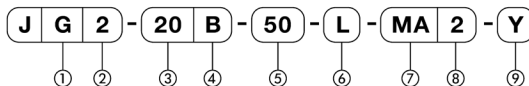


J Series

Air cylinder/Cushion type

Ø20, Ø25, Ø32, Ø40

Ordering Instructions



① Magnet

G : Cylinder with switch available (with built-in magnet)

② Action

2 : Double-acting, single rod

③ Bore (mm)

20 : Ø20

25 : Ø25

32 : Ø32

40 : Ø40

④ Cushion

B : Both-side air cushion

⑤ Stroke (mm)

Refer to Standard Stroke Table

⑥ Mounting

N : Standard type

L : Axial foot

A : Mounting plate

C : Eye

T : Center trunnion

Model No. of Packing

Bore (mm)	Packing
Ø20	JB20-PS
Ø25	JB25-PS
Ø32	JB32-PS
Ø40	JB40-PS

Model No. of Mounting Bracket

Bore (mm)	Ø20	Ø25	Ø32	Ø40
Axial foot mounting bracket	J20-L	J25-L	J32-L	J40-L
Flange mounting bracket	J20-A	J25-A	J32-A	J40-A
Eye mounting bracket	—	—	J32-C	J40-C
Trunnion mounting bracket	J20-T	J25-T	J32-T	J40-T

⑦ Sensor switch type

No symbol	No switch	
MA	MA-1 (AC110V, DC24V)	M type Reed switch
MB	MD-1 (DC24V)	
MC	MD-3 (DC5, 6V)	
MD	MR (AC, DC5 ~ 110V)	
ME	MA-2L (AC110V)	
MF	MA-2H (AC220V)	M type Proximity switch
MG	MT-3 (DC5 ~ 30V)	
MH	MT-3U (DC5 ~ 30V)	
MJ	MT-2 (DC24V)	
MK	MT-2U (DC24V)	

⑧ Number of switches

No symbol : No switch

2 : With 2 units

1 : With 1 unit

⑨ Accessories

No symbol : Rod end nut

Y : With rod end clevis

I : With rod end eye

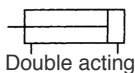
(note) Y : Provided with pin

Model No. of Sensor Switch Mounting Bracket

Bore (mm)	M type sensor switch
Ø20	J20-MJ
Ø25	J25-MJ
Ø32	J32-MJ
Ø40	J40-MJ



JIS Label



Value shown in this catalog is shown in SI unit. However, value within this output table is in generic unit. Use the following formula to convert to SI unit :

$$\text{Pressure } Y \text{ (MPa)} = X \text{ (kgf/cm}^2\text{)} \times 9.80665 \times 10^{-2}$$

$$\text{Force } Y \text{ (N)} = X \text{ (kgf)} \times 9.80665$$

Specifications

Action	Unit	Double-acting
Fluid		Non-lubricated air/Lubricated air
Pressure range	MPa(kgf/cm ²)	0.1~0.7(1.0~7.1)
Temperature range	°C	5~60
Piston speed range	mm/s	50~500
Cushion		Air cushion
Piston stroke allowance	mm	+1.0 0
Mounting		Standard type, Axial foot, Mounting plate, eye, Center trunnion

Standard stroke

(Unit: mm)

Bore	Standard stroke	Max. stroke
∅20	15, 25, 50, 75, 100, 125, 150	500
∅25	25, 50, 75, 100, 125, 150	
∅32	25, 50, 75, 100, 125, 150, 200, 250, 300	
∅40	50, 75, 100, 125, 150, 200, 250, 300	

Accessories

	Name	Standard type	Axial foot	Mounting plate	Eye	Center trunnion
Standard	Standard nut	○	○	○	—	—
	Rod end nut	○	○	○	○	○
Optional	With rod end clevis	○	○	○	○	○
	With rod end eye	○	○	○	○	○

Model with switch

M type reed switch

Lead with wire



Model No.	Rated voltage (V)	Rated current (mA)	Pilot lamp (Lights up at ON)	Application
MA-1	AC110	5~45	○	Relay PLC
	DC24	5~45		
MD-1	DC24	25~65	○	Relay
MD-3	DC5, 6	Max.50 (Inductive load) Max.300 (Resistive load)	○	IC circuit
MR	AC 5~110 DC	Max.50 (Inductive load) Max.300 (Resistive load)	No indicator	Relay PLC
MA-2L	AC110	5~150	○	Relay
MA-2H	AC220	5~150	○	Relay

(Note) The MA-2L is the same as the MA-1 except that MA-2L is also equipped with protective circuit SS-2L.

The MA-2H is the same as the MA-1 except that MA-2H is also equipped with protective circuit SS-2H.

M type proximity switch

Lead with wire



Model No.	Rated voltage (V)	Rated current range (mA)	Pilot lamp (Lights up at CN)	Application
MT-2 MT-2U	DC24 (DC10~30)	5~100	○	Relay PLC
MT-3 MT-3U	DC5~30	5~200	○	Relay PLC IC circuit

Minimum stroke with M type switch (Unit: mm)

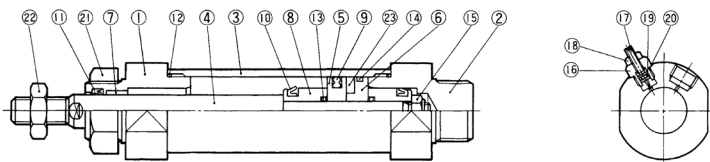
Bore	Number of switches		
	With 2 units (on the same surface)	With 2 units (on the different surfaces)	With 1 unit
Ø20	50	15	5
Ø25			
Ø32			
Ø40			

Sensor switch fixed position

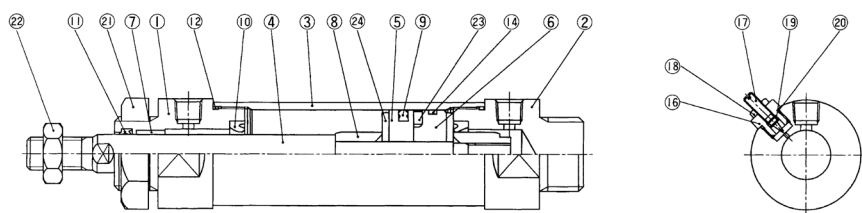
Sensor switch fixed position is the same as that of J Series Standard Type.

Construction

Ø20, Ø25



Ø32, Ø40



Parts List

No.	Name	No.	Name	No.	Name
1	Front cover	9	Piston packing	17	Cushion ejector pin
2	End cover	10	Cushion packing	18	Cushion locking nut
3	Outer tube	11	Rod packing	19	Cushion ejector pin packing
4	Piston rod	12	O-ring for cover	20	Cushion gasket
5	Piston A	13	Sleeve gasket	21	Standard nut
6	Piston B	14	Wear ring	22	Rod end nut
7	Bearing	15	U-shaped nut	23	Magnet
8	Buffering sleeve	16	Cushion cover	24	Demarcation strip

Packing list

Bore (mm)	9. Piston packing		10. Cushion packing		11. Rod packing		12. O-ring for cover	
	Model No.	Amount	Model No.	Amount	Model No.	Amount	Model No.	Amount
Ø20	PSD-20	1	GYH-13×7×3.8	2	PDU-10Z	1	SO-015-21	2
Ø25	PSD-25	1	GYH-17×11×3.8	2	PDU-12Z	1	SO-015-25	2
Ø32	PSD-32	1	CP-16	2	PDU-14Z	1	SO-015-29	2
Ø40	PSD-40	1	CP-18	2	PDU-16Z	1	SO-015-30	2

(Note) Packing repair and assembly kits are also available for purchase.

(Unit: mm)

Standard type N

Technical drawing of a standard type N shaft-hub assembly. The drawing shows a side view and an end view. The side view includes dimensions for the shaft (φ25), hub (φ32), and various diameters (φ10, φ19). It also shows the width across flats (13 and 24) and the width across the top (34). The end view shows the 30-degree chamfer and the 2-Rc(PT) 1/8 thread. The drawing is labeled 'Standard type N'.

The technical drawings show the mounting plate and stroke indicator assembly. The mounting plate is a triangular plate with a base of 60 mm and a height of 25 mm. The stroke indicator is mounted on the plate, with a base of 40 mm and a height of 16 mm. The stroke indicator has a base of 6.8 mm and a height of 3.2 mm. The stroke indicator is mounted on the plate with a base of 40 mm and a height of 16 mm. The stroke indicator has a base of 6.8 mm and a height of 3.2 mm. The stroke indicator is mounted on the plate with a base of 40 mm and a height of 16 mm. The stroke indicator has a base of 6.8 mm and a height of 3.2 mm.

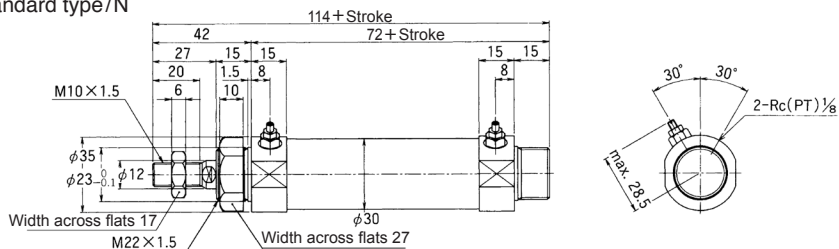
[illegible]

Technical drawing of a ball valve assembly. The front view (left) shows a circular body with a central bore. Dimensions include a bore diameter of $\phi 7.6_{-0.1}^{+0.0}$, an outer diameter of $\phi 8_{-0.06}^{+0.02}$, a body thickness of 14, a central bore length of 6.4, a flange thickness of 0.9, and a total width of 66. The side view (right) shows the valve handle and stem assembly. Dimensions include a handle diameter of $\phi 38$, a handle length of 9, a stem diameter of $\phi 9.5$, and a total assembly length of 29.5.

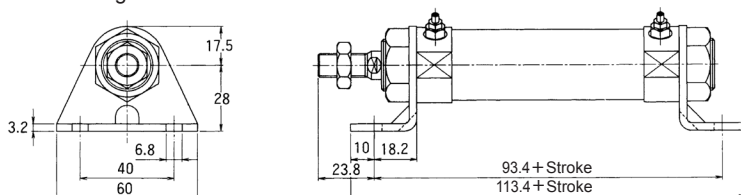
Double-acting $\varnothing 25/JG2-25B$

(Unit: mm)

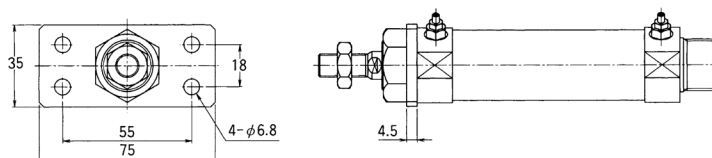
Standard type/N



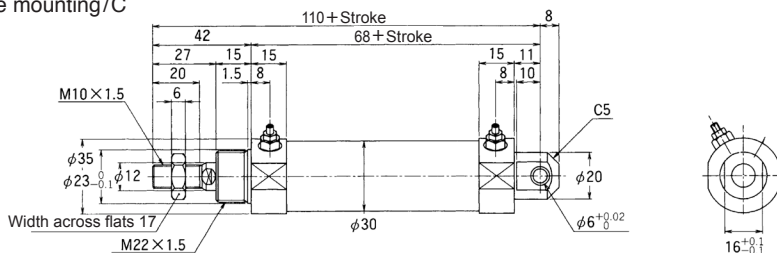
Axial foot mounting/L



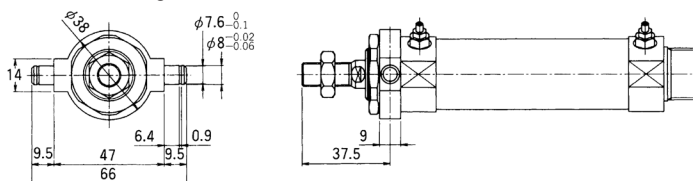
Mounting plate/A



Eye mounting/C



Center trunnion mounting/T



(Unit: mm)

[illegible]

Technical drawing of the 1000 Series Hydraulic Cylinder, showing front and side views with dimensions.

Front View Dimensions:

- Top flange outer diameter: 60
- Top flange inner diameter: 40
- Top flange thickness: 3.2
- Top flange height: 20.5
- Body diameter: 35
- Body length: 6.8

Side View Dimensions:

- Mounting bracket height: 29.8
- Mounting bracket width: 10
- Mounting bracket offset: 18.2
- Stroke length: 120.4 + Stroke
- Total length: 140.4 + Stroke

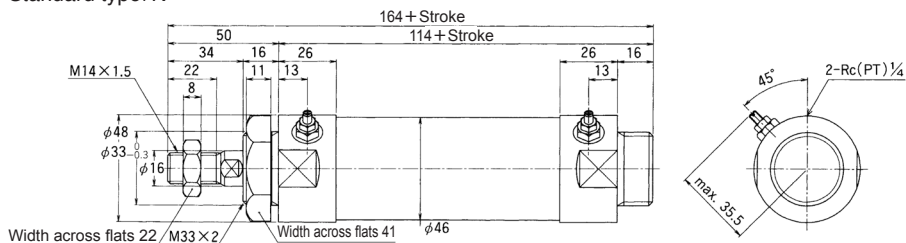
Technical drawing of the 1000 Series 1/2. The drawing includes a front view on the left and a side view on the right. The front view shows a square base with a central hexagonal port and four mounting holes. Dimensions are: overall width 80, overall height 40, central port width 60, and distance from center to mounting holes 20. A note indicates 4- ϕ 6.8. The side view shows the profile of the unit with a mounting flange and a dimension of 4.5.

[illegible]

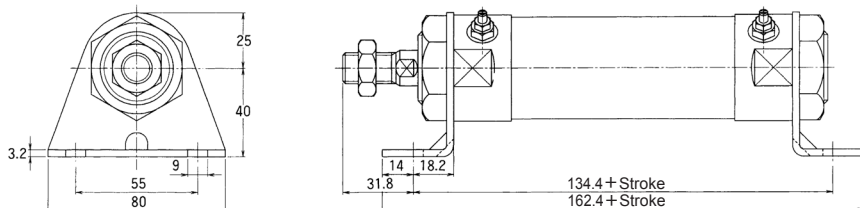
Double-acting $\varnothing 40$ /JG2-40B

(Unit: mm)

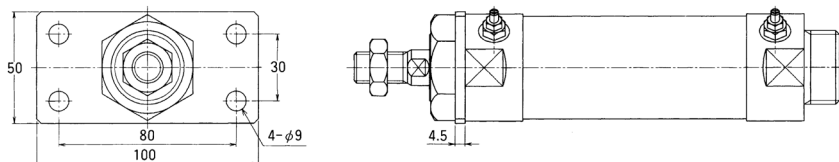
Standard type/N



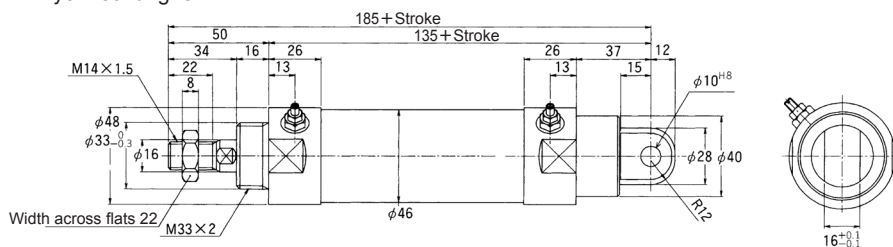
Axial foot mounting/L



Mounting plate/A



Eye mounting/C



Center trunnion mounting/T

