

# **AUTOGRIP<sup>®</sup>**



**POWER CHUCKS**

**ROTARY CYLINDERS**

**CLAMPING SERIES**



# AEROVIEW OF AUTOGRIP COMPANY

## AUTOGRIP MACHINERY COMPANY

AUTOGRIP machinery was established in 1989 in Taiwan. Our product lines focus on the power chucks, rotary cylinders and automatic clamping series. We provide the optimized solutions and services for our customers worldwide.

## LOCATION OF AUTOGRIP

AUTOGRIP Machinery's main factory is located in Puxin, Changhua, Taiwan, covering an area of 13,223 square meters. It is equipped with advanced production equipment and serves as the company's R&D center, focusing on the production of small-volume, customized parts and new product development. We adhere to world-class standards to meet customer needs and ensure high customer satisfaction.

The second factory, located in Yunlin Technology Industrial Park, is an automated production line specializing in standard products. It mainly produces 6", 8", and 10" hollow power chucks and rotary hydraulic cylinders. With a focus on mass production, it meets the market demand for quick delivery.

## AUTOGRIP'S BUSINESS PHILOSOPHY

With integrity and commitment, we provide the most professional products and services for the customers.



AUTOGRIP Changhua Headquarters

## WE ARE FROM TAIWAN

Every product from AUTOGRIP Machinery embodies the strong spirit of Taiwan - durable, highly rigid, and precise, delivering trusted quality.

With an excellent industry reputation, AUTOGRIP is committed to providing optimized workpiece clamping solutions and professional services to meet diverse manufacturing needs.

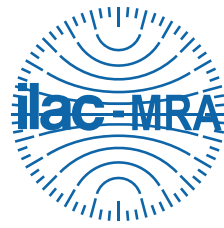


Yunlin CAPEL MACHINERY Factory

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# AUTOGRIP MECHANICAL TESTING LAB.

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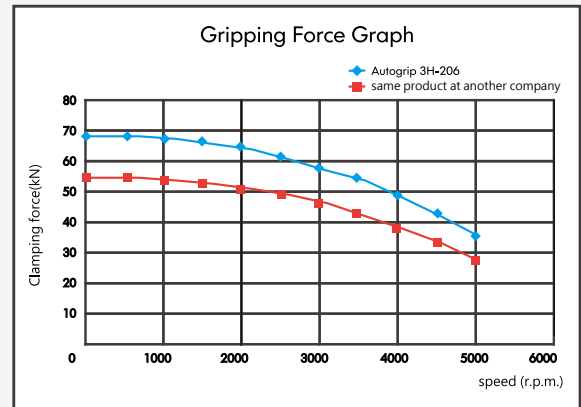
AUTOGRIP's mechanical testing laboratory is dedicated to the continuous development of reliable testing equipment and techniques to ensure exceptional product quality. Before any new product is introduced to the market, it undergoes a comprehensive series of tests to verify that its performance and precision meet design specifications. During production, products are also subjected to regular quality checks to maintain consistency and high standards.

The laboratory plays a crucial role in safeguarding quality for customers, delivering products that inspire confidence and provide a satisfying user experience.



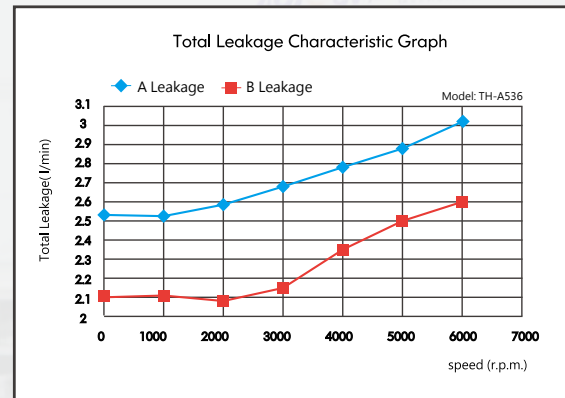
## DYNAMIC GRIPPING FORCE TEST

- Under specified test conditions, the curve of gripping force versus spindle speed is measured using a force sensor.



## DYNAMIC OIL LEAKING TEST

- The oil leaking of cylinder is measured at different rotary speed to ensure it is within engineering specification.



\*AUTOGRIP Mechanical Testing Lab. is the only one holding ISO/IEC 17025 accreditation - M 999 Gripping Force Test . Include:Dynamic Gripping Force Test and Pneumatic chuck Test.



# We Push the Boundaries of the Feasible

Your Trusted Partner in Workholding





# Why AUTOGRIP?

## 1. AVAILABLE FOR CUSTOMIZATION

We provide tailor-made workholding solutions to meet your specific needs:

- Automatic clamping systems.
- Workpiece seating confirmation.
- Customized air/hydraulic cylinders.
- Rotary valves & joints.
- Special soft & hard jaws.

## 2. EXTENSIVE SELECTION: CHUCKS & CYLINDERS

### Chucks

1-jaw to 6-jaw (3"–79"), including:

- Extra-long stroke
- Pull-back
- Stationary
- Collet chucks

### Cylinders

- Through-hole / Non-through hole
- Stroke control
- Coolant / Air connection
- Air cylinders
- Double rod / Compact type

## 3. FAST DELIVERY & RELIABLE SERVICE

Customer satisfaction has been our highest priority.

We are dedicated to providing superior quality products, on-time delivery, and responsive service — every time.



# GFS-100

## GRIPPING FORCE SENSOR

### FEATURES

- Stable Bluetooth 5.0 Transmission.
- Convenient Type-C Charging.
- High-Performance Lithium Battery.
- Supports Android and iOS.
- Configurable for 2-Jaw or 3-Jaw Operation.

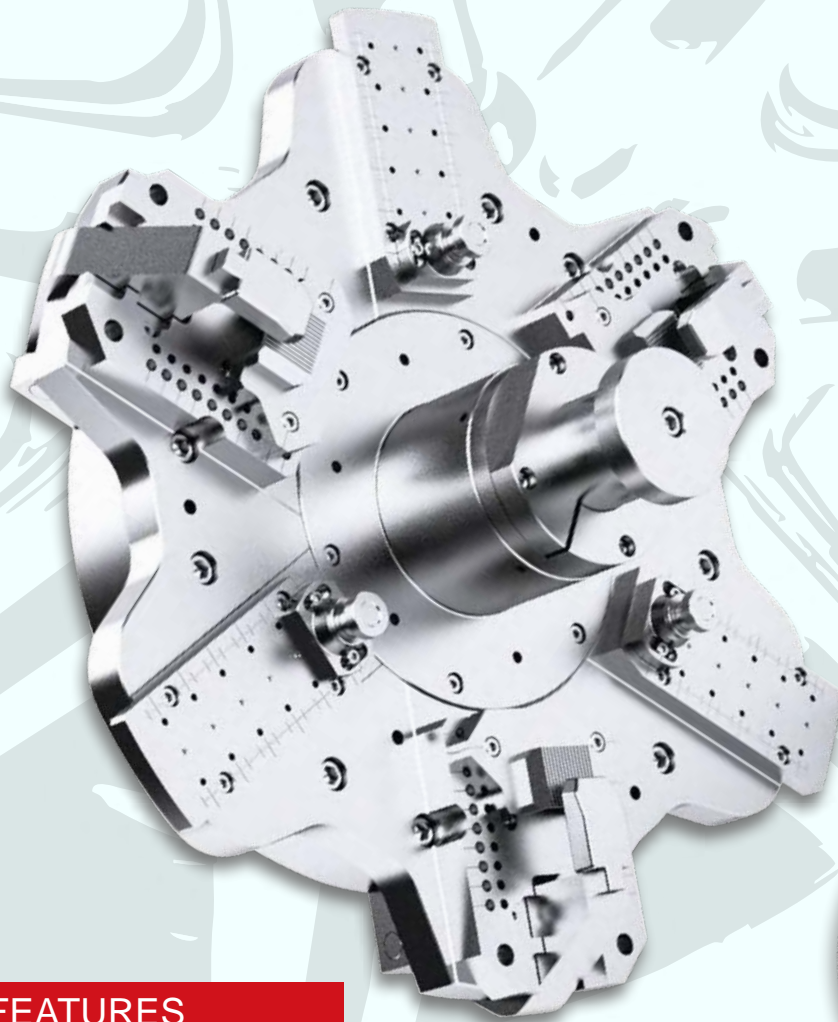


GFS-100 SPECIFICATIONS AND DIMENSIONS, PLEASE REFER TO ACCESSORIES PAGES.



# 3FW

ONE CHUCK. MULTIPLE SIZES.  
INFINITE POSSIBILITIES.



## FEATURES

- High rigidity and precision.
- Hardened and precision-ground slides for stability.
- For 13"–24" aluminum wheels .
- Adjustable supports with replaceable jaws and drive arms.
- For CNC lathes, wheel machines & MILL-TURN.



**AUTOGRIP**

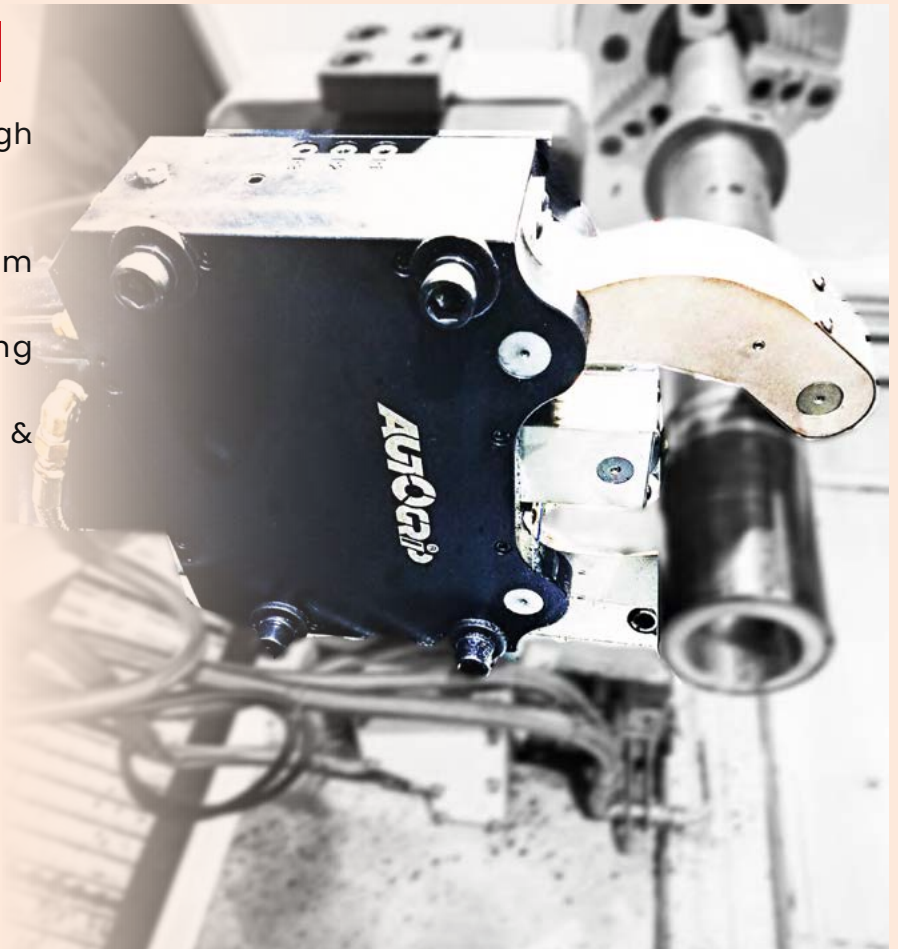
## SELF-CENTERING STEADY REST

# SELF-CENTERING STEADY REST

**High Rigidity. Precise Positioning. Reliable Clamping.**

### FEATURES

- High Clamping Force and High Concentricity.
- Enclosed Main Body Design.
- Central Lubrication System (Grease / Oil / Oil + Air).
- Built-in Check Valve Locking Mechanism.
- Compressed Air Waterproof & Chip-Resistant Design.
- Chip Guarding Device.



**SR /**  
Basic type



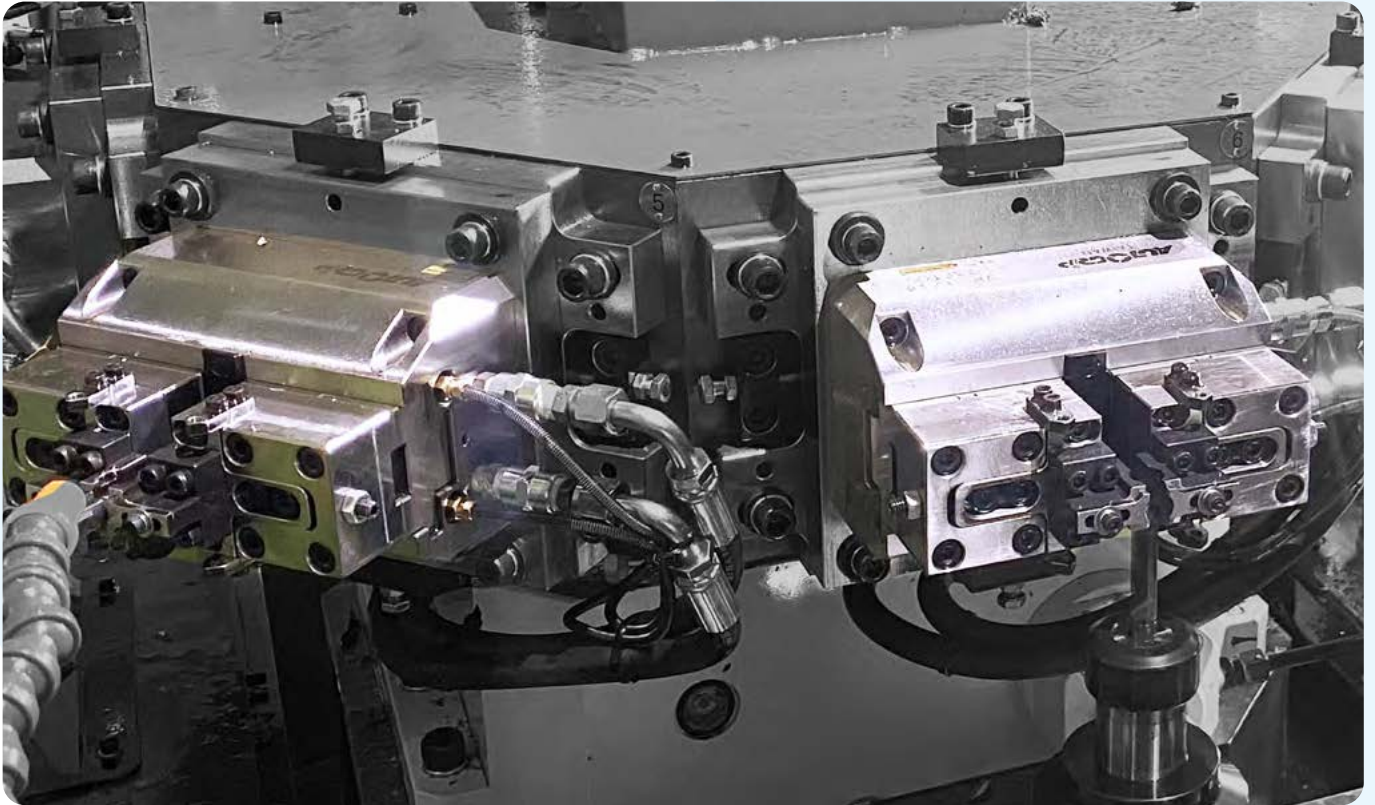
**SRR /**  
Advanced type



**SRB /**  
Side-Mounted type

## POWER CENTERING VISE

AUTOGRIP

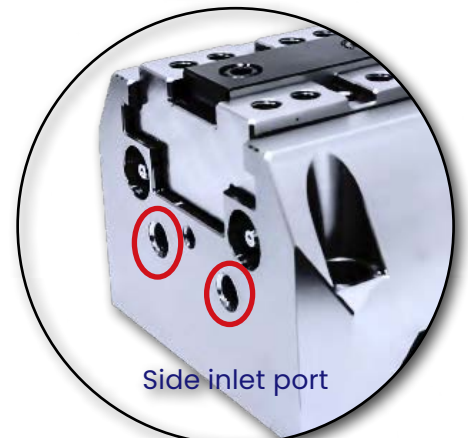


# VRA | VRH

## POWER CENTERING VISE

### FEATURES

- Slim and compact design maximizes machine workspace utilization.
- Oil ports are available on both side and bottom for flexible connection options.
- Suitable for milling machines and machining centers.



MODEL, SPECIFICATIONS, AND DIMENSIONS, PLEASE REFER TO THE POWER CENTERING VISE PAGE.

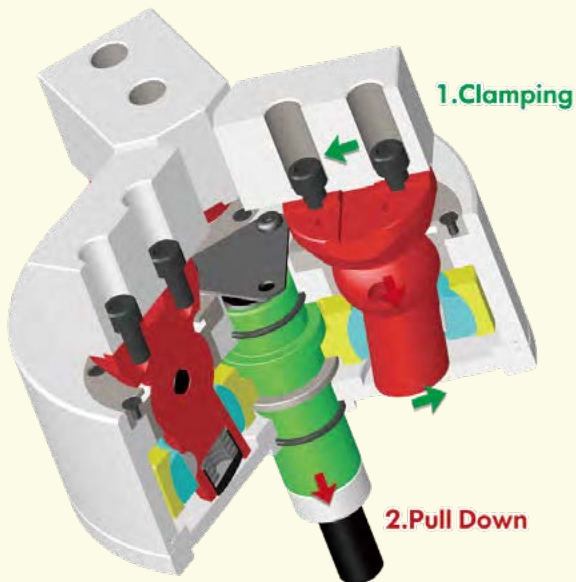


# 3W

## SWING TYPE THREE-JAW POWER CHUCK

### FEATURES

- Grip the work piece in radial direction and then pull down.
- Gripping on forging or casting part with taper up to 20°
- Jaw equalizing: 5°Max.
- Anti-dust and Seal proof for cutting fluid, easy to maintain.

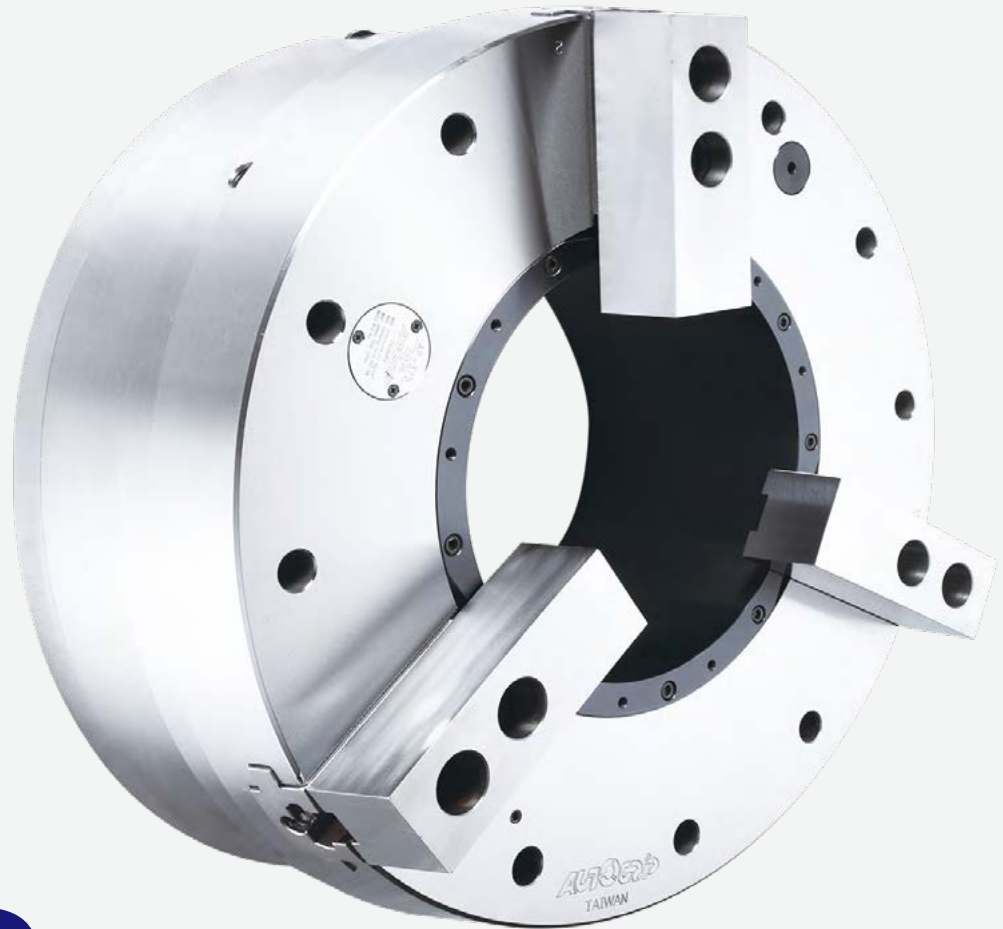


# LARGE THRU-HOLE AIR CHUCK

AUTOGRIP



**TAIWAN**  
EXCELLENCE 2018



# AP

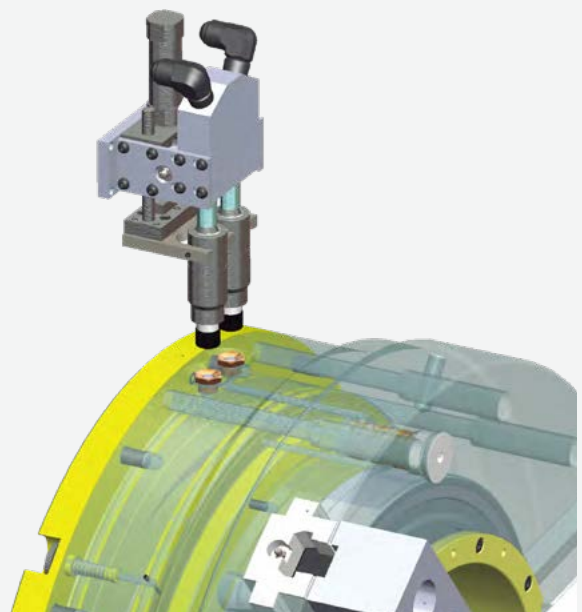
## 3-JAW THRU-HOLE

### FEATURES

- Large thru-hole :  $\varnothing 52\text{mm} \sim \varnothing 375\text{mm}$ .
- No distributor ring needed.
- Easy to install.
- Less maintenance.

### AIR FEED SYSTEM

- Pressure detection / Unique design.
- Built-in cylinder / Check valve.





# 3V series

The maximum diameter is

**2000mm (79")**

## FEATURES

- It's a WEDGE-HOOK type 3-jaw high speed power chuck.
- With manual radial setting of master jaws for the workpieces centering.
- Sealed against swarf, chips and coolant, suitable for vertical lathe.



- Various Models / Size: Available in 3 , 4 and 6-jaw versions .
- with sizes 12 to 79 inch diameter.
- Rotary cylinder : RE series .

# IS



## Power Indexing Chuck

### FEATURES

- Indexing operates during the spindle rotation, can perform a quick change between multiple working axes.
- All parts of chuck hardened, ground and lubricated directly.
- Sealed against swarf, chips and coolant.
- High rigidity and high repeatability precision.
- Unique indexing system and hydraulic system, with pressure detection device in chuck, high reliability.



## STATIONARY CHUCK BASE PLATE



# MP4

## MULTI-PLATE.4-PLATE

### FEATURES

- For milling machine / machine center.
- Allow simultaneous machining with up to 4 grippers. (Order can be customized for 2,3,6 grippers).
- Work with SM/SP/SD/SU/SE vertical chuck.
- Driven by Hydraulic or Pneumatic.
- Individual circuit for each chuck.
- Special design and reduce the height of working surface.
- Lock valve unit (optional).
- Air tight detection function(optional).



### STATIONARY CHUCK SERIES



**SM-LONG JAW STROKE STATIONARY CHUCK**  
• Long jaw stroke.



**SP-STATIONARY CHUCK**  
• Wedge-hook type.



**SD-STATIONARY PULL DOWN CHUCK**  
• Pull down / Heavy duty machining/  
Air tight detection.



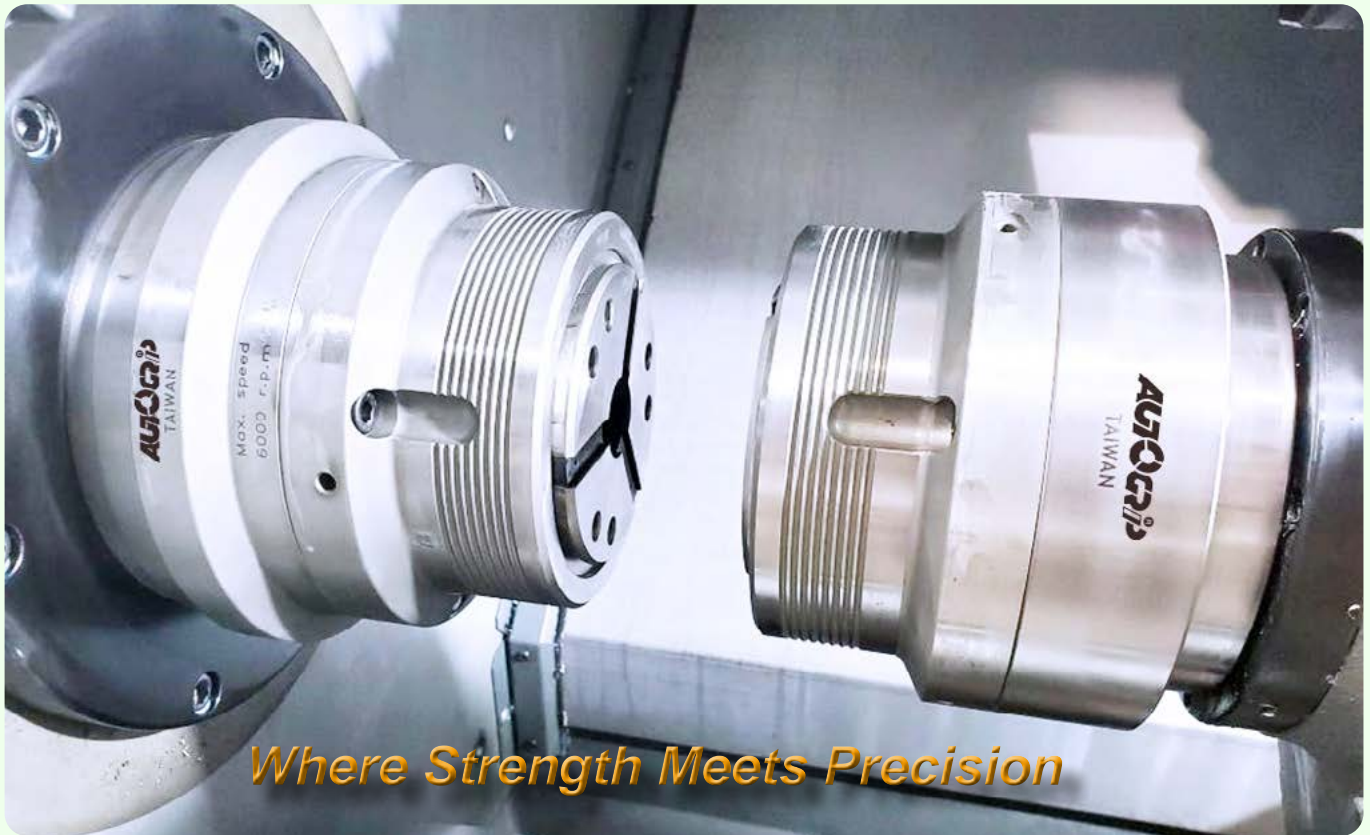
**SU-STATIONARY PULL LOCK CHUCK**  
• Pull lock / Heavy duty machining /  
Air tight detection.



**SE-STATIONARY EXPANSIBLE PULL LOCK CHUCK**  
• Pull lock / Inner dia. clamping / Air tight detection.

## COLLET CHUCKS

AUTOGRIP



*Where Strength Meets Precision*

# Rubber Grip Collet

## FEATURES

- **High Gripping Force** – Secure clamping for stable machining.
- **High Accuracy** – Consistent precision for every application.
- **Quick Jaw Change** – Fast setup for improved efficiency.
- **Dust-proof & Swarf-proof** – Reliable performance in harsh environments.
- **Grip Range  $\pm 0.5\text{mm}$**  – Flexible and versatile clamping solution.

lathe



Milling machine



SCB

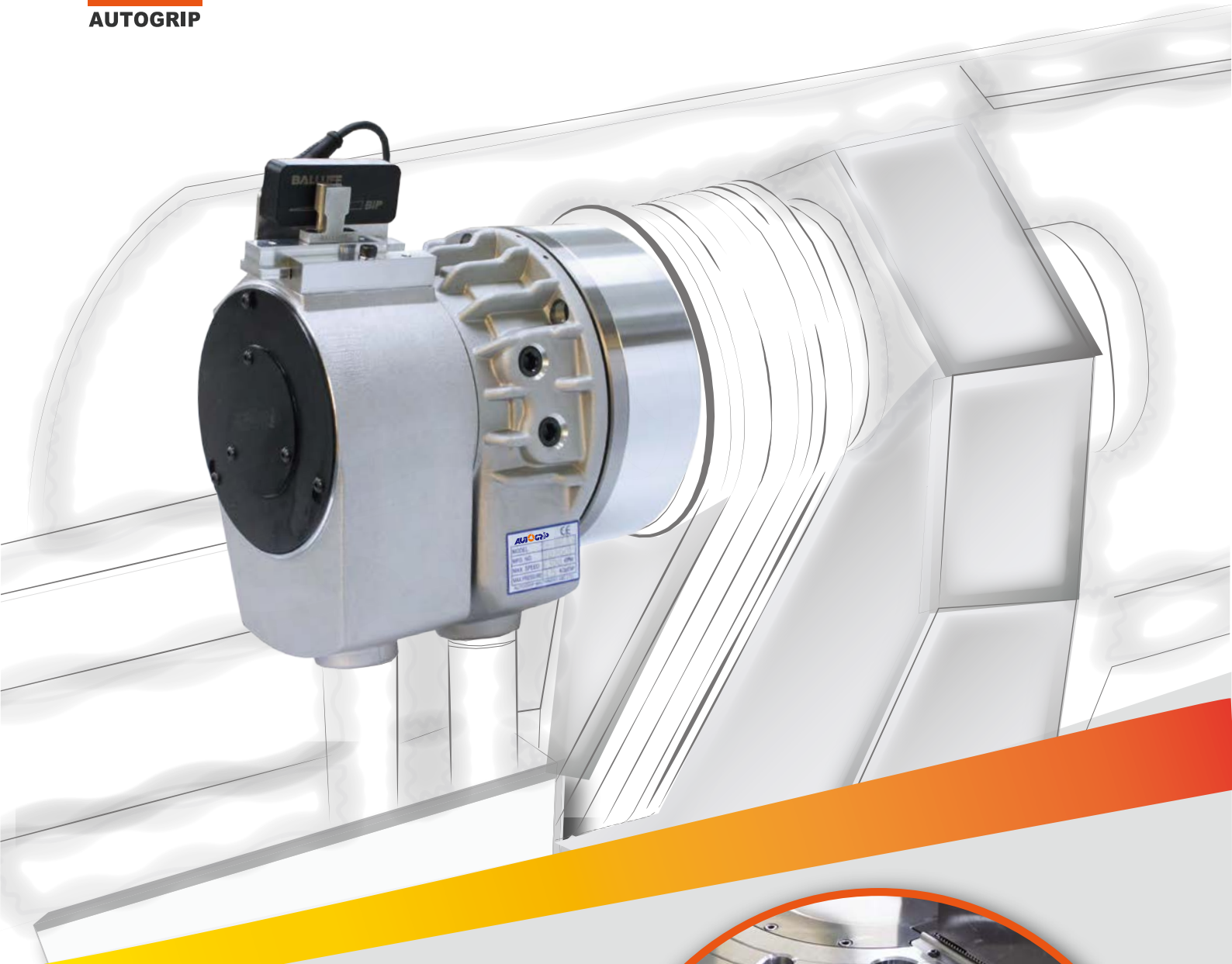


RG



**AUTOGRIP**

## ROTARY CYLINDER & LINEAR POSITION SENSOR



### FEATURES

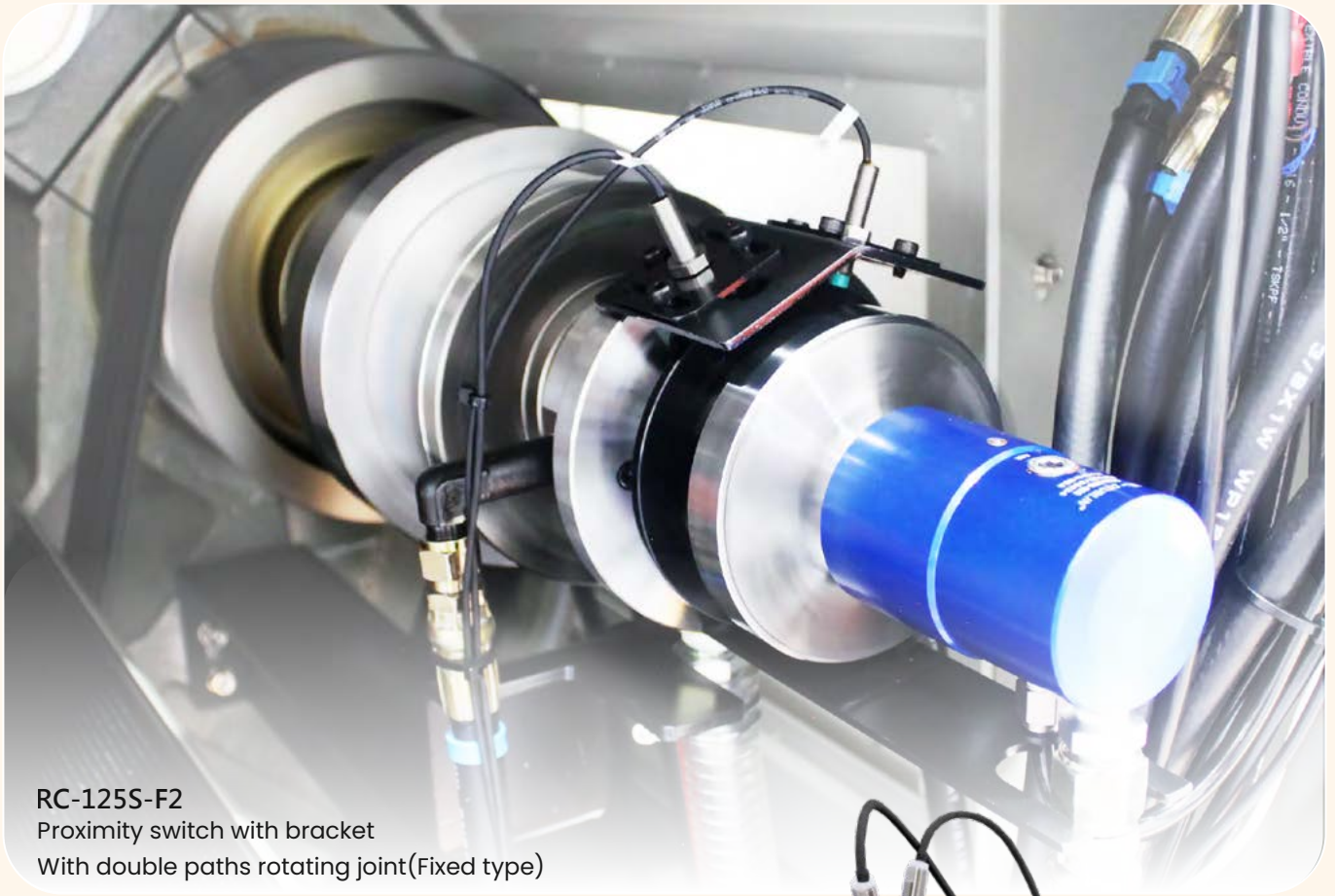
- Entire stroke range position monitoring.
- Position setup by teach-in function.
- Manual adjustment for proximity switch is unnecessary when changing workpiece.
- Suitable for sub-spindle or vertical lathes with limited space.
- Reduce idle time, increase throughput.



Vertical Lathe  
Hydraulic Cylinder

## HYDRAULIC CYLINDER WITH ROTATING JOINT

AUTOGRIP



RC-125S-F2  
Proximity switch with bracket  
With double paths rotating joint(Fixed type)

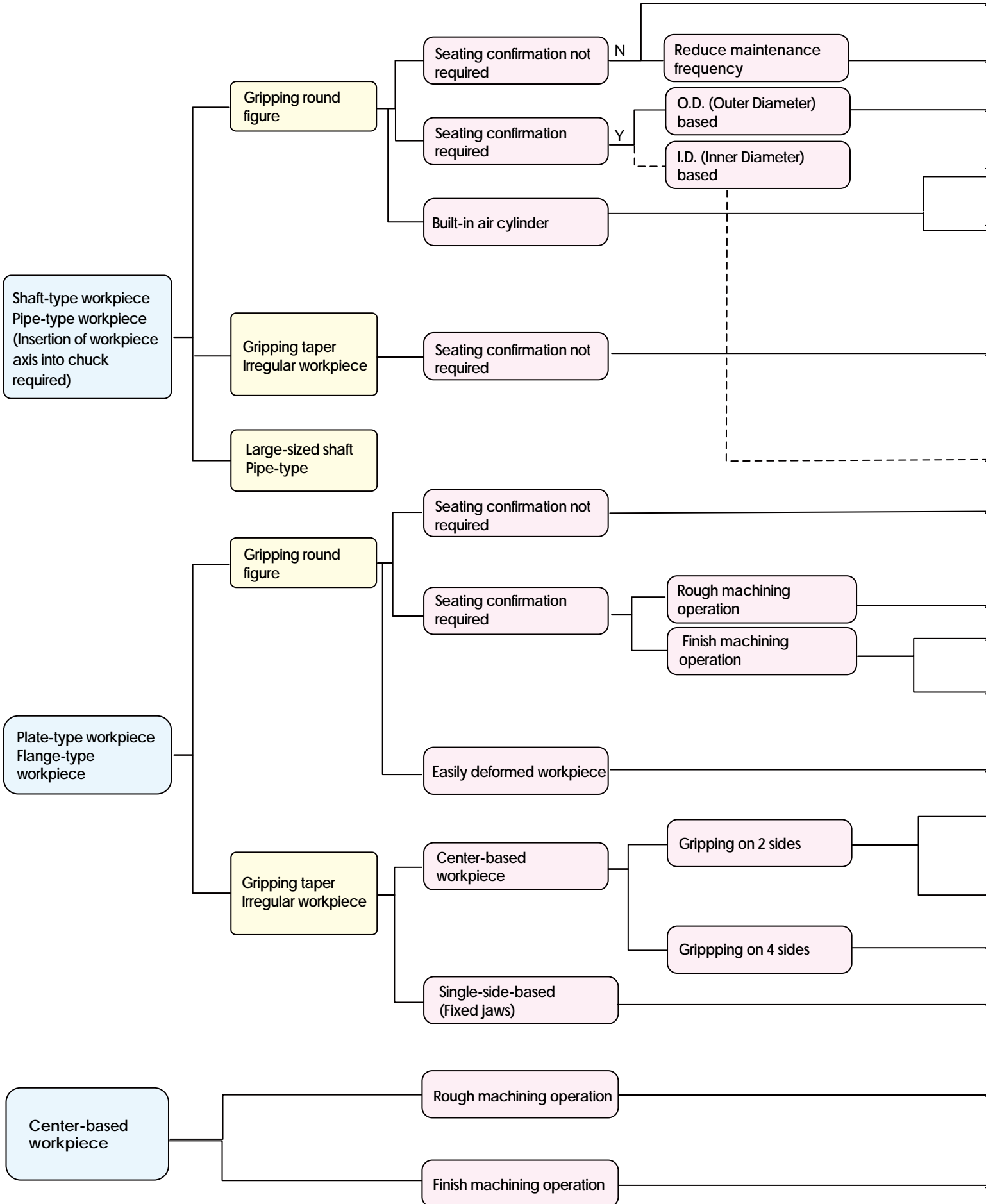
# RC series

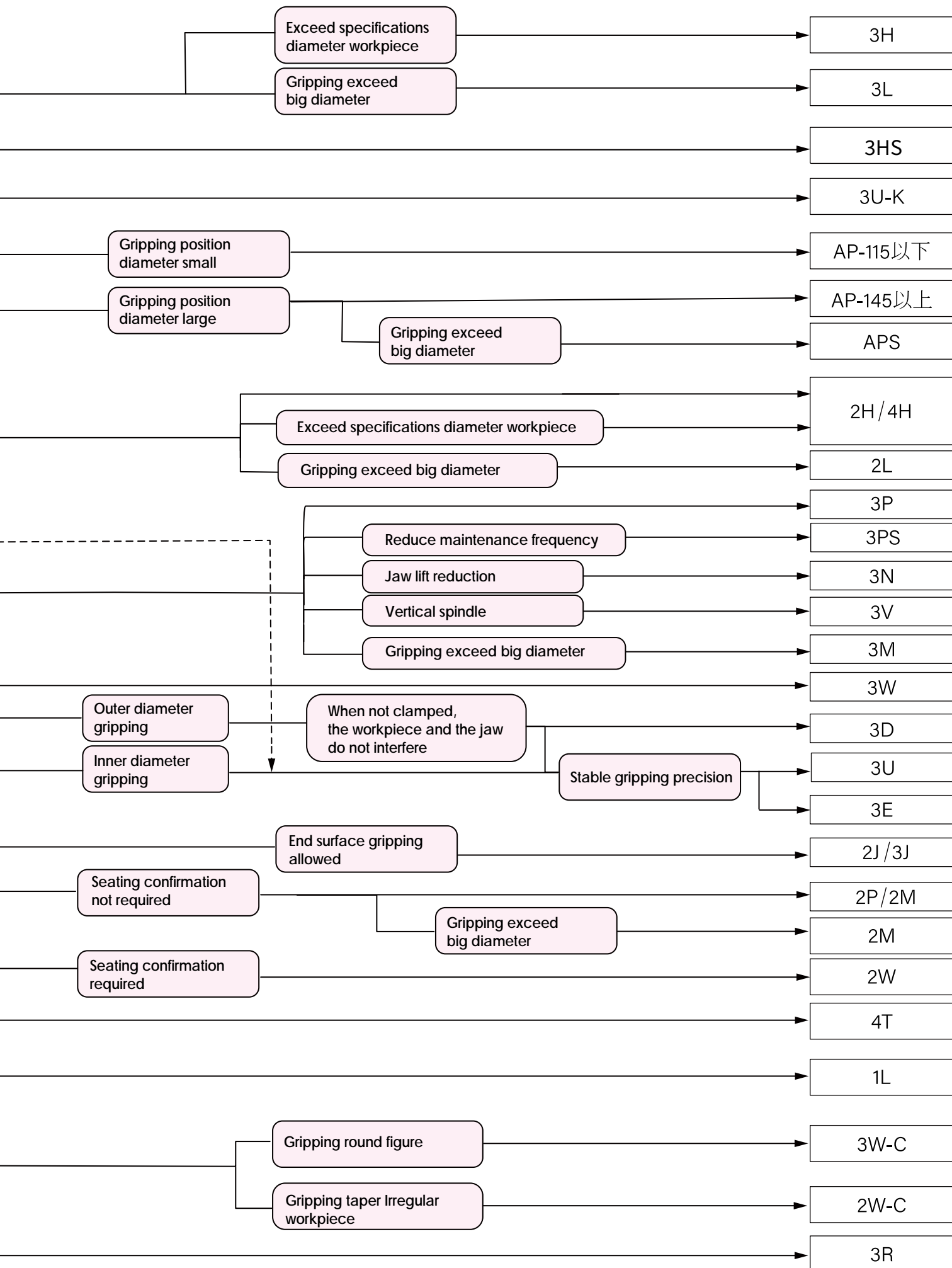


## HYDRAULIC CYLINDER WITH ROTATING JOINT

### FEATURES
















- Medium and solid hydraulic cylinder with channel.
- Can choose an external rotary joint with either single or double paths.
- It meets the demand for coolant through spindle and airtight pressure detect function.
- Has a built-in check valve for safety.
- The proximity switch and single or double paths rotating joint are optional.
- Stroke control via proximity switch or linear positioning system.





\*The contents in this chart are subject to change without notice for further improvement, etc.

## Power Chucks

|   |   |  |
|---|---|--|
|  <p><b>3H-2/3H-2A</b><br/>LARGE THRU-HOLE<br/>POWER CHUCK<br/>THRU-HOLE<br/>3-JAW</p> <p>1</p>       |  <p><b>3H/3H-A</b><br/>THRU-HOLE POWER<br/>CHUCK<br/>THRU-HOLE<br/>3-JAW</p> <p>3</p>                            |  <p><b>2H/2H-A</b><br/>THRU-HOLE POWER<br/>CHUCK<br/>THRU-HOLE<br/>2-JAW</p> <p>4</p>               |
|  <p><b>4H/4H-A</b><br/>THRU-HOLE POWER<br/>CHUCK<br/>THRU-HOLE<br/>4-JAW</p> <p>5</p>                |  <p><b>3P/3P-A</b><br/>POWER CHUCK<br/>NON-THRU-HOLE<br/>3-JAW</p> <p>6</p>                                      |  <p><b>2P/2P-A</b><br/>POWER CHUCK<br/>NON-THRU-HOLE<br/>2-JAW</p> <p>9</p>                         |
|  <p><b>3L/3L-A</b><br/>EXTRA LONG JAW<br/>STROKE<br/>POWER CHUCK<br/>THRU-HOLE / 3-JAW</p> <p>10</p> |  <p><b>2L/2L-A</b><br/>EXTRA LONG JAW<br/>STROKE<br/>POWER CHUCK<br/>THRU-HOLE<br/>2-JAW</p> <p>11</p>           |  <p><b>1L</b><br/>EXTRA LONG JAW<br/>STROKE<br/>POWER CHUCK<br/>NON-THRU-HOLE / 1-JAW</p> <p>13</p> |
|  <p><b>3M</b><br/>LONG JAW STROKE<br/>POWER CHUCK<br/>NON-THRU-HOLE<br/>3-JAW</p> <p>14</p>          |  <p><b>2M</b><br/>LONG JAW STROKE<br/>POWER CHUCK<br/>NON-THRU-HOLE<br/>2-JAW</p> <p>16</p>                      |  <p><b>3V-A</b><br/>POWER CHUCK FOR<br/>VERTICAL LATHE<br/>NON-THRU-HOLE<br/>3-JAW</p> <p>17</p>    |
|  <p><b>4V-A</b><br/>POWER CHUCK FOR<br/>VERTICAL LATHE<br/>NON-THRU-HOLE<br/>4-JAW</p> <p>19</p>     |  <p><b>3HS</b><br/>THRU-HOLE FULLY<br/>SEALED TYPE POWER<br/>CHUCK<br/>FULLY SEALED TYPE<br/>3-JAW</p> <p>21</p> |  <p><b>3PS</b><br/>FULLY SEALED TYPE<br/>POWER CHUCK<br/>FULLY SEALED TYPE<br/>3-JAW</p> <p>22</p>  |

## Special Purpose Power Chucks

|   |   |  |
|---|---|--|
|  <p><b>3N</b><br/>INCLINED MASTER<br/>JAWS<br/>POWER CHUCK<br/>NON-THRU-HOLE / 3-JAW</p> <p>23</p>             |  <p><b>3D</b><br/>PULL DOWN POWER<br/>CHUCK<br/>NON-THRU-HOLE / 3-JAW</p> <p>24</p>                                    |  <p><b>2D</b><br/>PULL DOWN POWER<br/>CHUCK<br/>NON-THRU-HOLE / 2-JAW</p> <p>25</p>                               |
|  <p><b>3E</b><br/>EXPANSIBLE PULL<br/>LOCK POWER CHUCK<br/>NON-THRU-HOLE / 3-JAW</p> <p>26</p>                 |  <p><b>3U</b><br/>PULL LOCK POWER<br/>CHUCK<br/>THRU-HOLE / 3-JAW</p> <p>27</p>  |  <p><b>3U-K</b><br/>PULL LOCK POWER<br/>CHUCK<br/>NON-THRU-HOLE / 3-JAW</p> <p>28</p>                             |
|  <p><b>3W/3W-C</b><br/>SWING TYPE 3-JAW<br/>POWER CHUCK<br/>SWING TYPE / 3-JAW</p> <p>29</p>                   |  <p><b>3RF</b><br/>RETRACTABLE-JAW<br/>3-JAW SHAFT CHUCK<br/>COMPENSATING TYPE<br/>3-JAW</p> <p>31</p>                 |  <p><b>3R</b><br/>SWING COMPENSATING<br/>TYPE 3-JAW POWER<br/>CHUCK<br/>COMPENSATING TYPE<br/>3-JAW</p> <p>33</p> |
|  <p><b>4T</b><br/>FOUR-JAW TWO<br/>MOTION TYPE POWER<br/>CHUCK<br/>NON-THRU-HOLE / 4-JAW</p> <p>34</p>         |  <p><b>3J</b><br/>FINGER POWER CHUCK<br/>NON-THRU-HOLE / 3-JAW</p> <p>35</p>   |  <p><b>2J</b><br/>FINGER POWER CHUCK<br/>NON-THRU-HOLE / 2-JAW</p> <p>36</p>                                      |
|  <p><b>IS</b><br/>POWER INDEXING<br/>CHUCK</p> <p>37</p>   |  <p><b>APS</b><br/>LARGE THRU-HOLE AIR<br/>CHUCK<br/>(DOUBLE SPEED JAW<br/>STROKE)<br/>THRU-HOLE / 3-JAW</p> <p>39</p> |  <p><b>AP</b><br/>LARGE THRU-HOLE AIR<br/>CHUCK<br/>THRU-HOLE / 3-JAW</p> <p>40</p>                               |
|  <p><b>3FW</b><br/>FINGER CHUCK FOR<br/>ALUMINUM WHEELS<br/>ALUMINUM ALLOY WHEELS<br/>PROCESSING</p> <p>43</p> |   |  |

## Collet Chucks



**CL**  
COLLET CHUCK  
THRU-HOLE

47



**CL-A**  
COLLET CHUCK  
THRU-HOLE

48



**DIN6343**  
STEEL COLLET  
STEEL COLLET

49



**CB/CB-A**  
DRAW BACK COLLET  
CHUCK  
THRU-HOLE

50



**CBE/CBE-A**  
END STOP COLLET  
CHUCK  
THRU-HOLE

51



**CBD/CBD-A**  
DEAD LENGTH COLLET  
CHUCK  
THRU-HOLE

52



**CME**  
END STOP COLLET  
CHUCK  
PULL POSITIONING

53



**CMD**  
DEAD LENGTH COLLET  
CHUCK  
DEAD LENGTH

54



**SCB**  
STATIONARY DRAW  
COLLET CHUCK  
THRU-HOLE

55



**RG**  
RUBBER GRIP COLLET

56

## Stationary Chucks



**VH**  
STATIONARY CHUCK  
WITH THRU-HOLE  
THRU-HOLE STATIONARY  
2/3-JAW

57



**VP**  
STATIONARY CHUCK  
NON-THRU-HOLE STATIONARY  
2/3-JAW

58



**SP**  
STATIONARY CHUCK  
NON-THRU-HOLE STATIONARY  
THRU-HOLE STATIONARY  
2/3-JAW

59



**SM**  
LONG JAW STROKE  
STATIONARY CHUCK  
NON-THRU-HOLE  
2/3-JAW

61



**SD**  
STATIONARY PULL  
DOWN CHUCK  
NON-THRU-HOLE  
3-JAW

62



**SU**  
STATIONARY PULL  
LOCK CHUCK  
NON-THRU-HOLE  
3-JAW

63



**SE**  
STATIONARY  
EXPANSIVE  
PULL LOCK CHUCK  
NON-THRU-HOLE  
3-JAW

64



**MP4**  
STATIONARY CHUCK  
BASE PLATE

65



**VH-201**  
HAND OPERATED  
AIR VALVE  
ACCESSORIES

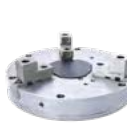
65

## Pneumatic Rotary Chuck



**RAP**  
PNEUMATIC ROTARY  
CHUCK  
PNEUMATIC ROTARY TYPE

66



**3MF**  
SELF-CENTERING  
3-JAW  
MANUAL CHUCK  
NON-THRU-HOLE / 3-JAW

67

## Vises



**VRA**  
POWER CENTERING VISE  
PNEUMATIC

68



**VRH**  
POWER CENTERING VISE  
HYDRAULIC

69



**MVSC**  
5-AXIS SELF CENTERING  
VISE  
5-AXIS

70



**MVRH**  
MC HDRAULIC VISE  
HYDRAULIC

71



**MVRE**  
MC POWER VISE  
POWER VISE

72

## Facing Heads



**FA**  
SINGLE-SLIDE FACING  
HEAD

SINGLE SLIDE

73



**FD**  
DOUBLE-SLIDE FACING  
HEAD

DOUBLE SLIDE

76

## Synchronous Clamp



**CP**  
SYNCHRONOUS CLAMP

CRANK TYPE

77



**CW**  
WEDGE-DRIVEN  
SYNCHRONOUS  
CLAMP

WEDGE-DRIVEN

78

## Rotary Cylinders



**TK**  
SHORT TYPE ROTATING  
HYDRAULIC CYLINDER  
WITH THRU-HOLE AND  
SAFETY DEVICE

THRU-HOLE / HYDRAULIC

79



**TS**  
SHORT TYPE ROTARY  
HYDRAULIC CYLINDER  
WITH BIG-BORE  
THRU-HOLE AND SAFETY  
DEVICE

THRU-HOLE / HYDRAULIC

83



**TH**  
ROTATING HYDRAULIC  
CYLINDER WITH  
THRU-HOLE AND SAFETY  
DEVICE

THRU-HOLE / HYDRAULIC

84



**TR**  
SMALL TYPE ROTARY  
HYDRAULIC CYLINDER  
WITH THRU-HOLE AND  
SAFETY DEVICE

THRU-HOLE / HYDRAULIC

85



**RA**  
ROTATING AIR  
CYLINDER

NON-THRU-HOLE  
AIR

86



**RH**  
ROTATING  
HYDRAULIC CYLINDER

NON-THRU-HOLE  
HYDRAULIC

87



**RK**  
ROTATING HYDRAULIC  
CYLINDER WITH SAFETY  
DEVICE

NON-THRU-HOLE  
HYDRAULIC

88



**RK-N**  
ROTATING HYDRAULIC  
CYLINDER

NON-THRU-HOLE  
HYDRAULIC

89



**RS**  
ROTATING HYDRAULIC  
CYLINDER WITH STROKE  
CONTROL AND SAFETY  
DEVICE

STROKE CONTROL / HYDRAULIC

90



**RS-N**  
ROTATING HYDRAULIC  
CYLINDER WITH  
STROKE CONTROL

STROKE CONTROL  
HYDRAULIC

91



**RL**  
ROTATING HYDRAULIC  
CYLINDER WITH  
COOLANT CONNECTION  
AND SAFETY DEVICE

COOLANT CONNECTION  
HYDRAULIC

92



**RL-N**  
ROTATING  
HYDRAULIC CYLINDER  
WITH COOLANT  
CONNECTION

COOLANT CONNECTION  
HYDRAULIC

93



**RL-AN**  
ROTATING HYDRAULIC  
CYLINDER WITH AIR  
CONNECTION

AIR CONNECTION  
HYDRAULIC

94



**RE**  
COMPACT STYLE  
HYDRAULIC CYLINDER  
WITH STROKE CONTROL  
AND SAFETY DEVICE

COMPACT STYLE  
HYDRAULIC

95



**RE-A**  
COMPACT STYLE  
HYDRAULIC CYLINDER  
WITH AIR CONNECTION  
AND SAFETY DEVICE

COMPACT STYLE / HYDRAULIC

97



**RE-L**  
COMPACT STYLE HYDRAULIC  
CYLINDER WITH COOLANT  
CONNECTION AND SAFETY  
DEVICE

COMPACT STYLE / HYDRAULIC

99



**RC**  
HYDRAULIC CYLINDER  
WITH  
ROTATING JOINT

ROTATING JOINT

101



**RD**  
DOUBLE ROD ROTATING  
CYLINDER WITH SAFETY  
DEVICE

DOUBLE-ROD  
HYDRAULIC

103



**RD-N**  
DOUBLE ROD ROTATING  
CYLINDER

DOUBLE-ROD  
HYDRAULIC

104



**RDL**  
DOUBLE ROD ROTATING  
CYLINDER WITH EXTERNAL  
ROTATING JOINT

DOUBLE-ROD  
HYDRAULIC

105

## Rotary Valves



**RV**  
HYDRAULIC ROTARY VALVE

OIL CIRCUIT DISTRIBUTOR

106



**RV-A**  
AIR ROTARY VALVE

AIR

106

## Rotary Joints



**RJ-52**  
SINGLE-PASSAGE ROTATING JOINT

SINGLE-PASSAGE

107



**RJ-80**  
COOLANT ROTATING JOINT

SINGLE-PASSAGE

107



**RJ-92**  
COOLANT ROTATING JOINT WITH AUTOMATIC ON/OFF SEAL

SINGLE-PASSAGE

108



**RJ-4E/RJ-5E**  
HYDRAULIC ROTATING JOINT

MULTI-PASSAGE, SINGLE MEDIUM

109



**RJ-A2E**  
AIR ROTATING JOINT

MULTI-PASSAGE, SINGLE MEDIUM

110



**RJ-22HA/RJ-41HA**  
COMBINED AIR AND HYDRAULIC ROTARY JOINT

MULTI-PASSAGE, DUAL MEDIUM

111



**RJ-52HV**  
COMBINED AIR AND HYDRAULIC ROTARY JOINT

MULTI-PASSAGE, DUAL MEDIUM

112

## Self-Centering Steady Rest



**SR**  
SELF-CENTERING STEADY REST

BASIC TYPE

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**SRR**  
SELF-CENTERING STEADY REST

ADVANCED TYPE

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**SRB**  
SELF-CENTERING STEADY REST

SIDE-MOUNTED TYPE

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GRIPPING FORCE SENSOR

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STANDARD SOFT BLANK JAW

STANDARD SOFT JAW

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STANDARD HARDENED JAW

STANDARD HARDENED JAW

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T-NUT

T-NUT

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ADAPTOR

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**CT/CT-S**  
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COOLANT COLLECTOR

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**CT-SB/CT-SBS**  
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COOLANT COLLECTOR

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**DRAW TUBE**  
THE CALCULATION OF DRAW TUBE LENGTH

DRAW TUBE

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**DRAW BAR**  
THE CALCULATION OF DRAW BAR LENGTH

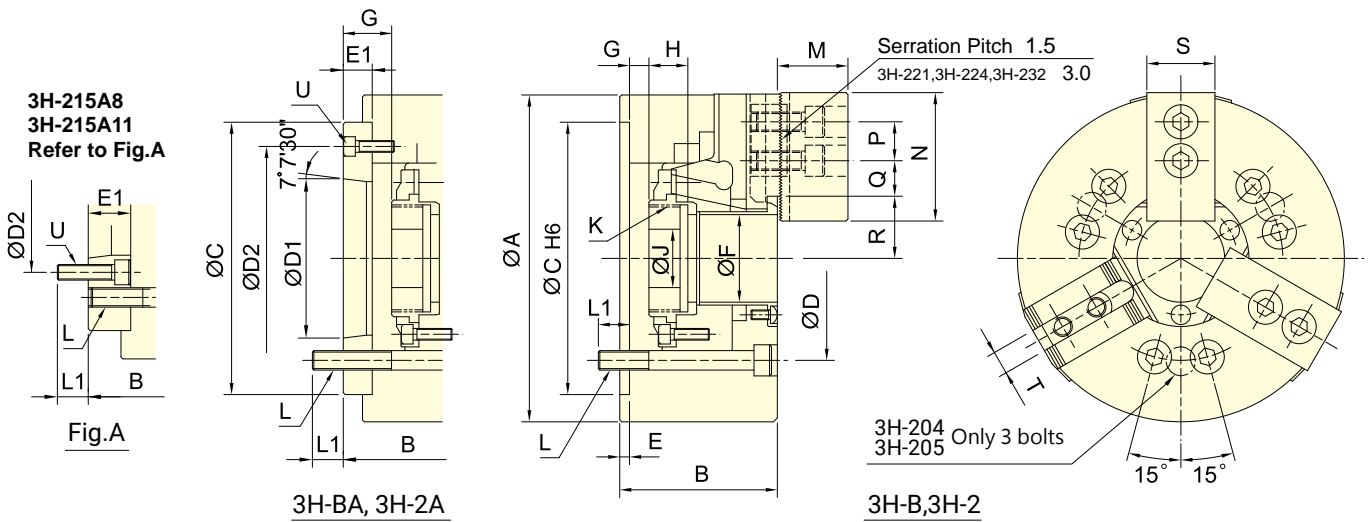
DRAW BAR

129



- WEDGE-HOOK type 3-jaw with the extra large through-hole.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.
- J is the hole diameter of blank draw nut.  
If not notified, AUTOGRIP will adopt the K Default as K value.  
K is the maximum thread specification and it could be customize.

POWER CHUCKS



Subject to technical changes

### SPECIFICATIONS

| Model  | Thru-hole (Dia.) | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |          |         |
|--------|------------------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|----------|---------|
|        | mm               | mm             | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |          |         |
| 3H-204 | A4               | 32             | 13                | 5.5                | 113                | 7              | 13.7(1400)          | 36.0(3670)                 | 8000              | 0.012  | 4.22          | 5.34                       | TK-A528  | 2.0(20) |
| 3H-205 | A4               | 39             | 13                | 5.5                | 138                | 10             | 17.2(1750)          | 48(4890)                   | 7000              | 0.02   | 6.3           | 7.1                        | TK-A533  | 2.5(25) |
| 3H-206 | A5               | 53             | 14                | 6                  | 170                | 13             | 23.3(2375)          | 66.8(6810)                 | 6000              | 0.06   | 13.1          | 14.9                       | TK-A646  | 2.5(25) |
| 3H-208 | A6               | 66             | 18                | 7.6                | 210                | 17             | 31.9(3250)          | 95.7(9760)                 | 5000              | 0.15   | 21.8          | 23.4                       | TK-A853  | 2.6(26) |
| 3H-210 | A8               | 86             | 21                | 8.9                | 260                | 37             | 49.1(5010)          | 152(15500)                 | 4500              | 0.32   | 37.5          | 43                         | TK-A1075 | 3.2(32) |
| 3H-212 | A11              | 106            | 25                | 10.6               | 315                | 43             | 58.8(6000)          | 157(16010)                 | 3700              | 0.74   | 58.6          | 64.7                       | TK-A1512 | 1.9(19) |
| 3H-215 | A8               | 145            | 25                | 10.6               | 405                | 49             | 71(7240)            | 180(18350)                 | 2500              | 2.8    | 127           | 149                        | TK-2114  | 2.1(21) |
| 3H-215 | A11              | 145            | 25                | 10.6               | 405                | 49             | 71(7240)            | 180(18350)                 | 2500              | 2.8    | 127           | 143.3                      | TK-2114  | 2.1(21) |
| 3H-215 | A15              | 145            | 25                | 10.6               | 405                | 49             | 71(7240)            | 180(18350)                 | 2500              | 2.8    | 127           | 135.6                      | TK-2114  | 2.1(21) |
| 3H-18B | A15              | 165            | 23                | 10.6               | 456                | 79             | 71(7240)            | 180(18350)                 | 2000              | 4.8    | 162.4         | 173.4                      | TK-2416  | 1.9(19) |
| 3H-221 | A15              | 180            | 28                | 12.9               | 530                | 105            | 90(9175)            | 234(23860)                 | 1800              | 7.5    | 223           | 234                        | TK-2416  | 2.4(24) |
| 3H-224 | A20              | 210            | 28                | 12.9               | 610                | 135            | 100(10200)          | 240(24500)                 | 1500              | 15.8   | 270           | 284                        | TK-2820  | 2.1(21) |
| 3H-232 | A20              | 275            | 34                | 18                 | 800                | 205            | 100(10200)          | 240(24500)                 | 1200              | 47     | 546           | 560                        | TK-2820  | 2.1(21) |

The dimensions and the specifications of 3H-2A, 3H-BA type are in red data.

## DIMENSIONS

| Model  | A   | B   | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H    | J    |       |      |      |     |
|--------|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|------|------|-------|------|------|-----|
| 3H-204 | A4  | 113 | 59  | 83  | 85  | 70.6  | 63.51  | 82.6  | 4 | 28     | 32     | 3.5  | 31.5 | -9.5  | 18.5 | 17.5 | 12  |
| 3H-205 | A4  | 138 | 60  | 71  | 110 | 82.6  | 63.51  | 96    | 4 | 15     | 39     | 1    | 16   | -12   | 3    | 20   | 12  |
| 3H-206 | A5  | 170 | 81  | 91  | 140 | 104.8 | 82.56  | 116   | 5 | 15     | 53     | 13   | 28   | -1    | 14   | 17.5 | 20  |
| 3H-208 | A6  | 210 | 91  | 103 | 170 | 133.4 | 106.38 | 150   | 5 | 17     | 66     | 16.5 | 33.5 | -1.5  | 15.5 | 20   | 30  |
| 3H-210 | A8  | 260 | 102 | 115 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 86     | 10.5 | 28.5 | -10.5 | 7.5  | 25   | 45  |
| 3H-212 | A11 | 315 | 110 | 126 | 300 | 235   | 196.87 | 260   | 6 | 22     | 106    | 10   | 32   | -15   | 7    | 28   | 50  |
| 3H-215 | A8  | 405 | 132 | 159 | 380 | 330.2 | 139.72 | 171.4 | 6 | 33     | 145    | 11   | 44   | -14   | 19   | 39   | 60  |
| 3H-215 | A11 | 405 | 132 | 166 | 380 | 330.2 | 196.87 | 235   | 6 | 40     | 145    | 11   | 51   | -14   | 26   | 39   | 60  |
| 3H-215 | A15 | 405 | 132 | 153 | 380 | 330.2 | 285.78 | 330.2 | 6 | 27     | 145    | 11   | 38   | -14   | 13   | 39   | 60  |
| 3H-18B | A15 | 456 | 145 | 166 | 380 | 330.2 | 285.78 | 330.2 | 6 | 27     | 165    | 18   | 45   | -5    | 22   | 40   | 60  |
| 3H-221 | A15 | 530 | 140 | 161 | 380 | 330.2 | 285.78 | 330.2 | 6 | 27     | 180    | 15   | 42   | -13   | 14   | 40   | 80  |
| 3H-224 | A20 | 610 | 145 | 166 | 520 | 463.6 | 412.78 | 463.6 | 6 | 27     | 210    | 15   | 42   | -13   | 14   | 41   | 80  |
| 3H-232 | A20 | 800 | 150 | 170 | 520 | 463.6 | 412.78 | 463.6 | 6 | 27     | 275    | 24   | 51   | -10   | 17   | 42   | 100 |

| Model  | K max. | K Default | L       | L1    | M    | N    | P  | Q max. | Q min. | R max. | R min. | S     | T     | U  |      |       |
|--------|--------|-----------|---------|-------|------|------|----|--------|--------|--------|--------|-------|-------|----|------|-------|
| 3H-204 | A4     | M38x1.5   | M32x1.5 | 3~M10 | 16.0 | 15   | 24 | 52     | 14     | 12.75  | 6.75   | 25    | 22.25 | 23 | 10   | 3~M10 |
| 3H-205 | A4     | M45x1.5   | M40x1.5 | 3~M10 | 14.5 | 14.5 | 31 | 62     | 14     | 20.25  | 6.75   | 29.5  | 26.8  | 25 | 10   | 3~M6  |
| 3H-206 | A5     | M60x2     | M55x2   | 6~M10 | 16.0 | 16   | 37 | 73     | 20     | 21.25  | 9.25   | 36    | 33    | 31 | 12   | 3~M6  |
| 3H-208 | A6     | M75x2     | M60x2   | 6~M12 | 17.0 | 15   | 38 | 95     | 25     | 23.7   | 10.2   | 45.7  | 41.9  | 35 | 14   | 3~M6  |
| 3H-210 | A8     | M95x2     | M85x2   | 6~M16 | 20.0 | 22   | 43 | 110    | 30     | 32.2   | 12.7   | 56.5  | 52.05 | 40 | 16   | 3~M8  |
| 3H-212 | A11    | M115x2    | M115x2  | 6~M20 | 30.0 | 28   | 51 | 130    | 30     | 44.75  | 14.75  | 67.8  | 62.5  | 50 | 21   | 3~M10 |
| 3H-215 | A8     | M155x3    | M115x2  | 6~M24 | 36.0 | 24   | 63 | 165    | 43     | 49.75  | 19.75  | 90    | 84.7  | 62 | 25.5 | 6~M16 |
| 3H-215 | A11    | M155x3    | M155x3  | 6~M24 | 36.0 | 31   | 63 | 165    | 43     | 49.75  | 19.75  | 90    | 84.7  | 62 | 25.5 | 6~M20 |
| 3H-215 | A15    | M155x3    | M155x3  | 6~M24 | 36.0 | 34   | 63 | 165    | 43     | 49.75  | 19.75  | 90    | 84.7  | 62 | 25.5 | 3~M12 |
| 3H-18B | A15    | M175x3    | M175x3  | 6~M24 | 38.0 | 36   | 63 | 165    | 43     | 64     | 20.5   | 102   | 96.7  | 62 | 25.5 | 3~M12 |
| 3H-221 | A15    | M190x3    | M190x3  | 6~M24 | 33.0 | 36   | 73 | 180    | 60     | 69.5   | 24.5   | 113.5 | 107.1 | 64 | 25   | 3~M12 |
| 3H-224 | A20    | M225x3    | M225x3  | 6~M24 | 35.0 | 33   | 73 | 180    | 60     | 93.5   | 24.5   | 128   | 121.5 | 64 | 25   | 3~M12 |
| 3H-232 | A20    | M295x3    | M295x3  | 6~M24 | 36.0 | 34   | 73 | 180    | 60     | 150.5  | 24.5   | 166   | 157   | 64 | 25   | 3~M12 |

The dimensions and the specifications of 3H-2A,3H-BA type are in red data.

// The 3H-2 series are power chucks with extra large thru-hole design. The rotary cylinders are recommended based on power chucks that from 4"~10" are common used in the industry. If you find that you need different bore size or installation interface, please just contact us. We have many standard and customized rotary cylinders for option and meet your needs. Please contact AUTOGRIP for more detailed information. Thanks.



- WEDGE-HOOK type 3-jaw with the large through-hole.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.
- J is the hole diameter of blank draw nut.  
If not notified, AUTOGRIP will adopt the K Default as K value.  
K is the maximum thread specification and it could be customize.

POWER CHUCKS

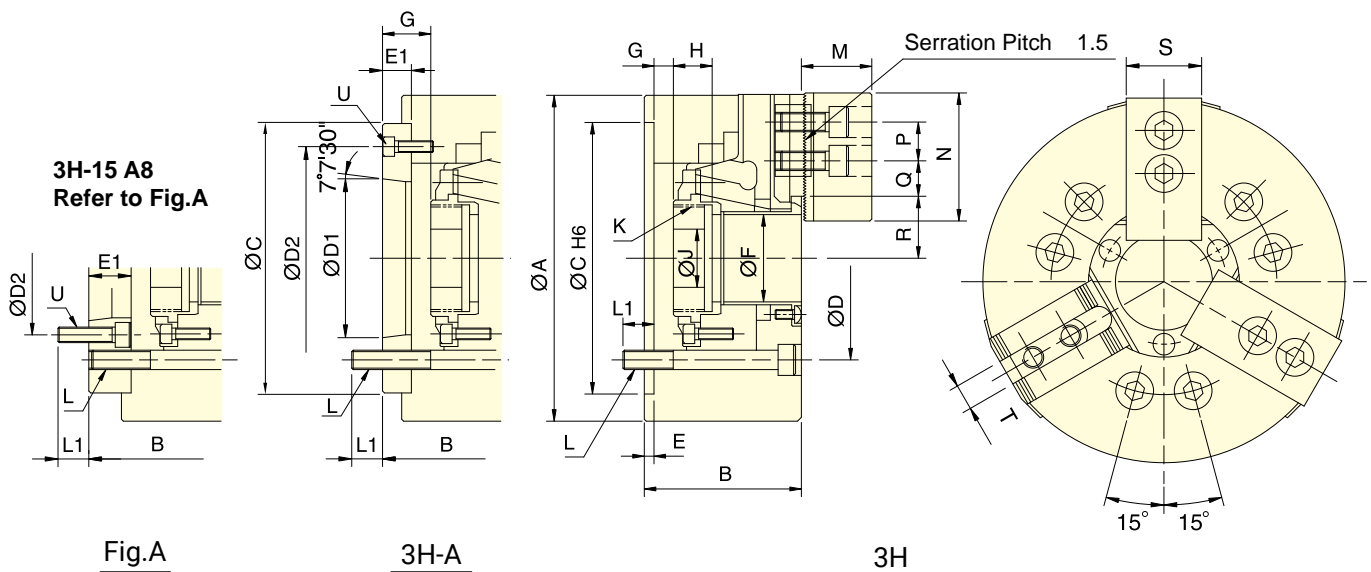


Fig.A

3H-A

3H

Subject to technical changes

### SPECIFICATIONS

| Model | Thru-hole (Dia.) | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed   | Moment of inertia | Weight | Matching cyl. | Max. pressure |          |         |
|-------|------------------|----------------|-------------------|-------------------|-------------------|----------------|---------------------|--------------|-------------------|--------|---------------|---------------|----------|---------|
|       |                  |                |                   |                   |                   |                |                     |              |                   |        |               |               | mm       | mm      |
| 3H-12 | A8               | 91             | 25                | 10.6              | 304               | 34             | 54.9 (5600)         | 143.7(14650) | 3300              | 0.77   | 56.6          | 59.3          | TK-A1291 | 2.5(25) |
| 3H-15 | A8               | 120            | 25                | 10.6              | 381               | 50             | 71 (7250)           | 179.8(18350) | 2500              | 2.28   | 120           | 134           | TK-A1512 | 2.3(23) |
| 3H-15 | A11              | 120            | 25                | 10.6              | 381               | 50             | 71 (7250)           | 179.8(18350) | 2500              | 2.28   | 120           | 127           | TK-A1512 | 2.3(23) |
| 3H-18 | A11              | 120            | 25                | 10.6              | 450               | 50             | 71(7250)            | 180.3(18400) | 2000              | 4.46   | 160           | 174           | TK-A1512 | 2.3(23) |

### DIMENSIONS

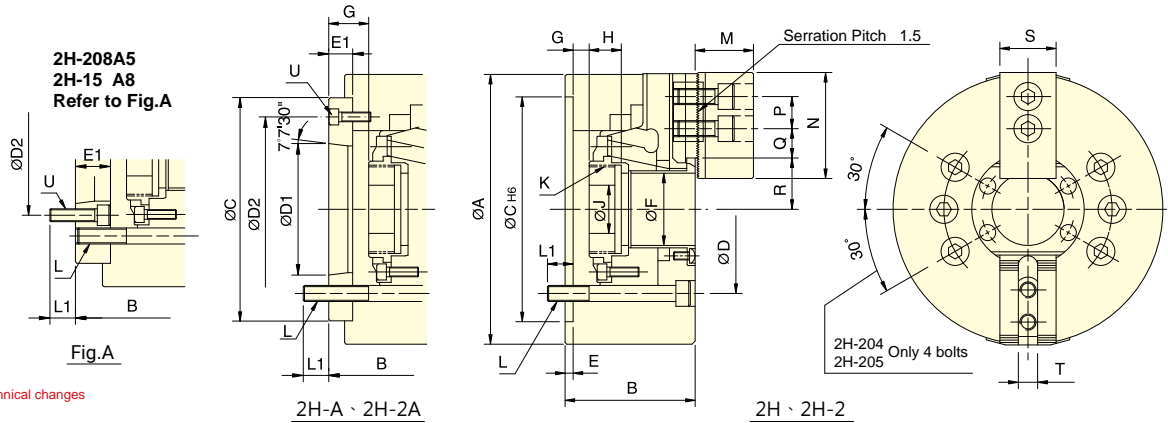
| Model | A   | B   | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H  | J  |     |    |    |    |
|-------|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|----|----|-----|----|----|----|
| 3H-12 | A8  | 304 | 110 | 122 | 220 | 171.4 | 139.72 | 190   | 6 | 18     | 91     | 10 | 28 | -15 | 3  | 28 | 50 |
| 3H-15 | A8  | 381 | 132 | 159 | 300 | 235   | 139.72 | 171.4 | 6 | 33     | 120    | 11 | 44 | -14 | 19 | 39 | 60 |
| 3H-15 | A11 | 381 | 132 | 148 | 300 | 235   | 196.87 | 260   | 6 | 22     | 120    | 11 | 33 | -14 | 8  | 39 | 60 |
| 3H-18 | A11 | 450 | 132 | 148 | 300 | 235   | 196.87 | 260   | 6 | 22     | 120    | 11 | 33 | -14 | 8  | 39 | 60 |

| Model | K max. | K Default | L      | L1     | M      | N     | P    | Q max. | Q min. | R max. | R min. | S     | T     | U    |      |      |            |       |
|-------|--------|-----------|--------|--------|--------|-------|------|--------|--------|--------|--------|-------|-------|------|------|------|------------|-------|
| 3H-12 | A8     | M100x2    | M100x2 | 6~M16  | 23     | 25    | 51.3 | 130    | 30     | 44.75  | 14.75  | 61.3  | 56    | 50   | 21   | 3~M8 |            |       |
| 3H-15 | A8     | M130x2    | M115x2 | M130x2 | M100x2 | 6~M20 | 30   | 24     | 63     | 165    | 43     | 49.75 | 19.75 | 77.5 | 72.2 | 62   | 25.5 or 22 | 6~M16 |
| 3H-15 | A11    | M130x2    | M130x2 | M130x2 | M130x2 | 6~M20 | 30   | 28     | 63     | 165    | 43     | 49.75 | 19.75 | 77.5 | 72.2 | 62   | 25.5 or 22 | 3~M10 |
| 3H-18 | A11    | M130x2    | M130x2 | M130x2 | M130x2 | 6~M20 | 31   | 29     | 63     | 165    | 43     | 82.75 | 21.25 | 77.5 | 72.2 | 62   | 25.5 or 22 | 3~M10 |

The dimensions and the specifications of 3H-A type are in red data.



- WEDGE-HOOK type 2-jaw with the large through-hole.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.
- J is the hole diameter of blank draw nut.  
If not notified, AUTOGRIP will adopt the K Default as K value.  
K is the maximum thread specification and it could be customize.



Subject to technical changes

### SPECIFICATIONS

| Model  | Thru-hole (Dia.) | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed    | Moment of inertia | Weight | Matching cyl. | Max. pressure |          |          |
|--------|------------------|----------------|-------------------|-------------------|--------------------|----------------|---------------------|---------------|-------------------|--------|---------------|---------------|----------|----------|
|        |                  |                |                   |                   |                    |                |                     |               |                   |        |               |               | mm       | mm       |
| 2H-204 | A4               | 32             | 13                | 5.5               | 113                | 7              | 9.2 (940)           | 19.4 (1980)   | 8000              | 0.012  | 4.2           | 4.8           | TK-A528  | 1.3 (13) |
| 2H-205 | A4               | 39             | 13                | 5.5               | 138                | 10             | 11.4 (1167)         | 32 (3260)     | 7000              | 0.02   | 6.8           | 7.6           | TK-A533  | 1.6 (16) |
| 2H-206 | A5               | 53             | 14                | 6                 | 170                | 13             | 15.5 (1580)         | 44.4 (4530)   | 6000              | 0.06   | 13.1          | 14.9          | TK-A646  | 1.6 (16) |
| 2H-208 | A5               | 66             | 18                | 7.6               | 210                | 17             | 23.1 (2360)         | 57.3 (5840)   | 5000              | 0.17   | 21.3          | 24.2          | TK-A853  | 1.8 (18) |
| 2H-208 | A6               | 66             | 18                | 7.6               | 210                | 17             | 23.1 (2360)         | 57.3 (5840)   | 5000              | 0.17   | 21.3          | 22.4          | TK-A853  | 1.8 (18) |
| 2H-210 | A8               | 86             | 21                | 8.9               | 260                | 37             | 32.9 (3355)         | 101.9 (10385) | 4500              | 0.31   | 33.5          | 36.2          | TK-A1075 | 2.2 (22) |
| 2H-12  | A8               | 91             | 25                | 10.6              | 304                | 34             | 36.7 (3740)         | 95.8 (9780)   | 3300              | 0.70   | 59.7          | 62.7          | TK-A1291 | 1.7 (17) |
| 2H-15  | A8               | 120            | 25                | 10.6              | 381                | 50             | 46.9 (4790)         | 119.6 (12200) | 2500              | 2.42   | 115           | 129           | TK-A1512 | 1.5 (15) |
| 2H-15  | A11              | 120            | 25                | 10.6              | 381                | 50             | 46.9 (4790)         | 119.6 (12200) | 2500              | 2.34   | 115           | 122           | TK-A1512 | 1.5 (15) |

### DIMENSIONS

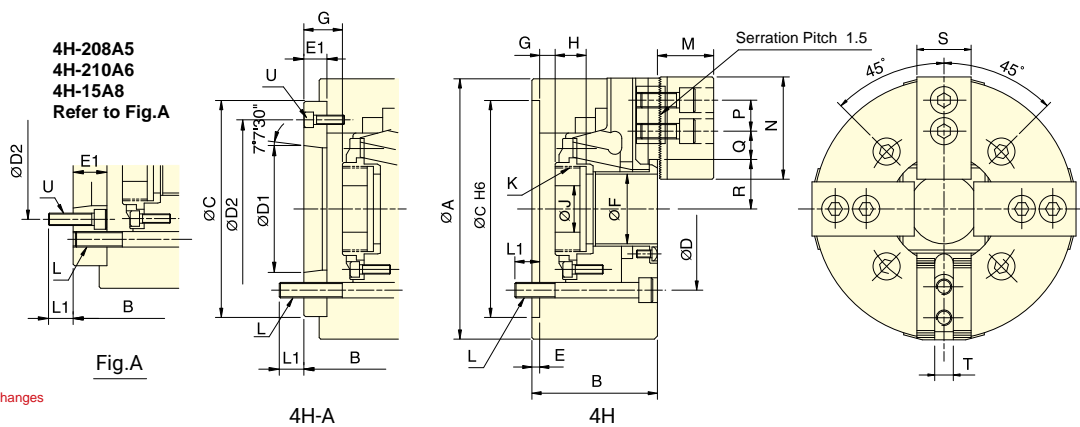
| Model  | A   | B   | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H    | J    |       |      |      |    |
|--------|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|------|------|-------|------|------|----|
| 2H-204 | A4  | 113 | 59  | 83  | 85  | 70.6  | 63.51  | 82.6  | 4 | 28     | 32     | 3.5  | 31.5 | -9.5  | 18.5 | 17.5 | 12 |
| 2H-205 | A4  | 138 | 60  | 71  | 110 | 82.6  | 63.51  | 96    | 4 | 15     | 39     | 1    | 16   | -12   | 3    | 20   | 12 |
| 2H-206 | A5  | 170 | 81  | 91  | 140 | 104.8 | 82.56  | 116   | 5 | 15     | 53     | 13   | 28   | -1    | 14   | 17.5 | 20 |
| 2H-208 | A5  | 210 | 91  | 109 | 170 | 133.4 | 82.56  | 104.8 | 5 | 23     | 66     | 16.5 | 39.5 | -1.5  | 21.5 | 20   | 30 |
| 2H-208 | A6  | 210 | 91  | 103 | 170 | 133.4 | 106.38 | 150   | 5 | 17     | 66     | 16.5 | 33.5 | -1.5  | 15.5 | 20   | 30 |
| 2H-210 | A8  | 260 | 102 | 115 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 86     | 10.5 | 28.5 | -10.5 | 7.5  | 25   | 45 |
| 2H-12  | A8  | 304 | 110 | 122 | 220 | 171.4 | 139.72 | 190   | 6 | 18     | 91     | 10   | 28   | -15   | 3    | 28   | 50 |
| 2H-15  | A8  | 381 | 133 | 160 | 300 | 235   | 139.72 | 171.4 | 6 | 33     | 120    | 11   | 44   | -14   | 19   | 39   | 60 |
| 2H-15  | A11 | 381 | 133 | 149 | 300 | 235   | 196.87 | 260   | 6 | 22     | 120    | 11   | 33   | -14   | 8    | 39   | 60 |

| Model  | K max. | K Default | L       | L1     | M      | N     | P  | Q max. | Q min. | R max. | R min. | S     | T     | U    |            |       |            |       |
|--------|--------|-----------|---------|--------|--------|-------|----|--------|--------|--------|--------|-------|-------|------|------------|-------|------------|-------|
| 2H-204 | A4     | M38x1.5   | M32x1.5 | 4~M10  | 16     | 15    | 24 | 52     | 14     | 12.75  | 6.75   | 25    | 22.25 | 23   | 10         | 3~M10 |            |       |
| 2H-205 | A4     | M45x1.5   | M40x1.5 | 4~M10  | 14.5   | 14.5  | 31 | 62     | 14     | 20.25  | 6.75   | 29.5  | 26.75 | 25   | 10         | 3~M6  |            |       |
| 2H-206 | A5     | M60x2     | M55x2   | 6~M10  | 16     | 16    | 37 | 73     | 20     | 22.75  | 9.25   | 36    | 33    | 31   | 12         | 3~M6  |            |       |
| 2H-208 | A5     | M75x2     | M60x2   | 6~M12  | 17     | 18    | 38 | 95     | 25     | 23.7   | 10.2   | 45.7  | 41.9  | 35   | 14         | 6~M10 |            |       |
| 2H-208 | A6     | M75x2     | M60x2   | 6~M12  | 17     | 15    | 38 | 95     | 25     | 23.7   | 10.2   | 45.7  | 41.9  | 35   | 14         | 3~M6  |            |       |
| 2H-210 | A8     | M95x2     | M85x2   | 6~M16  | 20     | 22    | 43 | 110    | 30     | 32.2   | 12.7   | 56.5  | 52.05 | 40   | 16         | 3~M8  |            |       |
| 2H-12  | A8     | M100x2    | M100x2  | 6~M16  | 23     | 25    | 51 | 130    | 30     | 44.75  | 14.75  | 61.3  | 56    | 50   | 21         | 3~M8  |            |       |
| 2H-15  | A8     | M130x2    | M115x2  | M130x2 | M100x2 | 6~M20 | 30 | 24     | 63     | 165    | 43     | 49.75 | 19.75 | 77.5 | 72.2       | 62    | 25.5 or 22 | 6~M16 |
| 2H-15  | A11    | M130x2    | M130x2  | 6~M20  | 30     | 28    | 63 | 165    | 43     | 49.75  | 19.75  | 77.5  | 72.2  | 62   | 25.5 or 22 | 3~M10 |            |       |

The dimensions and the specifications of 2H-A · 2H-2A type are in red data.



- WEDGE-HOOK type 4-jaw with the large through-hole.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.
- J is the hole diameter of blank draw nut.  
If not notified, AUTOGRIP will adopt the K Default as K value.  
K is the maximum thread specification and it could be customize.



Subject to technical changes

## SPECIFICATIONS

| Model  | Thru-hole (Dia.) | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed   | Moment of inertia | Weight |       | Matching cyl. | Max. pressure |         |
|--------|------------------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|--------------|-------------------|--------|-------|---------------|---------------|---------|
|        | mm               |                |                   |                    |                    |                |                     |              |                   | mm     | kg    |               |               | kg      |
| 4H-206 | A5               | 53             | 14                | 6.0                | 170                | 13             | 23.2(2375)          | 66.7(6810)   | 5000              | 0.06   | 12.5  | 16.7          | TK-C646       | 2.5(25) |
| 4H-208 | A5               | 66             | 18                | 7.6                | 210                | 17             | 34.3(3500)          | 85.8(8750)   | 4200              | 0.19   | 23.5  | 25.4          | TK-A853       | 2.8(28) |
| 4H-208 | A6               | 66             | 18                | 7.6                | 210                | 17             | 34.3(3500)          | 85.8(8750)   | 4200              | 0.19   | 23.5  | 24.3          | TK-A853       | 2.8(28) |
| 4H-210 | A6               | 86             | 21                | 8.9                | 260                | 37             | 49.1(5010)          | 152.0(15500) | 3800              | 0.4    | 38.7  | 44            | TK-A1075      | 3.2(32) |
| 4H-210 | A8               | 86             | 21                | 8.9                | 260                | 37             | 49.1(5010)          | 152.0(15500) | 3800              | 0.4    | 38.7  | 42.3          | TK-A1075      | 3.2(32) |
| 4H-12  | A8               | 91             | 25                | 10.6               | 304                | 34             | 54.9(5600)          | 143.6(14650) | 2700              | 0.77   | 62    | 65.7          | TK-A1291      | 2.5(25) |
| 4H-15  | A8               | 120            | 25                | 10.6               | 381                | 50             | 71(7250)            | 179.8(18350) | 2000              | 2.31   | 117.6 | 130           | TK-A1512      | 2.3(23) |
| 4H-15  | A11              | 120            | 25                | 10.6               | 381                | 50             | 71(7250)            | 179.8(18350) | 2000              | 2.31   | 117.6 | 123.5         | TK-A1512      | 2.3(23) |
| 4H-18  | A11              | 120            | 25                | 10.6               | 450                | 50             | 71(7250)            | 179.8(18350) | 1700              | 4.35   | 162.6 | 168.5         | TK-A1512      | 2.3(23) |

## DIMENSIONS

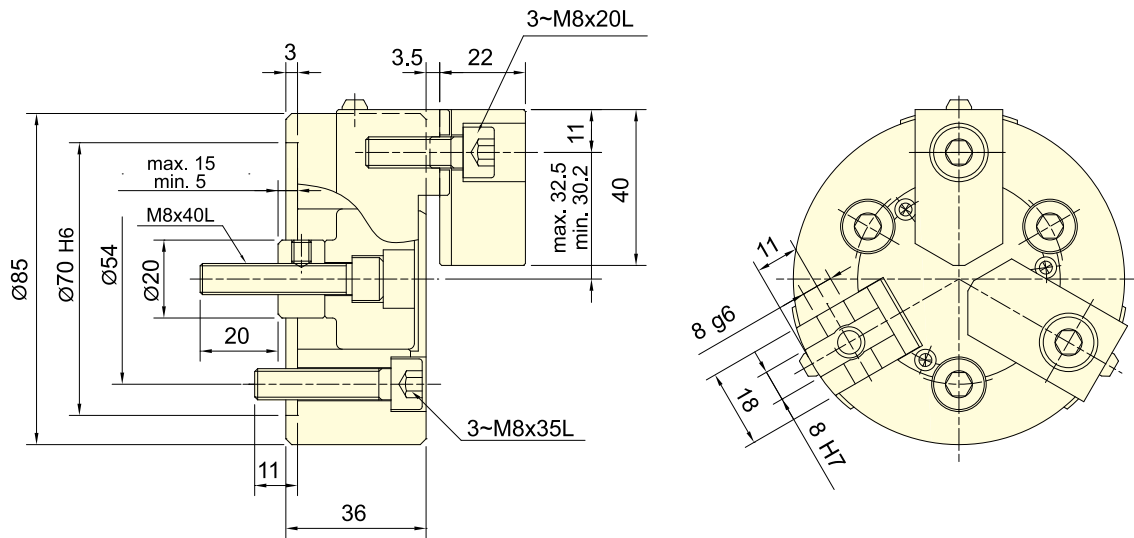
| Model  | A   | B   | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H    | J    |       |      |      |    |
|--------|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|------|------|-------|------|------|----|
| 4H-206 | A5  | 170 | 81  | 91  | 140 | 104.8 | 82.56  | 116   | 5 | 15     | 53     | 13   | 28   | -1    | 14   | 17.5 | 20 |
| 4H-208 | A5  | 210 | 91  | 109 | 170 | 133.4 | 82.56  | 104.8 | 5 | 23     | 66     | 16.5 | 39.5 | -1.5  | 21.5 | 20   | 30 |
| 4H-208 | A6  | 210 | 91  | 103 | 170 | 133.4 | 106.38 | 150   | 5 | 17     | 66     | 16.5 | 33.5 | -1.5  | 15.5 | 20   | 30 |
| 4H-210 | A6  | 260 | 102 | 122 | 220 | 171.4 | 106.38 | 133.4 | 5 | 25     | 86     | 10.5 | 35.5 | -10.5 | 14.5 | 25   | 45 |
| 4H-210 | A8  | 260 | 102 | 115 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 86     | 10.5 | 28.5 | -10.5 | 7.5  | 25   | 45 |
| 4H-12  | A8  | 304 | 110 | 122 | 220 | 171.4 | 139.72 | 190   | 6 | 18     | 91     | 10   | 28   | -15   | 3    | 28   | 50 |
| 4H-15  | A8  | 381 | 132 | 159 | 300 | 235   | 139.72 | 171.4 | 6 | 33     | 120    | 11   | 44   | -14   | 19   | 39   | 60 |
| 4H-15  | A11 | 381 | 132 | 148 | 300 | 235   | 196.87 | 260   | 6 | 22     | 120    | 11   | 33   | -14   | 8    | 39   | 60 |
| 4H-18  | A11 | 450 | 132 | 148 | 300 | 235   | 196.87 | 260   | 6 | 22     | 120    | 11   | 33   | -14   | 8    | 39   | 60 |

| Model  | K max. | K Default | L      | L1     | M      | N     | P    | Q max. | Q min. | R max. | R min. | S     | T     | U    |      |       |            |       |
|--------|--------|-----------|--------|--------|--------|-------|------|--------|--------|--------|--------|-------|-------|------|------|-------|------------|-------|
| 4H-206 | A5     | M60x2     | M55x2  | 4~M10  | 16     | 16    | 37   | 73     | 20     | 21.25  | 9.25   | 36    | 33    | 31   | 12   | 3~M6  |            |       |
| 4H-208 | A5     | M75x2     | M60x2  | 4~M12  | 17     | 18    | 38   | 95     | 25     | 23.7   | 10.2   | 45.7  | 41.9  | 35   | 14   | 6~M10 |            |       |
| 4H-208 | A6     | M75x2     | M60x2  | 4~M12  | 17     | 15    | 38   | 95     | 25     | 23.7   | 10.2   | 45.7  | 41.9  | 35   | 14   | 3~M6  |            |       |
| 4H-210 | A6     | M95x2     | M85x2  | 4~M16  | 20     | 18    | 43   | 110    | 30     | 32.2   | 12.7   | 56.5  | 52.05 | 40   | 16   | 6~M12 |            |       |
| 4H-210 | A8     | M95x2     | M85x2  | 4~M16  | 20     | 22    | 43   | 110    | 30     | 32.2   | 12.7   | 56.5  | 52.05 | 40   | 16   | 3~M8  |            |       |
| 4H-12  | A8     | M100x2    | M100x2 | 4~M16  | 23     | 25    | 51.3 | 130    | 30     | 44.75  | 14.75  | 61.3  | 56    | 50   | 21   | 3~M8  |            |       |
| 4H-15  | A8     | M130x2    | M115x2 | M130x2 | M100x2 | 4~M20 | 30   | 24     | 63     | 165    | 43     | 49.75 | 19.75 | 77.5 | 72.2 | 62    | 25.5 or 22 | 6~M16 |
| 4H-15  | A11    | M130x2    | M130x2 | M130x2 | M130x2 | 4~M20 | 31   | 28     | 63     | 165    | 43     | 49.75 | 19.75 | 77.5 | 72.2 | 62    | 25.5 or 22 | 3~M10 |
| 4H-18  | A11    | M130x2    | M130x2 | M130x2 | M130x2 | 4~M20 | 31   | 29     | 63     | 165    | 43     | 82.75 | 21.25 | 77.5 | 72.2 | 62    | 25.5 or 22 | 3~M10 |

The dimensions and the specifications of 4H-A type are in red data.



- WEDGE-HOOK type 3-jaw mini power chuck.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- Suitable for bench lathe.

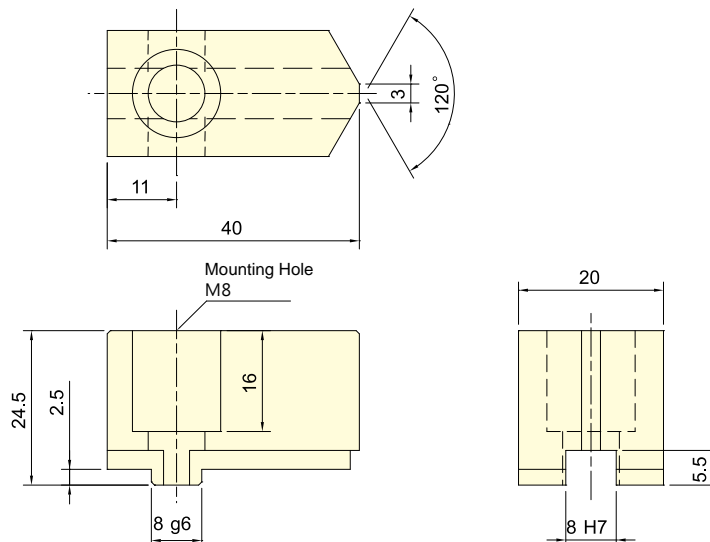


Subject to technical changes

### SPECIFICATIONS

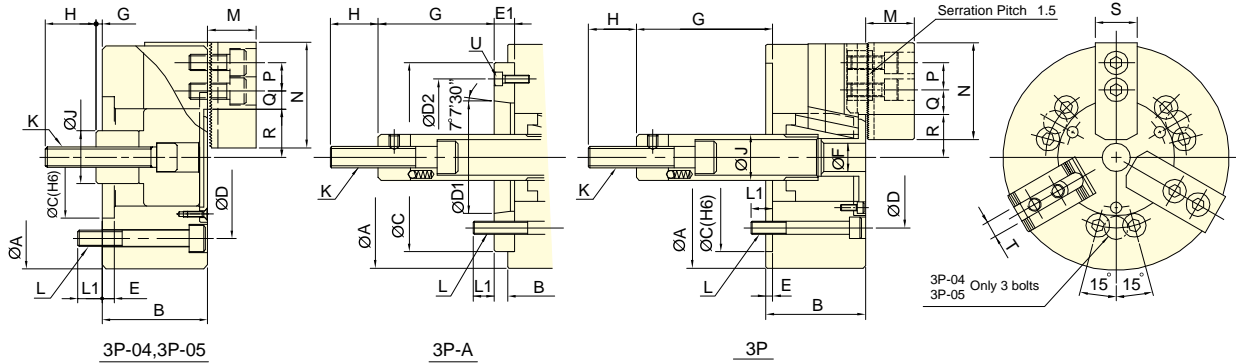
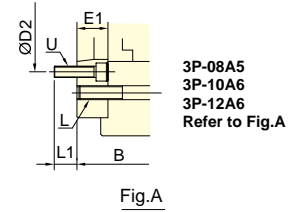
| Model        | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|--------------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|              | mm             | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>3P-03</b> | 10             | 4.6               | 85                 | 3                  | 4.5(460)       | 11.3(1150)          | 7000                       | 0.004             | 1.8    | RK-75         | 1.2(12.4)                  |

Standard Soft Jaw For 3P-03 Power Chuck  
SJ-K03





- WEDGE-HOOK type 3-jaw power chuck.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.



Subject to technical changes

### SPECIFICATIONS

| Model | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed   | Moment of inertia | Weight | Matching cyl. | Max. pressure                |                               |                   |
|-------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|--------------|-------------------|--------|---------------|------------------------------|-------------------------------|-------------------|
|       |                |                   |                    |                    |                |                     |              |                   |        |               |                              | mm                            | mm                |
| 3P-04 | 15             | 6.9               | 110                | 5                  | 8.1(830)       | 22.5(2300)          | 6000         | 0.01              | 4.1    | -             | RK-75(N)<br>RA-130<br>0.6(6) | 2.2(22)<br>0.6(6)             |                   |
| 3P-05 | 15             | 6.9               | 135                | 14                 | 8.1(830)       | 25(2550)            | 5500         | 0.02              | 6.2    | -             | RK-75(N)<br>RA-130<br>0.6(6) | 2.2(22)<br>0.6(6)             |                   |
| 3P-06 | A5             | 20                | 9.2                | 165                | 16             | 17.9(1830)          | 52.4(5350)   | 5250              | 0.05   | 13            | 14                           | RK-100(N)<br>RA-170<br>0.6(6) | 2.6(26)<br>0.6(6) |
| 3P-08 | A5             | 21                | 9.7                | 210                | 21             | 25(2550)            | 74.5(7600)   | 4750              | 0.14   | 24            | 28                           | RK-125(N)<br>RA-220<br>0.5(5) | 2.3(23)<br>0.5(5) |
| 3P-08 | A6             | 21                | 9.7                | 210                | 21             | 25(2550)            | 74.5(7600)   | 4750              | 0.14   | 24            | 27                           | RK-125(N)<br>RA-220<br>0.5(5) | 2.3(23)<br>0.5(5) |
| 3P-10 | A6             | 25                | 8.8                | 254                | 24             | 28.9(2950)          | 107.8(11000) | 4000              | 0.3    | 35            | 42                           | RK-125(N)<br>RA-220<br>0.6(6) | 2.6(26)<br>0.6(6) |
| 3P-10 | A8             | 25                | 8.8                | 254                | 24             | 28.9(2950)          | 107.8(11000) | 4000              | 0.3    | 35            | 40                           | RK-125(N)<br>RA-220<br>0.6(6) | 2.6(26)<br>0.6(6) |
| 3P-12 | A6             | 30                | 10.5               | 304                | 24             | 41(4180)            | 155.8(15900) | 3360              | 0.73   | 59            | 65                           | RK-150(N)<br>RA-270<br>0.8(8) | 2.6(26)<br>0.8(8) |
| 3P-12 | A8             | 30                | 10.5               | 304                | 24             | 41(4180)            | 155.8(15900) | 3360              | 0.73   | 59            | 63                           | RK-150(N)<br>RA-270<br>0.8(8) | 2.6(26)<br>0.8(8) |

### DIMENSIONS

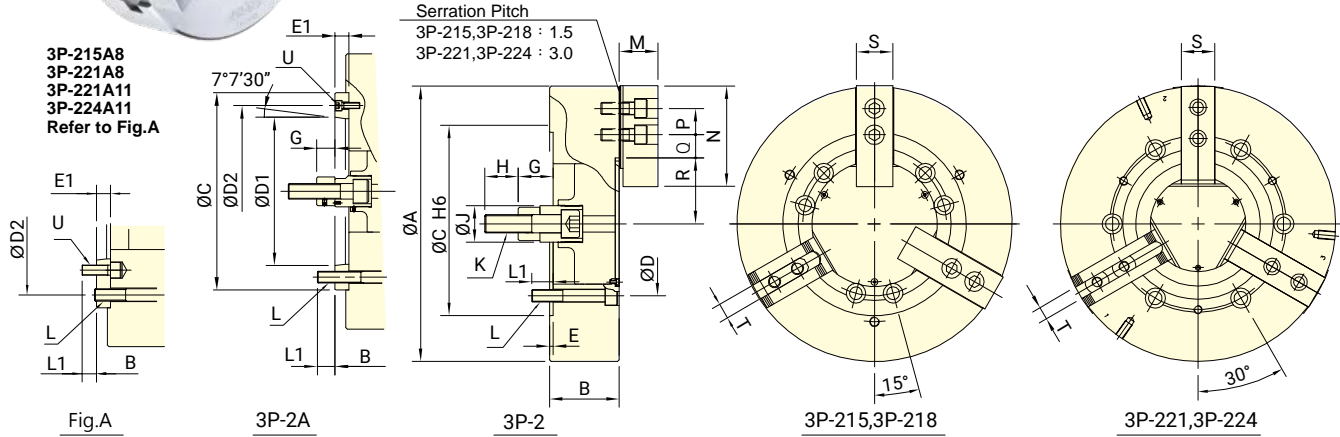
| Model | A   | B   | C   | D   | D1    | D2     | E     | E1 | F  | G max. | G min. | H    | J    |      |    |    |
|-------|-----|-----|-----|-----|-------|--------|-------|----|----|--------|--------|------|------|------|----|----|
| 3P-04 | 110 | 52  | -   | 60  | 80    | -      | 6     | -  | -  | 18     | -      | 25   | 26   |      |    |    |
| 3P-05 | 135 | 55  | -   | 80  | 100   | -      | 7     | -  | -  | 9      | -      | 35   | 28   |      |    |    |
| 3P-06 | A5  | 74  | 84  | 140 | 104.8 | 82.56  | 116   | 5  | 15 | 21     | 102.6  | 87.6 | 82.6 | 67.6 | 35 | 34 |
| 3P-08 | A5  | 85  | 103 | 170 | 133.4 | 82.56  | 104.8 | 5  | 23 | 25     | 127    | 104  | 106  | 83   | 36 | 38 |
| 3P-08 | A6  | 85  | 97  | 170 | 133.4 | 106.38 | 150   | 5  | 17 | 25     | 127    | 110  | 106  | 89   | 36 | 38 |
| 3P-10 | A6  | 89  | 109 | 220 | 171.4 | 106.38 | 133.4 | 5  | 25 | 34     | 158    | 133  | 133  | 108  | 36 | 45 |
| 3P-10 | A8  | 89  | 102 | 220 | 171.4 | 139.72 | 190   | 5  | 18 | 34     | 158    | 140  | 133  | 115  | 36 | 45 |
| 3P-12 | A6  | 106 | 125 | 220 | 171.4 | 106.38 | 133.4 | 6  | 25 | 34     | 163    | 138  | 133  | 108  | 36 | 50 |
| 3P-12 | A8  | 106 | 118 | 220 | 171.4 | 139.72 | 190   | 6  | 18 | 34     | 163    | 145  | 133  | 115  | 36 | 50 |

| Model | K        | L       | L1    | M  | N  | P  | Q max. | Q min. | R max. | R min. | S     | T     | U  |          |       |
|-------|----------|---------|-------|----|----|----|--------|--------|--------|--------|-------|-------|----|----------|-------|
| 3P-04 | M10x1.5  | 3~M8    | 12    | -  | 24 | 52 | 14     | 11.2   | 6.7    | 23.6   | 20.15 | 23    | 10 | -        |       |
| 3P-05 | M12x1.75 | 3~M8    | 14    | -  | 31 | 62 | 14     | 15.7   | 5.2    | 30.4   | 26.95 | 25    | 10 | -        |       |
| 3P-06 | A5       | M16x2   | 6~M10 | 14 | 14 | 37 | 73     | 20     | 18.25  | 9.25   | 38.25 | 33.65 | 31 | 12       | 3~M6  |
| 3P-08 | A5       | M20x2.5 | 6~M12 | 20 | 17 | 38 | 95     | 25     | 25.25  | 11.75  | 46.3  | 41.45 | 35 | 14       | 6~M10 |
| 3P-08 | A6       | M20x2.5 | 6~M12 | 20 | 18 | 38 | 95     | 25     | 25.25  | 11.75  | 46.3  | 41.45 | 35 | 14       | 3~M6  |
| 3P-10 | A6       | M20x2.5 | 6~M16 | 18 | 18 | 43 | 110    | 30     | 35.25  | 12.75  | 51.1  | 46.7  | 40 | 16       | 6~M12 |
| 3P-10 | A8       | M20x2.5 | 6~M16 | 18 | 25 | 43 | 110    | 30     | 35.25  | 12.75  | 51.1  | 46.7  | 40 | 16       | 3~M8  |
| 3P-12 | A6       | M20x2.5 | 6~M16 | 18 | 18 | 51 | 130    | 30     | 48.75  | 12.75  | 61    | 55.75 | 50 | 18 or 21 | 6~M12 |
| 3P-12 | A8       | M20x2.5 | 6~M16 | 18 | 25 | 51 | 130    | 30     | 48.75  | 12.75  | 61    | 55.75 | 50 | 18 or 21 | 3~M8  |

The dimensions and the specifications of 3P-A type are in red data.



- WEDGE-HOOK type 3-jaw power chuck.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.



Subject to technical changes

### SPECIFICATIONS

| Model  | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed   | Moment of inertia | Weight |       | Matching cyl. | Max. pres-<br>sure  |         |
|--------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|--------------|-------------------|--------|-------|---------------|---------------------|---------|
|        |                |                   |                    |                    |                |                     |              |                   | mm     | mm    |               |                     | mm      |
| 3P-215 | A8             | 35                | 16                 | 381                | 50             | 82(8360)            | 249(25390)   | 3000              | 1.8    | 109.9 | 122.4         | RH-200 or RK-200(N) | 2.8(28) |
| 3P-215 | A11            | 35                | 16                 | 381                | 50             | 82(8360)            | 249(25390)   | 3000              | 1.8    | 109.9 | 116           | RH-200 or RK-200(N) | 2.8(28) |
| 3P-218 | A11            | 35                | 16                 | 450                | 60             | 82(8360)            | 249(25400)   | 2800              | 2.32   | 124   | 130           | RH-200 or RK-200(N) | 2.8(28) |
| 3P-221 | A8             | 35                | 16                 | 530                | 59             | 82(8360)            | 272.6(27800) | 1900              | 4.9    | 177   | 200           | RH-200 or RK-200(N) | 2.8(28) |
| 3P-221 | A11            | 35                | 16                 | 530                | 59             | 82(8360)            | 272.6(27800) | 1900              | 4.9    | 177   | 194           | RH-200 or RK-200(N) | 2.8(28) |
| 3P-224 | A11            | 35                | 16                 | 610                | 152            | 82(8360)            | 272.6(27800) | 1750              | 7      | 230   | 246.28        | RH-200 or RK-200(N) | 2.8(28) |
| 3P-224 | A15            | 35                | 16                 | 610                | 152            | 82(8360)            | 272.6(27800) | 1750              | 7      | 230   | 238.6         | RH-200 or RK-200(N) | 2.8(28) |

### DIMENSIONS

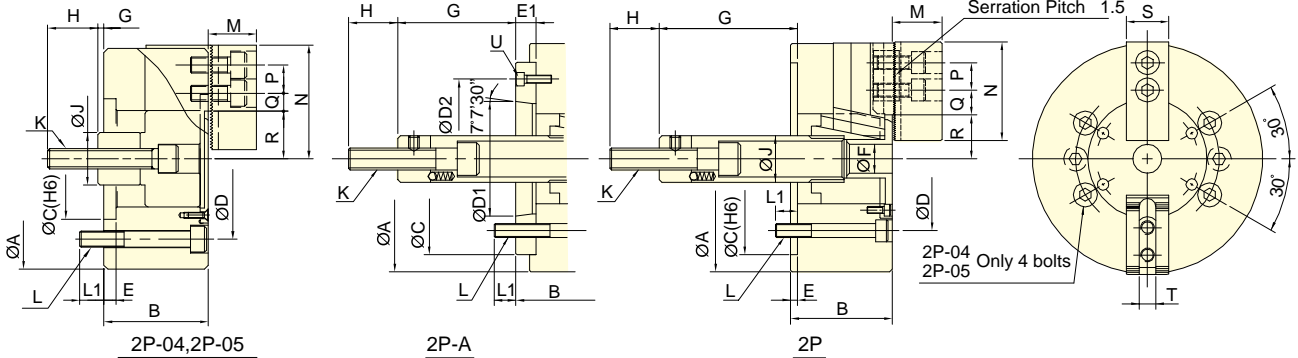
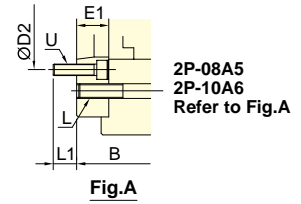
| Model      | A   | B   | C   | D   | D1    | D2     | E     | E1 | G max. | G min. | H  | J  | K  |    |    |         |
|------------|-----|-----|-----|-----|-------|--------|-------|----|--------|--------|----|----|----|----|----|---------|
| 3P-215 A8  | 381 | 114 | 141 | 300 | 235   | 139.72 | 171.4 | 6  | 33     | 104    | 71 | 69 | 36 | 55 | 60 | M30x3.5 |
| 3P-215 A11 | 381 | 114 | 130 | 300 | 235   | 196.87 | 260   | 6  | 22     | 104    | 82 | 69 | 47 | 55 | 60 | M30x3.5 |
| 3P-218 A11 | 450 | 114 | 130 | 300 | 235   | 196.87 | 260   | 6  | 22     | 92     | 70 | 57 | 35 | 55 | 60 | M30x3.5 |
| 3P-221 A8  | 530 | 125 | 152 | 380 | 330.2 | 139.72 | 171.4 | 6  | 33     | 97     | 64 | 62 | 29 | 55 | 60 | M30x3.5 |
| 3P-221 A11 | 530 | 125 | 146 | 380 | 330.2 | 196.87 | 235   | 6  | 27     | 97     | 70 | 62 | 35 | 55 | 60 | M30x3.5 |
| 3P-224 A11 | 610 | 125 | 146 | 380 | 330.2 | 196.87 | 235   | 6  | 27     | 97     | 70 | 62 | 35 | 55 | 60 | M30x3.5 |
| 3P-224 A15 | 610 | 125 | 146 | 380 | 330.2 | 285.78 | 330.2 | 6  | 27     | 97     | 70 | 62 | 35 | 55 | 60 | M30x3.5 |

| Model      | L     | L1 | M  | N    | P   | Q max. | Q min. | R max. | R min. | S    | T  | U    |       |
|------------|-------|----|----|------|-----|--------|--------|--------|--------|------|----|------|-------|
| 3P-215 A8  | 6-M20 | 30 | 24 | 63.3 | 165 | 43     | 51.25  | 18.25  | 77.5   | 69.5 | 62 | 25.5 | 6-M16 |
| 3P-215 A11 | 6-M20 | 30 | 33 | 63.3 | 165 | 43     | 51.25  | 18.25  | 77.5   | 69.5 | 62 | 25.5 | 3-M10 |
| 3P-218 A11 | 6-M20 | 35 | 33 | 63.3 | 165 | 43     | 52.75  | 18.25  | 108    | 100  | 62 | 25.5 | 3-M10 |
| 3P-221 A8  | 6-M24 | 31 | 24 | 71   | 180 | 60     | 96.5   | 24.5   | 86     | 78   | 64 | 25   | 6-M16 |
| 3P-221 A11 | 6-M24 | 31 | 28 | 71   | 180 | 60     | 96.5   | 24.5   | 86     | 78   | 64 | 25   | 6-M20 |
| 3P-224 A11 | 6-M24 | 31 | 28 | 71   | 180 | 60     | 96.5   | 24.5   | 125    | 117  | 64 | 25   | 6-M20 |
| 3P-224 A15 | 6-M24 | 31 | 34 | 71   | 180 | 60     | 96.5   | 24.5   | 125    | 117  | 64 | 25   | 3-M12 |

The dimensions and the specifications of 3P-A type are in red data.



- WEDGE-HOOK type 2-jaw power chuck.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.



Subject to technical changes

### SPECIFICATIONS

| Model | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |                   |
|-------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|-------------------|
|       | mm             | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |                   |
| 2P-04 | 15             | 6.9               | 110                | 5                  | 5.3(540)       | 14.7(1500)          | 6000                       | 0.01              | 3.8    | -             | 1.5(15)<br>0.4(4)          |                   |
| 2P-05 | 15             | 6.9               | 135                | 14                 | 5.3(540)       | 16.7(1700)          | 5500                       | 0.02              | 5.8    | -             | 1.5(15)<br>0.4(4)          |                   |
| 2P-06 | A5             | 20                | 9.2                | 165                | 14             | 12(1220)            | 35(3570)                   | 5250              | 0.04   | 12            | 13                         | 1.7(17)<br>0.4(4) |
| 2P-08 | A5             | 21                | 9.7                | 210                | 17             | 16.5(1680)          | 50(5100)                   | 4750              | 0.13   | 22            | 26                         | 1.5(15)<br>0.4(4) |
| 2P-08 | A6             | 21                | 9.7                | 210                | 17             | 16.5(1680)          | 50(5100)                   | 4750              | 0.13   | 22            | 25                         | 1.5(15)<br>0.4(4) |
| 2P-10 | A6             | 25                | 8.8                | 254                | 22             | 19.4(1980)          | 71.5(7300)                 | 4000              | 0.29   | 33            | 42                         | 1.8(18)<br>0.4(4) |
| 2P-10 | A8             | 25                | 8.8                | 254                | 22             | 19.4(1980)          | 71.5(7300)                 | 4000              | 0.29   | 33            | 40                         | 1.8(18)<br>0.4(4) |
| 2P-12 | A8             | 30                | 10.5               | 304                | 22             | 27.4(2800)          | 103.9(10600)               | 3360              | 0.70   | 57            | 61                         | 1.7(17)           |
| 2P-15 | A11            | 35                | 16                 | 381                | 50             | 54.9(5600)          | 164.6(16800)               | 3000              | 1.70   | 96            | 103                        | 1.9(19)           |

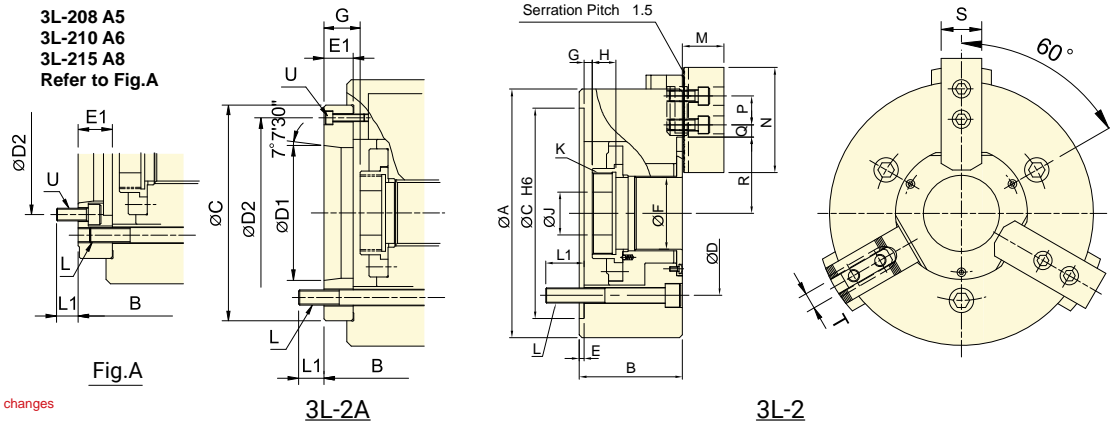
### DIMENSIONS

| Model | A   | B   | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H     | J    |
|-------|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|-------|------|
| 2P-04 | 110 | 52  | -   | 60  | 80  | -     | -      | 6     | - | 18     | -      | 3     | 25   |
| 2P-05 | 135 | 55  | -   | 80  | 100 | -     | -      | 7     | - | 9      | -      | 6     | 35   |
| 2P-06 | A5  | 165 | 74  | 84  | 140 | 104.8 | 82.56  | 116   | 5 | 15     | 21     | 102.6 | 87.6 |
| 2P-08 | A5  | 210 | 85  | 103 | 170 | 133.4 | 82.56  | 104.8 | 5 | 23     | 25     | 127   | 104  |
| 2P-08 | A6  | 210 | 85  | 97  | 170 | 133.4 | 106.38 | 150   | 5 | 17     | 25     | 127   | 110  |
| 2P-10 | A6  | 254 | 89  | 109 | 220 | 171.4 | 106.38 | 133.4 | 5 | 25     | 34     | 158   | 133  |
| 2P-10 | A8  | 254 | 89  | 102 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 34     | 158   | 140  |
| 2P-12 | A8  | 304 | 106 | 118 | 220 | 171.4 | 139.72 | 190   | 6 | 18     | 34     | 163   | 145  |
| 2P-15 | A11 | 381 | 114 | 130 | 300 | 235   | 196.87 | 260   | 6 | 22     | -      | 104   | 82   |

| Model | K              | L     | L1 | M  | N  | P   | Q max. | Q min. | R max. | R min. | S     | T  | U        |
|-------|----------------|-------|----|----|----|-----|--------|--------|--------|--------|-------|----|----------|
| 2P-04 | M10x1.5        | 4~M8  | 12 | -  | 24 | 52  | 11.3   | 8.3    | 23.3   | 20.15  | 23    | 10 | -        |
| 2P-05 | M12x1.75       | 4~M8  | 14 | -  | 31 | 62  | 14     | 13.5   | 30.4   | 26.95  | 25    | 10 | -        |
| 2P-06 | A5<br>M16x2    | 6~M10 | 14 | 14 | 37 | 73  | 20     | 18.25  | 9.25   | 38.25  | 33.65 | 31 | 12       |
| 2P-08 | A5<br>M20x2.5  | 6~M12 | 20 | 17 | 38 | 95  | 25     | 22.3   | 11.8   | 46.3   | 41.45 | 35 | 14       |
| 2P-08 | A6<br>M20x2.5  | 6~M12 | 20 | 18 | 38 | 95  | 25     | 22.3   | 11.8   | 46.3   | 41.45 | 35 | 14       |
| 2P-10 | A6<br>M20x2.5  | 6~M16 | 18 | 18 | 43 | 110 | 30     | 30.8   | 11.3   | 51.1   | 46.7  | 40 | 16       |
| 2P-10 | A8<br>M20x2.5  | 6~M16 | 18 | 25 | 43 | 110 | 30     | 30.8   | 11.3   | 51.1   | 46.7  | 40 | 16       |
| 2P-12 | A8<br>M20x2.5  | 6~M16 | 18 | 25 | 51 | 130 | 30     | 48.5   | 12.5   | -      | -     | 50 | 18 or 21 |
| 2P-15 | A11<br>M30x3.5 | 6~M20 | 30 | 33 | 63 | 165 | 43     | 48.8   | 23.3   | 77.5   | 69.5  | 62 | 25.5     |



- CRANK type 3-jaw with the large through-hole and extra long jaw stroke.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.
- J is the hole diameter of blank draw nut .  
K is the maximum thread specification and it could be customize.



Subject to technical changes

### SPECIFICATIONS

| Model  | Thru-hole (Dia.) | Plunger stroke | Jaw stroke (Dia.) | Chuck Dia. Max. | Chuck Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed | Moment of inertia | Weight | Matching cyl. | Max. pressure |             |         |
|--------|------------------|----------------|-------------------|-----------------|-----------------|----------------|---------------------|------------|-------------------|--------|---------------|---------------|-------------|---------|
|        |                  |                |                   |                 |                 |                |                     |            |                   |        |               |               | mm          | mm      |
| 3L-205 | A4               | 32             | 12                | 18              | 138             | 6              | 15.6(1590)          | 17.2(1750) | 4200              | 0.019  | 7.2           | 8             | TK-A533     | 2.3(23) |
| 3L-206 | A5               | 45             | 15                | 24              | 170             | 24             | 23.5(2400)          | 26.0(2650) | 3600              | 0.063  | 14.7          | 15.9          | TK-C646     | 2.7(27) |
| 3L-208 | A5               | 52             | 20                | 32              | 215             | 30             | 34.3(3500)          | 35.0(3570) | 3000              | 0.18   | 23            | 25.7          | TK-A853     | 2.8(28) |
| 3L-208 | A6               | 52             | 20                | 32              | 215             | 30             | 34.3(3500)          | 35.0(3570) | 3000              | 0.18   | 23            | 24.6          | TK-A853     | 2.8(28) |
| 3L-210 | A6               | 75             | 25                | 37.5            | 260             | 53             | 47.7(4870)          | 48.0(4895) | 2400              | 0.35   | 39.5          | 46.5          | TK-A1075    | 3.1(31) |
| 3L-210 | A8               | 75             | 25                | 37.5            | 260             | 53             | 47.7(4870)          | 48.0(4895) | 2400              | 0.35   | 39.5          | 45            | TK-A1075    | 3.1(31) |
| 3L-212 | A8               | 91             | 30                | 45              | 315             | 61             | 64.7(6600)          | 61.0(6220) | 2100              | 0.827  | 67.3          | 70.5          | TK-A1291    | 3.0(30) |
| 3L-215 | A8               | 120            | 35                | 52              | 405             | 52             | 84.3(8600)          | 85.0(8665) | 1600              | 2.58   | 139           | 152           | TK-A1512-35 | 2.7(27) |
| 3L-215 | A11              | 120            | 35                | 52              | 405             | 52             | 84.3(8600)          | 85.0(8665) | 1600              | 2.58   | 139           | 145           | TK-A1512-35 | 2.7(27) |

### DIMENSIONS

| Model  | A   | B   | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H    | J    |       |      |    |    |
|--------|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|------|------|-------|------|----|----|
| 3L-205 | A4  | 138 | 65  | 76  | 110 | 82.6  | 63.51  | 96    | 4 | 15     | 32     | 1    | 15   | -11   | 3    | 20 | 12 |
| 3L-206 | A5  | 170 | 84  | 97  | 140 | 104.8 | 82.56  | 116   | 5 | 18     | 45     | 6.5  | 24.5 | -8.5  | 9.5  | 19 | 20 |
| 3L-208 | A5  | 215 | 96  | 114 | 170 | 133.4 | 82.56  | 104.8 | 5 | 23     | 52     | 7    | 30   | -13   | 10   | 20 | 30 |
| 3L-208 | A6  | 215 | 96  | 114 | 170 | 133.4 | 106.38 | 150   | 5 | 23     | 52     | 7    | 30   | -13   | 10   | 20 | 30 |
| 3L-210 | A6  | 260 | 108 | 128 | 220 | 171.4 | 106.38 | 133.4 | 5 | 25     | 75     | 8.5  | 33   | -16.5 | 8    | 25 | 45 |
| 3L-210 | A8  | 260 | 108 | 121 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 75     | 8.5  | 26.5 | -16.5 | 1.5  | 25 | 45 |
| 3L-212 | A8  | 315 | 125 | 138 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 91     | 15   | 33   | -15   | 3    | 30 | 50 |
| 3L-215 | A8  | 405 | 150 | 177 | 300 | 235   | 139.72 | 171.4 | 6 | 33     | 120    | 12.5 | 45.5 | -22.5 | 10.5 | 39 | 60 |
| 3L-215 | A11 | 405 | 150 | 166 | 300 | 235   | 196.87 | 260   | 6 | 22     | 120    | 12.5 | 34.5 | -22.5 | -0.5 | 39 | 60 |

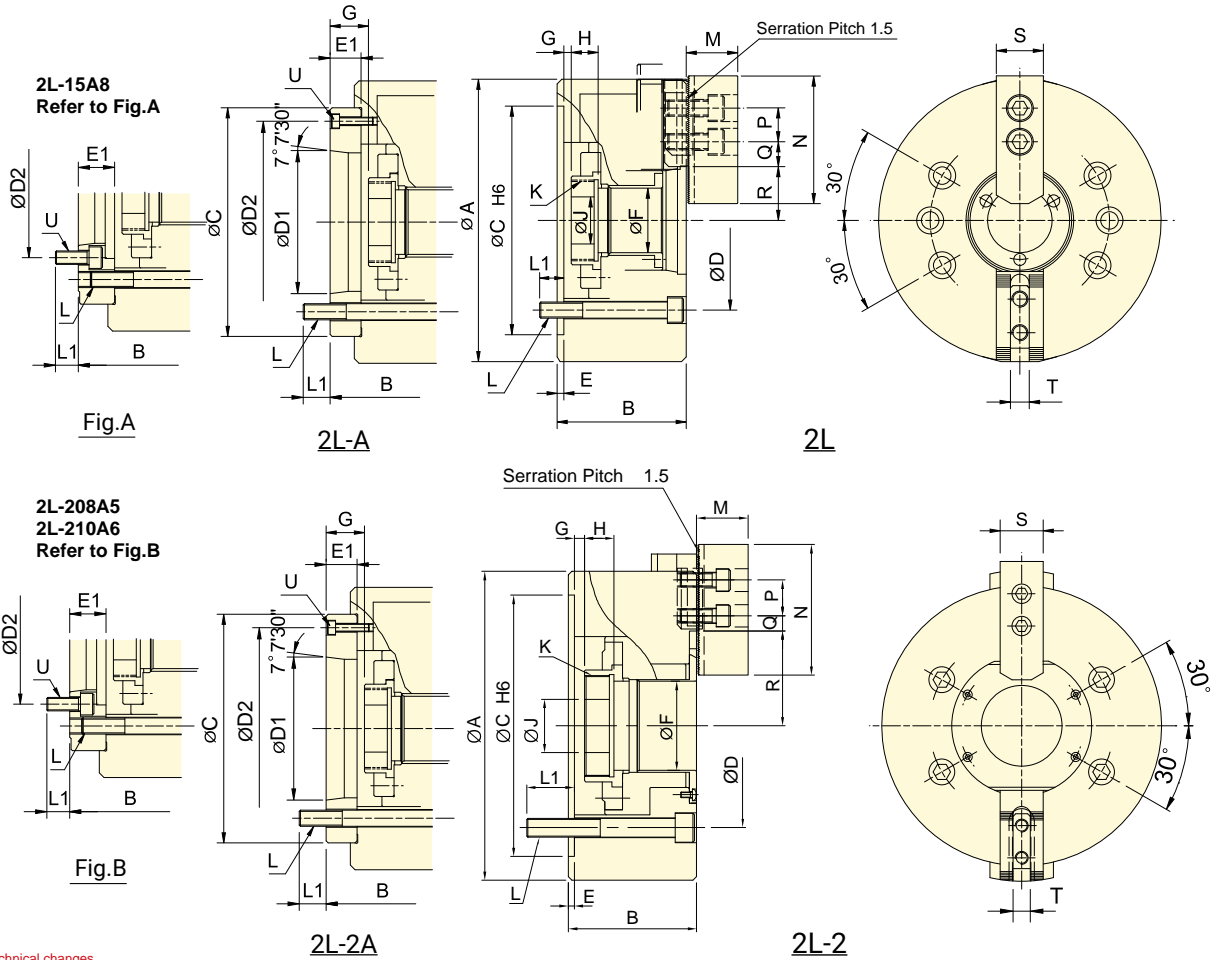
| Model  | K max. | L       | L1    | M     | N    | P  | Q max. | Q min. | R max. | R min. | S     | T     | U     |      |       |       |
|--------|--------|---------|-------|-------|------|----|--------|--------|--------|--------|-------|-------|-------|------|-------|-------|
| 3L-205 | A4     | M40x1.5 | 3~M10 | 15    | 15   | 31 | 62     | 14     | 15.75  | 5.25   | 38.5  | 29.5  | 25    | 10   | 3~M6  |       |
| 3L-206 | A5     | M55x2   | 3~M10 | 18    | 15   | 37 | 73     | 20     | 15.25  | 7.75   | 51    | 39    | 31    | 12   | 3~M6  |       |
| 3L-208 | A5     | M60x2   | 3~M12 | 18    | 19   | 38 | 95     | 25     | 19.25  | 10.25  | 63.5  | 47.5  | 35    | 14   | 6~M10 |       |
| 3L-208 | A6     | M60x2   | 3~M12 | 18    | 20   | 38 | 95     | 25     | 19.25  | 10.25  | 63.5  | 47.5  | 35    | 14   | 3~M6  |       |
| 3L-210 | A6     | M85x2   | M60x2 | 3~M16 | 24   | 20 | 43     | 110    | 30     | 24.75  | 11.25 | 80    | 61.25 | 40   | 16    | 3~M12 |
| 3L-210 | A8     | M85x2   | 3~M16 | 24    | 21   | 43 | 110    | 30     | 24.75  | 11.25  | 80    | 61.25 | 40    | 16   | 3~M8  |       |
| 3L-212 | A8     | M100x2  | 3~M16 | 24    | 21   | 51 | 130    | 30     | 29.75  | 13.25  | 96.5  | 74    | 50    | 21   | 3~M8  |       |
| 3L-215 | A8     | M130x2  | 6~M20 | 33    | 27.5 | 63 | 165    | 43     | 34.75  | 13.75  | 119   | 93    | 62    | 25.5 | 6~M16 |       |
| 3L-215 | A11    | M130x2  | 6~M20 | 33    | 31   | 63 | 165    | 43     | 34.75  | 13.75  | 119   | 93    | 62    | 25.5 | 3~M10 |       |

The dimensions and the specifications of 3L-A type are in red data.



- CRANK type 2-jaw with the large through-hole and extra long jaw stroke.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.
- J is the hole diameter of blank draw nut, K is the maximum thread specification and it could be customize.

POWER CHUCKS



Subject to technical changes

### SPECIFICATIONS

| Model  | Thru-hole (Dia.)<br>mm | Plunger stroke<br>mm | Jaw stroke (Dia.)<br>mm | Chuck Dia. Max.<br>mm | Chuck Dia. Min.<br>mm | Max. D.B. pull<br>kN (kgf) | Max. Clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg | Matching cyl. | Max. pressure              |             |         |
|--------|------------------------|----------------------|-------------------------|-----------------------|-----------------------|----------------------------|---------------------------------|--|--|--------------|---------------|----------------------------|-------------|---------|
|        |                        |                      |                         |                       |                       |                            |                                 |  |  |              |               | MPa (kgf/cm <sup>2</sup> ) |             |         |
| 2L-205 | A4                     | 32                   | 12                      | 18                    | 138                   | 6                          | 10.4(1060)                      | 11.4(1170)                               | 4200                                   | 0.018        | 6.9           | 7.7                        | TK-A533     | 1.5(15) |
| 2L-206 | A5                     | 45                   | 15                      | 24                    | 170                   | 24                         | 15.7(1600)                      | 17.3(1760)                               | 3600                                   | 0.063        | 14.4          | 15.6                       | TK-C646     | 1.8(18) |
| 2L-208 | A5                     | 52                   | 20                      | 32                    | 215                   | 30                         | 22.9(2330)                      | 27.1(2760)                               | 3000                                   | 0.173        | 22            | 26                         | TK-A853     | 1.9(19) |
| 2L-208 | A6                     | 52                   | 20                      | 32                    | 215                   | 30                         | 22.9(2330)                      | 27.1(2760)                               | 3000                                   | 0.173        | 22            | 24.2                       | TK-A853     | 1.9(19) |
| 2L-210 | A6                     | 75                   | 25                      | 37.5                  | 260                   | 53                         | 31.8(3250)                      | 37.3(3800)                               | 2400                                   | 0.33         | 40            | 45.5                       | TK-A1075    | 2.1(21) |
| 2L-210 | A8                     | 75                   | 25                      | 37.5                  | 260                   | 53                         | 31.8(3250)                      | 37.3(3800)                               | 2400                                   | 0.33         | 40            | 44                         | TK-A1075    | 2.1(21) |
| 2L-12  | A8                     | 91                   | 30                      | 45                    | 304                   | 30                         | 43.1(4400)                      | 50.0(5100)                               | 2100                                   | 0.8          | 60            | 65.5                       | TK-A1291    | 2.0(20) |
| 2L-15  | A8                     | 120                  | 35                      | 52                    | 385                   | 26                         | 56.2(5730)                      | 53.0(5400)                               | 1600                                   | 2.52         | 133           | 147                        | TK-A1512-35 | 1.8(18) |
| 2L-15  | A11                    | 120                  | 35                      | 52                    | 385                   | 26                         | 56.2(5730)                      | 53.0(5400)                               | 1600                                   | 2.52         | 133           | 140                        | TK-A1512-35 | 1.8(18) |

The dimensions and the specifications of 2L-A type are in red data.

## DIMENSIONS

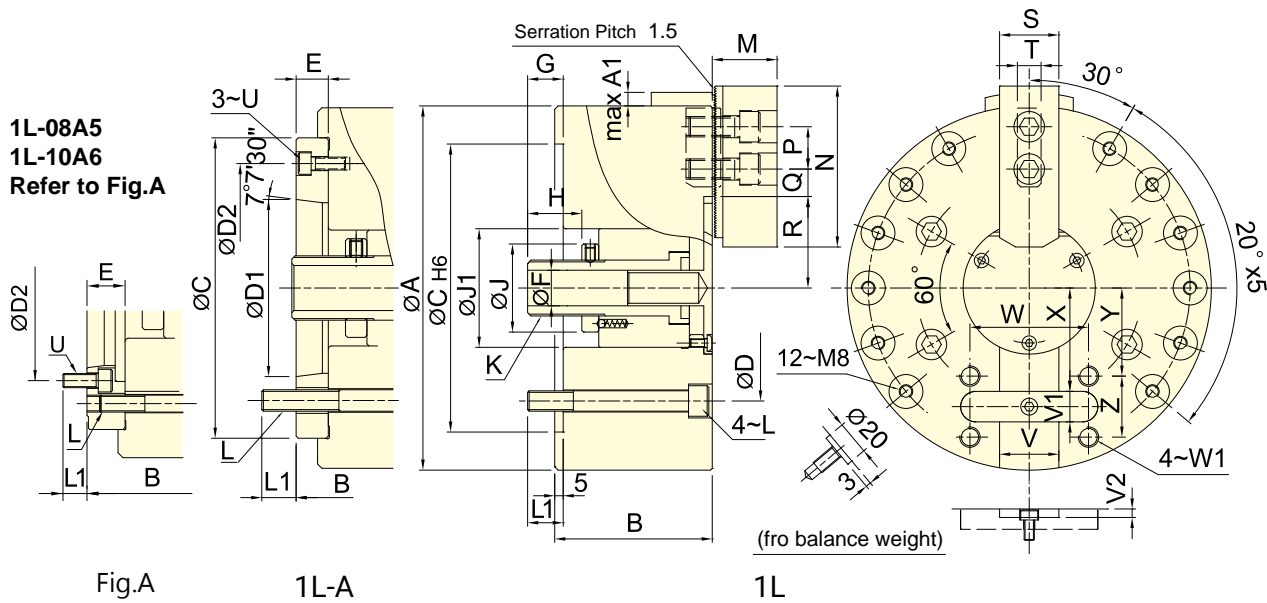
| Model  | A   | B   | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H    | J    |       |      |    |    |
|--------|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|------|------|-------|------|----|----|
| 2L-205 | A4  | 138 | 65  | 76  | 110 | 82.6  | 63.51  | 96    | 4 | 15     | 32     | 1    | 15   | -11   | 3    | 20 | 12 |
| 2L-206 | A5  | 170 | 84  | 97  | 140 | 104.8 | 82.56  | 116   | 5 | 18     | 45     | 6.5  | 24.5 | -8.5  | 9.5  | 19 | 20 |
| 2L-208 | A5  | 215 | 96  | 114 | 170 | 133.4 | 82.56  | 104.8 | 5 | 23     | 52     | 7    | 30   | -13   | 10   | 20 | 30 |
| 2L-208 | A6  | 215 | 96  | 114 | 170 | 133.4 | 106.38 | 150   | 5 | 23     | 52     | 7    | 30   | -13   | 10   | 20 | 30 |
| 2L-210 | A6  | 260 | 108 | 128 | 220 | 171.4 | 106.38 | 133.4 | 5 | 25     | 75     | 8.5  | 33   | -16.5 | 8    | 25 | 45 |
| 2L-210 | A8  | 260 | 108 | 121 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 75     | 8.5  | 26.5 | -16.5 | 1.5  | 25 | 45 |
| 2L-12  | A8  | 304 | 127 | 140 | 220 | 171.4 | 139.72 | 190   | 5 | 18     | 91     | 15   | 33   | -15   | 3    | 28 | 50 |
| 2L-15  | A8  | 385 | 150 | 177 | 300 | 235   | 139.72 | 171.4 | 6 | 33     | 120    | 12.5 | 45.5 | -22.5 | 10.5 | 39 | 60 |
| 2L-15  | A11 | 385 | 150 | 166 | 300 | 235   | 196.87 | 260   | 6 | 22     | 120    | 12.5 | 34.5 | -22.5 | -0.5 | 39 | 60 |

| Model  | K max. | L       | L1    | M     | N    | P  | Q max. | Q min. | R max. | R min. | S     | T     | U     |      |       |       |
|--------|--------|---------|-------|-------|------|----|--------|--------|--------|--------|-------|-------|-------|------|-------|-------|
| 2L-205 | A4     | M40x1.5 | 4~M10 | 15    | 15   | 31 | 62     | 14     | 15.75  | 5.25   | 38.5  | 29.5  | 25    | 10   | 3~M6  |       |
| 2L-206 | A5     | M55x2   | 4~M10 | 18    | 15   | 37 | 73     | 20     | 15.25  | 7.75   | 51    | 39    | 31    | 12   | 3~M6  |       |
| 2L-208 | A5     | M60x2   | 4~M12 | 18    | 19   | 38 | 95     | 25     | 19.25  | 10.25  | 63.5  | 47.5  | 35    | 14   | 6~M10 |       |
| 2L-208 | A6     | M60x2   | 4~M12 | 18    | 20   | 38 | 95     | 25     | 19.25  | 10.25  | 63.5  | 47.5  | 35    | 14   | 3~M6  |       |
| 2L-210 | A6     | M85x2   | M60x2 | 4~M16 | 24   | 20 | 43     | 110    | 30     | 24.75  | 11.25 | 80    | 61.25 | 40   | 16    | 6~M12 |
| 2L-210 | A8     | M85x2   | 4~M16 | 24    | 21   | 43 | 110    | 30     | 24.75  | 11.25  | 80    | 61.25 | 40    | 16   | 3~M8  |       |
| 2L-12  | A8     | M100x2  | 6~M16 | 22    | 19   | 51 | 130    | 30     | 46.25  | 19.25  | 77    | 54.5  | 50    | 21   | 3~M8  |       |
| 2L-15  | A8     | M130x2  | 6~M20 | 33    | 27.5 | 63 | 165    | 43     | 51.25  | 27.25  | 94.25 | 68.25 | 62    | 25.5 | 6~M16 |       |
| 2L-15  | A11    | M130x2  | 6~M20 | 33    | 31   | 63 | 165    | 43     | 51.25  | 27.25  | 94.25 | 68.25 | 62    | 25.5 | 3~M10 |       |



- CRANK type single-jaw with the large through-hole and extra long jaw stroke.
- Suitable for clamping the jig or irregular work piece.
- High rigidity and high clamping accuracy.

1L-08A5  
1L-10A6  
Refer to Fig.A



Subject to technical changes

### SPECIFICATIONS

| Model | Plunger stroke | Jaw stroke | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed | Moment of inertia | Weight |      | Matching cyl. | Max. pressure |           |
|-------|----------------|------------|--------------------|--------------------|----------------|---------------------|------------|-------------------|--------|------|---------------|---------------|-----------|
|       |                |            |                    |                    |                |                     |            |                   | mm     | mm   |               |               | mm        |
| 1L-06 | A5             | 20         | 16                 | 168                | 5              | 12.3(1250)          | 27.3(2780) | 3800              | 0.05   | 12.5 | 14.3          | RK-100        | 1.7(17.5) |
| 1L-08 | A5             | 25         | 20                 | 215                | 7              | 15.7(1600)          | 37.2(3800) | 3000              | 0.15   | 24.2 | 27.1          | RK-125        | 1.4(14.3) |
| 1L-08 | A6             | 25         | 20                 | 215                | 7              | 15.7(1600)          | 37.2(3800) | 3000              | 0.15   | 24.2 | 25.3          | RK-125        | 1.4(14.3) |
| 1L-10 | A6             | 30         | 24                 | 254                | 17             | 21.6(2200)          | 48.5(4950) | 2400              | 0.28   | 38.8 | 46            | RK-150        | 1.3(13.7) |
| 1L-10 | A8             | 30         | 24                 | 254                | 17             | 21.6(2200)          | 48.5(4950) | 2400              | 0.28   | 38.8 | 44.3          | RK-150        | 1.3(13.7) |

### DIMENSIONS

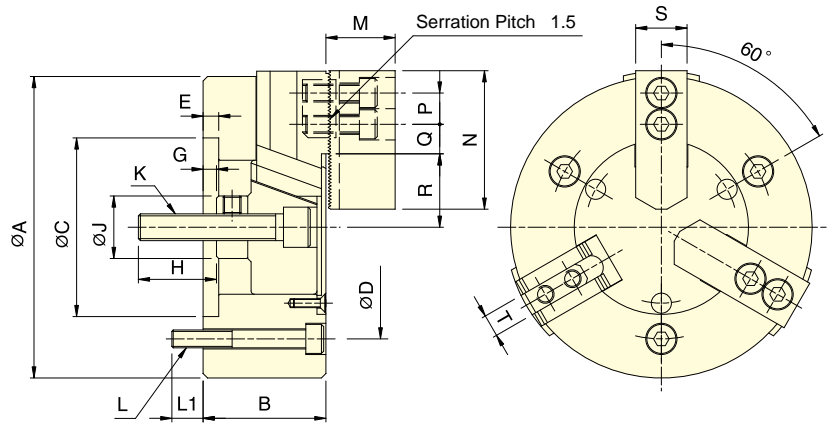
| Model | A  | A1  | B    | C   | D   | D1  | D2    | E      | F     | G max. | G min. | H  | J  | J1 | K max. | L  | L1      |     |    |    |
|-------|----|-----|------|-----|-----|-----|-------|--------|-------|--------|--------|----|----|----|--------|----|---------|-----|----|----|
| 1L-06 | A5 | 168 | 9.5  | 80  | 90  | 140 | 104.8 | 82.56  | 116   | 15     | 21     | 37 | 17 | 25 | 46     | 54 | M30x1.5 | M10 | 16 | 16 |
| 1L-08 | A5 | 215 | 8    | 93  | 111 | 170 | 133.4 | 82.56  | 104.8 | 23     | 21     | 46 | 21 | 32 | 52     | 70 | M33x1.5 | M12 | 21 | 19 |
| 1L-08 | A6 | 215 | 8    | 93  | 105 | 170 | 133.4 | 106.38 | 150   | 17     | 21     | 46 | 21 | 32 | 52     | 70 | M33x1.5 | M12 | 21 | 20 |
| 1L-10 | A6 | 254 | 13.5 | 108 | 128 | 220 | 171.4 | 106.38 | 133.4 | 25     | 30     | 47 | 17 | 30 | 62     | 90 | M45x1.5 | M16 | 25 | 20 |
| 1L-10 | A8 | 254 | 13.5 | 108 | 121 | 220 | 171.4 | 139.72 | 190   | 18     | 30     | 47 | 17 | 30 | 62     | 90 | M45x1.5 | M16 | 25 | 27 |

| Model | M  | N  | P   | Q max. | Q min. | R max. | R min. | S  | T  | U  | V(H6) | V1(h9) | V2 | W   | W1 | X   | Y    | Z    |    |
|-------|----|----|-----|--------|--------|--------|--------|----|----|----|-------|--------|----|-----|----|-----|------|------|----|
| 1L-06 | A5 | 37 | 73  | 20     | 19.75  | 7.75   | 46     | 30 | 31 | 12 | M6    | 30     | 15 | 4.5 | 64 | M10 | 44.5 | 36   | 30 |
| 1L-08 | A5 | 38 | 95  | 25     | 25.25  | 10.25  | 54     | 34 | 35 | 14 | M10   | 35     | 18 | 4.5 | 70 | M12 | 61   | 52   | 36 |
| 1L-08 | A6 | 38 | 95  | 25     | 25.25  | 10.25  | 54     | 34 | 35 | 14 | M6    | 35     | 18 | 4.5 | 70 | M12 | 61   | 52   | 36 |
| 1L-10 | A6 | 43 | 110 | 30     | 33.75  | 11.25  | 67     | 43 | 40 | 16 | M8    | 40     | 20 | 5   | 90 | M14 | 71   | 58.5 | 45 |
| 1L-10 | A8 | 43 | 110 | 30     | 33.75  | 11.25  | 67     | 43 | 40 | 16 | M8    | 40     | 20 | 5   | 90 | M14 | 71   | 58.5 | 45 |

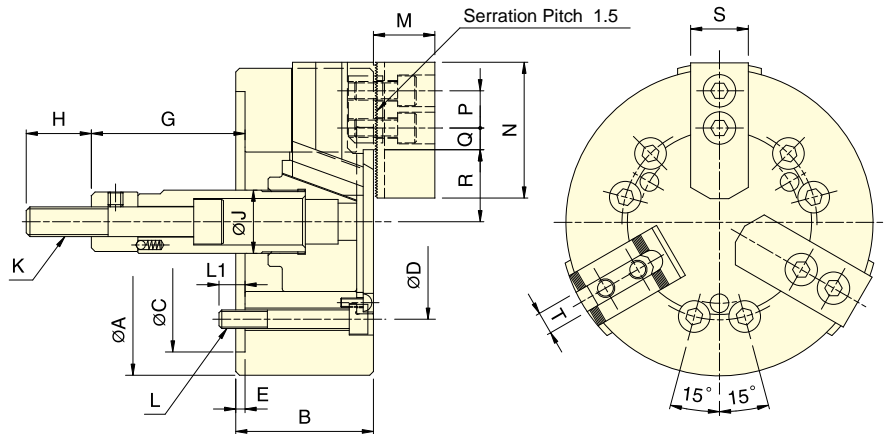
The dimensions and the specifications of 1L-A type are in red data.



- WEDGE-HOOK type 3-jaw power chuck and long jaw stroke.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.



3M-05



3M-06~3M-12

Subject to technical changes

## SPECIFICATIONS

| Model | Plunger stroke<br>mm | Jaw stroke (Dia.)<br>mm | Chucking Dia. Max.<br>mm | Chucking Dia. Min.<br>mm | Max. D.B. pull<br>kN (kgf) | Max. Clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg | Matching cyl. | Max. pressure              |
|-------|----------------------|-------------------------|--------------------------|--------------------------|----------------------------|---------------------------------|--|--|--------------|---------------|----------------------------|
|       |                      |                         |                          |                          |                            |                                 |  |  |              |               | MPa (kgf/cm <sup>2</sup> ) |
| 3M-05 | 15                   | 10.9                    | 135                      | 14                       | 9.8 (1000)                 | 23 (2350)                       | 4500                                     | 0.02                                   | 6.0          | RK-75(N)      | 2.7(27)                    |
| 3M-06 | 20                   | 14.5                    | 165                      | 14                       | 21.6 (2200)                | 50 (5100)                       | 4000                                     | 0.04                                   | 12.2         | RK-100(N)     | 3.0(30)                    |
| 3M-08 | 23                   | 16.7                    | 210                      | 17                       | 29.4 (3000)                | 72 (7340)                       | 3500                                     | 0.13                                   | 23.0         | RK-125(N)     | 2.9(29)                    |
| 3M-10 | 27                   | 19.6                    | 254                      | 22                       | 39.2 (4000)                | 102 (10400)                     | 3000                                     | 0.3                                    | 34.3         | RK-150(N)     | 2.8(28)                    |
| 3M-12 | 30                   | 21.8                    | 304                      | 26                       | 54.0 (5500)                | 150 (15300)                     | 2500                                     | 0.71                                   | 59.4         | RK-150(N)     | 3.6(36)                    |

## DIMENSIONS

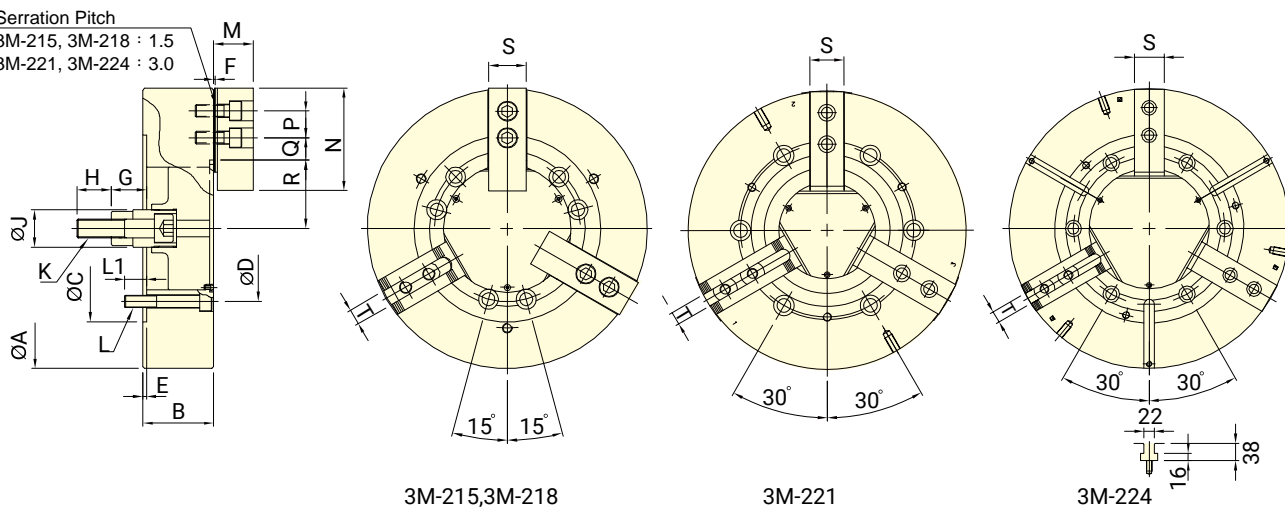
| Model | A   | B   | C(H6) | D     | E | G max. | G min. | H  | J  | K        |
|-------|-----|-----|-------|-------|---|--------|--------|----|----|----------|
| 3M-05 | 135 | 55  | 80    | 100   | 7 | 6      | -9     | 35 | 28 | M12x1.75 |
| 3M-06 | 165 | 74  | 140   | 104.8 | 5 | 101.6  | 81.6   | 36 | 34 | M16x2    |
| 3M-08 | 210 | 85  | 170   | 133.4 | 5 | 129    | 106    | 36 | 38 | M20x2.5  |
| 3M-10 | 254 | 89  | 220   | 171.4 | 5 | 160    | 133    | 36 | 45 | M20x2.5  |
| 3M-12 | 304 | 106 | 220   | 171.4 | 6 | 70     | 40     | 46 | 50 | M24x3    |

| Model | L     | L1 | M  | N   | P  | Q max. | Q min. | R max. | R min. | S  | T  |
|-------|-------|----|----|-----|----|--------|--------|--------|--------|----|----|
| 3M-05 | 3~M8  | 14 | 31 | 62  | 14 | 15.5   | 5      | 32.9   | 27.45  | 25 | 10 |
| 3M-06 | 6~M10 | 14 | 37 | 73  | 20 | 17     | 8      | 38.7   | 31.45  | 31 | 12 |
| 3M-08 | 6~M12 | 20 | 38 | 95  | 25 | 22.3   | 8.8    | 47.5   | 39.15  | 35 | 14 |
| 3M-10 | 6~M16 | 18 | 43 | 110 | 30 | 32.3   | 12.8   | 53.9   | 44.1   | 40 | 16 |
| 3M-12 | 6~M16 | 18 | 51 | 130 | 30 | 47.8   | 13.3   | 62.5   | 51.6   | 50 | 21 |



- WEDGE-HOOK type 3-jaw power chuck and long jaw stroke.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.

Serration Pitch  
 3M-215, 3M-218 : 1.5  
 3M-221, 3M-224 : 3.0



Subject to technical changes

## SPECIFICATIONS

| Model         | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|---------------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|               | mm             | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>3M-215</b> | 35             | 25.4              | 381                | 20                 | 91.0 (9280)    | 158.9 (16200)       | 2300                       | 1.8               | 96     | RK-200(N)     | 3.0(30)                    |
| <b>3M-218</b> | 35             | 25.4              | 450                | 51                 | 91.0 (9280)    | 158.9 (16200)       | 2000                       | 2.32              | 124    | RK-200(N)     | 3.0(30)                    |
| <b>3M-221</b> | 35             | 25.4              | 530                | 53                 | 91.0 (9280)    | 158.9 (16200)       | 1350                       | 4.9               | 175    | RK-200(N)     | 3.0(30)                    |
| <b>3M-224</b> | 35             | 25.4              | 610                | 160                | 91.0 (9280)    | 158.9 (16200)       | 1250                       | 7.2               | 225    | RK-200(N)     | 3.0(30)                    |

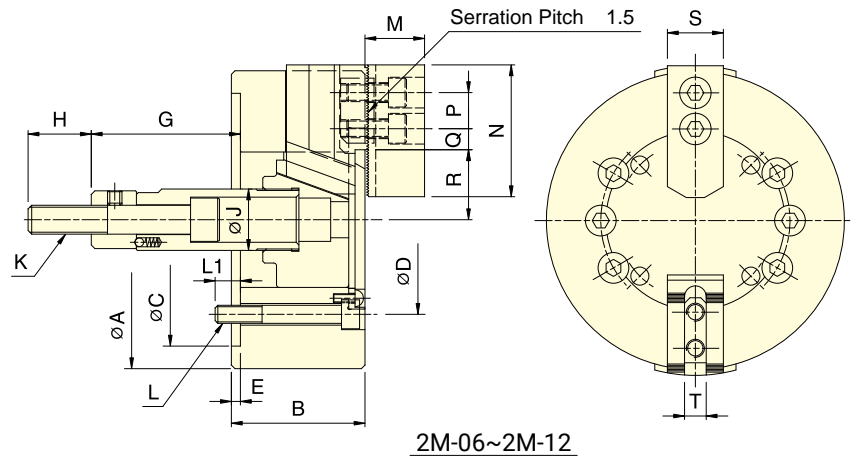
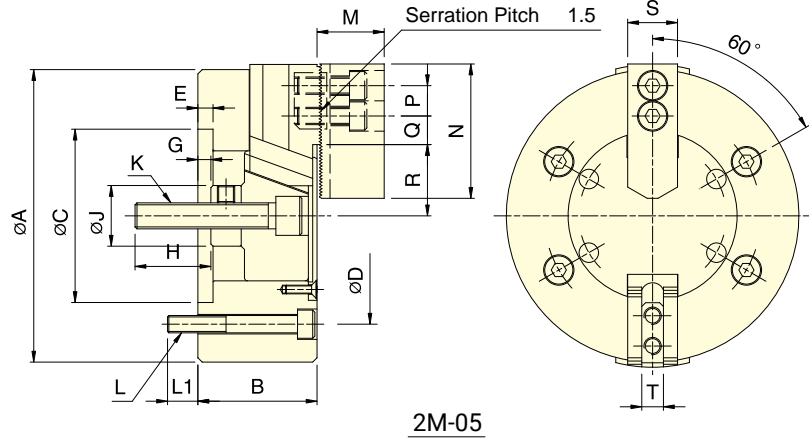
## DIMENSIONS

| Model         | A   | B   | C(H6) | D     | E | F | G max. | G min. | H  | J  |
|---------------|-----|-----|-------|-------|---|---|--------|--------|----|----|
| <b>3M-215</b> | 381 | 114 | 300   | 235   | 6 | 2 | 104    | 69     | 55 | 60 |
| <b>3M-218</b> | 450 | 114 | 300   | 235   | 6 | 2 | 92     | 57     | 55 | 60 |
| <b>3M-221</b> | 530 | 125 | 380   | 330.2 | 6 | 3 | 97     | 62     | 55 | 60 |
| <b>3M-224</b> | 610 | 125 | 380   | 330.2 | 6 | 3 | 97     | 62     | 55 | 60 |

| Model         | K       | L     | L1 | M    | N   | P  | Q max. | Q min. | R max. | R min. | S  | T    |
|---------------|---------|-------|----|------|-----|----|--------|--------|--------|--------|----|------|
| <b>3M-215</b> | M30x3.5 | 6-M20 | 30 | 63.3 | 165 | 43 | 49.75  | 18.25  | 79     | 66.3   | 62 | 25.5 |
| <b>3M-218</b> | M30x3.5 | 6-M20 | 35 | 63.3 | 165 | 43 | 51.25  | 18.25  | 109.5  | 96.8   | 62 | 25.5 |
| <b>3M-221</b> | M30x3.5 | 6-M24 | 31 | 71   | 180 | 60 | 90.5   | 24.5   | 92     | 79.3   | 64 | 25   |
| <b>3M-224</b> | M30x3.5 | 6-M24 | 31 | 71   | 180 | 60 | 90     | 24     | 131    | 118.3  | 64 | 25   |



- WEDGE-HOOK type 2-jaw power chuck and long jaw stroke.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.



Subject to technical changes

## SPECIFICATIONS

| Model        | Plunger stroke | Jaw stroke (Dia.) | Chuck Dia. Max. | Chuck Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|--------------|----------------|-------------------|-----------------|-----------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|              | mm             | mm                | mm              | mm              | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>2M-05</b> | 15             | 10.9              | 135             | 14              | 6.5(660)       | 11(1120)            | 4500                       | 0.02              | 6.0    | RK-75(N)      | 1.8(18)                    |
| <b>2M-06</b> | 20             | 14.5              | 165             | 14              | 14.3(1460)     | 24(2450)            | 4000                       | 0.04              | 12.2   | RK-100(N)     | 2.0(20)                    |
| <b>2M-08</b> | 23             | 16.7              | 210             | 17              | 19.6(2000)     | 36.6(3730)          | 3500                       | 0.13              | 23.0   | RK-125(N)     | 1.9(19.3)                  |
| <b>2M-10</b> | 27             | 19.6              | 254             | 22              | 26.1(2660)     | 49.3(5030)          | 3000                       | 0.30              | 34.3   | RK-150(N)     | 1.8(18.6)                  |
| <b>2M-12</b> | 30             | 21.8              | 304             | 26              | 36(3670)       | 66(6730)            | 2500                       | 0.71              | 59.1   | RK-150(N)     | 2.4(24)                    |

## DIMENSIONS

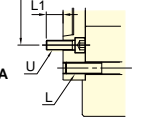
| Model        | A   | B   | C(H6) | D     | E | G max. | G min. | H  | J  |
|--------------|-----|-----|-------|-------|---|--------|--------|----|----|
| <b>2M-05</b> | 135 | 55  | 80    | 100   | 7 | 6      | -9     | 35 | 28 |
| <b>2M-06</b> | 165 | 74  | 140   | 104.8 | 5 | 101.6  | 81.6   | 36 | 34 |
| <b>2M-08</b> | 210 | 85  | 170   | 133.4 | 5 | 129    | 106    | 36 | 38 |
| <b>2M-10</b> | 254 | 89  | 220   | 171.4 | 5 | 160    | 133    | 36 | 45 |
| <b>2M-12</b> | 304 | 106 | 220   | 171.4 | 6 | 70     | 40     | 46 | 50 |

| Model        | K        | L     | L1 | M  | N   | P  | Q max. | Q min. | R max. | R min. | S  | T  |
|--------------|----------|-------|----|----|-----|----|--------|--------|--------|--------|----|----|
| <b>2M-05</b> | M12x1.75 | 4-M8  | 14 | 31 | 62  | 14 | 15.5   | 5      | 32.9   | 27.45  | 25 | 10 |
| <b>2M-06</b> | M16x2    | 6-M10 | 14 | 37 | 73  | 20 | 17     | 8      | 38.7   | 31.45  | 31 | 12 |
| <b>2M-08</b> | M20x2.5  | 6-M12 | 20 | 38 | 95  | 25 | 22.3   | 8.8    | 47.5   | 39.15  | 35 | 14 |
| <b>2M-10</b> | M20x2.5  | 6-M16 | 18 | 43 | 110 | 30 | 32.3   | 12.8   | 53.9   | 44.1   | 40 | 16 |
| <b>2M-12</b> | M24x3    | 6-M16 | 18 | 51 | 130 | 30 | 47.8   | 13.3   | 62.5   | 51.6   | 50 | 21 |



- WEDGE-HOOK type 3-jaw high speed power chuck.
- Sealed against swarf, chips and coolant, suitable for vertical lathe.

3V-15A8  
3V-18A8  
3V-21A11  
3V-24A11  
Refer to Fig.A



3V-15A15  
3V-18A15  
Refer to Fig.B

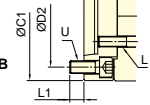
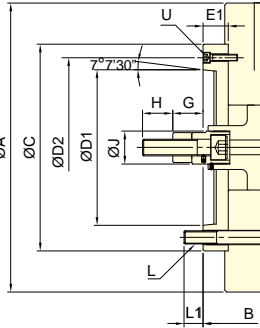
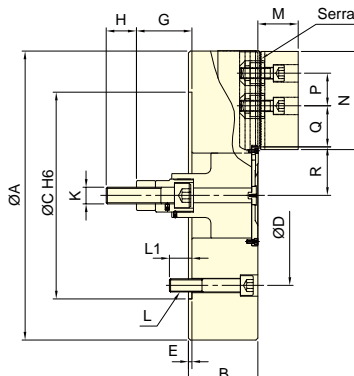


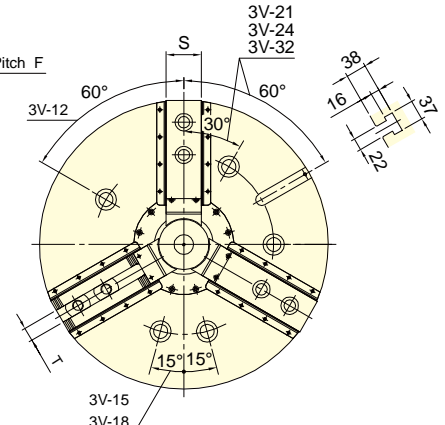
Fig.B



3V-A



3V



Subject to technical changes

### SPECIFICATIONS

| Model | Plunger stroke mm | Jaw stroke (Dia.) mm | Chucking Dia. Max. mm | Chucking Dia. Min. mm | Max. D.B. pull kN (kgf) | Max. Clamping force kN (kgf) | Max. speed min <sup>-1</sup> (r.p.m.) | Moment of inertia kg·m <sup>2</sup> | Weight kg |       | Matching cyl. | Max. pressure MPa (kgf/cm <sup>2</sup> ) |                   |                    |
|-------|-------------------|----------------------|-----------------------|-----------------------|-------------------------|------------------------------|---------------------------------------|-------------------------------------|-----------|-------|---------------|--|-------------------|--------------------|
|       |                   |                      |                       |                       |                         |                              |                                       |                                     |           |       |               |  |                   |                    |
| 3V-12 | A8                | 30                   | 12.7                  | 304                   | 30                      | 41(4180)                     | 156(15900)                            | 3150                                | 0.73      | 0.79  | 62.9          | 68.7                                     | RK-150<br>RE-150  | 2.6(26)            |
| 3V-15 | A8                | 35                   | 16                    | 381                   | 30                      | 81.9(8360)                   | 245.1(25000)                          | 2900                                | 1.97      | 2.27  | 105.5         | 128.5                                    | RK-200<br>RE-200K | 2.8(28)<br>3.0(30) |
| 3V-15 | A11               | 35                   | 16                    | 381                   | 30                      | 81.9(8360)                   | 245.1(25000)                          | 2900                                | 1.97      | 2.27  | 105.5         | 127                                      |                   |                    |
| 3V-15 | A15               | 35                   | 16                    | 381                   | 30                      | 81.9(8360)                   | 245.1(25000)                          | 2900                                | 3.33      | 2.67  | 105.5         | 142                                      |                   |                    |
| 3V-18 | A8                | 35                   | 16                    | 450                   | 80                      | 81.9(8360)                   | 245.1(25000)                          | 2600                                | 3.33      | 3.62  | 132.7         | 155.5                                    |                   |                    |
| 3V-18 | A11               | 35                   | 16                    | 450                   | 80                      | 81.9(8360)                   | 245.1(25000)                          | 2600                                | 3.33      | 3.63  | 132.7         | 154.5                                    |                   |                    |
| 3V-18 | A15               | 35                   | 16                    | 450                   | 80                      | 81.9(8360)                   | 245.1(25000)                          | 2600                                | 6.83      | 4.02  | 132.7         | 165                                      |                   |                    |
| 3V-21 | A11               | 35                   | 16                    | 530                   | 62                      | 81.9(8360)                   | 271.6(27700)                          | 1800                                | 6.83      | 7.46  | 196.5         | 227                                      |                   |                    |
| 3V-21 | A15               | 35                   | 16                    | 530                   | 62                      | 81.9(8360)                   | 271.6(27700)                          | 1800                                | 6.83      | 7.37  | 196.5         | 221                                      |                   |                    |
| 3V-24 | A11               | 35                   | 16                    | 610                   | 136                     | 81.9(8360)                   | 271.6(27700)                          | 1700                                | 11.19     | 11.83 | 241.7         | 272.8                                    |                   |                    |
| 3V-24 | A15               | 35                   | 16                    | 610                   | 136                     | 81.9(8360)                   | 271.6(27700)                          | 1700                                | 11.19     | 11.73 | 241.7         | 266                                      |                   |                    |
| 3V-32 | A15               | 35                   | 16                    | 800                   | 136                     | 81.9(8360)                   | 271.6(27700)                          | 1100                                | 28.97     | 29.51 | 353.6         | 378                                      |                   |                    |

### DIMENSIONS

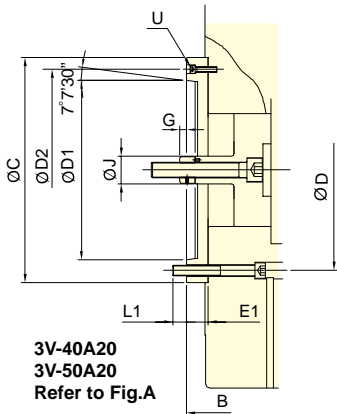
| Model | A   | B   | C   | C1  | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H   | J  |     |    |    |    |
|-------|-----|-----|-----|-----|-----|-----|-------|--------|-------|---|--------|--------|-----|----|-----|----|----|----|
| 3V-12 | A8  | 304 | 107 | 141 | 220 | -   | 171.4 | 139.72 | 190   | 6 | 40     | 1.5    | 113 | 73 | 83  | 43 | 36 | 50 |
| 3V-15 | A8  | 381 | 116 | 164 | 300 | -   | 235   | 139.72 | 171.4 | 6 | 54     | 1.5    | 153 | 99 | 118 | 64 | 55 | 60 |
| 3V-15 | A11 | 381 | 116 | 168 | 300 | -   | 235   | 196.87 | 260   | 6 | 58     | 1.5    | 153 | 95 | 118 | 60 | 55 | 60 |
| 3V-15 | A15 | 381 | 116 | 172 | -   | 380 | 235   | 285.78 | 330.2 | 6 | 62     | 1.5    | 153 | 91 | 118 | 56 | 55 | 60 |
| 3V-18 | A8  | 450 | 116 | 164 | 300 | -   | 235   | 139.72 | 171.4 | 6 | 54     | 1.5    | 153 | 99 | 118 | 64 | 55 | 60 |
| 3V-18 | A11 | 450 | 116 | 168 | 300 | -   | 235   | 196.87 | 260   | 6 | 58     | 1.5    | 153 | 95 | 118 | 60 | 55 | 60 |
| 3V-18 | A15 | 450 | 116 | 172 | -   | 380 | 235   | 285.78 | 330.2 | 6 | 62     | 1.5    | 153 | 91 | 118 | 56 | 55 | 60 |
| 3V-21 | A11 | 530 | 127 | 167 | 380 | -   | 330.2 | 196.87 | 235   | 6 | 46     | 3      | 137 | 91 | 102 | 56 | 55 | 60 |
| 3V-21 | A15 | 530 | 127 | 167 | 380 | -   | 330.2 | 285.78 | 330.2 | 6 | 46     | 3      | 137 | 91 | 102 | 56 | 55 | 60 |
| 3V-24 | A11 | 610 | 127 | 167 | 380 | -   | 330.2 | 196.87 | 235   | 6 | 46     | 3      | 137 | 91 | 102 | 56 | 55 | 60 |
| 3V-24 | A15 | 610 | 127 | 167 | 380 | -   | 330.2 | 285.78 | 330.2 | 6 | 46     | 3      | 137 | 91 | 102 | 56 | 55 | 60 |
| 3V-32 | A15 | 800 | 127 | 167 | 380 | -   | 330.2 | 285.78 | 330.2 | 6 | 46     | 3      | 137 | 91 | 102 | 56 | 55 | 60 |

| Model | K   | L       | L1    | M  | N  | P  | Q max. | Q min. | R max. | R min. | S    | T     | U  |      |       |
|-------|-----|---------|-------|----|----|----|--------|--------|--------|--------|------|-------|----|------|-------|
| 3V-12 | A8  | M20x2.5 | 3-M16 | 24 | 24 | 54 | 130    | 30     | 47.5   | 16     | 61   | 54.65 | 50 | 21   | 3-M8  |
| 3V-15 | A8  | M30x3.5 | 6-M20 | 35 | 24 | 66 | 165    | 43     | 51.25  | 18.25  | 77.5 | 69.5  | 62 | 25.5 | 6-M16 |
| 3V-15 | A11 | M30x3.5 | 6-M20 | 35 | 32 | 66 | 165    | 43     | 51.25  | 18.25  | 77.5 | 69.5  | 62 | 25.5 | 3-M10 |
| 3V-15 | A15 | M30x3.5 | 6-M20 | 35 | 26 | 66 | 165    | 43     | 51.25  | 18.25  | 77.5 | 69.5  | 62 | 25.5 | 6-M24 |
| 3V-18 | A8  | M30x3.5 | 6-M20 | 35 | 24 | 66 | 165    | 43     | 51.25  | 18.25  | 108  | 100   | 62 | 25.5 | 6-M16 |
| 3V-18 | A11 | M30x3.5 | 6-M20 | 35 | 32 | 66 | 165    | 43     | 51.25  | 18.25  | 108  | 100   | 62 | 25.5 | 3-M10 |
| 3V-18 | A15 | M30x3.5 | 6-M20 | 35 | 26 | 66 | 165    | 43     | 51.25  | 18.25  | 108  | 100   | 62 | 25.5 | 6-M24 |
| 3V-21 | A11 | M30x3.5 | 6-M24 | 41 | 35 | 74 | 180    | 60     | 93.5   | 24.5   | 89   | 81    | 64 | 25   | 6-M20 |
| 3V-21 | A15 | M30x3.5 | 6-M24 | 41 | 35 | 74 | 180    | 60     | 93.5   | 24.5   | 89   | 81    | 64 | 25   | 3-M12 |
| 3V-24 | A11 | M30x3.5 | 6-M24 | 41 | 35 | 74 | 180    | 60     | 93.5   | 24.5   | 128  | 120   | 64 | 25   | 6-M20 |
| 3V-24 | A15 | M30x3.5 | 6-M24 | 41 | 35 | 74 | 180    | 60     | 93.5   | 24.5   | 128  | 120   | 64 | 25   | 3-M12 |
| 3V-32 | A15 | M30x3.5 | 6-M24 | 41 | 35 | 74 | 180    | 60     | 189.5  | 24.5   | 128  | 120   | 64 | 25   | 3-M12 |

The dimensions and the specifications of 3V-A type are in red data.

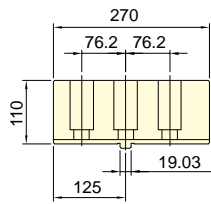
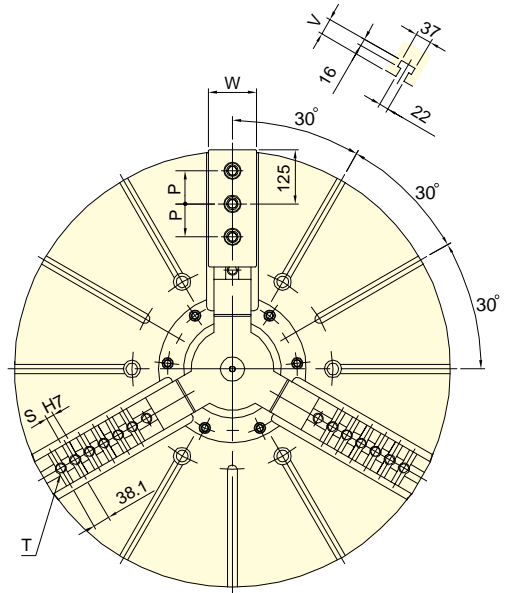
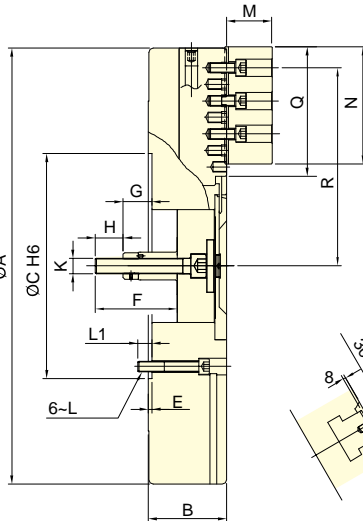


- WEDGE-HOOK type 3-jaw high speed power chuck.
- The jaws can be manually adjusted individually to help center the workpiece.
- Sealed against swarf, chips and coolant, suitable for vertical lathe.

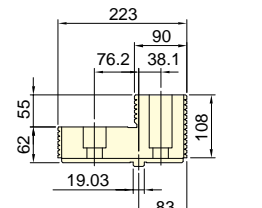


3V-40A20  
3V-50A20  
Refer to Fig.A

Fig.A



Soft jaw SJ-50 for V-40"-50"  
SJ-63 for V-63"-79"



Hardened jaw HJ-50 for V-40"-79"

Subject to technical changes

### SPECIFICATIONS

| Model | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed | Moment of inertia |                   | Weight |      | Matching cyl. | Max. pressure                          |                            |
|-------|----------------|-------------------|-------------------|-------------------|----------------|---------------------|------------|-------------------|-------------------|--------|------|---------------|--|----------------------------|
|       |                |                   |                   |                   |                |                     |            | kg-m <sup>2</sup> | kg-m <sup>2</sup> | kg     | kg   |               |  | MPa (kgf/cm <sup>2</sup> ) |
| 3V-40 | A20            | 57                | 46+(60)           | 1005              | 310            | 180(18350)          | 320(32620) | 630               | 68                | 72     | 780  | 849           | RK-250<br>RE-250<br>RE-A250<br>RE-L250 | 4.2(42)                    |
| 3V-50 | A20            | 57                | 46+(60)           | 1250              | 290            | 180(18350)          | 320(32620) | 500               | 145               | 148    | 1000 | 1050          |  | 4.2(42)                    |
| 3V-63 |                | 60                | 48+(80)           | 1600              | 390            | 200(20390)          | 360(36700) | 400               | 500               | -      | 1900 | -             |  | 4.6(46)                    |
| 3V-79 |                | 60                | 48+(80)           | 2000              | 440            | 200(20390)          | 360(36700) | 320               | 1250              | -      | 2800 | -             |  | 4.6(46)                    |

### DIMENSIONS

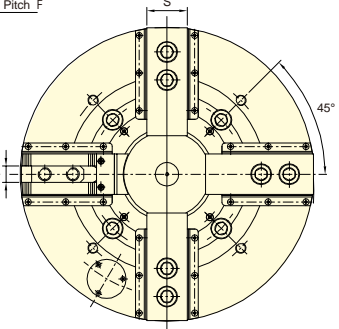
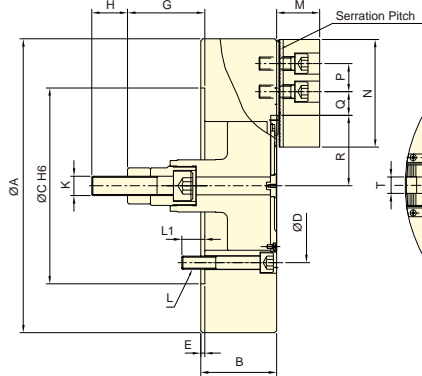
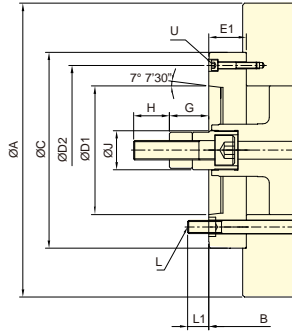
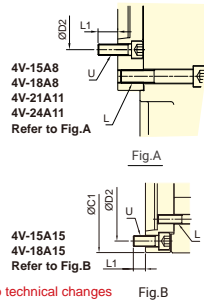
| Model | A   | B    | C   | D   | D1  | D2    | E      | E1    | F | G max. | G min. | H   | J  | K  |    |    |    |       |
|-------|-----|------|-----|-----|-----|-------|--------|-------|---|--------|--------|-----|----|----|----|----|----|-------|
| 3V-40 | A20 | 1005 | 184 | 226 | 520 | 463.6 | 412.78 | 463.6 | 8 | 50     | 190    | 123 | 73 | 66 | 16 | 65 | 65 | M36x4 |
| 3V-50 | A20 | 1250 | 184 | 226 | 520 | 463.6 | 412.78 | 463.6 | 8 | 50     | 190    | 123 | 73 | 66 | 16 | 65 | 65 | M36x4 |
| 3V-63 |     | 1600 | 222 | -   | 720 | 647.6 | -      | -     | 8 | -      | 218    | 131 | -  | 71 | -  | 65 | -  | M36x4 |
| 3V-79 |     | 2000 | 240 | -   | 720 | 647.6 | -      | -     | 8 | -      | 238    | 133 | -  | 73 | -  | 65 | -  | M36x4 |

| Model | L   | L1  | M  | N   | P   | Q    | R max. | R min. | S   | T        | U      | V     | W  |     |
|-------|-----|-----|----|-----|-----|------|--------|--------|-----|----------|--------|-------|----|-----|
| 3V-40 | A20 | M24 | 37 | 110 | 270 | 76.2 | 295    | 457    | 404 | 6~19.03  | 7~M24  | 3~M12 | 42 | 84  |
| 3V-50 | A20 | M24 | 37 | 110 | 270 | 76.2 | 416    | 563    | 510 | 9~19.03  | 9~M24  | 3~M12 | 42 | 84  |
| 3V-63 |     | M30 | 46 | 110 | 270 | 76.2 | 540    | 738    | 674 | 12~19.03 | 13~M24 | -     | 42 | 110 |
| 3V-79 |     | M30 | 48 | 110 | 270 | 76.2 | 740    | 914    | 850 | 16~19.03 | 17~M24 | -     | 42 | 110 |

The dimensions and the specifications of 3V-A type are in red data.



- WEDGE-HOOK type 4-jaw high speed power chuck.
- Sealed against swarf, chips and coolant, suitable for vertical lathe.



Subject to technical changes  
SPECIFICATIONS

| Model        | Plunger stroke<br>mm | Jaw stroke (Dia.)<br>mm | Chucking Dia. Max.<br>mm | Chucking Dia. Min.<br>mm | Max. D.B. pull<br>kN (kgf) | Max. Clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Moment of inertia |       | Weight       |       | Matching cyl. | Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) |                    |
|--------------|----------------------|-------------------------|--------------------------|--------------------------|----------------------------|---------------------------------|--|-------------------|-------|--------------|-------|---------------|---|--------------------|
|              |                      |                         |                          |                          |                            |                                 |  | kg·m <sup>2</sup> | kg    | kg           | kg    |               |   |                    |
| <b>4V-12</b> | <b>A8</b>            | 30                      | 12.7                     | 304                      | 48                         | 41(4180)                        | 156(15900)                               | 2520              | 0.72  | <b>0.79</b>  | 59    | <b>67</b>     | RK-150<br>RE-150                            | 2.6(26)            |
| <b>4V-15</b> | <b>A8</b>            | 35                      | 16                       | 381                      | 36                         | 81.9(8360)                      | 245.1(25000)                             | 2300              | 2.10  | <b>2.39</b>  | 108   | <b>131</b>    | RK-200<br>RE-200K                           | 2.8(28)<br>3.0(30) |
| <b>4V-15</b> | <b>A11</b>           | 35                      | 16                       | 381                      | 36                         | 81.9(8360)                      | 245.1(25000)                             | 2300              | 2.10  | <b>2.39</b>  | 108   | <b>130</b>    |   |                    |
| <b>4V-15</b> | <b>A15</b>           | 35                      | 16                       | 381                      | 36                         | 81.9(8360)                      | 245.1(25000)                             | 2300              | 2.10  | <b>2.79</b>  | 108   | <b>139</b>    |   |                    |
| <b>4V-18</b> | <b>A8</b>            | 35                      | 16                       | 450                      | 60                         | 81.9(8360)                      | 245.1(25000)                             | 2050              | 3.51  | <b>3.80</b>  | 139.3 | <b>162</b>    |   |                    |
| <b>4V-18</b> | <b>A11</b>           | 35                      | 16                       | 450                      | 60                         | 81.9(8360)                      | 245.1(25000)                             | 2050              | 3.51  | <b>3.80</b>  | 139.3 | <b>160.9</b>  |   |                    |
| <b>4V-18</b> | <b>A15</b>           | 35                      | 16                       | 450                      | 60                         | 81.9(8360)                      | 245.1(25000)                             | 2050              | 3.51  | <b>4.20</b>  | 139.3 | <b>172</b>    |   |                    |
| <b>4V-21</b> | <b>A11</b>           | 35                      | 16                       | 530                      | 62                         | 81.9(8360)                      | 271.6(27700)                             | 1450              | 6.98  | <b>7.62</b>  | 199   | <b>230</b>    |   |                    |
| <b>4V-21</b> | <b>A15</b>           | 35                      | 16                       | 530                      | 62                         | 81.9(8360)                      | 271.6(27700)                             | 1450              | 6.98  | <b>7.53</b>  | 199   | <b>223.7</b>  |   |                    |
| <b>4V-24</b> | <b>A11</b>           | 35                      | 16                       | 610                      | 152                        | 81.9(8360)                      | 271.6(27700)                             | 1350              | 11.34 | <b>11.98</b> | 243.8 | <b>275</b>    |   |                    |
| <b>4V-24</b> | <b>A15</b>           | 35                      | 16                       | 610                      | 152                        | 81.9(8360)                      | 271.6(27700)                             | 1350              | 11.34 | <b>11.88</b> | 243.8 | <b>268.3</b>  |   |                    |
| <b>4V-32</b> | <b>A15</b>           | 35                      | 16                       | 800                      | 152                        | 81.9(8360)                      | 271.6(27700)                             | 880               | 32.58 | <b>33.13</b> | 396   | <b>419.9</b>  |   |                    |

### DIMENSIONS

| Model        | A          | B   | C   | C1         | D   | D1  | D2    | E             | E1           | F | G max.    | G min. | H   | J         |     |           |    |           |
|--------------|------------|-----|-----|------------|-----|-----|-------|---------------|--------------|---|-----------|--------|-----|-----------|-----|-----------|----|-----------|
| <b>4V-12</b> | <b>A8</b>  | 304 | 107 | <b>141</b> | 220 | -   | 171.4 | <b>139.72</b> | <b>190</b>   | 6 | <b>40</b> | 1.5    | 113 | <b>73</b> | 83  | <b>43</b> | 36 | <b>50</b> |
| <b>4V-15</b> | <b>A8</b>  | 381 | 116 | <b>164</b> | 300 | -   | 235   | <b>139.72</b> | <b>171.4</b> | 6 | <b>54</b> | 1.5    | 153 | <b>99</b> | 118 | <b>64</b> | 55 | <b>60</b> |
| <b>4V-15</b> | <b>A11</b> | 381 | 116 | <b>168</b> | 300 | -   | 235   | <b>196.87</b> | <b>260</b>   | 6 | <b>58</b> | 1.5    | 153 | <b>95</b> | 118 | <b>60</b> | 55 | <b>60</b> |
| <b>4V-15</b> | <b>A15</b> | 381 | 116 | <b>172</b> | -   | 380 | 235   | <b>285.78</b> | <b>330.2</b> | 6 | <b>62</b> | 1.5    | 153 | <b>91</b> | 118 | <b>56</b> | 55 | <b>60</b> |
| <b>4V-18</b> | <b>A8</b>  | 450 | 116 | <b>164</b> | 300 | -   | 235   | <b>139.72</b> | <b>171.4</b> | 6 | <b>54</b> | 1.5    | 153 | <b>99</b> | 118 | <b>64</b> | 55 | <b>60</b> |
| <b>4V-18</b> | <b>A11</b> | 450 | 116 | <b>168</b> | 300 | -   | 235   | <b>196.87</b> | <b>260</b>   | 6 | <b>58</b> | 1.5    | 153 | <b>95</b> | 118 | <b>60</b> | 55 | <b>60</b> |
| <b>4V-18</b> | <b>A15</b> | 450 | 116 | <b>172</b> | -   | 380 | 235   | <b>285.78</b> | <b>330.2</b> | 6 | <b>62</b> | 1.5    | 153 | <b>91</b> | 118 | <b>56</b> | 55 | <b>60</b> |
| <b>4V-21</b> | <b>A11</b> | 530 | 127 | <b>167</b> | 380 | -   | 330.2 | <b>196.87</b> | <b>235</b>   | 6 | <b>46</b> | 3      | 137 | <b>91</b> | 102 | <b>56</b> | 55 | <b>60</b> |
| <b>4V-21</b> | <b>A15</b> | 530 | 127 | <b>167</b> | 380 | -   | 330.2 | <b>285.78</b> | <b>330.2</b> | 6 | <b>46</b> | 3      | 137 | <b>91</b> | 102 | <b>56</b> | 55 | <b>60</b> |
| <b>4V-24</b> | <b>A11</b> | 610 | 127 | <b>167</b> | 380 | -   | 330.2 | <b>196.87</b> | <b>235</b>   | 6 | <b>46</b> | 3      | 137 | <b>91</b> | 102 | <b>56</b> | 55 | <b>60</b> |
| <b>4V-24</b> | <b>A15</b> | 610 | 127 | <b>167</b> | 380 | -   | 330.2 | <b>285.78</b> | <b>330.2</b> | 6 | <b>46</b> | 3      | 137 | <b>91</b> | 102 | <b>56</b> | 55 | <b>60</b> |
| <b>4V-32</b> | <b>A15</b> | 800 | 147 | <b>187</b> | 380 | -   | 330.2 | <b>285.78</b> | <b>330.2</b> | 6 | <b>46</b> | 3      | 137 | <b>91</b> | 102 | <b>56</b> | 55 | <b>60</b> |

| Model        | K          | L       | L1    | M  | N         | P  | Q max. | Q min. | R max. | R min. | S    | T    | U  |      |              |
|--------------|------------|---------|-------|----|-----------|----|--------|--------|--------|--------|------|------|----|------|--------------|
| <b>4V-12</b> | <b>A8</b>  | M20x2.5 | 3~M16 | 24 | <b>24</b> | 42 | 110    | 30     | 51.75  | 15.75  | 61.3 | 54.9 | 40 | 16   | <b>4~M8</b>  |
| <b>4V-15</b> | <b>A8</b>  | M30x3.5 | 6~M20 | 35 | <b>24</b> | 66 | 165    | 43     | 40.75  | 18.25  | 87.5 | 79.4 | 62 | 25.5 | <b>6~M16</b> |
| <b>4V-15</b> | <b>A11</b> | M30x3.5 | 6~M20 | 35 | <b>32</b> | 66 | 165    | 43     | 40.75  | 18.25  | 87.5 | 79.4 | 62 | 25.5 | <b>4~M10</b> |
| <b>4V-15</b> | <b>A15</b> | M30x3.5 | 6~M20 | 35 | <b>26</b> | 66 | 165    | 43     | 40.75  | 18.25  | 87.5 | 79.4 | 62 | 25.5 | <b>6~M24</b> |
| <b>4V-18</b> | <b>A8</b>  | M30x3.5 | 6~M20 | 35 | <b>24</b> | 66 | 165    | 43     | 51.22  | 18.22  | 108  | 100  | 62 | 25.5 | <b>6~M16</b> |
| <b>4V-18</b> | <b>A11</b> | M30x3.5 | 6~M20 | 35 | <b>32</b> | 66 | 165    | 43     | 51.22  | 18.22  | 108  | 100  | 62 | 25.5 | <b>4~M10</b> |
| <b>4V-18</b> | <b>A15</b> | M30x3.5 | 6~M20 | 35 | <b>26</b> | 66 | 165    | 43     | 51.22  | 18.22  | 108  | 100  | 62 | 25.5 | <b>6~M24</b> |
| <b>4V-21</b> | <b>A11</b> | M30x3.5 | 6~M24 | 41 | <b>35</b> | 74 | 180    | 60     | 72.5   | 24.5   | 89   | 81   | 64 | 25   | <b>6~M20</b> |
| <b>4V-21</b> | <b>A15</b> | M30x3.5 | 6~M24 | 41 | <b>35</b> | 74 | 180    | 60     | 72.5   | 24.5   | 89   | 81   | 64 | 25   | <b>3~M12</b> |
| <b>4V-24</b> | <b>A11</b> | M30x3.5 | 6~M24 | 41 | <b>35</b> | 74 | 180    | 60     | 93.5   | 24.5   | 128  | 120  | 64 | 25   | <b>6~M20</b> |
| <b>4V-24</b> | <b>A15</b> | M30x3.5 | 6~M24 | 41 | <b>35</b> | 74 | 180    | 60     | 93.5   | 24.5   | 128  | 120  | 64 | 25   | <b>3~M12</b> |
| <b>4V-32</b> | <b>A15</b> | M30x3.5 | 6~M24 | 36 | <b>35</b> | 74 | 180    | 60     | 189.5  | 24.5   | 128  | 120  | 64 | 25   | <b>3~M12</b> |

The dimensions and the specifications of 4V-A type are in red data.



- WEDGE-HOOK type 4-jaw high speed power chuck.
- The jaws can be manually adjusted individually to help center the workpiece.
- Sealed against swarf, chips and coolant, suitable for vertical lathe.

4V-40 A20  
4V-50 A20  
4V-63 A20  
Refer to Fig.A

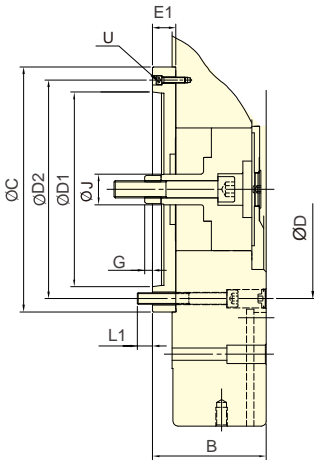
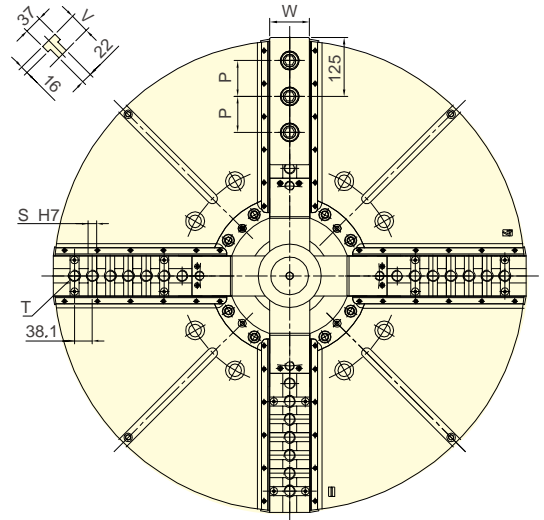
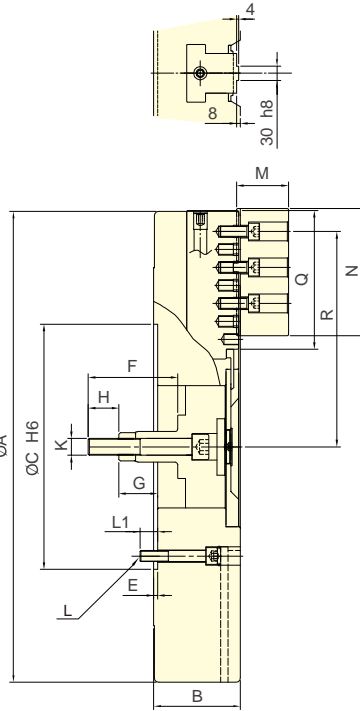


Fig.A



Subject to technical changes

### SPECIFICATIONS

| Model |     | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight    |  | Matching cyl. | Max. pressure              |
|-------|-----|----------------|-------------------|-------------------|-------------------|----------------|---------------------|----------------------------|-------------------|-----------|--|---------------|----------------------------|
|       |     | mm             | mm                | mm                | mm                | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg        |  |               | MPa (kgf/cm <sup>2</sup> ) |
| 4V-40 | A20 | 57             | 46+(60)           | 1000              | 310               | 180(18350)     | 320(32620)          | 500                        | 70 94             | 740 790   | RK-250<br>RE-250<br>RE-A250<br>RE-L250 | 4.2(42)       |                            |
| 4V-50 | A20 | 57             | 46+(60)           | 1250              | 290               | 180(18350)     | 320(32620)          | 450                        | 222 224           | 1130 1180 |  | 4.2(42)       |                            |
| 4V-63 |     | 60             | 48+(80)           | 1600              | 390               | 200(20390)     | 360(36700)          | 340                        | 565               | 2000      |  | 4.6(46)       |                            |

### DIMENSIONS

| Model     | A    | B   | C   | D   | D1    | D2           | E | E1 | F   | G max. | G min. | H  | J  | K     |
|-----------|------|-----|-----|-----|-------|--------------|---|----|-----|--------|--------|----|----|-------|
| 4V-40 A20 | 1000 | 184 | 226 | 520 | 463.6 | 412.78 463.6 | 8 | 50 | 190 | 123 73 | 66 16  | 65 | 65 | M36x4 |
| 4V-50 A20 | 1250 | 200 | 242 | 520 | 463.6 | 412.78 463.6 | 8 | 50 | 190 | 123 73 | 66 16  | 65 | 65 | M36x4 |
| 4V-63     | 1600 | 240 | -   | 720 | 647.6 | - -          | 8 | -  | 214 | 131    | 71     | 65 | -  | M36x4 |

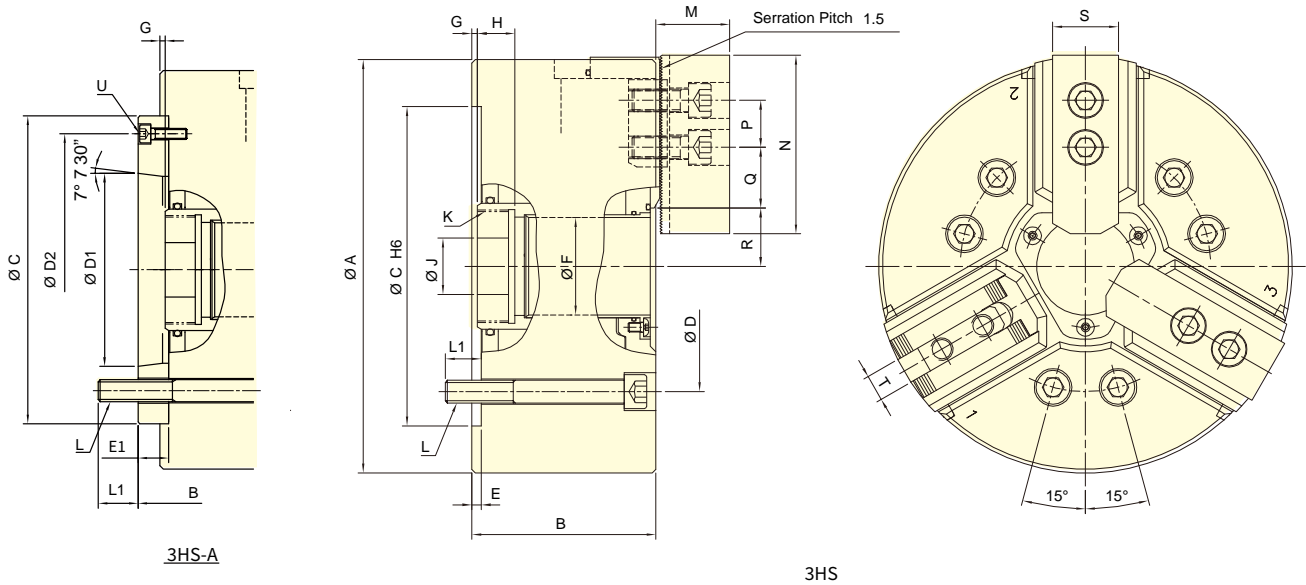
| Model     | L   | L1 | M   | N   | P    | Q   | R max. | R min. | S        | T      | U     | V  | W   |
|-----------|-----|----|-----|-----|------|-----|--------|--------|----------|--------|-------|----|-----|
| 4V-40 A20 | M24 | 37 | 110 | 270 | 76.2 | 295 | 457    | 404    | 6~19.03  | 7~M24  | 3~M12 | 42 | 84  |
| 4V-50 A20 | M24 | 38 | 110 | 270 | 76.2 | 416 | 563    | 510    | 9~19.03  | 9~M24  | 3~M12 | 42 | 84  |
| 4V-63     | M30 | 46 | 110 | 270 | 76.2 | 540 | 738    | 674    | 12~19.03 | 13~M24 | -     | 42 | 110 |

The dimensions and the specifications of 4V-A type are in red data.



- Fully sealed design extends maintenance intervals, improving production efficiency.
- Sealed design ensures constant lubrication and protects against the ingress of coolant and chips, which guarantees clamping precision and durability.
- Suitable for lights-out manufacturing; dry machining of castings and forgings; or when high-pressure coolant is utilized. Especially ideal for vertical lathes.
- Media fed through central bore - available for coolant or air. (optional)

POWER CHUCKS



Subject to technical changes

## SPECIFICATIONS

| Model         | Thru-hole (Dia.) | Plunger stroke | Jaw stroke (Dia.) | Chuck Dia. Max. | Chuck Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed | Moment of inertia | Weight | Matching cyl. | Max. pressure |          |         |
|---------------|------------------|----------------|-------------------|-----------------|-----------------|----------------|---------------------|------------|-------------------|--------|---------------|---------------|----------|---------|
|               |                  |                |                   |                 |                 |                |                     |            |                   |        |               |               | mm       | mm      |
| <b>3HS-08</b> | <b>A6</b>        | 52             | 18                | 7.6             | 220             | 22             | 31.9(3250)          | 92(9380)   | 5000              | 0.18   | 27.4          | <b>29</b>     | TK-A853  | 2.6(26) |
| <b>3HS-10</b> | <b>A8</b>        | 75             | 21                | 8.9             | 268             | 31             | 50(5100)            | 132(13460) | 4500              | 0.46   | 45.4          | <b>48.4</b>   | TK-A1075 | 3.2(32) |
| <b>3HS-12</b> | <b>A11</b>       | 91             | 25                | 10.6            | 315             | 48             | 58.8(6000)          | 154(15600) | 3500              | 0.83   | 65            | <b>71.2</b>   | TK-A1512 | 1.9(19) |

## DIMENSIONS

| Model         | A          | B   | C   | D          | D1  | D2    | E             | E1         | F | G max.    | G min. | H    | J           |     |              |    |    |
|---------------|------------|-----|-----|------------|-----|-------|---------------|------------|---|-----------|--------|------|-------------|-----|--------------|----|----|
| <b>3HS-08</b> | <b>A6</b>  | 220 | 98  | <b>110</b> | 170 | 133.4 | <b>106.38</b> | <b>150</b> | 5 | <b>17</b> | 52     | 20   | <b>15</b>   | 2   | <b>-3</b>    | 20 | 30 |
| <b>3HS-10</b> | <b>A8</b>  | 268 | 112 | <b>125</b> | 220 | 171.4 | <b>139.72</b> | <b>190</b> | 5 | <b>18</b> | 75     | 24   | <b>15</b>   | 3   | <b>-6</b>    | 25 | 35 |
| <b>3HS-12</b> | <b>A11</b> | 315 | 118 | <b>134</b> | 300 | 235   | <b>196.87</b> | <b>260</b> | 6 | <b>22</b> | 91     | 32.5 | <b>14.5</b> | 7.5 | <b>-10.5</b> | 28 | 50 |

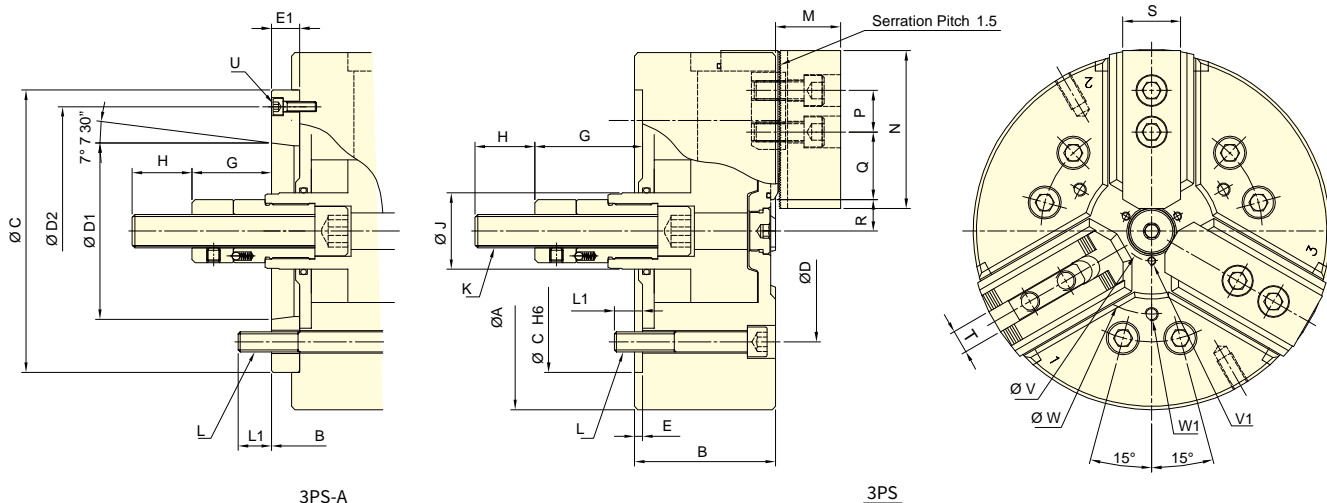
| Model         | K max.     | K Default | L     | L1    | M  | N         | P  | Q max. | Q min. | R max. | R min. | S    | T     | U  |    |              |
|---------------|------------|-----------|-------|-------|----|-----------|----|--------|--------|--------|--------|------|-------|----|----|--------------|
| <b>3HS-08</b> | <b>A6</b>  | M60x2     | M55x2 | 6~M12 | 19 | <b>17</b> | 39 | 95     | 25     | 47.75  | 29.75  | 29   | 25.2  | 35 | 14 | <b>3~M6</b>  |
| <b>3HS-10</b> | <b>A8</b>  | M85x2     | M70x2 | 6~M16 | 24 | <b>26</b> | 44 | 110    | 30     | 54.25  | 33.25  | 41.5 | 37.05 | 40 | 16 | <b>3~M8</b>  |
| <b>3HS-12</b> | <b>A11</b> | M100x2    | M85x2 | 6~M20 | 32 | <b>25</b> | 52 | 130    | 30     | 65.25  | 36.75  | 49.5 | 44.2  | 50 | 21 | <b>3~M10</b> |

The dimensions and the specifications of 3HS-A type are in red data.



- Fully sealed design extends maintenance intervals, improving production efficiency.
- Sealed design ensures constant lubrication and protects against the ingress of coolant and chips, which guarantees clamping precision and durability.
- Suitable for lights-out manufacturing; dry machining of castings and forgings; or when high-pressure coolant is utilized. Especially ideal for vertical lathes.
- Media fed through central bore - available for coolant or air. (optional)

POWER CHUCKS



Subject to technical changes

### SPECIFICATIONS

| Model         | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. clamping force | Max. speed | I    | Weight | Matching cyl. | Max. pressure |           |           |
|---------------|----------------|-------------------|-------------------|-------------------|----------------|---------------------|------------|------|--------|---------------|---------------|-----------|-----------|
|               |                |                   |                   |                   |                |                     |            |      |        |               |               | mm        | mm        |
| <b>3PS-08</b> | <b>A6</b>      | 22                | 9.3               | 215               | 21             | 30(3060)            | 82(8360)   | 4800 | 0.15   | 24.7          | <b>26.3</b>   | RK-125(N) | 2.7(27)   |
| <b>3PS-10</b> | <b>A8</b>      | 24                | 10.2              | 260               | 24             | 36(3670)            | 107(10910) | 4000 | 0.32   | 38.1          | <b>40.8</b>   | RK-150(N) | 3.1(31.7) |
| <b>3PS-12</b> | <b>A8</b>      | 30                | 12.7              | 315               | 30             | 60(6100)            | 165(16900) | 3200 | 0.75   | 66.3          | <b>69.3</b>   | RK-150(N) | 3.7(37.9) |

### DIMENSIONS

| Model         | A         | B   | C   | D          | D1  | D2    | E             | E1         | G max. | G min.    | H  | J         | K  |           |    |    |         |
|---------------|-----------|-----|-----|------------|-----|-------|---------------|------------|--------|-----------|----|-----------|----|-----------|----|----|---------|
| <b>3PS-08</b> | <b>A6</b> | 215 | 85  | <b>97</b>  | 170 | 133.4 | <b>106.38</b> | <b>150</b> | 5      | <b>17</b> | 87 | <b>70</b> | 65 | <b>48</b> | 36 | 46 | M20x2.5 |
| <b>3PS-10</b> | <b>A8</b> | 260 | 92  | <b>105</b> | 220 | 171.4 | <b>139.72</b> | <b>190</b> | 5      | <b>18</b> | 86 | <b>68</b> | 62 | <b>44</b> | 36 | 56 | M20x2.5 |
| <b>3PS-12</b> | <b>A8</b> | 315 | 106 | <b>118</b> | 220 | 171.4 | <b>139.72</b> | <b>190</b> | 6      | <b>18</b> | 96 | <b>78</b> | 66 | <b>48</b> | 36 | 67 | M20x2.5 |

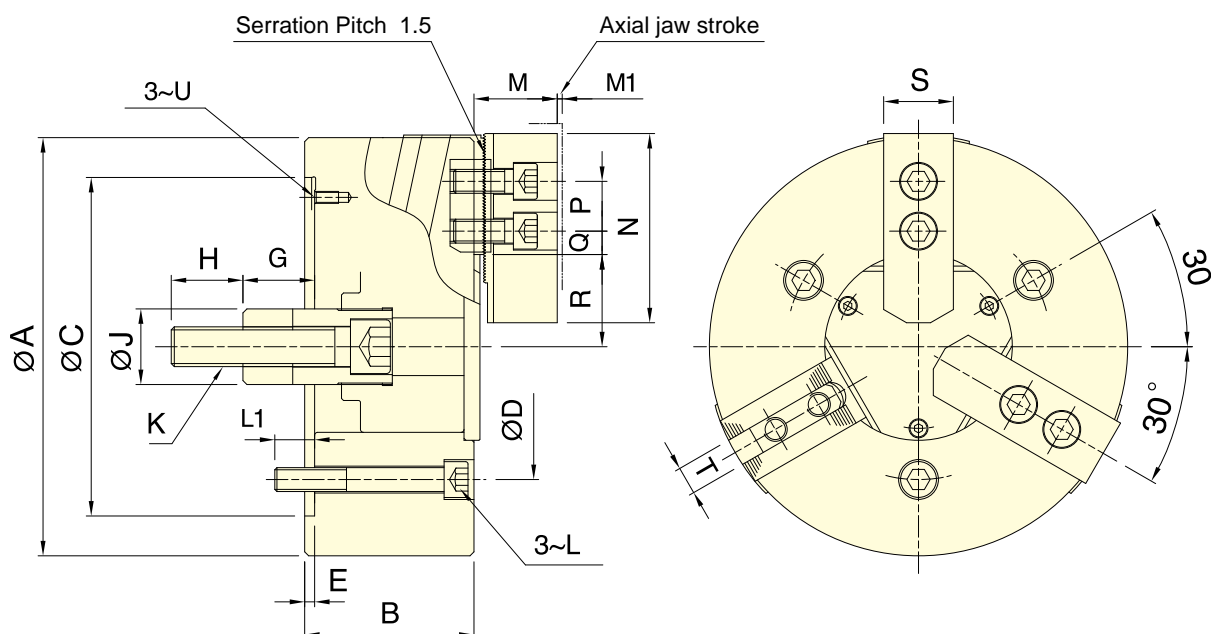
  

| Model         | L         | L1    | M  | N         | P  | Q max. | Q min. | R max. | R min. | S    | T     | U  | V  | V1          | W  | W1   |     |       |
|---------------|-----------|-------|----|-----------|----|--------|--------|--------|--------|------|-------|----|----|-------------|----|------|-----|-------|
| <b>3PS-08</b> | <b>A6</b> | 6~M12 | 17 | <b>20</b> | 39 | 95     | 25     | 54.25  | 36.25  | 18.5 | 13.85 | 35 | 14 | <b>3~M6</b> | 36 | 3~M5 | 100 | 3~M8  |
| <b>3PS-10</b> | <b>A8</b> | 6~M16 | 20 | <b>22</b> | 44 | 110    | 30     | 69.25  | 39.25  | 22.5 | 17.4  | 40 | 16 | <b>3~M8</b> | 45 | 3~M6 | 110 | 3~M8  |
| <b>3PS-12</b> | <b>A8</b> | 6~M16 | 22 | <b>24</b> | 52 | 130    | 30     | 86.75  | 46.25  | 27   | 20.65 | 50 | 21 | <b>3~M8</b> | 56 | 3~M6 | 220 | 3~M12 |

The dimensions and the specifications of 3PS-A type are in red data.



- The surface of the center through cover is grinding treated, it can be the position base surface of the jig/workpiece.
- The sideway of main jaws is inclined. It improves the clamping force and reduces the upfloat situation of the workpiece.
- Work with standard top jaws.
- Airtight pressure detect function is optional.
- External gripping only.



Subject to technical changes

## SPECIFICATIONS

| Model        | Plunger stroke | Jaw stroke (Dia.)   | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|--------------|----------------|---------------------|-------------------|-------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|              | mm             | mm                  | mm                | mm                | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>3N-06</b> | 20             | 8.1<br>(axial 0.9)  | 165               | 14                | 18 (1835)      | 61.5 (6270)         | 5000                       | 0.05              | 11.1   | RK-100(N)     | 2.6 (26)                   |
| <b>3N-08</b> | 23             | 9.4<br>(axial 1.0)  | 210               | 17                | 25 (2540)      | 85.8 (8750)         | 4500                       | 0.14              | 24.5   | RK-125(N)     | 2.2 (22)                   |
| <b>3N-10</b> | 25             | 10.2<br>(axial 1.1) | 254               | 22                | 29 (2950)      | 108 (11000)         | 4000                       | 0.32              | 34.5   | RK-150(N)     | 1.8 (18)                   |

## DIMENSIONS

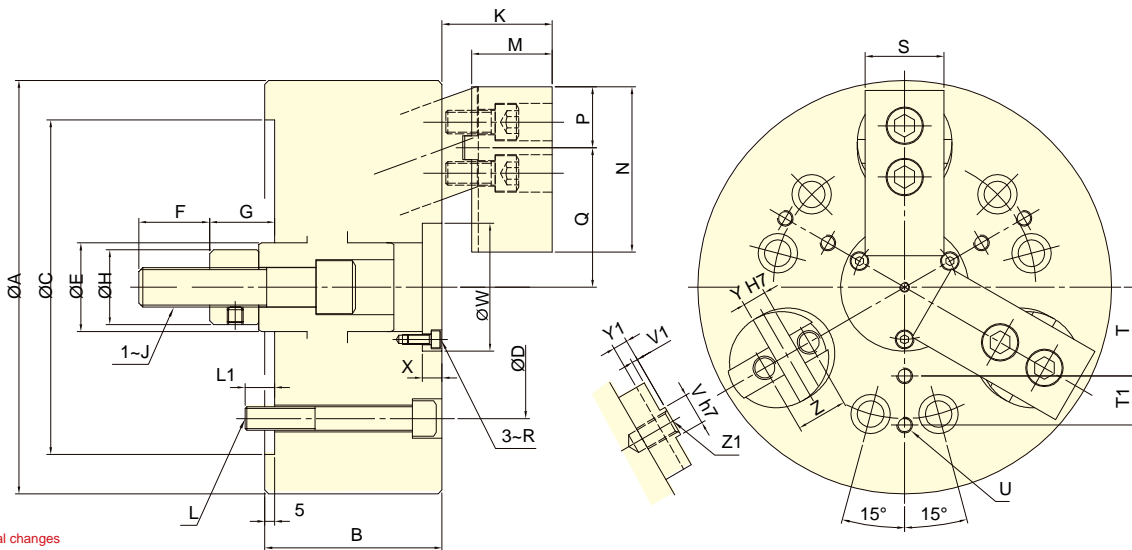
| Model        | A   | B  | C(H6) | D     | E | G max. | G min. | H  | J  | K       | L   |
|--------------|-----|----|-------|-------|---|--------|--------|----|----|---------|-----|
| <b>3N-06</b> | 165 | 72 | 140   | 104.8 | 5 | 54.5   | 34.5   | 36 | 34 | M16x2   | M10 |
| <b>3N-08</b> | 210 | 85 | 170   | 133.4 | 5 | 59     | 36     | 36 | 38 | M20x2.5 | M12 |
| <b>3N-10</b> | 254 | 89 | 220   | 171.4 | 5 | 63     | 38     | 36 | 45 | M20x2.5 | M16 |

| Model        | L1 | M  | M1  | N   | P  | Q max. | Q min. | R max. | R min. | S  | T  | U  |
|--------------|----|----|-----|-----|----|--------|--------|--------|--------|----|----|----|
| <b>3N-06</b> | 16 | 41 | 0.9 | 73  | 20 | 15.25  | 7.75   | 38.3   | 34.25  | 31 | 12 | M6 |
| <b>3N-08</b> | 20 | 42 | 1.0 | 95  | 25 | 22.25  | 11.75  | 46.3   | 41.6   | 35 | 14 | M6 |
| <b>3N-10</b> | 24 | 47 | 1.1 | 110 | 30 | 33.75  | 11.25  | 52.1   | 47     | 40 | 16 | M8 |



- Radial clamp and axial pull down at the same time, keep the workpiece attaching close to the base surface of the chuck.
- Almost no workpiece uplifting displacement.
- The body and the cylinder pull-down mechanism are heat-treated and fine boring, which guarantee the clamping precision and durability.
- Airtight pressure detect function is optional.



Subject to technical changes

## SPECIFICATIONS

| Model | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|-------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|       | mm             | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| 3D-04 | 7              | 5                 | 110                | 13                 | 6.0(612)       | 10.5(1070)          | 3500                       | 0.007             | 4.5    | RK-75         | 1.6(16.5)                  |
| 3D-05 | 7              | 5                 | 135                | 21                 | 10.0(1020)     | 17.0(1730)          | 3500                       | 0.018             | 7.9    | RK-75         | 2.7(27.5)                  |
| 3D-06 | 10             | 7.2               | 165                | 22                 | 15.0(1530)     | 25.0(2550)          | 3500                       | 0.051             | 15     | RK-100        | 2.1(21.4)                  |
| 3D-08 | 10             | 7.2               | 210                | 28                 | 25.0(2550)     | 45.0(4590)          | 3000                       | 0.15              | 26     | RK-125        | 2.2(22.5)                  |
| 3D-10 | 15             | 10.8              | 254                | 35                 | 35.0(3569)     | 60.0(6118)          | 2500                       | 0.37              | 46     | RK-125        | 3.1(31.6)                  |
| 3D-12 | 15             | 10.8              | 304                | 50                 | 45.0(4590)     | 75.0(7650)          | 2000                       | 0.79              | 70     | RK-150        | 2.8(28.5)                  |
| 3D-15 | 20             | 14.5              | 381                | 60                 | 53.9(5500)     | 90.0(9180)          | 1500                       | 2.25              | 132    | RK-150        | 3.4(34.2)                  |

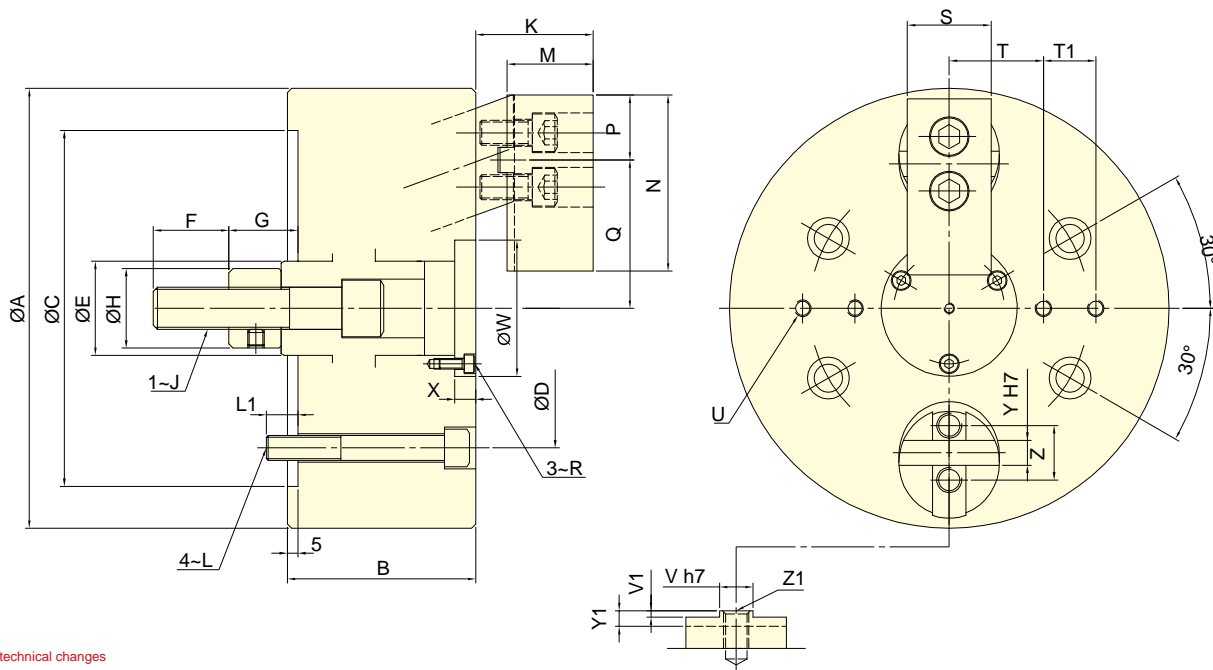
## DIMENSIONS

| Model | A   | B   | C (H6) | D     | E  | F  | G max. | G min. | H  | J   | K max. | K min. | L     | L1 | M    | N   | P  |
|-------|-----|-----|--------|-------|----|----|--------|--------|----|-----|--------|--------|-------|----|------|-----|----|
| 3D-04 | 110 | 60  | 85     | 70.6  | 25 | 20 | 22     | 15     | 25 | M10 | 30     | 23     | 3-M10 | 15 | 19.5 | 50  | 22 |
| 3D-05 | 135 | 70  | 110    | 82.6  | 30 | 25 | 24     | 17     | 28 | M12 | 35     | 28     | 3-M10 | 16 | 24.5 | 56  | 23 |
| 3D-06 | 165 | 85  | 140    | 104.8 | 35 | 36 | 37     | 27     | 32 | M16 | 45     | 35     | 6-M10 | 16 | 31   | 70  | 27 |
| 3D-08 | 210 | 90  | 170    | 133.4 | 45 | 36 | 38     | 28     | 38 | M20 | 56     | 46     | 6-M12 | 15 | 41   | 84  | 31 |
| 3D-10 | 254 | 110 | 220    | 171.4 | 55 | 46 | 47     | 32     | 50 | M24 | 65     | 50     | 6-M16 | 24 | 46   | 100 | 38 |
| 3D-12 | 304 | 125 | 220    | 171.4 | 55 | 50 | 49.5   | 34.5   | 53 | M27 | 70     | 55     | 6-M16 | 22 | 51   | 120 | 42 |
| 3D-15 | 381 | 140 | 300    | 235   | 70 | 55 | 61     | 41     | 55 | M30 | 86     | 66     | 6-M20 | 30 | 60   | 165 | 60 |

| Model | Q max. | Q min. | R  | S  | T    | T 1 | U     | V (h7) | V 1 | W   | X   | Y(H7) | Y1  | Z  | Z1  |
|-------|--------|--------|----|----|------|-----|-------|--------|-----|-----|-----|-------|-----|----|-----|
| 3D-04 | 37     | 34.5   | M3 | 25 | 22.5 | -   | 3-M6  | 8      | 2.5 | 35  | 4.5 | 8     | 6   | -  | M10 |
| 3D-05 | 46     | 43.5   | M3 | 30 | 27.5 | -   | 3-M6  | 8      | 2.5 | 44  | 4.5 | 8     | 6   | -  | M12 |
| 3D-06 | 57.7   | 54.3   | M4 | 35 | 35   | 20  | 6-M6  | 10     | 2.5 | 52  | 7   | 10    | 6.5 | -  | M14 |
| 3D-08 | 70.8   | 67.2   | M5 | 40 | 45   | 25  | 6-M8  | 16     | 3   | 65  | 10  | 12    | 7.5 | 26 | M12 |
| 3D-10 | 85     | 79.6   | M6 | 50 | 55   | 30  | 6-M8  | 18     | 3   | 75  | 12  | 15    | 7.5 | 32 | M14 |
| 3D-12 | 101.9  | 96.5   | M6 | 60 | 70   | 35  | 6-M10 | 20     | 3   | 90  | 12  | 17    | 7.5 | 36 | M16 |
| 3D-15 | 135.6  | 128.3  | M8 | 70 | 95   | 45  | 6-M12 | 24     | 4   | 120 | 13  | 20    | 6   | 40 | M16 |



- Radial clamp and axial pull down at the same time, keep the workpiece attaching close to the base surface of the chuck.
- Almost no workpiece uplifting displacement.
- The body and the cylinder pull-down mechanism are heat-treated and fine boring, which guarantee the clamping precision and durability.
- Airtight pressure detect function is optional.



Subject to technical changes

### SPECIFICATIONS

| Model        | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|--------------|----------------|-------------------|-------------------|-------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|              | mm             | mm                | mm                | mm                | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>2D-05</b> | 7              | 5                 | 135               | 21                | 6.6(680)       | 11.0(1150)          | 3500                       | 0.018             | 7.7    | RK-75         | 1.8(18.3)                  |
| <b>2D-06</b> | 10             | 7.2               | 165               | 22                | 10.0 (1020)    | 16.7 (1700)         | 3500                       | 0.045             | 12     | RK-100        | 1.4 (14.3)                 |
| <b>2D-08</b> | 10             | 7.2               | 210               | 28                | 16.7 (1700)    | 30.0 (3060)         | 3000                       | 0.13              | 23     | RK-125        | 1.5 (15)                   |
| <b>2D-10</b> | 15             | 10.8              | 254               | 35                | 23.3 (2379)    | 40.0 (4079)         | 2500                       | 0.34              | 43     | RK-125        | 2.1 (21.1)                 |
| <b>2D-12</b> | 15             | 10.8              | 304               | 50                | 30.0(3060)     | 50.0(5100)          | 2000                       | 0.73              | 71     | RK-150        | 1.9(19.0)                  |

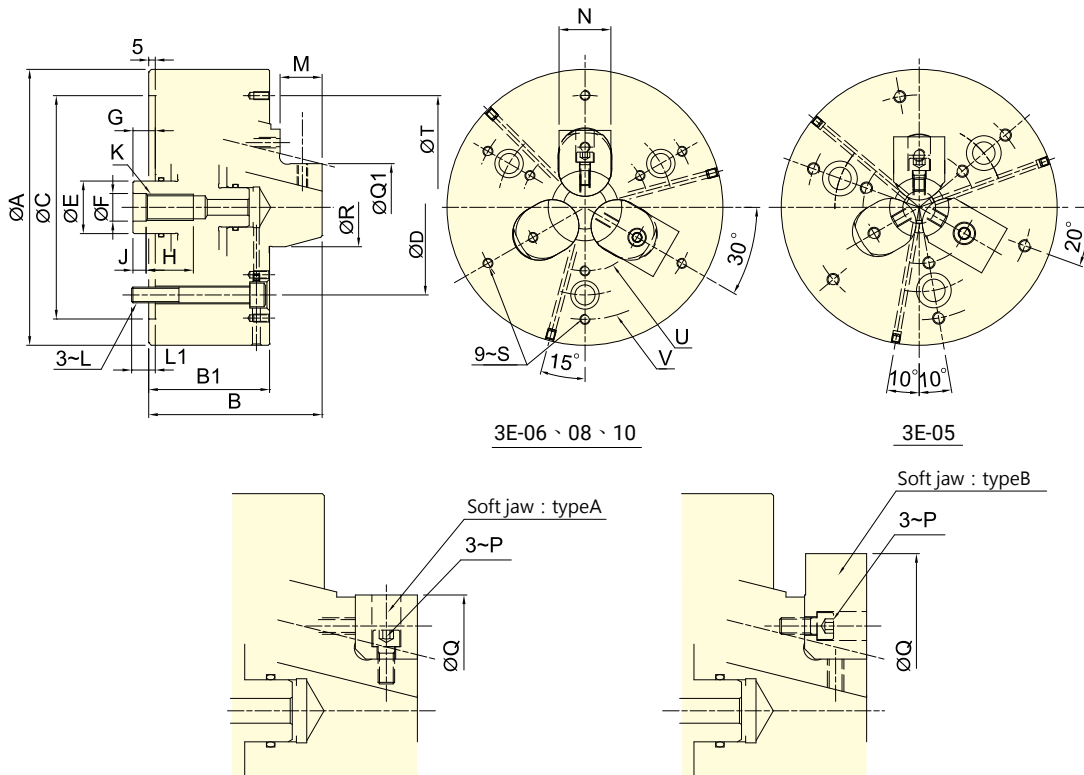
### DIMENSIONS

| Model        | A   | B   | C (H6) | D     | E  | F  | G max. | G min. | H  | J   | K max. | K min. | L   | L1 | M    | N   | P  |
|--------------|-----|-----|--------|-------|----|----|--------|--------|----|-----|--------|--------|-----|----|------|-----|----|
| <b>2D-05</b> | 135 | 70  | 110    | 82.6  | 30 | 25 | 24     | 17     | 28 | M12 | 35     | 28     | M10 | 16 | 24.5 | 56  | 23 |
| <b>2D-06</b> | 165 | 85  | 140    | 104.8 | 35 | 36 | 37     | 27     | 32 | M16 | 45     | 35     | M10 | 16 | 31   | 70  | 27 |
| <b>2D-08</b> | 210 | 90  | 170    | 133.4 | 45 | 36 | 38     | 28     | 38 | M20 | 56     | 46     | M12 | 15 | 41   | 84  | 31 |
| <b>2D-10</b> | 254 | 110 | 220    | 171.4 | 55 | 46 | 47     | 32     | 50 | M24 | 65     | 50     | M16 | 24 | 46   | 100 | 38 |
| <b>2D-12</b> | 304 | 125 | 220    | 171.4 | 55 | 50 | 49.5   | 34.5   | 53 | M27 | 70     | 55     | M16 | 22 | 51   | 120 | 42 |

| Model        | Q max. | Q min. | R  | S  | T    | T1 | U     | V (h7) | V1  | W  | X   | Y (H7) | Y1  | Z  | Z1  |
|--------------|--------|--------|----|----|------|----|-------|--------|-----|----|-----|--------|-----|----|-----|
| <b>2D-05</b> | 46     | 43.5   | M3 | 30 | 27.5 | -  | 2-M6  | 8      | 2.5 | 44 | 4.5 | 8      | 6   | -  | M12 |
| <b>2D-06</b> | 57.7   | 54.3   | M4 | 35 | 35   | 20 | 4-M6  | 10     | 2.5 | 52 | 7   | 10     | 6.5 | -  | M14 |
| <b>2D-08</b> | 70.8   | 67.2   | M5 | 40 | 45   | 25 | 4-M8  | 16     | 3   | 65 | 10  | 12     | 7.5 | 26 | M12 |
| <b>2D-10</b> | 85     | 79.6   | M6 | 50 | 55   | 30 | 4-M8  | 18     | 3   | 75 | 12  | 15     | 7.5 | 32 | M14 |
| <b>2D-12</b> | 101.9  | 96.5   | M6 | 60 | 70   | 35 | 4-M10 | 20     | 3   | 90 | 12  | 17     | 7.5 | 36 | M16 |



- Suitable for internal gripping.
- Radial clamp and axial pull down at the same time, keep the workpiece attaching close to the base surface of the chuck.
- Almost no workpiece uplifting displacement.
- With high precision and stability that chuck suitable for end process.
- Airtight pressure detect function is optional.



Subject to technical changes

### SPECIFICATIONS

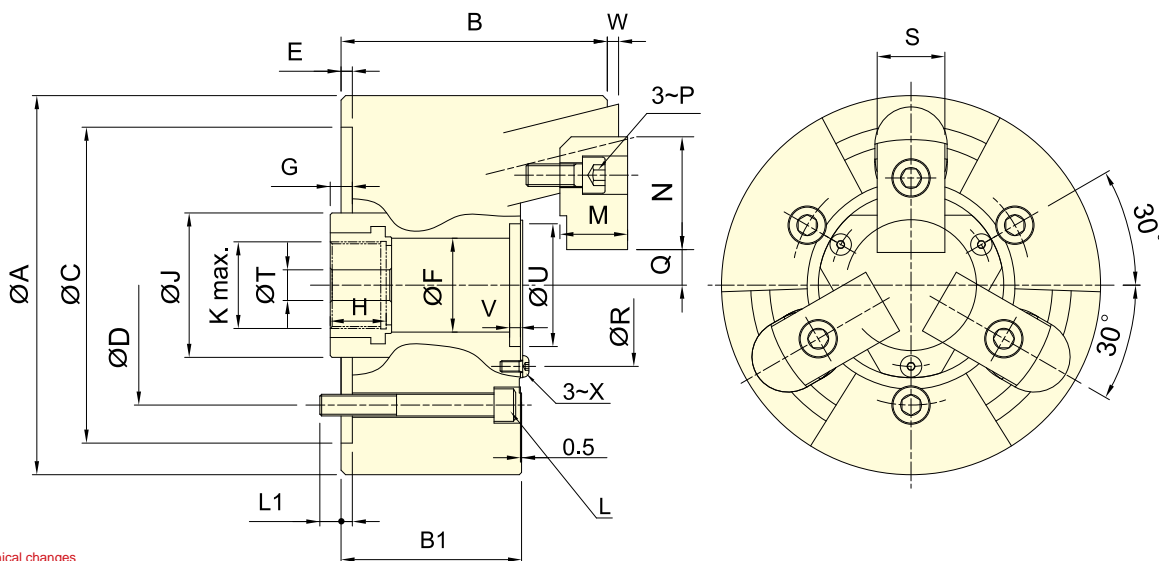
| Model        | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|--------------|----------------|-------------------|-------------------|-------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|              | mm             | mm                | mm                | mm                | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>3E-05</b> | 6              | 3                 | 83                | 29                | 13.0(1325)     | 42.0(4280)          | 7000                       | 0.018             | 7.5    | RK-100        | 1.8(18.5)                  |
| <b>3E-06</b> | 10             | 5                 | 110               | 44                | 18.0(1835)     | 58.0(5910)          | 6000                       | 0.042             | 13.6   | RK-100        | 2.5(25.6)                  |
| <b>3E-08</b> | 10             | 5                 | 150               | 50                | 25.0(2530)     | 80.0(8150)          | 5000                       | 0.14              | 26.5   | RK-125        | 2.2(22.5)                  |
| <b>3E-10</b> | 10             | 5                 | 190               | 60                | 35.0(3570)     | 100.0(10200)        | 3600                       | 0.31              | 39.5   | RK-150        | 2.8(28.5)                  |

### DIMENSIONS

| Model        | A  | B  | B1  | C (H6) | D      | E      | F (H8) | G max. | G min. | H  | J     | K   | L         | L1        |
|--------------|----|----|-----|--------|--------|--------|--------|--------|--------|----|-------|-----|-----------|-----------|
|              |    |    |     |        |        |        |        |        |        |    |       |     |           |           |
| Model        | M  | N  | P   | Q max. | Q min. | Q max. | Q min. | max.   | min.   | R  | S     | T   | U (p.c.d) | V (p.c.d) |
| <b>3E-05</b> | 20 | 25 | M6  | 68     | 50     | 83     | 67     | 50     | 29     | 25 | M6x12 | 110 | 55        | 110       |
| <b>3E-06</b> | 23 | 31 | M6  | 90     | 70     | 110    | 89     | 70     | 44     | 40 | M6x12 | 130 | 76        | 134       |
| <b>3E-08</b> | 30 | 35 | M8  | 110    | 90     | 150    | 108    | 90     | 50     | 49 | M6x12 | 170 | 100       | 170       |
| <b>3E-10</b> | 35 | 40 | M10 | 127    | 110    | 190    | 125    | 110    | 60     | 59 | M8x16 | 210 | 120       | 210       |



- Pin-Arbor Draw Down type 3-jaw thru-hole power chuck.
- High radial gripping force and high accuracy.
- Suitable for heavy machining.



Subject to technical changes

## SPECIFICATIONS

| Model         | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|---------------|----------------|-------------------|-------------------|-------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|               | mm             | mm                | mm                | mm                | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>3U-203</b> | 4              | 2                 | 42                | 14                | 5.8(590)       | 16.7(1700)          | 10000                      | 0.001             | 1.8    | RK-75(N)      | 1.6(16)                    |
| <b>3U-204</b> | 6              | 3                 | 60                | 10                | 10.0(1020)     | 28.4(2900)          | 8000                       | 0.005             | 3.9    | RK-75(N)      | 2.7(27)                    |
| <b>3U-205</b> | 6              | 3                 | 84                | 15                | 13.9(1420)     | 39.7(4050)          | 8000                       | 0.012             | 6.8    | RK-100(N)     | 2.0(20)                    |
| <b>3U-206</b> | 10             | 5                 | 105               | 24                | 17.9(1830)     | 57.8(5900)          | 7000                       | 0.055             | 14.7   | RK-100(N)     | 2.6(26)                    |
| <b>3U-208</b> | 12             | 6                 | 132               | 25                | 25.0(2550)     | 80.0(8150)          | 6000                       | 0.14              | 25.5   | RK-125(N)     | 2.2(22)                    |
| <b>3U-210</b> | 10             | 5                 | 163               | 34                | 31.0(3160)     | 100.0(10100)        | 4500                       | 0.36              | 43.5   | RK-125(N)     | 3.1(31)                    |
| <b>3U-212</b> | 10             | 5                 | 210               | 81                | 35.0(3570)     | 100.0(10100)        | 3600                       | 0.68              | 63.0   | RK-125(N)     | 3.1(31)                    |

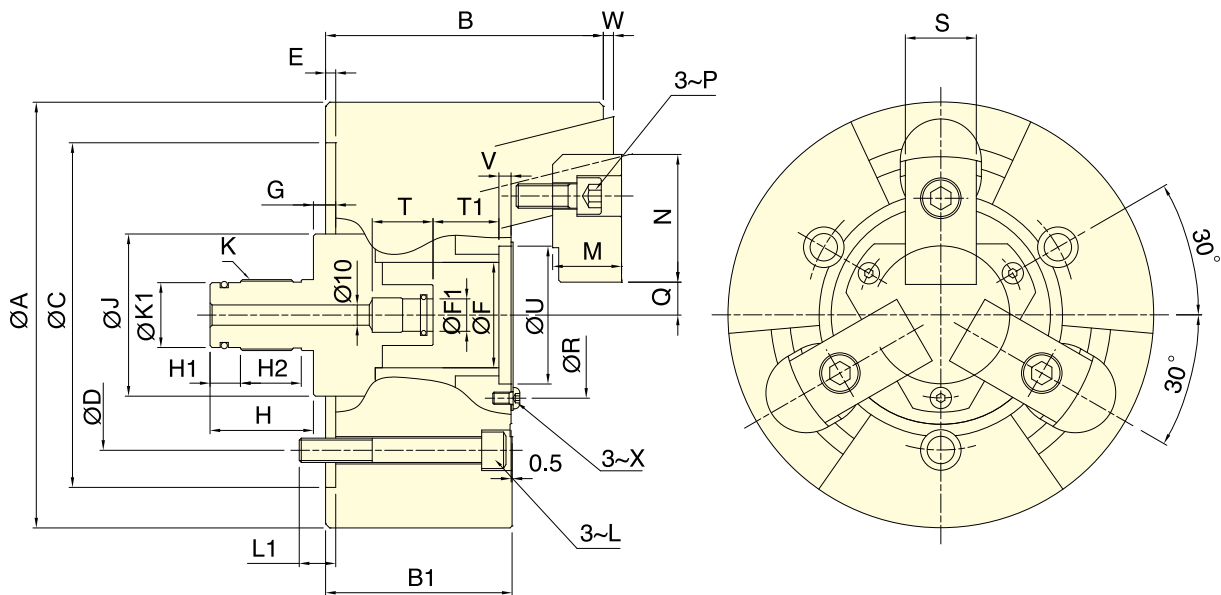
## DIMENSIONS

| Model         | A   | B    | B1  | C(H6) | D     | E   | F   | G max. | G min. | H    | J   | K       | L     | L1   |
|---------------|-----|------|-----|-------|-------|-----|-----|--------|--------|------|-----|---------|-------|------|
| <b>3U-203</b> | 85  | 54.5 | 42  | 70    | 54    | 3.5 | 25  | 18     | 14     | 22   | 38  | M20x1.5 | 3-M8  | 11   |
| <b>3U-204</b> | 110 | 72.5 | 55  | 85    | 70.6  | 4   | 30  | 16     | 10     | 24.5 | 42  | M24x1.5 | 3-M10 | 12   |
| <b>3U-205</b> | 135 | 84.5 | 63  | 110   | 82.6  | 4   | 35  | 16     | 10     | 26   | 50  | M28x1.5 | 3-M10 | 15   |
| <b>3U-206</b> | 168 | 118  | 80  | 140   | 104.8 | 5   | 45  | 20     | 10     | 31   | 60  | M38x1.5 | 3-M10 | 16.5 |
| <b>3U-208</b> | 210 | 137  | 92  | 170   | 133.4 | 5   | 52  | 23     | 11     | 31   | 80  | M48x2   | 3-M12 | 18   |
| <b>3U-210</b> | 254 | 152  | 102 | 220   | 171.4 | 5   | 75  | 25     | 15     | 37   | 105 | M68x2   | 3-M16 | 23   |
| <b>3U-212</b> | 304 | 157  | 102 | 220   | 171.4 | 5   | 100 | 25     | 15     | 37   | 135 | M92x2   | 3-M16 | 26   |

| Model         | M  | N    | P   | Q max. | Q min. | R   | S  | T  | U(H6) | V   | W max. | W min. | X   |
|---------------|----|------|-----|--------|--------|-----|----|----|-------|-----|--------|--------|-----|
| <b>3U-203</b> | 12 | 26   | M5  | 7.5    | 6.5    | 38  | 15 | 10 | 32    | 3.5 | 2      | -2     | M3  |
| <b>3U-204</b> | 17 | 40   | M6  | 10.75  | 9.25   | 46  | 20 | 10 | 38    | 4   | 3      | -3     | M4  |
| <b>3U-205</b> | 20 | 41.5 | M8  | 13.25  | 11.75  | 55  | 24 | 10 | 45    | 5   | 3      | -3     | M5  |
| <b>3U-206</b> | 30 | 50   | M10 | 15.75  | 13.25  | 72  | 30 | 17 | 58    | 6   | 5      | -5     | M5  |
| <b>3U-208</b> | 34 | 63   | M12 | 16.25  | 13.25  | 82  | 35 | 17 | 68    | 6   | 5      | -7     | M6  |
| <b>3U-210</b> | 39 | 74   | M14 | 20.75  | 18.25  | 107 | 40 | 17 | 93    | 6   | 5      | -5     | M8  |
| <b>3U-212</b> | 44 | 74   | M14 | 44.25  | 41.75  | 130 | 40 | 17 | 114   | 6   | 5      | -5     | M10 |



- Pin-Arbor Draw Down type 3-jaw non-thru-hole power chuck.
- High radial gripping force and high accuracy.
- Suitable for heavy machining.
- Can work with the airtight detection device to perform axial position confirm, suitable for the precision of large length size process.



Subject to technical changes

### SPECIFICATIONS

| Model   | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl.    | Max. pressure              |
|---------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|------------------|----------------------------|
|         | mm             | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |                  | MPa (kgf/cm <sup>2</sup> ) |
| 3U-205K | 6              | 3                 | 84                 | 15                 | 13.9(1420)     | 39.7(4050)          | 8000                       | 0.018             | 6.8    | RL-100, RL-A100N | 2.0(20)                    |
| 3U-206K | 10             | 5                 | 105                | 24                 | 17.9(1830)     | 57.8(5900)          | 7000                       | 0.055             | 14.9   | RL-100, RL-A100N | 2.5(25)                    |
| 3U-208K | 12             | 6                 | 132                | 25                 | 25.0(2550)     | 80.0(8150)          | 6000                       | 0.14              | 25.8   | RL-125, RL-A125N | 2.2(22)                    |
| 3U-210K | 10             | 5                 | 163                | 34                 | 31.0(3160)     | 100(10100)          | 4500                       | 0.36              | 44.0   | RL-125, RL-A125N | 3.1(31)                    |
| 3U-212K | 10             | 5                 | 210                | 81                 | 35.0(3570)     | 100(10100)          | 3600                       | 0.68              | 63.8   | RL-125, RL-A125N | 3.1(31)                    |

### DIMENSIONS

| Model   | A   | B    | B1  | C(H6) | D     | E | F   | F1(H8) | G max. | G min. | H  | H1 | H2 | J   | K       | K1 | L   |
|---------|-----|------|-----|-------|-------|---|-----|--------|--------|--------|----|----|----|-----|---------|----|-----|
| 3U-205K | 135 | 84.5 | 63  | 110   | 82.6  | 4 | 35  | 14     | 16     | 10     | 42 | 12 | -  | 50  | M25x1.5 | 22 | M10 |
| 3U-206K | 168 | 118  | 80  | 140   | 104.8 | 5 | 45  | 14     | 20     | 10     | 48 | 12 | 30 | 60  | M28x1.5 | 24 | M10 |
| 3U-208K | 210 | 137  | 92  | 170   | 133.4 | 5 | 52  | 16     | 23     | 11     | 51 | 15 | 30 | 80  | M35x1.5 | 30 | M12 |
| 3U-210K | 254 | 152  | 102 | 220   | 171.4 | 5 | 75  | 16     | 25     | 15     | 51 | 15 | 30 | 105 | M38x1.5 | 34 | M16 |
| 3U-212K | 304 | 157  | 102 | 220   | 171.4 | 5 | 100 | 16     | 25     | 15     | 51 | 15 | 30 | 135 | M45x1.5 | 40 | M16 |

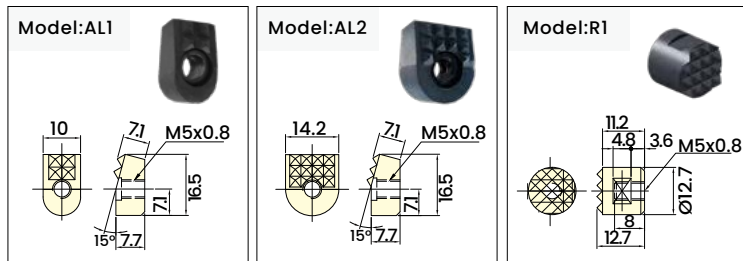
| Model   | L1   | M  | N    | P   | Q max. | Q min. | R   | S  | T  | T1   | U(H6) | V | W max. | W min. | X   |
|---------|------|----|------|-----|--------|--------|-----|----|----|------|-------|---|--------|--------|-----|
| 3U-205K | 15   | 20 | 41.5 | M8  | 13.25  | 11.75  | 55  | 24 | 25 | 15.5 | 45    | 5 | 3      | -3     | M5  |
| 3U-206K | 16.5 | 30 | 50   | M10 | 15.75  | 13.25  | 72  | 30 | 30 | 26.5 | 58    | 6 | 5      | -5     | M5  |
| 3U-208K | 18   | 34 | 63   | M12 | 16.25  | 13.25  | 82  | 35 | 30 | 32.5 | 68    | 6 | 5      | -7     | M6  |
| 3U-210K | 23   | 39 | 74   | M14 | 20.75  | 18.25  | 107 | 40 | 30 | 36.5 | 93    | 6 | 5      | -5     | M8  |
| 3U-212K | 26   | 44 | 74   | M14 | 44.25  | 41.75  | 130 | 40 | 30 | 36.5 | 114   | 6 | 5      | -5     | M10 |



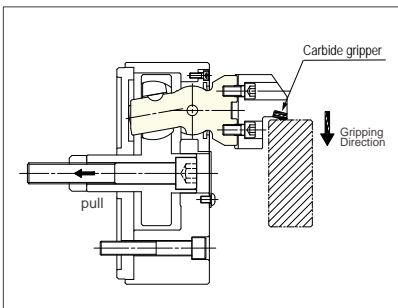
SPECIAL PURPOSE POWER CHUCKS

- Swing and grasp the workpiece to three jaw. (3W is automatically positioned to the center type.)
- Suitable for such materials as the casting and forging to process.
- Suitable for heavy machining.
- Seal proof for dust and cutting fluid, it is more convenient when maintenance.
- Swing parts are to heat treatment hardened and ground for steel, in order to improve products service life.
- Swing and grasp the workpiece to three jaw.(3W-C is center compensation type .)
- The workpieces compensation of eccentric is 2 mm, fixed position for the center thimble.
- Carbide gripper is optional. \* The type of the carbide gripper is selected according to the work-piece conditions.
- According to different processing requirements, O.D. Gripping and I.D. Gripping can be interchanged.

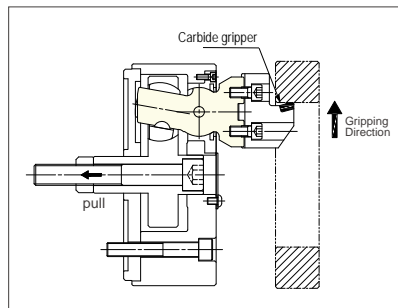
### Type of the Carbide gripper



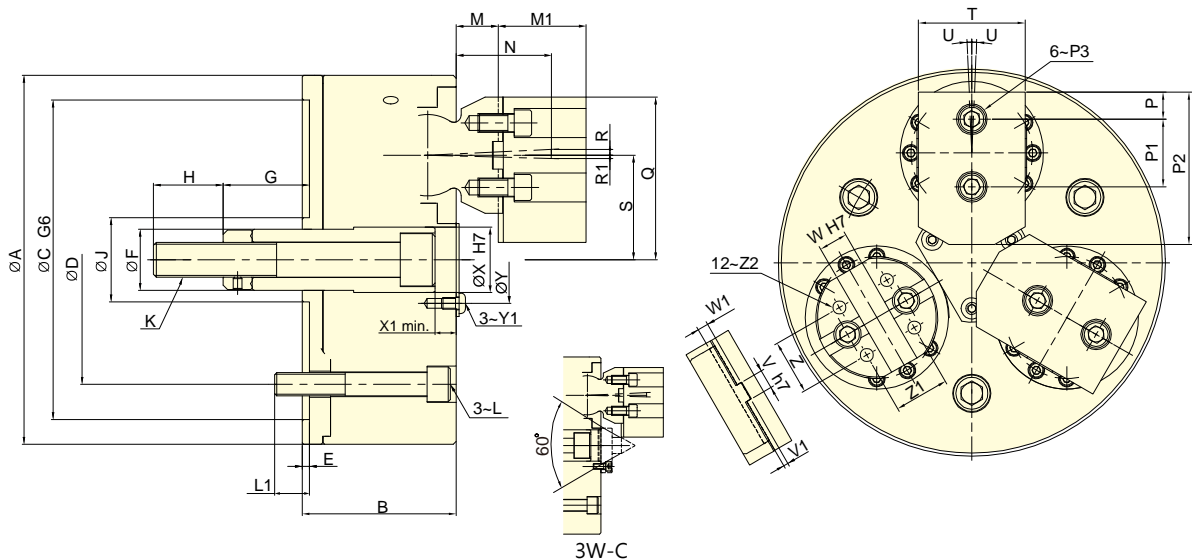
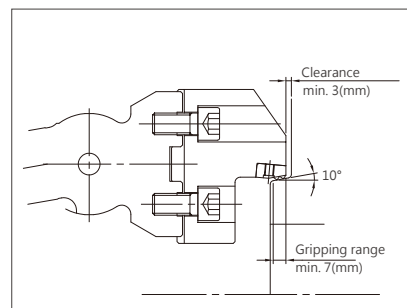
### O.D. Gripping



### I.D. Gripping



### Min. Gripping range



Subject to technical changes

**SPECIFICATIONS**

| Model         | Plunger stroke | Jaw stroke (Dia.) | Chucking O.D.<br>Min.-Max. | Chucking I.D.<br>Min.-Max. | Max. D.B. pull | Max. clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Compensation |
|---------------|----------------|-------------------|----------------------------|----------------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|--------------|
|               | mm             | mm                | mm                         | mm                         | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | mm           |
| <b>3W-08</b>  | 14.4           | 9.8               | 16~150                     | 76~203                     | 25(2550)       | 85.0(8670)          | 3700                       | 0.12              | 23     | RK-100(N)     | -            |
| <b>3W-C08</b> | 14.4           | 9.8               | 16~150                     | 76~203                     | 25(2550)       | 85.0(8670)          | 3700                       | 0.12              | 23     | RK-100(N)     | 2            |
| <b>3W-10</b>  | 17.5           | 12.5              | 50~205                     | 85~235                     | 35.3(3600)     | 105.9(10800)        | 2500                       | 0.37              | 48.6   | RK-125(N)     | -            |
| <b>3W-C10</b> | 17.5           | 12.5              | 50~205                     | 85~235                     | 35.3(3600)     | 105.9(10800)        | 2500                       | 0.37              | 48.6   | RK-125(N)     | 2            |
| <b>3W-12</b>  | 17.5           | 12.5              | 63~240                     | 127~305                    | 35.3(3600)     | 105.9(10800)        | 2400                       | 0.73              | 65     | RK-125(N)     | -            |
| <b>3W-C12</b> | 17.5           | 12.5              | 63~240                     | 127~305                    | 35.3(3600)     | 105.9(10800)        | 2400                       | 0.73              | 65     | RK-125(N)     | 2            |
| <b>3W-15</b>  | 22.5           | 15.9              | 76~317                     | 165~381                    | 56(5600)       | 168.2(16800)        | 2000                       | 1.81              | 97     | RK-150(N)     | -            |
| <b>3W-C15</b> | 22.5           | 15.9              | 76~317                     | 165~381                    | 56(5600)       | 168.2(16800)        | 2000                       | 1.81              | 97     | RK-150(N)     | 3            |

**DIMENSIONS**

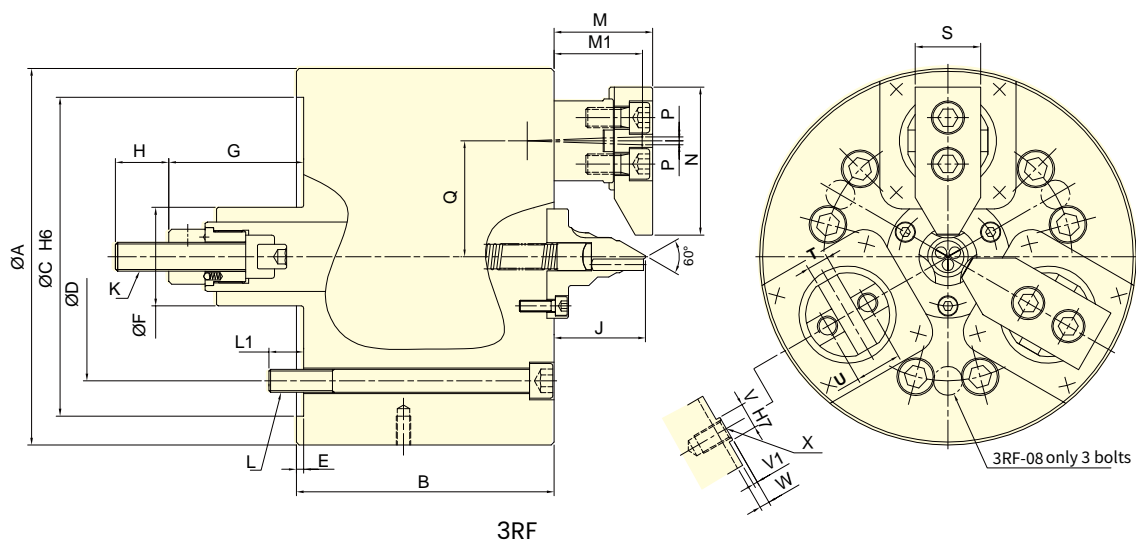
| Model         | A   | B   | C (G6) | D     | E | F  | G max. | G min. | H  | J  | K       | L   | L1 | M    | M1   | N    | P    | P1   | P2  |
|---------------|-----|-----|--------|-------|---|----|--------|--------|----|----|---------|-----|----|------|------|------|------|------|-----|
| <b>3W-08</b>  | 210 | 89  | 170    | 133.4 | 5 | 34 | 51.9   | 37.5   | 40 | 50 | M18x2.5 | M12 | 19 | 19.3 | 56.5 | 52.7 | 16   | 38   | 80  |
| <b>3W-C08</b> | 210 | 89  | 170    | 133.4 | 5 | 34 | 51.9   | 37.5   | 40 | 50 | M18x2.5 | M12 | 19 | 19.3 | 56.5 | 52.7 | 16   | 38   | 80  |
| <b>3W-10</b>  | 254 | 106 | 220    | 171.4 | 5 | 42 | 67.5   | 50     | 48 | 58 | M24x3   | M16 | 24 | 29   | 60.5 | 65.6 | 17.8 | 44.4 | 100 |
| <b>3W-C10</b> | 254 | 106 | 220    | 171.4 | 5 | 42 | 67.5   | 50     | 48 | 58 | M24x3   | M16 | 24 | 29   | 60.5 | 65.6 | 17.8 | 44.4 | 100 |
| <b>3W-12</b>  | 304 | 106 | 220    | 171.4 | 5 | 42 | 67.5   | 50     | 48 | 58 | M24x3   | M16 | 24 | 29   | 60.5 | 65.6 | 17.8 | 44.4 | 100 |
| <b>3W-C12</b> | 304 | 106 | 220    | 171.4 | 5 | 42 | 67.5   | 50     | 48 | 58 | M24x3   | M16 | 24 | 29   | 60.5 | 65.6 | 17.8 | 44.4 | 100 |
| <b>3W-15</b>  | 381 | 120 | 300    | 235   | 5 | 55 | 62.5   | 40     | 46 | 80 | M27x3   | M20 | 30 | 32.4 | 72   | 74.3 | 19   | 63.5 | 140 |
| <b>3W-C15</b> | 381 | 120 | 300    | 235   | 5 | 55 | 62.5   | 40     | 46 | 80 | M27x3   | M20 | 30 | 32.4 | 72   | 74.3 | 19   | 63.5 | 140 |

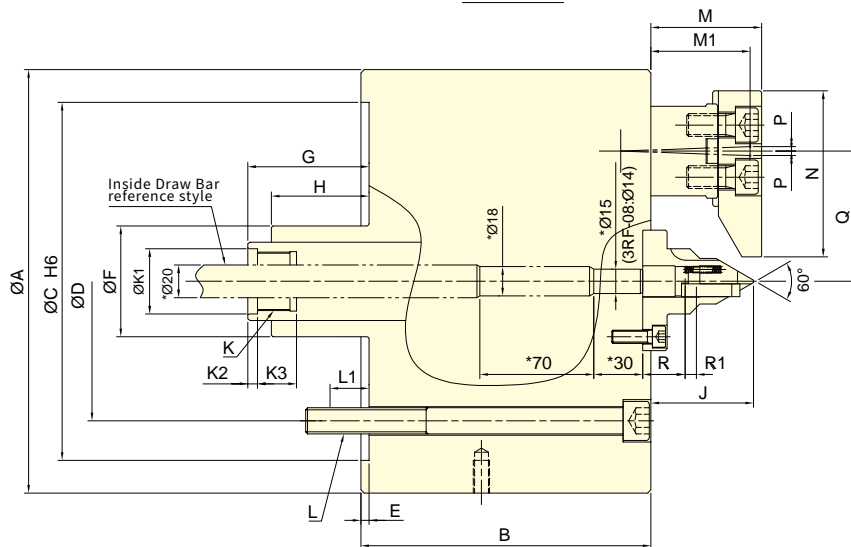
| Model         | P3  | Q     | R    | R1   | S    | T  | U   | V (h7) | V1 | W (H7) | W1 | X(H7) | X1  | Y  | Y1 | Z  | Z1 | Z2  |
|---------------|-----|-------|------|------|------|----|-----|--------|----|--------|----|-------|-----|----|----|----|----|-----|
| <b>3W-08</b>  | M12 | 95    | 2.69 | 2.24 | 60   | 57 | 2   | 7.94   | 3  | 12.68  | 7  | 34    | 3.5 | 46 | M6 | 32 | 32 | M10 |
| <b>3W-C08</b> | M12 | 95    | 2.69 | 2.24 | 60   | 57 | 2   | 7.94   | 3  | 12.68  | 7  | 34    | 3.5 | 46 | M6 | 32 | 32 | M10 |
| <b>3W-10</b>  | M12 | 112   | 4.03 | 2.26 | 72   | 70 | 2.5 | 12.7   | 3  | 19.03  | 7  | 45    | 5   | 60 | M8 | 36 | 36 | M10 |
| <b>3W-C10</b> | M12 | 112   | 4.03 | 2.26 | 72   | 70 | 2.5 | 12.7   | 3  | 19.03  | 7  | 45    | 5   | 60 | M8 | 36 | 36 | M10 |
| <b>3W-12</b>  | M12 | 132.5 | 4.03 | 2.26 | 92.5 | 70 | 2.5 | 12.7   | 3  | 19.03  | 7  | 45    | 5   | 60 | M8 | 36 | 36 | M10 |
| <b>3W-C12</b> | M12 | 132.5 | 4.03 | 2.26 | 92.5 | 70 | 2.5 | 12.7   | 3  | 19.03  | 7  | 45    | 5   | 60 | M8 | 36 | 36 | M10 |
| <b>3W-15</b>  | M12 | 172   | 5.14 | 2.83 | 121  | 80 | 2   | 12.7   | 3  | 19.03  | 7  | 56    | 3   | 90 | M8 | 36 | 36 | M10 |
| <b>3W-C15</b> | M12 | 172   | 5.14 | 2.83 | 121  | 80 | 2   | 12.7   | 3  | 19.03  | 7  | 56    | 3   | 90 | M8 | 36 | 36 | M10 |



- The workpiece compensation of eccentric is 1mm, fixed position for the center, swing and grasp the workpiece to three jaw.
- Second machining can be performed without reversing the workpiece, thus significantly reducing setup time.
- With compensating jaws clamping, the Rough and precision machining can be carried out.
- With sealed design, the maintenance costs can be reduced.
- Can be paired with double-rod rotary cylinder (3RF-D type).
- The driver pin thrust can be controlled by the pressure of the rotary cylinder (3RF-D type).



3RF



3RF-D

Note: The dimensions marked [\*] are the dimensions of the inside Draw Bar , Please don't change it.

Subject to technical changes

## SPECIFICATIONS

| Model          | Chucking Dia. | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Compensation |
|----------------|---------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|--------------|
|                | mm            | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               |              |
| <b>3RF-08</b>  | 43.5          | 9.4               | 70                 | 18                 | 39.2 (4000)    | 39.2 (4000)         | 4000                       | 0.15              | 39.4   | RS-1250       | 1            |
| <b>3RF-08D</b> | 43.5          | 9.4               | 70                 | 18                 | 39.2 (4000)    | 39.2 (4000)         | 4000                       | 0.15              | 38.6   | RDL-160S      | 1            |

| Model          | Chucking Dia. | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Compensation |
|----------------|---------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|--------------|
|                | mm            | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | mm           |
| <b>3RF-10</b>  | 50            | 11                | 85                 | 25                 | 44.1(4500)     | 67.4(6873)          | 3500                       | 0.56              | 68.3   | RS-1550       | 1            |
| <b>3RF-10D</b> | 50            | 11                | 85                 | 25                 | 44.1(4500)     | 67.4(6873)          | 3500                       | 0.56              | 67.5   | RDL-160S      | 1            |
| <b>3RF-12</b>  | 52            | 11.2              | 110                | 25                 | 78.4(8000)     | 99(10000)           | 2500                       | 0.56              | 109    | RS-2060       | 1            |
| <b>3RF-12D</b> | 52            | 11.2              | 110                | 25                 | 78.4(8000)     | 99(10000)           | 2500                       | 0.56              | 107.7  | RDL-160S      | 1            |

## DIMENSIONS

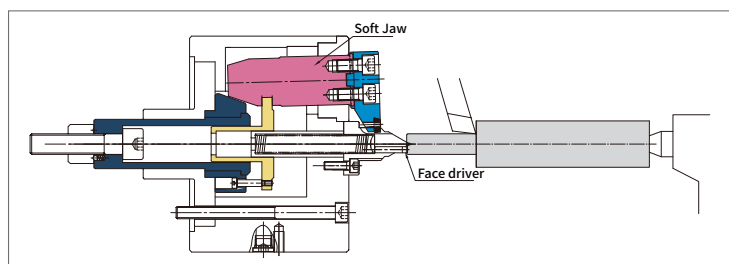
| Model          | A   | B   | C (H6) | D     | E | F  | G max. | G min. | H  | J  | K       | K1 (H7) | K2 | K3 | L     | L1 |
|----------------|-----|-----|--------|-------|---|----|--------|--------|----|----|---------|---------|----|----|-------|----|
| <b>3RF-08</b>  | 210 | 155 | 170    | 133.4 | 5 | 68 | 123    | 79.5   | 37 | 58 | M20x2.5 | -       | -  | -  | 3-M12 | 18 |
| <b>3RF-08D</b> | 210 | 155 | 170    | 133.4 | 5 | 68 | 98     | 54.5   | 50 | 58 | M36x1.5 | 40.5    | 6  | 24 | 3-M12 | 18 |
| <b>3RF-10</b>  | 260 | 178 | 220    | 171.4 | 5 | 68 | 143    | 93     | 37 | 63 | M20x2.5 | -       | -  | -  | 6-M16 | 24 |
| <b>3RF-10D</b> | 260 | 178 | 220    | 171.4 | 5 | 68 | 116.5  | 66.5   | 60 | 63 | M36x1.5 | 40.5    | 6  | 24 | 6-M16 | 26 |
| <b>3RF-12</b>  | 315 | 190 | 220    | 171.4 | 5 | 76 | 167    | 115    | 46 | 70 | M24x3   | -       | -  | -  | 6-M16 | 24 |
| <b>3RF-12D</b> | 315 | 190 | 220    | 171.4 | 5 | 76 | 135    | 83     | 75 | 70 | M40x1.5 | 44.5    | 6  | 28 | 6-M16 | 24 |

| Model          | M max. | M min. | M1 | N   | P    | Q   | R    | R1 max. | R1 min. | S  | T(H7) | U  | V  | V1 | W | X   |
|----------------|--------|--------|----|-----|------|-----|------|---------|---------|----|-------|----|----|----|---|-----|
| <b>3RF-08</b>  | 62     | 31     | 58 | 78  | 2.35 | 62  | -    | -       | -       | 40 | 12    | 26 | 16 | 3  | 7 | M12 |
| <b>3RF-08D</b> | 62     | 31     | 58 | 78  | 2.35 | 62  | 25.5 | 7       | 0       | 40 | 12    | 26 | 16 | 3  | 7 | M12 |
| <b>3RF-10</b>  | 68     | 35.5   | 61 | 102 | 2.75 | 80  | -    | -       | -       | 45 | 15    | 32 | 18 | 3  | 7 | M14 |
| <b>3RF-10D</b> | 68     | 35.5   | 61 | 102 | 2.75 | 80  | 28   | 7       | 0       | 45 | 15    | 32 | 18 | 3  | 7 | M14 |
| <b>3RF-12</b>  | 76     | 43     | 63 | 125 | 2.8  | 100 | -    | -       | -       | 50 | 17    | 36 | 20 | 3  | 7 | M16 |
| <b>3RF-12D</b> | 76     | 43     | 63 | 125 | 2.8  | 100 | 28   | 7       | 0       | 50 | 17    | 36 | 20 | 3  | 7 | M16 |

## APPLICATION NOTES

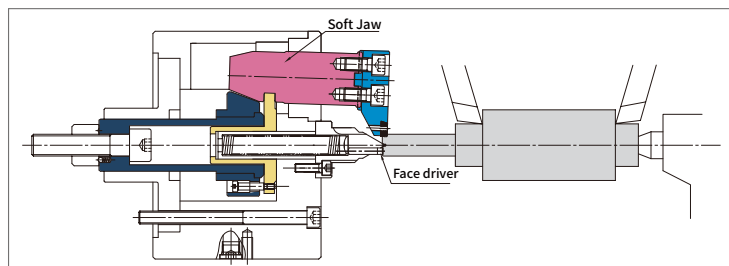
### 1. Clamping diameter machining

The compensating jaws are retracted. The workpiece is clamped between chuck center and tailstock center. Additionally, it is driven by the face driver.



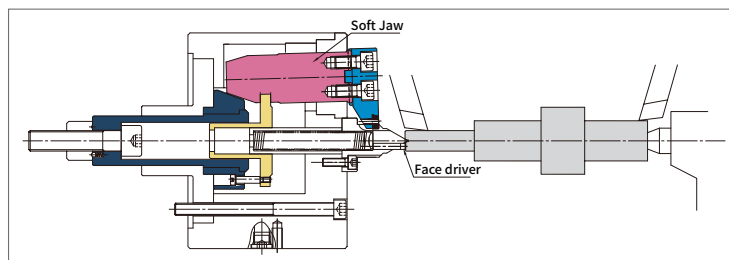
### 2. Rough machining

With compensating jaws clamping, the rough machining can be carried out.



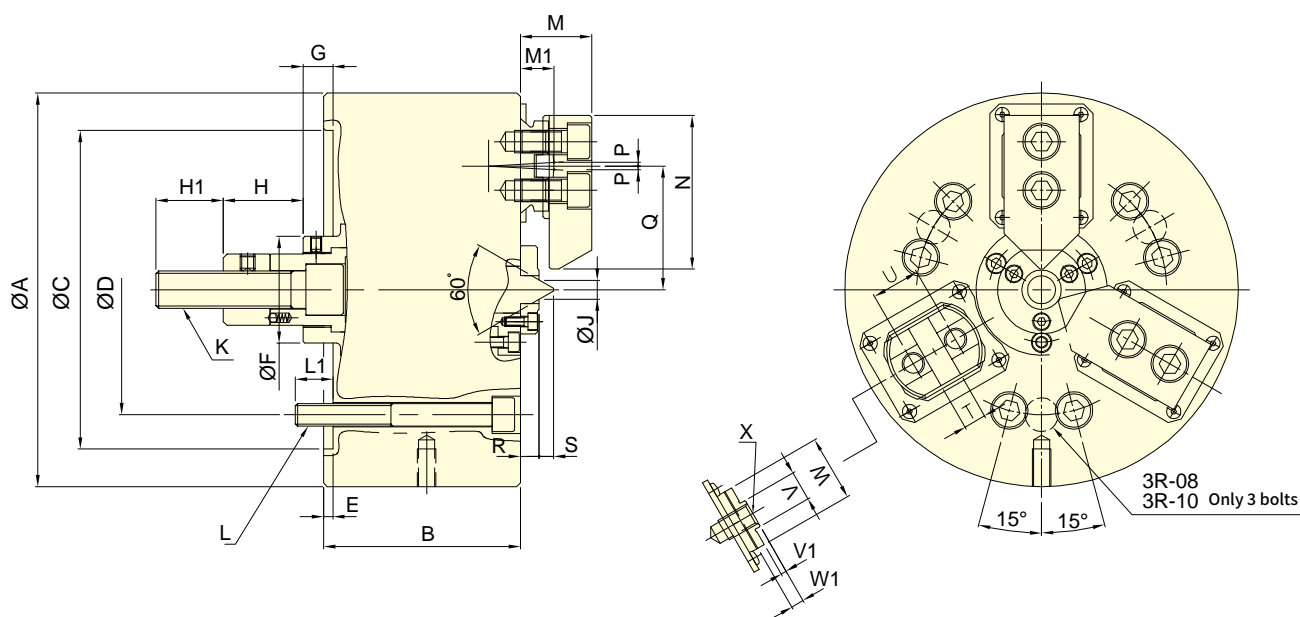
### 3. Finish machining

Additionally, it is driven by the face driver. The entire workpiece can be machined with precise concentricity.





- The workpieces compensation of eccentric is 2 mm, fixed position for the center thimble, swing and grasp the workpiece to three jaw.
- Special seal proof for dust and cutting fluid, it is more convenient when maintenance.
- Swing parts are to heat treatment hardened and ground for steel, in order to improve products service life.



Subject to technical changes

### SPECIFICATIONS

| Model        | Chucking Dia. | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Compensation |
|--------------|---------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|--------------|
|              | mm            | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               |              |
| <b>3R-08</b> | 20            | 8                 | 65                 | 18                 | 19.6(2000)     | 53.0(5404)          | 2800                       | 0.15              | 27     | RK-100N       | 2            |
| <b>3R-10</b> | 25            | 10                | 90                 | 22                 | 29.4(3000)     | 67.7(6901)          | 2500                       | 0.38              | 45     | RK-125N       | 2            |
| <b>3R-12</b> | 25            | 10.2              | 110                | 22                 | 39.4(4000)     | 88.4(9010)          | 2000                       | 0.75              | 72     | RK-150N       | 2            |

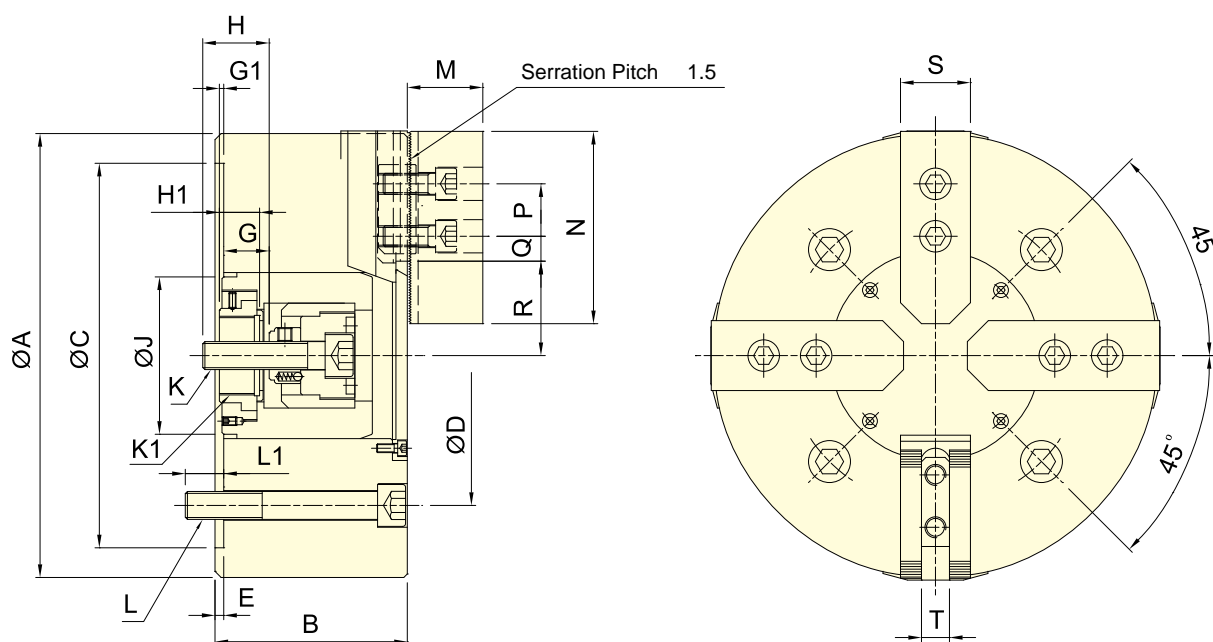
### DIMENSIONS

| Model        | A   | B   | C (H6) | D     | E   | F  | G max. | G min. | H    | H1   | J    | K       | L     | L1   |
|--------------|-----|-----|--------|-------|-----|----|--------|--------|------|------|------|---------|-------|------|
| <b>3R-08</b> | 210 | 105 | 170    | 133.4 | 5   | 57 | 26     | 6      | 42.5 | 36   | 10.4 | M20x2.5 | 3~M12 | 20   |
| <b>3R-10</b> | 254 | 115 | 220    | 171.4 | 5.5 | 64 | 36.5   | 11.5   | 25   | 39   | 15   | M20x2.5 | 3~M16 | 22.5 |
| <b>3R-12</b> | 304 | 130 | 220    | 171.4 | 5   | 70 | 25     | 0      | 33   | 45.5 | 15   | M24x3   | 3~M16 | 22   |

| Model        | M  | M1 | N   | P   | Q max. | Q min. | R  | S    | T (H7) | U  | V  | V1 | W  | W1 | X   |
|--------------|----|----|-----|-----|--------|--------|----|------|--------|----|----|----|----|----|-----|
| <b>3R-08</b> | 38 | 18 | 82  | 2   | 68     | 64     | 10 | 7.7  | 12     | 26 | 16 | 3  | 35 | 7  | M12 |
| <b>3R-10</b> | 40 | 19 | 102 | 2.6 | 82     | 78     | 10 | 11.3 | 15     | 32 | 18 | 3  | 40 | 7  | M14 |
| <b>3R-12</b> | 51 | 24 | 125 | 2.5 | 102.5  | 97.5   | 10 | 11.3 | 17     | 36 | 20 | 3  | 50 | 7  | M16 |



- CRANK type with two pairs of 2 jaws self center independent of each other.
- The 4T series is suitable for square bar and other nonuniform shaped workpieces.



Subject to technical changes

## SPECIFICATIONS

| Model        | Plunger stroke | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl. | Max. pressure              |
|--------------|----------------|-------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------|----------------------------|
|              | mm             | mm                | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>4T-08</b> | 17             | 13.6              | 210                | 24                 | 16.0 (1630)    | 54.3 (5540)         | 3000                       | 0.15              | 23.2   | RD-120(N)     | 1.7(17)                    |
| <b>4T-10</b> | 20             | 16                | 254                | 50                 | 21.6 (2200)    | 79.4 (8100)         | 2100                       | 0.35              | 44.3   | RD-125(N)     | 2.2(22)                    |
| <b>4T-12</b> | 20             | 16                | 304                | 50                 | 21.6 (2200)    | 79.4 (8100)         | 1500                       | 0.66              | 57.6   | RD-125(N)     | 2.2(22)                    |
| <b>4T-15</b> | 25             | 19.6              | 381                | 60                 | 27.2 (2780)    | 105.3 (10750)       | 1200                       | 2.25              | 118.3  | RD-125(N)     | 2.7(27)                    |

## DIMENSIONS

| Model        | A   | B   | C(H6) | D     | E | G max. | G min. | G1 max. | G1 min. | H  | H1 | J   | K       |
|--------------|-----|-----|-------|-------|---|--------|--------|---------|---------|----|----|-----|---------|
| <b>4T-08</b> | 210 | 91  | 170   | 133.4 | 5 | 32     | 15     | 2.5     | -14.5   | 29 | 20 | 61  | M14x2   |
| <b>4T-10</b> | 254 | 110 | 220   | 171.4 | 5 | 36.5   | 16.5   | 10      | -10     | 36 | 23 | 90  | M16x2   |
| <b>4T-12</b> | 304 | 110 | 220   | 171.4 | 5 | 36.5   | 16.5   | 10      | -10     | 36 | 23 | 90  | M16x2   |
| <b>4T-15</b> | 381 | 135 | 300   | 235   | 6 | 44.5   | 19.5   | 5       | -20     | 45 | 28 | 110 | M20x2.5 |

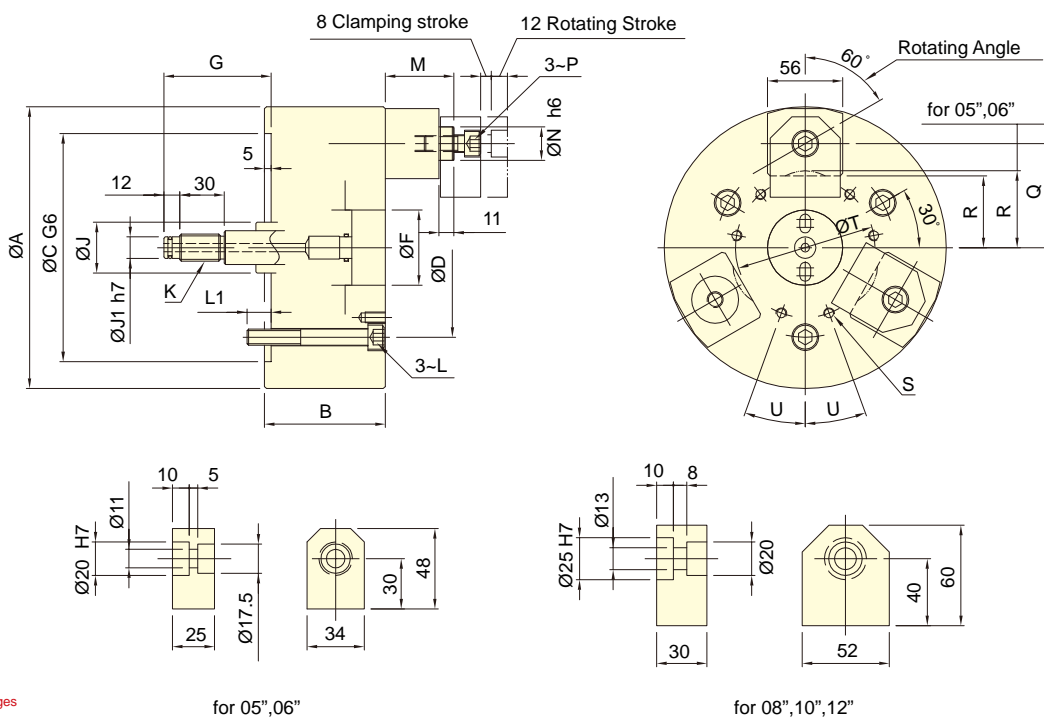
  

| Model        | K1      | L     | L1 | M  | N   | P  | Q max. | Q min. | R max. | R min. | S  | T  |
|--------------|---------|-------|----|----|-----|----|--------|--------|--------|--------|----|----|
| <b>4T-08</b> | M34x1.5 | 4-M2  | 20 | 38 | 95  | 25 | 25.25  | 13.25  | 46.1   | 39.3   | 35 | 14 |
| <b>4T-10</b> | M45x1.5 | 4-M16 | 25 | 43 | 110 | 30 | 32.25  | 12.75  | 59     | 51     | 40 | 16 |
| <b>4T-12</b> | M45x1.5 | 4-M16 | 25 | 43 | 110 | 30 | 54.75  | 15.75  | 59     | 51     | 40 | 16 |
| <b>4T-15</b> | M55x2   | 4-M20 | 30 | 51 | 130 | 30 | 66.5   | 12.5   | 78.9   | 69.1   | 50 | 21 |



- Gripping at the end face and preventing deformation of workpiece.
- Suitable for thin wall workpiece processing.
- The gripping compensating mechanism can grasp the irregular surface workpieces well.
- Airtight pressure detect function is optional.

SPECIAL PURPOSE POWER CHUCKS



Subject to technical changes

### SPECIFICATIONS

| Model        | Rotating stroke | Clamping stroke | Jaw's compensation | Chucking Dia.Max. | Chucking Dia.Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl.       | Max. pressure              |
|--------------|-----------------|-----------------|--------------------|-------------------|-------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------------|----------------------------|
|              | mm              | mm              | mm                 | mm                | mm                | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg     |                     | MPa (kgf/cm <sup>2</sup> ) |
| <b>3J-05</b> | 12              | 8               | 2                  | 53                | 25                | 7.5(765)       | 6.0(612)            | 4000                       | 0.02              | 11.0   | RK-100 OR RK-100(N) | 1.0(10)                    |
| <b>3J-06</b> | 12              | 8               | 2                  | 79                | 55                | 9.0(918)       | 7.5(765)            | 4000                       | 0.04              | 12.0   | RK-100 OR RK-100(N) | 1.2(12)                    |
| <b>3J-08</b> | 12              | 8               | 2                  | 106               | 75                | 18.0(1835)     | 16.5(1680)          | 3500                       | 0.13              | 23.0   | RK-100 OR RK-100(N) | 2.5(25)                    |
| <b>3J-10</b> | 12              | 8               | 2.5                | 150               | 119               | 18.0(1835)     | 16.5(1680)          | 3500                       | 0.30              | 33.0   | RK-100 OR RK-100(N) | 2.5(25)                    |
| <b>3J-12</b> | 12              | 8               | 2.5                | 200               | 169               | 18.0(1835)     | 16.5(1680)          | 3000                       | 0.56              | 44.0   | RK-100 OR RK-100(N) | 2.5(25)                    |

### DIMENSIONS

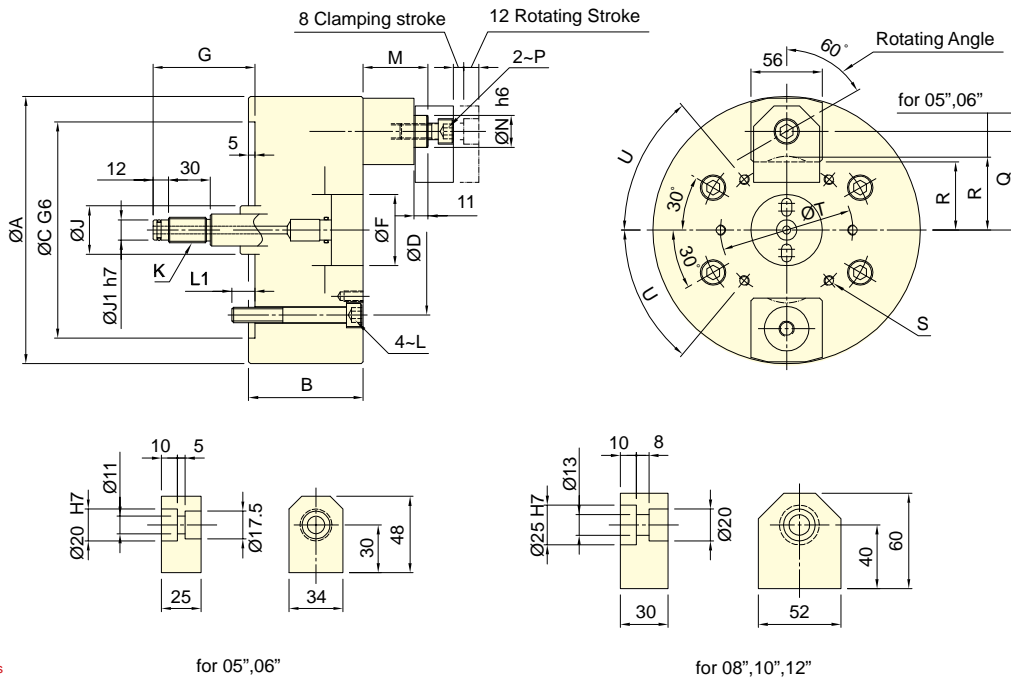
| Model        | A   | B  | C   | D     | F  | G max. | G min. | J  | J1 | K        |
|--------------|-----|----|-----|-------|----|--------|--------|----|----|----------|
| <b>3J-05</b> | 135 | 86 | 110 | 82.6  | 40 | 75     | 55     | 25 | 9  | M12x1.75 |
| <b>3J-06</b> | 165 | 86 | 140 | 104.8 | 45 | 75     | 55     | 28 | 12 | M16x2    |
| <b>3J-08</b> | 210 | 90 | 170 | 133.4 | 56 | 80     | 60     | 38 | 16 | M20x2.5  |
| <b>3J-10</b> | 254 | 95 | 220 | 171.4 | 56 | 75     | 55     | 38 | 16 | M20x2.5  |
| <b>3J-12</b> | 304 | 95 | 220 | 171.4 | 56 | 75     | 55     | 38 | 16 | M20x2.5  |

| Model        | L   | L1 | M max. | M min. | N  | P   | Q     | R     | S    | T   | U   |
|--------------|-----|----|--------|--------|----|-----|-------|-------|------|-----|-----|
| <b>3J-05</b> | M10 | 15 | 56     | 36     | 20 | M10 | 42.5  | 27    | 3-M6 | 50  | -   |
| <b>3J-06</b> | M10 | 15 | 56     | 36     | 20 | M10 | 57.5  | 40    | 3-M8 | 64  | -   |
| <b>3J-08</b> | M12 | 18 | 71     | 51     | 25 | M12 | 77.5  | 53.5  | 6-M8 | 104 | 20° |
| <b>3J-10</b> | M16 | 24 | 71     | 51     | 25 | M12 | 99.5  | 75.5  | 6-M8 | 140 | 20° |
| <b>3J-12</b> | M16 | 24 | 71     | 51     | 25 | M12 | 124.5 | 100.5 | 6-M8 | 190 | 20° |



- Gripping at the end face and preventing deformation of workpiece.
- Suitable for thin wall workpiece processing.
- The gripping compensating mechanism can grasp the irregular surface workpieces well.
- Airtight pressure detect function is optional.



Subject to technical changes

### SPECIFICATIONS

| Model | Rotating stroke | Clamping stroke | Jaw's compensation | Chucking Dia. Max. | Chucking Dia. Min. | Max. D.B. pull | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Matching cyl.       | Max. pressure              |
|-------|-----------------|-----------------|--------------------|--------------------|--------------------|----------------|---------------------|----------------------------|-------------------|--------|---------------------|----------------------------|
|       | mm              | mm              | mm                 | mm                 | mm                 | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     |                     | MPa (kgf/cm <sup>2</sup> ) |
| 2J-05 | 12              | 8               | 2                  | 53                 | 25                 | 5.0(510)       | 4.0(408)            | 4000                       | 0.015             | 9.0    | RK-100 OR RK-100(N) | 0.7(7)                     |
| 2J-06 | 12              | 8               | 2                  | 79                 | 55                 | 6.0(612)       | 5.0(510)            | 4000                       | 0.035             | 9.8    | RK-100 OR RK-100(N) | 0.8(8)                     |
| 2J-08 | 12              | 8               | 2                  | 106                | 75                 | 12.0(1224)     | 11.0(1122)          | 3500                       | 0.12              | 20.3   | RK-100 OR RK-100(N) | 1.7(17)                    |
| 2J-10 | 12              | 8               | 2.5                | 150                | 119                | 12.0(1224)     | 11.0(1122)          | 3500                       | 0.28              | 30.7   | RK-100 OR RK-100(N) | 1.7(17)                    |
| 2J-12 | 12              | 8               | 2.5                | 200                | 169                | 12.0(1224)     | 11.0(1122)          | 3000                       | 0.52              | 41.2   | RK-100 OR RK-100(N) | 1.7(17)                    |

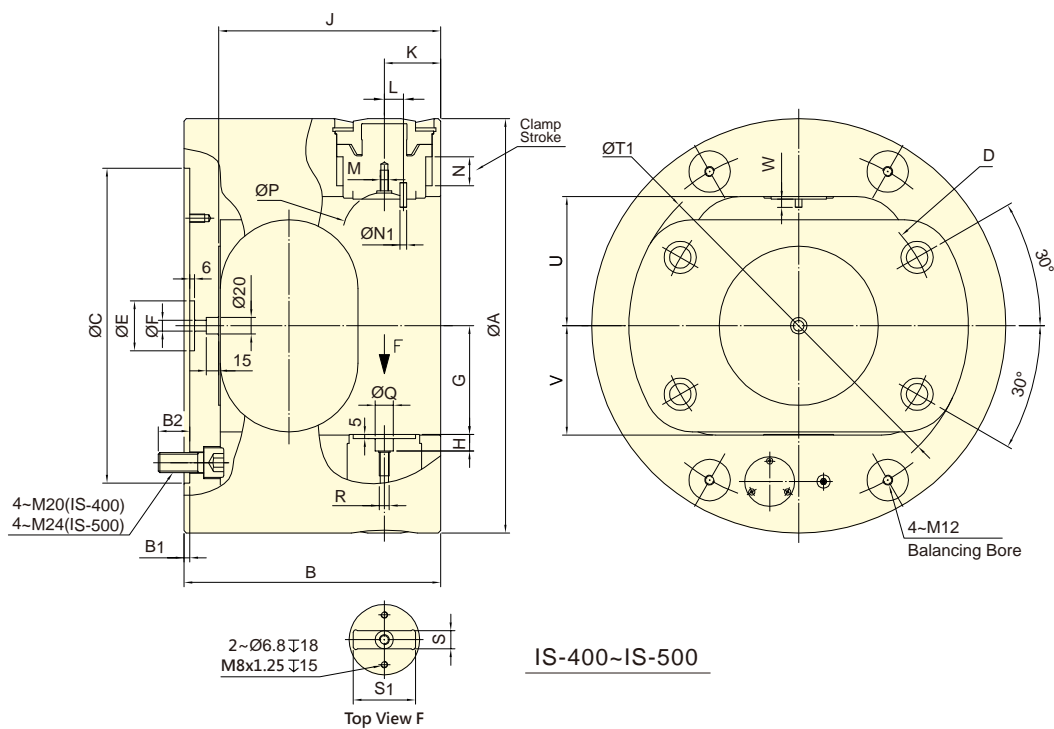
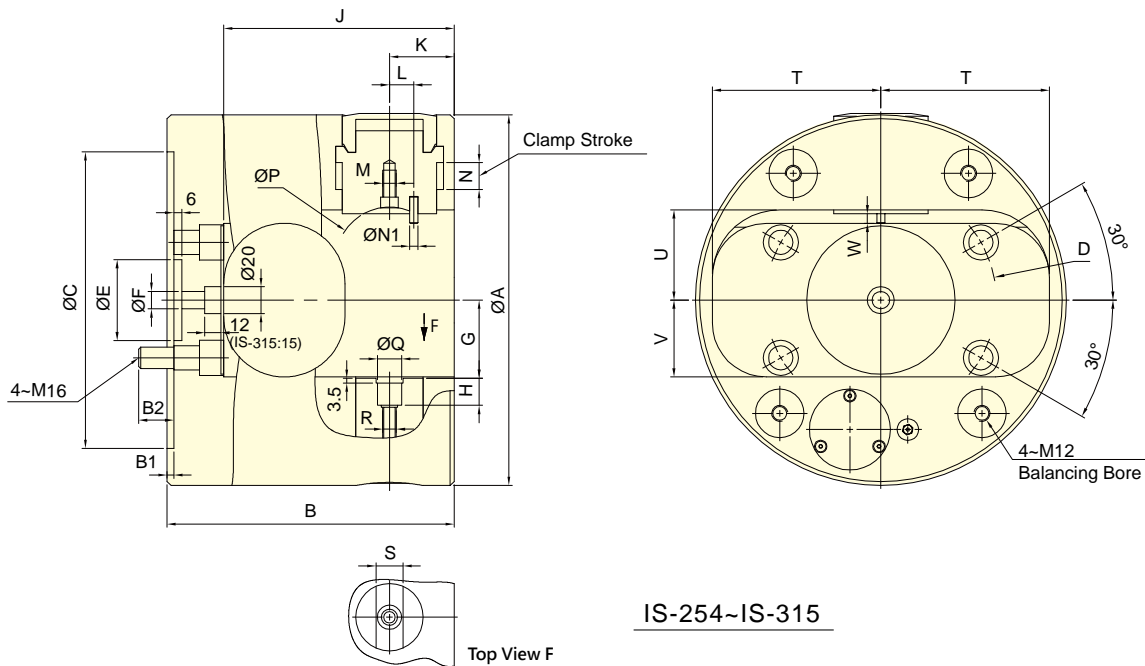
### DIMENSIONS

| Model | A   | B  | C   | D     | F  | G max. | G min. | J  | J1 | K        |
|-------|-----|----|-----|-------|----|--------|--------|----|----|----------|
| 2J-05 | 135 | 86 | 110 | 82.6  | 40 | 75     | 55     | 25 | 9  | M12x1.75 |
| 2J-06 | 165 | 86 | 140 | 104.8 | 45 | 75     | 55     | 28 | 12 | M16x2    |
| 2J-08 | 210 | 90 | 170 | 133.4 | 56 | 80     | 60     | 38 | 16 | M20x2.5  |
| 2J-10 | 254 | 95 | 220 | 171.4 | 56 | 75     | 55     | 38 | 16 | M20x2.5  |
| 2J-12 | 304 | 95 | 220 | 171.4 | 56 | 75     | 55     | 38 | 16 | M20x2.5  |

| Model | L   | L1 | M max. | M min. | N  | P   | Q     | R     | S    | T   | U   |
|-------|-----|----|--------|--------|----|-----|-------|-------|------|-----|-----|
| 2J-05 | M10 | 15 | 56     | 36     | 20 | M10 | 42.5  | 27    | 4-M6 | 50  | 30° |
| 2J-06 | M10 | 15 | 56     | 36     | 20 | M10 | 57.5  | 40    | 4-M8 | 64  | 30° |
| 2J-08 | M12 | 18 | 71     | 51     | 25 | M12 | 77.5  | 53.5  | 6-M8 | 104 | 50° |
| 2J-10 | M16 | 24 | 71     | 51     | 25 | M12 | 99.5  | 75.5  | 6-M8 | 140 | 50° |
| 2J-12 | M16 | 24 | 71     | 51     | 25 | M12 | 124.5 | 100.5 | 6-M8 | 190 | 50° |



- Indexing operates during the spindle rotation, can perform a quick change between multiple working axes.
- All parts of chuck hardened, ground and lubricated directly.
- Sealed against swarf, chips and coolant.
- High rigidity and high repeatability precision.
- Unique indexing system and hydraulic system, with pressure detection device in chuck, high reliability.



Subject to technical changes

## SPECIFICATIONS

| Model          | Index Angle | Jaw stroke | Chucking Area Dia Max. | Chucking Area Len Max. | Max. pressure       | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | ROTATING JOINT | Main Spindle Bore       | Clamp Jaw Weight |
|----------------|-------------|------------|------------------------|------------------------|---------------------|---------------------|----------------------------|-------------------|--------|----------------|-------------------------|------------------|
|                | Deg         | mm         | mm                     | mm                     | kgf/cm <sup>2</sup> | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     |                | mm                      | kg               |
| <b>IS-254</b>  | 4x90°       | 20         | 65                     | 160                    | 45                  | 19.5(1990)          | 3100                       | 0.41              | 41     | IRJ-5E1        | <sup>61</sup> and above | 0.6              |
| <b>IS-275</b>  | 4x90°       | 20         | 80                     | 220                    | 45                  | 25.4(2590)          | 2500                       | 0.61              | 52     | IRJ-5E1        | <sup>61</sup> and above | 1.2              |
| <b>IS-315</b>  | 4x90°       | 20         | 100                    | 230                    | 45                  | 25.0(2550)          | 1200                       | 1.13              | 76     | IRJ-5E1        | <sup>61</sup> and above | 1.8              |
| <b>*IS-400</b> | 4x90°       | 30         | 170                    | 260                    | 45                  | 34.5(3510)          | 1000                       | 3.4               | 125    | IRJ-5E1        | <sup>61</sup> and above | 4.0              |
| <b>*IS-500</b> | 4x90°       | 35         | 220                    | 310                    | 45                  | 45.7(4660)          | 1000                       | 9.4               | 220    | IRJ-5E1        | <sup>61</sup> and above | 6.0              |

## DIMENSIONS

| Model          | A   | B   | B1 | B2 | C(H6) | D     | E  | F  | G    | H    | J   | K  |
|----------------|-----|-----|----|----|-------|-------|----|----|------|------|-----|----|
| <b>IS-254</b>  | 254 | 190 | 5  | 23 | 220   | 171.4 | 60 | 13 | 47.5 | 18   | 155 | 48 |
| <b>IS-275</b>  | 275 | 213 | 5  | 26 | 220   | 171.4 | 60 | 13 | 58   | 20   | 171 | 48 |
| <b>IS-315</b>  | 315 | 232 | 5  | 22 | 220   | 171.4 | 60 | 13 | 71   | 18.5 | 187 | 50 |
| <b>*IS-400</b> | 400 | 260 | 6  | 30 | 300   | 235   | 60 | 13 | 99   | 21   | 220 | 60 |
| <b>*IS-500</b> | 500 | 308 | 6  | 38 | 380   | 330.2 | 60 | 13 | 131  | 21   | 266 | 68 |

| Model          | L  | M   | N  | N1 | P   | Q(H7) | R   | S(H7) | S1 | T   | T1  | U   | V    | W   |
|----------------|----|-----|----|----|-----|-------|-----|-------|----|-----|-----|-----|------|-----|
| <b>IS-254</b>  | 13 | M8  | 20 | 5  | 40  | 18    | M10 | 20    | -  | 106 | -   | 57  | 46.5 | 5.5 |
| <b>IS-275</b>  | 18 | M10 | 20 | 6  | 80  | 18    | M10 | 20    | -  | 125 | -   | 67  | 57   | 7   |
| <b>IS-315</b>  | 18 | M10 | 20 | 6  | 75  | 24    | M12 | 25    | -  | 136 | -   | 85  | 70   | 7.5 |
| <b>*IS-400</b> | 23 | M10 | 30 | 8  | 100 | 22    | M12 | 24    | 70 | -   | 330 | 112 | 100  | 10  |
| <b>*IS-500</b> | 25 | M10 | 35 | 8  | 100 | 22    | M12 | 24    | 75 | -   | 410 | 156 | 132  | 10  |



\*Index Angle 8x45° or Specific Angle, Please contact AUTOGRIP for more detailed information. Thanks.

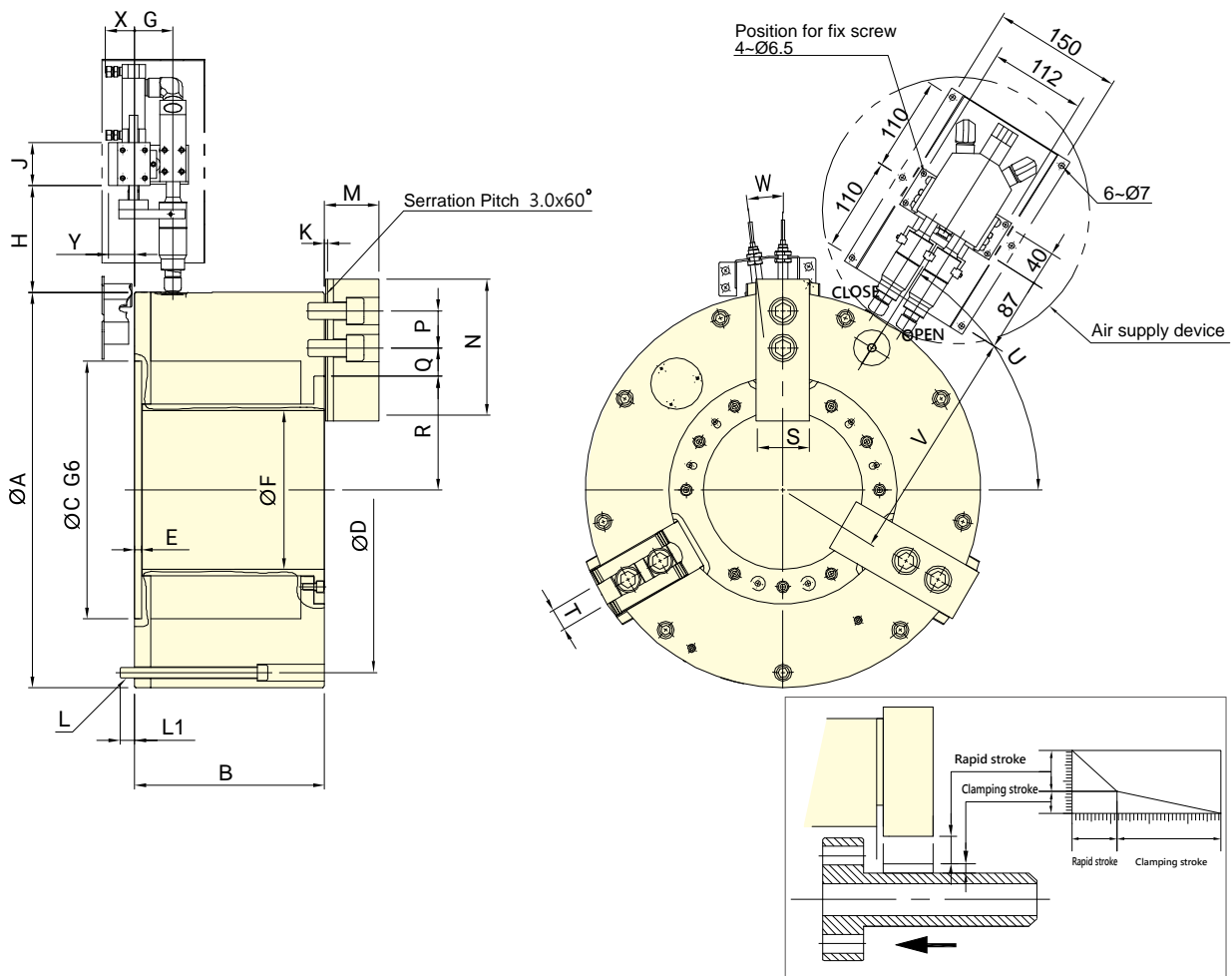
The maximum rotational speed can only be achieved when the hydraulic pressure is at its maximum. Additionally, the operating pressure and the weight of the clamping fixture must not exceed the values shown in the table above.

Indexing can be performed while the spindle is rotating. However, when indexing at high rotational speeds, it is recommended to reduce the speed by 50% to avoid vibration caused by imbalance when the workpiece is in an intermediate position. Furthermore, depending on the shape of the workpiece, indexing during spindle rotation may not be possible.

The "\*" model is produced upon order, with no stock available.



- Large through-hole 3-jaw power chuck with build in air cylinder.
- With build-in "pressure detection" device which can check the rapidly decreasing pressure within the chuck, guarantee to the security when operating.
- Features an air supply system, it is easy to install and maintain. No abrasion issue of traditional sealed ring. Maintenance cost and time can be saved.
- The build-in "clamping detection" device can avoid jaws clamping the workpiece during the rapid stroke stage. This mechanism can also prevent causing the damage of the internal parts or flying out of workpiece.(only for O.D. clamping)
- Extended jaw stroke design can shorten the processing time when gripping.
- Notice:No clamping in rapid stroke period.



Subject to technical changes

## SPECIFICATIONS

| Model          | Thru-hole Dia. | Jaw stroke (Dia.) |    | Chucking Dia. Max. | Chucking Dia. Min. | Max. Clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg | Air Consumption<br>lit(at 6kgf/cm <sup>2</sup> ) |
|----------------|----------------|-------------------|----|--------------------|--------------------|---------------------------------|--|--|--------------|--|
|                | mm             | mm                | mm | mm                 |                    |                                 |  |  |              |  |
| <b>APS-185</b> | 185            | 26                | 14 | 460                | 127                | 110(11216)                      | 1300                                     | 6.45                                   | 198          | 22   |

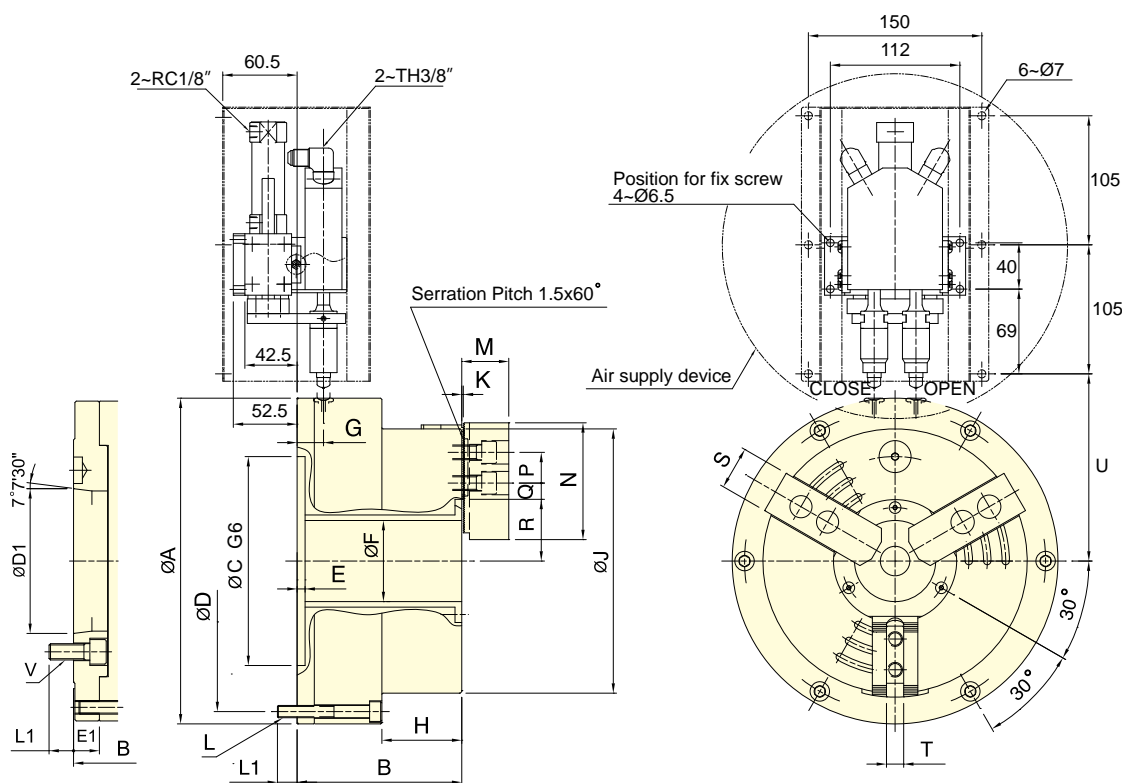
## DIMENSIONS

| Model          | A   | B   | C      | D      | E      | F      | G  | H    | J  | K   | L     | L1 | M    |
|----------------|-----|-----|--------|--------|--------|--------|----|------|----|-----|-------|----|------|
| <b>APS-185</b> | 460 | 221 | 300    | 425    | 8      | 185    | 45 | 124  | 50 | 3.5 | 9-M12 | 17 | 63.7 |
| Model          | N   | P   | Q max. | Q min. | R max. | R min. | S  | T    | U  | V   | W     | X  | Y    |
| <b>APS-185</b> | 165 | 43  | 37     | 17     | 145    | 125    | 62 | 25.5 | 58 | 272 | 7°    | 38 | 30   |



- Large through-hole 3-jaw pneumatic power chuck with a built-in air cylinder, ideal for pipe and tube machining.
- Equipped with an integrated pressure detection mechanism that monitors sudden pressure drops inside the chuck, ensuring safe operation (Applicable to O.D. gripping only).
- Features an air supply system that allows quick installation and easy maintenance, eliminating wear issues associated with traditional air sealing rings.
- Reduces installation and maintenance costs while minimizing downtime.

SPECIAL PURPOSE POWER CHUCKS



AP-A

Subject to technical changes

## SPECIFICATIONS

| Model  | Thru-hole Dia. | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. pressure              | Max. Clamping force | Max. speed                 | Moment of inertia | Weight | Air Consumption                |     |     |
|--------|----------------|-------------------|--------------------|--------------------|----------------------------|---------------------|----------------------------|-------------------|--------|--------------------------------|-----|-----|
|        | mm             | mm                | mm                 | mm                 | MPa (kgf/cm <sup>2</sup> ) | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg-m <sup>2</sup> | kg     | lit (at 6kgf/cm <sup>2</sup> ) |     |     |
| AP-52  | A6             | 52                | 5.9                | 170                | 15                         | 0.6(6.1)            | 40.5(4128)                 | 3900              | 0.2    | 26                             | 30  | 3.1 |
| AP-66  | A6             | 66                | 7.6                | 215                | 24                         | 0.6(6.1)            | 50(5097)                   | 3000              | 0.4    | 38                             | 45  | 5.1 |
| AP-86  | A8             | 86                | 8.9                | 268                | 43                         | 0.6(6.1)            | 80(8156)                   | 2800              | 0.7    | 58                             | 72  | 8.7 |
| AP-115 | A8             | 115               | 10.6               | 330                | 55                         | 0.6(6.1)            | 90(9174)                   | 2000              | 1.7    | 92                             | 112 | 12  |

## DIMENSIONS

| Model  | A  | B   | C   | D   | D1  | E   | E1     | F   | G  | H   | J    | K    | L   |   |       |
|--------|----|-----|-----|-----|-----|-----|--------|-----|----|-----|------|------|-----|---|-------|
| AP-52  | A6 | 235 | 121 | 140 | 170 | 215 | 106.38 | 6.5 | 19 | 52  | 21.5 | 58.5 | 170 | 2 | 6-M10 |
| AP-66  | A6 | 265 | 134 | 153 | 170 | 245 | 106.38 | 6.5 | 19 | 66  | 21.5 | 65   | 215 | 2 | 6-M10 |
| AP-86  | A8 | 315 | 142 | 169 | 220 | 295 | 139.72 | 6.5 | 27 | 86  | 21.5 | 67   | 268 | 2 | 6-M10 |
| AP-115 | A8 | 370 | 154 | 181 | 220 | 350 | 139.72 | 6.5 | 27 | 115 | 21.5 | 69   | 330 | 2 | 6-M10 |

| Model  | L1 | M  | N  | P  | Q max. | Q min. | R max. | R min. | S    | T    | U  | V  |       |       |
|--------|----|----|----|----|--------|--------|--------|--------|------|------|----|----|-------|-------|
| AP-52  | A6 | 15 | 18 | 37 | 73     | 20     | 21.2   | 9.2    | 38   | 35.1 | 31 | 12 | 145.5 | 6-M12 |
| AP-66  | A6 | 16 | 18 | 38 | 95     | 25     | 23.7   | 8.7    | 50.2 | 46.4 | 35 | 14 | 159.5 | 6-M12 |
| AP-86  | A8 | 16 | 24 | 43 | 110    | 30     | 32.2   | 12.7   | 62.2 | 57.8 | 40 | 16 | 184.5 | 6-M16 |
| AP-115 | A8 | 16 | 24 | 51 | 130    | 30     | 44.7   | 14.7   | 77   | 71.7 | 50 | 21 | 212   | 6-M16 |

The dimensions and the specifications of AP-A type are in red data.

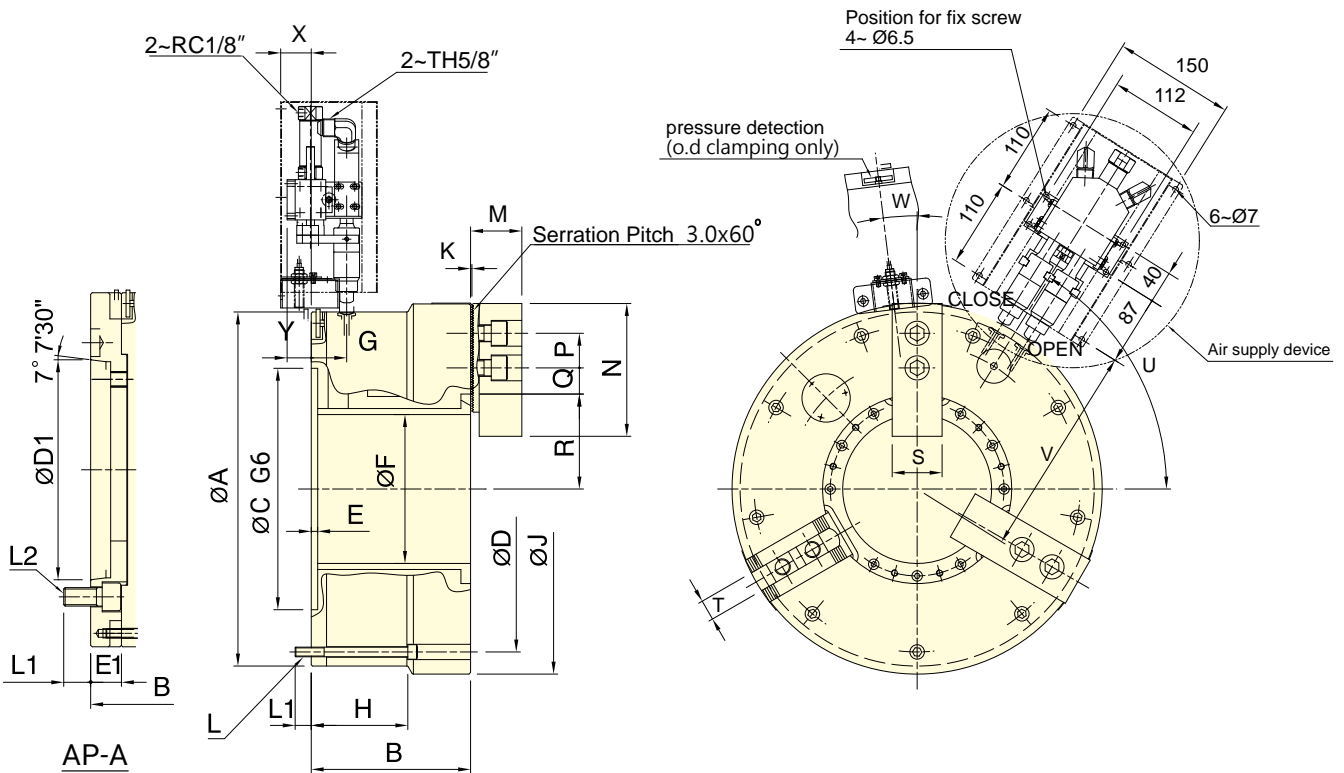


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TAIWAN EXCELLENCE



- Large through-hole 3-jaw pneumatic power chuck with a built-in air cylinder, ideal for pipe and tube machining.
- Equipped with an integrated pressure detection mechanism that monitors sudden pressure drops inside the chuck, ensuring safe operation (Applicable to O.D. gripping only).
- Features an air supply system that allows quick installation and easy maintenance, eliminating wear issues associated with traditional air sealing rings.
- Reduces installation and maintenance costs while minimizing downtime.

SPECIAL PURPOSE POWER CHUCKS



Subject to technical changes

## SPECIFICATIONS

| Model  | Thru-hole Dia. | Jaw stroke (Dia.) | Chucking Dia.Max. | Chucking Dia.Min. | Max. pressure | Max. Clamping force | Max. speed | Moment of inertia | Weight |     | Air Consumption |      |
|--------|----------------|-------------------|-------------------|-------------------|---------------|---------------------|------------|-------------------|--------|-----|-----------------|------|
|        |                |                   |                   |                   |               |                     |            |                   | mm     | mm  |                 | mm   |
| AP-145 | <b>A11</b>     | 145               | 14                | 420               | 62            | 0.6(6.1)            | 110(11213) | 1500              | 3.8    | 156 | <b>182</b>      | 17.8 |
| AP-185 | <b>A15</b>     | 185               | 14                | 460               | 100           | 0.6(6.1)            | 160(16310) | 1700              | 6.0    | 188 | <b>223</b>      | 22   |
| AP-230 | <b>A15</b>     | 230               | 17                | 535               | 170           | 0.6(6.1)            | 150(15290) | 1300              | 11.1   | 265 | <b>310</b>      | 34   |
| AP-275 | <b>A20</b>     | 275               | 17                | 580               | 200           | 0.6(6.1)            | 160(16310) | 1100              | 15.5   | 301 | <b>346</b>      | 39   |
| AP-320 | <b>A20</b>     | 320               | 17                | 658               | 200           | 0.6(6.1)            | 180(18348) | 1000              | 27.2   | 415 | <b>505</b>      | 45   |
| AP-375 | <b>A20</b>     | 375               | 24                | 738               | 260           | 0.6(6.1)            | 210(21406) | 900               | 44.2   | 530 | <b>545</b>      | 55   |

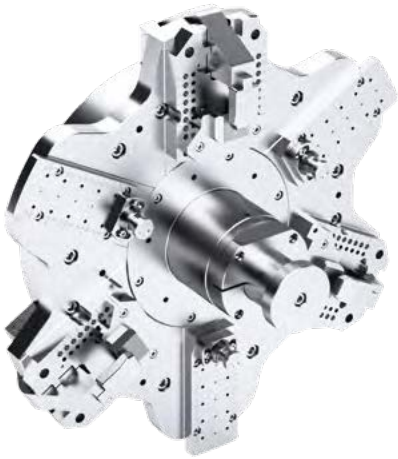
The dimensions and the specifications of AP-A type are in red data

## DIMENSIONS

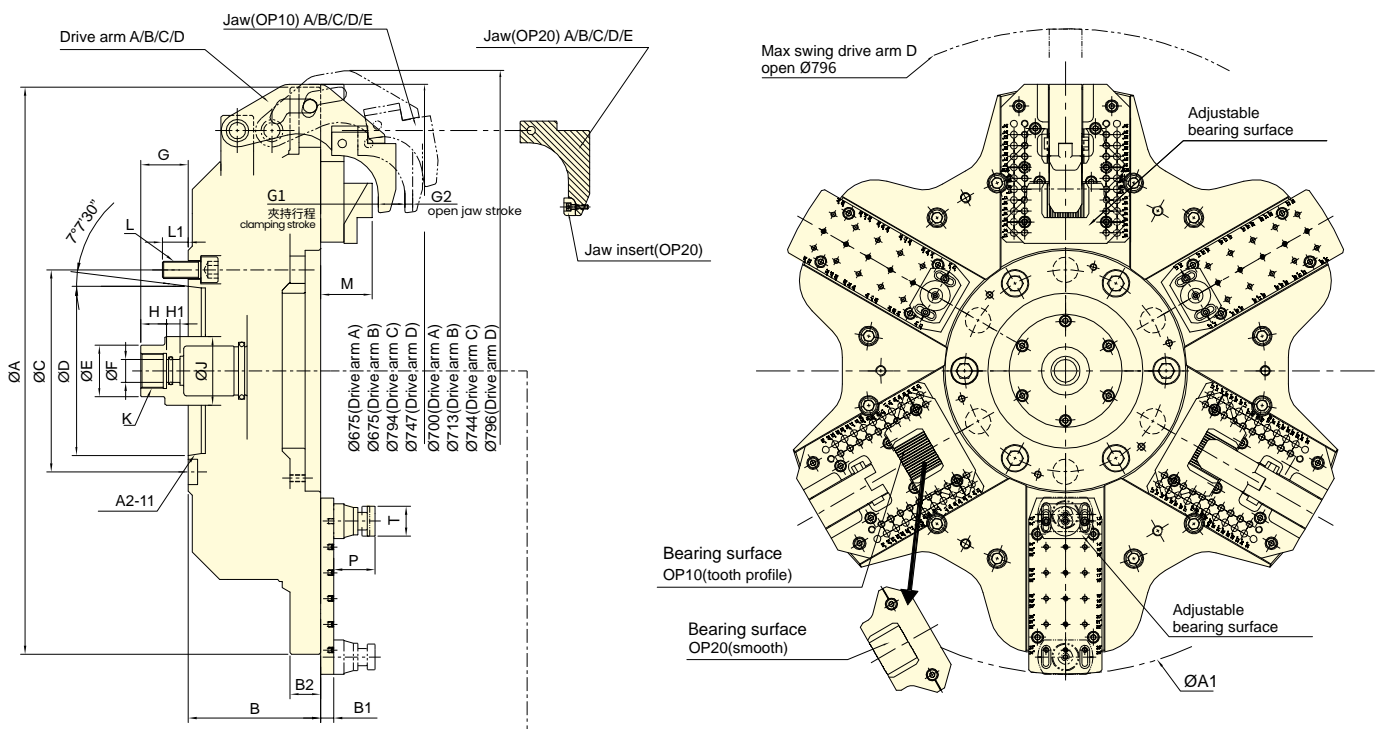
| Model         | A          | B   | C   | D          | D1  | E   | E1            | F | G         | H   | J  | K     | L   | L1  |       |    |           |
|---------------|------------|-----|-----|------------|-----|-----|---------------|---|-----------|-----|----|-------|-----|-----|-------|----|-----------|
| <b>AP-145</b> | <b>A11</b> | 400 | 198 | <b>231</b> | 300 | 365 | <b>196.87</b> | 8 | <b>33</b> | 145 | 34 | 120   | 420 | 3.5 | 9-M12 | 20 | <b>31</b> |
| <b>AP-185</b> | <b>A15</b> | 460 | 198 | <b>238</b> | 300 | 405 | <b>285.78</b> | 8 | <b>40</b> | 185 | 44 | 120   | 460 | 3.5 | 9-M12 | 20 | <b>35</b> |
| <b>AP-230</b> | <b>A15</b> | 515 | 226 | <b>266</b> | 380 | 483 | <b>285.78</b> | 8 | <b>40</b> | 230 | 49 | 145   | 535 | 3.5 | 6-M16 | 24 | <b>35</b> |
| <b>AP-275</b> | <b>A20</b> | 560 | 232 | <b>272</b> | 380 | 528 | <b>412.78</b> | 8 | <b>40</b> | 275 | 52 | 152   | 580 | 3.5 | 6-M16 | 24 | <b>35</b> |
| <b>AP-320</b> | <b>A20</b> | 615 | 256 | <b>306</b> | 520 | 580 | <b>412.78</b> | 8 | <b>50</b> | 320 | 55 | 116.5 | 658 | 3.5 | 9-M16 | 25 | <b>33</b> |
| <b>AP-375</b> | <b>A20</b> | 690 | 272 | <b>322</b> | 520 | 650 | <b>412.78</b> | 8 | <b>50</b> | 375 | 55 | 127   | 738 | 3.5 | 9-M16 | 28 | <b>33</b> |

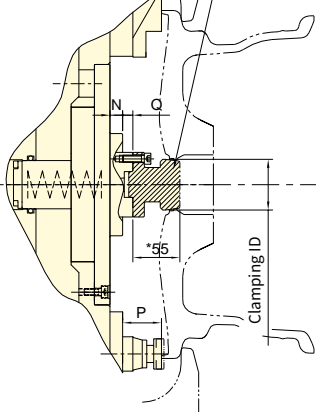
| Model         | L2         | M            | N    | P   | Q max. | Q min. | R max. | R min. | S     | T  | U    | V   | W   | X  | Y  |    |
|---------------|------------|--------------|------|-----|--------|--------|--------|--------|-------|----|------|-----|-----|----|----|----|
| <b>AP-145</b> | <b>A11</b> | <b>6~M20</b> | 63.7 | 165 | 43     | 53.5   | 23.5   | 98     | 91    | 62 | 25.5 | 57° | 242 | 0° | 38 | 20 |
| <b>AP-185</b> | <b>A15</b> | <b>6~M24</b> | 63.7 | 165 | 43     | 53.5   | 23.5   | 118    | 111   | 62 | 25.5 | 58° | 272 | 7° | 38 | 20 |
| <b>AP-230</b> | <b>A15</b> | <b>6~M24</b> | 71.7 | 180 | 60     | 48.5   | 18.5   | 145    | 136.5 | 64 | 25.5 | 30° | 300 | 7° | 33 | 15 |
| <b>AP-275</b> | <b>A20</b> | <b>6~M24</b> | 71.7 | 180 | 60     | 48.5   | 18.5   | 167.5  | 159   | 64 | 25.5 | 30° | 322 | 7° | 30 | 12 |
| <b>AP-320</b> | <b>A20</b> | <b>6~M24</b> | 81.5 | 210 | 60     | 60.5   | 24.5   | 190    | 181.5 | 75 | 30   | 52° | 350 | 7° | 27 | 9  |
| <b>AP-375</b> | <b>A20</b> | <b>6~M24</b> | 81.5 | 210 | 60     | 66.5   | 24.5   | 223.5  | 211.5 | 75 | 30   | 52° | 387 | 7° | 27 | 9  |



- Made of high-grade alloy steel. All sliding surfaces are surface-hardened and precision-ground to ensure durability and operational stability.
- Designed for rough and finish machining of aluminum alloy wheels for passenger vehicles.
- Accommodates wheel sizes ranging from 13" to 24" by adjusting the support and sealing surfaces, and replacing the drive arms and jaws.
- Changeable fixtures allow adaptation to various centering methods required in different machining processes, enhancing precision and production flexibility.
- Compatible with CNC lathes, dedicated wheel machining machines, and mill-turn centers.
- Optional matching jaws and drive arms available.

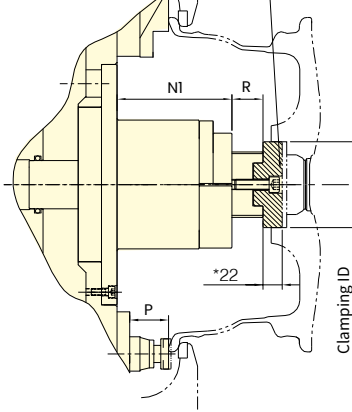


The jig is customized according to the customer's workpiece ID.



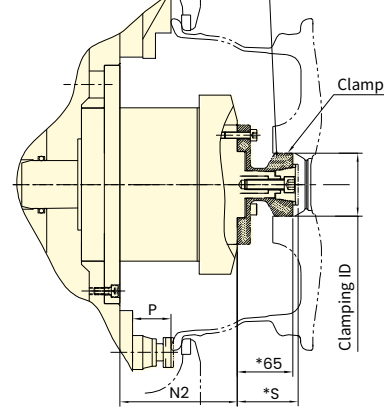
OP10 Centralizing method(Spring)

The jig is customized according to the customer's workpiece ID.



OP20 Centralizing method(thread)

Expanding Collet  
The jig is customized according to the customer's workpiece ID.



OP20 Centralizing method(Expanding Collet)

\* Dimensions may vary depending on the jig size.

## SPECIFICATIONS

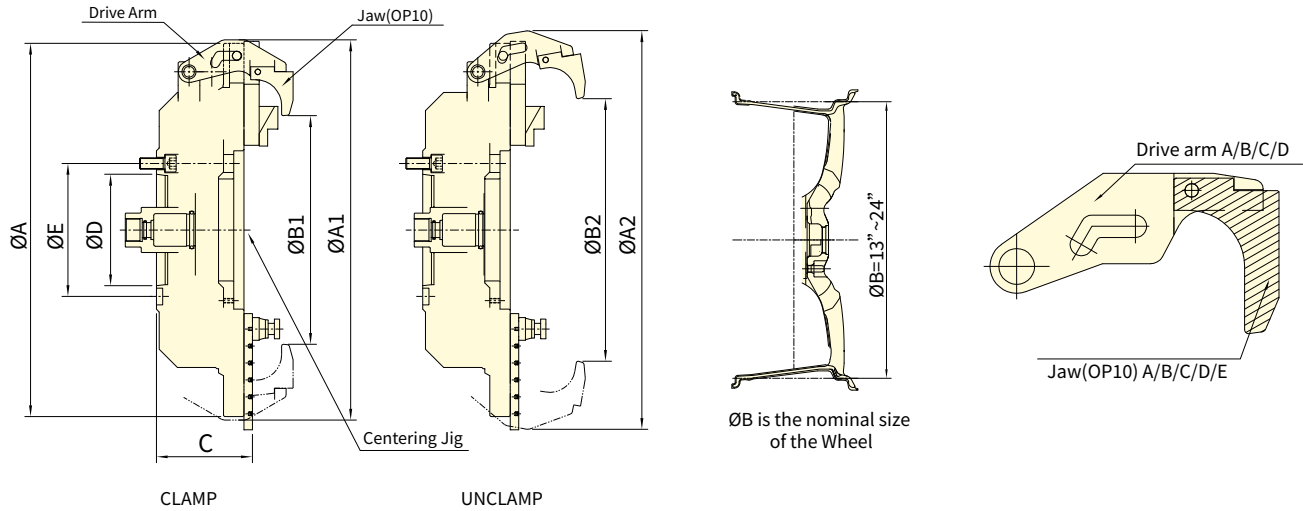
| Model         |            | Total axial stroke | Open jaw stroke | Clamping stroke | Max. clamping size of the Wheel | Min. clamping size of the Wheel | Max. D.B. pull | Max. clamping force |
|---------------|------------|--------------------|-----------------|-----------------|---------------------------------|---------------------------------|----------------|---------------------|
|               |            | mm                 | mm              | mm              | inch                            | inch                            | kN (kgf)       | kN (kgf)            |
| <b>3FW-26</b> | <b>A11</b> | 40                 | 9               | 31              | 24"                             | 13"                             | 34.3(3500)     | 30.9(3150)          |

| Model         |            | Max. speed                 | Moment of inertia | Weight (Jig not included) | Weight (OP10 jig included) | Weight (OP20 jig included) | Matching cyl. | Max. pressure           |
|---------------|------------|----------------------------|-------------------|---------------------------|----------------------------|----------------------------|---------------|-------------------------|
|               |            | min <sup>-1</sup> (r.p.m.) | kg·m <sup>2</sup> | kg                        | kg                         | kg                         |               | MPa kgf/cm <sup>2</sup> |
| <b>3FW-26</b> | <b>A11</b> | 2200                       | 7.3               | 160                       | 180                        | 190-200                    | RE-A1340      | 3.2(33)                 |

## DIMENSIONS

| Model         |            | A   | A1  | B     | B1 | B2 | C   | D      | E  | F    | G max. | G min. | G1 | G2 | H  | H1   | J  |
|---------------|------------|-----|-----|-------|----|----|-----|--------|----|------|--------|--------|----|----|----|------|----|
| <b>3FW-26</b> | <b>A11</b> | 660 | 706 | 154.5 | 15 | 36 | 235 | 196.87 | 60 | 26.5 | 55     | 15     | 31 | 9  | 30 | 15.5 | 80 |

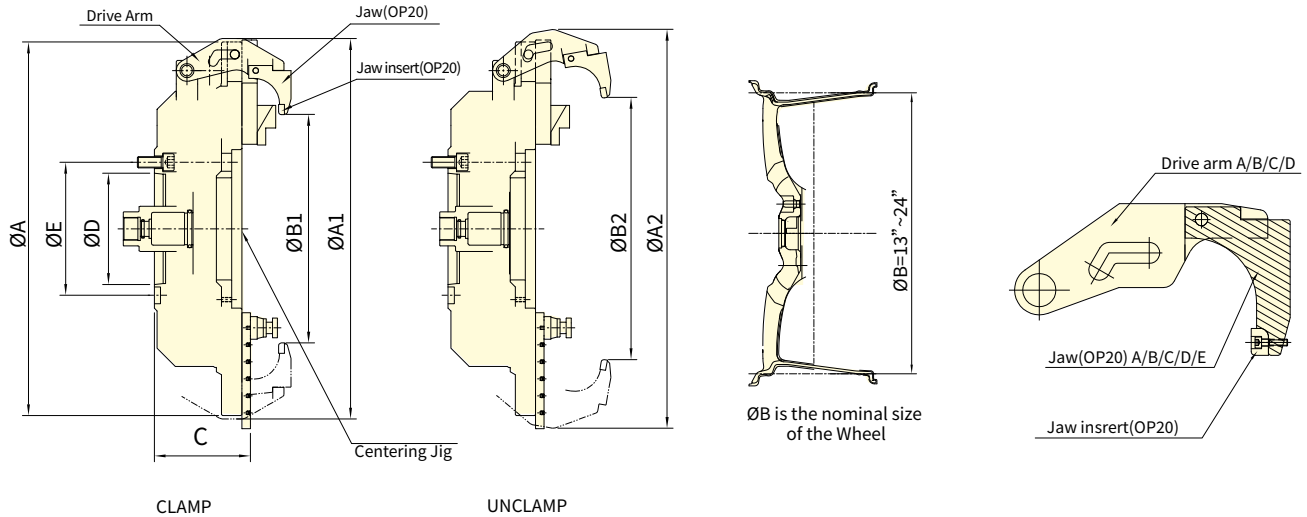
| Model         |            | K       | L     | L1 | M  | N  | N1  | N2 max. | N2 min. | P max. | P min. | Q max. | Q min. | R max. | R min. | S max. | S min. | T  |
|---------------|------------|---------|-------|----|----|----|-----|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|----|
| <b>3FW-26</b> | <b>A11</b> | M40x1.5 | 6~M20 | 30 | 60 | 15 | 134 | 220     | 38      | 48     | 42     | 15     | 0      | 106    | 32     | 71.5   | 66.5   | 35 |



Subject to technical changes

| Wheel size                               | Drive Arm         | Drive Arm A                 |                             | Drive Arm B                 |                             | Drive Arm C                 |                             | Drive Arm D                 |                             |
|--|-------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|  |                   | Min. ID<br>$\varnothing B1$ | Max. ID<br>$\varnothing B2$ | Min. ID<br>$\varnothing B1$ | Max. ID<br>$\varnothing B2$ | Min. ID<br>$\varnothing B1$ | Max. ID<br>$\varnothing B2$ | Min. ID<br>$\varnothing B1$ | Max. ID<br>$\varnothing B2$ |
| 13"                                      | Jaw A             |                             |                             |                             |                             |                             |                             |                             |                             |
|  | 339               | 400                         |                             |                             |                             |                             |                             |                             |                             |
| 14"                                      | Jaw B             |                             |                             |                             |                             |                             |                             |                             |                             |
|  | 364               | 425                         |                             |                             |                             |                             |                             |                             |                             |
| 15"                                      | Jaw C             |                             |                             |                             |                             |                             |                             |                             |                             |
|  | 392               | 453                         |                             |                             |                             |                             |                             |                             |                             |
| 16"                                      | Jaw D             |                             | Jaw A                       |                             |                             |                             |                             |                             |                             |
|  | 421               | 482                         | 419                         | 480                         |                             |                             |                             |                             |                             |
| 17"                                      | Jaw E             |                             | Jaw B                       |                             |                             |                             |                             |                             |                             |
|  | 445               | 506                         | 444                         | 505                         |                             |                             |                             |                             |                             |
| 18"                                      |                   |                             | Jaw C                       |                             | Jaw A                       |                             |                             |                             |                             |
|  |                   |                             | 472                         | 533                         | 477                         | 538                         |                             |                             |                             |
| 19"                                      |                   |                             | Jaw D                       |                             | Jaw B                       |                             |                             |                             |                             |
|  |                   |                             | 501                         | 502                         | 502                         | 563                         |                             |                             |                             |
| 20"                                      |                   |                             | Jaw E                       |                             | Jaw C                       |                             | Jaw A                       |                             |                             |
|  |                   |                             | 525                         | 586                         | 530                         | 591                         | 530                         | 591                         |                             |
| 21"                                      |                   |                             |                             |                             | Jaw D                       |                             | Jaw B                       |                             |                             |
|  |                   |                             |                             |                             | 559                         | 620                         | 555                         | 616                         |                             |
| 22"                                      |                   |                             |                             |                             | Jaw E                       |                             | Jaw C                       |                             |                             |
|  |                   |                             |                             |                             | 583                         | 644                         | 583                         | 644                         |                             |
| 23"                                      |                   |                             |                             |                             |                             |                             | Jaw D                       |                             |                             |
|  |                   |                             |                             |                             |                             |                             | 607                         | 668                         |                             |
| 24"                                      |                   |                             |                             |                             |                             |                             | Jaw E                       |                             |                             |
|  |                   |                             |                             |                             |                             |                             | 633                         | 694                         |                             |
| Max. chuck diameter<br>$\varnothing A$   | $\varnothing 660$ |                             |                             |                             |                             |                             |                             |                             |                             |
| Max. OD when CLAMP<br>$\varnothing A1$   | $\varnothing 675$ |                             | $\varnothing 675$           |                             | $\varnothing 694$           |                             | $\varnothing 747$           |                             |                             |
| Max. OD when UNCLAMP<br>$\varnothing A2$ | $\varnothing 700$ |                             | $\varnothing 713$           |                             | $\varnothing 744$           |                             | $\varnothing 796$           |                             |                             |
| Wheel size $\varnothing B$               | 13"~17"           |                             | 16"~20"                     |                             | 18"~22"                     |                             | 20"~24"                     |                             |                             |
| C  | 169.5             |                             |                             |                             |                             |                             |                             |                             |                             |
| $\varnothing D$                          | 196.87            |                             |                             |                             |                             |                             |                             |                             |                             |
| $\varnothing E$                          | 235               |                             |                             |                             |                             |                             |                             |                             |                             |

Blocks in the same color indicate that different combinations of drive arms and jaws can be used to clamp wheels of the same size. The selection depends on the available space of the machine.  
For example: Drive Arm A + Jaw D = clamping a 16" wheel, and Drive Arm B + Jaw A can also clamp a 16" wheel.



SPECIAL PURPOSE POWER CHUCKS

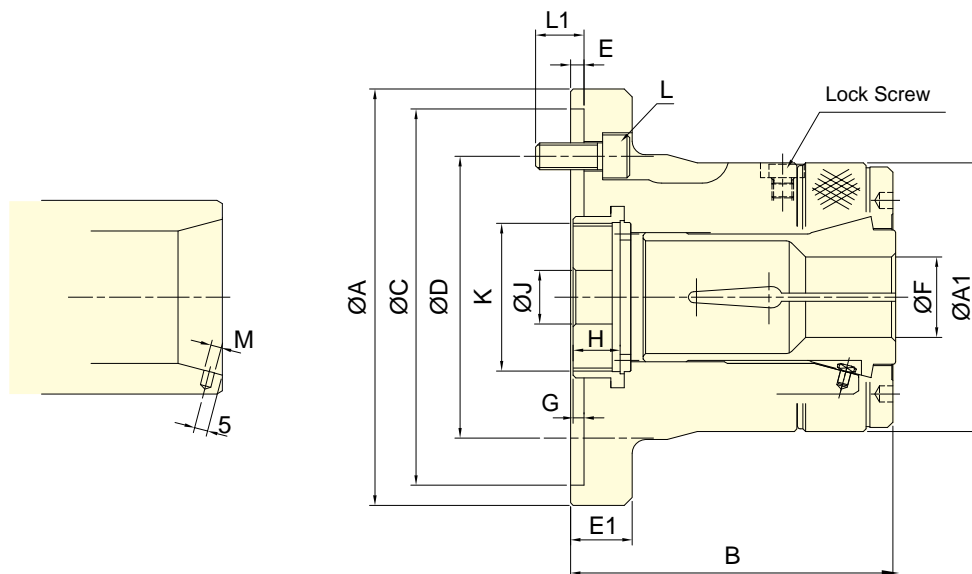
Subject to technical changes

| Wheel size \ Drive Arm   | Drive Arm A         |             | Drive Arm B         |             | Drive Arm C         |             | Drive Arm D         |             |
|--------------------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|---------------------|-------------|
|                          | Min. ID ØB1         | Max. ID ØB2 | Min. ID ØB1         | Max. ID ØB2 | Min. ID ØB1         | Max. ID ØB2 | Min. ID ØB1         | Max. ID ØB2 |
| 13"                      | Jaw A<br>335    396 |             |                     |             |                     |             |                     |             |
| 14"                      | Jaw B<br>362    423 |             |                     |             |                     |             |                     |             |
| 15"                      | Jaw C<br>392    453 |             |                     |             |                     |             |                     |             |
| 16"                      | Jaw D<br>417    478 |             | Jaw A<br>415    476 |             |                     |             |                     |             |
|                          | Jaw E<br>445    506 |             | Jaw B<br>442    503 |             |                     |             |                     |             |
| 18"                      |                     |             | Jaw C<br>472    553 |             | Jaw A<br>473    534 |             |                     |             |
|                          |                     |             | Jaw D<br>497    558 |             | Jaw B<br>500    561 |             |                     |             |
| 20"                      |                     |             | Jaw E<br>525    586 |             | Jaw C<br>530    591 |             | Jaw A<br>526    587 |             |
|                          |                     |             |                     |             | Jaw D<br>555    616 |             | Jaw B<br>553    614 |             |
| 22"                      |                     |             |                     |             | Jaw E<br>583    644 |             | Jaw C<br>583    644 |             |
| 23"                      |                     |             |                     |             |                     |             | Jaw D<br>603    664 |             |
| 24"                      |                     |             |                     |             |                     |             | Jaw E<br>633    694 |             |
| Max. chuck diameter ØA   | Ø660                |             |                     |             |                     |             |                     |             |
| Max. OD when CLAMP ØA1   | Ø675                |             | Ø675                |             | Ø694                |             | Ø747                |             |
| Max. OD when UNCLAMP ØA2 | Ø700                |             | Ø713                |             | Ø744                |             | Ø796                |             |
| Wheel size ØB            | 13"~17"             |             | 16"~20"             |             | 18"~22"             |             | 20"~24"             |             |
| C                        | 169.5               |             |                     |             |                     |             |                     |             |
| ØD                       | 196.87              |             |                     |             |                     |             |                     |             |
| ØE                       | 235                 |             |                     |             |                     |             |                     |             |

Blocks in the same color indicate that different combinations of drive arms and jaws can be used to clamp wheels of the same size. The selection depends on the available space of the machine.  
 For example: Drive Arm A + Jaw D = clamping a 16" wheel, and Drive Arm B + Jaw A can also clamp a 16" wheel.



- PUSH type collet used mainly on turning, CNC, special purpose machines , ect.
- High clamping accuracy, high speed and high rigidity.
- Sealed against swarf, chips and coolant.
- The collet used must accord with DIN 6343.



Subject to technical changes

## SPECIFICATIONS

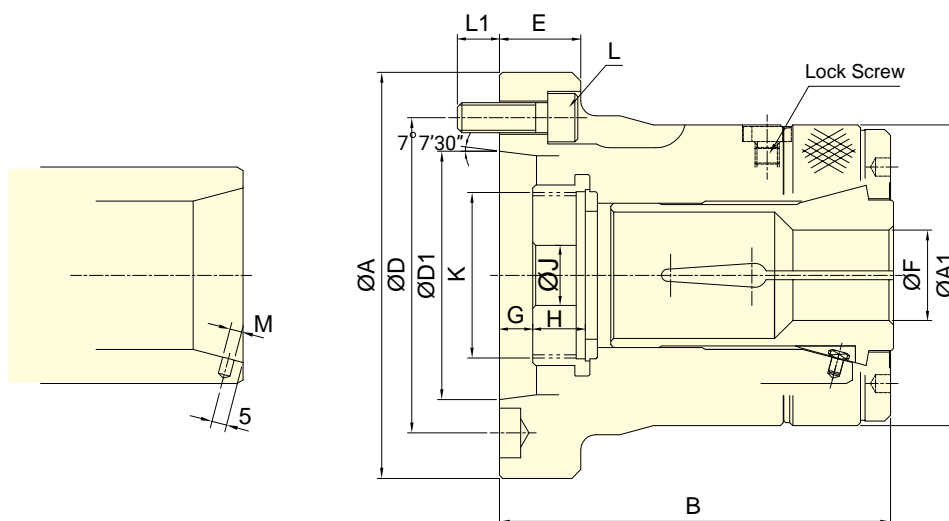
| Model   | Plunger stroke<br>mm | Max. Chucking Capacity |               |              | Max. D.B. pull<br>kN (kgf) | Max. clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg | Matching steel collet | Matching Cyl. | Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) |
|---------|----------------------|------------------------|---------------|--------------|----------------------------|---------------------------------|--|--|--------------|-----------------------|---------------|---|
|         |                      | Round<br>mm            | Hexagom<br>mm | Square<br>mm |                            |                                 |  |  |              |                       |               |   |
| CL-26   | 4.5                  | 26                     | 22            | 18           | 17.6(1800)                 | 37.9(3870)                      | 8000                                     | 0.040                                  | 4.3          | 161E                  | TK-A533       | 2.4(24)                                     |
| CL-30   | 4.5                  | 30                     | 26            | 21           | 19.6(2000)                 | 42.1(4300)                      | 8000                                     | 0.038                                  | 4.2          | 163E                  | TK-A533       | 2.7(27)                                     |
| CL-36   | 6                    | 36                     | 31            | 25           | 22.5(2300)                 | 48.5(4950)                      | 6000                                     | 0.062                                  | 7.0          | 171E                  | TK-C643       | 2.3(23)                                     |
| CL-42   | 6                    | 42                     | 36            | 29           | 24.5(2500)                 | 52.9(5400)                      | 6000                                     | 0.060                                  | 6.9          | 173E                  | TK-C643       | 2.5(25)                                     |
| CL-52   | 6                    | 52                     | 45            | 36           | 27.4(2800)                 | 59.0(6020)                      | 6000                                     | 0.101                                  | 14.3         | 177E                  | TK-A853       | 2.0(20)                                     |
| CL-6017 | 6                    | 60                     | 51            | 42           | 29.4(3000)                 | 63.7(6500)                      | 5000                                     | 0.098                                  | 14.1         | 185E                  | TS-866        | 1.8(18)                                     |
| CL-6022 | 6                    | 60                     | 51            | 42           | 29.4(3000)                 | 63.7(6500)                      | 5000                                     | 0.126                                  | 16.3         | 185E                  | TS-866        | 1.8(18)                                     |
| CL-80   | 6                    | 80                     | 69            | 56           | 34.3(3500)                 | 71.5(7300)                      | 4000                                     | 0.108                                  | 17.8         | 193E                  | TK-A1287      | 1.6(16)                                     |

## DIMENSIONS

| Model   | A   | A1  | B     | C(H6) | D     | E | E1 | F max. | F min. | G max. | G min. | H    | J  | K max.  | L        | L1 | M |
|---------|-----|-----|-------|-------|-------|---|----|--------|--------|--------|--------|------|----|---------|----------|----|---|
| CL-26   | 120 | 85  | 100   | 110   | 82.6  | 4 | 23 | 26     | 3      | 7      | 2.5    | 15   | 12 | M40x1.5 | 3~M10x25 | 16 | 4 |
| CL-30   | 120 | 85  | 100   | 110   | 82.6  | 4 | 23 | 30     | 3      | 7      | 2.5    | 15   | 12 | M40x1.5 | 3~M10x25 | 16 | 4 |
| CL-36   | 155 | 100 | 120   | 140   | 104.8 | 5 | 23 | 36     | 3      | 7      | 1      | 17.5 | 20 | M55x2   | 3~M10x25 | 18 | 4 |
| CL-42   | 155 | 100 | 120   | 140   | 104.8 | 5 | 23 | 42     | 3      | 7      | 1      | 17.5 | 20 | M55x2   | 3~M10x25 | 18 | 4 |
| CL-52   | 185 | 130 | 145.5 | 170   | 133.4 | 5 | 27 | 52     | 5      | 9      | 3      | 24   | 30 | M60x2   | 6~M12x30 | 20 | 5 |
| CL-6017 | 185 | 130 | 145.5 | 170   | 133.4 | 5 | 27 | 60     | 5      | 9      | 3      | 24   | 45 | M75x2   | 6~M12x30 | 20 | 5 |
| CL-6022 | 234 | 130 | 142   | 220   | 171.4 | 5 | 32 | 60     | 5      | 13     | 7      | 24   | 45 | M85x2   | 6~M16x30 | 20 | 5 |
| CL-80   | 234 | 156 | 163   | 220   | 171.4 | 5 | 32 | 80     | 20     | 15.5   | 9.5    | 22   | 45 | M100x2  | 6~M16x30 | 20 | 5 |



- PUSH type collet used mainly on turning, CNC, special purpose machines , ect.
- High clamping accuracy, high speed and high rigidity.
- Sealed against swarf, chips and coolant.
- The collet used must accord with DIN 6343.



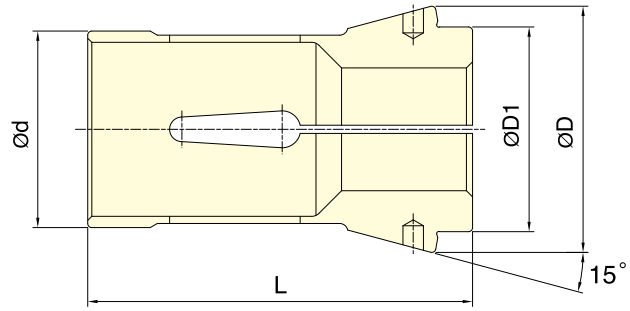
Subject to technical changes

## SPECIFICATIONS

| Model | Plunger stroke<br>mm | Max. Chucking Capacity |               |              | Max. D.B. pull<br>kN (kgf) | Max. clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg | Matching steel collet | Matching Cyl. | Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) |
|-------|----------------------|------------------------|---------------|--------------|----------------------------|---------------------------------|--|--|--------------|-----------------------|---------------|---|
|       |                      | Round<br>mm            | Hexagom<br>mm | Square<br>mm |                            |                                 |  |  |              |                       |               |   |
| CL-26 | A4                   | 4.5                    | 26            | 22           | 17.6(1800)                 | 37.9(3870)                      | 8000                                     | 0.040                                  | 4.2          | 161E                  | TK-A533       | 2.4(24)                                     |
| CL-30 | A4                   | 4.5                    | 30            | 26           | 19.6(2000)                 | 42.1(4300)                      | 8000                                     | 0.038                                  | 4.1          | 163E                  | TK-A533       | 2.7(27)                                     |
| CL-36 | A5                   | 6                      | 36            | 31           | 22.5(2300)                 | 48.5(4950)                      | 6000                                     | 0.058                                  | 6.3          | 171E                  | TK-C643       | 2.3(23)                                     |
| CL-42 | A5                   | 6                      | 42            | 36           | 24.5(2500)                 | 52.9(5400)                      | 6000                                     | 0.057                                  | 6.1          | 173E                  | TK-C643       | 2.5(25)                                     |
| CL-42 | A6                   | 6                      | 42            | 36           | 24.5(2500)                 | 52.9(5400)                      | 6000                                     | 0.061                                  | 7.5          | 173E                  | TK-C643       | 2.5(25)                                     |
| CL-52 | A6                   | 6                      | 52            | 45           | 27.4(2800)                 | 59.0(6020)                      | 6000                                     | 0.093                                  | 13.8         | 177E                  | TK-A853       | 2.0(20)                                     |
| CL-60 | A6                   | 6                      | 60            | 51           | 29.4(3000)                 | 63.7(6500)                      | 5000                                     | 0.091                                  | 13.5         | 185E                  | TS-866        | 1.8(18)                                     |
| CL-60 | A8                   | 6                      | 60            | 51           | 29.4(3000)                 | 63.7(6500)                      | 5000                                     | 0.104                                  | 14.5         | 185E                  | TS-866        | 1.8(18)                                     |
| CL-80 | A8                   | 6                      | 80            | 69           | 34.3(3500)                 | 71.5(7300)                      | 4000                                     | 0.120                                  | 19.8         | 193E                  | TK-A1287      | 1.6(16)                                     |

## DIMENSIONS

| Model | A  | A1  | B   | D     | D1    | E      | F max. | F min. | G max. | G min. | H    | J    | K max. | L       | L1       | M  |   |
|-------|----|-----|-----|-------|-------|--------|--------|--------|--------|--------|------|------|--------|---------|----------|----|---|
| CL-26 | A4 | 110 | 85  | 108   | 82.6  | 63.51  | 25     | 26     | 3      | 9.5    | 5    | 15   | 12     | M40x1.5 | 3~M10x30 | 15 | 4 |
| CL-30 | A4 | 110 | 85  | 108   | 82.6  | 63.51  | 25     | 30     | 3      | 9.5    | 5    | 15   | 12     | M40x1.5 | 3~M10x30 | 15 | 4 |
| CL-36 | A5 | 135 | 100 | 130   | 104.8 | 82.56  | 27     | 36     | 3      | 14     | 8    | 17.5 | 20     | M55x2   | 4~M10x30 | 14 | 4 |
| CL-42 | A5 | 135 | 100 | 130   | 104.8 | 82.56  | 27     | 42     | 3      | 14     | 8    | 17.5 | 20     | M55x2   | 4~M10x30 | 14 | 4 |
| CL-42 | A6 | 165 | 100 | 130   | 133.4 | 106.38 | 32     | 42     | 3      | 15     | 9    | 17.5 | 20     | M60x2   | 4~M12x35 | 16 | 4 |
| CL-52 | A6 | 170 | 130 | 154   | 133.4 | 106.38 | 27     | 52     | 5      | 10.5   | 4.5  | 24   | 45     | M60x2   | 4~M12x35 | 20 | 5 |
| CL-60 | A6 | 170 | 130 | 154   | 133.4 | 106.38 | 27     | 60     | 5      | 10.5   | 4.5  | 24   | 45     | M75x2   | 4~M12x35 | 20 | 5 |
| CL-60 | A8 | 210 | 130 | 147.5 | 171.4 | 139.72 | 35     | 60     | 5      | 3.5    | -2.5 | 24   | 45     | M85x2   | 4~M16x40 | 22 | 5 |
| CL-80 | A8 | 210 | 156 | 175   | 171.4 | 139.72 | 35     | 80     | 20     | 7.5    | 1.5  | 22   | 45     | M100x2  | 6~M16x40 | 22 | 5 |



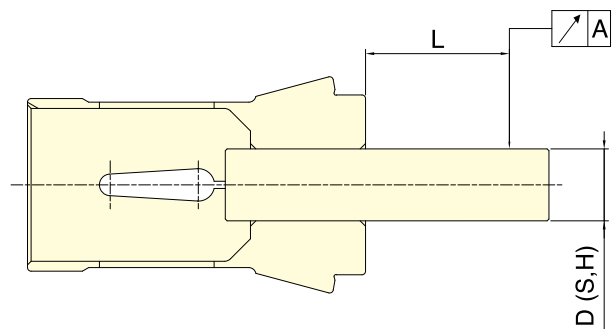
DIN 6343 Collet standard

Subject to technical changes

**DIMENSIONS**

| Collet      | Max. Chucking Capacity (mm) |         |        | d  | D   | D1 | L   | Matching Collet Chuck              |
|-------------|-----------------------------|---------|--------|----|-----|----|-----|------------------------------------|
|             | Round                       | Hexagom | Square |    |     |    |     |                                    |
| <b>161E</b> | 26                          | 22      | 18     | 32 | 45  | 34 | 75  | CL-26, CL-26A4                     |
| <b>163E</b> | 30                          | 26      | 21     | 35 | 48  | 38 | 80  | CL-30, CL-30A4                     |
| <b>171E</b> | 36                          | 31      | 25     | 42 | 55  | 42 | 94  | CL-36, CL-36A5                     |
| <b>173E</b> | 42                          | 36      | 29     | 48 | 60  | 50 | 94  | CL-42, CL-42A5, CL-42A6            |
| <b>177E</b> | 52                          | 45      | 36     | 58 | 70  | 60 | 94  | CL-52, CL-52A6                     |
| <b>185E</b> | 60                          | 51      | 42     | 66 | 84  | 73 | 110 | CL-6017, CL-6022, CL-60A6, CL-60A8 |
| <b>193E</b> | 80                          | 69      | 56     | 90 | 107 | 92 | 130 | CL-80, CL-80A8                     |

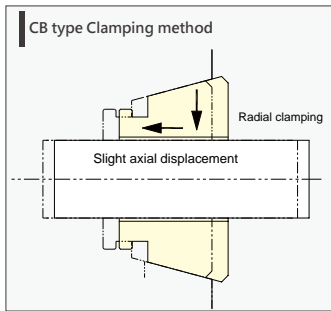
| Test Bar D(S,H) | L mm | A DIN   |         |
|-----------------|------|---------|---------|
|                 |      | Class 1 | Class 2 |
| 0.5~1.0         | 3    | 0.015   | 0.015   |
| 1.0~1.6         | 6    | 0.015   | 0.020   |
| 1.6~3.0         | 10   | 0.015   | 0.020   |
| 3.0~6.0         | 16   | 0.015   | 0.020   |
| 6.0~10.0        | 25   | 0.015   | 0.020   |
| 10.0~18.0       | 40   | 0.020   | 0.030   |
| 18.0~24.0       | 50   | 0.020   | 0.030   |
| 24.0~30.0       | 60   | 0.020   | 0.030   |
| 30.0~50.0       | 80   | 0.030   | 0.040   |
| 50.0~60.0       | 100  | 0.030   | 0.040   |



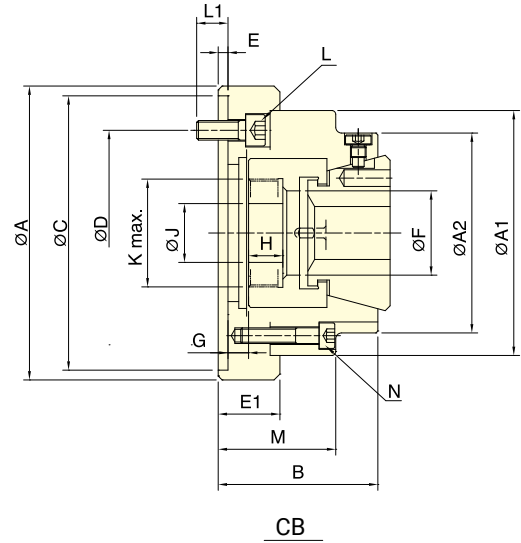
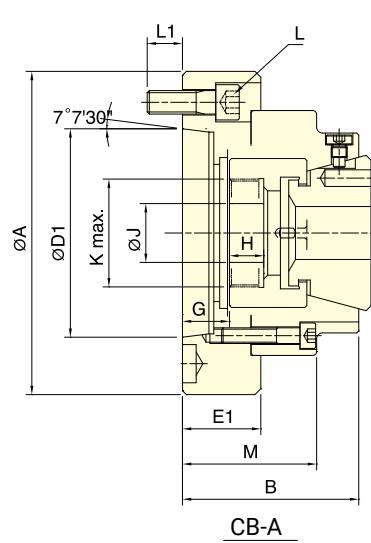
Note: Collets chuck are conformed to DIN 6343 Class2.



- Suitable for CNC lathes, dedicated machines, or other turning machinery for bar or shaft processing.
- Draw-back clamping with radial clamping and axial fine-tuning torque, featuring through-hole.
- High precision, high speed, and high rigidity structure.
- Comprehensive waterproof design to prevent cutting water from entering the spindle through holes.
- J is the hole diameter of blank draw nut.  
K is the maximum thread specification and it could be customize.



During clamping, the workpiece shifts slightly backward along with the collet.



Subject to technical changes

### SPECIFICATIONS

| Model           | Plunger stroke | Max. Chucking Capacity |         |        | Max. D.B. pull | Max. clamping force | Max. speed                 | Weight | Matching steel collet | Matching Cyl. | Max. pressure              |
|-----------------|----------------|------------------------|---------|--------|----------------|---------------------|----------------------------|--------|-----------------------|---------------|----------------------------|
|                 |                | Round                  | Hexagom | Square |                |                     |                            |        |                       |               |                            |
|                 | mm             | mm                     | mm      | mm     | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg     |                       |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>CB-42</b>    | 4.5            | 4~42                   | 7~36    | 7~30   | 34.3(3500)     | 78.4(8000)          | 7000                       | 6.5    | RG-42                 | TK-B846       | 2.8(28)                    |
| <b>CB-42 A5</b> | 4.5            | 4~42                   | 7~36    | 7~30   | 34.3(3500)     | 78.4(8000)          | 7000                       | 6.2    | RG-42                 | TK-B846       | 2.8(28)                    |
| <b>CB-42 A6</b> | 4.5            | 4~42                   | 7~36    | 7~30   | 34.3(3500)     | 78.4(8000)          | 7000                       | 7.4    | RG-42                 | TK-B846       | 2.8(28)                    |
| <b>CB-52</b>    | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 6      | RG-52                 | TK-A853       | 3.2(32)                    |
| <b>CB-5217</b>  | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 9.6    | RG-52                 | TK-A853       | 3.2(32)                    |
| <b>CB-52 A5</b> | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 6.5    | RG-52                 | TK-A853       | 3.2(32)                    |
| <b>CB-52 A6</b> | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 7.8    | RG-52                 | TK-A853       | 3.2(32)                    |
| <b>CB-65</b>    | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 5500                       | 15     | RG-65                 | TS-866        | 3.0(30)                    |
| <b>CB-65 A6</b> | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 5500                       | 13.6   | RG-65                 | TS-866        | 3.0(30)                    |
| <b>CB-65 A8</b> | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 5500                       | 17.6   | RG-65                 | TS-866        | 3.0(30)                    |
| <b>CB-80</b>    | 4.5            | 5~80                   | 8~68    | 8~56   | 50.0(5100)     | 115(11730)          | 5500                       | 19     | RG-80                 | TK-A1287      | 2.3(23)                    |
| <b>CB-80 A8</b> | 4.5            | 5~80                   | 8~68    | 8~56   | 50.0(5100)     | 115(11730)          | 5500                       | 19     | RG-80                 | TK-A1287      | 2.3(23)                    |

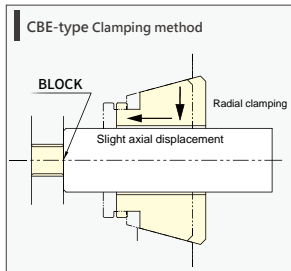
### DIMENSIONS

| Model           | A   | A1  | A2  | B    | C(H6) | D     | D1     | E | E1   | F    | G max. | G min. | H    | J  | K max. | L        | L1 | M    | N     |
|-----------------|-----|-----|-----|------|-------|-------|--------|---|------|------|--------|--------|------|----|--------|----------|----|------|-------|
| <b>CB-42</b>    | 150 | 125 | 102 | 81.5 | 140   | 104.8 | -      | 5 | 31   | 43   | 10.5   | 6      | 17.5 | 30 | M55x2  | 3~M10x25 | 11 | 60   | 4~M8  |
| <b>CB-42 A5</b> | 140 | 125 | 102 | 91.5 | -     | 104.8 | 82.56  | - | 41.5 | 43   | 25.5   | 21     | 17.5 | 30 | M55x2  | 4~M10x25 | 12 | 70   | 4~M8  |
| <b>CB-42 A6</b> | 165 | 125 | 102 | 91.5 | -     | 133.4 | 106.38 | - | 45   | 43   | 29     | 24.5   | 17.5 | 30 | M55x2  | 4~M12x35 | 18 | 73.5 | 4~M8  |
| <b>CB-52</b>    | 150 | 125 | 102 | 83.5 | 140   | 104.8 | -      | 5 | 31.5 | 53   | 11     | 6.5    | 17.5 | 30 | M60x2  | 4~M10x25 | 16 | 62.5 | 4~M8  |
| <b>CB-5217</b>  | 180 | 125 | 102 | 87   | 170   | 133.4 | -      | 5 | 35   | 53   | 14.5   | 10     | 17.5 | 30 | M60x2  | 4~M12x30 | 18 | 66   | 4~M8  |
| <b>CB-52 A5</b> | 140 | 125 | 102 | 93.5 | -     | 104.8 | 82.56  | - | 41.5 | 53   | 26     | 21.5   | 17.5 | 30 | M60x2  | 4~M10x30 | 16 | 72.5 | 4~M8  |
| <b>CB-52 A6</b> | 165 | 125 | 102 | 99   | -     | 133.4 | 106.38 | - | 47   | 53   | 31.5   | 27     | 17.5 | 30 | M60x2  | 6~M12x35 | 18 | 78   | 4~M8  |
| <b>CB-65</b>    | 185 | 145 | 120 | 100  | 170   | 133.4 | -      | 6 | 50   | 66   | 13.5   | 9      | 21.5 | 32 | M75x2  | 6~M12x40 | 20 | 73.5 | 4~M8  |
| <b>CB-65 A6</b> | 165 | 145 | 120 | 111  | -     | 133.4 | 106.38 | - | 61   | 66   | 30.5   | 26     | 21.5 | 32 | M75x2  | 4~M12x40 | 20 | 84.5 | 4~M8  |
| <b>CB-65 A8</b> | 207 | 145 | 120 | 107  | -     | 171.4 | 139.72 | - | 57   | 66   | 26.5   | 22     | 21.5 | 32 | M75x2  | 4~M16x40 | 24 | 80.5 | 4~M8  |
| <b>CB-80</b>    | 235 | 175 | 150 | 112  | 220   | 171.4 | -      | 5 | 37   | 82.5 | 13.5   | 8      | 25   | 45 | M85x2  | 6~M16x30 | 22 | 87   | 6~M10 |
| <b>CB-80 A8</b> | 210 | 175 | 150 | 125  | -     | 171.4 | 139.72 | - | 50   | 82.5 | 26.5   | 21     | 25   | 45 | M85x2  | 6~M16x50 | 24 | 100  | 6~M10 |

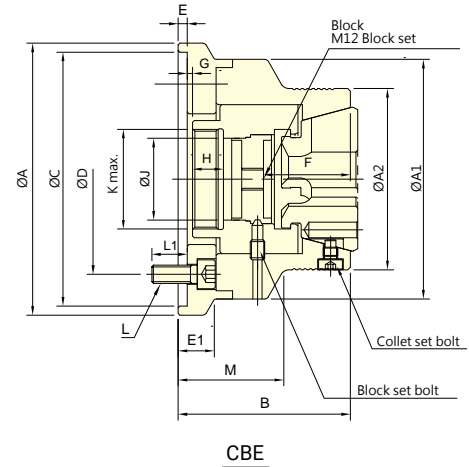
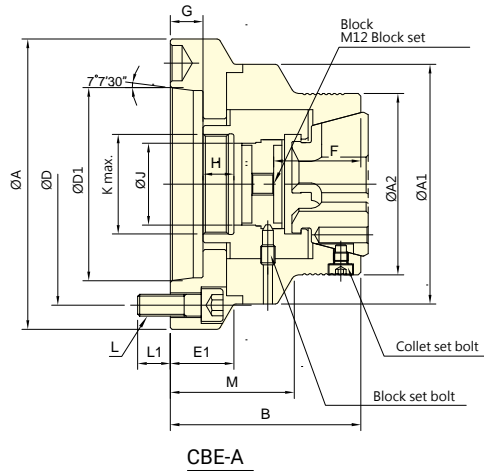


- The pull-back positioning clamping, combined with the workpiece stop block mechanism, features radial clamping and axial fine-tuning torque, enabling precise positioning of the workpiece feeding length for enhanced length accuracy control.
- The material stopper and dust cover can be interchanged for combined use, providing chip prevention functionality.
- J is the hole diameter of blank draw nut.  
K is the maximum thread specification and it could be customize.

COLLET CHUCKS



With the material stop mechanism in place, the workpiece does not shift backward during clamping, although there may be slight scuff marks on the surface.



Subject to technical changes

### SPECIFICATIONS

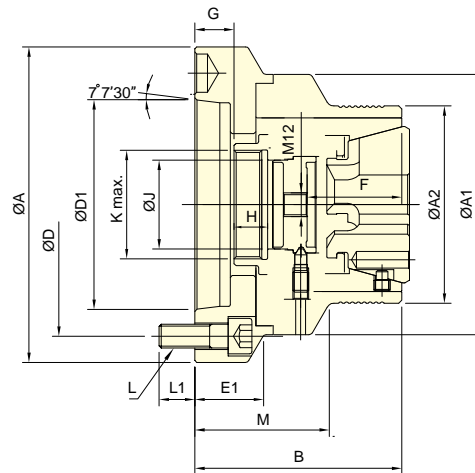
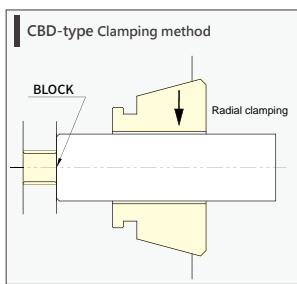
| Model            | Plunger stroke<br>mm | Max. Chucking Capacity |               |              | Max. D.B. pull<br>kN (kgf) | Max. clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Weight<br>kg | Matching steel collet | Matching Cyl. | Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) |
|------------------|----------------------|------------------------|---------------|--------------|----------------------------|---------------------------------|--|--------------|-----------------------|---------------|---|
|                  |                      | Round<br>mm            | Hexagom<br>mm | Square<br>mm |                            |                                 |  |              |                       |               |   |
| <b>CBE-42</b>    | 4.5                  | 4~42                   | 7~36          | 7~30         | 34.3(3500)                 | 78.4(8000)                      | 7000                                     | 6            | RG-42                 | TK-B846       | 2.8(28)                                     |
| <b>CBE-4212</b>  | 4.5                  | 4~42                   | 7~36          | 7~30         | 34.3(3500)                 | 78.4(8000)                      | 7000                                     | 6            | RG-42                 | TK-B846       | 2.8(28)                                     |
| <b>CBE-42 A5</b> | 4.5                  | 4~42                   | 7~36          | 7~30         | 34.3(3500)                 | 78.4(8000)                      | 7000                                     | 6.3          | RG-42                 | TK-B846       | 2.8(28)                                     |
| <b>CBE-42 A6</b> | 4.5                  | 4~42                   | 7~36          | 7~30         | 34.3(3500)                 | 78.4(8000)                      | 7000                                     | 7.4          | RG-42                 | TK-B846       | 2.8(28)                                     |
| <b>CBE-52</b>    | 4.5                  | 4~52                   | 7~36          | 7~30         | 39.2(4000)                 | 92.1(9400)                      | 7000                                     | 6.9          | RG-52                 | TK-A853       | 3.2(32)                                     |
| <b>CBE-5212</b>  | 4.5                  | 4~52                   | 7~36          | 7~30         | 39.2(4000)                 | 92.1(9400)                      | 7000                                     | 6.7          | RG-52                 | TK-A853       | 3.2(32)                                     |
| <b>CBE-5217</b>  | 4.5                  | 4~52                   | 7~36          | 7~30         | 39.2(4000)                 | 92.1(9400)                      | 7000                                     | 8.9          | RG-52                 | TK-A853       | 3.2(32)                                     |
| <b>CBE-52 A5</b> | 4.5                  | 4~52                   | 7~36          | 7~30         | 39.2(4000)                 | 92.1(9400)                      | 7000                                     | 7.8          | RG-52                 | TK-A853       | 3.2(32)                                     |
| <b>CBE-52 A6</b> | 4.5                  | 4~52                   | 7~36          | 7~30         | 39.2(4000)                 | 92.1(9400)                      | 7000                                     | 8.3          | RG-52                 | TK-A853       | 3.2(32)                                     |
| <b>CBE-65</b>    | 4.5                  | 4~65                   | 8~56          | 8~46         | 44.1(4500)                 | 103(10500)                      | 6000                                     | 8.6          | RG-65                 | TS-866        | 3.0(30)                                     |
| <b>CBE-6514</b>  | 4.5                  | 4~65                   | 8~56          | 8~46         | 44.1(4500)                 | 103(10500)                      | 6000                                     | 9.3          | RG-65                 | TS-866        | 3.0(30)                                     |
| <b>CBE-65 A5</b> | 4.5                  | 4~65                   | 8~56          | 8~46         | 44.1(4500)                 | 103(10500)                      | 6000                                     | 10.8         | RG-65                 | TS-866        | 3.0(30)                                     |
| <b>CBE-65 A6</b> | 4.5                  | 4~65                   | 8~56          | 8~46         | 44.1(4500)                 | 103(10500)                      | 6000                                     | 9.5          | RG-65                 | TS-866        | 3.0(30)                                     |
| <b>CBE-65 A8</b> | 4.5                  | 4~65                   | 8~56          | 8~46         | 44.1(4500)                 | 103(10500)                      | 6000                                     | 9.5          | RG-65                 | TS-866        | 3.0(30)                                     |

### DIMENSIONS

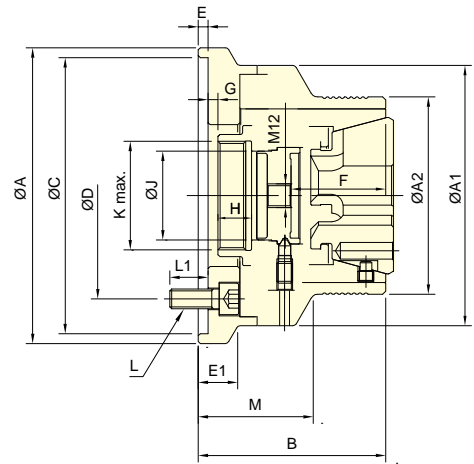
| Model            | A   | A1  | A2  | B   | C (H6) | D     | D1     | E | E1 | F  | G max. | G min. | H    | J  | K max. | L        | L1   | M  |
|------------------|-----|-----|-----|-----|--------|-------|--------|---|----|----|--------|--------|------|----|--------|----------|------|----|
| <b>CBE-42</b>    | 150 | 132 | 100 | 95  | 140    | 104.8 | -      | 5 | 20 | 48 | 5.5    | 1      | 17   | 45 | M55x2  | 4~M10x25 | 19.5 | 58 |
| <b>CBE-4212</b>  | 132 | 132 | 100 | 95  | 120    | 100   | -      | 5 | -  | 48 | 5.5    | 1      | 17   | 45 | M55x2  | 4~M10x25 | 19.5 | 58 |
| <b>CBE-42 A5</b> | 132 | 132 | 100 | 105 | -      | 104.8 | 82.56  | - | -  | 48 | 20.5   | 16     | 17   | 45 | M55x2  | 4~M10x30 | 16   | 68 |
| <b>CBE-42 A6</b> | 160 | 132 | 100 | 105 | -      | 133.4 | 106.38 | - | 35 | 48 | 20.5   | 16     | 17   | 45 | M55x2  | 4~M12x35 | 18   | 68 |
| <b>CBE-52</b>    | 150 | 140 | 107 | 99  | 140    | 104.8 | -      | 5 | -  | 52 | 5.5    | 1      | 17   | 56 | M60x2  | 4~M10x20 | 14.5 | 60 |
| <b>CBE-5212</b>  | 140 | 140 | 107 | 99  | 120    | 100   | -      | 5 | -  | 52 | 5.5    | 1      | 17   | 56 | M60x2  | 4~M10x20 | 14.5 | 60 |
| <b>CBE-5217</b>  | 180 | 140 | 107 | 109 | 170    | 133.4 | -      | 6 | -  | 52 | 14.5   | 10     | 17   | 56 | M60x2  | 4~M12x30 | 18   | 70 |
| <b>CBE-52 A5</b> | 140 | 140 | 107 | 109 | -      | 104.8 | 82.56  | - | -  | 52 | 20.5   | 16     | 17   | 56 | M60x2  | 4~M10x30 | 16   | 70 |
| <b>CBE-52 A6</b> | 160 | 140 | 107 | 109 | -      | 133.4 | 106.37 | - | -  | 52 | 20.5   | 16     | 17   | 56 | M60x2  | 4~M12x35 | 18   | 70 |
| <b>CBE-65</b>    | 180 | 157 | 122 | 114 | 170    | 133.4 | -      | 6 | 24 | 56 | 15     | 10.5   | 17.5 | 68 | M75x2  | 4~M12x30 | 18   | 72 |
| <b>CBE-6514</b>  | 157 | 157 | 122 | 116 | 140    | 104.8 | -      | 6 | -  | 56 | 17     | 12.5   | 17.5 | 68 | M75x2  | 4~M10x30 | 18   | 74 |
| <b>CBE-65 A5</b> | 157 | 157 | 122 | 114 | -      | 104.8 | 82.56  | - | -  | 56 | 21     | 16.5   | 17.5 | 68 | M75x2  | 4~M10x25 | 16   | 72 |
| <b>CBE-65 A6</b> | 157 | 157 | 122 | 112 | -      | 133.4 | 106.38 | - | -  | 56 | 19     | 14.5   | 17.5 | 68 | M75x2  | 4~M12x35 | 18.5 | 70 |
| <b>CBE-65 A8</b> | 202 | 157 | 122 | 116 | -      | 171.4 | 139.72 | - | 38 | 56 | 23     | 18.5   | 17.5 | 68 | M75x2  | 4~M16x35 | 24   | 74 |



- The push-forward clamping, combined with a stop block mechanism, features radial clamping with zero radial displacement, enabling precise positioning of the workpiece feeding length for improved length accuracy control.
- Combined with AUTOGRIP rubber collets, it prevents the typical forward pushing of elastic collets, preserving the integrity of the workpiece surface.
- The material stopper and dust cover can be interchanged for combined use, balancing through-hole applications and chip prevention functionality, suitable for sub-spindle clamping to reduce clamping pressure effects.
- J is the hole diameter of blank draw nut.  
K is the maximum thread specification and it could be customize.



CBD-A



CBD

Subject to technical changes

## SPECIFICATIONS

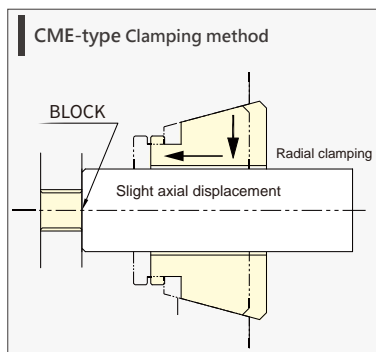
| Model            | Plunger stroke | Max. Chucking Capacity |         |        | Max. D.B. pull | Max. clamping force | Max. speed                 | Weight | Matching steel collet | Matching Cyl. | Max. pressure              |
|------------------|----------------|------------------------|---------|--------|----------------|---------------------|----------------------------|--------|-----------------------|---------------|----------------------------|
|                  |                | Round                  | Hexagom | Square |                |                     |                            |        |                       |               |                            |
|                  | mm             | mm                     | mm      | mm     | kN (kgf)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg     |                       |               | MPa (kgf/cm <sup>2</sup> ) |
| <b>CBD-52</b>    | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 7.3    | RG-52                 | TK-A853       | 3.0(30)                    |
| <b>CBD-5212</b>  | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 7.1    | RG-52                 | TK-A853       | 3.0(30)                    |
| <b>CBD-5217</b>  | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 10.9   | RG-52                 | TK-A853       | 3.0(30)                    |
| <b>CBD-52 A5</b> | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 7.8    | RG-52                 | TK-A853       | 3.0(30)                    |
| <b>CBD-52 A6</b> | 4.5            | 4~52                   | 7~36    | 7~45   | 39.2(4000)     | 92.1(9400)          | 7000                       | 9.1    | RG-52                 | TK-A853       | 3.0(30)                    |
| <b>CBD-65</b>    | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 6000                       | 8.6    | RG-65                 | TS-866        | 2.7(27)                    |
| <b>CBD-6514</b>  | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 6000                       | 9.3    | RG-65                 | TS-866        | 2.7(27)                    |
| <b>CBD-65 A5</b> | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 6000                       | 10.8   | RG-65                 | TS-866        | 2.7(27)                    |
| <b>CBD-65 A6</b> | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 6000                       | 9.5    | RG-65                 | TS-866        | 2.7(27)                    |
| <b>CBD-65 A8</b> | 4.5            | 4~65                   | 8~56    | 8~46   | 44.1(4500)     | 103(10500)          | 6000                       | 9.5    | RG-65                 | TS-866        | 2.7(27)                    |

## DIMENSIONS

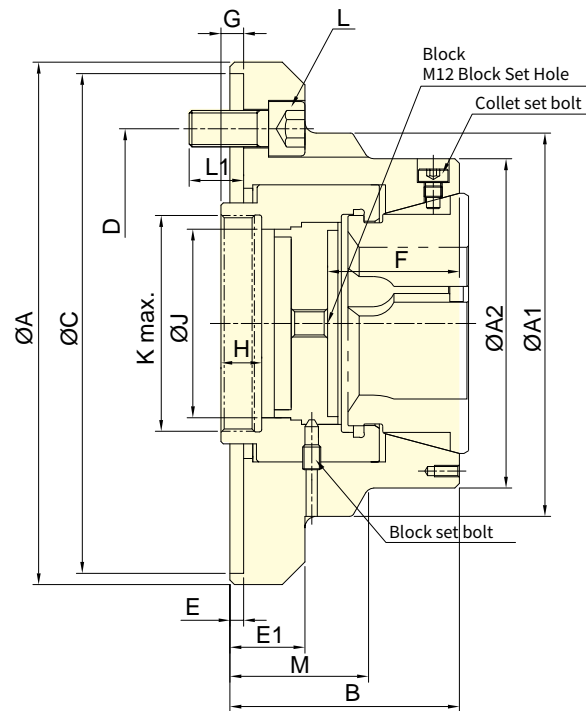
| Model            | A   | A1  | A2  | B   | C (H6) | D     | D1     | E | E1 | F  | G max. | G min. | H    | J  | K max. | L        | L1   | M  |
|------------------|-----|-----|-----|-----|--------|-------|--------|---|----|----|--------|--------|------|----|--------|----------|------|----|
| <b>CBD-52</b>    | 150 | 140 | 116 | 99  | 140    | 104.8 | -      | 5 | -  | 52 | 7      | 2.5    | 17   | 56 | M60x2  | 4~M10x20 | 14.5 | 57 |
| <b>CBD-5212</b>  | 140 | 140 | 116 | 99  | 120    | 100   | -      | 5 | -  | 52 | 7      | 2.5    | 17   | 56 | M60x2  | 4~M10x20 | 14.5 | 57 |
| <b>CBD-5217</b>  | 180 | 140 | 116 | 109 | 170    | 133.4 | -      | 6 | -  | 52 | 16     | 11.5   | 17   | 56 | M60x2  | 4~M12x30 | 18   | 67 |
| <b>CBD-52 A5</b> | 140 | 140 | 116 | 109 | -      | 104.8 | 82.56  | - | -  | 52 | 22     | 17.5   | 17   | 56 | M60x2  | 4~M10x30 | 16   | 67 |
| <b>CBD-52 A6</b> | 160 | 140 | 116 | 109 | -      | 133.4 | 106.38 | - | -  | 52 | 22     | 17.5   | 17   | 56 | M60x2  | 4~M12x35 | 18   | 67 |
| <b>CBD-65</b>    | 180 | 157 | 132 | 112 | 170    | 133.4 | -      | 6 | 24 | 54 | 15.5   | 11     | 17.5 | 68 | M75x2  | 4~M12x30 | 18   | 70 |
| <b>CBD-6514</b>  | 157 | 157 | 132 | 114 | 140    | 104.8 | -      | 6 | -  | 54 | 17.5   | 13     | 17.5 | 68 | M75x2  | 4~M10x30 | 18   | 72 |
| <b>CBD-65 A5</b> | 157 | 157 | 132 | 112 | -      | 104.8 | 82.56  | - | -  | 54 | 21.5   | 17     | 17.5 | 68 | M75x2  | 4~M10x25 | 16   | 70 |
| <b>CBD-65 A6</b> | 157 | 157 | 132 | 110 | -      | 133.4 | 106.38 | - | -  | 54 | 19.5   | 15     | 17.5 | 68 | M75x2  | 4~M12x35 | 18.5 | 68 |
| <b>CBD-65 A8</b> | 202 | 157 | 132 | 114 | -      | 171.4 | 139.72 | - | 38 | 54 | 23.5   | 19     | 17.5 | 68 | M75x2  | 4~M16x35 | 24   | 72 |



- Simple, concise, and lightweight design.
- Rear pull positioning clamping, with a stopper block mechanism. Equipped with radial clamping and axial fine-tuning torque, it can precisely position the workpiece's material entry length, ensuring more accurate length control.
- The stopper block and dust cover can be interchanged, allowing for through-hole applications and dustproof functionality.
- J is the hole diameter of blank draw nut.
- K is the maximum thread specification and it could be customize.



With the material stop mechanism in place, the workpiece does not shift backward during clamping, although there may be slight scuff marks on the surface.



Subject to technical changes

## SPECIFICATIONS

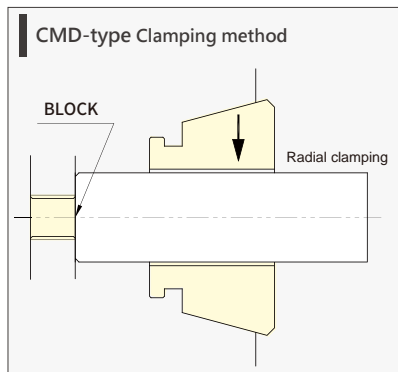
| Model         | Plunger stroke<br>mm | Max. Chucking Capacity |               |              | Max. D.B. pull<br>kN (kgf) | Max. clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Weight<br>kg | Matching steel collet | Matching Cyl. | Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) |
|---------------|----------------------|------------------------|---------------|--------------|----------------------------|---------------------------------|--|--------------|-----------------------|---------------|---|
|               |                      | Round<br>mm            | Hexagom<br>mm | Square<br>mm |                            |                                 |  |              |                       |               |   |
| <b>CME-80</b> | 4.5                  | 5-50                   | 6-68          | 8-56         | 50.0(5100)                 | 115(11730)                      | 6500                                     | 13.6         | RG-80                 | TK-A1287      | 2.3 (23)                                    |

## DIMENSIONS

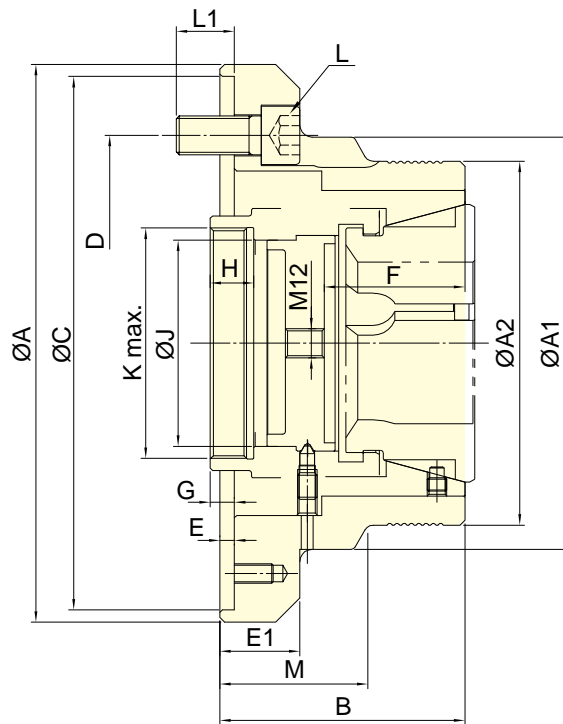
| Model         | A   | A1  | A2  | B   | C(H6) | D     | E | E1 | F  | G max. | G min. | H  | J  | K max. | L        | L1 | M  |
|---------------|-----|-----|-----|-----|-------|-------|---|----|----|--------|--------|----|----|--------|----------|----|----|
| <b>CME-80</b> | 230 | 170 | 145 | 101 | 220   | 171.4 | 6 | 33 | 58 | 12     | 7.5    | 18 | 83 | M95x2  | 3-M16x35 | 24 | 61 |



- Compact and lightweight design with simplified structure.
  - Dead length clamping with a built-in work stop ensures zero axial movement for precise workpiece positioning.
  - Compatible with AUTOGRIP rubber collets to prevent forward push and protect the workpiece surface.
  - Interchangeable work stop and dust cover for through-hole machining and chip protection. Ideal for sub-spindle clamping with reduced axial clamping force.
- J is the hole diameter of blank draw nut.
  - K is the maximum thread specification and it could be customize.



When clamping, the workpiece does not shift forward.



Subject to technical changes

## SPECIFICATIONS

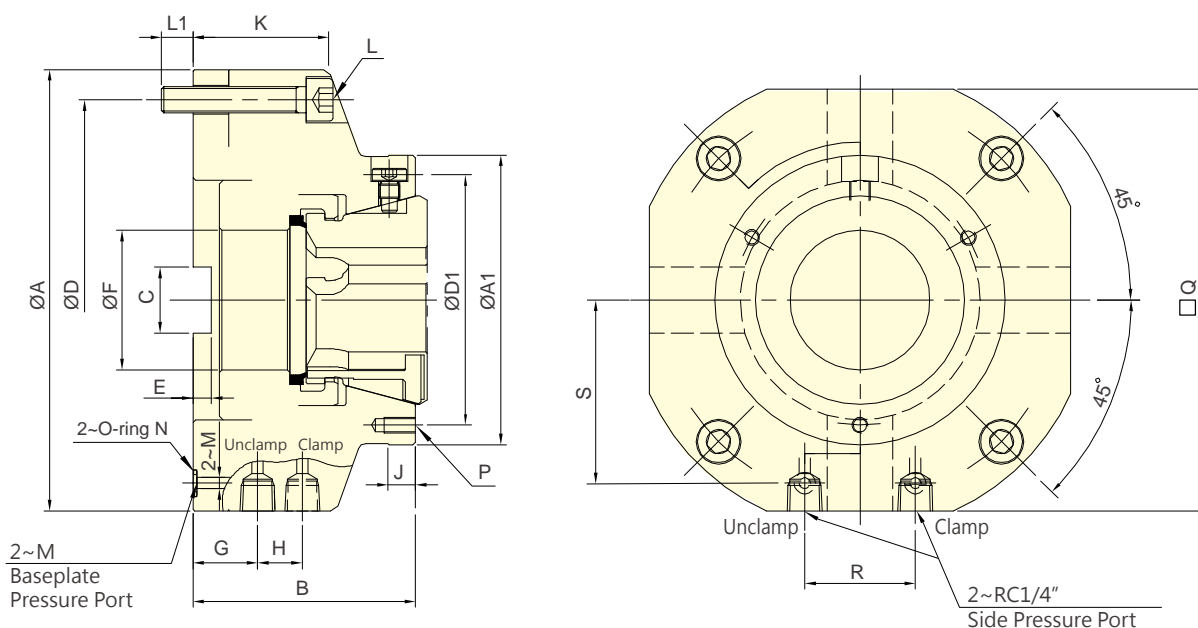
| Model         | Plunger stroke<br>mm | Max. Chucking Capacity |               |              | Max. D.B. pull<br>kN (kgf) | Max. clamping force<br>kN (kgf) | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Weight<br>kg | Matching steel collet | Matching Cyl. | Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) |
|---------------|----------------------|------------------------|---------------|--------------|----------------------------|---------------------------------|--|--------------|-----------------------|---------------|---|
|               |                      | Round<br>mm            | Hexagom<br>mm | Square<br>mm |                            |                                 |  |              |                       |               |   |
| <b>CMD-80</b> | 4.5                  | 5~80                   | 8~68          | 8~56         | 50.0(5100)                 | 115(11730)                      | 6500                                     | 13.6         | RG-80                 | TK-A1287      | 2.3(23)                                     |

## DIMENSIONS

| Model         | A   | A1  | A2  | B   | C(H6) | D     | E | E1 | F  | G max. | G min. | H  | J  | K max. | L        | L1 | M  |
|---------------|-----|-----|-----|-----|-------|-------|---|----|----|--------|--------|----|----|--------|----------|----|----|
| <b>CMD-80</b> | 230 | 170 | 150 | 101 | 220   | 171.4 | 6 | 33 | 58 | 12.5   | 8      | 18 | 85 | M95x2  | 3~M16x35 | 24 | 61 |



- Build-in cylinder, ideal for drilling machines, milling machines and machining centers
- Work with AUTOGRIP's rubber collet(RG series), quick change and saving runtime.
- Two modes for the media supply: side-supply mode or baseplate-supply mode.



Subject to technical changes

## SPECIFICATIONS

| Model         | Jaw stroke(Dia.) | Max. Chucking Capacity |         |        | Max. clamping force |            | Max. pressure              |                            | Weight | Matching steel collet |
|---------------|------------------|------------------------|---------|--------|---------------------|------------|----------------------------|----------------------------|--------|-----------------------|
|               |                  | Round                  | Hexagom | Square | Pneumatic           | Hydraulic  | Pneumatic                  | Hydraulic                  |        |                       |
| Model         | mm               | mm                     | mm      | mm     | kN (kgf)            | kN (kgf)   | MPa (kgf/cm <sup>2</sup> ) | MPa (kgf/cm <sup>2</sup> ) | kg     |                       |
| <b>SCB-52</b> | ± 0.5            | 4~52                   | 7~45    | 7~36   | 8.2(837)            | 101(10300) | 0.6(6)                     | 4.0(40)                    | 8.6    | RG-52                 |
| <b>SCB-65</b> | ± 0.5            | 4~65                   | 8~56    | 8~46   | 10(1020)            | 105(10700) | 0.6(6)                     | 4.2(42)                    | 10.2   | RG-65                 |

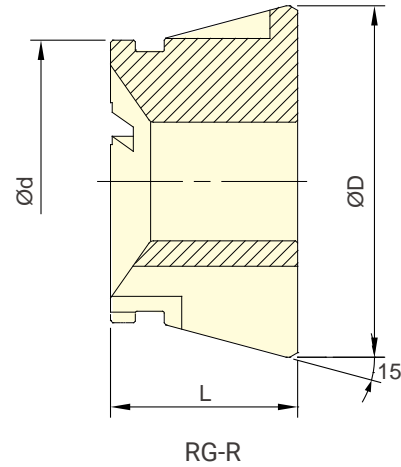
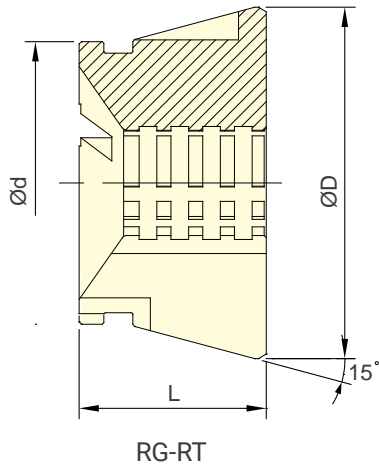
## DIMENSIONS

| Model         | A (g6) | A1  | B    | C  | D   | D1  | E | F  | G    | H  |
|---------------|--------|-----|------|----|-----|-----|---|----|------|----|
| <b>SCB-52</b> | 175    | 110 | 84.5 | 25 | 152 | 95  | 7 | 53 | 24.5 | 17 |
| <b>SCB-65</b> | 192    | 130 | 94   | 30 | 169 | 114 | 9 | 66 | 26.5 | 20 |

| Model         | J  | K    | L     | L1   | M   | N  | P       | Q   | R  | S    |
|---------------|----|------|-------|------|-----|----|---------|-----|----|------|
| <b>SCB-52</b> | 10 | 51.5 | 4~M10 | 12   | 4.2 | P7 | 3~M6x12 | 160 | 42 | 69.5 |
| <b>SCB-65</b> | 10 | 61.5 | 4~M10 | 12.5 | 4.2 | P7 | 3~M6x12 | 175 | 50 | 77   |



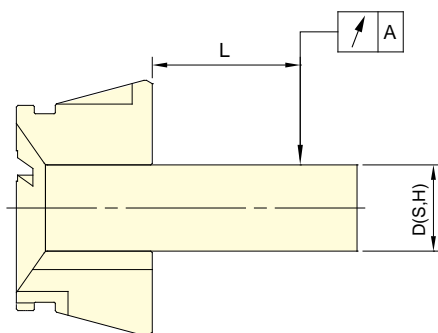
- Rubber grip collet for push type or draw type collet chucks.
- Full gripping area: high rigidity, more gripping force.  
Gripping smoothly: prevent to damage the workpiece.
- More accurate than standard spring collets.  
Accuracy: With customized rubber grip collet.
- Grip Range:  $\pm 0.5\text{mm}$ .
- Quick change and easy.
- Dust-proof and swarf-proof design.



Subject to technical changes

### SPECIFICATIONS

| Model   | Max. Chucking Capacity | d  | D     | L  | Matching Collect Chuck        |
|---------|------------------------|----|-------|----|-------------------------------|
|         | Round mm               |    |       |    |                               |
| RG-42R  | 4~42                   | 54 | 79.3  | 42 | CB-42, CBE-42                 |
| RG-42RT | 11~42                  | 54 | 79.3  | 42 | CB-42, CBE-42                 |
| RG-52R  | 4~52                   | 66 | 79.3  | 46 | CB-52, CBD-52, CBE-52, SCB-52 |
| RG-52RT | 11~52                  | 66 | 79.3  | 46 | CB-52, CBD-52, CBE-52, SCB-52 |
| RG-65R  | 4~65                   | 80 | 99.5  | 53 | CB-65, CBD-65, CBE-65, SCB-65 |
| RG-65RT | 11~65                  | 80 | 99.5  | 53 | CB-65, CBD-65, CBE-65, SCB-65 |
| RG-80   | 5~80                   | 95 | 114.5 | 53 | CB-80, CMD-80, CME-80         |

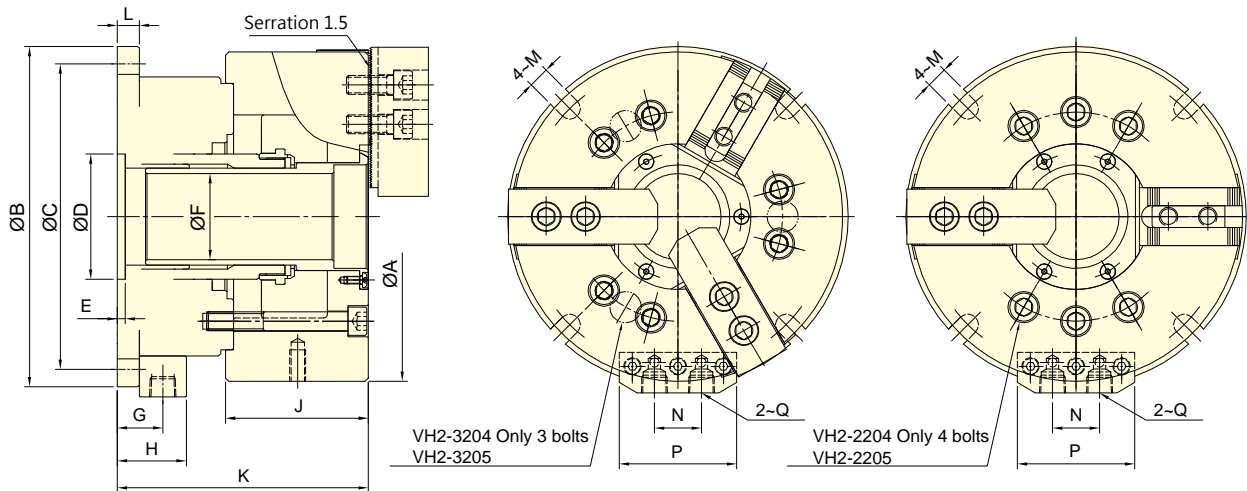


| Test Bar D(S,H) | L   | A DIN  |        |
|-----------------|-----|--------|--------|
|                 | mm  | Class1 | Class2 |
| 3.0~6.0         | 16  | 0.015  | 0.020  |
| 6.0~10.0        | 25  | 0.015  | 0.020  |
| 10.0~18.0       | 40  | 0.020  | 0.030  |
| 18.0~24.0       | 50  | 0.020  | 0.030  |
| 24.0~30.0       | 60  | 0.020  | 0.030  |
| 30.0~50.0       | 80  | 0.030  | 0.040  |
| 50.0~60.0       | 100 | 0.030  | 0.040  |

Note1 : Collets chuck are conformed to DIN 6343 Class2.  
 Note2 : AUTOGRIP's rubber grip collets are conformed to DIN 6343 Class1.



- Stationary Chuck with two or three jaws for drilling, milling and other machines.
- Specification and size of matching chuck for model VH2-2200 is the same as model 2H-2.
- Specification and size of matching chuck for model VH2-3200 is the same as model 3H-2.



Subject to technical changes

## SPECIFICATIONS

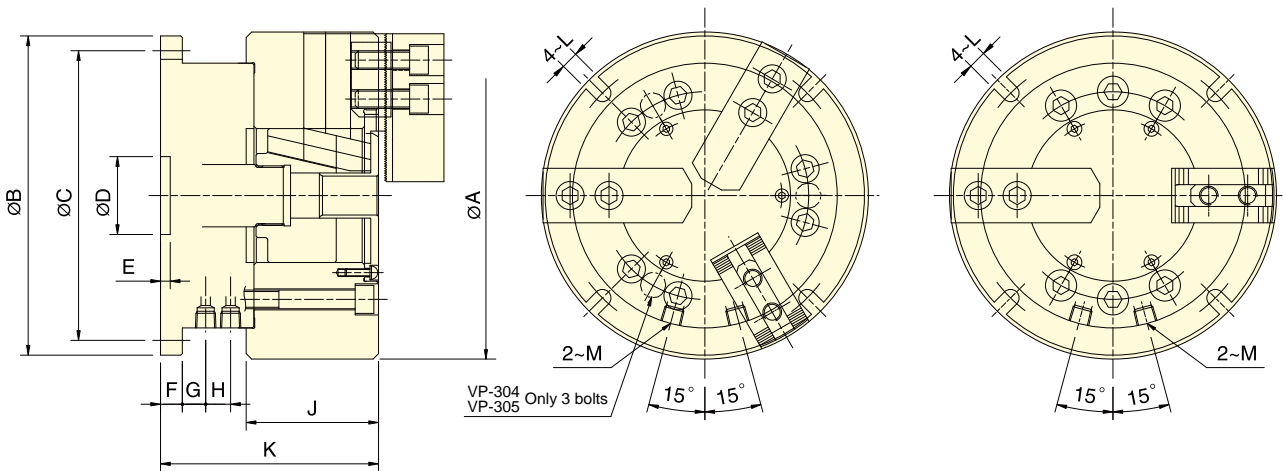
| Model    | Eff. Piston area          |                            | Jaw stroke(Dia.)<br>mm | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Weight<br>kg |
|----------|---------------------------|----------------------------|------------------------|--|--------------|
|          | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                        |  |              |
| VH2-2204 | 52.4                      | 46.7                       | 5.5                    | 2.0 (20)                                   | 9.5          |
| VH2-3204 | 52.4                      | 46.7                       | 5.5                    | 3.0 (30)                                   | 9.5          |
| VH2-2205 | 63.7                      | 57.9                       | 5.5                    | 2.0 (20)                                   | 13.1         |
| VH2-3205 | 63.7                      | 57.9                       | 5.5                    | 3.0 (30)                                   | 12.6         |
| VH2-2206 | 97.1                      | 88.5                       | 6.0                    | 1.8 (17.9)                                 | 21.5         |
| VH2-3206 | 97.1                      | 88.5                       | 6.0                    | 2.7 (26.8)                                 | 21.5         |
| VH2-2208 | 128.9                     | 113.6                      | 7.6                    | 2.1 (20.7)                                 | 32.9         |
| VH2-3208 | 128.9                     | 113.6                      | 7.6                    | 2.9 (28.6)                                 | 33.4         |
| VH2-2210 | 189.2                     | 174.3                      | 8.9                    | 1.9 (19.2)                                 | 55           |
| VH2-3210 | 189.2                     | 174.3                      | 8.9                    | 2.9 (28.7)                                 | 59           |

## DIMENSIONS

| Model    | A   | B   | C   | D(H7) | E | F  | G  | H  | J   | K     | L  | M    | N  | P  | Q     |
|----------|-----|-----|-----|-------|---|----|----|----|-----|-------|----|------|----|----|-------|
| VH2-2204 | 113 | 155 | 137 | 50    | 5 | 27 | 23 | 34 | 59  | 122.5 | 12 | 9    | 26 | 62 | RC1/4 |
| VH2-3204 | 113 | 155 | 137 | 50    | 5 | 27 | 23 | 34 | 59  | 122.5 | 12 | 9    | 26 | 62 | RC1/4 |
| VH2-2205 | 138 | 168 | 150 | 60    | 5 | 32 | 23 | 34 | 60  | 125   | 12 | 9    | 26 | 62 | RC1/4 |
| VH2-3205 | 138 | 168 | 150 | 60    | 5 | 32 | 23 | 34 | 60  | 125   | 12 | 9    | 26 | 62 | RC1/4 |
| VH2-2206 | 170 | 194 | 176 | 80    | 5 | 45 | 25 | 36 | 81  | 143   | 14 | 11   | 26 | 62 | RC1/4 |
| VH2-3206 | 170 | 194 | 176 | 80    | 5 | 45 | 25 | 36 | 81  | 143   | 14 | 11   | 26 | 62 | RC1/4 |
| VH2-2208 | 210 | 217 | 195 | 80    | 5 | 55 | 29 | 44 | 91  | 160   | 14 | 13.5 | 30 | 75 | RC3/8 |
| VH2-3208 | 210 | 217 | 195 | 80    | 5 | 55 | 29 | 44 | 91  | 160   | 14 | 13.5 | 30 | 75 | RC3/8 |
| VH2-2210 | 260 | 266 | 246 | 100   | 6 | 76 | 32 | 47 | 102 | 192   | 17 | 13.5 | 30 | 75 | RC3/8 |
| VH2-3210 | 260 | 266 | 246 | 100   | 6 | 76 | 32 | 47 | 102 | 192   | 17 | 13.5 | 30 | 75 | RC3/8 |



- Stationary Chuck with two or three jaws for drilling, milling and other machines.
- Specification and size of matching chuck for model VP-200 is the same as model 2P.
- Specification and size of matching chuck for model VP-300 is the same as model 3P.



Subject to technical changes

## SPECIFICATIONS

| Model  | Eff. Piston area          |                            | Jaw stroke(Dia.)<br>mm | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Weight<br>kg |
|--------|---------------------------|----------------------------|------------------------|--|--------------|
|        | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                        |  |              |
| VP-204 | 28.0                      | 24.9                       | 6.4                    | 2.1(21)                                    | 7.1          |
| VP-304 | 28.0                      | 24.9                       | 6.4                    | 3.2(32)                                    | 7.4          |
| VP-205 | 28.0                      | 24.9                       | 6.4                    | 2.2(22)                                    | 10.2         |
| VP-305 | 28.0                      | 24.9                       | 6.4                    | 3.3(33)                                    | 10.6         |
| VP-206 | 63.1                      | 53.5                       | 8.5                    | 2.3(23)                                    | 18.3         |
| VP-306 | 63.1                      | 53.5                       | 8.5                    | 3.4(34)                                    | 19.8         |
| VP-208 | 103.4                     | 90.8                       | 8.8                    | 1.9(19)                                    | 31.6         |
| VP-308 | 103.4                     | 90.8                       | 8.8                    | 2.8(28)                                    | 33.6         |
| VP-210 | 153.1                     | 133.5                      | 8.8                    | 1.5(15)                                    | 52.8         |
| VP-310 | 153.1                     | 133.5                      | 8.8                    | 2.2(22)                                    | 54.5         |

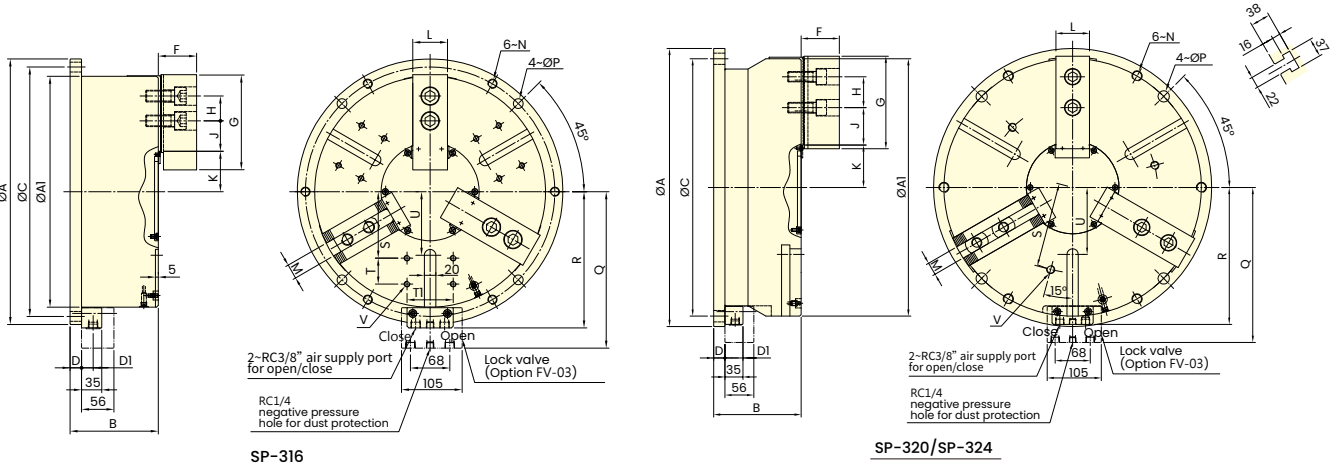
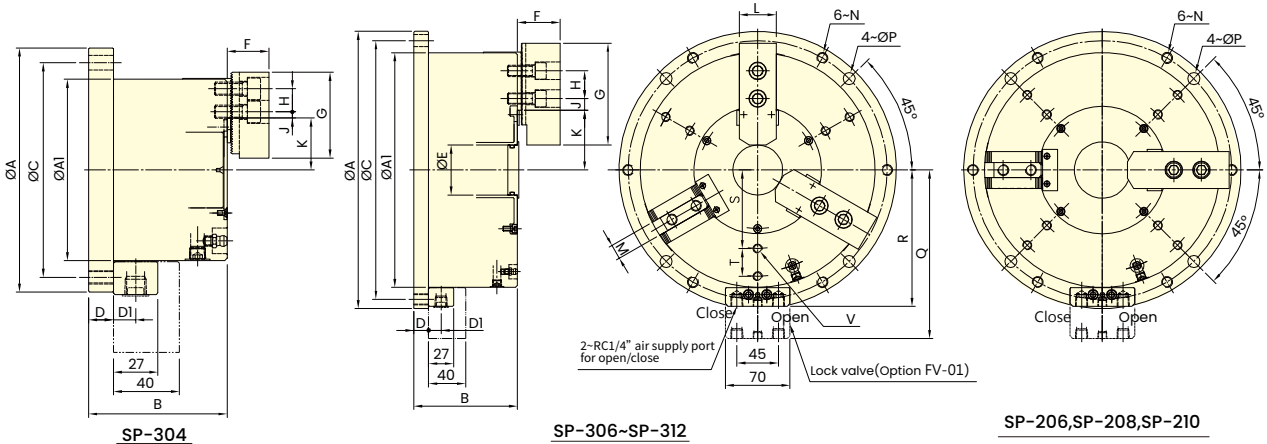
## DIMENSIONS

| Model  | A   | B   | C   | D(H8) | E   | F  | G    | H    | J  | K   | L  | M     |
|--------|-----|-----|-----|-------|-----|----|------|------|----|-----|----|-------|
| VP-204 | 110 | 146 | 130 | 30    | 4.5 | 12 | 18   | 2    | 52 | 92  | 9  | RC1/4 |
| VP-304 | 110 | 146 | 130 | 30    | 4.5 | 12 | 18   | 2    | 52 | 92  | 9  | RC1/4 |
| VP-205 | 135 | 146 | 130 | 30    | 4.5 | 12 | 18   | 2    | 55 | 95  | 9  | RC1/4 |
| VP-305 | 135 | 146 | 130 | 30    | 4.5 | 12 | 18   | 2    | 55 | 95  | 9  | RC1/4 |
| VP-206 | 165 | 178 | 160 | 40    | 5   | 12 | 14.5 | 12.5 | 74 | 125 | 11 | RC1/4 |
| VP-306 | 165 | 178 | 160 | 40    | 5   | 12 | 14.5 | 12.5 | 74 | 125 | 11 | RC1/4 |
| VP-208 | 210 | 205 | 186 | 40    | 5   | 14 | 15   | 16   | 85 | 140 | 11 | RC1/4 |
| VP-308 | 210 | 205 | 186 | 40    | 5   | 14 | 15   | 16   | 85 | 140 | 11 | RC1/4 |
| VP-210 | 254 | 248 | 225 | 50    | 6   | 17 | 20   | 18   | 89 | 176 | 13 | RC3/8 |
| VP-310 | 254 | 248 | 225 | 50    | 6   | 17 | 20   | 18   | 89 | 176 | 13 | RC3/8 |



- Stationary Chucks – Non-Thru-Hole and Thru-Hole Types.
- Available in two jaw configurations: 2-jaw and 3-jaw.
- Equipped with a built-in hydraulic cylinder; compatible with lock valves and can also be operated using air pressure.
- Features a small thru-hole, making it ideal for machining long bar workpieces.
- Side and bottom air/hydraulic inlets available; either can be used for operation.
- Slim and compact design. Compatible with standard soft jaws or hard jaws.
- Suitable for rotary machining and can be installed on mill-turn machines.
- Can be integrated with multi-plate setups for enhanced versatility.

STATIONARY CHUCKS



Subject to technical changes

## SPECIFICATIONS

| Model  | Jaw stroke (Dia.)<br>mm | Chucking Dia. |      | Max. clamping force |              | Max. pressure             |                           | Min. pressure<br>kgf/cm <sup>2</sup> | Air consumption<br>lit (at 6.0 kgf/cm <sup>2</sup> ) | Weight<br>kg |
|--------|-------------------------|---------------|------|---------------------|--------------|---------------------------|---------------------------|--------------------------------------|--|--------------|
|        |                         | Max.          | Min. | Pneumatic           | Hydraulic    | Pneumatic                 | Hydraulic                 |                                      |  |              |
|        |                         | mm            | mm   | kN(kgf)             | kN(kgf)      | MPa(kgf/cm <sup>2</sup> ) | MPa(kgf/cm <sup>2</sup> ) |                                      |  |              |
| SP-304 | 5.1                     | 110           | 10   | 11.0(1120)          | 20.0(2040)   | 0.7(7)                    | 1.2(12)                   | 2                                    | 0.5  | 7            |
| SP-206 | 5.5                     | 168           | 30   | 34.1(3477)          | 46.1(4752)   | 0.7(7)                    | 1.2(12)                   | 2                                    | 1.4  | 16           |
| SP-306 | 5.5                     | 168           | 30   | 35.5(3620)          | 60.0(5252)   | 0.7(7)                    | 1.2(12)                   | 2                                    | 1.4  | 16.5         |
| SP-208 | 6.8                     | 210           | 42   | 43.2(4405)          | 74.0(7545)   | 0.7(7)                    | 1.2(12)                   | 2                                    | 2.5  | 27.7         |
| SP-308 | 6.8                     | 210           | 42   | 51.5(5251)          | 88.3(9004)   | 0.7(7)                    | 1.2(12)                   | 2                                    | 2.5  | 28.7         |
| SP-210 | 7                       | 254           | 52   | 60.5(6169)          | 94.5(9636)   | 0.7(7)                    | 1.2(12)                   | 2                                    | 4.2  | 41.8         |
| SP-310 | 7                       | 254           | 52   | 68.2(6955)          | 118.7(12104) | 0.7(7)                    | 1.2(12)                   | 2                                    | 4.2  | 42           |

| Model         | Jaw stroke (Dia.) | Chucking Dia. |      | Max. clamping force |              | Max. pressure             |                           | Min. pressure       | Air consumption                   | Weight |
|---------------|-------------------|---------------|------|---------------------|--------------|---------------------------|---------------------------|---------------------|-----------------------------------|--------|
|               |                   | Max.          | Min. | Pneumatic           | Hydraulic    | Pneumatic                 | Hydraulic                 |                     |                                   |        |
|               | mm                | mm            | mm   | kN(kgf)             | kN(kgf)      | MPa(kgf/cm <sup>2</sup> ) | MPa(kgf/cm <sup>2</sup> ) | kgf/cm <sup>2</sup> | lit (at 6.0 kgf/cm <sup>2</sup> ) | kg     |
| <b>SP-312</b> | 9.3               | 304           | 60   | 75.8(7729)          | 148 (15091)  | 0.7(7)                    | 1.2(12)                   | 2                   | 6.4                               | 71.3   |
| <b>SP-316</b> | 14.5              | 400           | 30   | 120.7(12305)        | 120.7(12305) | 0.7(7)                    | 0.7(7)                    | 2                   | 10.6                              | 147.8  |
| <b>SP-320</b> | 16                | 500           | 45   | 155.6(15865)        | 155.6(15865) | 0.7(7)                    | 0.7(7)                    | 2                   | 15                                | 232.7  |
| <b>SP-324</b> | 16                | 600           | 140  | 215.9(22015)        | 215.9(22015) | 0.7(7)                    | 0.7(7)                    | 2                   | 22                                | 338.7  |

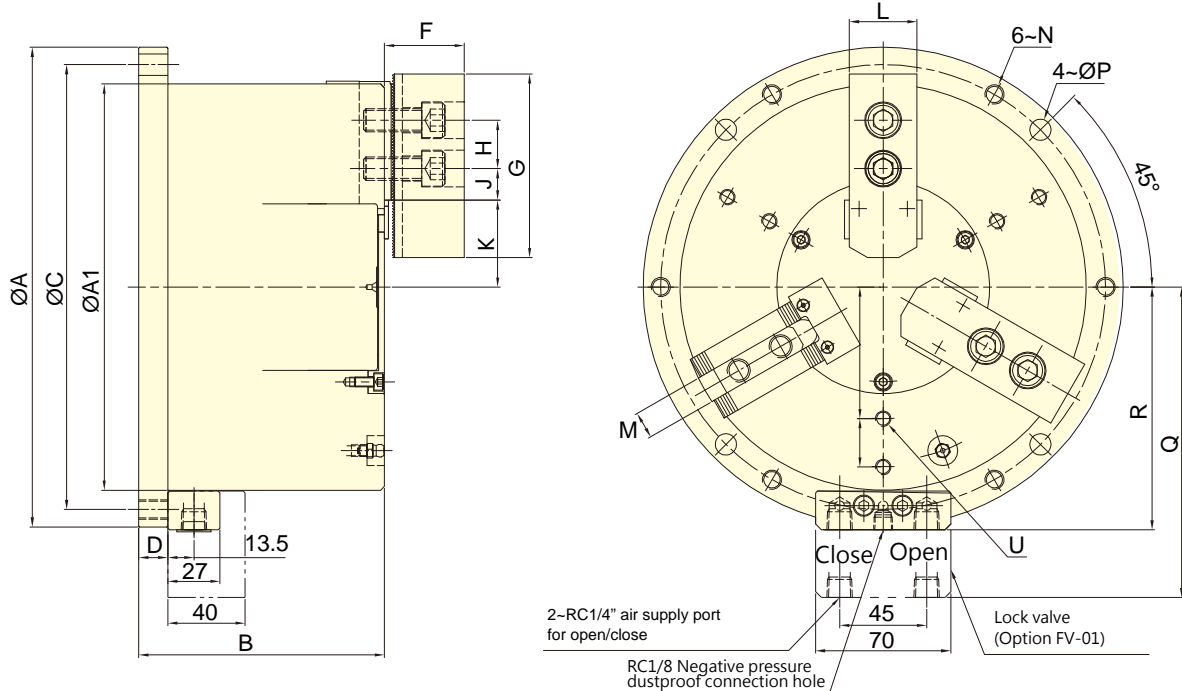
## DIMENSIONS

| Model         | A(h7) | A1  | B   | C   | D  | D1   | E  | F  | G   | H  | J max. | J min. |
|---------------|-------|-----|-----|-----|----|------|----|----|-----|----|--------|--------|
| <b>SP-304</b> | 148   | 110 | 84  | 130 | 15 | 13.5 | -  | 25 | 52  | 14 | 3.75   | 0.75   |
| <b>SP-206</b> | 206   | 168 | 94  | 188 | 15 | 13.5 | 25 | 40 | 73  | 20 | 10.75  | 4.75   |
| <b>SP-306</b> | 206   | 168 | 94  | 188 | 15 | 13.5 | 25 | 40 | 73  | 20 | 10.75  | 4.75   |
| <b>SP-208</b> | 248   | 210 | 108 | 230 | 15 | 13.5 | 32 | 41 | 95  | 25 | 16.25  | 8.75   |
| <b>SP-308</b> | 248   | 210 | 108 | 230 | 15 | 13.5 | 32 | 41 | 95  | 25 | 16.25  | 8.75   |
| <b>SP-210</b> | 300   | 254 | 112 | 280 | 16 | 13.5 | 54 | 46 | 110 | 30 | 23.25  | 12.75  |
| <b>SP-310</b> | 300   | 254 | 112 | 280 | 16 | 13.5 | 54 | 46 | 110 | 30 | 23.25  | 12.75  |
| <b>SP-312</b> | 350   | 304 | 130 | 330 | 18 | 13.5 | 65 | 54 | 130 | 30 | 30.75  | 12.75  |
| <b>SP-316</b> | 460   | 400 | 153 | 432 | 20 | 20   | -  | 66 | 165 | 43 | 67.75  | 18.25  |
| <b>SP-320</b> | 540   | 500 | 170 | 500 | 22 | 20   | -  | 74 | 180 | 60 | 87.5   | 24.5   |
| <b>SP-324</b> | 640   | 600 | 175 | 600 | 24 | 20   | -  | 74 | 180 | 60 | 87.5   | 24.5   |

| Model         | K max. | K min. | L  | M    | N        | P    | Q     | R     | S   | T  | T1 | U   | V          |
|---------------|--------|--------|----|------|----------|------|-------|-------|-----|----|----|-----|------------|
| <b>SP-304</b> | 31.5   | 28.95  | 23 | 10   | M8x1.25  | 9    | 110.5 | 75.5  | -   | -  | -  | -   | -          |
| <b>SP-206</b> | 47     | 44.25  | 31 | 12   | M10x1.5  | 11   | 139.5 | 104.5 | 55  | 18 | -  | -   | 6~M8x1.25  |
| <b>SP-306</b> | 47     | 44.25  | 31 | 12   | M10x1.5  | 11   | 139.5 | 104.5 | 55  | 18 | -  | -   | 6~M8x1.25  |
| <b>SP-208</b> | 53     | 49.6   | 35 | 14   | M10x1.5  | 11   | 160.5 | 125.5 | 68  | 25 | -  | -   | 6~M8x1.25  |
| <b>SP-308</b> | 53     | 49.6   | 35 | 14   | M10x1.5  | 11   | 160.5 | 125.5 | 68  | 25 | -  | -   | 6~M8x1.25  |
| <b>SP-210</b> | 64.5   | 61     | 40 | 16   | M12x1.75 | 13   | 182.5 | 147.5 | 85  | 30 | -  | -   | 6~M10x1.5  |
| <b>SP-310</b> | 64.5   | 61     | 40 | 16   | M12x1.75 | 13   | 182.5 | 147.5 | 85  | 30 | -  | -   | 6~M10x1.5  |
| <b>SP-312</b> | 77.5   | 72.85  | 50 | 21   | M12x1.75 | 13   | 207.5 | 172.5 | 100 | 35 | -  | -   | 6~M10x1.5  |
| <b>SP-316</b> | 70     | 62.75  | 60 | 25.5 | M16x2.0  | 17.5 | 271   | 236   | 115 | 45 | 80 | 110 | 12~M10x1.5 |
| <b>SP-320</b> | 82.5   | 74.5   | 64 | 25   | M20x2.5  | 22   | 301   | 266   | 165 | -  | -  | 130 | 3~M16x2.0  |
| <b>SP-324</b> | 129.5  | 121.5  | 64 | 25   | M20x2.5  | 22   | 351   | 316   | 200 | -  | -  | 180 | 3~M16x2.0  |



- Wedge-hook type solid power chuck with long jaw stroke.
- Equipped with a built-in hydraulic cylinder. When using air pressure as the power source, an optional pressure-holding valve can be installed.
- Easy installation — simply connect the piping and start machining.
- Thin and lightweight design, compatible with standard soft jaws or standard hard jaws.
- Features a single lubrication port for centralized lubrication.



Subject to technical changes

## SPECIFICATIONS

| Model         | Jaw stroke (Dia.)<br>mm | Chucking Dia. |      | Max. clamping force |            | Max. pressure             |                           | Min. pressure<br>kgf/cm <sup>2</sup> | Air consumption<br>lit (at 6.0 kgf/cm <sup>2</sup> ) | Weight<br>kg |
|---------------|-------------------------|---------------|------|---------------------|------------|---------------------------|---------------------------|--------------------------------------|--|--------------|
|               |                         | Max.          | Min. | Pneumatic           | Hydraulic  | Pneumatic                 | Hydraulic                 |                                      |  |              |
|               |                         | mm            | mm   | kN(kgf)             | kN(kgf)    | MPa(kgf/cm <sup>2</sup> ) | MPa(kgf/cm <sup>2</sup> ) |                                      |  |              |
| <b>SM-306</b> | 13.1                    | 168           | 14   | 18.0(1830)          | 32.2(3280) | 0.7(7)                    | 1.2(12)                   | 2                                    | 1.5  | 18.7         |
| <b>SM-308</b> | 16                      | 210           | 18   | 26.2(2670)          | 45.0(4590) | 0.7(7)                    | 1.2(12)                   | 2                                    | 2.7  | 32.5         |
| <b>SM-310</b> | 19.6                    | 254           | 20   | 37.0(3772)          | 63.0(6422) | 0.7(7)                    | 1.2(12)                   | 2                                    | 4.6  | 53.6         |

## DIMENSIONS

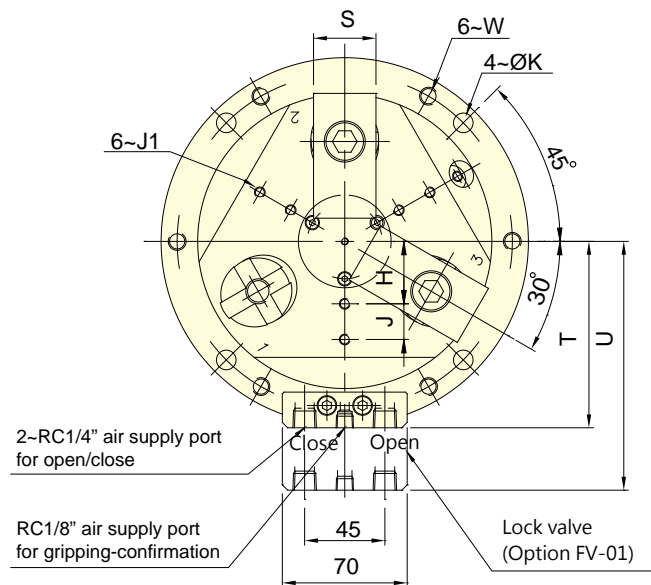
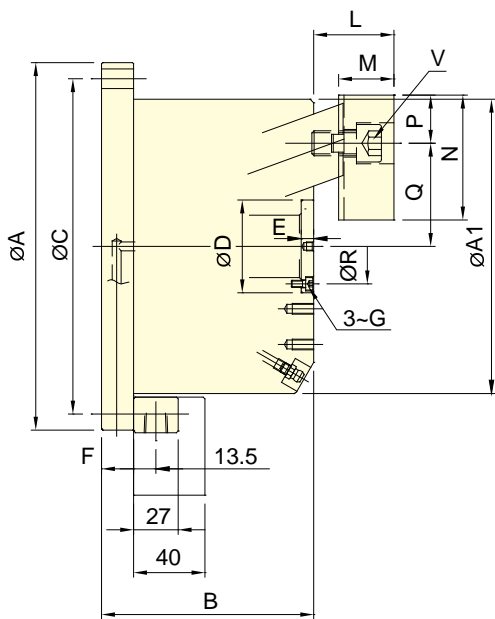
| Model         | A(h7) | A1  | B   | C   | D  | F  | G   | H  | J max. | J min. |
|---------------|-------|-----|-----|-----|----|----|-----|----|--------|--------|
| <b>SM-306</b> | 206   | 168 | 110 | 188 | 15 | 40 | 73  | 20 | 16.75  | 4.75   |
| <b>SM-308</b> | 248   | 210 | 127 | 230 | 15 | 41 | 95  | 25 | 23.75  | 8.75   |
| <b>SM-310</b> | 300   | 254 | 145 | 280 | 16 | 46 | 110 | 30 | 36.75  | 14.25  |

| Model         | K max. | K min. | L  | M  | N        | P  | Q     | R     | S  | T  |
|---------------|--------|--------|----|----|----------|----|-------|-------|----|----|
| <b>SM-306</b> | 39     | 32.45  | 31 | 12 | M10x1.5  | 11 | 139.5 | 104.5 | 55 | 18 |
| <b>SM-308</b> | 45     | 37     | 35 | 14 | M10x1.5  | 11 | 160.5 | 125.5 | 68 | 25 |
| <b>SM-310</b> | 50     | 40.2   | 40 | 16 | M12x1.75 | 13 | 182.5 | 147.5 | 85 | 30 |



- Build-in hydraulic cylinder; it can also work with lock valve and be driven by air pressure.
- Radial clamp and axial pull down at the same time, keep the workpiece attaching close to the base surface of the chuck.
- Almost no workpiece uplifting displacement.
- The body with heat treatment and the organization of cylinder pull-down and fine boring, which guarantee to the high clamping precision and durability, it's suitable for heavy duty machining.
- Can work together with multi-plate.
- Equipped with Airtight pressure detection function.



Subject to technical changes

## SPECIFICATIONS

| Model         | Jaw stroke (Dia.)<br>mm | Chucking Dia. |            | Max. clamping force  |                      | Max. pressure                          |  | Min. pressure<br>kgf/cm <sup>2</sup> | Air consumption<br>lit (at 6.0 kgf/cm <sup>2</sup> ) | Weight<br>kg |
|---------------|-------------------------|---------------|------------|----------------------|----------------------|--|--|--------------------------------------|--|--------------|
|               |                         | Max.<br>mm    | Min.<br>mm | Pneumatic<br>kN(kgf) | Hydraulic<br>kN(kgf) | Pneumatic<br>MPa(kgf/cm <sup>2</sup> ) | Hydraulic<br>MPa(kgf/cm <sup>2</sup> ) |                                      |  |              |
| <b>SD-304</b> | 5                       | 110           | 18         | 5.0 (510)            | 10.9 (1112)          | 0.6 (6)                                | 1.3 (13)                               | 2                                    | 0.26   | 8.1          |
| <b>SD-306</b> | 7.2                     | 165           | 35         | 11.5 (1173)          | 25.0 (2550)          | 0.6 (6)                                | 1.3 (13)                               | 2                                    | 0.58   | 20.6         |
| <b>SD-308</b> | 7.2                     | 210           | 28         | 21.7 (2213)          | 47.0 (4793)          | 0.6 (6)                                | 1.3 (13)                               | 2                                    | 1.02   | 34.1         |
| <b>SD-310</b> | 10.8                    | 254           | 40         | 36.0(3680)           | 60.0(6118)           | 0.6 (6)                                | 1.0 (10)                               | 2                                    | 2.05   | 55           |

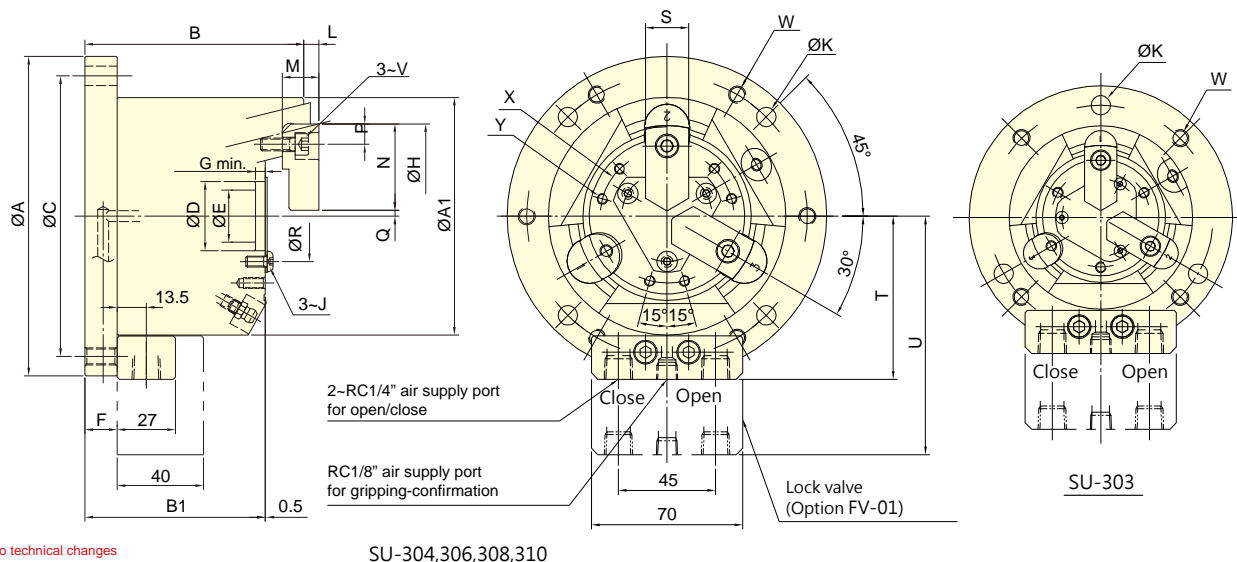
## DIMENSIONS

| Model         | A(h7) | A1  | B    | C   | D(H7/h7) | E  | F  | G  | H    | J  | J1     | K  | L max. | L min. |
|---------------|-------|-----|------|-----|----------|----|----|----|------|----|--------|----|--------|--------|
| <b>SD-304</b> | 148   | 110 | 93.5 | 130 | 35       | 2  | 15 | M3 | 22.5 | 10 | M5x0.8 | 9  | 30     | 23     |
| <b>SD-306</b> | 206   | 165 | 116  | 188 | 52       | 7  | 18 | M4 | 35   | 20 | M6x1   | 11 | 45     | 35     |
| <b>SD-308</b> | 248   | 210 | 122  | 230 | 65       | 10 | 18 | M5 | 45   | 25 | M8x1.2 | 11 | 56     | 46     |
| <b>SD-310</b> | 300   | 254 | 151  | 280 | 75       | 12 | 20 | M6 | 55   | 30 | M8x1.2 | 13 | 65     | 50     |

| Model         | M    | N   | P  | Q max. | Q min. | R  | S  | T     | U     | V     | W        |
|---------------|------|-----|----|--------|--------|----|----|-------|-------|-------|----------|
| <b>SD-304</b> | 19.5 | 52  | 19 | 37     | 34.5   | 27 | 25 | 75.5  | 110.5 | 3~M10 | M8x1.25  |
| <b>SD-306</b> | 31   | 70  | 27 | 57.8   | 54.2   | 42 | 35 | 104.5 | 139.5 | 3~M14 | M10x1.5  |
| <b>SD-308</b> | 41   | 84  | 31 | 70.8   | 67.2   | 53 | 40 | 125.5 | 160.5 | 6~M12 | M10x1.5  |
| <b>SD-310</b> | 46   | 100 | 38 | 85     | 79.6   | 62 | 50 | 147.5 | 182.5 | 6~M14 | M12x1.75 |



- Build-in hydraulic cylinder; it can also work with lock valve and be driven by air pressure.
- Radial clamp and axial pull down at the same time, keep the workpiece attaching close to the base surface of the chuck.
- Almost no workpiece uplifting displacement.
- Suitable for drilling, milling and other machines.
- The body with heat treatment and the organization of cylinder pull-down and fine boring, which guarantee to the high clamping precision and durability, it's suitable for heavy duty machining.
- Can work together with multi-plate.
- Equipped with Airtight pressure detection function.



Subject to technical changes

SU-304,306,308,310

## SPECIFICATIONS

| Model         | Jaw stroke (Dia.)<br>mm | Chucking Dia. |            | Max. clamping force  |                      | Max. pressure                          |  | Min. pressure<br>kgf/cm <sup>2</sup> | Air consumption<br>lit (at 6.0 kgf/cm <sup>2</sup> ) | Weight<br>kg |
|---------------|-------------------------|---------------|------------|----------------------|----------------------|--|--|--------------------------------------|--|--------------|
|               |                         | Max.<br>mm    | Min.<br>mm | Pneumatic<br>kN(kgf) | Hydraulic<br>kN(kgf) | Pneumatic<br>MPa(kgf/cm <sup>2</sup> ) | Hydraulic<br>MPa(kgf/cm <sup>2</sup> ) |                                      |  |              |
| <b>SU-303</b> | 2                       | 42            | 4          | 5.2(530)             | 12.8(1305)           | 0.6(6)                                 | 1.3(13)                                | 2                                    | 0.16   | 5.7          |
| <b>SU-304</b> | 3                       | 60            | 5          | 6.7 (683)            | 16.0 (1632)          | 0.6 (6)                                | 1.3 (13)                               | 2                                    | 0.26   | 7.4          |
| <b>SU-306</b> | 5                       | 105           | 31         | 18.5 (1886)          | 40.0 (4079)          | 0.6 (6)                                | 1.3 (13)                               | 2                                    | 0.58   | 18           |
| <b>SU-308</b> | 5                       | 132           | 32         | 37.0 (3773)          | 80.0 (8158)          | 0.6 (6)                                | 1.3 (13)                               | 2                                    | 1.02   | 31.5         |
| <b>SU-310</b> | 5                       | 163           | 44         | 46.2(4710)           | 100.0(10100)         | 0.6(6)                                 | 1.3(13)                                | 2                                    | 2.11   | 53           |

## DIMENSIONS

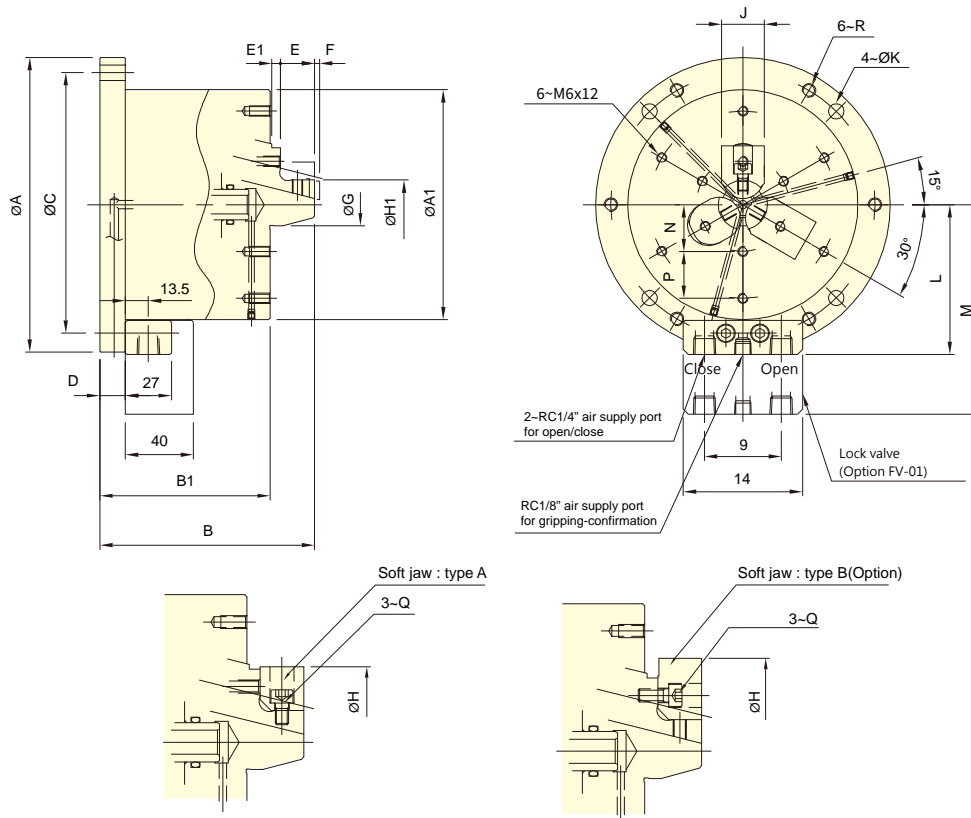
| Model         | A(h7) | A1  | B     | B1   | C   | D(H6) | E  | F  | G   | H(H6) | J  | K    | L max. | L min. |
|---------------|-------|-----|-------|------|-----|-------|----|----|-----|-------|----|------|--------|--------|
| <b>SU-303</b> | 122   | 85  | 80.5  | 68   | 104 | 28    | 22 | 12 | 3.5 | 66    | M3 | 3~9  | 5      | 1      |
| <b>SU-304</b> | 148   | 110 | 101.5 | 83.5 | 130 | 32    | 24 | 15 | 4.5 | 84    | M5 | 4~9  | 7      | 1      |
| <b>SU-306</b> | 206   | 168 | 136.5 | 104  | 188 | 35    | 25 | 18 | 6   | 129   | M5 | 4~11 | 15     | 5      |
| <b>SU-308</b> | 248   | 210 | 152   | 115  | 230 | 55    | 45 | 18 | 7   | 156   | M6 | 4~11 | 17     | 7      |
| <b>SU-310</b> | 300   | 254 | 181   | 131  | 280 | 65    | 53 | 20 | 7   | 187   | M8 | 4~13 | 9      | -1     |

| Model         | M  | N  | P    | Q max. | Q min. | R  | S  | T     | U     | V   | W          | X (p.c.d) | Y       |
|---------------|----|----|------|--------|--------|----|----|-------|-------|-----|------------|-----------|---------|
| <b>SU-303</b> | 12 | 30 | 7    | 3.5    | 2.5    | 36 | 15 | 63    | 98    | M5  | 4~M8x1.25  | 46        | 3~M5x10 |
| <b>SU-304</b> | 17 | 40 | 9.5  | 2.75   | 1.25   | 42 | 20 | 75.5  | 110.5 | M6  | 6~M8x1.25  | 62        | 6~M5x10 |
| <b>SU-306</b> | 30 | 50 | 17   | 15.75  | 13.25  | 49 | 30 | 104.5 | 139.5 | M10 | 6~M10x1.5  | 72        | 6~M6x12 |
| <b>SU-308</b> | 34 | 63 | 20.5 | 16.25  | 13.75  | 71 | 35 | 125.5 | 160.5 | M12 | 6~M10x1.5  | 95        | 6~M6x12 |
| <b>SU-310</b> | 39 | 74 | 23   | 20.75  | 18.25  | 85 | 40 | 147.5 | 182.5 | M14 | 6~M12x1.75 | 115       | 6~M6x12 |

## STATIONARY EXPANSIBLE PULL BACK CHUCK



- Build-in hydraulic cylinder; it can also work with lock valve and be driven by air pressure.
- For internal gripping.
- With high precision and stability.
- Suitable for the precision large length size process.
- Suitable for end process.
- Can work together with multi-plate.
- Airtight pressure detect function is optional.



Subject to technical changes

### SPECIFICATIONS

| Model         | Jaw stroke (Dia.)<br>mm | Chucking Dia. |            | Max. clamping force  |                      | Max. pressure                          |  | Min. pressure<br>kgf/cm <sup>2</sup> | Air consumption<br>lit (at 6.0 kgf/cm <sup>2</sup> ) | Weight<br>kg |
|---------------|-------------------------|---------------|------------|----------------------|----------------------|--|--|--------------------------------------|--|--------------|
|               |                         | Max.<br>mm    | Min.<br>mm | Pneumatic<br>kN(kgf) | Hydraulic<br>kN(kgf) | Pneumatic<br>MPa(kgf/cm <sup>2</sup> ) | Hydraulic<br>MPa(kgf/cm <sup>2</sup> ) |                                      |  |              |
| <b>SE-305</b> | 3                       | 83            | 29         | 14.3 (1459)          | 41.0 (4181)          | 0.7 (7)                                | 1.3 (13)                               | 2                                    | 0.46   | 14.6         |
| <b>SE-306</b> | 5                       | 110           | 44         | 20.0 (2040)          | 57.0 (5812)          | 0.7 (7)                                | 1.3 (13)                               | 2                                    | 0.58   | 20           |
| <b>SE-308</b> | 5                       | 150           | 50         | 32.0 (3263)          | 78.0 (7954)          | 0.7 (7)                                | 1.3 (13)                               | 2                                    | 1.02   | 33           |

### DIMENSIONS

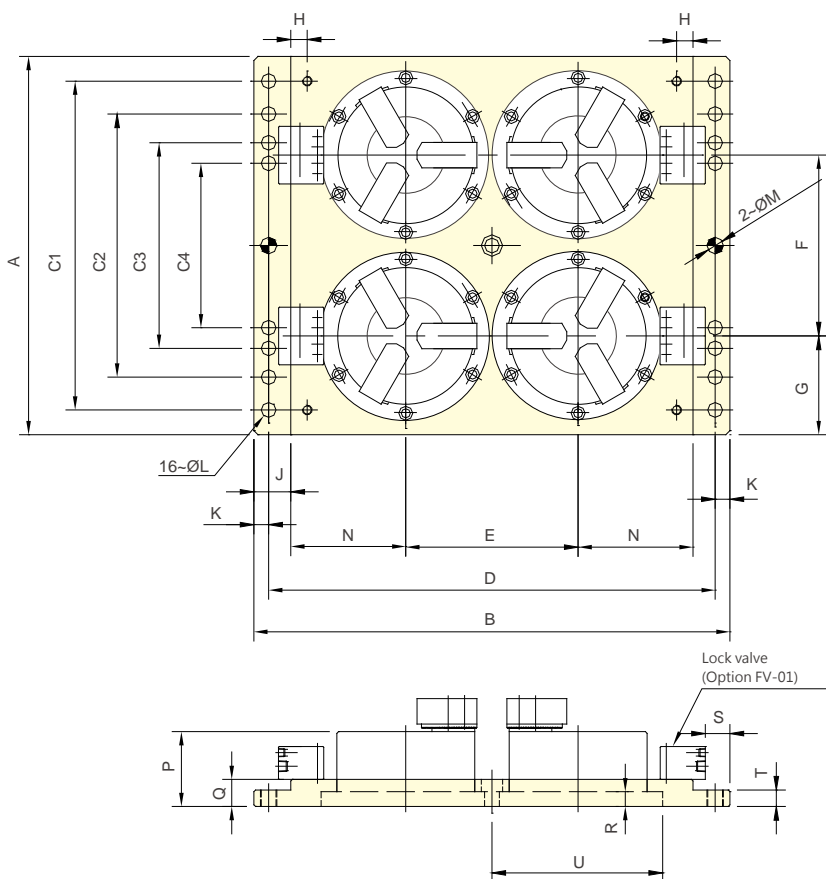
| Model         | A(h7) | A1  | B   | B1  | C   | D  | E  | E1 | F max. | F min. | G  | type A |        | type B |        |
|---------------|-------|-----|-----|-----|-----|----|----|----|--------|--------|----|--------|--------|--------|--------|
|               |       |     |     |     |     |    |    |    |        |        |    | H max. | H min. | H max. | H min. |
| <b>SE-305</b> | 173   | 135 | 126 | 100 | 155 | 15 | 20 | 5  | 3      | -3     | 25 | 68     | 50     | 83     | 67     |
| <b>SE-306</b> | 206   | 168 | 140 | 108 | 188 | 18 | 23 | 7  | 5      | -5     | 40 | 90     | 70     | 110    | 89     |
| <b>SE-308</b> | 248   | 210 | 164 | 119 | 230 | 18 | 30 | 9  | 5      | -5     | 49 | 110    | 90     | 150    | 108    |

| Model         | H1   |      | J  | K  | L     | M     | N    | P    | Q    | R       |
|---------------|------|------|----|----|-------|-------|------|------|------|---------|
|               | max. | min. |    |    |       |       |      |      |      |         |
| <b>SE-305</b> | 50   | 29   | 25 | 9  | 88    | 123   | 27.5 | 27.5 | 3~M6 | M8x1.25 |
| <b>SE-306</b> | 70   | 44   | 31 | 11 | 104.5 | 139.5 | 38   | 29   | 3~M6 | M10x1.5 |
| <b>SE-308</b> | 90   | 50   | 35 | 11 | 125.5 | 160.5 | 50   | 35   | 3~M8 | M10x1.5 |



- Use for milling machine or machining center to achieve simultaneous processing of multiple workpieces.
- Stationary cylinder lock valve (optional) can be mounted.
- Plate for 2,3,6 stationary chucks is optional.



Subject to technical changes

### DIMENSIONS

| Model            | A   | B   | C1  | C2  | C3  | C4  | D   | E   | F   | G   |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>MP4-06206</b> | 460 | 580 | 400 | 320 | 250 | 200 | 544 | 210 | 220 | 120 |

| Model            | H  | J  | K  | L  | M  | N   | P  | Q  | R  | S  | T  | U   |
|------------------|----|----|----|----|----|-----|----|----|----|----|----|-----|
| <b>MP4-06206</b> | 20 | 45 | 18 | 17 | 20 | 140 | *B | 33 | 18 | 20 | 20 | 206 |

The dimension \*B: Please refer to the dimension B of the chuck model assembled.

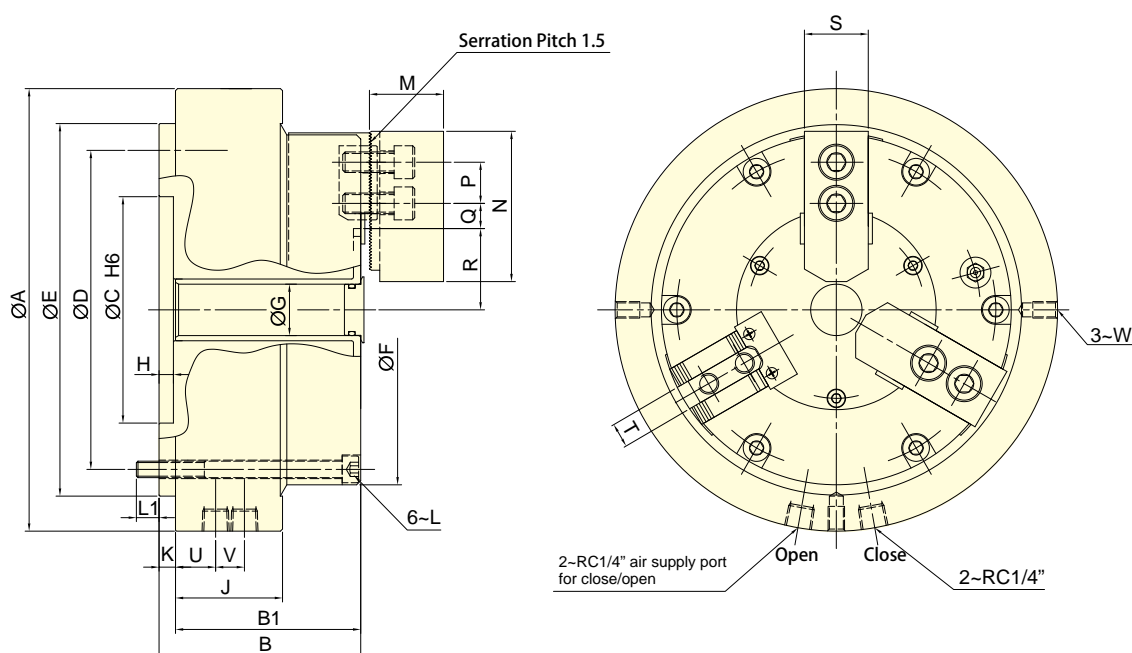


Subject to technical changes

| Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Operating angle | Port size |
|--|-----------------|-----------|
| 1.0 (10)                                   | 90 °            | Rc1/4     |



- Rotary chuck with built-in pneumatic cylinder, compact design, suitable for light machining, compatible to standard soft jaw/hard jaw.
  - Can be installed on a rotary table for indexing machining.
  - Sealed against dust and cutting chips.
  - Matching surfaces of all parts hardened, ground and lubricated directly.
- Note: To overcome friction force between distributor ring and chuck body, the rotating torque of rotary table must be high than the requirement shown in the table.



Subject to technical changes

## SPECIFICATIONS

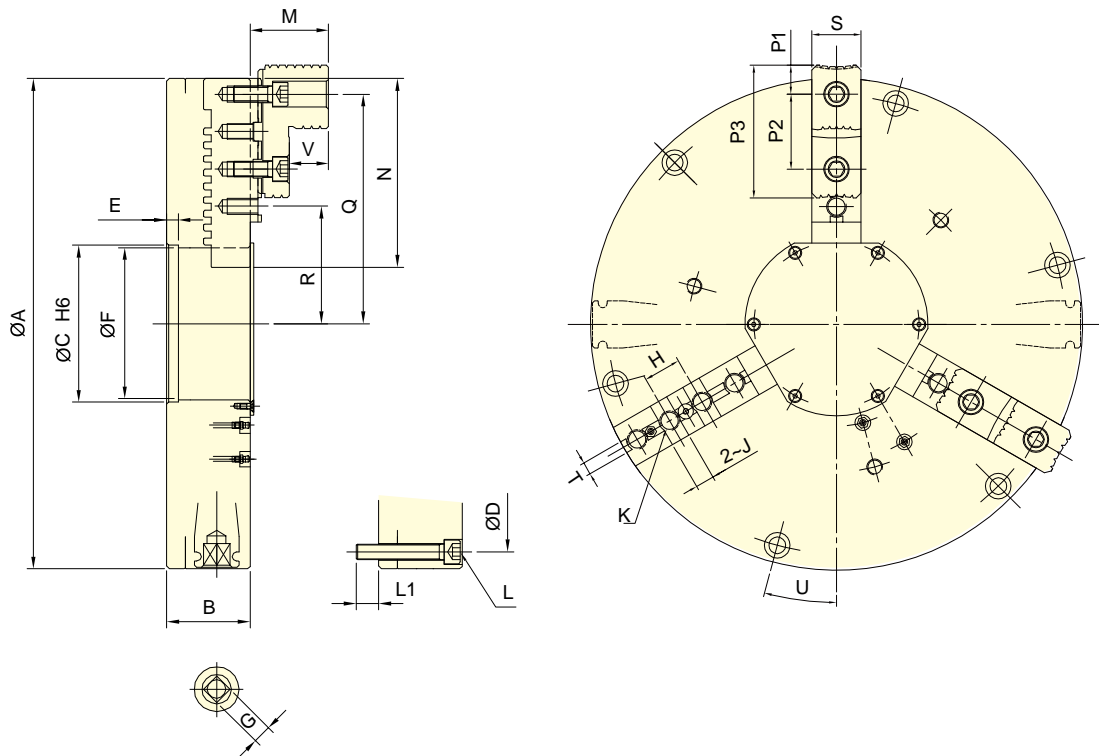
| Model          | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. clamping force Pneumatic( at 6.0kgf/cm <sup>2</sup> ) | Max. pressure (kgf/cm <sup>2</sup> ) | Max. speed (r.p.m.) | Max Rotation resistance torque Nm | Air consumption (at 6.0 kgf/cm <sup>2</sup> ) lit (kgf/cm <sup>2</sup> ) | Weight kg |
|----------------|-------------------|--------------------|--------------------|--|--------------------------------------|---------------------|-----------------------------------|--|-----------|
|                | mm                |                    |                    |  |                                      |                     |                                   |  |           |
| <b>RAP-306</b> | 5.5               | 170                | 25                 | 21.0(2141.4)   | 7                                    | 72                  | 40                                | 3.1  | 16.2      |
| <b>RAP-308</b> | 6.8               | 215                | 37                 | 34.2(3487.4)   | 7                                    | 60                  | 60                                | 3.1  | 30.6      |
| <b>RAP-310</b> | 7                 | 254                | 53                 | 48.0(4894.7)   | 7                                    | 53                  | 85                                | 4.2  | 42.4      |

## DIMENSIONS

| Model          | A   | B   | B1  | C ( H6) | D   | E   | F   | G  | H | J  | K  |
|----------------|-----|-----|-----|---------|-----|-----|-----|----|---|----|----|
| <b>RAP-306</b> | 215 | 98  | 90  | 110     | 155 | 181 | 170 | 25 | 7 | 52 | 8  |
| <b>RAP-308</b> | 260 | 113 | 104 | 110     | 200 | 226 | 215 | 32 | 8 | 52 | 9  |
| <b>RAP-310</b> | 300 | 117 | 52  | 140     | 235 | 261 | 254 | 54 | 8 | 52 | 10 |

| Model          | L    | L1 | M  | N   | P  | Q max. | Q min. | R max. | R min. | S  | T  | U    | V  | W    |
|----------------|------|----|----|-----|----|--------|--------|--------|--------|----|----|------|----|------|
| <b>RAP-306</b> | 6-M8 | 11 | 36 | 73  | 20 | 10.75  | 6.25   | 47     | 44.25  | 31 | 12 | 19.5 | 14 | 3-M8 |
| <b>RAP-308</b> | 6-M8 | 16 | 37 | 95  | 25 | 13.25  | 8.75   | 57     | 53.6   | 35 | 14 | 19.5 | 14 | 3-M8 |
| <b>RAP-310</b> | 6-M8 | 14 | 42 | 110 | 30 | 23.25  | 12.75  | 64.5   | 61     | 40 | 16 | 19.5 | 14 | 3-M8 |

- Thin and lightweight design and increase the z-axis machining range.
- With the center hole cover and dustproof design for the accuracy and service life of the chuck.
- For 5-axis indexing plates and milling machines.
- 3MF series are not designed for the vertical or horizontal lathes, unless there is a rigid plate and providing adequate support rigidity and strength.



Subject to technical changes

## SPECIFICATIONS

| Model         | Jaw stroke (Dia.) | Chucking Dia. Max. | Chucking Dia. Min. | Max. allowable torque | Max. clamping force | Max. speed                 | Weight |
|---------------|-------------------|--------------------|--------------------|-----------------------|---------------------|----------------------------|--------|
|               | mm                | mm                 | mm                 | N · m (kgf · m)       | kN (kgf)            | min <sup>-1</sup> (r.p.m.) | kg     |
| <b>3MF-16</b> | 60                | 350                | 95                 | 175 (17.8)            | 59 (6000)           | 1450                       | 66.9   |
| <b>3MF-20</b> | 80                | 450                | 135                | 170 (17.3)            | 71.2 (7300)         | 1150                       | 121    |
| <b>3MF-24</b> | 96                | 520                | 220                | 170 (17.3)            | 71.2 (7300)         | 950                        | 165    |

## DIMENSIONS

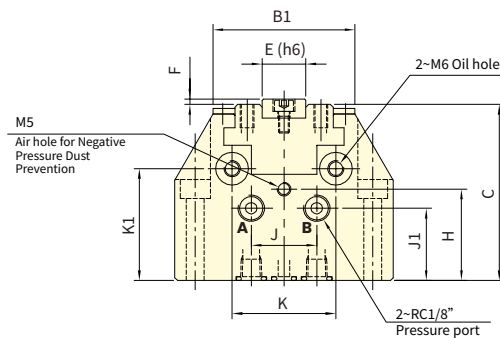
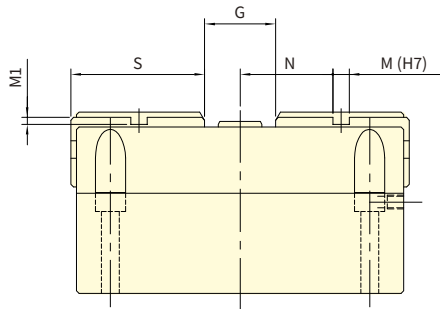
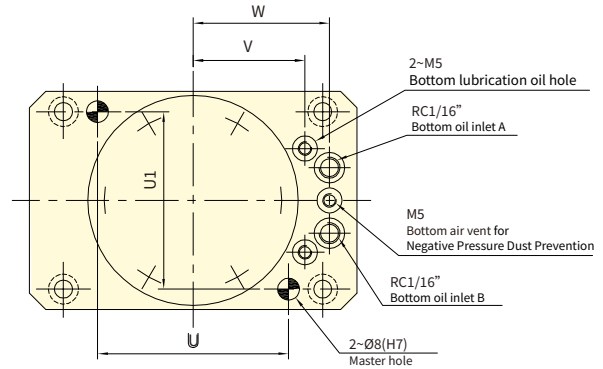
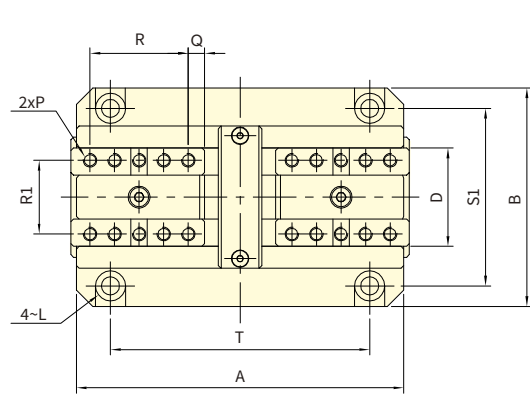
| Model         | A   | B  | C (H6) | D   | E  | F   | G    | H    | J (H7) | K     | L     | L1 | M  |
|---------------|-----|----|--------|-----|----|-----|------|------|--------|-------|-------|----|----|
| <b>3MF-16</b> | 400 | 80 | 140    | 375 | 10 | 135 | □ 14 | 27   | 19.03  | 4~M12 | 6~M12 | 23 | 60 |
| <b>3MF-20</b> | 500 | 85 | 170    | 465 | 12 | 160 | □ 19 | 38.1 | 19.03  | 4~M16 | 6~M16 | 23 | 80 |
| <b>3MF-24</b> | 600 | 84 | 220    | 560 | 10 | 210 | □ 19 | 38.1 | 19.03  | 4~M16 | 6~M16 | 23 | 79 |

| Model         | N     | P1    | P2   | P3    | Q max. | Q min. | R max. | R min. | S  | T (h8) | U   | V  |
|---------------|-------|-------|------|-------|--------|--------|--------|--------|----|--------|-----|----|
| <b>3MF-16</b> | 148.5 | 27.16 | 54   | 112.5 | 184.5  | 164    | 103    | 62     | 40 | 12.7   | 15° | 28 |
| <b>3MF-20</b> | 192.5 | 29.5  | 76.2 | 135   | 254    | 214    | 139.7  | 99.7   | 50 | 12.7   | 15° | 40 |
| <b>3MF-24</b> | 215   | 29.5  | 76.2 | 135   | 298    | 250    | 183.7  | 135.7  | 50 | 12.7   | 15° | 40 |



- Pneumatic actuation enables rapid clamping and unclamping, enhancing machining cycle efficiency.
- Slim and compact body design optimizes machine workspace utilization.
- Oil ports are available on both side and bottom, allowing flexible installation and hydraulic connection.
- Suitable for clamping applications on milling machines and machining centers.
- Hydraulic actuation is also supported; however, clamping and unclamping speed will be comparatively slower.



Subject to technical changes

## SPECIFICATIONS

| Model           | Jaw stroke(Dia.) | Max.Chucking (Dia.) | Max. clamping force Pneumatic | Max. clamping force Hydraulic | Max. pressure Pneumatic | Max. pressure Hydraulic | Max. Jaw Height | Weight |
|-----------------|------------------|---------------------|-------------------------------|-------------------------------|-------------------------|-------------------------|-----------------|--------|
|                 | mm               |                     |                               |                               |                         |                         |                 |        |
| <b>VRA-808</b>  | 8.8              | 100                 | 2.2(224)                      | 8.1(830)                      | 0.9(9)                  | 2.1(21)                 | 60              | 3.8    |
| <b>VRA-1012</b> | 12               | 120                 | 4.4(450)                      | 13.4(1370)                    | 0.9(9)                  | 2.1(21)                 | 60              | 7      |
| <b>VRA-1214</b> | 14               | 160                 | 15.0(1530)                    | 31.1(3171)                    | 0.9(9)                  | 2.1(21)                 | 60              | 12     |

## DIMENSIONS

| Model           | A   | B   | B1 | C    | D  | E(h6) | F   | G max | G min | H    | J  | J1   | K  | K1 | L  |
|-----------------|-----|-----|----|------|----|-------|-----|-------|-------|------|----|------|----|----|----|
| <b>VRA-808</b>  | 120 | 80  | 52 | 64.5 | 36 | 16    | 2   | 26    | 17.2  | 33.5 | 24 | 26.5 | 38 | 41 | M6 |
| <b>VRA-1012</b> | 150 | 100 | 64 | 76   | 45 | 20    | 2   | 32    | 20    | 39   | 30 | 32   | 45 | 49 | M8 |
| <b>VRA-1214</b> | 188 | 125 | 82 | 82.5 | 60 | 24    | 2.5 | 36    | 22    | 41.5 | 36 | 34.5 | 58 | 51 | M8 |

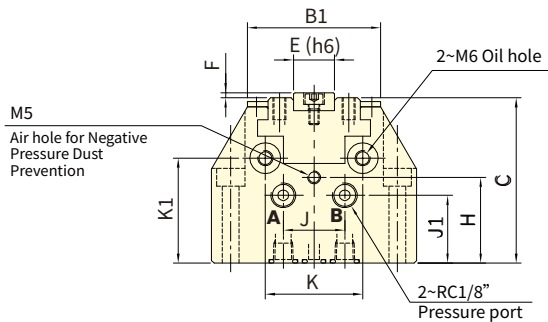
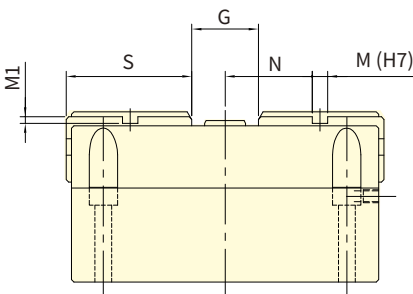
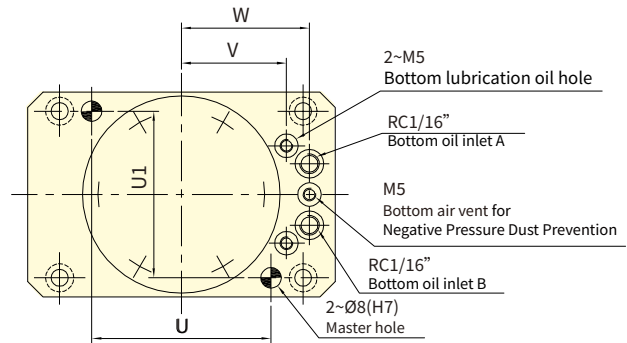
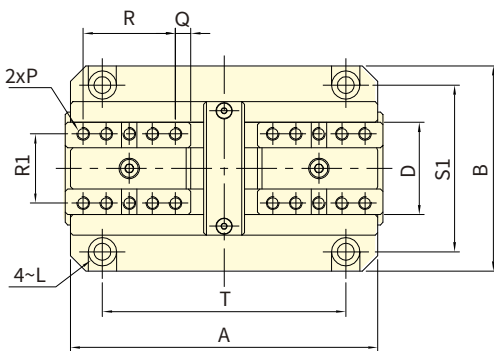
  

| Model           | M(H7) | M1  | N max | N min | P          | Q  | R    | R1 | S  | T   | T1  | U   | U1  | V  | W  |
|-----------------|-------|-----|-------|-------|------------|----|------|----|----|-----|-----|-----|-----|----|----|
| <b>VRA-808</b>  | 6     | 2.5 | 34    | 29.6  | 10~M5x0.8  | 6  | 9x4  | 27 | 49 | 95  | 65  | 70  | 65  | 41 | 50 |
| <b>VRA-1012</b> | 8     | 2.5 | 44    | 38    | 10~M6x1    | 8  | 12x4 | 32 | 63 | 120 | 80  | 90  | 80  | 54 | 63 |
| <b>VRA-1214</b> | 8     | 3   | 60    | 53    | 12~M8x1.25 | 10 | 12x5 | 43 | 80 | 158 | 100 | 128 | 100 | 69 | 78 |

VISE



- Designed exclusively for hydraulic actuation, achieving faster clamping and unclamping speed without compromising maximum clamping force.
- Slim and compact body design optimizes machine workspace utilization.
- Oil ports are available on both side and bottom, allowing flexible installation and hydraulic connection.
- Suitable for clamping applications on milling machines and machining centers.



Subject to technical changes

### SPECIFICATIONS

| Model           | Jaw stroke(Dia.) | Max.Chucking (Dia.) | Max. clamping force Pneumatic | Max. clamping force Hydraulic | Max. pressure Pneumatic | Max. pressure Hydraulic | Max. Jaw Height | Weight |
|-----------------|------------------|---------------------|-------------------------------|-------------------------------|-------------------------|-------------------------|-----------------|--------|
|                 | mm               |                     |                               |                               |                         |                         |                 |        |
| <b>VRH-808</b>  | 8.8              | 100                 | 7.8(795)                      | 5.0(50)                       | 60                      | 3.9                     | 60              | 3.8    |
| <b>VRH-1012</b> | 12               | 120                 | 15.6(1590)                    | 5.0(50)                       | 60                      | 7.2                     | 60              | 7      |
| <b>VRH-1214</b> | 14               | 160                 | 31.1(3171)                    | 6.0(60)                       | 60                      | 12.1                    | 60              | 12     |

### DIMENSIONS

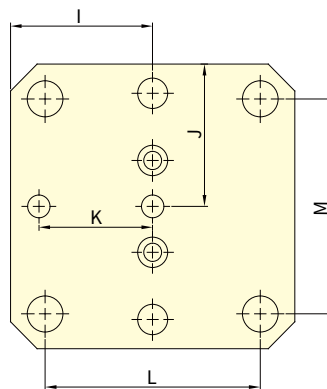
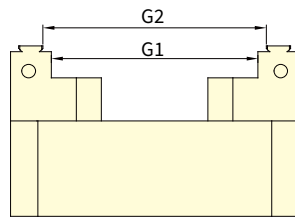
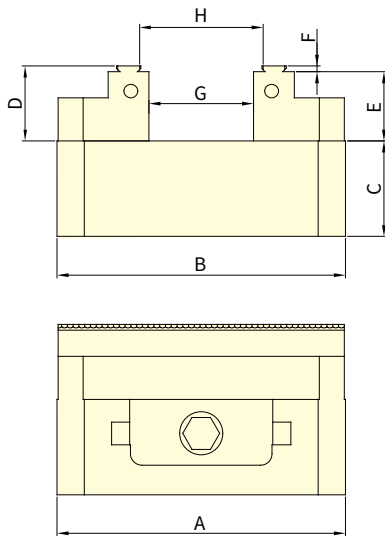
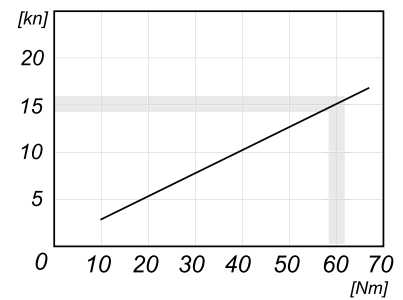
| Model           | A   | B   | B1 | C    | D  | E(h6) | F   | G max | G min | H    | J  | J1   | K  | K1 | L  |
|-----------------|-----|-----|----|------|----|-------|-----|-------|-------|------|----|------|----|----|----|
| <b>VRH-808</b>  | 120 | 80  | 52 | 64.5 | 36 | 16    | 2   | 26    | 17.2  | 33.5 | 24 | 26.5 | 38 | 41 | M6 |
| <b>VRH-1012</b> | 150 | 100 | 64 | 76   | 45 | 20    | 2   | 32    | 20    | 39   | 30 | 32   | 45 | 49 | M8 |
| <b>VRH-1214</b> | 188 | 125 | 82 | 82.5 | 60 | 24    | 2.5 | 36    | 22    | 41.5 | 36 | 34.5 | 58 | 51 | M8 |

| Model           | M (H7) | M1  | N max | N min | P          | Q  | R    | R1 | S  | T   | T1  | U   | U1  | V  | W  |
|-----------------|--------|-----|-------|-------|------------|----|------|----|----|-----|-----|-----|-----|----|----|
| <b>VRH-808</b>  | 6      | 2.5 | 34    | 29.6  | 10~M5x0.8  | 6  | 9x4  | 27 | 49 | 95  | 65  | 70  | 65  | 41 | 50 |
| <b>VRH-1012</b> | 8      | 2.5 | 44    | 38    | 10~M6x1    | 8  | 12x4 | 32 | 63 | 120 | 80  | 90  | 80  | 54 | 63 |
| <b>VRH-1214</b> | 8      | 3   | 60    | 53    | 12~M8x1.25 | 10 | 12x5 | 43 | 80 | 158 | 100 | 128 | 100 | 69 | 78 |



- Self-centering design ideal for 4-axis and 5-axis CNC rotary tables; compatible with horizontal and vertical machining.
- Centering repeatability of  $\pm 0.01$  mm ensures precise and stable workpiece positioning.
- Vise body made of high-grade alloy steel with hardened sliding surfaces (HRC 45+) for excellent wear resistance and rigidity.
- Jaws are made of fully hardened steel (HRC 55+), reversible and interchangeable for extended service life.
- Precision-built and easy to operate, ideal for demanding machining environments requiring high efficiency and accuracy.


**Clamping curve**


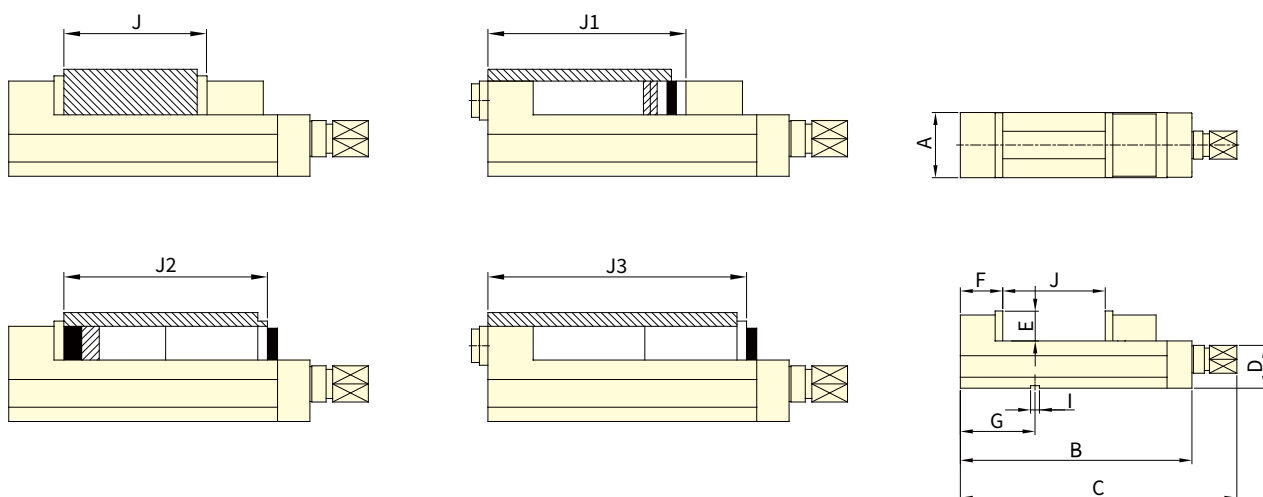
Subject to technical changes

**DIMENSIONS**

| Model             | A   | B   | C  | D  | E    | F   | G   | G1  | G2  | H   | I     | J    | K    | L  | M  | Weight (kg) |
|-------------------|-----|-----|----|----|------|-----|-----|-----|-----|-----|-------|------|------|----|----|-------------|
| <b>MVSC-764</b>   | 76  | 102 | 35 | 21 | 18.5 | 2.5 | 45  | 78  | 82  | 49  | 51    | 38   | 30   | 52 | 52 | 2.02        |
| <b>MVSC-1275</b>  | 127 | 127 | 42 | 33 | 30   | 2.5 | 47  | 91  | 96  | 52  | 63.5  | 63.5 | 50.8 | 96 | 96 | 5.71        |
| <b>MVSC-1276</b>  | 127 | 153 | 42 | 33 | 30   | 2.5 | 73  | 117 | 122 | 78  | 76.5  | 63.5 | 50.8 | 96 | 96 | 6.64        |
| <b>MVSC-1278</b>  | 127 | 210 | 42 | 33 | 30   | 2.5 | 130 | 167 | 172 | 135 | 105.5 | 63.5 | 50.8 | 96 | 96 | 8.26        |
| <b>MVSC-12710</b> | 127 | 255 | 42 | 33 | 30   | 2.5 | 175 | 219 | 226 | 180 | 127.5 | 63.5 | 50.8 | 96 | 96 | 9.5         |
| <b>MVSC-15010</b> | 150 | 255 | 57 | 37 | 34   | 2.5 | 143 | 207 | 212 | 148 | 127.5 | 75   | 100  | 96 | 96 | 15.54       |



- One-piece casting of the vise bed and movable jaw offers outstanding rigidity and stability, ideal for precision machining.
- The down-thrust spherical segment mechanism applies downward clamping force to eliminate jaw lifting and workpiece tilting, enhancing positioning accuracy and jaw longevity.
- The body is made of high-tensile ductile iron FCD60 (equivalent to GGG60), offering durability and strength for heavy-duty machining.
- Slideways are flame-hardened to HRC 45° for excellent wear resistance, maintaining long-term accuracy during extended use.



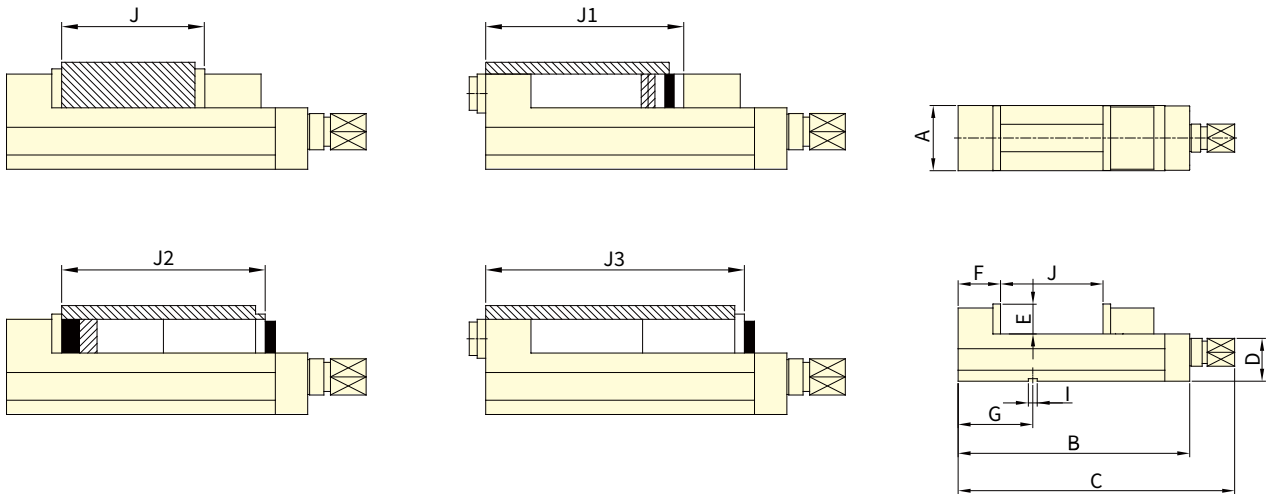
Subject to technical changes

### DIMENSIONS

| MODEL            | A   | B   | C   | D   | E  | F   | G   | I  | Jaw Opening(Max.) |     |     |     | Clamping Force (kgf) | Weight (kgs) |
|------------------|-----|-----|-----|-----|----|-----|-----|----|-------------------|-----|-----|-----|----------------------|--------------|
|                  |     |     |     |     |    |     |     |    | J                 | J1  | J2  | J3  |                      |              |
| <b>MVRH-100</b>  | 101 | 380 | 480 | 85  | 48 | 80  | 125 | 16 | 135               | 200 | 240 | 330 | 4000                 | 26           |
| <b>MVRH-130</b>  | 131 | 445 | 545 | 95  | 55 | 85  | 150 | 18 | 190               | 250 | 300 | 390 | 5000                 | 40           |
| <b>MVRH-160</b>  | 161 | 535 | 635 | 105 | 58 | 100 | 165 | 18 | 250               | 330 | 370 | 480 | 5500                 | 61           |
| <b>MVRH-160L</b> | 161 | 585 | 685 | 105 | 58 | 100 | 165 | 18 | 300               | 380 | 420 | 530 | 5500                 | 65           |
| <b>MVRH-200</b>  | 201 | 610 | 710 | 110 | 63 | 108 | 190 | 18 | 300               | 370 | 430 | 550 | 6900                 | 82           |



- One-piece casting of the vise bed and movable jaw ensures excellent rigidity, enhancing clamping stability and durability.
- The down-thrust spherical segment mechanism generates downward force during clamping, preventing jaw lifting and workpiece tilting—improving machining accuracy and jaw life.
- Constructed from high-tensile ductile iron (FCD60 / equivalent to GGG60) with a tensile strength of 60 kgf/mm<sup>2</sup> (approx. 80,000 psi), suitable for demanding machining conditions.
- Flame-hardened slideways (HRC 45°) provide superior wear resistance, maintaining consistent clamping performance even under prolonged use.



Subject to technical changes

#### DIMENSIONS

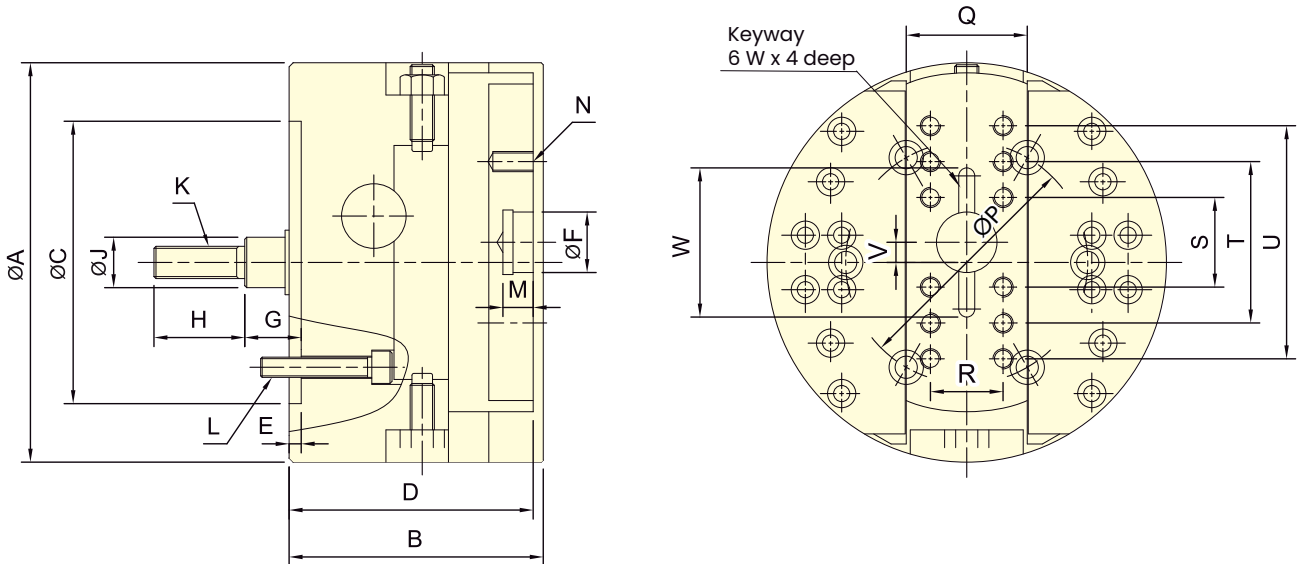
| MODEL            | A   | B   | C   | D   | E  | F   | G   | I  | Jaw Opening(Max.) |     |     |     | Clamping Force (kgf) | Weight (kgs) |
|------------------|-----|-----|-----|-----|----|-----|-----|----|-------------------|-----|-----|-----|----------------------|--------------|
|                  |     |     |     |     |    |     |     |    | J                 | J1  | J2  | J3  |                      |              |
| <b>MVRE-100</b>  | 101 | 400 | 490 | 85  | 48 | 80  | 125 | 16 | 155               | 200 | 240 | 33  | 3000                 | 27           |
| <b>MVRE-130</b>  | 131 | 645 | 555 | 95  | 55 | 85  | 150 | 18 | 230               | 250 | 300 | 390 | 3500                 | 41           |
| <b>MVRE-160</b>  | 161 | 555 | 645 | 105 | 58 | 100 | 165 | 18 | 300               | 330 | 370 | 480 | 4000                 | 61           |
| <b>MVRE-160L</b> | 161 | 615 | 705 | 105 | 58 | 100 | 165 | 18 | 350               | 380 | 420 | 530 | 4000                 | 65           |
| <b>MVRE-200</b>  | 201 | 630 | 720 | 110 | 63 | 108 | 190 | 18 | 340               | 370 | 430 | 550 | 4500                 | 82           |



- Feed mechanism is transmitted by Rack and Pinion with steady feed speed. Simple adjustment for feed speed and stroke.
- Matching surfaces of all parts hardened, grinding and lubricated directly. With rigidity and durability.
- Stopper accuracy:  $\pm 0.03\text{mm}$  , work with stopper screw.
- Suitable for using with RS type cylinder.

FACING HEADS

RACK AND PINION  
FA-615 FA-830 FA-1570



Subject to technical changes

## SPECIFICATIONS

| Model          | Plunger stroke | Slider stroke | Max. speed                 | Max. D.B. PULL | Weight | Matching cylinder | Max. pressure             |
|----------------|----------------|---------------|----------------------------|----------------|--------|-------------------|---------------------------|
|                | mm             | mm            | min <sup>-1</sup> (r.p.m.) | kN(kgf)        | kg     |                   | MPa(kgf/cm <sup>2</sup> ) |
| <b>FA-615</b>  | 15             | 15            | 1200                       | 3.3 (340)      | 11.9   | RS-6520N          | 1.2(12)                   |
| <b>FA-830</b>  | 30             | 30            | 800                        | 5.0 (510)      | 23.9   | RS-6530N          | 1.8(18)                   |
| <b>FA-1570</b> | 70             | 70            | 500                        | 18.2 (1855)    | 167    | RS-1080N          | 2.6(26)                   |

## DIMENSIONS

| Model          | A   | B   | C (H7) | D   | E | F (H7) | G max. | G min. | H  | J  | K        |
|----------------|-----|-----|--------|-----|---|--------|--------|--------|----|----|----------|
| <b>FA-615</b>  | 150 | 107 | 110    | 102 | 5 | 25     | 43     | 28     | 35 | 20 | M12x1.75 |
| <b>FA-830</b>  | 198 | 126 | 140    | 121 | 6 | 30     | 55     | 25     | 45 | 25 | M16x2    |
| <b>FA-1570</b> | 400 | 200 | 300    | 192 | 6 | 60     | 110    | 40     | 75 | 50 | M30x3.5  |

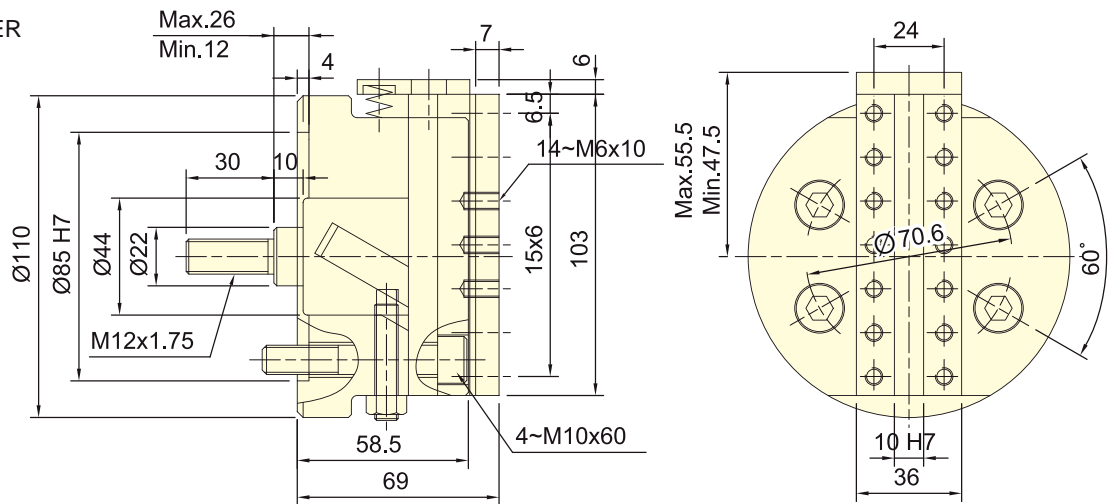
  

| Model          | L        | M  | N         | P    | Q   | R  | S   | T   | U   | V          | W  |
|----------------|----------|----|-----------|------|-----|----|-----|-----|-----|------------|----|
| <b>FA-615</b>  | 3-M10x40 | 12 | 8-M8x16   | 82.6 | 50  | 32 | 32  | 68  | -   | $\pm 7.5$  | 56 |
| <b>FA-830</b>  | 6-M10x55 | 15 | 12-M10x20 | 120  | 60  | 36 | 40  | 80  | 120 | $\pm 15$   | 66 |
| <b>FA-1570</b> | 6-M20x90 | 15 | 8-M16x20  | 235  | 120 | 80 | 130 | 260 | -   | $\pm 17.5$ | -  |



- Feed mechanism is Wedge Plunger, with steady feed speed. Simple adjustment for feed speed and stroke.
- Matching surfaces of all parts hardened, grinding and lubricated directly. With rigidity and durability.
- Stopper accuracy:  $\pm 0.03\text{mm}$ .
- Suitable for using with RS type cylinder.
- For precision processes, Wedge Plunger type facing heads are suitable for using with electro servo and ball screw mechanism.

**WEDGE PLUNGER  
FA-408**



Subject to technical changes

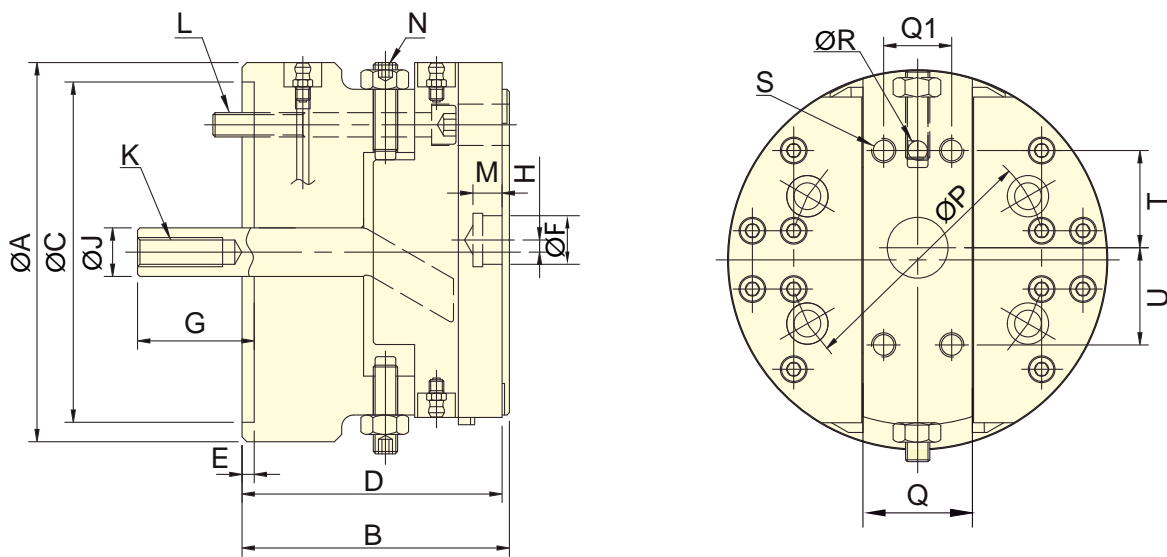
**SPECIFICATIONS**

| Model         | Plunger stroke | Slider stroke | Max. speed                 | Max. D.B. PULL | Weight | Matching cylinder | Max. pressure             |
|---------------|----------------|---------------|----------------------------|----------------|--------|-------------------|---------------------------|
|               | mm             | mm            | min <sup>-1</sup> (r.p.m.) | kN(kgf)        |        |                   | MPa(kgf/cm <sup>2</sup> ) |
| <b>FA-408</b> | 14             | 8             | 1600                       | 2.8 (280)      | 4.2    | RS-6520N          | 1.0 (10)                  |



- Feed mechanism is Wedge Plunger, with steady feed speed. Simple adjustment for feed speed and stroke.
- Matching surfaces of all parts hardened, grinding and lubricated directly. With rigidity and durability.
- Stopper accuracy:  $\pm 0.03\text{mm}$ .
- Suitable for using with RS type cylinder.
- For precision processes, Wedge Plunger type facing heads are suitable for using with electro servo and ball screw mechanism.

## WEDGE PLUNGER FA-610 FA-812



Subject to technical changes

### SPECIFICATIONS

| Model         | Plunger stroke | Slider stroke | Max. speed                       | Max. D.B. PULL | Weight | Matching cylinder | Max. pressure             |
|---------------|----------------|---------------|----------------------------------|----------------|--------|-------------------|---------------------------|
|               | mm             | mm            | $\text{min}^{-1}(\text{r.p.m.})$ | kN(kgf)        | kg     |                   | MPa(kgf/cm <sup>2</sup> ) |
| <b>FA-610</b> | 18             | 10            | 1200                             | 2.8 (280)      | 14.5   | RS-6520N          | 1.0(10)                   |
| <b>FA-812</b> | 21             | 12            | 800                              | 4.4 (450)      | 28.5   | RS-6530N          | 1.6(16)                   |

### DIMENSIONS

| Model         | A   | B   | C (H7) | D   | E | F (H7) | G max. | G min. | H       | J  | K        |
|---------------|-----|-----|--------|-----|---|--------|--------|--------|---------|----|----------|
| <b>FA-610</b> | 156 | 110 | 140    | 107 | 5 | 20     | 66     | 48     | $\pm 5$ | 20 | M12x1.75 |
| <b>FA-812</b> | 198 | 130 | 170    | 127 | 5 | 25     | 84     | 63     | $\pm 6$ | 25 | M16x2.0  |

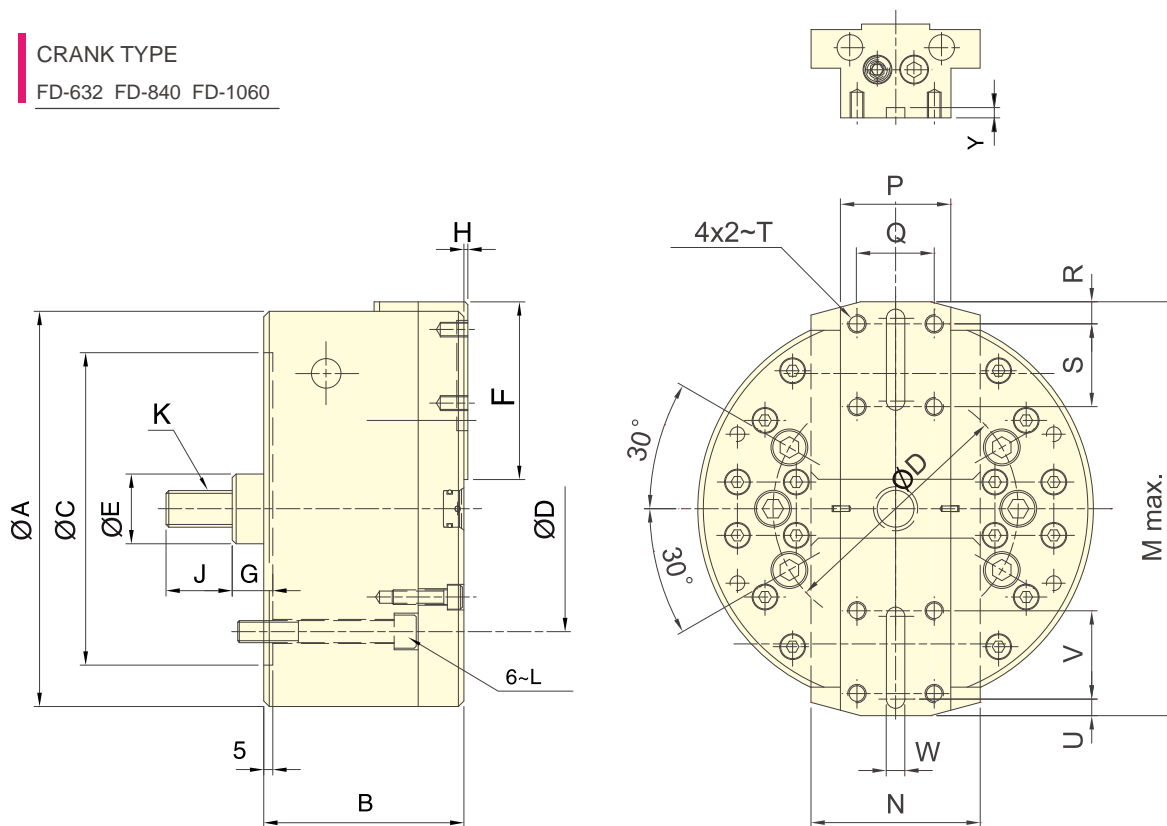
| Model         | L         | M  | N        | P     | Q  | Q1 | R (H8) | S        | T  | U  |
|---------------|-----------|----|----------|-------|----|----|--------|----------|----|----|
| <b>FA-610</b> | 4-M10x90  | 12 | 2-M10x45 | 104.8 | 45 | 28 | 8      | 4-M10x16 | 40 | 40 |
| <b>FA-812</b> | 4-M12x105 | 12 | 2-M12x60 | 133.4 | 54 | 32 | 10     | 4-M10x16 | 50 | 50 |



- Feed mechanism is transmitted by Crank with steady feed speed. Simple adjustment for feed speed and stroke.
- Matching surfaces of all parts hardened, grinding and lubricated directly. With rigidity and durability.
- Stopper accuracy:  $\pm 0.03\text{mm}$  , work with stoper screw.

### CRANK TYPE

FD-632 FD-840 FD-1060



Subject to technical changes

### SPECIFICATIONS

| Model          | Plunger stroke | Slider stroke(Dia.) | Max. speed                 | Max. D.B. PULL | Max. feed speed | Weight | Matching cylinder | Max. pressure             |
|----------------|----------------|---------------------|----------------------------|----------------|-----------------|--------|-------------------|---------------------------|
|                | mm             | mm                  | min <sup>-1</sup> (r.p.m.) | kN(kgf)        | mm/min.         | kg     |                   | MPa(kgf/cm <sup>2</sup> ) |
| <b>FD-632</b>  | 20             | 32                  | 3200                       | 16.9 (1720)    | 300             | 13.6   | RS-1030N          | 2.4(24)                   |
| <b>FD-840</b>  | 25             | 40                  | 2500                       | 20.6 (2100)    | 240             | 30.0   | RS-1030N          | 3.0(30)                   |
| <b>FD-1060</b> | 35             | 60                  | 1800                       | 20.6 (2100)    | 200             | 41.5   | RS-1040N          | 3.0(30)                   |

### DIMENSIONS

| Model          | A   | B   | C(H7) | D     | E  | F     | G max. | G Min. | H | J  | K       |
|----------------|-----|-----|-------|-------|----|-------|--------|--------|---|----|---------|
| <b>FD-632</b>  | 168 | 93  | 140   | 104.8 | 32 | 76    | 31     | 11     | 2 | 36 | M16x2.0 |
| <b>FD-840</b>  | 215 | 109 | 170   | 133.4 | 38 | 96.5  | 32.5   | 7.5    | 2 | 36 | M20x2.5 |
| <b>FD-1060</b> | 254 | 123 | 220   | 171.4 | 38 | 110.5 | 32.5   | -2.5   | 4 | 36 | M20x2.5 |

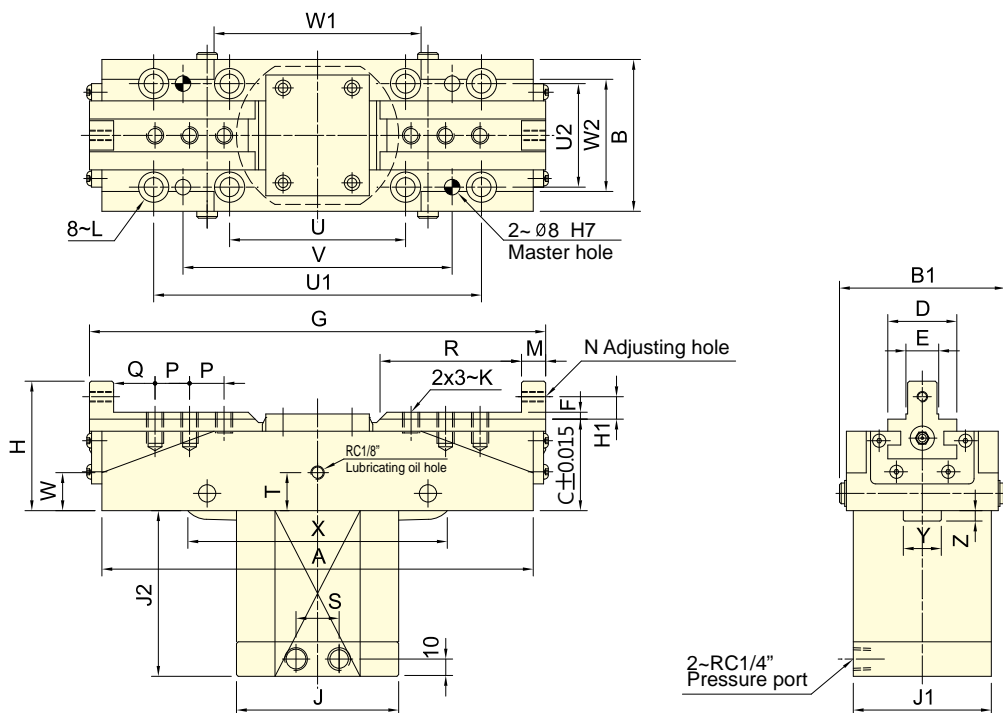
  

| Model          | L         | M   | N  | P  | Q  | R  | S  | T      | U  | V  | W(H8) | Y |
|----------------|-----------|-----|----|----|----|----|----|--------|----|----|-------|---|
| <b>FD-632</b>  | 6~M10x75  | 188 | 70 | 40 | 25 | 10 | 32 | M8x15  | 10 | 32 | 6     | 4 |
| <b>FD-840</b>  | 6~M12x85  | 238 | 92 | 60 | 42 | 12 | 45 | M10x15 | 12 | 45 | 10    | 6 |
| <b>FD-1060</b> | 6~M16x125 | 286 | 90 | 65 | 46 | 15 | 50 | M10x15 | 12 | 50 | 10    | 6 |



- CRANK type 2-jaw synchronous clamp with long jaw stroke.
- Matching surfaces of all parts hardened, ground and lubricated directly.
- High rigidity and high clamping accuracy.

SYNCHRONOUS CLAMPS



Subject to technical changes

## SPECIFICATIONS

| Model  | Eff. Piston area          |                            | Jaw stroke(Dia.)<br>mm | Clamping capacity<br>mm | Max. clamping force<br>kN (kgf) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Weight<br>kg |
|--------|---------------------------|----------------------------|------------------------|-------------------------|---------------------------------|--|--------------|
|        | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                        |                         |                                 |  |              |
| CP-20  | 28.27                     | 25.13                      | 20                     | 150                     | 14.4(1465)                      | 3.5(35)                                    | 9.5          |
| CP-30A | 28.27                     | 25.13                      | 30                     | 180                     | 14.4(1465)                      | 3.5(35)                                    | 11           |
| CP-30  | 28.27                     | 25.13                      | 30                     | 210                     | 14.4(1465)                      | 3.5(35)                                    | 12           |
| CP-40  | 28.27                     | 25.13                      | 40                     | 200                     | 14.4(1465)                      | 3.5(35)                                    | 12           |
| CP-50  | 38.48                     | 33.57                      | 50                     | 215                     | 17.7(1812)                      | 3.5(35)                                    | 18.5         |
| CP-70  | 50.26                     | 45.35                      | 70                     | 235                     | 23.9(2434)                      | 3.5(35)                                    | 30           |

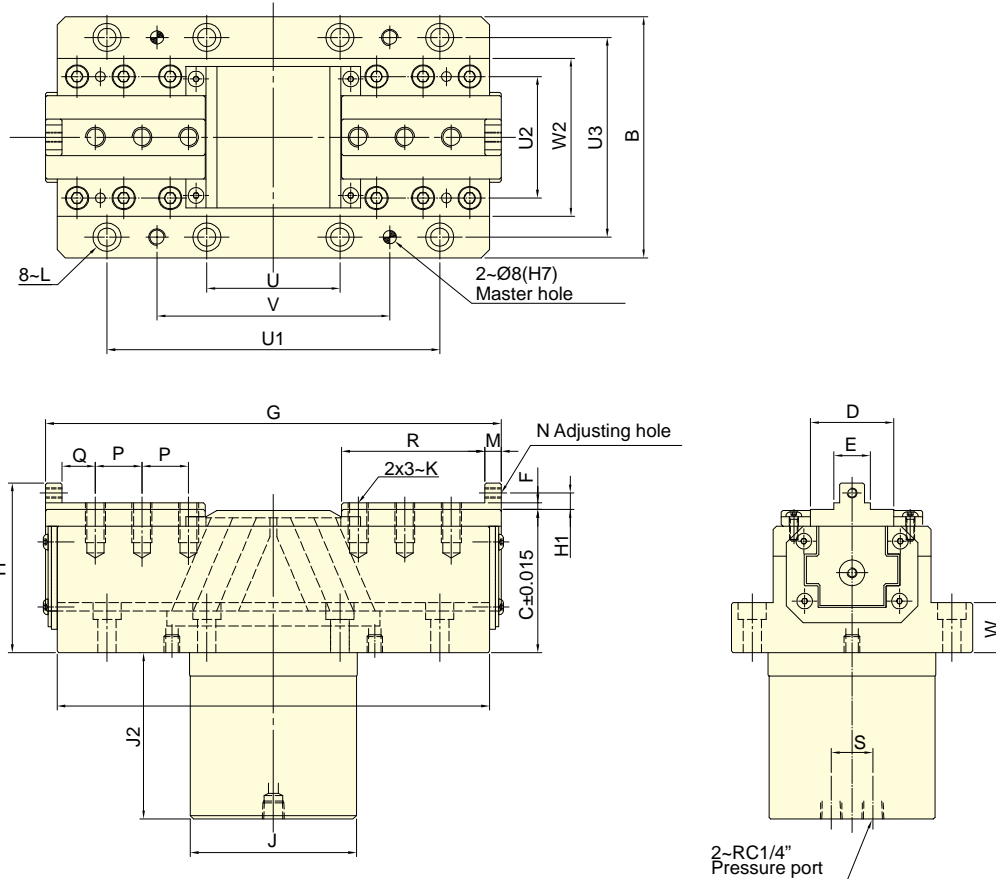
## DIMENSIONS

| Model  | A   | B   | B1  | C  | D  | E(h6) | F | G max. | Gmin | H   | H1 | J   | J1  | J2   | K        | L   | M  |
|--------|-----|-----|-----|----|----|-------|---|--------|------|-----|----|-----|-----|------|----------|-----|----|
| CP-20  | 215 | 88  | 96  | 53 | 40 | 18    | 4 | 249    | 229  | 75  | 13 | 94  | 76  | 83.5 | M10x1.5  | M10 | 12 |
| CP-30A | 250 | 88  | 96  | 53 | 40 | 18    | 4 | 295    | 265  | 75  | 13 | 94  | 76  | 96   | M10x1.5  | M10 | 14 |
| CP-30  | 280 | 88  | 96  | 53 | 40 | 22    | 4 | 327    | 297  | 75  | 13 | 94  | 76  | 96   | M12x1.75 | M10 | 14 |
| CP-40  | 270 | 88  | 96  | 53 | 40 | 22    | 4 | 331    | 291  | 75  | 13 | 94  | 76  | 110  | M12x1.75 | M10 | 14 |
| CP-50  | 300 | 110 | 115 | 65 | 50 | 28    | 5 | 369    | 319  | 90  | 15 | 105 | 105 | 120  | M12x1.75 | M10 | 16 |
| CP-70  | 346 | 120 | 126 | 89 | 55 | 32    | 5 | 430    | 360  | 114 | 15 | 115 | 115 | 146  | M14x2    | M12 | 16 |

| Model  | N       | P  | Q  | R   | S  | T  | U   | U1  | U2 | V   | W  | W1  | W2 | X   | Y  | Z    |
|--------|---------|----|----|-----|----|----|-----|-----|----|-----|----|-----|----|-----|----|------|
| CP-20  | M6x1    | 18 | 20 | 66  | 24 | 22 | 102 | 190 | 60 | 156 | 32 | 110 | 65 | 150 | 22 | 4    |
| CP-30A | M6x1    | 20 | 24 | 96  | 24 | 22 | 102 | 190 | 60 | 156 | 20 | 120 | 65 | 156 | 22 | 6    |
| CP-30  | M6x1    | 20 | 24 | 98  | 24 | 22 | 102 | 190 | 60 | 156 | 23 | 110 | 65 | 156 | 22 | 6    |
| CP-40  | M6x1    | 20 | 24 | 98  | 24 | 22 | 102 | 190 | 60 | 156 | 25 | 110 | 65 | 150 | 22 | 10.5 |
| CP-50  | M8x1.25 | 21 | 28 | 102 | 30 | 32 | 105 | 230 | 85 | 195 | 29 | 140 | 80 | 180 | 30 | 10   |
| CP-70  | M8x1.25 | 23 | 28 | 112 | 30 | 52 | 120 | 275 | 95 | 240 | 42 | 155 | 90 | 210 | 34 | 23.5 |



- This wedge-driven synchronous clamp features a long jaw stroke, providing continuous high clamping force during the machining process.
- The sliding surfaces are hardened and precision ground, with direct lubrication to enhance performance.
- High clamping accuracy and excellent dust protection.



Subject to technical changes

## SPECIFICATIONS

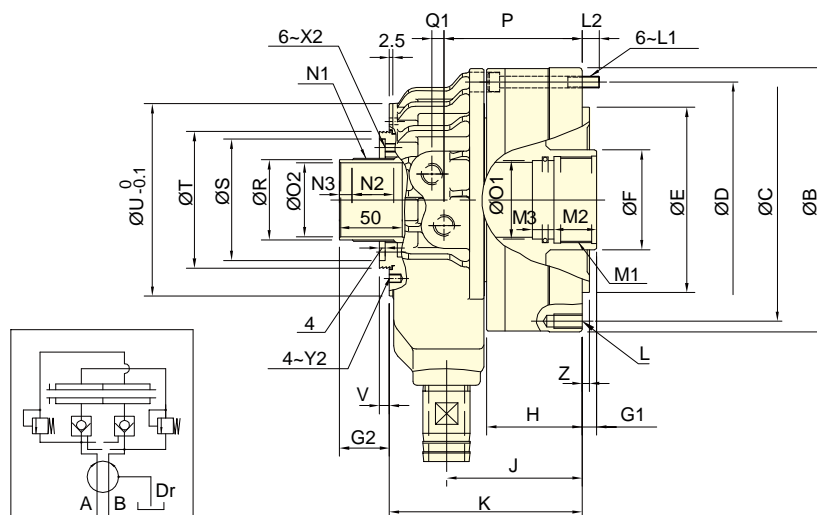
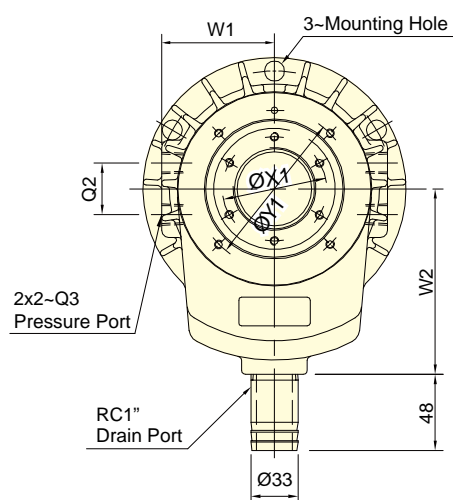
| Model        | Eff. Piston area |                 | Jaw stroke(Dia.) | Clamping capacity | Max. clamping force | Max. pressure             | Weight |
|--------------|------------------|-----------------|------------------|-------------------|---------------------|---------------------------|--------|
|              | Extend           | Retract         |                  |                   |                     |                           |        |
|              | cm <sup>2</sup>  | cm <sup>2</sup> | mm               | mm                | kN (kgf)            | MPa(kgf/cm <sup>2</sup> ) | kg     |
| <b>CW-30</b> | 31.10            | 24.10           | 30               | 150               | 34.3(3500)          | 7.0(70)                   | 32     |

## DIMENSIONS

| Model        | A    | B   | C  | D  | E(h6) | F  | Gmax | Gmin | H   | H1  | J   | J2  | K        | L   | M  |
|--------------|------|-----|----|----|-------|----|------|------|-----|-----|-----|-----|----------|-----|----|
| <b>CW-30</b> | 260  | 145 | 86 | 50 | 22    | 4  | 304  | 274  | 102 | 10  | 100 | 100 | M12x1.75 | M10 | 10 |
| Model        | N    | P   | Q  | R  | S     | U  | U1   | U2   | U3  | V   | W   | W2  |          |     |    |
| <b>CW-30</b> | M6x1 | 28  | 20 | 86 | 25    | 80 | 200  | 120  | 73  | 140 | 30  | 30  |          |     |    |



- Super short form, light weight large Through-Hole, just as 2/3 of typical model length.
- Built-in safety check valves and pressure relief valves.
- Can screw it from the rear end of the cylinder when mounting.
- Linear sensor can be attached.(optional)



Subject to technical changes

## SPECIFICATIONS

| Model           | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | Moment of inertia | Weight | Total oil leakage |
|-----------------|------------------|-----------------|---------------|------------|---------------|-------------------|--------|-------------------|
|                 | Extend           | Retract         |               |            |               |                   |        |                   |
|                 | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               |                   |        |                   |
| <b>TK-A528</b>  | 73.0             | 69.7            | 12            | 8000       | 4.5 (45)      | 0.012             | 6.2    | 3.0               |
| <b>TK-A533</b>  | 73.0             | 69.7            | 12            | 8000       | 4.5 (45)      | 0.012             | 6.0    | 3.0               |
| <b>TK-C643</b>  | 99.1             | 88.0            | 15            | 7000       | 4.5 (45)      | 0.018             | 7.5    | 3.0               |
| <b>TK-A646</b>  | 105.0            | 93.9            | 15            | 7000       | 4.5 (45)      | 0.018             | 7.3    | 3.0               |
| <b>TK-B646</b>  | 105.0            | 93.9            | 15            | 7000       | 4.5 (45)      | 0.018             | 8.6    | 3.0               |
| <b>TK-C646</b>  | 99.1             | 88.0            | 15            | 7000       | 4.5 (45)      | 0.018             | 7.5    | 3.0               |
| <b>TK-B846</b>  | 135.3            | 125.0           | 20            | 6300       | 4.5 (45)      | 0.032             | 12.4   | 3.9               |
| <b>TK-A853</b>  | 135.3            | 125.0           | 20            | 6300       | 4.5 (45)      | 0.032             | 11.8   | 3.9               |
| <b>TK-B853</b>  | 135.3            | 125.0           | 20            | 6300       | 4.5(45)       | 0.032             | 11.7   | 3.9               |
| <b>TK-A1068</b> | 170.1            | 155.3           | 25            | 5500       | 4.5 (45)      | 0.065             | 19.2   | 4.2               |
| <b>TK-A1075</b> | 170.1            | 155.3           | 25            | 5500       | 4.5(45)       | 0.065             | 18.8   | 4.2               |
| <b>TK-A1078</b> | 170.1            | 155.3           | 25            | 5500       | 4.5 (45)      | 0.065             | 17.4   | 4.2               |

\*Coolant Collector and Confirmation Device Please See Accessories pages.

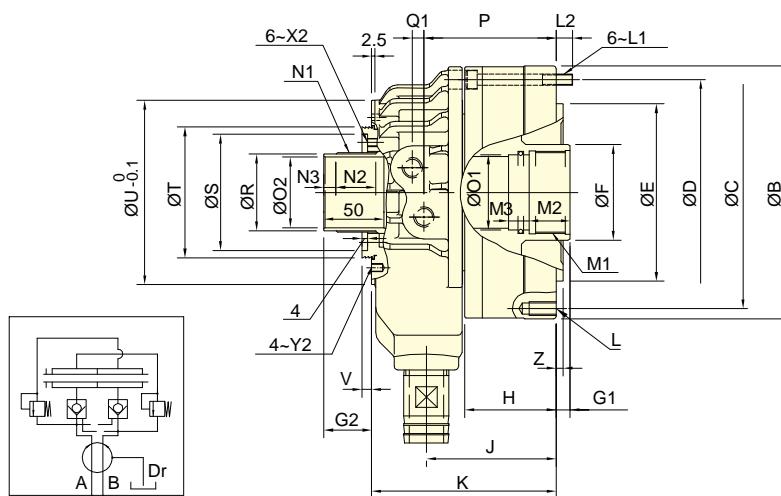
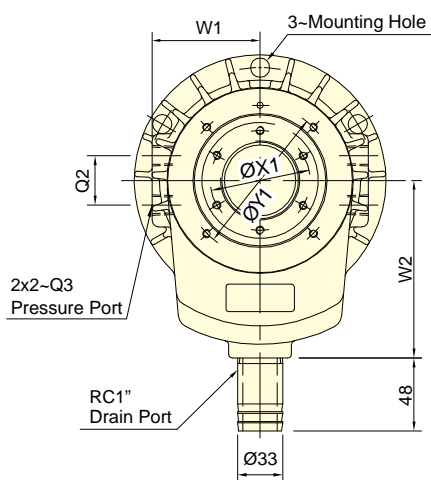
## DIMENSIONS

| Model           | A    | B   | C   | D   | E   | F  | G1   |      | G2   |      | H  | J    | K   | L         | L1     | L2 | M1      | M2 | M3 |
|-----------------|------|-----|-----|-----|-----|----|------|------|------|------|----|------|-----|-----------|--------|----|---------|----|----|
|                 | I.D. |     |     |     | h7  |    | max. | min. | max. | min. |    |      |     |           |        |    |         |    |    |
| <b>TK-A528</b>  | 105  | 141 | 125 | 125 | 110 | 45 | 12   | 0    | 38   | 26   | 49 | 77.5 | 123 | 6~M10x20  | M8x55  | 14 | M38x1.5 | 25 | 13 |
| <b>TK-A533</b>  | 105  | 141 | 125 | 125 | 110 | 45 | 12   | 0    | 38   | 26   | 49 | 77.5 | 123 | 6~M10x20  | M8x55  | 14 | M38x1.5 | 25 | 13 |
| <b>TK-C643</b>  | 128  | 156 | 140 | 140 | 120 | 65 | 15   | 0    | 44   | 29   | 56 | 85   | 125 | 12~M10x20 | M8x60  | 12 | M50x2   | 25 | 13 |
| <b>TK-A646</b>  | 128  | 162 | 147 | 147 | 130 | 65 | 15   | 0    | 44   | 29   | 56 | 85   | 125 | 12~M10x20 | M8x60  | 12 | M55x2   | 25 | 13 |
| <b>TK-B646</b>  | 128  | 162 | 130 | 147 | 100 | 65 | 15   | 0    | 44   | 29   | 66 | 95   | 135 | 12~M10x20 | M8x70  | 12 | M55x2   | 30 | 15 |
| <b>TK-C646</b>  | 125  | 156 | 140 | 140 | 120 | 65 | 15   | 0    | 44   | 29   | 56 | 85   | 125 | 12~M10x20 | M8x60  | 12 | M55x2   | 25 | 13 |
| <b>TK-B846</b>  | 145  | 185 | 170 | 165 | 130 | 70 | 20   | 0    | 48   | 28   | 66 | 95   | 135 | 12~M10x20 | M8x70  | 12 | M55x2   | 30 | 15 |
| <b>TK-A853</b>  | 145  | 185 | 170 | 165 | 140 | 70 | 20   | 0    | 48   | 28   | 66 | 95   | 135 | 12~M10x20 | M8x70  | 12 | M60x2   | 30 | 15 |
| <b>TK-B853</b>  | 145  | 185 | 170 | 165 | 130 | 70 | 20   | 0    | 48   | 28   | 66 | 95   | 135 | 12~M10x20 | M8x70  | 12 | M60x2   | 30 | 15 |
| <b>TK-A1068</b> | 170  | 212 | 190 | 190 | 160 | 95 | 25   | 0    | 50   | 25   | 74 | 108  | 158 | 12~M10x20 | M10x80 | 16 | M75x2   | 35 | 15 |
| <b>TK-A1075</b> | 170  | 212 | 190 | 190 | 160 | 95 | 25   | 0    | 50   | 25   | 74 | 108  | 158 | 12~M10x20 | M10x80 | 16 | M85x2   | 35 | 15 |
| <b>TK-A1078</b> | 170  | 212 | 190 | 190 | 160 | 95 | 25   | 0    | 50   | 25   | 74 | 108  | 158 | 12~M10x20 | M10x80 | 16 | M87x2   | 35 | 15 |

| Model           | N1      | N2 | N3 | O1 | O2 | P   | Q1  | Q2 | Q3    | R  | S   | T   | U   | V    | W1 | W2  | X1 | X2    | Y1  | Y2   | Z |
|-----------------|---------|----|----|----|----|-----|-----|----|-------|----|-----|-----|-----|------|----|-----|----|-------|-----|------|---|
|                 |         |    |    | H8 | H8 |     |     |    |       | g7 | H7  |     |     |      |    |     |    |       |     |      |   |
| <b>TK-A528</b>  | M39x1.5 | 25 | 8  | 35 | 28 | 79  | 8.5 | 30 | RC1/4 | 37 | 62  | 70  | 98  | 6    | 62 | 110 | 49 | M6x6  | 83  | M5x6 | 5 |
| <b>TK-A533</b>  | M39x1.5 | 25 | 8  | 35 | 33 | 79  | 8.5 | 30 | RC1/4 | 37 | 62  | 70  | 98  | 6    | 62 | 110 | 49 | M6x6  | 83  | M5x6 | 5 |
| <b>TK-C643</b>  | M52x1.5 | 29 | 9  | 45 | 43 | 87  | 8.5 | 36 | RC3/8 | 50 | 76  | 85  | 116 | 9.5  | 74 | 120 | 64 | M6x10 | 98  | M5x6 | 5 |
| <b>TK-A646</b>  | M52x1.5 | 29 | 9  | 50 | 46 | 87  | 8.5 | 36 | RC3/8 | 50 | 76  | 85  | 116 | 9.5  | 74 | 120 | 64 | M6x10 | 98  | M5x6 | 5 |
| <b>TK-B646</b>  | M52x1.5 | 29 | 9  | 50 | 46 | 97  | 8.5 | 36 | RC3/8 | 50 | 76  | 85  | 116 | 9.5  | 74 | 120 | 64 | M6x10 | 98  | M5x6 | 5 |
| <b>TK-C646</b>  | M52x1.5 | 29 | 9  | 50 | 46 | 87  | 8.5 | 36 | RC3/8 | 50 | 76  | 85  | 116 | 9.5  | 74 | 120 | 64 | M6x10 | 98  | M5x6 | 5 |
| <b>TK-B846</b>  | M58x1.5 | 30 | 8  | 50 | 46 | 97  | 8.5 | 36 | RC3/8 | 56 | 85  | 96  | 128 | 11.5 | 79 | 130 | 73 | M6x12 | 110 | M6x6 | 5 |
| <b>TK-A853</b>  | M58x1.5 | 30 | 8  | 55 | 53 | 97  | 8.5 | 36 | RC3/8 | 56 | 85  | 96  | 128 | 11.5 | 79 | 130 | 73 | M6x12 | 110 | M6x6 | 5 |
| <b>TK-B853</b>  | M58x1.5 | 30 | 8  | 55 | 53 | 97  | 8.5 | 36 | RC3/8 | 56 | 85  | 96  | 128 | 11.5 | 79 | 130 | 73 | M6x12 | 110 | M6x6 | 5 |
| <b>TK-A1068</b> | M84x2   | 34 | 9  | 70 | 68 | 110 | 12  | 40 | RC1/2 | 81 | 108 | 121 | 164 | 10   | 98 | 160 | 98 | M6x12 | 155 | M6x8 | 5 |
| <b>TK-A1075</b> | M84x2   | 34 | 9  | 80 | 75 | 110 | 12  | 40 | RC1/2 | 81 | 108 | 121 | 164 | 10   | 98 | 160 | 98 | M6x12 | 155 | M6x8 | 5 |
| <b>TK-A1078</b> | M84x2   | 34 | 9  | 82 | 78 | 110 | 12  | 40 | RC1/2 | 81 | 108 | 121 | 164 | 10   | 98 | 160 | 98 | M6x12 | 155 | M6x8 | 5 |



- Super short form, light weight large Through-Hole, just as 2/3 of typical model length.
- Built-in safety check valves and pressure relief valves.
- Can screw it from the rear end of the cylinder when mounting.
- Linear sensor can be attached.(optional)



Subject to technical changes

## SPECIFICATIONS

| Model       | Eff. piston area          |                            | Piston stroke | Max. speed | Max. pressure | Moment of inertia | Weight | Total oil leakage |
|-------------|---------------------------|----------------------------|---------------|------------|---------------|-------------------|--------|-------------------|
|             | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |               |            |               |                   |        |                   |
| TK-A1287    | 234.0                     | 217.5                      | 30            | 3800       | 4.0 (40)      | 0.092             | 24.8   | 4.5               |
| TK-A1291    | 234.0                     | 217.5                      | 30            | 3800       | 4.0 (40)      | 0.092             | 24.8   | 4.5               |
| TK-A1511    | 336.4                     | 315.2                      | 30            | 3000       | 3.5(35)       | 0.38              | 57.9   | 7.0               |
| TK-A1512    | 336.4                     | 315.2                      | 30            | 3000       | 3.5(35)       | 0.38              | 53.8   | 7.0               |
| TK-A1512-35 | 336.4                     | 315.2                      | 35            | 3000       | 3.5(35)       | 0.38              | 53.8   | 7.0               |
| TK-2114     | 373.2                     | 336.1                      | 35            | 2500       | 3.0 (30)      | 0.54              | 58.2   | 8.0               |

## DIMENSIONS

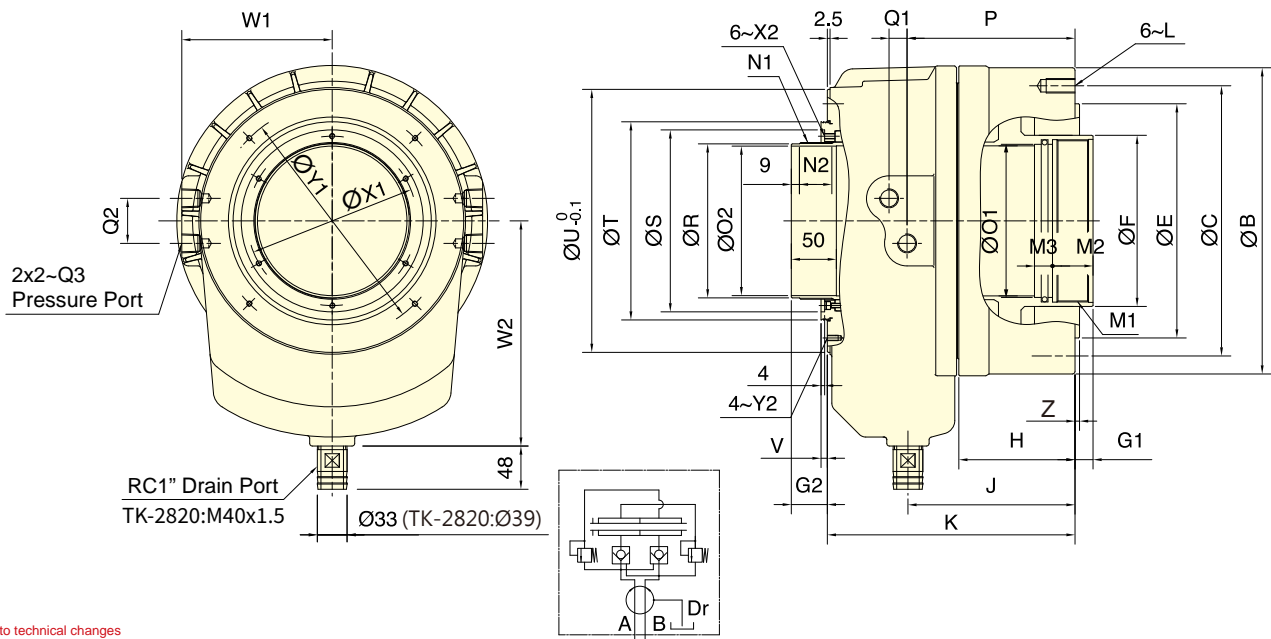
| Model       | A<br>I.D. | B   | C   | D   | E<br>h7 | F   | G1   |      | G2   |      | H   | J     | K     | L         | L1      | L2   | M1     | M2 | M3 | N1     |
|-------------|-----------|-----|-----|-----|---------|-----|------|------|------|------|-----|-------|-------|-----------|---------|------|--------|----|----|--------|
|             |           |     |     |     |         |     | max. | min. | max. | min. |     |       |       |           |         |      |        |    |    |        |
| TK-A1287    | 200       | 245 | 215 | 225 | 180     | 110 | 30   | 0    | 59   | 29   | 86  | 126   | 184   | 12-M12x24 | M10x90  | 14.5 | M95x2  | 35 | 15 | M99x2  |
| TK-A1291    | 200       | 245 | 215 | 225 | 180     | 110 | 30   | 0    | 59   | 29   | 86  | 126   | 184   | 12-M12x24 | M10x90  | 14.5 | M100x2 | 35 | 15 | M99x2  |
| TK-A1511    | 250       | 300 | 275 | 275 | 230     | 140 | 30   | 0    | 58   | 28   | 102 | 156   | 226   | 12-M16x36 | M12x110 | 21   | M120x2 | 45 | 15 | M129x2 |
| TK-A1512    | 250       | 300 | 275 | 275 | 230     | 140 | 30   | 0    | 58   | 28   | 102 | 156   | 226   | 12-M16x36 | M12x110 | 21   | M130x2 | 45 | 15 | M129x2 |
| TK-A1512-35 | 250       | 300 | 275 | 275 | 230     | 140 | 35   | 0    | 63   | 28   | 102 | 161   | 231   | 12-M16x36 | M12x115 | 21   | M130x2 | 45 | 15 | M129x2 |
| TK-2114     | 265       | 320 | 295 | 295 | 240     | 165 | 35   | 0    | 60   | 25   | 115 | 173.5 | 247.5 | 12-M16x32 | M12x120 | 17.5 | M155x2 | 45 | 20 | M149x2 |

| Model       | N2 | N3 | O1<br>H8 | O2<br>H8 | P      | Q1 | Q2 | Q3    | R<br>g7 | S<br>H7 | T   | U   | V | W1  | W2  | X1  | X2    | Y1  | Y2    | Z |
|-------------|----|----|----------|----------|--------|----|----|-------|---------|---------|-----|-----|---|-----|-----|-----|-------|-----|-------|---|
|             |    |    |          |          |        |    |    |       |         |         |     |     |   |     |     |     |       |     |       |   |
| TK-A1291    | 38 | 9  | 95       | 91       | 127.5  | 15 | 45 | RC1/2 | 96      | 120     | 138 | 180 | 7 | 110 | 185 | 108 | M6x10 | 165 | M6x10 | 5 |
| TK-A1511    | 38 | 9  | 115      | 110      | 153.75 | 17 | 50 | RC1/2 | 126     | 150     | 170 | 227 | 7 | 134 | 210 | 138 | M6x10 | 210 | M6x9  | 6 |
| TK-A1512    | 38 | 9  | 125      | 120      | 153.75 | 17 | 50 | RC1/2 | 126     | 150     | 170 | 227 | 7 | 134 | 210 | 138 | M6x10 | 210 | M6x9  | 6 |
| TK-A1512-35 | 38 | 9  | 125      | 120      | 158.75 | 17 | 50 | RC1/2 | 126     | 150     | 170 | 227 | 7 | 134 | 210 | 138 | M6x10 | 210 | M6x9  | 6 |
| TK-2114     | 38 | 9  | 145      | 140      | 170    | 17 | 50 | RC1/2 | 146     | 170     | 190 | 250 | 7 | 145 | 210 | 160 | M6x10 | 230 | M6x10 | 6 |

\*Coolant Collector and Confirmation Device Please See Accessories pages.



- New design, short form, light weight large through-hole.
- Built-in safety check valves and pressure relief valves.
- Linear sensor can be attached.(optional)



Subject to technical changes

## SPECIFICATIONS

| Model           | Eff. piston area |                 | Piston stroke | Max. speed                 | Max. pressure             | Moment of inertia | Weight | Total oil leakage |
|-----------------|------------------|-----------------|---------------|----------------------------|---------------------------|-------------------|--------|-------------------|
|                 | Extend           | Retract         |               |                            |                           |                   |        |                   |
|                 | cm <sup>2</sup>  | cm <sup>2</sup> | mm            | min <sup>-1</sup> (r.p.m.) | MPa(kgf/cm <sup>2</sup> ) | kg-m <sup>2</sup> | kg     | lit. / min.       |
| <b>TK-2416</b>  | 418.4            | 375.4           | 35            | 2000                       | 3.0 (30)                  | 1.12              | 78.0   | 9.0               |
| <b>TK-2416L</b> | 418.4            | 375.4           | 51            | 2000                       | 3.0 (30)                  | 1.31              | 79.2   | 9.0               |
| <b>TK-2820</b>  | 526.2            | 472.6           | 51            | 1600                       | 3.0 (30)                  | 2.4               | 134.0  | 10.0              |

## DIMENSIONS

| Model           | A    | B   | C   | E   | F   | G1   |      | G2   |      | H   | J     | K   | L      | M1     | M2 | M3 | N1     | N2 |
|-----------------|------|-----|-----|-----|-----|------|------|------|------|-----|-------|-----|--------|--------|----|----|--------|----|
|                 | I.D. |     |     | h7  |     | max. | min. | max. | min. |     |       |     |        |        |    |    |        |    |
| <b>TK-2416</b>  | 290  | 340 | 300 | 260 | 190 | 35   | 0    | 60   | 25   | 129 | 185.5 | 275 | M16x32 | M180x3 | 45 | 20 | M174x2 | 38 |
| <b>TK-2416L</b> | 290  | 340 | 300 | 260 | 190 | 51   | 0    | 76   | 25   | 145 | 201.5 | 291 | M16x32 | M180x3 | 45 | 20 | M174x2 | 52 |
| <b>TK-2820</b>  | 340  | 395 | 360 | 320 | 235 | 51   | 0    | 76   | 25   | 152 | 212.5 | 316 | M20x40 | M220x3 | 45 | 20 | M218x2 | 52 |

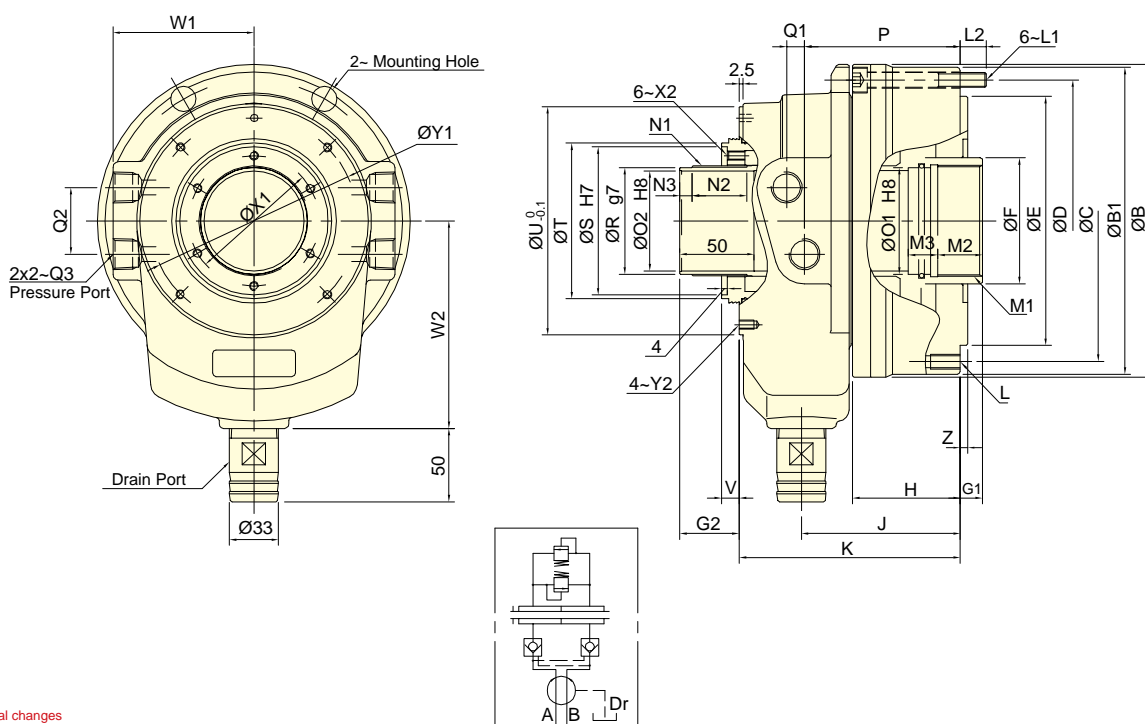
  

| Model           | O1  | O2  | P     | Q1 | Q2 | Q3    | R   | S   | T   | U   | V | W1    | W2  | X1  | X2    | Y1  | Y2    | Z |
|-----------------|-----|-----|-------|----|----|-------|-----|-----|-----|-----|---|-------|-----|-----|-------|-----|-------|---|
|                 | H8  | H8  |       |    |    |       | g7  | H7  |     |     |   |       |     |     |       |     |       |   |
| <b>TK-2416</b>  | 170 | 166 | 186.5 | 20 | 50 | RC1/2 | 171 | 202 | 220 | 292 | 7 | 167   | 250 | 188 | M6x11 | 260 | M6x12 | 5 |
| <b>TK-2416L</b> | 170 | 166 | 202.5 | 20 | 50 | RC1/2 | 171 | 202 | 220 | 292 | 7 | 167   | 250 | 188 | M6x11 | 260 | M6x12 | 6 |
| <b>TK-2820</b>  | 210 | 205 | 216   | 21 | 50 | RC1/2 | 215 | 262 | 285 | 360 | 7 | 202.5 | 300 | 240 | M6x12 | 320 | M6x12 | 6 |

\*Coolant Collector and Confirmation Device Please See Accessories pages.



- Bigger bore through-hole design. Super short form, light weighted.
- Built-in safety check valves and pressure relief valves.
- Front/Rear end mounting.
- Diameter of coolant collector's drain port is optional.  
Default : Ø33 ; optional : Ø40, Ø60.
- Linear sensor can be attached. (optional)



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area |                 | Piston stroke | Max. speed                 | Max. pressure             | Moment of inertia | Weight | Total oil leakage |
|----------------|------------------|-----------------|---------------|----------------------------|---------------------------|-------------------|--------|-------------------|
|                | Extend           | Retract         |               |                            |                           |                   |        |                   |
|                | cm <sup>2</sup>  | cm <sup>2</sup> | mm            | min <sup>-1</sup> (r.p.m.) | MPa(kgf/cm <sup>2</sup> ) | kg·m <sup>2</sup> | kg     | lit. / min.       |
| <b>TS-539</b>  | 72.4             | 67.1            | 15            | 8000                       | 4.5 (45)                  | 0.012             | 6.9    | 3.0               |
| <b>TS-866</b>  | 168.0            | 155.5           | 25            | 5600                       | 4.5 (45)                  | 0.056             | 16.3   | 4.0               |
| <b>TS-1081</b> | 189.2            | 174.3           | 25            | 4800                       | 4.5 (45)                  | 0.085             | 21.2   | 4.3               |
| <b>TS-1012</b> | 231.7            | 222.0           | 30            | 3500                       | 3.5(35)                   | 0.193             | 35.6   | 6.0               |

## DIMENSIONS

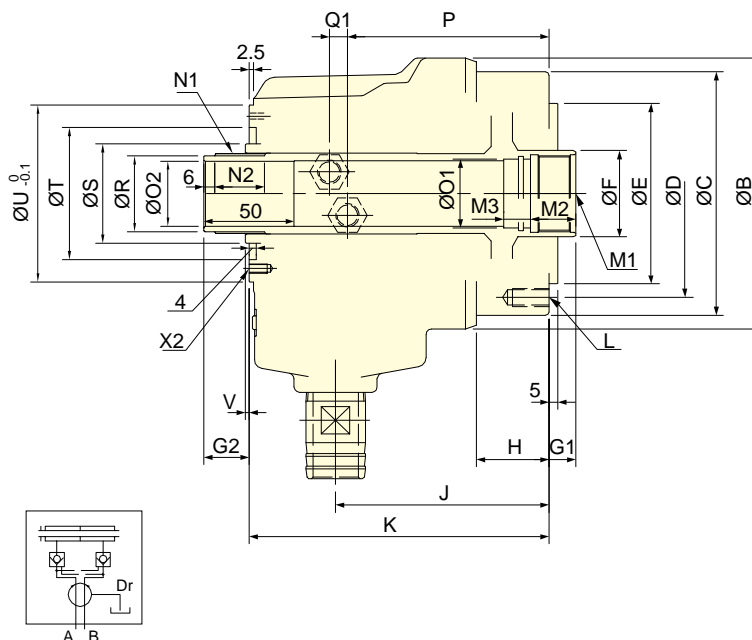
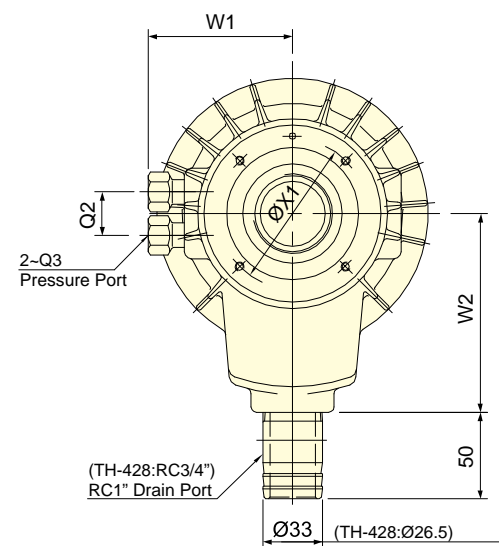
| Model          | A<br>I.D. | B   | B1  | C   | D   | E<br>h7 | F   | G1   |      | G2   |      | H    | J     | K     | L         | L1      | L2   | M1      | M2 | M3 |
|----------------|-----------|-----|-----|-----|-----|---------|-----|------|------|------|------|------|-------|-------|-----------|---------|------|---------|----|----|
|                |           |     |     |     |     |         |     | max. | min. | max. | min. |      |       |       |           |         |      |         |    |    |
| <b>TS-539</b>  | 107       | 143 | 141 | 125 | 125 | 110     | 52  | 15   | 0    | 42.5 | 27.5 | 57   | 91    | 124   | 6~M10x20  | M8x60   | 12   | M45x1.5 | 25 | 12 |
| <b>TS-866</b>  | 165       | 211 | 207 | 190 | 190 | 168     | 85  | 25   | 0    | 55   | 30   | 72.5 | 107   | 149   | 12~M10x20 | M10x80  | 17.5 | M75x2   | 35 | 15 |
| <b>TS-1081</b> | 180       | 226 | 222 | 205 | 205 | 168     | 100 | 25   | 0    | 58   | 33   | 74   | 115   | 166   | 12~M10x20 | M10x90  | 18   | M90x2   | 35 | 15 |
| <b>TS-1012</b> | 210       | 263 | 260 | 240 | 240 | 200     | 125 | 30   | 0    | 64   | 34   | 93.5 | 136.5 | 193.5 | 12~M10x20 | M12x100 | 20   | M115x2  | 35 | 15 |

| Model          | N1       | N2 | N3 | O1<br>(H8) | O2<br>(H8) | P   | Q1  | Q2 | Q3    | R<br>(g7) | S<br>(H7) | T   | U   | V  | W1   | W2  | X1  | X2    | Y1  | Y2    | Z |
|----------------|----------|----|----|------------|------------|-----|-----|----|-------|-----------|-----------|-----|-----|----|------|-----|-----|-------|-----|-------|---|
| <b>TS-539</b>  | M44x1.5  | 26 | 8  | 42         | 39         | 85  | 8.5 | 30 | RC1/4 | 42        | 69        | 72  | 103 | 10 | 62.5 | 100 | 54  | M6x10 | 90  | M5x12 | 5 |
| <b>TS-866</b>  | M74x1.5  | 37 | 8  | 72         | 66.5       | 105 | 12  | 45 | RC1/2 | 72        | 100       | 111 | 154 | 12 | 95   | 140 | 88  | M6x12 | 140 | M6x10 | 5 |
| <b>TS-1081</b> | M89X2.0  | 38 | 9  | 85         | 81         | 109 | 15  | 45 | RC1/2 | 86        | 113       | 123 | 175 | 16 | 103  | 160 | 103 | M6x12 | 160 | M6X10 | 5 |
| <b>TS-1012</b> | M118x2.0 | 47 | 9  | 110        | 106        | 131 | 16  | 46 | RC1/2 | 115       | 145       | 151 | 210 | 16 | 103  | 160 | 133 | M6x12 | 195 | M6x11 | 5 |

\*Coolant Collector and Confirmation Device. Please See Accessories pages.



- Super high speed, light weight large Through-Hole.
- Built-in check valve which prevents the internal pressure from sudden declining so that the workpiece will not fly out and cause a serious accident.
- Linear sensor can be attached.(optional)



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area          |                            | Piston stroke<br>mm | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Moment of inertia<br>kg-m <sup>2</sup> | Weight<br>kg | Total oil leakage<br>lit. / min. |
|----------------|---------------------------|----------------------------|---------------------|--|--|--|--------------|----------------------------------|
|                | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                     |  |  |  |              |                                  |
|                | <b>TH-428</b>             | 53.2                       |                     |  |  |  |              |                                  |
| <b>TH-A536</b> | 69.8                      | 67.5                       | 15                  | 8000                                     | 4.0(40)                                    | 0.05                                   | 8.3          | 3.0                              |

## DIMENSIONS

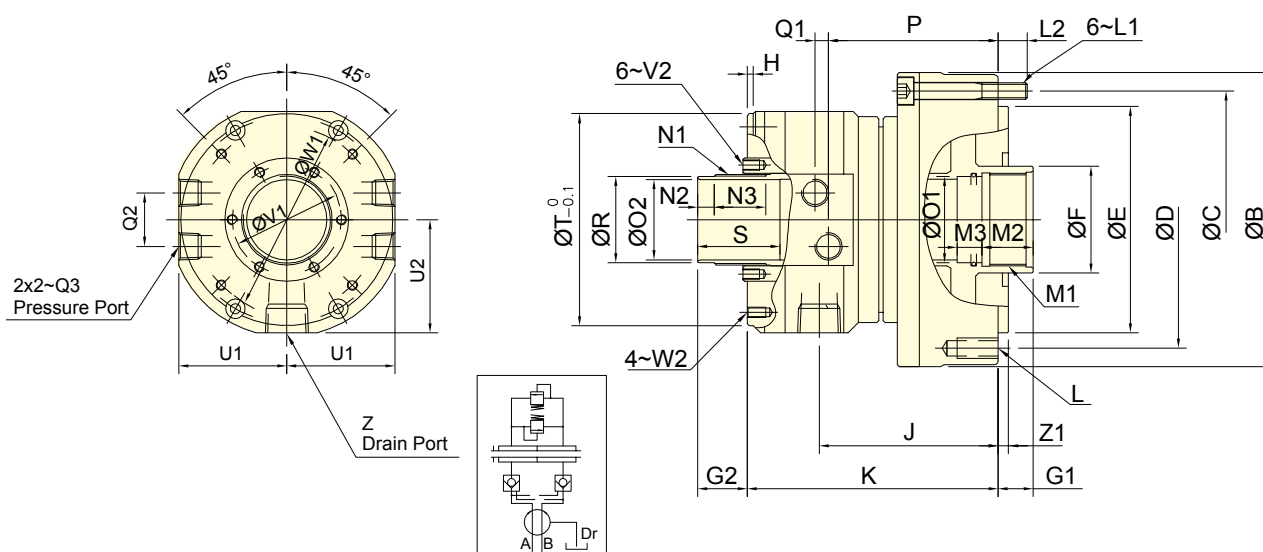
| Model          | A I.D. | B   | C   | D   | E (h7) | F  | G1 max. | G1 min. | G2 max. | G2 min. | H  | J     | K   | L        | M1      | M2 | M3 |
|----------------|--------|-----|-----|-----|--------|----|---------|---------|---------|---------|----|-------|-----|----------|---------|----|----|
| <b>TH-428</b>  | 90     | 130 | 120 | 100 | 80     | 40 | 10      | 0       | 35      | 25      | 45 | 127.5 | 155 | 6-M8x15  | M33x1.5 | 25 | 12 |
| <b>TH-A536</b> | 105    | 150 | 135 | 115 | 100    | 48 | 15      | 0       | 40      | 25      | 40 | 118   | 166 | 6-M10x20 | M42x1.5 | 25 | 15 |

| Model          | N1      | N2 | O1 (H8) | O2 (H8) | P     | Q1 | Q2 | Q3    | R (g7) | S  | T  | U  | V | W1 | W2  | X1 | X2    |
|----------------|---------|----|---------|---------|-------|----|----|-------|--------|----|----|----|---|----|-----|----|-------|
| <b>TH-428</b>  | M34x1.5 | 26 | 30      | 28      | 101.5 | 11 | 24 | RC1/4 | 32     | 45 | 65 | 86 | 4 | 72 | 105 | 76 | M4x7  |
| <b>TH-A536</b> | M44x1.5 | 28 | 38      | 36      | 111.5 | 10 | 24 | RC1/4 | 42     | 55 | 73 | 98 | 4 | 80 | 110 | 83 | M5x10 |

\*Coolant Collector and Confirmation Device Please See Accessories pages.



- Compact short-length design with lightweight construction for space-saving installation.
- Built-in check valve and pressure relief valve ensure enhanced operational safety.
- Large oil inlet and drain ports provide high oil flow and smooth drainage.
- Supports both front-end and rear-end mounting for flexible installation options.
- Suitable for use with both vertical and horizontal spindles.
- Linear sensor can be attached.(optional)



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | Moment of inertia | Weight | Total oil leakage |
|----------------|------------------|-----------------|---------------|------------|---------------|-------------------|--------|-------------------|
|                | Extend           | Retract         |               |            |               |                   |        |                   |
|                | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               |                   |        |                   |
| <b>TR-433</b>  | 49.5             | 45.4            | 10            | 8000       | 4.0(40)       | 0.010             | 6.2    | 3.0               |
| <b>TR-536</b>  | 56.4             | 54.2            | 15            | 8000       | 4.0(40)       | 0.011             | 6.4    | 3.0               |
| <b>TR-539</b>  | 72.4             | 67.1            | 15            | 8000       | 4.0(40)       | 0.010             | 6.8    | 3.0               |
| <b>TR-A646</b> | 105.0            | 93.9            | 15            | 7000       | 4.0(40)       | 0.015             | 9.5    | 3.0               |
| <b>TR-B646</b> | 105              | 93.9            | 15            | 7000       | 4.0(40)       | 0.015             | 10     | 3.0               |
| <b>TR-853</b>  | 135.3            | 125             | 20            | 6300       | 4.0(40)       | 0.032             | 11.5   | 3.9               |
| <b>TR-1075</b> | 170              | 155             | 25            | 4500       | 4.0(40)       | 0.065             | 18     | 4.2               |
| <b>TR-1291</b> | 234              | 217.5           | 30            | 3500       | 4.0(40)       | 0.092             | 29.5   | 4.5               |

\*Coolant Collector and Confirmation Device Please See Accessories pages.

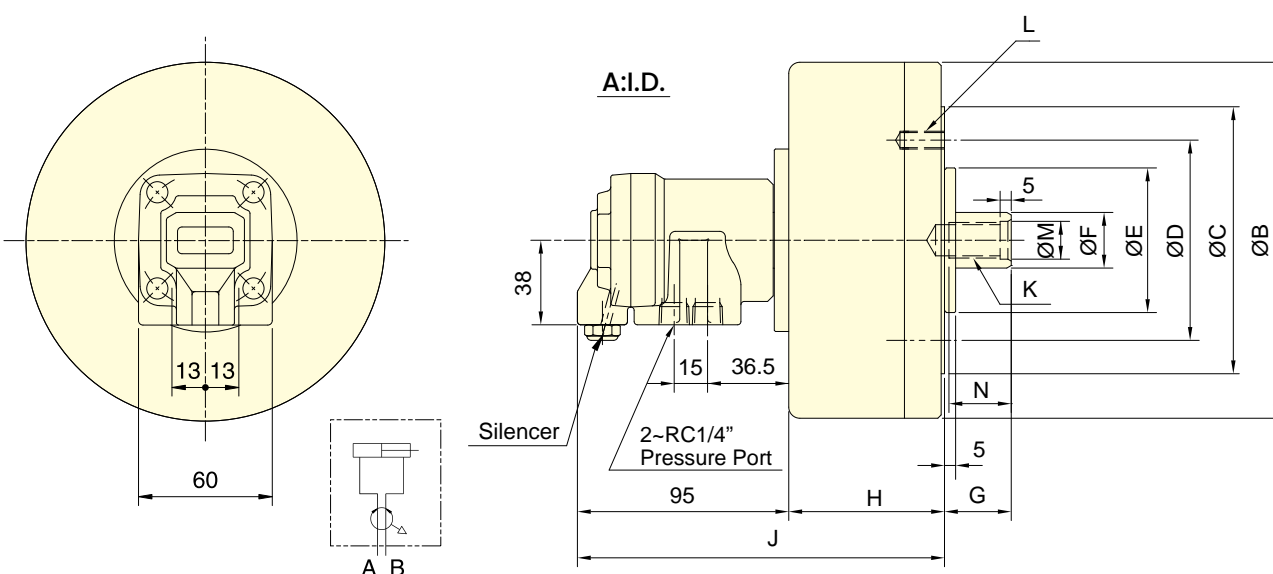
## DIMENSIONS

| Model          | A    | B   | C   | D   | E   | F   | G1   |      | G2   |      | H   | J     | K     | L         | L1      | L2   | M1      | M2 | M3 |
|----------------|------|-----|-----|-----|-----|-----|------|------|------|------|-----|-------|-------|-----------|---------|------|---------|----|----|
|                | I.D. |     |     |     | h7  |     | max. | min. | max. | min. |     |       |       |           |         |      |         |    |    |
| <b>TR-433</b>  | 90   | 120 | 106 | 100 | 80  | 46  | 10   | 0    | 30   | 20   | 3.5 | 97    | 133   | 6-M8x15   | M8x60   | 12   | M40x1.5 | 25 | 10 |
| <b>TR-536</b>  | 97   | 133 | 115 | 115 | 100 | 48  | 15   | 0    | 34   | 19   | 3.5 | 97    | 133   | 6-M10x20  | M8x60   | 12   | M42x1.5 | 25 | 15 |
| <b>TR-539</b>  | 107  | 143 | 125 | 125 | 110 | 52  | 15   | 0    | 34   | 19   | 4   | 97    | 133   | 6-M10x20  | M8x60   | 12   | M45x1.5 | 25 | 12 |
| <b>TR-A646</b> | 128  | 165 | 147 | 147 | 130 | 65  | 15   | 0    | 34   | 19   | 3.5 | 97    | 135   | 12-M10x20 | M8x60   | 11.5 | M55x2   | 25 | 13 |
| <b>TR-B646</b> | 128  | 162 | 147 | 130 | 100 | 65  | 15   | 0    | 34   | 19   | 3.5 | 107.5 | 145   | 12-M10x20 | M8x70   | 11.5 | M55x2   | 30 | 15 |
| <b>TR-853</b>  | 145  | 185 | 165 | 170 | 130 | 70  | 20   | 0    | 47   | 27   | 4.5 | 118.5 | 160   | 12~M10X20 | M8x75   | 12   | M60x2   | 30 | 15 |
| <b>TR-1075</b> | 170  | 212 | 190 | 190 | 160 | 95  | 25   | 0    | 52   | 27   | 4.5 | 129.5 | 181   | 12~M10x20 | M10x1.5 | 16   | M85x2   | 35 | 15 |
| <b>TR-1291</b> | 200  | 248 | 225 | 215 | 180 | 110 | 30   | 0    | 59   | 29   | 5   | 146   | 240.5 | 12~M12x24 | M10x95  | 16   | M100x2  | 35 | 15 |

| Model          | N1      | N2 | N3 | O1 | O2 | P     | Q1  | Q2 | Q3     | R  | S  | T   | U1   | U2 | V1    | V2    | W1  | W2    | Z      | Z1 |
|----------------|---------|----|----|----|----|-------|-----|----|--------|----|----|-----|------|----|-------|-------|-----|-------|--------|----|
|                |         |    |    | H8 | H8 |       |     |    |        | g7 |    |     |      |    |       |       |     |       |        |    |
| <b>TR-433</b>  | M39x1.5 | 8  | 25 | 36 | 33 | 92.5  | 6.5 | 26 | RC1/4  | 37 | 40 | 98  | 52.5 | 55 | 50    | M5x8  | 83  | M5x9  | RC1/2  | 5  |
| <b>TR-536</b>  | M44x1.5 | 6  | 28 | 38 | 36 | 92.5  | 6.5 | 26 | RC1/4  | 42 | 43 | 98  | 52.5 | 55 | 53    | M5x8  | 83  | M5x7  | RC1/2  | 5  |
| <b>TR-539</b>  | M44x1.5 | 8  | 25 | 42 | 39 | 92.5  | 6.5 | 26 | RC1/4  | 42 | 40 | 103 | 52.5 | 55 | 53    | M5x8  | 90  | M5x9  | RC1/2  | 5  |
| <b>TR-A646</b> | M52x1.5 | 8  | 25 | 50 | 46 | 95    | 5   | 32 | RC3/8  | 50 | 50 | 116 | 59   | 62 | 61.5  | M5x9  | 98  | M5x9  | RC1/2  | 5  |
| <b>TR-B646</b> | M52x1.5 | 8  | 30 | 50 | 46 | 105   | 5   | 32 | RC3/8  | 50 | 50 | 116 | 59   | 62 | 61.5  | M5x8  | 98  | M5x9  | RC1/2  | 5  |
| <b>TR-853</b>  | M58x1.5 | 8  | 30 | 55 | 53 | 114   | 8   | 34 | RC 3/8 | 56 | 50 | 128 | 65   | 67 | 70    | M5x10 | 110 | M6x11 | RC 1/2 | 5  |
| <b>TR-1075</b> | M84x2   | 9  | 33 | 80 | 75 | 123.5 | 12  | 40 | RC 1/2 | 81 | 50 | 164 | 83   | 86 | 95    | M5x10 | 155 | M6x11 | RC 3/4 | 5  |
| <b>TR-1291</b> | M99x2   | 9  | 38 | 95 | 91 | 139   | 14  | 45 | RC1/2  | 96 | 50 | 180 | 91.5 | 93 | 110.5 | M6x12 | 165 | M6x12 | RC3/4  | 5  |



- The rotary valve and cylinder body, all made of special light alloy, are light-weight.
- Through unique design, the rotary valve can considerably reduce the waste in compressing air and efficiently increase its utilization.
- When used, a little oil mist should be contained.



Subject to technical changes

## SPECIFICATIONS

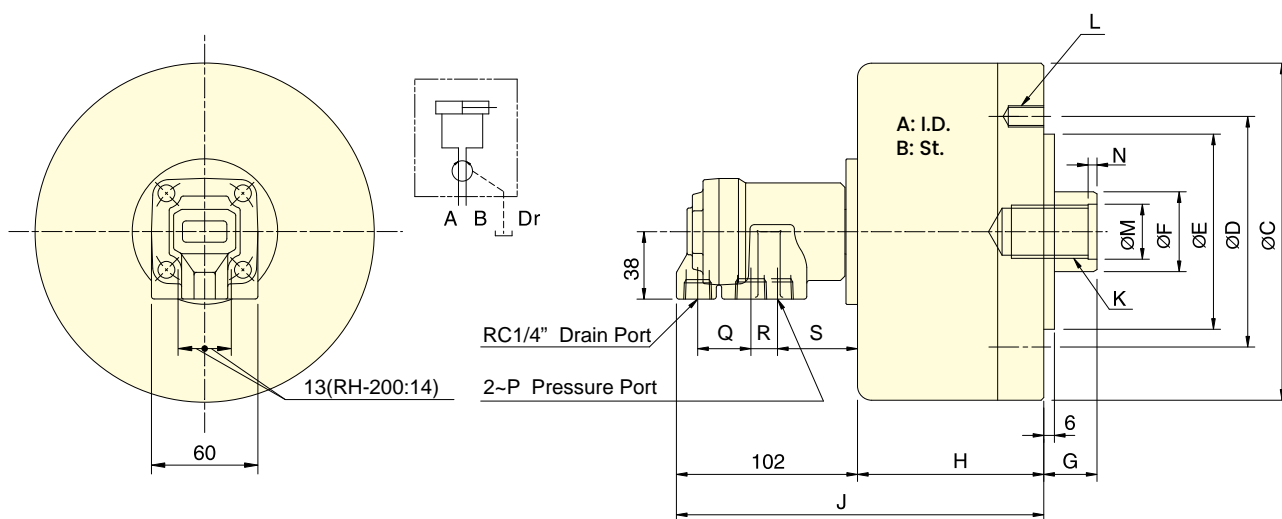
| Model         | Eff. piston area          |                            | Piston stroke<br>mm | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg | Air Leakage<br>(6kgf/cm <sup>2</sup> )<br>cc/sec |
|---------------|---------------------------|----------------------------|---------------------|--|--|--|--------------|--|
|               | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                     |  |  |  |              |  |
| <b>RA-100</b> | 77.0                      | 74.4                       | 15                  | 6000                                     | 0.8(8)                                     | 0.03                                   | 3.9          | 400  |
| <b>RA-130</b> | 131.2                     | 124.7                      | 15                  | 5000                                     | 0.8(8)                                     | 0.05                                   | 5.2          | 400  |
| <b>RA-170</b> | 225.4                     | 219.0                      | 20                  | 5000                                     | 0.8(8)                                     | 0.18                                   | 8.5          | 400  |
| <b>RA-220</b> | 378.6                     | 369.3                      | 25                  | 4000                                     | 0.8(8)                                     | 0.36                                   | 14.5         | 400  |
| <b>RA-270</b> | 571.0                     | 562.9                      | 30                  | 3000                                     | 0.8(8)                                     | 0.75                                   | 18.4         | 400  |

## DIMENSIONS

| Model         | A   | B   | C   | D   | E<br>(h7) | F  | G<br>max. | G<br>min. | H   | J   | K        | L        | M (H8) | N  |
|---------------|-----|-----|-----|-----|-----------|----|-----------|-----------|-----|-----|----------|----------|--------|----|
| <b>RA-100</b> | 100 | 130 | -   | 80  | 60        | 22 | 50        | 35        | 65  | 160 | M12x1.75 | 6-M8x16  | 13     | 25 |
| <b>RA-130</b> | 130 | 160 | 120 | 90  | 65        | 25 | 45        | 30        | 70  | 165 | M16x2.0  | 6-M8x16  | 17     | 30 |
| <b>RA-170</b> | 170 | 200 | 140 | 100 | 80        | 25 | 45        | 25        | 85  | 180 | M16x2.0  | 6-M10x18 | 17     | 30 |
| <b>RA-220</b> | 220 | 255 | 170 | 130 | 110       | 30 | 50        | 25        | 91  | 186 | M20x2.5  | 6-M12x20 | 21     | 35 |
| <b>RA-270</b> | 270 | 305 | 190 | 130 | 110       | 35 | 55        | 25        | 105 | 200 | M24x3.0  | 6-M12x20 | 25     | 40 |



- The rotary valve and cylinder body, all made of special light alloy, light-weight.
- Through unique design, the rotary valve enables the inside bearing to get sufficient lubricating and cooling and endure high-speed rotary for longer service life.
- The drain port should be independently connected to oil tank to avoid back pressure.



Subject to technical changes

## SPECIFICATIONS

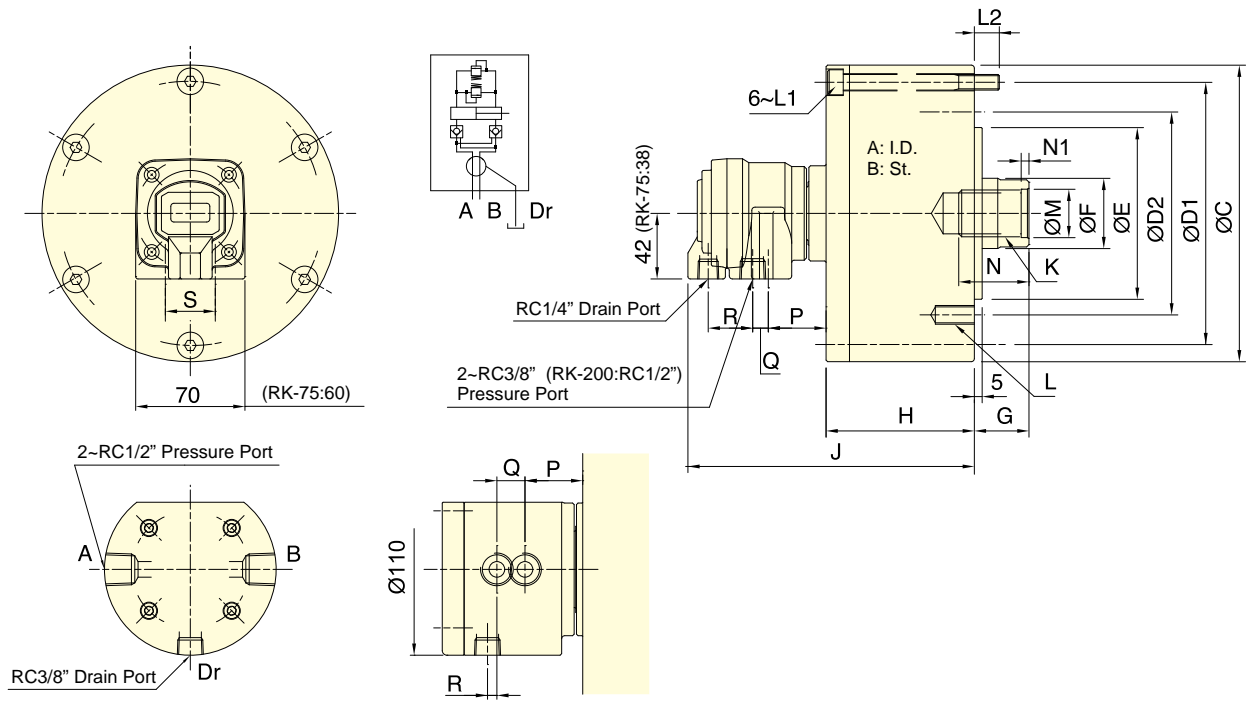
| Model         | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | Moment of inertia | Weight |
|---------------|------------------|-----------------|---------------|------------|---------------|-------------------|--------|
|               | Extend           | Retract         |               |            |               |                   |        |
|               | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               |                   |        |
| <b>RH-65</b>  | 31.0             | 27.9            | 15            | 6000       | 3.5(35)       | 0.01              | 2.9    |
| <b>RH-80</b>  | 47.7             | 42.8            | 15            | 6000       | 3.5(35)       | 0.01              | 3.4    |
| <b>RH-100</b> | 75.4             | 70.5            | 20            | 5500       | 3.5(35)       | 0.04              | 4.9    |
| <b>RH-125</b> | 119.6            | 112.5           | 25            | 5500       | 3.5(35)       | 0.08              | 6.8    |
| <b>RH-200</b> | 310.0            | 286.3           | 35            | 4000       | 4.0(40)       | 0.38              | 20.4   |

## DIMENSIONS

| Model         | A   | B  | C   | D   | E (h7) | F  | G max. | G min. | H    | J     | K           | L         | M (H8) | N | P     | Q  | R  | S  |
|---------------|-----|----|-----|-----|--------|----|--------|--------|------|-------|-------------|-----------|--------|---|-------|----|----|----|
| <b>RH-65</b>  | 65  | 15 | 98  | 80  | 60     | 22 | 45     | 30     | 73   | 175   | M12x1.75x30 | 6~M8x16   | 14     | 4 | RC3/8 | 30 | 15 | 45 |
| <b>RH-80</b>  | 80  | 15 | 112 | 90  | 65     | 25 | 45     | 30     | 74   | 176   | M16x2.0x30  | 6~M8x16   | 17     | 4 | RC3/8 | 30 | 15 | 45 |
| <b>RH-100</b> | 100 | 20 | 135 | 100 | 80     | 25 | 45     | 25     | 88.5 | 190.5 | M16x2.0x30  | 6~M10x20  | 17     | 4 | RC3/8 | 30 | 15 | 45 |
| <b>RH-125</b> | 125 | 25 | 160 | 130 | 110    | 30 | 50     | 25     | 95.5 | 197.5 | M20x2.5x35  | 6~M12x20  | 21     | 4 | RC3/8 | 30 | 15 | 45 |
| <b>RH-200</b> | 200 | 35 | 245 | 145 | 120    | 55 | 70     | 35     | 130  | 232   | M36x4       | 12~M16x30 | 38     | 5 | RC1/2 | 31 | 16 | 43 |



- For short form, light weight and high speed rotary cylinder.
- Built-in safety check valves and pressure relief valves.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.



RK-250

Subject to technical changes

## SPECIFICATIONS

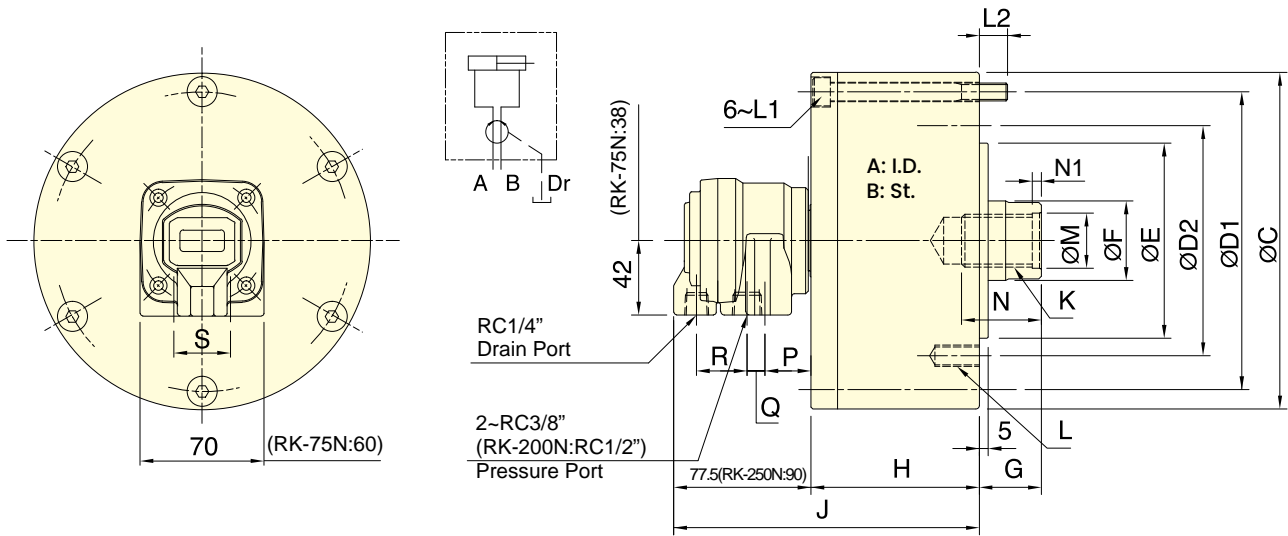
| Model         | Eff. piston area |                 | Piston stroke | Max. speed                 | Max. pressure            | Moment of inertia | Weight |
|---------------|------------------|-----------------|---------------|----------------------------|--------------------------|-------------------|--------|
|               | Extend           | Retract         |               |                            |                          |                   |        |
|               | cm <sup>2</sup>  | cm <sup>2</sup> | mm            | min <sup>-1</sup> (r.p.m.) | MPa(kg/cm <sup>2</sup> ) | kg·m <sup>2</sup> | kg     |
| <b>RK-75</b>  | 44.2             | 37.1            | 15            | 6000                       | 4.0 (40)                 | 0.01              | 2.9    |
| <b>RK-100</b> | 78.5             | 71.5            | 20            | 6000                       | 4.0 (40)                 | 0.03              | 4.4    |
| <b>RK-125</b> | 122.7            | 113.1           | 25            | 6000                       | 4.0 (40)                 | 0.05              | 6.9    |
| <b>RK-150</b> | 176.7            | 160.8           | 30            | 5500                       | 4.0 (40)                 | 0.09              | 9.5    |
| <b>RK-200</b> | 314.1            | 290.4           | 35            | 5500                       | 4.0 (40)                 | 0.28              | 15.4   |
| <b>RK-250</b> | 469.1            | 436.0           | 60            | 2000                       | 5.0(50)                  | 0.40              | 45.2   |

## DIMENSIONS

| Model         | A   | B  | C   | D1  | D2  | E (h7) | F  | G max. | G min. | H   | J   | K       | L         | L1      | L2   | M (H8) | N  | N1 | P    | Q  | R    | S  |
|---------------|-----|----|-----|-----|-----|--------|----|--------|--------|-----|-----|---------|-----------|---------|------|--------|----|----|------|----|------|----|
| <b>RK-75</b>  | 75  | 15 | 107 | 90  | 90  | 65     | 30 | 45     | 30     | 57  | 148 | M20x2.5 | 6-M8x16   | M8x60   | 12   | 21     | 35 | 5  | 41.5 | 10 | 27.5 | 26 |
| <b>RK-100</b> | 100 | 20 | 132 | 115 | 100 | 80     | 30 | 45     | 25     | 72  | 163 | M20x2.5 | 6-M10x20  | M8x75   | 12   | 21     | 35 | 5  | 39.5 | 10 | 28.5 | 32 |
| <b>RK-125</b> | 125 | 25 | 160 | 140 | 130 | 110    | 35 | 50     | 25     | 82  | 172 | M24x3.0 | 6-M12x20  | M8x85   | 12   | 25     | 45 | 5  | 38.5 | 10 | 28.5 | 32 |
| <b>RK-150</b> | 150 | 30 | 190 | 170 | 130 | 110    | 45 | 55     | 25     | 95  | 184 | M30x3.5 | 12-M12x24 | M10x100 | 15.5 | 32     | 45 | 5  | 37   | 10 | 28.5 | 32 |
| <b>RK-200</b> | 200 | 35 | 245 | 220 | 145 | 120    | 55 | 70     | 35     | 115 | 201 | M36x4.0 | 12-M16x30 | M10x125 | 21   | 38     | 60 | 5  | 38   | 6  | 28.5 | 28 |
| <b>RK-250</b> | 245 | 60 | 307 | 275 | 220 | 160    | 65 | 85     | 25     | 165 | 255 | M42x3.0 | 12-M20x35 | M16x175 | 28   | 45     | 65 | 12 | 33   | 18 | 6    | -  |



- For short form, light weight and high speed rotary cylinder.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.



Subject to technical changes

## SPECIFICATIONS

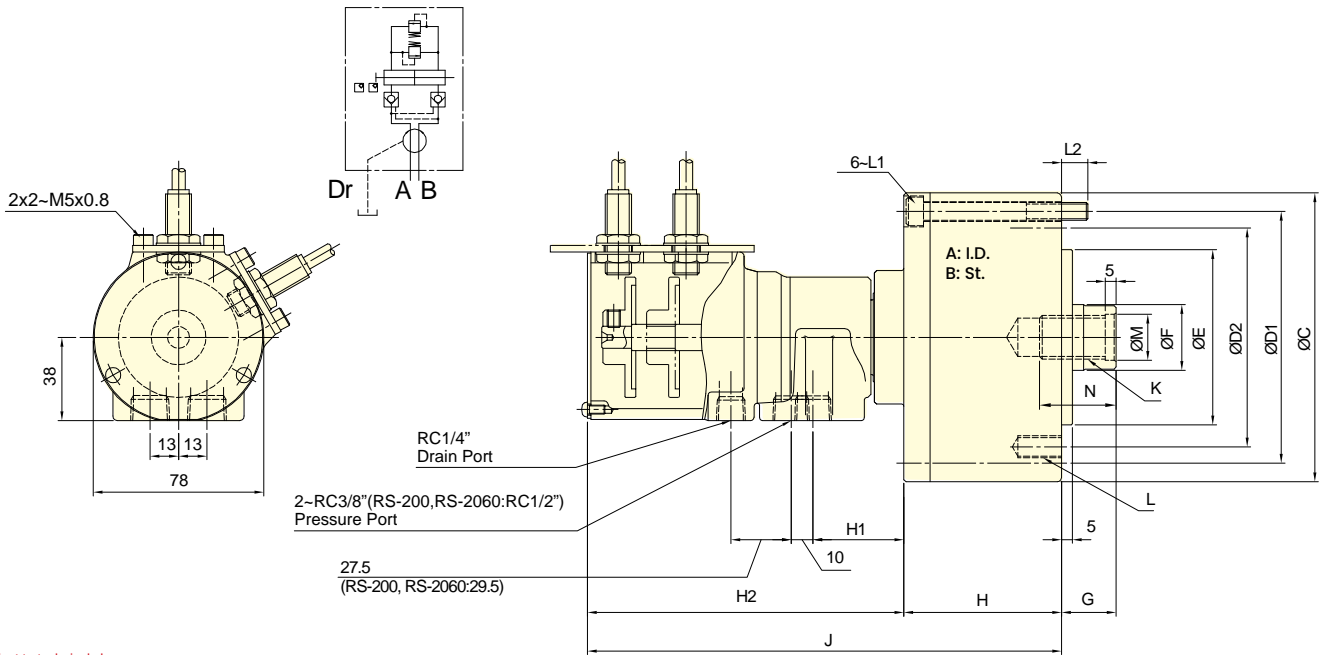
| Model          | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | Moment of inertia | Weight |
|----------------|------------------|-----------------|---------------|------------|---------------|-------------------|--------|
|                | Extend           | Retract         |               |            |               |                   |        |
|                | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               |                   |        |
| <b>RK-75N</b>  | 44.2             | 37.1            | 15            | 6000       | 4.0(40)       | 0.01              | 2.8    |
| <b>RK-100N</b> | 78.5             | 71.5            | 20            | 6000       | 4.0(40)       | 0.03              | 4.3    |
| <b>RK-125N</b> | 122.7            | 113.1           | 25            | 6000       | 4.0(40)       | 0.05              | 6.8    |
| <b>RK-150N</b> | 176.7            | 160.8           | 30            | 5500       | 4.0(40)       | 0.09              | 9.4    |
| <b>RK-200N</b> | 314.1            | 290.4           | 35            | 5500       | 4.0(40)       | 0.28              | 15.3   |
| <b>RK-250N</b> | 469.1            | 436.0           | 60            | 2000       | 5.0(50)       | 0.40              | 45.2   |

## DIMENSIONS

| Model          | A   | B  | C   | D1  | D2  | E (h7) | F  | G max. | G min. | H   | J     | K       | L         | L1      | L2   | M (H8) | N  | N1 | P  | Q  | R    | S  |
|----------------|-----|----|-----|-----|-----|--------|----|--------|--------|-----|-------|---------|-----------|---------|------|--------|----|----|----|----|------|----|
| <b>RK-75N</b>  | 75  | 15 | 107 | 90  | 90  | 65     | 30 | 45     | 30     | 57  | 134.5 | M20x2.5 | 6~M8x16   | M8x60   | 12   | 21     | 35 | 5  | 28 | 10 | 27.5 | 26 |
| <b>RK-100N</b> | 100 | 20 | 132 | 115 | 100 | 80     | 30 | 45     | 25     | 72  | 149.5 | M20x2.5 | 6~M10x20  | M8x75   | 12   | 21     | 35 | 5  | 26 | 10 | 28.5 | 32 |
| <b>RK-125N</b> | 125 | 25 | 160 | 140 | 130 | 110    | 35 | 50     | 25     | 82  | 159.5 | M24x3.0 | 6~M12x20  | M8x85   | 12   | 25     | 45 | 5  | 26 | 10 | 28.5 | 32 |
| <b>RK-150N</b> | 150 | 30 | 190 | 170 | 130 | 110    | 45 | 55     | 25     | 95  | 172.5 | M30x3.5 | 12~M12x24 | M10x100 | 15.5 | 32     | 45 | 5  | 26 | 10 | 28.5 | 32 |
| <b>RK-200N</b> | 200 | 35 | 245 | 220 | 145 | 120    | 55 | 70     | 35     | 115 | 192.5 | M36x4.0 | 12~M16x30 | M10x125 | 21   | 38     | 60 | 5  | 30 | 6  | 28.5 | 28 |
| <b>RK-250N</b> | 245 | 60 | 307 | 275 | 220 | 160    | 65 | 85     | 25     | 165 | 255   | M42x3.0 | 6~M20x2.5 | M16x175 | 28   | 45     | 65 | 12 | 37 | 18 | 6    | -  |



- For short form, high speed and stroke control.
- With proximity sensor, the movement of the position is easy to adjust and confirm when operating.
- Built-in safety check valves and pressure relief valves.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- Stroke Detection Type can be customized to Linear Positioning System.



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | I<br>Moment of inertia | Weight |
|----------------|------------------|-----------------|---------------|------------|---------------|------------------------|--------|
|                | Extend           | Retract         |               |            |               |                        |        |
|                | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               |                        |        |
| <b>RS-75</b>   | 43.0             | 37.1            | 15            | 6000       | 4.0 (40)      | 0.01                   | 3.4    |
| <b>RS-100</b>  | 77.4             | 71.5            | 20            | 6000       | 4.0 (40)      | 0.04                   | 4.9    |
| <b>RS-125</b>  | 121.6            | 113.1           | 25            | 6000       | 4.0 (40)      | 0.05                   | 7.4    |
| <b>RS-1250</b> | 121.6            | 113.1           | 50            | 6000       | 4.0 (40)      | 0.05                   | 8.7    |
| <b>RS-150</b>  | 175.6            | 160.8           | 30            | 5500       | 4.0 (40)      | 0.10                   | 10.7   |
| <b>RS-1550</b> | 175.6            | 160.8           | 50            | 5500       | 4.0 (40)      | 0.10                   | 11.5   |
| <b>RS-200</b>  | 313.0            | 290.4           | 35            | 5500       | 4.0 (40)      | 0.29                   | 15.9   |
| <b>RS-2060</b> | 313.0            | 290.4           | 60            | 5500       | 4.0 (40)      | 0.29                   | 17.6   |

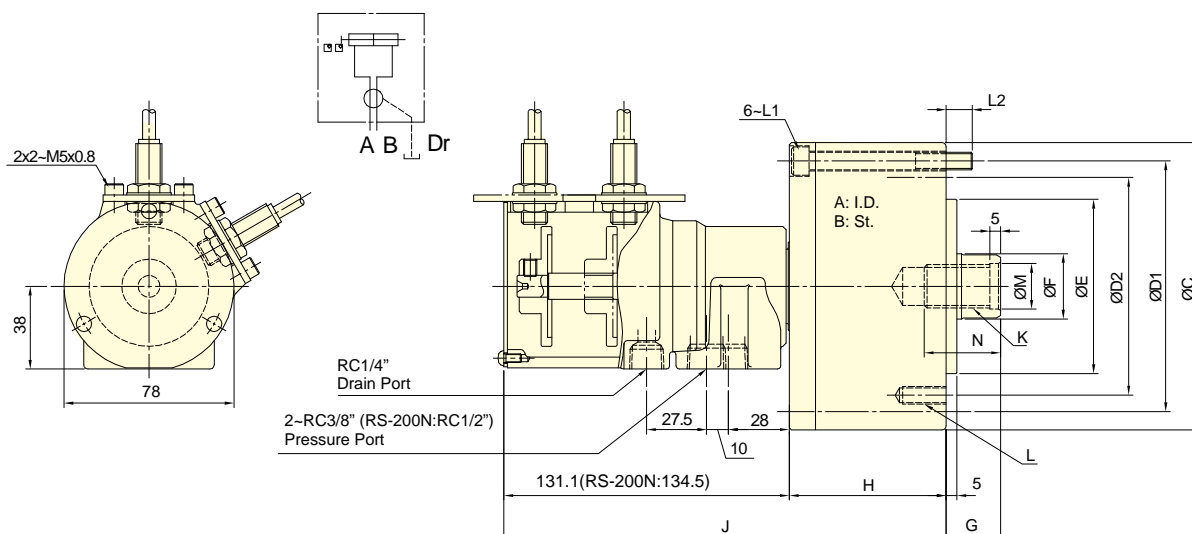
## DIMENSIONS

| Model          | A   | B  | C   | D1  | D2  | E (h7) | F  | G max. | G min. | H   | H1 | H2    | J     | K       | L         | L1      | L2   | M (H8) | N  |
|----------------|-----|----|-----|-----|-----|--------|----|--------|--------|-----|----|-------|-------|---------|-----------|---------|------|--------|----|
| <b>RS-75</b>   | 75  | 15 | 107 | 90  | 90  | 65     | 30 | 45     | 30     | 57  | 42 | 145   | 202   | M20x2.5 | 6-M8x16   | M8x60   | 12   | 21     | 35 |
| <b>RS-100</b>  | 100 | 20 | 132 | 115 | 100 | 80     | 30 | 45     | 25     | 72  | 42 | 145   | 217   | M20x2.5 | 6-M10x20  | M8x75   | 12   | 21     | 35 |
| <b>RS-125</b>  | 125 | 25 | 160 | 140 | 130 | 110    | 35 | 50     | 25     | 82  | 41 | 144   | 226   | M24x3.0 | 6-M12x20  | M8x85   | 12   | 25     | 45 |
| <b>RS-1250</b> | 125 | 50 | 160 | 140 | 130 | 110    | 35 | 75     | 25     | 107 | 41 | 174   | 281   | M24x3.0 | 6-M12x20  | M8x110  | 12   | 25     | 45 |
| <b>RS-150</b>  | 150 | 30 | 190 | 170 | 130 | 110    | 45 | 55     | 25     | 95  | 39 | 142   | 237   | M30x3.5 | 12-M12x24 | M10x100 | 15.5 | 32     | 45 |
| <b>RS-1550</b> | 150 | 50 | 190 | 170 | 130 | 110    | 45 | 75     | 25     | 115 | 39 | 172   | 287   | M30x3.5 | 12-M12x24 | M10x120 | 15.5 | 31     | 45 |
| <b>RS-200</b>  | 200 | 35 | 245 | 220 | 145 | 120    | 55 | 70     | 35     | 115 | 34 | 142.5 | 257.5 | M36x4.0 | 12-M16x30 | M10x125 | 21   | 38     | 60 |
| <b>RS-2060</b> | 200 | 60 | 245 | 220 | 145 | 120    | 55 | 95     | 35     | 140 | 34 | 169   | 309   | M36x4.0 | 12-M16x30 | M10x145 | 16   | 38     | 60 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- For short form, high speed and stroke control.
- With proximity sensor, the movement of the position is easy to adjust and confirm when operating.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- Stroke Detection Type can be customized to Linear Positioning System.



Subject to technical changes

## SPECIFICATIONS

| Model    | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | I                 | Weight |
|----------|------------------|-----------------|---------------|------------|---------------|-------------------|--------|
|          | Extend           | Retract         |               |            |               |                   |        |
|          | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               | kg·m <sup>2</sup> |        |
| RS-6520N | 32.0             | 28.3            | 20            | 6000       | 4.0(40)       | 0.01              | 3.2    |
| RS-6530N | 32.0             | 28.3            | 30            | 6000       | 4.0(40)       | 0.01              | 3.3    |
| RS-75N   | 43.0             | 37.1            | 15            | 6000       | 4.0(40)       | 0.01              | 3.3    |
| RS-7530N | 43.0             | 37.1            | 30            | 6000       | 4.0(40)       | 0.013             | 3.7    |
| RS-100N  | 77.4             | 71.5            | 20            | 6000       | 4.0(40)       | 0.04              | 4.8    |
| RS-125N  | 121.6            | 113.1           | 25            | 6000       | 4.0(40)       | 0.05              | 7.3    |
| RS-150N  | 175.6            | 160.8           | 30            | 5500       | 4.0(40)       | 0.16              | 10.6   |
| RS-200N  | 313.0            | 290.4           | 35            | 5500       | 4.0(40)       | 0.29              | 15.9   |

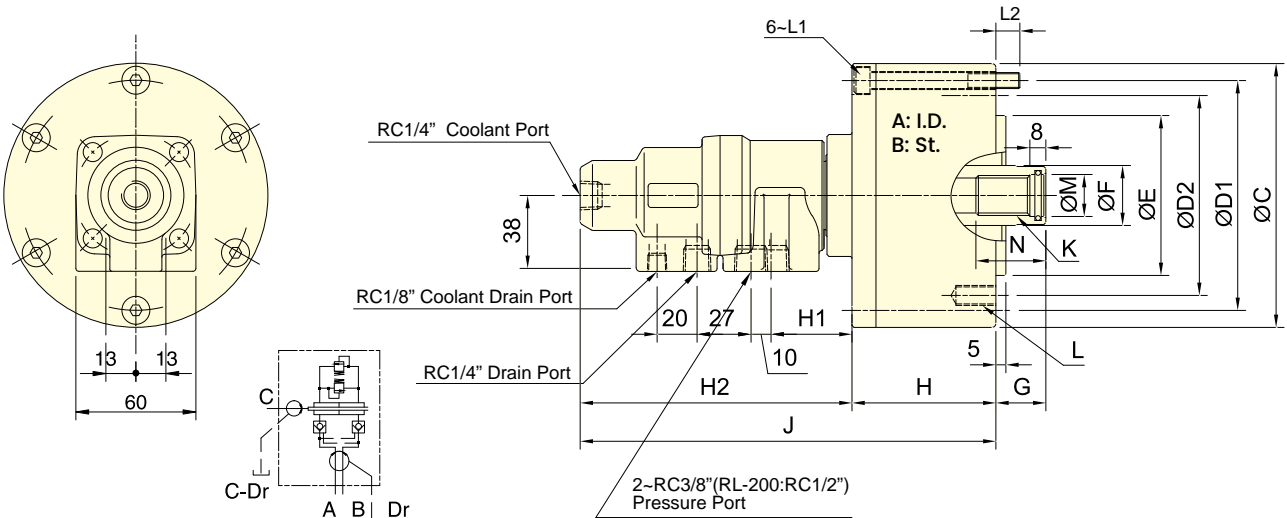
## DIMENSIONS

| Model    | A   | B  | C   | D1  | D2  | E (h7) | F  | G max. | G min. | H   | J     | K       | L         | L1      | L2   | M (H8) | N  |
|----------|-----|----|-----|-----|-----|--------|----|--------|--------|-----|-------|---------|-----------|---------|------|--------|----|
| RS-6520N | 65  | 20 | 97  | 80  | 80  | 60     | 25 | 45     | 25     | 62  | 193   | M16x2.0 | 6~M8x16   | M6x70   | 14.5 | 17     | 30 |
| RS-6530N | 65  | 30 | 97  | 80  | 80  | 60     | 25 | 45     | 15     | 62  | 203   | M16x2.0 | 6~M8x16   | M6x80   | 14.5 | 17     | 30 |
| RS-75N   | 75  | 15 | 107 | 90  | 90  | 65     | 30 | 45     | 30     | 57  | 188   | M20x2.5 | 6~M8x16   | M8x60   | 12   | 21     | 35 |
| RS-7530N | 75  | 30 | 107 | 90  | 90  | 65     | 30 | 45     | 15     | 72  | 203   | M20x2.5 | 6~M8x16   | M8x75   | 12   | 21     | 35 |
| RS-100N  | 100 | 20 | 132 | 115 | 100 | 80     | 30 | 45     | 25     | 72  | 203   | M20x2.5 | 6~M10x20  | M8x75   | 12   | 21     | 35 |
| RS-125N  | 125 | 25 | 160 | 140 | 130 | 110    | 35 | 50     | 25     | 82  | 213   | M24x3.0 | 6~M12x20  | M8x85   | 12   | 25     | 45 |
| RS-150N  | 150 | 30 | 190 | 170 | 130 | 110    | 45 | 55     | 25     | 95  | 226   | M30x3.5 | 12~M12x24 | M10x100 | 15.5 | 32     | 45 |
| RS-200N  | 200 | 35 | 245 | 220 | 145 | 120    | 55 | 70     | 35     | 115 | 249.5 | M36x4.0 | 12~M16x30 | M10x125 | 21   | 38     | 60 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- To allow coolant to be feed from the rear end of the distributor through the rotating union
- Built-in safety check valves and pressure relief valves.
- The drain port should be independently connected to oil tank to avoid back pressure.
- The rotary cylinder should not run without liquid through coolant port.



Subject to technical changes

## SPECIFICATIONS

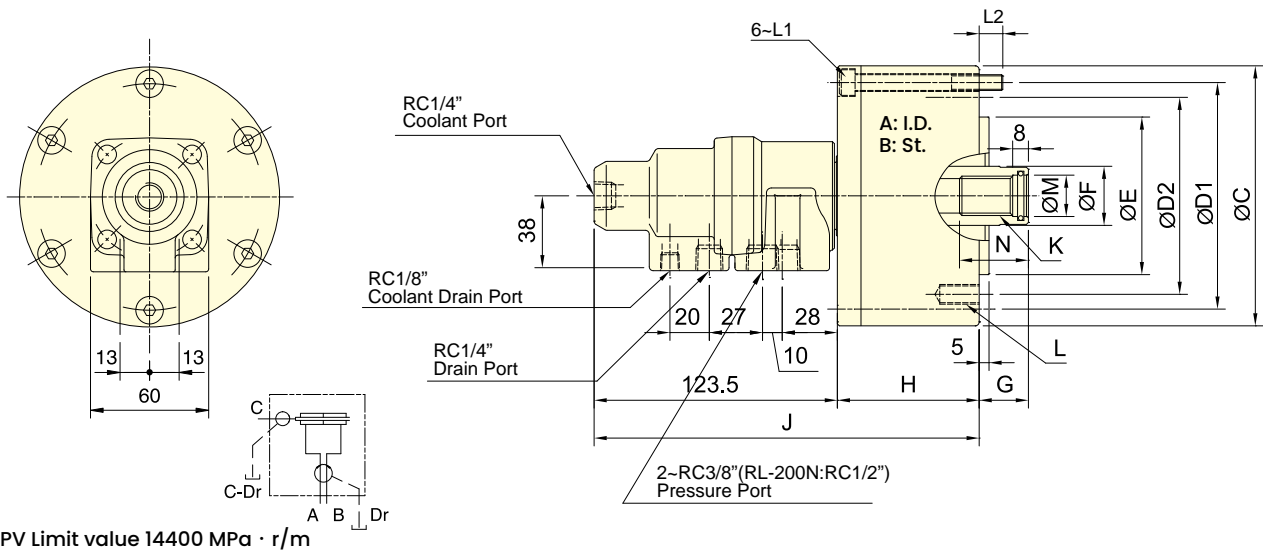
| Model         | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | Coolant connection<br>Max. pressure | I                 |        |
|---------------|------------------|-----------------|---------------|------------|---------------|-------------------------------------|-------------------|--------|
|               | Extend           | Retract         |               |            |               |                                     | Moment of inertia | Weight |
|               | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               |                                     |                   |        |
| <b>RL-75</b>  | 42.6             | 37.1            | 15            | 6000       | 4.0(40)       | 3.5(35)                             | 0.01              | 3.1    |
| <b>RL-100</b> | 77.0             | 71.5            | 20            | 6000       | 4.0(40)       | 3.5(35)                             | 0.04              | 4.6    |
| <b>RL-125</b> | 121.2            | 113.1           | 25            | 6000       | 4.0(40)       | 3.5(35)                             | 0.06              | 7.1    |
| <b>RL-150</b> | 175.2            | 160.8           | 30            | 5500       | 4.0(40)       | 3.5(35)                             | 0.10              | 9.7    |
| <b>RL-200</b> | 312.5            | 290.4           | 35            | 5500       | 4.0(40)       | 3.5(35)                             | 0.30              | 15.6   |

## DIMENSIONS

| Model         | A   | B  | C   | D1  | D2  | E<br>(h7) | F  | G max. | G min. | H   | H1 | H2  | J   | K       | L         | L1      | L2   | M<br>(H8) | N  |
|---------------|-----|----|-----|-----|-----|-----------|----|--------|--------|-----|----|-----|-----|---------|-----------|---------|------|-----------|----|
| <b>RL-75</b>  | 75  | 15 | 107 | 90  | 90  | 65        | 30 | 45     | 30     | 57  | 42 | 137 | 194 | M20x2.5 | 6~M8x16   | M8x60   | 12   | 21        | 35 |
| <b>RL-100</b> | 100 | 20 | 132 | 115 | 100 | 80        | 30 | 45     | 25     | 72  | 42 | 137 | 209 | M20x2.5 | 6~M10x20  | M8x75   | 12   | 21        | 35 |
| <b>RL-125</b> | 125 | 25 | 160 | 140 | 130 | 110       | 35 | 50     | 25     | 82  | 41 | 136 | 218 | M24x3.0 | 6~M12x20  | M8x85   | 12   | 25        | 45 |
| <b>RL-150</b> | 150 | 30 | 190 | 170 | 130 | 110       | 45 | 55     | 25     | 95  | 39 | 134 | 230 | M30x3.5 | 12~M12x24 | M10x100 | 15.5 | 32        | 45 |
| <b>RL-200</b> | 200 | 35 | 245 | 220 | 145 | 120       | 55 | 70     | 35     | 115 | 36 | 132 | 248 | M36x4.0 | 12~M16x30 | M10x125 | 21   | 38        | 60 |



- To allow coolant to be feed from the rear end of the distributor through the rotating union.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- The rotary cylinder should not run without liquid through coolant port.



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area          |                            | Piston stroke<br>mm | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Coolant connection<br>Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) | I<br>Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg |
|----------------|---------------------------|----------------------------|---------------------|--|--|---|---|--------------|
|                | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                     |  |  |   |   |              |
|                | <b>RL-75N</b>             | 42.6                       |                     |  |  |   | 37.1  | 15           |
| <b>RL-100N</b> | 77.0                      | 71.5                       | 20                  | 6000                                     | 4.0 (40)                                   | 3.5(35)   | 0.04  | 4.5          |
| <b>RL-125N</b> | 121.2                     | 113.1                      | 25                  | 6000                                     | 4.0 (40)                                   | 3.5(35)   | 0.06  | 7.0          |
| <b>RL-150N</b> | 175.2                     | 160.8                      | 30                  | 5500                                     | 4.0 (40)                                   | 3.5(35)   | 0.10  | 9.6          |
| <b>RL-200N</b> | 312.5                     | 290.4                      | 35                  | 5500                                     | 4.0 (40)                                   | 3.5(35)   | 0.29  | 15.5         |

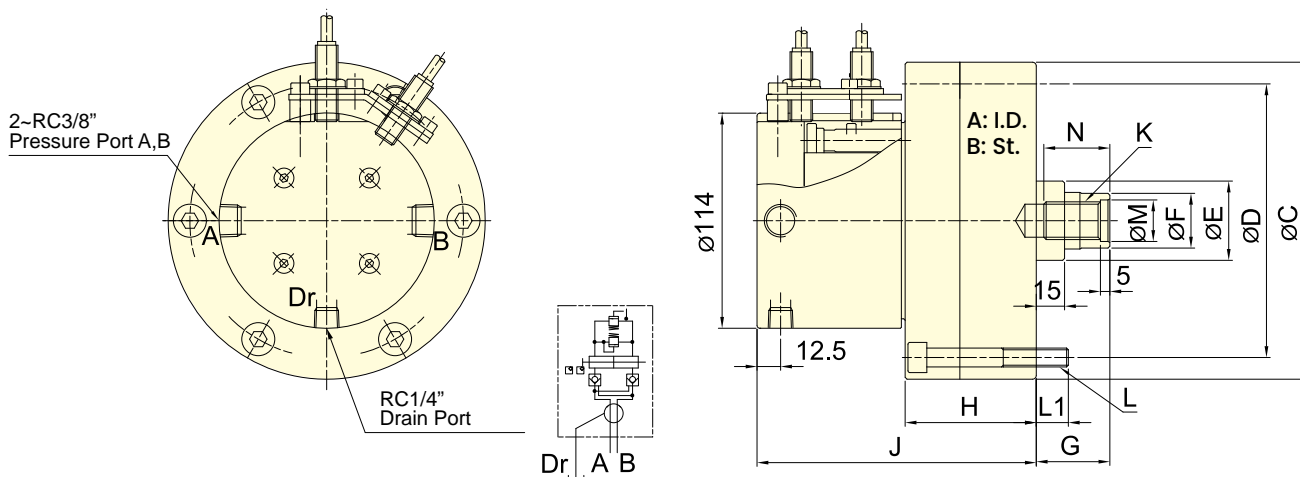
## DIMENSIONS

| Model          | A   | B  | C   | D1  | D2  | E<br>(h7) | F  | G<br>max. | G<br>min. | H   | J   | K       | L          | L1      | L2   | M<br>(H8) | N  |
|----------------|-----|----|-----|-----|-----|-----------|----|-----------|-----------|-----|-----|---------|------------|---------|------|-----------|----|
| <b>RL-75N</b>  | 75  | 15 | 107 | 90  | 90  | 65        | 30 | 45        | 30        | 57  | 180 | M20x2.5 | 6-M8x16    | M8x60   | 12   | 21        | 35 |
| <b>RL-100N</b> | 100 | 20 | 132 | 115 | 100 | 80        | 30 | 45        | 25        | 72  | 195 | M20x2.5 | 6-M10x20   | M8x75   | 12   | 21        | 35 |
| <b>RL-125N</b> | 125 | 25 | 160 | 140 | 130 | 110       | 35 | 50        | 25        | 82  | 205 | M24x3.0 | 6-M12x20   | M8x85   | 12   | 25        | 45 |
| <b>RL-150N</b> | 150 | 30 | 190 | 170 | 130 | 110       | 45 | 55        | 25        | 95  | 218 | M30x3.5 | 12-M12x24  | M10x100 | 15.5 | 32        | 45 |
| <b>RL-200N</b> | 200 | 35 | 245 | 220 | 145 | 120       | 55 | 70        | 35        | 115 | 240 | M36x4.0 | 12-M16x 30 | M10x125 | 21   | 38        | 60 |





- For short form, light weight and high speed rotary cylinder.
- Built-in safety check valves, pressure relief valves and proximity sensor.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- Stroke Detection Type can be customized to Linear Positioning System.



Subject to technical changes

## SPECIFICATIONS

| Model         | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | I                 | Weight |
|---------------|------------------|-----------------|---------------|------------|---------------|-------------------|--------|
|               | Extend           | Retract         |               |            |               |                   |        |
|               | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               | kg·m <sup>2</sup> |        |
| <b>RE-110</b> | 92.7             | 87.9            | 20            | 6000       | 3.5(35)       | 0.02              | 6.9    |
| <b>RE-120</b> | 110.8            | 106             | 21            | 6000       | 4.0(40)       | 0.03              | 8.8    |
| <b>RE-130</b> | 130.4            | 123.1           | 30            | 6000       | 4.0(40)       | 0.03              | 9.1    |

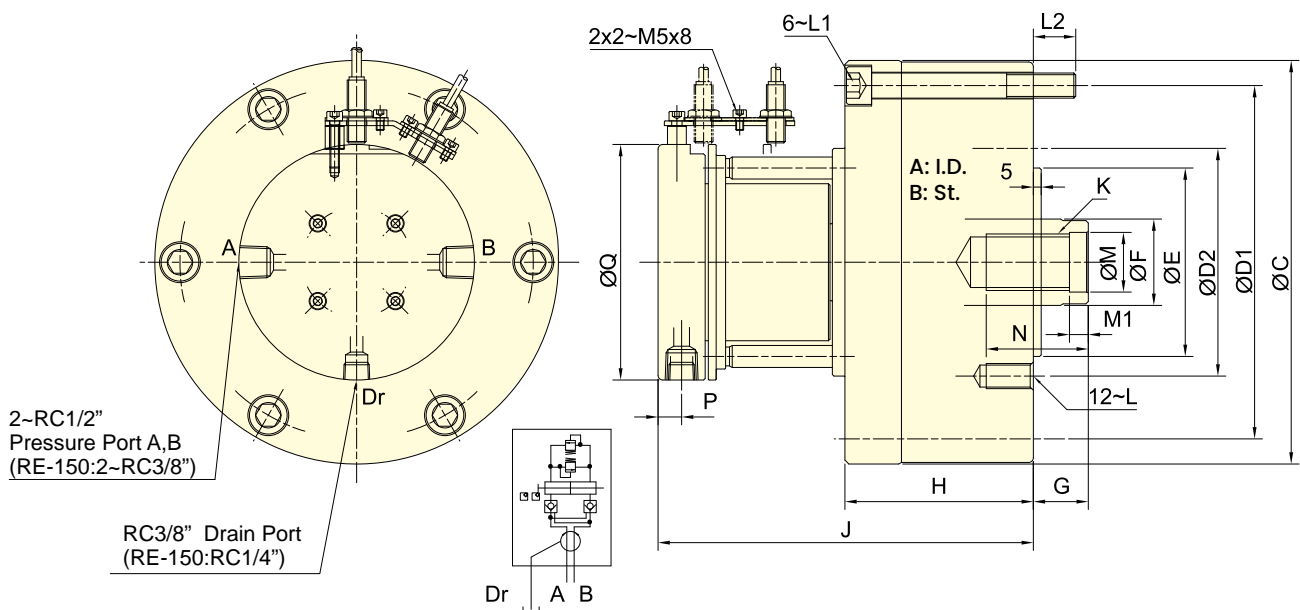
## DIMENSIONS

| Model         | A   | B  | C (h7) | D   | E  | F  | G max. | G min. | H    | J   | K       | L        | L1 | M (H8) | N  |
|---------------|-----|----|--------|-----|----|----|--------|--------|------|-----|---------|----------|----|--------|----|
| <b>RE-110</b> | 110 | 20 | 145    | 128 | 42 | 29 | 60     | 40     | 66   | 146 | M20x2.5 | 6~M8x70  | 12 | 22     | 35 |
| <b>RE-120</b> | 120 | 21 | 168    | 145 | 42 | 29 | 60     | 39     | 69.5 | 148 | M20x2.5 | 6~M10x75 | 17 | 22     | 35 |
| <b>RE-130</b> | 130 | 30 | 168    | 150 | 50 | 33 | 60     | 30     | 79.5 | 158 | M24x3.0 | 6~M10x85 | 17 | 27     | 40 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- For short form, light weight and high speed rotary cylinder, suitable for vertical lathe.
- Built-in safety check valves, pressure relief valves and proximity sensor.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- Stroke Detection Type can be customized to Linear Positioning System.



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area |                 | Piston stroke | Max. speed                 | Max. pressure             | I<br>Moment of inertia | Weight |
|----------------|------------------|-----------------|---------------|----------------------------|---------------------------|------------------------|--------|
|                | Extend           | Retract         |               |                            |                           |                        |        |
|                | cm <sup>2</sup>  | cm <sup>2</sup> | mm            | min <sup>-1</sup> (r.p.m.) | MPa(kgf/cm <sup>2</sup> ) | kg·m <sup>2</sup>      | kg     |
| <b>RE-150</b>  | 174.4            | 160.8           | 30            | 5500                       | 4.0 (40)                  | 0.06                   | 14.9   |
| <b>RE-200K</b> | 292.4            | 274.9           | 35            | 4000                       | 4.0 (40)                  | 0.19                   | 29.1   |
| <b>RE-200L</b> | 292.4            | 265.4           | 50            | 4000                       | 5.0 (50)                  | 0.21                   | 30.4   |
| <b>RE-250</b>  | 465.2            | 438.2           | 60            | 2000                       | 5.0 (50)                  | 0.43                   | 47.2   |

## DIMENSIONS

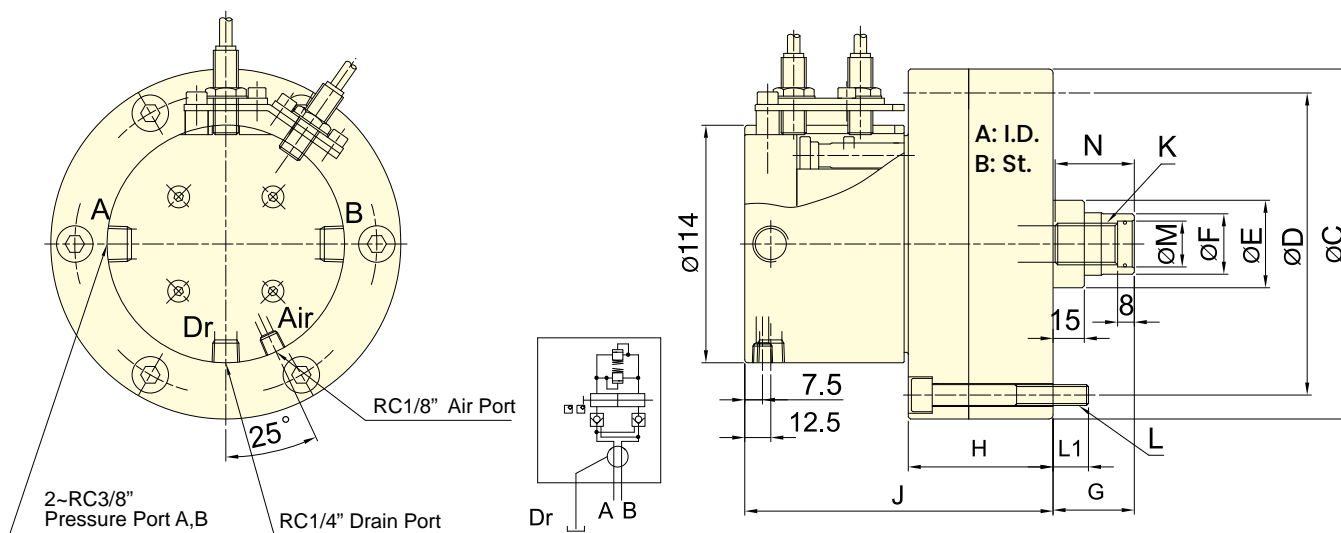
| Model          | A   | B  | C   | D1  | D2  | E (h7) | F  | G max. | G min. | H   | J     | K       | L      | L1      | L2   | M (H8) | M1 | N  | P    | Q   |
|----------------|-----|----|-----|-----|-----|--------|----|--------|--------|-----|-------|---------|--------|---------|------|--------|----|----|------|-----|
| <b>RE-150</b>  | 150 | 30 | 205 | 180 | 130 | 110    | 45 | 60     | 30     | 99  | 177.5 | M30x3.5 | M12x24 | M12x105 | 18.5 | 32     | 10 | 50 | 12.5 | 114 |
| <b>RE-200K</b> | 195 | 35 | 257 | 225 | 145 | 120    | 55 | 73     | 38     | 120 | 239   | M36x4.0 | M16x30 | M16x130 | 27   | 38     | 12 | 65 | 15   | 150 |
| <b>RE-200L</b> | 195 | 50 | 257 | 225 | 170 | 125    | 65 | 80     | 30     | 135 | 254   | M42x3.0 | M16x30 | M16x145 | 27   | 45     | 12 | 65 | 15   | 150 |
| <b>RE-250</b>  | 245 | 60 | 307 | 275 | 220 | 160    | 65 | 85     | 25     | 165 | 280   | M42x3.0 | M20x35 | M16x175 | 28   | 45     | 12 | 65 | 15   | 150 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- For short form, light weight and high speed rotary cylinder. To allow compressed air to be feed from the rear end of the distributor through the rotating union.
- Built-in safety check valves, pressure relief valves and proximity sensor.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- When used, a little oil mist should be contained.
- The rotary cylinder should not run without air passing through the air port.
- Stroke Detection Type can be customized to Linear Positioning System.

ROTARY CYLINDERS



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area          |                            | Piston stroke<br>mm | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Air connection<br>Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) | I<br>Moment of inertia<br>kg·m <sup>2</sup> | Weight<br>kg |
|----------------|---------------------------|----------------------------|---------------------|--|--|---|---|--------------|
|                | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                     |  |  |   |   |              |
| <b>RE-A110</b> | 91.2                      | 87.9                       | 20                  | 6000                                     | 4.0(40)                                    | 0.8(8)  | 0.02  | 6.9          |
| <b>RE-A120</b> | 109.3                     | 106                        | 21                  | 6000                                     | 4.0(40)                                    | 0.8(8)  | 0.02  | 8.8          |
| <b>RE-A130</b> | 128.9                     | 123.1                      | 30                  | 6000                                     | 4.0(40)                                    | 0.8(8)  | 0.03  | 9.1          |

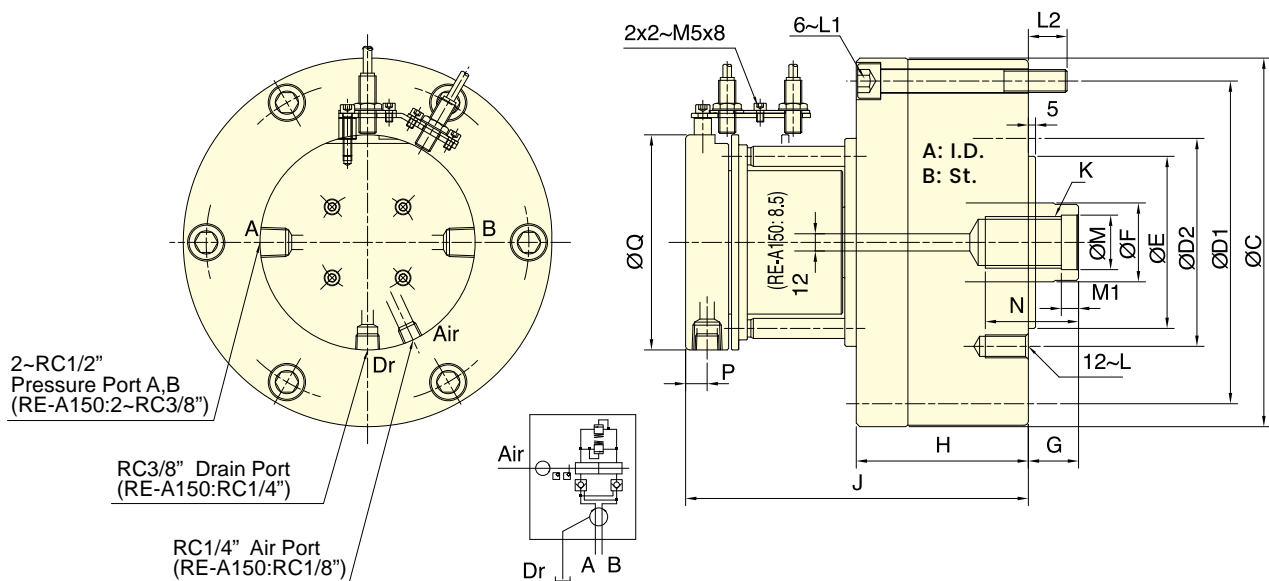
## DIMENSIONS

| Model          | A   | B  | C<br>(h7) | D   | E  | F  | G<br>max. | G<br>min. | H    | J   | K       | L        | L1 | M<br>(H8) | N  |
|----------------|-----|----|-----------|-----|----|----|-----------|-----------|------|-----|---------|----------|----|-----------|----|
| <b>RE-A110</b> | 110 | 20 | 145       | 128 | 42 | 29 | 60        | 40        | 66   | 146 | M20x2.5 | 6~M8x70  | 12 | 22        | 38 |
| <b>RE-A120</b> | 120 | 21 | 168       | 145 | 42 | 29 | 60        | 39        | 69.5 | 148 | M20x2.5 | 6~M10x75 | 17 | 22        | 38 |
| <b>RE-A130</b> | 130 | 30 | 168       | 150 | 50 | 33 | 60        | 30        | 79.5 | 158 | M24x3.0 | 6~M10x85 | 17 | 27        | 43 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- For short form, light weight and high speed rotary cylinder. To allow compressed air to be feed from the rear end of the distributor through the rotating union.
- Built-in safety check valves, pressure relief valves and proximity sensor.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- When used, a little oil mist should be contained.
- The rotary cylinder should not run without air passing through the air port.
- Stroke Detection Type can be customized to Linear Positioning System.



Subject to technical changes

## SPECIFICATIONS

| Model    | Eff. piston area          |                            | Piston stroke<br>mm | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Air connection<br>Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) | I                                      |  | Weight<br>kg |
|----------|---------------------------|----------------------------|---------------------|--|--|---|--|--|--------------|
|          | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |                     |  |  |   | Moment of inertia<br>kg-m <sup>2</sup> |  |              |
| RE-A150  | 174.4                     | 160.8                      | 30                  | 5500                                     | 4.0(40)                                    | 0.8(8)  | 0.06                                   |  | 14.9         |
| RE-A200K | 292.4                     | 274.9                      | 35                  | 4000                                     | 4.0(40)                                    | 0.8(8)  | 0.19                                   |  | 29.1         |
| RE-A200L | 292.4                     | 265.4                      | 50                  | 4000                                     | 5.0(50)                                    | 0.8(8)  | 0.21                                   |  | 30.4         |
| RE-A250  | 465.2                     | 438.2                      | 60                  | 2000                                     | 5.0(50)                                    | 0.8(8)  | 0.43                                   |  | 47.2         |

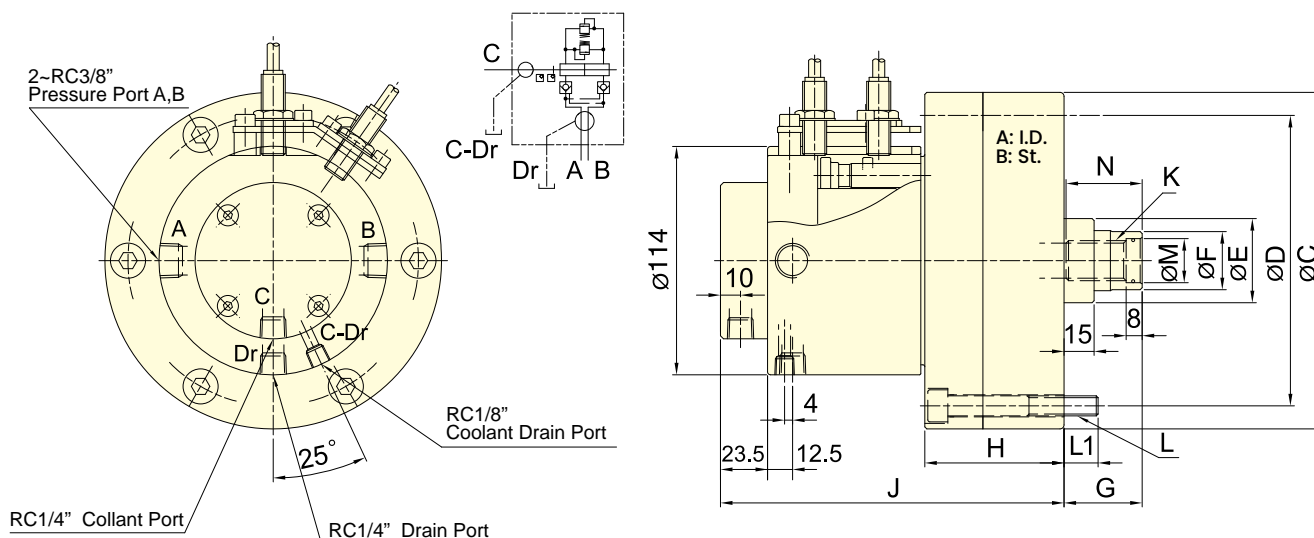
## DIMENSIONS

| Model    | A   | B  | C   | D1  | D2  | E<br>(h7) | F  | G<br>max. | G<br>min. | H   | J     | K       | L      | L1      | L2   | M<br>(H8) | M1 | N  | P    | Q   |
|----------|-----|----|-----|-----|-----|-----------|----|-----------|-----------|-----|-------|---------|--------|---------|------|-----------|----|----|------|-----|
| RE-A150  | 150 | 30 | 205 | 180 | 130 | 110       | 45 | 60        | 30        | 99  | 177.5 | M30x3.5 | M12x24 | M12x105 | 18.5 | 32        | 10 | 50 | 12.5 | 114 |
| RE-A200K | 195 | 35 | 257 | 225 | 145 | 120       | 55 | 73        | 38        | 120 | 239   | M36x4.0 | M16x30 | M16x130 | 27   | 38        | 12 | 65 | 15   | 150 |
| RE-A200L | 195 | 50 | 257 | 225 | 170 | 125       | 65 | 80        | 30        | 135 | 254   | M42x3.0 | M16x30 | M16x145 | 27   | 45        | 12 | 65 | 15   | 150 |
| RE-A250  | 245 | 60 | 307 | 275 | 220 | 160       | 65 | 85        | 25        | 165 | 280   | M42x3.0 | M20x35 | M16x175 | 28   | 45        | 12 | 65 | 15   | 150 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- For short form, light weight and high speed rotary cylinder. To allow coolant to be feed from the rear end of the distributor through the rotating union.
- Built-in safety check valves, pressure relief valves and proximity sensor.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- The rotary cylinder should not run without liquid through coolant port.
- Stroke Detection Type can be customized to Linear Positioning System.



Subject to technical changes

## SPECIFICATIONS

| Model   | Eff. piston area |                 | Piston stroke | Max. speed | Max. pressure | Coolant connection<br>Max. pressure | I                 |                   | Weight |
|---------|------------------|-----------------|---------------|------------|---------------|-------------------------------------|-------------------|-------------------|--------|
|         | Extend           | Retract         |               |            |               |                                     | Moment of inertia | kg·m <sup>2</sup> |        |
|         | cm <sup>2</sup>  | cm <sup>2</sup> |               |            |               |                                     |                   |                   |        |
| RE-L110 | 92.7             | 87.9            | 20            | 6000       | 4.0(40)       | 1.5(15)                             | 0.02              | 7.2               |        |
| RE-L120 | 109.3            | 106             | 21            | 6000       | 4.0(40)       | 1.5(15)                             | 0.03              | 9.1               |        |
| RE-L130 | 128.9            | 123.1           | 30            | 6000       | 4.0(40)       | 1.5(15)                             | 0.03              | 9.5               |        |

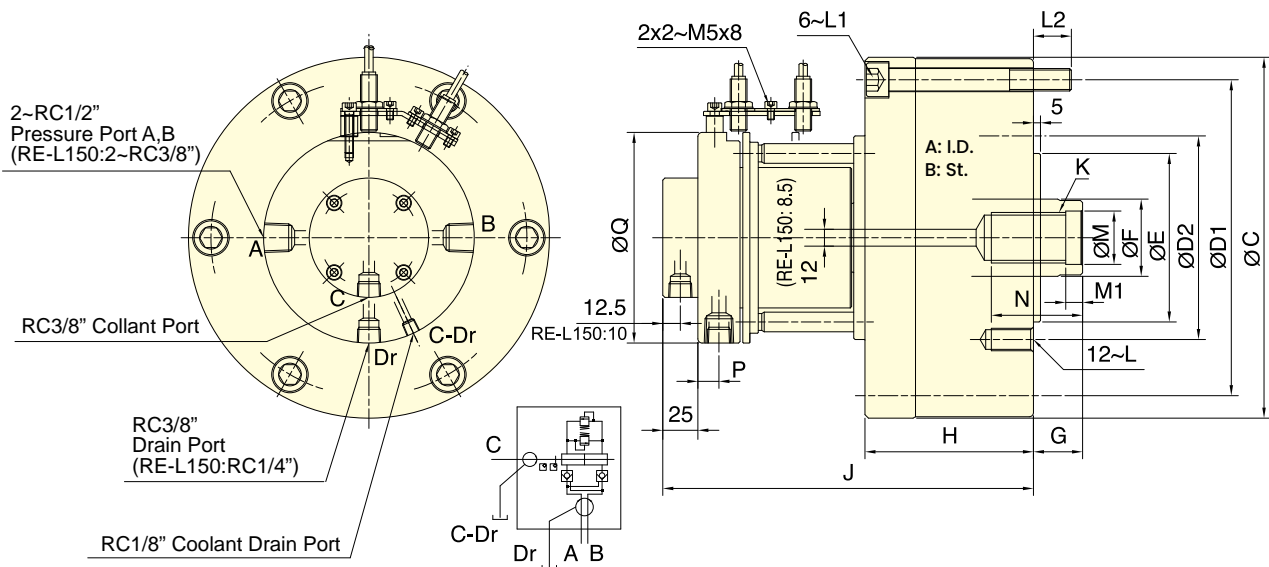
## DIMENSIONS

| Model   | A   | B  | C (h7) | D   | E  | F  | G max. | G min. | H    | J     | K       | L        | L1 | M (H8) | N  |
|---------|-----|----|--------|-----|----|----|--------|--------|------|-------|---------|----------|----|--------|----|
| RE-L110 | 110 | 20 | 145    | 128 | 42 | 29 | 60     | 40     | 66   | 169.5 | M20x2.5 | 6~M8x70  | 12 | 22     | 38 |
| RE-L120 | 120 | 21 | 168    | 145 | 42 | 29 | 60     | 39     | 69.5 | 171.5 | M20x2.5 | 6~M10x75 | 17 | 22     | 38 |
| RE-L130 | 130 | 30 | 168    | 150 | 50 | 33 | 60     | 30     | 79.5 | 181.5 | M24x3.0 | 6~M10x85 | 17 | 27     | 43 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- For short form, light weight and high speed rotary cylinder. To allow coolant to be feed from the rear end of the distributor through the rotating union, suitable for vertical lathe.
- Built-in safety check valves, pressure relief valves and proximity sensor.
- Can screw it from the rear end of the cylinder when mounting.
- The drain port should be independently connected to oil tank to avoid back pressure.
- The rotary cylinder should not run without liquid through coolant port.
- Stroke Detection Type can be customized to Linear Positioning System.



Subject to technical changes

### SPECIFICATIONS

| Model           | Eff. piston area |                 | Piston stroke<br>mm | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Coolant connection<br>Max. pressure<br>MPa (kgf/cm <sup>2</sup> ) | I                 |      | Weight<br>kg |
|-----------------|------------------|-----------------|---------------------|--|--|---|-------------------|------|--------------|
|                 | Extend           | Retract         |                     |  |  |   | Moment of inertia |      |              |
|                 | cm <sup>2</sup>  | cm <sup>2</sup> |                     |  |  |   |                   |      |              |
| <b>RE-L150</b>  | 174.4            | 160.8           | 30                  | 5500                                     | 4.0(40)                                    | 1.5(15)   | 0.06              | 15.2 |              |
| <b>RE-L200K</b> | 292.4            | 274.9           | 35                  | 4000                                     | 4.0(40)                                    | 1.5(15)   | 0.19              | 29.4 |              |
| <b>RE-L200L</b> | 292.4            | 265.4           | 50                  | 4000                                     | 5.0(50)                                    | 1.5(15)   | 0.21              | 30.7 |              |
| <b>RE-L250</b>  | 465.2            | 438.2           | 60                  | 2000                                     | 5.0(50)                                    | 1.5(15)   | 0.43              | 47.5 |              |

### DIMENSIONS

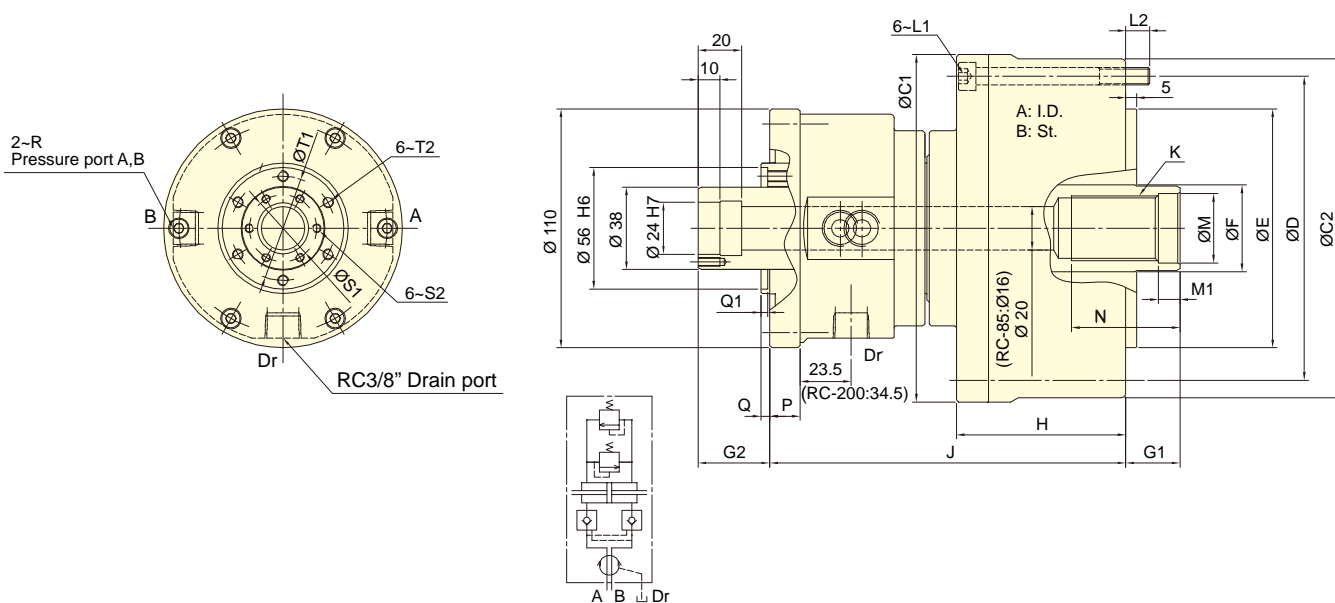
| Model           | A   | B  | C   | D1  | D2  | E (h7) | F  | G max. | G min. | H   | J   | K       | L      | L1      | L2   | M (H8) | M1 | N  | P    | Q   |
|-----------------|-----|----|-----|-----|-----|--------|----|--------|--------|-----|-----|---------|--------|---------|------|--------|----|----|------|-----|
| <b>RE-L150</b>  | 150 | 30 | 205 | 180 | 130 | 110    | 45 | 60     | 30     | 99  | 201 | M30x3.5 | M12x24 | M12x105 | 18.5 | 32     | 10 | 50 | 12.5 | 114 |
| <b>RE-L200K</b> | 195 | 35 | 257 | 225 | 145 | 120    | 55 | 73     | 38     | 120 | 264 | M36x4.0 | M16x30 | M16x130 | 27   | 38     | 12 | 65 | 15   | 150 |
| <b>RE-L200L</b> | 195 | 50 | 257 | 225 | 170 | 125    | 65 | 80     | 30     | 135 | 279 | M42x3.0 | M16x30 | M16x145 | 27   | 45     | 12 | 65 | 15   | 150 |
| <b>RE-L250</b>  | 245 | 60 | 307 | 275 | 220 | 160    | 65 | 85     | 25     | 165 | 305 | M42x3.0 | M20x35 | M16x175 | 28   | 45     | 12 | 65 | 15   | 150 |

\*Proximity sensor : DC 10-30V 100mA NPN.



- Center through-hole hydraulic cylinder, suitable for horizontal CNC lathes.
- Can choose an external rotary joint with either single or double paths.
- It meets the demand for coolant through spindle and airtight pressure detect function.
- Has a built-in check valve for safety.
- Stroke control via proximity switch or linear positioning system.
- The proximity switch and single or double paths rotating joint are optional.

ROTARY CYLINDERS



Subject to technical changes

## SPECIFICATIONS

| Model         | Eff. piston area          |                            | Piston stroke | Max. speed | Max. pressure | I<br>Moment of inertia | Weight |
|---------------|---------------------------|----------------------------|---------------|------------|---------------|------------------------|--------|
|               | Extend<br>cm <sup>2</sup> | Retract<br>cm <sup>2</sup> |               |            |               |                        |        |
| <b>RC-85</b>  | 43.8                      | 48.1                       | 20            | 5000       | 3.5(35)       | 0.01                   | 6.8    |
| <b>RC-100</b> | 65.6                      | 64.4                       | 20            | 5000       | 3.5(35)       | 0.02                   | 9.2    |
| <b>RC-125</b> | 109.8                     | 108.5                      | 25            | 5000       | 3.5(35)       | 0.03                   | 11.1   |
| <b>RC-145</b> | 152.2                     | 143.9                      | 30            | 5000       | 3.5(35)       | 0.03                   | 14.6   |
| <b>RC-200</b> | 279.3                     | 273.6                      | 35            | 4000       | 4.0(40)       | 0.26                   | 35.5   |

## DIMENSIONS

| Model         | A   | B  | C1  | C2  | D   | E (h7) | F  | G1max. | G1min. | G2max. | G2min. | H     | J     | K       |
|---------------|-----|----|-----|-----|-----|--------|----|--------|--------|--------|--------|-------|-------|---------|
| <b>RC-85</b>  | 85  | 20 | 120 | 116 | 100 | 65     | 32 | 45     | 25     | 28     | 8      | 76.5  | 156.5 | M24x1.5 |
| <b>RC-100</b> | 100 | 20 | 135 | 131 | 115 | 80     | 40 | 45     | 25     | 28     | 8      | 72    | 158.5 | M30x1.5 |
| <b>RC-125</b> | 125 | 25 | 160 | 156 | 140 | 110    | 40 | 50     | 25     | 33     | 8      | 78    | 164   | M30x1.5 |
| <b>RC-145</b> | 145 | 30 | 187 | 183 | 165 | 110    | 50 | 55     | 25     | 38     | 8      | 83    | 169.5 | M40x1.5 |
| <b>RC-200</b> | 195 | 35 | 257 | 257 | 225 | 120    | 55 | 73     | 38     | 51.5   | 16.5   | 120.5 | 22.5  | M36x4.0 |

| Model         | L1        | L2   | M(H8) | M1 | N  | P  | Q   | Q1 | R     | S1 | S2    | T1 | T2    |
|---------------|-----------|------|-------|----|----|----|-----|----|-------|----|-------|----|-------|
| <b>RC-85</b>  | 6~M8x80   | 12.5 | 25.4  | 10 | 40 | 14 | 4   | 3  | RC3/8 | 31 | M4x10 | 48 | M5x9  |
| <b>RC-100</b> | 6~M8x75   | 12.5 | 32    | 10 | 50 | 14 | 4   | 3  | RC3/8 | 31 | M4x10 | 48 | M5x9  |
| <b>RC-125</b> | 6~M8x80   | 11   | 32    | 10 | 50 | 14 | 4   | 3  | RC3/8 | 31 | M4x10 | 48 | M5x9  |
| <b>RC-145</b> | 6~M10x90  | 18   | 42    | 12 | 57 | 14 | 4   | 3  | RC3/8 | 31 | M4x10 | 48 | M5x9  |
| <b>RC-200</b> | 6~M16x130 | 26   | 38    | 12 | 65 | 15 | 6.5 | 4  | RC1/2 | 35 | M4x10 | 60 | M5x11 |

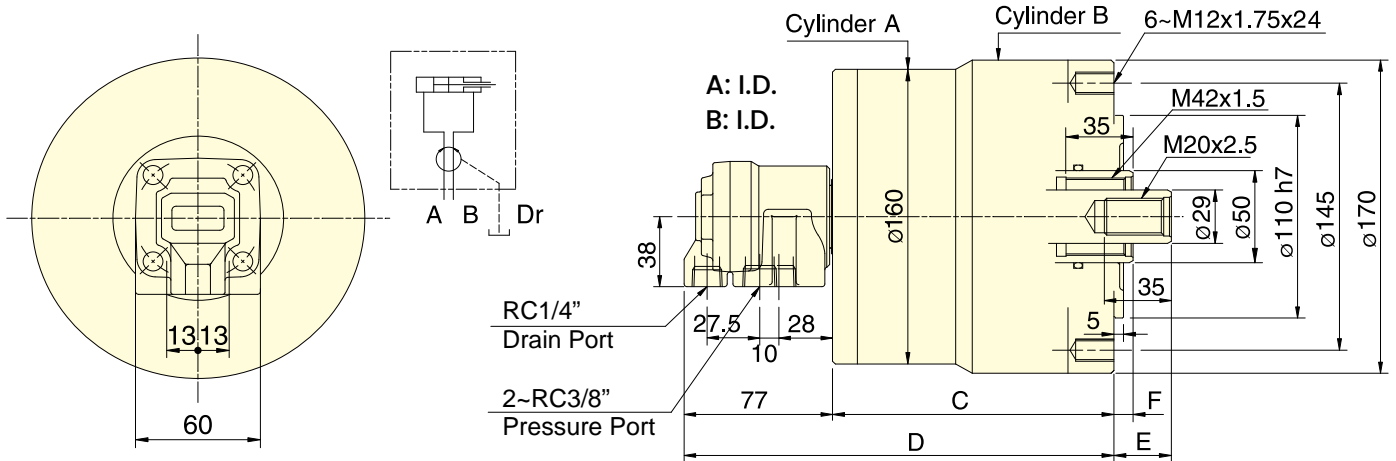
- Rotating joint and Proximity switch with bracket type.

|           |  |           |   |
|-----------|--|-----------|---|
| <b>F1</b> | With single path rotating joint (Fixed type) | <b>F2</b> | With double paths rotating joint(Fixed type)  |
|           |  |           |   |
| <b>M1</b> | With single path rotating joint(Moving type) | <b>M2</b> | With double paths rotating joint(Moving type) |
|           |  |           |   |
| <b>B</b>  | linear Sensor with bracket                   | <b>S</b>  | Proximity switch with bracket                 |
|           |  |           |   |

- \* The proximity switch and rotary joint are optional.
- \* Choose and attach the appropriate type.
- \* Please contact AUTOGRIP for more detailed drawing.



- For short form, light weight, double rod rotary cylinder.
- The drain port should be independently connected to oil tank to avoid back pressure.



Subject to technical changes

## SPECIFICATIONS

| Model          | Eff. piston area     |                      |                      |                      | Piston stroke<br>mm | Max. speed<br>min <sup>-1</sup> (r.p.m.) | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | I<br>Moment of inertia | Weight<br>kg |
|----------------|----------------------|----------------------|----------------------|----------------------|---------------------|--|--|------------------------|--------------|
|                | Extend               |                      | Retract              |                      |                     |  |  |                        |              |
|                | A<br>cm <sup>2</sup> | B<br>cm <sup>2</sup> | A<br>cm <sup>2</sup> | B<br>cm <sup>2</sup> |                     |  |  |                        |              |
| <b>RD-120N</b> | 122.7                | 126.1                | 116.1                | 113.1                | 20                  | 5000                                     | 3.0(30)                                    | 0.14                   | 11.2         |
| <b>RD-125N</b> | 122.7                | 126.1                | 116.1                | 113.1                | 25                  | 5000                                     | 3.0(30)                                    | 0.15                   | 11.4         |

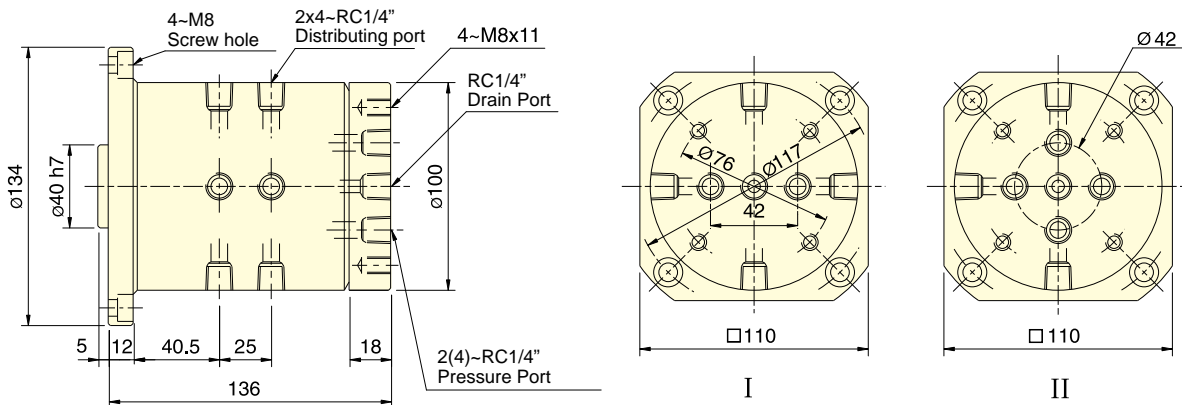
## DIMENSIONS

| Model          | A   | B   | C   | D   | E max. | E min. | F max. | F min. |
|----------------|-----|-----|-----|-----|--------|--------|--------|--------|
| <b>RD-120N</b> | 125 | 130 | 137 | 214 | 60     | 40     | 35     | 15     |
| <b>RD-125N</b> | 125 | 130 | 147 | 224 | 55     | 30     | 35     | 10     |





- Rotary valve is used for clamping cylinder on rotary table.
- Through unique design, it can make the rotary housing be rotated light force and is free from oil leaking.
- I Type is a single circuit which controls the clamping.
- II Type is a double circuit which separately controls the clamping.
- The drain port of RV type should be independently connected to oil tank to avoid back pressure.

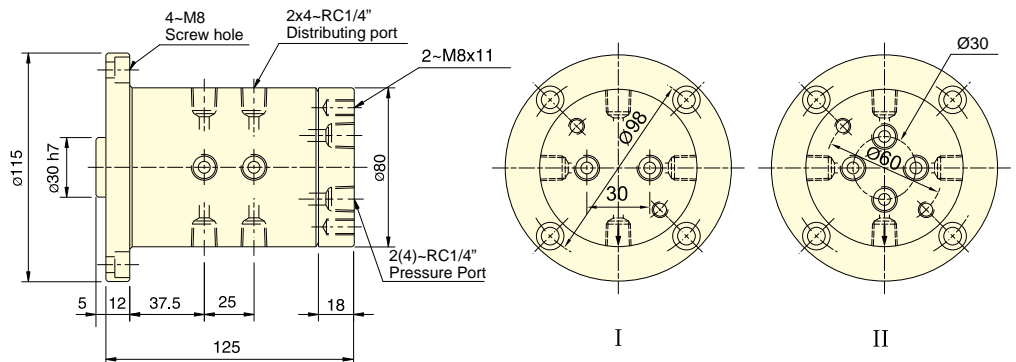


Subject to technical changes

### SPECIFICATIONS

| Model         | Distributing | Max. pressure             | Weight |
|---------------|--------------|---------------------------|--------|
|               |              | MPa(kgf/cm <sup>2</sup> ) | kg     |
| <b>RV-31H</b> | 4 (by order) | 4.0 (40)                  | 7.4    |

Note:RV can be custom-made.



Subject to technical changes

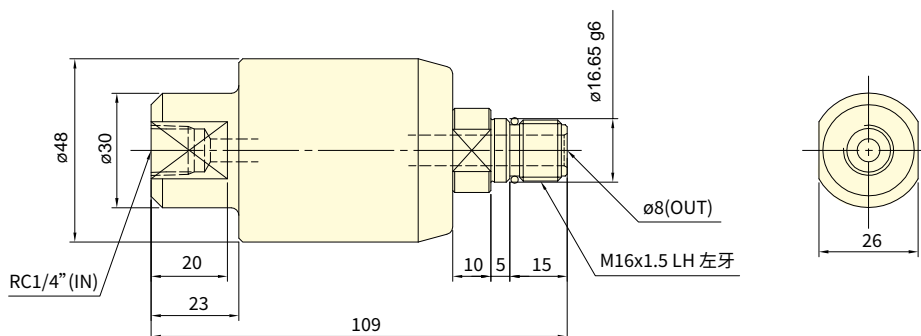
### SPECIFICATIONS

| Model          | Distributing | Max. pressure             | Weight |
|----------------|--------------|---------------------------|--------|
|                |              | MPa(kgf/cm <sup>2</sup> ) | kgs    |
| <b>RV-A31H</b> | 4 (by order) | 0.8(8)                    | 4.8    |

Note:RV-A can be custom-made.



- Single-passage design suitable for air or water fluid transmission.
- Compact structure and easy installation, ideal for various rotating equipment.
- Equipped with high-efficiency sealing technology to prevent leakage and ensure long service life.
- The joint should not run without liquid through coolant port.



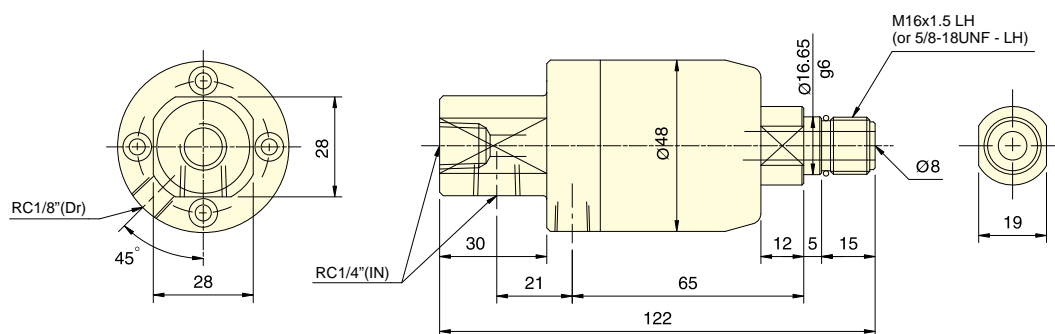
Subject to technical changes

### SPECIFICATIONS

| Model        | Coolant connection<br>PV Limit value<br>(MPa·r/m.) | Air connection<br>PV Limit value<br>(MPa·r/m.) | Delivery amount<br>(at 50 kgf/cm <sup>2</sup> ) | Max. speed<br>(r.p.m.) | Coolant connection<br>Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Air connection<br>Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Weight (kg) |
|--------------|--|--|---|------------------------|--|--|-------------|
| <b>RJ-52</b> | 8000   | 3200   | 28l/min   | 3000                   | 4.0(40)  | 0.8(8.0)   | 0.5         |



- Coolant joint for high speed, high pressure. Usable for oil and water-soluble coolant.
- Seal bushing inside is made of cemented carbide and ceramics, which provide higher wear-resistance.
- The joint should not run without liquid through coolant port.



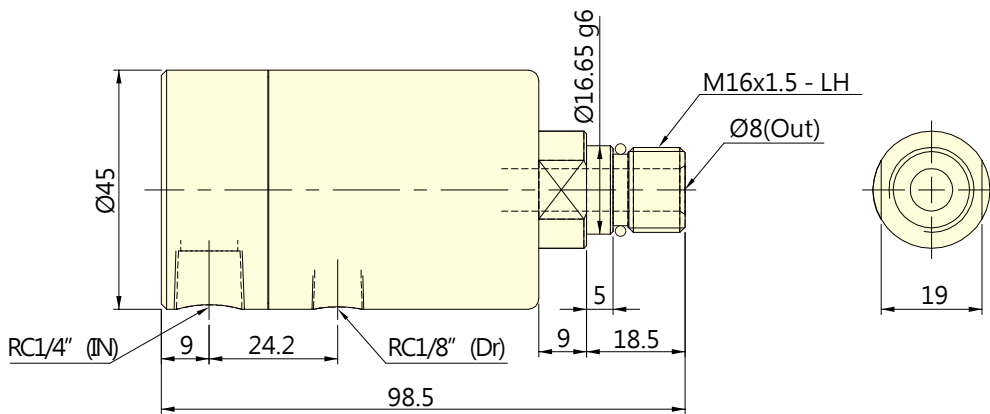
Subject to technical changes

### SPECIFICATIONS

| Model        | PV Limit value MPa· r/m | Max. pressure MPa(kgf/cm <sup>2</sup> ) | Delivery amount (at 50 kgf/cm <sup>2</sup> ) | Max. speed (r.p.m.) | Weight (kg) |
|--------------|-------------------------|---|--|---------------------|-------------|
| <b>RJ-80</b> | 14400                   | 6.0(60)                                 | 28 l/min                                     | 8000                | 0.5         |



- Short form, light weight coolant rotating joint.
- Coolant joint for high speed, high pressure. Usable for oil and water-soluble coolant.
- Seal bushing inside is made of cemented carbide and ceramics, which provide higher wear-resistance.
- The seal will depart automatically if no liquid passes during operation, and will not be damaged due to dry touching.
- Min. pressure is 4kgf/cm<sup>2</sup>.



Subject to technical changes

### SPECIFICATIONS

| Model        | PV Limit value<br>MPa·r/m | Max. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Delivery amount<br>(at 50 kgf/cm <sup>2</sup> ) | Max. speed (r.p.m.) | Min. pressure<br>MPa(kgf/cm <sup>2</sup> ) | Weight (kg) |
|--------------|---------------------------|--|---|---------------------|--|-------------|
| <b>RJ-92</b> | 17500                     | 7.0(70)                                    | 28 l/min  | 10000               | 0.4(4)                                     | 0.46        |

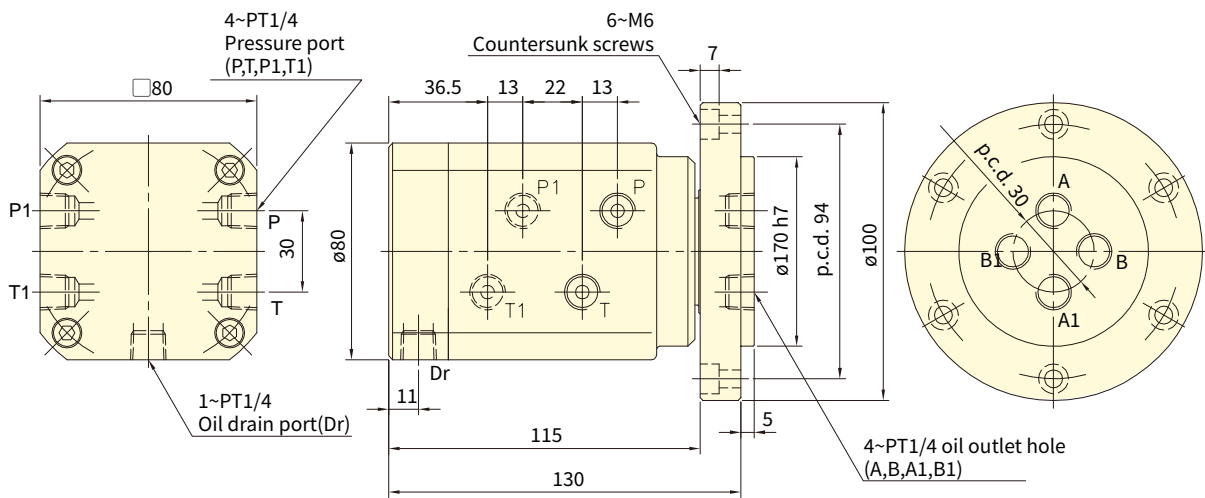
# RJ-4E/RJ-5E HYDRAULIC ROTARY JOINT

Multi-passage, single medium

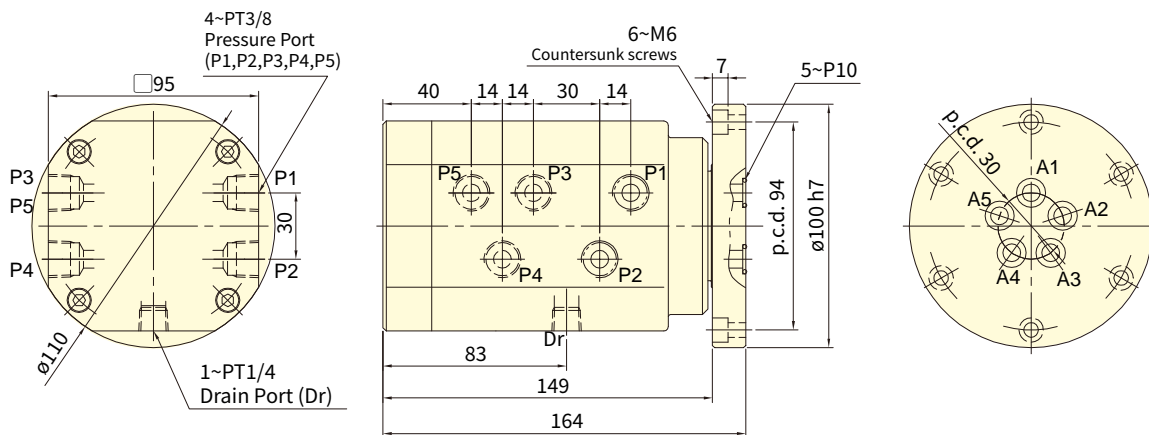


- Available in 4-port / 4-channel and 5-port / 5-channel configurations, with customizable multi-channel hydraulic options upon request.
- Designed for bidirectional hydraulic control such as clamping and unclamping, ensuring precise and reliable operation to enhance productivity.
- Each channel adopts a balanced mechanical seal structure.
- The hydraulic circuit layout, number of passages, and mounting interface can all be customized according to requirements.

## Model:RJ-4E



## Model:RJ-5E



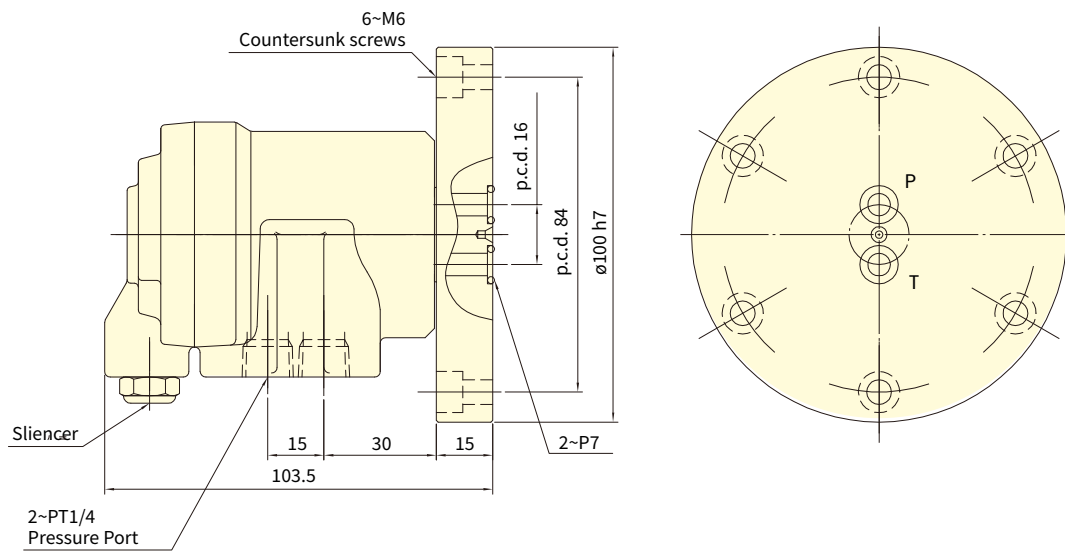
Subject to technical changes

## SPECIFICATIONS

| Model | Distributing | Max. speed (r.p.m.) | Max. pressure (kgf/cm <sup>2</sup> ) | Weight (kg) |
|-------|--------------|---------------------|--------------------------------------|-------------|
| RJ-4E | 4 in / 4 out | 3500                | 35                                   | 4.5         |
| RJ-5E | 5 in / 5 out | 3500                | 35                                   | 7.5         |



- Provides 2 independent channels for compressed air transmission.
- Integrates multiple air lines into a single component, significantly simplifying piping layout and saving installation space.
- Minimal rotational resistance ensures smooth and stable operation, effectively saving energy.
- The air configuration, number of passages, and mounting interface can all be customized according to requirements



Subject to technical changes

### SPECIFICATIONS

| Model  | Distributing | Max. speed (r.p.m.) | Max. pressure (kgf/cm <sup>2</sup> ) | Weight (kg) |
|--------|--------------|---------------------|--------------------------------------|-------------|
| RJ-A2E | 2            | 3000                | 8                                    | 1.2         |

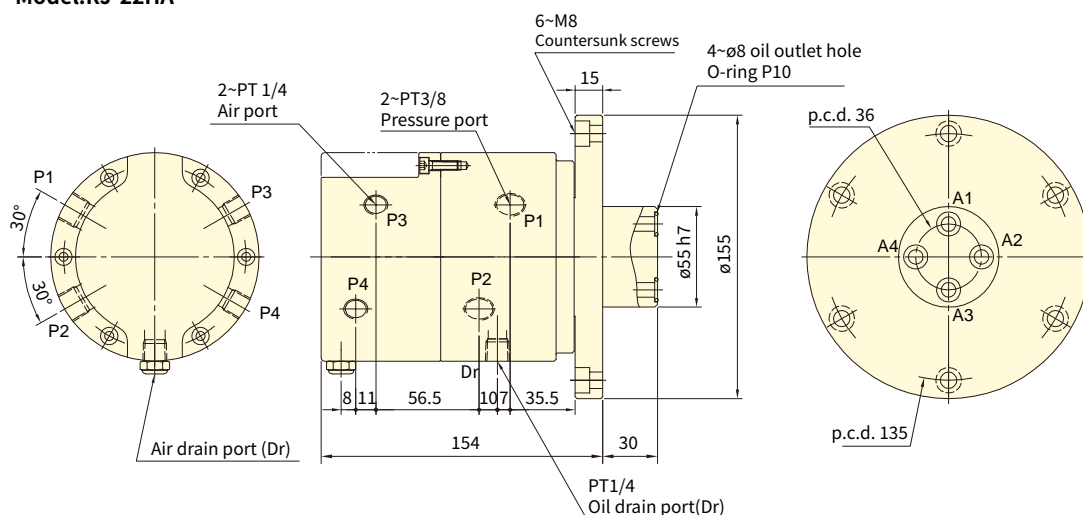
# RJ-22HA/RJ-41HA COMBINED AIR AND HYDRAULIC ROTARY JOINT

Multi-passage, dual medium

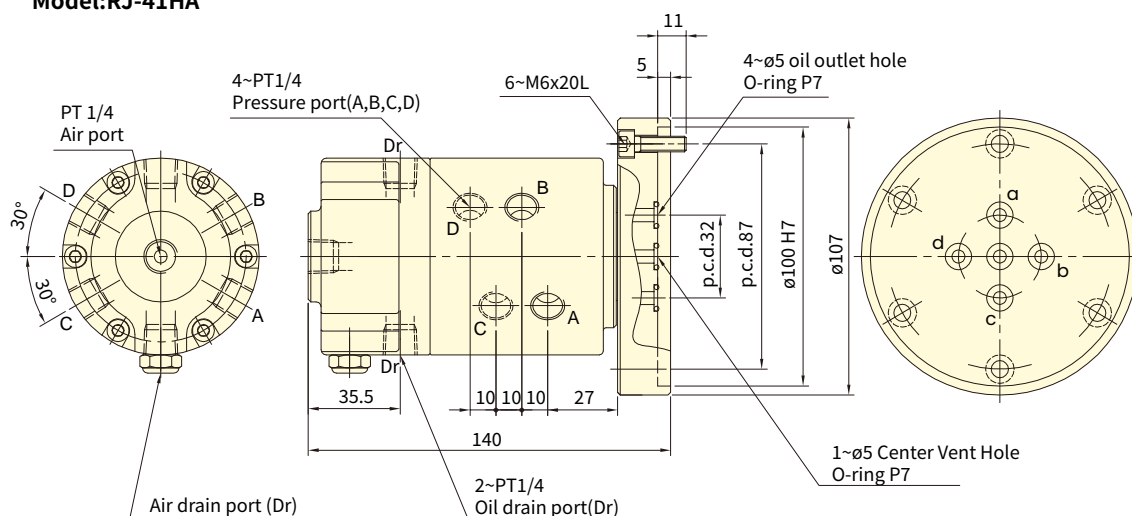


- Available Configurations: 4-Channel (2 Hydraulic + 2 Air) and 5-Channel (4 Hydraulic + 1 Air)
- Enables clamping and unclamping control; applicable to workpiece detection, tool air-blow cleaning, and similar automation functions.
- Ideal for rotary tables on mill-turn machines and multi-axis machining centers.
- Features high-performance sealing technology to prevent leakage of oil, ensuring long-term operational stability.
- Customizable Air and hydraulic configurations, number of passages, and mounting interface and supports dual media
- Optional integration with optical scales is available for enhanced precision and system synchronization.

**Model:RJ-22HA**



**Model:RJ-41HA**



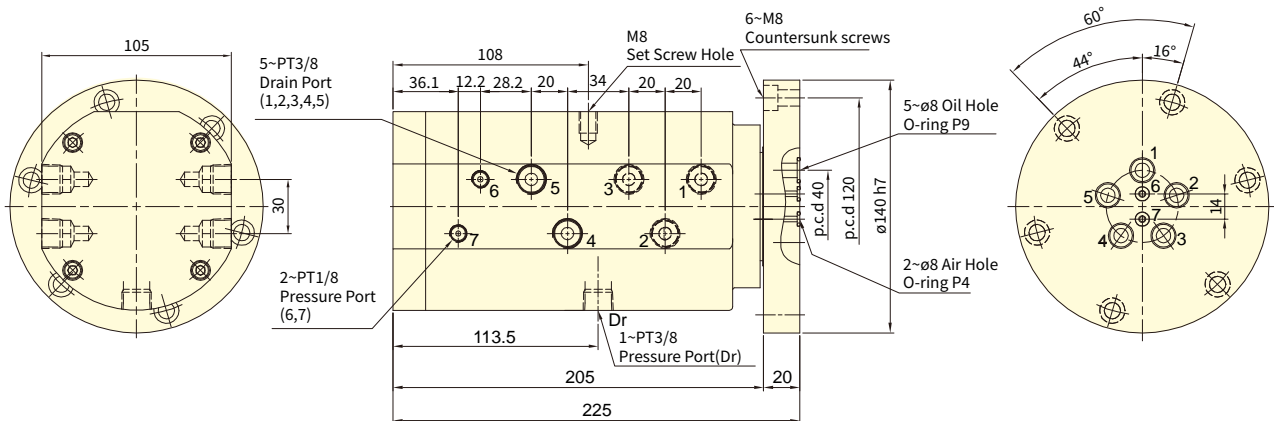
Subject to technical changes

## SPECIFICATIONS

| Model   | Distributing        | Max. speed (r.p.m.) | Max. pressure MPa(kgf/cm <sup>2</sup> ) |           | Weight (kg) |
|---------|---------------------|---------------------|---|-----------|-------------|
|         |                     |                     | Pneumatic                               | Hydraulic |             |
| RJ-22HA | 2 Hydraulic + 2 Air | 1000                | 8                                       | 60        | 10.5        |
| RJ-41HA | 4 Hydraulic + 1 Air | 3000                | 8                                       | 50        | 2.95        |



- 5 Hydraulic + 2 Air Channel Design.
- Supports multi-media transmission, ideal for simultaneous control of clamping and unclamping operations.
- The fully sealed air passage design ensures independent channels for stable pressure, with the air section also supporting vacuum applications.
- High-performance sealing structure prevents cross-leakage between oil and air, enhancing system reliability and machining accuracy.
- Supports medium to low-speed rotation, suitable for multi-axis workstations and compound machining centers.
- Customizable Air and hydraulic configurations, number of passages, and mounting interface and supports dual media
- Optional integration with optical scales is available for enhanced precision and system synchronization.

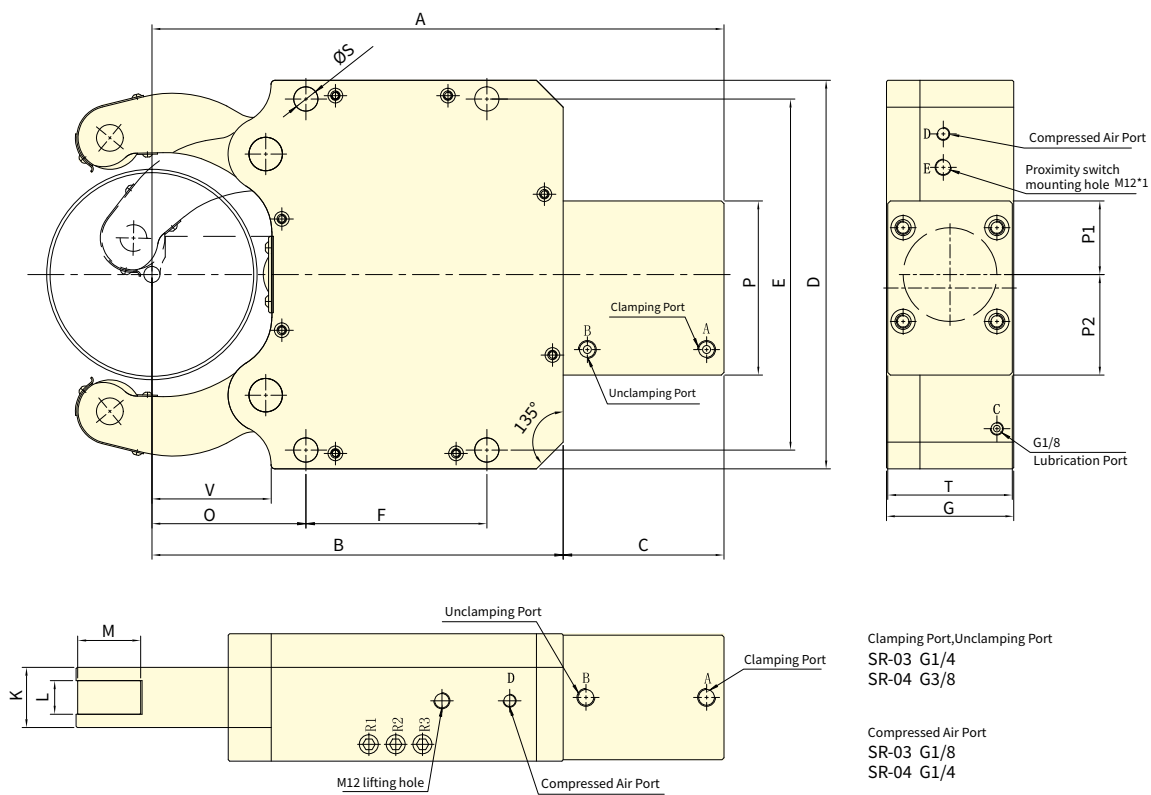


### SPECIFICATIONS

| Model          | Distributing        | Max. speed (r.p.m.) | Max. pressure (kgf/cm <sup>2</sup> ) |           | Weight (kg) |
|----------------|---------------------|---------------------|--------------------------------------|-----------|-------------|
|                |                     |                     | Pneumatic                            | Hydraulic |             |
| <b>RJ-52HV</b> | 5 Hydraulic + 2 Air | 1000                | 8                                    | 70        | 15.9        |



- High Clamping Force and High Concentricity.
- Enclosed Main Body Design.
- Central Lubrication: Grease/Oil/Oil + Air.
- Built-in Check Valve Locking Mechanism.
- Compressed Air Waterproof and Chip-Resistant Design: Prevents chips from entering the main body during machining.
- Chip Guarding Device.



Subject to technical changes

## SPECIFICATIONS

| Model  | Eff. piston area | Chuckling Dia. Max. | Chuckling Dia. Min. | Max. clamping force | Max. roller surface speed | Max. pressure | Clamping accuracy | Repeat accuracy | clamping weight | Weight |
|--------|------------------|---------------------|---------------------|---------------------|---------------------------|---------------|-------------------|-----------------|-----------------|--------|
|        | cm <sup>2</sup>  | mm                  | mm                  | kN (kgf)            | M/min.                    | bar           | mm                | mm              | kg              | kg     |
| SR-02A | 19.6             | 102                 | 8                   | 4.59(468)           | 900                       | 30            | 0.02              | 0.005           | 459             | 19     |
| SR-03  | 38.5             | 152                 | 12                  | 10.2(1040)          | 750                       | 60            | 0.02              | 0.005           | 1000            | 39     |
| SR-04  | 63.5             | 245                 | 30                  | 15(1529)            | 760                       | 75            | 0.05              | 0.007           | 1500            | 98     |

## DIMENSIONS

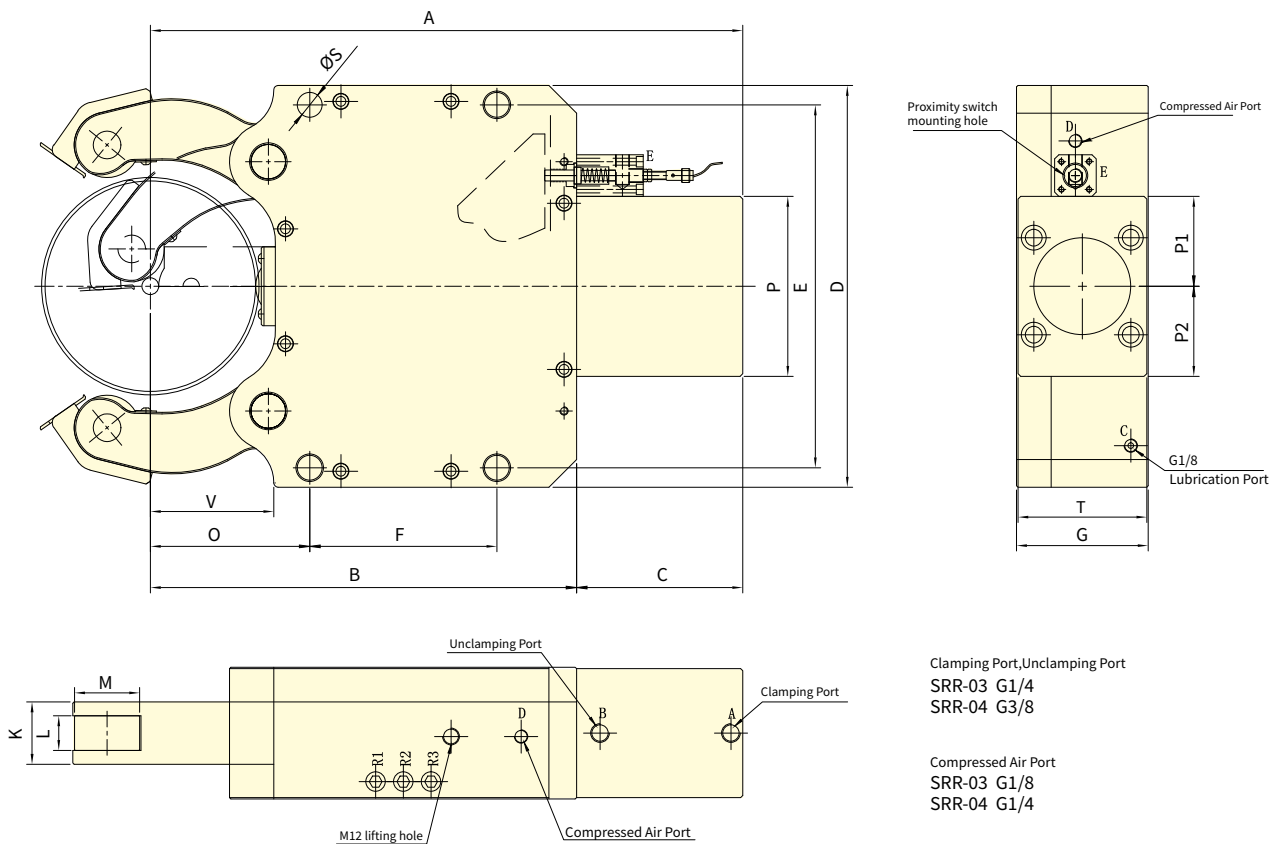
| Model  | A   | B   | C   | D   | E   | F   | G   | O   |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|
| SR-02A | 279 | 197 | 82  | 205 | 170 | 85  | 70  | 70  |
| SR-03  | 427 | 307 | 120 | 290 | 262 | 135 | 95  | 115 |
| SR-04  | 603 | 448 | 155 | 405 | 365 | 240 | 110 | 146 |

| Model  | K  | L (Width of rollers) | M (Diameter of rollers) | P   | P1 | P2 | S  | T   | V   |
|--------|----|----------------------|-------------------------|-----|----|----|----|-----|-----|
| SR-02A | 35 | 19                   | 35                      | 102 | 51 | 51 | 14 | 68  | 54  |
| SR-03  | 45 | 25                   | 47                      | 130 | 55 | 75 | 18 | 93  | 89  |
| SR-04  | 60 | 25                   | 52                      | 150 | 75 | 75 | 23 | 105 | 128 |



- Precision Type.
- Sealed body design for low maintenance.
- Programmable, suitable for automated assembly lines.
- Equipped with water/air sprays for debris, coolant-proof, and chip-proof.
- Range: 12-245mm.



Subject to technical changes

## SPECIFICATIONS

| Model         | Eff. piston area | Chucking Dia. Max. | Chucking Dia. Min. | Max. clamping force | Max. roller surface speed | Max. pressure | Clamping accuracy | Repeat accuracy | clamping weight | Weight |
|---------------|------------------|--------------------|--------------------|---------------------|---------------------------|---------------|-------------------|-----------------|-----------------|--------|
|               | cm <sup>2</sup>  | mm                 | mm                 | kN (kgf)            | M/min.                    | bar           | mm                | mm              | kg              | kg     |
| <b>SRR-03</b> | 38.5             | 152                | 12                 | 10.2(1040)          | 750                       | 65            | 0.04              | 0.007           | 1000            | 39     |
| <b>SRR-04</b> | 63.5             | 245                | 30                 | 15(1529)            | 760                       | 60            | 0.05              | 0.007           | 1500            | 98     |

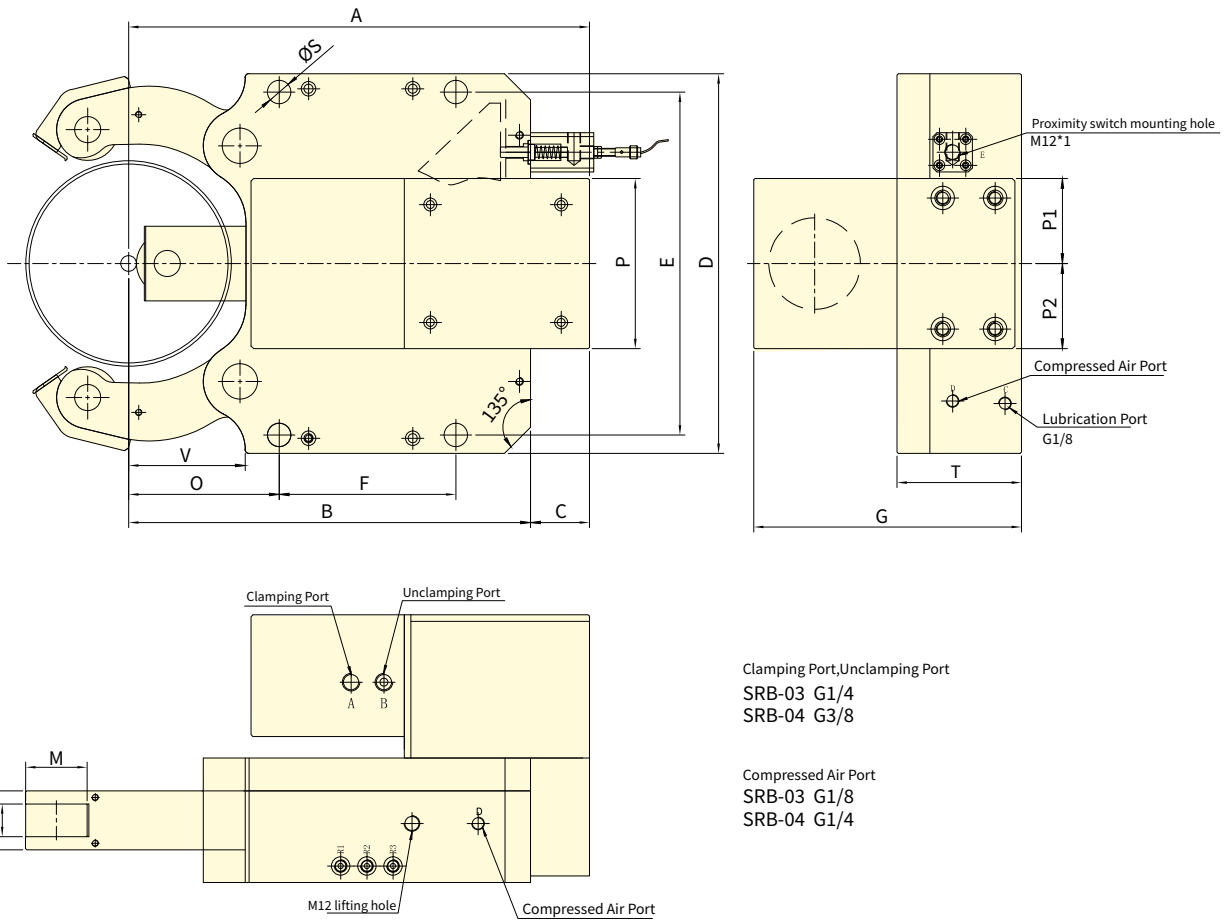
## DIMENSIONS

| Model         | A   | B   | C   | D   | E   | F   | G   | O   |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| <b>SRR-03</b> | 427 | 307 | 120 | 290 | 262 | 135 | 95  | 115 |
| <b>SRR-04</b> | 603 | 448 | 155 | 405 | 365 | 240 | 110 | 146 |

| Model         | K  | L<br>(Width of rollers) | M<br>(Diameter of rollers) | P   | P1 | P2 | S  | T   | V   |
|---------------|----|-------------------------|----------------------------|-----|----|----|----|-----|-----|
| <b>SRR-03</b> | 45 | 25                      | 47                         | 130 | 65 | 65 | 18 | 93  | 89  |
| <b>SRR-04</b> | 60 | 25                      | 52                         | 150 | 75 | 75 | 23 | 105 | 128 |



- Side-Mounted Hydraulic Cylinder Steady Rest.
- Fully Sealed Body, Low Maintenance.
- Optional Water/Air Jet for Chip Removal and Cooling Functionality.
- Compact Size and Structure.
- Range: 12-245 mm.



Subject to technical changes

## SPECIFICATIONS

| Model         | Eff. piston area | Chucking Dia. Max. | Chucking Dia. Min. | Max. clamping force | Max. roller surface speed | Max. pressure | Clamping accuracy | Repeat accuracy | clamping weight | Weight |
|---------------|------------------|--------------------|--------------------|---------------------|---------------------------|---------------|-------------------|-----------------|-----------------|--------|
|               | cm <sup>2</sup>  | mm                 | mm                 | kN (kgf)            | M/min.                    |               |                   |                 |                 |        |
| <b>SRB-03</b> | 38.5             | 152                | 12                 | 10(1019)            | 850                       | 55            | 0.04              | 0.007           | 1000            | 44     |
| <b>SRB-04</b> | 63.5             | 245                | 30                 | 15(1529)            | 750                       | 75            | 0.05              | 0.007           | 1500            | 115    |

## DIMENSIONS

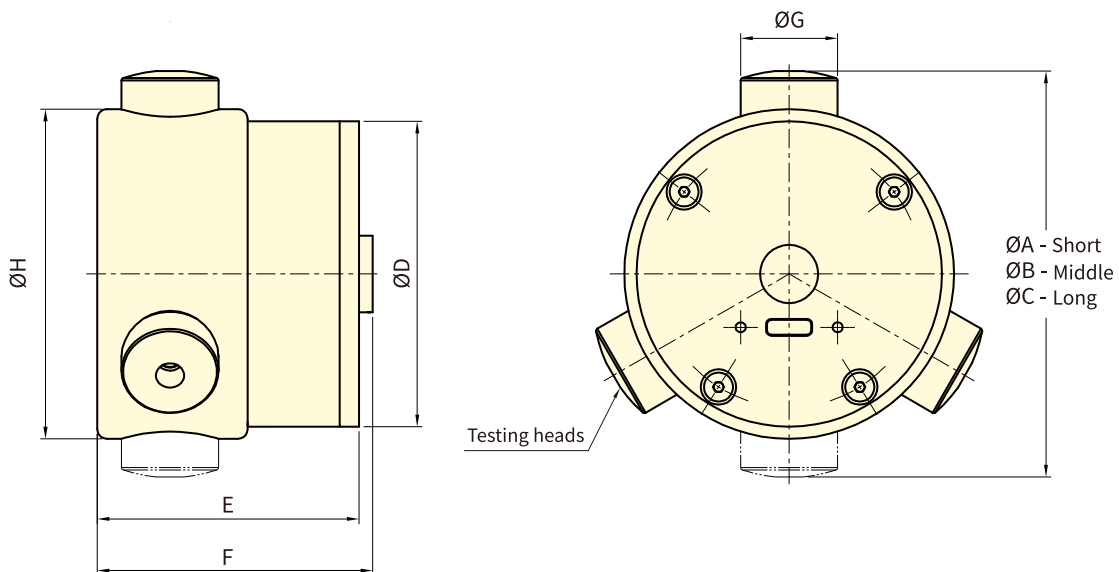
| Model         | A   | B   | C  | D   | E   | F   | G     | O   |
|---------------|-----|-----|----|-----|-----|-----|-------|-----|
| <b>SRB-03</b> | 352 | 307 | 45 | 290 | 262 | 135 | 204.5 | 115 |
| <b>SRB-04</b> | 480 | 448 | 32 | 405 | 365 | 240 | 245   | 146 |

| Model         | K  | L<br>(Width of rollers) | M<br>(Diameter of rollers) | P   | P1 | P2 | S  | T   | V   |
|---------------|----|-------------------------|----------------------------|-----|----|----|----|-----|-----|
| <b>SRB-03</b> | 45 | 25                      | 47                         | 130 | 65 | 65 | 18 | 95  | 89  |
| <b>SRB-04</b> | 60 | 25                      | 52                         | 150 | 75 | 75 | 23 | 110 | 128 |



- **Stable Bluetooth 5.0 Transmission:** Equipped with the latest Bluetooth 5.0 technology, ensuring stability in wireless connections.
- **Convenient Type-C Charging:** Supports Type-C charging for added convenience in recharging.
- **High-Performance Lithium Battery:** Provides a longer-lasting battery life, eliminating concerns about power during work.
- **Supports Android and iOS:** Whether you use Android or iOS systems, the GFS-100 is perfectly compatible, offering a seamless experience.
- **Configurable for 2-Jaw or 3-Jaw Operation:** Based on your specific needs, the GFS-100 can easily be configured for either 2-jaw or 3-jaw operation, providing greater flexibility.
- **Note:** The first-generation gripping force sensor (GFS-100) and the second-generation gripping force sensor (GFS-100) APP are not compatible and cannot be used interchangeably.
- **iOS System:** Apple iOS 16.1.2.
- **Android System:** Android version 12.



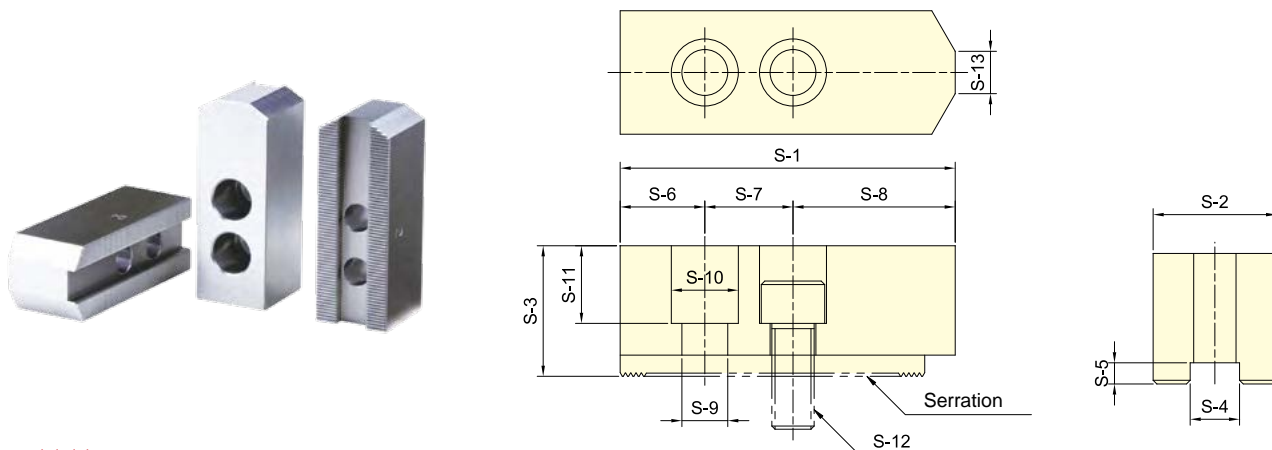
Subject to technical changes

### SPECIFICATIONS

| Model          | Max. Load (1-jaw) | Max. Speed | Gripping range | Accuracy |
|----------------|-------------------|------------|----------------|----------|
|                | (kN)              | (r.p.m.)   | (mm)           |          |
| <b>GFS-100</b> | 100               | 6000       | 70 , 84 , 104  | ±2%      |

### DIMENSIONS

| Model          | A  | B  | C   | D  | E  | F  | G  | H  |
|----------------|----|----|-----|----|----|----|----|----|
| <b>GFS-100</b> | 70 | 84 | 104 | 63 | 54 | 57 | 20 | 68 |



Subject to technical changes

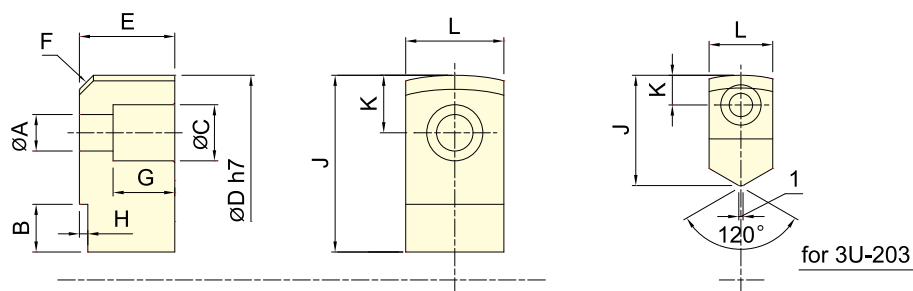
## DIMENSIONS

| MODEL          | S-1 | S-2 | S-3 | S-4  | S-5 | S-6 | S-7 | S-8 | S-9 | S-10 | S-11 | S-12 | S-13 | Serration Pitch | Matching Chuck  | 3 Jaw Weight |
|----------------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|------|------|------|-----------------|---|--------------|
|                |     |     |     |      |     |     |     |     |     |      |      |      |      |                 |   | kg           |
| <b>SJ-04</b>   | 52  | 23  | 23  | 10   | 5   | 10  | 14  | 28  | 9   | 14   | 13   | M8   | 3    | 1.5×60°         | 3H-204, 3P-04   | 0.5          |
| <b>SJ-05</b>   | 62  | 25  | 30  | 10   | 5   | 10  | 14  | 38  | 9   | 14   | 20   | M8   | 3.5  | 1.5×60°         | 3H-205, 3L-205, 3P-05, 3M-05  | 0.8          |
| <b>SJ-06</b>   | 73  | 31  | 36  | 12   | 5   | 15  | 20  | 38  | 11  | 17   | 24   | M10  | 14   | 1.5×60°         | 3H-206, 3L-206, 3P-06, 3M-06  | 1.5          |
| <b>SJ-08</b>   | 95  | 35  | 37  | 14   | 5   | 24  | 25  | 46  | 13  | 19   | 22   | M12  | 16   | 1.5×60°         | 3H-208, 3L-208, 3P-08, 3M-08  | 2.4          |
| <b>SJ-10</b>   | 110 | 40  | 42  | 16   | 5   | 30  | 30  | 50  | 13  | 19   | 27   | M12  | 18   | 1.5×60°         | 3H-210, 3L-210, 3P-10, 3M-10  | 3.7          |
| <b>*SJ-12H</b> | 130 | 50  | 50  | 21   | 5   | 40  | 30  | 60  | 17  | 25   | 30   | M16  | 23   | 1.5×60°         | 3H-12, 3H-212, 3L-212, 3V-12, 3P-12, 3M-12  | 6.3          |
| <b>SJ-12P</b>  | 130 | 50  | 50  | 18   | 5   | 40  | 30  | 60  | 16  | 23   | 30   | M14  | 23   | 1.5×60°         | 3H-12, 3H-212, 3L-212, 3V-12, 3P-12, 3M-12  | 6.5          |
| <b>SJ-15H</b>  | 165 | 62  | 62  | 22   | 8   | 37  | 43  | 85  | 21  | 32   | 37   | M20  | -    | 1.5×60°         | 3H-15, 3H-215, 3H-18, 3L-15, 3P-215, 3P-218, 3V-15, 3V-18                                   | 12.6         |
| <b>*SJ-15P</b> | 165 | 62  | 62  | 25.5 | 6   | 37  | 43  | 85  | 21  | 32   | 37   | M20  | -    | 1.5×60°         | 3H-15, 3H-215, 3H-18, 3L-15, 3P-215, 3P-218, 3V-15, 3V-18                                   | 12.5         |
| <b>SJ-21</b>   | 180 | 64  | 70  | 25   | 9   | 40  | 60  | 80  | 21  | 32   | 45   | M20  | -    | 3.0×60°         | 3H-221, 3H-224, 3H-232, 3P-221, 3P-224, 3V-21, 3V-24, 3V-32, 3M-221, 3M-224, SP-320, SP-324 | 15.8         |

\* 12" Chucks are originally equipped with SJ-12H.

\* 15" Chucks are originally equipped with SJ-15P.

## STANDARD SOFT JAW FOR 3U CHUCK

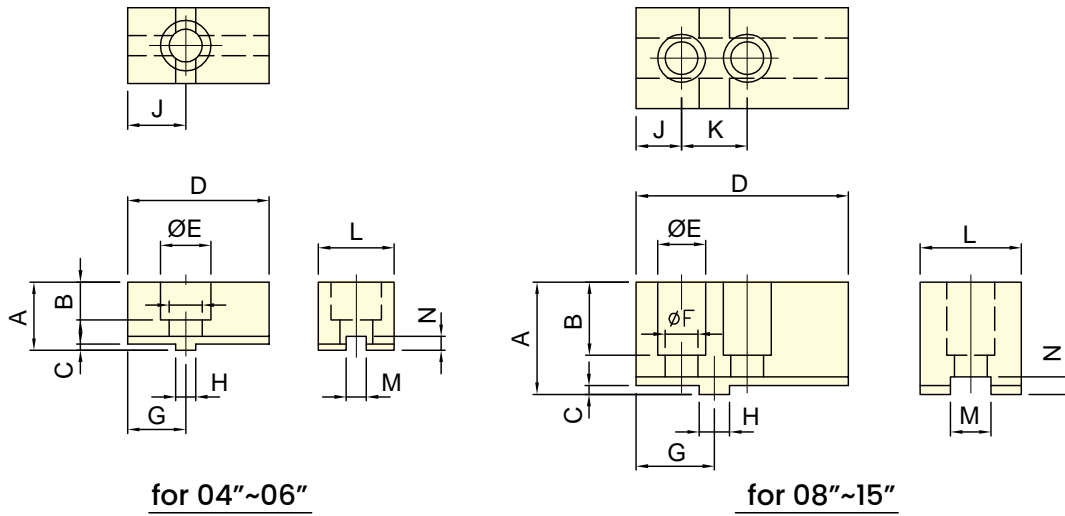


Subject to technical changes

## DIMENSIONS

| MODEL         | A   | B    | C   | D   | E  | F  | G  | H | J    | K    | L  |
|---------------|-----|------|-----|-----|----|----|----|---|------|------|----|
| <b>3U-203</b> | 5.5 | 11   | 9.5 | 66  | 12 | C3 | 7  | 3 | 26   | 7    | 15 |
| <b>3U-204</b> | 6.6 | 11   | 11  | 84  | 17 | C4 | 11 | 3 | 32   | 9.5  | 20 |
| <b>3U-205</b> | 9   | 13.5 | 14  | 108 | 20 | C4 | 12 | 3 | 41.5 | 13   | 24 |
| <b>3U-206</b> | 11  | 15   | 17  | 129 | 30 | C6 | 20 | 3 | 50   | 17   | 30 |
| <b>3U-208</b> | 13  | 17   | 20  | 156 | 34 | C6 | 22 | 3 | 63   | 20.5 | 35 |
| <b>3U-210</b> | 15  | 20   | 22  | 187 | 39 | C6 | 24 | 4 | 74   | 23   | 40 |
| <b>3U-212</b> | 15  | 18   | 22  | 234 | 44 | C6 | 29 | 4 | 72   | 23   | 40 |

## STANDARD SOFT JAW FOR 2D/3D CHUCK

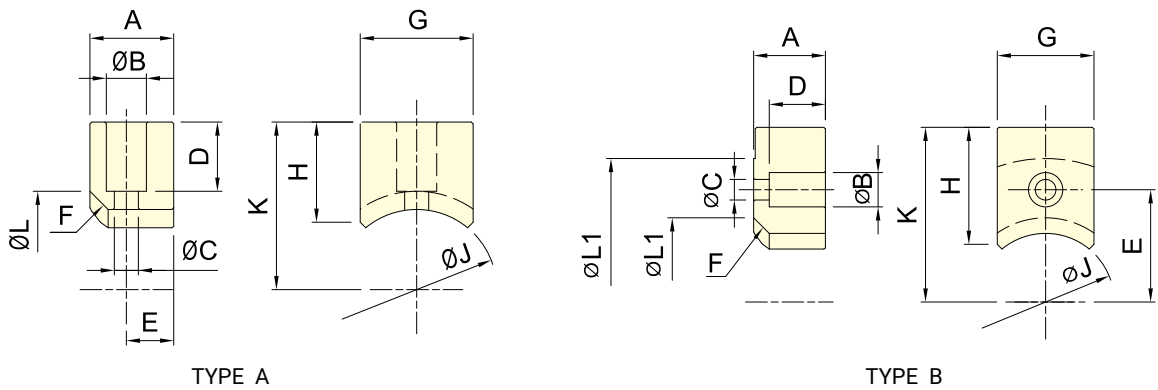


Subject to technical changes

### DIMENSIONS

| MODEL | A    | B  | C   | D   | E    | F    | G  | H  | J  | K  | L  | M  | N   |
|-------|------|----|-----|-----|------|------|----|----|----|----|----|----|-----|
| 3D-04 | 22   | 13 | 2.5 | 52  | 17.5 | 11   | 19 | 8  | 19 | -  | 25 | 8  | 5.5 |
| 3D-05 | 27   | 15 | 2.5 | 56  | 20   | 13   | 23 | 8  | 23 | -  | 30 | 8  | 5.5 |
| 3D-06 | 34   | 21 | 3   | 70  | 23   | 15.5 | 27 | 10 | 27 | -  | 35 | 10 | 6   |
| 3D-08 | 44.5 | 29 | 3.5 | 84  | 19   | 13   | 31 | 12 | 18 | 26 | 40 | 16 | 7   |
| 3D-10 | 49.5 | 32 | 3.5 | 100 | 22   | 15   | 38 | 15 | 22 | 32 | 50 | 18 | 7   |
| 3D-12 | 54.5 | 36 | 3.5 | 120 | 26   | 18   | 42 | 17 | 24 | 36 | 60 | 20 | 7   |
| 3D-15 | 65   | 40 | 5   | 165 | 26   | 18   | 60 | 20 | 40 | 40 | 70 | 24 | 10  |

## STANDARD SOFT JAW FOR 3E CHUCK

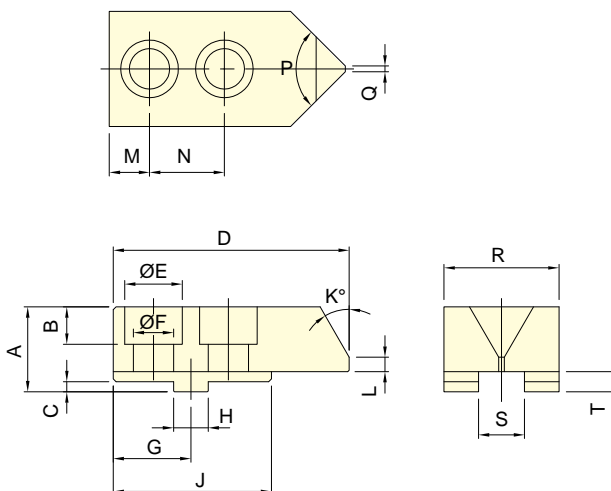


Subject to technical changes

### DIMENSIONS

| MODEL | A      | B  | C    | D   | E    | F    | G  | H  | J    | K  | L    | L1 |     |
|-------|--------|----|------|-----|------|------|----|----|------|----|------|----|-----|
| 3E-05 | A Type | 20 | 11   | 6.6 | 16.5 | 10   | C5 | 25 | 22   | 29 | 34.5 | 39 | -   |
|       | B Type | 20 | 11   | 6.6 | 15   | 25.5 | C5 | 25 | 30   | 29 | 42.5 | 39 | 69  |
| 3E-06 | A Type | 23 | 11   | 7   | 19   | 13   | C5 | 31 | 27.5 | 44 | 46   | 54 | -   |
|       | B Type | 23 | 11   | 6.6 | 18   | 36   | C5 | 31 | 37.5 | 44 | 56   | 54 | 92  |
| 3E-08 | A Type | 30 | 14   | 9   | 25   | 15   | C6 | 35 | 36   | 50 | 56   | 62 | -   |
|       | B Type | 30 | 14   | 9   | 24   | 41   | C6 | 35 | 56   | 50 | 76   | 62 | 112 |
| 3E-10 | A Type | 35 | 17.5 | 11  | 26.5 | 17.5 | C5 | 40 | 40   | 60 | 64.5 | 70 | -   |
|       | B Type | 35 | 17.5 | 11  | 26   | 47.5 | C5 | 40 | 71.5 | 60 | 96   | 70 | 129 |

## STANDARD SOFT JAW FOR 3R CHUCK

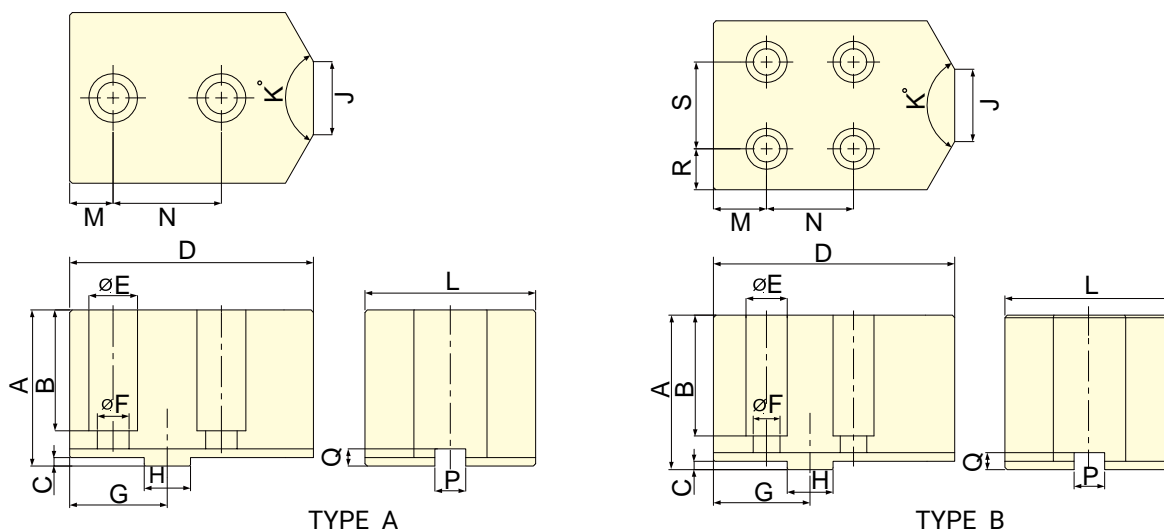


Subject to technical changes

### DIMENSIONS

| MODEL        | A    | B  | C   | D   | E  | F  | G  | H  | J  | K  | L | M  | N  | P  | Q | R  | S  | T |
|--------------|------|----|-----|-----|----|----|----|----|----|----|---|----|----|----|---|----|----|---|
| <b>3R-08</b> | 29.5 | 13 | 3.5 | 82  | 20 | 14 | 27 | 12 | 55 | 30 | 5 | 14 | 26 | 90 | 2 | 40 | 16 | 7 |
| <b>3R-10</b> | 30.5 | 15 | 3.5 | 102 | 23 | 16 | 37 | 15 | 65 | 30 | 7 | 21 | 32 | 90 | 2 | 40 | 18 | 7 |

## STANDARD SOFT JAW FOR 3W CHUCK



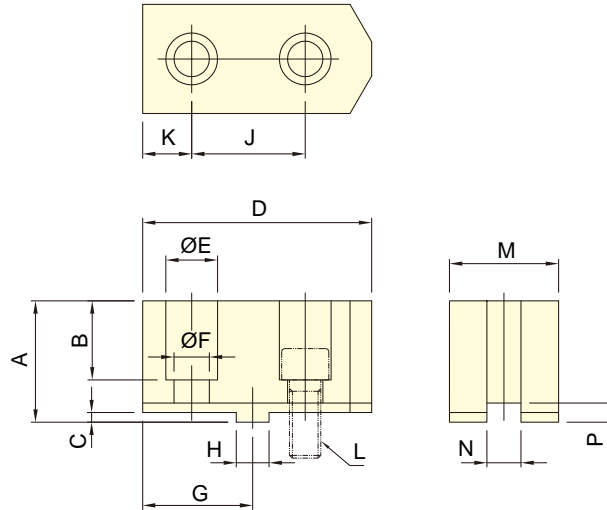
Subject to technical changes

### DIMENSIONS

| MODEL        |               | A  | B    | C   | D   | E  | F  | G  | H     | J  | K   | L  | M    | N    | P    | Q | R    | S  |
|--------------|---------------|----|------|-----|-----|----|----|----|-------|----|-----|----|------|------|------|---|------|----|
| <b>3W-08</b> | <b>A Type</b> | 60 | 44   | 3.5 | 80  | 20 | 13 | 35 | 12.68 | 30 | 120 | 57 | 16   | 38   | 7.94 | 7 | -    | -  |
|              | <b>B Type</b> | 60 | 48   | 3.5 | 80  | 17 | 11 | 35 | 12.68 | 30 | 120 | 57 | 19   | 32   | 7.94 | 7 | 12.5 | 32 |
| <b>3W-10</b> | <b>A Type</b> | 64 | 49.5 | 3.5 | 100 | 20 | 13 | 40 | 19.03 | 30 | 120 | 70 | 17.8 | 44.4 | 12.7 | 7 | -    | -  |
|              | <b>B Type</b> | 64 | 50   | 3.5 | 100 | 17 | 11 | 40 | 19.03 | 30 | 120 | 70 | 22   | 36   | 12.7 | 7 | 17   | 36 |
| <b>3W-12</b> | <b>A Type</b> | 64 | 49.5 | 3.5 | 100 | 20 | 13 | 40 | 19.03 | 30 | 120 | 70 | 17.8 | 44.4 | 12.7 | 7 | -    | -  |
|              | <b>B Type</b> | 64 | 50   | 3.5 | 100 | 17 | 11 | 40 | 19.03 | 30 | 120 | 70 | 22   | 36   | 12.7 | 7 | 17   | 36 |

\*3W series Carbide gripper is optional. \* The type of the gripper is selected according to the work-piece conditions.

## STANDARD SOFT JAW FOR 3MF CHUCK

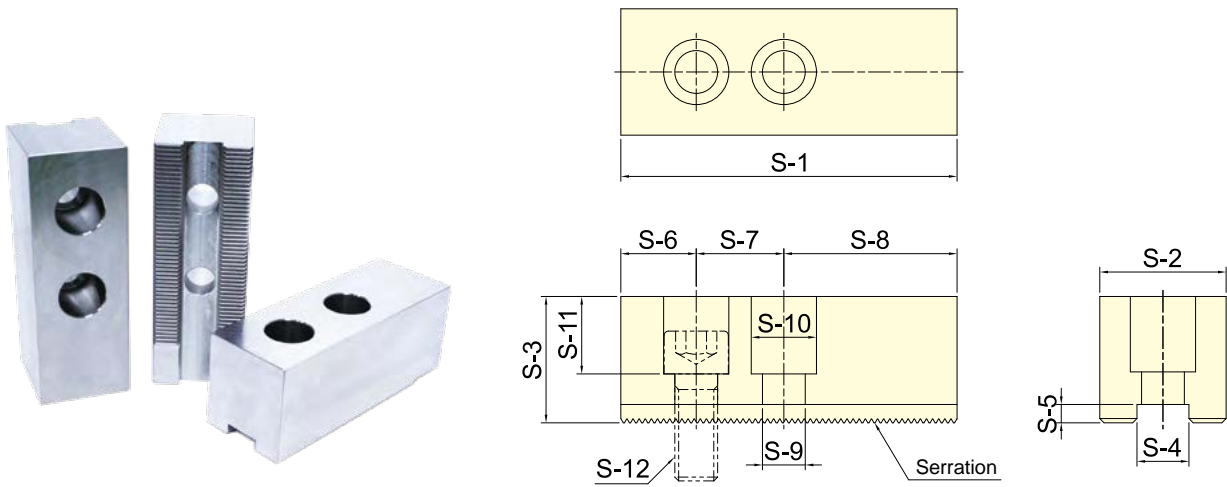


Subject to technical changes

### DIMENSIONS

| MODEL         | A  | B  | C | D   | E  | F  | G  | H     | J    | K    | L   | M  | N    | P    | 3 Jaw Weight (kg) |
|---------------|----|----|---|-----|----|----|----|-------|------|------|-----|----|------|------|-------------------|
| <b>3MF-20</b> | 70 | 48 | 6 | 160 | 25 | 17 | 80 | 19.03 | 76.2 | 41.9 | M16 | 50 | 12.7 | 11.5 | 10.4              |

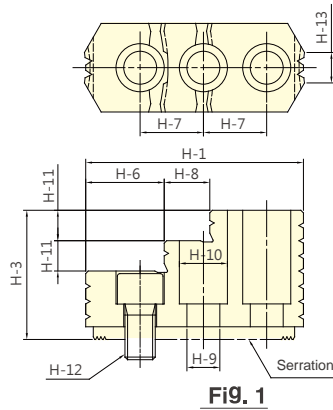
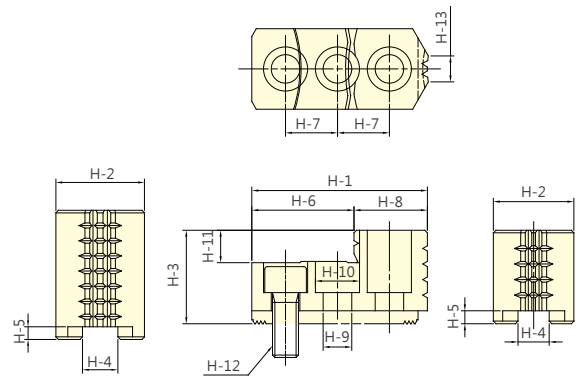
## STANDARD SOFT JAW FOR AP CHUCK



Subject to technical changes

### DIMENSIONS

| MODEL         | S-1 | S-2 | S-3 | S-4  | S-5 | S-6 | S-7 | S-8 | S-9 | S-10 | S-11 | S-12 | Serration Pitch | Matching Chuck | 3 Jaw Weight (kg) |
|---------------|-----|-----|-----|------|-----|-----|-----|-----|-----|------|------|------|-----------------|----------------|-------------------|
| <b>SJ-185</b> | 165 | 62  | 62  | 25.5 | 9   | 37  | 43  | 85  | 21  | 32   | 38   | M20  | 3.0×60°         | AP-145, AP-185 | 12.2              |
| <b>SJ-275</b> | 180 | 64  | 70  | 25.5 | 9   | 40  | 60  | 80  | 21  | 32   | 45   | M20  | 3.0×60°         | AP-230, AP-275 | 16.1              |
| <b>SJ-320</b> | 210 | 75  | 80  | 30   | 9   | 40  | 60  | 110 | 26  | 38   | 55   | M24  | 3.0×60°         | AP-320, AP-375 | 24.7              |

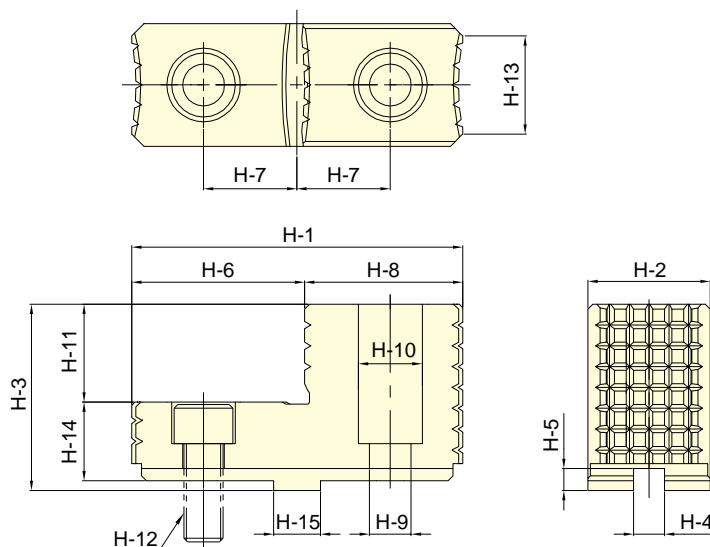

**Fig. 1**

**Fig. 2**

Subject to technical changes

**DIMENSIONS**

| MODEL           | H-1   | H-2 | H-3 | H-4  | H-5 | H-6   | H-7 | H-8  | H-9 | H-10 | H-11 | H-12 | H-13 | Serration Pitch | Matching Chuck  | 3 Jaw Weight (kg) | Reference Drawing |
|-----------------|-------|-----|-----|------|-----|-------|-----|------|-----|------|------|------|------|-----------------|---|-------------------|-------------------|
| <b>HJ-05</b>    | 54.2  | 23  | 28  | 10   | 4   | 31.1  | 14  | 23.1 | 8.5 | 13.5 | 10   | M8   | 3.6  | 1.5 × 60°       | 3H-204, 3H-205  | 1                 | Fig.2             |
| <b>HJ-06</b>    | 67.6  | 31  | 36  | 12   | 5   | 40.2  | 20  | 27.4 | 11  | 17   | 12   | M10  | 9.3  | 1.5 × 60°       | 3H-206, 3P-06   | 1.7               | Fig.2             |
| <b>HJ-08</b>    | 86.1  | 35  | 51  | 14   | 5   | 33.5  | 25  | 18.4 | 13  | 19   | 12   | M12  | 14   | 1.5 × 60°       | 3H-208, 3P-08   | 2                 | Fig.1             |
| <b>HJ-10</b>    | 100   | 40  | 54  | 16   | 5   | 39.5  | 30  | 22.5 | 13  | 19   | 13   | M12  | 15   | 1.5 × 60°       | 3H-210, 3P-10   | 3                 | Fig.1             |
| <b>* HJ-12H</b> | 100.2 | 50  | 52  | 21   | 5   | 64.7  | 30  | 35.5 | 17  | 25   | 17   | M16  | 31.5 | 1.5 × 60°       | 3H-12,3H-212, 3L-212, 3V-12,3P-12, 3M-12                    | 3.5               | Fig.2             |
| <b>* HJ-12P</b> | 100.2 | 50  | 52  | 18   | 5   | 64.7  | 30  | 35.5 | 15  | 23   | 17   | M14  | 31.5 | 1.5 × 60°       | 3H-12,3H-212, 3L-212, 3V-12,3P-12, 3M-12                    | 3.6               | Fig.2             |
| <b>* HJ-15H</b> | 140.7 | 62  | 86  | 22   | 8   | 62.5  | 43  | 34   | 21  | 32   | 20   | M20  | 43   | 1.5 × 60°       | 3H-15, 3H-215, 3H-18, 3L-15 3V-15, 3V-18,3P-215, 3P-218     | 9.6               | Fig.1             |
| <b>* HJ-15P</b> | 140.7 | 62  | 86  | 25.5 | 6   | 62.5  | 43  | 34   | 21  | 32   | 20   | M20  | 43   | 1.5 × 60°       | 3H-15, 3H-215, 3H-18, 3L-15 3V-15, 3V-18,3P-215, 3P-218     | 9.5               | Fig.1             |
| <b>HJ-21</b>    | 153.5 | 80  | 90  | 25   | 9   | 103.7 | 50  | 49.8 | 21  | 32   | 40   | M20  | 56.5 | 3.0 × 60°       | 3H-221, 3H-224, 3H-232, 3P-221, 3P-224, 3V-21, 3V-24, 3V-32 | 14.3              | Fig.2             |

\* For HJ-12H, HJ-12P, HJ-15H, HJ-15P, please confirm the dimension of H-4 before placing the order.

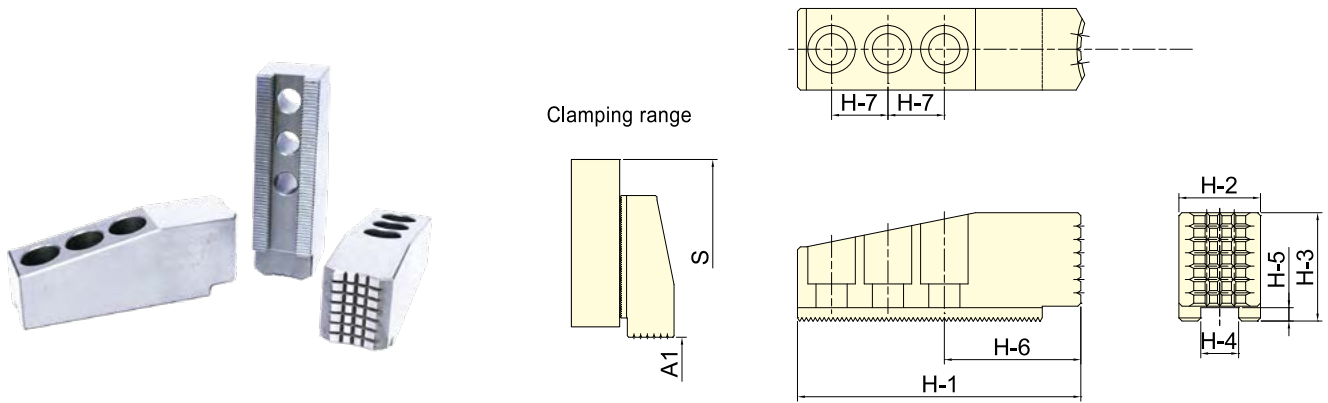
**STANDARD HARDEN JAW FOR 3MF CHUCK**


Subject to technical changes

**DIMENSIONS**

| Model         | H-1 | H-2 | H-3 | H-4  | H-5 | H-6 | H-7  | H-8 | H-9 | H-10 | H-11 | H-12 | H-13 | H-14 | H-15  | Matching Chuck | 3 Jaw Weight |
|---------------|-----|-----|-----|------|-----|-----|------|-----|-----|------|------|------|------|------|-------|----------------|--------------|
| <b>3MF-20</b> | 135 | 50  | 76  | 12.7 | 9   | 70  | 38.1 | 65  | 17  | 26   | 40   | M16  | 40   | 32   | 19.03 | 3MF-20         | 6.7          |

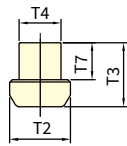
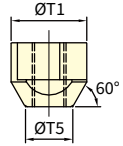
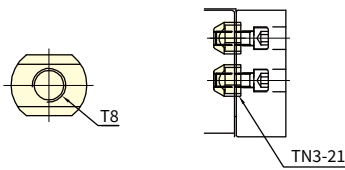
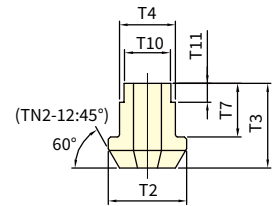
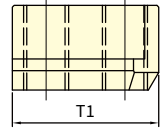
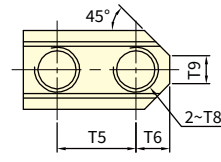
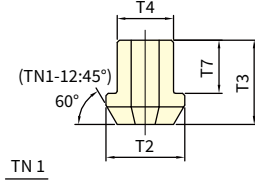
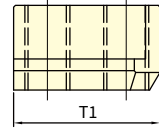
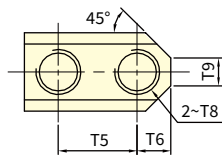
STANDARD HARDEN JAW FOR AP CHUCK



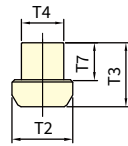
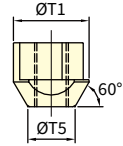
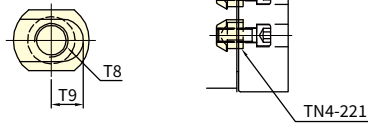
Subject to technical changes

DIMENSIONS

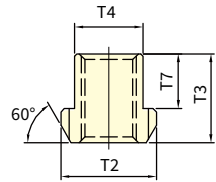
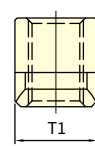
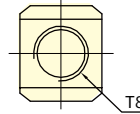
| Model         | H-1 | H-2 | H-3 | H-4  | H-5 | H-6 | H-7 | A1      | S   | Serration Pitch | Matching Chuck | 3 Jaw Weight (kg) |
|---------------|-----|-----|-----|------|-----|-----|-----|---------|-----|-----------------|----------------|-------------------|
| <b>HJ-145</b> | 191 | 55  | 73  | 25.5 | 9   | 92  | 38  | 30-125  | 420 | 3.0×60°         | AP-145         | 12.5              |
| <b>HJ-145</b> | 191 | 55  | 73  | 25.5 | 9   | 92  | 38  | 35-165  | 460 | 3.0×60°         | AP-185         | 12.5              |
| <b>HJ-145</b> | 191 | 55  | 73  | 25.5 | 9   | 92  | 38  | 55-240  | 535 | 3.0×60°         | AP-230         | 12.5              |
| <b>HJ-145</b> | 191 | 55  | 73  | 25.5 | 9   | 92  | 38  | 100-285 | 580 | 3.0×60°         | AP-275         | 12.5              |
| <b>HJ-320</b> | 243 | 75  | 82  | 30   | 9   | 110 | 50  | 105-300 | 658 | 3.0×60°         | AP-320         | 24.6              |
| <b>HJ-320</b> | 243 | 75  | 82  | 30   | 9   | 110 | 50  | 165-375 | 738 | 3.0×60°         | AP-375         | 24.6              |



TN 3



TN 4



TN 5

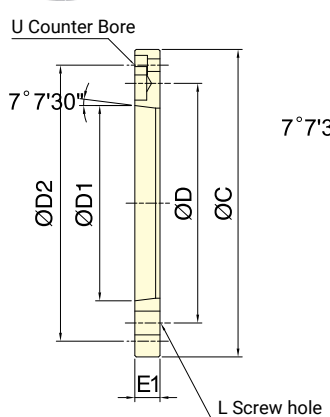
Subject to technical changes

### DIMENSIONS

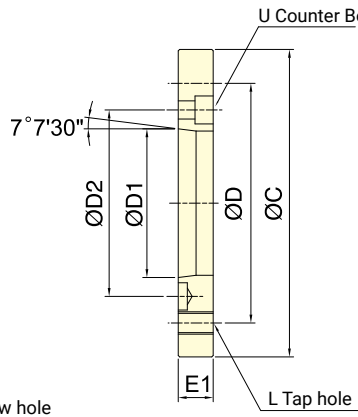
| Model     | T1   | T2   | T3   | T4   | T5 | T6   | T7   | T8  | T9 | T10 | T11 | Matching Chuck  | 3 Pcs Weight |
|-----------|------|------|------|------|----|------|------|-----|----|-----|-----|---|--------------|
|           |      |      |      |      |    |      |      |     |    |     |     |   | (kg)         |
| TN1-04    | 26   | 14   | 15   | 10   | 14 | 6    | 9.5  | M8  | 5  | -   | -   | H-204, H-205, P-04, P-05, L-205, M-05, SP-304                         | 0.06         |
| TN1-06    | 36   | 17   | 18.5 | 12   | 20 | 8    | 11   | M10 | 6  | -   | -   | H-206, P-06, L-206, 1L-06, M-06, 3N-06, AP-52, RAP-306, SP-306        | 0.15         |
| TN1-08    | 46.5 | 20   | 20.5 | 14   | 25 | 10.5 | 12   | M12 | 10 | -   | -   | H-208, P-08, L-208, 1L-08, M-08, 3N-08, 4T-08, AP-66, RAP-308, SP-308 | 0.27         |
| TN1-10    | 51   | 22   | 21.5 | 16   | 30 | 11   | 13   | M12 | 11 | -   | -   | H-210, P-10, L-210, 1L-10, M-10, 3N-10, 4T-10, AP-86, RAP-310, SP-310 | 0.36         |
| * TN1-12  | 55.5 | 29.5 | 28   | 21   | 30 | 12   | 16.5 | M16 | 13 | -   | -   | P-12, L-12, M-12  | 0.63         |
| TN2-12    | 55.5 | 29.5 | 28   | 21   | 30 | 12   | 16.5 | M14 | 13 | 18  | 4.5 | P-12, L-12, M-12  | 0.63         |
| * TN1-15  | 80   | 35   | 39.5 | 25.5 | 43 | 17   | 20.5 | M20 | 14 | -   | -   | 2H-15, 3H-18B, P-15, P-215, P-218, L-15, M-215, M-218, V-15, V-18     | 1.53         |
| TN2-15    | 80   | 35   | 39.5 | 25.5 | 43 | 17   | 20.5 | M20 | 14 | 22  | 6   | 2H-15, 3H-18B, P-15, P-215, P-218, L-15, M-215, M-218, V-15, V-18     | 1.5          |
| * TN1-212 | 56   | 29.5 | 23.5 | 21   | 30 | 12   | 12   | M16 | 10 | -   | -   | H-12, H-212, L-212, V-12, 4T-15, AP-115                               | 0.63         |
| TN2-212   | 56   | 29.5 | 23.5 | 21   | 30 | 12   | 12   | M14 | 10 | 18  | 4   | H-12, H-212, L-212, V-12, 4T-15, AP-115                               | 0.63         |
| * TN1-215 | 80   | 35   | 34   | 25.5 | 43 | 17   | 19   | M20 | 14 | -   | -   | 3H-15, 4H-15, 3H-18, 4H-18, H-215, L-215, SP-316                      | 1.32         |
| TN2-215   | 80   | 35   | 34   | 25.5 | 43 | 17   | 19   | M20 | 14 | 22  | 6   | 3H-15, 4H-15, 3H-18, 4H-18, H-215, L-215, SP-316                      | 1.29         |
| TN3-21    | 46   | 37.5 | 45   | 25   | 26 | -    | 26   | M20 | -  | -   | -   | P-221, P-224, M-221, M-224, V-21, V-24, V-32,                         | 1.84         |
| TN4-221   | 45   | 36   | 38   | 25   | 28 | -    | 22   | M20 | 19 | -   | -   | H-221, H-224, H-232, SP-320, SP-324                                   | 0.63         |
| TN5-185   | 32   | 35   | 30   | 25.5 | -  | -    | 19   | M20 | -  | -   | -   | AP-145, AP-185, AP-230, AP-275  | 0.15         |
| TN5-320   | 36   | 42   | 39   | 30   | -  | -    | 24   | M24 | -  | -   | -   | AP-320, AP-375  | 0.24         |

\* 12" Chucks are originally equipped with TN1-12 & TN1-212.

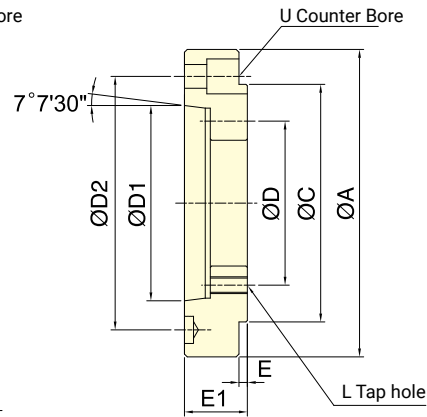
\* 15" Chucks are originally equipped with TN1-15 & TN1-215.



**FL1**



**FL2**



**FL3**

Subject to technical changes

## DIMENSIONS

| Model             | A   | C   | D     | D1      | D2    | E   | E1        | L   | U   | Remark  | Weight (kg) |
|-------------------|-----|-----|-------|---------|-------|-----|-----------|-----|-----|---|-------------|
| <b>FL3-04A24</b>  | 110 | 85  | 70.6  | 63.513  | 82.6  | 8   | 28        | M10 | M10 | 3H-204, 2H-204  | 1.12        |
| <b>FL3-04A25</b>  | 140 | 85  | 70.6  | 82.563  | 104.8 | 5.5 | 32        | M10 | M10 | 3H-204, 2H-204  | 2.28        |
| <b>FL1-05A24</b>  | -   | 110 | 82.6  | 63.513  | 96    | -   | 15        | M10 | M6  | 3H-205, 2H-205, 3L-05, 2L-05, 3J-05, 2J-05  | 0.65        |
| <b>FL3-05A25</b>  | 135 | 110 | 82.6  | 82.563  | 104.8 | 6   | 30        | M10 | M10 | 3H-205, 2H-205, 3L-05, 2L-05  | 1.99        |
| <b>FL1-06A25</b>  | -   | 140 | 104.8 | 82.563  | 116   | -   | 15<br>*18 | M10 | M6  | 2H-206, 4H-206, 3H-206, 3P-06, 2P-06, 3M-06, 2M-06,<br>3E-06, 3D-06, 2D-06, 3N-06, 3J-06, 2J-06<br>*3L-206, *2L-206   | 0.96        |
| <b>FL3-06A26</b>  | 165 | 140 | 104.8 | 106.375 | 133.4 | 6   | 35        | M10 | M12 | 2H-206, 4H-206, 3H-206, 3L-206, 2L-206, 3P-06, 2P-06,<br>3M-06, 2M-06, 3E-06, 3D-06, 2D-06, 3N-06, 3J-06, 2J-06   | 3.12        |
| <b>FL2-08A25</b>  | -   | 170 | 133.4 | 82.563  | 104.8 | -   | 23        | M12 | M10 | 3H-208, 2H-208, 4H-208, 3P-08, 2P-08, 3M-08, 2M-08,<br>4T-08, 3E-08, 3D-08, 2D-08, 3N-08, 3J-08, 2J-08,<br>3R-08, 3W-08, 3Q-08<br>*3L-208, *2L-208,   | 2.7         |
| <b>FL1-08A26</b>  | -   | 170 | 133.4 | 106.375 | 150   | -   | 17<br>*23 | M12 | M6  | 2H-208, 4H-208, 3H-208, 3P-08, 2P-08, 3M-08, 2M-08, 4T-08,<br>3E-08, 3D-08, 2D-08, 3N-08, 3J-08, 2J-08, 3R-08, 3W-08,<br>3Q-08<br>*3L-208, *2L-208  | 1.55        |
| <b>FL2-10A26</b>  | -   | 220 | 171.4 | 106.375 | 133.4 | -   | 25        | M16 | M12 | 4H-10, 3P-10, 2P-10, 3M-10, 2M-10,<br>3H-12, 2H-12, 4H-12, 3L-212, 2L-12, 3P-12, 2P-12, 3M-12, 2M-12,<br>4T-10, 4T-12, 3E-10, 3D-10, 2D-10, 3N-10, 3J-10, 2J-10, 3R-10,<br>3Q-10, 3W-10, 3W-12  | 5.02        |
| <b>FL1-10A28</b>  | -   | 220 | 171.4 | 139.719 | 190   | -   | 18        | M16 | M8  | 2H-210, 4H-10, 3H-210, 3L-210, 2L-210, 3P-10, 2P-10, 3M-10,<br>2M-10, 3H-12, 2H-12, 4H-12, 3L-212, 2L-12, 3P-12, 2P-12, 3M-12,<br>2M-12, 4T-10, 4T-12, 3E-10, 3D-10, 2D-10, 3N-10, 3J-10, 2J-10,<br>3R-10, 3Q-10, 3Q-12, 3W-10, 3W-12 | 2.73        |
| <b>FL2-15A28</b>  | -   | 300 | 235   | 139.719 | 171.4 | -   | 33        | M20 | M16 | 3H-15, 3H-212, 2H-15, 4H-15, 3L-15, 2L-15, 3P-215, 2P-15,<br>3M-15, 2M-15, 4T-15, 3H-18, 4H-18, 3P-218  | 12.52       |
| <b>FL1-15A211</b> | -   | 300 | 235   | 196.869 | 260   | -   | 22        | M20 | M10 | 3H-15, 3H-212, 2H-15, 4H-15, 3L-15, 2L-15, 3P-215, 2P-15,<br>3M-15, 2M-15, 4T-15, 3H-18, 4H-18, 3P-218  | 6.03        |
| <b>FL2-21A28</b>  | -   | 380 | 330.2 | 139.719 | 171.4 | -   | 33        | M24 | M16 | 3H-215, 3P-221, 3P-224  | 22.05       |
| <b>FL2-21A211</b> | -   | 380 | 330.2 | 196.869 | 235   | -   | 40<br>*27 | M24 | M20 | 3H-215<br>*3P-221, *3P-224  | 16.28       |
| <b>FL1-21A215</b> | -   | 380 | 330.2 | 285.775 | 330.2 | -   | 27        | M24 | M12 | 3H-215, 3H-18B, 3H-221, 3P-221, 3P-224  | 8.6         |
| <b>FL2-40A215</b> | -   | 520 | 463.6 | 285.775 | 330.2 | -   | 40        | M24 | M24 | 3H-224  | 43.26       |
| <b>FL1-40A220</b> | -   | 520 | 463.6 | 412.775 | 463.6 | -   | 27        | M24 | M12 | 3H-224, 3H-232  | 13.55       |

Models with "\*" mark are produced only by order.

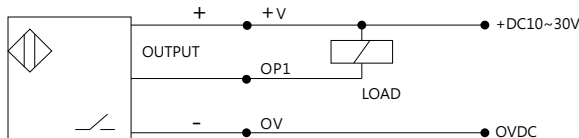


- The proximity switch and linear Sensor are optional.
- The proximity switch is optional.

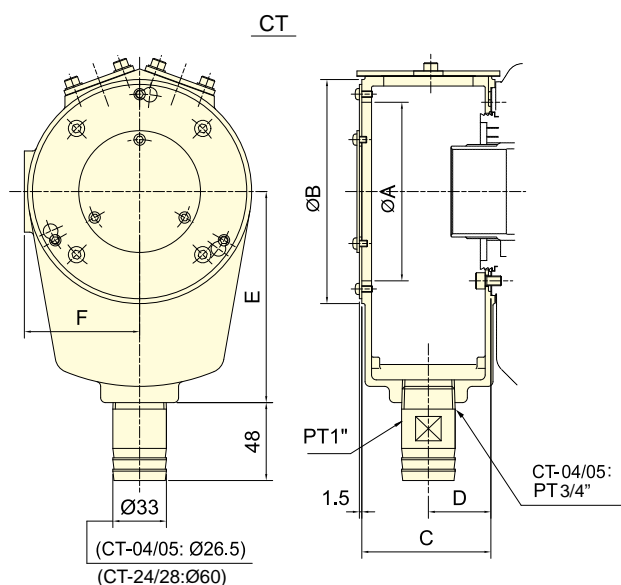
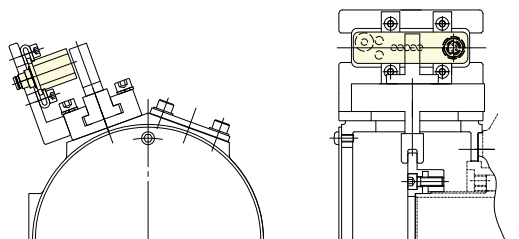
| Power supply | Switching cap. | Output type |
|--------------|----------------|-------------|
| DC 10/30V    | 100mA          | NPN         |

### Terminal Connections

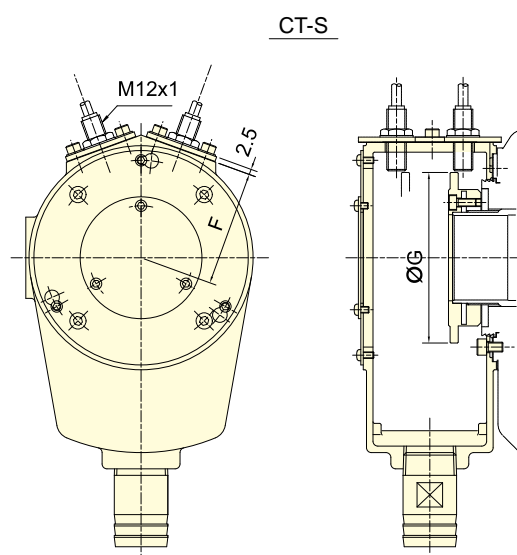
| +V    | OP1   | OV   |
|-------|-------|------|
| BROWN | BLACK | BLUE |



### linear Sensor installation drawing



Coolant Collector



Coolant Collector with Detecting Ring

Subject to technical changes

### DIMENSIONS

| Model            | A   | B   | C   | D  | E   | F    | G   | Weight (kg) |      | Matching cyl.                              |
|------------------|-----|-----|-----|----|-----|------|-----|-------------|------|--|
|                  |     |     |     |    |     |      |     | CT          | CT-S |  |
| CT-04/CT-04S     | 87  | 110 | 60  | 29 | 110 | 57   | 79  | 0.9         | 1.1  | TH-428                                     |
| CT-05/CT-05S(TH) | 87  | 110 | 60  | 29 | 110 | 57   | 84  | 0.9         | 1.1  | TH-A536                                    |
| CT-05/CT-05S(TK) | 87  | 110 | 60  | 29 | 110 | 57   | 84  | 0.9         | 1.1  | TK-A528, TK-A533                           |
| CT-06/CT-06S     | 100 | 125 | 74  | 36 | 120 | 64.5 | 94  | 1.2         | 1.6  | TK-C643, TK-A646, TK-B646, TK-C646, TR-646 |
| CT-08/CT-08S     | 110 | 138 | 80  | 39 | 130 | 71   | 105 | 1.3         | 1.8  | TK-B846, TK-A853, TK-B853, TR-853          |
| CT-K10/CT-K10S   | 158 | 185 | 88  | 43 | 160 | 94.5 | 145 | 1.9         | 2.6  | TK-A1068, TK-A1075, TK-A1078, TR-1075      |
| CT-12/CT-12S     | 158 | 185 | 88  | 43 | 160 | 94.5 | 145 | 1.9         | 2.6  | TK-A1287, TK-A1291, TR-1291                |
| CT-15/CT-15S     | 206 | 235 | 100 | 50 | 210 | 121  | 190 | 3.1         | 4.3  | TK-A1511, TK-A1512, TK-A1512-35            |
| CT-21/CT-21S     | 226 | 255 | 100 | 50 | 210 | 131  | 210 | 3.3         | 4.6  | TK-2114                                    |
| CT-24/CT-24S     | 250 | 270 | 100 | 50 | 230 | 154  | 248 | 3.5         | 5.5  | TK-2416, TK-2416L                          |
| CT-28/CT-28S     | 310 | 330 | 100 | 50 | 260 | 181  | 305 | 4.3         | 7.2  | TK-2820                                    |



# CT-SB/CT-SBS

## COOLANT COLLECTOR WITH STROKE CONTROL



- The proximity switch and linear Sensor are optional.
- Drain port Ø40 and Ø60 are optional product.
- Drain port Ø60 only use to CT-S08B,CT-S10B,CT-S12B.

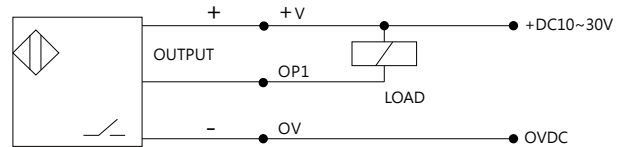
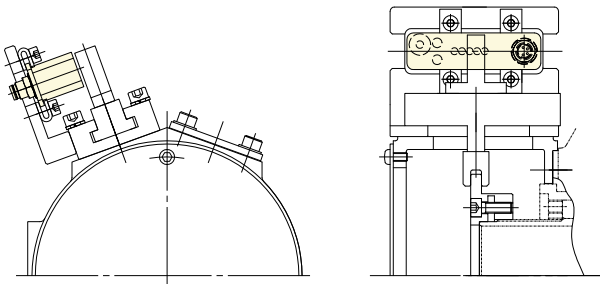
- The proximity switch is optional.

| Power supply | Switching cap. | Output type |
|--------------|----------------|-------------|
| DC 10/30V    | 100mA          | NPN         |

- Terminal Connections

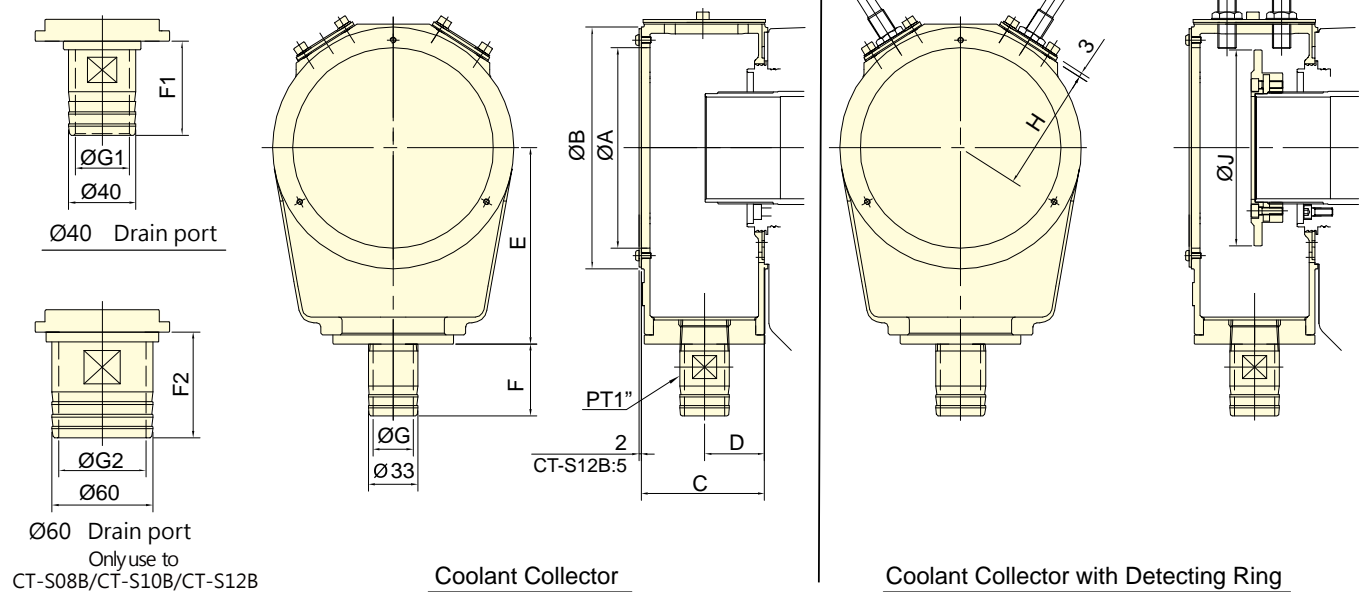
| +V    | OP1   | OV   |
|-------|-------|------|
| BROWN | BLACK | BLUE |

- linear Sensor installation drawing



### CT-SB

### CT-SBS



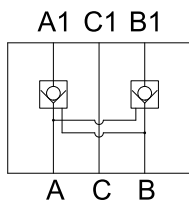
Subject to technical changes

#### DIMENSIONS

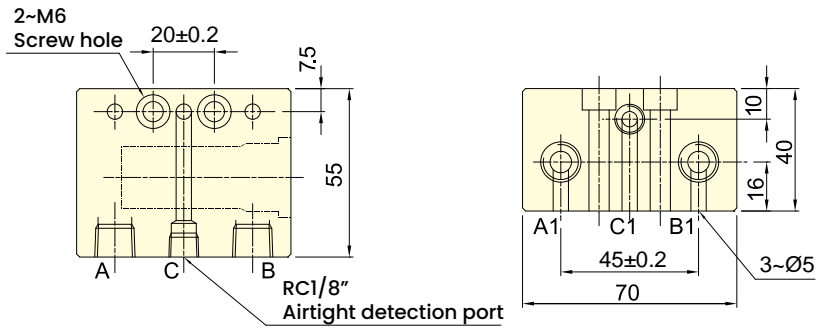
| Model            | A   | B   | C    | D    | E   | F    | F1 | F2 | G  | G1 | G2 | H   | J   | Weight (kg) |        | Matching cyl.  |
|------------------|-----|-----|------|------|-----|------|----|----|----|----|----|-----|-----|-------------|--------|----------------|
|                  |     |     |      |      |     |      |    |    |    |    |    |     |     | CT-SB       | CT-SBS |                |
| CT-S05B/CT-S05BS | 97  | 120 | 68.3 | 33.3 | 96  | 49.6 | 56 | -  | 25 | 32 | -  | 62  | 86  | 1.1         | 1.6    | TS-539, TR-539 |
| CT-S08B/CT-S08BS | 133 | 160 | 82   | 40   | 130 | 49.6 | 56 | 63 | 25 | 32 | 52 | 82  | 130 | 0.9         | 1.4    | TS-866         |
| CT-S10B/CT-S10BS | 160 | 188 | 88   | 43   | 148 | 49.6 | 56 | 63 | 25 | 32 | 52 | 96  | 148 | 1.16        | 2.9    | TS-1081        |
| CT-S12B/CT-S12BS | 205 | 234 | 87   | 43.5 | 171 | 49.6 | 56 | 63 | 25 | 32 | 52 | 121 | 190 | 4.3         | 5.6    | TS-1210        |



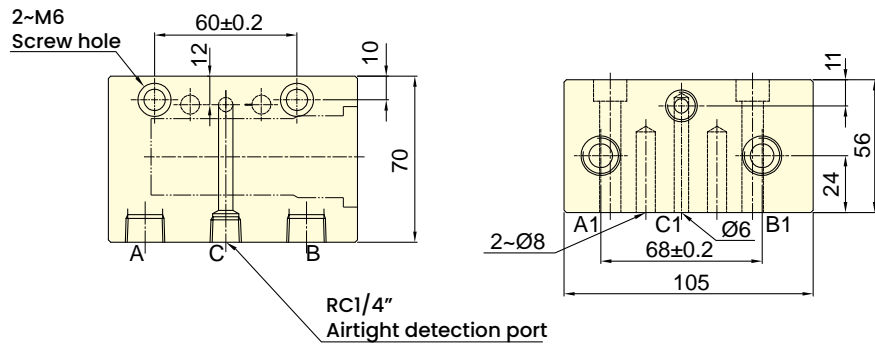
**Model:FV-01**



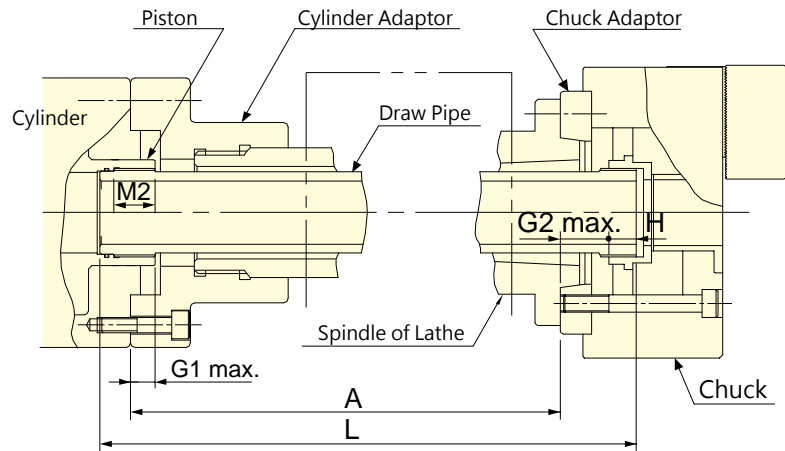
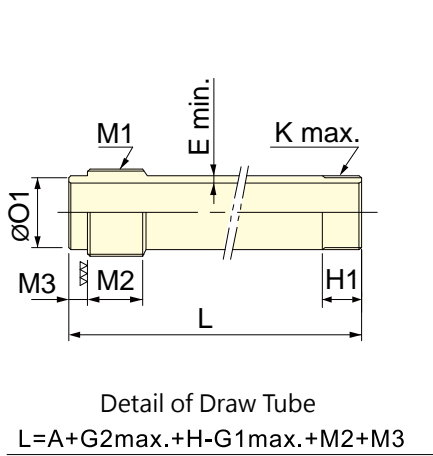
Circuit drawing



**Model:FV-03**



Subject to technical changes



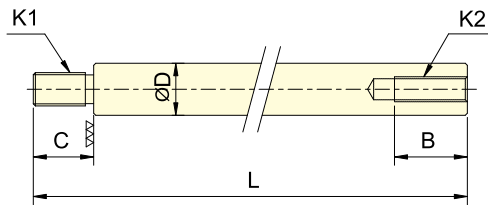
Subject to technical changes

### SPECIFICATIONS

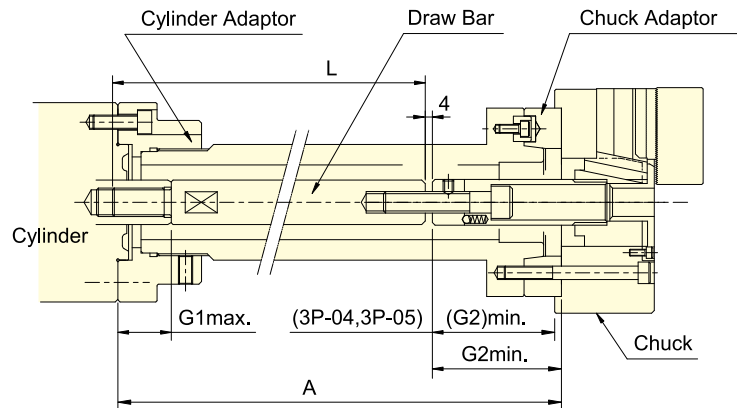
| Chuck type | Cylinder type | G1       | H  | M3 | M2 | G2   | M1 | H1     | O1   |      | K                | E      | L |         |
|------------|---------------|----------|----|----|----|------|----|--------|------|------|------------------|--------|---|---------|
|            |               | max.     |    |    |    | max. |    |        | (f7) | max. |                  |        |   | min.    |
| 3H-12      | A8            | TK-A1291 | 30 | 23 | 12 | 35   | 28 | M100x2 | 35   | 95   | -0.036<br>-0.071 | M100x2 | 5 | A+56+12 |
| 3H-15      | A11           | TK-A1512 | 30 | 33 | 12 | 45   | 33 | M130x2 | 45   | 125  | -0.043<br>-0.083 | M130x2 | 5 | A+81+12 |
| 3H-18      | A11           | TK-A1512 | 30 | 33 | 12 | 45   | 33 | M130x2 | 45   | 125  | -0.043<br>-0.083 | M130x2 | 5 | A+81+12 |

| Chuck type | Cylinder type | G1       | H  | M3   | M2 | G2   | M1   | H1      | O1   |      | K                | E       | L |           |
|------------|---------------|----------|----|------|----|------|------|---------|------|------|------------------|---------|---|-----------|
|            |               | max.     |    |      |    | max. |      |         | (f7) | max. |                  |         |   | min.      |
| 3H-204     | A4            | TK-A528  | 12 | 14.5 | 10 | 25   | 31.5 | M38x1.5 | 20   | 35   | -0.025<br>-0.05  | M38x1.5 | 5 | A+59+10   |
| 3H-205     | A4            | TK-A533  | 12 | 17   | 10 | 25   | 16   | M38x1.5 | 25   | 35   | -0.025<br>-0.05  | M45x1.5 | 5 | A+46+10   |
| 3H-206     | A5            | TK-A646  | 15 | 14   | 10 | 25   | 28   | M55x2   | 20   | 50   | -0.025<br>-0.05  | M60x2   | 5 | A+52+10   |
| 3H-208     | A6            | TK-A853  | 20 | 16.5 | 12 | 30   | 33.5 | M60x2   | 20   | 55   | -0.03<br>-0.06   | M75x2   | 5 | A+60+12   |
| 3H-210     | A8            | TK-A1075 | 25 | 21   | 12 | 35   | 28.5 | M85x2   | 25   | 80   | -0.03<br>-0.06   | M95x2   | 5 | A+59.5+12 |
| 3H-212     | A11           | TK-A1512 | 30 | 23   | 12 | 45   | 32   | M130x2  | 30   | 125  | -0.043<br>-0.083 | M115x2  | 5 | A+70+12   |
| 3H-215     | A8            | TK-2114  | 35 | 33   | 17 | 45   | 44   | M155x2  | 40   | 145  | -0.043<br>-0.083 | M115x2  | 5 | A+87+17   |
| 3H-215     | A11           | TK-2114  | 35 | 33   | 17 | 45   | 51   | M155x2  | 40   | 145  | -0.043<br>-0.083 | M155x3  | 5 | A+93+17   |
| 3H-215     | A15           | TK-2114  | 35 | 33   | 17 | 45   | 38   | M155x2  | 40   | 145  | -0.043<br>-0.083 | M155x3  | 5 | A+81+17   |
| 3H-18B     | A15           | TK-2416  | 35 | 35   | 17 | 45   | 45   | M180x3  | 40   | 170  | -0.043<br>-0.083 | M175x3  | 5 | A+90+17   |
| 3H-221     | A15           | TK-2416  | 35 | 34   | 17 | 45   | 42   | M180x3  | 40   | 170  | -0.043<br>-0.083 | M190x3  | 5 | A+86+17   |
| 3H-224     | A20           | TK-2820  | 51 | 35   | 17 | 45   | 42   | M220x3  | 40   | 210  | -0.050<br>-0.096 | M225x3  | 5 | A+71+17   |
| 3H-232     | A20           | TK-2820  | 51 | 37   | 17 | 45   | 51   | M220x3  | 45   | 230  | -0.050<br>-0.096 | M295x3  | 5 | A+82+17   |

Note: To calculate the draw-tube length of 2H, 4H as 3H, 3H-2.



Detail of Draw Bar  
 $L=A-G1_{max.}-G2_{min.}-4+C$



Subject to technical changes

### SPECIFICATIONS

| Chuck type    | Cylinder type    | B  | C     | D     | G1   | G2   | K1            | K2       | L           |
|---------------|------------------|----|-------|-------|------|------|---------------|----------|-------------|
|               |                  |    |       |       | max. | min. |               |          |             |
| <b>3P-04</b>  | RK-75(N)/RA-130  | 30 | 30/20 | 30/25 | 45   | 3    | M20x2.5/M16x2 | M10x1.5  | A-22/A-32   |
| <b>3P-05</b>  | RK-75(N)/RA-130  | 40 | 30/20 | 30/25 | 45   | -6   | M20x2.5/M16x2 | M12x1.75 | A-13/A-23   |
| <b>3P-06</b>  | RK-100(N)/RA-170 | 40 | 30/25 | 30/25 | 45   | 81.5 | M20x2.5/M16x2 | M16x2    | A-101/A-106 |
| <b>3P-08</b>  | RK-125(N)/RA-220 | 40 | 40/30 | 35/30 | 50   | 106  | M24x3/M20x2.5 | M20x2.5  | A-120/A-130 |
| <b>3P-10</b>  | RK-125(N)/RA-220 | 40 | 40/30 | 35/30 | 50   | 133  | M24x3/M20x2.5 | M20x2.5  | A-147/A-157 |
| <b>3P-12</b>  | RK-150(N)/RA-270 | 40 | 40/35 | 45/35 | 55   | 133  | M30x3.5/M24x3 | M20x2.5  | A-152/A-157 |
| <b>3P-215</b> | RK-200(N)/RH-200 | 60 | 55    | 55    | 70   | 69   | M36x4         | M30x3.5  | A-88        |
| <b>3P-218</b> | RK-200(N)/RH-200 | 60 | 55    | 55    | 70   | 57   | M36x4         | M30x3.5  | A-76        |
| <b>3P-221</b> | RK-200(N)/RH-200 | 60 | 55    | 55    | 70   | 62   | M36x4         | M30x3.5  | A-81        |
| <b>3P-224</b> | RK-200(N)/RH-200 | 60 | 55    | 55    | 70   | 62   | M36x4         | M30x3.5  | A-81        |

Note: To calculate the draw-bar length of 2P as 3P.

| Chuck type   | Cylinder type | B  | C  | D  | G1   | G2   | K1      | K2       | L     |
|--------------|---------------|----|----|----|------|------|---------|----------|-------|
|              |               |    |    |    | max. | min. |         |          |       |
| <b>3M-05</b> | RK-75(N)      | 40 | 30 | 30 | 45   | -2   | M20x2.5 | M12x1.75 | A-17  |
| <b>3M-06</b> | RK-100(N)     | 40 | 30 | 30 | 45   | 81.5 | M20x2.5 | M16x2    | A-101 |
| <b>3M-08</b> | RK-125(N)     | 40 | 40 | 35 | 50   | 106  | M24x3.0 | M20x2.5  | A-120 |
| <b>3M-10</b> | RK-150(N)     | 40 | 40 | 35 | 50   | 135  | M24x3.0 | M20x2.5  | A-148 |
| <b>3M-12</b> | RK-150(N)     | 50 | 40 | 45 | 55   | 40   | M30x3.5 | M24x3    | A-59  |

Note: To calculate the draw-bar length of 2M as 3M.





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