

# MBOD

# CONCENTRIC OD CLAMPS



(Jaw)



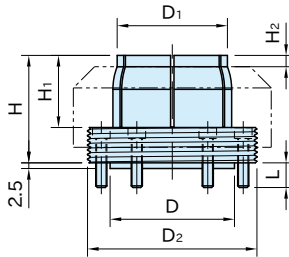
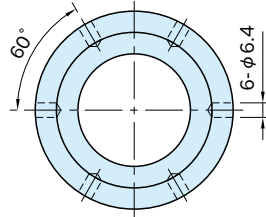
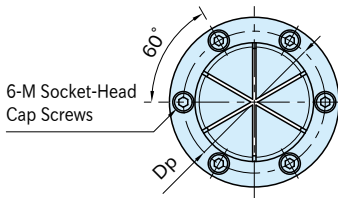
(Cap)



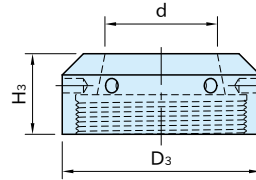
## ★Key Point

Compact design with high clamping force  
Applicable to small workpieces of  $\phi 2.5\text{mm}$   
and long workpieces

Jaw	Cap
S17C Steel Fluoroplastic coated	A6061 aluminum Hard anodized



(Jaw)



(Cap)

Part Number	Adaptable Workpiece Dia. *)	D <sub>1</sub>	H <sub>1</sub>	H	H <sub>2</sub>	D <sub>0</sub> ( <sub>-0.05</sub> )	D <sub>2</sub>	M	L	D <sub>p</sub>	D <sub>3</sub>	H <sub>3</sub>	d
<b>MBOD-1</b>	$\phi 2.5 - \phi 15.9$	19.1	22.9	35.6	4.6	23.9	38.1	M3×0.5-16L	6.8	29	50.8	25.4	20.1
<b>MBOD-2</b>	$\phi 5.1 - \phi 45.7$	49.5	32.4	48.3	5.1	55.9	76.2	M5×0.8-22L	11.1	63.8	88.9	36.2	50.5

\*)Machine the jaw to the workpiece diameter with attention to the Recommended Jaw Compression.

Part Number	Clamping Force (kN)	Allowable Tightening Torque (N·m)	Recommended Jaw Compression	Allowable Jaw Compression	Weight (g)
<b>MBOD-1</b>	17.3	81.5	0.07	0.38	200
<b>MBOD-2</b>	17.8	135.5	0.1	0.64	960

## Related Product

Jaws can be ordered separately.

• **MBOD-01** Jaws

## Feature

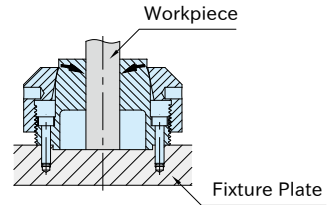
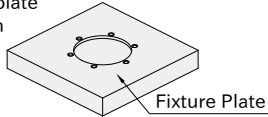
- Collet-shaped jaws generate high clamping force.
- The machinable jaw can clamp any shape of workpieces and hold long workpieces with a wide clamping area by machining completely through.

## Note

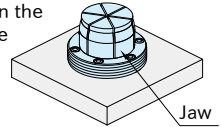
Do not tighten the cap without the workpiece to prevent damage and deformation.

## How To Use

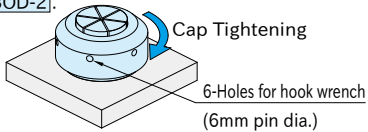
- ① Prepare a pocket on the plate according to D dimension of the jaw and drill 6 tapped holes.



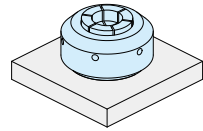
- ② Fix the jaw on the plate with the supplied screws.



- ③ Tighten the cap until the compression reaches the Recommended Jaw Compression. Each 15° of rotation compresses 0.025mm for jaw of **MBOD-1** and 0.05mm for **MBOD-2**.



- ④ Machine the jaw to nominal size of the workpiece.



## Technical Information

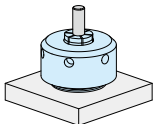
Indicators on the cap are guides to read the rotation degree for torque control without a torque wrench.

Tightening Torque (N·m)	MBOD-1		MBOD-2	
	Rotation Degree (**)	Clamping Force (kN)	Rotation Degree (**)	Clamping Force (kN)
13.5	43°	2.9	20°	1.8
27	66°	5.8	31°	3.6
40.5	88°	8.7	37°	5.3
54	111°	11.6	44°	7.1
68	133°	14.5	49°	8.9
81.5	165°	17.3	53°	10.7
95	-	-	56°	12.5
108.5	-	-	60°	14.2
122	-	-	65°	16
135.5	-	-	67°	17.8

\*\* 0° is when the clamp first contacts the workpiece.

## Application Example

■ Small round workpiece



■ Long workpiece

