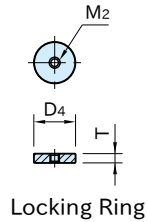
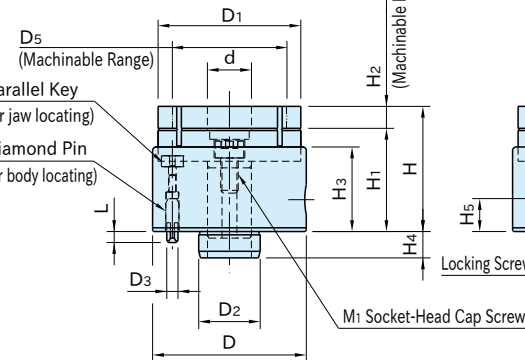
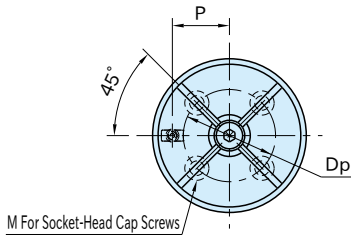
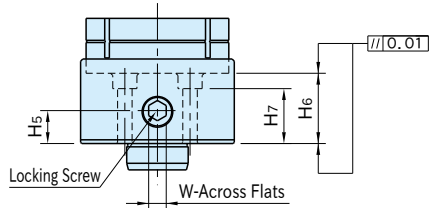


# CP120

# OD HOLDING CLAMPS



Body	Jaw
S45C steel Black oxide finish	A7075 alluminum Anodized Blue
Shaft / Locking Screw	Housing / Locking Ring
SCM435 steel Black oxide finish Quenched and tempered	S45C steel Black oxide finish



Part Number	D <sub>1</sub>	d	H	H <sub>2</sub>	D <sub>5</sub> *)		D	H <sub>1</sub>	H <sub>3</sub>	H <sub>6</sub> (±0.01)	D <sub>2</sub> (g6)	H <sub>4</sub>	M	H <sub>7</sub>	D <sub>p</sub>	D <sub>3</sub> (h6)	L	P (±0.02)
					min.	max.												
CP120-06501	65	19	57	10	20	55	70	47	39	32	28	12	M6	25	42	6	5	26
CP120-09001	90	23	72	15	24	80	95	57	46	38	42	14	M8	28	60	8	7	36

Part Number	W	H <sub>5</sub>	M <sub>1</sub>	M <sub>2</sub>	D <sub>4</sub>	T	Clamping Force (kN)	Allowable Screw Torque (N·m)	Weight (kg)
CP120-06501	8	15	M 8x1.25-15L	M4x0.7	18	4	4	60	1.1
CP120-09001	10	17	M10x1.5 -20L	M5x0.8	22	6	6	100	2.6

\*) Values are for reference only. The remaining jaw thickness should be determined considering the machining load.

## Technical Information

- Part locating repeatability: ±0.03
- Jaw locating repeatability: ±0.02

## Supplied With

- 1 of locking ring
- 1 of diamond pin
- 1 of socket-head cap screw

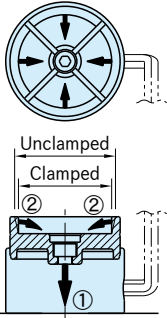
## Note

- Do not tighten the clamp screw without the workpiece set to prevent damage and deformation.
- Machine the jaw within the machinable range.

## Related Product

- CP121 Jaws
- CP122 Mounting-on-lathe Adapters

## Feature

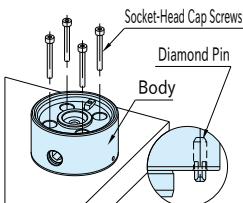


- ① When the locking screw is tightened, the central bottom part of the jaw is pulled down.
- ② At the same time the 4 jaw sections tilt toward the center to clamp the circumference of a part.

- The diaphragm clamping mechanism allows securely clamping a part with 4 jaw sections.
- Different irregularly-shaped parts can be clamped.
- The allowable compression diameter is 0.6 mm, making it ideal for lost wax, die cast, extruded, drawn, and premachined workpieces.

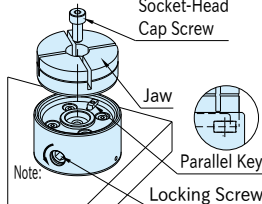
## How To Use

### 1. Body Mounting



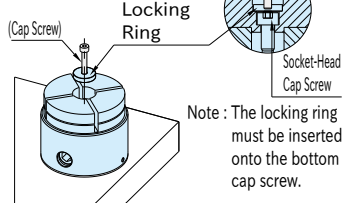
Insert an included diamond pin into the body for locating, and then secure the body to the fixture plate with 4 socket-head cap screws.

### 2. Jaw Setting



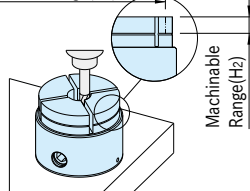
Engage the keyway on the bottom of the jaw with the parallel key on the top of the body, and then secure the jaw with an included cap screw.  
 Note: At jaw installation, ensure the locking screw is fully loosened by turning it counterclockwise until it stops.

### 3. Jaw Machining

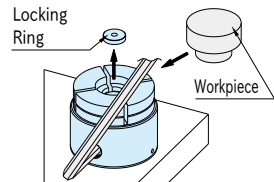


(1) Set the locking ring in the jaw. (using a cap screw facilitates setting)

### Machinable Range(Ds)



### 4. Workpiece Loading

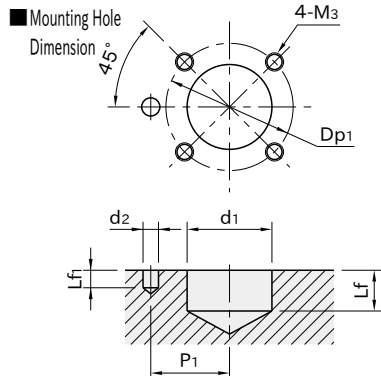


(2) Tighten the locking screw to clamp the locking ring. (Tighten with half of the allowable screw torque or more.) After clamping the screw, remove the screw from the locking ring.

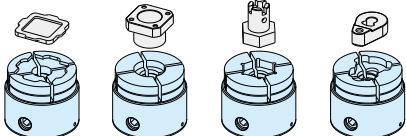
(3) Machine the jaw to the contours of the workpiece, within the machinable range.

- Loosen the cap screw to remove the locking ring.
- Load the workpiece and tighten the clamping screw for clamping.
- Following the above steps for jaw machining, the clearance between the jaw and the workpiece will be 0.3 mm in diameter.

## How To Install



Part Number	d <sub>1</sub> (H7)	Lf	d <sub>2</sub> (G7)	Lf <sub>1</sub>	P <sub>1</sub> (±0.02)	M <sub>3</sub>	Dp <sub>1</sub>
CP120-06501	28	13	6	6	26	M6×1	42
CP120-09001	42	15	8	8	36	M8×1.25	60



- Tightening the locking screw on the side of the body allows holding a part on its circumference.
- Machinable jaws allow clamping parts of various shapes.
- Ideal way to hold parts for machining on small-size machining centers, tapping centers, small-size 5-axis machines, CNC rotary tables, etc.