

Samchully Machinery Co., Ltd.

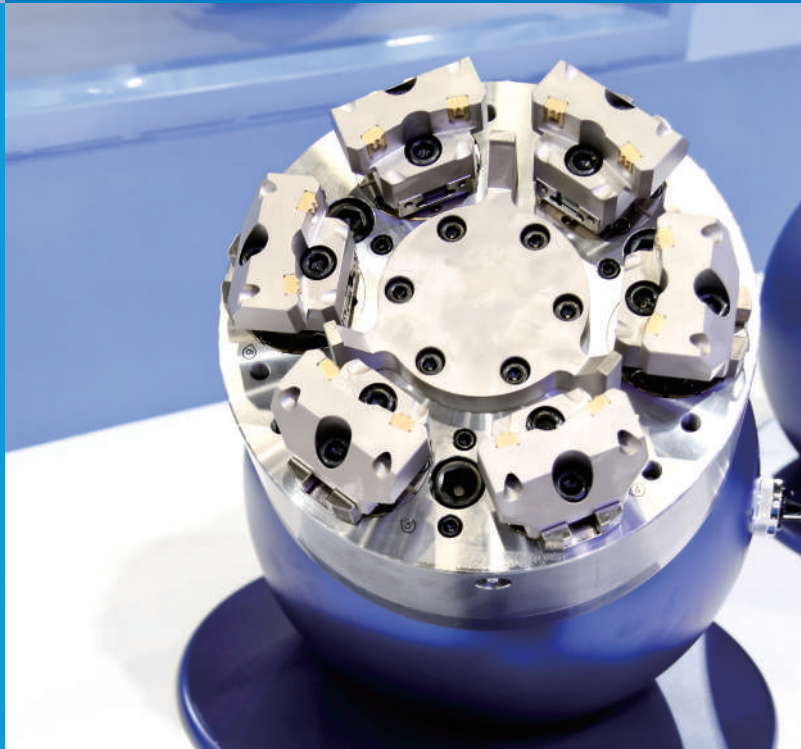
Offers 30 years of experience in providing a wide range of premium quality work-holding products such as application, hydraulic, and manual chucks, milling vises, magnet chuck and rotary tables.

In keeping with our tradition of providing quality products, we perennially hold ISO:9001 and TUV certifications. Samchully Machinery Co., Ltd. also received Single Part Per Million certification [Single PPM] in 2007. The Single PPM quality assurance program is specifically adapted to North-East Asian manufacturing which relies heavily on outsourcings to leverage economies of scale. The Single PPM program emphasizes close collaboration with employees and vendors to reduce incoming component defects to a single digit (less than 10) for every million parts received.

Samchully is one of the first certified organizations in South Korea.







We proudly supply some of the world's leading machine tool makers, including Doosan (Daewoo), Hyundai-Wia (Kia) and Haas Automation, and provide after-market sales support through an extensive global network of distributors.

At Samchully, we are committed to you, our customer. We pride ourselves in providing the best value product in the world by combining premium quality, affordable pricing, and reliable service. We believe that you deserve better workholding options— you deserve Samchully.



SAMCHULLY

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SPECIAL CHUCK



PBL

Universal Ball-Lock
Power Chuck

06 P



CDI

Inside-Collet
Chuck

19 P



IAH

Auto-Indexing
Chuck

28 P



EGL

Centering Ball Lock
Chuck

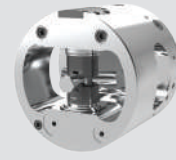
08 P



FD

Finger Chuck

20 P



IAN

Auto-Indexing
Chuck

30 P



PIL

Inside Pin Arbor
Chuck

10 P



COR

Outside-Collet
Chuck

21 P



PHD

Outside Pull-Down
Chuck

32 P



POL

Outside Pin Arbor
Chuck

11 P



CORH

Outside-Collet
Chuck

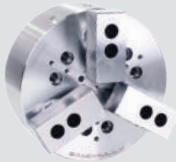
22 P



PHDN

Inside Pull-Down
Chuck

34 P



DDL

Outside Draw-
Down Chuck

12 P



DP

Diaphragm Chuck

24 P



RS

Retractable-Jaw
Shaft Chuck

36 P



DDO

Inside Draw-Down
Chuck

14 P



GDP

Gear Chuck

25 P



CSF

Compensating
Chuck

38 P



DDT

Outside 2-Jaw
Draw-Down Chuck

16 P



BDG

Bevel-Gear Chuck

26 P



FWC

Aluminum Wheel
Chuck

40 P



CDO

Outside-Collet
Chuck

18 P



IAHT

Auto-Indexing
Chuck

27 P

PBL Universal Ball-Lock Power Chuck



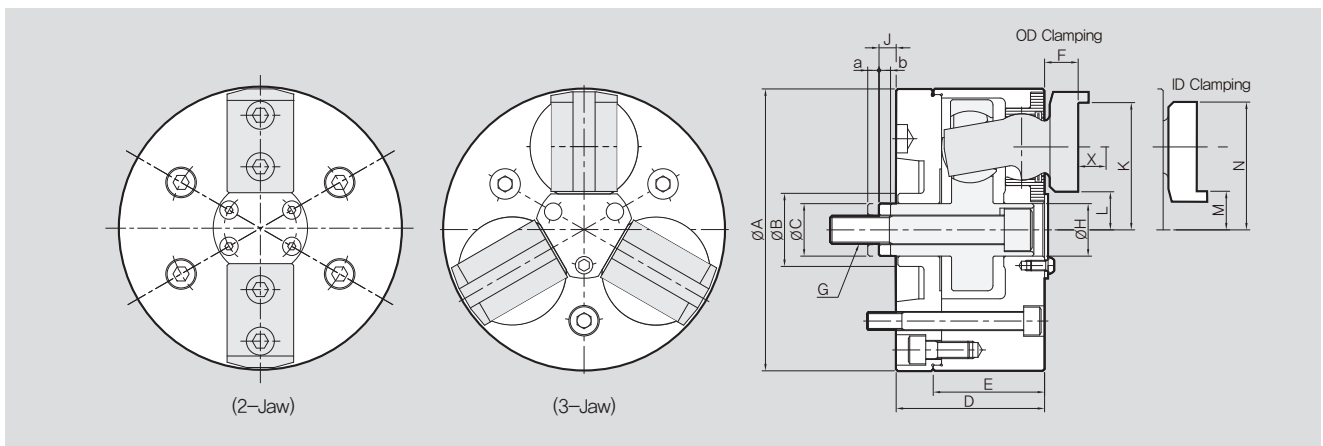
Application / Benefits

Compensating feature provides proper clamping for rough castings or forgings
Ability to clamp OD and ID

Technical features

Grips on tapers up to 10°

Jaws pivot up to 5° to grip on uneven surfaces



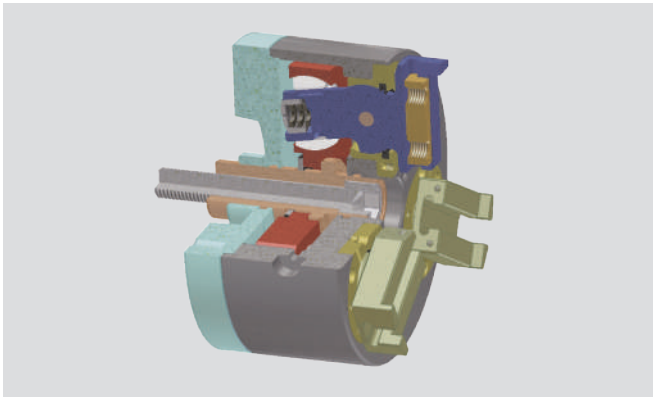
DIMENSIONS

| | PBL-06 | PBL-08 | PBL-10 | PBL-12 | PBL-15 | PBL-18 | PBL-21 | PBL-24 |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| ØA | 162 | 200 | 254 | 300 | 381 | 457 | 533 | 610 |
| ØB min. | 40 | 45 | 58 | 58 | 83 | 120.7 | 120.7 | - |
| ØC | 30.16 | 31.75 | 41.27 | 41.27 | 57.16 | 88.9 | 88.9 | 80 |
| D | 85.2 | 100 | 118 | 118 | 131 | 131 | 131 | 131 |
| E | 59.2 | 70 | 86.6 | 86.6 | 96.1 | 96.1 | 96.1 | 100.9 |
| F | 19.3 | 23.3 | 29.1 | 29.1 | 32.4 | 32.4 | 32.4 | 32.4 |
| G | M16 | M16 | M18 | M18 | M24 | M30 | M30 | M30 |
| ØH | 30.170 | 31.760 | 41.285 | 41.285 | 57.160 | 88.900 | 88.900 | 88.900 |
| J | 10.6 | 10.4 | 13.5 | 13.5 | 24.7 | 31.7 | 31.7 | 31.7 |
| a | 5.1 | 8 | 8 | 8 | 10.3 | 10.3 | 10.3 | 10.3 |
| b | 6.2 | 6.4 | 9.5 | 9.5 | 12 | 12 | 12 | 12 |
| K | 73.15 | 88.95 | 112.7 | 133.27 | 171.45 | 209.55 | 247.65 | 285.8 |
| L | 20.3 | 25.3 | 30.2 | 50.87 | 65.8 | 103.9 | 142 | 180.2 |
| M | 22.1 | 25.35 | 30.3 | 50.77 | 69.8 | 107.9 | 146 | 184.2 |
| N | 75 | 89 | 112.8 | 133.37 | 175.46 | 213.6 | 252 | 289.81 |
| X | 24.9 | 29.4 | 36.5 | 36.5 | 41.9 | 41.9 | 41.9 | 41.9 |

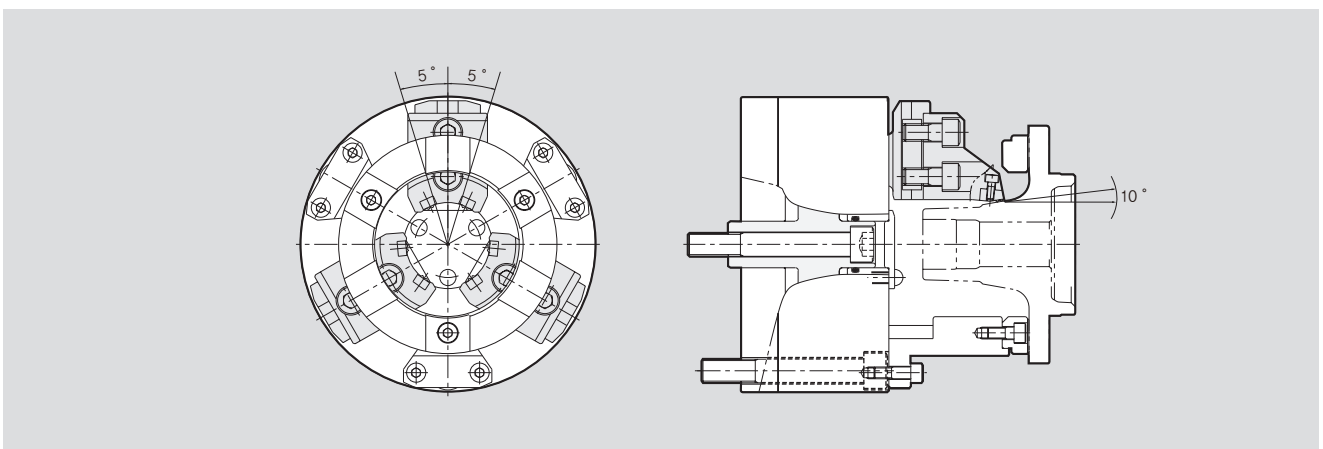
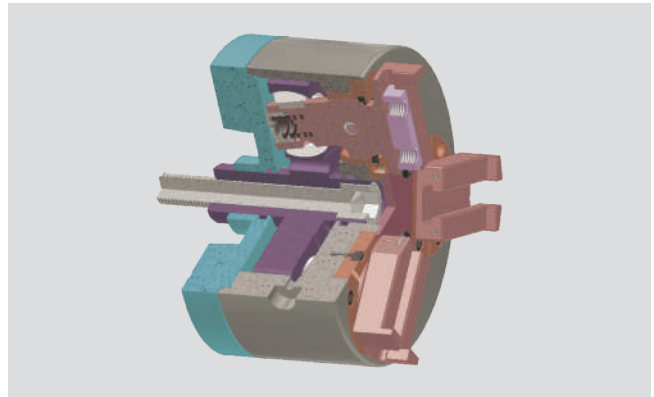
SPECIFICATIONS

| | PBL-06 | PBL-08 | PBL-10 | PBL-12 | PBL-15 | PBL-18 | PBL-21 | PBL-24 | |
|---------------------------|--------------|----------|--------|--------|---------|---------|---------|---------|---------|
| Max. Clamping Force [kgf] | 6600 | 8700 | 10800 | 10800 | 16500 | 16500 | 16500 | 16500 | |
| Max. Drawbar Pull [kgf] | 2200 | 2900 | 3600 | 3600 | 5500 | 5500 | 5500 | 5500 | |
| Jaw Stroke Dia. [mm] | 7.9 | 9.5 | 12.7 | 12.7 | 15.8 | 15.8 | 15.8 | 15.8 | |
| Plunger Stroke [mm] | 11.3 | 14.3 | 17.5 | 17.5 | 22.3 | 22.3 | 22.3 | 22.3 | |
| Clamping Range [mm] | Outside Dia. | 12.7~120 | 16~152 | 50~203 | 63~241 | 76~317 | 89~394 | 162~470 | 180~520 |
| | Inside Dia. | 70~152 | 76~203 | 85~235 | 127~305 | 165~381 | 241~457 | 317~533 | 350~600 |
| Max. Speed [r.p.m.] | 4000 | 3500 | 2500 | 2000 | 1800 | 1500 | 1000 | 1000 | |
| Weight [kg] | 18.0 | 27.0 | 45.0 | 67.5 | 84.5 | 120.0 | 180.0 | 290 | |
| GD2 [kgf·m ²] | 0.15 | 0.48 | 1.23 | 2.42 | 8.49 | 15.17 | 25.00 | 25 | |

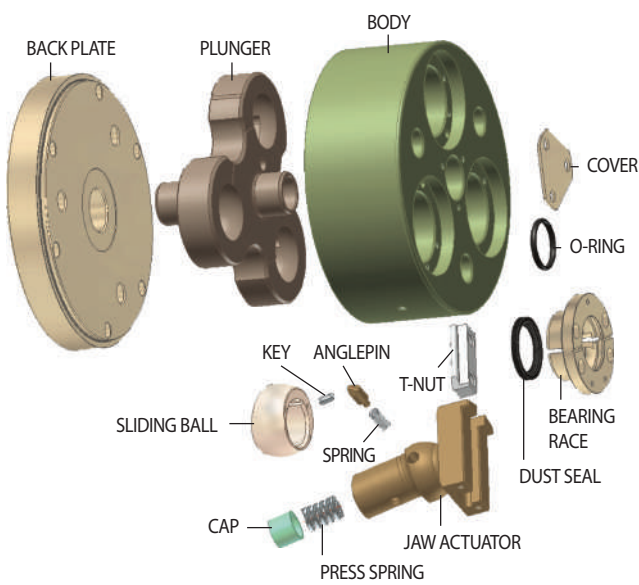
Centralizing



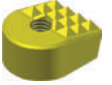
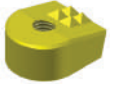

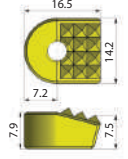
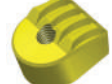

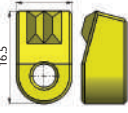
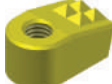
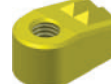


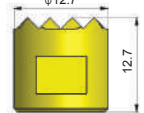
Compensating



PBL Components



Inserts

| Angle Lot Style | | | |
|--|---|---|---|
|  |  |  |  |
| PC127-10SC | PC127-4SC | PC130-4SC | |
|  |  | |  |
| PC132-4SC | PC145-5SC | | |
|  |  | | |
| PC127-4SC-S | PC130-2SC-S | | |
| Round Style | | | |
|  |  | |  |
| PC070-12SC | PC070-4SC | | |

EGL Centering Ball Lock Chuck



Application / Customer's Benefit

I.D & O.D Clamping for rough castings or forgings

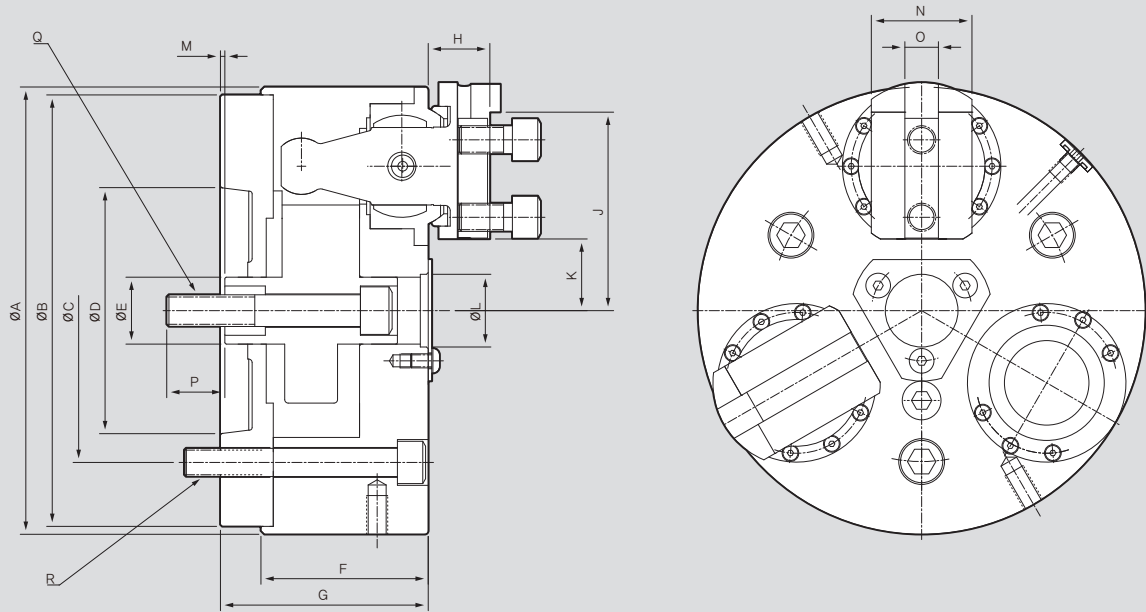
Technical features

Grips on taper upto 10°

Compensating centrifugal force provides faster rotating RPM than PBL chuck's full sealed to prevent chips from entering the chuck body
pull down function (1mm)

SPECIFICATIONS

| | EGL-08 | EGL-10 | EGL-15 |
|---|----------------|----------------|----------|
| Plunger Stroke [mm] | 18 | 23 | 24 |
| Jaw Stroke Ang [°] | 5.2 | 5.3 | 4.5 |
| Max. Drawbar Pull [kgf] | 25 | 40 | 50 |
| Max. Clamping Force [kgf] | 60 | 96 | 120 |
| Moment of inertia [kgf · m ²] | 0.16 | 0.37 | 2.5 |
| Recommended Actuating Cylinders | Y-1225, 1240RE | Y-1225, 1240RE | Y-1530RE |
| Max. Speed [r.p.m.] | 4500 | 3800 | 2200 |
| Weight [kg] | 27 | 43 | 125 |



DIMENSIONS

| | EGL-08 | EGL-10 | EGL-15 |
|---------|------------|------------|------------|
| ØA | 212 | 254 | 390 |
| ØB | 205 | 245 | 380 |
| ØC | 133.4 | 171.4 | 235 |
| ØD | 106.375 | 139.719 | 196.869 |
| ØE | 31.76 | 38 | 57.16 |
| F | 76 | 95 | 113 |
| G | 100 | 118 | 142 |
| H | 26.5 | 35 | 39 |
| J | 88.95 | 112.7 | 171.45 |
| K | 29 | 40.7 | 74 |
| ØL | 31.76 | 41.29 | 57.16 |
| ØM max. | 15 | 23.5 | 25 |
| ØM min. | -3 | 0.5 | 1 |
| N | 44.45 | 57.15 | 66.68 |
| O | 14.24 | 19.05 | 22.2 |
| P | 28 | 33 | 39 |
| Q | M16 x 90L | M18 x 110L | M24 x 140L |
| R | M12 x 105L | M16 x 120L | M20 x 150L |

PIL Inside Pin Arbor Chuck



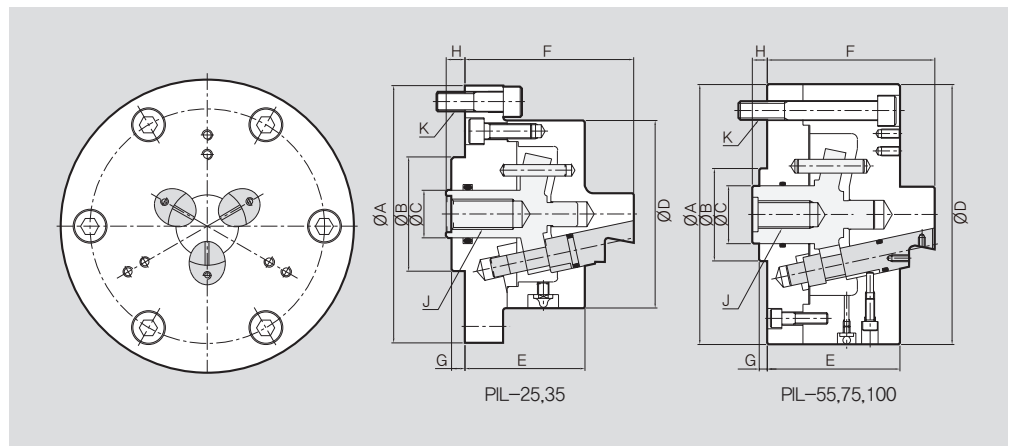
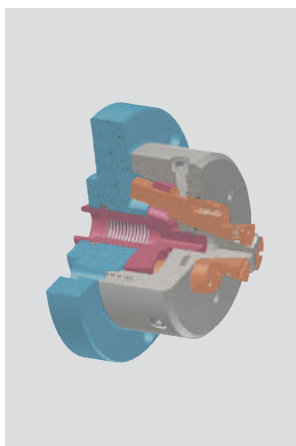
Application / Benefits

Ideal for second operation I.D. gripping

Technical features

Active pull-down for high precision

Counter centrifugal gripping reduces distortion



DIMENSIONS

| | PIL-25 | PIL-35 | PIL-55 | PIL-75 | PIL-100 |
|--------|--------------|--------------|--------------|--------------|--------------|
| ØA | 135 | 135 | 190 | 225 | 270 |
| ØB(h7) | 60 | 60 | 80 | 80 | 120 |
| ØC | 20 | 25 | 32 | 50 | 50 |
| ØD | 85 | 100 | 190 | 225 | 270 |
| E | 60 | 63 | 93 | 115 | 130 |
| F | 80 | 88.5 | 120 | 145 | 170 |
| G | 7 | 7 | 7 | 7 | 7 |
| Hmax. | 12 | 12 | 18 | 18 | 23 |
| Hmin. | 8 | 8 | 8 | 8 | 13 |
| J | M12 | M16 | M16 | M24 | M24 |
| K | 3-M10 PCD118 | 3-M10 PCD118 | 3-M16 PCD150 | 6-M16 PCD180 | 6-M16 PCD180 |

SPECIFICATIONS

| | PIL-25 | PIL-35 | PIL-55 | PIL-75 | PIL-100 | |
|---------------------------|---------|--------|--------|--------|---------|---------|
| Max. Clamping Force [kgf] | 2250 | 3380 | 5640 | 7150 | 7150 | |
| Max. Drawbar Pull [kgf] | 1200 | 1800 | 3000 | 3800 | 3800 | |
| Jaw Stroke Dia. [mm] | 1.7 | 1.7 | 4.2 | 4.2 | 4.2 | |
| Plunger Stroke [mm] | 4 | 4 | 10 | 10 | 10 | |
| Clamping Range [mm] | Pin Jaw | 17~25 | 25~40 | 35~55 | 55~76 | 80~110 |
| | Top Jaw | - | 48~60 | 62~90 | 85~130 | 120~180 |
| Max. Speed [r.p.m.] | 5000 | 4500 | 3500 | 2500 | 2000 | |
| Weight [kg] | 3.5 | 4.3 | 18.4 | 35 | 55 | |
| GD2 [kgf·m ²] | 0.013 | 0.026 | 0.33 | 0.88 | 2.0 | |

POL Outside Pin Arbor Chuck



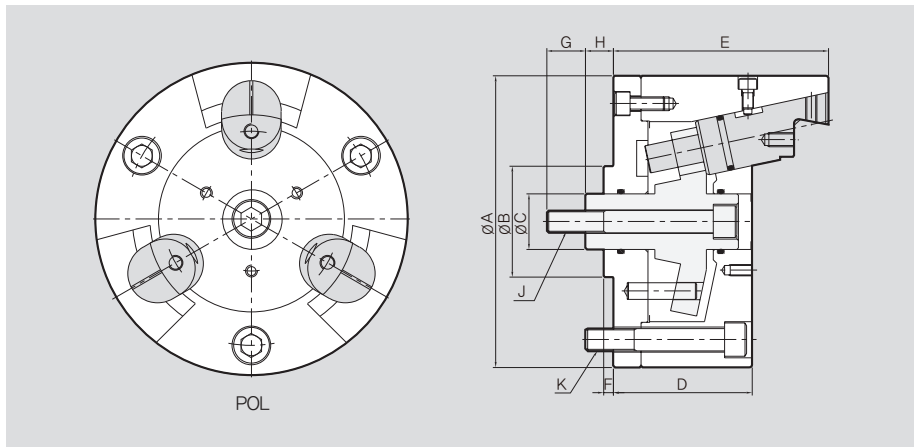
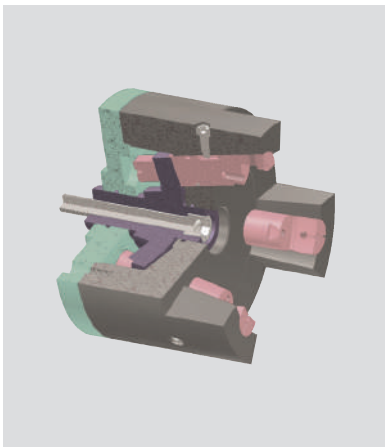
Application / Benefits

Ideal for second operation O.D. gripping on thin walled parts

Technical features

Active pull-down for high precision

Counter centrifugal gripping reduces distortion



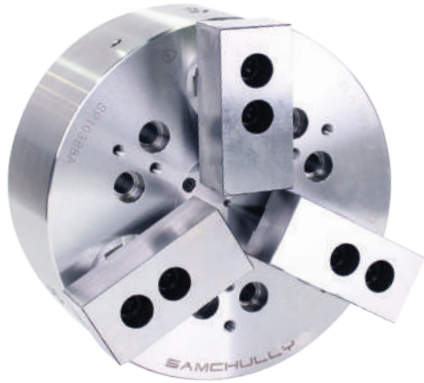
DIMENSIONS

| | POL-80 | POL-100 | POL-140 | POL-180 | POL-230 | POL-300 |
|--------|-------------|--------------|--------------|--------------|--------------|---------|
| ΦA | 130 | 162 | 210 | 250 | 320 | 400 |
| ΦB(h7) | 60 | 80 | 80 | 80 | 120 | - |
| ΦC | 24 | 30 | 40 | 45 | 50 | 60 |
| ΦD | 72 | 90 | 100 | 110 | 130 | 137 |
| E | 103 | 130 | 155 | 165 | 200 | 248 |
| F | 5 | 7 | 7 | 7 | 7 | 7 |
| G | 20 | 30 | 30 | 30 | 40 | 40 |
| Hmax. | 18 | 22.5 | 25 | 25 | 30 | 25 |
| Hmin. | 10 | 12.5 | 15 | 15 | 20 | 15 |
| J | M12 | M16 | M16 | M18 | M20 | M35 |
| K | 3-M8 PCD100 | 3-M12 PCD130 | 3-M16 PCD170 | 3-M16 PCD210 | 6-M16 PCD270 | M24 |

SPECIFICATIONS

| | POL-80 | POL-100 | POL-140 | POL-180 | POL-230 | POL-300 | |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|
| Max. Clamping Force [kgf] | 2250 | 3760 | 4700 | 5640 | 7520 | 7520 | |
| Max. Drawbar Pull [kgf] | 1200 | 2000 | 2500 | 3000 | 4000 | 4000 | |
| Jaw Stroke Dia. [mm] | 3.4 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | |
| Plunger Stroke [mm] | 8 | 10 | 10 | 10 | 10 | 10 | |
| Clamping Range [mm] | Pin Jaw | 65~80 | 86~100 | 120~140 | 150~180 | - | - |
| | Top Jaw | 15~60 | 20~80 | 60~110 | 100~145 | 120~200 | 150~270 |
| Max. Speed [r.p.m.] | 5000 | 4500 | 3000 | 2000 | 2000 | 2000 | |
| Weight [kg] | 8 | 16 | 27 | 46 | 70 | 165 | |
| GD2 [kgf·m ²] | 0.067 | 0.2 | 0.54 | 1.43 | 3.5 | 5.6 | |

DDL Outside Draw-Down Chuck



Application / Benefits

Workpiece pulled down to location for superior accuracy

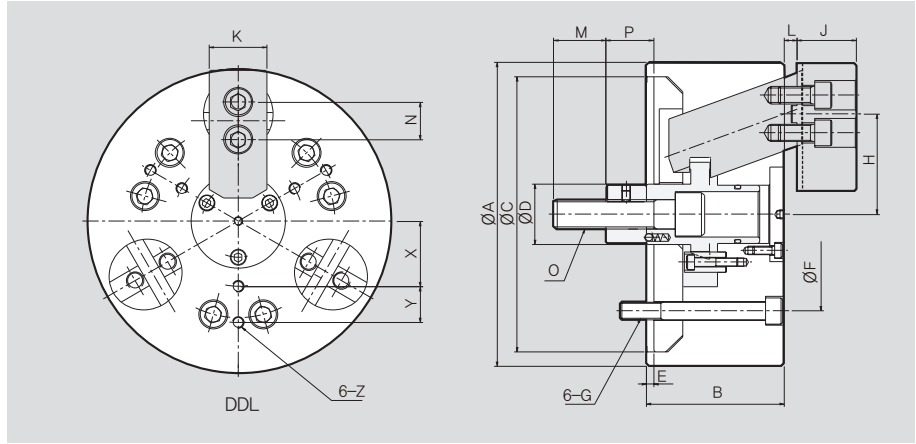
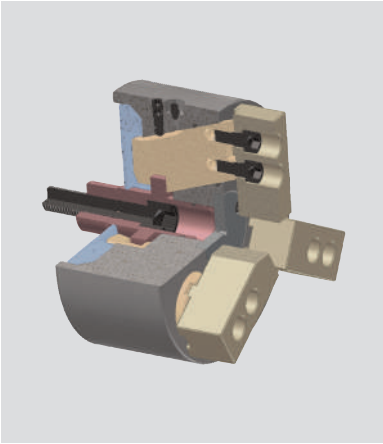
Technical features

Very accurate for parallel and perpendicular surfaces

Sealed to prevent chips and coolant from entering the chuck body

SPECIFICATIONS

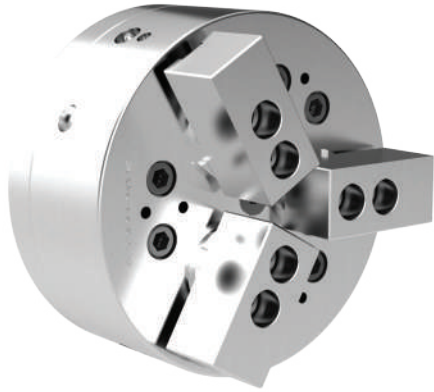
| | DDL-04 | DDL-05 | DDL-06 | DDL-08 | DDL-10 | DDL-12 | DDL-15 | DDL-20 | |
|---------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| Max. Clamping Force [kgf] | 1350 | 2000 | 2500 | 4500 | 6000 | 7500 | 9000 | 23800 | |
| Max. Drawbar Pull [kgf] | 800 | 1000 | 1500 | 2500 | 3500 | 4500 | 5500 | 9100 | |
| Jaw Stroke Dia. [mm] | 5 | 5.0 | 7.2 | 7.2 | 10.8 | 10.8 | 14.5 | 18 | |
| Plunger Stroke [mm] | 7 | 7 | 10 | 10 | 15 | 15 | 20 | 28 | |
| Clamping Range [mm] | Pin Jaw | 10~55 | 15~65 | 35~85 | 40~200 | 50~250 | 50~300 | 60~380 | 80~450 |
| | Top Jaw | 10~50 | 15~60 | 35~80 | 40~150 | 50~200 | 50~250 | 60~320 | 80~400 |
| Max. Speed [r.p.m.] | 5500 | 3500 | 3500 | 3000 | 2500 | 2000 | 1500 | 1700 | |
| Weight [kg] | 4.5 | 7.3 | 14 | 27 | 46 | 68 | 110 | 230 | |
| GD2 [kgf·m ²] | 0.05 | 0.07 | 0.18 | 0.66 | 1.50 | 3.20 | 9.00 | 12 | |



DIMENSIONS

| | DDL-04 | DDL-05 | DDL-06 | DDL-08 | DDL-10 | DDL-12 | DDL-15 | DDL-20 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| ØA | 98 | 130 | 165 | 210 | 254 | 304 | 381 | 500 |
| B | 60 | 70 | 85 | 95 | 110 | 125 | 140 | 150 |
| ØC(h7) | 60 | 80 | 140 | 190 | 230 | 230 | 300 | 420 |
| ØD | 25 | 28 | 34 | 40 | 50 | 54 | 60 | 95 |
| E | 5 | 5 | 5 | 5 | 5 | 5 | 8 | 9 |
| ØF | 80 | 100 | 104.8 | 133.4 | 171.4 | 171.4 | 230 | 360 |
| G | 3-M8 | 3-M8 | M10 | M12 | M16 | M16 | M20 | - |
| Hmax. | 38.25 | 44 | 58 | 71 | 85 | 102 | 133.6 | 180.5 |
| Hmin. | 33.25 | 41.5 | 54.4 | 67.4 | 79.6 | 96.6 | 126.4 | 171.4 |
| J | 19.5 | 24.5 | 31 | 41 | 49 | 51 | 60 | 71 |
| K | 25 | 30 | 35 | 40 | 50 | 60 | 70 | 80 |
| Lmax. | 10.5 | 10.5 | 14 | 14 | 19 | 19 | 26 | 32 |
| Lmin. | 3.5 | 3.5 | 4 | 4 | 4 | 4 | 6 | 7 |
| M | 20 | 25 | 36 | 36 | 46 | 50 | 47 | 49 |
| N | - | - | - | 26 | 32 | 36 | 40 | 44 |
| O | M10 | M12 | M16 | M20 | M24 | M27 | M30 | - |
| Pmax. | 14 | 24 | 33 | 38 | 47 | 47 | 71 | 72 |
| Pmin. | 7 | 17 | 23 | 28 | 32 | 32 | 51 | 47 |
| X | 25 | 30 | 35 | 45 | 55 | 70 | 95 | 150 |
| Y | - | - | 20 | 25 | 30 | 35 | 45 | 50 |
| Z | 3-M6 | M6 | M6 | M8 | M8 | M10 | M12 | M16 |

DDO Inside Draw-Down Chuck



Application / Benefits

Workpiece pulled down to location for superior accuracy

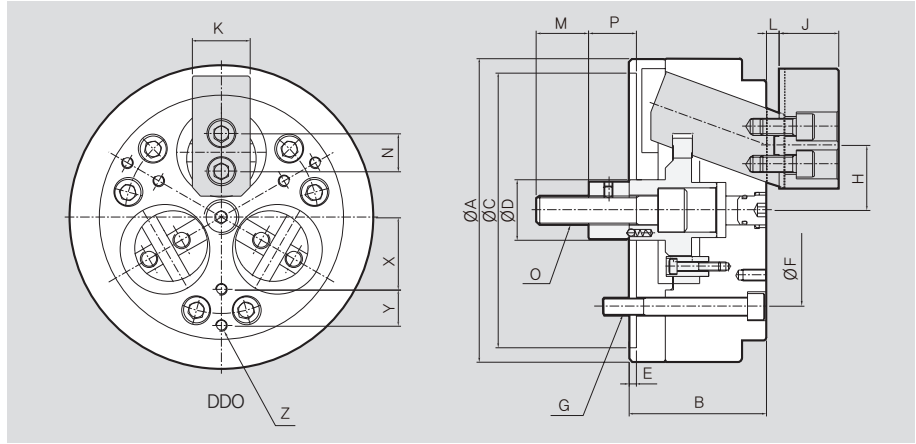
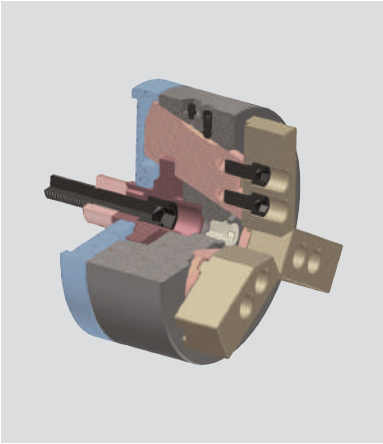
Technical features

Very accurate for parallel and perpendicular surfaces

Sealed to prevent chips and coolant from entering the chuck body

SPECIFICATIONS

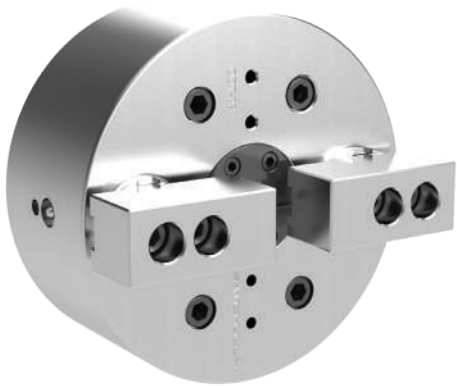
| | DDO-06 | DDO-08 | DDO-10 | DDO-12 | DDO-15 | |
|---------------------------|----------|--------|--------|---------|---------|---------|
| Max. Clamping Force [kgf] | 2500 | 4500 | 6000 | 7500 | 9000 | |
| Max. Drawbar Pull [kgf] | 1500 | 2500 | 3500 | 4500 | 5500 | |
| Jaw Stroke Dia. [mm] | 5.8 | 7.2 | 10.8 | 10.8 | 14.5 | |
| Clamping Range [mm] | Standard | 35~140 | 40~180 | 50~220 | 60~270 | 250~340 |
| | Top Jaw | 70~140 | 90~180 | 100~220 | 110~220 | 200~340 |
| Max. Speed [r.p.m.] | 5000 | 4500 | 4000 | 3500 | 1500 | |
| Weight [kg] | 13 | 26 | 44 | 68 | 110 | |
| GD2 [kgf·m ²] | 0.18 | 0.66 | 1.50 | 2.90 | 6.5 | |



DIMENSIONS

| | DDO-06 | DDO-08 | DDO-10 | DDO-12 | DDO-15 |
|--------------|--------|--------|--------|--------|--------|
| ΦA | 165 | 210 | 254 | 304 | 381 |
| B | 80 | 95 | 110 | 125 | 140 |
| $\Phi C(h7)$ | 140 | 190 | 230 | 230 | 300 |
| ΦD | 35 | 42 | 52 | 80 | 60 |
| E | 5 | 5 | 5 | 5 | 8 |
| ΦF | 104.8 | 133.4 | 171.4 | 171.4 | 230 |
| G | M10 | M12 | M16 | M16 | M20 |
| Hmax. | 37.9 | 46.6 | 57.9 | 65.4 | 93.6 |
| Hmin. | 35 | 43 | 52.5 | 60 | 86.4 |
| J | 30 | 41 | 46 | 51 | 60 |
| K | 35 | 40 | 50 | 60 | 70 |
| Lmax. | 12 | 14 | 19 | 19 | 26 |
| Lmin. | 4 | 4 | 4 | 4 | 6 |
| M | 36 | 36 | 46 | 50 | 55 |
| N | - | 26 | 32 | 36 | 40 |
| O | M16 | M20 | M24 | M27 | M30 |
| Pmax. | 31 | 38 | 47 | 47 | 63 |
| Pmin. | 23 | 28 | 32 | 32 | 43 |
| X | 40 | 50 | 60 | 70 | 95 |
| Y | 20 | 25 | 30 | 40 | 45 |
| Z | M6 | M8 | M8 | M10 | M12 |

DDT Outside 2-Jaw Draw-Down Chuck



Application / Benefits

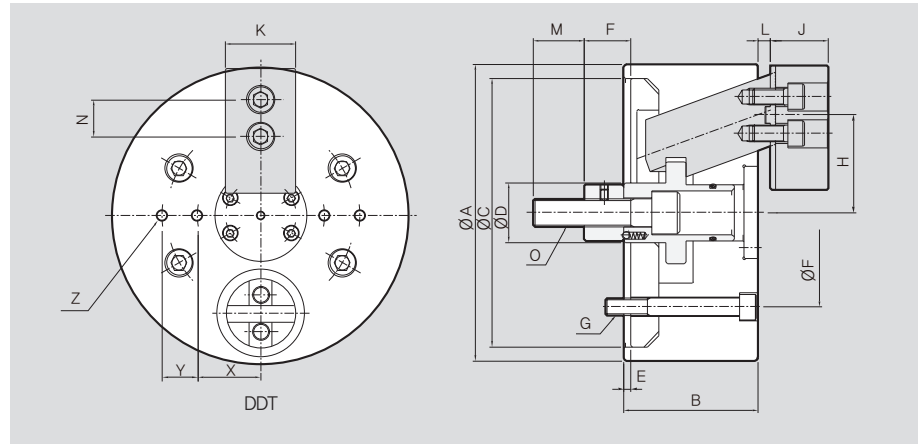
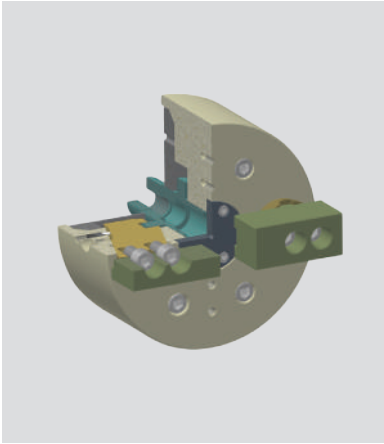
Workpiece pulled down to location for superior accuracy

Technical features

Ideal for machining square, rectangular and irregularly-shaped components
Very accurate for parallel and perpendicular surfaces

SPECIFICATIONS

| | DDT-06 | DDT-08 | DDT-10 |
|---------------------------|----------|--------|--------|
| Max. Clamping Force [kgf] | 1600 | 2800 | 4000 |
| Max. Drawbar Pull [kgf] | 1000 | 1700 | 2500 |
| Jaw Stroke Dia. [mm] | 7.2 | 7.2 | 10.2 |
| Plunger Stroke [mm] | 11.0 | 11.0 | 16.0 |
| Clamping Range [mm] | Standard | 40~200 | 50~250 |
| | Top Jaw | 35~80 | 40~150 |
| Max. Speed [r.p.m.] | 2500 | 2200 | 1800 |
| Weight [kg] | 14 | 26 | 42 |
| GD2 [kgf·m ²] | 0.19 | 0.57 | 1.50 |



DIMENSIONS

| | DDT-06 | DDT-08 | DDT-10 |
|--------|--------|--------|--------|
| ΦA | 160 | 210 | 254 |
| B | 85 | 95 | 110 |
| ΦC(h7) | 140 | 190 | 230 |
| ΦD | 35 | 42 | 52 |
| E | 5 | 5 | 5 |
| ΦF | 104.8 | 133.4 | 171.4 |
| G | M10 | M12 | M16 |
| Hmax. | 58 | 71 | 85 |
| Hmin. | 54.4 | 67.5 | 79.9 |
| J | 31 | 41 | 46 |
| K | 35 | 40 | 50 |
| Lmax. | 18 | 15 | 23 |
| Lmin. | 8 | 8 | 9 |
| M | 36 | 38 | 46 |
| N | - | 26 | 32 |
| O | M16 | M20 | M24 |
| Pmax. | 34 | 39 | 48 |
| Pmin. | 23 | 28 | 32 |
| X | 35 | 45 | 55 |
| Y | 20 | 25 | 30 |
| Z | M6 | M8 | M8 |

CDO Outside-Collet Chuck

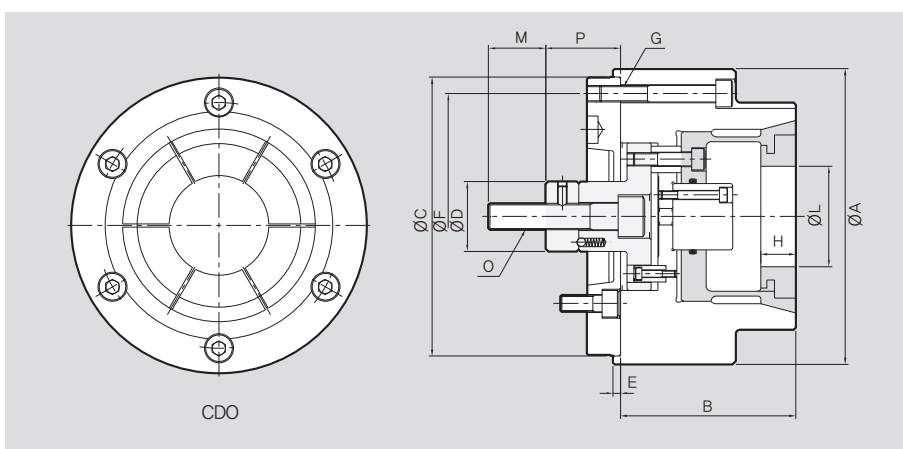
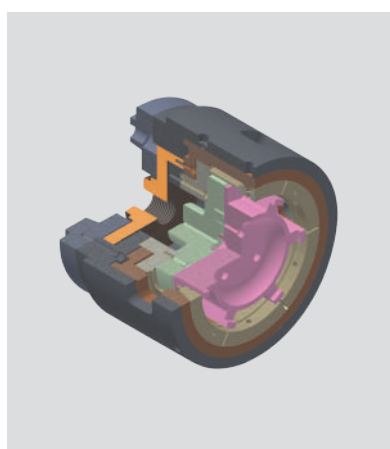


Application / Benefits

OD clamping of entire workpiece eliminates distortion
Pull down feature to locator provides superior accuracy

Technical features

Interchangeable top jaws grip the workpiece O.D.
Capable of air sensing and/or air/coolant porting for chip removal



DIMENSIONS

| | CDO-06 | CDO-08 | CDO-10 | CDO-12 |
|--------|--------|--------|--------|--------|
| ΦA | 165 | 210 | 250 | 300 |
| B | 115 | 125 | 145 | 170 |
| ΦC(h7) | 150 | 200 | 230 | 230 |
| ΦD | 35 | 42 | 52 | 52 |
| E | 5 | 5 | 5 | 5 |
| ΦF | 130 | 180 | 210 | 270 |
| G | M12 | M12 | M16 | M16 |
| H | 30 | 35 | 45 | 50 |
| ΦLmax. | 50 | 90 | 130 | 180 |
| ΦLmin. | 15 | 80 | 80 | 100 |
| M | 36 | 36 | 46 | 50 |
| O | M16 | M20 | M24 | M24 |
| Pmax. | 26 | 32 | 35 | 36 |
| Pmin. | 23 | 29 | 32 | 32 |

SPECIFICATIONS

| | CDO-06 | CDO-08 | CDO-10 | CDO-12 |
|---------------------------|--------|--------|--------|--------|
| Max. Clamping Force [kgf] | 2800 | 4600 | 6500 | 7500 |
| Max. Drawbar Pull [kgf] | 1500 | 2500 | 3500 | 4000 |
| Jaw Stroke Dia. [mm] | 1.6 | 1.6 | 1.6 | 2.0 |
| Plunger Stroke [mm] | 3 | 3 | 3 | 4 |
| Clamping Range [mm] | Max | 80 | 130 | 180 |
| | Min | 15 | 40 | 100 |
| Max. Speed [r.p.m.] | 4500 | 4000 | 3300 | 2500 |
| Weight [kg] | 11 | 23 | 49 | 67 |
| GD2 [kgf·m ²] | 0.11 | 0.44 | 1.76 | 3.10 |

CDI Inside-Collet Chuck

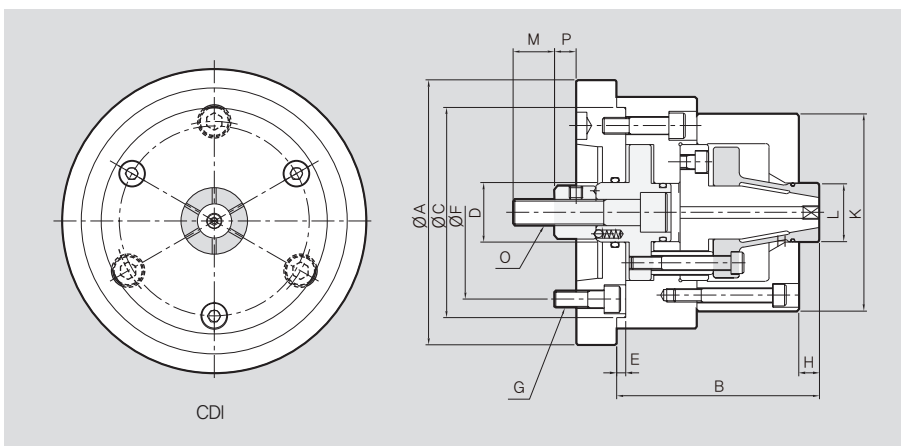
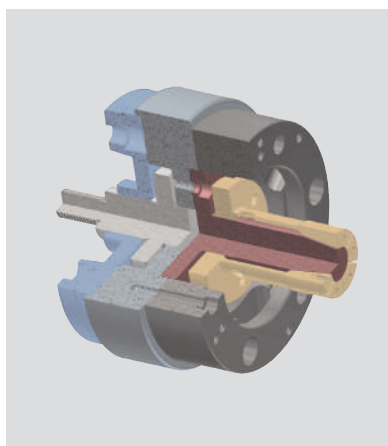


Application / Benefits

High accuracy, Good torque transmission
Even clamping pressure for no deformation
Custom made mandrels

Technical features

Pull down feature for better accuracy
Vulcanized rubber to protect mandrels from chips
Easily ported for air sensing or air/coolant for chip removal



DIMENSIONS

| | CDI-06 | CDI-08 | CDI-10 | CDI-12 |
|--------|--------|--------|--------|--------|
| ΦA | 165 | 200 | 250 | 300 |
| B | 115 | 135 | 180 | 220 |
| ΦC(h7) | 150 | 170 | 230 | 230 |
| ΦD | 35 | 42 | 52 | 52 |
| E | 6 | 6 | 6 | 6 |
| ΦF | 104.8 | 133.4 | 171.4 | 171.4 |
| G | M10 | M12 | M16 | M16 |
| H | 15 | 20 | 35 | 40 |
| ΦK | L+25 | L+35 | L+40 | L+50 |
| ΦLmax. | 15 | 90 | 130 | 180 |
| ΦLmin. | 40 | 40 | 90 | 130 |
| M | 40 | 45 | 55 | 55 |
| O | M16 | M20 | M24 | M24 |
| Pmax. | 26 | 33 | 36 | 37 |
| Pmin. | 23 | 29 | 32 | 32 |

SPECIFICATIONS

| | CDI-06 | CDI-08 | CDI-10 | CDI-12 |
|---------------------------|--------|--------|--------|--------|
| Max. Clamping Force [kgf] | 4000 | 7000 | 12000 | 15000 |
| Max. Drawbar Pull [kgf] | 1500 | 2500 | 4000 | 4800 |
| Jaw Stroke Dia. [mm] | 0.8 | 1.0 | 1.0 | 1.4 |
| Plunger Stroke [mm] | 3 | 4 | 4 | 5 |
| Clamping Range [mm] | Max | 90 | 130 | 180 |
| | Min | 15 | 40 | 90 |
| Max. Speed [r.p.m.] | 4500 | 4000 | 3300 | 2500 |
| Weight [kg] | 7 | 14 | 34 | 55 |
| GD2 [kgf·m ²] | 0.06 | 0.19 | 0.71 | 2 |

FD Finger Chuck

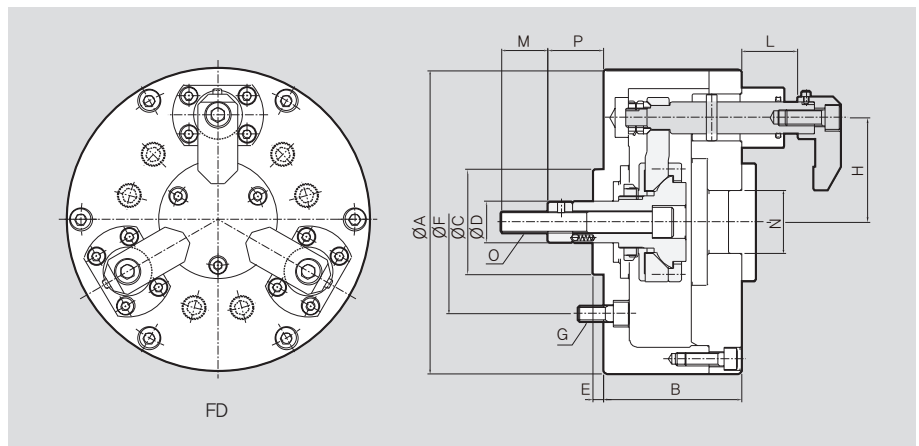
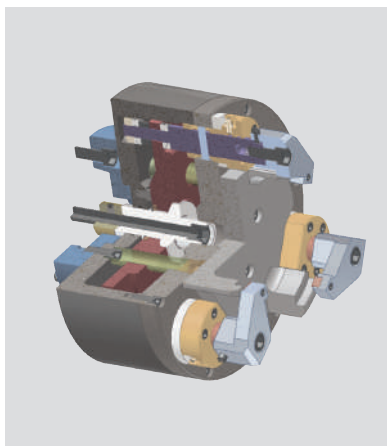


Application / Benefits

Ideal for thin walled parts to eliminate distortion by clamping onto the face

Technical features

Floating clamping fingers adjust to workpiece shape and will pull down to a locator
Available in 2-jaw, 3-jaw, and 4-jaw models



DIMENSIONS

| | FD-06 | FD-08 | FD-10 | FD-12 | FD-15 | FD-18 |
|--------|-------|-------|-------|-------|-------|-------|
| ΦA | 165 | 210 | 254 | 304 | 381 | 457 |
| B | 75 | 85 | 95 | 110 | 125 | 140 |
| ΦC(h7) | 60 | 80 | 120 | 120 | 150 | 150 |
| ΦD | 35 | 42 | 52 | 52 | 55 | 55 |
| E | 7 | 7 | 7 | 7 | 7 | 7 |
| ΦF | 104.8 | 133.4 | 171.4 | 171.4 | 230 | 230 |
| G | M10 | M12 | M16 | M16 | M20 | M20 |
| H | 55 | 75 | 95 | 120 | 155 | 192 |
| ΦLmax. | 54 | 59 | 72 | 72 | 84 | 84 |
| ΦLmin. | 30 | 35 | 40 | 45 | 50 | 50 |
| M | 36 | 36 | 46 | 46 | 50 | 50 |
| ΦN | 40 | 45 | 55 | 55 | 60 | 60 |
| O | M16 | M20 | M24 | M24 | M27 | M27 |
| Pmax. | 44 | 50 | 60 | 60 | 75 | 75 |
| Pmin. | 30 | 35 | 40 | 40 | 50 | 50 |

SPECIFICATIONS

| | FD-06 | FD-08 | FD-10 | FD-12 | FD-15 | FD-18 |
|---------------------------|-------|-------|-------|-------|-------|-------|
| Max. Clamping Force [kgf] | 1400 | 2100 | 2800 | 2800 | 3600 | 3600 |
| Max. Drawbar Pull [kgf] | 1800 | 2700 | 3600 | 3600 | 4500 | 4500 |
| Jaw Stroke Dia. [mm] | 2 | 2 | 2 | 2 | 2 | 2 |
| Plunger Stroke [mm] | 14 | 15 | 20 | 20 | 20 | 25 |
| Clamping Range [mm] | Max | 75 | 110 | 145 | 195 | 330 |
| | Min | 30 | 50 | 60 | 110 | 215 |
| Max. Speed [r.p.m.] | 3500 | 2800 | 2400 | 2100 | 1800 | 1500 |
| Weight [kg] | 9 | 18 | 30 | 41 | 73 | 102 |
| GD2 [kgf·m ²] | 0.12 | 0.41 | 1.05 | 2.17 | 5.65 | 11.6 |

COR Outside-Collet Chuck

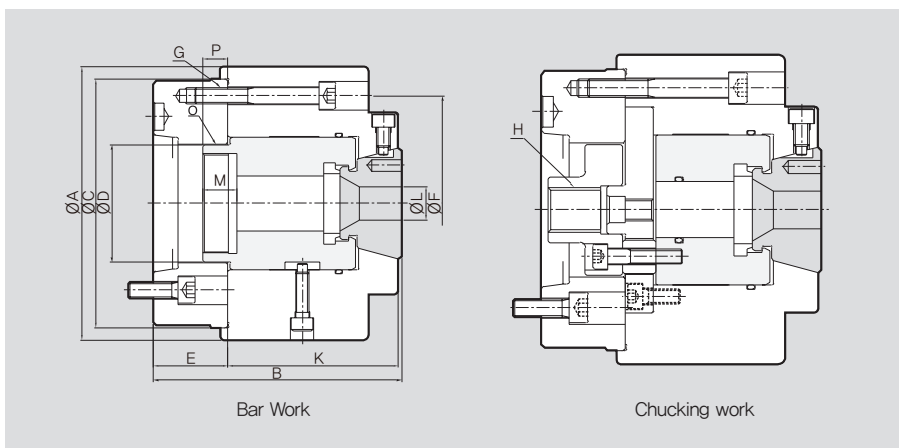
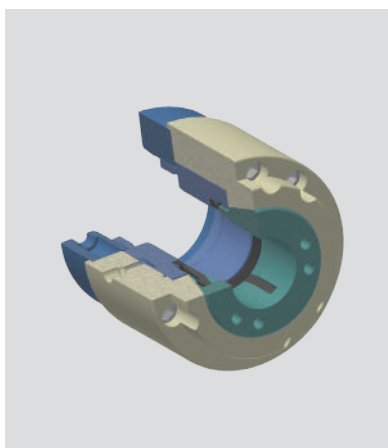


Application / Benefits

Quick change OD clamping collet chuck
No centrifugal losses for consistent clamp forces

Technical features

Vulcanized rubber - steel segmented collet
Round, square and hexagonal collets available



DIMENSIONS

| | COR-32 | COR-50 | COR-65 | COR-90 |
|-------------------|---------|---------|---------|---------|
| ΦA | 165 | 165 | 180 | 210 |
| B | 150 | 150 | 170 | 190 |
| $\Phi C(h7)$ | 150 | 150 | 170 | 170 |
| ΦD | 71 | 87 | 103 | 103 |
| E | 45 | 45 | 49 | 55 |
| ΦF | 130 | 130 | 150 | 150 |
| G | M10 | M10 | M12 | M12 |
| H | M24 | M24 | M30 | M30 |
| K | 103 | 103 | 119 | 133 |
| $\Phi L_{max.}$ | 32 | 50 | 65 | 90 |
| $\Phi L_{min.}$ | 5 | 12 | 16 | 30 |
| M | 20.5 | 27.5 | 25 | 25 |
| O | M60x2.0 | M74x1.5 | M90x2.0 | M90x2.0 |
| P _{max.} | 16.5 | 23 | 25.5 | 28.5 |
| P _{min.} | 13.5 | 20 | 22.5 | 22.5 |

SPECIFICATIONS

| | | COR-32 | COR-50 | COR-65 | COR-90 |
|---------------------------|------------|--------|--------|--------|--------|
| Max. Clamping Force [kgf] | | 6400 | 8200 | 9200 | 13300 |
| Max. Drawbar Pull [kgf] | | 3200 | 4100 | 4600 | 6500 |
| Collect Expansion [mm] | | 1.0 | 1.0 | 1.0 | 2.0 |
| Plunger Stroke [mm] | | 3 | 3 | 3 | 6 |
| Chucking Dia. [mm] | Bar Work | 5~32 | 12~50 | 16~65 | 30~90 |
| | Chuck Work | 7~32 | 12~50 | 16~65 | 30~90 |
| Max. Speed [r.p.m.] | | 4500 | 4500 | 4000 | 3500 |
| Weight [kg] | | 25 | 25 | 32 | 38 |

CORH Outside-Collet Chuck



Application / Customer's Benefit

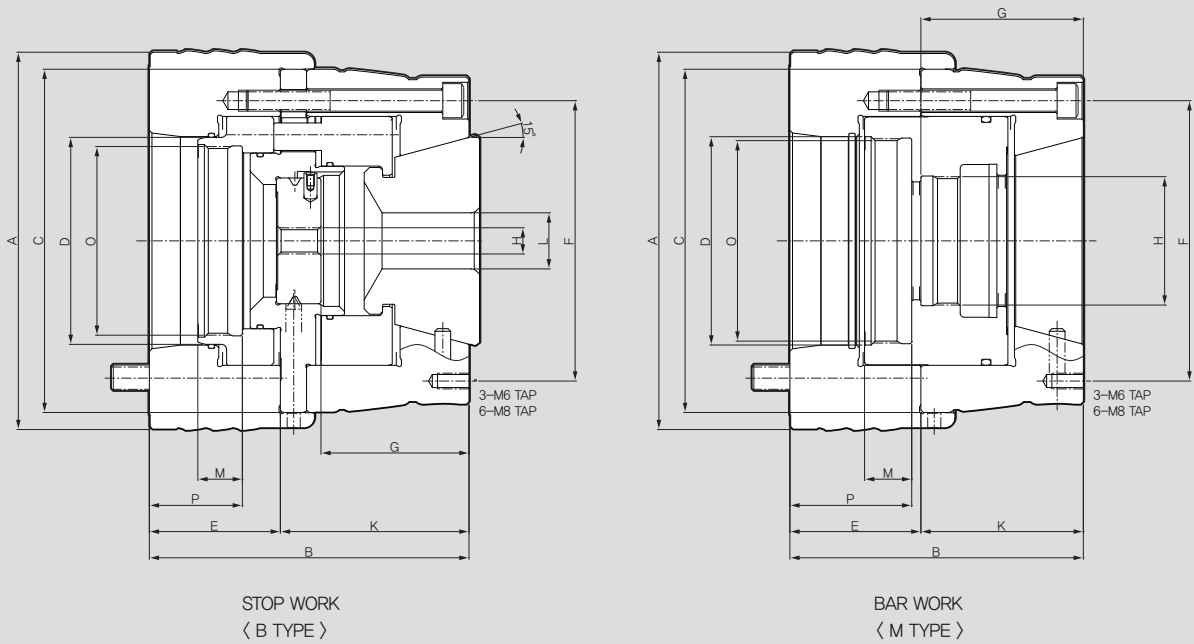
The COR chuck is I.D clamping chuck which has high surface, also it has strong clamping force during high r.p.m. precision.

Technical features

Quick change rubber -steel segment collet
Round, square and hexagonal collets available

SPECIFICATIONS

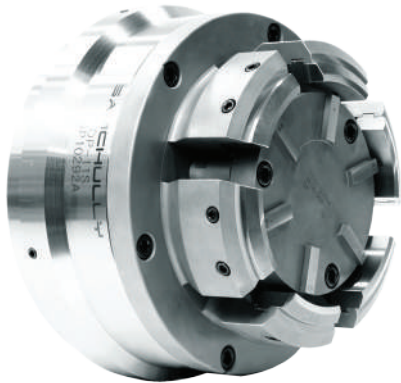
| | CORH-42B / M | CORH-52B / M | CORH-65B / M |
|---------------------------|--------------|--------------|--------------|
| Max. Clamping force [kgf] | 8100 | 4000 | 4500 |
| Max. Drawbar Pull [kgf] | 3500 | 9500 | 10700 |
| Collet Expansion [mm] | Φ 1.6 | Φ 1.6 | Φ 1.6 |
| Plunger Stroke [mm] | 4.5 | 4.5 | 4.5 |
| Clamp Dia Range [mm] | Φ 5 ~ Φ 42 | Φ 5 ~ Φ 52 | Φ 5 ~ Φ 62 |
| Max. Speed [r.p.m.] | 7000 | 7000 | 6000 |
| Weight [kg] | 10 | 10 | 10 |



DIMENSIONS

| | CORH-42B / M | CORH-52B / M | CORH-65B / M |
|---------|-------------------------|-------------------------|-------------------------|
| ΦA | 144 | 144 | 160 |
| B | 122 / 112 | 122 / 112 | 131 / 121 |
| ΦC | 131 | 131 | 148 |
| ΦD | 79 / 79.5 | 79 / 79.5 | 79 / 79.5 |
| E | 50 | 50 | 52 |
| ΦF | 107 | 107 | 126 |
| G | 56.5 / 64 | 56.5 / 64 | 63.5 / 67.5 |
| H | M10 / M49 X 1.5p | M10 / M60 X 1.5p | M12 / M72 X 1.5p |
| K | 72 / 62 | 72 / 62 | 79 / 69 |
| ΦL max. | 42 | 52 | 65 |
| ΦL min. | 5 | 5 | 5 |
| ΦM | 17 / 18 | 17 / 16 | 18 |
| O | M72 X 1.5p / M78 X 1.5p | M72 X 1.5p / M78 X 1.5p | M72 X 1.5p / M78 X 1.5p |
| P max. | 38.0 / 49.0 | 38.0 / 47.0 | 36.0 / 52.0 |
| P min. | 33.5 / 44.5 | 33.4 / 42.5 | 32.0 / 47.5 |

DP Diaphragm Chuck

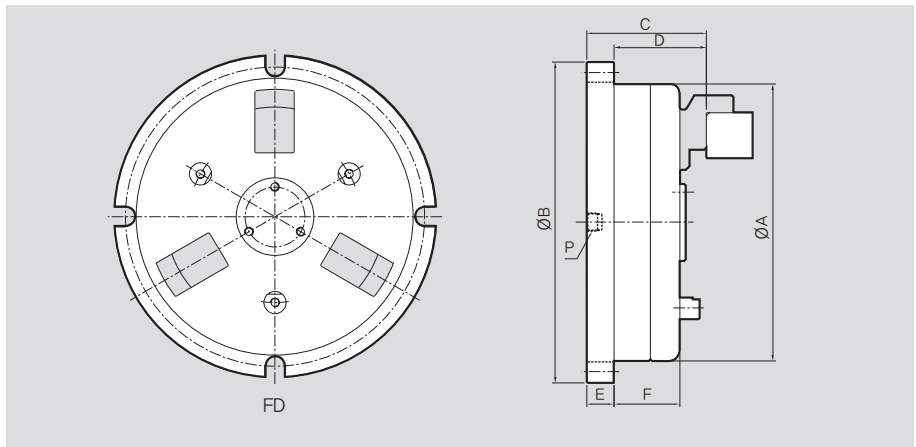
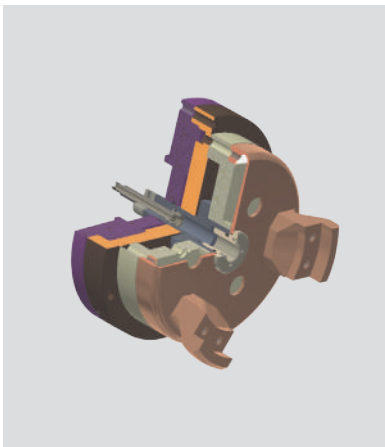


Application / Benefits

Ideal for cylindrical grinding, turning and hard turning that require high concentricity and roundness.
Thin walled or fragile parts that are easily distorted.
Can hold accuracies up to 2 μ

Technical features

Minimal maintenance due to sealed body
Can be configured to be self contained or by drawbar



DIMENSIONS

| | DP-06 | DP-08 | DP-10 | DP-13 | DP-17 |
|----|-------|-------|-------|-------|-------|
| ØA | 171.4 | 212.9 | 251 | 327.2 | 428.9 |
| ØB | 208 | 246 | 284 | 360 | 476 |
| C | 92 | 96.8 | 96.8 | 108 | 109.5 |
| D | 72.9 | 77.7 | 77.7 | 88.9 | 90.4 |
| E | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 |
| F | 65 | 70 | 85 | 85 | 85 |
| P | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |

SPECIFICATIONS

| | DP-06 | DP-08 | DP-10 | DP-13 | DP-17 |
|---------------------------------|----------|----------|----------|----------|----------|
| Max. Clamping Force [kgf] | 450 | 720 | 1150 | 2000 | 3600 |
| No. of Jaw | 3 (6Jaw) | 3 (6Jaw) | 3 (6Jaw) | 3 (6Jaw) | 3 (6Jaw) |
| Jaw Stroke [kgf] | 0.23 | 0.25 | 0.25 | 0.35 | 0.40 |
| Grip Dia. [mm] | 44~107 | 76~143 | 114~181 | 150~248 | 203~349 |
| Max. Speed [r.p.m.] | 4500 | 4000 | 3500 | 3000 | 2000 |
| Pressure [kgf/cm ²] | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Weight [kg] | 11 | 20 | 26.5 | 43 | 89 |

GDP Gear Chuck

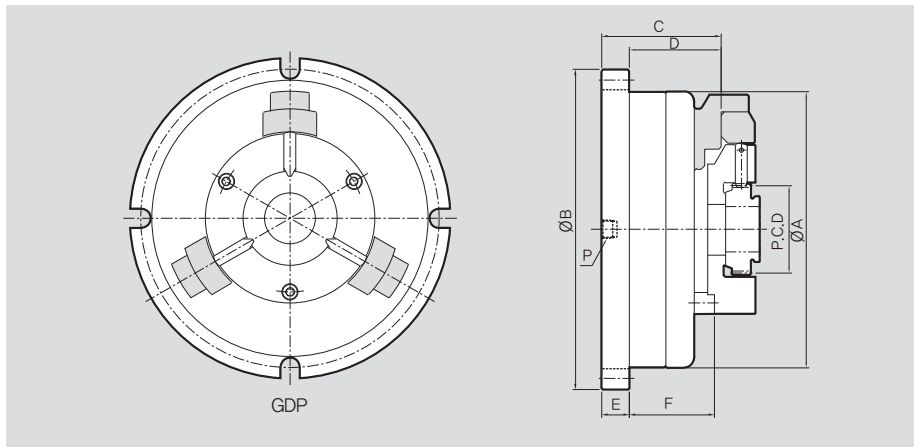
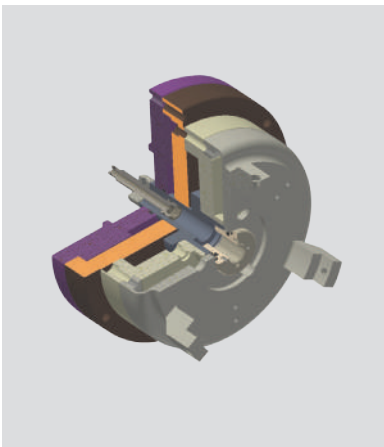


Application / Benefits

Diaphragm chuck with a pin cage to clamp onto gears by their pitch diameter.

Technical features

Diaphragm chuck for hard turning/ grinding gears
Jaws can be easily changed



DIMENSIONS

| | GDP-08 | GDP-10 | GDP-13 | GDP-17 |
|-------|--------|--------|--------|--------|
| ØA | 212.9 | 251 | 327.2 | 428.9 |
| ØB | 246 | 284 | 360 | 476 |
| C | 96.8 | 96.8 | 108 | 109.5 |
| D | 77.7 | 77.7 | 88.9 | 90.4 |
| E | 19.1 | 19.7 | 19.1 | 19.1 |
| F | 70 | 85 | 85 | 85 |
| P | 1/4 | 1/4 | 1/4 | 1/4 |
| H | 55 | 75 | 95 | 120 |
| Lmax. | 54 | 59 | 72 | 72 |
| Lmin. | 30 | 35 | 40 | 45 |
| M | 36 | 36 | 46 | 46 |
| ØN | 40 | 45 | 55 | 55 |
| O | M16 | M20 | M24 | M24 |
| Pmax. | 44 | 50 | 60 | 60 |
| Pmin. | 30 | 35 | 40 | 40 |

SPECIFICATIONS

| | GDP-08 | GDP-10 | GDP-13 | GDP-17 |
|---------------------------------|--------|--------|---------|---------|
| Max. Clamping Force [kgf] | 720 | 1150 | 2000 | 3600 |
| No. of Jaw | 3 | 3 | 3 | 3 |
| Jaw Stroke [kgf] | 0.25 | 0.25 | 0.35 | 0.40 |
| Grip Dia. [mm] | 40~70 | 70~100 | 100~160 | 160~250 |
| Max. Speed [r.p.m.] | 4000 | 3500 | 3000 | 2000 |
| Pressure [kgf/cm ²] | 4.5 | 4.5 | 4.5 | 4.5 |
| Weight [kg] | 20 | 26.5 | 43 | 89 |

BDG Bevel-Gear Chuck

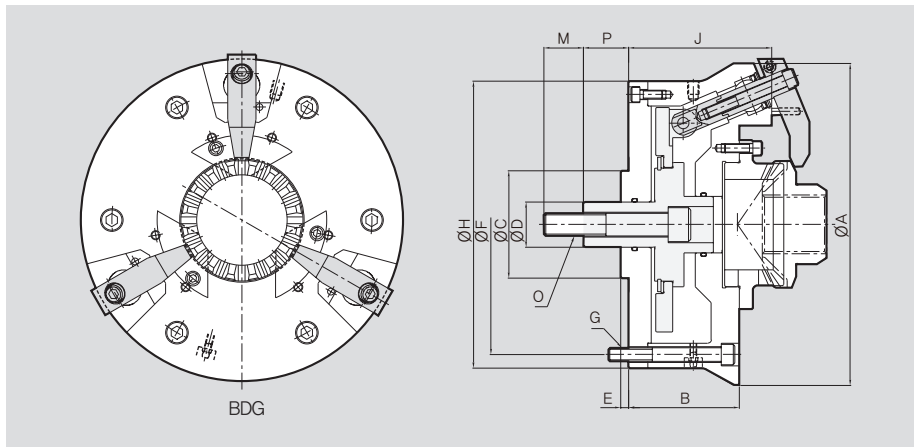
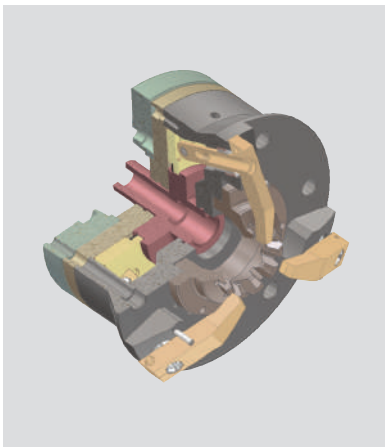


Application / Benefits

For ID machining of bevel gears.
Eliminates distortion by clamping onto face

Technical features

Finger chuck for high accuracy clamping of bevel gears
Floating action ensures equal clamping force on all 3 fingers
Available with hydraulic and pneumatic actuation



DIMENSIONS

| | BDG-07 | BDG-10 |
|--------|--------|--------|
| ΦA | 215 | 285 |
| B | 98 | 98 |
| ΦC(h7) | 80 | 95 |
| ΦD | 30 | 40 |
| E | 7 | 7 |
| ΦF | 160 | 230 |
| G | M12 | M12 |
| ΦH | 185 | 254 |
| J | 126.5 | 126.5 |
| M | 27 | 35 |
| O | M16 | M20 |
| Pmax. | 45 | 45 |
| Pmin. | 30 | 30 |

SPECIFICATIONS

| | BDG-07 | BDG-10 |
|-------------------------|--------------|--------------|
| Max. Drawbar Pull [kgf] | 1500 | 1500 |
| Plunger Stroke [mm] | 15 | 15 |
| Clamping Range [mm] | 22.2 ~ 147.5 | 88.9 ~ 203.2 |
| Max. Speed [r.p.m.] | 2000 | 1500 |
| Weight [kg] | 30 | 45 |

IAHT Auto-Indexing Chuck



Application / Benefits

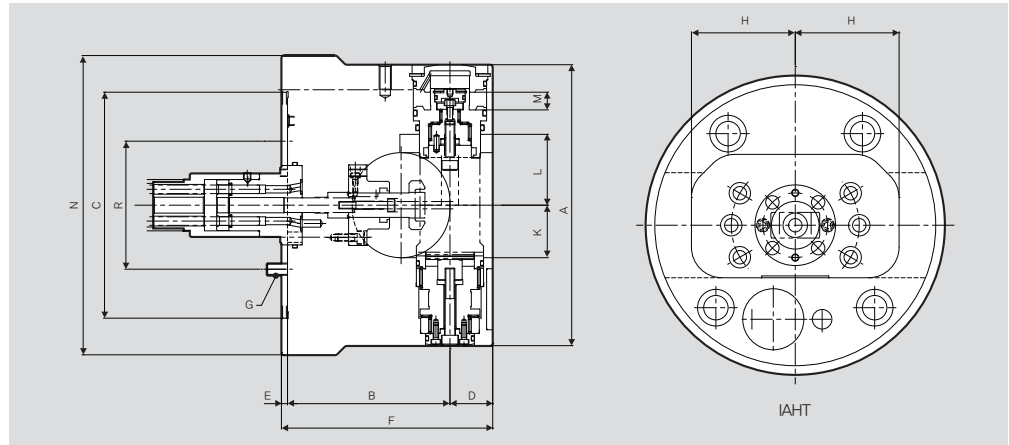
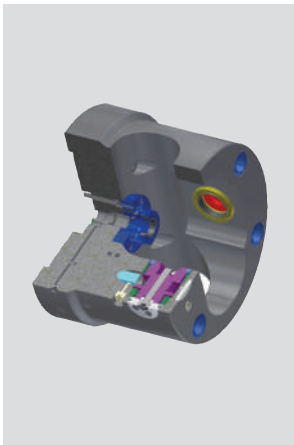
Machine multiple surfaces in a single clamping

Technical features

Accurate, durable indexing system

Index positions 6 x 60° or 3 x 120°, The check valve assures safe operation

Confirmation of index position via pressure sensors



DIMENSIONS

| | IAHT-230 | IAHT-280 | IAHT-300 |
|--------|----------|----------|----------|
| ΦA | 230 | 280 | 300 |
| B | 158 | 193.5 | 200 |
| ΦC(h7) | 130 | 170 | 170 |
| D | 123 | 143.5 | 143.5 |
| E | 15 | 11 | 11 |
| F | M10 | M16 | M16 |
| G | 35 | 50 | 56.5 |
| H | 102 | 82.5 | 82.5 |
| K | 40 | 56 | 56 |
| L | 58 | 71 | 65 |
| M | 14.5 | 21 | 25 |
| ΦN | 245 | 295 | 295 |
| ΦR | 104.8 | 130 | 130 |

SPECIFICATIONS

| | IAHT-230 | IAHT-280 | IAHT-300 |
|--------------------------------------|----------|----------|----------|
| Clamp Piston Area [cm ²] | 1270 | 2170 | 3500 |
| Main Spindle Bore [mm] | OVER 45 | OVER 45 | OVER 45 |
| Max. Speed [r.p.m.] | 2400 | 2000 | 1800 |
| Weight [kg] | 35 | 65 | 83 |
| GD2 [kgf·m ²] | 1.3 | 3.6 | 4.2 |

IAH Auto-Indexing Chuck



Application / Benefits

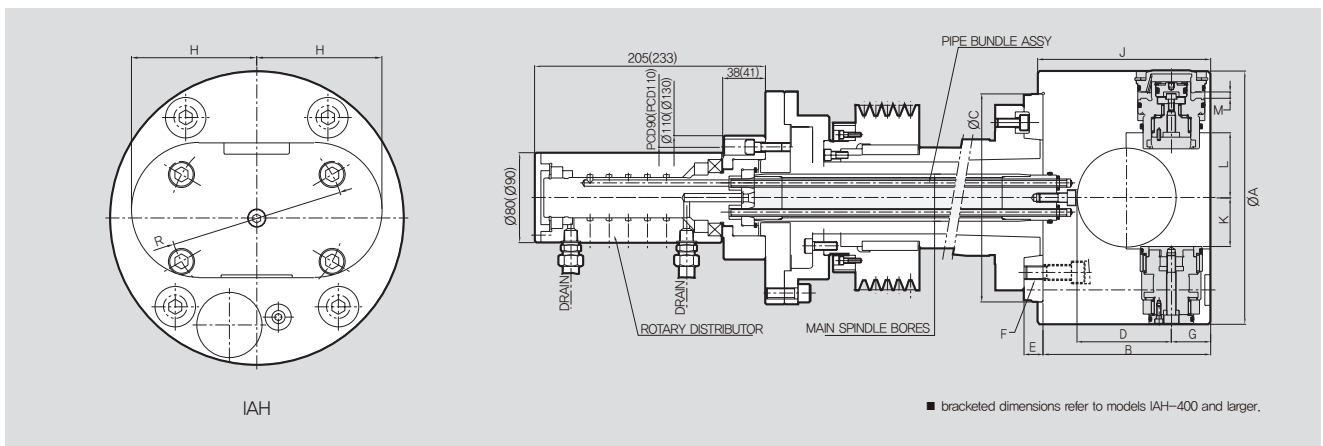
Machine multiple surfaces in a single clamping

Technical features

Accurate, durable indexing system

Index positions 4 x 90° or 8 x 45°, The check valve assures safe operation

Confirmation of index position via pressure sensors

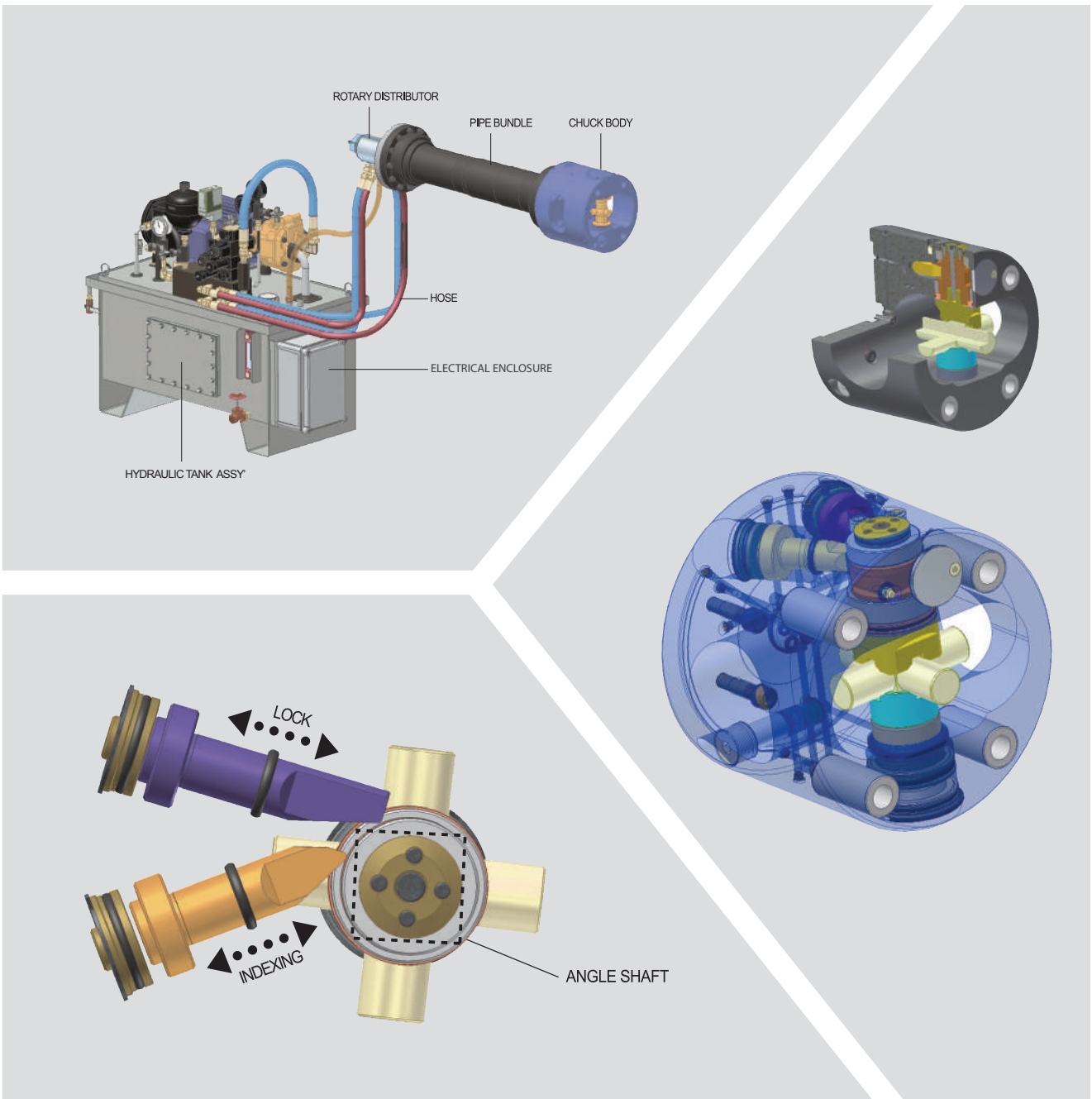


DIMENSIONS

| | IAH-225 | IAH-250 | IAH-275 | IAH-315 | IAH-350 | IAH-400 | IAH-500 | IAH-670 |
|--------|---------|---------|---------|---------|---------|---------|----------|---------|
| ΦA | 225 | 250 | 280 | 315 | 350 | 400 | 500 | 670 |
| B | 149 | 185 | 208 | 227 | 235 | 253 | 301 | 465 |
| ΦC(h7) | 185 | 210 | 210 | 235 | 290 | 290 | 380 | 380 |
| D | 84 | 113 | 125 | 136 | 148 | 160 | 200 | 286 |
| E | 25 | 25 | 25 | 25 | 30 | 30 | 35 | 40 |
| F | M12 | M12 | M16 | M16 | M20 | M20 | M20, M24 | M24 |
| G | 35 | 40 | 48 | 50 | 50 | 60 | 68 | 90 |
| H | 95 | 106 | 125 | 136 | 145 | 165 | 205 | 275 |
| J | 154 | 190 | 213 | 232 | 240 | 259 | 308 | 470 |
| K | 46 | 46 | 57 | 70 | 84 | 100 | 133 | 176 |
| L | 58 | 55 | 67 | 85 | 102 | 114 | 157 | 214 |
| M | 11.5 | 20 | 20.5 | 22 | 23 | 30 | 35 | 40 |
| ΦR | 133.4 | 133.4 | 171.4 | 171.4 | 235 | 235 | 235 | 330.2 |

SPECIFICATIONS

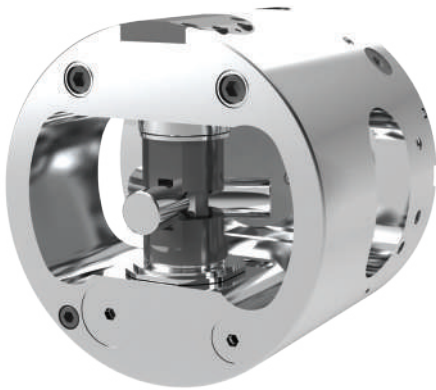
| | IAH-225 | IAH-250 | IAH-280 | IAH-315 | IAH-350 | IAH-400 | IAH-500 | IAH-670 |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Max. Clamping Force [kgf] | 1270 | 1730 | 2550 | 2550 | 2550 | 3530 | 4670 | 5890 |
| Main Spindle Bore [mm] | OVER 45 | OVER 45 | OVER 45 | OVER 45 | OVER 55 | OVER 55 | OVER 55 | OVER 55 |
| Max. Speed [r.p.m.] | 2800 | 2400 | 2000 | 1800 | 1800 | 1200 | 900 | 600 |
| Weight [kg] | 29 | 44 | 56 | 75 | 100 | 145 | 230 | 540 |
| GD2 [kgf·m ²] | 0.9 | 1.7 | 2.8 | 5.0 | 8.0 | 15.0 | 25.4 | 32.5 |
| Max. Workpiece Size [mm] | 60 | 65 | 80 | 100 | 135 | 170 | 220 | 300 |
| Max. Workpiece Size [mm] | 100 | 160 | 220 | 230 | 240 | 260 | 310 | 400 |



Work Pieces



IAN Auto-Indexing Chuck



Application / Benefits

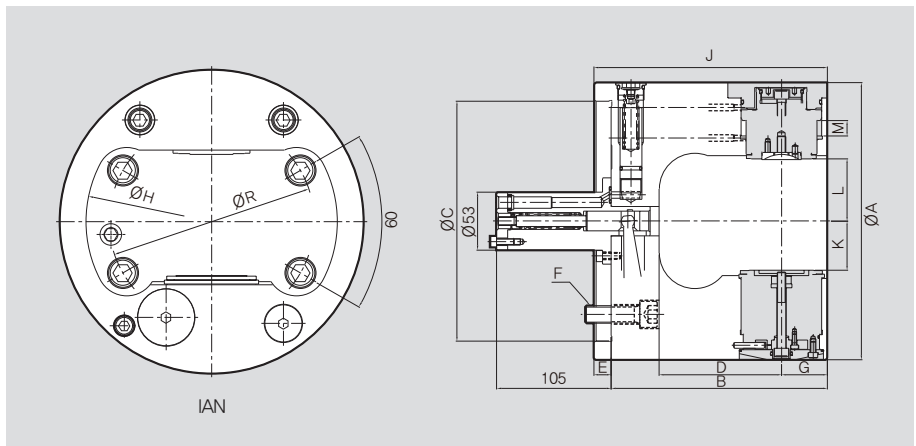
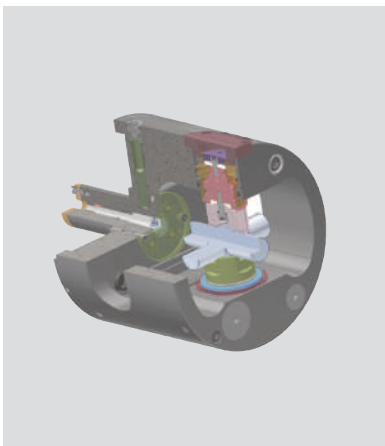
Machine multiple surfaces in a single clamping

Technical features

Accurate, durable indexing system

Index positions 3 x 120° / 4 x 90°

Confirmation of index position via proximity switches

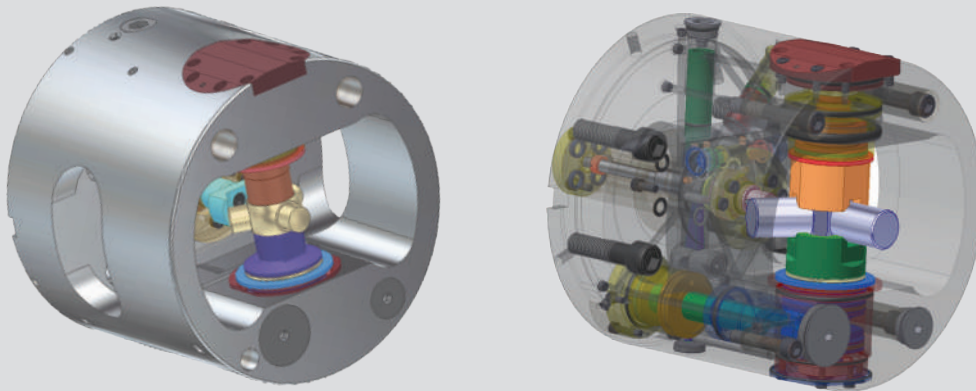
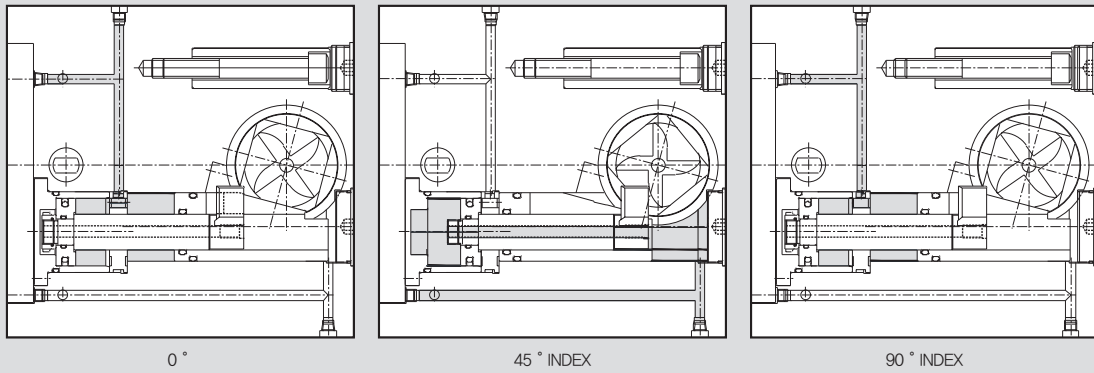


DIMENSIONS

| | IAN-235 | IAN-254 | IAN-280 |
|--------|---------|---------|---------|
| ØA | 235 | 254 | 280 |
| B | 172 | 198 | 211 |
| ØC(h7) | 170 | 220 | 220 |
| D | 102 | 112 | 125 |
| E | 16 | 16 | 16 |
| F | M12 | M16 | M16 |
| G | 30 | 42 | 42 |
| ØH | 206 | 228 | 250 |
| J | 188 | 214 | 227 |
| K | 42.5 | 45 | 58 |
| L | 54.5 | 57 | 70 |
| M | 15 | 17 | 17 |
| R | 133.4 | 171.4 | 171.4 |

SPECIFICATIONS

| | IAN-235 | IAN-254 | IAN-280 |
|--------------------------------------|---------|---------|---------|
| Clamp Piston Area [cm ²] | 30 | 43 | 43 |
| Max. Pressure [kgf·m ²] | 45 | 45 | 45 |
| Max. Speed [r.p.m.] | 3000 | 2500 | 2300 |
| Weight [kg] | 32 | 45 | 55 |
| GD2 [kgf·m ²] | 0.27 | 0.47 | 0.88 |



Work Pieces



PHD Outside Pull-Down Chuck



Application / Benefits

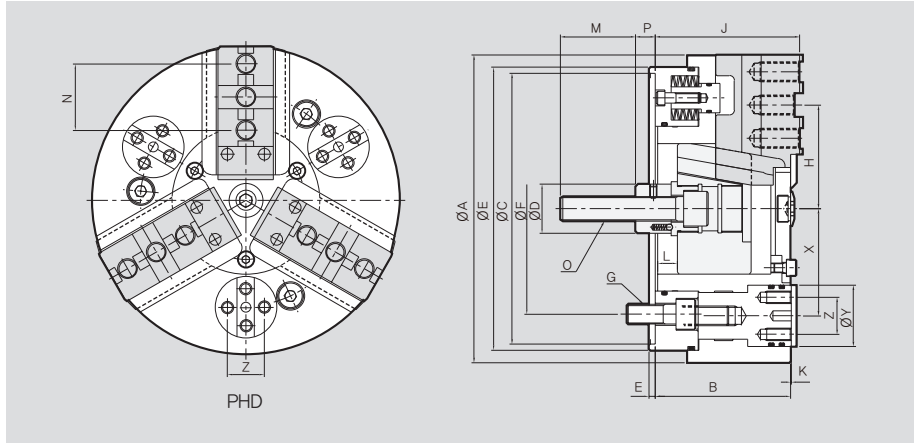
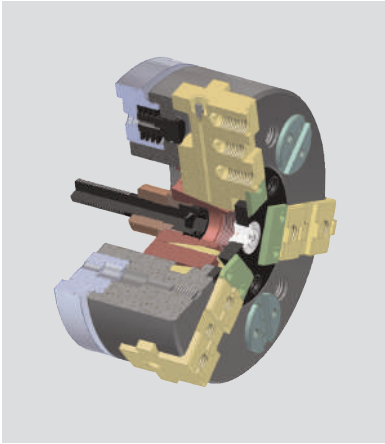
TOD clamping chuck ideal for parts with small gripping surfaces.
High accuracy to hold parallel and perpendicular tolerances.

Technical features

Chuck will center the workpiece, then chuck body will pull back to locate workpiece on fixed locator stop(s)

SPECIFICATIONS

| | PHD-200 | PHD-250 | PHD-300 | PHD-380 |
|---------------------------|---------|---------|---------|---------|
| Max. Clamping Force [kgf] | 8100 | 11000 | 13500 | 16500 |
| Max. Drawbar Pull [kgf] | 3000 | 4000 | 5000 | 6000 |
| Jaw Stroke Dia. [mm] | 8.5 | 10.5 | 12 | 12 |
| Plunger Stroke [mm] | 24 | 30 | 34 | 34 |
| Stop Traction [kgf] | 200 | 300 | 300 | 450 |
| Max. Speed [r.p.m.] | 3500 | 3000 | 2500 | 200 |
| Weight [kg] | 21 | 37 | 54 | 95 |



DIMENSIONS

| | PHD-200 | PHD-250 | PHD-300 | PHD-380 |
|--------|---------|---------|---------|---------|
| ØA | 200 | 250 | 300 | 380 |
| B | 105 | 115 | 123 | 135 |
| ØC(h7) | 170 | 220 | 220 | 300 |
| ØD | 40 | 40 | 50 | 50 |
| ØE | 5 | 5 | 5 | 5 |
| ØF | 133.4 | 171.4 | 171.4 | 235 |
| G | M12 | M16 | M16 | M20 |
| Hmax. | 71.5 | 87 | 105 | 133.5 |
| Hmin. | 67.3 | 81.7 | 99 | 127.5 |
| J | 107 | 117 | 125 | 137 |
| K | 1 | 1 | 1 | 1 |
| Lmax. | 34 | 34 | 34 | 34 |
| Lmin. | 10 | 4 | 5 | 16 |
| M | 52 | 60 | 60 | 60 |
| N | 44.5 | 54 | 63.5 | 76.2 |
| O | M20 | M20 | M24 | M24 |
| Pmax. | 25 | 31 | 30 | 19 |
| Pmin. | 1 | 1 | -4 | -15 |
| X | 70 | 87 | 108 | 130 |
| ØY | 42 | 50 | 68 | 80 |
| Z | 24 | 30 | 40 | 54 |

PHDN Inside Pull-Down Chuck



Application / Benefits

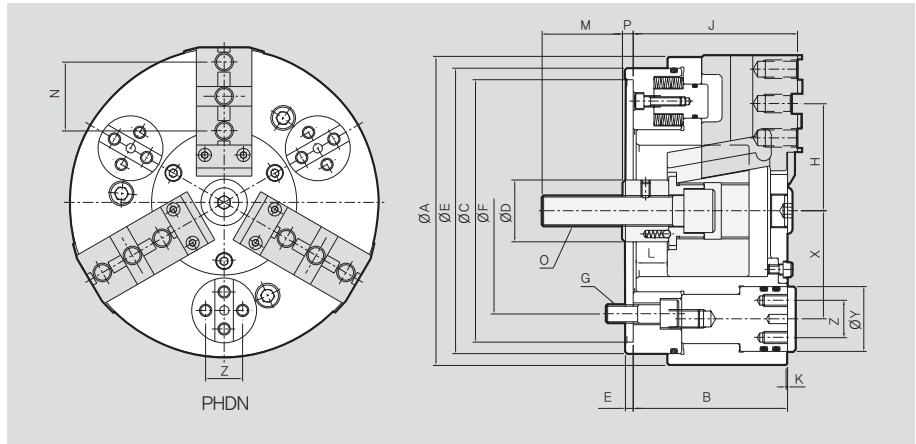
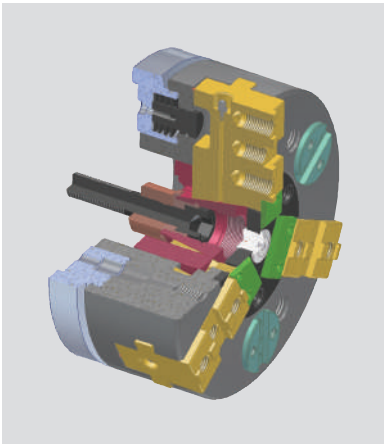
ID clamping chuck ideal for parts with small gripping surfaces
High accuracy to hold parallel and perpendicular tolerances

Technical features

Chuck will center the workpiece, then chuck body will pull back to locate workpiece on fixed locator stop(s).

SPECIFICATIONS

| | PHDN-200 | PHDN-250 | PHDN-300 | PHDN-380 |
|---------------------------|----------|----------|----------|----------|
| Max. Clamping Force [kgf] | 8100 | 11000 | 13500 | 16500 |
| Max. Drawbar Pull [kgf] | 3000 | 4000 | 5000 | 6000 |
| Jaw Stroke Dia. [mm] | 8.5 | 10.5 | 12.0 | 12.0 |
| Plunger Stroke [mm] | 24 | 30 | 34 | 34 |
| Stop Traction [kgf] | 200 | 300 | 300 | 450 |
| Max. Speed [r.p.m.] | 3500 | 3000 | 2500 | 200 |
| Weight [kg] | 21 | 37 | 54 | 95 |



DIMENSIONS

| | PHDN-200 | PHDN-250 | PHDN-300 | PHDN-380 |
|--------|----------|----------|----------|----------|
| ØA | 200 | 250 | 300 | 380 |
| B | 105 | 115 | 123 | 135 |
| ØC(h7) | 170 | 220 | 220 | 300 |
| ØD | 40 | 40 | 50 | 50 |
| ØE | 5 | 5 | 5 | 5 |
| ØF | 133.4 | 171.4 | 171.4 | 235 |
| G | M12 | M16 | M16 | M20 |
| Hmax. | 71.5 | 87 | 105 | 133.5 |
| Hmin. | 67.3 | 81.7 | 99 | 127.5 |
| J | 107 | 117 | 125 | 137 |
| K | 1 | 1 | 1 | 1 |
| Lmax. | 34 | 34 | 39 | 50 |
| Lmin. | 10 | 4 | 5 | 16 |
| M | 52 | 60 | 60 | 60 |
| N | 44.5 | 54 | 63.5 | 76.2 |
| O | M20 | M20 | M24 | M24 |
| Pmax. | 15 | 24 | 23 | 19 |
| Pmin. | -9 | -6 | -11 | -15 |
| X | 70 | 87 | 108 | 130 |
| ØY | 42 | 50 | 68 | 80 |
| Z | 24 | 30 | 40 | 54 |

RS Retractable-Jaw Shaft Chuck



Application / Benefits

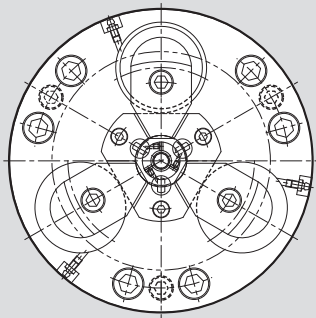
Machining of shafts with 1 setup

Technical features

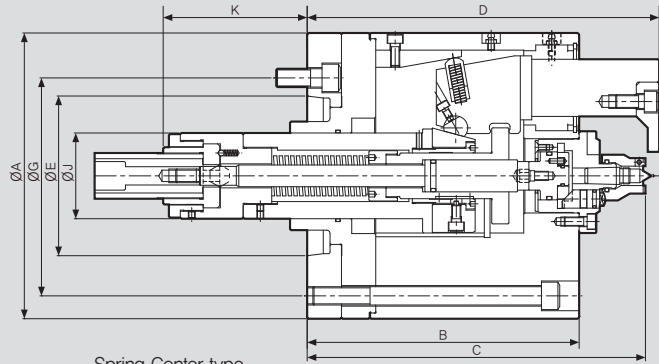
Jaws clamp on shaft during OD and facing operation.
 Jaws then retract and face driver engaged to finish OD.
 Requires dual piston cylinder

SPECIFICATIONS

| | RS-200 | RS-250 | RS-300 |
|---------------------------|-------------|--------|--------|
| Max. Clamping Force [kgf] | 4000 | 6500 | 10000 |
| Max. Drawbar Pull [kgf] | 3800 | 6000 | 8000 |
| Clamping Range [mm] | Chuck | 25~110 | 40~140 |
| | Face Driver | 12~70 | 12~100 |
| Max. Speed [r.p.m.] | 4000 | 3500 | 2500 |
| Weight [kg] | 35 | 60 | 100 |
| GD2 [kgf·m ²] | 0.19 | 0.79 | 1.35 |



IAH



Spring Center type

DIMENSIONS

| | RS-200 | RS-250 | RS-300 |
|-------|---------|---------|---------|
| ΦA | 200 | 250 | 300 |
| Bmax. | 164 | 205 | 205 |
| Bmin. | 139 | 173.5 | 173.5 |
| C | 192 | 240 | 240 |
| Dmin. | 205 | 252.5 | 252.5 |
| Dmin. | 190 | 221 | 221 |
| ΦE | 106.375 | 139.719 | 139.719 |
| ΦG | 133.4 | 171.4 | 171.4 |
| H | 3xM12 | 3xM16 | 3xM16 |
| ΦJ | 50 | 60 | 80 |
| Kmax. | 96.5 | 109.5 | 114.5 |
| Kmin. | 58.5 | 62.5 | 67.5 |
| L | M16 | M20 | M24 |
| M | 30 | 45 | 50 |
| Pmax. | 41.5 | 49.5 | 49.5 |
| Pmin. | 3.5 | 2.5 | 25 |
| Q | M34x0.5 | M40x0.5 | M50x0.5 |
| R | 30 | 35 | 40 |
| Smax. | 92 | 105 | 110 |
| Smin. | 82 | 95 | 100 |
| T | 12.5 | 16.5 | 13.5 |
| U | 10 | 10 | 10 |
| V | M12 | M16 | M16 |
| W | 30 | 37 | 37 |

CSF Compensating Chuck



Application / Benefits

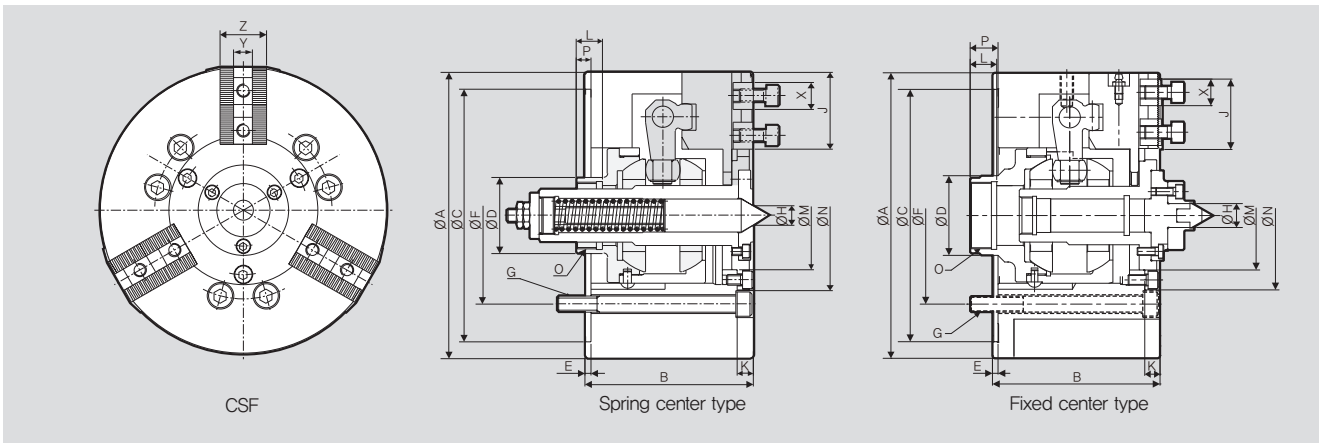
A spherical bearing enables the jaws to compensate for high-precision work on rounded surfaces

Technical features

Jaws float on spherical bearing to determined clamping points
Spring or fixed center available, All three jaws apply constant gripping force

SPECIFICATIONS

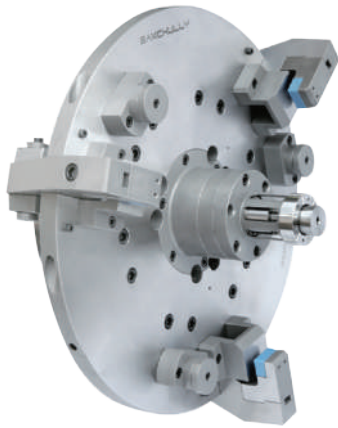
| | CSF-07 | CSF-08 | CSF-12 |
|-----------------------------|--------|--------|--------|
| Static Clamping force [kgf] | 2600 | 3200 | 4400 |
| Max. Drawbar Pull [kgf] | 1500 | 2100 | 2700 |
| Jaw Stroke Dia. [mm] | 16 | 20 | 25 |
| Plunger Stroke [mm] | 20 | 25 | 30 |
| Min. Chucking Dia. [mm] | 20 | 25 | 30 |
| Max. Runout Dia. [mm] | 4 | 4 | 6 |
| Max. Speed [r.p.m.] | 4000 | 3200 | 2000 |
| Spring Force [kgf] | 45 | 52 | 106 |
| Weight [kg] | 15 | 28 | 58 |
| GD2 [kgf·m ²] | 0.25 | 0.8 | 3.13 |



DIMENSIONS

| | CSF-07 | CSF-08 | CSF-12 |
|--------|----------|----------|----------|
| ΦA | 170 | 215 | 280 |
| B | 99 | 126.2 | 154.7 |
| ΦC(h7) | 140 | 190 | 255 |
| ΦD | 42 | 57 | 72 |
| ΦE | 4 | 4.2 | 5.7 |
| ΦF | 104.8 | 133.4 | 171.4 |
| G | 3-M10 | 6-M12 | 6-M16 |
| ΦH | 11 | 15 | 20 |
| J | 45 | 57.5 | 72 |
| K | 11 | 13 | 17 |
| L | 20 | 20 | 26 |
| ΦM | 65 | 82 | 110 |
| ΦN | 86 | 112.1 | 142.2 |
| O | M34xP1.5 | M50xP1.5 | M60xP1.5 |
| Pmax. | 28.2 | 34 | 44 |
| Pmin. | 8.2 | 9 | 14 |
| X | 16 | 20 | 26 |
| Y | 11 | 14 | 20 |
| Z | 28 | 35 | 45 |

FWC Aluminum Wheel Chuck

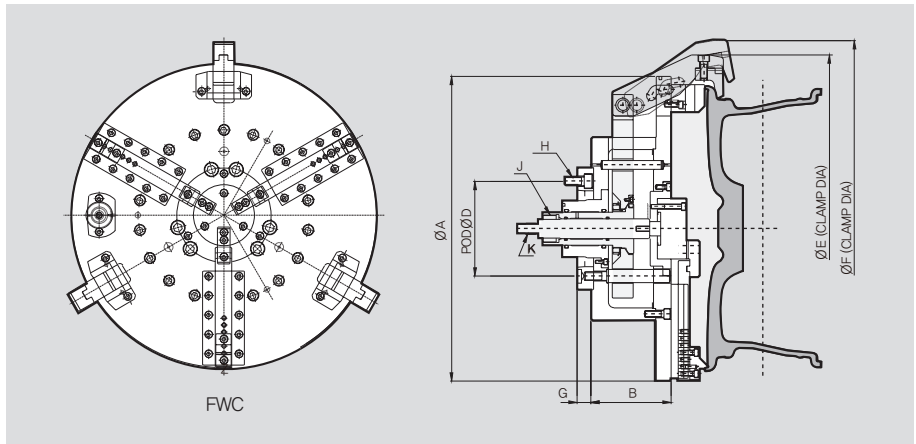
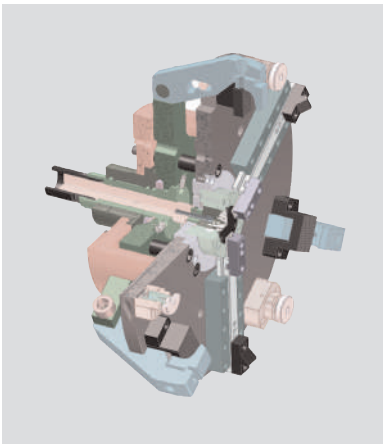


Application / Benefits

Ideal for machining the aluminum wheels used on cars and motorcycles
Improving the productivity with lower weight and moment of inertia(GD^2)

Technical features

Finger clamping type of cam arm structure has strong clamping force.
Lower weight increases efficiency and reduces down time.



DIMENSIONS

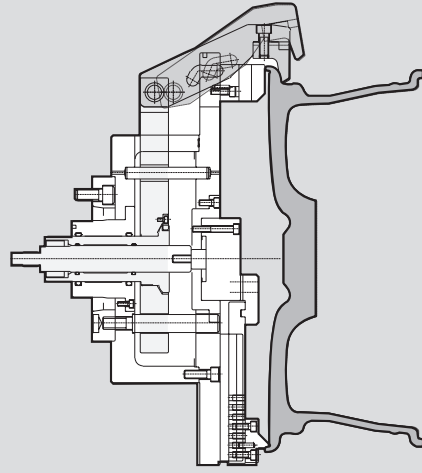
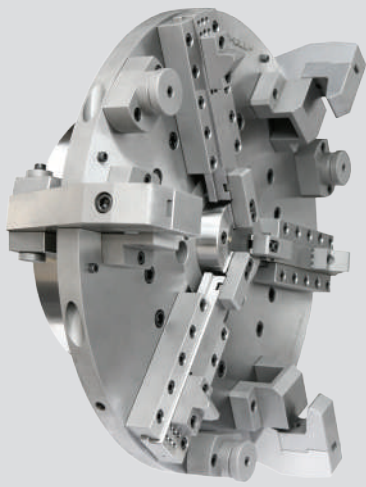
| JAW | | A | B | C | D | |
|---------|---------|-----|----|----|------|------|
| FWC-300 | Cam Arm | S | 12 | 13 | 14 | 15 |
| | | M | 13 | 14 | 15 | 16 |
| | | L | 14 | 15 | 16 | 17 |
| | | XL | 15 | 16 | 17 | 18 |
| JAW | | A | B | C | D | |
| FWC-310 | Cam Arm | S | 13 | 14 | 15 | 16 |
| | | M | 14 | 15 | 16 | 17 |
| | | L | 15 | 16 | 17 | 18 |
| | | XL | 16 | 17 | 18 | 19 |
| | | XXL | 17 | 18 | 19 | 20 |
| JAW | | A | B | C | D | |
| FWC-320 | Cam Arm | S | 17 | 18 | 19 | 20 |
| | | M | 18 | 19 | 20 | 21.5 |
| | | L | 19 | 20 | 21.5 | 22.5 |

| | FWC-300 | FWC-310 | FWC-320 |
|-------|----------|----------|----------|
| ØA | 495 | 550 | 660 |
| B | 139.7 | 145 | 199.5 |
| C(h6) | 139.719 | 196.87 | 196.87 |
| ØD | 171.45 | 235 | 235 |
| E | Flexible | Flexible | Flexible |
| F | Flexible | Flexible | Flexible |
| G | 25 | 35 | 35 |
| H | M16 | M20 | M20 |
| J | M42 | M42 | M42 |
| K | M24 | M24 | M24 |

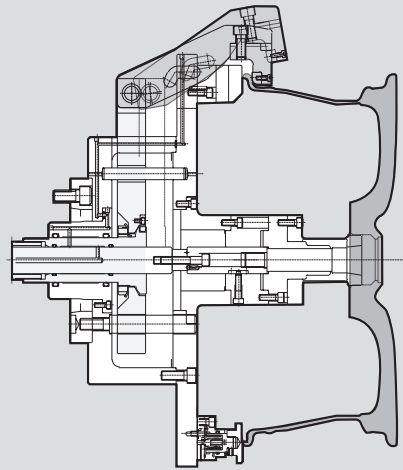
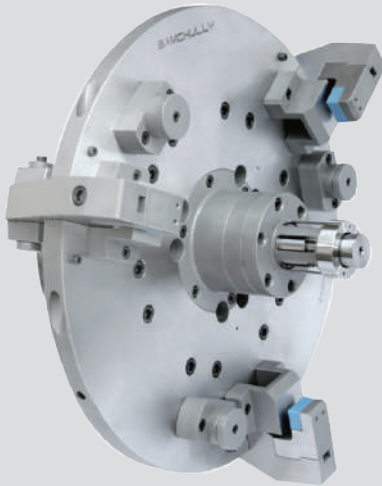
SPECIFICATIONS

| | FWC-300 | FWC-310 | FWC-320 |
|---------------------------|---------|---------|-----------|
| Max. Clamping Force [kgf] | 970 | 970 | 970 |
| Max. Drawbar Pull [kgf] | 3000 | 3000 | 3000 |
| Jaw Stroke Dia. [mm] | 27 | 27 | 27 |
| Plunger Stroke [mm] | 35 | 35 | 35 |
| Wheel Size Range [inch] | 12~18 | 13~20 | 17.5~24.5 |
| Max. Speed [r.p.m.] | 2800 | 2200 | 1800 |
| Weight [kg] | 120 | 160 | 240 |
| GD2 | 2.4 | 3.5 | 7.5 |

| | FWC-300 | FWC-310 | FWC-320 | |
|-------------------|---------|---------|---------|---|
| Wheel Size [inch] | 12" | O | | |
| | 13" | O | O | |
| | 14" | O | O | |
| | 15" | O | O | |
| | 16" | O | O | |
| | 17" | O | O | O |
| | 18" | O | O | O |
| | 19" | | O | O |
| | 20" | | O | O |
| | 21.5" | | | O |
| | 22.5" | | | O |



(OP#10)



(OP#20)



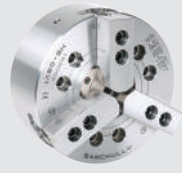
POWER CHUCK



IDF

Self centering 2+2 Jaw Power Chuck

44 P



HS

Standard 3-jaw HighSpeed Open Center Chuck

62 P



HCHT/F

2, 4-jaw Open Center Chuck

84 P



IDS

Self centering 2+2+2 Jaw Power Chuck

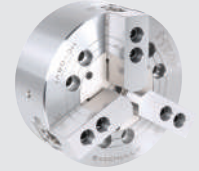
48 P



HS-A (Adaptor)

3-jaw High-Speed Open Center Chuck

64 P



HC

3-jaw Close Center Chuck

86 P



UR

Mega Bore 3-Jaw High-Speed Open Center Chuck

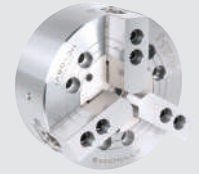
50 P



HST/F

2, 4-jaw High-Speed Open Center Chuck

68 P



HC-A (Adaptor)

3-jaw Close Center Chuck

92 P



QJC

Quick Jaw Change Chuck

52 P



HSL (Long Stroke)

3-jaw High-Speed Open Center Chuck

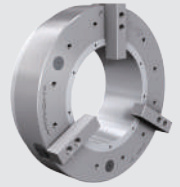
70 P



HCT/F

2, 4-jaw Close Center Chuck

96 P



PAC

Mega-Bore Pneumatic Self-Contained Chuck

54 P



MH

Mega-Bore 3-jaw High-Speed Open Center Chuck

72 P



HC-SE

3-jaw Sealed Close Center Chuck

100 P



RTC

Rotary Table Chuck

56 P



MHT/F

Mega-Bore 2, 4-jaw High-Speed Open Center Chuck

74 P



HCL (Long Stroke)

3-jaw Close Center Chuck

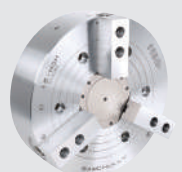
102 P



MCA

Stationary Pneumatic Chuck

58 P



HCH

3-jaw Open Center Chuck

76 P



HCLT/F (Long Stroke)

2, 4-jaw Open Center Chuck

104 P



MCH

Stationary Hydraulic Chuck

60 P



HCH-A (Adaptor)

3-jaw Open Center Chuck

80 P



HCWF

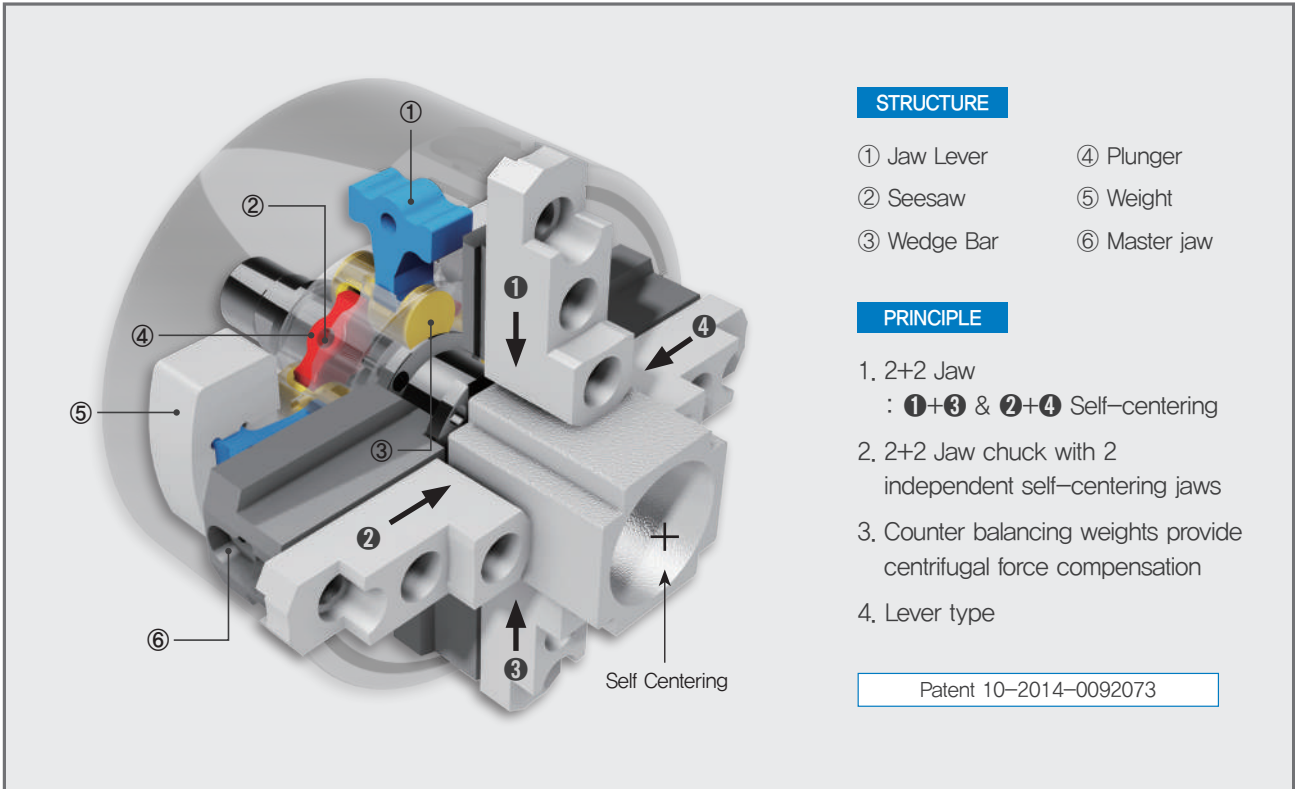
4-jaw Double Wedge Hydraulic Chuck

106 P

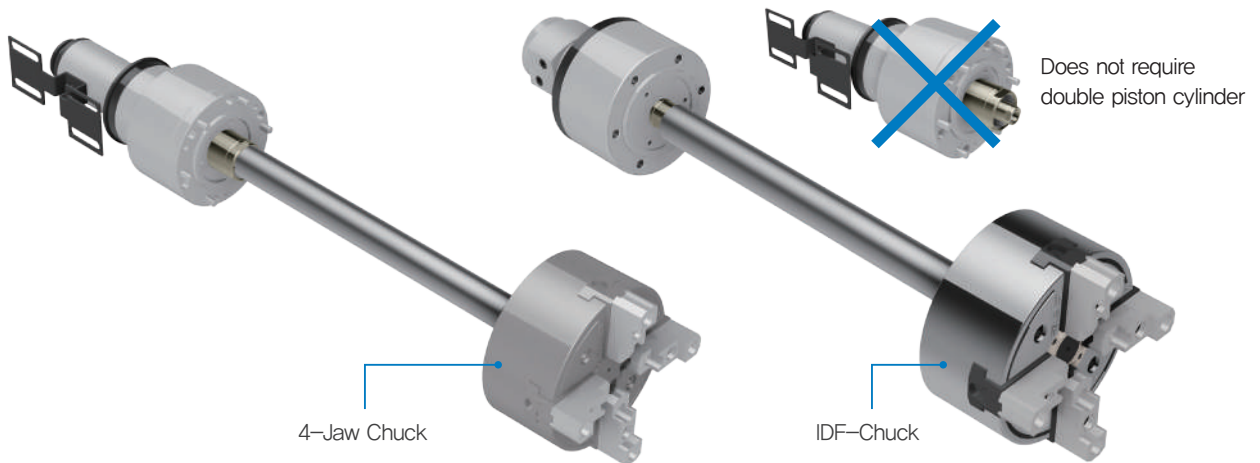
IDF

Self centering 2+2 Jaw Power Chuck

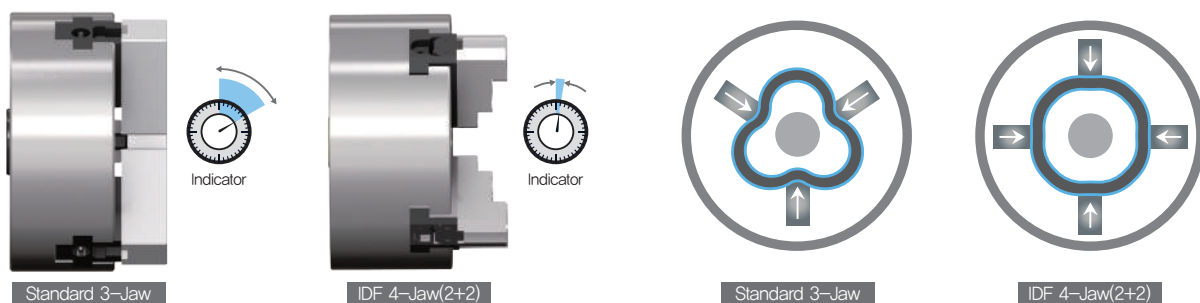
Performance and quality are much better than standard 3-jaw configurations.
4-Jaw(2+2) Chuck requires dual-piston cylinder, but IDF is compatible with existing cylinder(100%)



01/ Cost-saving compatibility with standard cylinders



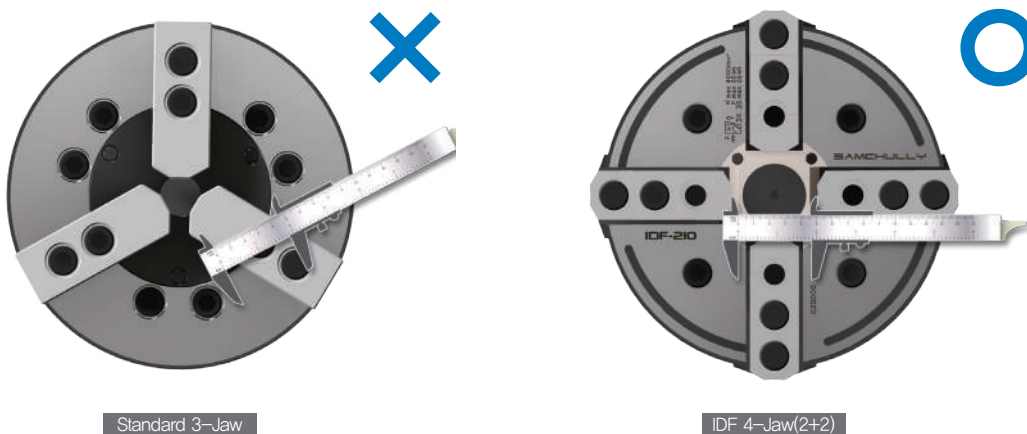
02/ Better performance than standard 3-jaw



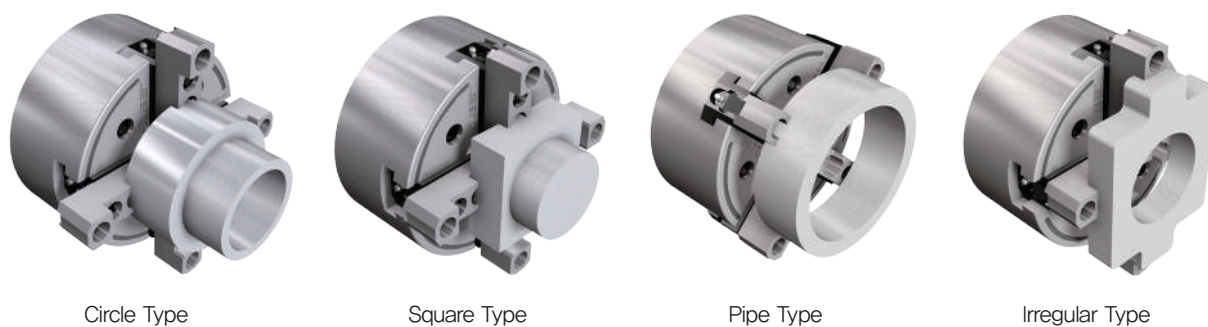
Decreased 1/10 For Floating Range

1/3 For Deformation Of Thin Work Piece

03/ Easy to measure the workpieces after jaw boring



04/ Use irregular workpieces without interchanging chuck



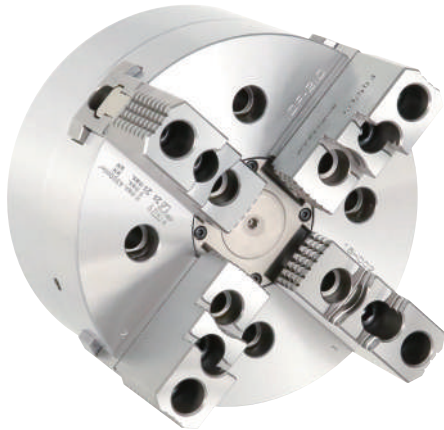
Circle Type

Square Type

Pipe Type

Irregular Type

IDF Self centering 2+2 Jaw Power Chuck



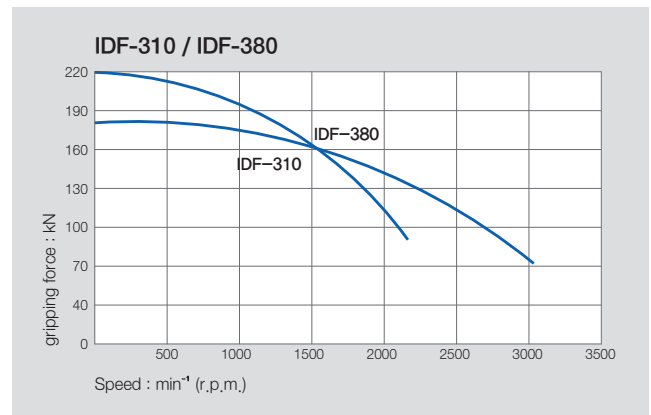
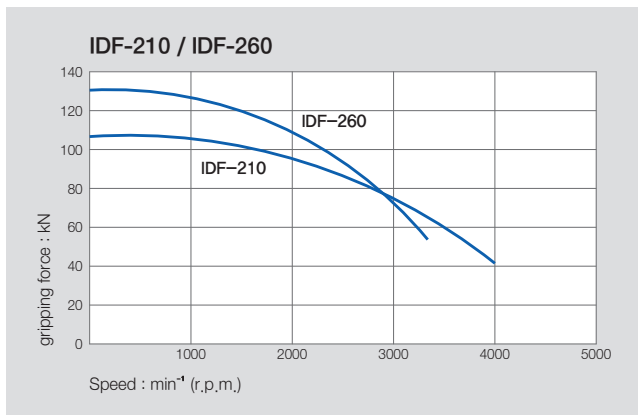
Application / Benefits

High precision self-centering 4-Jaw power chuck(2+2 Jaw)

Technical features

Self-centering in two axes
 Single wedge actuation does not require dual-piston cylinder
 2+2 Jaw chuck with 2 independent self-centering jaws

ACTUAL GRIPPING FORCE DIAGRAM

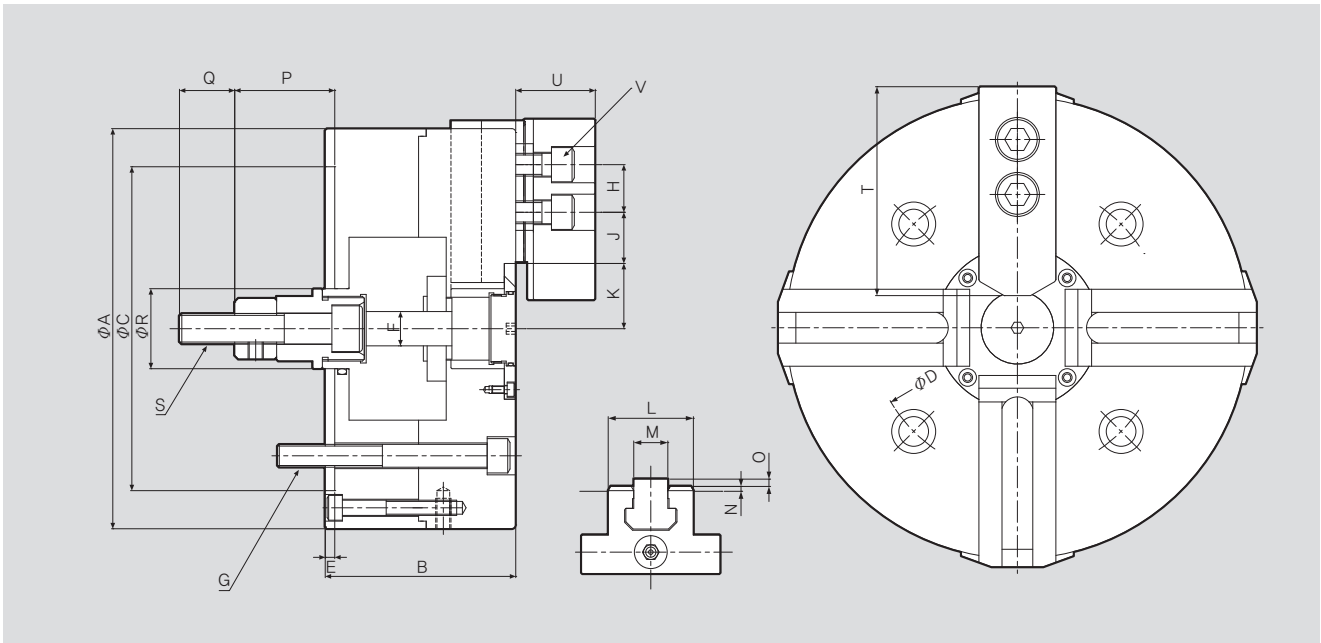


※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

| | IDF-210 | IDF-260 | IDF-310 | IDF-380 |
|--|------------|------------|------------|------------|
| Jaw Stroke Radial. [mm] | 5.2 | 6.2 | 6.2 | 6.2 |
| Compensation [mm] | ± 2 | ± 2 | ± 2 | ± 2 |
| Plunger Stroke [mm] | 10 | 12 | 12 | 12 |
| Max. Permissible Input Force [kN(kgf)] | 40(4081) | 50(5102) | 70(7143) | 80(8163) |
| Max. Static Gripping Force [kN(kgf)] | 100(10204) | 130(13265) | 180(18367) | 220(22448) |
| Max. r.p.m. [min ⁻¹] | 4000 | 3200 | 3000 | 2100 |
| Operating Cylinder | Y-1225RE | Y-1530RE | Y-1530RE | Y-2035RE |
| Weight [kg] | 24 | 43 | 68 | 110 |
| Moment of inertia [kg · m ²] | 0.14 | 0.39 | 0.88 | 2.2 |

※ Maximum turning speed is based upon actual measurement.
 ※ Specifications are subject to change without notice.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | IDF-210 | IDF-260 | IDF-310 | IDF-380 |
|-------------|---------|---------|---------|---------|
| ΦA | 210 | 260 | 310 | 380 |
| B | 100 | 120 | 127 | 135 |
| ΦC | 170 | 220 | 220 | 300 |
| ΦD | 133.4 | 171.4 | 171.4 | 235 |
| E | 5 | 5 | 5 | 5 |
| F | 24 | 30 | 30 | 40 |
| G | M12 | M16 | M16 | M20 |
| H | 25 | 30 | 30 | 43 |
| J (Max/Min) | 39/10 | 45/13 | 58/13 | 53/18 |
| K (Max/Min) | 34.2/29 | 46.2/40 | 53.2/47 | 74.2/68 |
| L | 35 | 40 | 50 | 62 |
| M | 14 | 16 | 18 | 25.5 |
| N | 5 | 5 | 5 | 5 |
| O | 3 | 3 | 3 | 3 |
| P(Max/Min) | 52/62 | 53/65 | 53/65 | 93/81 |
| Q | 29 | 33 | 33 | 33 |
| R | 42 | 50 | 55 | 55 |
| S | M16x80 | M20x80 | M20x80 | M30x125 |
| T | 95 | 98 | 115 | 135 |
| U | 42 | 46 | 54 | 64 |
| V | M12x30 | M12x35 | M14x45 | M20x45 |

RELATED PRODUCT



IDS Self centering 2+2+2 Jaw Power Chuck



Application / Customer's Benefit

High accuracy Self centering 2+2+2 jaw power chuck

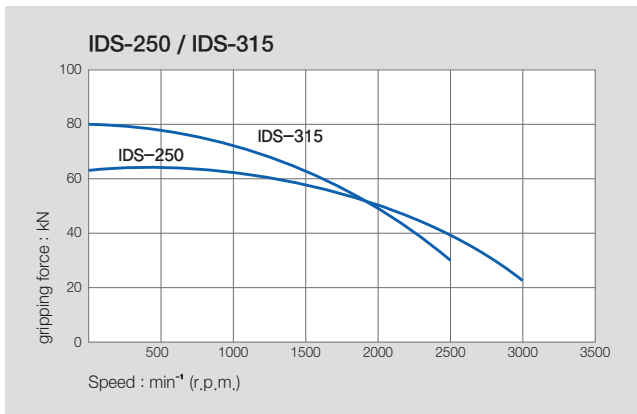
Technical features

Ideal for thin workpiece (Easily deformable workpiece)

Compensating deviation of workpieces by 2+2+2 jaw (clamping 6 point at once)

100% compatibility with existing cylinder

ACTUAL GRIPPING FORCE DIAGRAM



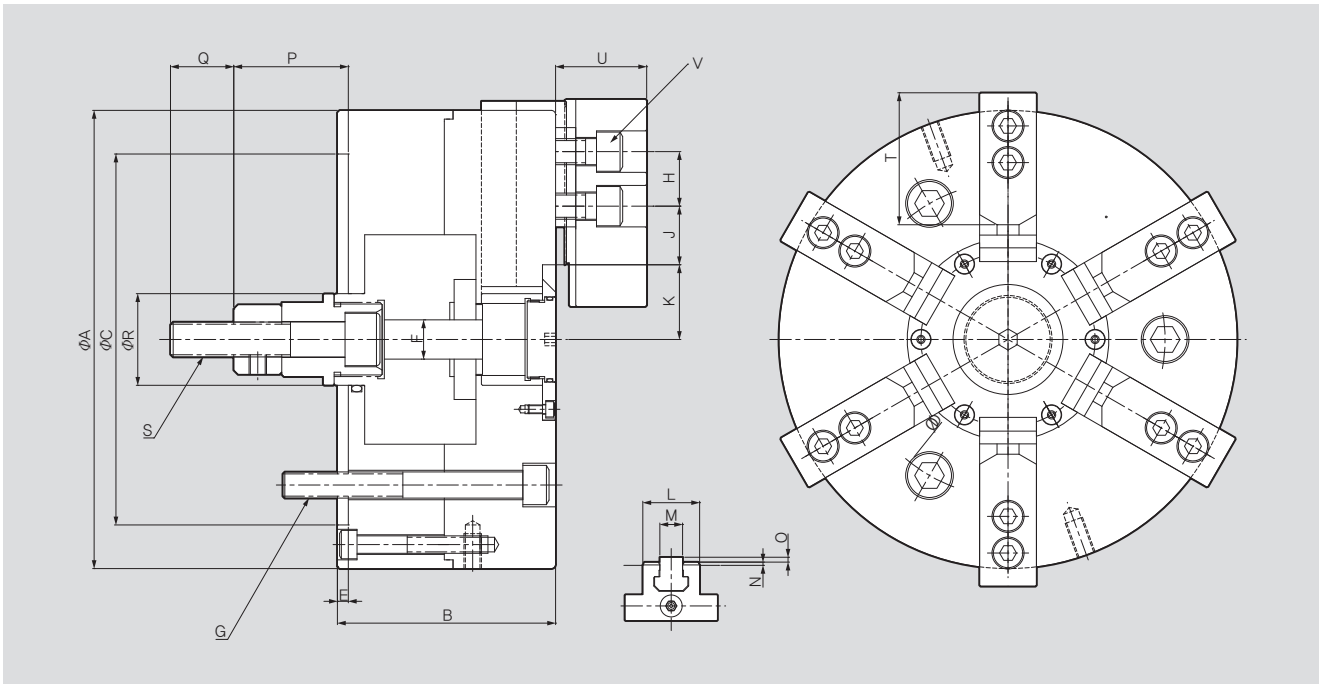
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

| | IDS-250 | IDS-315 |
|--|----------|----------|
| Jaw Stroke Radial [mm] | 6 | 6 |
| Compensation [mm] | 4 | 4 |
| Plunger Stroke [mm] | 12 | 12 |
| Max. Permissible Input Force [kN(kgf)] | 38 | 40 |
| Max. Gripping Force [kN(kgf)] | 64 | 80 |
| Max. r.p.m [min⁻¹] | 3000 | 2500 |
| Operating Cylinder | Y-1530RE | Y-1530RE |
| Weight [kg] | 39 | 65 |
| Moment of inertia [kg · m²] | 0.35 | 0.75 |

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | IDS-250 | IDS-315 |
|-------------|---------|---------|
| ΦA | 250 | 315 |
| B | 113 | 212 |
| ΦC | 220 | 220 |
| ΦD | 171.4 | 171.4 |
| E | 6 | 6 |
| F | 34 | 38 |
| G | M16 | M16 |
| H | 20 | 20 |
| J (Max/Min) | 42/11 | 64/11 |
| K (Max/Min) | 57/51 | 68/62 |
| L | 31 | 31 |
| M | 12 | 12 |
| N | 4 | 4 |
| O | 3 | 3 |
| P(Max/Min) | 63/75 | 63/75 |
| Q | 36 | 36 |
| R | 56 | 70 |
| S | M20x90 | M20x90 |
| T | 72 | 72 |
| U | 35 | 35 |
| V | M10x30 | M10x30 |

RELATED PRODUCT



UR Mega Bore 3-Jaw High-Speed Open Center Chuck



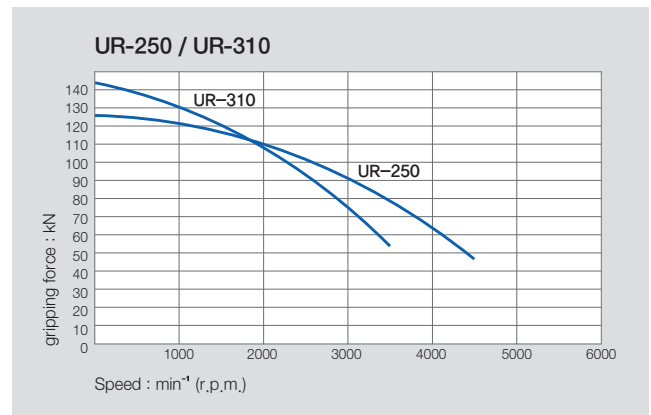
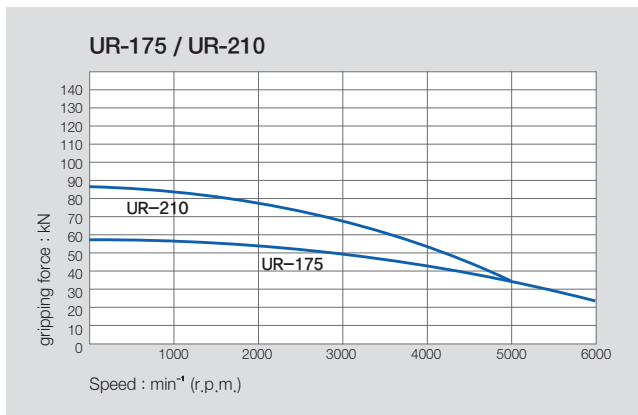
Application / Benefits

For work requiring through-hole
Choose between metric or inch serrated jaws

Technical features

Case hardened body to assure high precision and longevity
Wedge style enables high clamping force

ACTUAL GRIPPING FORCE DIAGRAM



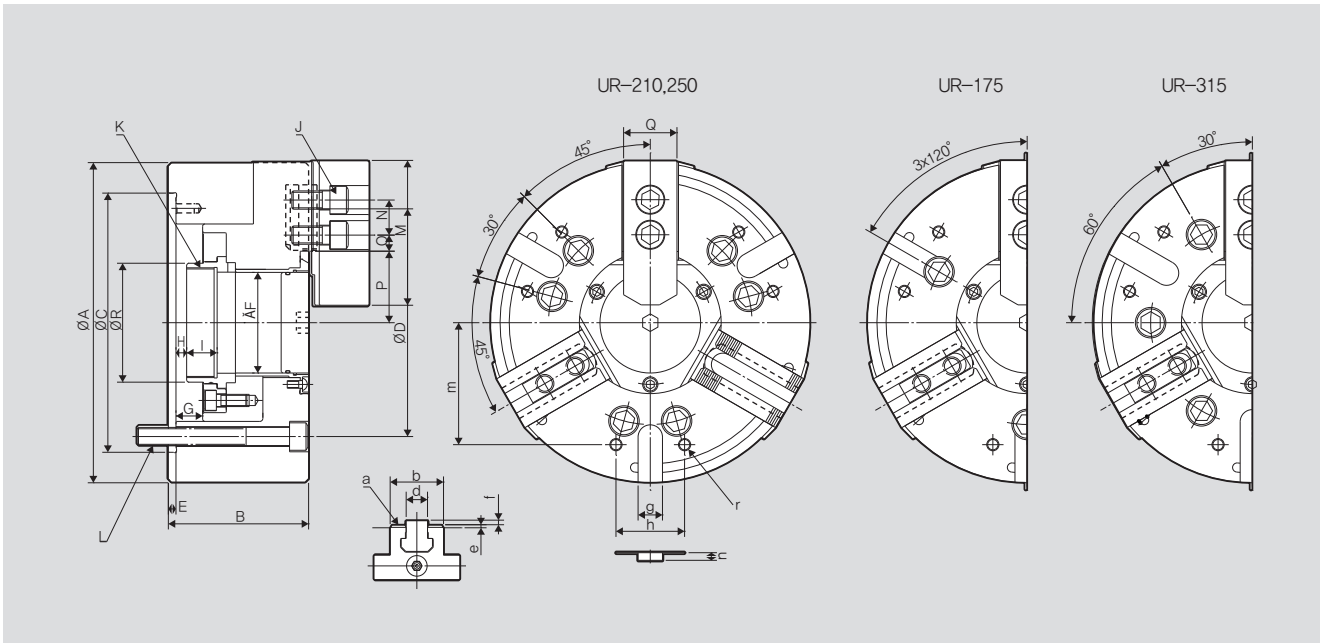
※ Results reflect gripping force when using standard Samchully soft jaws, Variations in size of jaw and workpiece may decrease gripping force.

SPECIFICATIONS

| | UR-175 | UR-210 | UR-250 | UR-315 |
|---|------------|------------|------------|------------|
| Thru Hole Dia. [mm] | 56 | 66 | 82 | 122 |
| Grip Dia. Max. [mm] | 175 | 210 | 254 | 315 |
| Grip Dia. Min. [mm] | 16 | 23 | 30 | 74 |
| Jaw Stroke Dia. [mm] | 6.4 | 8.0 | 10.0 | 10.6 |
| Plunger Stroke [mm] | 14 | 17.5 | 22 | 23 |
| Max. Permissible Input Force [kN(kgf)] | 25(2551) | 38(3878) | 50(5102) | 50(5102) |
| Max. Static Gripping Force [kN(kgf)] | 70(7143) | 108(11020) | 145(14796) | 145(14796) |
| Max. r.p.m. [min ⁻¹] | 6000 | 5000 | 4000 | 3200 |
| Weight [kg] | 11 | 19.5 | 30 | 42 |
| Moment of inertia [kg · m ²] | 0.05 | 0.12 | 0.27 | 0.62 |
| Operating Cylinder | SD-15452 | SD-17568 | SD-18582 | SD-30516 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 1.8(18.35) | 2.5(25.49) | 2.8(28.55) | 1.4(14.27) |

※ Specifications are subject to change without notice.

Thru Hole Range : $\varnothing 56 \sim \varnothing 122$
Clamping Range : $\varnothing 16.5 \sim \varnothing 315$



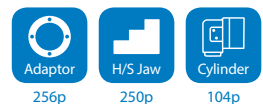
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

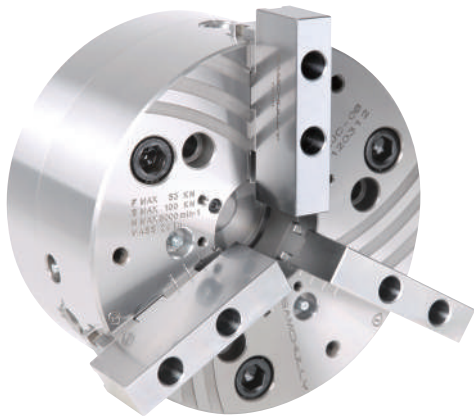
| | UR-175 | UR-210 | UR-250 | UR-315 |
|---------------|---------------------|---------------------|---------------------|---------------------|
| ΦA | 175 | 210 | 254 | 315 |
| B | 81 | 92 | 103 | 115 |
| ΦC | 160 | 170 | 220 | 300 |
| ΦD | 133.4 | 133.4 | 171.4 | 235 |
| E | 5 | 5 | 5 | 5 |
| F | 56 | 66 | 82 | 122 |
| G | 14 | 17.5 | 22 | 23 |
| H (max./min.) | 4 / -10 | 7 / -10.5 | 13 / -9 | 19 / -4 |
| I | 18 | 20 | 20 | 23 |
| J (UR-D/UR-M) | M10 / M10 | M12 / M12 | M12 / M12 | M16 / M16 |
| K (max) | M62x1.5P | M72x1.5P | M85x2.0P | M125x2.0P |
| L | M12 | M12 | M16 | M20 |
| M | 70 | 95 | 110 | 125 |
| N (UR-D/UR-M) | 16.5 / 20 | 23 / 25 | 30 / 30 | 30 / 30 |
| O (max./min.) | 22 / 10 | 23 / 11 | 32 / 14 | 37 / 15 |
| P (max./min.) | 38/35 | 47/43 | 57/62 | 81/76 |
| Q | 31 | 35 | 40 | 50 |
| R | 71 | 78 | 92 | 143 |
| a (UR-D/UR-M) | 1/16"x90° / 1.5x60° | 1/16"x90° / 1.5x60° | 1/16"x90° / 1.5x60° | 1/16"x90° / 1.5x60° |
| b | 33 | 38 | 45 | 45 |
| d (UR-D/UR-M) | 12 / 14 | 17 / 14 | 21 / 16 | 21 / 21 |
| e | 3 | 3 | 4 | 4 |
| f | 2.5 | 2.5 | 3.5 | 3.5 |
| g | 16 | 16 | 16 | 20 |
| h | 36 | 45 | 60 | 60 |
| m | 65 | 80 | 102 | 100 |
| n | 5 | 5 | 5 | 5 |
| r | M8 | M8 | M10 | M10 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



QJC Quick Jaw Change Chuck



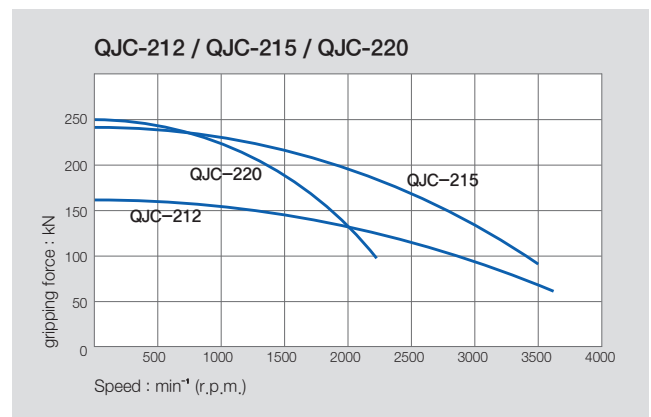
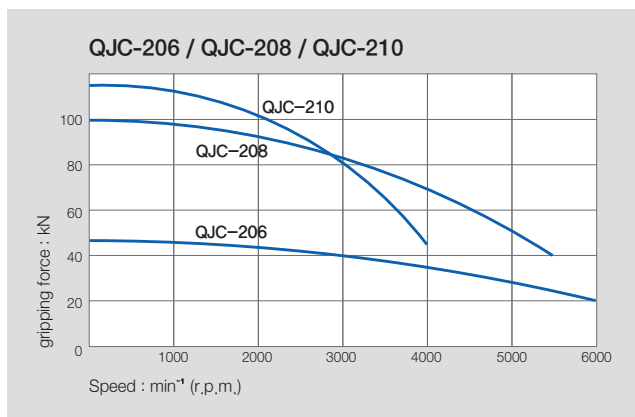
Application / Benefits

- Minimal set-up times ; change jaws within a minute
- Reversible jaws
- High repeatability of < 0.02mm
- No reboring required

Technical features

- Wedge bar system minimizes loss of gripping force
- Built-in safety feature ensures jaw serration engagement

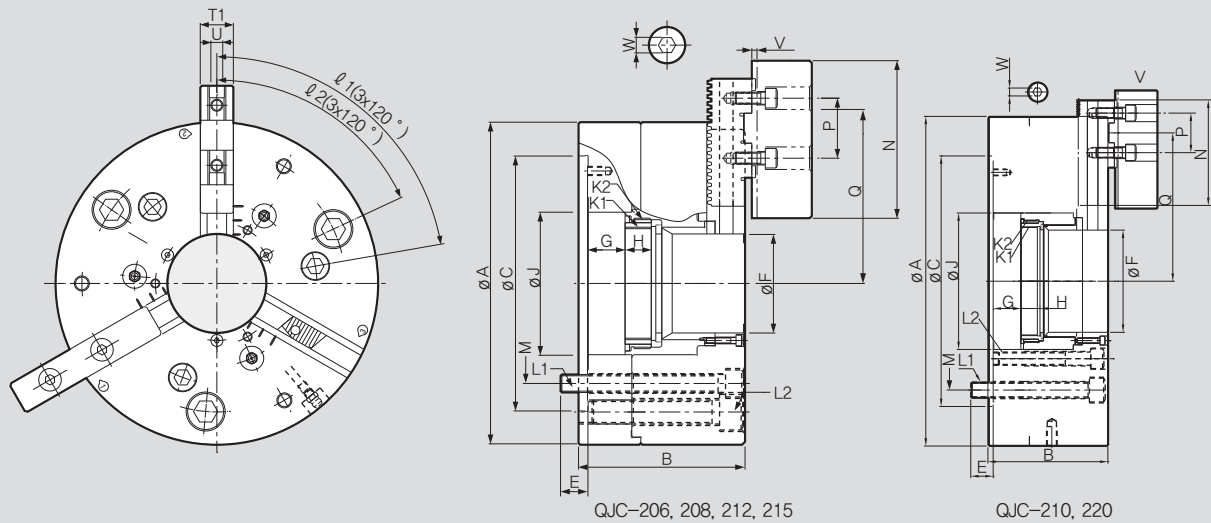
ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | QJC-206 | QJC-208 | QJC-210 | QJC-212 | QJC-215 | QJC-220 |
|---|-----------|------------|------------|------------|------------|------------|
| Jaw Stroke Dia. [mm] | 11.4 | 14.4 | 16 | 16 | 17 | 20 |
| Plunger Stroke [mm] | 20 | 25 | 28 | 28 | 32 | 42 |
| Permissible Input Force [kN(kgf)] | 30(3059) | 54(5404) | 65(6628) | 90(9177) | 133(13562) | 120(12236) |
| Max.static Gripping Force [kN(kgf)] | 45(4538) | 100(10197) | 115(11726) | 160(16315) | 240(24473) | 250(25492) |
| Max. r.p.m. [min ⁻¹] | 6000 | 5500 | 4000 | 3600 | 3500 | 2200 |
| Weight [kg] | 13 | 24 | 42 | 66 | 109 | 225 |
| Moment of inertia [kg · m ²] | 0.11 | 0.11 | 0.41 | 0.97 | 2.3 | 6.5 |
| Operating Cylinder | SD-13546 | SD-17568 | SD-18582 | SD-21511 | SDL-25411 | SDL-30516 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 3.0(30.5) | 3.0(35.6) | 3.7(37.7) | 4.0(40.7) | 4.0(40.7) | 2.9(29.5) |

Thru Hole Range : $\varnothing 45 \sim \varnothing 155$
Clamping Range : $\varnothing 15 \sim \varnothing 400$



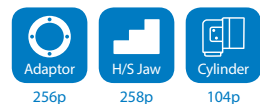
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

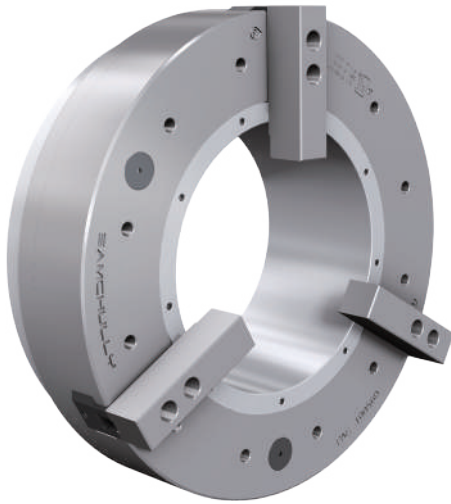
| | QJC-206 | QJC-208 | QJC-210 | QJC-212 | QJC-215 | QJC-220 |
|----------|---------|---------|---------|---------|---------|---------|
| ΦA | 165 | 215 | 260 | 315 | 400 | 500 |
| B | 95 | 111 | 129.3 | 138.1 | 144 | 182 |
| ΦC | 140 | 170 | 220 | 220 | 300 | 380 |
| E | 14 | 18 | 23.7 | 24.9 | 25 | 34 |
| ΦF | 45 | 66 | 81 | 104 | 128 | 155 |
| G max. | 20.2 | 25 | 28 | 28.5 | 32 | 42 |
| G min. | 0 | 0 | 0 | 0 | 0 | 0 |
| H | 15 | 17.5 | 22 | 23.2 | 22 | 29 |
| ΦJ | 68 | 95 | 114 | 148 | 180 | 207 |
| K1 | M50 | M75 | M90 | M115 | M138 | M165 |
| K2 | M60 | M87 | M105 | M135 | M160 | M185 |
| L1 | 3-M10 | 3-M12 | 3-M16 | 3-M16 | 3-M20 | 3-M24 |
| L2 | 3-M12 | 3-M16 | 3-M12 | 3-M20 | 3-M24 | 3-M20 |
| i_1 | 80° | 80° | 80° | 80° | 70° | 85° |
| i_2 | 20° | 65° | 65° | 70° | 60° | 75° |
| M | 104.8 | 133.35 | 171.4 | 171.4 | 235 | 330.2 |
| N | 85 | 97 | 125 | 125 | 145 | 160 |
| P | 32 | 40 | 40 | 40 | 54 | 60 |
| Q max. | 76.8 | 118.3 | 129.7 | 159.1 | 182.4 | 225 |
| Q min. | 58 | 71.2 | 102.2 | 106.9 | 121.9 | 141 |
| T1 | 20 | 22 | 30 | 30 | 35 | 45 |
| T2 | 20 | 22 | 26 | 32 | 32 | 48 |
| U | 8 | 10 | 12 | 12 | 12 | 18 |
| V | 2.5 | 2.5 | 3 | 3 | 3 | 4 |
| W | 8 | 10 | 10 | 10 | 10 | 12 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



PAC Mega-Bore Pneumatic Self-Contained Chuck



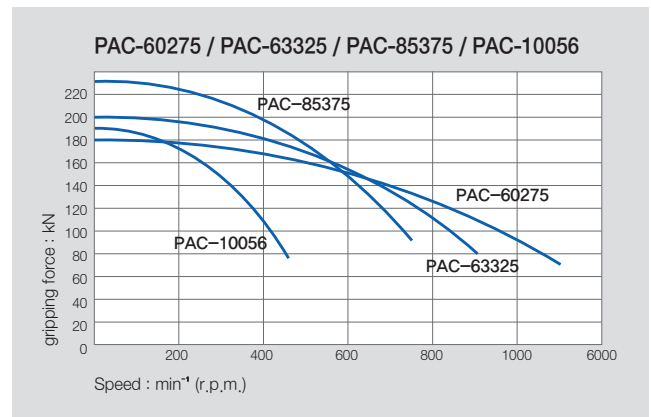
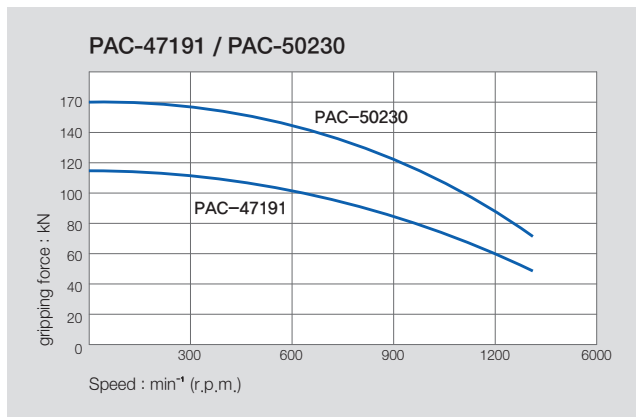
Application / Benefits

Suitable for large pipe machining
Utilizes full spindle through hole

Technical features

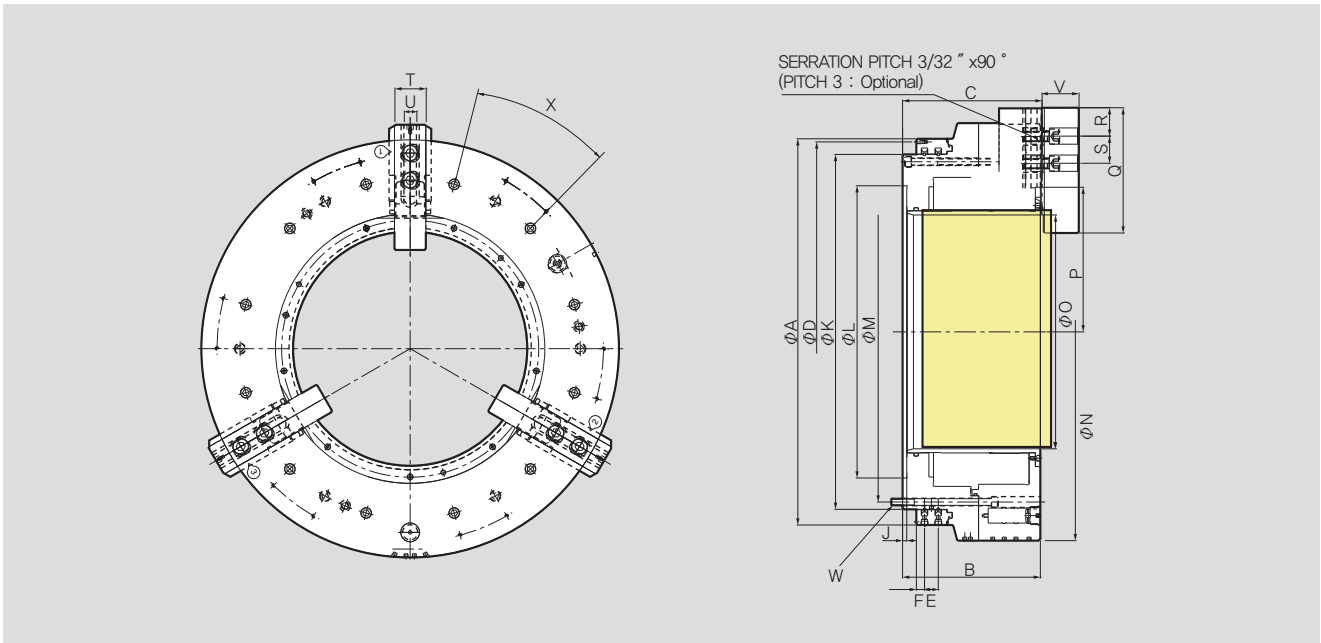
Self-contained air chuck with check valve
Maintains pressure during power outage

ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | PAC-47191 | PAC-50230 | PAC-60275 | PAC-63325 | PAC-85375 | PAC-10056 |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Thru Hole Dia. [mm] | 191 | 230 | 275 | 325 | 375 | 560 |
| Jaw Stroke Dia. [mm] | 20 | 25.4 | 25.4 | 25.4 | 25.4 | 25.4 |
| Rapid | 13 | 16.9 | 16.9 | 16.9 | 13.4 | 15 |
| Clamp | 7 | 8.5 | 8.5 | 8.5 | 12 | 10.4 |
| Operating Pressure [MPa] | 0.2~0.8 | 0.2~0.8 | 0.2~0.8 | 0.2~0.8 | 0.2~0.8 | 0.2~0.8 |
| Clamping Force [kN] | 115 | 170 | 180 | 200 | 230 | 190 |
| Max. r.p.m. [min⁻¹] | 1300 | 1300 | 1100 | 900 | 750 | 450 |
| Weight [kg] | 190 | 325 | 355 | 630 | 970 | 960 |
| Moment of inertia [N · m²(kg · m²)] | 9.8 | 16.1 | 20.6 | 35.1 | 105 | 157.6 |



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | PAC-47191 | PAC-50230 | PAC-60275 | PAC-63325 | PAC-85375 | PAC-10056 |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|
| ΦA | 470 | 570 | 605 | 685 | 850 | 1000 |
| B | 238 | 280 | 280 | 305.5 | 352 | 330 |
| C | 240 | 282 | 284 | 329.5 | 356 | 334 |
| ΦD | 448 | 550 | 585 | 666 | 830 | 910 |
| E | 26 | 26 | 26 | 33 | 33 | 33 |
| F | 17 | 17 | 17 | 19 | 19.5 | 19.5 |
| J | 8 | 8 | 8 | 8 | 8 | 10 |
| ΦK | 400 | 500 | 535 | 610 | 775 | 850 |
| ΦL | 310 | 415 | 450 | 510 | 700 | 700 |
| ΦM | 374 | 474 | 508 | 580 | 745 | 815 |
| ΦN | 470 | 570 | 605 | 685 | 850 | 1000 |
| ΦO | 191 | 230 | 275 | 325 | 375 | 560 |
| P Max. | 147 | 180.5 | 205.9 | 230.9 | 268 | 346.3 |
| P Min. | 127 | 156 | 180.5 | 205.5 | 268 | 321.1 |
| Q | 170 | 195 | 195 | 240 | 300 | 300 |
| R | 25 | 37 | 37 | 42 | 68 | 68 |
| S | 40 | 40 | 40 | 65 | 65 | 65 |
| T | 60 | 60 | 60 | 75 | 75 | 75 |
| U | 25.5 | 25.5 | 25.5 | 30 | 30 | 30 |
| V | 60 | 80 | 78 | 80 | 90 | 88 |
| W | 9-M12 | 12-M12 | 12-M12 | 12-M16 | 12-M16 | 12-M16 |
| X | 40° | 30° | 30° | 30° | 30° | 30° |

RTC Rotary Table Chuck



Application / Benefits

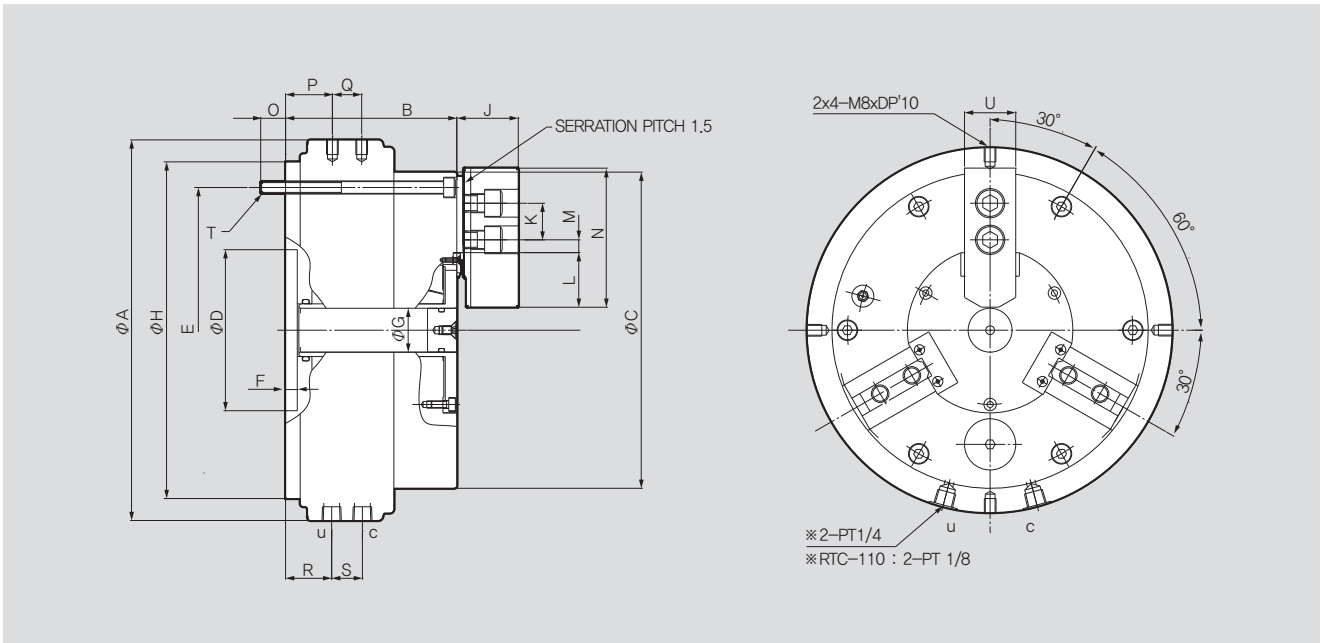
Suitable for indexing
Soft jaws compatible with standard power chucks

Technical features

Sealed against coolant and chips
Built in air cylinder with compact design

SPECIFICATIONS

| | RTC-110 | RTC-160 | RTC-210 | RTC-260 |
|---|---------|---------|---------|---------|
| Thru Hole Dia. [mm] | 8 | 20 | 30 | 43 |
| Jaw Stroke Dia. [mm] | 5.2 | 5.2 | 6.3 | 6.3 |
| Plunger Stroke [mm] | 11.3 | 11.5 | 13.7 | 13.6 |
| Max. Static Gripping Force [kN(kgf)] | 7.5 | 21 | 33 | 48 |
| Max. Pneumatic Pressure [MPa(kgf/cm ²)] | 0.7 (7) | 0.7 (7) | 0.7 (7) | 0.7 (7) |
| Max. r.p.m. [min ⁻¹] | 100 | 72 | 50 | 50 |
| Weight (included Soft Jaws) [kg] | 7.3 | 22 | 27.7 | 42.5 |

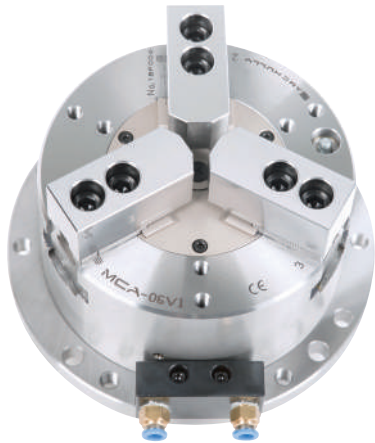


※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | RTC-110 | RTC-160 | RTC-210 | RTC-260 |
|----------|---------|---------|---------|----------|
| ΦA | 145 | 210 | 260 | 304 |
| B | 92 | 102 | 117 | 125 |
| ΦC | 113 | 166 | 216 | 264 |
| ΦD | 80 | 80 | 110 | 140 |
| E | 98 | 148 | 195 | 234 |
| F | 6 | 7 | 8 | 8 |
| ΦG | 8 | 20 | 30 | 43 |
| ΦH | 124 | 175 | 230 | 268 |
| J | 27 | 36 | 42 | 46 |
| K | 14 | 20 | 25 | 30 |
| L max. | 32.8 | 41.9 | 53 | 66 |
| L min. | 30.2 | 39.3 | 49.85 | 62.85 |
| M max. | 5.4 | 9.25 | 14.75 | 16 |
| M min. | 2.4 | 4.75 | 8.75 | 8.5 |
| N | 55 | 72 | 95 | 110 |
| O | 11 | 15 | 17 | 16 |
| P | 25.5 | 31 | 32 | 39.5 |
| Q | 12.2 | 18 | 20 | 21 |
| R | 25.5 | 32.3 | 31.5 | 39.5 |
| S | 12.2 | 15.2 | 21 | 21 |
| T | M6x95L | M8x105L | M8x125L | M10x130L |
| U | 23 | 31 | 35 | 40 |

MCA Stationary Pneumatic Chuck



Application / Benefits

Ideal for machining centers

Technical features

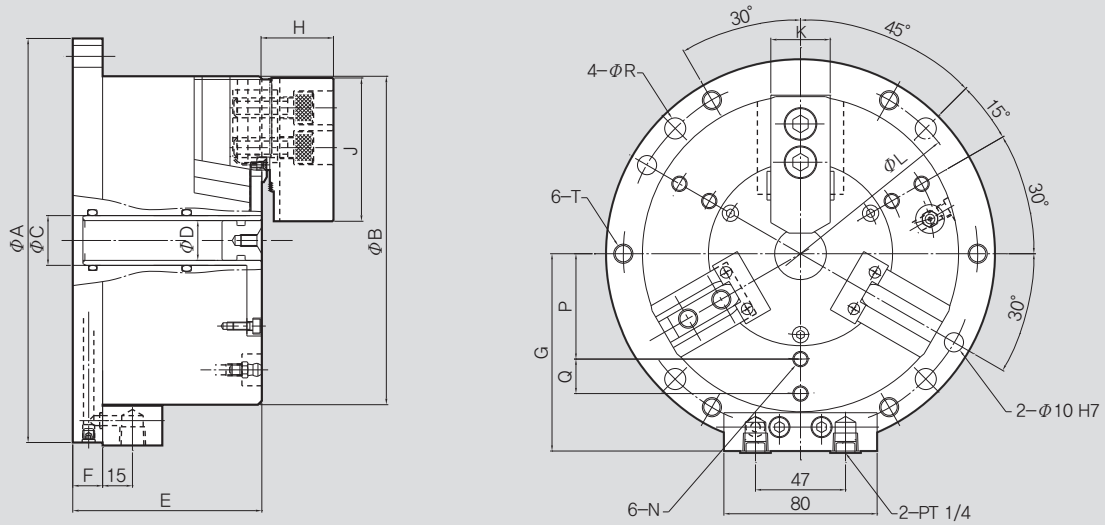
Sealed against coolant and chips

Built-in air cylinder with compact design

SPECIFICATIONS

| | MCA-04 | MCA-06 | MCA-08 | MCA-10 |
|---|----------|----------|----------|----------|
| Clamping Force (Pneumatic 6bar) [kN(kgf)] | 7.5(765) | 21(2140) | 33(3300) | 48(4800) |
| Jaw Stroke Dia. [mm] | 5.2 | 5.2 | 6.3 | 6.3 |
| Grip Dia. Max [mm] | 110 | 165 | 210 | 254 |
| Grip Dia. Min [mm] | 10 | 23 | 30 | 50 |
| Max. Pneumatic Pressure [MPa(kgf/cm ²)] | 0.7(7) | 0.7(7) | 0.7(7) | 0.7(7) |
| Weight [kg] | 7.3 | 16 | 28 | 43 |

Thru Hole Range : $\varnothing 20 \sim \varnothing 43$
Clamping Range : $\varnothing 10 \sim \varnothing 250$

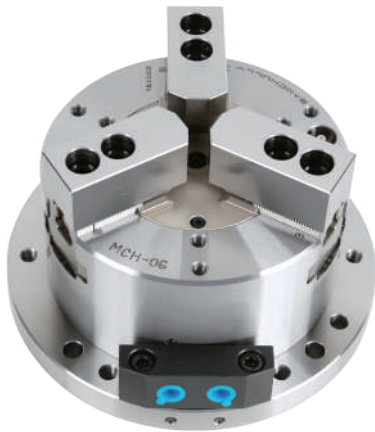


※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | MCA-04 | MCA-06 | MCA-08 | MCA-10 |
|-----------|--------|--------|--------|--------|
| ΦA | 148 | 203 | 248 | 300 |
| ΦB | 110 | 165 | 210 | 254 |
| ΦC | 20 | 25 | 36 | 50 |
| ΦD | - | 20 | 30 | 43 |
| E | 90 | 95 | 106 | 110 |
| F | 15 | 15 | 15 | 16 |
| G | 75.5 | 103 | 125.5 | 147.5 |
| H | 27 | 36 | 42 | 46 |
| J | 55 | 72 | 95 | 110 |
| K | 23 | 31 | 35 | 40 |
| N | M8 | M8 | M8 | M10 |
| ΦL(P.C.D) | 130 | 185 | 230 | 280 |
| P | - | 55 | 68 | 80 |
| Q | - | 58 | 68 | 80 |
| ΦR | 9 | 11 | 11 | 13 |
| T | M10 | M10 | M10 | M12 |

MCH Stationary Power Chuck



Application / Benefits

Ideal for machining centers

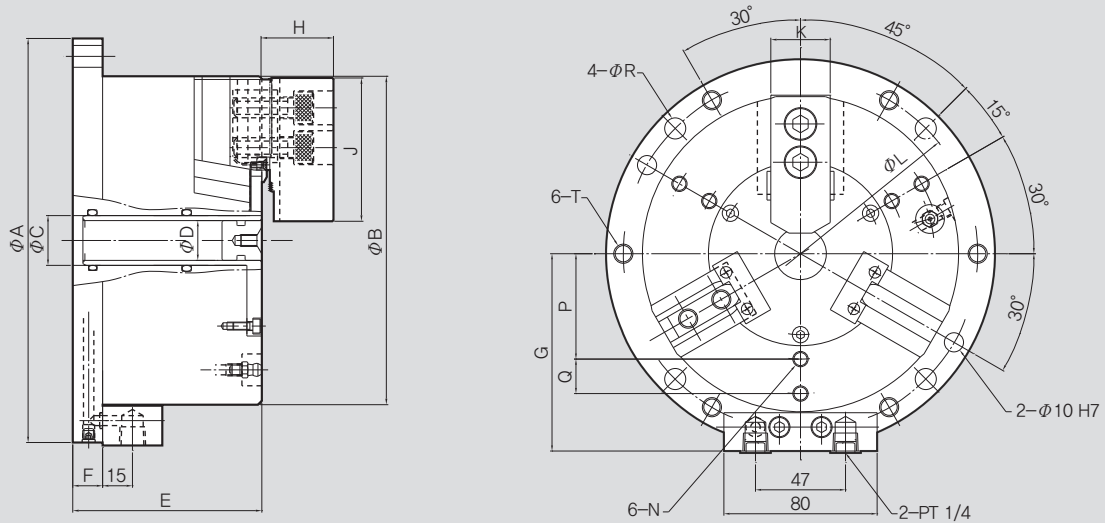
Technical features

Sealed against coolant and chips

Built-in hydraulic cylinder with compact design

SPECIFICATIONS

| | MCH-06 | MCH-08 | MCH-10 |
|---|--------|--------|--------|
| Clamping Force (25bar) [kN] | 55 | 85 | 125 |
| Jaw Stroke Dia. [mm] | 5.2 | 6.3 | 6.8 |
| Grip Dia. Max [mm] | 169 | 210 | 254 |
| Grip Dia. Min [mm] | 15 | 30 | 50 |
| Max. Pneumatic Pressure [MPa(kgf/cm ²)] | 18 | 18 | 15 |
| Weight [kg] | 18 | 30 | 44 |



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | MCH-06 | MCH-08 | MCH-10 |
|-------------|--------|--------|--------|
| ΦA | 210 | 255 | 300 |
| ΦB | 165 | 210 | 254 |
| ΦC | 25 | 36 | 50 |
| ΦD | 20 | 30 | 43 |
| E | 100 | 111 | 121 |
| F | 20 | 20 | 20 |
| G | 103 | 125.5 | 147.5 |
| H | 36 | 42 | 46 |
| J | 72 | 95 | 110 |
| K | 31 | 35 | 40 |
| N | M8 | M8 | M10 |
| ΦL (P.C.D.) | 185 | 235 | 280 |
| P | 55 | 68 | 80 |
| Q | 18 | 25 | 35 |
| ΦR | 11 | 11 | 13 |
| T | M10 | M10 | M12 |

HS Standard 3-Jaw High-Speed Open Center Chuck



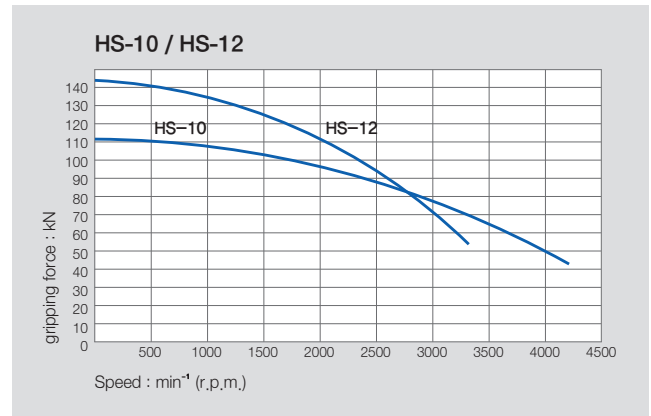
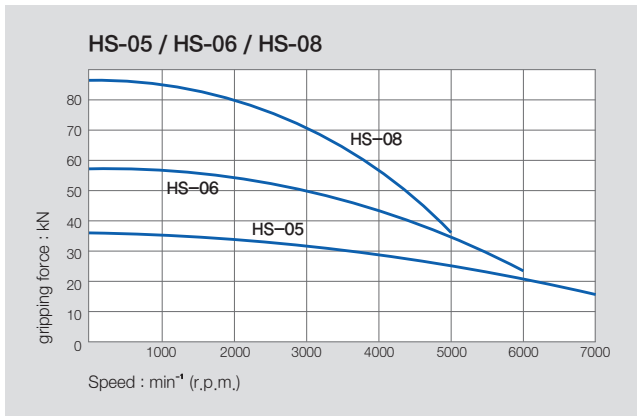
Application / Benefits

For work requiring a through hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

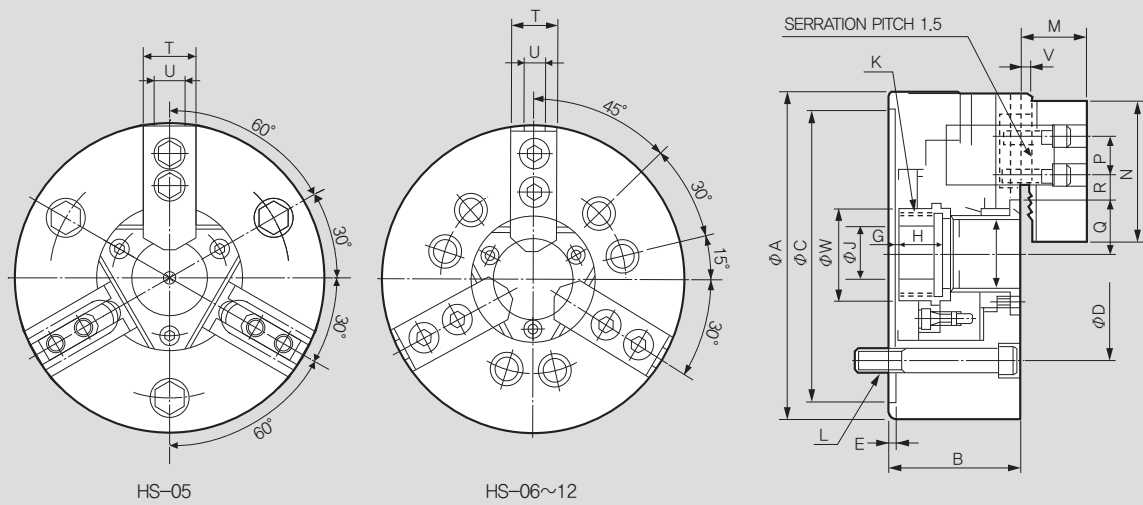


SPECIFICATIONS

| | HS-05 | HS-06 | HS-08 | HS-10 | HS-12 |
|---|------------|---------------------|---------------------|---------------------|------------|
| Thru Hole Dia. [mm] | 33 | 46 | 52 | 77 | 91 |
| Grip Dia. Max [mm] | 135 | 169 | 210 | 254 | 304 |
| Grip Dia. Min [mm] | 12 | 15 | 13 | 31 | 34 |
| Jaw Stroke Dia. [mm] | 5.4 | 5.5 | 7.4 | 8.8 | 10.6 |
| Plunger Stroke [mm] | 10 | 12 | 16 | 19 | 23 |
| Permissible Input Force [kN(kgf)] | 17.5(1784) | 22(2243) | 34.8(3549) | 43(4385) | 55(5608) |
| Max. Static Gripping Force [kN(kgf)] | 36(3671) | 57(5812) | 86(8769) | 111(11319) | 144(14686) |
| Max. r.p.m. [min ⁻¹] | 7000 | 6000 | 5000 | 4200 | 3300 |
| Weight [kg] | 6.7 | 11.9 | 22.3 | 34.5 | 55.3 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.016 | 0.052 | 0.145 | 0.305 | 0.707 |
| Operating Cylinder | SH-10036 | SH-13046 (SYH-1246) | SH-15052 (SYH-1552) | SH-18077 (SYH-1877) | SYH2091 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 2.9(30) | 2.8(28.6) | 2.65(27) | 2.7(27.5) | 2.7(27.5) |
| Operating Hard Jaw | HB04N1 | HB06A1 | HB08A1 | HB10A1 | HB12N1 |
| KITAGAWA® Model | B-205 | B-206 | B-208 | B-210 | B-212 |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



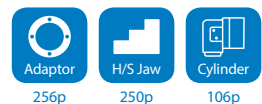
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HS-05 | HS-06 | HS-08 | HS-10 | HS-12 |
|--------------|----------|----------|-----------|-----------|-----------|
| ΦA | 135 | 169 | 210 | 254 | 304 |
| B | 60 | 81 | 91 | 100 | 110 |
| $\Phi C(H6)$ | 110 | 140 | 170 | 220 | 220 |
| ΦD | 82.6 | 104.8 | 133.4 | 171.4 | 171.4 |
| E | 4 | 5 | 5 | 5 | 6 |
| ΦF | 33 | 46 | 52 | 77 | 91 |
| G max. | 1 | 11 | 14.5 | 8.5 | 8 |
| G min. | -9 | -1 | -1.5 | -10.5 | -15 |
| H | 20 | 19 | 20.5 | 25 | 28 |
| ΦJ | 12 | 20 | 30 | 45 | 50 |
| K max. | M42x1.5 | M55x2.0 | M60x2.0 | M85x2.0 | M100x2.0 |
| L | 3-M10x60 | 6-M10x95 | 6-M12x105 | 6-M16x120 | 6-M16x130 |
| M | 26 | 29 | 39 | 43 | 50.5 |
| N | 54 | 72 | 95 | 110 | 111 |
| P | 14 | 20 | 25 | 30 | 30 |
| Q max. | 26.5 | 32 | 38.7 | 51 | 61.3 |
| Q min. | 23.8 | 29.25 | 35 | 46.6 | 56 |
| R max. | 19.75 | 22.75 | 29.75 | 33.75 | 45.75 |
| R min. | 7.75 | 9.25 | 14.75 | 14.25 | 15.75 |
| T | 23 | 31 | 35 | 40 | 49 |
| U | 10 | 12 | 14 | 16 | 21 |
| V | 2 | 2 | 2 | 2 | 2 |
| ΦW | 45 | 60 | 66 | 94 | 108 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



HS-A 3-Jaw High-Speed Open Center Chuck with Adaptor (135mm - 210mm)



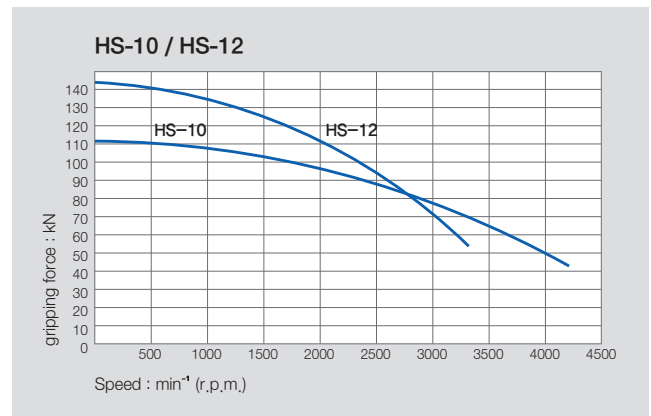
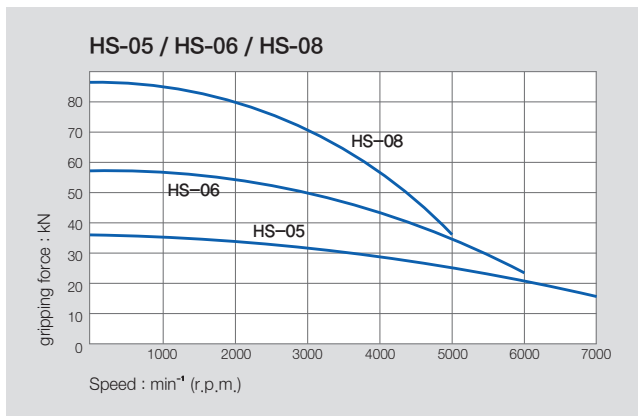
Application / Benefits

For work requiring a through hole

Technical features

Wedge hook style chuck with high gripping force

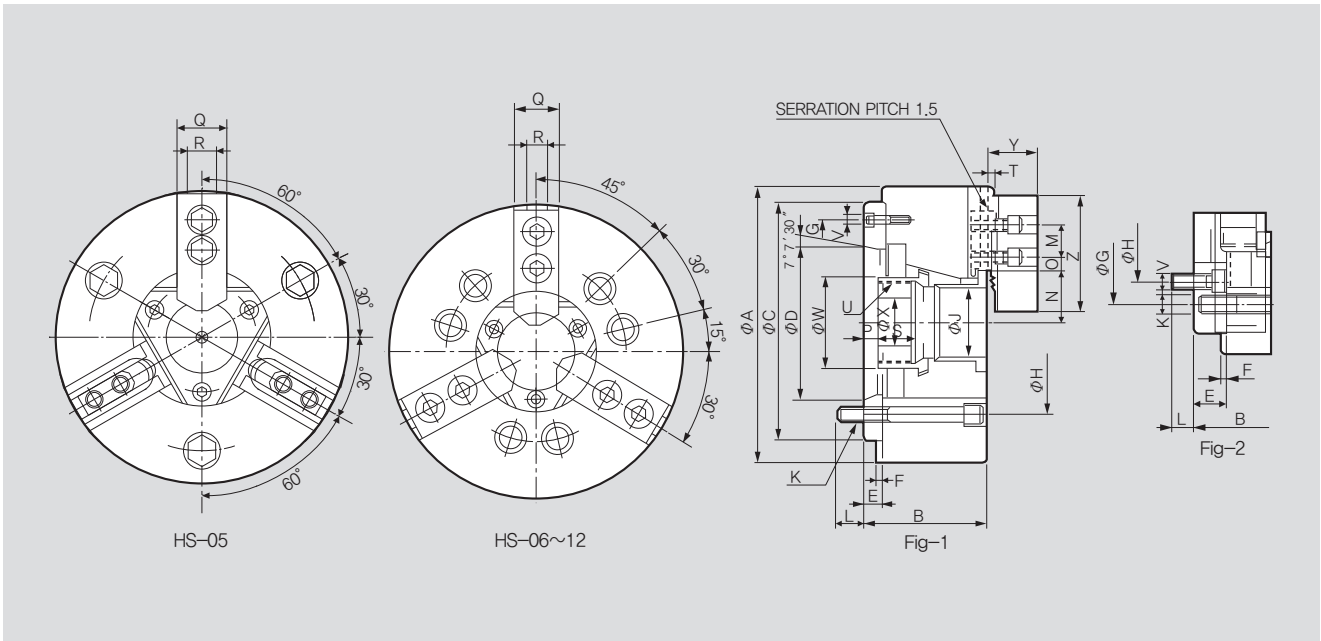
ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | HS-05A05 | HS-06A05 | HS-08A06 |
|---|-------------|---------------------|---------------------|
| Spindle Nose | A2-5 | A2-5 | A2-6 |
| Thru Hole Dia. [mm] | 33 | 46 | 52 |
| Grip Dia. Max [mm] | 135 | 169 | 210 |
| Grip Dia. Min [mm] | 12 | 15 | 13 |
| Jaw Stroke Dia. [mm] | 5.4 | 5.5 | 7.4 |
| Plunger Stroke [mm] | 10 | 12 | 16 |
| Max. Permissible Input Force [kN(kgf)] | 17.5(1784) | 22(2243) | 34.8(3549) |
| Max. Static Gripping Force [kN(kgf)] | 36(3671) | 57(5812) | 86(8769) |
| Max. r.p.m. [min ⁻¹] | 7000 | 6000 | 5000 |
| Weight [kg] | 7.5 | 13.7 | 23.6 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.687(0.07) | 2.45(0.250) | 6.9(0.71) |
| Operating Cylinder | SYH-1036 | SH-13046 (SYH-1246) | SH-15052 (SYH-1552) |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 3.43(35.0) | 2.8(28.6) | 2.65(27) |
| Operating Hard Jaw | HB04N1 | HB06A1 | HB08A1 |
| KITAGAWA® Model | B-205 | B-206A5 | B-208A6 |

- ※ Specifications are subject to change without notice.
- ※ HS-10A06 and HS-10A08 are available with 75mm and 77mm thru holes.
- ※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



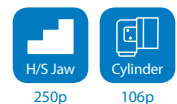
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HS-05A05 | HS-06A05 | HS-08A06 |
|--------|----------|----------|-----------|
| ΦA | 135 | 169 | 210 |
| B | 72 | 91 | 103 |
| ΦC(H6) | 110 | 140 | 170 |
| ΦD | 82.56 | 82.563 | 106.375 |
| E | 16 | 15 | 17 |
| F | 4 | 5 | 5 |
| ΦG | 104.8 | 104.8 | 133.4 |
| ΦH | 104.8 | 104.8 | 133.4 |
| ΦJ | 33 | 46 | 52 |
| K | 3-M10x75 | 6-M10x95 | 6-M12x105 |
| L | 14 | 16 | 18 |
| M | 14 | 20 | 25 |
| N max. | 26.5 | 32 | 38.7 |
| N min. | 23.8 | 29.25 | 35 |
| O max. | 19.75 | 22.75 | 29.75 |
| O min. | 7.75 | 9.25 | 14.75 |
| P max. | 17 | 26 | 31.5 |
| P min. | 7 | 14 | 15.5 |
| Q | 23 | 31 | 35 |
| R | 10 | 12 | 14 |
| S | 20 | 19 | 20.5 |
| T | 2 | 2 | 2 |
| U max. | M40x1.5 | M55x2 | M60x2 |
| V | 3xM6 | 3xM6 | 6xM6 |
| ΦW | 47 | 60 | 66 |
| ΦX | - | 20 | 30 |
| Y | 26 | 29 | 39 |
| Z | 54 | 72 | 95 |

※ Blank and machined draw-nuts are available.
※ Refer to Fig-2 for HS-10A06, HS-12A06.

RELATED PRODUCT



HS-A 3-Jaw High-Speed Open Center Chuck with Adaptor (254mm - 304mm)



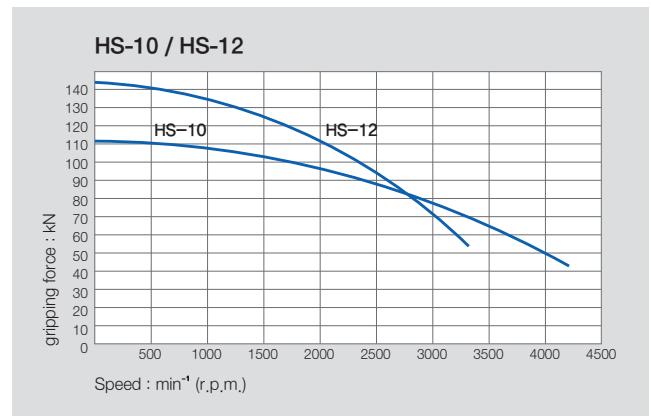
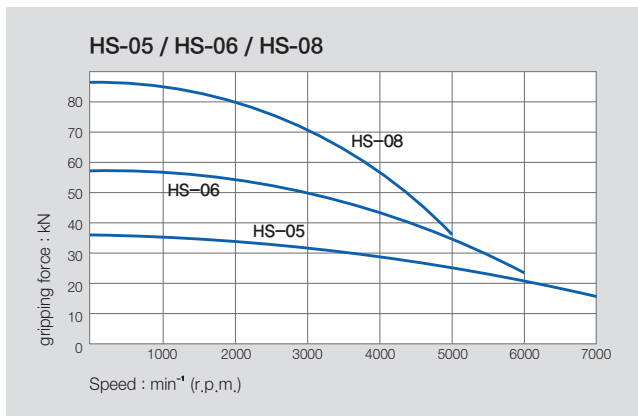
Application / Benefits

For work requiring a through hole

Technical features

Wedge hook style chuck with high gripping force

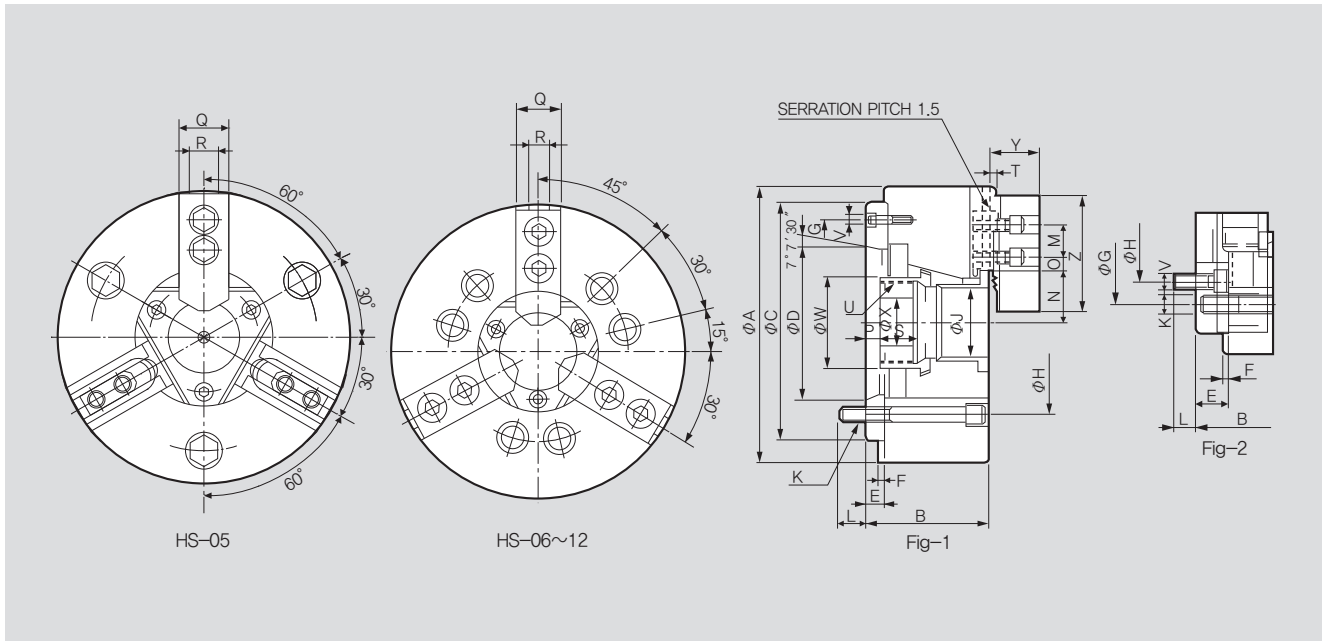
ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | HS-10A06 | HS-10A08 | HS-12A06 | HS-12A08 |
|--|---------------------|----------------------|------------|------------|
| Spindle Nose | A2-6 | A2-8 | A2-6 | A2-8 |
| Thru Hole Dia. [mm] | 77 | 77 | 91 | 91 |
| Grip Dia. Max [mm] | 254 | 254 | 304 | 304 |
| Grip Dia. Min [mm] | 31 | 34 | 42 | 50 |
| Jaw Stroke Dia. [mm] | 8.8 | 8.8 | 10.6 | 10.6 |
| Plunger Stroke [mm] | 19 | 19 | 23 | 23 |
| Max. Permissible Input Force [kN(kgf)] | 43(4385) | 43(4385) | 55(5608) | 55(5608) |
| Max. Static Gripping Force [kN(kgf)] | 111(11319) | 111(11319) | 144(14684) | 144(14684) |
| Max. r.p.m. [min⁻¹] | 4200 | 4200 | 3300 | 3300 |
| Weight [kg] | 41.5 | 40 | 67 | 64 |
| Moment of inertia [N · m²(kg · m²)] | 12.75(1.3) | 12.65(1.29) | 30.6(3.12) | 30.0(3.06) |
| Operating Cylinder | SH-18077 (SYH-1877) | SYH-18077 (SYH-1877) | SYH-2091 | SYH-2091 |
| Max. Hydraulic Pressure [MPa(kgf/cm²)] | 2.7(27.5) | 2.7(27.5) | 2.7(27.5) | 2.7(27.5) |
| Operating Hard Jaw | HB10A1 | HB10A1 | HB12N1 | HB12N1 |
| KITAGAWA® Model | B-210A6 | B-210A8 | B-212A6 | B-212A8 |

- ※ Specifications are subject to change without notice.
- ※ HS-10A06 and HS-10A08 are available with 75mm and 77mm thru holes.
- ※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



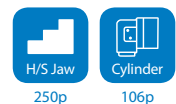
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HS-10A06 | HS-10A08 | HS-12A06 | HS-12A08 |
|--------------|-----------|-----------|-----------|-----------|
| ΦA | 254 | 254 | 304 | 304 |
| B | 120 | 113 | 129 | 122 |
| $\Phi C(H6)$ | 220 | 220 | 220 | 220 |
| ΦD | 106.375 | 139.719 | 106.375 | 139.719 |
| E | 25 | 18 | 25 | 18 |
| F | 5 | 5 | 6 | 6 |
| ΦG | 133.4 | 171.4 | 133.4 | 190 |
| ΦH | 171.4 | 171.4 | 171.4 | 171.4 |
| ΦJ | 77 | 77 | 91 | 91 |
| K | 6-M16x100 | 6-M16x120 | 6-M16x110 | 6-M16x130 |
| L | 18.5 | 24 | 18.5 | 25 |
| M | 30 | 30 | 30 | 30 |
| N max. | 51 | 51 | 61.3 | 61.3 |
| N min. | 46.6 | 46.6 | 56 | 56 |
| O max. | 33.75 | 33.75 | 45.75 | 45.75 |
| O min. | 14.25 | 14.25 | 15.75 | 15.75 |
| P max. | 33.5 | 26.5 | 33 | 26 |
| P min. | 14.5 | 7.5 | 10 | 3 |
| Q | 40 | 40 | 49 | 49 |
| R | 16 | 16 | 21 | 21 |
| S | 25 | 25 | 28 | 28 |
| T | 2 | 2 | 2 | 2 |
| U max. | M75x2 | M85x2 | M90x2 | M100x2 |
| V | 6xM12 | 6xM8 | 6xM12 | 6xM8 |
| ΦW | 94 | 94 | 108 | 108 |
| ΦX | 45 | 45 | 50 | 50 |
| Y | 43 | 43 | 50.5 | 50.5 |
| Z | 110 | 110 | 111 | 111 |

※ Blank and machined draw-nuts are available.
※ Refer to Fig-2 for HS-10A06, HS-12A06.

RELATED PRODUCT



HST / HSF 2-Jaw, 4-Jaw High-Speed Open Center Chuck



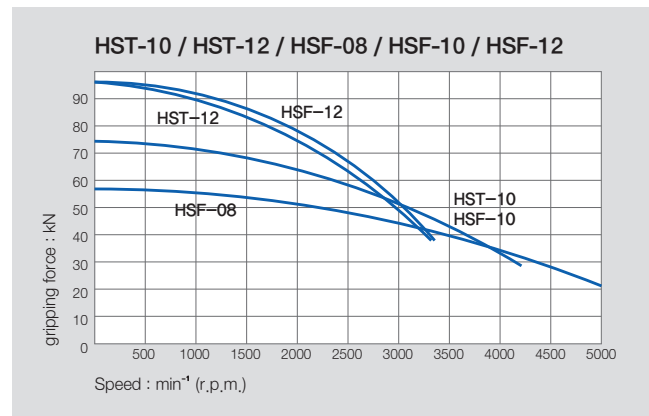
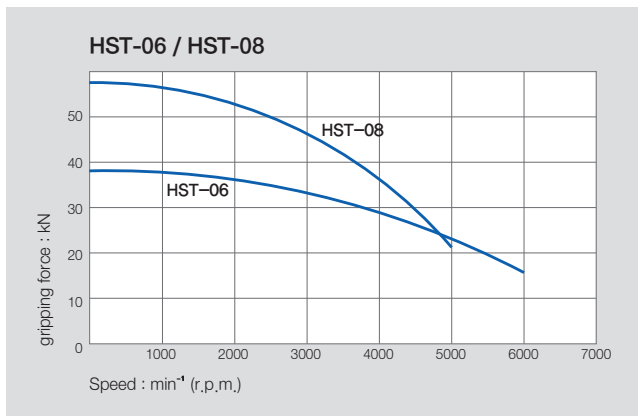
Application / Benefits

For square or rectangular parts requiring a through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

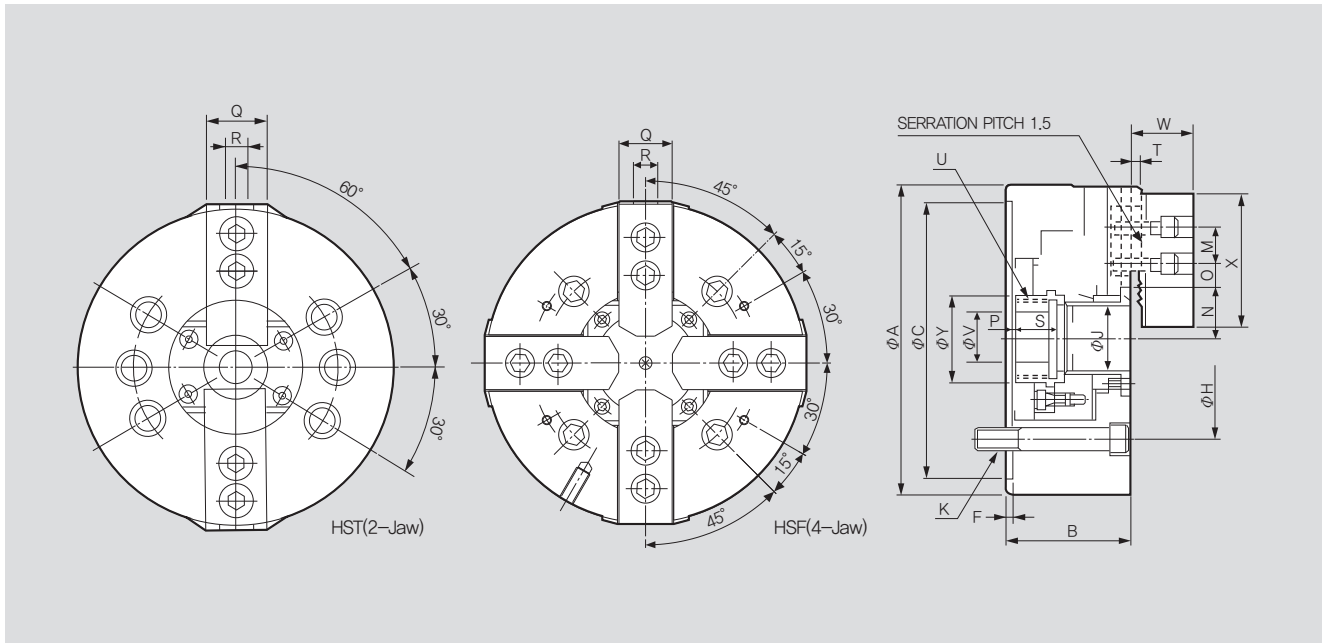


SPECIFICATIONS

| | HST-06 | HST-08 | HST-10 | HST-12 | HSF-08 | HSF-10 | HSF-12 |
|---|------------------------|------------------------|------------------------|-------------|------------------------|------------------------|-------------|
| Thru Hole Dia. [mm] | 46 | 52 | 77 | 91 | 52 | 77 | 91 |
| Grip Dia. Max [mm] | 169 | 210 | 254 | 304 | 210 | 254 | 304 |
| Grip Dia. Min [mm] | 15 | 13 | 31 | 34 | 13 | 31 | 34 |
| Jaw Stroke Dia. [mm] | 5.5 | 7.4 | 8.8 | 10.6 | 7.4 | 8.8 | 10.6 |
| Plunger Stroke [mm] | 12 | 16 | 19 | 23 | 16 | 19 | 23 |
| Max. Permissible Input Force [kN(kgf)] | 14.5 (1479) | 23.2 (2366) | 28.5 (2906) | 36.7 (3742) | 23.2 (2366) | 28.5 (2906) | 36.7 (3742) |
| Max. Static Gripping Force [kN(kgf)] | 38 (3875) | 57.3 (5843) | 74 (7546) | 96 (9789) | 57.3 (5843) | 74 (7546) | 96 (9789) |
| Max. r.p.m. [min ⁻¹] | 6000 | 5000 | 4200 | 3300 | 5000 | 4200 | 3300 |
| Weight [kg] | 11.5 | 21.3 | 33.5 | 52 | 22.5 | 34.5 | 52 |
| Moment of inertia [N · m ² (kg · m ²)] | 2.21 (0.225) | 6.47 (0.66) | 12.06 (1.23) | 27.46 (2.8) | 6.67 (0.68) | 12.08 (1.24) | 27.42 (2.8) |
| Operating Cylinder | SH-13046 (SYH-1246) | SH-15052 (SYH-1552) | SH-18077 (SYH-1877) | SYH-2091 | SH-15052 (SYH-1552) | SH-18077 (SYH-1877) | SYH-2091 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 1.85 (18.9) | 1.80 (18.4) | 1.80 (18.4) | 1.81 (18.5) | 1.80 (18.4) | 1.80 (18.4) | 1.80 (28.5) |
| KITAGAWA® Model | BT-206 | BT-208 | BT-210 | BT-212 | - | - | - |

※ Maximum turning speed is based upon actual measurement.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HST-06 | HST-08 | HST-10 | HST-12 | HSF-08 | HSF-10 | HSF-12 |
|---------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| $\varnothing A$ | 169 | 210 | 254 | 304 | 210 | 254 | 304 |
| B | 81 | 91 | 100 | 110 | 91 | 100 | 110 |
| $\varnothing C(H6)$ | 140 | 170 | 220 | 220 | 170 | 220 | 220 |
| F | 5 | 5 | 5 | 6 | 5 | 5 | 5 |
| $\varnothing H$ | 104.8 | 133.4 | 171.4 | 171.4 | 133.4 | 171.4 | 171.4 |
| $\varnothing J$ | 46 | 52 | 77 | 91 | 52 | 77 | 91 |
| K | 6-M10x95 | 6-M12x105 | 6-M16x100 | 6-M16x110 | 4-M10x105 | 4-M12x120 | 4-M16x130 |
| M | 20 | 25 | 30 | 30 | 25 | 30 | 30 |
| N max. | 32 | 38.7 | 51 | 61.3 | 38.7 | 51 | 61.3 |
| N min. | 29.25 | 35 | 46.6 | 56 | 35 | 46.6 | 56 |
| O max. | 22.75 | 30 | 34 | 45.75 | 29.75 | 33.75 | 45.75 |
| O min. | 9.25 | 15 | 14.5 | 15.75 | 14.75 | 14.25 | 15.75 |
| P min | -1 | -1.5 | -10.5 | -15 | -1.5 | -11 | -15 |
| P max | 11 | 14.5 | 8.5 | 8 | 14.5 | 8.5 | 8 |
| Q | 31 | 35 | 40 | 49 | 35 | 40 | 49 |
| R | 12 | 14 | 16 | 21 | 14 | 16 | 21 |
| S | 19 | 20.5 | 25 | 28 | 20.5 | 25 | 28 |
| Y | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| U max. | M55x2.0 | M60x2.0 | M85x2.0 | M100x2.0 | M60x2.0 | M85x2.0 | M100x2.0 |
| $\varnothing V$ | 20 | 30 | 45 | 50 | 30 | 45 | 50 |
| W | 29 | 39 | 43 | 50.5 | 39 | 43 | 50.5 |
| X | 66 | 95 | 110 | 111 | 95 | 110 | 111 |
| $\varnothing Y$ | 60 | 66 | 94 | 108 | 66 | 94 | 108 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



HSL 3-Jaw High-Speed Open Center Long-Stroke Chuck



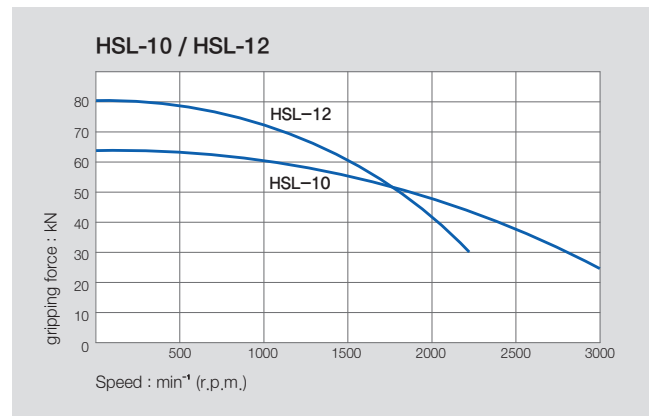
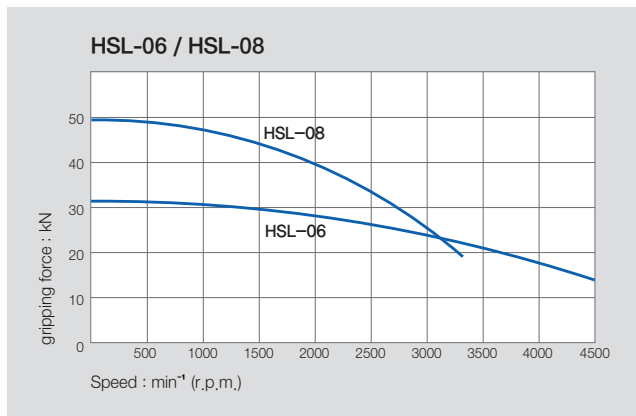
Application / Benefits

For work requiring longer stroke and through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | HSL-06 | HSL-08 | HSL-10 | HSL-12 |
|---|---------------------|---------------------|---------------------|------------|
| Thru Hole Dia. [mm] | 33 | 46 | 53 | 63 |
| Grip Dia. Max [mm] | 169 | 215 | 254 | 304 |
| Grip Dia. Min [mm] | 28 | 32 | 42 | 43 |
| Jaw Stroke Dia. [mm] | 20.2 | 25.4 | 30 | 36 |
| Plunger Stroke [mm] | 15 | 22 | 25 | 30 |
| Max. Permissible Input Force [kN(kgf)] | 27.9(2845) | 41.1(4191) | 53.8(5486) | 69.3(7067) |
| Max. Static Gripping Force [kN(kgf)] | 31.2(3182) | 49.0(4997) | 63.0(6427) | 80.4(8199) |
| Max. r.p.m. [min ⁻¹] | 4500 | 3300 | 3000 | 2200 |
| Weight [kg] | 14 | 25 | 45 | 78 |
| Moment of inertia [N · m ² (kg · m ²)] | 1.67(0.17) | 7.75(0.79) | 12(1.2) | 36(3.67) |
| Operating Cylinder | SH-13046 (SYH-1246) | SH-15052 (SYS-1552) | SH-18077 (SYH-1877) | SYH-2091 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 3.40(34.7) | 2.99(30.5) | 3.20(32.6) | 3.22(32.8) |
| Operating Hard Jaw | HB06A1 | HB08A1 | HB10A1 | HB12N1 |
| KITAGAWA® Model | BL-206 | BL-208 | BL-210 | BL-212 |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.

MH Mega Bore 3-Jaw High-Speed Open Center Chuck



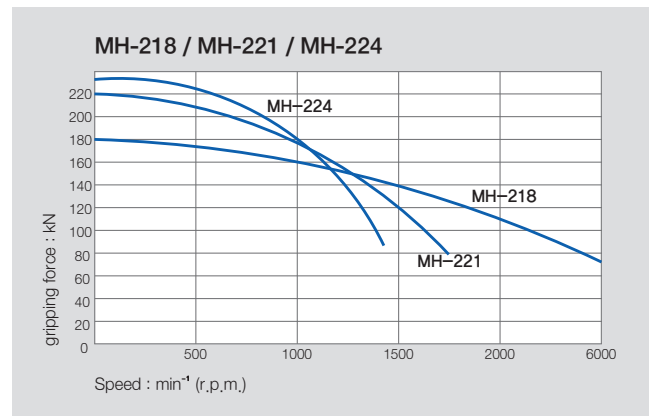
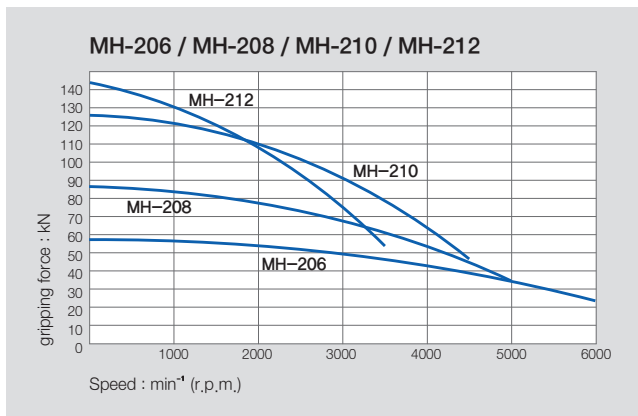
Application / Benefits

For work requiring a large through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

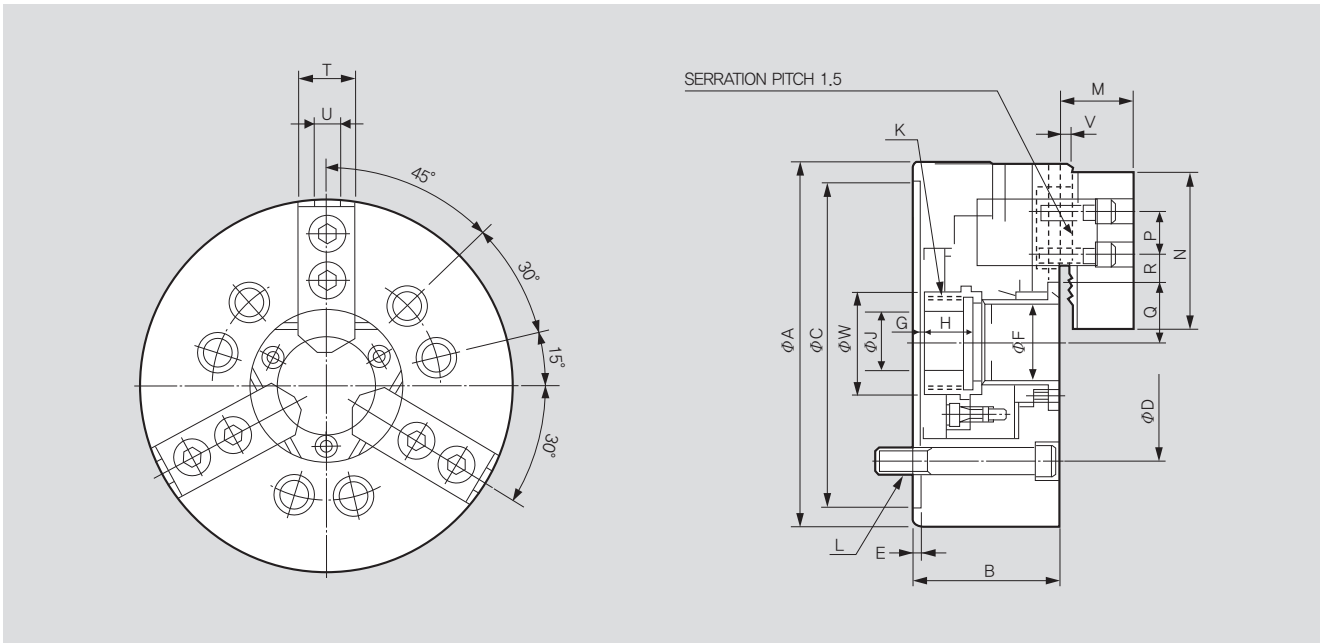


SPECIFICATIONS

| | MH-206 | MH-208 | MH-210 | MH-212 | MH-218 | MH-221 | MH-224 |
|---|------------------------|------------------------|--------------|-------------|-------------|-------------|------------|
| Thru Hole Dia. [mm] | 52 | 66 | 82 | 103 | 166.5 | 166.5 | 190 |
| Grip Dia. Max [mm] | 175 | 210 | 254 | 315 | 457 | 530 | 610 |
| Grip Dia. Min. [mm] | 16.5 | 23 | 30 | 54 | 73 | 105 | 120 |
| Jaw Stroke Dia. [mm] | 6.4 | 7.4 | 8.8 | 10.6 | 11.5 | 10.6 | 10.6 |
| Plunger Stroke [mm] | 15 | 17.5 | 19 | 23 | 25 | 23 | 23 |
| Max. Permissible Input Force [kN(kgf)] | 24.7(2551) | 36.4(3596) | 49(4976) | 55(5608) | 71(7240) | 90(9177) | 90(9177) |
| Max. Static Gripping Force [kN(kgf)] | 57.3(5847) | 87(8872) | 126.6(12848) | 144(14686) | 180(18355) | 220(22460) | 234(23861) |
| Max. r.p.m. [min ⁻¹] | 6000 | 5000 | 4500 | 3000 | 2000 | 1700 | 1400 |
| Weight [kg] | 11.9 | 23 | 32 | 55.3 | 170 | 228 | 293 |
| Moment of inertia [N · m ² (kg · m ²)] | 2.26(0.23) | 5.6(0.57) | 12.37(1.26) | 28.93(2.95) | 174.6(17.8) | 342.1(34.7) | 651(66.4) |
| Operating Cylinder | SH-15052 (SYH-1552) | SH-17068 (SYH-1768) | SH-19082 | SH-21010 | SYHL-2816 | SYHL-2816 | SHL-39024 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 1.78(18.1) | 2.34(23.9) | 2.74(28) | 2.65(27.2) | 3.07(32) | 2.86(29.1) | 1.57(16.1) |
| Operating Hard Jaw | HB06A1 | HB08A1 | HB10A1 | HB12N1 | HB15A1 | HB18B2 | HB18B2 |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



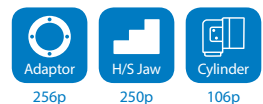
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | MH-206 | MH-208 | MH-210 | MH-212 | MH-218 | MH-221 | MH-224 |
|--------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ΦA | 175 | 210 | 254 | 315 | 457 | 530 | 610 |
| B | 81 | 91 | 100 | 110 | 135 | 140 | 149 |
| $\Phi C(H6)$ | 140 | 170 | 220 | 300 | 380 | 380 | 380 |
| ΦD | 104.8 | 133.4 | 171.4 | 235 | 300.2 | 330.2 | 330.2 |
| E | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| ΦF | 52 | 66 | 82 | 103 | 166.5 | 166.5 | 190 |
| G max. | 14 | 7.5 | 8.5 | 8 | 8 | 11 | 20 |
| G min. | -1 | -10 | -10.5 | -15 | -23 | -12 | -3 |
| H | 17.5 | 27 | 25 | 28 | 50 | 39 | 40.5 |
| ΦJ | 20 | 30 | 52 | 82.5 | 107 | 80 | 80 |
| K max. | M60x2.0 | M75x2.0 | M90x2.0 | M116x2.0 | M175x3.0 | M180x3.0 | M200x3.0 |
| L | 3-M10x95 | 6-M12x115 | 6-M16x120 | 6-M20x130 | 6-M20x130 | 6-M22x140 | 6-M22x150 |
| M | 33 | 39 | 43 | 51 | 69 | 73 | 73 |
| N | 72 | 95 | 110 | 111 | 165 | 180 | 180 |
| P | 20 | 25 | 30 | 30 | 50 | 60 | 60 |
| Q max. | 38 | 45.7 | 54.5 | 67.3 | 102 | 111.75 | 119.5 |
| Q min. | 34.8 | 42 | 50.1 | 62 | 96.25 | 106.5 | 114.2 |
| R max. | 21.75 | 23.75 | 32.25 | 45.75 | 58.25 | 72.5 | 105.5 |
| R min. | 10.25 | 11.75 | 14.25 | 15.75 | 20.25 | 21.5 | 21.5 |
| T | 31 | 35 | 40 | 49 | 69 | 65 | 65 |
| U | 12 | 14 | 16 | 21 | 22 | 25 | 25 |
| V | 2 | 2 | 2 | 2 | 5 | 5 | 5 |
| ΦW | 65 | 80 | 101 | 124 | 186 | 197 | 210 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



MHT / MHF Mega Bore 2-Jaw / 4-Jaw high-Speed Open Center Chuck



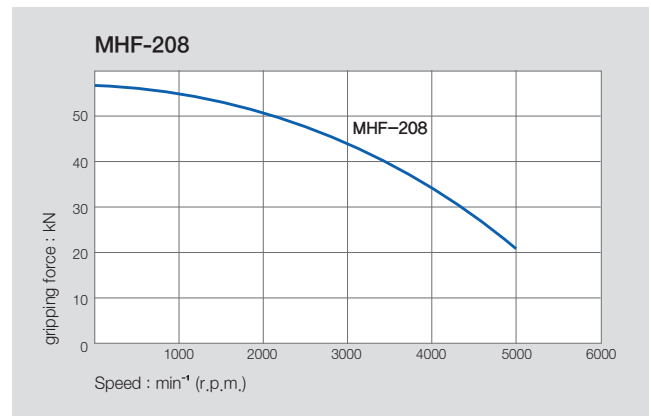
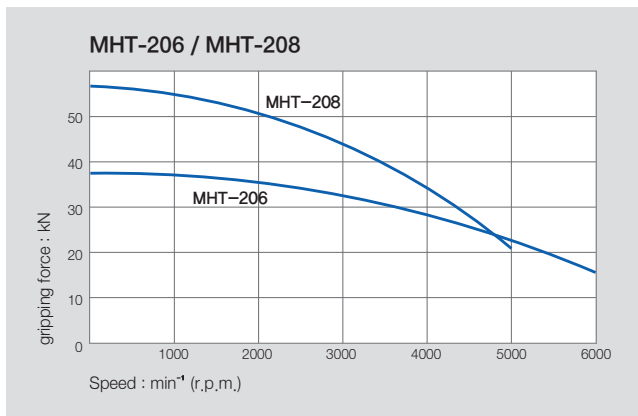
Application / Benefits

For rectangular or square work requiring a large through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

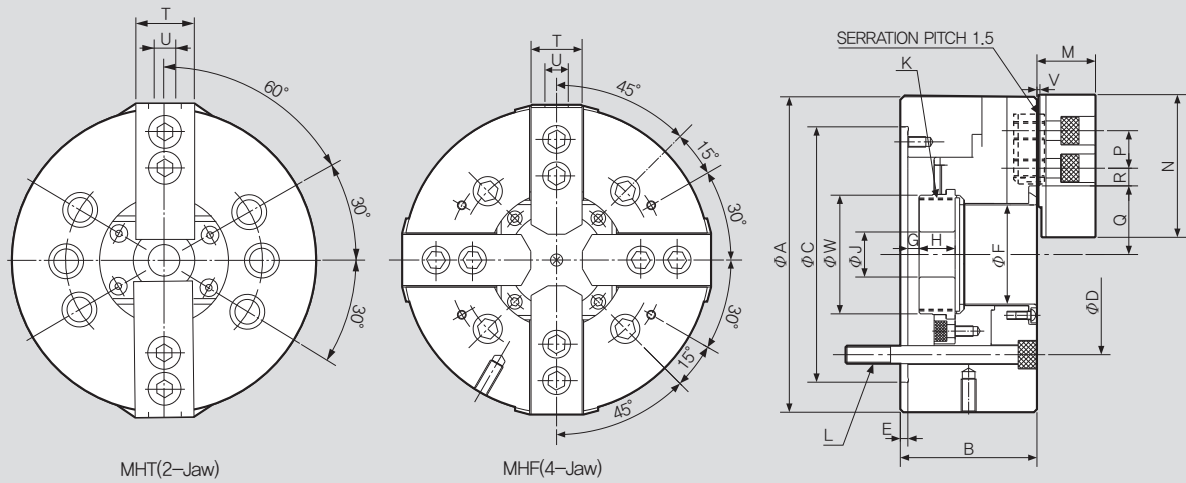


SPECIFICATIONS

| | MHT-206 | MHT-208 | MHF-208 |
|---|----------------------|---------------------|---------------------|
| Thru Hole Dia. [mm] | 52 | 66 | 66 |
| Grip Dia. Max [mm] | 175 | 210 | 210 |
| Grip Dia. Min [mm] | 16.5 | 23 | 23 |
| Jaw Stroke Dia. [mm] | 6.4 | 7.4 | 7.4 |
| Plunger Stroke [mm] | 15 | 17.5 | 17.5 |
| Max. Permissible Input Force [kN(kgf)] | 16.6(1700) | 23.5(2397) | 23.25(2397) |
| Max. Static Gripping Force [kN(kgf)] | 38(3875) | 57.9(5914) | 57.9(5914) |
| Max. r.p.m. [min ⁻¹] | 6000 | 5000 | 5000 |
| Weight [kg] | 11.5 | 21.7 | 23.5 |
| Moment of inertia [N · m ² (kg · m ²)] | 2.2(0.225) | 6.47(0.66) | 5.59(0.57) |
| Operating Cylinder | SYH-15052 (SYH-1552) | SH-17068 (SYH-1768) | SH-17068 (SYH-1768) |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 1.18(12) | 1.59(16.3) | 1.59(163.3) |
| Operating Hard Jaw | HB06A1 | HB06A1 | HBF08A1 |
| KITAGAWA® Model | - | - | - |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



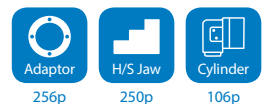
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | MHT-206 | MHT-208 | MHF-208 |
|--------------|-----------|-----------|-----------|
| ΦA | 175 | 210 | 210 |
| B | 81 | 91 | 91 |
| $\Phi C(H6)$ | 140 | 170 | 170 |
| ΦD | 104.8 | 133.4 | 133.4 |
| E | 5 | 5 | 5 |
| ΦF | 52 | 66 | 66 |
| G max. | 14 | 7.5 | 7.5 |
| G min. | -1 | -10 | -10 |
| H | 17.5 | 27 | 27 |
| ΦJ | 20 | 30 | 30 |
| K max. | M60x2.0 | M75x2.0 | M75x2.0 |
| L | 6-M10x 95 | 6-M12x115 | 4-M12x115 |
| M | 32.5 | 39 | 39 |
| N | 72 | 95 | 95 |
| P | 20 | 25 | 25 |
| Q max. | 38 | 45.7 | 45.7 |
| Q min. | 34.8 | 42 | 42 |
| R max. | 21.75 | 23.75 | 23.75 |
| R min. | 10.25 | 11.75 | 11.75 |
| T | 31 | 35 | 35 |
| U | 12 | 14 | 14 |
| V | 2 | 2 | 2 |
| ΦW | 65 | 80 | 80 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



HCH 3-Jaw Open Center Chuck (110mm - 450mm)



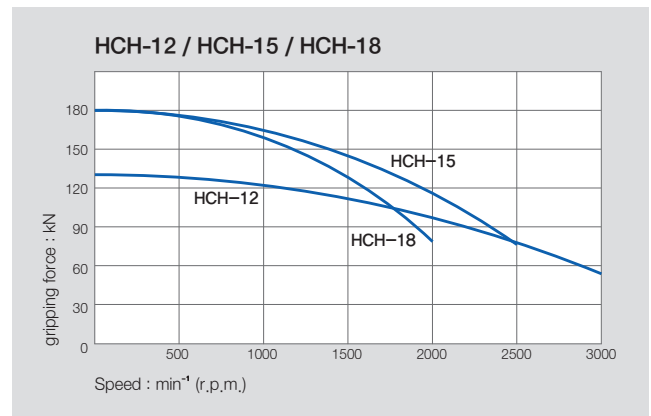
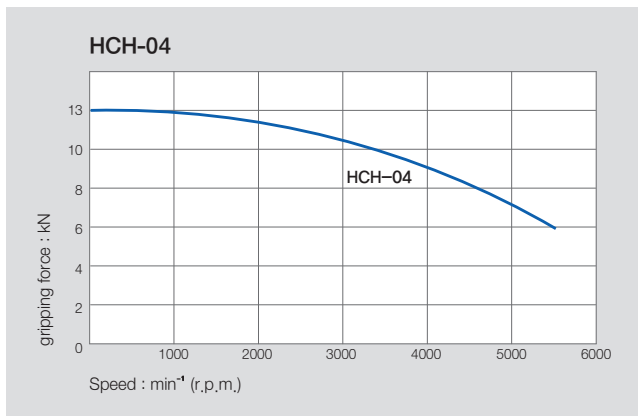
Application / Benefits

For work requiring a through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



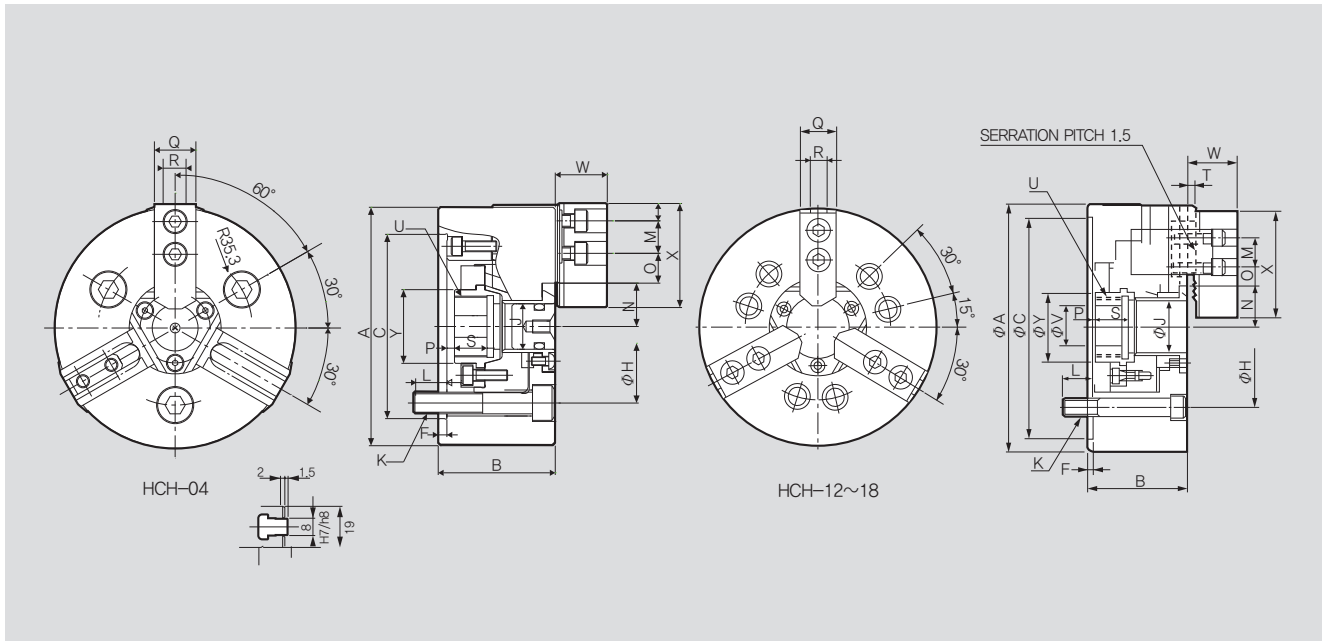
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

| | HCH-04 | HCH-12 | HCH-15 | HCH-18 |
|---|------------|-------------|-------------|-------------|
| Thru Hole Dia. [mm] | 21 | 78 | 117.5 | 117.5 |
| Grip Dia. Max [mm] | 110 | 304 | 381 | 450 |
| Grip Dia. Min [mm] | 5 | 19 | 30 | 30 |
| Jaw Stroke Dia. [mm] | 4.2 | 10.6 | 10.6 | 10.6 |
| Plunger Stroke [mm] | 6.5 | 23 | 23 | 23 |
| Max. Permissible Input Force [kN(kgf)] | 8(800) | 49(4997) | 71(7240) | 71(7240) |
| Max. Static Gripping Force [kN(kgf)] | 13(1350) | 129(13150) | 180(18355) | 180(18355) |
| Max. r.p.m. [min ⁻¹] | 5500 | 3000 | 2500 | 2000 |
| Weight [kg] | 3.7 | 63 | 120 | 164 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.2(0.024) | 29.71(3.03) | 89.41(9.09) | 174.6(17.8) |
| Operating Cylinder | HYH-0933 | SH-19082 | SH-25011 | SH-25011 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 2.2(22.4) | 2.3(23.5) | 2.3(23.5) | 2.3(23.5) |
| Operating Hard Jaw | HB04A1 | HB12B1 | HB15A1 | HB15A1 |
| KITAGAWA® Model | B-04 | B-12 | B-15 | B-18 |

※ Specifications are subject to change without notice.

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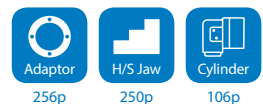
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HCH-04 | HCH-12 | HCH-15 | HCH-18 |
|--------------|---------|---------|----------|----------|
| ΦA | 110 | 304 | 381 | 450 |
| B | 54 | 110 | 133 | 133 |
| $\Phi C(H6)$ | 85 | 220 | 300 | 380 |
| F | 4 | 6 | 6 | 6 |
| H | 70.6 | 171.4 | 235 | 235 |
| ΦJ | 21 | 78 | 117.5 | 117.5 |
| K | 3-M10 | 6-M16 | 6-M20 | 6-M20 |
| L | 15.5 | 23 | 50 | 30 |
| M | 15 | 30 | 43 | 43 |
| N max. | 20 | 58 | 82 | 82 |
| N min. | 17.9 | 52.7 | 76.7 | 76.7 |
| O max. | 14.25 | 48.75 | 43.75 | 78.25 |
| O min. | 6.75 | 12.75 | 18.25 | 18.25 |
| P max. | 3.5 | 8 | 11 | 11 |
| P min. | -3 | -15 | -12 | -12 |
| Q | 19 | 49 | 62 | 62 |
| R | 8 | 18 | 22 | 22 |
| S | 15 | 38 | 39 | 39 |
| T | 2 | 5 | 5 | 5 |
| U max. | M28x1.5 | M88x2.0 | M130x2.0 | M130x2.0 |
| ΦV | 10 | 50 | 60 | 60 |
| W | 24 | 54 | 70 | 70 |
| X | 48 | 129 | 165 | 165 |
| ΦY | 34 | 96 | 139 | 139 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



HCH 3-Jaw Open Center Chuck (530mm-800mm)



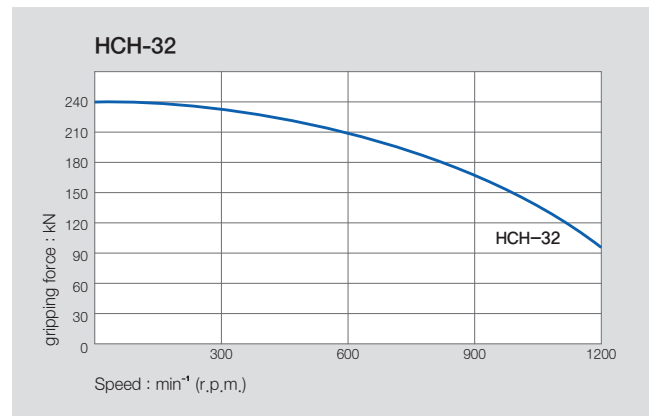
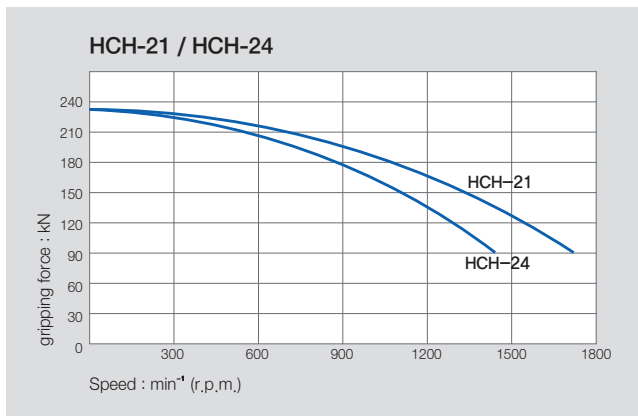
Application / Benefits

For work requiring a through-hole
Large diameter chucks offered for large work

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



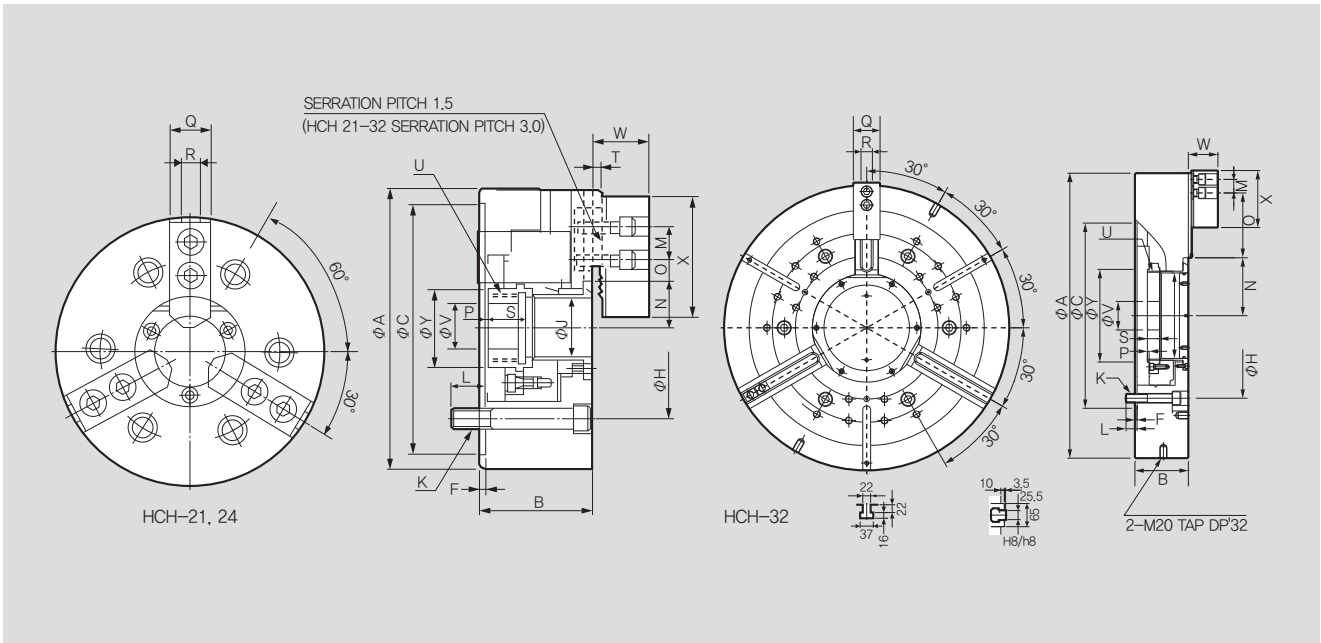
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

| | HCH-21 | HCH-24 | HCH-32 |
|---|-------------|-------------|------------|
| Thru Hole Dia. [mm] | 140 | 165 | 240 |
| Grip Dia. Max [mm] | 530 | 610 | 800 |
| Grip Dia. Min [mm] | 87 | 110 | 240 |
| Jaw Stroke Dia. [mm] | 10.6 | 10.6 | 18 |
| Plunger Stroke [mm] | 23 | 23 | 34 |
| Max. Permissible Input Force [kN(kgf)] | 90(9177) | 90(9177) | 100(10193) |
| Max. Static Gripping Force [kN(kgf)] | 234(23861) | 234(23861) | 240(24464) |
| Max. r.p.m. [min ⁻¹] | 1700 | 1400 | 1200 |
| Weight [kg] | 235 | 293 | 530 |
| Moment of inertia [N · m ² (kg · m ²)] | 351.1(35.8) | 651.2(66.4) | 598.4(61) |
| Operating Cylinder | SH-25011 | SYHL-2816 | SYHL-2816 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 3.0(30.6) | 3.0(30.6) | 3.2(33.6) |
| Operating Hard Jaw | HB18B2 | HB18B2 | HB32B2 |
| KITAGAWA® Model | B-21 | B-24 | - |

※ Specifications are subject to change without notice.

※ Samcully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HCH-21 | HCH-24 | HCH-32 |
|--------------|----------|----------|----------|
| ΦA | 530 | 610 | 800 |
| B | 140 | 149 | 150 |
| $\Phi C(H6)$ | 380 | 380 | 520 |
| F | 6 | 6 | 6 |
| H | 330.2 | 330.2 | 463.6 |
| ΦJ | 140 | 165 | 240 |
| K | 6-M22 | 6-M22 | 6-M24 |
| L | 31 | 32 | 31 |
| M | 60 | 60 | 38 |
| N max. | 98.5 | 108 | 162.6 |
| N min. | 93.2 | 102.7 | 153.6 |
| O max. | 87.5 | 117.5 | 182 |
| O min. | 21.5 | 21.5 | 20 |
| P max. | 11 | 20 | 29 |
| P min. | -12 | -3 | -5 |
| Q | 65 | 65 | 75 |
| R | 25 | 25 | 25.5 |
| S | 39 | 40 | 34.5 |
| T | 5 | 5 | 10 |
| U max. | M155x3.0 | M175x3.0 | M250x3.0 |
| ΦV | 80 | 80 | 80 |
| W | 72 | 72 | 83 |
| X | 180 | 180 | 160 |
| ΦY | 170 | 187 | 260 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



HCH-A 3-Jaw Open Center Chuck with adaptor (304mm - 381mm)



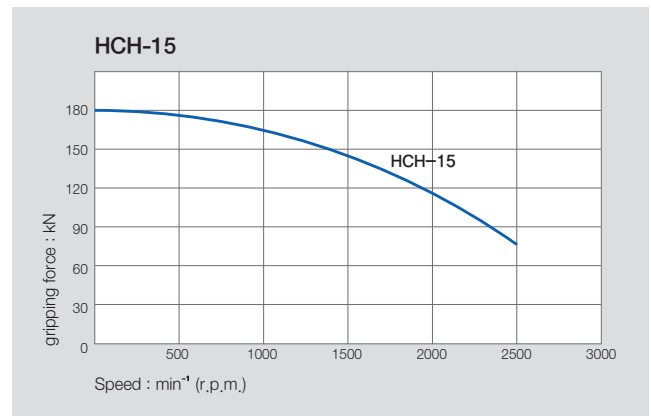
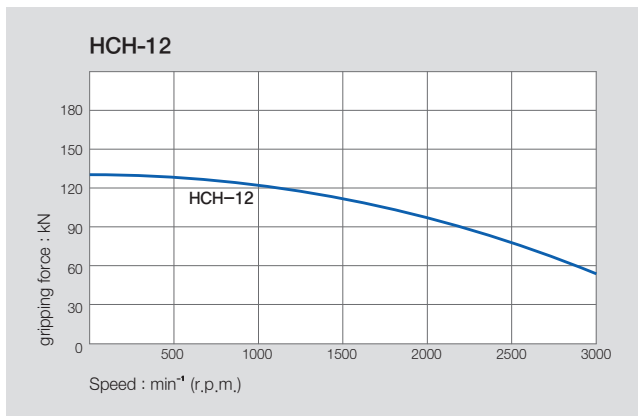
Application / Benefits

For work requiring a through-hole
Large diameter chucks offered for large work

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

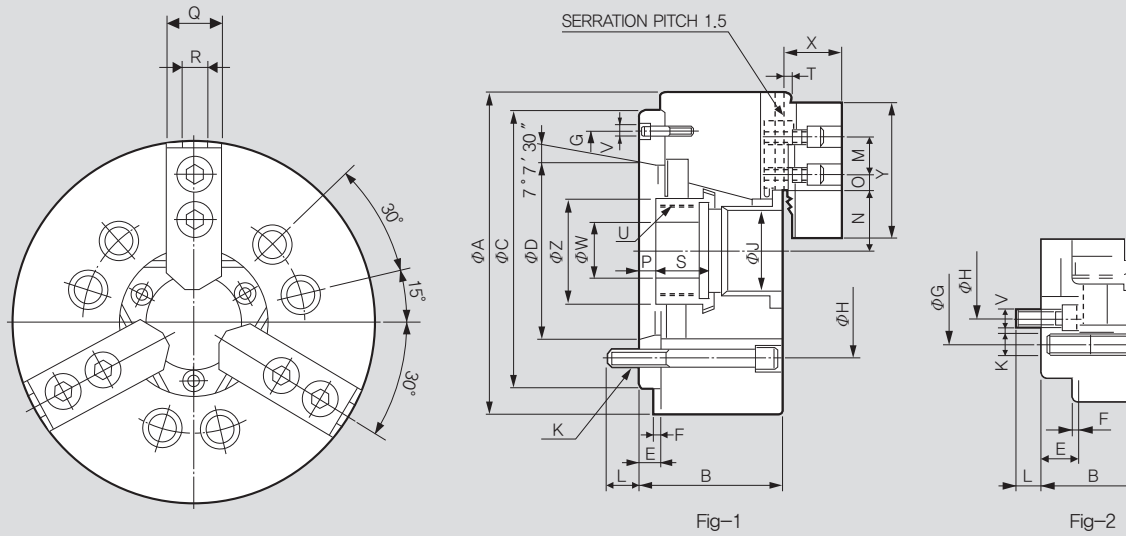


SPECIFICATIONS

| | HCH-12A06 | HCH-12A08 | HCH-15A08 | HCH-15A11 |
|--|-------------|-------------|-------------|-------------|
| Spindle Nose | A2-6 | A2-8 | A2-8 | A2-11 |
| Thru Hole Dia. [mm] | 78 | 78 | 117.5 | 117.5 |
| Grip Dia. Max [mm] | 304 | 304 | 381 | 381 |
| Grip Dia. Min [mm] | 19 | 19 | 30 | 30 |
| Jaw Stroke Dia. [mm] | 10.6 | 10.6 | 10.6 | 10.6 |
| Plunger Stroke [mm] | 23 | 23 | 23 | 23 |
| Max. Permissible Input Force [kN(kgf)] | 49(4997) | 49(4997) | 71(7240) | 71(7240) |
| Max. Static Gripping Force [kN(kgf)] | 129(13150) | 129(13150) | 180(18355) | 180(18355) |
| Max. r.p.m. [min⁻¹] | 3000 | 3000 | 2500 | 2500 |
| Weight [kg] | 69 | 66 | 134 | 127 |
| Moment of inertia [N · m²(kg · m²)] | 31.38(3.20) | 30.79(3.14) | 96.89(9.88) | 93.55(9.54) |
| Operating Cylinder | SYH-2091 | SYH-2091 | SH-25011 | SH-25011 |
| Max. Hydraulic Pressure [MPa(kgf/cm²)] | 2.3(23.5) | 2.3(23.5) | 2.3(23.5) | 2.3(23.5) |
| Operating Hard Jaw | HB12B1 | HB12B1 | HB15A1 | HB15A1 |
| KITAGAWA® Model | B-12A6 | B-12A8 | B-15A8 | B-15A11 |

※ Specifications are subject to change without notice.

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※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

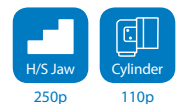
DIMENSIONS

| | HCH-12A06 | HCH-12A08 | HCH-15A08 | HCH-15A11 |
|--------------|-----------|-----------|-----------|-----------|
| ΦA | 304 | 304 | 381 | 381 |
| B | 129 | 122 | 160 | 149 |
| $\Phi C(H6)$ | 220 | 220 | 300 | 300 |
| ΦD | 106.375 | 139.719 | 139.719 | 196.869 |
| E | 25 | 18 | 33 | 22 |
| F | 6 | 6 | 6 | 6 |
| ΦG | 171.4 | 190 | 235 | 260 |
| ΦH | 133.4 | 171.4 | 171.4 | 235 |
| ΦJ | 78 | 78 | 117.5 | 117.5 |
| K | 6-M16x110 | 6-M16x130 | 6-M20x130 | 6-M20x150 |
| L | 18.5 | 25 | 24 | 28 |
| M | 30 | 30 | 43 | 43 |
| N max. | 58 | 58 | 82 | 82 |
| N min. | 52.7 | 52.7 | 76.7 | 76.7 |
| O max. | 48.75 | 48.75 | 43.75 | 43.75 |
| O min. | 12.75 | 12.75 | 18.25 | 18.25 |
| P max. | 33 | 26 | 44 | 33 |
| P min. | 10 | 3 | 21 | 10 |
| Q | 49 | 49 | 62 | 62 |
| R | 18 | 18 | 22 | 22 |
| S | 38 | 38 | 39 | 39 |
| T | 5 | 5 | 5 | 5 |
| U max. | M88x2.0 | M88x2.0 | M130x2.0 | M130x2.0 |
| V | 6-M12 | 3-M8 | 6-M16 | 3-M10 |
| ΦW | 50 | 50 | 60 | 60 |
| X | 53.5 | 53.5 | 70 | 70 |
| Y | 129 | 129 | 165 | 165 |
| ΦZ | 96 | 96 | 139 | 139 |

※ Blank and machined draw-nuts are available.

※ Refer to Fig-2 for HCH-12A06, HCH-12A08.

RELATED PRODUCT



HCH-A 3-Jaw Open Center Chuck with adaptor (450mm - 610mm)



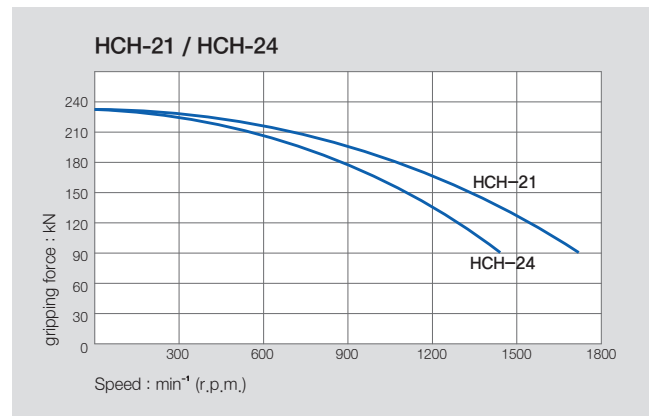
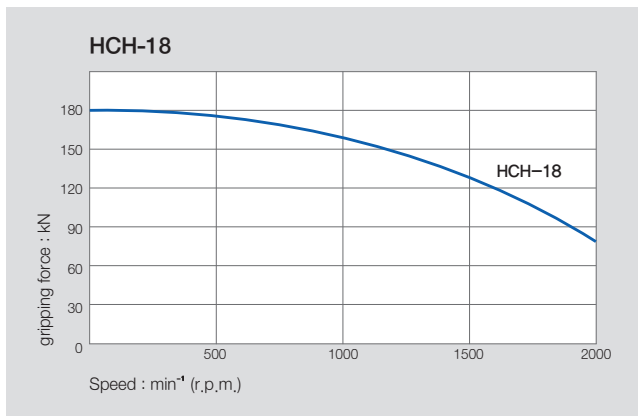
Application / Benefits

For work requiring a through-hole
Large diameter chucks offered for large work

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



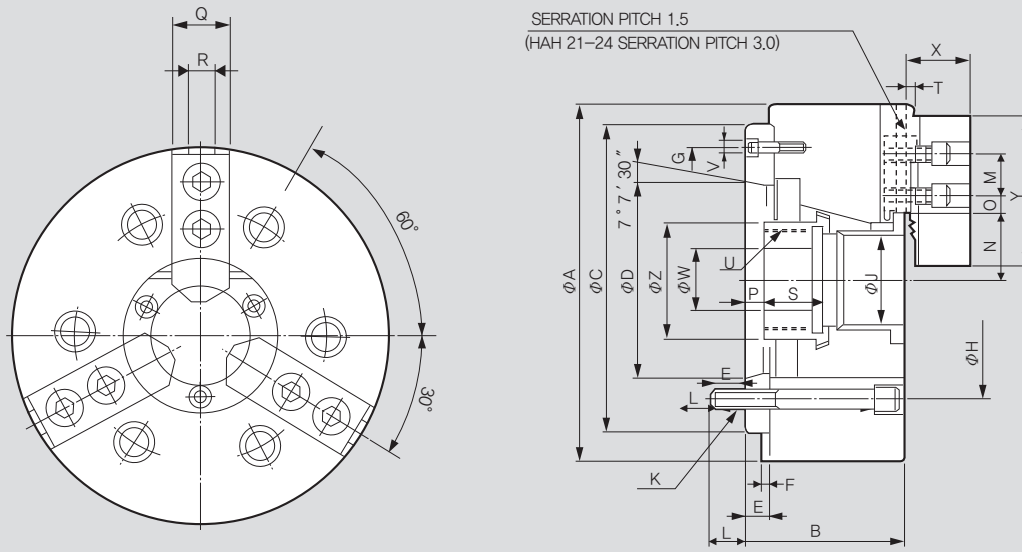
SPECIFICATIONS

| | HCH-18A11 | HCH-21A15 | HCH-24A15 |
|---|--------------|--------------|--------------|
| Spindle Nose | A2-11 | A2-15 | A2-15 |
| Thru Hole Dia. [mm] | 117.5 | 140 | 165 |
| Grip Dia. Max [mm] | 450 | 530 | 610 |
| Grip Dia. Min [mm] | 30 | 87 | 110 |
| Jaw Stroke Dia. [mm] | 10.6 | 10.6 | 10.6 |
| Plunger Stroke [mm] | 23 | 23 | 23 |
| Max. Permissible Input Force [kN(kgf)] | 71(7240) | 90(91770) | 90(9177) |
| Max. Static Gripping Force [kN(kgf)] | 180(18355) | 234(23861) | 234(23861) |
| Max. r.p.m. [min ⁻¹] | 2000 | 1700 | 1400 |
| Weight [kg] | 178 | 246 | 304 |
| Moment of inertia [N · m ² (kg · m ²)] | 187.30(19.1) | 362.83(37.0) | 660.94(67.4) |
| Operating Cylinder | SH-25011 | SH-25011 | SYHL-2816 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 2.3(23.5) | 3.0(30.6) | 3.0(30.6) |
| Operating Hard Jaw | HB15A1 | HB18B2 | HB18B2 |
| KITAGAWA® Model | B-18A11 | B-21A15 | B-24A15 |

※ Specifications are subject to change without notice.

※ Samcully Machinery Co, Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.

Thru Hole Range : $\varnothing 117.5 \sim \varnothing 165$
Clamping Range : $\varnothing 30 \sim \varnothing 610$



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HCH-18A11 | HCH-21A15 | HCH-24A15 |
|--------|-----------|-----------|-----------|
| ΦA | 450 | 530 | 610 |
| B | 149 | 161 | 170 |
| ΦC(H6) | 380 | 380 | 380 |
| ΦD | 196.869 | 285.775 | 285.775 |
| E | 22 | 27 | 27 |
| F | 6 | 6 | 6 |
| ΦG | 320 | 330.2 | 330.2 |
| ΦH | 235 | 330.2 | 330.2 |
| ΦJ | 117.5 | 140 | 165 |
| K | 6-M20x150 | 6-M22x170 | 6-M22x180 |
| L | 28 | 34 | 35 |
| M | 43 | 60 | 60 |
| N max. | 82 | 98.5 | 108 |
| N min. | 76.7 | 93.2 | 102.7 |
| O max. | 78.28 | 87.5 | 117.5 |
| O min. | 18.25 | 21.5 | 21.5 |
| P max. | 33 | 38 | 47 |
| P min. | 10 | 15 | 24 |
| Q | 62 | 65 | 65 |
| R | 22 | 25 | 25 |
| S | 39 | 39 | 40 |
| T | 5 | 5 | 5 |
| U max. | M130x2.0 | M155x3.0 | M175x3.0 |
| V | 3-M10 | 3-M12 | 3-M12 |
| ΦW | 60 | 80 | 80 |
| X | 70 | 72 | 72 |
| Y | 165 | 180 | 180 |
| ΦZ | 139 | 170 | 187 |

※ Blank and machined draw-nuts are available.

※ HCH-21A15 and HCH24A15 are available with M22 or M24 mounting bolts.

RELATED PRODUCT



HCHT / HCHF 2-Jaw,4-Jaw Open Center Chuck



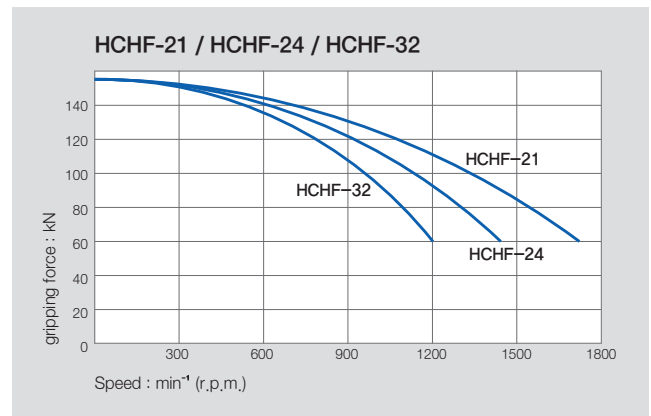
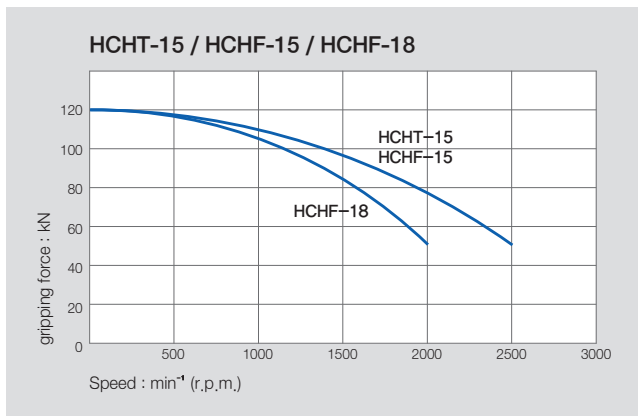
Application / Benefits

For rectangular or square work requiring a through-hole
Large diameters offered for large work

Technical features

Gripping force transmission by wedge structure

ACTUAL GRIPPING FORCE DIAGRAM

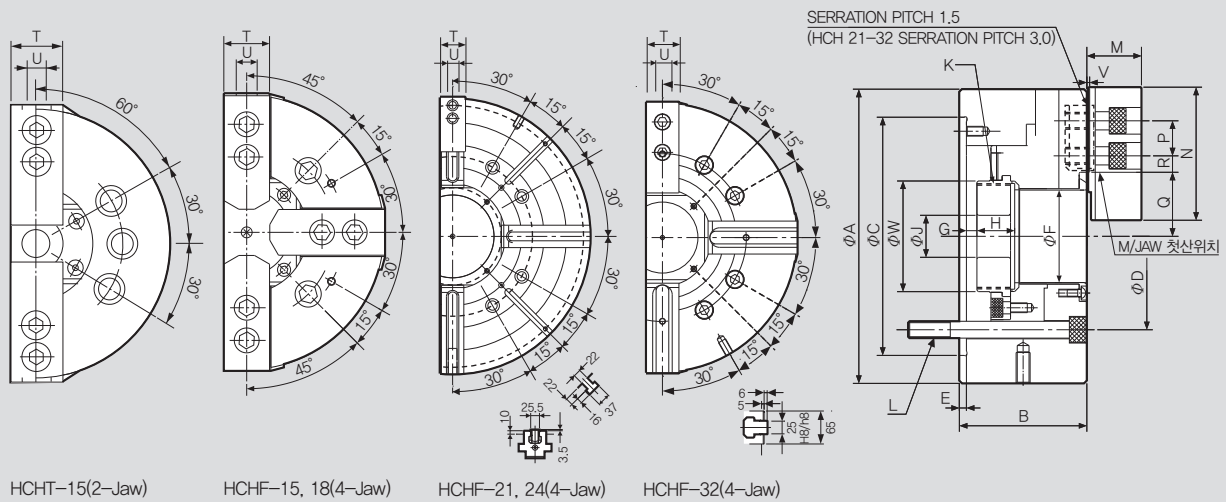


SPECIFICATIONS

| | HCHT-15 | HCHF-15 | HCHF-18 | HCHF-21 | HCHF-24 | HCHF-32 |
|---|-------------|------------|-------------|-------------|-------------|------------|
| Thru Hole Dia. [mm] | 117.5 | 117.5 | 117.5 | 140 | 166.5 | 240 |
| Grip Dia. Max [mm] | 381 | 381 | 450 | 530 | 610 | 800 |
| Grip Dia. Min [mm] | 30 | 30 | 30 | 87 | 110 | 160 |
| Jaw Stroke Dia. [mm] | 10.6 | 10.6 | 10.6 | 10.6 | 1.06 | 18 |
| Plunger Stroke [mm] | 23 | 23 | 23 | 23 | 23 | 34 |
| Max. Permissible Input Force [kN(kgf)] | 47(4793) | 47(4793) | 47(4793) | 60(6117) | 60(6117) | 60(6795) |
| Max. Static Gripping Force [kN(kgf)] | 120(12236) | 120(12236) | 120(12236) | 156(15907) | 156(15907) | 156(15821) |
| Max. r.p.m. [min ⁻¹] | 2500 | 2500 | 2000 | 1700 | 1400 | 1200 |
| Weight [kg] | 115 | 115 | 159 | 235 | 293 | 530 |
| Moment of inertia [N · m ² (kg · m ²)] | 87.28(8.90) | 87.3(8.90) | 165.8(16.9) | 351.2(35.8) | 651.4(66.4) | 601(61) |
| Operating Cylinder | SH-25011 | SH-25011 | SH-25011 | SH-25011 | SH-25011 | SYHL-2816 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 1.5(15.3) | 1.5(15.3) | 1.5(15.3) | 1.97(20.1) | 1.97(20.1) | 2.2(22.4) |
| Operating Hard Jaw | HB15A1 | HB15A1 | HB15A1 | HB18B2 | HB18B2 | HB32B2 |
| KITAGAWA® Model | BT-15 | - | - | - | - | - |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



HCHT-15(2-Jaw)

HCHF-15, 18(4-Jaw)

HCHF-21, 24(4-Jaw)

HCHF-32(4-Jaw)

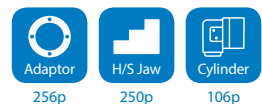
※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HCHT-15 | HCHF-15 | HCHF-18 | HCHF-21 | HCHF-24 | HCHF-32 |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|
| ΦA | 381 | 381 | 450 | 530 | 610 | 800 |
| B | 133 | 133 | 133 | 140 | 149 | 150 |
| $\Phi C(H6)$ | 300 | 300 | 380 | 380 | 380 | 520 |
| ΦD | 235 | 235 | 235 | 330.2 | 330.2 | 463.6 |
| E | 6 | 6 | 6 | 6 | 6 | 6 |
| ΦF | 117.5 | 118 | 118 | 140 | 165 | 240 |
| G max. | 11 | 11 | 11 | 11 | 20 | 34 |
| G min. | -12 | -12 | -12 | -12 | -3 | 0 |
| H | 39 | 39 | 39 | 39 | 40 | 34.5 |
| ΦJ | 60 | 60 | 60 | 80 | 80 | 80 |
| K max. | M130x2.0 | M130x2.0 | M130x2.0 | M155x3.0 | M175x3.0 | M250x3.0 |
| L | 6-M20x150 | 4-M20x150 | 4-M20x130 | 8-M22x140 | 8-M22x150 | 8-M24x130 |
| M | 70 | 70 | 70 | 72 | 72 | 83 |
| N | 165 | 165 | 165 | 180 | 180 | 160 |
| P | 43 | 43 | 43 | 60 | 60 | 38 |
| Q max. | 82 | 82 | 82 | 98.5 | 102.7 | 162.6 |
| Q min. | 76.7 | 76.7 | 76.7 | 93.2 | 108 | 153.6 |
| R max. | 43.75 | 43.75 | 78.25 | 87.5 | 117.5 | 182 |
| R min. | 18.25 | 18.25 | 18.25 | 21.5 | 21.5 | 20 |
| T | 62 | 62 | 62 | 65 | 65 | 75 |
| U | 22 | 22 | 22 | 25 | 25 | 25.5 |
| V | 5 | 5 | 5 | 5 | 5 | 3.5 |
| ΦW | 139 | 139 | 136 | 170 | 187 | 260 |

※ Blank and machined draw-nuts are available.

RELATED PRODUCT



HC 3-Jaw Closed-Center Chuck (110mm - 304mm)



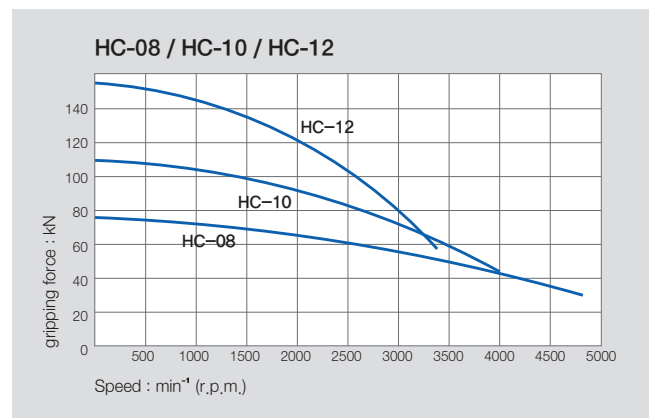
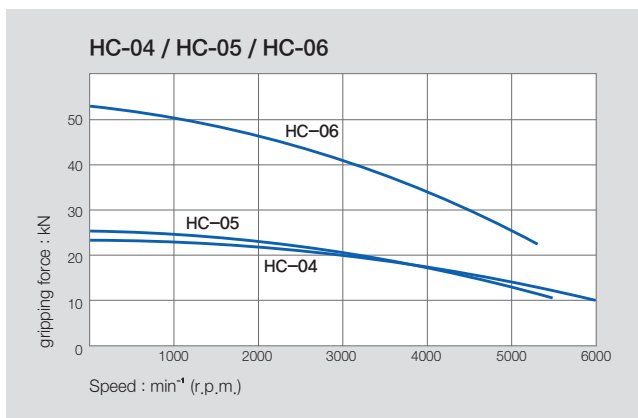
Application / Benefits

Ideal for vertical lathes and work that does not require a through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

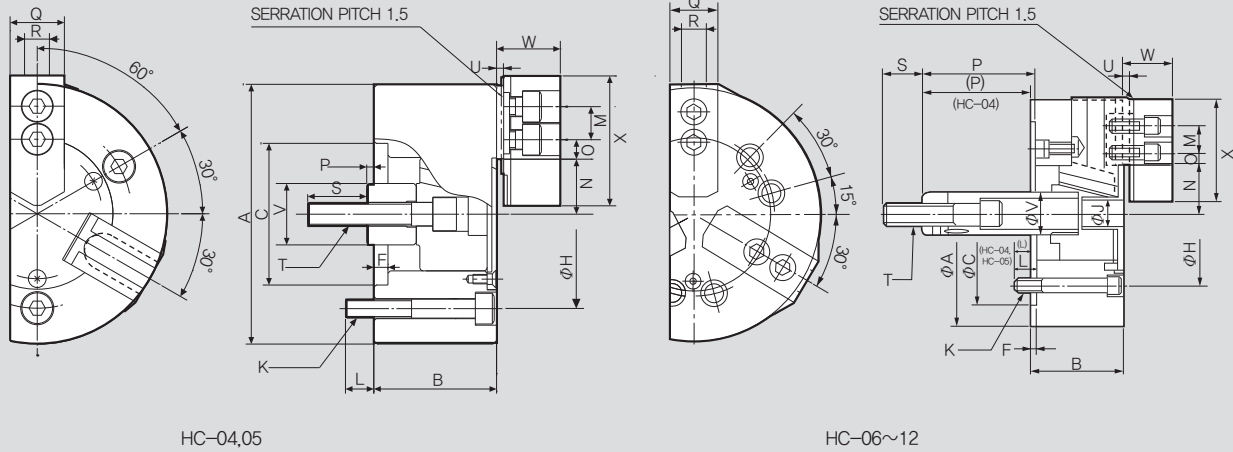


SPECIFICATIONS

| | HC-04 | HC-05 | HC-06 | HC-08 | HC-10 | HC-12 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| Jaw Stroke Dia. [mm] | 6.4 | 6.4 | 8.5 | 8.8 | 8.8 | 10.5 |
| Plunger Stroke [mm] | 14 | 14 | 18.5 | 19 | 25 | 30 |
| Grip Dia. Max [mm] | 110 | 135 | 165 | 210 | 254 | 304 |
| Grip Dia. Min [mm] | 8 | 16 | 19 | 23 | 24 | 26 |
| Max. Permissible Input Force [kN(kgf)] | 8.2(836) | 8.2(836) | 18(1835) | 25(2549) | 29(2957) | 41(4181) |
| Max. Static Gripping Force [kN(kgf)] | 22.8(2325) | 25.2(2570) | 52.5(5353) | 75(7648) | 108(11013) | 156(15907) |
| Max. r.p.m. [min ⁻¹] | 6000 | 5500 | 5270 | 4760 | 4010 | 3380 |
| Weight [kg] | 4.1 | 6.2 | 13 | 25 | 37 | 57.3 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.008 | 0.014 | 0.042 | 0.135 | 0.3 | 0.72 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 2.4(24.5) | 2.4(24.5) | 2.6(26.5) | 2.5(25.5) | 2.8(28.6) | 2.7(27.5) |
| Operating Cylinder Hydraulic | Y-0715R(RE) | Y-0715R(RE) | Y-1020R(RE) | Y-1225R(RE) | Y-1225R(RE) | Y-1530R(RE) |
| Operating Cylinder Pneumatic | AY-1315R | AY-1315R | AY-1720R | AY-2225R | AY-2225R | AY-2730R |
| Operating Hard Jaw | HB04N1 | HB04N1 | HB06A1 | HB08A1 | HB10A1 | HB12B1 |
| KITAGAWA® Model | N-04 | N-05 | N-06 | N-08 | N-10 | N-12 |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



HC-04,05

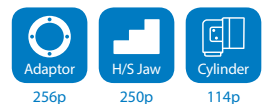
HC-06~12

※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HC-04 | HC-05 | HC-06 | HC-08 | HC-10 | HC-12 |
|--------|---------|----------|----------|-----------|-----------|-------------------------|
| ΦA | 110 | 135 | 165 | 210 | 254 | 304 |
| B | 52 | 55 | 74 | 85 | 89 | 106 |
| ΦC(H6) | 60 | 80 | 140 | 170 | 220 | 220 |
| F | 6 | 7 | 5 | 5 | 5 | 6 |
| ΦH | 80 | 100 | 104.8 | 133.4 | 171.4 | 171.4 |
| ΦJ | - | - | 21 | 25 | 34 | 34 |
| K | 3-M8x55 | 3-M8x60 | 6-M10x90 | 6-M12x100 | 6-M16x105 | 6-M16x120 |
| L | 12 | 14 | 14 | 20 | 38 | 38 |
| M | 14 | 19 | 20 | 25 | 30 | 30 |
| N max. | 23.3 | 30.4 | 37.8 | 46.3 | 51.1 | 61 |
| N min. | 20.1 | 27.2 | 33.5 | 41.9 | 46.7 | 55.75 |
| O max. | 11.25 | 11.25 | 18 | 22.25 | 30.75 | 48.75 |
| O min. | 8.25 | 6.75 | 7.5 | 9 | 11.25 | 12.75 |
| P max. | 17 | 6 | 100 | 109(125) | 119(158) | 142(163) |
| P min. | 3 | -8 | 81.5 | 90(100) | 94(133) | 112(133) |
| Q | 23 | 23 | 31 | 35 | 40 | 50 |
| R | 10 | 10 | 12 | 14 | 16 | 18 |
| S | 25 | 35 | 36 | 36 | 36 | 36 |
| T | M10x1.5 | M12x1.75 | M16x2.0 | M20x2.5 | M20x2.5 | M24x3.0(㉞) / M20x2.5(산) |
| U | 3 | 3 | 4 | 5 | 5 | 5 |
| ΦV | 26 | 28 | 34 | 38 | 45 | 50 |
| W | 27 | 29 | 35 | 42 | 46 | 54 |
| X | 55 | 62 | 72 | 95 | 110 | 129 |

RELATED PRODUCT



HC 3-Jaw Closed-Center Chuck (381mm - 1000mm)



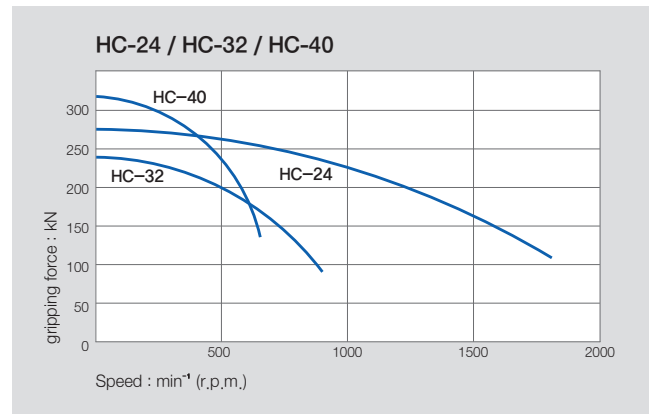
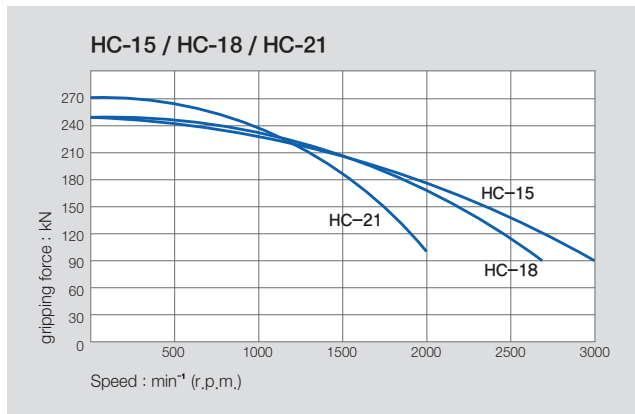
Application / Benefits

Ideal for vertical lathes and work that does not require a through-hole
Large sizes offered for large work

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



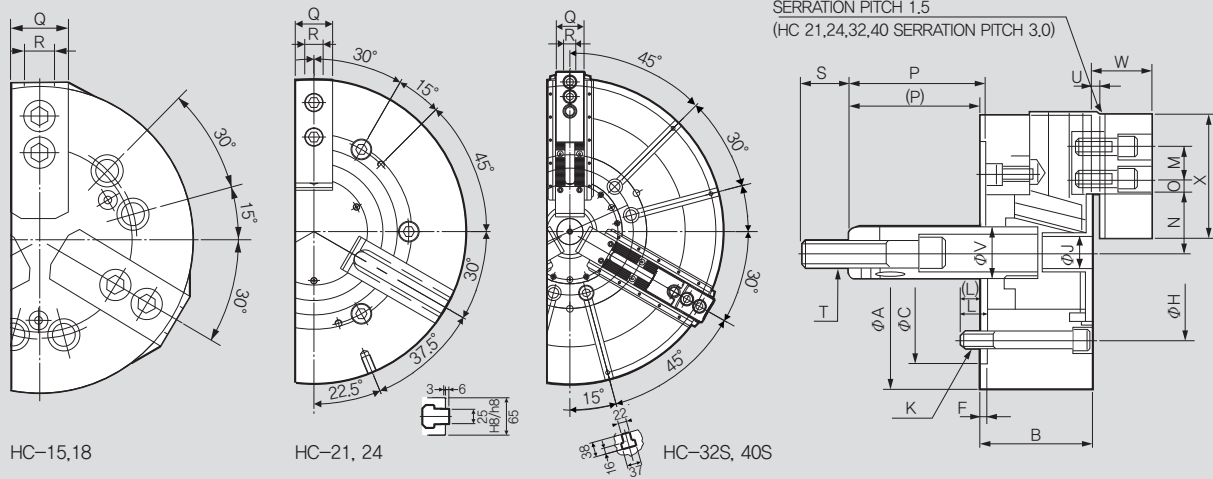
※ When using taller heavier jaw or clamping on a bigger diameter reduce draw pull rotating speed accordingly.

SPECIFICATIONS

| | HC-15 | HC-18 | HC-21 | HC-24 | HC-32S | HC-40S |
|---|-------------|-------------|-------------|-------------|-------------|------------|
| Jaw Stroke Dia. [mm] | 16 | 16 | 16 | 16 | 20 | 30 |
| Plunger Stroke [mm] | 35 | 35 | 35 | 35 | 38 | 23 |
| Grip Dia. Max [mm] | 381 | 450 | 530 | 610 | 800 | 1000 |
| Grip Dia. Min [mm] | 71 | 133 | 62 | 152 | 200 | 330 |
| Max. Permissible Input Force [kN(kgf)] | 82(8362) | 82(8362) | 82(8362) | 82(8362) | 100(12236) | 180(18256) |
| Max. Static Gripping Force [kN(kgf)] | 249(25391) | 249(25391) | 273(27838) | 273(27838) | 240(21805) | 320(32454) |
| Max. r.p.m. [min ⁻¹] | 3040 | 2710 | 1940 | 1760 | 800 | 630 |
| Weight [kg] | 96 | 124 | 180 | 223 | 350 | 600 |
| Moment of inertia [N · m ² (kg · m ²)] | 1.85 | 3.2 | 7.1 | 12.2 | 38.5 | 89 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.99(40.8) | 3.99(40.8) |
| Operating Cylinder Hydraulic | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2050R(RE) | Y-2560RE |
| Operating Hard Jaw | HB15N1 | HB15N1 | HB18B2 | HB18B2 | HB32SB2 | HB40SB2 |
| KITAGAWA® Model | N-15 | N-18 | N-21 | N-24 | - | - |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.

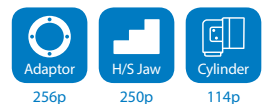


※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HC-15 | HC-18 | HC-21 | HC-24 | HC-32S | HC-40S |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|
| ΦA | 381 | 450 | 530 | 610 | 800 | 1000 |
| B | 114 | 114 | 125 | 125 | 150 | 180 |
| $\Phi C(H6)$ | 300 | 300 | 380 | 380 | 380 | 520 |
| F | 6 | 6 | 6 | 6 | 6 | 8 |
| ΦH | 235 | 235 | 330.2 | 330.2 | 330.2 | 463.6 |
| ΦJ | 27 | 27 | 27 | 27 | 65 | 50 |
| K | 6-M20X150 | 6-M20X115 | 6-M22X120 | 6-M22X120 | 6-M24X120 | 6-M24X120 |
| L | 65 | 30 | 31 | 31 | 39 | 32 |
| M | 43 | 43 | 60 | 60 | 76.2 | 76.2 |
| N max. | 77.5 | 108 | 86 | 125 | 117.3 | 212.8 |
| N min. | 69.5 | 100 | 78 | 117 | 102.3 | 187.8 |
| O max. | 48.75 | 48.75 | 93.5 | 93.5 | 234.1 | 169.8 |
| O min. | 23.25 | 23.25 | 27.5 | 27.5 | 36 | 17.4 |
| P max. | 104 | 92 | 97 | 97 | 38 | 30 |
| P min. | 69 | 57 | 62 | 62 | 0 | -27 |
| Q | 62 | 62 | 65 | 65 | 75 | 110 |
| R | 25.5 | 25.5 | 25 | 25 | 12.7 | 30 |
| S | 55 | 55 | 55 | 55 | 70 | 65 |
| T | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M36x4.0 |
| U | 2 | 2 | 3 | 3 | 8 | -4 |
| ΦV | 60 | 60 | 60 | 60 | 70 | 70 |
| W | 61 | 61 | 70 | 71 | 81 | 106 |
| X | 135 | 135 | 180 | 180 | 165 | 270 |

RELATED PRODUCT



HC (Groove type jaws)

3-Jaw Hydraulic / 4-Jaw Independent Chuck
(800mm - 1600mm)



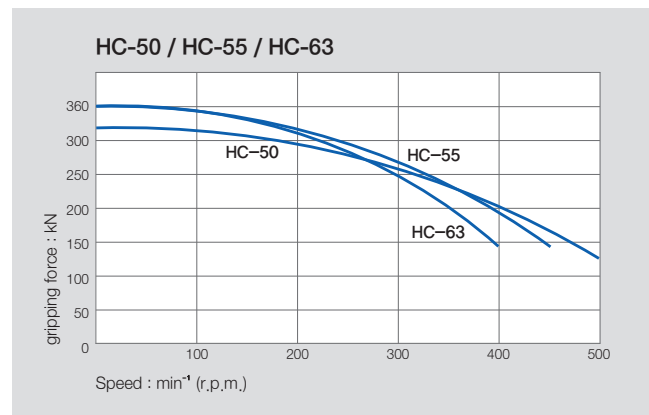
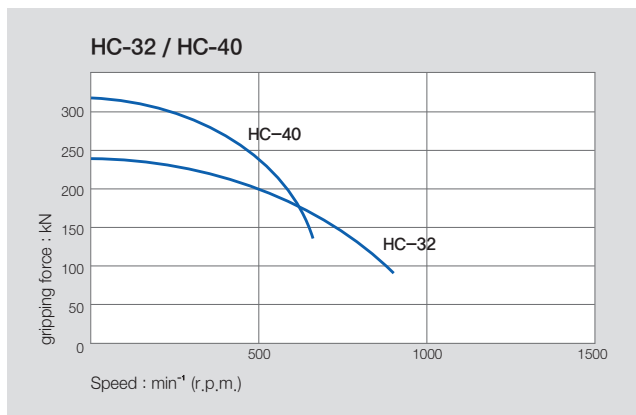
Application / Benefits

Ideal for vertical lathes and work that does not require a through-hole
Large sizes offered for large work
Manual adjustment feature allows both hydraulic and manual clamping for covering a wide range of diameters and clamping irregular work

Technical features

Wedge hook style chuck with high gripping force

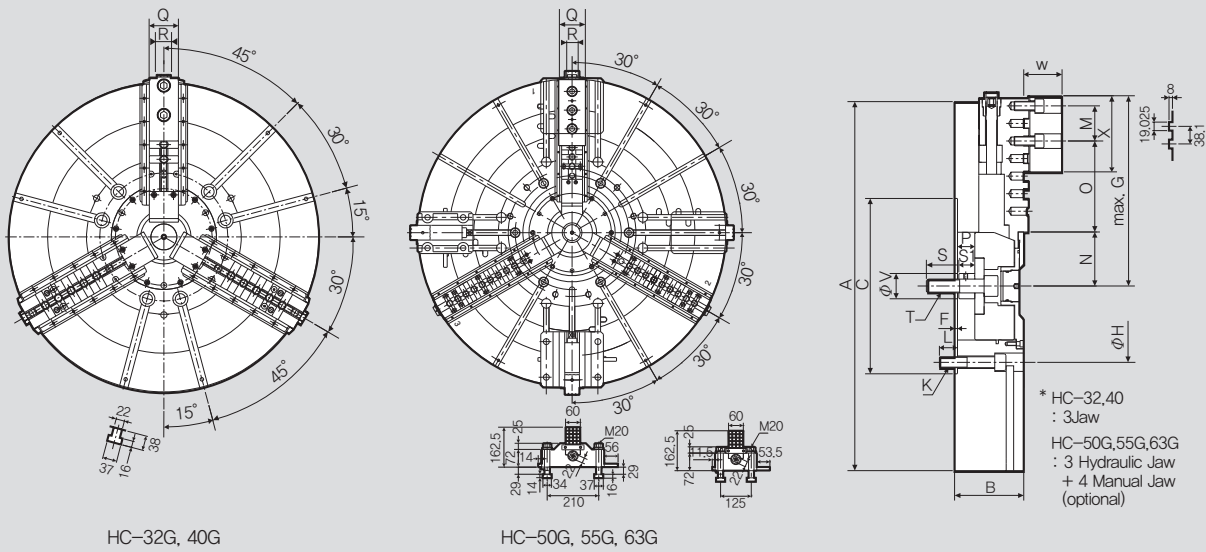
ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | HC-32G | HC-40G | HC-50G | HC-55G | HC-63G | HC-80G |
|------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Jaw Stroke Dia. | 20 | 46 | 46 | 48 | 48 | 48 |
| Manual Setting | 30 | 30 | 30 | 40 | 40 | 40 |
| Plunger Stroke | 38 | 57 | 57 | 60 | 60 | 60 |
| Grip Dia. Max | 800 | 1000 | 1250 | 1400 | 1600 | 2000 |
| Grip Dia. Min | 200 | 330 | 330 | 460 | 460 | 460 |
| Max. Permissible Input Force | 100 (12170) | 180 (18256) | 180 (18256) | 200 (20394) | 200 (20394) | 200 (20394) |
| Max. Static Gripping Force | 240 (21805) | 320 (32454) | 320 (32454) | 360 (36710) | 360 (36710) | 360 (36710) |
| Max. r.p.m. | 800 | 630 | 500 | 450 | 400 | 320 |
| Weight | 350 | 600 | 800 | 1350 | 1850 | 2900 |
| Moment of inertia | 15.25 | 43.625 | 55 | 70 | 125 | 1360 |
| Operating Cylinder | Y-2050RE | Y-2560RE | Y-2560RE | Y-2560RE | Y-2560RE | Y-2560RE |
| Max. Hydraulic Pressure | 3.99(40.8) | 3.99(40.8) | 3.99(40.8) | 4.5(46) | 4.5(46) | 4.5(46) |
| Operating Hard Jaw | HB32GB | HB40GB | HB40GB | HB40GB | HB40GB | HB40GB |

※ Specifications are subject to change without notice.



HC-32G, 40G

HC-50G, 55G, 63G

※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

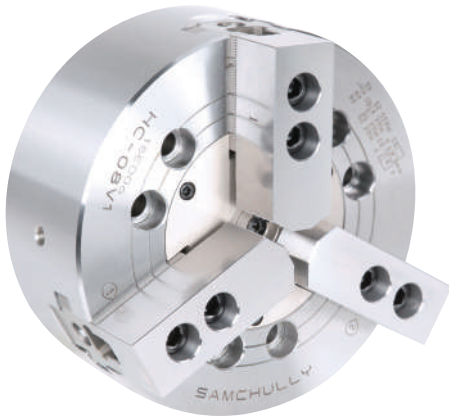
DIMENSIONS

| | HC-32G | HC-40G | HC-50G | HC-55G | HC-63G | HC-80G |
|--------------|----------|----------|----------|----------|----------|----------|
| ΦA | 800 | 1000 | 1250 | 1400 | 1600 | 2000 |
| B | 150 | 182 | 180 | 220 | 220 | 240 |
| $\Phi C(H6)$ | 380 | 520 | 520 | 720 | 720 | 720 |
| F | 6 | 8 | 8 | 8 | 8 | 8 |
| G | 442.5 | 509.6 | 623.9 | 710.6 | 786.8 | 977 |
| ΦH | 330.2 | 463.6 | 463.6 | 647.6 | 647.6 | 647.6 |
| K | M24X120L | M24X140L | M24X140L | M24X160L | M24X160L | M30X180L |
| L | 39 | 32 | 32 | 36 | 36 | 46 |
| M | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 |
| N max. | 117.6 | 217.3 | 217.3 | 250 | 250 | 250 |
| N min. | 102.7 | 194.3 | 194.3 | 226 | 226 | 226 |
| O max. | 196.9 | 91.1 | 205.4 | 250.4 | 335.6 | 526.1 |
| O min. | 44.5 | 14.9 | 14.9 | 30.8 | 30.8 | 68.9 |
| P max. | 38 | 60 | 60 | 82 | 13 | 100 |
| P min. | 0 | 3 | 3 | 22 | 22 | 40 |
| Q | 75 | 110 | 110 | 110 | 110 | 110 |
| S | 70 | 65 | 65 | 65 | 65 | 65 |
| S1 | 35 | 35 | 35 | 35 | 35 | 35 |
| T | M30x3.5 | M36x4.0 | M36x4.0 | M36x4.0 | M36x4.0 | M36x4.0 |
| ΦV | 55 | 70 | 70 | 70 | 70 | 70 |
| W | 83 | 106 | 106 | 104 | 104 | 104 |
| X | 165 | 270 | 270 | 270 | 270 | 270 |
| a1 | 12.7 | 30 | 30 | 30 | 30 | - |
| a2 | 8 | -4 | -4 | -6 | -6 | - |
| a3 | 3 | 4 | 4 | 4 | 4 | - |
| a4 | 75 | 85 | 85 | 110 | 110 | - |

RELATED PRODUCT



HC-A 3-Jaw Closed-Center Chuck with Adaptor (165mm - 304mm)



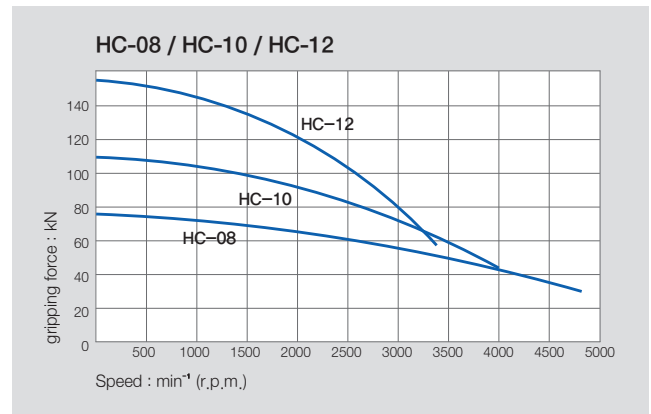
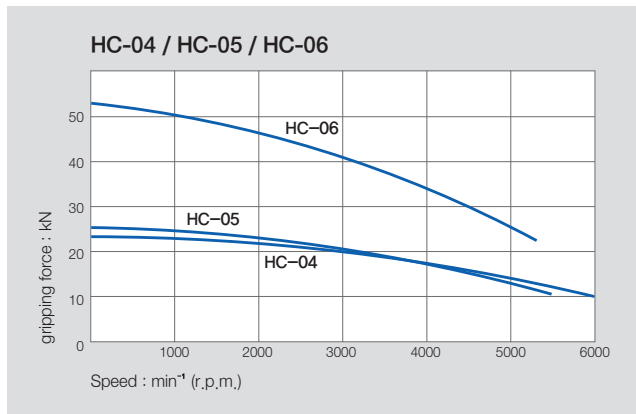
Application / Benefits

Ideal for vertical lathes and work that does not require a through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



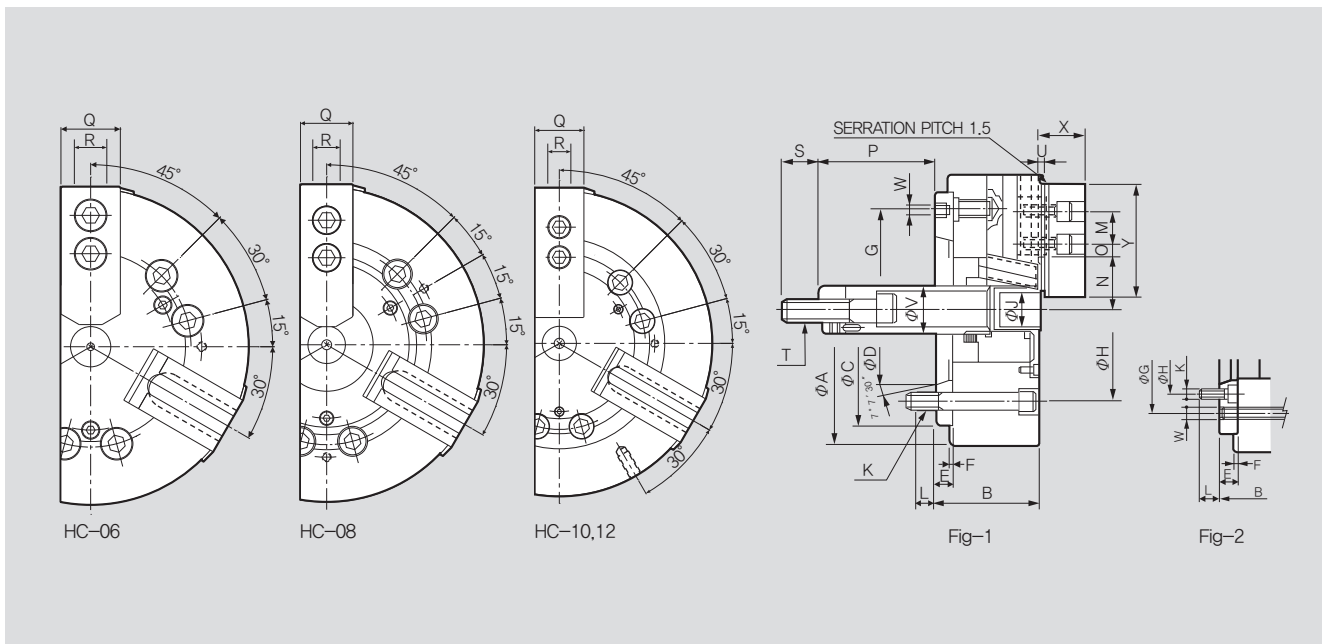
SPECIFICATIONS

| | HC-06A05 | HC-08A06 | HC-10A06 | HC-10A08 | HC-12A06 | HC-12A08 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|
| Spindle Nose No. | A2-5 | A2-6 | A2-6 | A2-8 | A2-6 | A2-8 |
| Jaw Stroke Dia. [mm] | 8.5 | 8.8 | 8.8 | 8.8 | 10.5 | 10.5 |
| Plunger Stroke [mm] | 18.5 | 19 | 25 | 25 | 30 | 30 |
| Grip Dia. Max [mm] | 165 | 210 | 254 | 254 | 304 | 304 |
| Grip Dia. Min [mm] | 19 | 23 | 24 | 224 | 26 | 26 |
| Max. Permissible Input Force [kN(kgf)] | 18(1835) | 25(2549) | 29(2957) | 29(2957) | 41(4181) | 41(4181) |
| Max. Static Gripping Force [kN(kgf)] | 52.5(5353) | 75(7648) | 108(11013) | 108(11013) | 156(15907) | 156(15907) |
| Max. r.p.m. [min ⁻¹] | 5270 | 4760 | 4010 | 4010 | 3380 | 3380 |
| Weight [kg] | 14 | 27 | 40 | 40 | 67 | 66 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.042 | 0.135 | 0.3 | 0.3 | 1.85 | 1.85 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 2.6(26.5) | 2.5(25.5) | 2.8(28.6) | 2.8(28.6) | 2.7(27.5) | 2.7(27.5) |
| Operating Cylinder Hydraulic | Y-1020R(RE) | Y-1225R(RE) | Y-1225R(RE) | Y-1225R(RE) | Y-1530R(RE) | Y-1530R(RE) |
| Operating Cylinder Pneumatic | AY-1720R | AY-2225R | AY-2225R | AY-2225R | AY-2730R | AY-2730R |
| Operating Hard Jaw | HB06A1 | HB08A1 | HB10A1 | HB10A1 | HB12A1 | HB12A1 |
| KITAGAWA® Model | N-06A05 | N-08A06 | N-10A06 | N-10A08 | N-12A06 | N-12A08 |

※ Refer to Fig-2 for HC-10A06 and HC-12A06.

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HC-06A05 | HC-08A06 | HC-10A06 | HC-10A08 | HC-12A06 | HC-12A08 |
|--------------|----------|----------|----------|----------|-------------------|-------------------|
| ΦA | 165 | 210 | 254 | 254 | 304 | 304 |
| B | 84 | 97 | 109 | 102 | 125 | 118 |
| $\Phi C(H6)$ | 140 | 170 | 220 | 220 | 220 | 220 |
| ΦD | 82.563 | 106.375 | 106.375 | 139.719 | 106.375 | 139.719 |
| E | 15 | 17 | 25 | 18 | 25 | 18 |
| F | 5 | 5 | 5 | 5 | 6 | 6 |
| ΦG | 116 | 150 | 171.4 | 190 | 171.4 | 190 |
| ΦH | 104.8 | 133.4 | 133.4 | 171.4 | 133.4 | 171.4 |
| ΦJ | 21 | 25 | 34 | 34 | 34 | 34 |
| K | 6-M10 | 6-M12 | 6-M12 | 6-M16 | 6-M12 | 6-M16 |
| L | 14 | 18 | 18.5 | 25 | 18 | 25 |
| M | 20 | 25 | 30 | 30 | 30 | 30 |
| N max. | 37.8 | 46.3 | 51.1 | 51.1 | 61 | 61 |
| N min. | 33.5 | 41.9 | 46.7 | 46.7 | 55.75 | 55.75 |
| O max. | 13.75 | 22.25 | 30.75 | 30.75 | 48.75 | 48.75 |
| O min. | 7.75 | 11.75 | 11.25 | 11.25 | 12.75 | 12.75 |
| P max. | 85 | 92(108) | 94(133) | 101(140) | 117(138) | 124(145) |
| P min. | 66.5 | 73(89) | 69(108) | 76(115) | 87(108) | 94(115) |
| Q | 31 | 35 | 40 | 40 | 49 | 49 |
| R | 12 | 14 | 16 | 16 | 18 | 18 |
| S | 358 | 36 | 36 | 36 | 36 | 36 |
| T | M16x2.0 | M20x2.5 | M20x2.5 | M20x2.5 | M24x3.0 (M20x2.5) | M24x3.0 (M20x2.5) |
| U | 4 | 5 | 5 | 5 | 5 | 5 |
| ΦV | 34 | 38 | 45 | 45 | 50 | 50 |
| W | 3-M6 | 3-M6 | 6-M16 | 3-M8 | 6-M16 | 3-M8 |
| X | 35 | 42 | 46 | 46 | 53.5 | 53.5 |

RELATED PRODUCT



HC-A 3-Jaw Closed-Center Chuck with Adaptor (381mm - 610mm)



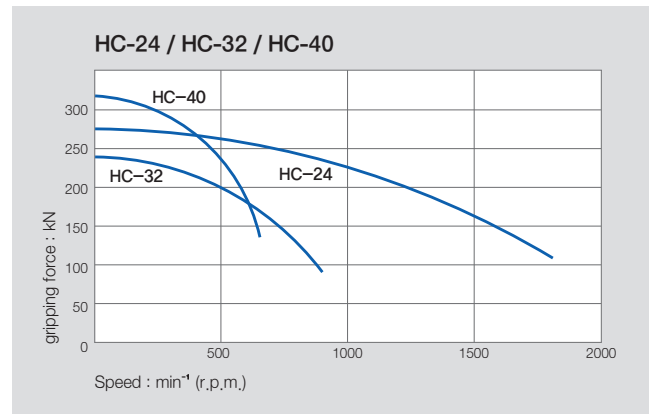
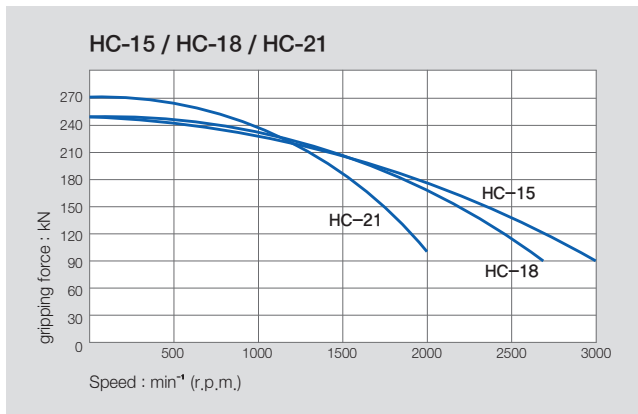
Application / Benefits

Ideal for vertical lathes and work that does not require a through-hole
Large sizes offered for large work

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



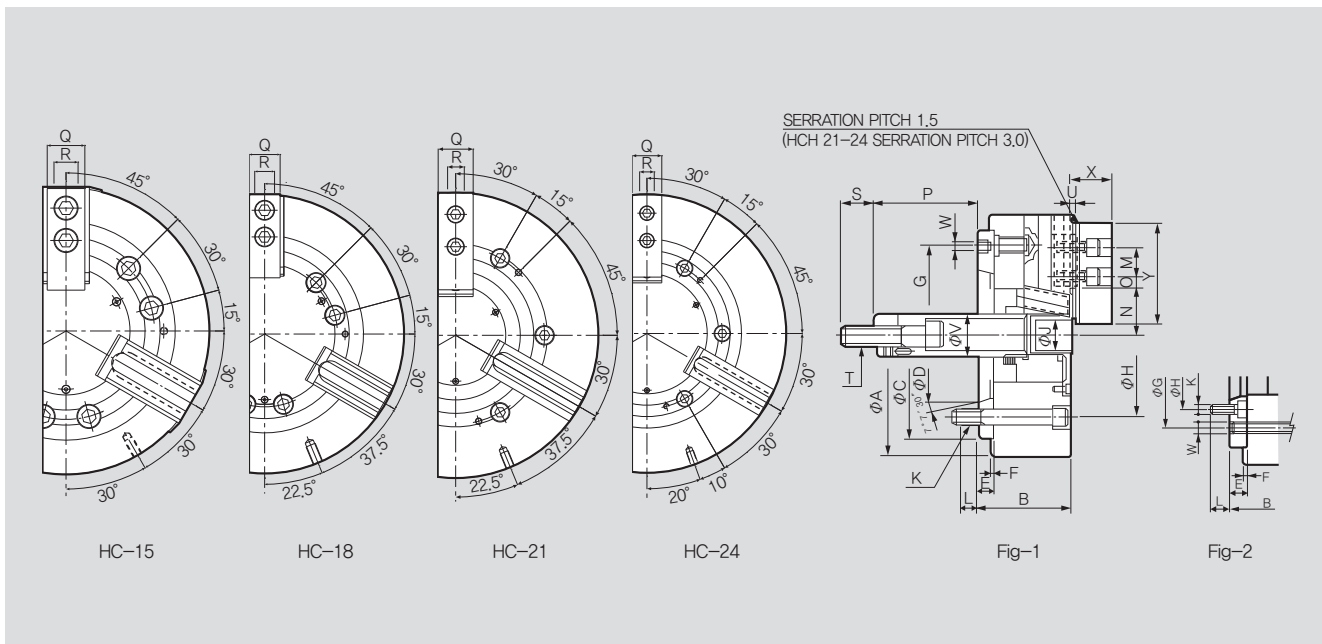
SPECIFICATIONS

| | HC-15A08 | HC-15A11 | HC-18A08 | HC-18A11 | HC-21A11 | HC-21A15 | HC-24A11 | HC-24A15 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Spindle Nose No. | A2-8 | A2-11 | A2-8 | A2-11 | A2-11 | A2-15 | A2-11 | A2-15 |
| Jaw Stroke Dia. [mm] | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Plunger Stroke [mm] | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 |
| Grip Dia. Max [mm] | 381 | 381 | 450 | 450 | 530 | 530 | 610 | 610 |
| Grip Dia. Min [mm] | 71 | 71 | 133 | 133 | 62 | 62 | 152 | 152 |
| Max. Permissible Input Force [kN(kgf)] | 82(8362) | 82(8362) | 82(8362) | 82(8362) | 82(8362) | 82(8362) | 82(8362) | 82(8362) |
| Max. Static Gripping Force [kN(kgf)] | 249(25391) | 249(25391) | 249(25391) | 249(25391) | 273(27838) | 273(27838) | 273(27838) | 273(27838) |
| Max. r.p.m. [min ⁻¹] | 3040 | 3040 | 2710 | 2710 | 1940 | 1940 | 1760 | 1760 |
| Weight [kg] | 105 | 103 | 134 | 131 | 198 | 190 | 241 | 234 |
| Moment of inertia [N · m ² (kg · m ²)] | 1.85 | 1.85 | 3.2 | 3.2 | 7.1 | 7.1 | 12.2 | 12.2 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) |
| Operating Cylinder Hydraulic | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) |
| Operating Hard Jaw | HB15N1 | HB15N1 | HB15N1 | HB15N1 | HB18B2 | HB18B2 | HB18B2 | HB18B2 |
| KITAGAWA® Model | N-15A08 | N-15A08 | N-18A11 | N-18A11 | N-21A11 | N-21A15 | N-24A11 | N-24A15 |

※ Specifications are subject to change without notice.

※ Refer to Fig-2 for HC-15A08, HC-18A08, HC-21A11, HC-24A11.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HC-15A08 | HC-15A11 | HC-18A08 | HC-18A11 | HC-21A11 | HC-21A15 | HC-24A11 | HC-24A15 |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|
| ΦA | 381 | 381 | 450 | 450 | 530 | 530 | 610 | 610 |
| B | 141 | 130 | 141 | 130 | 161 | 146 | 161 | 146 |
| $\Phi C(H6)$ | 300 | 300 | 300 | 300 | 380 | 380 | 380 | 380 |
| ΦD | 139.719 | 196.869 | 139.719 | 196.869 | 196.869 | 285.775 | 196.869 | 285.775 |
| E | 33 | 22 | 33 | 22 | 42 | 27 | 42 | 27 |
| F | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| ΦG | 235 | 260 | 235 | 260 | 330.2 | 330.2 | 330.2 | 330.2 |
| ΦH | 171.4 | 235 | 171.4 | 235 | 235 | 330.2 | 235 | 330.2 |
| ΦJ | 27 | 27 | 27 | 27 | 27 | 27 | 27 | 27 |
| K | 6-M16 | 6-M20 | 6-M16 | 6-M20 | 6-M20 | 6-M22 | 6-M20 | 6-M22 |
| L | 24 | 33 | 24 | 33 | 29 | 34 | 29 | 34 |
| M | 43 | 43 | 43 | 43 | 60 | 60 | 60 | 60 |
| N max. | 77.5 | 77.5 | 108 | 108 | 86 | 86 | 125 | 125 |
| N min. | 69.5 | 69.5 | 100 | 100 | 78 | 78 | 117 | 117 |
| O max. | 48.75 | 48.75 | 48.75 | 48.75 | 93.5 | 93.5 | 93.5 | 93.5 |
| O min. | 23.25 | 23.25 | 23.25 | 23.25 | 27.5 | 27.5 | 27.5 | 27.5 |
| P max. | 71 | 82 | 59 | 70 | 55 | 70 | 55 | 70 |
| P min. | 36 | 47 | 24 | 35 | 20 | 35 | 20 | 35 |
| Q | 50 | 50 | 50 | 50 | 65 | 65 | 65 | 65 |
| R | 25.5 | 25.5 | 25.5 | 25.5 | 25 | 25 | 25 | 25 |
| S | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| T | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 |
| U | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| ΦV | 60 | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| W | 6-M20 | 3-M10 | 6-M20 | 3-M10 | 6-M22 | 3-M12 | 6-M22 | 6-M12 |
| X | 61 | 61 | 61 | 61 | 70 | 70 | 70 | 70 |

RELATED PRODUCT



HCT 2-Jaw Closed-Center Chuck



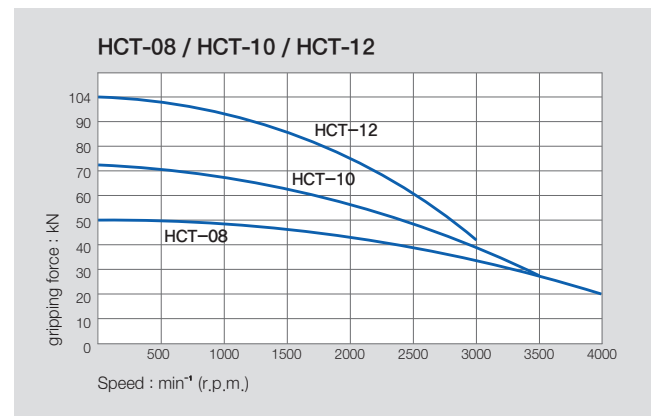
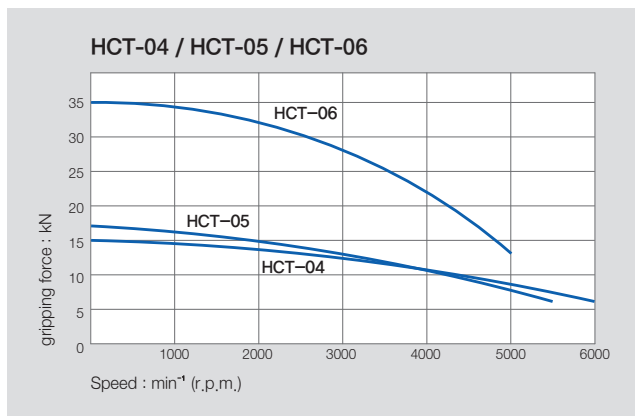
Application / Benefits

Ideal for vertical lathes and square or rectangular work that does not require a through-hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

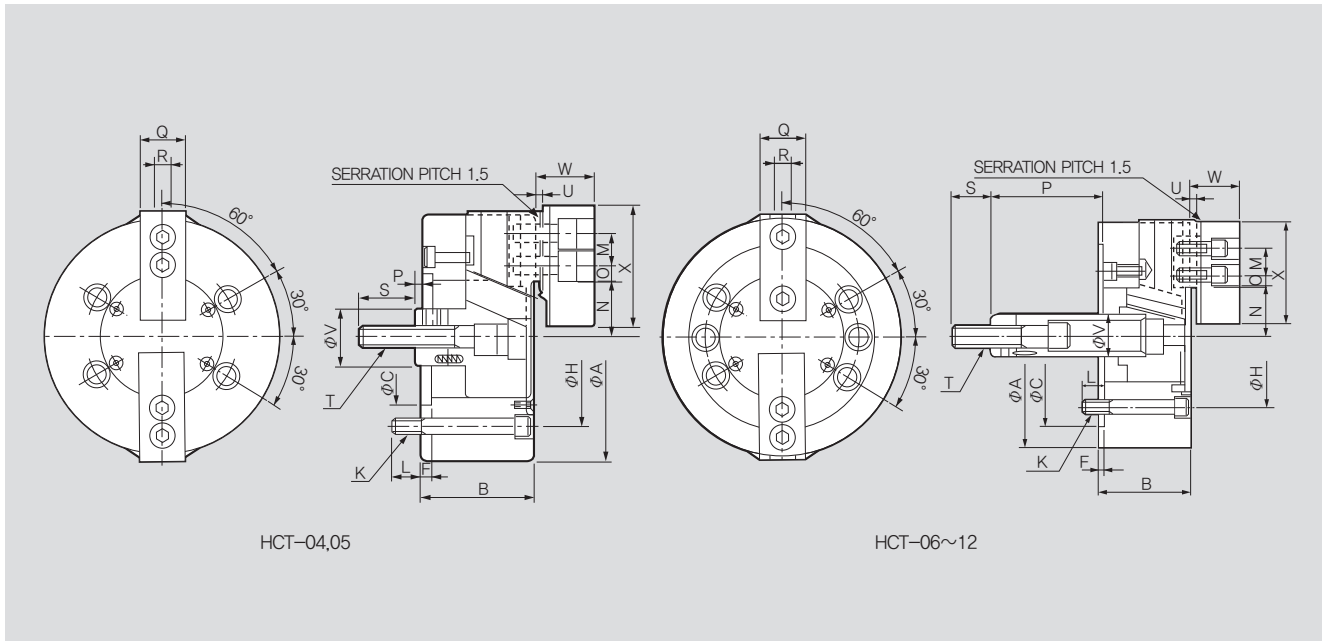


SPECIFICATIONS

| | HCT-04 | HCT-05 | HCT-06 | HCT-08 | HCT-10 | HCT-12 |
|---|------------|------------|-----------|------------|------------|------------|
| Jaw Stroke Dia. [mm] | 6.4 | 6.4 | 8.5 | 8.8 | 8.8 | 10.5 |
| Plunger Stroke [mm] | 14 | 14 | 18.5 | 19 | 25 | 30 |
| Grip Dia. Max [mm] | 110 | 135 | 165 | 210 | 254 | 310 |
| Grip Dia. Min [mm] | 5 | 16 | 14 | 17 | 22 | 22 |
| Max. Permissible Input Force [kN(kgf)] | 5.3(540) | 5.3(540) | 12(1224) | 16.5(1683) | 19.5(1988) | 27.5(2804) |
| Max. Static Gripping Force [kN(kgf)] | 15.2(1550) | 16.9(1713) | 35(3569) | 50(5099) | 72(7342) | 104(10605) |
| Max. r.p.m. [min ⁻¹] | 6000 | 5500 | 5000 | 4000 | 3500 | 3000 |
| Weight [kg] | 3.8 | 5.8 | 11.4 | 22 | 31.6 | 55 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.007 | 0.013 | 0.04 | 0.13 | 0.293 | 0.68 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 1.68(17.1) | 1.68(17.1) | 1.7(17.3) | 1.6(16.3) | 1.9(19.4) | 1.8(18.4) |
| Operating Cylinder | Y-0715R | Y-0715R | Y-1020R | Y-1225R | Y-1225R | Y-1530R |
| KITAGAWA® Model | NT-04 | NT-05 | NT-06 | NT-08 | NT-10 | NT-12 |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co, Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.

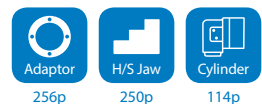


※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HCT-04 | HCT-05 | HCT-06 | HCT-08 | HCT-10 | HCT-12 |
|--------------|---------|----------|----------|----------|----------|-----------|
| ΦA | 110 | 135 | 165 | 210 | 254 | 304 |
| B | 52 | 55 | 74 | 85 | 89 | 106 |
| $\Phi C(H6)$ | 60 | 80 | 140 | 170 | 220 | 220 |
| F | 6 | 7 | 5 | 5 | 5 | 6 |
| ΦH | 80 | 100 | 104.8 | 133.4 | 171.4 | 171.4 |
| K | 4-M8x55 | 4-M8x60 | 6-M10x70 | 6-M12x85 | 6-M16x85 | 6-M16x100 |
| L | 12 | 14 | 14 | 20 | 18 | 18 |
| M | 14 | 19 | 20 | 25 | 30 | 30 |
| N max. | 23.3 | 30.4 | 37.8 | 46.3 | 51.1 | 61 |
| N min. | 20.1 | 27.2 | 33.55 | 41.9 | 46.7 | 55.75 |
| O max. | 11.25 | 11.25 | 13.75 | 22.25 | 30.75 | 48.75 |
| O min. | 8.75 | 6.75 | 7.75 | 11.75 | 11.25 | 12.75 |
| P max. | 17 | 6 | 100 | 125 | 158 | 163 |
| P min. | 3 | -8 | 81.5 | 106 | 133 | 133 |
| Q | 23 | 23 | 31 | 0.35 | 40 | 49 |
| R | 10 | 10 | 12 | 14 | 16 | 18 |
| S | 25 | 35 | 36 | 36 | 36 | 36 |
| T | M10x1.5 | M12x1.75 | M16x2.0 | M20x2.5 | M20x2.5 | M20x2.5 |
| U | 3 | 3 | 4 | 5 | 5 | 5 |
| ΦV | 26 | 28 | 34 | 38 | 45 | 50 |
| W | 27 | 29 | 35 | 42 | 46 | 53.5 |
| X | 55 | 62 | 72 | 95 | 110 | 129 |

RELATED PRODUCT



HCF 4-Jaw Closed-Center Chuck



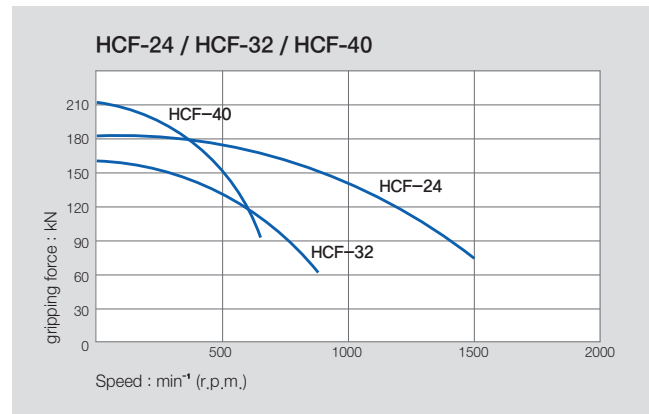
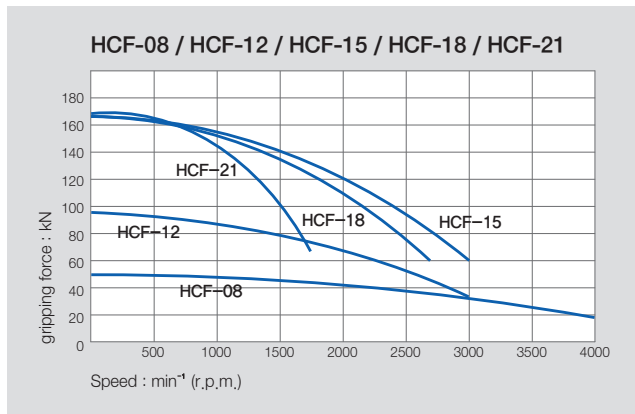
Application / Benefits

Ideal for vertical lathes and square work that does not require a through-hole
Large sizes offered for large work

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

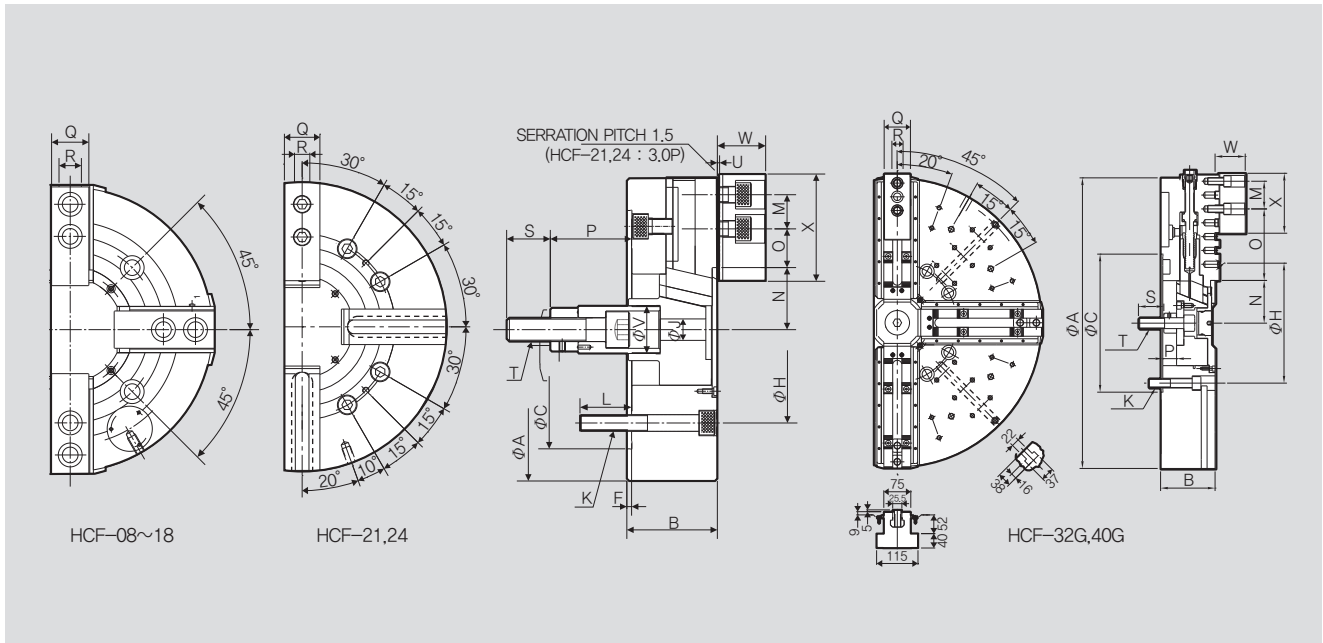


SPECIFICATIONS

| | HCF-08 | HCF-12 | HCF-15 | HCF-18 | HCF-21 | HCF-24 | HCF-32 | HCF-40 |
|---|-------------|-------------|--------------|--------------|-------------|-------------|------------|------------|
| Jaw Stroke Dia. [mm] | 8.8 | 10.5 | 16 | 16 | 16 | 16 | 30 | 46 |
| Plunger Stroke [mm] | 19 | 30 | 35 | 35 | 35 | 35 | 38 | 57 |
| Grip Dia. Max [mm] | 210 | 304 | 381 | 450 | 530 | 610 | 800 | 1000 |
| Grip Dia. Min [mm] | 17 | 26 | 71 | 133 | 62 | 152 | 85 | 150 |
| Max. Permissible Input Force [kN(kgf)] | 16.5(1638) | 27.5(2804) | 54.6(5575) | 54.6(5575) | 54.6(5575) | 54.6(5575) | 88(8925) | 120(12245) |
| Max. Static Gripping Force [kN(kgf)] | 50(5099) | 104(10605) | 165.8(16927) | 165.8(16927) | 168(18550) | 183(18550) | 156(15821) | 213(21769) |
| Max. r.p.m. [min ⁻¹] | 4000 | 3000 | 3040 | 2710 | 1700 | 1500 | 800 | 630 |
| Weight [kg] | 22 | 55 | 98 | 124 | 180 | 223 | 350 | 620 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.14 | 0.76 | 2.02 | 3.57 | 7.6 | 12.9 | 41.2 | 94 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 1.6(16.3) | 1.8(18.4) | 2.13(21.7) | 2.13(21.7) | 2.13(21.7) | 2.13(21.7) | 3(30.6) | 2.7(27.2) |
| Operating Cylinder | Y-1225R(RE) | Y-1530R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2050RE | Y-2560RE |
| Operating Hard Jaw | HB08A1 | HB12B1 | HB15N1 | HB15N1 | HB18B2 | HB18B2 | HB32SB2 | HB40SB2 |

※ Specifications are subject to change without notice.

※ HCF-12 is also available with long stroke.



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HCF-08 | HCF-12 | HCF-15 | HCF-18 | HCF-21 | HCF-24 | HCF-32G | HCF-40G |
|--------------|---------|---------|---------|---------|---------|---------|------------|-----------------|
| ΦA | 210 | 304 | 381 | 450 | 530 | 610 | 800 | 1000 |
| B | 85 | 106 | 114 | 114 | 125 | 150 | 150 | 180 |
| $\Phi C(H6)$ | 170 | 220 | 300 | 300 | 380 | 380 | 380 | 520 |
| F | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 8 |
| ΦH | 150 | 171.4 | 235 | 235 | 330.2 | 330.2 | 330.2 | 463.6 |
| ΦJ | 25 | 34 | 27 | 27 | 27 | 27 | 65 | 32 |
| K | 6-M12 | 4-M16 | 4-M20 | 4-M20 | 8-M22 | 8-M22 | 8-M24x120L | 8-M20x160L(M24) |
| L | 30 | 38 | 65 | 30 | 61 | 31 | 41 | 32 |
| M | 25 | 30 | 43 | 43 | 60 | 60 | 76.2 | 76.2 |
| N max. | 46.3 | 61 | 78 | 108 | 86 | 125 | 117.6 | 217.3 |
| N min. | 41.9 | 55.7 | 70 | 100 | 78 | 117 | 102.7 | 194.3 |
| O max. | 22.25 | 48.75 | 48.75 | 48.75 | 93.5 | 93.5 | 196.9 | 91.1 |
| O min. | 11.75 | 12.75 | 23.25 | 23.25 | 27.5 | 27.5 | 44.5 | 14.9 |
| P max. | 125 | 163 | 104 | 92 | 97 | 97 | 35 | -25 |
| P min. | 106 | 133 | 69 | 57 | 62 | 62 | -3 | 32 |
| Q | 35 | 49 | 50 | 50 | 65 | 65 | 75 | 110 |
| R | 14 | 18 | 26 | 26 | 25 | 25 | 25.5 | 30 |
| S | 36 | 36 | 55 | 55 | 55 | 55 | 70 | 65 |
| T | M20x2.5 | M20x2.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 | M36x4.0 |
| U | 5 | 5 | 2 | 2 | 3 | 3 | 5 | 4 |
| ΦV | 38 | 50 | 60 | 60 | 60 | 60 | 102 | 52 |
| W | 42 | 53.5 | 61 | 60 | 70 | 70 | 82 | 106 |
| X | 95 | 129 | 135 | 135 | 180 | 180 | 165 | 270 |

※ HCF-32G and HCF-40G jaws come in tongue and groove only
 ※ HCF-21 and HCF-24 are available with M22 or M24 mounting bolts.

RELATED PRODUCT



HC-SE 3-Jaw Sealed Closed-center Chuck



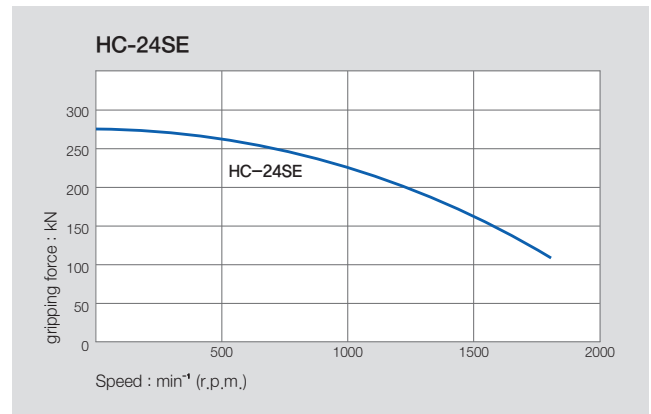
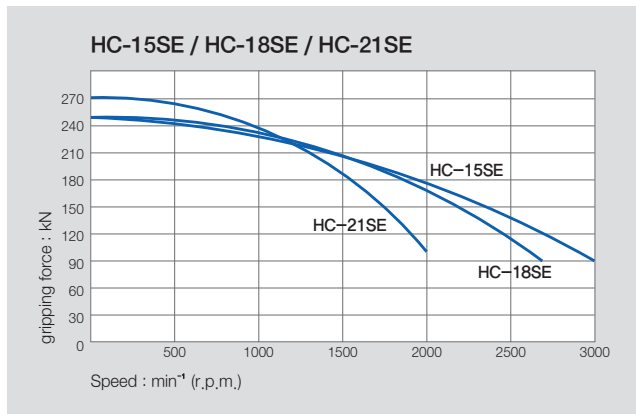
Application / Benefits

Ideal for vertical lathes and square or rectangular work that does not require a through-hole
 Large sizes offered for large work
 Sealed with wipers to minimize maintenance

Technical features

Wedge hook style chuck with high gripping force

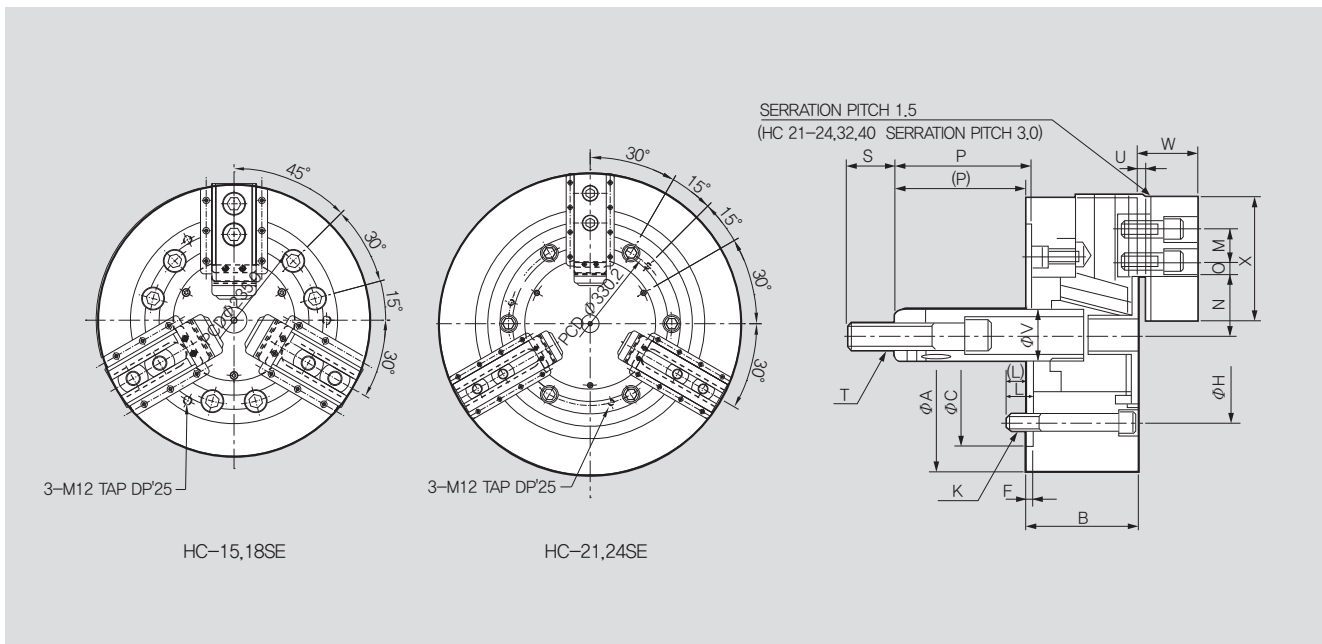
ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | HC-15SE | HC-18SE | HC-21SE | HC-24SE |
|---|-------------|-------------|-------------|-------------|
| Jaw Stroke Dia. [mm] | 16 | 16 | 16 | 16 |
| Plunger Stroke [mm] | 35 | 35 | 35 | 35 |
| Grip Dia. Max [mm] | 381 | 450 | 530 | 610 |
| Grip Dia. Min [mm] | 71 | 133 | 62 | 152 |
| Max. Permissible Input Force [kN(kgf)] | 82(8362) | 82(8362) | 82(8362) | 82(8362) |
| Max. Static Gripping Force [kN(kgf)] | 249(25391) | 249(25391) | 273(27838) | 273(27838) |
| Max. r.p.m. [min ⁻¹] | 3040 | 2710 | 1940 | 1760 |
| Weight [kg] | 96 | 124 | 180 | 223 |
| Moment of inertia [N · m ² (kg · m ²)] | 1.8 | 2.35 | 4.8 | 6.925 |
| Max.hydraulic Pressure [MPa(kgf/cm ²)] | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) | 3.2(32.6) |
| Operating Cylinder Hydraulic | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) | Y-2035R(RE) |
| Operating Hard Jaw | HB15N1 | HB15N1 | HB18B2 | HB18B2 |
| KITAGAWA® Model | N-15 | N-18 | N-21 | N-24 |

※ Specifications are subject to change without notice.
 ※ HCF-12 is also available with long stroke.

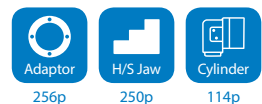


※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| | HC-15SE | HC-18SE | HC-21SE | HC-24SE |
|--------------|-----------|-----------|-----------|-----------|
| ΦA | 381 | 450 | 530 | 610 |
| B | 114 | 114 | 125 | 125 |
| $\Phi C(H6)$ | 300 | 300 | 380 | 380 |
| F | 6 | 6 | 6 | 6 |
| ΦH | 235.0 | 235.0 | 330.2 | 330.2 |
| J | - | - | - | - |
| K | 6-M20x150 | 6-M20x115 | 6-M22x120 | 6-M22x120 |
| L | 65 | 30 | 31 | 31 |
| M | 43 | 43 | 60 | 60 |
| N max. | 77.5 | 108 | 86 | 125 |
| N min. | 69.5 | 100 | 78 | 117 |
| O max. | 48.75 | 48.75 | 93.5 | 93.5 |
| O min. | 23.25 | 23.25 | 27.5 | 27.5 |
| P max. | 104 | 92 | 97 | 97 |
| P min. | 69 | 57 | 62 | 62 |
| Q | 62 | 62 | 65 | 65 |
| R | 25.5 | 25.5 | 25 | 25 |
| S | 55 | 55 | 55 | 55 |
| T | M30x3.5 | M30x3.5 | M30x3.5 | M30x3.5 |
| U | 2 | 2 | 3 | 3 |
| ΦV | 60 | 60 | 60 | 60 |
| W | 61 | 61 | 70 | 71 |
| X | 135 | 135 | 180 | 180 |

RELATED PRODUCT



HCL 3-Jaw Closed-Center Long-Stroke Chuck



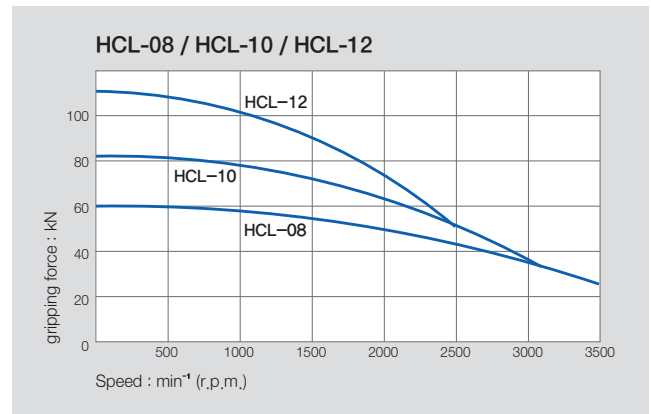
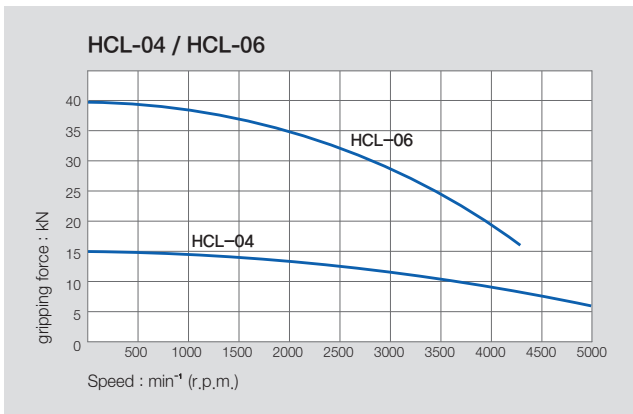
Application / Benefits

ideal for vertical lathes and square or rectangular work that does not require a through-hole
Longer jaw stroke

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | HCL-04 | HCL-06 | HCL-08 | HCL-10 | HCL-12 |
|---|-------------|-------------|-------------|-------------|-------------|
| Jaw Stroke Dia. [mm] | 12.1 | 13 | 16.2 | 18.1 | 19.4 |
| Plunger Stroke [mm] | 15 | 20 | 25 | 28 | 30 |
| Grip Dia. Max [mm] | 110 | 165 | 210 | 254 | 304 |
| Grip Dia. Min [mm] | 12 | 22 | 23 | 27 | 33 |
| Max. Permissible Input Force [kN(kgf)] | 10(1020) | 21(2141) | 30(3059) | 40(4079) | 54(5506) |
| Max. Static Gripping Force [kN(kgf)] | 14.4(1468) | 39(3977) | 60(6118) | 81(8260) | 111(11319) |
| Max. r.p.m. [min ⁻¹] | 5000 | 4300 | 3600 | 3100 | 2500 |
| Weight [kg] | 4.1 | 12 | 22.9 | 34.6 | 60 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.29(0.03) | 1.76(0.18) | 5.39(0.55) | 11.8(1.20) | 28.4(2.90) |
| Max.hydraulic Pressure [MPa(kgf/cm ²)] | 2.9(29.6) | 3.0(29.6) | 2.9(29.6) | 2.8(28.6) | 3.6(36.7) |
| Operating Cylinder | Y-0715R(RE) | Y-1020R(RE) | Y-1225R(RE) | Y-1530R(RE) | Y-1530R(RE) |
| Operating Hard Jaw | HB04N1 | HB06A1 | HB08A1 | HB10A1 | HB12B1 |
| KITAGAWA® Model | NL-04 | NT-06 | NT-08 | NT-10 | NT-12 |

※ Specifications are subject to change without notice.

※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.

HCLT / HCLF 2-Jaw,4Jaw Closed-Center Long-Stroke Chuck



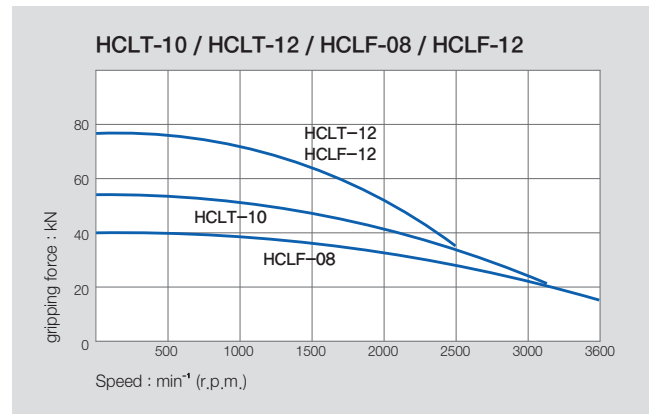
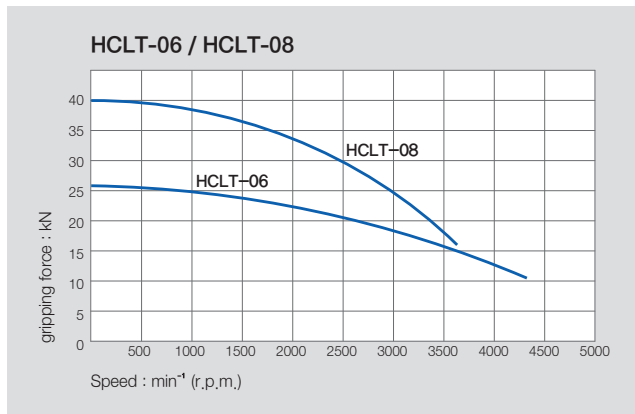
Application / Benefits

Ideal for vertical lathes and rectangular or square work that does not require a through hole

Technical features

Wedge hook style chuck with high gripping force

ACTUAL GRIPPING FORCE DIAGRAM

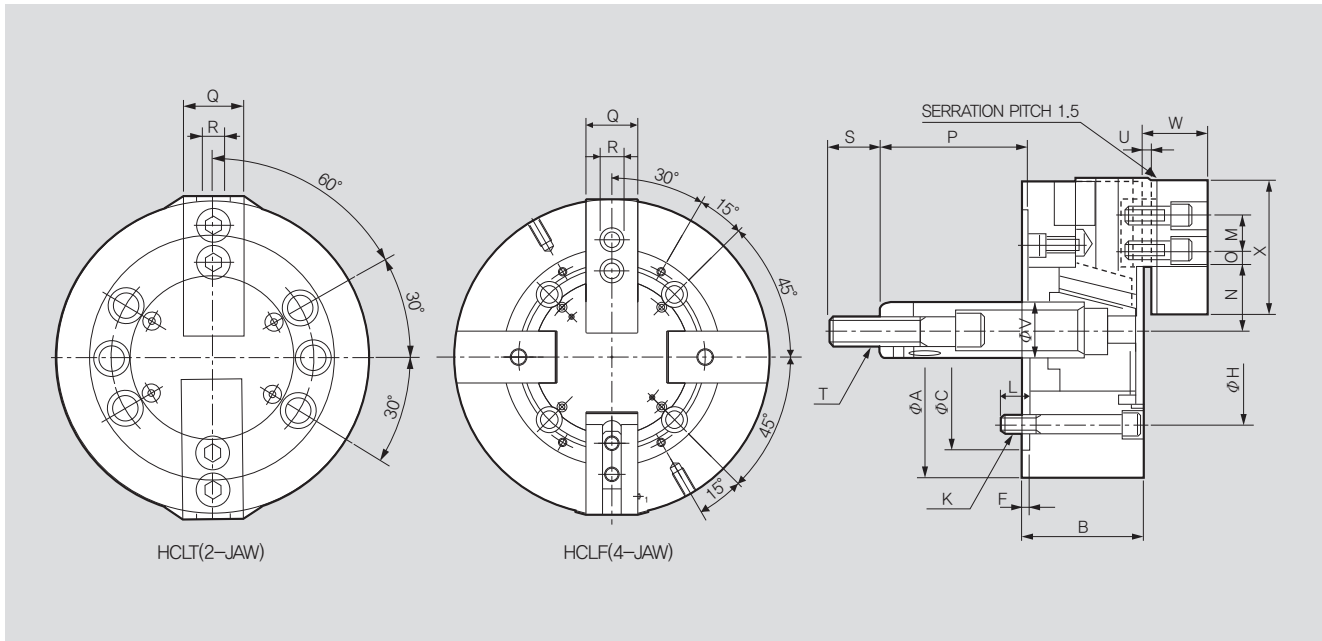


SPECIFICATIONS

| | HCLT-06 | HCLT-08 | HCLT-10 | HCLT-12 | HCLF-08 | HCLF-12 |
|---|------------|------------|------------|------------|------------|------------|
| Jaw Stroke Dia. [mm] | 13 | 16.2 | 18.1 | 19.4 | 16.2 | 19.4 |
| Plunger Stroke [mm] | 20 | 25 | 28 | 30 | 25 | 30 |
| Grip Dia. Max [mm] | 165 | 210 | 254 | 304 | 210 | 304 |
| Grip Dia. Min [mm] | 22 | 24 | 27 | 33 | 24 | 33 |
| Max. Permissible Input Force [kN(kgf)] | 14(1428) | 20(2039) | 27(2753) | 36(3671) | 20(2039) | 36(3671) |
| Max. Static Gripping Force [kN(kgf)] | 26(2651) | 40(4079) | 54(5508) | 74(7546) | 40(4079) | 74(7546) |
| Max. r.p.m. [min ⁻¹] | 4300 | 4300 | 3100 | 2500 | 3600 | 2500 |
| Weight [kg] | 12.5 | 12.5 | 35.5 | 60.5 | 24 | 60.5 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.043 | 0.133 | 0.293 | 0.71 | 0.132 | 0.71 |
| Max. Hydraulic Pressure [MPa(kgf/cm ²)] | 2.06(21.0) | 2.03(20.7) | 1.93(19.7) | 2.50(25.5) | 2.03(20.7) | 2.50(25.5) |
| Operating Cylinder | Y-1020R | Y-1225R | Y-1530R | Y-1530R | Y-1225R | Y-1530R |
| KITAGAWA® Model | NLT-06 | NLT-08 | NLT-10 | NLT-12 | NLT-08 | NLT-12 |

※ Specifications are subject to change without notice.

※ Samcully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa® Iron Works Co., Ltd.

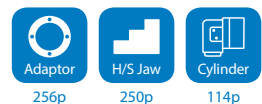


※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

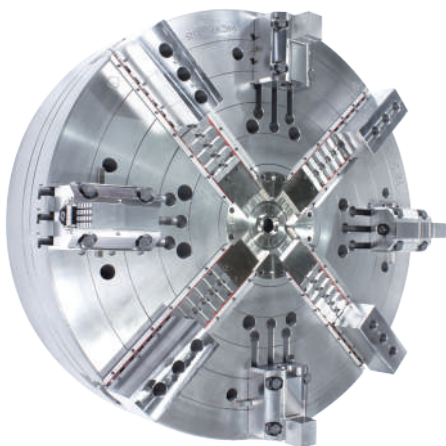
DIMENSIONS

| | HCLT-06 | HCLT-08 | HCLT-10 | HCLT-12 | HCLF-08 | HCLF-12 |
|--------------|----------|----------|-----------|-----------|----------|-----------|
| ΦA | 165 | 210 | 253 | 304 | 210 | 304 |
| B | 74 | 85 | 89 | 106 | 85 | 106 |
| $\Phi C(H6)$ | 140 | 170 | 220 | 220 | 170 | 220 |
| F | 5 | 5 | 5 | 6 | 5 | 6 |
| ΦH | 104.8 | 133.4 | 171.4 | 171.4 | 133.4 | 171.45 |
| K | 6-M10x70 | 6-M12x85 | 6-M16x105 | 6-M16x120 | 4-M16x85 | 4-M16x120 |
| L | 14 | 20 | 38 | 38 | 20 | 38 |
| M | 20 | 25 | 30 | 30 | 25 | 30 |
| N max. | 40.5 | 48.1 | 54.4 | 65.7 | 48.1 | 65.7 |
| N min. | 34 | 40 | 45.35 | 56 | 40 | 56 |
| O max. | 13.75 | 21 | 29.5 | 42.75 | 21 | 42.75 |
| O min. | 9.25 | 12 | 11.5 | 12.25 | 12 | 12.25 |
| P max. | 101.5 | 131 | 161 | 163 | 131 | 163 |
| P min. | 81.5 | 106 | 133 | 133 | 106 | 133 |
| Q | 31 | 35 | 40 | 50 | 35 | 50 |
| R | 12 | 14 | 16 | 18 | 14 | 18 |
| S | 36 | 36 | 36 | 36 | 36 | 36 |
| T | M16x2.0 | M20x2.5 | M20x2.5 | M20x2.5 | M20x2.5 | M20x2.5 |
| U | 4 | 5 | 5 | 5 | 5 | 5 |
| ΦV | 34 | 38 | 45 | 50 | 38 | 50 |
| W | 35 | 42 | 46 | 54 | 42 | 54 |
| X | 72 | 95 | 110 | 129 | 95 | 129 |

RELATED PRODUCT



HCWF 4-Jaw Double Wedge Power Chuck



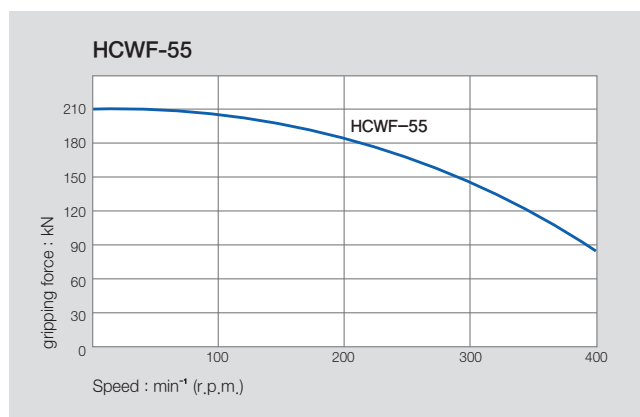
Application / Benefits

For clamping round, cubic, pipe and geometrically irregular workpieces
Available with manual jaws

Technical features

Dual wedge for 2+2 clamping

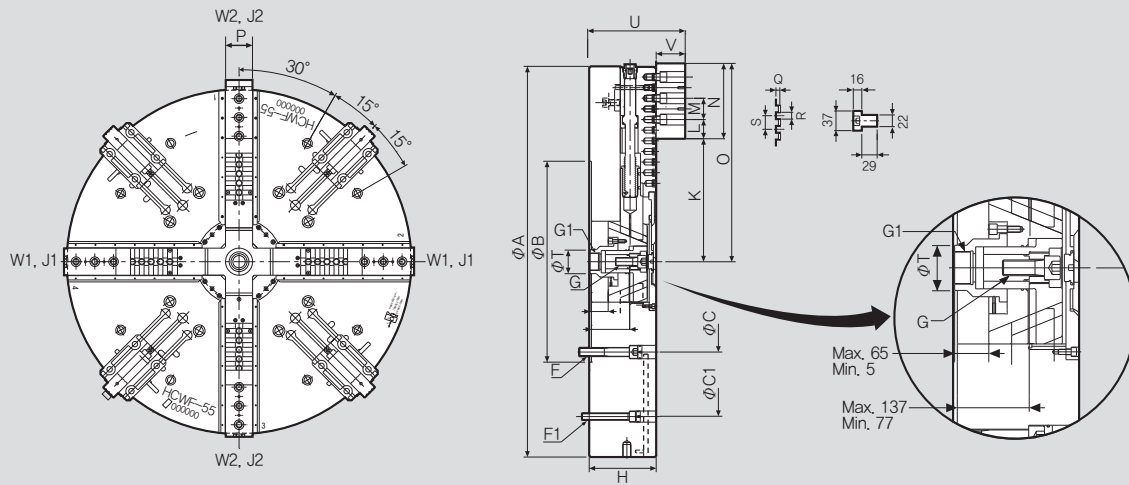
ACTUAL GRIPPING FORCE DIAGRAM



SPECIFICATIONS

| | HCWF-55 |
|---|-------------|
| 2 Step Manual Jaw Function | ☉ |
| Manual Setting (Radial Chuck Jaw) | 40+(24) |
| Manual Jaw Stroke Dia. [mm] | 60 |
| Plunger Stroke [mm] | 60 |
| Grip Dia. Max [mm] | 1400 |
| Grip Dia. Min [mm] | - |
| Max. Permissible Input Force [kN(kgf)] | 120 (W1,W2) |
| Max.Static Gripping Force [kN] | 210 (J1,J2) |
| Max. r.p.m. [min ⁻¹] | 400 |
| Weight [kg] | 1400 |
| Moment of inertia [N · m ² (kg · m ²)] | 9.05 |
| Operating Cylinder | DYV-21560 |

※ ☉ = Option



※ It is recommended to grease chucks at least twice a day in order to maximize longevity.

DIMENSIONS

| HCWF-55 | | | |
|---------|---------|--------|----------|
| ΦA | 1400 | L1max. | 65 |
| ΦB | 720 | L1min. | 5 |
| ΦC | 647.6 | L2max. | 137 |
| ΦC1 | 1110 | L2min. | 77 |
| D | 26 | M | 76.2 |
| E | 40 | N | 270 |
| F | M30x180 | O | Max. 716 |
| F1 | M24x170 | P | 85 |
| G | M30x80 | Q | 11 |
| G1 | M62x2.0 | R | 19.025 |
| H | 240 | S | 38.1 |
| Kmax. | 250 | ΦT | 110 |
| Kmin. | 226 | U | 343 |
| | | V | 104 |

RELATED PRODUCT





ROTARY CYLINDER



SD

Mega-Bore Short body Open Center Hydraulic Cylinder

110 P



Y-RE

Closed Center Hyd. Cylinder with Proximity Bracket

126 P



SD-E

Mega-Bore Short body Open-Center Hydraulic Cylinder

112 P



YH-RE

Ultra Compact Closed Center Hyd. Cylinder with Proximity Bracket

130 P



SD-S

Mega-Bore Short Body Open-Center Hydraulic Cylinder (Seal Type)

114 P



YS-RA

Ultra Compact Closed Center Hyd. Cylinder with Proximity Bracket & Built in Rotary Union

132 P



SH

Standard Mega Bore Short Body Open Center Hyd. Cylinder

116 P



YS-RC

Ultra Compact Closed Center Hyd. Cylinder with Proximity Bracket & Built in Rotary Union

134 P



SHL (Long Stroke)

Mega Bore Short Body Open Center Hyd. Cylinder

118 P



DY

Double Piston Hyd. Cylinder

136 P



SYH

Standard Open Center Hyd. Cylinder

120 P



DYV

Double Piston Hyd. Cylinder with Lock Valve

138 P



SYHL (Long Stroke)

Open Center Hyd. Cylinder

122 P



AY-R

Closed Center Pneumatic Cylinder

140 P



Y-R

Standard Closed Center Hyd. Cylinder

124 P

SD Mega-Bore Short body Open Center Hydraulic Cylinder



Application / Benefits

- Low drain rate
- Compact design
- Large bore for work requiring through hole

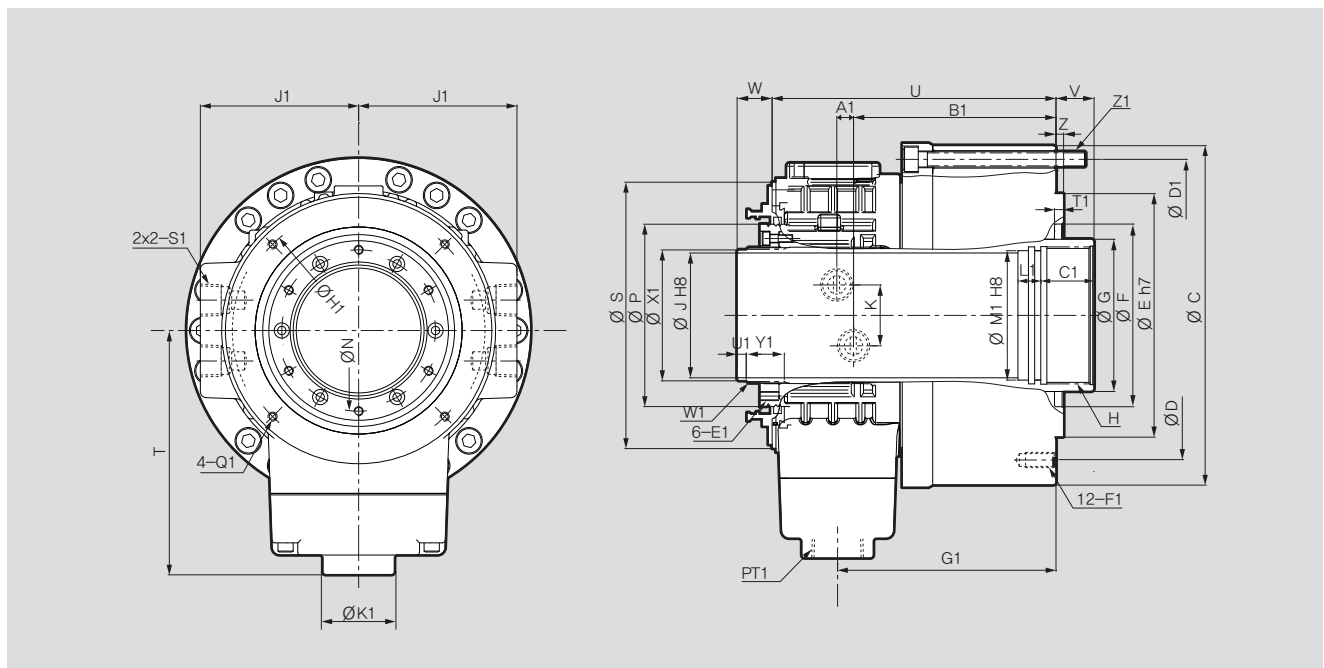
Technical features

- Low leakage minimizes heat
- Check valve maintains pressure during power outage

SPECIFICATIONS

| | SD-13546 | SD-15452 | SD-17568 | SD-18577 | SD-18582 | SD-21510 | SDL-25411 | SDL-30516 |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| Available I.D. [mm] | 46 | 52 | 68 | 77 | 82 | 103 | 117.5 | 166.5 |
| Piston Dia. [mm] | 132 | 156 | 170 | 185 | 185 | 215 | 250 | 305 |
| Piston Stroke [mm] | 25 | 25 | 29 | 29 | 30 | 35 | 50 | 51 |
| Piston Force (Push) [kN(kgf)] | 47(4800) | 67(6800) | 75(7656) | 89(9000) | 85(8700) | 105(10700) | 138(14100) | 152(15483) |
| Piston Force (Pull) [kN(kgf)] | 44(4500) | 63(6400) | 70(7050) | 82(8300) | 79(8100) | 101(10300) | 126(12900) | 138(14060) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.5(45bar) | 4.5(45bar) | 4.5(45bar) | 4.5(45bar) | 4.5(45bar) | 4.5(45bar) | 4.0(40bar) | 3.3(33bar) |
| Max. r.p.m. [min ⁻¹] | 7000 | 6200 | 5600 | 5000 | 4800 | 3500 | 3000 | 2000 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.021 | 0.045 | 0.07 | 0.097 | 0.11 | 0.188 | 0.50 | 1.45 |
| Weight [kg] | 10 | 14 | 18 | 23 | 26 | 37 | 54 | 90 |
| Total Leakage [l /min] | 2.5 | 3 | 3.2 | 3.5 | 3.5 | 4.5 | 6 | 8.4 |

- ※ Maximum turning speed is based upon actual measurement.
- ※ Specifications are subject to change without notice.



- ※ See the product dimension Table on the right.

DIMENSIONS

| | SD-13546 | SD-15452 | SD-17568 | SD-18577 | SD-18582 | SD-21510 | SDL-25411 | SDL-30516 |
|-------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| ΦC | 165 | 190 | 210 | 218 | 223 | 266 | 310 | 370 |
| ΦD | 130 | 170 | 190 | 190 | 190 | 225 | 275 | 290 |
| ΦD1 | 147 | 170 | 190 | 200 | 205 | 240 | 275 | 345 |
| ΦE | 100 | 130 | 160 | 160 | 160 | 200 | 230 | 260 |
| ΦF | 80 | 85 | 120 | 120 | 120 | 160 | 166 | 240 |
| ΦG | 65 | 70 | 85 | 95 | 100 | 125 | 140 | 190 |
| H | M52x2.0p | M60x2.0p | M75x2.0p | M85x2.0p | M90x2.0p | M112x2.0p | M130x2.0p | M180x3.0p |
| ΦJ | 46.5 | 52 | 68 | 77 | 82 | 103 | 117.5 | 166.5 |
| K | 36 | 36 | 40 | 40 | 40 | 48 | 46 | 42 |
| N | 63 | 76 | 92 | 102 | 106 | 128 | 138 | 188 |
| ΦP | 78.8 | 89.8 | 105.8 | 115.8 | 119.8 | 157.8 | 170 | 222 |
| ΦS | 116 | 135 | 154 | 164 | 175 | 205 | 230 | 278 |
| T | 119 | 134 | 141 | 149.5 | 160.5 | 174.5 | 204 | 230 |
| U | 159 | 150.5 | 172.5 | 182 | 186.5 | 203 | 258 | 290 |
| V max | 15 | 22 | 25 | 25 | 25 | 35 | 46 | 51 |
| V min | -10 | -3 | -4 | -4 | -5 | 0 | -4 | 0 |
| W max | 55 | 50 | 59 | 56 | 53 | 60 | 75 | 76 |
| W min | 30 | 25 | 30 | 27 | 23 | 25 | 25 | 25 |
| Z | 5 | 5 | 5 | 8 | 5 | 5 | 6 | 5 |
| A1 | 8.5 | 8.5 | 11 | 11 | 11 | 14 | 18 | 17.5 |
| B1 | 117.5 | 107.5 | 122.5 | 129.5 | 133 | 140 | 178.5 | 206 |
| C1 | 30 | 30 | 30 | 35 | 35 | 30 | 45 | 45 |
| E1 | M6 | M6 | M6 | M6 | M6 | M6 | M6 | M6 |
| F1DP' | M10x20 | M10x20 | M10x20 | M10x20 | M10x20 | M12x20 | M16x32 | M16x32 |
| G1 | 125.5 | 115.5 | 132.5 | 139.5 | 143.5 | 152.5 | 194.5 | 221 |
| H1 | 105 | 118 | 145 | 155 | 160 | 190 | 206 | 256 |
| J1 | 75 | 80 | 90 | 95 | 104 | 120 | 135 | 160 |
| K1 | 47 | 47 | 47 | 47 | 47 | 47 | 47 | 47 |
| L1 | 15 | 15 | 21 | 15 | 15 | 15 | 20 | 20 |
| M1 | 48 | 55 | 71 | 80 | 85 | 106 | 123 | 170 |
| Q1 | M5x10 | M6x10 | M6x10 | M6x10 | M6x12 | M6x12 | M6x12 | M6x12 |
| S1 | PT1/2 | PT1/2 | PT1/2 | PT1/2 | PT1/2 | PT1/2 | PT1/2 | PT1/2 |
| T1 | 7 | 7 | 8 | 8 | 8 | 6 | 6 | 7 |
| W1 | M52x1.5p | M58x1.5p | M74x1.5p | M84x2.0p | M89x2.0p | M119x2.0p | M124x2.0p | M180x3.0p |
| ΦX1 | 50 | 56 | 71.5 | 81 | 86 | 116 | 121.5 | 170.5 |
| Y1 | 24 | 20 | 28 | 26 | 25 | 38 | 29 | 45 |
| U1 | 9 | 9 | 8 | 9 | 6 | 9 | 9 | 8 |
| Z1 | 6-M8x90 | 6-M8x90 | 6-M10x95 | 8-M8x110 | 6-M10x110 | 6-M12x120 | 8-M12x140 | 6-M10x95 |

SD-E Mega-Bore Short body Open-Center Hydraulic Cylinder (Europe standard)



Application / Customer's Benefit

Low drain, Ultra slim open-center cylinder

Technical features

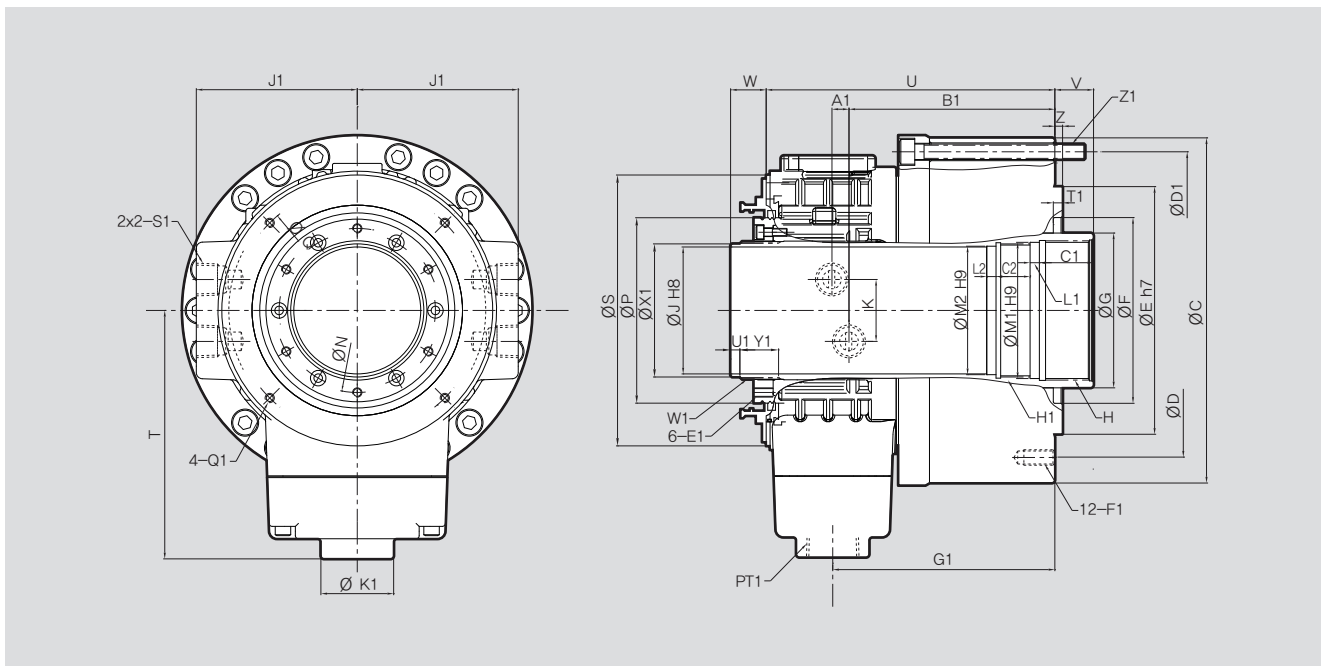
The low drain reduce the heating generated by Hyd. unit

SPECIFICATIONS

| | SD-13546E | SD-15452E | SD-16567E | SD-17577E | SD-18582E | SD-19586E | SD-20595E | SD-21511E |
|---|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|
| Available I.D. [mm] | 46.5 | 52.5 | 67.5 | 77 | 82 | 86.5 | 95.5 | 110.5 |
| Piston Dia. [mm] | 132 | 151 | 165 | 177 | 185 | 190 | 205 | 220 |
| Piston Stroke [mm] | 25 | 25 | 29 | 29 | 30 | 34 | 34 | 35 |
| Piston Force (Push) [kN(kgf)] | 47(4800) | 62(6285) | 67(6863) | 80(8100) | 85(8700) | 90(9200) | 105(10700) | 115(11700) |
| Piston Force (Pull) [kN(kgf)] | 44(4500) | 57(5850) | 62(6351) | 73(7400) | 79(8100) | 83(8500) | 95(9700) | 107(10900) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.5(45) | 4.5(45) | 4.5(45) | 4.5(45) | 4.5(45) | 4.5(45) | 4.5(45) | 4.5(45) |
| Max. r.p.m. [min ⁻¹] | 7000 | 6200 | 5600 | 5000 | 4800 | 4500 | 4000 | 3600 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.03 | 0.045 | 0.07 | 0.097 | 0.11 | 0.13 | 0.17 | 0.28 |
| Weight [kg] | 11 | 14 | 18 | 23 | 26 | 27 | 29 | 40 |
| Total Leakage [ℓ /min] | 2.5 | 3 | 3.2 | 3.5 | 3.5 | 4 | 5 | 7 |

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



※ See the product dimension Table on the right.

DIMENSIONS

| | SD-13546E | SD-15452E | SD-16567E | SD-17577E | SD-18582E | SD-19586E | SD-20595E | SD-21511E |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ΦC | 162 | 182 | 197 | 214 | 223 | 228 | 245 | 266 |
| ΦD | 130 | 165 | 180 | 195 | 205 | 210 | 227 | 240 |
| ΦD1 | 147 | 165 | 180 | 195 | 205 | 210 | 227 | 240 |
| ΦE | 130 | 140 | 160 | 160 | 168 | 180 | 210 | 210 |
| ΦF | 76 | 85 | 120 | 120 | 120 | 120 | 130 | 160 |
| ΦG | 61 | 70 | 85 | 95 | 100 | 105 | 115 | 130 |
| H | M55x2.0p | M60x2.0p | M75x2.0p | M85x2.0p | M90x2.0p | M112x2.0p | M105x2.0p | M120x2.0p |
| H1 | M50X1.5p | M55x2.0p | M72x1.5p | M80x2.0p | | M90x2.0p | M100x2.0p | M115x2.0p |
| ΦJ | 46.5 | 52.5 | 67.5 | 77 | 82 | 86.5 | 95.5 | 110.5 |
| K | 36 | 36 | 40 | 40 | 40 | 40 | 40 | 48 |
| N | 64 | 76 | 92 | 102 | 106 | 112 | 124 | 139 |
| ΦP | 78.8 | 89.8 | 105.8 | 115.8 | 119.8 | 125.8 | 137.8 | 160 |
| ΦS | 116 | 135 | 154 | 164 | 175 | 181 | 188 | 208 |
| T | 119 | 134 | 141 | 149.5 | 159.5 | 158.5 | 166 | 174.5 |
| U | 149 | 148 | 172.5 | 172.5 | 186.5 | 191 | 200 | 233.5 |
| V max | 22 | 22 | 25 | 25 | 23 | 31 | 31 | 31 |
| V min | -3 | -3 | -4 | -4 | -7 | -3 | -3 | -4 |
| W max | 42 | 45.5 | 51.5 | 51.5 | 53 | 58 | 59 | 63 |
| W min | 17 | 20.5 | 22.5 | 22.5 | 23 | 24 | 25 | 28 |
| Z | 5 | 5 | 8 | 8 | 5 | 8 | 8 | 8 |
| A1 | 8.5 | 8.5 | 11 | 11 | 11 | 13 | 13 | 14 |
| B1 | 107.5 | 107.5 | 122.5 | 122.5 | 133 | 136 | 143 | 170.5 |
| C1 | 25 | 25 | 25 | 25 | 35 | 32 | 32 | 32 |
| C2 | 25 | 28 | 28 | 28 | | 30 | 30 | 30 |
| E1 | M6 | M6 | M6 | M6 | M6 | M6 | M6 | M6 |
| F1DP' | M10 DP'20 | M10 DP'20 | M10 DP'20 | M10 DP'20 | M10 DP'20 | M10 DP'20 | M10 DP'20 | M12 DP'24 |
| G1 | 115.5 | 115.5 | 132.5 | 132.5 | 143.5 | 144 | 151 | 180 |
| J1 | 75 | 80 | 90 | 95 | 104 | 108 | 116 | 120 |
| K1 | 47 | 47 | 47 | 47 | 47 | 47 | 47 | 47 |
| L1 | 6 | 6 | 6 | 6 | 15 | 6 | 6 | 6 |
| L2 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 |
| M1 | 52.5 | 57 | 72.5 | 82 | 85 | 92 | 102.5 | 117.5 |
| M2 | 47 | 52.5 | 69 | 77 | | 87 | 97 | 112 |
| Q | 105 | 118 | 145 | 155 | 160 | 168 | 168 | 190 |
| Q1 | M5DP'10 | M6DP'10 | M6DP'10 | M6DP'10 | M6DP'12 | M6DP'12 | M6DP'12 | M6DP'12 |
| S1 | G3/8 | G3/8 | G3/8 | G3/8 | G3/8 | G3/8 | G3/8 | G3/8 |
| T1 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 |
| W1 | M52x1.5p | M60x1.5p | M74x1.5p | M84x2.0p | M89x2.0p | M94x2.0p | M104x2.0p | M120x2.0p |
| ΦX1 | 50 | 58 | 71 | 81 | 86 | 91 | 101 | 117 |
| Y1 | 24 | 21 | 24 | 25 | 25 | 26 | 26 | 34 |
| U1 | 6 | 5 | 5 | 5 | 6 | 5 | 6 | 6 |
| Z1 | 6-M8x90 | 6-M8x90 | 6-M10x100 | 6-M10x100 | 6-M10x110 | 6-M10x105 | 6-M10x110 | 6-M10x135 |

SD-S Mega-Bore Short Body Open-Center Hydraulic Cylinder (Seal Type)



Application / Customer's Benefit

Low drain, Ultra slim open-center cylinder

Technical features

Low drain minimized heat

Prohibit leakage of cylinder by sealed function

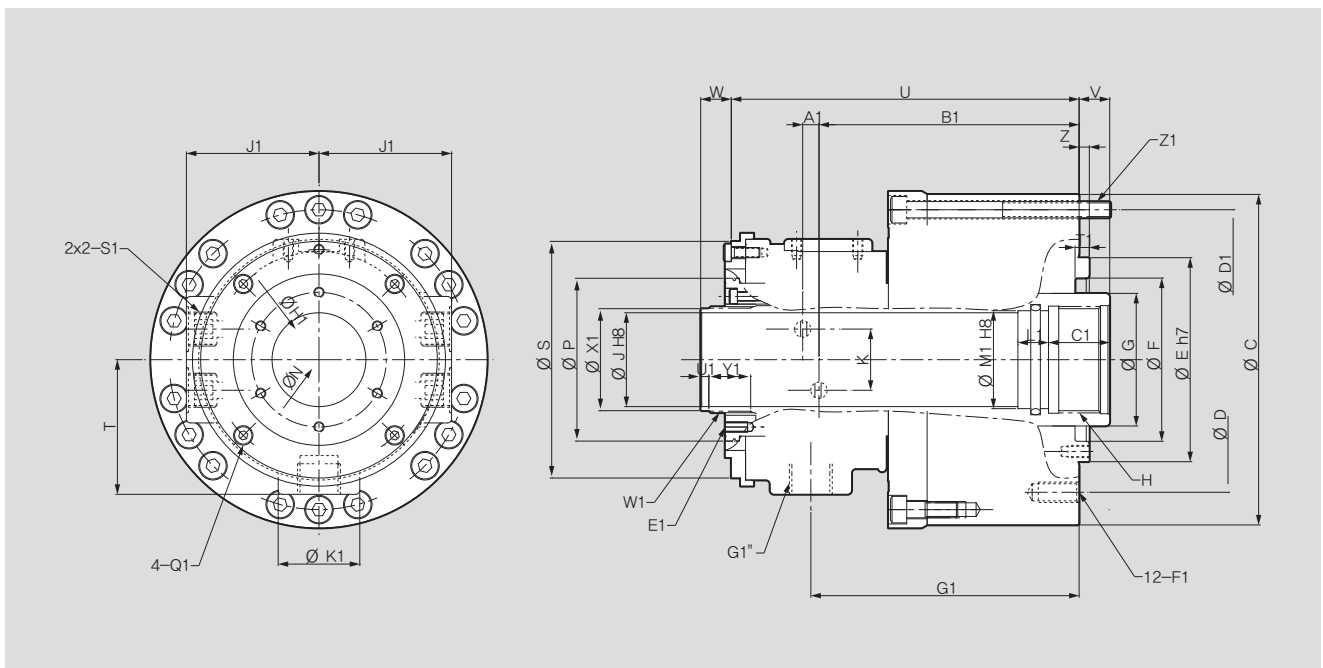
Ideal for small space of machine and installation into sub spindle.

SPECIFICATIONS

| | SD-13546S | SD-18546S | SD-17568S |
|---|------------------|------------------|------------------|
| Available I.D. [mm] | 46 | 46 | 68 |
| Piston Dia. [mm] | 132 | 170 | 170 |
| Piston Stroke [mm] | 25 | 30 | 29 |
| Piston Force (Push) [kN(kgf)] | 47(4800) | 85(8700) | 75(7656) |
| Piston Force (Pull) [kN(kgf)] | 44(4500) | 80(8200) | 70(7050) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.5 MPA (45 bar) | 4.5 MPA (45 bar) | 4.5 MPA (45 bar) |
| Max. r.p.m. [min ⁻¹] | 6000 | 4800 | 4800 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.021 | 0.11 | 0.07 |
| Weight [kg] | 9 | 20 | 18 |
| Total Leakage [ℓ /min] | 2.5 | 3 | 3.2 |

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



※ See the product dimension Table on the right.

DIMENSIONS

| | SD-13546S | SD-18546S | SD-17568S |
|-------|-----------|-----------|-----------|
| C | 162 | 223 | 207 |
| D | 130 | 190 | 190 |
| D1 | 147 | 205 | 190 |
| E | 100 | 160 | 160 |
| F | 80 | 120 | 120 |
| G | 65 | 65 | 85 |
| H | M52x2.0p | M55x2.0p | M75x2.0p |
| J | 46 | 46 | 68 |
| K | 30 | 30 | 40 |
| N | 66 | 66 | 92 |
| P | 79.8 | 79.8 | 105.8 |
| S | 116 | 116 | 154 |
| T | 66 | 66 | 91 |
| U | 166 | 179.5 | 194 |
| V max | 15 | 29 | 25 |
| V min | -10 | -1 | -4 |
| W max | 40 | 45 | 59 |
| W min | 15 | 15 | 30 |
| Z | 5 | 5 | 5 |
| A1 | 8 | 8 | 10 |
| B1 | 127.5 | 136.5 | 138.3 |
| C1 | 30 | 30 | 30 |
| E1 | M5 | M5 | M6 |
| F1DP' | M10 DP'20 | M10 DP'20 | M10DP'20 |
| G1 | 131.5 | 140.5 | 143 |
| H1 | 105 | 105 | 145 |
| J1 | 65 | 65 | 90 |
| K1 | 40 | 40 | 47 |
| L1 | 15 | 15 | 21 |
| M1 | 48 | 51 | 71 |
| Q1 | M5 DP'10 | M5 DP'10 | M6 DP'10 |
| S1 | PT1/2 | PT1/2 | PT1/2 |
| T1 | 7 | 7 | 8 |
| W1 | M52x1.5p | M52x1.5p | M74x1.5p |
| X1 | 50 | 50 | 71.5 |
| Y1 | 20 | 20 | 38 |
| U1 | 5 | 5 | 8 |
| Z1 | 6-M8x100 | 6-M10x105 | 6-M10x100 |

SH Standard Mega-Bore Short-Body Open Center Hydraulic Cylinder



Application / Benefits

Large bore for work requiring through hole
Compact design

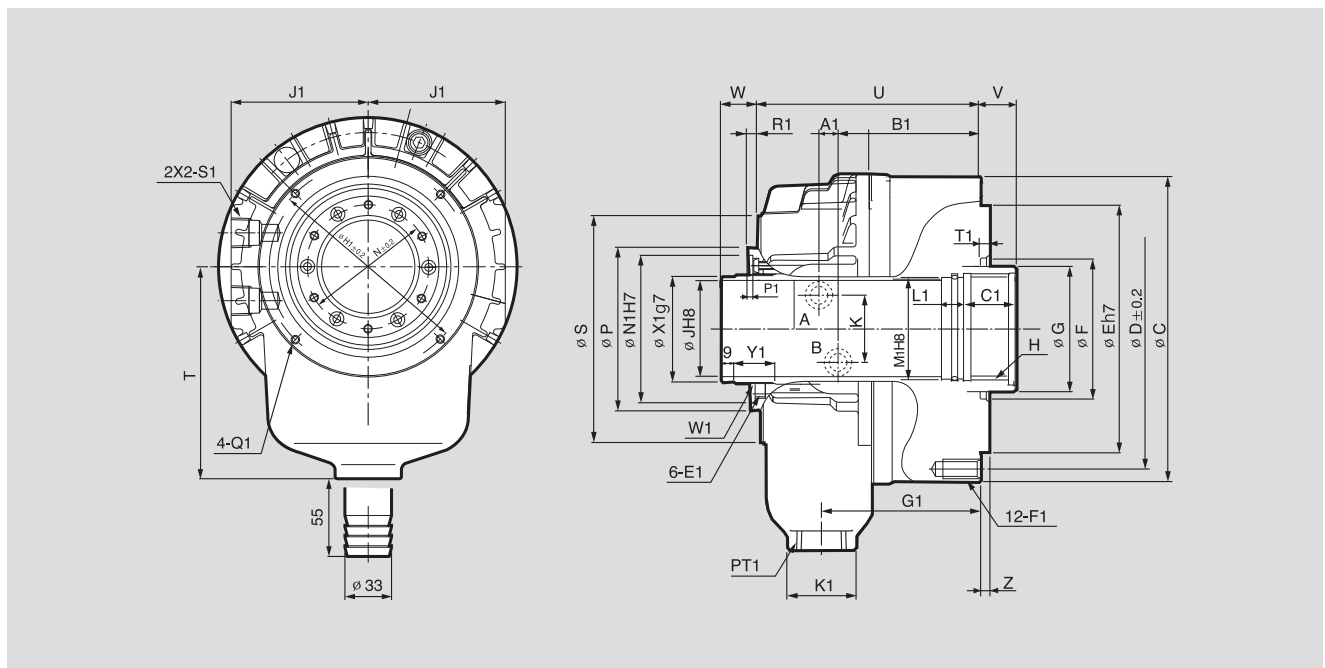
Technical features

Check valve maintains pressure during power outage

SPECIFICATIONS

| | SH-10036 | SH-13046 | SH-15052 | SH-17068 | SH-18077 | SH-19082 | SH-21010 | SH-25011 |
|---|-------------|------------|-------------|-------------|-------------|-------------|-------------|------------|
| Available I.D. [mm] | 36 | 46 | 52 | 68 | 77 | 82 | 106 | 117.5 |
| Piston Dia. [mm] | 105 | 135 | 156 | 170 | 185 | 190 | 215 | 255 |
| Piston Stroke [mm] | 12 | 15 | 22 | 25 | 25 | 25 | 30 | 23 |
| Piston Force (Push) [kN(kgf)] | 25(2549) | 42.3(4285) | 60(6118) | 63(6531) | 75.3(7632) | 78.1(7924) | 91.8(9357) | 132(13390) |
| Piston Force (Pull) [kN(kgf)] | 24(2447) | 38.1(3865) | 56(5710) | 59.8(6060) | 69.6(7087) | 72.5(7350) | 87.8(8952) | 121(12305) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) |
| Max. r.p.m. [min ⁻¹] | 8000 | 7000 | 6200 | 5600 | 5000 | 4800 | 3500 | 3000 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.43(0.044) | 0.2(0.021) | 0.44(0.045) | 0.65(0.067) | 0.83(0.084) | 0.95(0.097) | 1.84(0.188) | 1.9(0.193) |
| Weight [kg] | 8.4 | 10 | 14 | 16.5 | 18 | 25 | 37 | 50 |
| Total Leakage [l /min] | 3.0 | 3.0 | 3.9 | 4.0 | 4.2 | 4.5 | 6.0 | 7.0 |

※ Maximum turning speed is based upon actual measurement.
※ Specifications are subject to change without notice.



※ See the product dimension Table on the right.

DIMENSIONS

| | SH-10036 | SH-13046 | SH-15052 | SH-17068 | SH-18077 | SH-19082 | SH-21010 | SH-25011 |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|
| ΦC | 135 | 165 | 190 | 210 | 218 | 223 | 263 | 310 |
| ΦD | 115 | 130 | 170 | 190 | 190 | 190 | 225 | 275 |
| ΦE | 100 | 100 | 130 | 160 | 160 | 160 | 200 | 230 |
| ΦF | 65 | 80 | 85 | 120 | 120 | 120 | 160 | 166 |
| ΦG | 48 | 65 | 70 | 85 | 95 | 100 | 125 | 140 |
| Hmax. | M42x1.5 | M52x2.0 | M60x2.0 | M75x2.0 | M85x2.0 | M90x2.0 | M115x2.0 | M130x2.0 |
| ΦJ | 36 | 46 | 52 | 68 | 77 | 82 | 106 | 117.5 |
| K | 30 | 40 | 40 | 48 | 48 | 58 | 48 | 46 |
| N | 55 | 64 | 73 | 88 | 98 | 103 | 142 | 138 |
| ΦP | 73 | 85 | 96 | 111 | 121 | 126 | 157.8 | 170 |
| ΦS | 104 | 116 | 135 | 154 | 164 | 175 | 205 | 230 |
| T | 115 | 120 | 130 | 150 | 165 | 166 | 195 | 107.5 |
| U | 130 | 142 | 136 | 155 | 167 | 174 | 199.7 | 231 |
| V max. | 15 | 15 | 22 | 25 | 25 | 25 | 30 | 18 |
| V min. | 3 | 0 | 0 | 0 | 0 | 0 | 0 | -5 |
| W max. | 37 | 40 | 47 | 50 | 50 | 44 | 55 | 48 |
| W min. | 25 | 25 | 25 | 25 | 25 | 19 | 25 | 25 |
| Z | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| A1 | 9 | 8.5 | 9 | 10 | 10 | 11.5 | 14 | 19 |
| B1 | 90 | 103 | 97.5 | 108 | 119.5 | 122 | 136.5 | 150 |
| C1 | 25 | 30 | 30 | 35 | 35 | 35 | 35 | 45 |
| E1 | M5 | M6 | M6 | M6 | M6 | M6 | M6 | M6 |
| F1DP' | M10x17 | M10x20 | M10x20 | M10x20 | M10x20 | M12x20 | M12x20 | M16x32 |
| G1 | 93.5 | 111 | 101 | 113 | 125 | 129.5 | 151 | 163.5 |
| H1 | 96 | 105 | 118 | 145 | 155 | 160 | 190 | 206 |
| J1 | 73 | 82 | 92 | 97 | 102 | 105 | 120 | 140 |
| K1 | 47 | 47 | 47 | 47 | 47 | 47 | 47 | 55 |
| L1 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 |
| ΦM1 | 38 | 48 | 55 | 70 | 80 | 85 | 110 | 123 |
| ΦN1 | 64 | 76 | 85 | 100 | 108 | 113 | 128 | 150 |
| P1 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5.5 |
| Q1 | M5x7 | M5x6 | M6x7 | M6x10 | M6x10 | M6x10 | M6x10 | M6x12 |
| R1 | 5 | 6 | 7 | 7 | 7 | 7 | 7 | 7.5 |
| S1 | PT 1/2 | PT 1/2 | PT 1/2 | PT 1/2 | PT 1/2 | PT 1/2 | PT 1/2 | PT 1/2 |
| T1 | 6 | 6 | 5.5 | 5 | 5 | 6 | 6 | 6 |
| W1 | M44x1.5 | M52x1.5 | M58x1.5 | M74x1.5 | M84x2.0 | M89x2.0 | M119x2.0 | M124x2.0 |
| ΦX1 | 42 | 50 | 56 | 72.5 | 81 | 86 | 116 | 122 |
| Y1 | 30 | 24 | 20 | 26 | 26 | 26 | 38 | 29 |

SHL Mega-Bore Short-Body Long-Stroke Open Center Hydraulic Cylinder



Application / Benefits

For work requiring through hole and long stroke

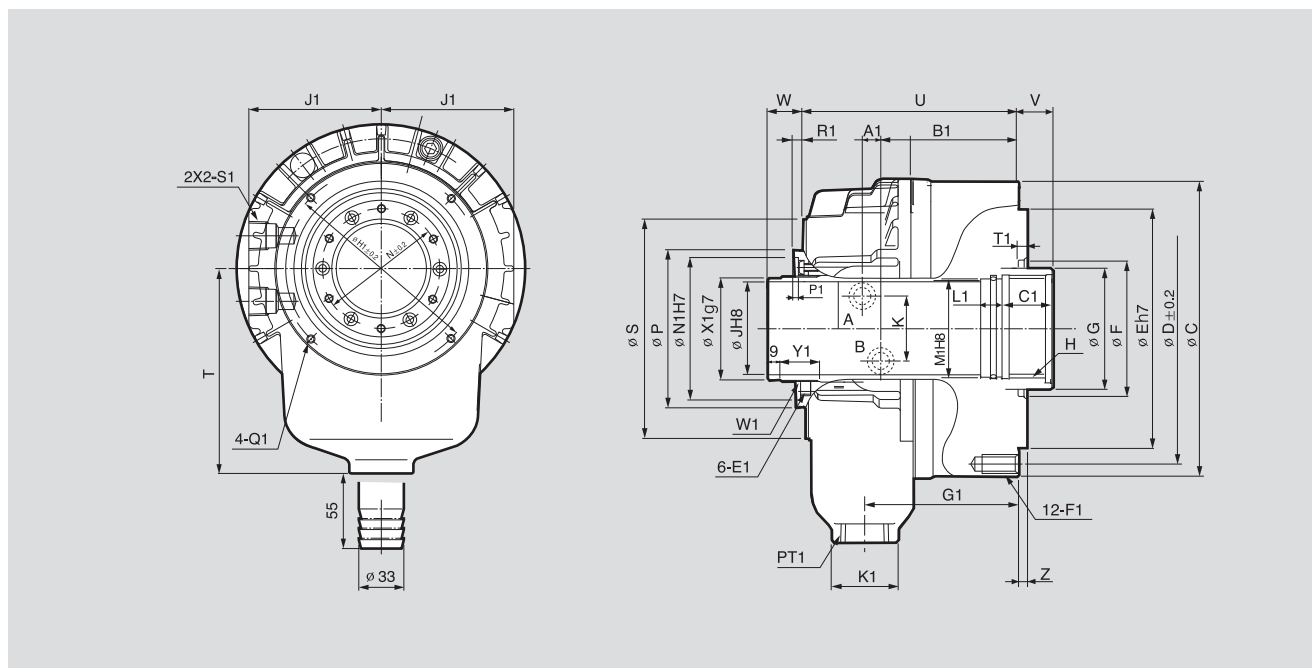
Technical features

Check valve maintains pressure during power outage

SPECIFICATIONS

| | SHL-17068 | SHL-18077 | SHL-25011 | SHL-39024 |
|---|-------------|-------------|------------|--------------|
| Available I.D. [mm] | 68 | 77 | 117.5 | 240 |
| Piston Dia. [mm] | 170 | 185 | 255 | 390 |
| Piston Stroke [mm] | 40 | 40 | 50 | 51 |
| Piston Force (Push) [kN(kgf)] | 63(6531) | 75.3(7632) | 132(13390) | 152.5(15570) |
| Piston Force (Pull) [kN(kgf)] | 59.8(6060) | 69.6(7087) | 121(12305) | 138.7(14152) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 2.5(25) |
| Max. r.p.m. [min ⁻¹] | 5600 | 5000 | 3000 | 1500 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.69(0.070) | 0.86(0.088) | 1.9(0.193) | 39.64(4.045) |
| Weight [kg] | 17.8 | 18.5 | 54 | 140 |
| Total Leakage [l /min] | 4 | 4.2 | 7 | 22 |

※ Specifications are subject to change without notice.

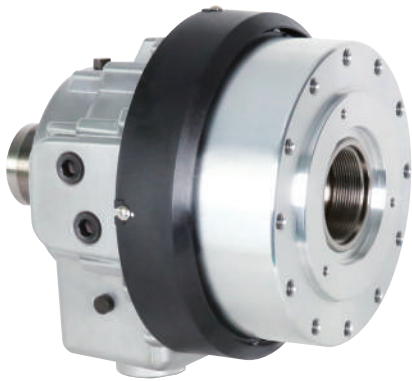


※ See the product dimension Table on the right.

DIMENSIONS

| | SHL-17068 | SHL-18077 | SHL-25011 | SHL-39024 |
|--------|-----------|-----------|-----------|-----------|
| ΦC | 210 | 218 | 310 | 450 |
| ΦD | 190 | 190 | 275 | 420 |
| ΦE | 160 | 160 | 230 | 320 |
| ΦF | 120 | 120 | 166 | 280 |
| ΦG | 85 | 95 | 140 | 265 |
| H max. | M75x2.0 | M85x2.0 | M130x2.0 | M250x3.0 |
| ΦJ | 68 | 77 | 117.5 | 240 |
| K | 48 | 48 | 46 | 30 |
| ΦN | 88 | 98 | 138 | 268 |
| ΦP | 111 | 121 | 170 | 310 |
| ΦS | 154 | 164 | 230 | 370 |
| T | 150 | 165 | 107.5 | 340 |
| U | 175 | 182 | 258 | 302.5 |
| V max. | 35 | 35 | 46 | 50 |
| V min. | -5 | -5 | -4 | -1 |
| W max. | 65 | 65 | 87 | 76 |
| W min. | 25 | 25 | 37 | 25 |
| Z | 5 | 5 | 6 | 6 |
| A1 | 10 | 10 | 19 | 22 |
| B1 | 128 | 134.5 | 176.5 | 199 |
| C1 | 35 | 35 | 45 | 45 |
| E1 | M6 | M6 | M6 | M6 |
| F1DP' | M10x20 | M10x20 | M16x32 | M16x40 |
| G1 | 133 | 140 | 190.5 | 215 |
| H1 | 145 | 155 | 206 | 350 |
| J1 | 97 | 102 | 140 | 215 |
| K1 | 47 | 47 | 55 | 75 |
| L1 | 15 | 15 | 120 | 20 |
| M1 | 71 | 80 | 123 | 243 |
| N1 | 100 | 108 | 150 | 284 |
| P1 | 4 | 4 | 5.5 | 5.5 |
| Q1 | M6x10 | M6x10 | M6x12 | M6x12 |
| R1 | 7 | 7 | 7.5 | 7.5 |
| S1 | PT 1/2 | PT 1/2 | PT 1/2 | PT 1/2 |
| T1 | 5 | 5 | 6 | 6 |
| W1 | M74x1.5 | M84x2.0 | M124x2.0 | M253x2.0 |
| ΦX1 | 72.5 | 81 | 122 | 249 |
| Y1 | 26 | 26 | 29 | 38 |

SYH Standard Open Center Hydraulic Cylinder



Application / Benefits

Compact and lightweight
For work requiring through hole

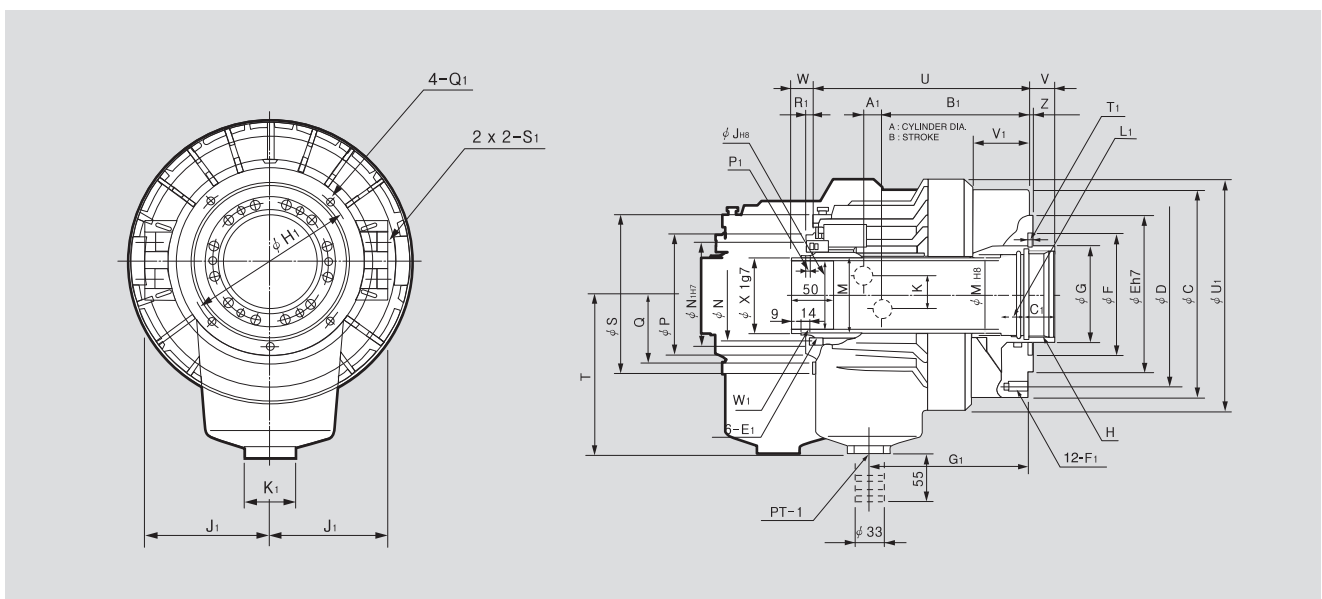
Technical features

Check valve maintains pressure during power outage

SPECIFICATIONS

| | SYH-1036 | SYH-1246 | SYH-1552 | SYH-1877 | SYH-2091 |
|---|-------------|----------------------|-------------|-------------|-------------|
| Available I.D. [mm] | 36 | 36,39,40,41,43,45,46 | 46,52,69 | 68,69,75,77 | 78,91 |
| Piston Dia. [mm] | 105 | 125 | 155 | 180 | 205 |
| Piston Stroke [mm] | 15 | 15 | 22 | 25 | 30 |
| Piston Surface Area (Push) [cm ²] | 67 | 100 | 161 | 198 | 252 |
| Piston Surface Area (Pull) [cm ²] | 64.5 | 89 | 150 | 183 | 234 |
| Piston Force (Push) Push [kN(kgf)] | 25(2549) | 38(3875) | 60(6118) | 74(7546) | 94(9584) |
| Piston Force (Pull) Push [kN(kgf)] | 24(2447) | 33(3365) | 56(5710) | 69(7036) | 88(8973) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) |
| Max. r.p.m. [min ⁻¹] | 8000 | 8000 | 6200 | 4700 | 3800 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.10(0.011) | 0.18(0.019) | 0.52(0.053) | 0.93(0.095) | 1.45(0.153) |
| Weight [kg] | 8.6 | 12 | 16.8 | 26 | 33 |
| Total leakage [l /min] | 3 | 3 | 3.9 | 4.2 | 4.5 |
| KITAGAWA® Model | S-1036 | S-1246 | S-1552 | S-1875 | S-2091 |

※ Maximum turning speed is based upon actual measurement.
※ Specifications are subject to change without notice.

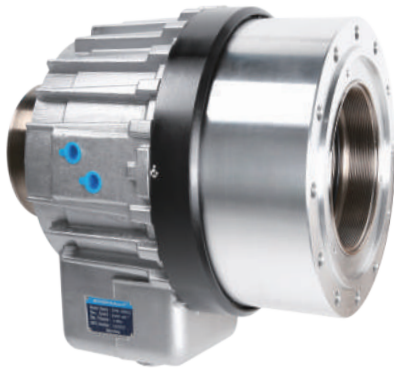


※ See the product dimension Table on the right.

DIMENSIONS

| | SYH-1036 | SYH-1246 | SYH-1552 | SYH-1877 | SYH-2091 |
|--------|----------|-----------|-----------|-----------|-----------|
| ΦC | 135 | 155 | 190 | 215 | 240 |
| ΦD | 115 | 130 | 170 | 190 | 215 |
| ΦE | 100 | 100 | 130 | 160 | 180 |
| ΦF | 65 | 80 | 85 | 120 | 140 |
| ΦG | 48 | 65 | 70 | 95 | 110 |
| H max. | M42x1.5 | M52x2.0 | M60x2.0 | M85x2.0 | M100x2.0 |
| ΦJ | 36 | 46 | 52 | 77 | 91 |
| K | 30 | 36 | 36 | 36 | 34 |
| ΦM | 44.6 | 52.9 | 59.6 | 84.6 | 99.6 |
| ΦN | 55 | 64 | 73 | 98 | 108 |
| ΦP | 73 | 85 | 96 | 121 | 138 |
| ΦQ | 45 | 51.5 | 57 | 70 | 79 |
| ΦS | 104 | 118 | 137 | 166 | 182 |
| T | 115 | 115 | 130 | 160 | 185 |
| U | 156 | 184 | 191 | 230 | 253 |
| V max. | 15 | 15 | 22 | 25 | 30 |
| V min. | 0 | 0 | 0 | 0 | 0 |
| W max. | 40 | 40 | 47 | 50 | 55 |
| W min. | 25 | 25 | 25 | 25 | 25 |
| Z | 5 | 5 | 5 | 5 | 5 |
| A1 | 11 | 11.5 | 12 | 17.5 | 21 |
| B1 | 102.5 | 126.5 | 136 | 153.5 | 168 |
| C1 | 25 | 30 | 30 | 35 | 35 |
| E1 | M5x11 | M6x9 | M6x9 | M6x9 | M6x14 |
| F1 | 6-M10x17 | 12-M10x20 | 12-M10x20 | 12-M10x20 | 12-M12x24 |
| G1 | 98 | 135 | 145 | 166.5 | 183 |
| H1 | 88 | 98 | 110 | 155 | 165 |
| J1 | 73 | 76 | 86 | 101 | 110 |
| K1 | 47 | 47 | 47 | 47 | 47 |
| L1 | 15 | 15 | 15 | 15 | 15 |
| M1 | 38 | 50 | 55 | 80 | 95 |
| ΦN1 | 64 | 76 | 85 | 108 | 120 |
| P1 | 4 | 4 | 4 | 4 | 4 |
| Q1 | M5x10 | M5x10 | M6x12 | M6x12 | M6x12 |
| R1 | 5 | 6 | 7 | 7 | 7 |
| S1 | PT3/8 | PT1/2 | PT1/2 | PT1/2 | PT1/2 |
| T1 | 6 | 6 | 6 | 6 | 6 |
| ΦU1 | 158 | 200 | 220 | 242 | 267 |
| V1 | 28 | 46 | 51 | 58 | 66 |
| W1 | M44x1.5 | M52x1.5 | M58x1.5 | M84x2.0 | M99x2.0 |
| ΦX1 | 42 | 50 | 56 | 81 | 96 |

SYHL Open Center Long-Stroke Hydraulic Cylinder



Application / Benefits

For work requiring through hole and long stroke

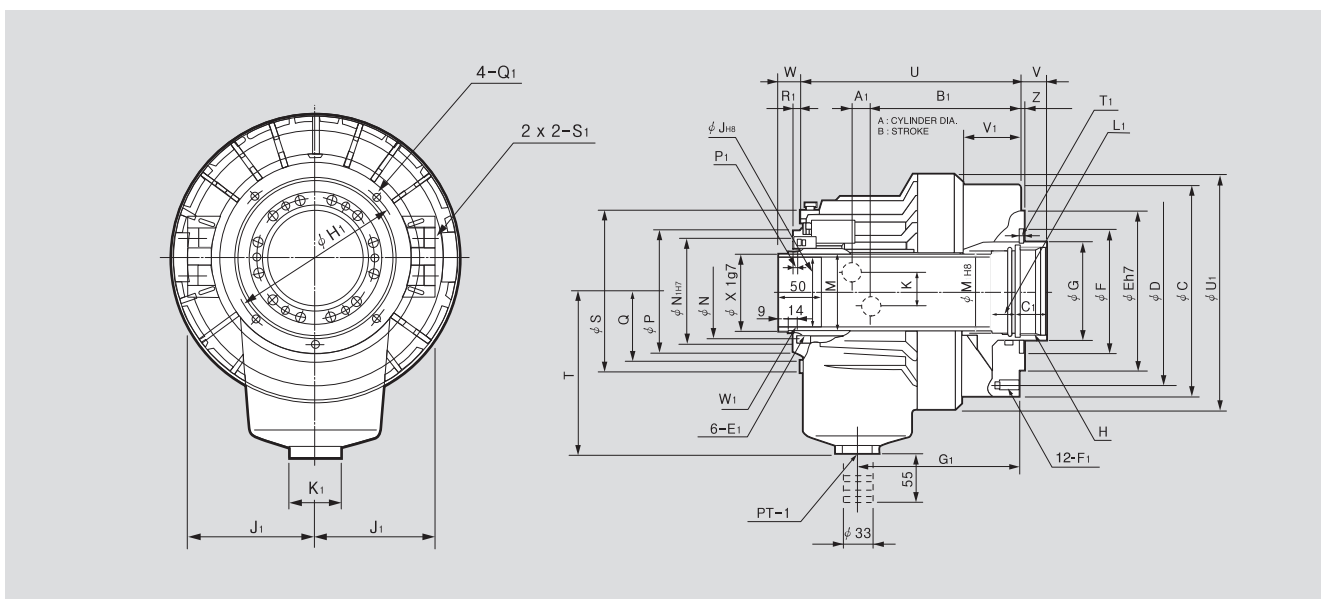
Technical features

Check valve maintains pressure during power outage

SPECIFICATIONS

| | SYHL-1246 | SYHL-1552 | SYHL-1877 | SYHL-2091 | SYHL-2816 |
|---|-------------|-------------|-------------|-------------|------------|
| Available I.D. [mm] | 46 | 52 | 68,75,77 | 91 | 166.5 |
| Piston Dia. [mm] | 125 | 155 | 180 | 205 | 280 |
| Piston Stroke [mm] | 32 | 34 | 40 | 50 | 51 |
| Piston Surface Area (Push) [cm ²] | 100 | 161 | 198 | 252 | 377 |
| Piston Surface Area (Pull) [cm ²] | 89 | 150 | 183 | 234 | 332 |
| Piston Force (Push) [kN(kgf)] | 38(3875) | 60(6118) | 74(7546) | 94(9585) | 113(11522) |
| Piston Force (Pull) [kN(kgf)] | 33(3365) | 56(5710) | 69(7063) | 88(8973) | 100(10196) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 3.3(33.6) |
| Max. r.p.m. [min ⁻¹] | 7000 | 6200 | 4700 | 3800 | 2000 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.21(0.022) | 0.56(0.058) | 0.10(0.098) | 1.56(0.160) | 35.5(3.31) |
| Weight [kg] | 12.8 | 17 | 26.8 | 34.1 | 101 |
| Total leakage [l /min] | 3 | 3.9 | 4.2 | 4.5 | 8.4 |
| KITAGAWA® Model | S-1246L | S-1552L | S-1875L | S-2091L | S-2816L |

- ※ Specifications are subject to change without notice.
- ※ Certain models have several thru-hole sizes available.
- ※ The bore threading varies by model. H max represents the largest possible threading.



※ See the product dimension Table on the right.

DIMENSIONS

| | SYHL-1246 | SYHL-1552 | SYHL-1877 | SYHL-2091 | SYHL-2816 |
|--------|-----------|-----------|-----------|-----------|-----------|
| ΦC | 155 | 190 | 215 | 240 | 325 |
| ΦD | 130 | 170 | 190 | 215 | 290 |
| ΦE | 100 | 130 | 160 | 180 | 260 |
| ΦF | 80 | 85 | 120 | 140 | 240 |
| ΦG | 65 | 70 | 95 | 110 | 190 |
| H max. | M55x2.0 | M60x2.0 | M85x2.0 | M100x2.0 | M180x3.0 |
| ΦJ | 46 | 52 | 77 | 91 | 166.5 |
| K | 36 | 36 | 36 | 34 | 30 |
| ΦM | 52.9 | 59.6 | 84.6 | 99.6 | 174.6 |
| ΦN | 64 | 73 | 98 | 108 | 188 |
| ΦP | 85 | 96 | 121 | 138 | 222 |
| Q | 51.5 | 57 | 70 | 79 | 120 |
| ΦS | 118 | 137 | 166 | 182 | 282 |
| T | 115 | 130 | 160 | 185 | 250 |
| U | 205 | 208 | 246 | 273 | 370 |
| V | 27 | 29 | 35 | 50 | 51 |
| V | -5 | -5 | -5 | 0 | 0 |
| W | 57 | 59 | 65 | 75 | 76 |
| W | 25 | 25 | 25 | 25 | 25 |
| Z | 5 | 5 | 5 | 5 | 5 |
| A1 | 11.5 | 12 | 17.5 | 21 | 28 |
| B1 | 147.5 | 153 | 169.5 | 188 | 259 |
| C1 | 30 | 30 | 35 | 35 | 45 |
| E1 | M6x9 | M6x9 | M6x9 | M6x14 | M6x12 |
| F1 | M10x20 | M10x20 | M10x20 | M12x24 | M16x32 |
| G1 | 156 | 162 | 182.5 | 203 | 276 |
| H1 | 98 | 110 | 155 | 165 | 256 |
| J1 | 76 | 86 | 101 | 110 | 162 |
| K1 | 47 | 47 | 47 | 47 | 47 |
| L1 | 15 | 15 | 15 | 15 | 20 |
| M1 | 50 | 55 | 80 | 95 | 170 |
| ΦN1 | 76 | 85 | 108 | 120 | 200 |
| P1 | 4 | 4 | 4 | 4 | 4 |
| Q1 | M5x10 | M6x12 | M6x12 | M6x12 | M6x12 |
| R1 | 6 | 7 | 7 | 7 | 7 |
| S1 | PT1/2 | PT1/2 | PT1/2 | PT1/2 | PT1/2 |
| T1 | 12 | 12 | 12 | 12 | 7 |
| ΦU1 | 200 | 220 | 242 | 267 | 352 |
| V1 | 67 | 68 | 74 | 86 | 123 |
| W1 | M52x1.5 | M58x1.5 | M84x2.0 | M99x2.0 | M173x2.0 |
| ΦX1 | 50 | 56 | 81 | 96 | 170.5 |

Y-R Standard Closed-Center Hydraulic Cylinder



Application / Benefits

For closed center chucks and work not requiring spindle through

Technical features

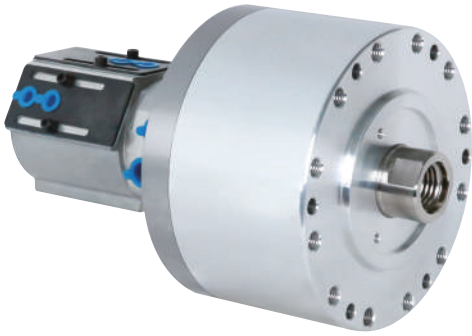
Check valve maintains pressure during power outage

SPECIFICATIONS

| | Y-0715R | Y-1020R | Y-1225R | Y-1530R | Y-2035R |
|---|--------------|------------|------------|------------|--------------|
| Piston Stroke [mm] | 15 | 20 | 25 | 30 | 35 |
| Piston Surface Area (Push) [cm ²] | 44 | 86 | 122 | 176 | 314 |
| Piston Surface Area (Pull) [cm ²] | 37 | 79 | 113 | 160 | 290 |
| Piston Force (Push) [kN(kgf)] | 16.6(1693) | 32.0(3264) | 46.0(4692) | 66.0(6732) | 117.0(11934) |
| Piston Force (Pull) [kN(kgf)] | 13.9(1417) | 29(2957) | 42(4283) | 60(6118) | 108(11013) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) |
| Max. r.p.m. [min ⁻¹] | 6000 | 6000 | 6000 | 5500 | 5500 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.118(0.012) | 0.49(0.05) | 0.88(0.09) | 1.86(0.19) | 3.82(0.39) |
| Weight [kg] | 4 | 7.1 | 10 | 13.5 | 22 |
| Total leakage [l /min] | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| KITAGAWA® Model | Y-0715R | Y-1020R | Y-1225R | Y-1530R | Y-2035R |

- ※ Specifications are subject to change without notice.
- ※ Piston forces measured at max pressure of 4.0MPa (40.8 kgf/cm²)
- ※ Total leakage measured at cylinder pressure of 3.0MPa(30.6 kgf/cm²) and oil temperature at
- ※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd

Y-RE Closed-Center Hydraulic Cylinder with Proximity Bracket (75mm~125mm)



Application / Benefits

For work not requiring through spindle
Includes brackets for proximity switches (switches not included)

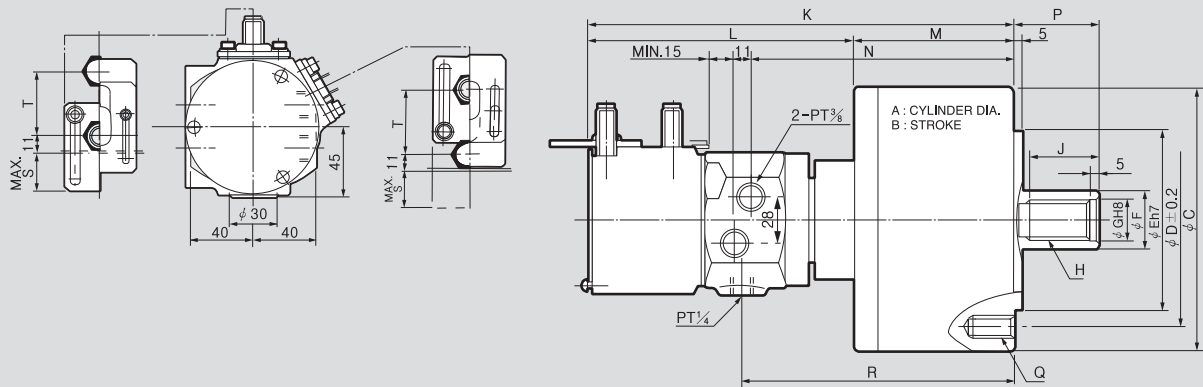
Technical features

Check valve maintains pressure during power outage

SPECIFICATIONS

| | Y-0715RE | Y-1020RE | Y-1025RE | Y-1225RE | Y-1240RE |
|---|--------------|------------|------------|------------|------------|
| Piston Stroke [mm] | 15 | 20 | 25 | 25 | 40 |
| Piston Surface Area (Push) [cm ²] | 44 | 84 | 84 | 120 | 120 |
| Piston Surface Area (Pull) [cm ²] | 37 | 79 | 79 | 113 | 113 |
| Piston Force (Push) [kN(kgf)] | 16.6(1693) | 32.0(3264) | 32.0(3264) | 46.0(4692) | 46.0(4692) |
| Piston Force (Pull) [kN(kgf)] | 13.9(1417) | 29(2957) | 29(2957) | 42(4283) | 42(4283) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) |
| Max. r.p.m. [min ⁻¹] | 6000 | 6000 | 6000 | 6000 | 6000 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.118(0.012) | 0.46(0.05) | 0.49(0.05) | 0.88(0.09) | 0.88(0.09) |
| Weight [kg] | 4.5 | 7.6 | 7.7 | 10.5 | 11 |
| Total leakage [ℓ /min] | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| KITAGAWA® Model | Y-0715RE | Y-1020RE | Y-1025RE | Y-1225RE | Y-1240RE |

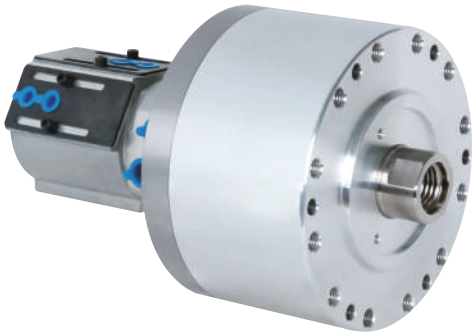
- ※ Specifications are subject to change without notice.
- ※ Piston forces measured at max pressure of 4.0MPa (40.8 kgf/cm²)
- ※ Total leakage measured at cylinder pressure of 3.0MPa(30.6 kgf/cm²) and oil temperature at
- ※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd



DIMENSIONS

| | Y-0715RE | Y-1020RE | Y-1025RE | Y-1225RE | Y-1240RE |
|---------------|----------|----------|----------|----------|----------|
| A | 75 | 105 | 105 | 125 | 125 |
| B | 15 | 20 | 25 | 25 | 40 |
| φC | 104 | 135 | 135 | 160 | 160 |
| φD | 90 | 100 | 100 | 130 | 130 |
| φE | 65 | 80 | 80 | 110 | 110 |
| φF | 30 | 30 | 30 | 35 | 35 |
| φG | 21 | 21 | 21 | 25 | 25 |
| H | M20x2.5 | M20x2.5 | M20x2.5 | M24x3.0 | M24x3.0 |
| J | 32 | 35 | 35 | 44 | 44 |
| K | 227 | 252 | 257 | 260 | 306 |
| L | 161 | 163 | 163 | 163 | 194 |
| M | 66 | 89 | 94 | 97 | 112 |
| N | 127 | 152 | 157 | 160 | 175 |
| P max. | 46 | 45 | 45 | 51 | 65 |
| P min. | 31 | 25 | 20 | 26 | 25 |
| Q | 6-M6x20 | 6-M10x20 | 6-M10x20 | 6-M12x24 | 6-M12x24 |
| R | 133 | 158 | 163 | 166 | 181 |
| S | 23 | 23 | 23 | 23 | - |
| T | 41 | 41 | 41 | 41 | - |

Y-RE Closed-Center Hydraulic Cylinder with Proximity Bracket (150mm~250mm)



Application / Benefits

For work not requiring through spindle
Includes brackets for proximity switches (switches not included)

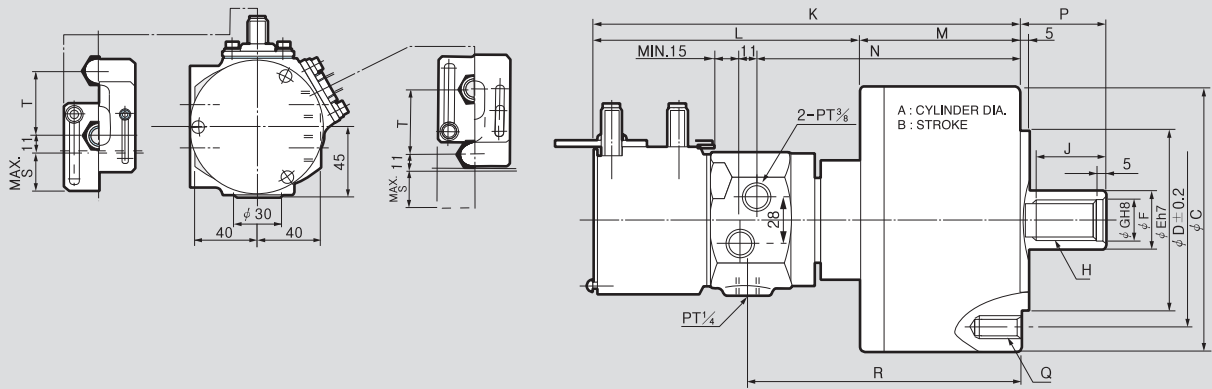
Technical features

Check valve maintains pressure during power outage

SPECIFICATIONS

| | Y-1530RE | Y-1550RE | Y-2035RE | Y-2050RE | Y-2560RE |
|---|------------|------------|--------------|--------------|------------|
| Piston Stroke [mm] | 30 | 50 | 35 | 50 | 60 |
| Piston Surface Area (Push) [cm ²] | 174 | 174 | 312 | 312 | 515 |
| Piston Surface Area (Pull) [cm ²] | 160 | 160 | 290 | 290 | 482 |
| Piston Force (Push) [kN(kgf)] | 66.0(6732) | 66.0(6732) | 117.0(11934) | 117.0(11934) | 193(19541) |
| Piston Force (Pull) [kN(kgf)] | 60(6118) | 60(6118) | 108(11013) | 108(11013) | 180(18289) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) | 4.0(40.8) |
| Max. r.p.m. [min ⁻¹] | 5500 | 5500 | 5500 | 5500 | 2000 |
| Moment of inertia [N · m ² (kg · m ²)] | 1.86(0.19) | 1.96(0.20) | 3.82(0.39) | 4.12(0.42) | 9.0(0.92) |
| Weight [kg] | 14 | 14.8 | 22.5 | 23.5 | 85 |
| Total leakage [ℓ /min] | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| KITAGAWA® Model | Y-1530RE | Y-1550RE | Y-2035RE | Y-2050RE | - |

- ※ Specifications are subject to change without notice.
- ※ Piston forces measured at max pressure of 4.0MPa (40.8 kgf/cm²)
- ※ Total leakage measured at cylinder pressure of 3.0MPa(30.6 kgf/cm²) and oil temperature at
- ※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for kitagawa Iron Works Co., Ltd



DIMENSIONS

| | Y-1530RE | Y-1550RE | Y-2035RE | Y-2050RE | Y-2560RE |
|----------|----------|----------|-----------|-----------|-----------|
| A | 150 | 150 | 200 | 200 | 250 |
| B | 30 | 50 | 35 | 50 | 60 |
| ϕ C | 190 | 190 | 245 | 245 | 305 |
| ϕ D | 130 | 130 | 145 | 145 | 220 |
| ϕ E | 110 | 110 | 120 | 120 | 160 |
| ϕ F | 45 | 45 | 55 | 55 | 65 |
| ϕ G | 31 | 31 | 37 | 37 | 44 |
| H | M30x3.5 | M30x3.5 | M36x4.0 | M36x4.0 | M42x3.0 |
| J | 45 | 55 | 60 | 60 | 65 |
| K | 269 | 320 | 288 | 333 | 379 |
| L | 163 | 194 | 166 | 192 | 207 |
| M | 106 | 126 | 122 | 141 | 172 |
| N | 169 | 189 | 183 | 202 | 227 |
| P max. | 56 | 80 | 69 | 80 | 85 |
| P min. | 26 | 30 | 34 | 30 | 25 |
| Q | 6-M12x24 | 6-M12x24 | 12-M16x30 | 12-M16x30 | 12-M20x35 |
| R | 175 | 195 | 189 | 208 | 233 |
| S | 23 | - | 28 | - | - |
| T | 41 | - | 46 | - | - |

YH-RE Ultra-Compact Closed-Center Hydraulic Cylinder with Proximity Bracket



Application / Benefits

Ultra compact closed center cylinder with brackets for proximity switches (switches not included)

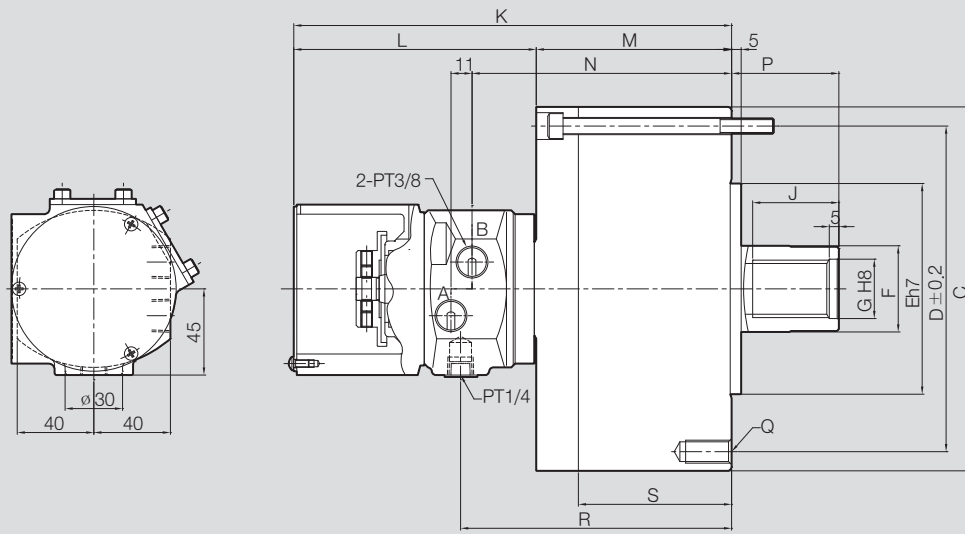
Technical features

Check valve maintains pressure during power outage

SPECIFICATIONS

| | YH-10120RE | YH-10125RE | YH-12125RE | YH-12140RE | YH-15130RE | YH-15150RE | YH-20135RE | YH-20150RE | YH-25160RE |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Piston Stroke [mm] | 20 | 25 | 25 | 40 | 30 | 50 | 35 | 50 | 60 |
| Piston Surface Area (Push) [cm ²] | 78 | 78 | 114 | 114 | 168 | 168 | 305 | 305 | 515 |
| Piston Surface Area (Pull) [cm ²] | 73 | 73 | 106 | 106 | 154 | 154 | 283 | 283 | 482 |
| Piston Force (Push) [kN(kgf)] | 29(2960) | 29(2960) | 42(4326) | 42(4326) | 63(6375) | 63(6375) | 114(11573) | 114(11573) | 193(19541) |
| Piston Force (Pull) [kN(kgf)] | 27(2770) | 27(2770) | 39(4022) | 39(4022) | 57(5843) | 57(5843) | 105(10738) | 105(10738) | 180(18289) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 40(40.8) | 40(40.8) | 40(40.8) | 40(40.8) | 40(40.8) | 40(40.8) | 40(40.8) | 40(40.8) | 40(40.8) |
| Max. r.p.m. [min ⁻¹] | 6000 | 6000 | 6000 | 6000 | 5500 | 5500 | 5500 | 5500 | 2000 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.49(0.05) | 0.49(0.05) | 0.88(0.09) | 0.88(0.09) | 1.86(0.19) | 1.96(0.2) | 3.82(0.39) | 4.12(0.42) | 9(0.92) |
| Weight [kg] | 7.6 | 7.7 | 10.5 | 11 | 14 | 14.5 | 22.5 | 23.5 | 88 |
| Total leakage [ℓ /min] | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |

※ Specifications are subject to change without notice.



DIMENSIONS

| | YH-10120RE | YH-10125RE | YH-12125RE | YH-12140RE | YH-15130RE | YH-15150RE | YH-20135RE | YH-20150RE | YH-25160RE |
|--------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ΦC | 135 | 135 | 160 | 160 | 190 | 190 | 245 | 245 | 305 |
| ΦD | 118 | 118 | 142 | 142 | 170 | 170 | 222 | 222 | 275 |
| ΦE | 80 | 80 | 110 | 110 | 110 | 110 | 120 | 120 | 160 |
| ΦF | 30 | 30 | 35 | 35 | 45 | 45 | 55 | 55 | 65 |
| ΦG | 21 | 21 | 25 | 25 | 31 | 31 | 37 | 37 | 44 |
| J | 35 | 35 | 44 | 44 | 45 | 55 | 60 | 60 | 65 |
| K | 209.6 | 214.6 | 220.6 | 267.1 | 228.6 | 280.1 | 240.6 | 280.1 | 310 |
| L | 126.6 | 126.6 | 126.6 | 156.6 | 126.6 | 158.1 | 133.6 | 158.1 | 136 |
| M | 83 | 88 | 94 | 109 | 102 | 122 | 107 | 122 | 142.5 |
| N | 116.5 | 121.5 | 127.5 | 142.5 | 135.5 | 155.5 | 140.5 | 155.5 | 176 |
| P max. | 45 | 45 | 51 | 65 | 56 | 80 | 69 | 80 | 85 |
| P min. | 25 | 20 | 26 | 25 | 26 | 30 | 34 | 30 | 25 |
| Q | 6-M10x20 | 6-M10x20 | 12-M12x24 | 12-M12x24 | 12-M12x24 | 12-M12x24 | 12-M16x30 | 12-M16x30 | 12-M20x35 |
| R | 122.5 | 127.5 | 133.5 | 148.5 | 141.5 | 161.5 | 146.5 | 161.5 | 182 |
| S | 67 | 72 | 72 | 87 | 80 | 100 | 85 | 100 | 120.5 |

YS-RA

Ultra-Compact Closed-Center Hydraulic Cylinder
with Proximity Bracket and Built-in Rotary joint



Application / Benefits

Compact cylinder for work not requiring spindle through
Built-in rotary union for air through

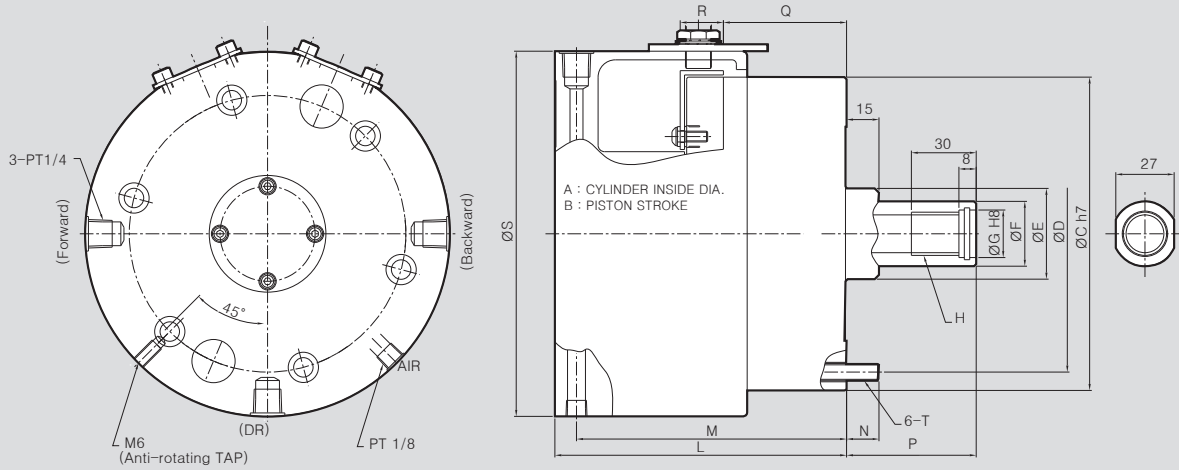
Technical features

Check valve maintains pressure during power outage
Built in rotary joint

SPECIFICATIONS

| | YS-11020RA | YS-12021RA | YS-13030RA |
|---|--------------|--------------|--------------|
| Piston Stroke [mm] | 20 | 21 | 30 |
| Piston Surface Area (Push) [cm ²] | 87.6 | 105.7 | 131.8 |
| Piston Surface Area (Pull) [cm ²] | 84 | 102 | 122.5 |
| Piston Force (Push) [kN(kgf)] | 28(2855) | 39(3977) | 47(4793) |
| Piston Force (Pull) [kN(kgf)] | 27(2753) | 38(3875) | 45(4589) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 3.5(35.7) | 4.0(40.8) | 4.0(40.8) |
| Max. r.p.m. [min ⁻¹] | 6000 | 6000 | 6000 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.157(0.016) | 0.274(0.028) | 0.284(0.029) |
| Weight [kg] | 8.2 | 10.2 | 10.3 |
| Total leakage [ℓ /min] | 1.2 | 1.2 | 1.2 |

※ Specifications are subject to change without notice.



DIMENSIONS

| | YS-11020RA | YS-12021RA | YS-13030RA |
|--------|------------|------------|------------|
| A | 110 | 120 | 130 |
| B | 20 | 21 | 30 |
| ØC | 145 | 168 | 168 |
| ØD | 128 | 145 | 150 |
| ØE | 42 | 42 | 51 |
| ØF | 30 | 30 | 36 |
| ØG | 22 | 22 | 26 |
| H | M20x2.5 | M20x2.5 | M24x3.0 |
| J | 30 | 30 | 35 |
| K | 15 | 15 | 15 |
| L | 135 | 135 | 144 |
| M | 125 | 125 | 134 |
| N | 14 | 17 | 17 |
| P max. | 60 | 60 | 60 |
| P min. | 40 | 39 | 30 |
| Q max. | 77 | 78 | 90 |
| Q min. | 57 | 57 | 66 |
| R | 20 | 20 | 20 |
| ØS | 169 | 192 | 192 |
| T | M8x80 | M8x80 | M10x80 |

YS-RC

Ultra-compact closed-center hydraulic cylinder with proximity bracket and built-in rotary joint



Application / Customer's Benefit

Ultra-compact closed-center hydraulic cylinder

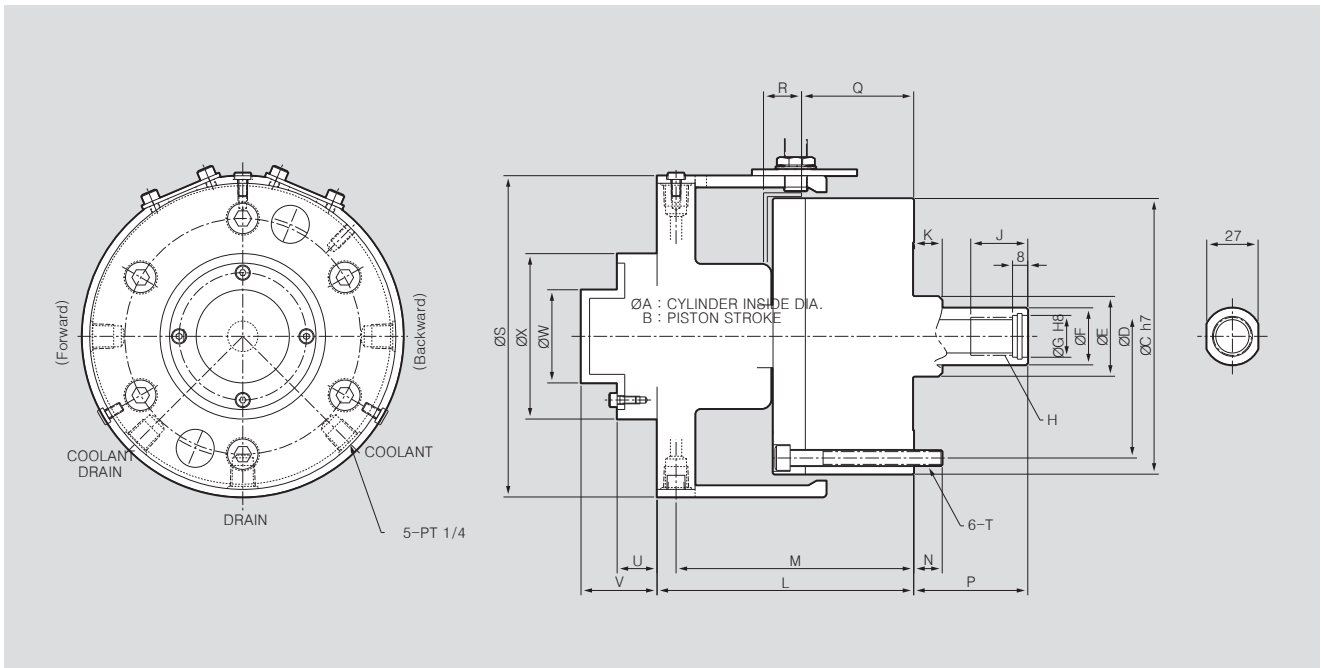
Technical features

Built-in lock and relief valves prevent damage caused by excessive pressure
Ensures safety during blackouts or loss of power by maintaining pull force
Built-in Rotary joint

SPECIFICATIONS

| | YS-11020RC |
|---|--------------|
| Piston Stroke [mm] | 20 |
| Piston Surface Area (Push) [cm ²] | 87.6 |
| Piston Surface Area (Pull) [cm ²] | 84 |
| Piston Force (Push) [kN(kgf)] | 28(2855) |
| Piston Force [kN(kgf)] | 27(2753) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 3.5(35.7) |
| Max. r.p.m. [min ⁻¹] | 6000 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.157(0.016) |
| Weight [kg] | 9 |
| Total leakage [l /min] | 1.2 |

- ※ Maximum turning speed is based upon actual measurement.
- ※ Specifications are subject to change without notice.

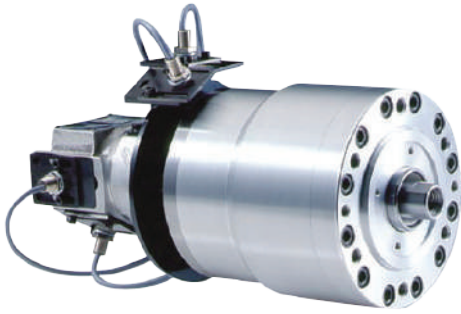


DIMENSIONS

| | YS-11020RC |
|----|------------|
| A | 110 |
| B | 20 |
| ØC | 145 |
| ØD | 128 |
| ØE | 42 |
| ØF | 30 |
| ØG | 22 |
| H | M20x2.5 |
| J | 30 |
| K | 15 |
| L | 135 |
| M | 125 |

| | YS-11020RC |
|--------|------------|
| N | 15 |
| P max. | 60 |
| P min. | 40 |
| Q max. | 77 |
| Q min. | 57 |
| R | 20 |
| ØS | 169 |
| T | M8x80 |
| U | 21 |
| V | 40 |
| W | 49 |
| X | 87 |

DY Double-Piston Hydraulic Cylinder



Application / Benefits

For 2+2 chucks, face drivers, ejectors and applications requiring dual actuation

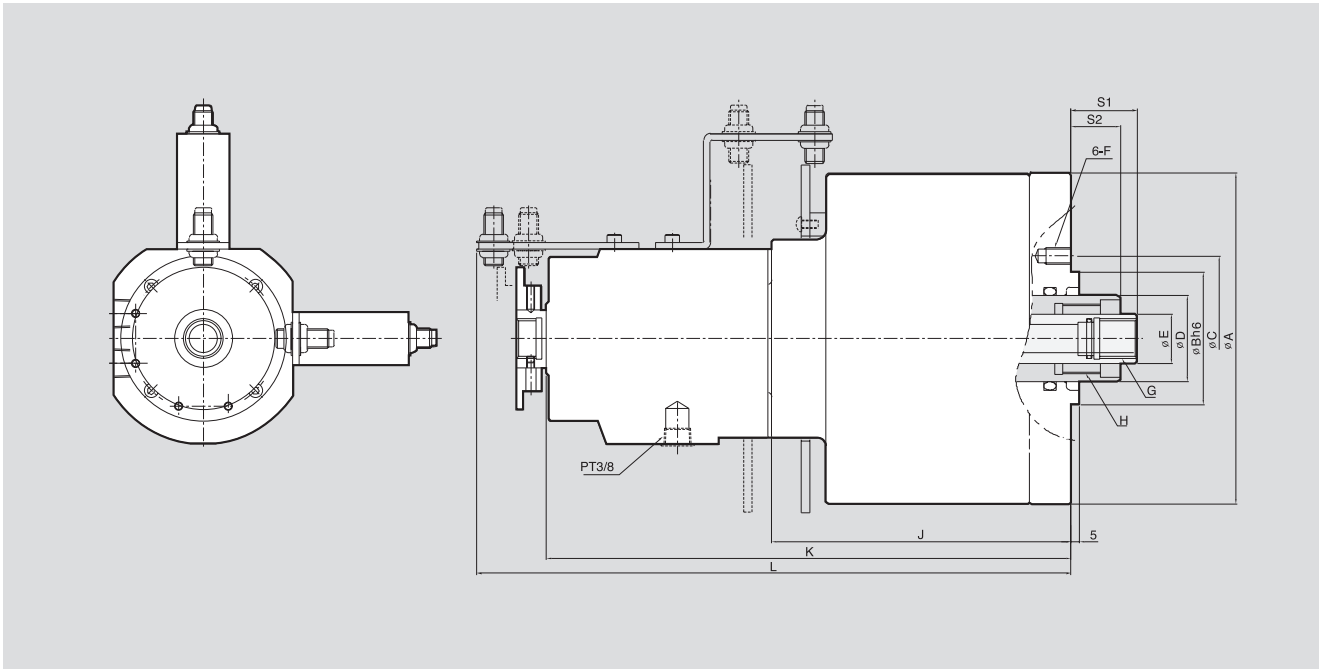
Technical features

Double piston for dual actuation

SPECIFICATIONS

| | DY-12530 | | DY-16030 | |
|---|--------------|----------|-----------|----------|
| | Piston A | Piston B | Piston A | Piston B |
| Piston Dia. [mm] | 125 | 85 | 160 | 85 |
| Piston Area [cm ²] | 102 | 46 | 164 | 46 |
| Piston Stroke. Max | 49 | 38 | 60 | 48 |
| Piston Stroke. Min | 34 | 18 | 45 | 18 |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 4(40.8) | | 4(40.8) | |
| Max. r.p.m. [min ⁻¹] | 5000 | | 3000 | |
| Weight [kg] | 16.5 | | 24.5 | |
| Moment of inertia [N · m ² (kg · m ²)] | 0.441(0.045) | | 2.94(0.3) | |

※ Specifications are subject to change without notice.



- ※ Piston A : Outer Piston
- ※ Piston B : Inner Piston

DIMENSIONS

| | DY-12530 | DY-16030 |
|--------|----------|----------|
| ΦA | 160 | 200 |
| ΦB(h6) | 110 | 125 |
| ΦC | 145 | 100 |
| ΦD | 50 | 52 |
| ΦE | 29 | 30 |
| F | 6-M12 | 6-M10 |
| G | M20x1.5 | M24x1.5 |
| H | M42x1.5 | M42x1.5 |
| J | 178 | 181 |
| K | 299 | 371 |
| L | 341 | 359 |



Application / Benefits

For 2+2 chucks, face drivers, ejectors and applications requiring dual actuation

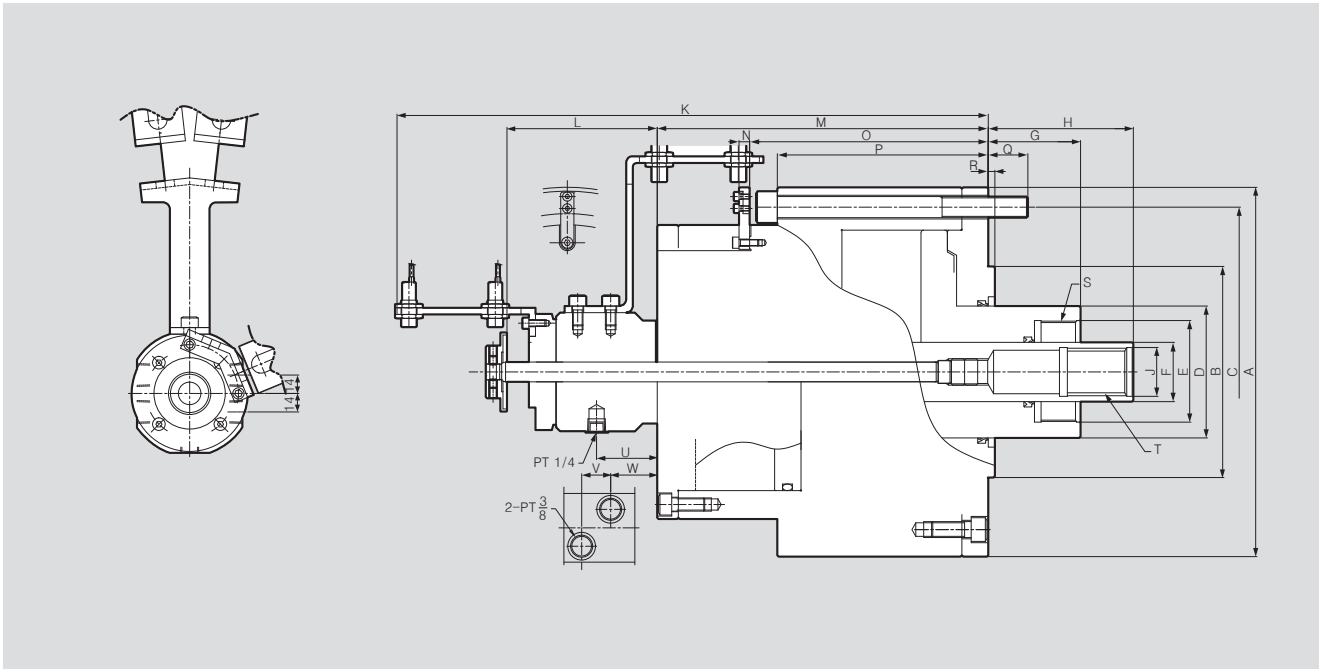
Technical features

Built-in ports for air and coolant through

SPECIFICATIONS

| | DYV-21560 | |
|--|------------|------------|
| | Piston A | Piston B |
| Piston Stroke | 60 | 60 |
| Piston Force (Push) [kN(kgf)] | 16.9(1724) | 11.8(1206) |
| Piston Force (Pull) [kN(kgf)] | 13.9(1420) | 11.1(1130) |
| Piston Surface Area (Push) [cm ²] | 363 | 254 |
| Piston Surface Area (Pull) [cm ²] | 301 | 238 |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 5.1(50) | |
| Max. r.p.m. [min ⁻¹] | 3200 | |
| Weight [kg] | 92 | |
| Moment of inertia [N·m ² (kgf·m ²)] | 0.89 | |

- ※ Specifications are subject to change without notice.
- ※ Piston Force : Hydraulic 4.0MPa (40.8 kgf/cm²)
- ※ Total leakage pressure : 3.0MPa(30.6 kgf/cm²) at 50° C
- ※ Samchully Machinery Co., Ltd. is no longer an OEM manufacturer for Kitagawa Iron Works Co., Ltd



- ※ Piston A : Outer Piston
- ※ Piston B : Inner Piston

DIMENSIONS

| DYV-21560 | | | |
|-----------|-------|---|---------|
| ΦA | 280 | L | 114 |
| ΦB | 160 | M | 251 |
| ΦC | 250 | N | 8 |
| ΦD | 100 | O | 181 |
| ΦE | 77 | P | 160 |
| ΦF | 45 | Q | 30 |
| G max. | 70 | R | 5 |
| G min. | 10 | S | M75x2.0 |
| H max. | 110 | T | M36x4.0 |
| H min. | 50 | U | 46 |
| ΦJ | 37 | V | 22 |
| K | 448.3 | W | 35.3 |

AY-R Closed-Center Pneumatic Cylinder



Application / Benefits

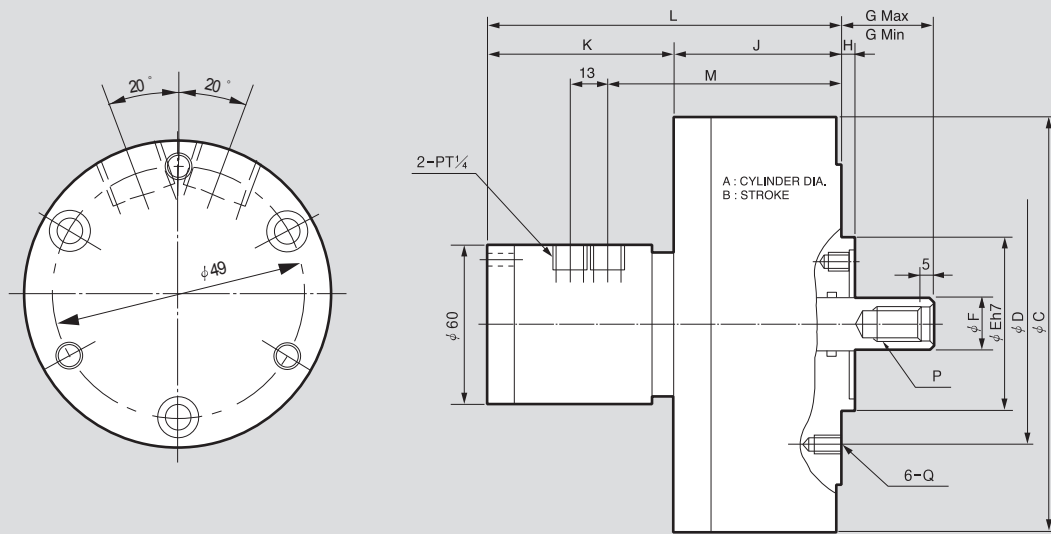
Closed-Center Pneumatic Cylinder
Suitable for cutting thin material

SPECIFICATIONS

| | AY-1005R | AY-1315R | AY-1720R | AY-2225R | AY-2730R |
|---|-------------|-------------|-------------|-------------|-------------|
| Piston Stroke [mm] | 5 | 15 | 20 | 25 | 30 |
| Piston Surface Area (Push) [cm ²] | 78.5 | 131 | 225 | 378 | 570.4 |
| Piston Surface Area (Pull) [cm ²] | 73.6 | 128 | 220.1 | 371.1 | 560.8 |
| Piston Force (Push) [kN(kgf)] | 5.4(552) | 7.7(786) | 13.23(1350) | 22.2(2268) | 33.5(3422) |
| Piston Force (Pull) [kN(kgf)] | 5.1(518) | 7.5(770) | 12.9(1320) | 21.8(2226) | 33.0(3364) |
| Max. Operating Pressure [MPa(kgf/cm ²)] | 8(0.82) | 8(0.82) | 8(0.82) | 8(0.82) | 8(0.82) |
| Max. r.p.m. [min ⁻¹] | 5000 | 5000 | 5000 | 4000 | 3000 |
| Weight [kg] | 4.1 | 5.2 | 8.3 | 13.3 | 18.7 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.686(0.07) | 0.686(0.07) | 1.078(0.11) | 2.450(0.25) | 7.350(0.75) |

※ Maximum turning speed is based upon actual measurement.

※ Specifications are subject to change without notice.



DIMENSIONS

| | AY-1005R | AY-1315R | AY-1720R | AY-2225R | AY-2730R |
|--------------|----------|----------|----------|----------|----------|
| A | 100 | 130 | 170 | 220 | 270 |
| B | 5 | 15 | 20 | 25 | 30 |
| ϕC | 128 | 156 | 200 | 255 | 305 |
| ϕD | 90 | 90 | 100 | 130 | 130 |
| $\phi E(h7)$ | 65 | 65 | 80 | 110 | 110 |
| ϕF | 20 | 20 | 25 | 30 | 35 |
| G max. | 30 | 35 | 65 | 71 | 76 |
| G min. | 25 | 20 | 45 | 46 | 46 |
| H | 5 | 5 | 5 | 5 | 5 |
| J | 53 | 63 | 82 | 93 | 103 |
| K | 70 | 70 | 70 | 70 | 74.5 |
| L | 123 | 133 | 152 | 163 | 177.5 |
| M | 79 | 89 | 108 | 119 | 133.5 |
| N | M5 | M6 | M7 | M8 | M9 |
| Q | M6x11 | M6x11 | M10x16 | M12x20 | M12x20 |
| P | M12x22 | M12x22 | M16x30 | M20x35 | M24x40 |



MANUAL CHUCK



SC

Standard Scroll
Chuck(Hard Jaws)

145 P



SL

Standard Slotter
Chuck(Hard Jaws)

155 P



FSC

Standard Front
Mounting Scroll
Chuck(Hard Jaws)

147 P



MU

Manual Chuck

156 P



FTU

Standard Front
Mounting Scroll
Chuck(Hard Jaws)

148 P



IC

Independent
Chuck(Hard Jaws)

158 P



TC

Standard Scroll
Chuck(Soft & Hard
Top Jaws)

149 P



IC Mega Bore

Independent
Chuck(Hard Jaws)

160 P



FTC

Front Mounting
Scroll Chuck(Soft &
Hard Top Jaws)

150 P



ST

2-Jaw Scroll Chuck
(Soft Top Jaws)

152 P



SF

4-Jaw Scroll Chuck
(Hard Jaws)

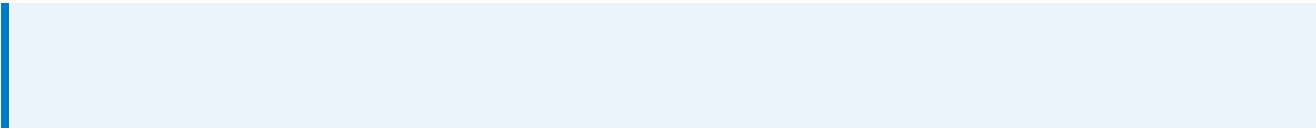
153 P



SCS

6-Jaw Scroll Chuck
(Hard Jaws)

154 P




SAMCHULLY

SC Standard Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 16 \sim \varnothing 57$
Clamping Range : $\varnothing 2 \sim \varnothing 180$

 Adaptor
262p

 H/S Jaw
261p



Application / Benefits

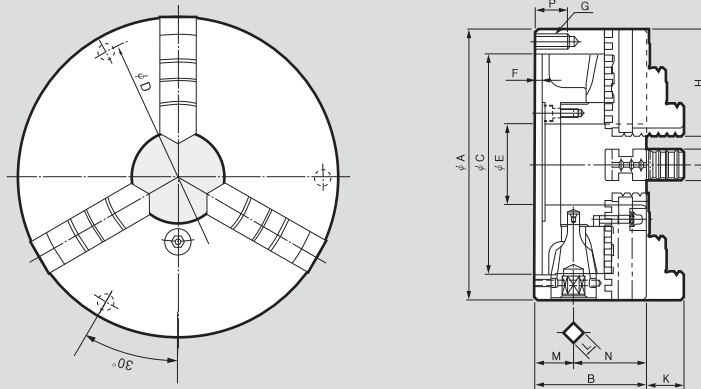
For work requiring through hole

Technical features

Reversible one-piece hard jaws

Rear mounting only

Self-centering jaws manually opened by t-handle



DIMENSIONS

| | SC-85(3") | SC-110(4") | SC-130(5") | SC-165(6") | SC-190(7") |
|---------------------|-----------|------------|------------|------------|------------|
| $\varnothing A$ | 85 | 110 | 130 | 167 | 192 |
| B | 44.1 | 58 | 60 | 65 | 75 |
| $\varnothing C(H6)$ | 60 | 80 | 100 | 130 | 155 |
| $\varnothing D$ | 73 | 95 | 115 | 147 | 172 |
| $\varnothing E$ | 16 | 24 | 34 | 47 | 57 |
| F | 3.5 | 4.5 | 4.5 | 5 | 5 |
| G | 3-M6 | 3-M8 | 3-M8 | 3-M10 | 3-M10 |
| H | 35 | 44 | 50 | 65 | 75 |
| J | 11 | 14 | 16 | 19 | 22 |
| K | 14.6 | 20.0 | 20.1 | 25.07 | 30.06 |
| L | 7 | 8 | 8 | 10 | 11 |
| M | 17 | 24.5 | 22.5 | 24 | 27.5 |
| N | 27.1 | 32.35 | 37 | 41 | 47.5 |
| P | 13 | 16 | 16 | 20 | 20 |

SPECIFICATIONS

| | SC-85 (3") | SC-110 (4") | SC-130 (5") | SC-165 (6") | SC-190 (7") |
|---|-------------|-------------|-------------|-------------|-------------|
| Max. Static Gripping Force [kN(kgf)] | 9(918) | 12(1224) | 15(1530) | 31(3161) | 31(3161) |
| Clamping Range External [\varnothing mm] | 2~70 | 3~94 | 3~110 | 3~160 | 4~180 |
| Clamping Range Internal [\varnothing mm] | 24~64 | 29~84 | 33~100 | 48~150 | 56~170 |
| Handle Torque [N · m(kgf · m)] | 29.4(3.0) | 44.1(4.1) | 63.7(6.5) | 88.3(9.0) | 107.9(11.0) |
| Max. r.p.m. [min^{-1}] | 2500 | 2500 | 2500 | 4000 | 3500 |
| Weight [kg] | 1.5 | 3.1 | 4.4 | 11.4 | 12.2 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.05(0.005) | 0.17(0.017) | 0.35(0.036) | 1.18(0.12) | 2.35(0.24) |

SC Standard Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 75 \sim \varnothing 130$
Clamping Range : $\varnothing 5 \sim \varnothing 346$

Adaptor
262p

H/S Jaw
261p



Application / Benefits

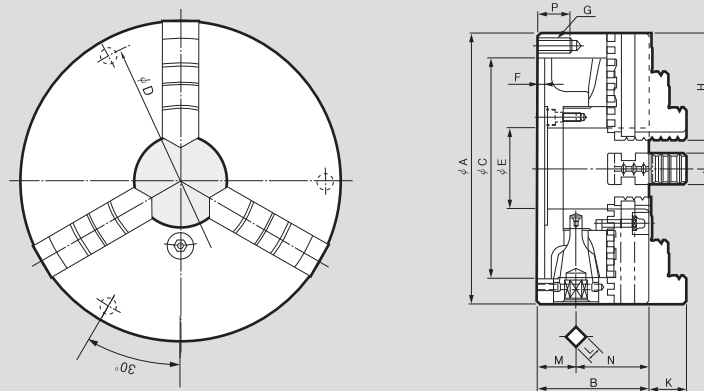
For work requiring through hole

Technical features

Reversible one-piece hard jaws

Rear mounting only

Self-centering jaws manually opened by t-handle



DIMENSIONS

| | SC-230(9") | SC-273(10") | SC-310(12") | SC-355(14") | SC-405(16") |
|---------------------|------------|-------------|-------------|-------------|-------------|
| $\varnothing A$ | 232 | 273 | 310 | 355 | 405 |
| B | 84 | 86 | 96 | 110 | 114.5 |
| $\varnothing C(H6)$ | 190 | 230 | 260 | 300 | 345 |
| $\varnothing D$ | 210 | 250 | 285 | 328 | 375 |
| $\varnothing E$ | 75 | 89 | 100 | 105 | 130 |
| F | 6 | 6 | 7 | 8 | 8 |
| G | 3-M12 | 3-M12 | 3-M12 | 6-M12 | 6-M12 |
| H | 85 | 98 | 110 | 133 | 133 |
| J | 24 | 28 | 30 | 35 | 35 |
| K | 35.04 | 40.02 | 45.08 | 62.98 | 63 |
| L | 12 | 12 | 14 | 14 | 15 |
| M | 29.5 | 31.5 | 31.5 | 42.4 | 43 |
| N | 54.5 | 54.5 | 64.5 | 67.6 | 71.5 |
| P | 25 | 25 | 25 | 36 | 36 |

SPECIFICATIONS

| | SC-230 (9") | SC-273 (10") | SC-310 (12") | SC-355 (14") | SC-405 (16") |
|---|-------------|--------------|--------------|--------------|--------------|
| Max. Static Gripping Force [kN(kgf)] | 37(3773) | 46(4691) | 55(5608) | 40.5(4130) | 45(4589) |
| Clamping Range External [\varnothing mm] | 5~200 | 5~260 | 10~300 | 25~315 | 25~346 |
| Clamping Range Internal [\varnothing mm] | 62~210 | 70~250 | 86~290 | 107~290 | 113~324 |
| Handle Torque [N · m(kgf · m)] | 147(15.0) | 176.5(18.0) | 206(21.0) | 225.6(23.0) | 245(25.0) |
| Max. r.p.m. [min^{-1}] | 2900 | 2500 | 2200 | 1500 | 1500 |
| Weight [kg] | 21.2 | 28 | 41 | 54 | 74 |
| Moment of inertia [$\text{N} \cdot \text{m}^2(\text{kg} \cdot \text{m}^2)$] | 6.27(0.64) | 9.90(1.01) | 23.0(2.35) | 37.2(3.8) | 67.6(6.9) |

※ Maximum turning speed is based upon actual measurement.

FSC Standard Front-Mounting Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 34 \sim \varnothing 100$
Clamping Range : $\varnothing 3 \sim \varnothing 300$

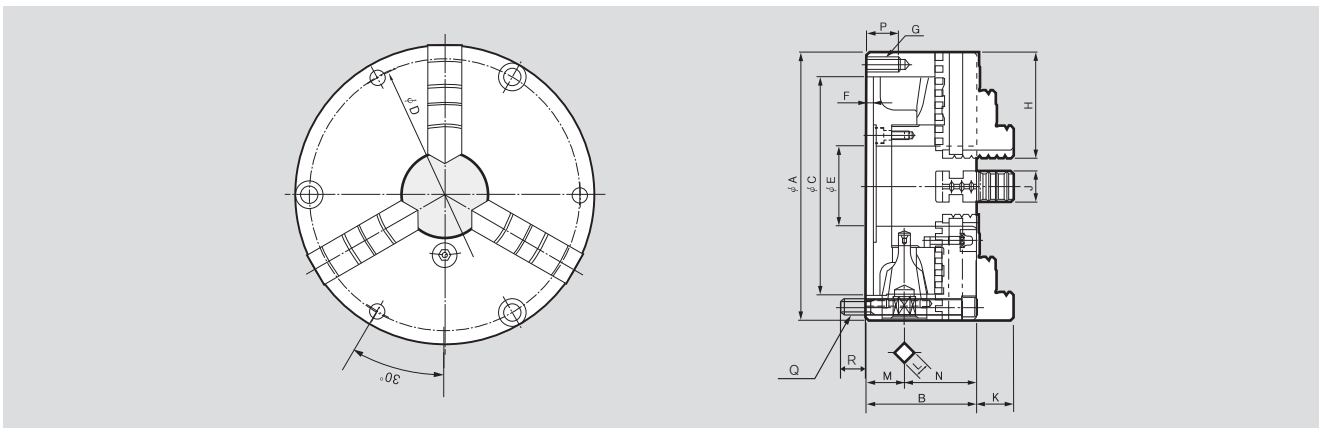


Application / Benefits

For work requiring through hole
Front mounting holes for convenient installation on lathes and spindles

Technical features

Reversible one-piece hard jaws
Self-centering jaws manually opened by t-handle



DIMENSIONS

| | FSC-130(5") | FSC-165(6") | FSC-190(7") | FSC-230(9") | FSC-273(10") | FSC-310(12") |
|--------------|-------------|-------------|-------------|-------------|--------------|--------------|
| ΦA | 130 | 167 | 192 | 232 | 273 | 310 |
| B | 60 | 65 | 75 | 84 | 86 | 96 |
| $\Phi C(H6)$ | 100 | 130 | 155 | 190 | 230 | 260 |
| ΦD | 115 | 147 | 172 | 210 | 250 | 285 |
| ΦE | 34 | 45 | 57 | 75 | 89 | 100 |
| F | 4.5 | 5 | 5 | 6 | 6 | 7 |
| G | 3-M8 | 3-M10 | 3-M10 | 3-M12 | 3-M12 | 3-M12 |
| H | 50 | 65 | 75 | 87 | 98 | 110 |
| J | 16 | 19 | 22 | 24 | 28 | 30 |
| K | 19.6 | 25.07 | 30.06 | 35.04 | 40.02 | 45.08 |
| L | 8 | 10 | 11 | 12 | 12 | 14 |
| M | 22.5 | 24 | 27.5 | 29.5 | 31.5 | 31.5 |
| N | 37 | 41 | 47.5 | 54.5 | 54.5 | 64.5 |
| P | 16 | 20 | 20 | 25 | 25 | 25 |
| Q | 3-M8x65 | 3-M10x70 | 3-M10x85 | 3-M12x95 | 3-M12x95 | 3-M12x110 |
| R | 14 | 16 | 17 | 24 | 20 | 27 |

SPECIFICATIONS

| | FSC-130(5") | FSC-165(6") | FSC-190(7") | FSC-230(9") | FSC-273(10") | FSC-310(12") |
|---|-------------|-------------|-------------|-------------|--------------|--------------|
| Max. Static Gripping Force [kN(kgf)] | 15(1530) | 31(3161) | 31(3161) | 37(3773) | 46(4691) | 55(5608) |
| Clamping Range External [ϕ mm] | 3~110 | 3~160 | 4~180 | 5~220 | 5~260 | 10~300 |
| Clamping Range Internal [ϕ mm] | 3~100 | 48~150 | 56~170 | 62~210 | 70~250 | 86~290 |
| Handle Torque [N · m(kgf · m)] | 63.7(6.5) | 88.3(9.0) | 107.9(11.0) | 147(15.0) | 176.5(18.0) | 206(21.0) |
| Max. r.p.m. [min^{-1}] | 2500 | 4000 | 3500 | 2900 | 2500 | 2200 |
| Weight [kg] | 4.4 | 11.4 | 12 | 21.2 | 28 | 41 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.35(0.036) | 1.18(0.12) | 2.35(0.24) | 6.27(0.64) | 9.90(1.01) | 23.0(2.35) |

※ Specifications are subject to change without notice.

FTU Standard Front-Mounting Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 32 \sim \varnothing 103$
Clamping Range : $\varnothing 3 \sim \varnothing 300$



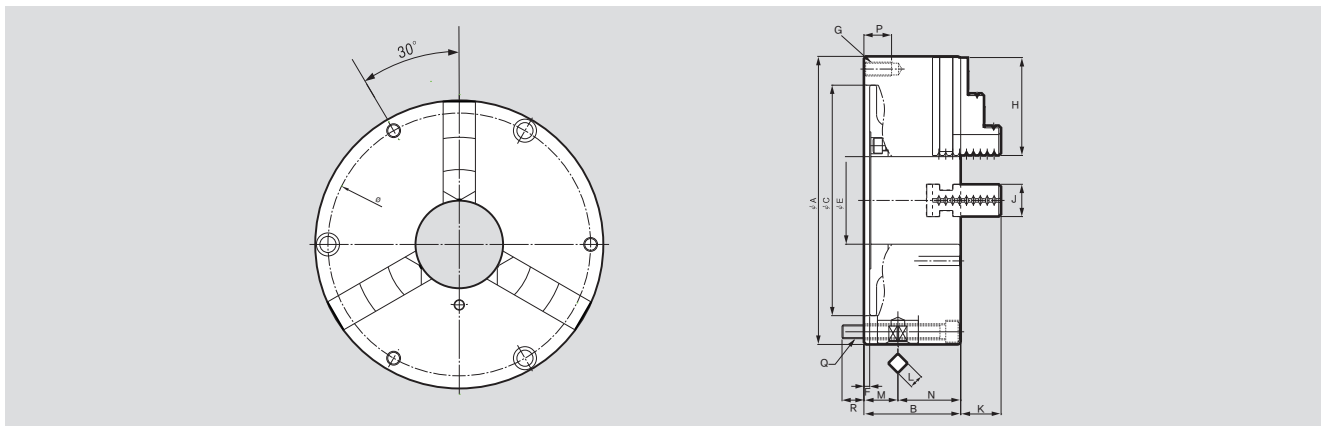
Application / Customer's Benefit

Scroll chuck with hardened jaws (Front mounting).

Technical features

Includes a set of one-piece hard jaws.

Two-piece hard jaws and soft jaws are available as additional options.



DIMENSIONS

| | FTU-125 | FTU-160 | FTU-200 | FTU-250 | FTU-315 |
|----------|---------|----------|----------|----------|-----------|
| ΦA | 125 | 160 | 200 | 250 | 315 |
| B | 56 | 65 | 75 | 85 | 96 |
| ΦC | 95 | 125 | 160 | 200 | 260 |
| ΦD | 108 | 140 | 176 | 224 | 286 |
| ΦE | 32 | 42 | 55 | 76 | 103 |
| F | 4 | 4 | 4 | 5 | 5 |
| G | 3-M8 | 3-M10 | 3-M10 | 3-M12 | 3-M126 |
| H | 50 | 65 | 75 | 85 | 110 |
| J | 20 | 20 | 25 | 28 | 32 |
| K | 20 | 29 | 32 | 34 | 43 |
| L | 8 | 10 | 11 | 12 | 14 |
| M | 21 | 24 | 27.5 | 30.5 | 31.5 |
| N | 35 | 41 | 47.5 | 54.5 | 64.5 |
| P | 16 | 20 | 20 | 24 | 32 |
| Q | 3-M8x60 | 6-M10x70 | 6-M10x80 | 6-M12x90 | 6-M16x100 |
| R | 13 | 16 | 16 | 18 | 21 |

SPECIFICATIONS

| | FTU-125 | FTU-160 | FTU-200 | FTU-250 | FTU-315 |
|----------------------------|-----------|-----------|-------------|-------------|-------------|
| Max. Static Gripping Force | 15(1530) | 31(3161) | 37(3773) | 46(4691) | 55(5608) |
| Clamping Range | 3~110 | 3~1655 | 4~190 | 5~220 | 10~300 |
| | 33~100 | 48~145 | 56~180 | 62~230 | 86~290 |
| Handle Torque | 63.7(6.5) | 88.3(9.0) | 147.0(15.0) | 176.5(18.0) | 206.0(21.0) |
| Max. r.p.m. | 2500 | 4000 | 2900 | 2500 | 2200 |
| Weight | 4.0 | 10.5 | 17.0 | 25.0 | 42.0 |
| Moment of inertia | 0.32 | 1.02 | 4.95 | 7.75 | 21.0 |

※ Specifications are subject to change without notice.

TC Standard Scroll Chuck (Soft and Hard top Jaws)

Thru Hole Range : $\varnothing 57 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 300$

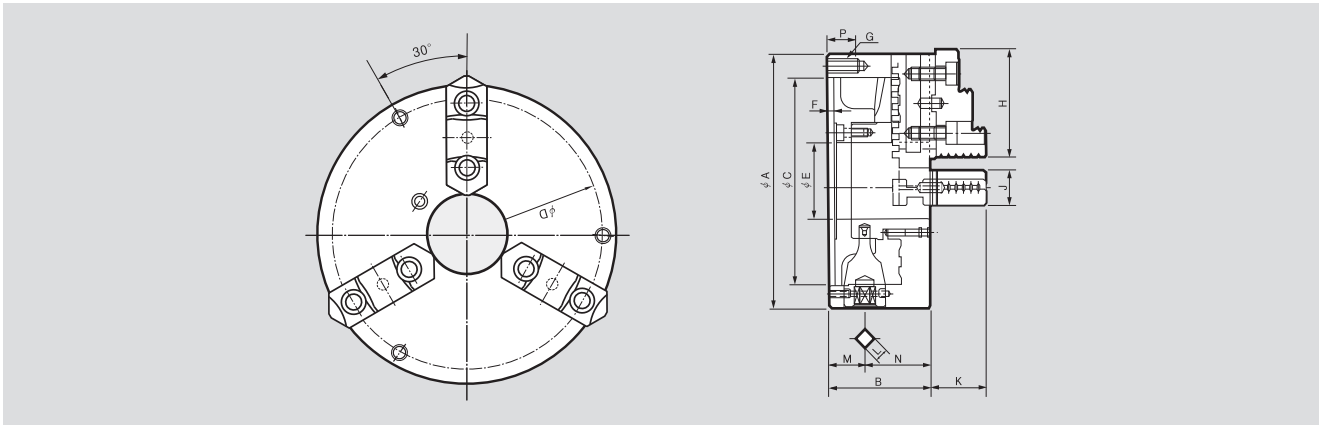


Application / Benefits

For work requiring through hole

Technical features

- Two-piece, reversible base jaw and top hard jaws (soft top jaws also included)
- Rear mounting only
- Self-centering jaws manually opened and closed by t-handle



DIMENSIONS

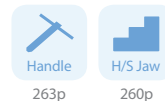
| | TC-190(7") | TC-230(9") | TC-273(10") | TC-310(12") |
|-----------------|------------|------------|-------------|-------------|
| $\varnothing A$ | 192 | 232 | 273 | 310 |
| B | 78.7 | 83.7 | 88 | 96 |
| $\varnothing C$ | 155 | 190 | 230 | 260 |
| $\varnothing D$ | 172 | 210 | 250 | 285 |
| $\varnothing E$ | 57 | 75 | 89 | 100 |
| F | 5 | 6 | 6 | 7 |
| G | 3-M10 | 3-M12 | 3-M12 | 3-M12 |
| H | 80.5 | 90.5 | 103.5 | 115.5 |
| J | 28 | 32 | 35 | 40 |
| K | 42.8 | 53.8 | 57.82 | 56.08 |
| L | 11 | 12 | 12 | 14 |
| M | 27.5 | 29.5 | 31.5 | 31.5 |
| N | 51.2 | 54.2 | 56.5 | 64.5 |
| P | 20 | 25 | 25 | 25 |
| Mounting bolt | 3-M10 | 3-M12 | 3-M12 | 3-M12 |

SPECIFICATIONS

| | TC-190(7") | TC-230(9") | TC-273(10") | TC-310(12") |
|---|-------------|------------|-------------|-------------|
| Max. Static Gripping Force [kN(kgf)] | 31(3161) | 37(3773) | 46(4691) | 55(5608) |
| Clamping Range External [\varnothing mm] | 4~180 | 5~220 | 5~260 | 10~300 |
| Clamping Range Internal [\varnothing mm] | 56~170 | 62~210 | 70~250 | 86~290 |
| Handle Torque [N · m(kgf · m)] | 107.9(11.0) | 147(15.0) | 173.5(18.0) | 206(21.0) |
| Max. r.p.m. [min^{-1}] | 6500 | 2900 | 2500 | 2200 |
| Weight [kg] | 12.2 | 21.2 | 28 | 41 |
| Moment of inertia [N · m ² (kg · m ²)] | 2.35(0.24) | 6.24(0.64) | 9.90(1.01) | 23.0(2.35) |

※ Maximum turning speed is based upon actual measurement.

FTC Front-Mounting Scroll Chuck (Soft and Hard top Jaws)



Application / Benefits

For work requiring through hole
Front mounting holes for convenient installation on lathes and spindles

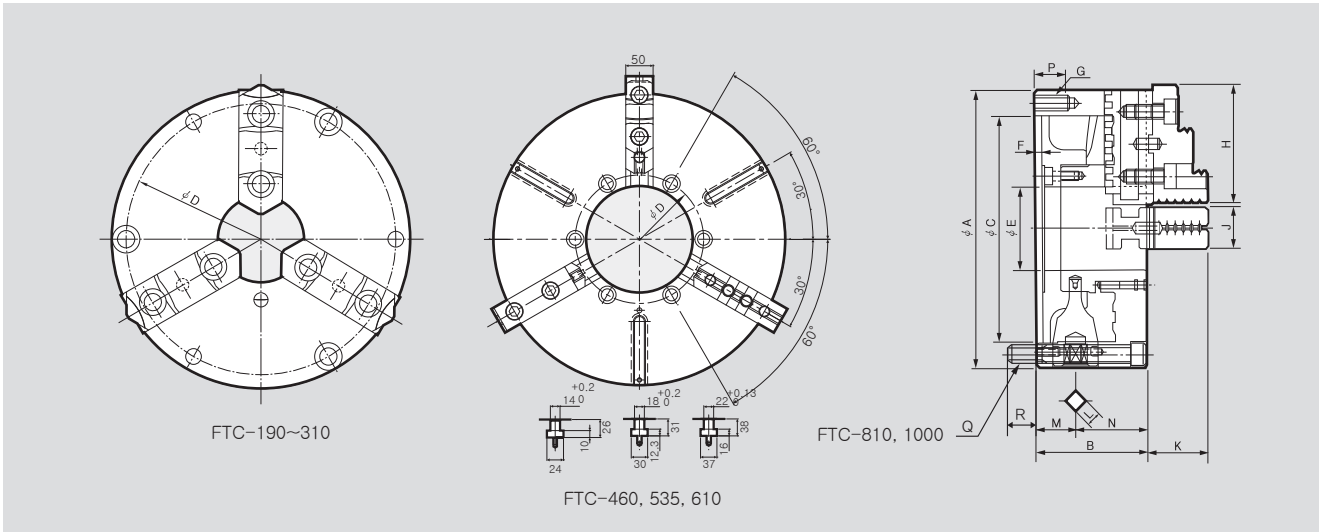
Technical features

Two-piece, reversible base jaw and top hard jaws (soft top jaws also included)
Self-centering jaws manually opened and closed by t-handle

SPECIFICATIONS

| | FTC-165 | FTC-190(7") | FTC-230(9") | FTC-273(10") | FTC-310(12") |
|---|----------|-------------|-------------|--------------|--------------|
| Max. Static Gripping Force [kN(kgf)] | 31(3161) | 31(3161) | 37(3773) | 46(4691) | 55(5608) |
| Clamping Range External [ϕ mm] | 3~160 | 4~180 | 5~220 | 5~260 | 10~300 |
| Clamping Range Internal [ϕ mm] | 55~150 | 56~170 | 62~210 | 70~250 | 86~290 |
| Handle Torque [N · m(kgf · m)] | 88(9.0) | 107.9(11.0) | 147(15.0) | 176.5(18.0) | 206(21.0) |
| Max. r.p.m. [min^{-1}] | 4000 | 3500 | 2900 | 2500 | 2200 |
| Weight [kg] | 9 | 12.2 | 21.2 | 28 | 41 |
| Moment of inertia [N · m ² (kg · m ²)] | 0.033 | 0.62(0.063) | 1.61(0.163) | 2.63(0.265) | 5.85(0.588) |

| | FTC-460(18") | FTC-535(21") | FTC-610(24") | FTC-810(32") | FTC-1000(40") |
|---|--------------|--------------|--------------|--------------|---------------|
| Max. Static Gripping Force [kN(kgf)] | 65(6650) | 73(7400) | 80(8200) | 110(11216) | 110(11216) |
| Clamping Range External [ϕ mm] | 40~410 | 45~481 | 130~576 | 270~810 | 340~990 |
| Clamping Range Internal [ϕ mm] | 152~436 | 155~499 | 235~592 | 390~800 | 450~940 |
| Handle Torque [N · m(kgf · m)] | 255.0(26) | 313.9(32) | 372.7(38) | 588(60) | 588(60) |
| Max. r.p.m. [min^{-1}] | 1200 | 950 | 850 | 650 | 470 |
| Weight [kg] | 106 | 182 | 238 | 480 | 780 |
| Moment of inertia [N · m ² (kg · m ²)] | 124(12.6) | 287(29.3) | 488(49.8) | 598(61) | 598(61) |

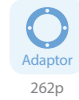


DIMENSIONS

| | FTC-165 | FTC-190(7") | FTC-230(9") | FTC-273(10") | FTC-310(12") | FTC-460(18") | FTC-535(21") | FTC-610B(24") | FTC-810(32") | FTC-1000(40") |
|--------------|----------|-------------|-------------|--------------|--------------|--------------|--------------|---------------|--------------|---------------|
| ΦA | 167 | 192 | 232 | 273 | 310 | 460 | 535 | 610 | 810 | 1000 |
| B | 69 | 78.7 | 83.7 | 88 | 96 | 114 | 143 | 143 | 180 | 196 |
| $\Phi C(H6)$ | 130 | 155 | 190 | 230 | 260 | 400 | 270 | 380 | 520 | 910 |
| ΦD | 147 | 172 | 210 | 250 | 285 | 425 | 235 | 315 | 425 | 510 |
| ΦE | 47 | 57 | 75 | 89 | 100 | 190 | 195 | 275 | 375 | 580 |
| F | 5 | 5 | 6 | 6 | 7 | 8 | 12 | 14 | 16 | 16 |
| G | 3-M10 | 3-M10 | 3-M12 | 3-M12 | 3-M12 | - | - | - | - | - |
| H | 67 | 80.5 | 90.5 | 103.5 | 115.5 | 140(130) | 150(130) | 130 | 248 | 286 |
| J | 26 | 28 | 32 | 35 | 40 | 50 | 50 | 50 | 70 | 70 |
| K | 38.5 | 42.8 | 53.8 | 57.82 | 56.08 | 80 | 82 | 82 | 95 | 95 |
| L | 10 | 11 | 12 | 12 | 14 | 17 | 22 | 22 | 22 | 22 |
| M | 24 | 27.5 | 29.5 | 31.5 | 31.5 | 38.2 | 57.5 | 57.5 | 64 | 69.5 |
| N | 45 | 51.2 | 54.2 | 56.5 | 64.5 | 76 | 85.5 | 85.5 | 116 | 126.5 |
| P | 20 | 20 | 25 | 25 | 25 | - | - | - | - | - |
| Q | 3-M10x75 | 3-M10x90 | 3-M12x95 | 3-M12x95 | 3-M12x110 | 3-M16x125 | 3-M20x140 | 3-M20x140 | 3-M24x140 | 3-M24x190 |
| R | 17 | 22 | 24 | 20 | 27 | 29 | 32 | 33 | 32 | 35 |

ST 2Jaw Scroll Chuck (Soft top Jaws)

Thru Hole Range : $\varnothing 57 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 300$



Application / Benefits

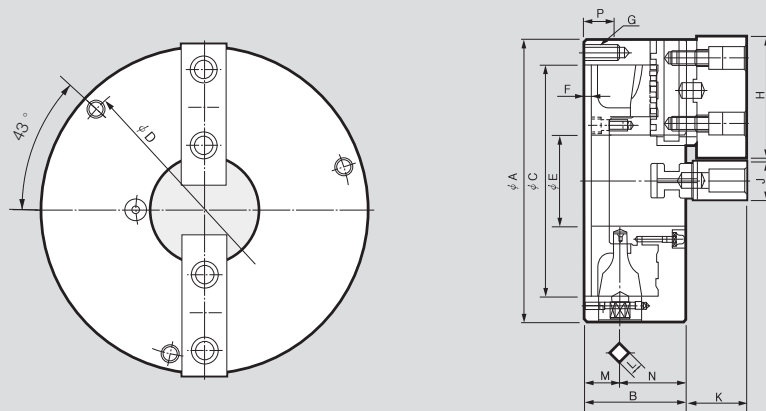
For square or rectangular requiring through hole

Technical features

Two-piece base and soft top jaws

Rear mounting only

Self-centering jaws manually opened and closed by t-handle



DIMENSIONS

| | ST-190(7") | ST-230(9") | ST-273(10") | ST-310(12") |
|---------------------|------------|------------|-------------|-------------|
| $\varnothing A$ | 192 | 232 | 273 | 310 |
| B | 78.7 | 83.7 | 88 | 96 |
| $\varnothing C(H6)$ | 155 | 190 | 230 | 260 |
| $\varnothing D$ | 172 | 210 | 250 | 285 |
| $\varnothing E$ | 57 | 75 | 89 | 100 |
| F | 5 | 6 | 6 | 7 |
| G | 3-M10 | 3-M12 | 3-M12 | 3-M12 |
| H | 88 | 100 | 110 | 125 |
| J | 32 | 32 | 35 | 40 |
| K | 44.8 | 49.8 | 54.32 | 50.58 |
| L | 11 | 12 | 12 | 14 |
| M | 27.5 | 29.5 | 31.5 | 31.5 |
| N | 51.2 | 54.2 | 56.5 | 64.5 |
| P | 20 | 25 | 25 | 25 |

SPECIFICATIONS

| | ST-190(7") | ST-230(9") | ST-273(10") | ST-310(12") |
|---|------------|------------|-------------|-------------|
| Max. Static Gripping Force [kN(kgf)] | 20.7(2110) | 24.7(2518) | 46(4691) | 55(5608) |
| Clamping Range External [ϕ mm] | 4~180 | 5~220 | 5~260 | 10~300 |
| Clamping Range Internal [ϕ mm] | 62~170 | 70~210 | 70~250 | 86~290 |
| Handle Torque [N · m(kgf · m)] | 73.5(7.5) | 98(10.0) | 176.5(18.0) | 206(21.0) |
| Max. r.p.m. [min^{-1}] | 3500 | 2900 | 2500 | 2200 |
| Weight [kg] | 12.6 | 21.4 | 28 | 41 |
| Moment of inertia [N · m ² (kg · m ²)] | 2.55(0.26) | 6.27(0.64) | 9.90(1.01) | 23.0(2.35) |

SF 4-Jaw Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 57 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 300$



Application / Benefits

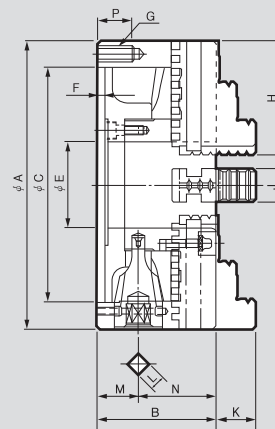
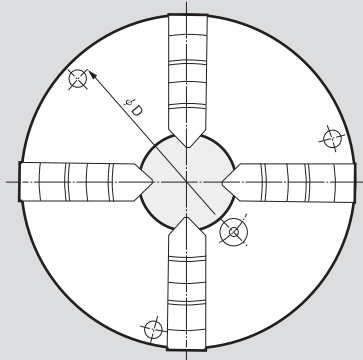
For square work requiring through hole

Technical features

Rear mounting only

One-piece reversible, hard jaws

Self-centering jaws manually opened and closed by t-handle



DIMENSIONS

| | SF-190(7") | SF-230(9") | SF-273(10") | SF-310(12") | SF-405(16") |
|---------------------|------------|------------|-------------|-------------|-------------|
| $\varnothing A$ | 192 | 232 | 273 | 310 | 405 |
| B | 75 | 84 | 86 | 96 | 114.5 |
| $\varnothing C(H6)$ | 155 | 190 | 230 | 260 | 345 |
| $\varnothing D$ | 172 | 210 | 250 | 285 | 375 |
| $\varnothing E$ | 57 | 75 | 89 | 100 | 130 |
| F | 5 | 6 | 6 | 7 | 8 |
| G | 3-M10 | 3-M12 | 3-M12 | 3-M12 | 6-M12 |
| H | 75 | 85 | 98 | 110 | 133 |
| J | 22 | 24 | 28 | 30 | 35 |
| K | 30.06 | 35.04 | 40.02 | 45.08 | 63 |
| L | 11 | 12 | 12 | 14 | 15 |
| M | 27.5 | 29.5 | 31.5 | 31.5 | 42 |
| N | 47.5 | 54.5 | 54.5 | 64.5 | 72.5 |
| P | 20 | 25 | 25 | 25 | 36 |

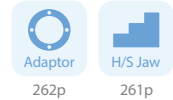
SPECIFICATIONS

| | SF-190(7") | SF-230(9") | SF-273(10") | SF-310(12") |
|---|-------------|------------|-------------|-------------|
| Max. Static Gripping Force [kN(kgf)] | 31(3161) | 37(3773) | 46(4691) | 55(5608) |
| Clamping Range External [ϕ mm] | 4~180 | 5~220 | 5~260 | 10~300 |
| Clamping Range Internal [ϕ mm] | 56~170 | 62~210 | 70~250 | 86~290 |
| Handle Torque [N · m(kgf · m)] | 107.9(11.0) | 147(15.0) | 176.5(18.0) | 206(21.0) |
| Max. r.p.m. [min^{-1}] | 3500 | 2900 | 2500 | 2200 |
| Weight [kg] | 12.5 | 21.5 | 28 | 41 |
| Moment of inertia [N · m ² (kg · m ²)] | 2.45(0.25) | 6.37(0.65) | 9.90(1.01) | 23.0(2.35) |

※ Maximum turning speed is based upon actual measurement.

SCS 6-Jaw Scroll Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 75 \sim \varnothing 100$
Clamping Range : $\varnothing 5 \sim \varnothing 300$

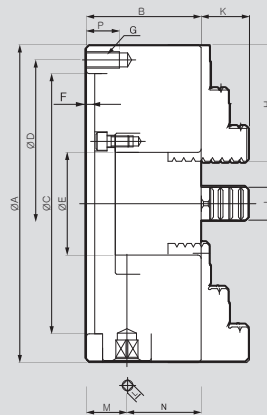
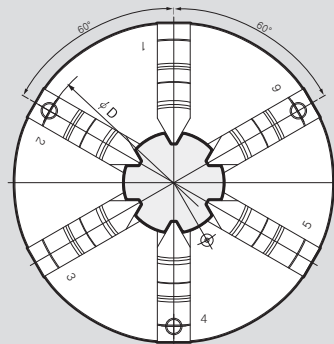


Application / Benefits

For work prone to deformity requiring through hole
Minimizes deformation

Technical features

Rear mounting only
One-piece reversible, hard jaws
Self-centering jaws manually opened and closed by t-handle



DIMENSIONS

| | SCS-230(9") | SCS-273(10") | SCS-310(12") |
|--------------|-------------|--------------|--------------|
| ΦA | 232 | 273 | 310 |
| B | 84 | 86 | 96 |
| $\Phi C(H6)$ | 190 | 230 | 260 |
| ΦD | 210 | 250 | 285 |
| ΦE | 75 | 89 | 100 |
| F | 6 | 6 | 7 |
| G | 3-M12 | 3-M12 | 3-M12 |
| H | 85 | 98 | 110 |
| J | 24 | 28 | 30 |
| K | 35.04 | 40.02 | 45.08 |
| L | 12 | 12 | 14 |
| M | 29.5 | 31.5 | 31.5 |
| N | 54.5 | 54.5 | 64.5 |
| P | 25 | 25 | 25 |

SPECIFICATIONS

| | SCS-230 (9") | SCS-273 (10") | SCS-310 (12") |
|---|--------------|---------------|---------------|
| Max. Static Gripping Force [kN(kgf)] | 37(3773) | 46(4691) | 55(5608) |
| Clamping Range External [ϕ mm] | 5~200 | 5~260 | 10~300 |
| Clamping Range Internal [ϕ mm] | 62~210 | 70~250 | 86~290 |
| Handle Torque [N · m(kgf · m)] | 147(15.0) | 176.5(18.0) | 206(21.0) |
| Max. r.p.m. [min^{-1}] | 2900 | 2500 | 2200 |
| Weight [kg] | 24 | 32 | 45 |
| Moment of inertia [N · m ² (kg · m ²)] | 6.27(0.64) | 9.90(1.01) | 23.0(2.35) |

※ Maximum turning speed is based upon actual measurement.

SL Standard Slotter Chuck (Hard Jaws)

Thru Hole Range : $\varnothing 60 \sim \varnothing 100$
Clamping Range : $\varnothing 4 \sim \varnothing 266$

 Handle
263p

 H/S Jaw
261p

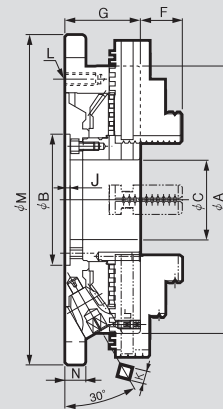
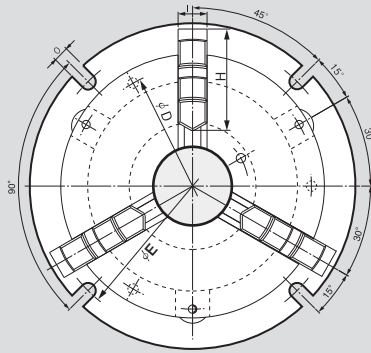


Application / Benefits

Low-profile and compact
Ideal for machining centers

Technical features

Angled t-handle slot
One-piece, reversible hard jaws



DIMENSIONS

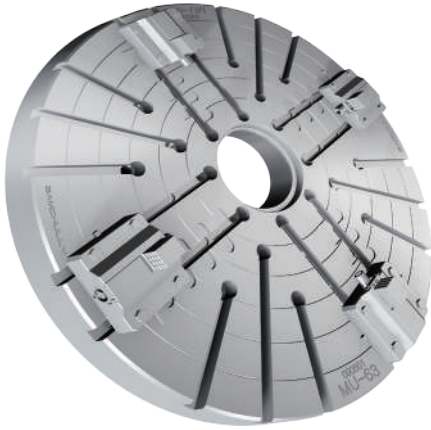
| | SL-08 | SL-10 | SL-12 |
|---------|-------|-------|-------|
| ΦA | 215 | 255 | 305 |
| ΦB(HC6) | 110 | 125 | 160 |
| ΦC | 60 | 76 | 100 |
| ΦD | 190.5 | 230 | 280 |
| ΦE | 240 | 286 | 340 |
| F | 35.04 | 40.02 | 45.05 |
| G | 64 | 72 | 76 |
| H | 85 | 98 | 110 |
| I | 25 | 28 | 30 |
| J | 4 | 4.5 | 5 |
| K | 11 | 12 | 14 |
| L | M10 | M12 | M12 |
| M | 266 | 315 | 370 |
| N | 17 | 20 | 22 |
| O | 13 | 15 | 17 |

SPECIFICATIONS

| | SL-08 | SL-10 | SL-12 |
|--------------------------------------|-----------|-----------|-----------|
| Max. Static Gripping Force [kN(kgf)] | 37(3,800) | 46(4,700) | 55(5,620) |
| Clamping Range External [φmm] | 4~182 | 4~220 | 5~266 |
| Clamping Range Internal [φmm] | 58~174 | 68~212 | 80~263 |
| Handle Torque [N · m(kgf · m)] | 117.7(13) | 176.5(18) | 196.2(20) |
| Weight [kg] | 17.6 | 27.7 | 40 |

※ Maximum turning speed is based upon actual measurement.

MU Manual Chuck



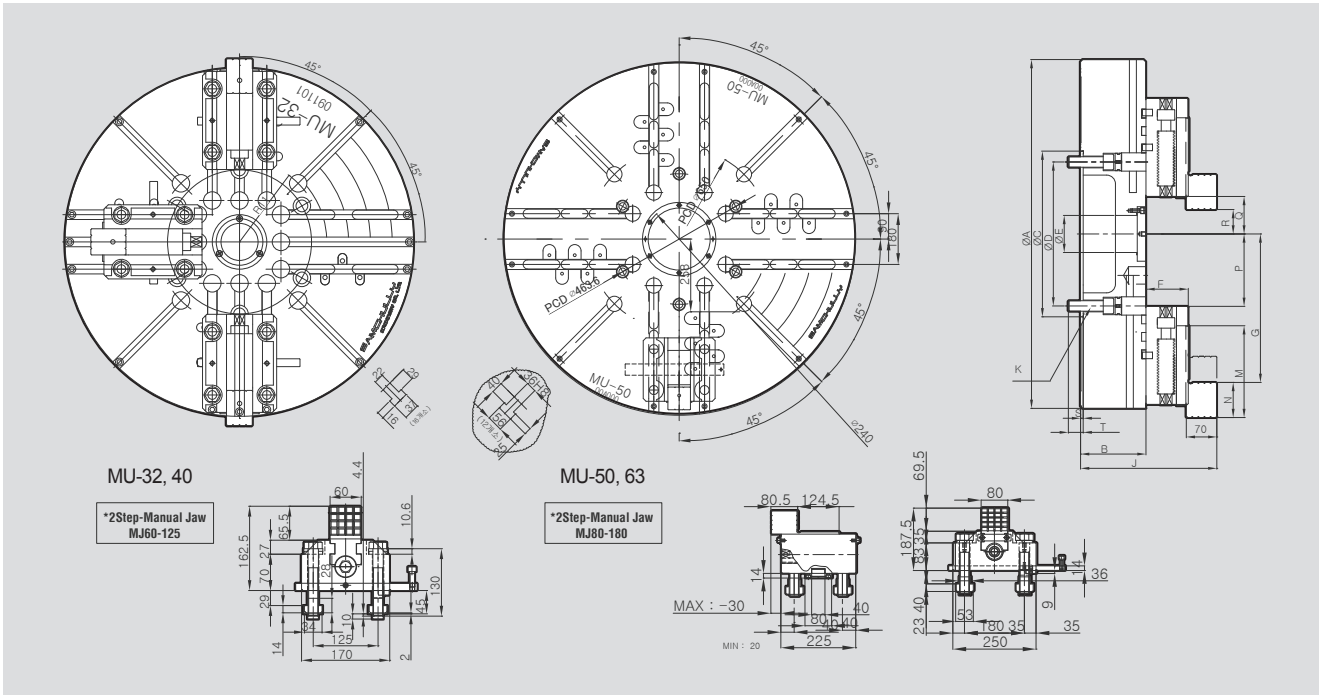
Application / Benefits

Easy to operate scroll chuck with stepped jaws.

SPECIFICATIONS

| | MU-32 | MU-40 | MU-50 | MU-63 |
|---|-------|-------|-------|-------|
| Box Jaw Stroke [mm] | 60 | 60 | 50 | 50 |
| Max. Static Gripping Force. [kN(kgf)] | - | - | - | - |
| Clamping Range. Max [mm] | 681 | 885 | 1050 | 1450 |
| Clamping Range. Min [mm] | 112 | 316 | 281 | 321 |
| Max. r.p.m. [min^{-1}] | 650 | 500 | 400 | 360 |
| Weight [kg] | 350 | 800 | 1250 | 1600 |
| Moment of inertia [$\text{N} \cdot \text{m}^2(\text{kg} \cdot \text{m}^2)$] | - | - | - | - |

- ※ Maximum turning speed is based upon actual measurement.
- ※ T-Slot can be changed at the request.

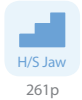
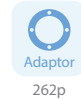


DIMENSIONS

| | MU-32 | MU-40 | MU-50 | MU-63 |
|--------------|-----------|-----------|------------|-------------|
| ΦA | 800 | 1000 | 1250 | 1600 |
| $\Phi B(76)$ | 150 | 150 | 180 | 240 |
| ΦC | 380 | 520 | 520 | 1020 |
| ΦD | 330.2 | 463.6 | 463.6 | 956 |
| ΦE | 85 | 178 | 220 | 320 |
| F | 99.5 | 99.5 | 124.5 | 124.5 |
| G max | 340.5 | 442.5 | 525 | 725 |
| J | 312.5 | 312.5 | 367.5 | 427.5 |
| K | 6-M24x80L | 6-M24x90L | 6-M24x100L | 12-M24x140L |
| M | 210.5 | 210.5 | 205 | 205 |
| N | 80.5 | 80.5 | 80.5 | 80.5 |
| P | 166 | 268 | 345 | 365 |
| Q | 86 | 188 | 170.5 | 190.5 |
| R min | 56 | 158 | 140.5 | 160.5 |
| S | 6 | 8 | 8 | 8 |
| T | 34 | 41 | 54 | 38 |

IC Independent Chuck (Hard Jaws) (200mm - 400mm)

Thru Hole Range : $\varnothing 50 \sim \varnothing 90$
Clamping Range : $\varnothing 75 \sim \varnothing 360$

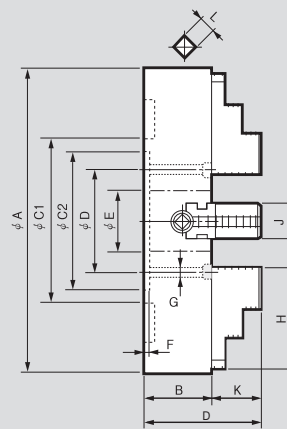
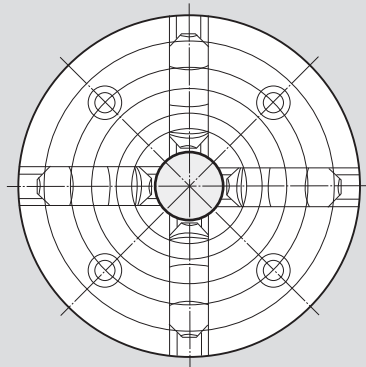


Application / Benefits

Independently jaws suitable for irregular work
Chucks 10 inches and larger have t-slots on body for added versatility

Technical features

One-piece, reversible hard jaws



DIMENSIONS

| | IC-08 | IC-10 | IC-12 | IC-14 | IC-16 |
|----|-------|-------|-------|-------|-------|
| A | 200 | 250 | 300 | 350 | 400 |
| B | 75 | 80 | 88 | 90 | 100 |
| C1 | 200 | 165 | 186 | 210 | 230 |
| C2 | 175 | 150 | 170 | 190 | 210 |
| D | 155 | 125 | 140 | 160 | 180 |
| E | 50 | 55 | 65 | 75 | 90 |
| F | 6 | 6 | 6 | 8 | 8 |
| G | M12 | M12 | M12 | M12 | M16 |
| H | 75 | 90 | 100 | 110 | 120 |
| J | 30 | 30 | 35 | 35 | 40 |
| K | 30 | 35 | 40 | 45 | 50 |
| L | 10 | 10 | 12 | 12 | 14 |

SPECIFICATIONS

| | IC-08 | IC-10 | IC-12 | IC-14 | IC-16 |
|---|-------|-------|-------|-------|-------|
| Max. Static Gripping Force [kN(kgf)] | 1000 | 1400 | 1600 | 1700 | 2000 |
| Clamping Range External [ϕ mm] | 75 | 95 | 125 | 155 | 190 |
| Clamping Range Internal [ϕ mm] | 185 | 220 | 265 | 310 | 360 |
| Max. r.p.m. [min^{-1}] | 1600 | 1600 | 1400 | 1400 | 1200 |
| Weight [kg] | 14.8 | 21 | 29.5 | 40 | 56.5 |
| Moment of inertia [$\text{N} \cdot \text{m}^2(\text{kg} \cdot \text{m}^2)$] | 0.3 | 0.6 | 1.4 | 2.9 | 4.5 |

※ Specifications are subject to change without notice.

IC Independent Chuck (Hard Jaws) (450mm - 813mm)

Thru Hole Range : $\varnothing 100 \sim \varnothing 140$
Clamping Range : $\varnothing 220 \sim \varnothing 750$

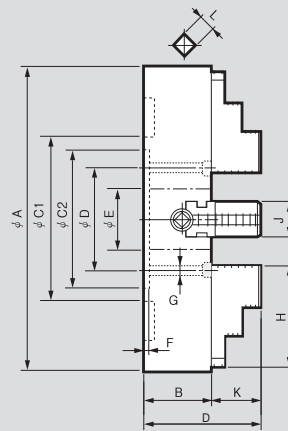
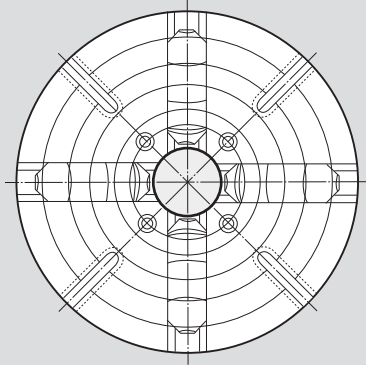


Application / Benefits

Independently moving jaws suitable for irregular work
Chucks 10 inches and larger have t-slots on body for added versatility

Technical features

One-piece, reversible hard jaws



DIMENSIONS

| | IC-18 | IC-20 | IC-24 | IC-28 | IC-32 |
|----|-------|-------|-------|-------|-------|
| A | 450 | 500 | 600 | 710 | 800 |
| B | 105 | 110 | 120 | 120 | 120 |
| C1 | 230 | 272 | 330 | 382 | 440 |
| C2 | 250 | 250 | 300 | 350 | 400 |
| D | 200 | 220 | 260 | 300 | 350 |
| E | 100 | 110 | 120 | 140 | 140 |
| F | 8 | 8 | 10 | 12 | 12 |
| G | M16 | M16 | M20 | M20 | M20 |
| H | 130 | 140 | 160 | 180 | 200 |
| J | 40 | 45 | 50 | 50 | 60 |
| K | 55 | 60 | 70 | 70 | 89 |
| L | 14 | 14 | 14 | 14 | 24 |

SPECIFICATIONS

| | IC-18 | IC-20 | IC-24 | IC-28 | IC-32 |
|---|-------|-------|-------|-------|-------|
| Max. Static Gripping Force [kN(kgf)] | 2000 | 2200 | 2300 | 2396 | 2447 |
| Clamping Range External [ϕ mm] | 220 | 250 | 320 | 385 | 485 |
| Clamping Range Internal [ϕ mm] | 405 | 450 | 550 | 650 | 750 |
| Max. r.p.m. [min^{-1}] | 1200 | 900 | 900 | 900 | 600 |
| Weight [kg] | 70 | 90 | 150 | 247 | 357 |
| Moment of inertia [$\text{N} \cdot \text{m}^2(\text{kg} \cdot \text{m}^2)$] | 7 | 11.8 | 25.3 | 58 | 103 |

- ※ Maximum turning speed is based upon actual measurement.
- ※ Specifications are subject to change without notice.

IC Independent Chuck (Hard Jaws)

(500mm - 600mm) **MEGA BORE**

Thru Hole Range : $\varnothing 180 \sim \varnothing 275$
Clamping Range : $\varnothing 450 \sim \varnothing 550$

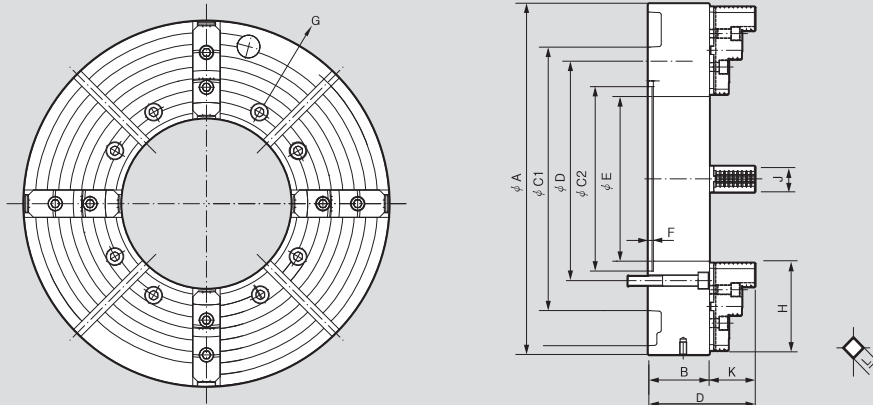


Application / Benefits

Durable with large bore ideal for oil-field related work such as pipe
Independently moving jaws

Technical features

Adapters enable mounting on various spindle sizes
Two-piece, reversible base and hard top jaw (also includes soft jaws)



DIMENSIONS

| | IC-2018 | IC-2023 | IC-2423 | IC-2427 |
|-----------|---------|---------|---------|---------|
| ΦA | 500 | 500 | 600 | 600 |
| B | 110 | 110 | 140 | 140 |
| $\Phi C2$ | 260 | 300 | 420 | 420 |
| ΦD | 230 | 270 | 463.6 | 463.6 |
| ΦE | 180 | 230 | 230 | 275 |
| F | - | 8 | 10 | 10 |
| G | M16 | M16 | M24 | M24 |
| H | 135 | 140 | 200 | 200 |
| J | 45 | 45 | 60 | 60 |
| K | 83.45 | 83.45 | 104.15 | 104.15 |
| L | 14 | 14 | 24 | 24 |

SPECIFICATIONS

| | IC-2018 | IC-2023 | IC-2423 | IC-2427 |
|---|------------|------------|------------|------------|
| Max. Static Gripping Force [kN(kgf)] | 27.4(2800) | 27.4(2800) | 28.5(2904) | 30(3056) |
| Clamping Range External [ϕ mm] | 460 | 460 | 550 | 550 |
| Clamping Range Internal [ϕ mm] | 450 | 450 | 530 | 550 |
| Max. r.p.m. [min^{-1}] | 800 | 800 | 800 | 800 |
| Weight [kg] | 180 | 170 | 350 | 340 |
| Moment of inertia [$\text{N} \cdot \text{m}^2(\text{kg} \cdot \text{m}^2)$] | 54.9(5.6) | 51.41(5.3) | 61.74(6.3) | 61.74(6.3) |

※ Soft & Hard jaws are basic components.
※ Specifications are subject to change without notice.

IC Independent Chuck (Hard Jaws)

(600mm - 1000mm) **MEGA BORE**

Thru Hole Range : $\varnothing 320 \sim \varnothing 560$
Clamping Range : $\varnothing 550 \sim \varnothing 1000$

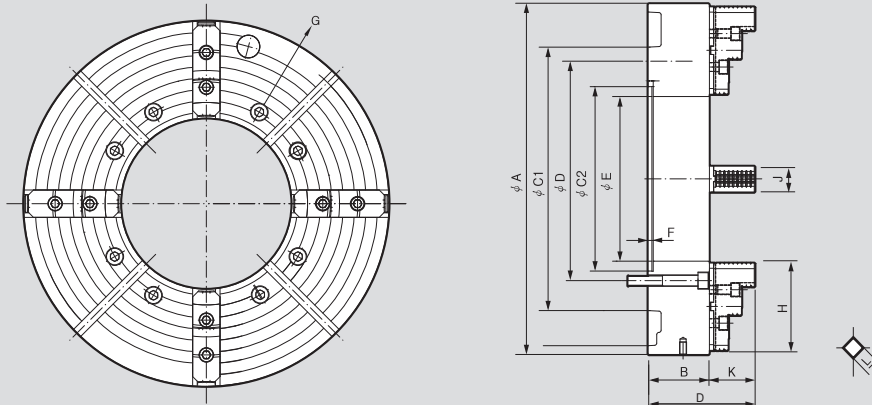


Application / Benefits

Durable with large bore ideal for oil-field related work such as pipe
Independently moving jaws

Technical features

Adapters enable mounting on various spindle sizes
Two-piece, reversible base and hard top jaw (also includes soft jaws)



DIMENSIONS

| | IC-2432 | IC-3232 | IC-3237 | IC-4056 |
|-----------|---------|---------|---------|---------|
| ΦA | 600 | 800 | 800 | 1000 |
| B | 140 | 140 | 140 | 160 |
| $\Phi C2$ | 420 | 420 | 420 | 650 |
| ΦD | 463.6 | 463.6 | 463.6 | 700 |
| ΦE | 320 | 325 | 375 | 560 |
| F | 10 | 12 | 12 | 10 |
| G | M24 | M24 | M24 | M22 |
| H | 200 | 200 | 200 | 200 |
| J | 60 | 60 | 60 | 60 |
| K | 104.15 | 104.15 | 104.15 | 104.15 |
| L | 24 | 24 | 24 | - |

SPECIFICATIONS

| | IC-2432 | IC-3232 | IC-3237 | IC-4056 |
|---|------------|------------|------------|----------|
| Max. Static Gripping Force [kN(kgf)] | 30(3056) | 32.4(3300) | 32.4(3300) | 36(3700) |
| Clamping Range External [ϕ mm] | 550 | 750 | 750 | 920 |
| Clamping Range Internal [ϕ mm] | 550 | 730 | 730 | 840 |
| Max. r.p.m. [min^{-1}] | 800 | 600 | 600 | 480 |
| Weight [kg] | 340 | 463 | 490 | 660 |
| Moment of inertia [$\text{N} \cdot \text{m}^2(\text{kg} \cdot \text{m}^2)$] | 61.74(6.3) | 382(39) | 382(39) | - |

- ※ Soft & Hard jaws are basic components.
- ※ Specifications are subject to change without notice.



STEADY REST



STA

Self-Centering
Steady Rest

164 P



STRA

Wide-Opening
Self-Centering
Steady Rest

166 P

STA Self-Centering Steady Rest



Application / Benefits

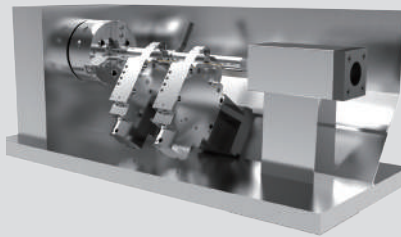
Enhances the accuracy when machining unstable, heavy or long work piece

Technical features

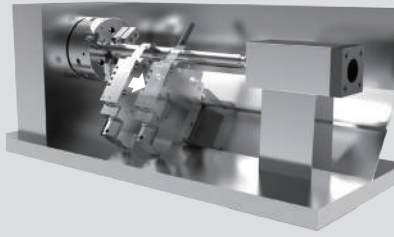
The arms and center rollers are interconnected and designed to self-adjust to various size workpieces.

The mechanical design improves durability by eliminating the need for springs.

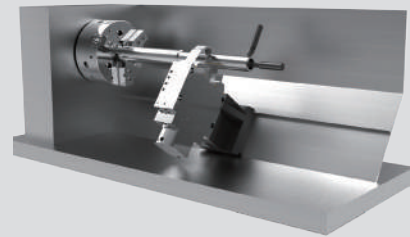
Fixed or Travelling Applications



Fixed Tandem Steady Rest



Travelling Steady Rest

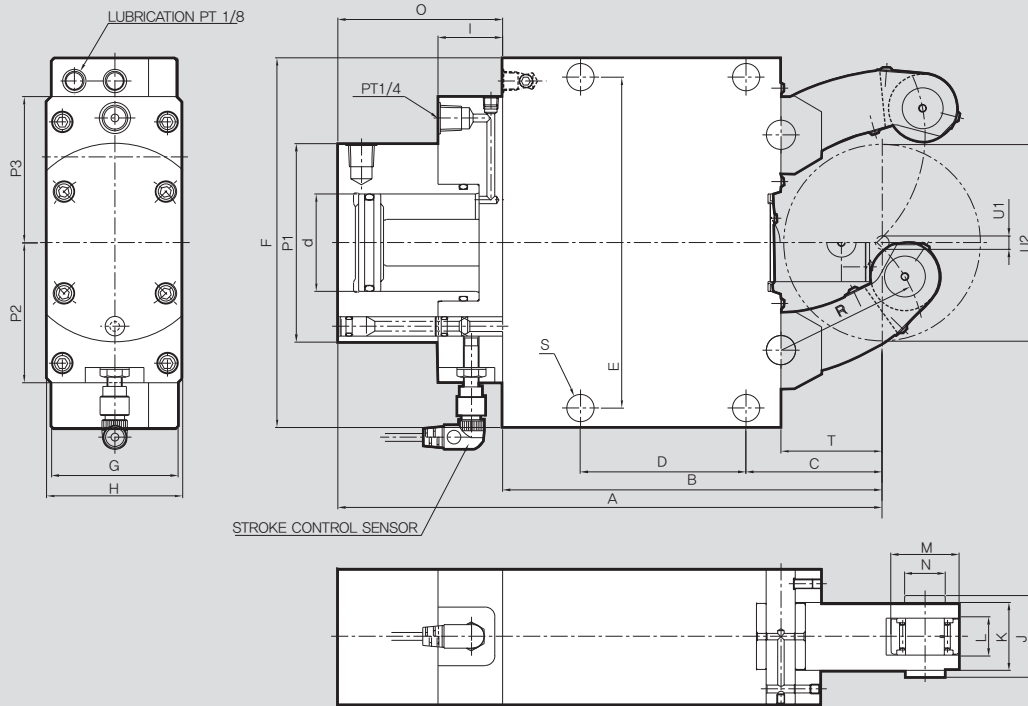


Fixed Steady Rest For End Machining

SPECIFICATIONS

| | STA-1 | STA-2 | STA-3 | STA-3.1 | STA-3.2 | STA-4 | STA-5 | STA-5.1 | STA-6 |
|------------------------------------|-------|-------|-------|---------|---------|-------|-------|---------|-------|
| Piston Area [cm ²] | 7 | 19.6 | 50 | 50 | 50 | 78 | 78 | 78 | 132 |
| Max. Clamping Force / Roller [kgf] | 100 | 450 | 1000 | 1000 | 1000 | 1500 | 2000 | 2000 | 3000 |
| Operation Pressure [bar] | Max. | 50 | 70 | 60 | 60 | 60 | 80 | 80 | 70 |
| | Min. | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Centering Range [mm] | Max. | 64 | 101 | 152 | 165 | 200 | 245 | 310 | 460 |
| | Min. | 4 | 8 | 12 | 20 | 50 | 30 | 45 | 125 |
| Max. Roller Surface Speed [m/min] | 800 | 800 | 725 | 725 | 725 | 715 | 700 | 700 | 700 |
| Centering Accuracy [mm] | 0.02 | 0.02 | 0.04 | 0.04 | 0.04 | 0.05 | 0.06 | 0.06 | 0.06 |
| Repeatability Accuracy [mm] | 0.005 | 0.005 | 0.007 | 0.007 | 0.007 | 0.007 | 0.01 | 0.01 | 0.01 |
| Weight [kg] | 6 | 14 | 39 | 40 | 43 | 92 | 152 | 155 | 420 |

STA



DIMENSIONS

| | STA-1 | STA-2 | STA-3 | STA-3.1 | STA-3.2 | STA-4 | STA-5 | STA-5.1 | STA-6 |
|----|-------|-------|-------|---------|---------|-------|-------|---------|-------|
| A | 207 | 279.5 | 431 | 440 | 455 | 608 | 697.5 | 717.5 | 944.5 |
| B | 137 | 195 | 312 | 320 | 335 | 448 | 510 | 530 | 709 |
| C | 51 | 70 | 115 | 123 | 138 | 146 | 178 | 198 | 215 |
| D | 64 | 85 | 135 | 135 | 135 | 240 | 270 | 270 | 330 |
| E | 118 | 170 | 262 | 262 | 262 | 365 | 400 | 400 | 640 |
| F | 132 | 190 | 290 | 290 | 290 | 400 | 440 | 440 | 680 |
| G | 55 | 70 | 85 | 85 | 85 | 110 | 145 | 145 | 145 |
| H | 70 | 70 | 100 | 100 | 100 | 144 | 144 | 144 | 158 |
| I | 33 | 33 | 37 | 37 | 37 | 37 | 37 | 37 | 37 |
| J | 24 | 42 | 52 | 52 | 52 | 67 | 83 | 83 | 83 |
| K | 20 | 35 | 45 | 45 | 45 | 60 | 75 | 75 | 75 |
| L | 12 | 19 | 25 | 25 | 25 | 25 | 29 | 29 | 29 |
| M | 19 | 35 | 47 | 47 | 47 | 52 | 62 | 62 | 80 |
| N | 6 | 21 | 25 | 25 | 25 | 32 | 36 | 36 | 42 |
| O | 70 | 84.5 | 120 | 120 | 120 | 160 | 187.5 | 187.5 | 235.5 |
| P1 | 84 | 102 | 137 | 137 | 137 | 165 | 165 | 165 | 190 |
| P2 | 66 | 72 | 90 | 90 | 90 | 102 | 102 | 102 | 115 |
| P3 | 66 | 75 | 100 | 100 | 100 | 110 | 110 | 110 | 130 |
| R | 50.5 | 74 | 119 | 124 | 139 | 172 | 209 | 229 | 290 |
| S | 11 | 14 | 18 | 18 | 18 | 23 | 23 | 23 | 27 |
| T | 37 | 52 | 85 | 93 | 103 | 128 | 160 | 180 | 175 |
| U1 | 4 | 8 | 11 | 20 | 50 | 35 | 45 | 85 | 125 |
| U2 | 64 | 101 | 152 | 165 | 220 | 245 | 310 | 350 | 460 |

STRA Wide-Opening Self-Centering Steady Rest



Application / Benefits

Enhances the accuracy when machining unstable, heavy or long work piece

Technical features

The arms and center rollers are interconnected and designed to self-adjust to various size workpieces

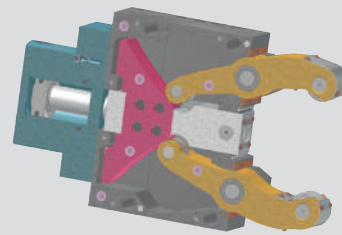
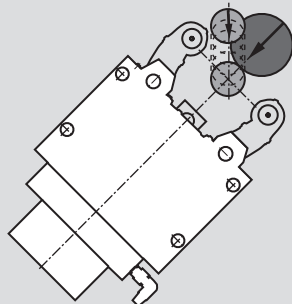
The mechanical design improves durability by eliminating the need for springs

The top arm pivots extra wide to allow for easier drop down loading when working on mills or flatbed lathes

Fixed or Travelling Applications

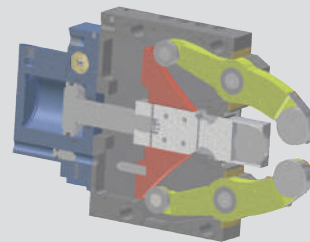
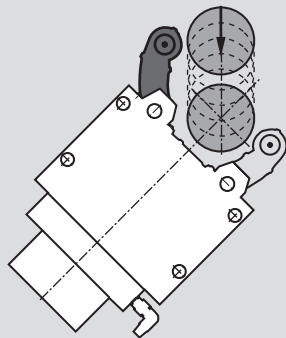
STA

Conventional model



STRA

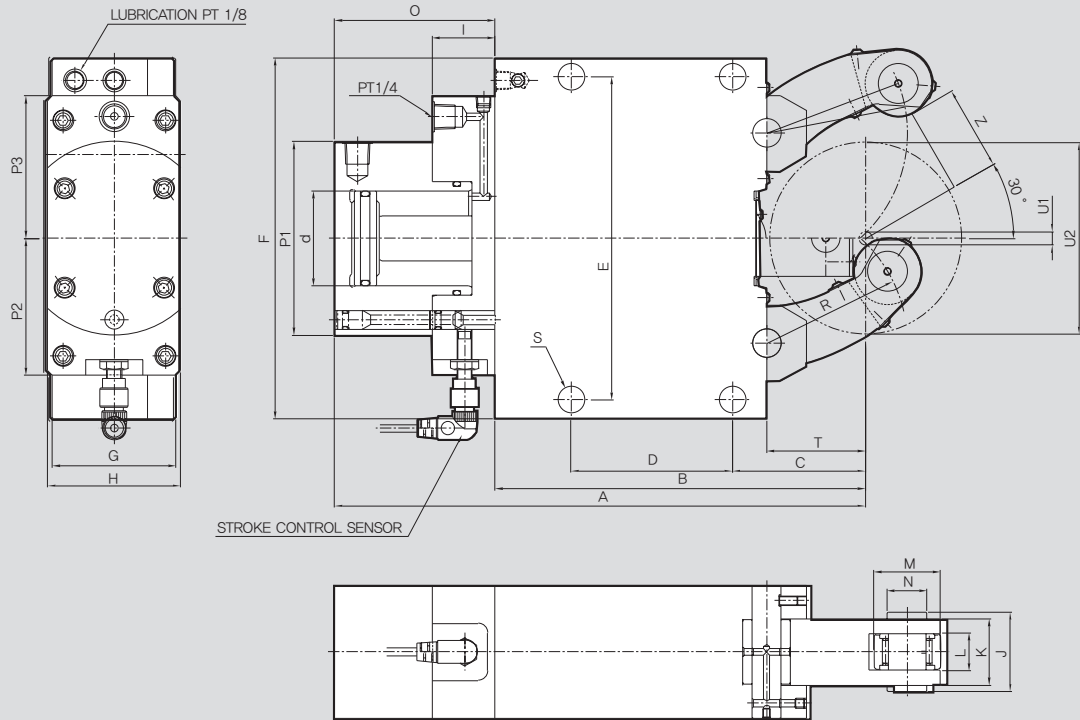
The wide opening arm of the STRA steady rest makes vertical loading and automation convenient



SPECIFICATIONS

| | STRA-1 | STRA-2 | STRA-3 | STRA-3.1 | STRA-4 | STRA-5 | STRA-6 | |
|------------------------------------|--------|--------|--------|----------|--------|--------|--------|-----|
| Piston Area [cm ²] | 7 | 19.6 | 50 | 50 | 78 | 78 | 132 | |
| Max. Clamping Force / Roller [kgf] | 100 | 450 | 1000 | 1000 | 1500 | 2000 | 3000 | |
| Operation Pressure [bar] | Max. | 50 | 70 | 60 | 60 | 60 | 80 | 70 |
| | Min. | 6 | 8 | 8 | 8 | 8 | 8 | 8 |
| Centering Range [mm] | Max. | 52 | 80 | 130 | 150 | 220 | 268 | 460 |
| | Min. | 4 | 8 | 12 | 22 | 30 | 50 | 160 |
| Max. Roller Surface Speed [m/min] | 800 | 800 | 725 | 725 | 715 | 700 | 700 | |
| Centering Accuracy [mm] | 0.02 | 0.02 | 0.04 | 0.04 | 0.05 | 0.06 | 0.06 | |
| Repeatability Accuracy [mm] | 0.005 | 0.005 | 0.007 | 0.007 | 0.007 | 0.01 | 0.01 | |
| Weight [kg] | 6 | 14 | 39 | 40 | 92 | 152 | 420 | |

STRA



DIMENSIONS

| | STRA-1 | STRA-2 | STRA-3 | STRA-3.1 | STRA-4 | STRA-5 | STRA-6 |
|----|--------|--------|--------|----------|--------|--------|--------|
| A | 207 | 279.5 | 431 | 440 | 608 | 688.5 | 944.5 |
| B | 137 | 195 | 312 | 320 | 448 | 510 | 709 |
| C | 51 | 70 | 115 | 123 | 146 | 178 | 215 |
| D | 64 | 85 | 135 | 135 | 240 | 270 | 330 |
| E | 118 | 170 | 262 | 262 | 365 | 400 | 640 |
| F | 132 | 190 | 290 | 290 | 400 | 440 | 680 |
| G | 55 | 70 | 85 | 85 | 110 | 145 | 145 |
| H | 70 | 70 | 100 | 100 | 144 | 144 | 158 |
| I | 33 | 33 | 37 | 37 | 37 | 37 | 37 |
| J | 24 | 42 | 52 | 52 | 67 | 83 | 83 |
| K | 20 | 35 | 45 | 45 | 60 | 75 | 75 |
| L | 12 | 19 | 25 | 25 | 25 | 29 | 29 |
| M | 19 | 35 | 47 | 47 | 52 | 62 | 80 |
| N | 6 | 21 | 25 | 25 | 32 | 36 | 42 |
| O | 70 | 84.5 | 120 | 120 | 160 | 187.5 | 235.5 |
| P1 | 84 | 102 | 137 | 137 | 165 | 165 | 190 |
| P2 | 66 | 72 | 90 | 90 | 102 | 102 | 115 |
| P3 | 66 | 75 | 100 | 100 | 110 | 110 | 130 |
| R | 50.5 | 74 | 119 | 124 | 172 | 209 | 290 |
| S | 11 | 14 | 18 | 18 | 23 | 23 | 27 |
| T | 37 | 52 | 85 | 93 | 128 | 160 | 175 |
| Z | 26.5 | 41 | 66 | 76 | 111 | 135 | 230 |
| U1 | 4 | 8 | 12 | 22 | 30 | 50 | 160 |
| U2 | 52 | 80 | 130 | 150 | 220 | 268 | 460 |



ACCESSORIES



Soft Jaw

Power Chuck
Soft Jaw

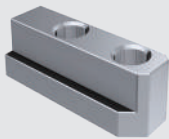
262 P



Hard Jaw

Power Chuck
Hard Jaw

264 P



T-Nut

Power Chuck
T-Nut

266 P



Adaptor

Power Chuck
Adaptor Plates

268 P



QJC Jaw

Quick Jaw Change
Chuck Jaws

270 P



TC, FTC Jaw

Scroll Chuck Jaws

272 P



SC, IC Jaw

Scroll Chuck Jaws

273 P



Etc.

Scroll Chuck
Accessories

274 P

Soft Jaw

Power Chuck Soft Jaw



Application / Benefits

Works with HC.

Fig. 1

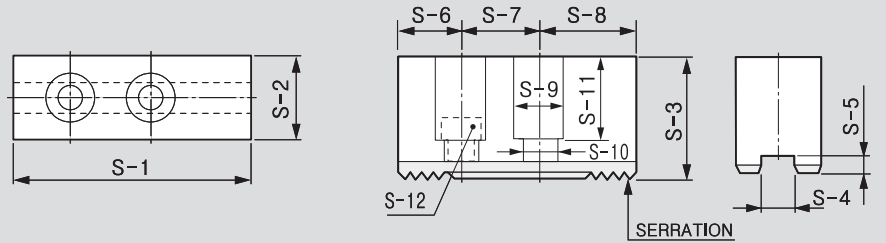


Fig. 2

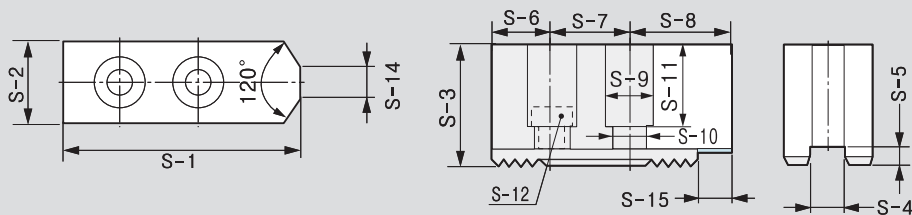
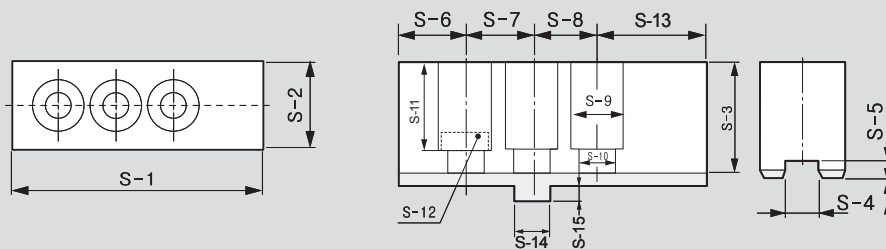


Fig. 3



※ See the product dimension Table on the right.

DIMENSIONS

| | SB04C1 | SB05N1 | SB06B1 (40/60/80/100/120) | SB08B1 (60/80/100/120) | SB10B1 (60/80/100/120) | SB12A1 (60/80/100/120) | SB12N1 (60/80/100/120) | SB15C1 |
|-----------------|---------|-------------|---------------------------------|---------------------------------|---------------------------------|---------------------------|---------------------------|------------------|
| Fig. | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| Serration Pitch | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° |
| S-1 | 48 | 62 | 72 | 95 | 110 | 129 | 111 | 165 |
| S-2 | 19 | 23 | 31 | 35 | 40 | 50 | 50 | 62 |
| S-3 | 23 | 25 | 32 (40/60/80/100/120) | 38 (60/80/100/120) | 42 (60/80/100/120) | 50 (60/80/100/120) | 50 (60/80/100/120) | 66 |
| S-4 | 8 | 10 | 12 | 14 | 16 | 18 | 21 | 22 |
| S-5 | 3 | 4 | 5 | 5 | 5 | 5 | 4 | 8 |
| S-6 | 8 | 12 | 15 | 24 | 30 | 39 | 21 | 37 |
| S-7 | 15 | 19 | 20 | 25 | 30 | 30 | 30 | 43 |
| S-8 | 25 | 28 | 37 | 46 | 50 | 60 | 60 | 85 |
| S-9 | 11 | 13.5 | 17 | 19 | 19 | 23 | 25 | 32 |
| S-10 | 7 | 8.5 | 11 | 13 | 13 | 15 | 17 | 21 |
| S-11 | 15 | 16.5 | 20 | 23 | 27 | 30 | 33 | 42 |
| S-12 | M6x16 | M8x20 | M10x30 | M12x35 | M12x35 | M14x45 | M16x40 | M20x60 |
| S-13 | - | - | - | - | - | - | - | - |
| S-14 | 6 | 5 | 12 | 12 | 15 | - | - | - |
| S-15 | - | - | - | - | 20 | - | - | - |
| Corresponding | HCH-04 | HS/HC-04,05 | HS/HCH/HC-06, MH-206, UR-175 | HCH/HC/HS-08, MH-208, UR-210 | HCH/HC/HS-10, MH-210, UR-250 | HC/HCH-12 | HS-12, MH-212 UR-315 | HCH-15 HCH-18 |

| | SB15N1 | SB15A2 | SB18A2 | SB32B2 | SB32GB | SB32SB2 | SB40GB | SB40SB2 |
|-----------------|--------------|---------|--|-----------------------|-------------------|-----------------------|-----------------------------------|--------------------------------------|
| Fig. | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 1 |
| Serration Pitch | 1.5x60° | 3.0x60° | 3.0x60° | 3.0x60° | - | 3.0x60° | - | 3.0x60° |
| S-1 | 135 | 165 | 180 | 160 | 165 | 185 | 270 | 270 |
| S-2 | 50 | 62 | 65 | 75 | 75 | 75 | 110 | 110 |
| S-3 | 60 | 66 | 70 | 75 | 83 | 75 | 117 | 110 |
| S-4 | 25.5 | 22 | 25 | 25.5 | 12.7 | 25.5 | 30 | 30 |
| S-5 | 5 | 8 | 9 | 7 | 13 | 7.5 | 13 | 7.5 |
| S-6 | 26 | 30 | 40 | 25 | 21.9 | 26.8 | 48.8 | 32.5 |
| S-7 | 43 | 50 | 60 | 38 | 76.2 | 38.1 | 76.2 | 60 |
| S-8 | 66 | 85 | 80 | 97 | - | 82 | 76.2 | - |
| S-9 | 32 | 32 | 32 | 32 | 32 | 32 | 39 | 39 |
| S-10 | 21 | 21 | 21 | 22 | 22 | 22 | 26 | 26 |
| S-11 | 39 | 42 | 45 | 54 | 59 | 57 | 90 | 90 |
| S-12 | M20x55 | M20x60 | M20x60 | M20 | M20 | M20 | M24 | M24 |
| S-13 | - | - | - | - | - | 82 | 68.8 | 117.5 |
| S-14 | - | - | - | - | 19.025 | - | 19.025 | - |
| S-15 | - | - | - | - | - | - | - | 85 |
| Corresponding | HC-15, HC-18 | MH-218 | HC/HCH-21, HC/HCH-24, MH-221,224 | HCH-32 [Serration] | HC-32 [Groove] | HC-32S [Serration] | HC-40 [Groove] /50,55,63,70,80 | HC-40 [Serration] /50,55,63,70,80 |

Hard Jaw

Power Chuck Hard Jaw



Application / Benefits

Works with HC.

Fig. 1

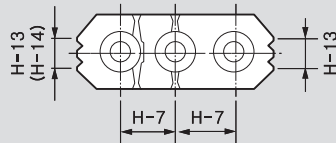


Fig. 2

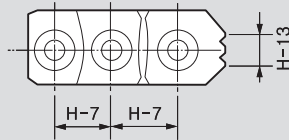
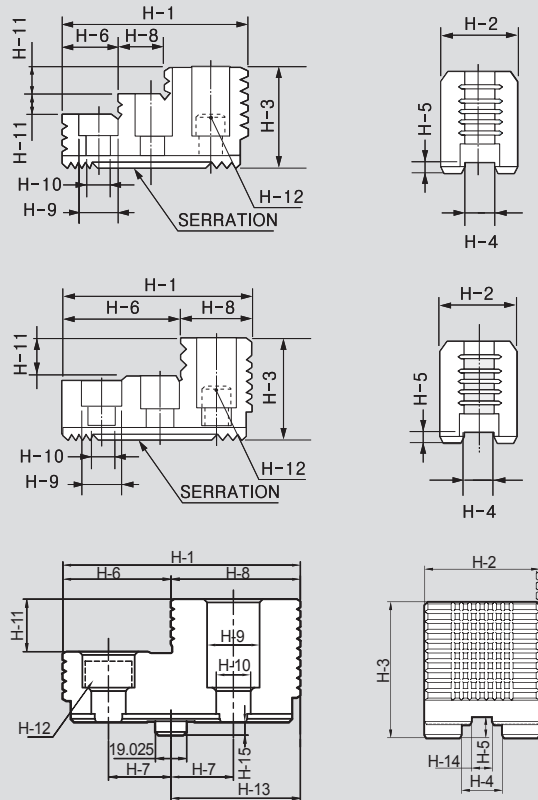
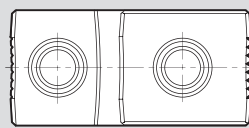


Fig. 3



※ See the product dimension Table on the right.

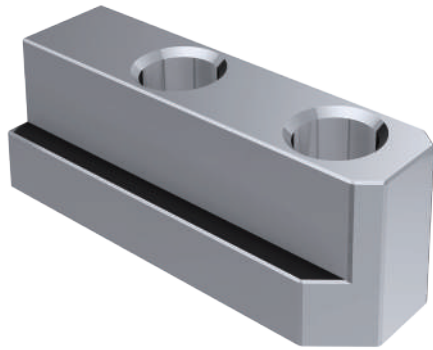
DIMENSIONS

| | HB04N1 | HB06A1 | HB08A1 | HB10A1 | HB12B1 | HB12N1 | HB15A1 | HB15A2 |
|-----------------|--------------|---------------------------------|---------------------------------|---------------------------------|-----------|-------------------------|-------------------|---------|
| Fig. | 2 | 4 | 2 | 1 | 2 | 2 | 1 | 1 |
| Serration Pitch | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 1.5x60° | 3.0x60° |
| H-1 | 53 | 67 | 86 | 99.5 | 97.5 | 103 | 149 | 149 |
| H-2 | 23 | 31 | 35 | 40 | 50 | 50 | 62 | 62 |
| H-3 | 27.5 | 41 | 51 | 54 | 55 | 52 | 86 | 86 |
| H-4 | 10 | 12 | 14 | 16 | 18 | 21 | 22 | 22 |
| H-5 | 4 | 5 | 5 | 5 | 5 | 4 | 9 | 9 |
| H-6 | 30.5 | 18 | 31 | 43 | 64.5 | 62.5 | 63 | 63 |
| H-7 | 14 | 20 | 25 | 30 | 30 | 30 | 43 | 50 |
| H-8 | 22.5 | 17 | 18 | 17 | 33 | 40.5 | 34 | 34 |
| H-9 | 13.5 | 17 | 19 | 19 | 22 | 25 | 32 | 32 |
| H-10 | 8.5 | 11 | 13 | 13 | 15 | 17 | 21 | 21 |
| H-11 | 10 | 9 | 12 | 13 | 20 | 17 | 20 | 20 |
| H-12 | M8 | M10 | M12 | M12 | M14 | M16 | M20 | M20 |
| H-13 | 6 | 10 | 12 | 15 | 18 | 30 | 40 | 40 |
| H-14 | - | 10 | 12 | 15 | - | - | 40 | 40 |
| H-15 | - | - | - | - | - | - | - | - |
| Corresponding | HS-04, HS-05 | HC/HCH/HS-06, MH-206, UR-175 | HC/HCH/HS-08, MH-208, UR-210 | HC/HCH/HS-10, MH-210, UR-250 | HC/HCH-12 | HS-12, MH-212 UR-315 | HCH-15, HCH-18 | MH-218 |

| | HB15N1 | HB18B2 | HB32B2 | HB32GB | HB32SB2 | HB40GB | HB40SB2 | - |
|-----------------|--------------|--|-----------------------|-------------------|----------------------|---------------------------------|------------------------------------|---|
| Fig. | 1 | 2 | 2 | 3 | 2 | 3 | 2 | - |
| Serration Pitch | 1.5x60° | 3.0x60° | 3.0x60° | - | 3.0x60° | - | 3.0x60° | - |
| H-1 | 149 | 159.5 | 150 | 150 | 168 | 223 | 223 | - |
| H-2 | 62 | 80 | 70 | 70 | 70 | 80 | 80 | - |
| H-3 | 86 | 90 | 75 | 83 | 75 | 124 | 117 | - |
| H-4 | 25.5 | 25 | 25.5 | 25 | 25.5 | 30 | 30 | - |
| H-5 | 5 | 9 | 7 | 13 | 7.5 | 15 | 8 | - |
| H-6 | 69 | 104.5 | 66 | 66 | 89 | 133 | 133 | - |
| H-7 | 43 | 50 | 76.2 | 38.1 | 38.1 | 38.1 | 114.3 | - |
| H-8 | 27 | 55 | 79 | 79 | 79 | 90 | 90 | - |
| H-9 | 32 | 32 | 32 | 32 | 32 | 39 | 39 | - |
| H-10 | 21 | 21 | 21 | 21 | 21 | 26 | 26 | - |
| H-11 | 20 | 40 | 32 | 32 | 32 | 55 | 55 | - |
| H-12 | M20 | M20 | M20 | M20 | M20 | M24 | M24 | - |
| H-13 | 43 | 55 | - | 79 | - | 83 | - | - |
| H-14 | 38 | - | - | 12.7 | - | - | - | - |
| H-15 | - | - | - | 8 | - | 7 | - | - |
| Corresponding | HC-15, HC-18 | HC/HCH-21, HC/HCH-24, MH-221,224 | HCH-32 [Serration] | HC-32 [Groove] | HC-32 [Serration] | HC-40[Groove] 50,55,63,70,80 | HC-40[Serration] 50,55,63,70,80 | - |

T-NUT

Power Chuck T-Nuts



Application / Benefits
Power Chuck T-Nut

Fig. 1

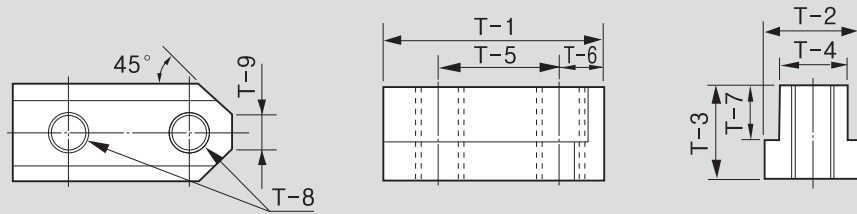


Fig. 2

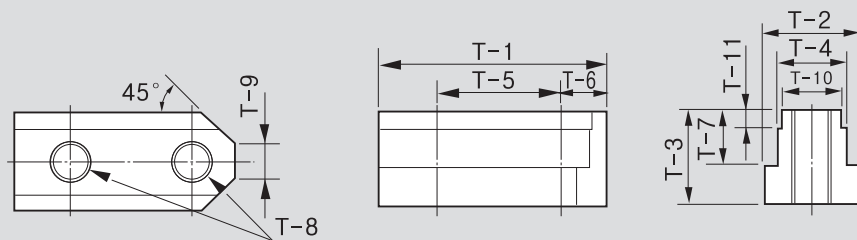
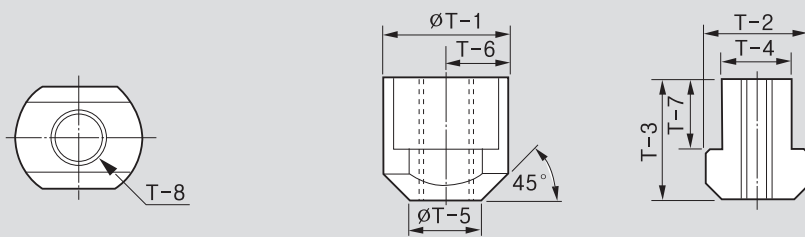


Fig. 3



※ See the product dimension Table on the right.

DIMENSIONS

| | TN-HCH-04 | TN-HS-04, TN-HS-05 | TN-HC-04 | TN-HC-05 | TN-HS-06 | TN-HCH, TN-HC-06 | TN-HS-08 | TN-HCH, TN-HC-08 | TN-HS-10 | TN-HCH, TN-HC-10 |
|---------------|----------------------------|-------------------------------|---------------------------|---------------------------|---------------------------------|-------------------------------|---------------------------------|-------------------------------|----------------------------------|--------------------------------|
| Fig. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| T-1 | 24.5 | 26 | 28 | 32 | 36 | 36.5 | 46.5 | 48 | 51 | 55 |
| T-2 | 11.5 | 15 | 15 | 15 | 17.5 | 17.5 | 20.5 | 20.5 | 22.5 | 22.5 |
| T-3 | 13.5 | 15 | 18 | 18 | 18.5 | 22.5 | 20.5 | 25.5 | 21.5 | 25.5 |
| T-4 | 8 | 10 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 |
| T-5 | 15 | 14 | 14 | 19 | 20 | 20 | 25 | 25 | 30 | 30 |
| T-6 | 4.5 | 6 | 7 | 6 | 8.25 | 7.5 | 10.5 | 11 | 11 | 11 |
| T-7 | 9 | 9.5 | 12.5 | 12.5 | 11 | 15 | 12 | 16 | 13 | 16 |
| T-8 | M6 | M8 | M8 | M8 | M10 | M10 | M12 | M12 | M12 | M12 |
| T-9 | 5 | 5 | 5 | 6 | 8 | 6 | 12 | 8 | 11 | 8 |
| T-10 | - | - | - | - | - | - | - | - | - | - |
| T-11 | - | - | - | - | - | - | - | - | - | - |
| Corresponding | HCH Type of 4" Chuck | HS Type of 4", 5" Chuck | HC Type of 4" Chuck | HC Type of 5" Chuck | HS/MH/UR Type of 6" Chuck | HCH/HC Type of 6" Chuck | HS/MH/UR Type of 8" Chuck | HCH/HC Type of 8" Chuck | HS/MH/UR Type of 10" Chuck | HCH/HC Type of 10" Chuck |

| | TN-HS-12 | TN-HCH, TN-HC-12 | TN-HCH-15, TN-HCH-18 | TN-HC-15, TN-HC-18 | TN-MH-218 | TNX-HC-21, TNX-HC-24 | TN-HCH-32 | TN-HC-32 | TN-HC-40 |
|---------------|-------------------------------|--------------------------------|----------------------------------|--------------------------------|-----------|---|-----------|----------|----------|
| Fig. | 1 | 1 | 2 | 1 | 2 | 3 | 3 | 3 | 3 |
| T-1 | 55.5 | 55.5 | 80 | 80 | 80 | 46 | 35 | 37 | 42 |
| T-2 | 29.5 | 26.5 | 33.5 | 35 | 33.5 | 37.5 | 35 | 37.5 | 42.5 |
| T-3 | 27.75 | 33.5 | 45.5 | 49 | 45.5 | 45 | 39.5 | 47.5 | 49.5 |
| T-4 | 21 | 18 | 24 | 25.5 | 24 | 25 | 25.5 | 25.5 | 30 |
| T-5 | 30 | 30 | 43 | 43 | 50 | 26.5 | 25 | - | - |
| T-6 | 12 | 11.5 | 17 | 17 | 17 | 23 | - | - | - |
| T-7 | 16.25 | 20 | 29 | 20 | 29 | 26 | 20.5 | 28.5 | 30.5 |
| T-8 | M16 | M14 | M20 | M20 | M20 | M20 | M20 | M20 | M24 |
| T-9 | 13 | 12 | 11 | 11 | 16 | - | - | - | - |
| T-10 | - | - | 22 | - | - | - | - | - | - |
| T-11 | - | - | 7.5 | - | - | - | - | - | - |
| Corresponding | HS/MH Type of 12" Chuck | HCH/HC Type of 12" Chuck | HCH Type of 15", 18" Chuck | HC Type of 5", 18" Chuck | MH-218 | HC/HCF-21,24 HCH/HCHF- 21,24(H), MH-221(H) | HCH-32 | HC-32 | HC-40 |

※ TNX-HC-21-24, TNX-HC-32 require two T-nuts per jaw.

※ TNX-HC-40 require three T-nuts per jaw.

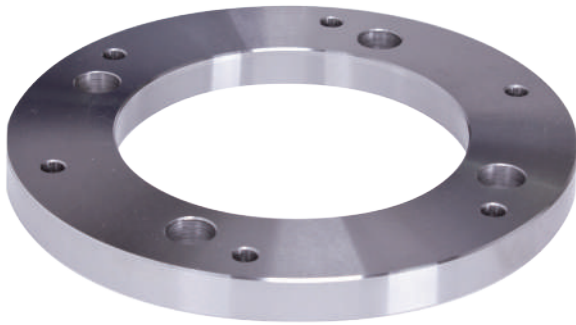


Important for maintenance and safe operation.

- Fortified with molybdenum disulfide (MoS₂)
- Maximum extreme-pressure protection
- Exceptional adhesion & cohesion characteristics
- Superior friction-reduction properties-protects against friction-related heat & wear
- Excellent resistance to water washout & spray off
- Reduces maintenance & downtime
- Reduces operating temperatures
- Extends equipment life.

Adaptor Plates

Power Chuck Adaptor Plates



Application / Benefits

Power Chuck Adaptor Plates

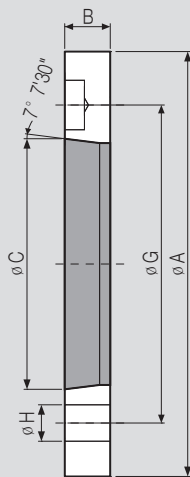


Fig. 1 : Direct Type

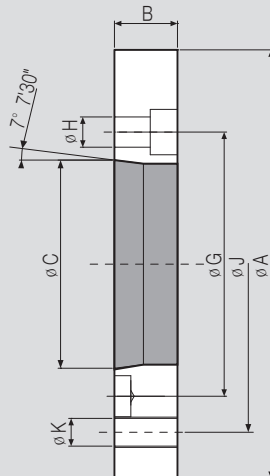


Fig. 2 : Indirect Type

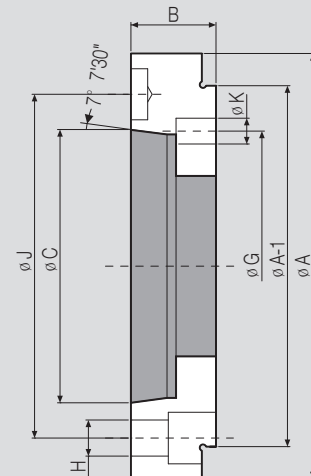


Fig. 3 : Plate Type

※ See the product dimension Table on the right.

DIMENSIONS

| | Fig. | Spindle Nose | A | B | C | G | H | Corresponding | |
|-------------|------|--------------|-----|----|---------|--------|------|---|--|
| AP06A05 | 1 | A2-5 | 140 | 15 | 82.563 | 104.78 | 12 | HS/HSL/HCH/HC/HCL-06, MH-206, UR-175 | |
| APT06A05 | 1 | A2-5 | 140 | 15 | 82.563 | 104.78 | 12 | HST/HCT/HCLT-06, MHT-206 | |
| AP08A06 | 1 | A2-6 | 170 | 17 | 106.375 | 133.35 | 13.5 | HS/HSL/HCH/HC/HCL-08, MH-208, UR-210 | |
| APT08A06 | 1 | A2-6 | 170 | 17 | 106.375 | 133.35 | 13.5 | HST/HCT/HCLT-08, MHT-208 | |
| APF08A06 | 1 | A2-6 | 170 | 17 | 106.375 | 133.35 | 13.5 | HSF/HCF/HCLF-08, MHF-208 | |
| AP10/12A08 | 1 | A2-8 | 220 | 18 | 139.719 | 171.45 | 18 | HS/HSL/HCH/HC/HCL-10,12, MH-210, UR-250 | |
| APT10/12A08 | 1 | A2-8 | 220 | 18 | 139.719 | 171.45 | 17 | HST/HCT/HCLT-10,12 | |
| APF10/12A08 | 1 | A2-8 | 220 | 18 | 139.719 | 171.45 | 18 | HSF-10,12, HCF/HCLF-12 | |
| AP212A08 | 1 | A2-8 | 300 | 22 | 139.719 | 235 | 21 | MH-212, UR-315 | |
| AP212A11 | 1 | A2-11 | 300 | 22 | 196.87 | 235 | 21 | MH-212 | |
| AP15A11 | 1 | A2-11 | 300 | 22 | 196.87 | 235 | 21 | HCH-15, HC-15,18 | |
| APT15A11 | 1 | A2-11 | 300 | 22 | 196.87 | 235 | 21 | HCHT-15 | |
| APF15A11 | 1 | A2-11 | 300 | 22 | 196.87 | 235 | 21 | HCHF-15, HCF-15,18 | |
| AP18A11 | 1 | A2-11 | 380 | 22 | 196.87 | 235 | 21 | HCH-18 | |
| APF18A11 | 1 | A2-11 | 380 | 22 | 196.87 | 235 | 21 | HCHF-18 | |
| AP21/24A15 | 1 | A2-15 | 380 | 27 | 285.775 | 330.2 | 24 | HCH/HC-21,24, MH-221,224 | |

| | Fig. | Spindle Nose | A | B | C | G | H | J | K | Corresponding |
|------------|------|--------------|-----|----|---------|--------|------|--------|-----|--|
| AP08A05 | 2 | A2-5 | 170 | 25 | 82.563 | 104.78 | 12 | 133.35 | M12 | HS/ HST/ HSF/ HSL/ HCH/ HC/ HCT/ HCF/ HCL/ HCLT/ HCLF-08, MH/ MHT/ MHF-208 |
| AP10/12A06 | 2 | A2-6 | 220 | 25 | 106.375 | 133.35 | 13.5 | 171.45 | M16 | HS/ HST/ HSF/ HSL/ HCH/ HC/ HCT/ HCL/ HCLT-10,12, MH-210, HCF/ HCLF-12 |
| AP15A08 | 2 | A2-8 | 300 | 33 | 139.719 | 171.45 | 18 | 235 | M20 | HCH/ HCHT/ HCHF-15, HC/HCF-15,18 |
| AP218A15 | 2 | A2-15 | 380 | 60 | 285.775 | 330.2 | 24 | 300 | M20 | MH-218 |
| AP21/24A11 | 2 | A2-11 | 380 | 27 | 196.87 | 235 | 21 | 330.2 | M22 | HCH/ HC-21,24, MH-221,224 |
| AP21/24A11 | 2 | A2-11 | 380 | 42 | 196.87 | 235 | 22 | 330.2 | M22 | HCH/ HCHF/ HC/ HCF-21,24, MH-221,224 |
| AP21/24A11 | 2 | A2-11 | 380 | 42 | 196.87 | 235 | 22 | 330.2 | M24 | HC/HCF-32, HCH/HCHF/HC-21N,24N |
| AP21/24A15 | 2 | A2-15 | 380 | 42 | 285.775 | 330.2 | 24 | 330.2 | M22 | HCH/ HC-21,24, MH-221,224 |
| AP32A15 | 2 | A2-15 | 380 | 42 | 285.775 | 330.2 | 26 | 330.2 | M24 | HC-32 |
| AP32/40A11 | 2 | A2-11 | 520 | 50 | 196.87 | 235 | 22 | 463.6 | M24 | HCH-32, HC-40, HC-50 |
| AP32/40A15 | 2 | A2-15 | 520 | 42 | 285.775 | 330.2 | 26 | 463.6 | M24 | HCH-32, HC-40, HC-50 |

| | Fig. | Spindle Nose | A | A-1 | B | C | G | H | J | K | Corresponding |
|---------|------|--------------|-----|-----|----|---------|--------|----|--------|-----|--|
| AP06A06 | 3 | A2-6 | 165 | 140 | 33 | 106.375 | 133.35 | 14 | 104.78 | M10 | HS/ HSL/ HCH/ HC/ HCL-06, MH-206 |
| AP08A08 | 3 | A2-8 | 210 | 170 | 30 | 139.719 | 171.45 | 18 | 133.35 | M12 | HS/ HST/ HSF/ HSL/ HCH/ HC/ HCT/ HCF/ HCL/ HCLT/ HCLF-08, MH/ MHT/ MHF-208 |

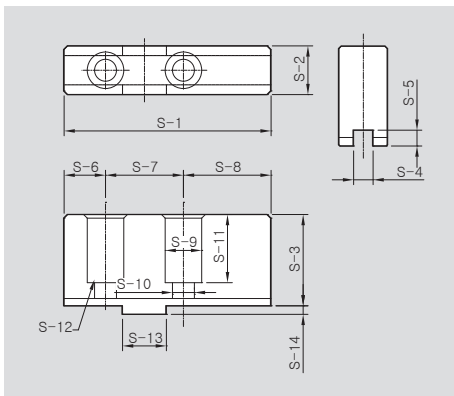
QJC-Jaw Quick Jaw Change Chuck Jaws



Soft Top Jaws

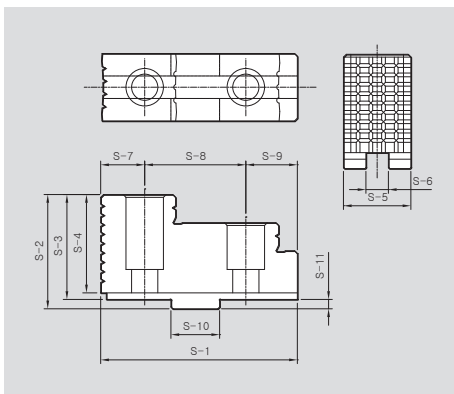


Hard Top Jaws



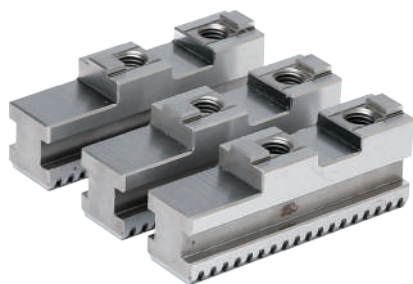
SOFT TOP JAWS DIMENSIONS

| | QSB206 | QSB208 | QSB210 | QSB215 |
|---------------|---------|---------|-----------------|---------|
| S-1 | 85 | 105 | 125 | 145 |
| S-2 | 20 | 22 | 30 | 35 |
| S-3 | 37.5 | 40 | 50 | 50 |
| S-4 | 8 | 10 | 12 | 12 |
| S-5 | 6.5 | 8.5 | 8.5 | 8.5 |
| S-6 | 17 | 25 | 25 | 31 |
| S-7 | 32 | 40 | 40 | 54 |
| S-8 | 36 | 40 | 60 | 60 |
| S-9 | 15 | 15 | 20 | 20 |
| S-10 | 9 | 9 | 14 | 14 |
| S-11 | 28 | 31 | 39 | 34 |
| S-12 | M8x20 | M8x20 | M12x30 | M12x40 |
| S-13 | 18 | 20 | 20 | 26 |
| S-14 | 3.5 | 5 | 5 | 5 |
| Corresponding | QJC-206 | QJC-208 | QJC-210,QJC-212 | QJC-215 |



HARD TOP JAWS DIMENSIONS

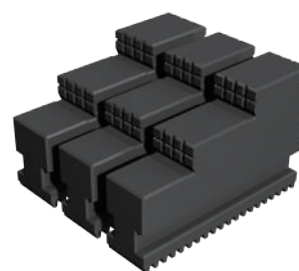
| | QHB206 | QHB208 | QHB210 | QHB215 |
|---------------|---------|---------|-----------------|---------|
| S-1 | 63 | 72 | 90 | 105 |
| S-2 | 36 | 43 | 55 | 61 |
| S-3 | 32.5 | 38 | 50 | 56 |
| S-4 | 29.5 | 34.5 | 46.5 | 52.5 |
| S-5 | 20 | 22 | 30 | 36 |
| S-6 | 8 | 10 | 12 | 12 |
| S-7 | 17 | 15 | 21 | 23.5 |
| S-8 | 32 | 40 | 40 | 54 |
| S-9 | 14 | 17 | 29 | 27.5 |
| S-10 | 18 | 20 | 20 | 26 |
| S-11 | 3.5 | 5 | 5 | 5 |
| Corresponding | QJC-206 | QJC-208 | QJC-210,QJC-212 | QJC-215 |



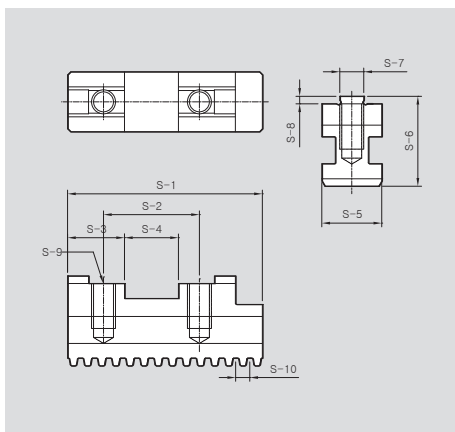
Base Jaws



Monoblok Soft Jaws

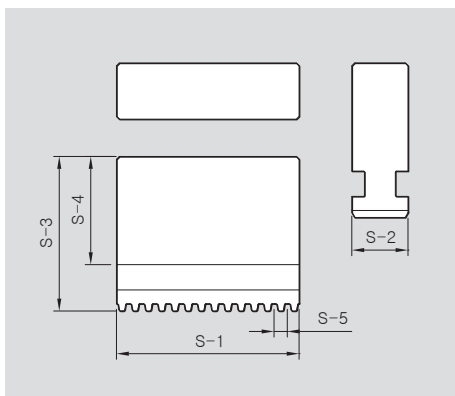


Monoblok Hard Jaws



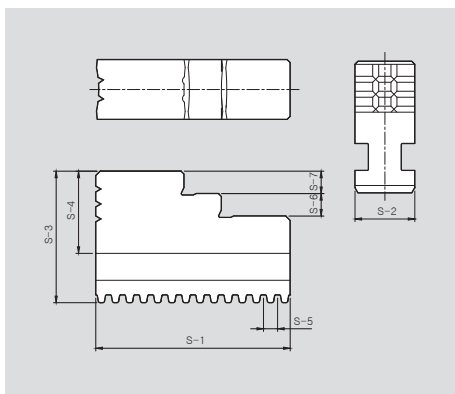
BASE JAWS DIMENSIONS

| | QBJ206 | QBJ208 | QBJ210 | QBJ212 | QBJ215 |
|---------------|---------|---------|---------|---------|---------|
| S-1 | 65 | 85 | 104 | 115 | 125 |
| S-2 | 32 | 40 | 40 | 40 | 54 |
| S-3 | 19 | 23 | 26 | 26 | 30 |
| S-4 | 18 | 20 | 20 | 20 | 26 |
| S-5 | 20 | 22 | 26 | 32 | 32 |
| S-6 | 30 | 32 | 40 | 45 | 45 |
| S-7 | 8 | 10 | 12 | 12 | 12 |
| S-8 | 2.5 | 2 | 3 | 3 | 3 |
| S-9 | M8 | M8 | M12 | M12 | M12 |
| S-10 | 4.712 | 4.712 | 5.498 | 5.498 | 5.498 |
| Corresponding | QJC-206 | QJC-208 | QJC-210 | QJC-212 | QJC-215 |



SOLID SOFT JAWS DIMENSIONS

| | MQSB206 | MQSB208 | MQSB210 | MQSB212 | MQSB215 |
|---------------|---------|---------|---------|---------|---------|
| S-1 | 65 | 85 | 104 | 115 | 125 |
| S-2 | 20 | 22 | 26 | 32 | 32 |
| S-3 | 55 | 65 | 84 | 90 | 100 |
| S-4 | 38.5 | 48 | 63 | 64 | 74 |
| S-5 | 4.712 | 4.712 | 5.498 | 5.498 | 5.498 |
| Corresponding | QJC-206 | QJC-208 | QJC-210 | QJC-212 | QJC-215 |



SOLID HARD JAWS DIMENSIONS

| | MQHB206 | MQHB208 | MQHB210 | MQHB212 | MQHB215 |
|---------------|---------|---------|---------|---------|---------|
| S-1 | 65 | 85 | 104 | 115 | 125 |
| S-2 | 20 | 22 | 26 | 32 | 32 |
| S-3 | 55 | 65 | 84 | 90 | 100 |
| S-4 | 38.5 | 48 | 63 | 64 | 74 |
| S-5 | 4.712 | 4.712 | 5.498 | 5.498 | 5.498 |
| S-6 | 7.5 | 10 | 14 | 14 | 45 |
| S-7 | 7.5 | 10 | 14 | 14 | 15 |
| Corresponding | QJC-206 | QJC-208 | QJC-210 | QJC-212 | QJC-215 |

TC, FTC-Jaw Scroll Chuck Jaws



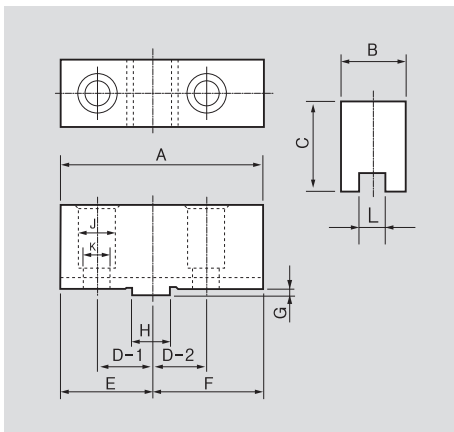
TC / FTC Soft Jaws



TC / FTC Hard Jaws

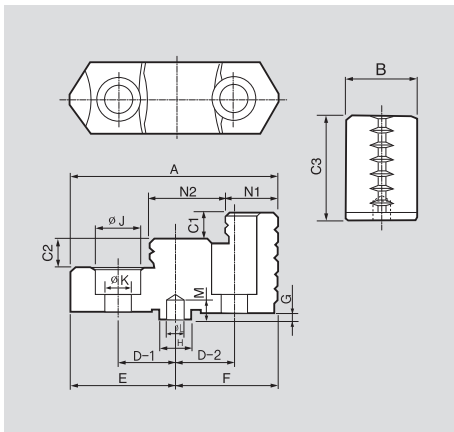


TC / FTC Base Jaws



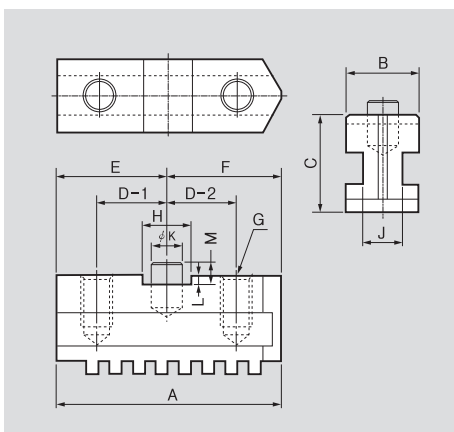
TC/FTC SOFT JAWS DIMENSIONS

| | TC-190 | TC-230 | TC-273 | TC-310 | FTC-460 | FTC-535 | FTC-610 |
|-----|--------|--------|--------|--------|---------|---------|---------|
| A | 88 | 100 | 110 | 125 | 140 | 150 | 150 |
| B | 32 | 32 | 35 | 40 | 50 | 50 | 50 |
| C | 41 | 44 | 48.5 | 49.5 | 71.5 | 76.5 | 76.5 |
| D-1 | 22.225 | 26.99 | 26.99 | 31.75 | 38.1 | 38.1 | 38.1 |
| D-2 | 22.225 | 26.99 | 26.99 | 31.75 | 38.1 | 38.1 | 38.1 |
| E | 40 | 45 | 51 | 58 | 63.5 | 67.5 | 67.5 |
| F | 48 | 55 | 59 | 67 | 76.5 | 82.5 | 82.5 |
| G | 3 | 3 | 3 | 3 | 5.8 | 6 | 6 |
| H | 12.68 | 19.03 | 19.03 | 19.03 | 19.03 | 19.03 | 19.03 |
| J | 17 | 19 | 19 | 19 | 32 | 32 | 32 |
| K | 11 | 12.7 | 12.7 | 12.7 | 22 | 22 | 22 |
| L | 7.94 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 |
| M | 7 | 7 | 7 | 7 | - | - | - |



TC/FTC HARD JAWS DIMENSIONS

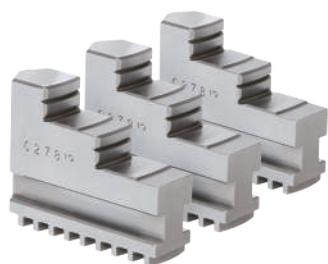
| | TC-190 | TC-230 | TC-273 | TC-310 | FTC-450 | FTC-535 | FTC-610 |
|----|--------|--------|--------|--------|---------|---------|---------|
| A | 80.5 | 90.5 | 103.5 | 115.5 | 130 | 130 | 130 |
| B | 28 | 32 | 35 | 40 | 50 | 50 | 50 |
| C1 | 10 | 12 | 14 | 15 | 17 | 17 | 17 |
| C2 | 10 | 12 | 14 | 15 | 17 | 17 | 17 |
| C3 | 41 | 48 | 52 | 54 | 76.8 | 76.8 | 76.8 |
| D1 | 22.225 | 26.99 | 26.99 | 31.75 | 38.1 | 38.1 | 38.1 |
| D2 | 22.225 | 26.99 | 26.99 | 31.75 | 38.1 | 38.1 | 38.1 |
| E | 40.5 | 45.5 | 52 | 58 | 63.5 | 63.5 | 63.5 |
| F | 40 | 45 | 51.5 | 57.5 | 66.5 | 66.5 | 66.5 |
| G | 3 | 3 | 3 | 3 | 5.8 | 5.8 | 5.8 |
| H | 12.68 | 19.03 | 19.03 | 19.03 | 19.025 | 19.025 | 19.025 |
| ΦJ | 17 | 19 | 19 | 19 | 32 | 32 | 32 |
| ΦK | 11 | 13 | 13 | 13 | 22 | 22 | 22 |
| ΦL | 7.9 | 12.7 | 12.7 | 12.7 | - | - | - |
| N1 | 21.5 | 23.5 | 31.5 | 30.5 | 52 | 52 | 52 |
| N2 | 29 | 33 | 34 | 40 | 35 | 35 | 35 |



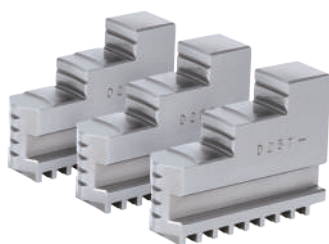
TC/FTC BASE JAWS DIMENSIONS

| | TC-190 | TC-230 | TC-273 | TC-310 | FTC-460 | FTC-535 | FTC-610 |
|-----|--------|--------|--------|--------|----------|----------|----------|
| A | 75 | 87 | 98 | 111 | 165 | 177 | 205 |
| B | 28 | 28 | 28 | 32 | 45 | 50 | 50 |
| C | 34 | 38 | 40 | 42.5 | 54 | 57 | 60 |
| D-1 | 22.225 | 26.99 | 26.99 | 31.75 | 38.1 | 38.1 | 38.1 |
| D-2 | 22.225 | 26.99 | 26.99 | 31.75 | 38.1 | 38.1 | 38.1 |
| E | 35.5 | 42.5 | 47 | 54 | - | - | - |
| F | 39.5 | 44.5 | 51 | 57 | 66.5 | 66.5 | 66.5 |
| G | 2-M10 | 2-M12 | 2-M12 | 2-M12 | 4-M20 | 4-M20 | 5-M20 |
| H | 12.68 | 19.03 | 19.03 | 19.03 | 2-19.025 | 2-19.025 | 2-19.025 |
| J | 15 | 15 | 15 | 17.2 | 27 | 30 | 30 |
| K | 7.95 | 12.7 | 12.7 | 12.7 | - | - | - |
| L | 3.5 | 3.5 | 3.5 | 3.5 | - | - | - |
| M | 6.5 | 6.5 | 6.5 | 6.5 | 9.3 | 9.3 | 9.3 |

SC, IC-Jaw Scroll Chuck Jaws



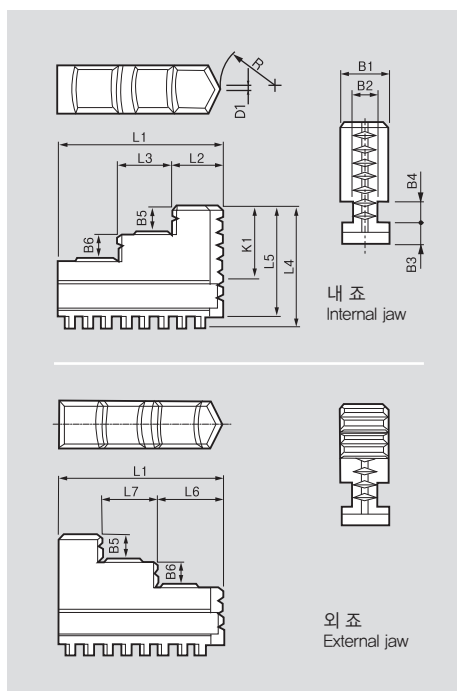
SC Jaws(Internal)



SC Jaws(External)

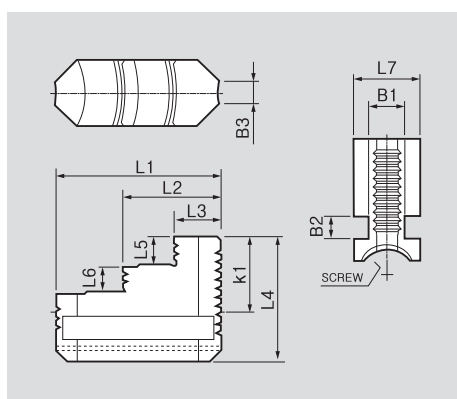


IC Jaws



SC JAWS DIMENSIONS

| | SC-85 | SC-110 | SC-130 | SC-165 | SC-190 | SC-230 | SC-273 | SC-310 | SC-355 | SC-405 |
|----|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| L1 | 35 | 42 | 50 | 65 | 75 | 85 | 98 | 110 | 133 | 133 |
| L2 | 11 | 13 | 15 | 20 | 23 | 26 | 30 | 35 | 44 | 44 |
| L3 | 10 | 13 | 15 | 22 | 25 | 28 | 33 | 35 | 42 | 42 |
| L4 | 29 | 34.5 | 40 | 46.5 | 55.5 | 64.5 | 69.5 | 82.5 | 101 | 101 |
| L5 | 26.5 | 31 | 36 | 42 | 50.5 | 59.5 | 64 | 76 | 94.5 | 94.5 |
| L6 | 16 | 19 | 21 | 27 | 30 | 33 | 38 | 43 | 53 | 53 |
| L7 | 10 | 13 | 15 | 22 | 25 | 28 | 33 | 35 | 42 | 42 |
| B1 | 11 | 14 | 16 | 19 | 22 | 24 | 28 | 30 | 35 | 35 |
| B2 | 5.7 | 7.5 | 7.2 | 9.2 | 11.2 | 13.2 | 15 | 15 | 19 | 19 |
| B3 | 4.7 | 6.2 | 7.7 | 8.2 | 9.7 | 11.2 | 11.2 | 13.4 | 14 | 14 |
| B4 | 6.55 | 6.55 | 8.2 | 8.13 | 9.74 | 11.38 | 11.38 | 16.12 | 16.2 | 16.2 |
| B5 | 6 | 7 | 8 | 10 | 12 | 14 | 15 | 16 | 21 | 21 |
| B6 | 6 | 4.3 | 7.4 | 10 | 12 | 14 | 15 | 16 | 22 | 22 |
| K1 | 17.75 | 21.05 | 23.4 | 25.07 | 30.06 | 35.04 | 40.02 | 45.08 | 62.98 | 62.98 |
| R | 7.5 | 11 | 15 | 20 | 25 | 30 | 37 | 43 | 43 | 43 |
| D1 | 1 | 1.5 | 1.5 | 2 | 2 | 3 | 3 | 4 | 4 | 4 |



IC JAWS DIMENSIONS

| | IC-08 | IC-10 | IC-12 | IC-14 | IC-16 | IC-18 | IC-20 | IC-24 | IC-28 | IC-32 |
|--------------|--------|--------|--------|--------|--------|--------|----------|----------|--------|--------|
| L1 | 75 | 90 | 100 | 110 | 120 | 130 | 140 | 160 | 180 | 200 |
| L2 | 44 | 54 | 60 | 67 | 73.5 | 80 | 85 | 99 | 100 | 120 |
| L3 | 21 | 26 | 28 | 31 | 33.5 | 37 | 40 | 46 | 47 | 55 |
| L4 | 55.5 | 61.5 | 70.5 | 75.5 | 84 | 89 | 106 | 116.4 | 111 | 138 |
| L5 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 28.2 | 28 | 30 |
| L6 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 28.2 | 29 | 30 |
| L7 | 30 | 30 | 35 | 35 | 40 | 40 | 45 | 50 | 50 | 60 |
| B1 | 16 | 16 | 19 | 19 | 22.5 | 22.5 | 27.5 | 31 | 30 | 40 |
| B2 | 10.3 | 10.3 | 11.5 | 11.5 | 11.5 | 11.5 | 16.4 | 16.4 | 15.3 | 20 |
| B3 | 10 | 10 | 13.6 | 14.6 | 15 | 15 | 16 | 18 | 20 | 34 |
| K1 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 70 | 70 | 89 |
| Threads/inch | 5/inch | 5/inch | 4/inch | 4/inch | 4/inch | 4/inch | 3.5/inch | 3.5/inch | 4/inch | 6.0 mm |

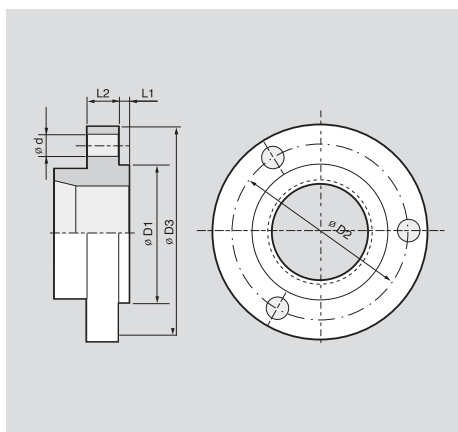
Accessories Scroll Chuck Accessories



IC Screw Bar

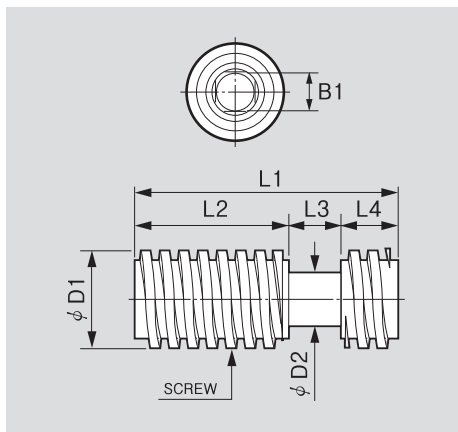


IC Stopper



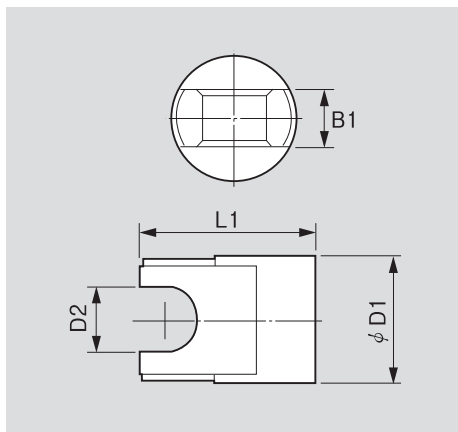
SC ADAPTOR DIMENSIONS (Reference)

| | | SC-85 | SC-110 | SC-130 | SC-165 | SC-190 | SC-230 | SC-273 | SC-310 | SC-355 |
|-----------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| $\Phi D1$ | base length | 60 | 80 | 100 | 130 | 155 | 190 | 230 | 260 | 300 |
| | tolerance | -0.021 | -0.021 | -0.025 | -0.028 | -0.028 | -0.033 | -0.033 | -0.036 | -0.036 |
| $\Phi D2$ | base length | 73 | 95 | 115 | 147 | 172 | 210 | 250 | 285 | 328 |
| | tolerance | ± 0.2 | ± 0.2 | ± 0.2 | ± 0.2 | ± 0.2 | ± 0.2 | ± 0.2 | ± 0.3 | ± 0.3 |
| $\Phi D3$ | | 88 | 115 | 135 | 170 | 195 | 235 | 275 | 310 | 355 |
| L1 | | 3 | 4 | 4 | 4.5 | 4.5 | 5.5 | 5.5 | 6.5 | 6.5 |
| L2 | | 10 | 12 | 12 | 15 | 18 | 20 | 20 | 22 | 26 |
| Φd | | 6.6 | 9 | 11 | 11 | 13 | 13 | 13 | 13 | 13 |



IC SCREW BAR DIMENSIONS

| | IC-08 | IC-10 | IC-12 | IC-14 | IC-16 | IC-18 | IC-20 | IC-24 | IC-28 | IC-32 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| L1 | 70 | 91.5 | 111 | 130 | 149 | 169 | 189 | 233 | 299 | 330 |
| L2 | 41 | 58 | 73 | 85.5 | 108.5 | 123.5 | 137 | 162 | 193 | 216 |
| L3 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | 18 | 24 |
| L4 | 15 | 19.5 | 22 | 28.5 | 22.5 | 27.5 | 32 | 51 | 68 | 90 |
| $\Phi D1$ | 26 | 26 | 30 | 30 | 34 | 34 | 35 | 38 | 38 | 44 |
| $\Phi D2$ | 14 | 14 | 16 | 16 | 18 | 18 | 19 | 20 | 22 | 28 |
| B1 | 10 | 10 | 12 | 12 | 14 | 14 | 14 | 14 | 14 | 19 |
| Thread / inch | 5/inch | 5/inch | 4/inch | 4/inch | 4/inch | 4/inch | 4/inch | 4/inch | 4/inch | 4.5/inch |



IC STOPPER DIMENSIONS

| | IC-08 | IC-10 | IC-12 | IC-14 | IC-16 | IC-18 | IC-20 | IC-24 | IC-28 | IC-32 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| L1 | 42 | 45 | 51 | 49 | 55 | 60 | 53 | 59 | 57.5 | 59 |
| $\Phi D1$ | 26 | 26 | 30 | 30 | 34 | 34 | 35 | 38 | 38 | 44 |
| $\Phi D2$ | 14.5 | 14.5 | 16.5 | 16.5 | 18.5 | 18.5 | 19.5 | 20.5 | 23 | 27.5 |
| B1 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | 18 | 24 |



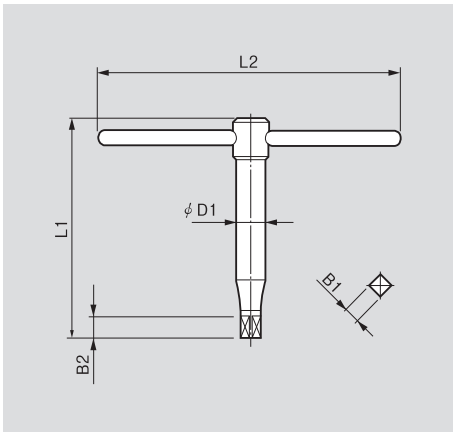
Scroll Chuck Handles



Scroll Chuck Mounting Bolts(SC Type)



Scroll Chuck Mounting Bolts(IC Type)



SC, FTC, SL, IC HANDLE DIMENSIONS

| | SC-85 | SC-110 | SC-130 | SC-165 | SC-190 | SC-230 | SC-273 | SC-310 | SC-355 | SC-405 |
|-----|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| L1 | 65 | 70 | 75 | 120 | 160 | 160 | 160 | 200 | 200 | 170 |
| L2 | 110 | 140 | 170 | 210 | 240 | 290 | 330 | 390 | 390 | 450 |
| B1 | 7 | 8 | 8 | 10 | 11 | 12 | 12 | 14 | 14 | 15 |
| B2 | 10 | 11 | 11 | 13 | 14 | 15 | 15 | 18 | 18 | 20 |
| ØD1 | 15 | 17 | 20 | 20 | 20 | 22 | 22 | 26 | 26 | 26 |

| | FTC-460 | FTC-535 | FTC-610 | SL-08 | SL-10 | SL-12 |
|-----|---------|---------|---------|-------|-------|-------|
| L1 | 205 | 230 | 230 | 200 | 240 | 280 |
| L2 | 500 | 500 | 500 | 240 | 270 | 320 |
| B1 | 17 | 6*-22 | 6*-22 | 11 | 12 | 14 |
| B2 | 20 | 26 | 26 | 16 | 16 | 18 |
| ØD1 | 25 | 30 | 30 | 20 | 22 | 26 |

| | IC-08 | IC-10 | IC-12 | IC-14 | IC-16 | IC-18 | IC-20 | IC-24 | IC-28 | IC-32 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| L1 | 130 | 150 | 170 | 170 | 220 | 220 | 220 | 230 | 300 | 300 |
| L2 | 200 | 250 | 300 | 350 | 400 | 400 | 450 | 500 | 500 | 500 |
| B1 | 10 | 10 | 12 | 12 | 14 | 14 | 14 | 14 | 14 | 19 |
| B2 | 14 | 14 | 17 | 17 | 19 | 19 | 20 | 20 | 20 | 20 |
| ØD1 | 15 | 18 | 19 | 19 | 22 | 22 | 22 | 25 | 28 | 35 |

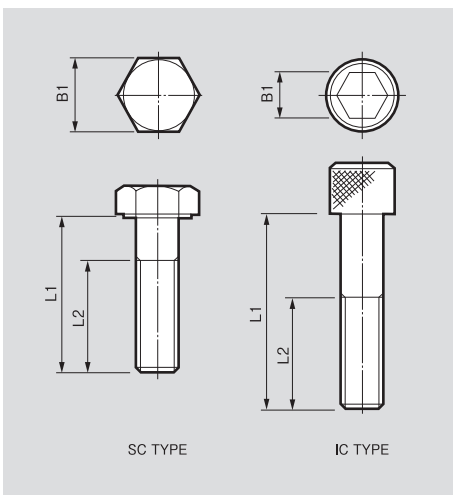
* 6* = Hexagon

SC, FTC, IC MOUNTING BOLT DIMENSIONS

| | SC-85 | SC-110 | SC-130 | SC-165 | SC-190 | SC-230 | SC-273 | SC-310 | SC-355 |
|-----------|---------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| Bolt size | M6xP1.0 | M8xP1.25 | M8xP1.25 | M10xP1.5 | M10xP1.5 | M12xP1.75 | M12xP1.75 | M12xP1.75 | M12xP1.75 |
| QTR | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 |
| L1 | 22 | 25 | 25 | 32 | 36 | 40 | 40 | 45 | 50 |
| L2 | 18 | 20 | 20 | 26 | 26 | 30 | 30 | 30 | 30 |
| ØB1 | 10 | 13 | 13 | 17 | 17 | 19 | 19 | 19 | 19 |

| | FTC-460 | FTC-535 | FTC-610 |
|-----------|----------|----------|----------|
| Bolt size | M16xP125 | M20xP140 | M20xP140 |
| QTR | 6 | 6 | 6 |
| L1 | 125 | 140 | 140 |
| L2 | 38 | 52 | 52 |
| ØB1 | 24 | 30 | 30 |

| | IC-08 | IC-10 | IC-12 | IC-14 | IC-16 | IC-18 | IC-20 | IC-24 | IC-28 | IC-32 |
|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|
| Bolt size | M12xP1.75 | M12xP1.75 | M12xP1.75 | M12xP1.75 | M16xP2.0 | M16xP2.0 | M16xP2.0 | M20xP2.5 | M20xP2.5 | M20xP2.5 |
| QTR | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 8 |
| L1 | 60 | 85 | 100 | 100 | 110 | 110 | 120 | 135 | 120 | 130 |
| L2 | 35 | 40 | 55 | 55 | 60 | 60 | 60 | 70 | 54 | 54 |
| ØB1 | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 17 | 17 | 17 |



SC TYPE

IC TYPE



SAMCHULLY