstigsten erwiesen. / The stress on the tool is lowest when immerging, because the looping angle remains relatively low. The programming is slightly more complicated but has proofed most beneficial for thread milling with TM “RS” and CTM.



BERECHNUNG: SCHNITTGESCHWINDIGKEIT, VORSCHUB UND BEARBEITUNGSZEIT BEIM INNENGEWINDEFRÄSEN

CALCULATION: CUTTING SPEED, FEED AND MACHINING TIME FOR INTERNAL THREAD MILLING



> **Schnittgeschwindigkeit** / Cutting speed — $V_c = \frac{d \times \pi \times n}{1000}$ (m/min)

> **Drehzahl** / Revolution p. m — $n = \frac{Vc \times 1000}{d \times \pi}$ (g/min)

> **Umfangsgeschwindigkeit** / Perimeter feed — $Vf = n \times z \times fz$ (mm/min)

> **Mittelpunkvorschubgeschwindigkeit** / Center feed — $Va = \frac{Vf \times dAFr}{dAWrkst}$ (mm/min)

Beim Gewindefräsen wird die Vorschubgeschwindigkeit Va im CNC Programm eingegeben. / For thread milling operations the feed Va is programmed into the CNC machine.

> **Gewindefräszeit 360° /** Thread milling time 360° — $tFr = \frac{\pi \times dAWrkst \times 60}{Va}$ (sec)

> **Zeit für 180° Einfahrschleife /** Time for 180° entry loop — $tE180° = \frac{\pi \times dAWrkst \times 60}{Vf}$ (sec)

> **Zeit für 90° Einfahrschleife /** Time for 90° entry loop — $tE90° = \frac{\pi \times dAWrkst \times 60}{2 \times Vf}$ (sec)

> **Zeit für 180° Ausfahrschleife /** Time for 180° exit loop — $tA180° = \frac{\pi \times dAWrkst \times 60}{Vf}$ (sec)

> **Zeit für 90° Ausfahrschleife /** Time for 90° exit loop — $tA90° = \frac{\pi \times dAWrkst \times 60}{2 \times Vf}$ (sec)

> **Bearbeitungszeit komplett /** Total machining time — $tH = tE + tFr + tA$

Vc	=	**Schnittgeschwindigkeit m/min /** Cutting speed (m/min)
N	=	**Drehzahl U/min /** Revolution **(rpm)**
fz	=	**Vorschub mm/p. Zahn /** Feed p. tooth
Vf	=	**Umfangsvorschubgeschwindigkeit mm/min** Perimeter feed (mm/min)
Va	=	**Mittelpunktsvorschubgeschwindigkeit mm/min** Center feed (mm/min)
$dAFr$	=	**Schneidendurchmesser mm /** Cutting diameter
$dAWrkst$	=	**Kerndurchmesser** Core diameter
Z	=	**Schneidenanzahl /** Quantity of teeth
tFr	=	**Fräszeit 360° /** Milling time 360°
$tE180°$	=	**Zeit für 180° Einfahrschleife /** Time for 180° entry loop
$tE90°$	=	**Zeit für 90° Einfahrschleife /** Time for 90° entry loop
$tA180°$	=	**Zeit für 180° Ausfahrschleife /** Time for 180° exit loop
$tA90°$	=	**Zeit für 90° Ausfahrschleife /** Time for 90° exit loop
tH	=	**Bearbeitungszeit komplett /** Total machining time

CNC PROGRAMMIERUNG FÜR DAS FRÄSER VON INNENGEWINDEN
CNC PROGRAMMING FOR INTERNAL THREAD MILLING

Die Programme zur Werkstückbearbeitung werden normalerweise nach DIN 66025 durchgeführt und beginnen mit der Auswahl von Fräsers und Werkzeugwechsler. Der Fräser wird im Eilgang über das Werkstück in Position gebracht und auf Idealhöhe für die Bearbeitung gesenkt. Um die Arbeitslast auf dem Fräser zu minimieren, wird eine 180° Einfahrschleife gewählt. Der 360° Bearbeitungszyklus hat bei Bearbeitung im Uhrzeigersinn zur Herstellung von Rechtsgewinden Z als Richtung. Um mögliche Verweilmarken auf dem Gewinde zu vermeiden, wird eine 180° Ausfahrschleife gewählt. Zum Abschluß des Fräszyklus fährt das Werkzeug wieder auf die Ausgangsposition.
Programming for thread milling is normally done according to DIN 66025 and starts with the selection of tool and tool changer. The tool is positioned in rapid motion above the workpiece and lowered to the correct height for starting the machining cycle. To minimize stress on the tool, a 180° entry loop is chosen.
The 360° machining cycle has direction Z when producing right hand threads clockwise. To avoid marks on the thread, a 180° exit loop is chosen. The cycle is finished by returning to the initial position.

CNC PROGRAMMIERUNG / CNC PROGRAMMING:

N10 T1 M6
Auswahl Werkzeug, Werkzeugwechsler
Tool and tool changer selection

N20 G20 G54 G00 X0 Y0
N30 Z2 D1 S (W1) M3
Positionierung über Werkstück
Positioning above workpiece

N40 G91 G00 Z -(W2)
Verfahren inkremental / Incremental moving

N50 G01 X0 Y -(W3)
Achskorrektur / Axle correction

N60 G42 X0 Y (W5)
Einfahrschleife / Entry loop

N70 G02 X0 Y -(W6) IO J -(W7) Z -(W8)
Start Bearbeitungszyklus, lineare Interpolation
Start machining cycle, linear interpolation

N80 G02 X0 Y0 IO J (W9)
Z -(W10) F (W11)
Ausfahrschleife / Exit loop

N90 G02 X0 Y (W12) IO J (W13)
Z -(W14) F (W15)
Gegenläufige Achskorrektur / Reverse axle correction

N100 G00 G40 Y -(W16)
Lineare Bewegung zum Bohrungsmittelpunkt Linear movement towards hole center

N120 G00 G53 G90 G80 Z2 M95
Rückkehr zur Ausgangsposition / Return to initial position

N130 M30
Programmende / End of programme

LEGENDE / LEGEND:

W1	**Drehzahl Spindel /** Spindle rotation	**W10**	**Steigung P /** Pitch P
W2	**Gewindetiefe /** Thread depth	**W11**	**Maschinenvorschub Va /** Machine advance Va
W3	**0,3 x Sicherheits für Gewindetiefe 0 /** Thread depth	**W12**	**Distanz zum Zentrum (a) – W3 /** Centerdistance (a) – W3
W4	**Vorschub Vf /** Feed Vf	**W13**	**W6 : 2**
W5	**Fräserradius /** Thread mill radius	**W14**	**0,15 x Gewindesteigung P /** 0,15 x pitch P
W6	**Distanz zum Zentrum (a) – W3 /** Centerdistance (a) – W3	**W15**	**Vorschub Vf /** Feed Vf
W7	**W6 : 2**	**W16**	**Fräserradius /** Thread mill radius
W8	**0,15 x Gewindesteigung P /** 0,15 x pitch P	**W17**	**0,3 x Distanz zum Zentrum (a) /** 0,3 x centerdistance (a)
W9	**Bohrungsradius RAWrkst /** Drill hole radius RAWrkst	**G90**	**Absolutwerteingabe /** Exact value input
M6	**Werkzeugwechsel /** Tool change	**G0**	**Positionierung im Eilgang /** Rapid motion positioning
G54	**geradlieniges Einfahren /** straight entrance	**M3**	**Drehung im Uhrzeigersinn /** Clockwise motion
Z2	**Anfahren /** Approach	**G00**	**Positionierung im Eilgang /** Rapid motion positioning
S3/99	**Drehzahl (U/min) /** Rotation (rpm)	**G42**	**Fräserradius /** Thread mill radius
G91	**Inkrementalwert /** Incremental value	**G53/80**	**Zyklus beenden /** End of cycle
G02	**Kreisinterpolation /** Circle interpolation		

BEARBEITUNGSZYKLUS MIT GEWINDEFRÄSER TYP "RS"
MACHINING CYCLE WITH THREAD MILL TYPE TM "RS"

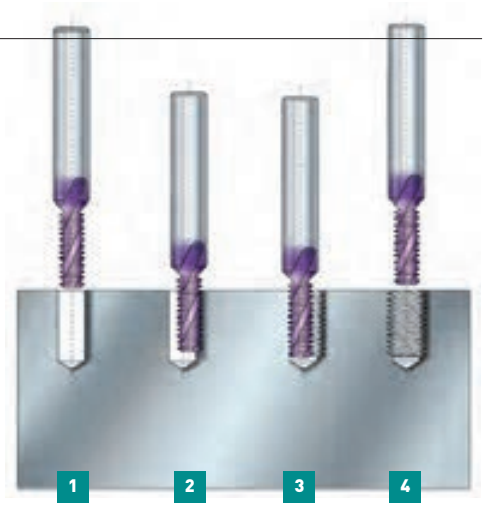
ARBEITSABLAUF / MACHINING CYCLE:

1 **Positionierung des Werkzeugs zentrisch über der Bohrung** / Tool is centered above the drill hole

2 **Start des Gewindefräsens mit einer 180° Einfahrschleife**
Start of thread milling with a 180° immersion loop

3 **Beenden des Fräsvorganges mit einer 180° Ausfahrschleife**
End of thread milling with a 180° exit loop

4 **Zurückfahren auf Startposition und Beenden der Bearbeitung**
Return to starting position and finalizing the machining process



VORTEILE DES GEWINDEFRÄSENS MIT SCHAFTGEWINDEFRÄSERN
BENEFITS OF THREAD MILLING WITH STRAIGHT SHANK THREAD MILLS

- **Die Maßhaltigkeit des Gewindes kann mit hoher Präzision bestimmt werden**
  The thread accuracy can be tetermined with high precision
- **Kein Bruch des Schnittprofils /** No damage of thread profile
- **Niedriger Energiebedarf /** Low energy consumption
- **Kurze Bearbeitungszeiten dank hoher Schnittgeschwindigkeiten**
  Low machining time due to high cutting speed
- **Hervorragende Oberflächengüte der Gewinde /** Excellent surface finishing of threads
- **Eine Vielzahl unterschiedlicher Gewindedurchmesser gleicher Steigung können mit einem Werkzeug hergestellt werden**
  One tool can produce a great variety of thread diameters with identical pitch
- **Kurze Späne, somit keine Spanprobleme /** Short chips avoid problems
- **Ein Werkzeug kann sowohl Rechts- als auch Linksgewinde in Sack- und in Durchgangslöchern herstellen**
  The same tool can produce right and left hand threads in blind and through holes
- **Auch dünnwandige Werkstücke sind aufgrund der geringen Fräskräfte bearbeitbar**
  Due to low milling power machining of thin walled workpieces possible
- **Schnittwerte können flexibel dem zu bearbeitendem Material angepasst werden.**
  Cutting data can be adapted flexibly to the material to be machined
- **Kein Drehrichtungswechsel mit der Hauptspindel notwendig.**
  No reversal of rotation of the main spindle necessary
- **Kein Gewindeschneidfutter notwendig. /** No threading chucks necessary
- **Exakte Gewindetiefe. /** Exact thread depth
- **Bei Sacklochbearbeitung kann das Gewinde bis nahe zum Grund gefertigt werden.**
  When machining blind holes, the thread can be produced very close to the bottom
- **Geringe Werkzeugkosten bei großen Gewinden /** Low tool costs for big threads
- **Gute Bearbeitung auch schwer bearbeitbarer Werkstoffe**
  Easy machining of materials difficult to machine

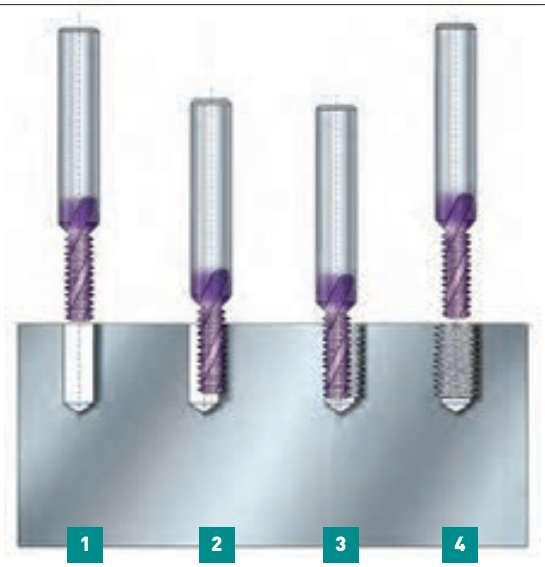
VORAUSSETZUNG FÜR DEN KORREKTEN EINSATZ
REQUIREMENTS FOR CORRECT USE

- **CNC-Fräsmaschine mit 3D Bahnsteuerung**
  CNC milling machine with 3D continuous control
- **Korrekte Programmierung der Ein- und Ausfahrschleife um Werkzeugbruch zu vermeiden**
  Correct programming of immersion and exit loop to prevent tool breakage
- **Stabile Werkzeugeinspannung und hohe Maschinensteifigkeit**
  Stabil workpiece clamping and machine situation

BEARBEITUNGSZYKLUS MIT GEWINDEFRÄSER TYP TM, TMI
MACHINING CYCLE WITH THREAD MILL TYPE TM, TMI

ARBEITSABLAUF / MACHINING CYCLE:

1. **Positionierung des Werkzeugs zentrisch über der Bohrung /** Tool is centered above the drill hole
2. **Start des Gewindefräsens mit einer 90° Einfahrschleife** Start of thread milling with a 90° immersion loop
3. **Beenden des Fräsvorganges mit einer 90° Ausfahrschleife** End of thread milling with an exit loop
4. **Zurückfahren auf Startposition und Beenden der Bearbeitung** Return to starting position and finalizing the machining process

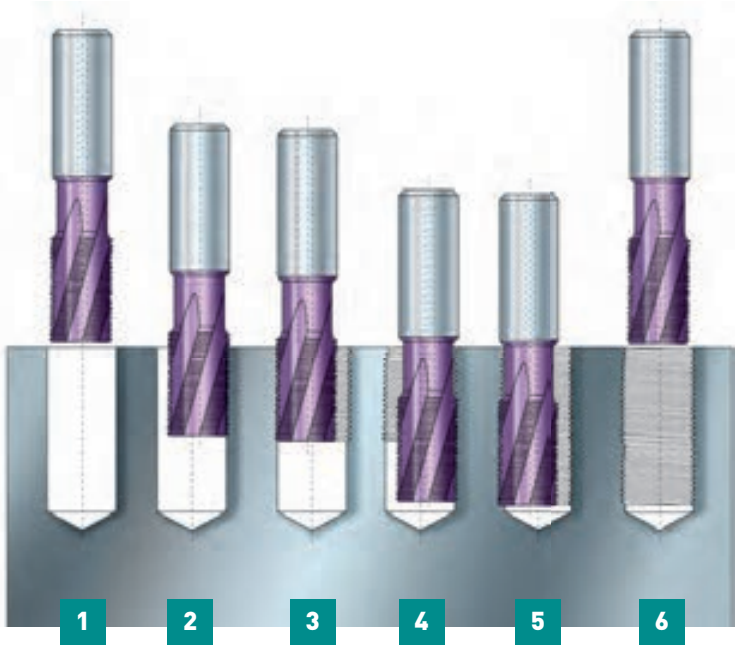


DOPPELTER BEARBEITUNGSZYKLUS MIT GEWINDEFRÄSER TYP TM, TM I
DOUBLE MACHINING CYCLE WITH THREAD MILL TYPE TM, TMI

Es ist sicher zu stellen, dass die Verjüngung zwischen Schneidenteil und Schaft zur Herstellung der gewünschte Gewindetiefe ausreicht.
The reduction between cutting part and shank of the tool must be sufficient for the depth of the desired thread.

ARBEITSABLAUF / MACHINING CYCLE:

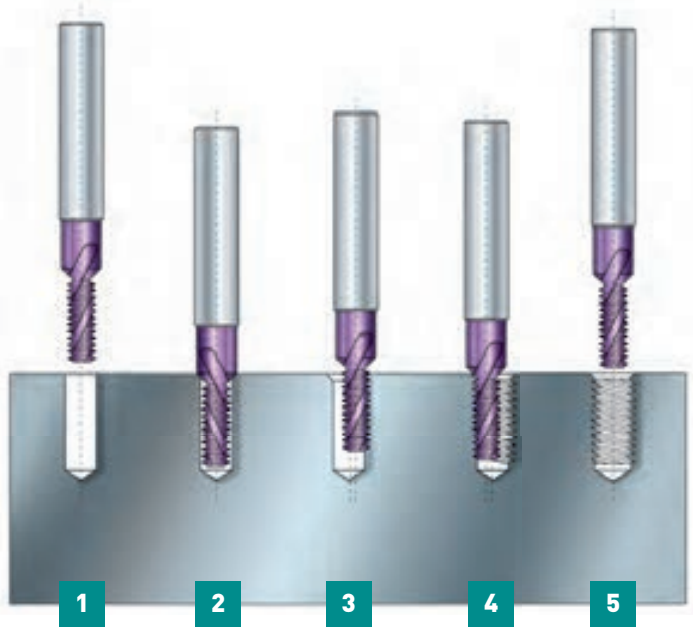
1. **Positionierung des Werkzeugs zentrisch über der Bohrung -** Tool is centered above the drill hole
2. **Start des Gewindefräsens mit einer 90° Einfahrschleife -** Start of thread milling with a 90° immersion loop
3. **Beenden des 1. Fräsvorganges mit einer 90° Ausfahrschleife -** End of the first thread milling cycle with an exit loop
4. **Zustellung in Z-Richtung um die gewünschte Anzahl von Steigungen -** Tool needs to move in the Z-axis by a multiple of the pitch of the thread to be cut
5. **Start des 2. Fräsvorganges mit einer 90° Einfahrschleife -** Start of second thread milling cycle with a 90° immersion loop
6. **Endgültiges Beenden des Fräsvorganges mit einer 90° Ausfahrschleife und Zurückfahren in die Ausgangsposition**
Final termination of thread milling with an exit loop and return to initial position



KOMBINIERTE BEARBEITUNG: GEWINDEFRÄSEN UND SENKEN MIT TYP CTM
COMBINED MACHINING:
THREAD MILLING AND COUNTERSINKING WITH TYPE CTM

ARBEITSABLAUF / MACHINING CYCLE:

1. Positionierung des Werkzeugs zentrisch über der Bohrung / Tool is centered above the drill hole
2. Ansenken der 90°-Fase
   Countersinking at 90°
3. Start des Gewindefräsens mit einer 180° Einfahrschleife
   Start of thread milling with a 180° immersion loop
4. Beenden des Fräsvorganges mit einer 180° Ausfahrschleife
   End of thread milling with an exit loop
5. Zurückfahren auf Startposition und Beenden der Bearbeitung
   Return to starting position and finalizing the machining process

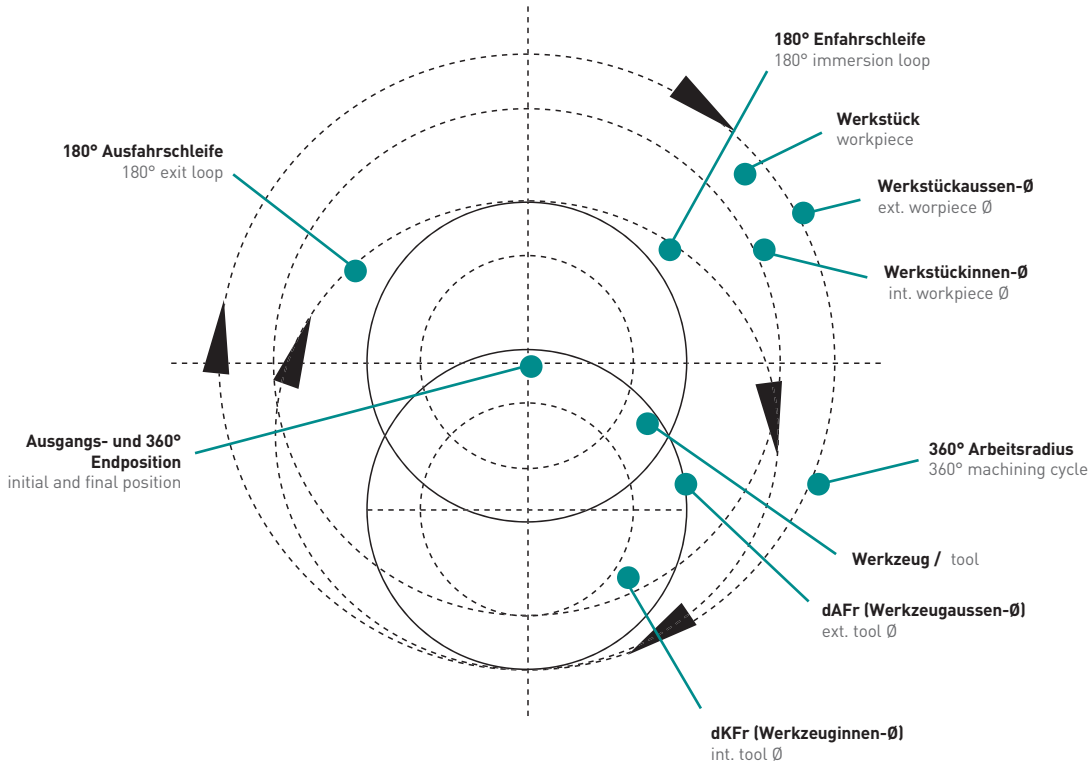


VORTEIL BEIM EINSATZ DES KOMBINIERTEN WERKZEUGS CTM
BENEFITS OF USING THE COMBINED TOOL CTM

- Hohe Produktivität durch Herstellung von Schutzsenkung und Gewinde ohne Werkzeugwechsel in einem Arbeitsgang
  High productivity through countersinking and thread milling in one productive cycle without tool change
- Verkürzung der Hauptzeit
  Reduction of main machining time
- Verkürzung der Rüst- und Werkzeugwechselzeiten
  Reduction of machine preparation and tool changing times

DARSTELLUNG DES AEBEITSZYKLUS
MACHINING CYCLE DIAGRAMME

INNENGEWINDEFRÄSEN / INTERNAL THREAD MILLING

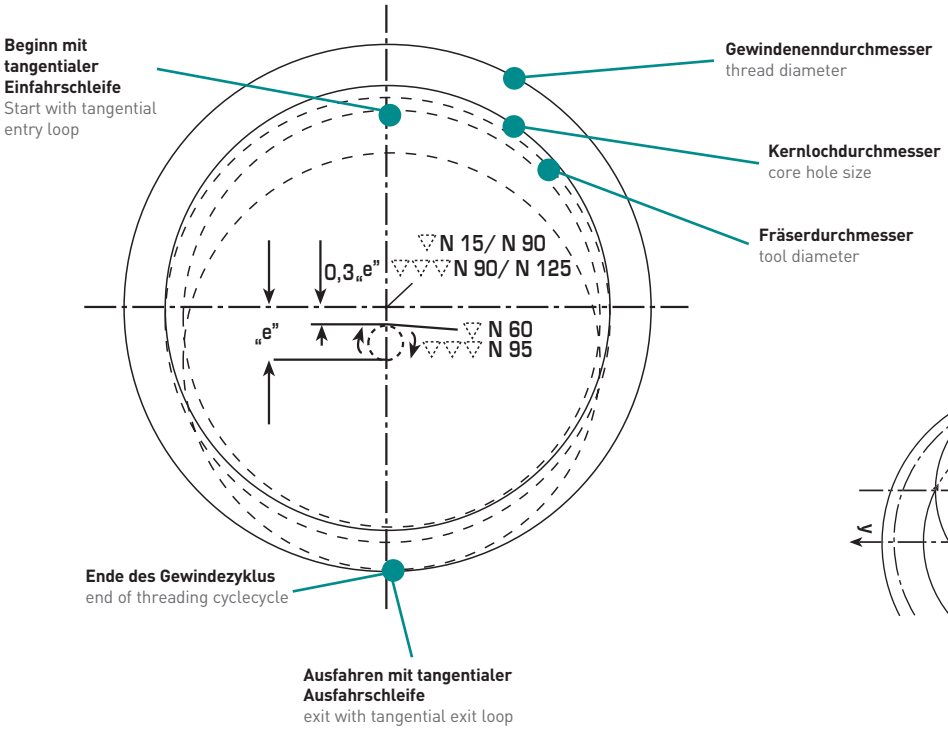


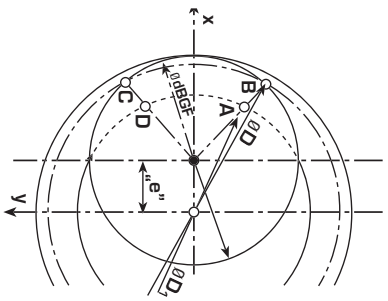
GEWINDEFRÄSEN MIT DTM
THREAD MILLING WITH DTM

VORGEHENSWEISE BEIM BOHREN, SENKEN UND GEWINDEFRÄSEN
METHODOLOGIE FOR DRILLING, CHAMFERING AND THREAD MILLING

Die DTM Fräser sind Werkzeuge zur kombinierten Spanförderung, deren Eigenschaften Bohren, Senken und Gewindefräsen in einem einzigen Arbeitsgang ermöglichen. Gegenüber dem konventionellen Gewindeschneiden ergeben sich erhebliche Vorteile:
The DTM thread mills are tools for combined chip removal. Their characteristics allow drilling, chamfering and thread milling in one single operation. Compared to conventional tapping, the following advantages exist:

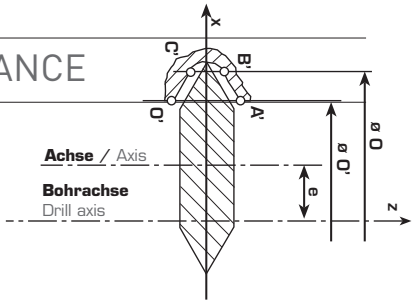
- **verkürzte Bearbeitungszeiten**
  short machining time
- **kein Werkzeugwechsel**
  no tool change
- **sehr hohe Bearbeitungsqualität**
  very good finishing
- **kurze Späne mit gutem Spantransport**
  short chips with good chipflow
- **ein Werkzeug für Sack- und Durchgangslöcher**
  one tool for blind and through hole
- **geringer Schneiddruck ermöglicht die Bearbeitung dünnwandiger Werkstücke**
  low cutting pressure allows machining of thin walled workpieces
- **alle gewünschten Toleranzen können gefertigt werden**
  all tolerances can be obtained
- **exakte Gewindetiefe**
  exact thread depth



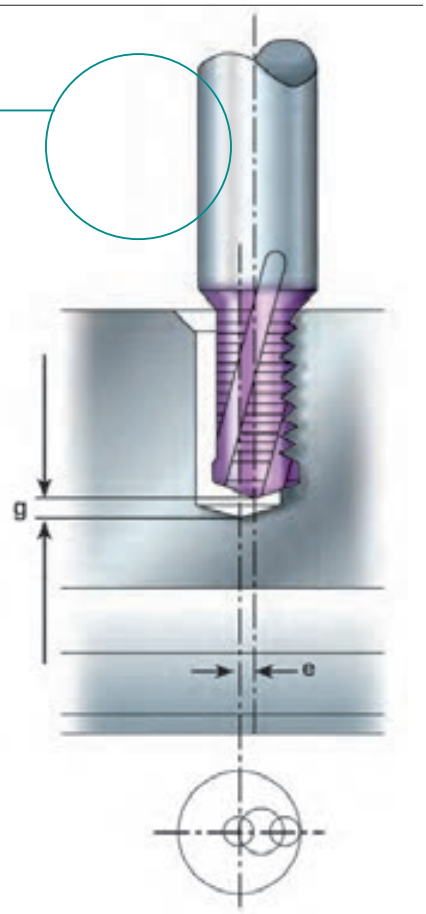


VERÄNDERUNG DER TOLERANZEN / VARIATION OF TOLERANCE

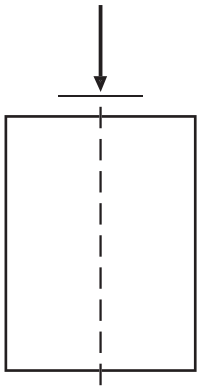
Durch Veränderung des Fräserradius im Programm kann jede gewünschte Toleranz erzielt werden.
By changing the tool radius in the program any tolerance can be achieved.



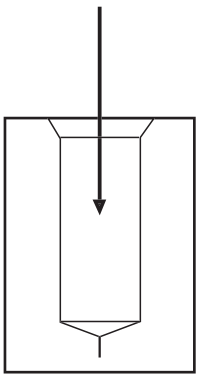
BEARBEIZTUNGSBEISPIEL / APPLICATION EXAMPLE



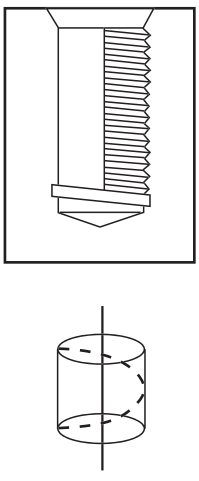
Wie exemplarisch in untenstehenden Zeichnungen dargestellt, ist die Bearbeitung auf einer 3 Achsen CNC Maschine durch schnelle Positionierung für die Arbeitsgänge des Bohrens und Senkens charakterisiert. Nach kurzem Rückzug (g) und Positionierung (e) wird der Gewindefräsvorgang eingeleitet, der im Gleichlauf (G02) durchgeführt wird. Werkzeugdrehrichtung und Zirkulation sind gleich, was den Werkzeugverschleiß minimiert.
Beim Gegenlauf (G03) ist die Werkzeugdrehrichtung gegenläufig zur Zirkulationsrichtung. Diese Bearbeitungsart ist in Materialien bis 700 N/mm, bspw. Aluminiumlegierungen, einsetzbar und verkürzt die Bearbeitungszeit erheblich.
As shown in below drawing, when working on a 3D CNC machine a quick approach for the drilling and chamfering process is done.
After short retreat (g) and positioning (e) the climb milling (G02) thread milling process is started. Tool rotation is identical with circulation, which minimizes tool wear. In conventional milling (G03) the tool rotates in reverse direction to the circulation. This type of machining is adequate for materials – 700 N/mm, e.g. Aluminium alloys and reduces machining time substantially.



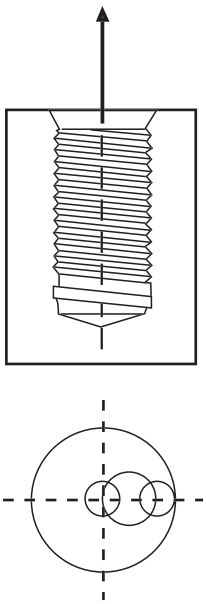
Positionierung im Eilgang
Quick positioning



Bohren, Senken und Rückzug auf Gewindefräsposition
Drilling, chamfering and retreat to thread milling position



Gewindezyklus
Thread milling cycle



Rückzug auf Ausgangsposition und Beenden des Prozesses
Return to starting position, end of process

BEARBEITUNGSZYKLUS MIT GEWINDEFRÄSER TYP TP
MACHINING CYCLE WITH THREAD MILL TYPE TP

ARBEITSABLAUF / MACHINING CYCLE:

1. **Positionierung des Werkzeugs zentrisch über der Bohrung**
   Tool is centered above the drill hole
2. **Start des Gewindefräsens mit einer 90° Einfahrschleife**
   Start of thread milling with a 90° immersion loop
3. **Beenden des Fräsvorganges mit einer 90° Ausfahrschleife**
   End of thread milling with an exit loop
4. **Zurückfahren auf Startposition und Beenden der Bearbeitung**
   Return to starting position and finalizing the machining process



ARBEITSZYKLUS MIT GEWINDEFRÄSER TYP MICRO
MACHINING CYCLE WITH THREAD MILL TYPE MICRO

ARBEITSABLAUF / MACHINING CYCLE:

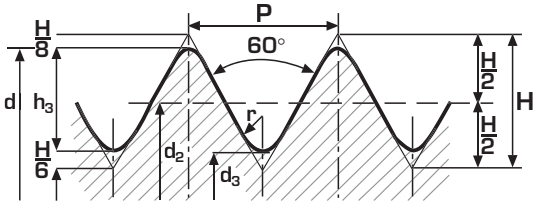
1. **Werkzeugs fährt auf Startposition zentrisch über die Bohrung -** Tool is centered above the drill hole
2. **Start des Gewindefräsens mit einer 180° Einfahrschleife -** Start of thread milling with a 180° immersion loo
3. **Zirkulares Gewindefräsen auf Gewindetiefe**
   Thread milling with helical intepolation down to required thread depth
4. **Zirkulares Gewindefräsen auf Gewindetiefe**
   Thread milling with helical intepolation down to required thread depth
5. **Beenden des Gewindefräsvorganges mit einer Ausfahrschleife -** Start of second thread milling cycle with a 90° immersion loop
6. **Verfahren auf Startposition un Beenden des Bearbeitungsvorganges -** Return to initial position and end of machining cycle



GEWINDEARTEN UND -GRÖSSEN

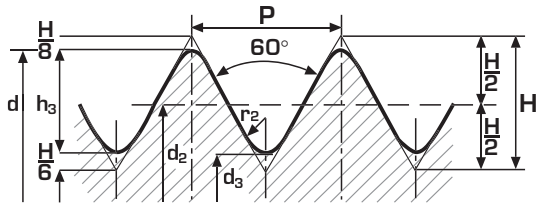
THREAD TYPES AND SIZES

METRISCH / METRIC ISO



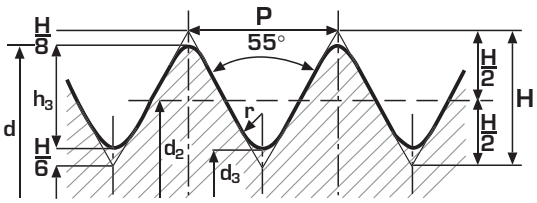
H = 0,86603 . P
h3 = 0,61343 . P
d2 = d - (0,6495 . P)
d3 = d - (2 . h3)
r = H/6 = 0,14434 . P

UNF-UNC



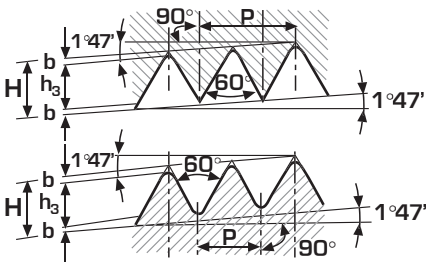
H = 0,86603 . P
h3 = 0,61343 . P
d2 = d - (0,6495 . P)
d3 = d - (2 . h3)
r1 = 0,10825 . P
r2 = 0,1443 . P

WITHWORTH BSW, BSF, BSPP



H = 0,96049 . P
h3 = 0,64033 . P
d2 = d - h3
d3 = d - (2 . h3)
r = 0,13733 . P

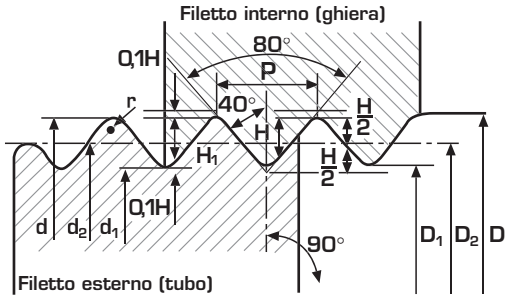
GAS KONISCH / CONICAL, NPT



H = 0,866025 . P
h3 = 0,8000 . P
b = 0,033 . P

STAHLPANZERROHRGEWINDE

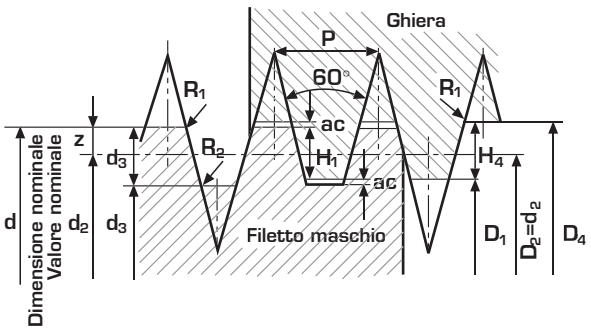
STEEL CONDUIT THREAD DIN 40 430



P = 25,4 / z
r = 0,107 . P
H = 0,595878 . P
H1 = 0,8 H = 0,4767 . P

TRAPEZGEWINDE

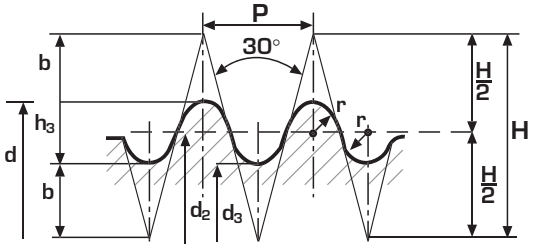
TRAPEZOIDAL THREAD ISO DIN 103



D1 = d - 2 H1 = d - P
H1 = 0,5 . P
H4 = H1 + ac = 0,5 . P + ac
h3 = H1 + ac = 0,5 . P + ac
z = 0,25 P = H1/2
D4 = d +- 2ac
d3 = d - 2h3
d2 = D2 = d - 2z = d-0,5 . P
ac = Jeu/Gioco
R1 = max. 0,5 ac
R2 = max. ac

RUNDGEWINDE

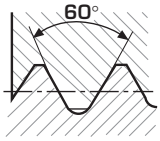
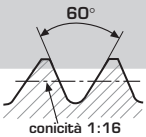
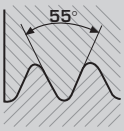
KNUCKLE THREAD DIN 405



H = 1,86603 . P
h3 = 0,5 . P
d2 = d - h3
d3 = d - (2 . h3)
r = 0,23851 . P
b = 0,68301 . P

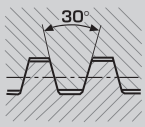
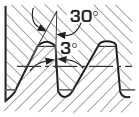
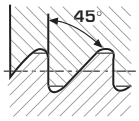
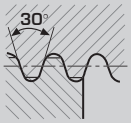
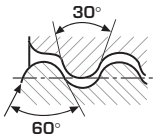
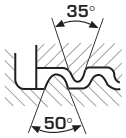
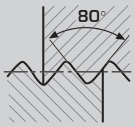
GEWINDEARTEN UND -GRÖSSEN

THREAD TYPES AND SIZES

Benennung Designation	**Profil (Skizze)** Profile (sketch)	**Kennbuchstabe** Code	**Kurzbezeichnung** Example	**Nenngrösse** Range	**nach Norm** acc. to	**Anwendung** Application
						Uhren- und Feinwerktechnik clock and precision mechanics
Metrisches ISO Gewinde Metric ISO thread			M 0,8 M M 20x1	0,3 fino a 0,9 mm M 30 1 - 68 mm 1 - 1000 mm	DIN 14 DIN 13 DIN 13	**allgemeine Regelgewinde** general standard threads **wenn Steigung des Regelgewinde zugross** when pitch of standard thread too high
Metrisches Gewinde mit Übergangstoleranzfeld Metric thread with transition tolerance field			M 10 Sn 4 M 10 Sk 6 M M 10 Sn 4 a tenuta M18 x 1,5 DIN 72501	3 - 150 mm 3 - 150 mm 18 mm	DIN 13 DIN 72501	**nicht dichtend** not sealing **Einschraubende an Stiftschrauben, dichtend** tap bolts, sealing
Metrisches Gewinde für Zündkerzen Metric thread for spark plugs		M	M 14x1,25 DIN 72502	14 mm	DIN 72502	**Zündkerzen** spark plugs
Metrisches Gewinde mit großem Spiel Metric thread with high clearance		M	M 36 DIN 2510	12 - 180 mm	DIN 2510	**Schraubverbindung mit Dehnschaft** screw connection with flexible shank
Zylindrisches metrisches Innengewinde Cylindrical metric internal thread		M	M 30x2 DIN 158	6 - 60 mm	DIN 158	**dichte Innengewinde** sealed internal threads
Kegeliges metrisches Aussengewinde External metric taper thread		M DIN 158	M 30x2 Keg	6 - 60 mm	DIN 158	**dichte Innengewinde** sealed internal threads
Whitworth Rohrgewinde Whitworth pipe thread		R	R 3/4 Rp 1/2 DIN 2999	R 1/8 - R6 inch R 1/8 - R6 inch	DIN 259 DIN 2999	**Außengewinde für Rohre und Rohrverbindungen -** external pipe threads and pipe fittings **Innengewinde für Rohre und Rohrverbindungen -** internal pipe threads and pipe fittings
Whitworth Rohrgewinde, zylindrisch Whitworth pipe thread, cylindrica		RP	Rp 1/8 DIN 3858	R 1/8 - R6 inch	DIN 3858	**Innengewinde für Rohre und Rohrverbindungen -** internal pipe threads and pipe fittings
Whitworth Rohrgewinde, konisch Whitworth pipe thread, tapered		R	Rp 1/2 DIN 2999 Rp 1/8 DIN 3858	R 1/8 - R6 inch R1 1/2 inch	DIN 2999 DIN 3858	**Außengewinde für Gewinderohre und Fittings -** external pipe threads and pipe fittings **Außengewinde für Rohrverschraubungen** external pipe threads

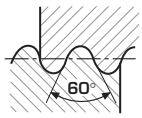
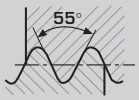
GEWINDEARTEN UND -GRÖSSEN

THREAD TYPES AND SIZES

Benennung Designation	**Profil (Skizze)** Profile (sketch)	**Kennbuchstabe** Code	**Kurzbezeichnung** Example	**Nenngrösse** Range	**nach Norm** acc. to	**Anwendung** Application
Metrisches ISO Trapezgewinde Metric ISO trapezoidal thread		Tr	Tr 40x7	8 - 300 mm	DIN 103	**allgemeine Anwendungen** general purpose
Metrisches Sägegewinde Metric buttress thread		S	S 48x8	10 - 640 mm	DIN 513	**allgemeine Anwendungen** general purpose
			S 630x20 DIN 2781	100 - 1250 mm	DIN 2781	**hydraulische Pressen** hydraulic presses
		Rd	Rd 40 x 1/6	8 - 200 mm	DIN 405/1+2	**allgemeine Anwendungen** general purpose
			Rd 40 x 5	10 - 300 mm	DIN 20 400	**große Tragtiefe im Bergbau** large carrying depth in the mining industry
			Rd 80 x 100 DIN 15 403	50 - 320 mm	DIN 15 403	**Lasthaken** loading hooks
			Rd 70 DIN 7273	20 - 100 mm	DIN 7273	**Blechteile und zugehörige Verschraubg.** sheet metal and associated bolts
Rundgewinde Knuckle Thread		GL DIN 168	Rd 40x1/7 DIN 3182	40, 80, 110 mm	DIN 3182	**zylindrische Rundgewinde, Atemschutzgeräte** cylindrical knuckles threads, respirators
			GL 25x3	8 - 45 mm	DIN 168	**Glasbehältnisse** glass containers
Elektrogewinde Electrical thread		E	E 27 DIN 40 400	E14, E16, E18, E27, E33 mm	DIN 40 400	**D-Sicherungen, Lampensockel und –fassungen** D-type fuses, lamp holders and sockets
Elektrogewinde Glass Thread		Glasg	Glasg 74,5 DIN 40 450	74,5 - 188 mm	DIN 40 450	**Elektrotechnik, für Schutzgläser – u. Kappen** electrical devices, protection glasses and caps
Stahlpanzerrohrgewinde Steel conduit thread		R	Pg 21 DIN 40 430	Pg 7 - Pg 48	DIN 40 430	**Elektrotechnik** electrical industry

GEWINDEARTEN UND -GRÖSSEN

THREAD TYPES AND SIZES

Benennung Designation	**Profil (Skizze)** Profile (sketch)	**Kennbuchstabe** Code	**Kurzbezeichnung** Example	**Nenngrösse** Range	**nach Norm** acc. to	**Anwendung** Application
Blechschrau- ben-gewinde Sheet metal screw threads		ST	ST 3,5 DIN 7970	1,5 - 9,5 mm	DIN 7970	Blechschrauben tapping screw threads
Holzschrauben-gewinde Wood screw threads		-	4 - DIN 7998	1,6 - 20 mm	DIN 7998	Holzschrauben wood screws
Fahrrad -gewind Bicycle threads		fg	fg 9,5	2 - 34,8 mm	din 79012	Fahrräder und Mopeds bicycles and motor bicycles
Ventilge - winde Tyre valve thread		Vg	Vg 12 DIN 7756	5 - 12 mm	DIN 7756	Ventilgewinde für Fahrzeugbereifung valve threads for vehicle tyres
kegeliges Whitworthgewinde Whitworth thread, tapered		W	W 28,8 x 1/4 keg DIN 477	19,8 mm 28,8 mm 31,3 mm	DIN 477 foglio 1	valvole per gas side connecting pieces of gas bottle valves
kegeliges-Gestäge, Rohrgewinde Tapered linkage, pipe threads		Gg	gg 51 DIN 4941 Gg 4 1/2 DIN 20314	44,5 - 88,9 mm 3 1/2, 4 1/2, 5 1/2 inch	DIN 20 314	Tiefbohrtechnik, Brunnenbau, Bergbau deep drilling tecnique building of wells, mining industry

SELTENE GEWINDEARTEN
RARE THREAD TYPES

Benennung designation	**Norm** acc. to	**impiego** application
Trapezgewinde, 1- u. 2-gängig / trapezoidal single a. double t.	din 263	**Schienenfahrzeuge /** rail transport
Trapezgewinde, ersetzt d. / trapezoidal threads, repl.by din 103	din 378	**Bewegungsgewinde /** action threads
Trapezgewinde, ersetzt d. / trapezoidal threads, repl. by din 103	din 379	**Bewegungsgewinde /** action threads
Futerrohrgewinde / knuckle threads	din 4933	**Bohrungen /** drillings
Brillengewinde / threads for spectacles	din 5347	**Implantation /** implantation
Blechschrauben / sheet metal screw threads	din 7075	**Bleche /** sheet metals
Rundgewinde / knuckle threads (passo / pitch 7 mm)	din 262	**Fahrzeuge, Schutzkappen /** vehicles, protection muffs
Druckgasflaschengewinde gas pressure container threads	din 4668	**Ventilverbindungen, Schutzkappen** valve joints, protection caps
Gefrieraussenrohrgewinde cooling system threads	din 4930	**Kühlleitungen, - systeme /** refrigeration tubes a. systems
Isolierflaschengewinde / isolated container threads	din 5396	**Isolierte Behälter /** isolated containers
kegel. Feingewinde metrisch / tapered metric fine (1:20)	din 8507	**Löt-, Schweißgeräte /** soldering a. welding equipment
lötlose Rohrverschraubungsgewinde / pressed pipe threads	din 8904	**Lötfreie Verbindungen** pressed joints
Sägengewinde / buttress threads	din 20401	**Steigung /** pitch 0,5 - 2mm
Trapezgewinde gerundet / trapezoidal threads	din 30295	**Eisenbahnkonstruktion** railway construction
Rundgewinde f. Kfz-Bau / knuckle threads for vehicle constr.	din 70156	**Transportbereich /** transport
Nähmaschinengewinde / sewing machine threads ng	din 5309	-

AUSLÄNDISCHE GEWINDEARTEN / FOREIGN THREAD TYPES

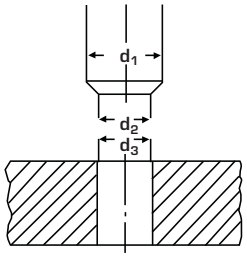
Benennung Designation	**Kennbuchstabe** Code	**Kurzzeichen Beispiel** Denomination Example	**nach Norm** acc. to standard	**Ursprungsland** Country of origin
Unified Schraubengewinde Unified screw thread	UNM UN, UNC, UNF, UNS UNJF, UNJC	0,80 UNM 1/4 - 20 UNC 1/4 - 20 UNC-3A-LH 1/4 - 28 UNJF	ASA B 1.10 ANSI B 1.1, B.S. 1580 CSA B 1.1 B.S. 4084	USA USA GB CA GB
US-Schraubengew. alte Norm US screw thread, old norm	NC, NF, NEF, NS, N	12 - 32 NEF	ASA B 1.1	USA
Whitworth-Gewinde / thread	BSW, BSF	1/4 - in. - 20 BSW	B.S. 84	GB
B.A.-Gewinde / thread	B.A.	11 B.A.	B.S. 93	GB
zyl. Rohrgewinde cylindrical pipe thread	NPSC, NPSM, NPSL, NPSH DRYSEAL NPSF DRYSEAL NPSJ BSP.F BSP.PI filetto interno	1/8 – 27 NPSC 1/8 – 27 dryseal NPSF 1 in. BSP.F 1 in. BSP.PI	ANSI B 2.1 ANSI B 2.2 B.S. 2779 B.S. 21	USA USA GB GB
kegeliges Rohrgewinde tapered pipe thread	NPT, NPTR DRYSEAL NPTF BSP. Tr	3/8 - 18 NPT 1/8 - 27 dryseal NPTF 1 in. - BSP. Tr	ANSI 2.1 ANSI B 2.2 B.S. 21	USA USA GB
API-Gewinde / thread	API con suffisso	1 1/2 API TBG	API Std 5 B	USA
Trapezgewinde Trap. thread	ACME STUB - ACME	1 3/4 4 ACME 1/2 - 20 STUB - ACME	B.S. 1104 ASA B 1.8	GB USA
Sägengewinde buttress thread	BUTT BUTTRESS	1/2 - 20 BUTT 1/2 - 20 BUTT	ASA B 1.8 - ASA B 1.5 (in Überarbeitung / in revision) B.S. 1657	USA GB
Fahrradgew. bycicle thread	BSC	1/24 - 26 BSC	B.S. 811	GB

TECHNISCHE DATEN ZUM AUFBOHREN

TECHNICAL DATA FOR CORE DRILLING

Mindestvorbohrdurchmesser für die Anwendung von Aufbohrern nach
Minimal diameter for the application of core drills according to

DIN 344, 343 e 1864 edizione 8. 1971



d_1 = **Aufbohrer Nenn-Ø**
nominal tool Ø

d_2 = **kleinster Anschnitt-Ø**
minimal chamfer Ø

d_3 = **kleinster Vorbohr-Ø**
minimal core hole Ø

Aufbohrer Nenn-Ø nominal tool Ø	**kleinster Vorbohr-Ø** minimal core hole Ø	**Aufbohrer Nenn-Ø** nominal tool Ø	**kleinster Vorbohr-Ø** minimal core hole Ø
5	3,5	17	11,9
6	4,2	18	12,6
7	4,9	19	13,3
8	5,6	20	14
9	6,3	21	14,6
10	7,0	22	15,3
11	7,7	23	16
12	8,4	24	16,6
13	9,1	25	17,3
14	9,8	26	18
15	10,5	27	18,6
16	11,2	28	19,3

Aufbohrer Nenn-Ø nominal tool Ø	**kleinster Vorbohr-Ø** minimal core hole Ø	**Aufbohrer Nenn-Ø** nominal tool Ø	**kleinster Vorbohr-Ø** minimal core hole Ø
29	20	41	28,5
30	20,5	42	29
31	21	43	30
32	22	44	30,5
33	23	45	31
34	24	46	32
35	25	47	32,5
36	25,5	48	33
37	26	49	34
38	26,5	50	34,5
39	27	-	-
40	28	-	-

ISO-TOLERANZEN FÜR PRÄZISIONSWERKZEUGE
ISO TOLERANCES FOR PRECISION CUTTING TOOLS

WERTE IN µm / FIGURES IN µm (= 1/1000 MM)

Toleranzen für Präzisionswerkzeuge Tolerances for precision cutting tools		**mehr als**	**bei Durchmesserbereich** for diameter range D (mm)							
Nenn-Ø nominal Ø	**Schaft-Ø u. andere Maße** Shank-Ø a. other sizes	**<** **–**	**1** **3**	**3** **6**	**6** **10**	**10** **18**	**18** **30**	**30** **50**	**50** **80**	**80** **120**
VHM-Hochleistungs-Spibo, 2 Schneiden Solid carbide high performance drills, 2 flutes		m 7		+ 16	+ 21 + 4	+ 25 + 6	+ 29 + 7	+ 8		
VHM-Hochleistungs-Spibo, 3 Schneiden Solid carbide high performance drills, 3 flutes		h 7	0 - 10	0 - 12	0 - 15	0 - 18	0 - 21	0		
	VHM-Hochleistungs-Spibo Solid carbide high performance drills	h 6	0 - 6	0 - 8	0 - 9	0 - 11	0 - 13			
Spiral-, Auf-, Mehrfasenbohrer Twist, core, subland drills HSS, HSS-Co		h 8	0 - 14	0 - 18	0 - 22	0 - 27	0 - 33	0 - 39	0 - 46	0 - 54
HM-bestückte Spibo, Mehrfasenbohrer (Bohrer-Ø) Carbide tipped and subland drills (pilot-Ø)	**Masch. u. Kegelreibahlen mit Zyl.-Schaft, Zentrierbohrer, Maschinen- Gewinde-, Gewindebohrer mit u. ohne Kühlmittelzufuhr, Handand Gewindebohrer (Fertigschneider)** Reamers, taper pin reamers with straigh shank, center drills, machine taps with a. without oil feed holes, hand bottoming taps	h 9	0 - 25	0 - 30	0 - 36	0 - 43	0 - 52	0 - 62	0 - 74	0 - 87
	Gewindebohrer Vor- u. Mittelschneider, Vierkante Taper and Plug taps, square	h 12	0 - 100	0 - 120	0 - 150	0 - 180	0 - 210	0 - 250	0 - 300	0 - 350
Hand-Reibahlen, Kegel- u. Zylinderschaft Hand reamers taper pin and straight shank		k 11			+ 90 0	+ 110 0	+ 130 0	+ 160 0		

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