

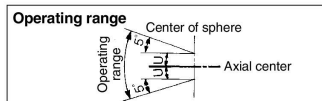
Floating Joint: For Compact Cylinders

JB Series

RoHS

Specifications

Operating pressure	Air pressure compact cylinder 1 MPa or less
--------------------	--



Specifications

Model	Applicable bore size (mm)	Applicable cylinder nominal thread size	Maximum operating tension and compression force (N)		Allowable eccentricity U (mm)	Rotating angle	Ambient temperature
			Compression side	Tension side			
JB12-3-050	12	M3 x 0.5	112	112	0.5	±5°	-5 to 60°C
JB16-4-070	16	M4 x 0.7	200	200	0.5		
JB20-5-080	20	M5 x 0.8	1100	300	0.5		
JB25-6-100	25	M6 x 1	2500	500	0.5		
JB40-8-125	32, 40	M8 x 1.25	6000	1300	0.75		
JB63-10-150	50, 63	M10 x 1.5	11000	3100	1		
JB80-16-200	80	M16 x 2	18000	5000	1.25		
JB100-20-250	100	M20 x 2.5	28000	7900	2		
JB140-22-250	125, 140	M22 x 2.5	54000	15300	2.5		
JB160-24-300	160	M24 x 3	71000	20000	3		

How to Order

JB

40

-

8-125

-

Option

Nil

None

X11

High temperature specifications
-5 to 100°C

For compact cylinders/
Female thread

Applicable bore size (mm)

Symbol	Applicable bore size (mm)
12	12
16	16
20	20
25	25
40	32, 40
63	50, 63
80	80
100	100
140	125, 140
160	160

Thread nominal size

Nominal thread size	Applicable cylinder nominal thread size
3-050	M3 x 0.5
4-070	M4 x 0.7
5-080	M5 x 0.8
6-100	M6 x 1
8-125	M8 x 1.25
10-150	M10 x 1.5
16-200	M16 x 2
20-250	M20 x 2.5
22-250	M22 x 2.5
24-300	M24 x 3

⚠ Precautions

Be sure to read this before handling the products. Refer to back page 50 for Safety Instructions.

Mounting

⚠ Warning

- To screw the male threads of the rod into the female threads of the socket or the case, make sure that it does not bottom out. If the floating joint is used with its rod bottomed out, the stud will not be able to float, causing damage. For the screw-in depth of the female threads, refer to the dimensions (page 1155). As a rule, after the rod bottoms out, back off 1 to 2 turns.
- The dust cover may adhere to the stud. In this case, move the dust cover at the neck of the stud by the finger or twist the stud slightly left or right to break in the dust cover before use.

Additionally, when screwing the stud and socket or the case into a driven body, screw in such parts with the dust cover removed. When screwing in such parts without removing the dust cover, this may cause damage to the dust cover.

- To use a floating joint to connect the cylinder rod to a driven body, secure it in place by applying a torque that is appropriate for the thread size. Also, if there is a risk of loosening during operation, take measures to prevent loosening, such as using a locking pin or thread adhesive. In the event that the connected portion becomes loose, the driven body might lose control or fall off, leading to equipment damage or injury to personnel.
- This product is not a rotary joint. So, the product cannot be used for rotational or rotation acting applications.
- Be sure to use the cushion mechanism of the cylinder or the buffer mechanism, such as the shock absorber so that any impact force is not applied to the floating joint when stopping a driven body. If there is no buffer mechanism, an excessive impact force is generated. As a result, the tensile compression force of the floating joint may exceed its maximum level.

Maintenance

⚠ Warning

- Do not reuse if disassembled. High strength adhesive is applied to the portion of the connection that is threaded to prevent it from loosening, and it must not be disassembled. If it is forcefully disassembled, it could lead to damage.

⚠ Caution

- The black zinc chromate treatment is applied to the material surfaces of the case, flange and foot. However, the white deposit may rarely occur on the surface. This white deposit does not affect the product functions. However, if the white deposit becomes a problem from a viewpoint of appearance, special products with the surface treatment changed to the electroless nickel plating are also available. For details, please contact SMC.