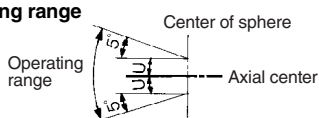


Floating Joint: Standard Type

Series JA

Specifications

Operating pressure	Pneumatic cylinder: 1 MPa or less
	Hydraulic cylinder: 3.5 MPa or less
Mounting	Basic style, Flange style, Foot style
Operating range 	



Series JA

⚠ Precautions

Be sure to read before handling.
Refer to pages 10-24-3 to 10-24-6 for Safety Instructions and Actuator 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.
For the screw-in depth of the female threads, refer to the dimensions (page 10-19-4). As a rule, after the rod bottoms out, back off 1 to 2 turns.
- When screwing stud or socket, or case in the driven object, make sure to screw them in the state that dust cover has been removed from the case. If screwing without removing dust cover, dust cover might be broken.
- 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.
- Do not use for rotational applications, because it is not a fitting designed for rotational axis.

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	Applicable bore size (mm)	Applicable cylinder nominal thread size	Maximum operating tension and compression force (N)			Allowable eccentricity U (mm)	Rotating angle
			Basic style	Flange style	Foot style		
Standard/Thread nominal size							
JA6-3-050	6	M3 x 0.5	19	—	—	0.5	±5°
JA10-4-070	10	M4 x 0.7	54	—	—	0.5	
JA15-5-080	10, 15	M5 x 0.8	123	—	—	0.5	
JA15-6-100	15	M6 x 1	123	—	—	0.5	
JA□20-8-125	20	M8 x 1.25	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	±5°
JA□160-36-150	160	M36 x 1.5	71000	55000 *	55000 *	3	
Option/Thread nominal size							
JA□20-8-100	20	M8 x 1	1100	1100	1000 *	0.5	
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	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	
JA160-33-200	160	M33 x 2	71000	55000 *	55000 *	3	

* For 3.5 MPa hydraulic cylinders, operate within the maximum tension and compression force.

How to Order

JA F 40 — 14-150 — X11

Mounting style

Nil	Basic style
F	Flange style
L	Foot style

Applicable bore size (mm)

Model	Symbol	Applicable bore size (mm)
Standard	6	6
	10	10
	15	10, 15
	20	20
	30	25, 30
	40	40
	63	50, 63
	80	80
	100	100
	140	125, 140
	160	160

Thread nominal size (Standard)

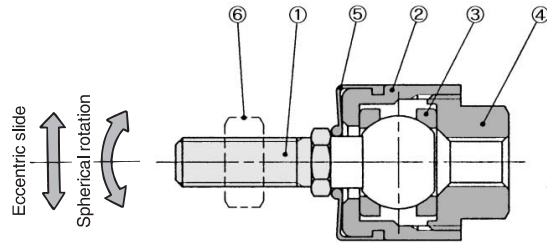
Nominal thread size	Applicable cylinder nominal thread size
3-050	M3 x 0.5
4-070	M4 x 0.7
5-080	M5 x 0.8
6-100	M6 x 1
8-125	M8 x 1.25
10-125	M10 x 1.25
14-150	M14 x 1.5
18-150	M18 x 1.5
22-150	M22 x 1.5
26-150	M26 x 1.5
30-150	M30 x 1.5
36-150	M36 x 1.5

Option

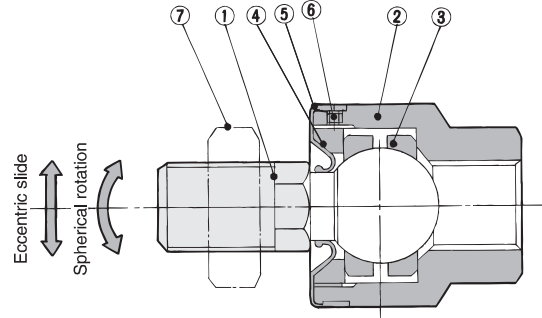
X11	High temperature specifications -5 to 100°C
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Construction

ø6 to ø15



ø20 to ø160



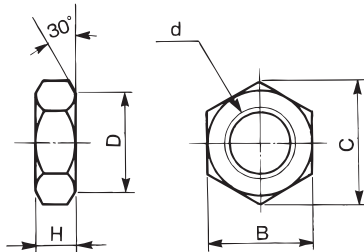
Component Parts

No.	Description	Material	Note
①	Stud	Free-cutting steel	
②	Case	Brass	
③	Ring	Stainless steel	
④	Socket	Brass	
⑤	Dust cover	Synthetic rubber	
⑥	Rod end nut	Low carbon steel wire rod	

No.	Description	Material	Note
①	Stud	Chromium molybdenum steel	
②	Case	Carbon steel	
③	Ring	Chromium 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	
⑨	Foot	Rolled steel	

Accessory Dimensions

Rod end nut



d: Thread nominal size	H	B	C	D
M3 x 0.5	2.4	5.5	6.4	5.3
M4 x 0.7	3.2	7	8.1	6.8
M5 x 0.8	4	8	9.2	7.8
M6 x 1	5	10	11.5	9.8
M8 x 1	5	13	15	12.5
M8 x 1.25	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 x 1.5	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 x 1.75	7	19	21.9	18
M14 x 1.5	8	22	25.4	21
M16 x 1.5	10	24	27.7	23
M16 x 2	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 x 2.5	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 x 3	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 style and foot style cannot be replaced.

Part no. for 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. for 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

Rod end nut (1 pc.) is attached to the standard type of Series JA and JAH.

But if it is needed additionally, order it as follows.

Example.....Rod end nut for JA40-14-150

RE^A_B

REC

C□X

C□Y

MQ^Q_M

RHC

MK(2)

RS^Q_G

RS^H_A

RZQ

MI^W_S

CEP1

CE1

CE2

ML2B

C₆¹/₅-S

CV

MVGQ

CC

RB

J

D-

-X

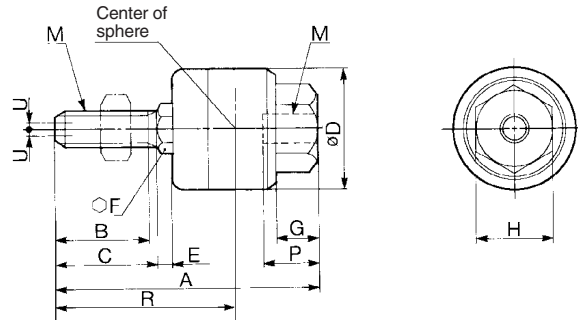
20-

Data

Series JA

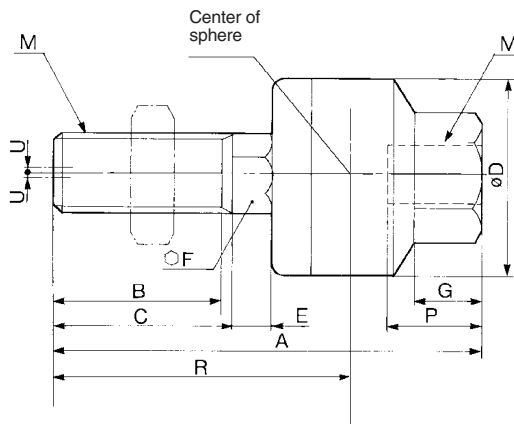
Basic Style: JA6 to JA160

JA6 to 15

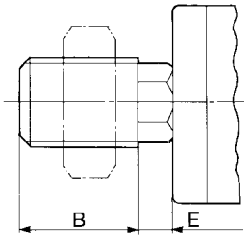


Use the precision spanner for clock 4 mm in the case of mounting male thread of JA6 and JA10.

JA20 to 160



Without C-dimension



(mm)

Applicable bore size (mm)	Model	M		A	B	C	D	E	F	G	H	Center of sphere R	Maximum thread depth P	Allowable eccentricity U	Maximum operating tension and compression force (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	15	5	0.5	19	0.01
10 (CJ1)	JA10-4-070	4	0.7	26	9	10	12	1.5	4	4	7	17	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	23	7	0.5	123	0.02
15 (CZ1)	JA15-6-100	6	1	34.5	12.5	14	16	2	6	5	10	23	7	0.5	123	0.02
20	JA20-8-125	8	1.25	44	17.5	—	21	4.5	7	7	13	30.5	8	0.5	1100	0.05
25, 30	JA30-10-125	10	1.25	49.5	19.5	—	24	5	8	8	17	34	9	0.5	2500	0.07
40	JA40-14-150	14	1.5	60	20	—	31	6	11	11	22	38	13	0.75	6000	0.16
50, 63	JA63-18-150	18	1.5	74.5	25	—	41	7.5	14	13.5	27	47.5	15	1	11000	0.31
80	JA80-22-150	22	1.5	89.5	29	—	50	9.5	19	16	32	56.5	18	1.25	18000	0.58
100	JA100-26-150	26	1.5	110	35	—	59.5	11.5	24	20	41	68	24	2	28000	1.08
125, 140	JA140-30-150	30	1.5	152	42	45	79	14	30	22	46	94.5	38	2.5	54000	2.7
160	JA160-36-150	36	1.5	178	52	55	96	16	36	24	55	112	42	3	71000	4.7

Standard Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa

Option Pneumatic: Up to 1 MPa Hydraulic: Up to 3.5 MPa

20	JA20-8-100	8	1	44	17.5	—	21	4.5	7	7	13	30.5	8	0.5	1100	0.05
25	JA25-10-150	10	1.5	49.5	19.5	—	24	5	8	8	17	34	9	0.5	2500	0.07
32	JA32-10-100	10	1	49.5	19.5	—	24	5	8	8	17	34	9	0.5	2500*	0.07
30, 40	JA40-12-125	12	1.25	60	20	—	31	6	11	11	22	38	13	0.75	4400	0.16
40	JA40-12-150	12	1.5	60	20	—	31	6	11	11	22	38	13	0.75	4400	0.16
30, 40	JA40-12-175	12	1.75	60	20	—	31	6	11	11	22	38	13	0.75	4400	0.16
50	JA50-16-150	16	1.5	71.5	22	—	41	7.5	14	13.5	27	44.5	15	1	11000	0.3
50, 63	JA63-16-200	16	2	71.5	22	—	41	7.5	14	13.5	27	44.5	15	1	11000	0.3
80	JA80-20-250	20	2.5	90.5	27	30	50	9.5	19	16	32	57.5	18	1.25	18000	0.6
100	JA100-24-300	24	3	110	32	35	59.5	11.5	24	20	41	68	24	2	28000	1.05
100	JA100-27-150	27	1.5	110	35	—	59.5	11.5	24	20	41	68	24	2	28000	1.08
125	JA125-27-200	27	2	123	34	38	66	13	27	20	41	77	24	2	28000*	1.5
160	JA160-33-200	33	2	165	38	42	96	16	36	24	55	99	42	3	71000	4.5

* For 3.5 MPa hydraulic cylinders, operate within the maximum tension and compression force.