■ YGG-BT/oil pressure plate speed control lever cylinder
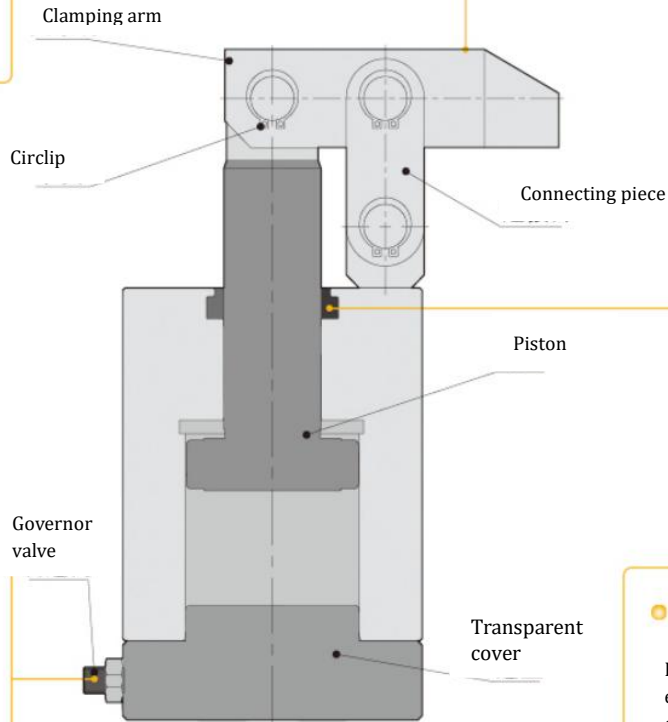
Pressure Range
15-70kg/cm^2

Three-way clamping arm

3 types of clamp arms with different installation directions are available and can be selected according to the workpiece, oil pressure piping and fixture settings.

Clamping arm

Circlip

Connecting piece

Piston

Governor valve

Governor valve

The clamping speed can be controlled by the speed control valve to realize the clamping sequence to meet your use requirements.

Transparent cover

High quality seals

High quality seals are used to effectively prevent coolant and chips from entering the cylinder block.

The figure shows the sectional view of the YGG-BT clamping state

Model Representation

YGG—BT ① ② (Example: YGG-BT25)
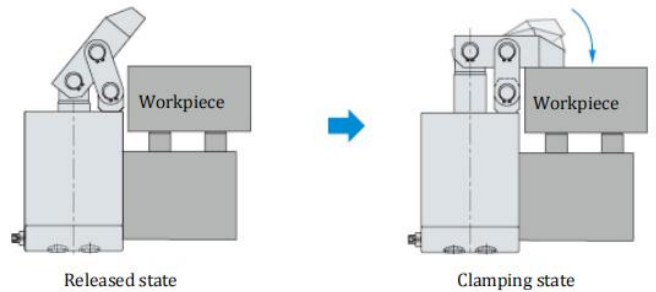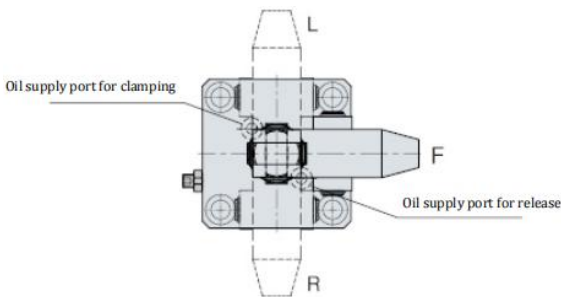
YGG-BT

①Dimension (refer to specification sheet)
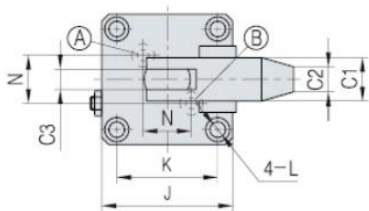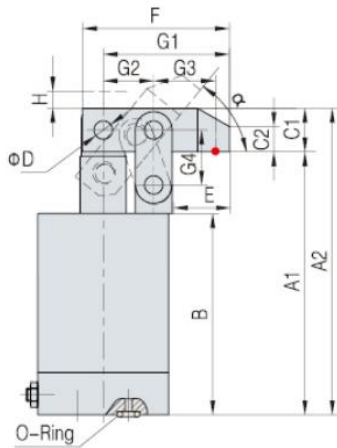
25
32
40
50
63

②Clamping arm direction

F: forward

L: left

R: right

Oil Circuit Plate Method

Oil supply port for clamping

Oil supply port for release

Piping type (no pipe interface)
The figure shows the clamping state of YGG-BT

Action Description

Released state

Clamping state

A-clamp port
B-release port

• − Optimal clamping position

The figure shows the clamping state

Overall Dimension
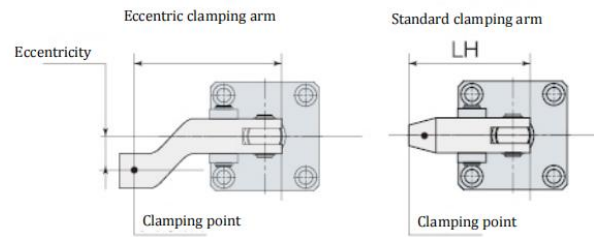
Model / Dimension	YGG–BT25	YGG–BT32	YGG–BT40	YGG–BT50	YGG–BT63
A1	112	115	129.9	146.3	163.1
A2	131	134	152.1	171.7	194.9
B	85	88	98	108	119
C1	□19	□19	□22.2	□25.4	□31.8
C2	11	11	13	15	19
C3	9	9	10	11	15
ΦD	Φ8	Φ8	Φ10	Φ12	Φ15
E	25	25	31	37	43
F	64	64	77	90	110
G1	55	55	66	77	94
G2	22	22	26	30	36
G3	28	28	34	39	48
G4	24	24	29	33	39
H	3	3	4	3	4
J	55	57	69	75	96
K	42	44	52	58	75
L	Φ6.8−Φ10.5*6.5D	Φ6.8−Φ10.5*7D	Φ9−Φ14*9D	Φ9−Φ14*9D	Φ11−Φ18*11D
N	19	21	23	28	32
O-Ring	P7	P7	P9	P9	P9
α	61°	61°	60°	66°	60°

Note: □ indicates square

Allowable Eccentricity of Clamping Arm

When the clamping point at the front end of the clamping arm of YGG connecting rod lever cylinder is not on the center line of the piston rod and the clamping arm due to the shape of the workpiece, the eccentric clamping arm shown in the right figure can be used. However, the eccentricity shall not exceed the allowable eccentricity in the following table. If a clamping arm exceeding the allowable eccentricity is used, the connecting rod mechanism and the piston rod will bear a large eccentric load, resulting in fault.

Eccentric clamping arm   Standard clamping arm

Eccentricity   LH

Clamping point   Clamping point

YGG–BT25			YGG–BT32			YGG–BT40	
Oil pressure (MPa)	Allowable eccentricity (mm)		Oil pressure (MPa)	Allowable eccentricity (mm)		Oil pressure (MPa)	Allowable eccentricity (mm)
	Clamping arm length G2+G3 (mm)			Clamping arm length G2+G3 (mm)			Clamping arm length G2+G3 (mm)
	50			50			60
7	22		7			7	5
6.5	25		6.5			6.5	5
6	32		6	5		6	12
5.5	37		5.5	10		5.5	21
5	47		5	15		5	32
4.5	57		4.5	21		4.5	45
4	↑		4	27		4	57
3.5	↑		3.5	37		3.5	↑
3	↑		3	51		3	↑
2.5	57		2.5	57		2.5	57

YGG–BT50			YGG–BT63	
Oil pressure (MPa)	Allowable eccentricity (mm)		Oil pressure (MPa)	Allowable eccentricity (mm)
	Clamping arm length G2+G3 (mm)			Clamping arm length G2+G3 (mm)
	69			84
7	15		7	11
6.5	23		6.5	17
6	30		6	25
5.5	35		5.5	35
5	42		5	47
4.5	50		4.5	59
4	57		4	70
3.5	70		3.5	80
3	↑		3	↑
2.5	70		2.5	80