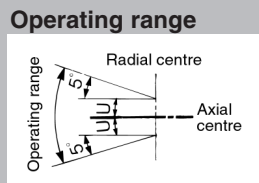
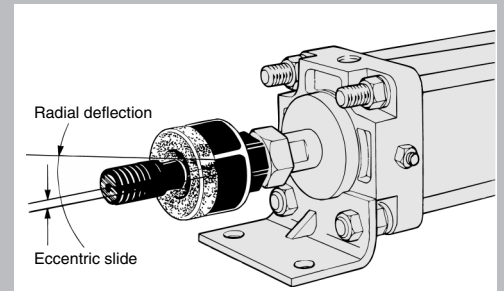





Floating Joint Series JA/JAH/JB

The floating joint can absorb any “off-centring” or “loss of parallel accuracy” between the cylinder and the driven body.

- ▮ Centring is unnecessary.
- ▮ A high level of machining accuracy is unnecessary.
- ▮ The installation time is dramatically reduced.
- ▮ It is compact and is suitable for high tensile stresses.
- ▮ Long life (with dustproof cover)
- ▮ Rotation angle: $\pm 5^\circ$



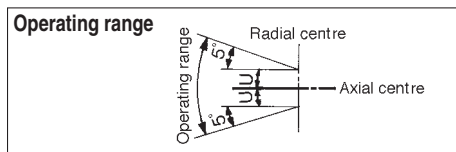
Variations

| Series | Operating pressure | | Cylinder bore size (mm) | Mounting | Page |
|--|--------------------|--------------------|---|--------------------------|------|
| | Air cylinder | Hydraulic cylinder | | | |
| Series JA  | 1MPa or less | 3.5MPa or less | 6, 10, 15, 20 25, 32, 40, 50 63, 80, 100, 125 140, 160 | Basic Flange Foot | 6-4 |
| Series JAH (Heavy load)  | — | 7MPa or less | 40, 50, 63 80, 100 | Basic Flange Foot | 6-9 |
| Series JB (For compact cylinder)  | 1MPa or less | — | 12, 16, 20, 25 32, 40, 50, 63 80, 100 | Basic (Female thread) | 6-12 |

Floating Joint/Standard Series JA

Specifications

| | |
|--------------------|--|
| Operating pressure | Air cylinder: $\leq 1\text{MPa}$ |
| | Hydraulic cylinder: $\leq 3.5\text{MPa}$ |
| Mounting | Basic, Flange, Foot |



Series JA

⚠ Precautions

Be sure to read before handling.
Refer to p.0-39 to 0-46 for Safety Instructions and common precautions.

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 bottom out, the stud will not be able to float, causing damage. Refer to the dimensions (P.5.2-4) for the screw-in depth of the female threads. As a rule, after the rod bottoms out, back off 1 to 2 turns.
- 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.

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.

Model/Specifications

| Model | Cylinder bore size (mm) | Thread nominal size | Max. operating force (tension/compression) (N) | | | Allowable eccentricity U (mm) | Rot. angle |
|--------------------------------------|-------------------------|---------------------|--|--------|--------|-------------------------------|---------------|
| | | | Basic | Flange | Foot | | |
| Standards/Thread nominal size | | | | | | | |
| JA6-3-050 | 6 | M3 | 19 | — | — | 0.5 | $\pm 5^\circ$ |
| JA10-4-070 | 10 | M4 | 54 | — | — | 0.5 | |
| JA15-5-080 | 10/15 | M5 | 123 | — | — | 0.5 | |
| JA15-6-100 | 15 | M6 | 123 | — | — | 0.5 | |
| JA□20-8-125 | 20 | M8 | 1100 | 1100 | 1000* | 0.5 | |
| JA□30-10-125 | 25/30 | M10 X 1.25 | 2500 | 2500 | 2000* | 0.5 | |
| JA□40-14-150 | 40 | M14 X 1.5 | 6000 | 4400 | 4400 | 0.75 | |
| JA□63-18-150 | 50/63 | M18 X 1.5 | 11000 | 11000 | 9000* | 1 | |
| JA□80-22-150 | 80 | M22 X 1.5 | 18000 | 18000 | 14000* | 1.25 | |
| JA□100-26-150 | 100 | M26 X 1.5 | 28000 | 28000 | 22000* | 2 | |
| JA□140-30-150 | 125/140 | M30 X 1.5 | 54000 | 36000* | 36000* | 2.5 | |
| JA□160-36-150 | 160 | M36 X 1.5 | 71000 | 55000* | 55000* | 3 | |
| Options/Thread nominal size | | | | | | | |
| JA□20-8-100 | 20 | M8 X 1 | 1100 | 1100 | 1000* | 0.5 | $\pm 5^\circ$ |
| JA□25-10-150 | 25 | M10 X 1.5 | 2500 | 2500 | 2000 | 0.5 | |
| JA□32-10-100 | 32 | M10 X 1 | 2500* | 2500* | 2000* | 0.5 | |
| JA□40-12-125 | 30/40 | M12 X 1.25 | 4400 | 4400 | 4400 | 0.75 | |
| JA□40-12-150 | 40 | M12 X 1.5 | 4400 | 4400 | 4400 | 0.75 | |
| JA□40-12-175 | 30/40 | M12 X 1.75 | 4400 | 4400 | 4400 | 0.75 | |
| JA□50-16-150 | 50/63 | M16 X 1.5 | 11000 | 11000 | 9000 | 1 | |
| JA□63-16-200 | 50/63 | M16 X 2 | 11000 | 11000 | 9000* | 1 | |
| JA□80-20-250 | 80 | M20 X 2.5 | 18000 | 18000 | 14000* | 1.25 | |
| JA□100-24-300 | 100 | M24 X 3 | 28000 | 28000 | 22000* | 2 | |
| JA□100-27-150 | 100 | M27 X 1.5 | 28000 | 28000 | 22000* | 2 | |
| JA□125-27-200 | 125 | M27 X 2 | 28000* | 28000* | 22000* | 2 | |
| JA□160-33-200 | 160 | M33 X 2 | 71000 | 55000* | 55000* | 3 | |
| JA160-36-200 | 160 | M36 X 2 | 71000 | — | — | 3 | |

* In case of hydraulic cylinder 3.5MPa, use it within max. operating force.

* Applicable cylinder bore sizes are approximate. Look at the thread size to select the product.

How to Order

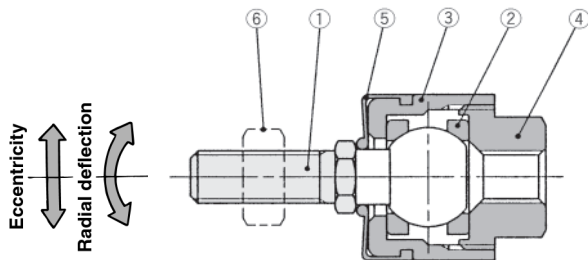
JA F 40 — 14-150

| Mounting | | Applicable cylinder bore size (mm) | | Thread nominal size (Standard) | |
|----------|--------|------------------------------------|---------|--------------------------------|---|
| Model | Symbol | Model | Symbol | Nominal size | Applicable cylinder thread nominal size |
| — | Basic | 6 | 6 | 3-050 | M3 |
| F | Flange | 10 | 10 | 4-070 | M4 |
| L | Foot | 15 | 10/15 | 5-080 | M5 |
| | | 20 | 20/25 | 6-100 | M6 |
| | | 30 | 25/30 | 8-125 | M8 |
| | | 40 | 40 | 10-125 | M10 X 1.25 |
| | | 63 | 50/63 | 14-150 | M14 X 1.5 |
| | | 80 | 80 | 18-150 | M18 X 1.5 |
| | | 100 | 100 | 22-150 | M22 X 1.5 |
| | | 140 | 125/140 | 26-150 | M26 X 1.5 |
| | | 160 | 160 | 30-150 | M30 X 1.5 |
| | | | | 36-150 | M36 X 1.5 |

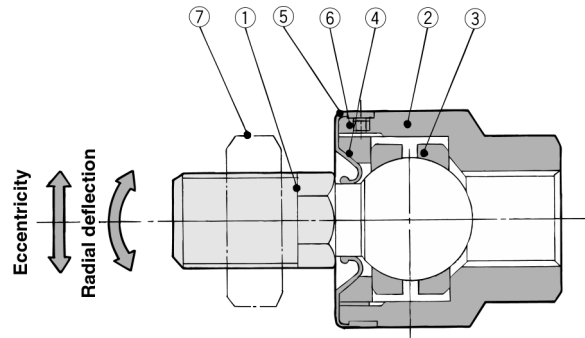
* Applicable cylinder bore sizes are approximate. Look at the thread size to select the product.

Construction

ø6 to ø15



ø20 to ø160



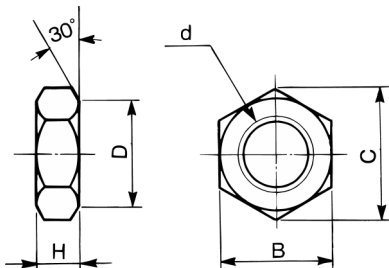
Component Parts

| No. | Description | Material |
|-----|-------------|----------------------------|
| ① | Stud | Shaving steel |
| ② | Case | Brass |
| ③ | Ring | Carbon steel |
| ④ | Socket | Brass |
| ⑤ | Dust cover | Synthetic rubber |
| ⑥ | Rod end nut | Low carbon steel wire rods |

| No. | Description | Material |
|-----|-------------|-------------------------|
| ① | Stud | Chrome-molybdenum steel |
| ② | Case | Carbon steel |
| ③ | Ring | Chrome-molybdenum steel |
| ④ | Cap | Carbon steel |
| ⑤ | Dust cover | Synthetic rubber |
| ⑥ | Set screw | Carbon steel |
| ⑦ | Rod end nut | Carbon steel |
| ⑧ | Flange | Rolled steel plate |
| ⑨ | Foot | Rolled steel plate |

Accessories Dimensions

Rod end nut



| d: Thread nominal size | H | B | C | D |
|------------------------|-----|-----|------|------|
| M3 | 2.4 | 5.5 | 6.4 | 5.3 |
| M4 | 3.2 | 7 | 8.1 | 6.8 |
| M5 | 4 | 8 | 9.2 | 7.8 |
| M6 | 5 | 10 | 11.5 | 9.8 |
| M8 X 1 | 5 | 13 | 15 | 12.5 |
| M8 | 5 | 13 | 15 | 12.5 |
| M10 X 1 | 6 | 17 | 19.6 | 16.5 |
| M10 X 1.25 | 6 | 17 | 19.6 | 16.5 |
| M10 | 6 | 17 | 19.6 | 16.5 |
| M12 X 1.25 | 7 | 19 | 21.9 | 18 |
| M12 X 1.5 | 7 | 19 | 21.9 | 18 |
| M12 | 7 | 19 | 21.9 | 18 |
| M14 X 1.5 | 8 | 22 | 25.4 | 21 |
| M16 X 1.5 | 10 | 24 | 27.7 | 23 |
| M16 | 10 | 24 | 27.7 | 23 |
| M18 X 1.5 | 11 | 27 | 31.2 | 26 |

| d: Thread nominal size | H | B | C | D |
|------------------------|----|----|------|----|
| M20 X 1.5 | 12 | 30 | 34.6 | 29 |
| M20 | 12 | 30 | 34.6 | 29 |
| M22 X 1.5 | 13 | 32 | 37 | 31 |
| M24 X 1.5 | 14 | 36 | 41.6 | 34 |
| M24 X 2 | 14 | 36 | 41.6 | 34 |
| M24 | 14 | 36 | 41.6 | 34 |
| M26 X 1.5 | 16 | 41 | 47.3 | 39 |
| M27 X 1.5 | 16 | 41 | 47.3 | 39 |
| M27 X 2 | 16 | 41 | 47.3 | 39 |
| M30 X 1.5 | 18 | 46 | 53.1 | 44 |
| M30 X 2 | 18 | 46 | 53.1 | 44 |
| M33 X 2 | 20 | 50 | 57.7 | 48 |
| M36 X 1.5 | 21 | 55 | 63.5 | 53 |
| M39 X 1.5 | 23 | 60 | 69.3 | 57 |
| M42 X 3 | 25 | 65 | 75 | 62 |
| M48 X 1.5 | 29 | 75 | 86.5 | 72 |

Floating joint replacement parts



∑Dust cover

Order with the following part no. if dust cover is damaged.

Replaceable dust cover is only for the basic style. Flange styles and foot styles cannot be replaced.

| Part No. of dust cover | Applicable model |
|------------------------|------------------|
| P2152051 | JA6, JA10 |
| P2152052 | JA15, JB12, JB16 |
| P215215 | JA20, JB20 |
| P215225 | JA30, JB30 |
| P215235 | JA40, JB40 |
| P215245 | JA63, JA50, JB63 |

| Part No. of dust cover | Applicable model |
|------------------------|----------------------|
| P215255 | JA80, JAH40, JB80 |
| P215265 | JA100, JAH50, JB100 |
| P215275 | JA125, JAH63 |
| P215285 | JA140, JAH80, JB140 |
| P215295 | JA160, JAH100, JB160 |

∑Rod end nut

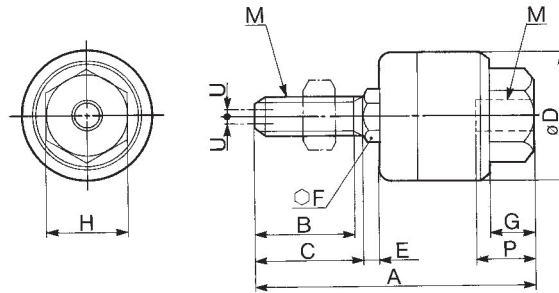
If rod end nut for the basic style of JA and JAH is needed, order it as follows:

Example) JA40-14-150 NUT

Series JA

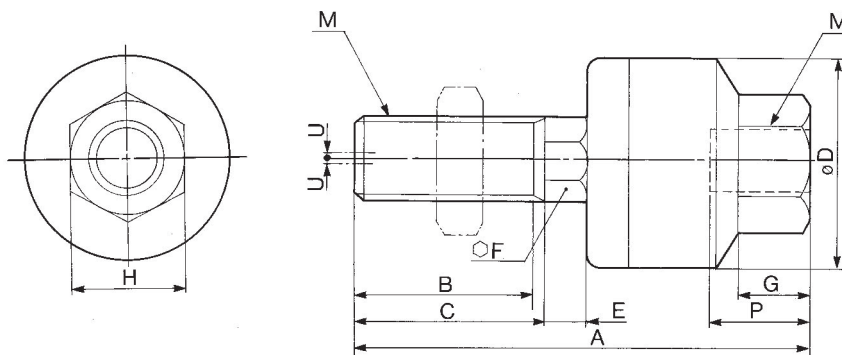
Basic/JA6 to JA160

JA6 to 15

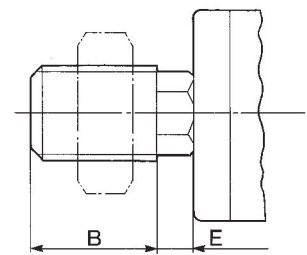


Use the precision spanner for clock 4mm in case of mounting male thread of JA6 and JA10.

JA20 to 160



Without C-dimension



| Cylinder bore size | Model | M | | A | B | C | D | E | F | G | H | Max. thread depth P | Allowable eccentricity U | Max. operating force (tension/compression) (N) | Weight (kg) |
|--------------------|--------------|--------------|-------|------|------|----|------|------|----|------|-----|---------------------|--------------------------|--|-------------|
| | | Nominal size | Pitch | | | | | | | | | | | | |
| 6 | JA6-3-050 | 3 | 0.5 | 23.2 | 7 | 8 | 12 | 1.5 | 4 | 3.2 | 5.5 | 5 | 0.5 | 19 | 0.01 |
| 10 (CJ1) | JA10-4-070 | 4 | 0.7 | 26 | 9 | 10 | 12 | 1.5 | 4 | 4 | 7 | 5.5 | 0.5 | 54 | 0.01 |
| 10 (CZ1)/15 (CJ1) | JA15-5-080 | 5 | 0.8 | 34.5 | 12.5 | 14 | 16 | 2 | 6 | 5 | 10 | 7 | 0.5 | 123 | 0.02 |
| 15 (CZ1) | JA15-6-100 | 6 | 1 | 34.5 | 12.5 | 14 | 16 | 2 | 6 | 5 | 10 | 7 | 0.5 | 123 | 0.02 |
| 20 | JA20-8-125 | 8 | 1.25 | 44 | 17.5 | — | 21 | 4.5 | 7 | 7 | 13 | 8 | 0.5 | 1100 | 0.05 |
| 25/30 | JA30-10-125 | 10 | 1.25 | 49.5 | 19.5 | — | 24 | 5 | 8 | 8 | 17 | 9 | 0.5 | 2500 | 0.07 |
| 40 | JA40-14-150 | 14 | 1.5 | 60 | 20 | — | 31 | 6 | 11 | 11 | 22 | 13 | 0.75 | 6000 | 0.16 |
| 50/63 | JA63-18-150 | 18 | 1.5 | 74.5 | 25 | — | 41 | 7.5 | 14 | 13.5 | 27 | 15 | 1 | 11000 | 0.31 |
| 80 | JA80-22-150 | 22 | 1.5 | 89.5 | 29 | — | 50 | 9.5 | 19 | 16 | 32 | 18 | 1.25 | 18000 | 0.58 |
| 100 | JA100-26-150 | 26 | 1.5 | 110 | 35 | — | 59.5 | 11.5 | 24 | 20 | 41 | 24 | 2 | 28000 | 1.08 |
| 125/140 | JA140-30-150 | 30 | 1.5 | 152 | 42 | 45 | 79 | 14 | 30 | 22 | 46 | 38 | 2.5 | 54000 | 2.7 |
| 160 | JA160-36-150 | 36 | 1.5 | 178 | 52 | 55 | 96 | 16 | 36 | 24 | 55 | 42 | 3 | 71000 | 4.7 |

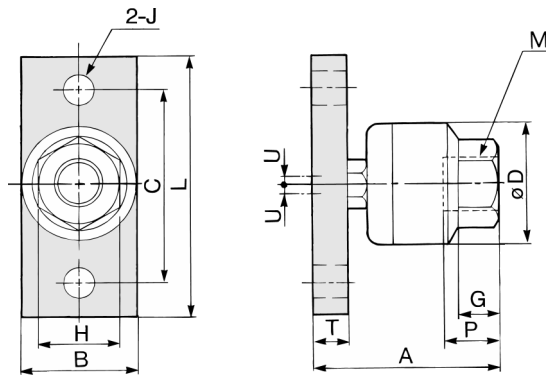
Options Air cylinder: Max. 1MPa Hydraulic cylinder: Max. 3.5MPa

| | | | | | | | | | | | | | | | |
|-------|--------------|----|------|------|------|----|------|------|----|------|----|----|------|--------|------|
| 20 | JA20-8-100 | 8 | 1 | 44 | 17.5 | — | 21 | 4.5 | 7 | 7 | 13 | 8 | 0.5 | 1100 | 0.05 |
| 25 | JA25-10-150 | 10 | 1.5 | 49.5 | 19.5 | — | 24 | 5 | 8 | 8 | 17 | 9 | 0.5 | 2500 | 0.07 |
| 32 | JA32-10-100 | 10 | 1 | 49.5 | 19.5 | — | 24 | 5 | 8 | 8 | 17 | 9 | 0.5 | 2500* | 0.07 |
| 30/40 | JA40-12-125 | 12 | 1.25 | 60 | 20 | — | 31 | 6 | 11 | 11 | 22 | 13 | 0.75 | 4400 | 0.16 |
| 40 | JA40-12-150 | 12 | 1.5 | 60 | 20 | — | 31 | 6 | 11 | 11 | 22 | 13 | 0.75 | 4400 | 0.16 |
| 30/40 | JA40-12-175 | 12 | 1.75 | 60 | 20 | — | 31 | 6 | 11 | 11 | 22 | 13 | 0.75 | 4400 | 0.16 |
| 50/63 | JA50-16-150 | 16 | 1.5 | 71.5 | 22 | — | 41 | 7.5 | 14 | 13.5 | 27 | 15 | 1 | 11000 | 0.3 |
| 50/63 | JA63-16-200 | 16 | 2 | 71.5 | 22 | — | 41 | 7.5 | 14 | 13.5 | 27 | 15 | 1 | 11000 | 0.3 |
| 80 | JA80-20-250 | 20 | 2.5 | 90.5 | 27 | 30 | 50 | 9.5 | 19 | 16 | 32 | 18 | 1.25 | 18000 | 0.6 |
| 100 | JA100-24-300 | 24 | 3 | 110 | 32 | 35 | 59.5 | 11.5 | 24 | 20 | 41 | 24 | 2 | 28000 | 1.05 |
| 100 | JA100-27-150 | 27 | 1.5 | 110 | 35 | — | 59.5 | 11.5 | 24 | 20 | 41 | 24 | 2 | 28000 | 1.08 |
| 125 | JA125-27-200 | 27 | 2 | 123 | 34 | 38 | 66 | 13 | 27 | 20 | 41 | 24 | 2 | 28000* | 1.5 |
| 160 | JA160-33-200 | 33 | 2 | 165 | 38 | 42 | 96 | 16 | 36 | 24 | 55 | 42 | 3 | 71000 | 4.5 |
| 160 | JA160-36-200 | 36 | 2 | 178 | 51 | 55 | 96 | 16 | 55 | 24 | 55 | 42 | 3 | 71000 | 4.7 |

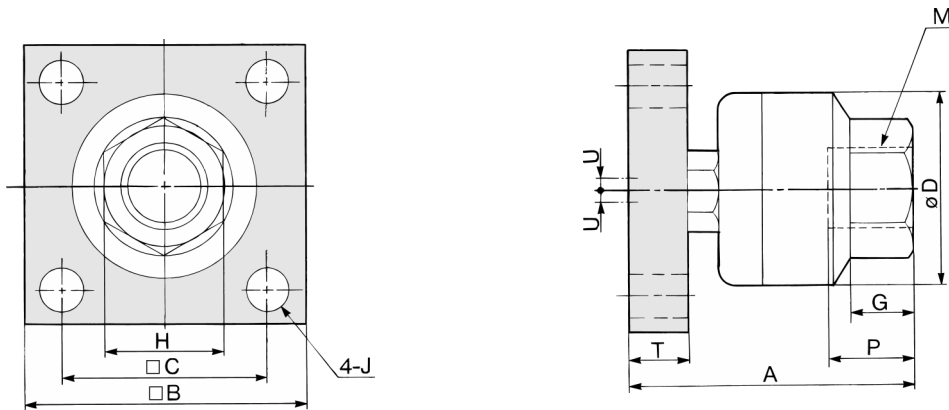
* In case a hydraulic cylinder 3.5MPa, use it within the above max. operating force.

Flange/JAF20 to JAF160

JAF20 to 40



JAF50 to 160



| Cylinder bore size | Model | M | | A | B | L | C | D | T | J | G | H | Max. thread depth P | Allowable eccentricity U | Max. operating force (tension/compression) (N) | Weight (kg) |
|--------------------|---------------|--------------|-------|------|-----|----|-----|------|----|-----|------|----|---------------------|--------------------------|--|-------------|
| | | Nominal size | Pitch | | | | | | | | | | | | | |
| 20 | JAF20-8-125 | 8 | 1.25 | 32.5 | 19 | 48 | 36 | 21 | 6 | 6.6 | 7 | 13 | 8 | 0.5 | 1100 | 0.08 |
| 25/30 | JAF30-10-125 | 10 | 1.25 | 36 | 25 | 52 | 40 | 24 | 6 | 6.6 | 8 | 17 | 9 | 0.5 | 2500 | 0.12 |
| 40 | JAF40-14-150 | 14 | 1.5 | 49 | 32 | 70 | 52 | 31 | 9 | 9 | 11 | 22 | 13 | 0.75 | 4400 | 0.28 |
| 50/63 | JAF63-18-150 | 18 | 1.5 | 61.5 | 65 | — | 45 | 41 | 12 | 9 | 13.5 | 27 | 15 | 1 | 11000 | 0.63 |
| 80 | JAF80-22-150 | 22 | 1.5 | 76.5 | 75 | — | 55 | 50 | 16 | 11 | 16 | 32 | 18 | 1.25 | 18000 | 1.15 |
| 100 | JAF100-26-150 | 26 | 1.5 | 94 | 90 | — | 65 | 59.5 | 19 | 11 | 20 | 41 | 24 | 2 | 28000 | 2.07 |
| 125/140 | JAF140-30-150 | 30 | 1.5 | 131 | 125 | — | 82 | 79 | 24 | 18 | 22 | 46 | 38 | 2.5 | 36000* | 5.2 |
| 160 | JAF160-36-150 | 36 | 1.5 | 152 | 150 | — | 100 | 96 | 29 | 22 | 24 | 55 | 42 | 3 | 55000* | 9 |

Options Air cylinder: Max. 1MPa Hydraulic cylinder: Max. 3.5MPa

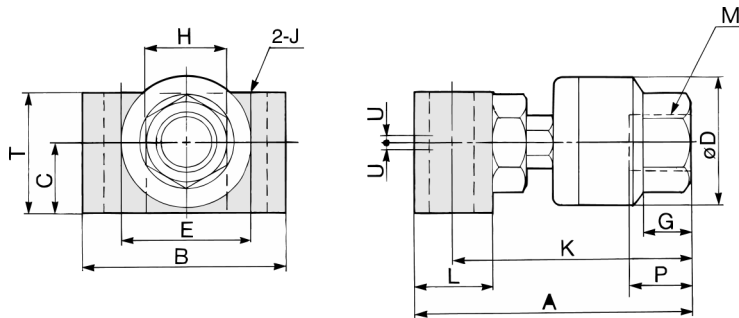
| | | | | | | | | | | | | | | | | |
|-------|---------------|----|------|------|-----|----|-----|------|----|-----|------|----|----|------|--------|------|
| 20 | JAF20-8-100 | 8 | 1 | 32.5 | 19 | 48 | 36 | 21 | 6 | 6.6 | 7 | 13 | 8 | 0.5 | 1100 | 0.08 |
| 25 | JAF25-10-150 | 10 | 1.5 | 36 | 25 | 52 | 40 | 24 | 6 | 6.6 | 8 | 17 | 9 | 0.5 | 2500 | 0.12 |
| 32 | JAF32-10-100 | 10 | 1 | 36 | 25 | 52 | 40 | 24 | 6 | 6.6 | 8 | 17 | 9 | 0.5 | 2500* | 0.12 |
| 30/40 | JAF40-12-125 | 12 | 1.25 | 49 | 32 | 70 | 52 | 31 | 9 | 9 | 11 | 22 | 13 | 0.75 | 4400 | 0.28 |
| 40 | JAF40-12-150 | 12 | 1.5 | 49 | 32 | 70 | 52 | 31 | 9 | 9 | 11 | 22 | 13 | 0.75 | 4400 | 0.28 |
| 30/40 | JAF40-12-175 | 12 | 1.75 | 49 | 32 | 70 | 52 | 31 | 9 | 9 | 11 | 22 | 13 | 0.75 | 4400 | 0.28 |
| 50/63 | JAF50-16-150 | 16 | 1.5 | 61.5 | 65 | — | 45 | 41 | 12 | 9 | 13.5 | 27 | 15 | 1 | 11000 | 0.63 |
| 50/63 | JAF63-16-200 | 16 | 2 | 61.5 | 65 | — | 45 | 41 | 12 | 9 | 13.5 | 27 | 15 | 1 | 11000 | 0.63 |
| 80 | JAF80-20-250 | 20 | 2.5 | 76.5 | 75 | — | 55 | 50 | 16 | 11 | 16 | 32 | 18 | 1.25 | 18000 | 1.15 |
| 100 | JAF100-24-300 | 24 | 3 | 94 | 90 | — | 65 | 59.5 | 19 | 11 | 20 | 41 | 24 | 2 | 28000 | 2.07 |
| 100 | JAF100-27-150 | 27 | 1.5 | 94 | 90 | — | 65 | 59.5 | 19 | 11 | 20 | 41 | 24 | 2 | 28000 | 2.07 |
| 125 | JAF125-27-200 | 27 | 2 | 106 | 100 | — | 72 | 66 | 21 | 18 | 20 | 41 | 24 | 2 | 28000* | 2.8 |
| 160 | JAF160-33-200 | 33 | 2 | 152 | 150 | — | 100 | 96 | 29 | 22 | 24 | 55 | 42 | 3 | 55000* | 9 |

* In case of a hydraulic cylinder 3.5MPa, use it within the above max. operating force.

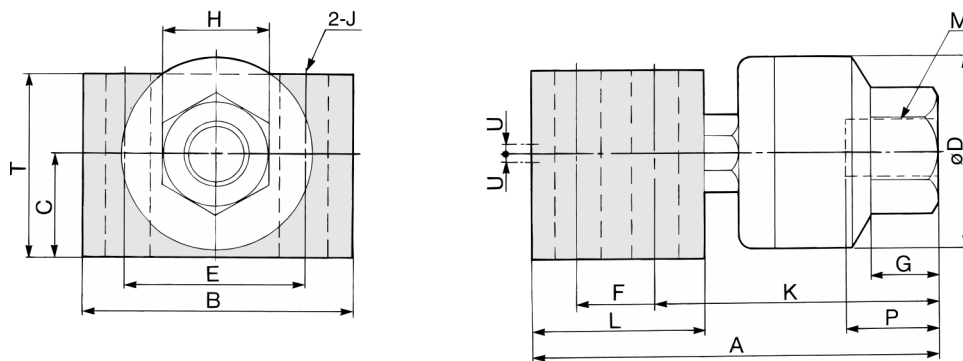
Series JA

Foot/JAL20 to JAF160

JAL20 to 100



JAL125 to 160



| Cylinder bore size | Model | M | | A | B | C | D | E | F | K | L | T | J | G | H | Max. thread depth P | Allowable eccentricity U | Max. operating force (tension/compression) (N) | Weight (kg) |
|--------------------|-------|--------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---------------------|--------------------------|--|-------------|
| | | Nominal size | Pitch | | | | | | | | | | | | | | | | |

Standards Air cylinder: Max. 1MPa Hydraulic cylinder: Max. 3.5MPa

| | | | | | | | | | | | | | | | | | | | |
|---------|---------------|----|------|------|-----|------|------|----|----|------|----|----|-----|------|----|----|------|--------|------|
| 20 | JAL20-8-125 | 8 | 1.25 | 44 | 30 | 11.5 | 21 | 18 | — | 38 | 12 | 19 | 6.6 | 7 | 13 | 8 | 0.5 | 1000* | 0.09 |
| 25/30 | JAL30-10-125 | 10 | 1.25 | 52 | 42 | 14 | 24 | 24 | — | 44 | 16 | 25 | 9 | 8 | 17 | 9 | 0.5 | 2000* | 0.18 |
| 40 | JAL40-14-150 | 14 | 1.5 | 67 | 52 | 17.5 | 31 | 30 | — | 57.5 | 19 | 30 | 11 | 11 | 22 | 13 | 0.75 | 4400 | 0.36 |
| 50/63 | JAL63-18-150 | 18 | 1.5 | 82.5 | 56 | 23 | 41 | 34 | — | 71.5 | 22 | 38 | 11 | 13.5 | 27 | 15 | 1 | 9000* | 0.61 |
| 80 | JAL80-22-150 | 22 | 1.5 | 98.5 | 70 | 28 | 50 | 42 | — | 86 | 25 | 47 | 14 | 16 | 32 | 18 | 1.25 | 14000* | 1.09 |
| 100 | JAL100-26-150 | 26 | 1.5 | 123 | 80 | 35 | 59.5 | 48 | — | 107 | 32 | 58 | 16 | 20 | 41 | 24 | 2 | 22000* | 2.03 |
| 125/140 | JAL140-30-150 | 30 | 1.5 | 187 | 96 | 45 | 79 | 60 | 44 | 125 | 80 | 79 | 18 | 22 | 46 | 38 | 2.5 | 36000* | 6.4 |
| 160 | JAL160-36-150 | 36 | 1.5 | 213 | 116 | 55 | 96 | 74 | 48 | 144 | 90 | 89 | 22 | 24 | 55 | 42 | 3 | 55000* | 10 |

Options Air cylinder: Max. 1MPa Hydraulic cylinder: Max. 3.5MPa

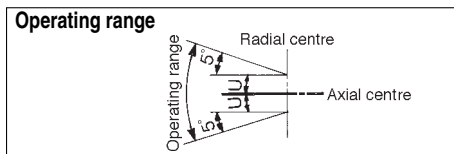
| | | | | | | | | | | | | | | | | | | | |
|-------|---------------|----|------|------|-----|------|------|----|----|------|----|----|-----|------|----|----|------|--------|------|
| 20 | JAL20-8-100 | 8 | 1 | 44 | 30 | 11.5 | 21 | 18 | — | 38 | 12 | 19 | 6.6 | 7 | 13 | 8 | 0.5 | 1000* | 0.09 |
| 25 | JAL25-10-150 | 10 | 1.5 | 52 | 42 | 14 | 24 | 24 | — | 44 | 16 | 25 | 9 | 8 | 17 | 9 | 0.5 | 2000 | 0.18 |
| 32 | JAL32-10-100 | 10 | 1 | 52 | 42 | 14 | 24 | 24 | — | 44 | 16 | 25 | 9 | 8 | 17 | 9 | 0.5 | 2000* | 0.18 |
| 30/40 | JAL40-12-125 | 12 | 1.25 | 67 | 52 | 17.5 | 31 | 30 | — | 57.5 | 19 | 30 | 11 | 11 | 22 | 13 | 0.75 | 4400 | 0.36 |
| 40 | JAL40-12-150 | 12 | 1.5 | 67 | 52 | 17.5 | 31 | 30 | — | 57.5 | 19 | 30 | 11 | 11 | 22 | 13 | 0.75 | 4400 | 0.36 |
| 30/40 | JAL40-12-175 | 12 | 1.75 | 67 | 52 | 17.5 | 31 | 30 | — | 57.5 | 19 | 30 | 11 | 11 | 22 | 13 | 0.75 | 4400 | 0.36 |
| 50/63 | JAL50-16-150 | 16 | 1.5 | 82.5 | 56 | 23 | 41 | 34 | — | 71.5 | 22 | 38 | 11 | 13.5 | 27 | 15 | 1 | 9000 | 0.61 |
| 50/63 | JAL63-16-200 | 16 | 2 | 82.5 | 56 | 23 | 41 | 34 | — | 71.5 | 22 | 38 | 11 | 13.5 | 27 | 15 | 1 | 9000* | 0.61 |
| 80 | JAL80-20-250 | 20 | 2.5 | 98.5 | 70 | 28 | 50 | 42 | — | 86 | 25 | 47 | 14 | 16 | 32 | 18 | 1.25 | 14000* | 1.09 |
| 100 | JAL100-24-300 | 24 | 3 | 123 | 80 | 35 | 59.5 | 48 | — | 107 | 32 | 58 | 16 | 20 | 41 | 24 | 2 | 22000* | 2.03 |
| 100 | JAL100-27-150 | 27 | 1.5 | 123 | 80 | 35 | 59.5 | 48 | — | 107 | 32 | 58 | 16 | 20 | 41 | 24 | 2 | 22000* | 2.03 |
| 125 | JAL125-27-200 | 27 | 2 | 155 | 88 | 38 | 66 | 54 | 36 | 102 | 70 | 69 | 14 | 20 | 41 | 24 | 2 | 22000* | 4.1 |
| 160 | JAL160-33-200 | 33 | 2 | 213 | 116 | 55 | 96 | 74 | 48 | 144 | 90 | 89 | 22 | 24 | 55 | 42 | 3 | 55000* | 10 |

* In case of a hydraulic cylinder 3.5MPa, use it within the above max. operating force.

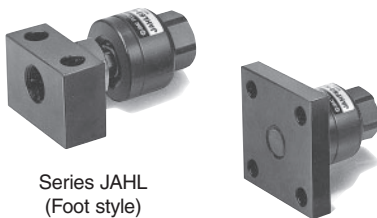
Floating Joint/Heavy Load Style Series JAH

Specifications

| | |
|--------------------|--|
| Operating pressure | Hydraulic cylinder: $\leq 7\text{MPa}$ |
| Mounting | Basic, Flange, Foot |



Series JAH



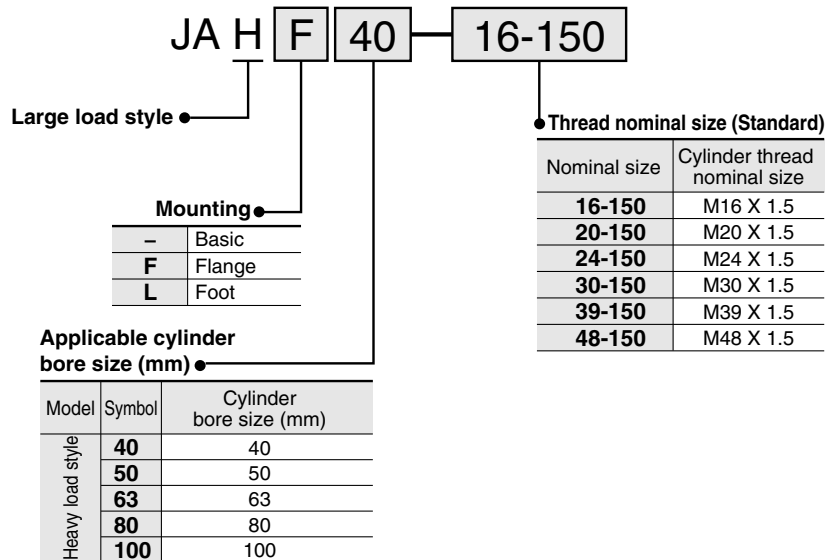
Series JAHL
(Foot style)

Series JAHF
(Flange style)

Model/Specifications

| Model | Cylinder bore size (mm) | Thread nominal size | Max. operating force (tension/compression) (N) | | | Allowable eccentricity U (mm) | Rotation angle |
|--------------------------------------|-------------------------|---------------------|--|--------|-------|-------------------------------|----------------|
| | | | Basic | Flange | Foot | | |
| Standards/Thread nominal size | | | | | | | |
| JAH□40-16-150 | 40 | M16 X 1.5 | 11000 | 9000 | 9000 | 1.25 | ±5° |
| JAH□50-20-150 | 50 | M20 X 1.5 | 18000 | 14000 | 14000 | 2 | |
| JAH□63-24-150 | 63 | M24 X 1.5 | 28000 | 22000 | 22000 | 2 | |
| JAH□80-30-150 | 80 | M30 X 1.5 | 54000 | 36000 | 36000 | 2.5 | |
| JAH□100-39-150 | 100 | M39 X 1.5 | 71000 | 55000 | 55000 | 3 | |
| JAH□100-48-150 | 100 | M48 X 1.5 | 71000 | 55000 | 55000 | 3 | |
| Options/Thread nominal size | | | | | | | |
| JAH□63-24-200 | 63 | M24 X 2 | 28000 | 22000 | 22000 | 2 | ±5° |
| JAH□80-30-200 | 80 | M30 X 2 | 54000 | 36000 | 36000 | 2.5 | |
| JAH□100-42-300 | 100 | M42 X 3 | 71000 | 55000 | 55000 | 3 | |

How to Order



⚠ Precautions

Be sure to read before handling. Refer to p.0-39 to 0-46 for Safety Instructions and common precautions.

Mounting

⚠ Warning

① 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. Refer to the dimensions (p.5.2-8) for the screw-in depth of the female threads. As a rule, after the rod bottoms out, back off 1 to 2 turns.

② 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. Furthermore, 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.

Maintenance

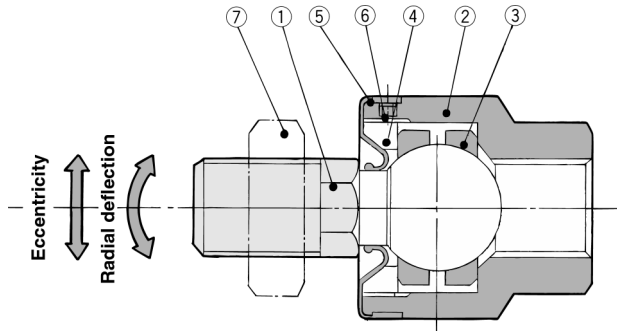
⚠ Warning

① 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.

Series JAH

Construction



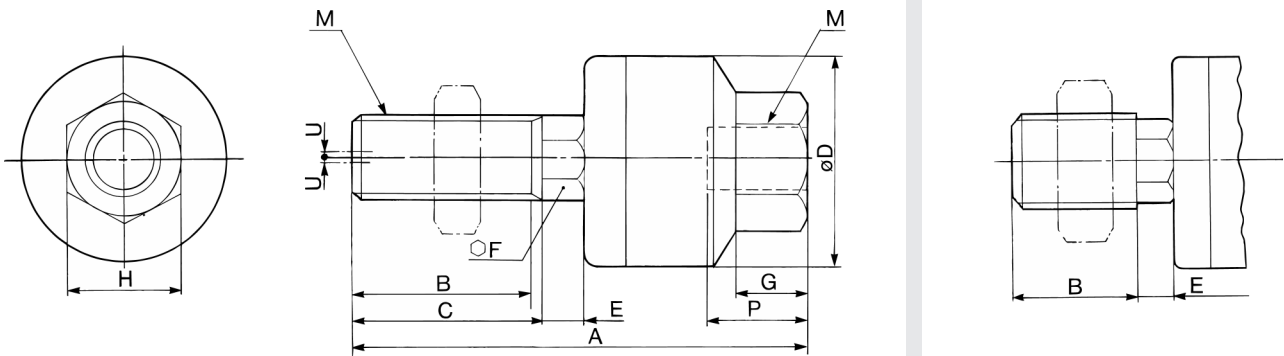
Component Parts

| No. | Description | Material |
|-----|-------------|-------------------------|
| ① | Stud | Chrome-molybdenum steel |
| ② | Case | Carbon steel |
| ③ | Ring | Chrome-molybdenum steel |
| ④ | Cap | Carbon steel |
| ⑤ | Dust cover | Synthetic rubber |
| ⑥ | Set screw | Carbon steel |
| ⑦ | Rod end nut | Carbon steel |
| ⑧ | Flange | Rolled steel plate |
| ⑨ | Foot | Rolled steel plate |

Basic/JAH

JAH40 to 100

Without C-dimension



| Cylinder bore size | Model | M | | A | B | C | D | E | F | G | H | Max. thread depth P | Allowable eccentricity U | Max. operating force (tension/compression) (N) | Weight (kg) |
|--------------------|-------|--------------|-------|---|---|---|---|---|---|---|---|---------------------|--------------------------|--|-------------|
| | | Nominal size | Pitch | | | | | | | | | | | | |

Standards/Heavy load style Hydraulic cylinder: Max. 7MPa

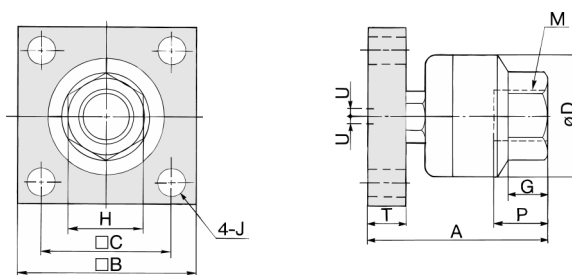
| | | | | | | | | | | | | | | | |
|-----|---------------|----|-----|------|----|----|------|------|----|----|----|----|------|-------|------|
| 40 | JAH40-16-150 | 16 | 1.5 | 85.5 | 22 | 25 | 50 | 9.5 | 19 | 16 | 32 | 18 | 1.25 | 11000 | 0.58 |
| 50 | JAH50-20-150 | 20 | 1.5 | 101 | 28 | 31 | 59.5 | 11.5 | 24 | 16 | 32 | 18 | 2 | 18000 | 1.08 |
| 63 | JAH63-24-150 | 24 | 1.5 | 120 | 32 | 35 | 66 | 13 | 27 | 20 | 41 | 24 | 2 | 28000 | 1.5 |
| 80 | JAH80-30-150 | 30 | 1.5 | 152 | 42 | 45 | 79 | 14 | 30 | 22 | 46 | 38 | 2.5 | 54000 | 2.7 |
| 100 | JAH100-39-150 | 39 | 1.5 | 178 | 52 | 55 | 96 | 16 | 36 | 24 | 55 | 42 | 3 | 71000 | 4.8 |
| 100 | JAH100-48-150 | 48 | 1.5 | 191 | 61 | — | 96 | 16 | 36 | 29 | 70 | 49 | 3 | 71000 | 5.4 |

Options/Heavy load style Hydraulic cylinder: Max. 7MPa

| | | | | | | | | | | | | | | | |
|-----|---------------|----|---|-----|----|----|----|----|----|----|----|----|-----|-------|-----|
| 63 | JAH63-24-200 | 24 | 2 | 120 | 31 | 35 | 66 | 13 | 27 | 20 | 41 | 24 | 2 | 28000 | 1.5 |
| 80 | JAH80-30-200 | 30 | 2 | 152 | 41 | 45 | 79 | 14 | 30 | 22 | 46 | 38 | 2.5 | 54000 | 2.7 |
| 100 | JAH100-42-300 | 42 | 3 | 178 | 55 | — | 96 | 16 | 36 | 24 | 55 | 42 | 3 | 71000 | 4.8 |

Flange/JAHF

JAHF40 to 100



(mm)

| Cylinder bore size | Model | M | | A | B | C | D | T | J | G | H | Max. thread depth P | Allowable eccentricity U | Max. operating force (tension/compression) (N) | Weight (kg) |
|--------------------|-------|--------------|-------|---|---|---|---|---|---|---|---|---------------------|--------------------------|--|-------------|
| | | Nominal size | Pitch | | | | | | | | | | | | |

Standards/Heavy load style Hydraulic cylinder: Max. 7MPa

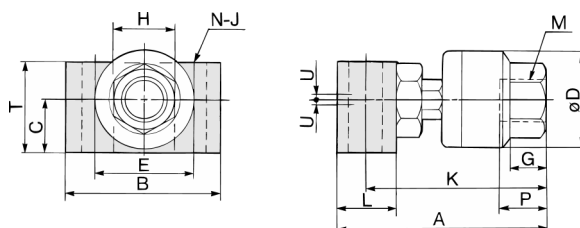
| | | | | | | | | | | | | | | | |
|-----|----------------|----|-----|-----|-----|-----|------|----|----|----|----|----|------|-------|------|
| 40 | JAHF40-16-150 | 16 | 1.5 | 76 | 75 | 50 | 50 | 15 | 11 | 16 | 32 | 18 | 1.25 | 9000 | 1.25 |
| 50 | JAHF50-20-150 | 20 | 1.5 | 89 | 100 | 62 | 59.5 | 18 | 14 | 16 | 32 | 18 | 2 | 14000 | 2.5 |
| 63 | JAHF63-24-150 | 24 | 1.5 | 106 | 100 | 72 | 66 | 21 | 18 | 20 | 41 | 24 | 2 | 22000 | 2.8 |
| 80 | JAHF80-30-150 | 30 | 1.5 | 131 | 125 | 82 | 79 | 24 | 18 | 22 | 46 | 38 | 2.5 | 36000 | 5.2 |
| 100 | JAHF100-39-150 | 39 | 1.5 | 152 | 150 | 100 | 96 | 29 | 22 | 24 | 55 | 42 | 3 | 55000 | 9 |
| 100 | JAHF100-48-150 | 48 | 1.5 | 159 | 150 | 100 | 96 | 29 | 22 | 28 | 70 | 49 | 3 | 55000 | 9.3 |

Options/Heavy load style Hydraulic cylinder: Max. 7MPa

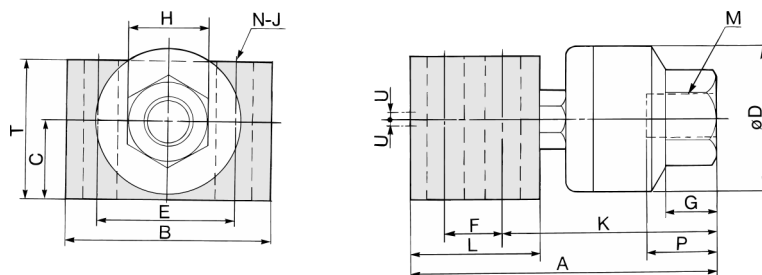
| | | | | | | | | | | | | | | | |
|-----|----------------|----|---|-----|-----|-----|----|----|----|----|----|----|-----|-------|-----|
| 63 | JAHF63-24-200 | 24 | 2 | 106 | 100 | 72 | 66 | 21 | 18 | 20 | 41 | 24 | 2 | 22000 | 2.8 |
| 80 | JAHF80-30-200 | 30 | 2 | 131 | 125 | 82 | 79 | 24 | 18 | 22 | 46 | 38 | 2.5 | 36000 | 5.2 |
| 100 | JAHF100-42-300 | 42 | 3 | 152 | 150 | 100 | 96 | 29 | 22 | 24 | 55 | 42 | 3 | 55000 | 9 |

Foot/JAHL

JAHL40/50



JAHL63 to 100



(mm)

| Cylinder bore size | Model | M | | A | B | C | D | E | F | K | L | T | N | J | G | H | Max. thread depth P | Allowable eccentricity U | Max. operating force (tension/compression) (N) | Weight (kg) |
|--------------------|-------|--------------|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---------------------|--------------------------|--|-------------|
| | | Nominal size | Pitch | | | | | | | | | | | | | | | | | |

Standards/Large load style Hydraulic cylinder: Max. 7MPa

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----------------|----|-----|------|-----|----|------|----|----|-----|----|----|---|----|----|----|----|------|-------|------|
| 40 | J AHL40-16-150 | 16 | 1.5 | 98.5 | 70 | 28 | 50 | 42 | — | 86 | 25 | 47 | 2 | 14 | 16 | 32 | 18 | 1.25 | 9000 | 1.09 |
| 50 | J AHL50-20-150 | 20 | 1.5 | 123 | 80 | 35 | 59.5 | 48 | — | 107 | 32 | 58 | 2 | 16 | 20 | 41 | 24 | 2 | 14000 | 2.03 |
| 63 | J AHL63-24-150 | 24 | 1.5 | 155 | 88 | 38 | 66 | 54 | 36 | 102 | 70 | 69 | 4 | 18 | 20 | 41 | 24 | 2 | 22000 | 4.1 |
| 80 | J AHL80-30-150 | 30 | 1.5 | 187 | 96 | 45 | 79 | 60 | 44 | 125 | 80 | 79 | 4 | 18 | 22 | 46 | 38 | 2.5 | 36000 | 6.4 |
| 100 | J AHL100-39-150 | 39 | 1.5 | 213 | 116 | 55 | 96 | 74 | 48 | 144 | 90 | 89 | 4 | 22 | 24 | 55 | 42 | 3 | 55000 | 10 |
| 100 | J AHL100-48-150 | 48 | 1.5 | 220 | 116 | 55 | 96 | 74 | 48 | 151 | 90 | 89 | 4 | 22 | 28 | 70 | 49 | 3 | 55000 | 10.5 |

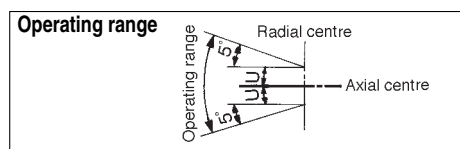
Options/Large load style Hydraulic cylinder: Max. 7MPa

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----------------|----|---|-----|-----|----|----|----|----|-----|----|----|---|----|----|----|----|-----|-------|-----|
| 63 | J AHL63-24-200 | 24 | 2 | 155 | 88 | 38 | 66 | 54 | 36 | 102 | 70 | 69 | 4 | 18 | 20 | 41 | 24 | 2 | 22000 | 4.1 |
| 80 | J AHL80-30-200 | 30 | 2 | 187 | 96 | 45 | 79 | 60 | 44 | 125 | 80 | 79 | 4 | 18 | 22 | 46 | 38 | 2.5 | 36000 | 6.4 |
| 100 | J AHL100-42-300 | 42 | 3 | 213 | 116 | 55 | 96 | 74 | 48 | 144 | 90 | 89 | 4 | 22 | 24 | 55 | 42 | 3 | 55000 | 10 |

Floating Joint/For Compact Cylinder Series JB

Specifications

| | |
|--------------------|--|
| Operating pressure | Air pressure compact cylinder $\leq 1\text{MPa}$ |
|--------------------|--|

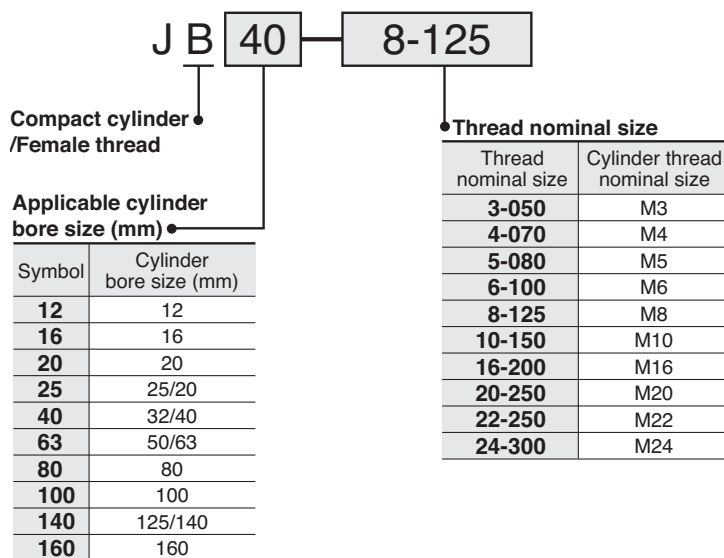


Model/Specifications

| Model | Cylinder bore size (mm) | Cylinder thread nominal size | Max. operating force (tension/compression) (N) | | Allowable eccentricity U (mm) | Rotation angle |
|--------------|-------------------------|------------------------------|--|--------------|-------------------------------|----------------|
| | | | Compression side | Tension side | | |
| JB12-3-050 | 12 | M3 | 112 | 112 | 0.5 | $\pm 5^\circ$ |
| JB16-4-070 | 16 | M4 | 200 | 200 | 0.5 | |
| JB20-5-080 | 20 | M5 | 1100 | 300 | 0.5 | |
| JB25-6-100 | 25 | M6 | 2500 | 500 | 0.5 | |
| JB40-8-125 | 32/40 | M8 | 6000 | 1300 | 0.75 | |
| JB63-10-150 | 50/63 | M10 | 11000 | 3100 | 1 | |
| JB80-16-200 | 80 | M16 | 18000 | 5000 | 1.25 | |
| JB100-20-250 | 100 | M20 | 28000 | 7900 | 2 | |
| JB140-22-250 | 125/140 | M22 | 54000 | 15300 | 2.5 | |
| JB160-24-300 | 160 | M24 | 71000 | 20000 | 3 | |

* Applicable cylinder bore sizes are approximate.
Look at the thread size to select the product.

How to Order



* Applicable cylinder bore sizes are approximate.
Look at the thread size to select the product.

⚠ Precautions

Be sure to read before handling.
Refer to p.0-39 to 0-46 for Safety Instructions and common precautions.

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. Refer to the dimensions (p.5.2-11) for the screw-in depth of the female threads. As a rule, after the rod bottoms out, back off 1 to 2 turns.

- 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.

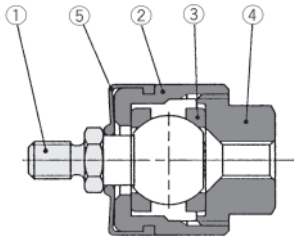
Maintenance

⚠ Warning

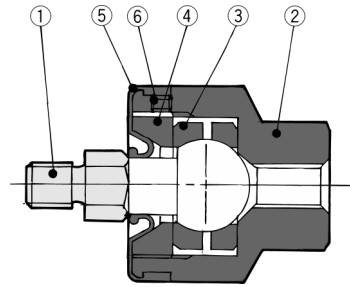
- Do not reuse if disassembled. High strength adhesive is applied to the portion of the connection that is threaded to prevent it from loosening, and it must not be disassembled. If it is forcefully disassembled, it could lead to damage.

Construction

ø12/ø16



ø20 to ø160



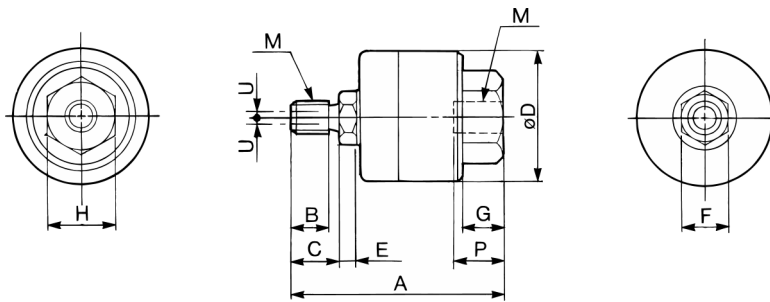
Component Parts

| No. | Description | Material |
|-----|-------------|------------------|
| ① | Stud | Shaving steel |
| ② | Case | Brass |
| ③ | Ring | Carbon steel |
| ④ | Socket | Brass |
| ⑤ | Dust cover | Synthetic rubber |

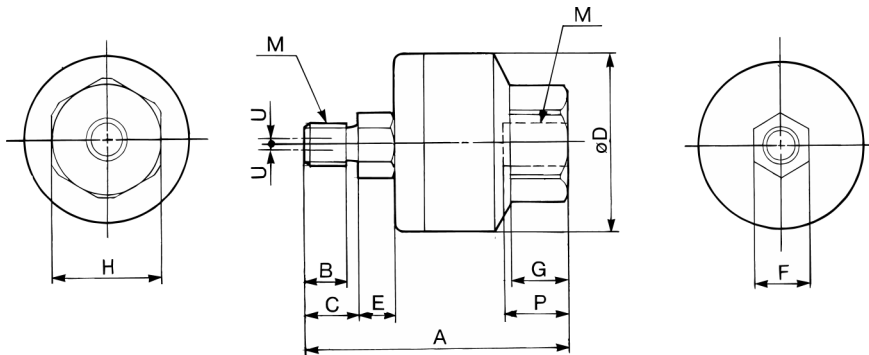
| No. | Description | Material |
|-----|-------------|-------------------------|
| ① | Stud | Chrome-molybdenum steel |
| ② | Case | Carbon steel |
| ③ | Ring | Chrome-molybdenum steel |
| ④ | Cap | Carbon steel |
| ⑤ | Dust cover | Synthetic rubber |
| ⑥ | Set screw | Carbon steel |

Basic/JB

JB16/20



JB20 to 160



| Cylinder bore size | Model | M | | A | B | C | D | E | F | G | H | Max. thread depth P | Allowable eccentricity U | Max. operating force (tension/compression) (N) | | Weight (kg) |
|--------------------|--------------|--------------|-------|------|-----|-----|------|------|----|------|----|---------------------|--------------------------|--|--------------|-------------|
| | | Nominal size | Pitch | | | | | | | | | | | Max. operating force (tension/compression) (N) | | |
| | | | | | | | | | | | | | | Compression side | Tension side | |
| 12 | JB12-3-050 | 3 | 0.5 | 24.5 | 3 | 4 | 16 | 2 | 6 | 5 | 10 | 7 | 0.5 | 112 | 112 | 0.02 |
| 16 | JB16-4-070 | 4 | 0.7 | 26.5 | 4.5 | 6 | 16 | 2 | 6 | 5 | 10 | 7 | 0.5 | 200 | 200 | 0.02 |
| 20 | JB20-5-080 | 5 | 0.8 | 33 | 5 | 6.5 | 21 | 4.5 | 7 | 7 | 13 | 8 | 0.5 | 1100 | 300 | 0.04 |
| 25 | JB25-6-100 | 6 | 1 | 38 | 6 | 8 | 24 | 5 | 8 | 8 | 17 | 9 | 0.5 | 2500 | 500 | 0.07 |
| 32/40 | JB40-8-125 | 8 | 1.25 | 51 | 8.5 | 11 | 31 | 6 | 11 | 11 | 22 | 13 | 0.75 | 6000 | 1300 | 0.15 |
| 50/63 | JB63-10-150 | 10 | 1.5 | 62.5 | 10 | 13 | 41 | 7.5 | 14 | 13.5 | 27 | 15 | 1 | 11000 | 3100 | 0.29 |
| 80 | JB80-16-200 | 16 | 2 | 80.5 | 16 | 20 | 50 | 9.5 | 19 | 16 | 32 | 18 | 1.25 | 18000 | 5000 | 0.56 |
| 100 | JB100-20-250 | 20 | 2.5 | 101 | 21 | 26 | 59.5 | 11.5 | 24 | 20 | 41 | 24 | 2 | 28000 | 7900 | 1.04 |
| 125/140 | JB140-22-250 | 22 | 2.5 | 129 | 18 | 22 | 79 | 14 | 30 | 22 | 46 | 38 | 2.5 | 54000 | 15300 | 2.6 |
| 160 | JB160-24-300 | 24 | 3 | 149 | 20 | 26 | 96 | 16 | 36 | 24 | 55 | 42 | 3 | 71000 | 20000 | 4.5 |

