# Pivot clamp



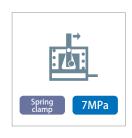












# Spring type that is best suited for light cutting process on thin workpieces

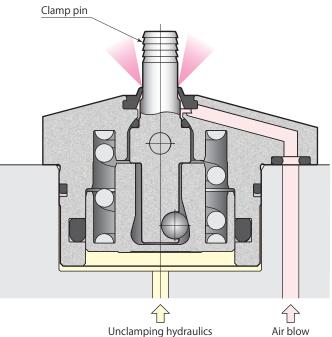
#### Patented

#### Compact design with enhanced built in structure

Spring force is amplified to provide strong clamping force by using wedge mechanism and principle of leveraging.

#### Air blow feature

Air blow circuit is built in to prevent adhesion and intrusion of metal chips and coolant to clamp pin tip section and clamp interiors.

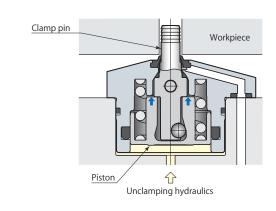


#### High strength & wedge shaped clamp pin

Features superior wear resistance due to stainless steel and hardening, ensuring secure clamping of workpiece with edge of leading tip.

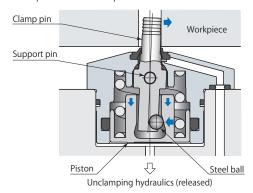
#### 1 Unclamp

Unclamping hydraulic pressure causes the piston to ascend, and the clamp pin is pushed by upper edge of piston, at perpendicular angle.



#### 2 Clamp

When unclamping hydraulic pressure is released, piston descends due to spring force and pushes the ball sideways. The clamp pin tilts with support pin at the center and clamps onto the workpiece.



# **Specifications**

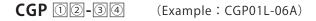
Model	Standard		CGP01-06 <sup>A</sup> <sub>B</sub>	CGP01-07 <sup>A</sup> <sub>B</sub>	CGP01-08 <sup>A</sup> <sub>B</sub>	CGP02-09 <sup>A</sup> <sub>B</sub>	CGP02-10 <sup>A</sup> <sub>B</sub>	CGP02-11 <sup>A</sup> <sub>B</sub>
	Low clamping force		CGP01L-06 <sup>A</sup> <sub>B</sub>	CGP01L-07 <sup>A</sup> <sub>B</sub>	CGP01L-08 <sup>A</sup> <sub>B</sub>	CGP02L-09 <sup>A</sup> <sub>B</sub>	CGP02L-10 <sup>A</sup> <sub>B</sub>	CGP02L-11 <sup>A</sup> <sub>B</sub>
Clamping	Standard	kN	0.63-0.72-0.73		0.98-1.30-1.34			
force*	Low clamping force	kN	0.28-0.36-0.37		0.48-0.81-0.86			
Clamping hole diameter	Standard hole diameter	mm	ø6	ø7	ø8	ø9	ø10	ø11
	Allowable range	mm	ø5.8-7.5	ø6.8-8.5	ø7.8-9.5	ø8.8-10.5	ø9.8–11.5	ø10.8–12.5
Max. clamp stroke		mm	1.0		1.0			
Cylinder capacity (unclamp)		cm³	2.16		3.18			
Insert depth		mm	2.0-10.0		2.0-10.0			
Mass		kg	0.29		0.34			

- Pressure range: 2-7 MPa
- Proof pressure: 10.5 MPa
- Operating temperature:0-70 °C
- Fluid used: General mineral based hydraulic oil (ISO-VG32 equivalent)
- Recommended air blow pressure: 0.3-0.4 MPa
- \*: Clamping force changes as angle of clamp pin changes depending on clamp hole diameter.

Values shown in the table represent clamping force for clamping hole for maximum hole diameter, standard hole diameter and minimum hole diameter.

(Example) For CGP01-06A, clamping force is 0.63 kN for hole diameter of ø7.5 mm, 0.72 kN for hole diameter of ø6 mm and 0.73 kN for hole diameter of ø5.8 mm.

## Model designation





② Clamping force
(Nil): Standard

L : Low clamping force

(Nil): Standard

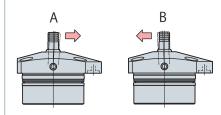
**L**: Low clamping force

③ Clamping hole diameter**06** ∶ ø6 mm

**07**: ø7 mm **08**: ø8 mm

**09**: ø9 mm **10**: ø10 mm

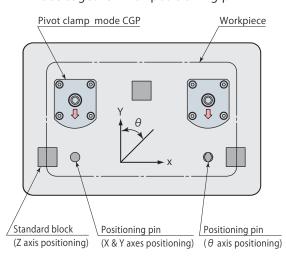
**11** : Ø10 mm



④ Clamping direction

#### Usage example

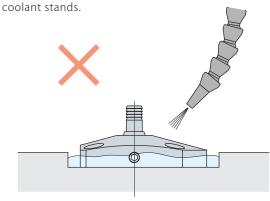
#### Use together with positioning pin



#### Caution in use

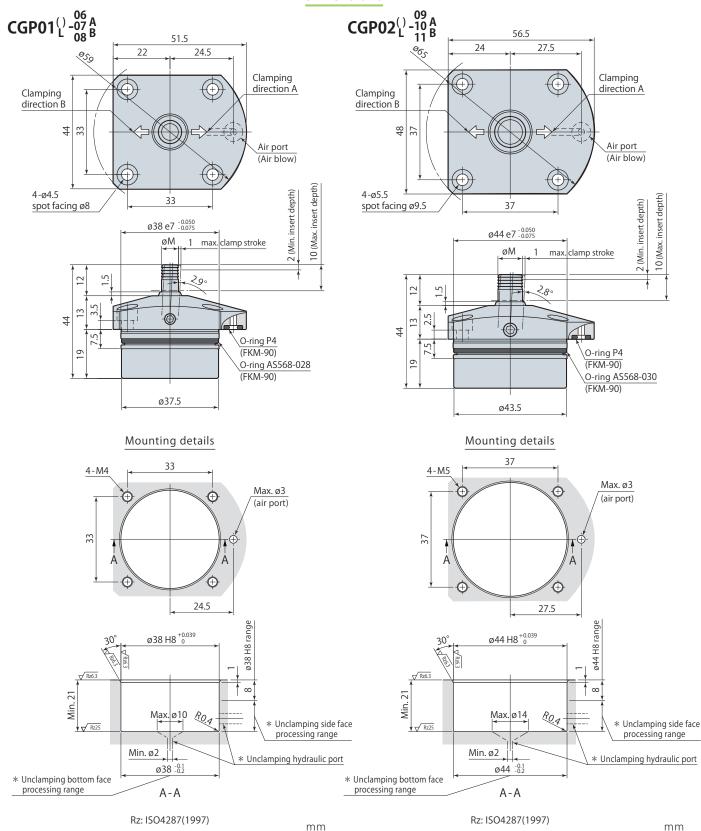
Avoid splashing coolant over the clamp as much as possible.

Also keep the clamp away from the area where the coolant stands.



Spring CGP Pivot clamp 7MPa clamp

### Dimensions



Model	CGP01 [7-06]	CGP01 1/2-07 g	CGP011/2-088
M (clamp pin diameter)	5.5	6.5	7.5

Model	CGP02 <sup>()</sup> -09 <sup>A</sup> <sub>B</sub>	CGP02 <sup>()</sup> -10 <sup>A</sup> <sub>B</sub>	CGP02 <sup>()</sup> -11 <sup>A</sup> <sub>B</sub>	
M (clamp pin diameter)	8.5	9.5	10.5	

\*: Unclamping hydraulic port must be made on either side or bottom face.

() -- () -- () -- ()

- This diagram indicates unclamped condition.
- Mounting screws are not included.

