



**CHUCK**

# Closed Centre Power Chuck

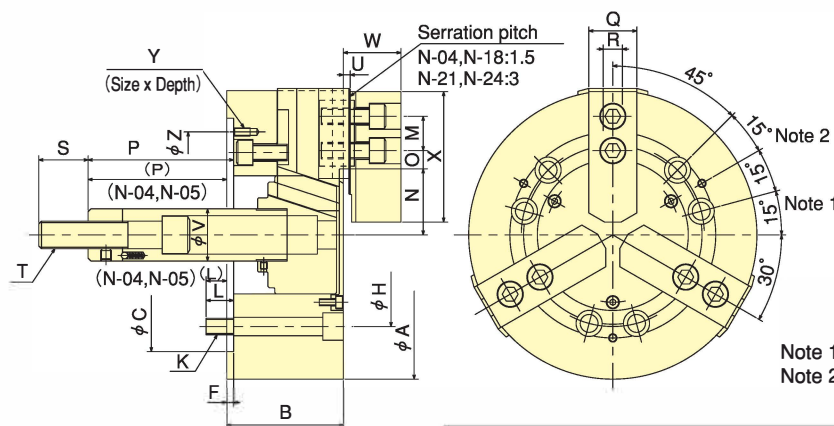
## N series

### Closed Centre Standard Chuck

### The standard Closed Centre chuck

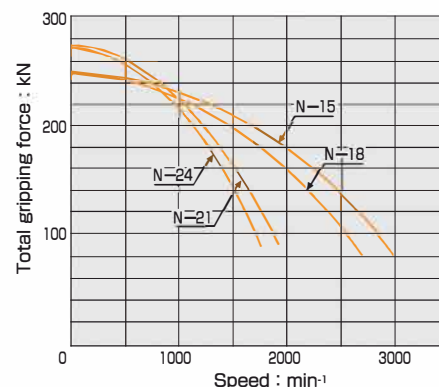
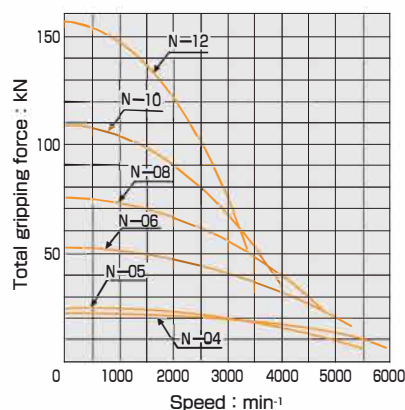
\*CE correspondence

#### Dimensional Drawings



#### Gripping Characteristic Graphs

※With standard blank soft top jaw.



#### Dimensions

※Mounting bolt P. C. D. for N-04 & N-05 : 120° pitch : 3 pcs. ※Mounting bolt P. C. D. for N-21 & N-24 : 60° pitch : 6 pcs.

| Dimensions Model | A   | B   | C (H6) | F | H     | J  | K     | L  | M  | N max. | N min. | O max. | O min. | P max. | P min. | Q  | R    | S  | T   | U | V  | W  | X   | Y      | Z     |
|------------------|-----|-----|--------|---|-------|----|-------|----|----|--------|--------|--------|--------|--------|--------|----|------|----|-----|---|----|----|-----|--------|-------|
| N-04             | 110 | 52  | 60     | 6 | 80    | —  | 3-M8  | 12 | 14 | 23.3   | 20.1   | 11.25  | 8.25   | 18     | 3      | 23 | 10   | 25 | M10 | 3 | 26 | 27 | 55  | —      | —     |
| N-05             | 135 | 55  | 80     | 7 | 100   | —  | 3-M8  | 14 | 19 | 30.4   | 27.2   | 11.25  | 6.75   | 9      | —6     | 23 | 10   | 35 | M12 | 3 | 28 | 29 | 62  | —      | —     |
| N-06             | 165 | 74  | 140    | 5 | 104.8 | 21 | 6-M10 | 14 | 20 | 37.8   | 33.55  | 13.75  | 7.75   | 101.5  | 81.5   | 31 | 12   | 36 | M16 | 4 | 34 | 35 | 72  | M6×10  | 116   |
| N-08             | 210 | 85  | 170    | 5 | 133.4 | 25 | 6-M12 | 20 | 25 | 46.3   | 41.9   | 22.25  | 11.75  | 127    | 106    | 35 | 14   | 36 | M20 | 5 | 38 | 42 | 95  | M6×12  | 150   |
| N-10             | 254 | 89  | 220    | 5 | 171.4 | 34 | 6-M16 | 18 | 30 | 51.1   | 46.7   | 30.75  | 11.25  | 158    | 133    | 40 | 16   | 36 | M20 | 5 | 45 | 46 | 110 | M8×15  | 190   |
| N-12             | 304 | 106 | 220    | 6 | 171.4 | 34 | 6-M16 | 18 | 30 | 61     | 55.75  | 48.75  | 12.75  | 163    | 133    | 50 | 18   | 36 | M20 | 5 | 50 | 54 | 129 | M8×15  | 190   |
| N-15             | 381 | 114 | 300    | 6 | 235   | —  | 6-M20 | 30 | 43 | 77.5   | 69.5   | 48.75  | 23.25  | 104    | 69     | 50 | 25.5 | 55 | M30 | 2 | 60 | 61 | 135 | M10×20 | 260   |
| N-18             | 450 | 114 | 300    | 6 | 235   | —  | 6-M20 | 30 | 43 | 108    | 100    | 48.75  | 23.25  | 92     | 57     | 50 | 25.5 | 55 | M30 | 2 | 60 | 61 | 135 | M10×20 | 260   |
| N-21             | 530 | 125 | 380    | 6 | 330.2 | —  | 6-M22 | 31 | 60 | 86     | 78     | 93.5   | 27.5   | 97     | 62     | 65 | 25   | 55 | M30 | 3 | 60 | 71 | 180 | M12×30 | 330.2 |
| N-24             | 610 | 125 | 380    | 6 | 330.2 | —  | 6-M22 | 31 | 60 | 125    | 117    | 93.5   | 27.5   | 97     | 62     | 65 | 25   | 55 | M30 | 3 | 60 | 71 | 180 | M12×30 | 330.2 |

#### Specifications

※Max. speed is shown using actual test data. ※For large type more than N-24, confer with KITAGAWA.

| Specifications Model | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min⁻¹ | Net Weight with Soft top jaws kg | Moment of inertia kg·m² | Matching pressure | Cylinder air | Max. pressure MPa (kgf/cm²) | Matching Hard top jaw | Matching Soft top jaw |
|----------------------|-------------------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------|----------------------------------|-------------------------|-------------------|--------------|-----------------------------|-----------------------|-----------------------|
| N-04                 | 110 8             | 6.4                      | 15                | 82 (836)                          | 228 (2325)                   | 6000             | 4.1                              | 0.008                   | Y0715R            | AY1315R      | 2.4 (24.5)                  | —                     | SB04B1                |
| N-05                 | 135 16            | 6.4                      | 15                | 82 (836)                          | 252 (2570)                   | 5500             | 6.2                              | 0.015                   | Y0715R            | AY1315R      | 2.4 (24.5)                  | HB05C1                | SB05B1                |
| N-06                 | 165 19            | 8.5                      | 20                | 18 (1835)                         | 525 (5353)                   | 5270             | 13                               | 0.045                   | Y1020R            | AY1720R      | 2.6 (26.5)                  | HB06B1                | SB06B1                |
| N-08                 | 210 23            | 8.8                      | 21                | 25 (2549)                         | 75 (7648)                    | 4760             | 25                               | 0.138                   | Y1225R            | AY2225R      | 2.5 (25.5)                  | HB08A1                | SB08B1                |
| N-10                 | 254 24            | 8.8                      | 25                | 29 (2957)                         | 108 (11013)                  | 4010             | 37                               | 0.300                   | Y1225R            | AY2225R      | 2.8 (28.6)                  | HB10A1                | SB10B1                |
| N-12                 | 304 26            | 10.5                     | 30                | 41 (4181)                         | 156 (15907)                  | 3380             | 57.3                             | 0.725                   | Y1530R            | —            | 2.7 (27.5)                  | HB12B1                | SB12A1                |
| N-15                 | 381 72            | 16                       | 35                | 82 (8362)                         | 249 (25391)                  | 3040             | 101                              | 1.9                     | Y2035R            | —            | 3.2 (32.6)                  | HB15N1                | SB15N1                |
| N-18                 | 450 133           | 16                       | 35                | 82 (8362)                         | 249 (25391)                  | 2710             | 126                              | 3.3                     | Y2035R            | —            | 3.2 (32.6)                  | HB15N1                | SB15N1                |
| N-21                 | 530 62            | 16                       | 35                | 82 (8362)                         | 273 (27838)                  | 1940             | 198                              | 7.1                     | Y2035R            | —            | 3.2 (32.6)                  | HB18B2                | SB18A2                |
| N-24                 | 610 152           | 16                       | 35                | 82 (8362)                         | 273 (27838)                  | 1760             | 252                              | 12.0                    | Y2035R            | —            | 3.2 (32.6)                  | HB18B2                | SB18A2                |

**CHUCK**

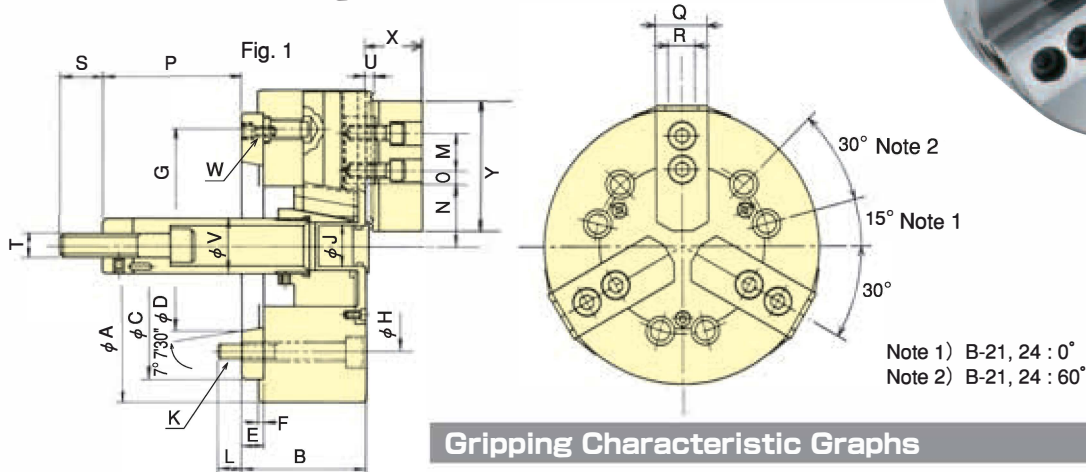
# Closed Centre Power Chuck (Direct Mount)

## N-A series

Chuck Adaptor is equipped to suit Spindle Nose Closed Centre standard chuck

\*CE correspondence

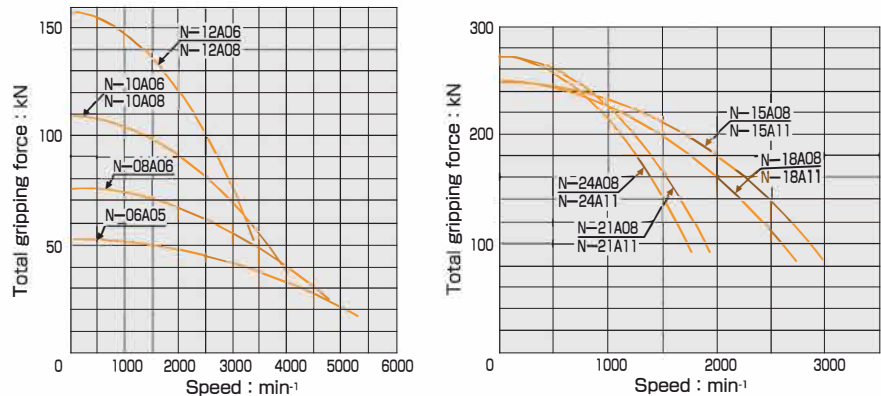
### Dimensional Drawings



Standard Chuck

### Gripping Characteristic Graphs

\*With standard blank soft top jaw.



**Dimensions** \*N-10A06, N-12A06, N-15A08, N-18A08, N-21A08, N-21A11, N-24A11 are referred to in Fig-2 \*Mounting Bolt P.C.D for N-21A08~N-24A15: 60° Pitch: 6pcs..

| Dimensions | A   | B   | C   | D   | E   | F  | G | H     | J     | K  | L     | M  | N max. | N min. | O max. | O min. | P max. | P min. | Q    | R  | S    | T  | U   | V | W  | X     | Y  |     |
|------------|-----|-----|-----|-----|-----|----|---|-------|-------|----|-------|----|--------|--------|--------|--------|--------|--------|------|----|------|----|-----|---|----|-------|----|-----|
| N-06A05    | 165 | 84  | 140 | 82  | 563 | 15 | 5 | 116   | 104.8 | 21 | 6-M10 | 14 | 20     | 37.8   | 33.55  | 13.75  | 7.75   | 86.5   | 66.5 | 31 | 12   | 36 | M16 | 4 | 34 | 3-M6  | 35 | 72  |
| N-08A06    | 210 | 97  | 170 | 106 | 375 | 17 | 5 | 150   | 133.4 | 25 | 6-M12 | 18 | 25     | 46.3   | 41.9   | 22.25  | 11.75  | 110    | 89   | 35 | 14   | 36 | M20 | 5 | 38 | 3-M6  | 42 | 95  |
| N-10A06    | 254 | 104 | 220 | 106 | 375 | 20 | 5 | 171.4 | 133.4 | 34 | 6-M12 | 18 | 30     | 51.1   | 46.7   | 30.75  | 11.25  | 114    | 89   | 40 | 16   | 36 | M20 | 5 | 45 | 6-M16 | 46 | 110 |
| N-10A08    | 254 | 102 | 220 | 139 | 719 | 18 | 5 | 190   | 171.4 | 34 | 6-M16 | 25 | 30     | 51.1   | 46.7   | 30.75  | 11.25  | 140    | 115  | 40 | 16   | 36 | M20 | 5 | 45 | 3-M8  | 46 | 110 |
| N-12A06    | 304 | 120 | 220 | 106 | 375 | 20 | 6 | 171.4 | 133.4 | 34 | 6-M12 | 18 | 30     | 61     | 55.75  | 48.75  | 12.75  | 119    | 89   | 50 | 18   | 36 | M20 | 5 | 50 | 6-M16 | 54 | 129 |
| N-12A08    | 304 | 118 | 220 | 139 | 719 | 18 | 6 | 190   | 171.4 | 34 | 6-M16 | 25 | 30     | 61     | 55.75  | 48.75  | 12.75  | 145    | 115  | 50 | 18   | 36 | M20 | 5 | 50 | 3-M8  | 54 | 129 |
| N-15A08    | 381 | 130 | 300 | 139 | 719 | 22 | 6 | 235   | 171.4 | —  | 6-M16 | 23 | 43     | 77.5   | 69.5   | 48.75  | 23.25  | 82     | 47   | 50 | 25.5 | 55 | M30 | 2 | 60 | 6-M20 | 61 | 135 |
| N-15A11    | 381 | 130 | 300 | 196 | 869 | 22 | 6 | 260   | 235   | —  | 6-M20 | 33 | 43     | 77.5   | 69.5   | 48.75  | 23.25  | 82     | 47   | 50 | 25.5 | 55 | M30 | 2 | 60 | 3-M10 | 61 | 135 |
| N-18A08    | 450 | 130 | 300 | 139 | 719 | 22 | 6 | 235   | 171.4 | —  | 6-M16 | 23 | 43     | 108    | 100    | 48.75  | 23.25  | 70     | 35   | 50 | 25.5 | 55 | M30 | 2 | 60 | 6-M20 | 61 | 135 |
| N-18A11    | 450 | 130 | 300 | 196 | 869 | 22 | 6 | 260   | 235   | —  | 6-M20 | 33 | 43     | 108    | 100    | 48.75  | 23.25  | 70     | 35   | 50 | 25.5 | 55 | M30 | 2 | 60 | 3-M10 | 61 | 135 |
| N-21A08    | 530 | 146 | 380 | 139 | 719 | 27 | 6 | 330.2 | 171.4 | —  | 6-M16 | 23 | 60     | 86     | 78     | 93.5   | 27.5   | 70     | 35   | 65 | 25   | 55 | M30 | 3 | 60 | 6-M22 | 71 | 180 |
| N-21A11    | 530 | 146 | 380 | 196 | 869 | 27 | 6 | 330.2 | 235   | —  | 6-M20 | 28 | 60     | 86     | 78     | 93.5   | 27.5   | 70     | 35   | 65 | 25   | 55 | M30 | 3 | 60 | 6-M22 | 71 | 180 |
| N-24A15    | 530 | 146 | 380 | 285 | 775 | 27 | 6 | 330.2 | 330.2 | —  | 6-M22 | 34 | 60     | 86     | 78     | 93.5   | 27.5   | 70     | 35   | 65 | 25   | 55 | M30 | 3 | 60 | 3-M12 | 71 | 180 |
| N-24A11    | 610 | 146 | 380 | 196 | 869 | 27 | 6 | 330.2 | 235   | —  | 6-M20 | 28 | 60     | 125    | 117    | 93.5   | 27.5   | 70     | 35   | 65 | 25   | 55 | M30 | 3 | 60 | 6-M22 | 71 | 180 |
| N-24A15    | 610 | 146 | 380 | 285 | 775 | 27 | 6 | 330.2 | 330.2 | —  | 6-M22 | 34 | 60     | 125    | 117    | 93.5   | 27.5   | 70     | 35   | 65 | 25   | 55 | M30 | 3 | 60 | 3-M12 | 71 | 180 |

**Specifications** \*Max. speed is shown using actual test data.

| Specifications | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min⁻¹ | Net Weight with Soft top jaws kg | Moment of Inertia N·m² (kg·m²) | Matching Cylinder pressure | Max. pressure MPa (kgf/cm²) | Matching Hard top jaw | Matching Soft top jaw | Spindle nose size |
|----------------|-------------------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------|----------------------------------|--------------------------------|----------------------------|-----------------------------|-----------------------|-----------------------|-------------------|
| N-06A05        | 165 19            | 8.5                      | 20                | 18 (1835)                         | 525 (5353)                   | 5270             | 14                               | 0.050                          | Y1020R                     | 26 (265)                    | HB06B1                | SB06B1                | A2-5              |
| N-08A06        | 210 23            | 8.8                      | 21                | 25 (2549)                         | 75 (7648)                    | 4760             | 27                               | 0.148                          | Y1225R                     | 25 (255)                    | HB08A1                | SB08B1                | A2-6              |
| N-10A06        | 254 24            | 8.8                      | 25                | 29 (2957)                         | 108 (11013)                  | 4010             | 40                               | 0.335                          | Y1225R                     | 28 (286)                    | HB10A1                | SB10B1                | A2-6              |
| N-10A08        | 254 24            | 8.8                      | 25                | 29 (2957)                         | 108 (11013)                  | 4010             | 40                               | 0.328                          | Y1225R                     | 28 (286)                    | HB10A1                | SB10B1                | A2-8              |
| N-12A06        | 304 26            | 10.5                     | 30                | 41 (4181)                         | 156 (15907)                  | 3380             | 67                               | 0.760                          | Y1530R                     | 27 (275)                    | HB12B1                | SB12A1                | A2-6              |
| N-12A08        | 304 26            | 10.5                     | 30                | 41 (4181)                         | 156 (15907)                  | 3380             | 66                               | 0.753                          | Y1530R                     | 27 (275)                    | HB12B1                | SB12A1                | A2-8              |
| N-15A08        | 381 72            | 16                       | 35                | 82 (8362)                         | 249 (25391)                  | 3040             | 111                              | 2.0                            | Y2035R                     | 32 (326)                    | HB15N1                | SB15N1                | A2-8              |
| N-15A11        | 381 72            | 16                       | 35                | 82 (8362)                         | 249 (25391)                  | 3040             | 108                              | 2.0                            | Y2035R                     | 32 (326)                    | HB15N1                | SB15N1                | A2-11             |
| N-18A08        | 450 133           | 16                       | 35                | 82 (8362)                         | 249 (25391)                  | 2710             | 136                              | 3.4                            | Y2035R                     | 32 (326)                    | HB15N1                | SB15N1                | A2-8              |
| N-18A11        | 450 133           | 16                       | 35                | 82 (8362)                         | 249 (25391)                  | 2710             | 133                              | 3.4                            | Y2035R                     | 32 (326)                    | HB15N1                | SB15N1                | A2-11             |
| N-21A08        | 530 62            | 16                       | 35                | 82 (8362)                         | 273 (27838)                  | 1940             | 219                              | 7.5                            | Y2035R                     | 32 (326)                    | HB18B2                | SB18A2                | A2-8              |
| N-21A11        | 530 62            | 16                       | 35                | 82 (8362)                         | 273 (27838)                  | 1940             | 216                              | 7.5                            | Y2035R                     | 32 (326)                    | HB18B2                | SB18A2                | A2-11             |
| N-24A15        | 530 62            | 16                       | 35                | 82 (8362)                         | 273 (27838)                  | 1940             | 225                              | 7.7                            | Y2035R                     | 32 (326)                    | HB18B2                | SB18A2                | A2-15             |
| N-24A11        | 610 152           | 16                       | 35                | 82 (8362)                         | 273 (27838)                  | 1760             | 270                              | 12.4                           | Y2035R                     | 32 (326)                    | HB18B2                | SB18A2                | A2-11             |
| N-24A15        | 610 152           | 16                       | 35                | 82 (8362)                         | 273 (27838)                  | 1760             | 263                              | 12.3                           | Y2035R                     | 32 (326)                    | HB18B2                | SB18A2                | A2-15             |





**CHUCK**

# Large Power Chuck for Vertical Lathes

## NV series

### Low maintenance Power Chuck for Vertical Lathes Sealed Base Jaw to prevent Swarf and Coolant ingress

- **Protection against Swarf and Coolant**  
Protector and Scraper at Base Jaw prevent Swarf and Coolant ingress.

- **Standard Jaw**  
NV series is compatible with standard Hard and Soft Jaws as sealing is at the Base Jaw.

\*CE correspondence



#### ■ Dimensional Drawings

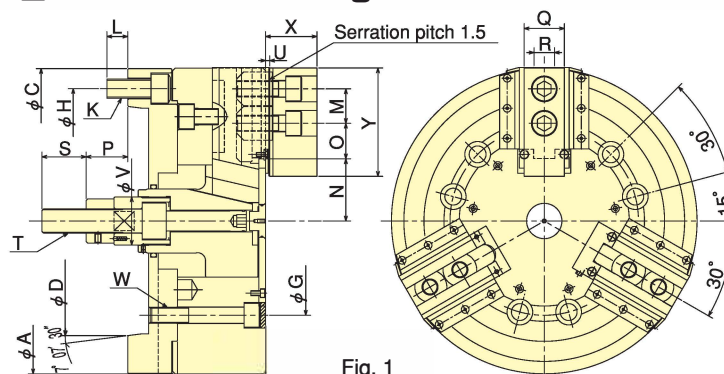


Fig. 1

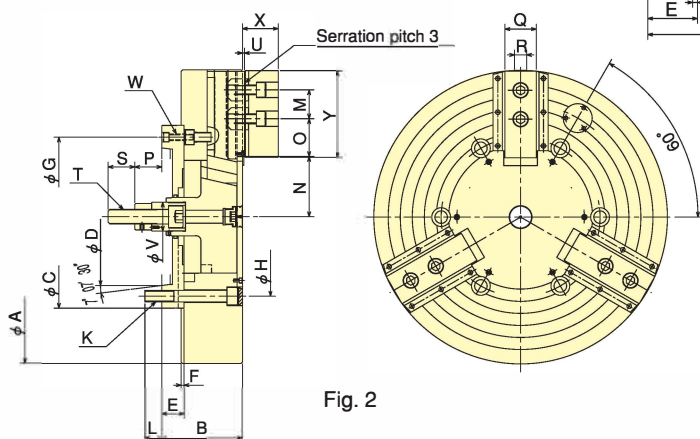
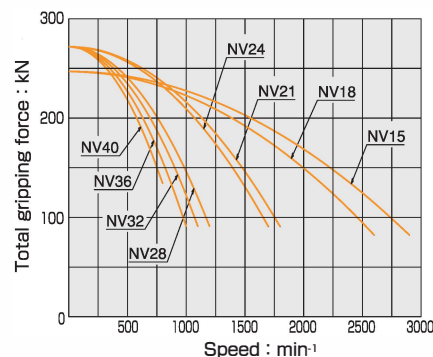


Fig. 2

#### Gripping Characteristic Graphs

※With standard blank soft top jaw.



#### ■ Dimensions

※NV15&18 are based on Fig.1. NV21~40 are based on Fig.2.

| Model   | A    | B   | C   | D       | E  | F | G     | H     | K     | L  | M  | N max. | N min. | O max. | O min. | P max. | P min. | Q  | R    | S  | T   | U | V  | W     | X  | Y   |
|---------|------|-----|-----|---------|----|---|-------|-------|-------|----|----|--------|--------|--------|--------|--------|--------|----|------|----|-----|---|----|-------|----|-----|
| NV15C15 | 381  | 172 | 380 | 285.775 | 62 | 6 | 235.0 | 330.2 | 6-M24 | 26 | 43 | 77.5   | 69.5   | 48.75  | 2325   | 91     | 56     | 50 | 25.5 | 55 | M30 | 5 | 60 | 6-M20 | 64 | 135 |
| NV18C15 | 450  | 172 | 380 | 285.775 | 62 | 6 | 235.0 | 330.2 | 6-M24 | 26 | 43 | 108    | 100    | 48.75  | 2325   | 91     | 56     | 50 | 25.5 | 55 | M30 | 5 | 60 | 6-M20 | 64 | 135 |
| NV21C15 | 530  | 167 | 380 | 285.775 | 46 | 6 | 330.2 | 330.2 | 6-M24 | 35 | 60 | 86     | 78     | 93.5   | 275    | 91     | 56     | 65 | 25.0 | 55 | M30 | 6 | 60 | 3-M12 | 74 | 180 |
| NV24C15 | 610  | 167 | 380 | 285.775 | 46 | 6 | 330.2 | 330.2 | 6-M24 | 29 | 60 | 125    | 117    | 93.5   | 275    | 91     | 56     | 65 | 25.0 | 55 | M30 | 6 | 60 | 3-M12 | 74 | 180 |
| NV28C15 | 700  | 167 | 380 | 285.775 | 46 | 6 | 330.2 | 330.2 | 6-M24 | 29 | 60 | 125    | 117    | 141.5  | 275    | 91     | 56     | 65 | 25.0 | 55 | M30 | 6 | 60 | 3-M12 | 74 | 180 |
| NV32C15 | 800  | 167 | 380 | 285.775 | 46 | 6 | 330.2 | 330.2 | 6-M24 | 29 | 60 | 125    | 117    | 189.5  | 275    | 91     | 56     | 65 | 25.0 | 55 | M30 | 6 | 60 | 3-M12 | 74 | 180 |
| NV36C15 | 914  | 167 | 380 | 285.775 | 46 | 6 | 330.2 | 330.2 | 6-M24 | 29 | 60 | 125    | 117    | 249.5  | 275    | 91     | 56     | 65 | 25.0 | 55 | M30 | 6 | 60 | 3-M12 | 74 | 180 |
| NV40C15 | 1000 | 167 | 380 | 285.775 | 46 | 6 | 330.2 | 330.2 | 6-M24 | 29 | 60 | 125    | 117    | 282.5  | 275    | 91     | 56     | 65 | 25.0 | 55 | M30 | 6 | 60 | 3-M12 | 74 | 180 |

※The above dimensions are for mounting back plate of 15-nose. The back plate of 11-nose can also be mounted.

#### ■ Specifications

| Model   | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min <sup>-1</sup> | Net Weight with Soft top jaws kg | Moment of inertia kg·m <sup>2</sup> | Matching Cylinder | Max. pressure MPa (kgf/cm <sup>2</sup> ) | Matching Soft top jaw | Spindle nose size |
|---------|-------------------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------------------|----------------------------------|-------------------------------------|-------------------|------------------------------------------|-----------------------|-------------------|
| NV15C15 | 381 72            | 16                       | 35                | 82 (8362)                         | 247 (25187)                  | 2900                         | 139                              | 2.7                                 | Y2035R            | 3.2 (32.6)                               | SB15N1                | A2-15             |
| NV18C15 | 450 133           | 16                       | 35                | 82 (8362)                         | 247 (25187)                  | 2600                         | 166                              | 4.1                                 | Y2035R            | 3.2 (32.6)                               | SB15N1                | A2-15             |
| NV21C15 | 530 62            | 16                       | 35                | 82 (8362)                         | 272 (27736)                  | 1800                         | 227                              | 7.6                                 | Y2035R            | 3.2 (32.6)                               | SB18A2                | A2-15             |
| NV24C15 | 610 152           | 16                       | 35                | 82 (8362)                         | 272 (27736)                  | 1700                         | 282                              | 12.8                                | Y2035R            | 3.2 (32.6)                               | SB18A2                | A2-15             |
| NV28C15 | 700 152           | 16                       | 35                | 82 (8362)                         | 272 (27736)                  | 1200                         | 360                              | 21.9                                | Y2035R            | 3.2 (32.6)                               | SB18A2                | A2-15             |
| NV32C15 | 800 152           | 16                       | 35                | 82 (8362)                         | 272 (27736)                  | 1100                         | 472                              | 37.2                                | Y2035R            | 3.2 (32.6)                               | SB18A2                | A2-15             |
| NV36C15 | 914 152           | 16                       | 35                | 82 (8362)                         | 272 (27736)                  | 1000                         | 594                              | 62.4                                | Y2035R            | 3.2 (32.6)                               | SB18A2                | A2-15             |
| NV40C15 | 1000 152          | 16                       | 35                | 82 (8362)                         | 272 (27736)                  | 800                          | 738                              | 91.5                                | Y2035R            | 3.2 (32.6)                               | SB18A2                | A2-15             |

※The above specifications are for mounting back plate of 15-nose. The back plate of 11-nose can also be mounted.



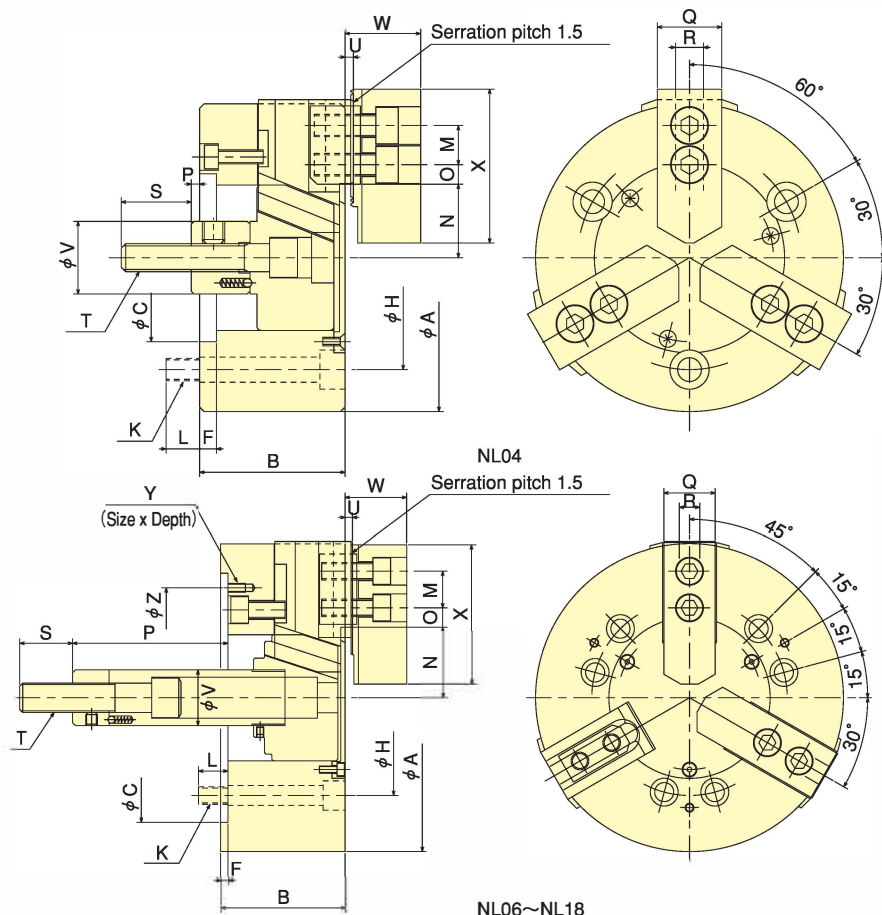
**CHUCK**

# Closed Centre Power Chuck (Long Stroke) NL series

## Extra Long Jaw Stroke Flange work securely gripped

\*CE correspondence

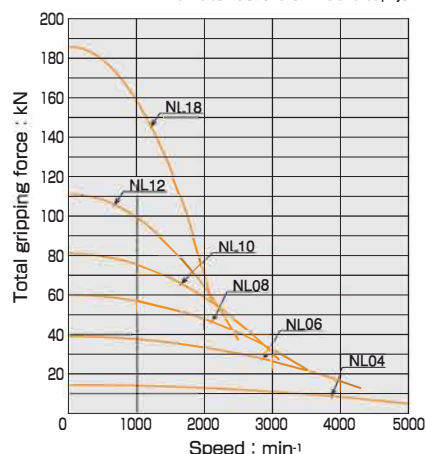
### Dimensional Drawings



Standard Chuck

### Gripping Characteristic Graphs

※With standard blank soft top jaw.



### Dimensions

| Model | A   | B   | C (H6) | F | H     | K     | L  | M  | N max. | N min. | O max. | O min. | P max. | P min. | Q  | R    | S  | T   | U | V  | W  | X   | Y      | Z   |
|-------|-----|-----|--------|---|-------|-------|----|----|--------|--------|--------|--------|--------|--------|----|------|----|-----|---|----|----|-----|--------|-----|
| NL04  | 110 | 52  | 60     | 6 | 80    | 3-M 8 | 12 | 14 | 26.5   | 20.45  | 9.75   | 6.75   | 18     | 3      | 23 | 10   | 25 | M10 | 3 | 26 | 27 | 55  | —      | —   |
| NL06  | 165 | 74  | 140    | 5 | 104.8 | 6-M10 | 14 | 20 | 40.5   | 34     | 13.75  | 9.25   | 101.5  | 81.5   | 31 | 12   | 36 | M16 | 4 | 34 | 35 | 72  | M6 x10 | 116 |
| NL08  | 210 | 85  | 170    | 5 | 133.4 | 6-M12 | 20 | 25 | 48.1   | 40     | 20.75  | 11.75  | 131    | 106    | 35 | 14   | 36 | M20 | 5 | 38 | 42 | 95  | M6 x12 | 150 |
| NL10  | 254 | 89  | 220    | 5 | 171.4 | 6-M16 | 18 | 30 | 54.4   | 45.35  | 29.5   | 11.5   | 161    | 133    | 40 | 16   | 36 | M20 | 5 | 45 | 46 | 110 | M8 x15 | 190 |
| NL12  | 304 | 106 | 220    | 6 | 171.4 | 6-M16 | 18 | 30 | 65.7   | 56     | 42.75  | 12.75  | 47     | 17     | 50 | 18   | 46 | M24 | 5 | 50 | 54 | 129 | M8 x15 | 190 |
| NL18  | 450 | 114 | 300    | 6 | 235   | 6-M20 | 30 | 43 | 110.5  | 97.5   | 47.25  | 23.25  | 97     | 57     | 50 | 25.5 | 55 | M30 | 2 | 55 | 61 | 135 | M10x20 | 260 |

### Specifications

| Model | Max. | Min. | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min <sup>-1</sup> | Net Weight with Soft top jaws kg | Moment of inertia kg·m <sup>2</sup> | Matching Cylinder | Max. pressure MPa (kgf/cm <sup>2</sup> ) | Matching Soft top jaw | Matching Hard top jaw |
|-------|------|------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------------------|----------------------------------|-------------------------------------|-------------------|------------------------------------------|-----------------------|-----------------------|
| NL04  | 110  | 6    | 12.1                     | 15                | 10 (1020)                         | 144 (1468)                   | 5000                         | 4.1                              | 0.008                               | Y0715R            | 2.9 (29.6)                               | SB04B1                | —                     |
| NL06  | 165  | 22   | 13                       | 20                | 21 (2141)                         | 39 (3977)                    | 4300                         | 12                               | 0.045                               | Y1020R            | 3.0 (30.6)                               | SB06B1                | HB06B1                |
| NL08  | 210  | 23   | 16.2                     | 25                | 30 (3059)                         | 60 (6118)                    | 3600                         | 22.9                             | 0.138                               | Y1225R            | 2.9 (29.6)                               | SB08B1                | HB08A1                |
| NL10  | 254  | 27   | 18.1                     | 28                | 40 (4079)                         | 81 (8260)                    | 3100                         | 34.6                             | 0.300                               | Y1530R            | 2.8 (28.6)                               | SB10A1                | HB10A1                |
| NL12  | 304  | 32   | 19.4                     | 30                | 54 (5506)                         | 111 (11319)                  | 2500                         | 60                               | 0.725                               | Y1530R            | 3.6 (36.7)                               | SB12A1                | HB12B1                |
| NL18  | 450  | 124  | 26                       | 40                | 91 (9279)                         | 186 (18966)                  | 2100                         | 124                              | 2.35                                | Y2050R            | 3.5 (35.9)                               | SB15N1                | —                     |





**CHUCK**

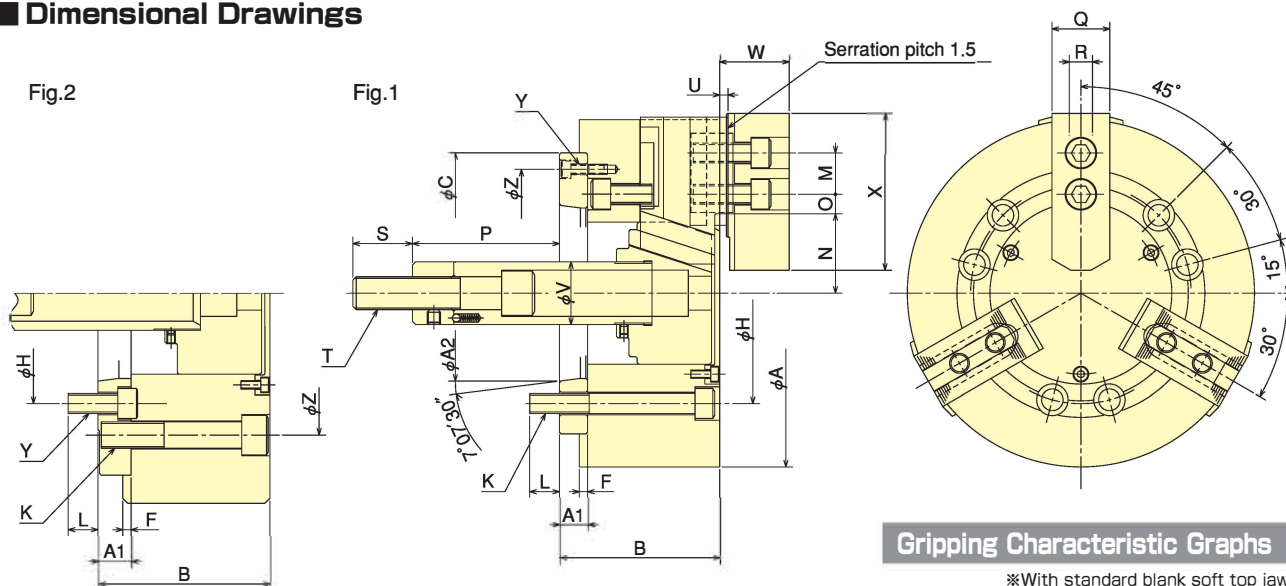
# Closed Centre Power Chuck (Long Stroke, Direct Mount) NL-A series

**Chuck Adaptor is equipped to suit Spindle Nose  
Flange work securely gripped**

\* CE correspondence

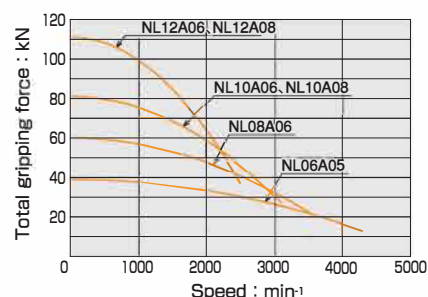


## Dimensional Drawings



## Gripping Characteristic Graphs

※With standard blank soft top jaw.



## Dimensions

※NL10A06 and NL12A06 are based on Fig. 2.

| Dimensions Model | A   | B   | C   | F | H     | K     | L  | M  | N max. | N min. | O max. | O min. | P max. | P min. | Q  | R  | S  | T   | U | V  | W  | X   | Y     | Z     | A1 | A2      |
|------------------|-----|-----|-----|---|-------|-------|----|----|--------|--------|--------|--------|--------|--------|----|----|----|-----|---|----|----|-----|-------|-------|----|---------|
| NL06A05          | 165 | 84  | 140 | 5 | 104.8 | 6-M10 | 14 | 20 | 40.5   | 34     | 13.75  | 9.25   | 86.5   | 66.5   | 31 | 12 | 36 | M16 | 4 | 34 | 35 | 72  | 3-M6  | 116   | 15 | 82.563  |
| NL08A06          | 210 | 97  | 170 | 5 | 133.4 | 6-M12 | 18 | 25 | 48.1   | 40     | 20.75  | 11.75  | 114    | 89     | 35 | 14 | 36 | M20 | 5 | 38 | 42 | 95  | 3-M6  | 150   | 17 | 106.375 |
| NL10A06          | 254 | 104 | 220 | 5 | 133.4 | 6-M16 | 18 | 30 | 54.4   | 45.35  | 29.5   | 11.5   | 141    | 113    | 40 | 16 | 36 | M20 | 5 | 45 | 46 | 110 | 6-M12 | 171.4 | 20 | 106.375 |
| NL10A08          | 254 | 102 | 220 | 5 | 171.4 | 6-M16 | 25 | 30 | 54.4   | 45.35  | 29.5   | 11.5   | 143    | 115    | 40 | 16 | 36 | M20 | 5 | 45 | 46 | 110 | 3-M8  | 190   | 18 | 139.719 |
| NL12A06          | 304 | 120 | 220 | 6 | 133.4 | 6-M16 | 18 | 30 | 65.7   | 56     | 42.75  | 12.75  | 3      | -27    | 50 | 18 | 46 | M24 | 5 | 50 | 54 | 129 | 6-M12 | 171.4 | 20 | 106.375 |
| NL12A08          | 304 | 118 | 220 | 6 | 171.4 | 6-M16 | 25 | 30 | 65.7   | 56     | 42.75  | 12.75  | 1      | -29    | 50 | 18 | 46 | M24 | 5 | 50 | 54 | 129 | 3-M8  | 190   | 18 | 139.719 |

## Specifications

| Specifications Model | Gripping range mm Max. | Gripping range mm Min. | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min <sup>-1</sup> | Net Weight with Soft top jaws kg | Moment of inertia kg·m <sup>2</sup> | Matching Cylinder | Max. pressure MPa (kgf/cm <sup>2</sup> ) | Matching Soft top jaw | Matching Hard top jaw | Spindle nose size |
|----------------------|------------------------|------------------------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------------------|----------------------------------|-------------------------------------|-------------------|------------------------------------------|-----------------------|-----------------------|-------------------|
| NL06A05              | 165                    | 22                     | 13                       | 20                | 21 (2141)                         | 39 ( 3977)                   | 4300                         | 12.5                             | 0.048                               | Y1020R            | 3.0 (30.6)                               | SB06B1                | HB06B1                | A2-5              |
| NL08A06              | 210                    | 23                     | 16.2                     | 25                | 30 (3059)                         | 60 ( 6118)                   | 3600                         | 24.5                             | 0.148                               | Y1225R            | 2.9 (29.6)                               | SB08B1                | HB08A1                | A2-6              |
| NL10A06              | 254                    | 27                     | 18.1                     | 28                | 40 (4079)                         | 81 ( 8260)                   | 3100                         | 40                               | 0.335                               | Y1530R            | 2.8 (28.6)                               | SB10A1                | HB10A1                | A2-6              |
| NL10A08              | 254                    | 27                     | 18.1                     | 28                | 40 (4079)                         | 81 ( 8260)                   | 3100                         | 37.6                             | 0.326                               | Y1530R            | 2.8 (28.6)                               | SB10A1                | HB10A1                | A2-8              |
| NL12A06              | 304                    | 32                     | 19.4                     | 30                | 54 (5506)                         | 111 (11319)                  | 2500                         | 64.6                             | 0.759                               | Y1530R            | 3.6 (36.7)                               | SB12A1                | HB12B1                | A2-6              |
| NL12A08              | 304                    | 32                     | 19.4                     | 30                | 54 (5506)                         | 111 (11319)                  | 2500                         | 63                               | 0.750                               | Y1530R            | 3.6 (36.7)                               | SB12A1                | HB12B1                | A2-8              |



**CHUCK**

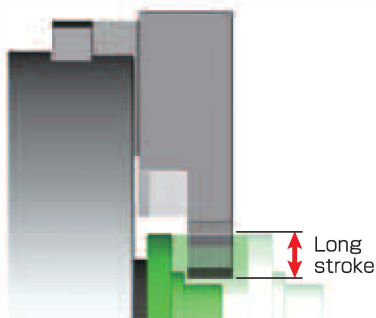
# Mega-Long Stroke Chuck

## ML series

**Exceptionally long Jaw stroke**  
**Suitable for Multi-Diameter gripping and flange work**

\* CE correspondence

### Gripping Example



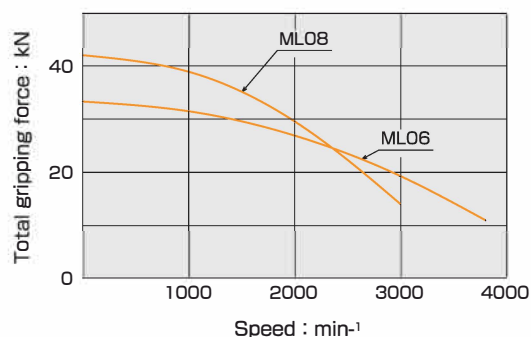
● Suitable for works with large flange



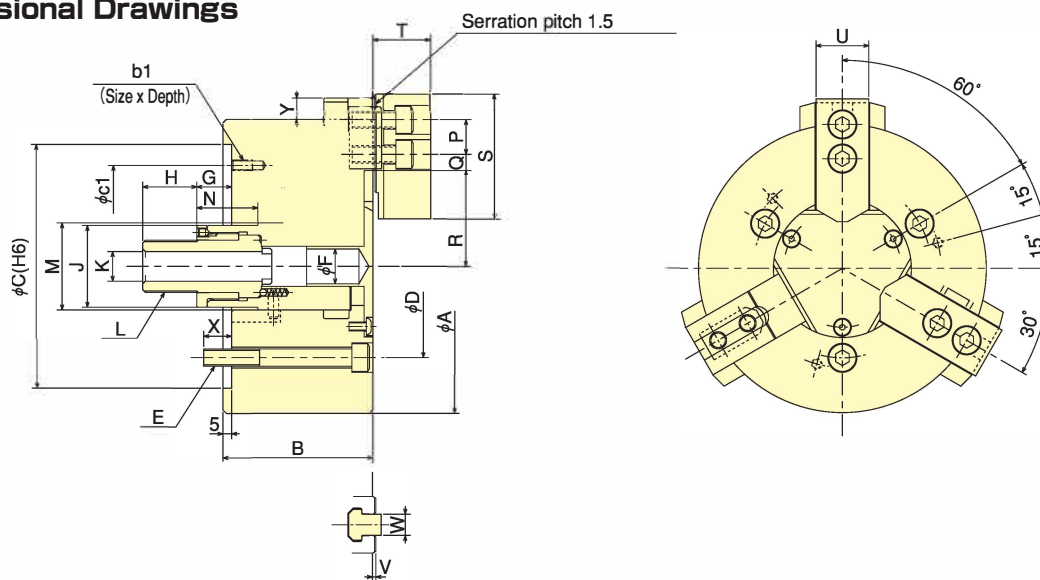
Standard Chuck

### Gripping Characteristic Graphs

※ With standard blank soft top jaw.



### Dimensional Drawings



### Dimensions

| Model | A   | B  | C   | D     | E     | F  | G max. | G min. | H  | J  | K  | L       | M  | N  | P  | Q max. | Q min. |
|-------|-----|----|-----|-------|-------|----|--------|--------|----|----|----|---------|----|----|----|--------|--------|
| ML06  | 169 | 86 | 140 | 104.8 | 3-M10 | 20 | 40     | 20     | 31 | 47 | 17 | M30×1.5 | 50 | 35 | 20 | 13.75  | 9.25   |
| ML08  | 215 | 99 | 170 | 133.4 | 3-M12 | 20 | 34     | 9      | 34 | 54 | 17 | M33×1.5 | 70 | 29 | 25 | 17.75  | 11.75  |

| Model | R max. | R min. | S  | T    | U  | V | W  | X  | Y max. | b1      | c1  |
|-------|--------|--------|----|------|----|---|----|----|--------|---------|-----|
| ML06  | 55     | 35     | 72 | 33.2 | 31 | 2 | 12 | 16 | 12.5   | 3-M6×12 | 116 |
| ML08  | 65.6   | 40.6   | 95 | 39.2 | 35 | 2 | 14 | 21 | 12.1   | 3-M6×12 | 150 |

### Specifications

| Model | Gripping range mm   | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min⁻¹ | Net Weight with Soft top jaws kg | Moment of inertia kg·m² | Matching Cylinder | Max. pressure MPa (kgf/cm²) | Matching Soft top jaw |
|-------|---------------------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------|----------------------------------|-------------------------|-------------------|-----------------------------|-----------------------|
| ML06  | Max. 169<br>Min. 55 | 40                       | 20                | 36.0 (3671)                       | 33.0 (3365)                  | 3800             | 13.7                             | 0.048                   | Y1225R            | 3.46 (35.3)                 | SB06B1                |
| ML08  | Max. 215<br>Min. 54 | 50                       | 25                | 45.0 (4589)                       | 42.0 (4283)                  | 3000             | 26.0                             | 0.167                   | Y1530R            | 3.06 (31.2)                 | SB08B1                |



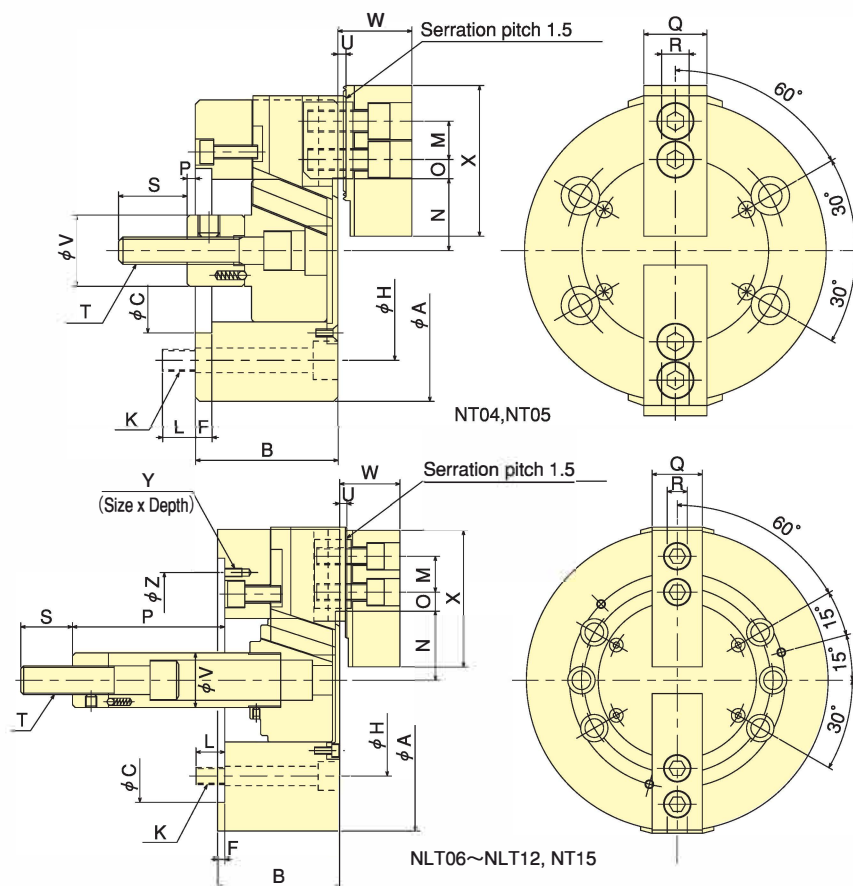
**CHUCK**

# 2-Jaw Closed Center Power Chuck (NLT-Long Stroke) NT·NLT series

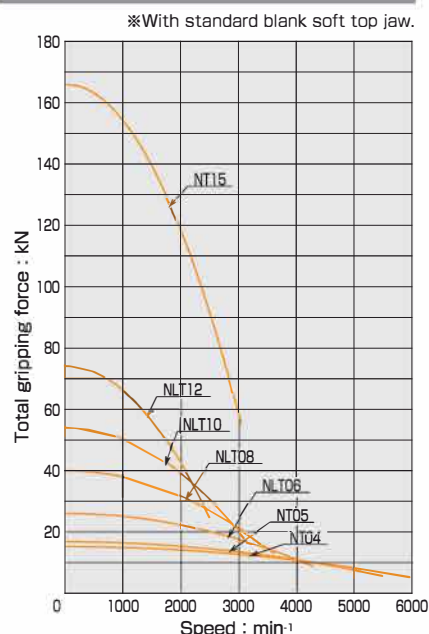
**Best suited for gripping  
Irregular shaped components**

\*CE correspondence

## ■ Dimensional Drawings



## Gripping Characteristic Graphs



## ■ Dimensions

| Dimensions Model | A   | B   | C (H6) | F | H     | K     | L  | M  | N max. | N min. | O max. | O min. | P max. | P min. | Q  | R    | S  | T   | U | V  | W  | X   | Y      | Z   |
|------------------|-----|-----|--------|---|-------|-------|----|----|--------|--------|--------|--------|--------|--------|----|------|----|-----|---|----|----|-----|--------|-----|
| NT04             | 110 | 52  | 60     | 6 | 80    | 4-M8  | 12 | 14 | 23.3   | 20.1   | 10.25  | 8.75   | 18     | 3      | 23 | 10   | 25 | M10 | 3 | 26 | 27 | 55  | -      | -   |
| NT05             | 135 | 55  | 80     | 7 | 100   | 4-M8  | 14 | 19 | 30.4   | 27.2   | 11.5   | 7      | 9      | -6     | 23 | 10   | 35 | M12 | 3 | 28 | 29 | 62  | -      | -   |
| NLT06            | 165 | 74  | 140    | 5 | 104.8 | 6-M10 | 14 | 20 | 40.5   | 34     | 13.75  | 9.25   | 101.5  | 81.5   | 31 | 12   | 36 | M16 | 4 | 34 | 35 | 72  | M6×10  | 116 |
| NLT08            | 210 | 85  | 170    | 5 | 133.4 | 6-M12 | 20 | 25 | 48.1   | 40     | 21     | 12     | 131    | 106    | 35 | 14   | 36 | M20 | 5 | 38 | 42 | 95  | M6×12  | 150 |
| NLT10            | 254 | 89  | 220    | 5 | 171.4 | 6-M16 | 18 | 30 | 54.4   | 45.35  | 29.5   | 11.5   | 161    | 133    | 40 | 16   | 36 | M20 | 5 | 45 | 46 | 110 | M8×15  | 190 |
| NLT12            | 304 | 106 | 220    | 6 | 171.4 | 6-M16 | 18 | 30 | 65.7   | 56     | 42.75  | 12.75  | 163    | 133    | 50 | 18   | 36 | M20 | 5 | 50 | 54 | 129 | M8×15  | 190 |
| NT15             | 381 | 114 | 300    | 6 | 235   | 6-M20 | 30 | 43 | 77.5   | 69.5   | 48.75  | 23.25  | 104    | 69     | 50 | 25.5 | 55 | M30 | 2 | 55 | 61 | 135 | M10×20 | 260 |

## ■ Specifications \*Max. speed is shown using actual test data.

| Specifications Model | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min <sup>-1</sup> | Net Weight with Soft top jaws kg | Moment of inertia kg·m <sup>2</sup> | Matching Cylinder | Max. pressure MPa (kgf/cm <sup>2</sup> ) | Matching Soft top jaw |
|----------------------|-------------------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------------------|----------------------------------|-------------------------------------|-------------------|------------------------------------------|-----------------------|
| NT04                 | 110 5             | 6.4                      | 15                | 5.3 ( 540)                        | 152 ( 1550)                  | 6000                         | 3.8                              | 0.007                               | Y0715R            | 1.68 (17.1)                              | SB04A1T               |
| NT05                 | 135 16            | 6.4                      | 15                | 5.3 ( 540)                        | 168 ( 1713)                  | 5500                         | 5.8                              | 0.013                               | Y0715R            | 1.68 (17.1)                              | SB05A1T               |
| NLT06                | 165 22            | 13                       | 20                | 14 (1428)                         | 26 ( 2651)                   | 4300                         | 12.5                             | 0.043                               | Y1020R            | 2.06 (21.0)                              | SB06A1T               |
| NLT08                | 210 24            | 16.2                     | 25                | 20 (2039)                         | 40 ( 4079)                   | 3600                         | 24                               | 0.133                               | Y1225R            | 2.03 (20.7)                              | SB08A1T               |
| NLT10                | 254 27            | 18.1                     | 28                | 27 (2753)                         | 54 ( 5506)                   | 3100                         | 35.5                             | 0.293                               | Y1530R            | 1.93 (19.7)                              | SB10A1T               |
| NLT12                | 304 33            | 19.4                     | 30                | 36 (3671)                         | 74 ( 7546)                   | 2500                         | 60.5                             | 0.708                               | Y1530R            | 2.50 (25.5)                              | SB12A1T               |
| NT15                 | 381 72            | 16                       | 35                | 54.7(5578)                        | 166 (16927)                  | 3040                         | 93                               | 1.790                               | Y2035R            | 2.1 (21.4)                               | SB15N1T               |

\*Altering Back Plate enables to change over 3-Jaw Chuck into 2-Jaw Chuck.





**CHUCK**

# 2-Jaw Mega-Long Stroke Chuck

## MLT series

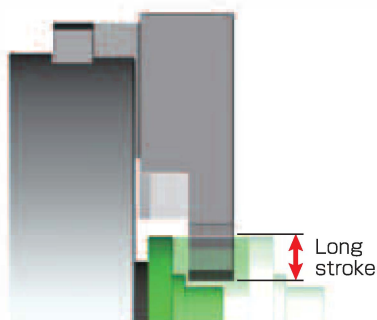
**Exceptionally long Jaw stroke**  
**Best suited for gripping irregular shaped components**

\*CE correspondence



Standard Chuck

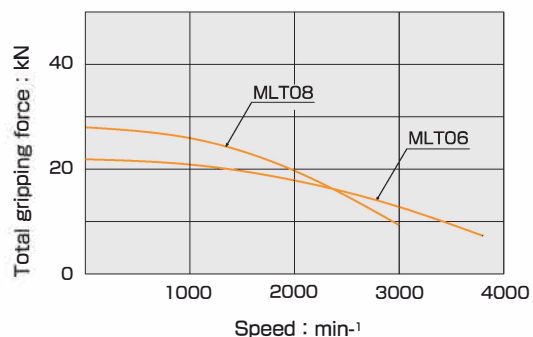
### Gripping Example



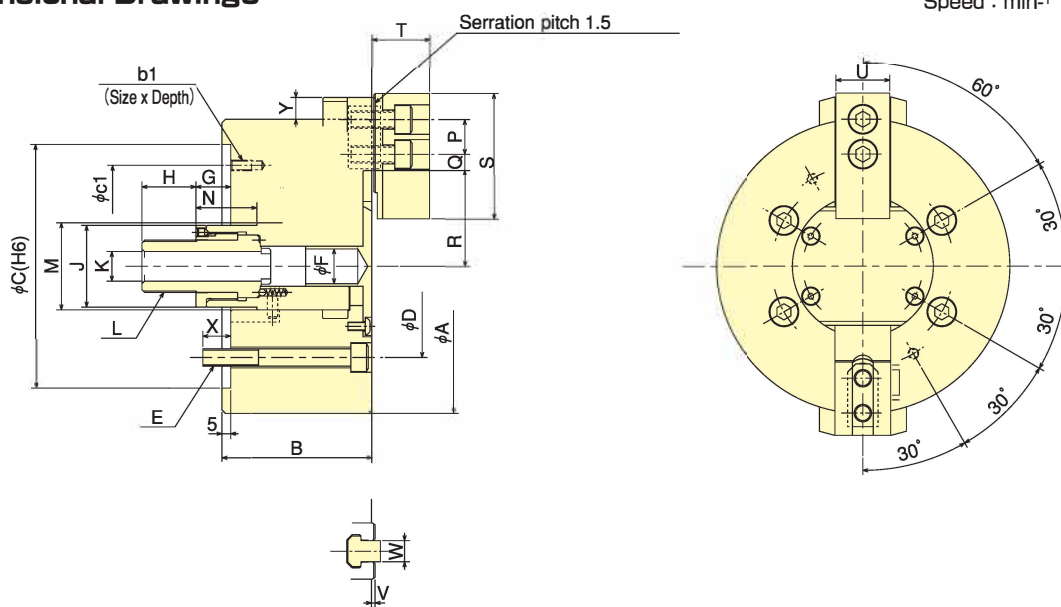
- Suitable for machining of valves.  
Common jaw sets can be used due to long stroke.

### Gripping Characteristic Graphs

※With standard blank soft top jaw.



### Dimensional Drawings



### Dimensions

| Model | A   | B  | C   | D     | E     | F  | G max. | G min. | H  | J  | K  | L       | M  | N  | P  | Q max. | Q min. |
|-------|-----|----|-----|-------|-------|----|--------|--------|----|----|----|---------|----|----|----|--------|--------|
| MLT06 | 169 | 86 | 140 | 104.8 | 4-M10 | 20 | 40     | 20     | 31 | 47 | 17 | M30×1.5 | 50 | 35 | 20 | 13.75  | 9.25   |
| MLT08 | 215 | 99 | 170 | 133.4 | 4-M12 | 20 | 34     | 9      | 34 | 54 | 17 | M33×1.5 | 70 | 29 | 25 | 18     | 12     |

| Model | R max. | R min. | S  | T    | U  | V | W  | X  | Y max. | b1      | c1  |
|-------|--------|--------|----|------|----|---|----|----|--------|---------|-----|
| MLT06 | 55     | 35     | 72 | 33.2 | 31 | 2 | 12 | 16 | 12.5   | 2-M6×12 | 116 |
| MLT08 | 65.6   | 40.6   | 95 | 39.2 | 35 | 2 | 14 | 21 | 12.1   | 3-M6×12 | 150 |

### Specifications

| Model | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min⁻¹ | Net Weight with Soft top jaws kg | Moment of inertia kg·m² | Matching Cylinder | Max. pressure MPa (kgf/cm²) | Matching Soft top jaw |
|-------|-------------------|--------------------------|-------------------|-----------------------------------|------------------------------|------------------|----------------------------------|-------------------------|-------------------|-----------------------------|-----------------------|
| MLT06 | 169 40            | 40                       | 20                | 24 (2447)                         | 21.9 (2230)                  | 3800             | 13.7                             | 0.054                   | Y1225R            | 2.39 (24.4)                 | SB06A1T               |
| MLT08 | 215 44            | 50                       | 25                | 30 (3059)                         | 28 (2855)                    | 3000             | 25.7                             | 0.164                   | Y1530R            | 2.13 (21.7)                 | SB08A1T               |

※Altering Back Plate enables to change over 3-Jaw Chuck into 2-Jaw Chuck.



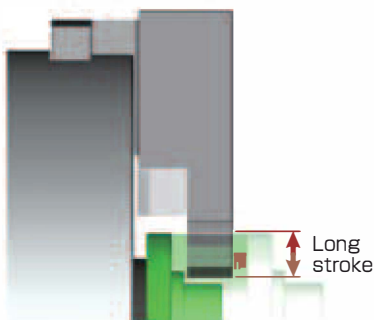
**CHUCK**

# 1-Jaw Mega-Long Stroke Chuck MLV series

**Exceptionally long Jaw stroke**  
**Best suited for jig work fixturing**

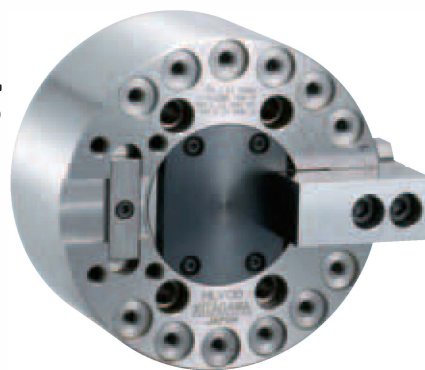
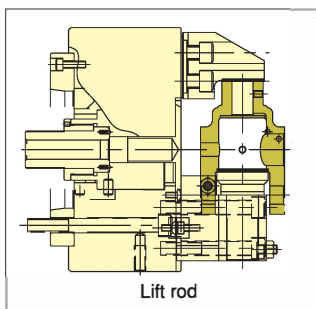
\*CE correspondence

Gripping Example



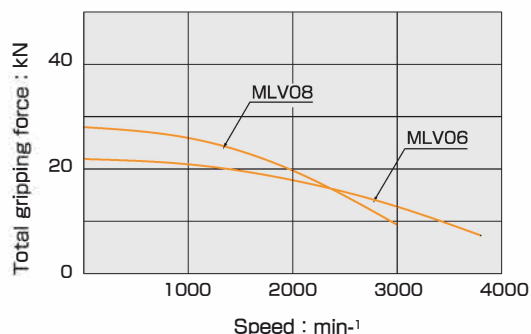
- Halve the set-up time and increase performance.

Gripping Example

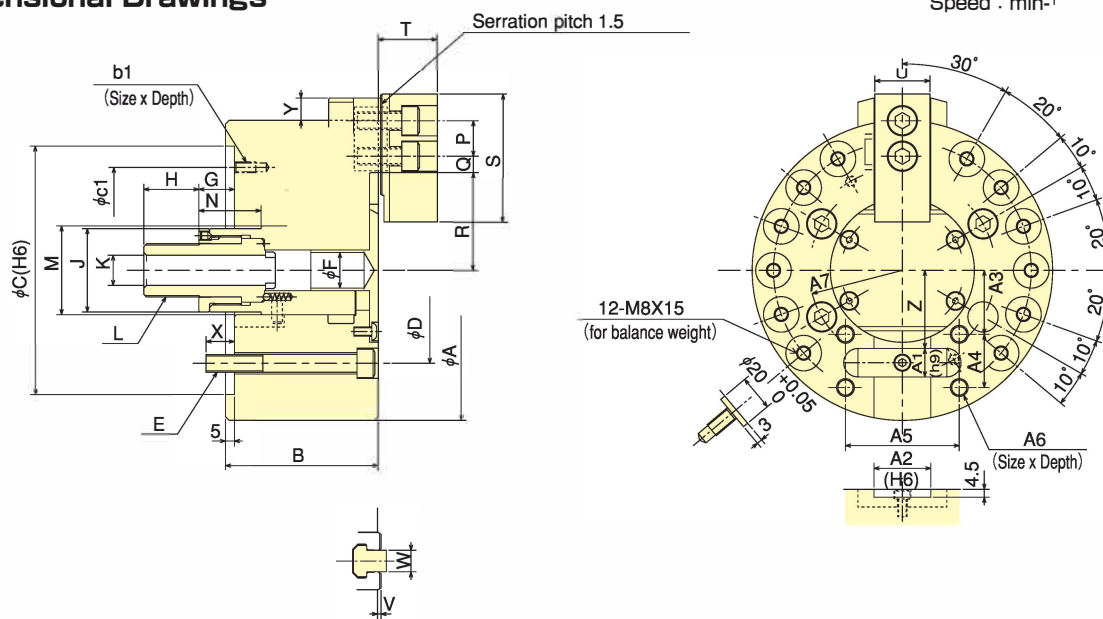


Gripping Characteristic Graphs

※With standard blank soft top jaw.



## Dimensional Drawings



## Dimensions

| Model | A   | B  | C   | D     | E     | F  | G max. | G min. | H  | J  | K  | L       | M  | N  | P  | Q max. | Q min. |
|-------|-----|----|-----|-------|-------|----|--------|--------|----|----|----|---------|----|----|----|--------|--------|
| MLV06 | 169 | 86 | 140 | 104.8 | 4-M10 | 20 | 40     | 20     | 31 | 47 | 17 | M30×1.5 | 50 | 35 | 20 | 13.75  | 9.25   |
| MLV08 | 215 | 99 | 170 | 133.4 | 4-M12 | 20 | 34     | 9      | 34 | 54 | 17 | M33×1.5 | 70 | 29 | 25 | 18     | 12     |

| Model | R max. | R min. | S  | T    | U  | V | W  | X  | Y max. | Z  | A1 | A2 | A3 | A4 | A5 | A6       | A7   | b1      | c1  |
|-------|--------|--------|----|------|----|---|----|----|--------|----|----|----|----|----|----|----------|------|---------|-----|
| MLV06 | 55     | 35     | 72 | 33.2 | 31 | 2 | 12 | 16 | 12.5   | 44 | 16 | 32 | 36 | 30 | 64 | 4-M10×16 | 72.5 | 2-M6×12 | 116 |
| MLV08 | 65.6   | 40.6   | 95 | 39.2 | 35 | 2 | 14 | 21 | 12.1   | 60 | 18 | 37 | 51 | 36 | 70 | 4-M12×20 | 95   | 3-M6×12 | 150 |

## Specifications

| Model | Gripping range mm   | Jaw Stroke mm | Plunger Stroke mm | Max. Draw Bar Pull Force kN (kgf) | Max. Gripping Force kN (kgf) | Max. Speed min⁻¹ | Net Weight with Soft top jaws kg | Moment of inertia kg·m² | Matching Cylinder | Max. pressure MPa (kgf/cm²) | Matching Soft top jaw |
|-------|---------------------|---------------|-------------------|-----------------------------------|------------------------------|------------------|----------------------------------|-------------------------|-------------------|-----------------------------|-----------------------|
| MLV06 | Max. 169<br>Min. 40 | 20            | 20                | 12.0 (1224)                       | 21.9 (2230)                  | 3800             | 13.2                             | 0.050                   | Y1225R            | 1.32 (13.5)                 | SB06A1V               |
| MLV08 | 215 44              | 25            | 25                | 15.0 (1530)                       | 28.0 (2855)                  | 3000             | 25.0                             | 0.155                   | Y1530R            | 1.19 (12.3)                 | SB08A1V               |



**CHUCK**

# 4-Jaw Lever Type Power Operated Chuck with Closed Centre HW series

**Steadily grips block, oval, or any irregular shaped works**  
**Self Centring Mechanism (2+2 Jaws)**

## ● Self Centring Mechanism

2 independent Jaw sets give Dual Action clamping allowing irregular shapes to be easily gripped. Consequently, it is the best to chuck a deformed work such as a square shape and elliptical shape.

## ● Long Stroke

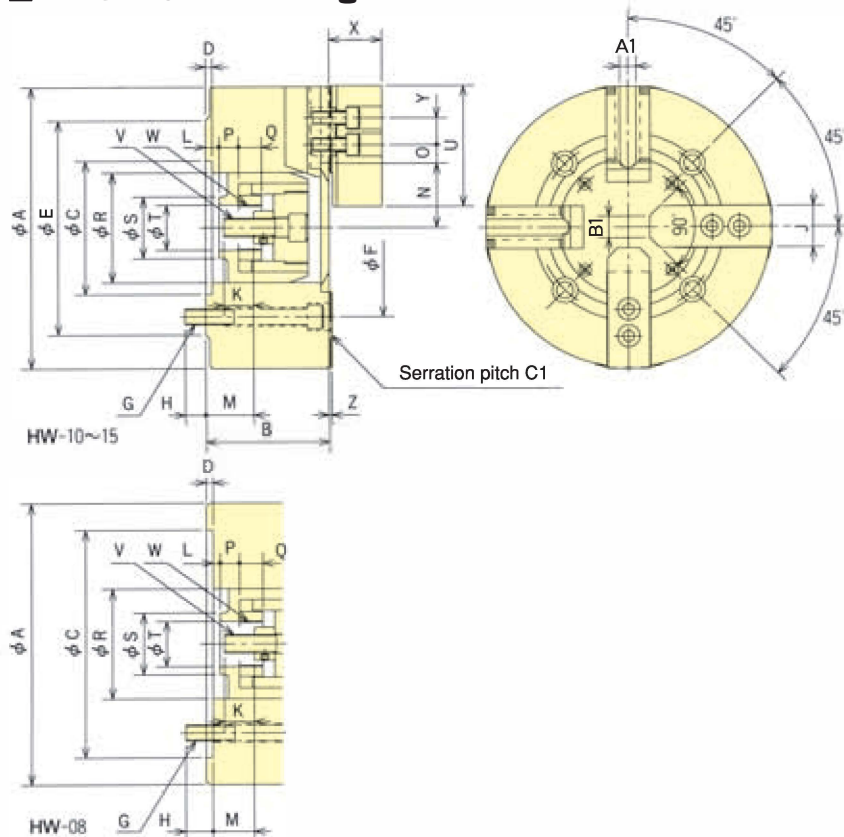
Long Jaw Stroke ensures components with variation are gripped securely.

\*CE correspondence

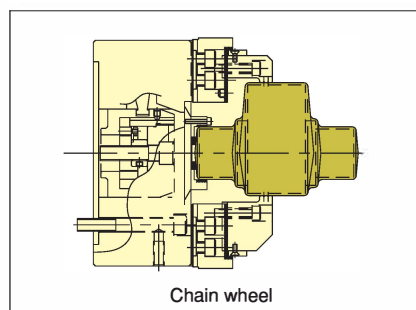


Standard Chuck

## ■ Dimensional Drawings

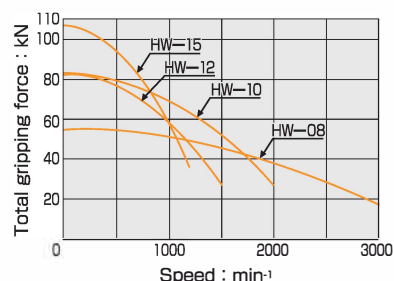


## Gripping Example



## Gripping Characteristic Graphs

※With standard blank soft top jaw.



## ■ Dimensions

| Model | A   | B   | C (H6) | D   | E   | F    | G     | H  | J  | K  | L max. | L min. | M max. | M min. | N max. | N min. | O max. | O min. | P    | Q  | R   | S  | T  | U   | V      | W       | X  | Y  | Z | A1 | B1 | C1  |
|-------|-----|-----|--------|-----|-----|------|-------|----|----|----|--------|--------|--------|--------|--------|--------|--------|--------|------|----|-----|----|----|-----|--------|---------|----|----|---|----|----|-----|
| HW-08 | 210 | 91  | 170    | 5   | -   | 1334 | 4-M12 | 20 | 31 | 29 | 10.5   | -65    | 39     | 22     | 50.3   | 43.7   | 28.75  | 9.25   | 17.5 | 17 | 82  | 46 | 34 | 90  | M14x20 | M34x1.5 | 39 | 20 | 2 | 12 | 16 | 1.5 |
| HW-10 | 270 | 110 | 120    | 5.5 | 200 | 170  | 4-M16 | 24 | 40 | 31 | 18     | -4     | 49     | 27     | 64     | 56     | 28     | 13     | 20   | 20 | 103 | 58 | 42 | 110 | M16x20 | M42x1.5 | 45 | 30 | 5 | 16 | -  | 3.0 |
| HW-12 | 304 | 110 | 120    | 5.5 | 200 | 170  | 4-M16 | 24 | 40 | 31 | 18     | -4     | 49     | 27     | 64     | 56     | 49     | 13     | 20   | 20 | 103 | 58 | 42 | 110 | M16x20 | M42x1.5 | 45 | 30 | 5 | 16 | -  | 3.0 |
| HW-15 | 381 | 135 | 195    | 7.5 | 285 | 235  | 4-M20 | 30 | 50 | 55 | 26     | 1      | 59.5   | 34.5   | 78     | 69.5   | 66.5   | 12.5   | 18.5 | 24 | 130 | 78 | 55 | 129 | M20x25 | M55x2   | 53 | 38 | 5 | 18 | -  | 3.0 |

## ■ Specifications

| Model | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Draw Bar* (Per of Plunger) kN (kgf) | Max. Gripping Force* (Per of Jaw) kN (kgf) | Max. Speed min | Net Weight with Soft top jaws kg | Moment of inertia kg·m² | Matching Cylinder | Max. pressure MPa(kgf/cm²) | Matching Soft top jaw |
|-------|-------------------|--------------------------|-------------------|------------------------------------------|--------------------------------------------|----------------|----------------------------------|-------------------------|-------------------|----------------------------|-----------------------|
| HW-08 | 210               | 26                       | 132               | 17                                       | 16.5 (1683)                                | 28 (2855)      | 23                               | 0.153                   | YW1220R           | 1.71 (17.4)                | SB08A2Q               |
| HW-10 | 270               | 54                       | 16                | 22                                       | 23 (2345)                                  | 42 (4283)      | 50                               | 0.500                   | YW1225R           | 2.29 (23.4)                | SB10A2Q               |
| HW-12 | 304               | 54                       | 16                | 22                                       | 23 (2345)                                  | 42 (4283)      | 58                               | 0.700                   | YW1225R           | 2.29 (23.4)                | SB10A2Q               |
| HW-15 | 381               | 63                       | 17                | 25                                       | 28 (2855)                                  | 54 (5506)      | 118                              | 2.25                    | YW1225R           | 2.73 (27.8)                | SB15A2Q               |

※In chuck total, both maximum allowable input value and static gripping force value are double on the above list.

※The movement order of jaw cannot be assigned in combination with YW cylinder. (Contact to Kitagawa when assignment is required.)





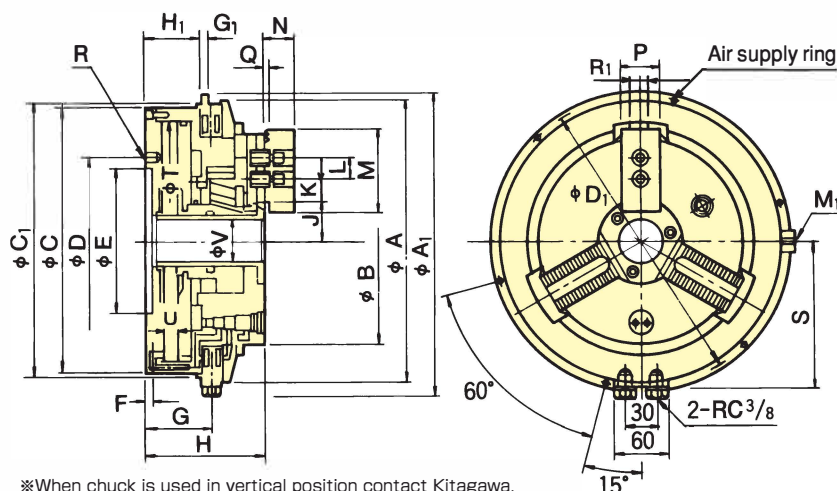
**CHUCK**

# 3-Jaw Air-Operated Self Contained Chuck UVE-K series

## Built-in Pneumatic Cylinder



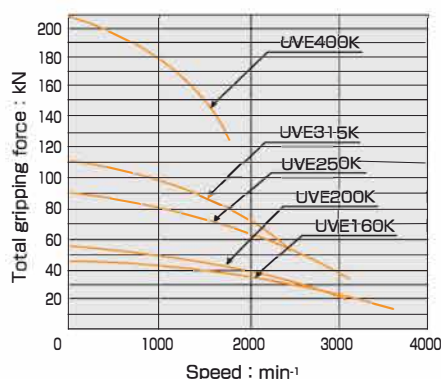
### Dimensional Drawings



※When chuck is used in vertical position contact Kitagawa.

### Gripping Characteristic Graphs

※Each curve shows air pressure 0.6MPa (6.1kgf/cm<sup>2</sup>). This is a case that standard soft jaws are used.



### Dimensions

| Mode    | A   | B   | C   | D   | E (H7) | F   | G    | H   | J max. | J min. | K max. | K min. | L  | M    | N    | P  | Q    | R     | S   | T   | U  | V   | A <sub>1</sub> | C <sub>1</sub> (h6) | D <sub>1</sub> | G <sub>1</sub> | H <sub>1</sub> ±0.1 | M <sub>1</sub> | R <sub>1</sub> |
|---------|-----|-----|-----|-----|--------|-----|------|-----|--------|--------|--------|--------|----|------|------|----|------|-------|-----|-----|----|-----|----------------|---------------------|----------------|----------------|---------------------|----------------|----------------|
| UVE160K | 250 | 170 | 230 | 180 | 160    | 6.5 | 83   | 137 | 33.5   | 29.3   | 19.25  | 10.25  | 25 | 76.5 | 38.5 | 40 | 2.25 | 6-M10 | 138 | 205 | 24 | 38  | 273            | 240                 | 260            | 6              | 71                  | M10            | 14             |
| UVE200K | 280 | 200 | 260 | 210 | 185    | 8   | 82.5 | 141 | 43     | 38.8   | 20.25  | 11.25  | 30 | 110  | 43   | 40 | 2.25 | 6-M10 | 150 | 230 | 24 | 50  | 302            | 275                 | 288            | 6              | 69                  | M10            | 16             |
| UVE250K | 330 | 250 | 310 | 260 | 235    | 8   | 87.5 | 151 | 47.5   | 42.6   | 39.75  | 12.75  | 30 | 110  | 43   | 40 | 2.25 | 6-M10 | 175 | 280 | 28 | 60  | 350            | 320                 | 336            | 6              | 74                  | M12            | 16             |
| UVE315K | 385 | 315 | 365 | 315 | 290    | 8   | 90.5 | 155 | 64     | 59.1   | 46.25  | 14.75  | 38 | 129  | 51   | 50 | 2.25 | 6-M10 | 206 | 335 | 28 | 92  | 410            | 380                 | 395            | 8              | 77                  | M12            | 18             |
| UVE400K | 495 | 400 | 475 | 340 | 300    | 8   | 118  | 200 | 86     | 79     | 37.5   | 16.5   | 60 | 156  | 71   | 62 | 3.3  | 6-M16 | 257 | 440 | 40 | 120 | 518            | 485                 | 505            | 8              | 104                 | M16            | 22             |

### Specifications

| Mode    | Thru-Hole mm | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Gripping Force (at air pressure 0.6MPa (6.1kgf/cm <sup>2</sup> )) kN (kgf) | Max. Speed min <sup>-1</sup> | Net Weight kg | Moment of inertia kg·m <sup>2</sup> | Matching Soft top jaw | Max. pressure MPa | Air assumption per 10mm (at air pressure 6.1kgf/cm <sup>2</sup> ) l | Serration pitch |
|---------|--------------|-------------------|--------------------------|-------------------|---------------------------------------------------------------------------------|------------------------------|---------------|-------------------------------------|-----------------------|-------------------|---------------------------------------------------------------------|-----------------|
| UVE160K | 38           | 170 18            | 8.4                      | 24                | 45 (4588)                                                                       | 3600 (3500)                  | 29.5          | 0.25                                | SB06C1                | 0.6 (6.1)         | 2.375                                                               | 1.5             |
| UVE200K | 50           | 200 18            | 8.4                      | 24                | 54 (5506)                                                                       | 3200 (2800)                  | 38.5          | 0.35                                | SB10B1                | 0.6 (6.1)         | 2.990                                                               | 1.5             |
| UVE250K | 60           | 250 18            | 9.8                      | 28                | 90 (9177)                                                                       | 3000 (2200)                  | 61            | 0.725                               | SB10B1                | 0.6 (6.1)         | 4.432                                                               | 1.5             |
| UVE315K | 92           | 315 48            | 9.8                      | 28                | 111 (11318)                                                                     | 2500 (1800)                  | 81            | 1.45                                | SB12C1                | 0.6 (6.1)         | 6.343                                                               | 1.5             |
| UVE400K | 120          | 400 90            | 14                       | 40                | 210 (21413)                                                                     | 1800 (1200)                  | 145           | 4.375                               | SB15A2                | 0.6 (6.1)         | 10.943                                                              | 3               |

※Maximum speed is shown with each value under air pressure of 0.6MPa, using standard soft jaw and fixed air supply ring. If the supply ring is not fixed, each value in ( ) is applied.

※Gripping force of a jaw is one third of max. gripping force.

※Standard accessories : Soft jaw, air pressure gauge, tools of a set.

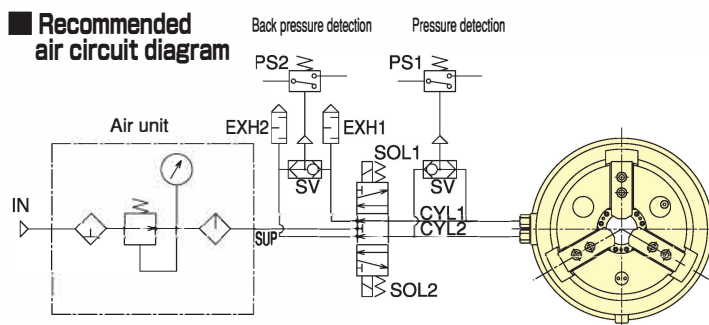
### Hard Jaw (Option accessories)

| Model   | Gripping range mm | Hard jaw |
|---------|-------------------|----------|
| UVE160K | φ12~φ170          | HB06U1   |
| UVE200K | φ14~φ180          | HB08U1   |
| UVE250K | φ21~φ225          | HB08U1   |
| UVE315K | φ36~φ310          | HB12U1   |
| UVE400K | φ80~φ400          | HB16U2   |

※Hard jaw for UVE200K & 250K is same.

※Hard jaw for UVE500K size or more is manufactured under prearrangement.

### Recommended air circuit diagram





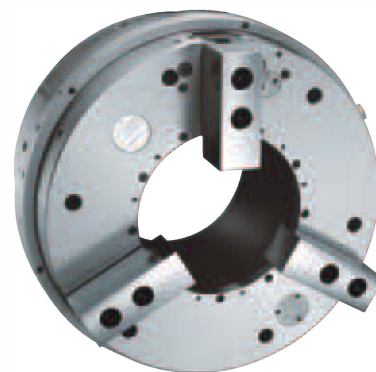
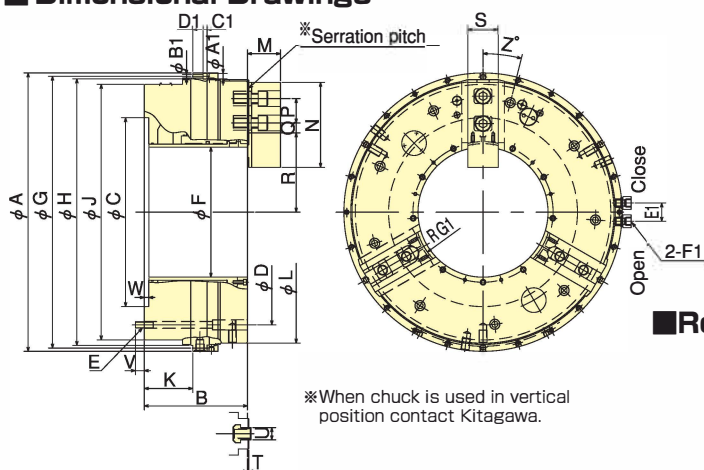
**CHUCK**

# 3-Jaw Air-Operated Self Contained Chuck UB series

**Built-in Pneumatic Cylinder**  
**Large chuck best suited for pipe processing**

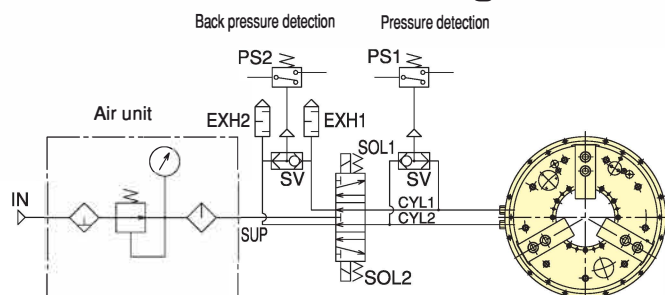
- The jaw position can be detected
- Internal pressure can be detected
- \* CE correspondence

## Dimensional Drawings



Standard Chuck

## Recommended Air Circuit Diagram



※Serration pitch Model UBxxxK : mm, UBxxxP : inch

## Dimensions

| Model    | A1 | B1  | C1  | D1 | E1 | F1    | G1   |
|----------|----|-----|-----|----|----|-------|------|
| UB450K/P | 11 | 6.6 | 6.6 | 25 | 45 | Rc3/8 | 87.5 |
| UB560K/P | 14 | 9   | 9   | 20 | 45 | Rc1/2 | 134  |
| UB630K/P | 14 | 9   | 10  | 25 | 45 | Rc1/2 | 160  |
| UB710K/P | 17 | 11  | 11  | 33 | 45 | Rc1/2 | 185  |

| Model    | Dimensions |     |           |     | E     | F   | G   | H<br>(H7) | J   | K     | L   | M    |      | N     | P  | Q<br>max. | Q<br>min. | R<br>max. | R<br>min. | S  | T   | U    | V  | W  | Z  |
|----------|------------|-----|-----------|-----|-------|-----|-----|-----------|-----|-------|-----|------|------|-------|----|-----------|-----------|-----------|-----------|----|-----|------|----|----|----|
|          | A          | B   | C<br>(H7) | D   |       |     |     |           |     |       |     | mm   | inch |       |    |           |           |           |           |    |     |      |    |    |    |
| UB450K/P | 494        | 212 | 275       | 373 | 9-M12 | 181 | 481 | 470       | 431 | 98.5  | 441 | 67.3 | 68.7 | 165   | 43 | 41.5      | 17.5      | 121.4     | 114.4     | 62 | 3.3 | 25.5 | 17 | 6  | 20 |
| UB560K/P | 626        | 230 | 375       | 485 | 6-M16 | 275 | 610 | 595       | 556 | 113.5 | 568 | 70.5 | 71.9 | 180   | 60 | 42        | 18        | 169       | 160.5     | 65 | 3.3 | 25.5 | 24 | 11 | 40 |
| UB630K/P | 698        | 254 | 465       | 555 | 9-M16 | 320 | 682 | 669       | 629 | 119.5 | 645 | 81.3 | 82.7 | 209.5 | 60 | 50.5      | 23.5      | 195       | 186.5     | 75 | 3.3 | 30   | 22 | 11 | 14 |
| UB710K/P | 790        | 252 | 520       | 620 | 9-M16 | 375 | 770 | 745       | 702 | 118.5 | 714 | 81.3 | 82.7 | 209.5 | 60 | 62.3      | 26.3      | 222.5     | 211.5     | 75 | 3.3 | 30   | 24 | 11 | 24 |

## Specifications

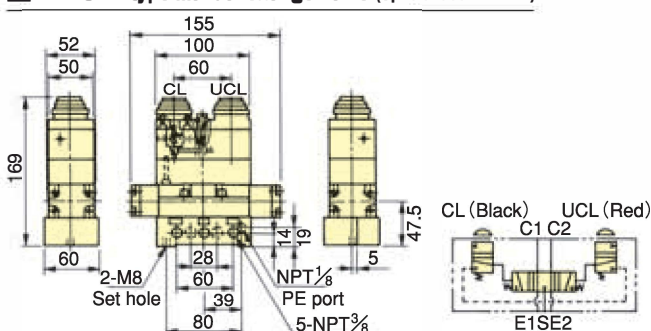
| Model    | Thru-Hole mm | Gripping range mm | Jaw Stroke (diameter) mm | Plunger Stroke mm | Max. Gripping Force kN (kgf) | Max. Speed min <sup>-1</sup> | Net Weight with Soft top jaws kg | Moment of inertia kg·m <sup>2</sup> | Max pressure MPa (kgf/cm <sup>2</sup> ) | Air consumption per 10mm (at air pressure 0.6MPa) (L/kgf/cm <sup>2</sup> ) |
|----------|--------------|-------------------|--------------------------|-------------------|------------------------------|------------------------------|----------------------------------|-------------------------------------|-----------------------------------------|----------------------------------------------------------------------------|
| UB450K/P | 181          | 441 120           | 14                       | 40                | 100 (10200)                  | 1300                         | 204                              | 5.55                                | 0.6 (6.1)                               | 4.83                                                                       |
| UB560K/P | 275          | 568 220           | 17                       | 37                | 120 (12230)                  | 1100                         | 320                              | 15.8                                | 0.6 (6.1)                               | 7.17                                                                       |
| UB630K/P | 320          | 645 225           | 17                       | 37                | 162 (16520)                  | 1000                         | 480                              | 28.1                                | 0.6 (6.1)                               | 9.27                                                                       |
| UB710K/P | 375          | 714 275           | 22                       | 36                | 144 (14680)                  | 900                          | 550                              | 38.9                                | 0.6 (6.1)                               | 11.10                                                                      |

※Maximum speed is shown with each value under air pressure of 0.6MPa, using standard soft jaw and fixed air supply ring. If the supply ring is not fixed, each value in ( ) is applied.

※Gripping force of a jaw is one third of max. gripping force. ※Standard accessories : Soft jaw, air pressure gauge, tools of a set.

※The work of diameter smaller than the above minimum gripping diameter can be gripped by using a collet pad (option).

## AVF-3-FL type manual change valve (Special accessories)



This valve is light-weight, compact and can be operated with the press of a button. The simple piping can be routed when the selector is mounted on the lathe. The valve is the exhaust centre type and designed for exclusive UB types.

|                             |                                   |
|-----------------------------|-----------------------------------|
| Pressure                    | 0~1MPa (10.1kgf/cm <sup>2</sup> ) |
| Proof pressure              | 1.5MPa (15.3kgf/cm <sup>2</sup> ) |
| Push button operation force | 4kg                               |
| Connection bore             | Rc3/8                             |



**CHUCK**

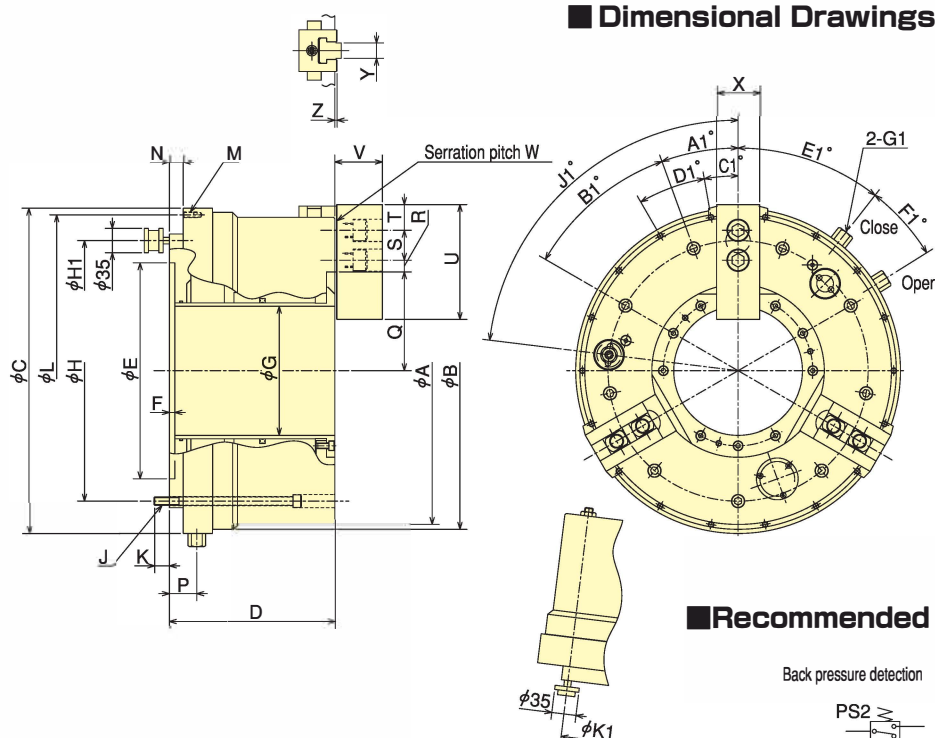
# 3-Jaw Air-Operated Self Contained Chuck UPR series

**Air-operated chuck perfect for oil pipe standards**

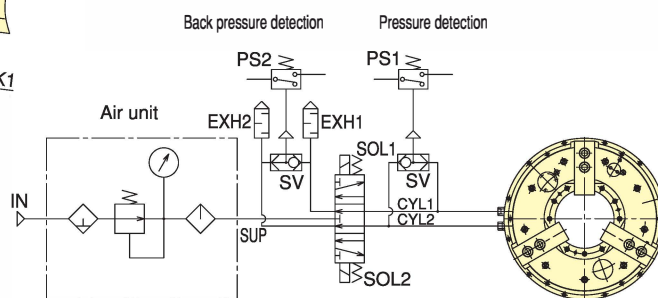
- Easy installation
- Easy centering adjustment
- Service & maintenance improved.  
Easy replacing consumable parts



## Dimensional Drawings



## Recommended air circuit diagram



## Dimensions

| Model  | A   | B   | C<br>(0/0.2) | D   | E<br>(H7) | F  | G   | H   | J      | K  | L   |
|--------|-----|-----|--------------|-----|-----------|----|-----|-----|--------|----|-----|
| UPR450 | 441 | 455 | 467          | 238 | 310       | 8  | 185 | 374 | 9-M12  | 22 | 448 |
| UPR600 | 590 | 605 | 605          | 272 | 450       | 8  | 275 | 508 | 12-M12 | 22 | 585 |
| UPR650 | 655 | 675 | 685          | 283 | 510       | 8  | 325 | 580 | 12-M16 | 24 | 666 |
| UPR710 | 715 | 740 | 750          | 283 | 550       | 8  | 375 | 620 | 9-M16  | 24 | 730 |
| UPR910 | 915 | 915 | 925          | 291 | 700       | 10 | 560 | 800 | 12-M16 | 26 | 905 |

| Model  | M              | N  | P    | Q<br>max. | Q<br>min. | R<br>max. | R<br>min. | S  | T    | U     | V    | W   | X  | Y<br>(h8) | Z   | A1  | B1     | C1  | D1     | E1  | F1  | G1    | H1  | J1  | K1  |
|--------|----------------|----|------|-----------|-----------|-----------|-----------|----|------|-------|------|-----|----|-----------|-----|-----|--------|-----|--------|-----|-----|-------|-----|-----|-----|
| UPR450 | 18-M8 Depth 20 | 20 | 39.5 | 142       | 122       | 34.75     | 16.75     | 43 | 37   | 165   | 68.3 | 1.5 | 62 | 22        | 3.3 | 20° | 9x40°  | 10° | 18x20° | 38° | 20° | Rc3/8 | 374 | 83° | 374 |
| UPR600 | 18-M8 Depth 20 | 20 | 50   | 196.5     | 171.5     | 32.5      | 20.5      | 60 | 39.5 | 180   | 70.5 | 3   | 65 | 25.5      | 3.3 | 15° | 12x30° | 0°  | 18x20° | 25° | 20° | Rc3/8 | 508 | 60° | 508 |
| UPR650 | 18-M8 Depth 20 | 20 | 50   | 223       | 198       | 38.5      | 20.5      | 60 | 40   | 209.5 | 81.3 | 3   | 75 | 30        | 3.3 | 15° | 12x30° | 0°  | 18x20° | 25° | 20° | Rc1/2 | 580 | 60° | 580 |
| UPR710 | 18-M8 Depth 20 | 20 | 43   | 248       | 223       | 50.5      | 23.5      | 60 | 40   | 209.5 | 81.3 | 3   | 75 | 30        | 3.3 | 20° | 9x40°  | 0°  | 18x20° | 30° | 15° | Rc1/2 | 620 | 45° | 620 |
| UPR910 | 18-M8 Depth 20 | 33 | 56   | 342       | 317       | 50.5      | 23.5      | 60 | 40   | 209.5 | 81.3 | 3   | 75 | 30        | 3.3 | 15° | 12x30° | 0°  | 18x20° | 30° | 15° | Rc1/2 | 800 | 60° | 800 |

## Specifications

| Model  | Thru-Hole<br>mm | Gripping range mm<br>Max. | Gripping range mm<br>Min. | Jaw Stroke (diameter) mm<br>Rapid | Jaw Stroke (diameter) mm<br>Gripping | Plunger<br>Stroke mm | Max. Gripping Force<br>kN (kgf) | Max. Speed<br>min <sup>-1</sup> | Net Weight<br>kg | Moment of inertia<br>kg·m <sup>2</sup> | Max. pressure<br>MPa |
|--------|-----------------|---------------------------|---------------------------|-----------------------------------|--------------------------------------|----------------------|---------------------------------|---------------------------------|------------------|----------------------------------------|----------------------|
| UPR450 | 185             | 441                       | 127                       | 26                                | 14                                   | 53                   | 100(10197)                      | 1300                            | 195              | 5.5                                    | 0.6                  |
| UPR600 | 275             | 590                       | 235                       | 33                                | 17                                   | 53.5                 | 120(12236)                      | 1100                            | 365              | 19.7                                   | 0.5                  |
| UPR650 | 325             | 655                       | 240                       | 33                                | 17                                   | 53.5                 | 147(14990)                      | 1000                            | 476              | 32.2                                   | 0.6                  |
| UPR710 | 375             | 715                       | 294                       | 33                                | 17                                   | 53.5                 | 162(16519)                      | 900                             | 532              | 43.1                                   | 0.6                  |
| UPR910 | 560             | 915                       | 475                       | 33                                | 17                                   | 53.5                 | 162(16519)                      | 600                             | 735              | 103                                    | 0.5                  |





**CHUCK**

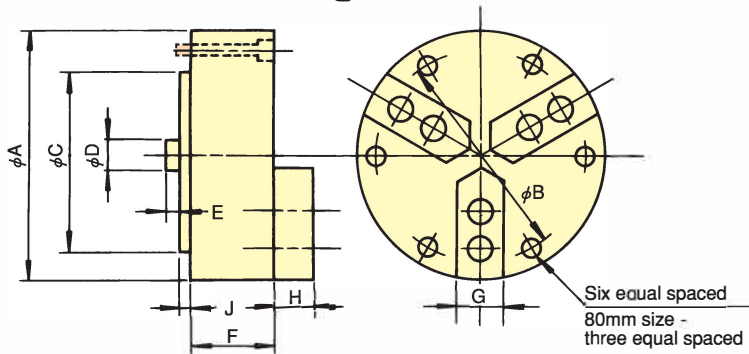
# 3-Jaw Ultra High Precision Air Chuck KPC series

**High Repeatability**

**Optimum KPC chuck for finishing and precision processes**

● Built-in Pneumatic Cylinder

## Dimensional Drawings



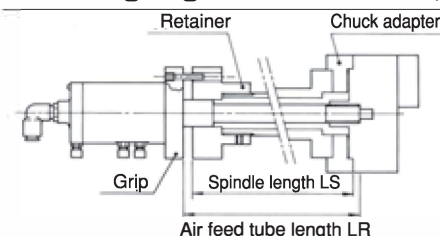
## Dimensions

| model      | A   | B     | C (h6) | D    | E max. | E min. | F    | G  | H  | J | Jaw Mounting bolts | Mounting bolts | Net Weight with Soft top jaws kg |
|------------|-----|-------|--------|------|--------|--------|------|----|----|---|--------------------|----------------|----------------------------------|
| KPC803C100 | 80  | 70    | 60     | 20.6 | 17     | 9.9    | 55   | 20 | 19 | 2 | 3-M5x16            | 3-M5x60        | 1.8                              |
| KPC43C048  | 100 | 88.9  | 82.55  | 20.6 | 18.8   | 15.3   | 50.5 | 20 | 19 | 2 | 3x2-M5x16          | 6-M5x55        | 2.1                              |
| KPC43C100  | 100 | 88.9  | 82.55  | 20.6 | 18     | 10.8   | 55   | 20 | 19 | 2 | 3x2-M5x16          | 6-M5x60        | 2.1                              |
| KPC63C100  | 150 | 135.8 | 124.97 | 20.6 | 17.6   | 10.4   | 56   | 25 | 19 | 2 | 3x4-M5x16          | 6-M6x65        | 6.3                              |

## Specifications

| model         | Specifications | Repeatability mm | Number of Jaws | Jaw Stroke (diameter) mm | Gripping range external $\phi$ | Gripping range Internal $\phi$ | Max. Gripping Force kN (kgf) (Air pressure 0.7MPa) | Max. Speed (with std. Aluminum jaw) min <sup>-1</sup> |
|---------------|----------------|------------------|----------------|--------------------------|--------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------------------------|
| KPC803C100P   |                | 0.0025           | 3              | 2.5                      | 3~70                           | 6~79                           | 4.3 (438)                                          | 6000                                                  |
| KPC803C100EP  |                | 0.0013           |                |                          |                                |                                |                                                    |                                                       |
| KPC803C100EP1 |                | 0.0010           |                |                          |                                |                                |                                                    |                                                       |
| KPC43C048P    |                | 0.0025           | 3              | 1.2                      | 3.5~87                         | 6~99                           | 7.6 (775)                                          | 6000                                                  |
| KPC43C048EP   |                | 0.0013           |                |                          |                                |                                |                                                    |                                                       |
| KPC43C048EP1  |                | 0.0010           |                |                          |                                |                                |                                                    |                                                       |
| KPC43C100P    |                | 0.0025           | 3              | 2.5                      | 3~87                           | 6~99                           | 7.6 (775)                                          | 6000                                                  |
| KPC43C100EP   |                | 0.0013           |                |                          |                                |                                |                                                    |                                                       |
| KPC43C100EP1  |                | 0.0010           |                |                          |                                |                                |                                                    |                                                       |
| KPC63C100P    |                | 0.0025           | 3              | 2.5                      | 3~135                          | 6~149                          | 11.6 (1183)                                        | 4000                                                  |
| KPC63C100EP   |                | 0.0013           |                |                          |                                |                                |                                                    |                                                       |
| KPC63C100EP1  |                | 0.0010           |                |                          |                                |                                |                                                    |                                                       |

## Ordering length of air feed tube (option)



When ordering the air feed tube (coolant or non-coolant type), specify the spindle length LS as shown in the illustration. Air feed tube length LR is determined by LS. E.G. LR = LS + 17

In case of KPC43C048: LR = LS + 12  
Chuck Adaptor and Retainer are options

**COBOTEC 21**  
ENGINEERING

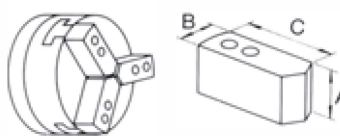
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office@cobotec.ro

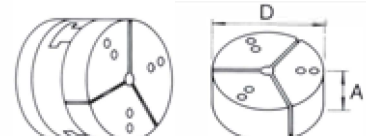
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Cod Postal 077045

## Standard type jaw



## Pie type jaw



## Standard type jaw Dimensions

| Chuck      | Jaw model     | Mat-erial | Dimensions mm | A    | B    | C |
|------------|---------------|-----------|---------------|------|------|---|
| KPC80 TYPE | KJ1A3-7       | A l       | 19            | 20   | 38.4 |   |
|            | KJ1A3-15      | A l       | 38            | 20   | 38.4 |   |
|            | KJ1A3-1       | A l       | 25            | 20   | 38.4 |   |
|            | KJ1S3-7 S45C  | 19        | 20            | 38.4 |      |   |
|            | KJ1S3-15 S45C | 38        | 20            | 38.4 |      |   |
|            | KJ1A4-1       | A l       | 25            | 20   | 48.4 |   |
| KPC4 TYPE  | KJ1A4-7       | A l       | 19            | 20   | 48.4 |   |
|            | KJ1A4-15      | A l       | 38            | 20   | 48.4 |   |
|            | KJ1S4-1       | S45C      | 25            | 20   | 48.4 |   |
|            | KJ1S4-2       | S45C      | 51            | 20   | 48.4 |   |
|            | KJ1S4-7       | S45C      | 19            | 20   | 48.4 |   |
|            | KJ1S4-15      | S45C      | 38            | 20   | 48.4 |   |

## Pie type jaw Dimensions

| Chuck      | Jaw model | Mat-erial | Dimensions mm | A  | B    | C | D   |
|------------|-----------|-----------|---------------|----|------|---|-----|
| KPC80 TYPE | KJ3A3-1   | A l       | 25            | 25 | 73.4 |   | 80  |
|            | KJ3S3-1   | S45C      | 25            | 25 | 73.4 |   | 80  |
|            | KJ3S3-7   | S45C      | 19            | 25 | 73.4 |   | 80  |
| KPC4 TYPE  | KJ3A4-1   | A l       | 25            | 25 | 100  |   | 100 |
|            | KJ3A4-15  | A l       | 38            | 25 | 100  |   | 100 |
|            | KJ3S4-1   | S45C      | 25            | 25 | 100  |   | 100 |
|            | KJ3S4-2   | S45C      | 51            | 25 | 100  |   | 100 |
|            | KJ3S4-7   | S45C      | 19            | 25 | 100  |   | 100 |
| KPC6 TYPE  | KJ3S4-15  | S45C      | 38            | 25 | 100  |   | 100 |
|            | KJ3A6-1   | A l       | 25            | 25 | 150  |   | 150 |
|            | KJ3S6-1   | S45C      | 25            | 25 | 150  |   | 150 |
| KPC6 TYPE  | KJ3S6-7   | S45C      | 19            | 25 | 150  |   | 150 |
|            | KJ3S6-15  | S45C      | 38            | 25 | 150  |   | 150 |