

●: Standard, ■: Not available

Variation	Model no.	Thread size										Thread size										Page
		M3×0.5	M4×0.7	M5×0.8	M6×1.0	M8×1.0	M8×1.25	M10×1.25		M12×1.25	M12×1.5	M14×1.5	M16×1.5	M18×1.5	M22×1.5	M26×1.5	M30×1.5	M36×1.5	M40×1.5	M45×1.5		
Basic type	FJ-0	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	552
Foot type	FJ-L	■	■	■	■	●	●	●			●	●	●	●	●	●	●	●	●	●	●	552
Flange type	FJ-F	■	■	■	■	●	●	●			●	●	●	●	●	●	●	●	●	●	●	552

- RRC
- GRC
- RV3*
- NHS
- HR
- LN
- FH100
- HAP
- BSA2
- BHA/BHG
- LHA
- LHAG
- HKP
- HLA/HLB
- HLAG/HLBG
- HEP
- HCP
- HMF
- HMFB
- HFP
- HLC
- HGP
- FH500
- HBL
- HDL
- HMD
- HJL
- BHE
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2--HC
- CKH2
- CKLB2
- NCK/SCK/FCK
- FJ**
- FK
- Ending

- RRC
- GRC
- RV3*
- NHS
- HR
- LN
- FH100
- HAP
- BSA2
- BHA/BHG
- LHA
- LHAG
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- CK
- CKA
- CKS
- CKF
- CKJ
- CKL2
- CKL2--HC
- CKH2
- CKLB2
- NCK/SCK/FCK
- FJ**
- FK
- Ending

Floating joint
Related products



Pneumatic components

Safety precautions

Always read this section before starting use.

Refer to Intro 69 for general details on the cylinders, and to Ending 78 for cylinder switches.

Floating joint FJ Series

Installation & Adjustment

WARNING

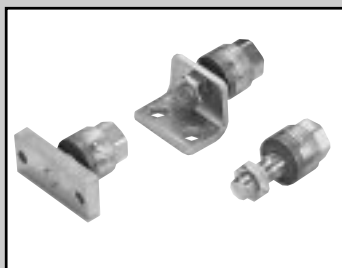
- When screwing the male thread of a rod onto the female thread of a socket or case, check that it does not butt the bottom.
If this floating joint is used with the rod butted against the bottom, the ball stud does not float and **fails to function properly**.
As a guide, the thread should be screwed onto the female thread to **one or two turns from the bottom butted position**.
Observe screw-in dimensions (P) for FJ-3 to 5.
- When connecting the object to be driven and the cylinder rod with a floating joint, tighten securely at a torque that matches thread size. If connection may come loose during use, fix with a pin or apply adhesive to prevent loosening.
If the connection section loosens and dislocates, the driven object could spin or drop off, causing device damage or injury.
- The screw section can be turned but is not a rotary joint. Do not use this for rotary purposes.

During Use & Maintenance

WARNING

- Do not disassemble and reuse.

RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/ BHG
LHA
LHAG
HKP
HLA/ HLB
HLAG/ HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HBL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 -*HC
CKH2
CKLB2
NCK/ SCK/FCK
FJ
FK
Ending



Floating joint

FJ Series

● Applicable cylinder bore size: ϕ 20 to ϕ 200



Specifications

Descriptions Model no.	Nominal thread size \times thread pitch	Max. working tensile and compressive force kN			Allowable eccentricity (mm)	Oscillating angle	Ambient temperature range
		Basic type	Flange type	Foot type			
FJ-* 3	M3 x 0.5	0.019	—	—	0.5	$\pm 5^\circ$	-10 to 60°C (no freezing)
4	M4 x 0.7	0.053	—	—	0.5		
5	M5 x 0.8	0.121	—	—	0.5		
6	M6 x 1.0	1.08	—	—	0.75		
8	M8 x 1.0	1.08	1.08	1.08	0.75		
8-1.25	M8 x 1.25	1.08	1.08	1.08	0.75		
10	M10 x 1.25	2.45	2.45	2.45	0.75		
12-1.25	M12 x 1.25	2.45	2.45	2.45	0.75		
12	M12 x 1.5	2.45	2.45	2.45	0.75		
14	M14 x 1.5	5.88	5.88	5.88	1.0		
16	M16 x 1.5	10.8	10.8	10.8	1.5		
18	M18 x 1.5	10.8	10.8	10.8	1.5		
22	M22 x 1.5	17.6	17.6	17.6	2.0		
26	M26 x 1.5	27.5	27.5	27.5	3.0		
30	M30 x 1.5	60.8	60.8	60.8	3.0		
36	M36 x 1.5	87.3	87.3	87.3	4.0		
40	M40 x 1.5	87.3	87.3	87.3	4.0		
45	M45 x 1.5	108	108	108	4.0		

Note 1: Max. working tension and compression shows static load.

Note 2: FJ-8-1.25 and FJ-12-1.25 are options. FJ-36, 40 and 45 are custom order.

How to order

FJ - **0** - **3**

A Installation

B Nominal thread size x thread pitch

Symbol	Descriptions			
A Installation				
0	Basic type			
L	Foot type			
F	Flange type			
B Nominal thread size \times thread pitch				
	Installation	0	L	F
3	M3 \times 0.5	●		
4	M4 \times 0.7	●		
5	M5 \times 0.8	●		
6	M6 \times 1.0	●		
8	M8 \times 1.0	●	●	●
8-1.25	M8 \times 1.25	●	●	●
10	M10 \times 1.25	●	●	●
12-1.25	M12 \times 1.25	●	●	●
12	M12 \times 1.5	●	●	●
14	M14 \times 1.5	●	●	●
16	M16 \times 1.5	●	●	●
18	M18 \times 1.5	●	●	●
22	M22 \times 1.5	●	●	●
26	M26 \times 1.5	●	●	●
30	M30 \times 1.5	●	●	●
36	M36 \times 1.5	●	●	●
40	M40 \times 1.5	●	●	●
45	M45 \times 1.5	●	●	●

<Example of model number>

FJ-0-3

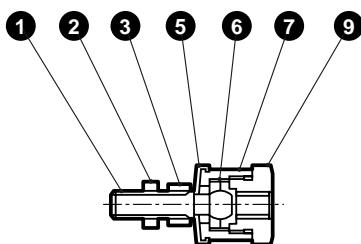
Model: Floating joint

A Installation: Basic type

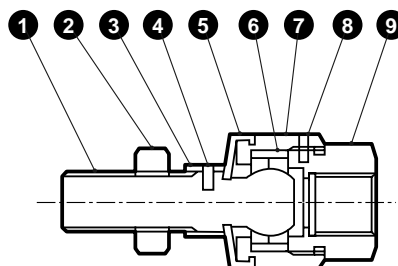
B Nominal thread size x thread pitch: M3 \times 0.5

Internal structure and parts list

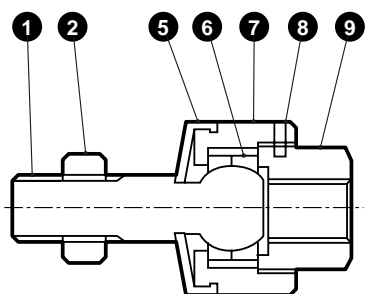
● FJ-O-3 to 5



● FJ-O-6, 8, 10
FJ-O-36 to 45



● FJ-12 to 30



No.	Parts name	Material	Treatment	No.	Parts name	Material	Treatment
1	Ball stud	Alloy steel	Trivalent chromate treatment	8	Spring pin	Steel	Blackening
2	Rod nut	Steel	Trivalent chromate treatment	9	Socket	Brass (FJ3 to 5)	Electroless nickeling
3	Stud nut	Steel	Trivalent chromate treatment			Steel (FJ6 to 45)	Trivalent chromate treatment
4	Spring pin	Steel	Blackening	-	Foot	Steel (FJ8.10.12)	Trivalent chromate treatment
5	Dust guard	Special nitrile rubber	-			Cast iron (FJ14 to 30)	Trivalent chromate treatment
6	Ball holder	Steel (FJ3 to 5)	Electroless nickeling			Steel (FJ36 to 45)	Trivalent chromate treatment
		Alloy steel (FJ6 to 45)	Trivalent chromate treatment	-	Flange	Steel	Trivalent chromate treatment
7	Case	Brass (FJ3 to 5)	Electroless nickeling				
		Steel (FJ6 to 45)	Trivalent chromate treatment				

Note 1: Spring pin (4) is not available for FJ-8 and 10.
Note 2: Dust cover is not attached to FJ -30 and over.

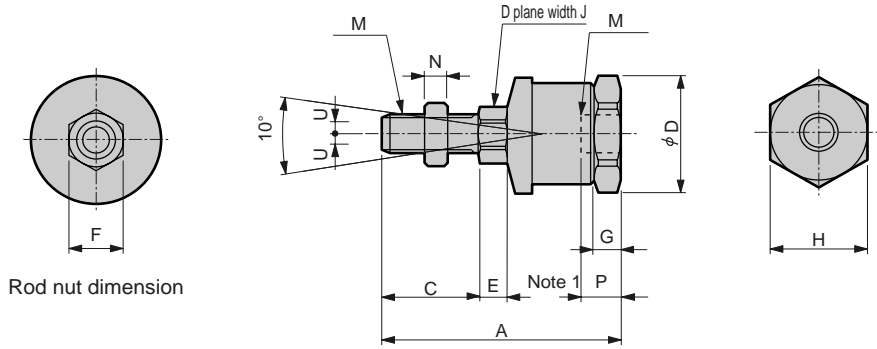
RRC
GRC
RV3*
NHS
HR
LN
FH100
HAP
BSA2
BHA/ BHG
LHA
LHAG
HKP
HLA/ HLB
HLAG/ HLBG
HEP
HCP
HMF
HMFB
HFP
HLC
HGP
FH500
HBL
HDL
HMD
HJL
BHE
CKG
CK
CKA
CKS
CKF
CKJ
CKL2
CKL2 -HC
CKH2
CKLB2
NCK/ SCK/FCK
FJ
FK
Ending

Floating joint
Related products

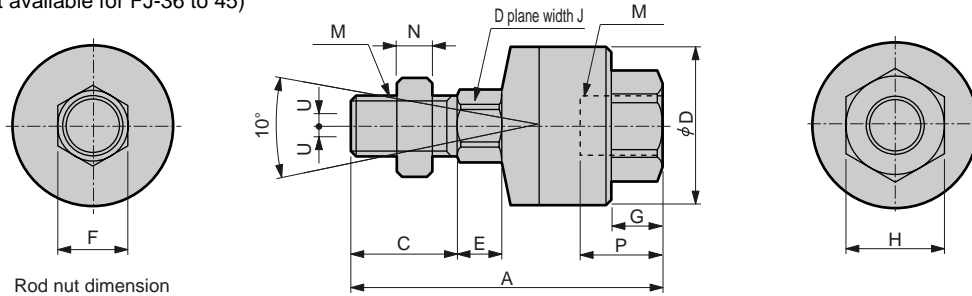
Dimensions: Basic type



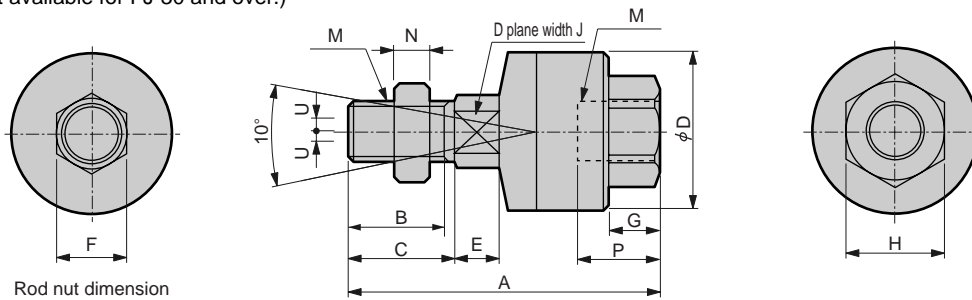
● FJ-O-3 to 5



● FJ-O-6, 8, 10, 36 to 45 (Dust cover is not available for FJ-36 to 45)



● FJ-O-12 to 30 (Dust cover is not available for FJ-30 and over.)



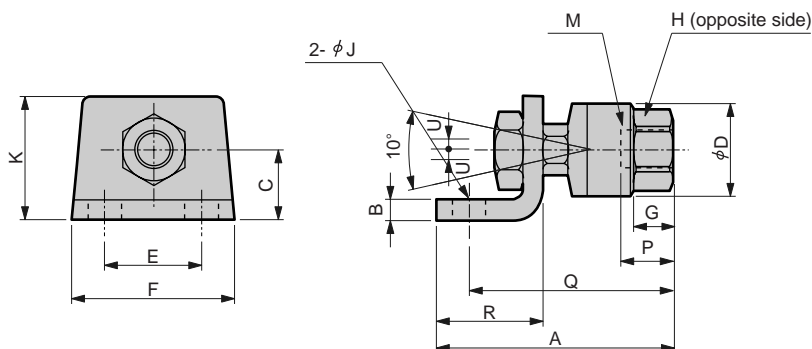
Note 1: Observe screw in dimension (P) for FJ- * -3 to 5.

Model no.	Applicable cylinders	M		A	B	C	D	E	F	G	H	J	N	P Note 1	Eccentricity U	Max. working tensile/ compressive force kN	Weight kg
		Nominal dim.	Pitch														
FJ-O-3	SCP-6/SMD2-6	3	0.5	23	-	8.3	12	2.5	5.5	2.5	11	5.5	1.8	4.5	0.5	0.019	0.012
4	SCP-10/SMD2-10	4	0.7	26	-	10	12	3.5	7	2.5	11	5.5	2.4	4.4	0.5	0.053	0.012
5	SCP-16/SSD-12-N/SMD2-16	5	0.8	31.6	-	12	15.5	4	8	3.5	14	7	3.2	6	0.5	0.121	0.022
6	SSD-16-N/SMD2-20	6	1.0	45.4	-	15.8	21	4	10	9	17	10	3.6	12	0.75	1.08	0.057
8	CMA2/CMK2/CKV-20/JSK2/JSM2-20	8	1.0	48.4	-	18.8	21	4	13	9	17	10	5	12	0.75	1.08	0.061
8-1.25	SMD2-25/SSD-20-N/ SCM-20	8	1.25	48.4	-	18.8	21	4	13	9	17	10	5	12	0.75	1.08	0.061
10	CMA2-30/SMD2-32/CMK2/ SCG/CKV2-25/32/FCD-25-N/ SSD-25-N/SCM-25/32/ JSK2-25-32-JSM2-30	10	1.25	56.2	-	22	24	7	17	10	19	12	6	12	0.75	2.45	0.092
12	CMA2/CMK2/CKV2-40/JSK2/JSM2-40	12	1.5	58	20.5	23	27	6	19	10	21	12	7	11.8	0.75	2.45	0.12
12-1.25	-	12	1.25	58	20.5	23	27	6	19	10	21	12	7	11.8	0.75	2.45	0.12
14	SCG-40/SCA2-40/FCD-32/40-N SSD-32/40-N/SCM-40/JSC3-40	14	1.5	68.5	20	22	32	7	22	13	27	14	8	16.5	1.0	5.88	0.22
16	CAV2-50 COV2-50	16	1.5	84.2	26	29	43	11	24	14	27	16	10	16.9	1.5	10.8	0.4
18	SCG-50/63/SCA2-50/63/ FCD-50/63-N/SSD-50/63-N/ SCM-50/63/JSC3-50/63	18	1.5	84.2	26	29	43	11	27	14	27	18	11	16.9	1.5	10.8	0.41
22	SCG-80/SCA2-80/SSD-80-N/ SCM-80/JSC3-80	22	1.5	102.5	31	34	53	14	32	17	32	22	13	17.2	2.0	17.6	0.75
26	SCG-100/SCA2-100/SSD-100-N/SCM-100/JSC3-100	26	1.5	121.6	39	42	69	15	41	20	41	26	16	20.8	3.0	27.5	1.5
30	SCS-125/140/JSC3-125/140	30	1.5	145.2	47	50	90	16	46	21	46	30	18	26	3.0	60.8	3.1
36	SCS-160/JSC3-160	36	1.5	163.5	-	57	108	16	55	22	55	36	21	25	4.0	87.3	4.6
40	SCS-180/JSC3-180	40	1.5	170.5	-	64	108	16	60	22	55	40	24	25	4.0	87.3	4.7
45	SCS-200	45	1.5	199.5	-	72	118	18	70	24	60	45	27	35	4.0	108	7.0

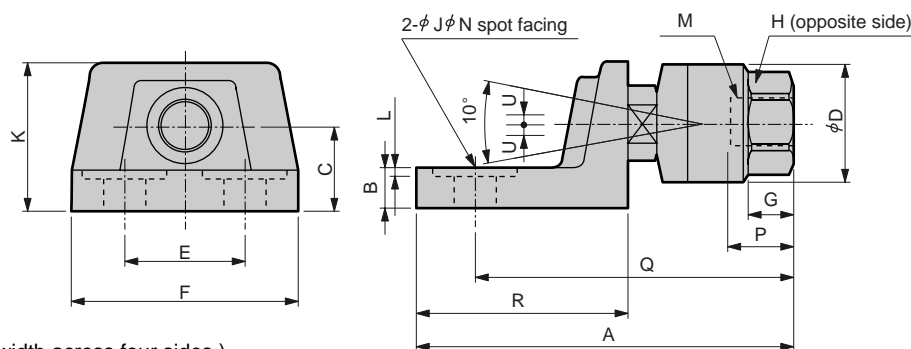
Dimensions: Foot type



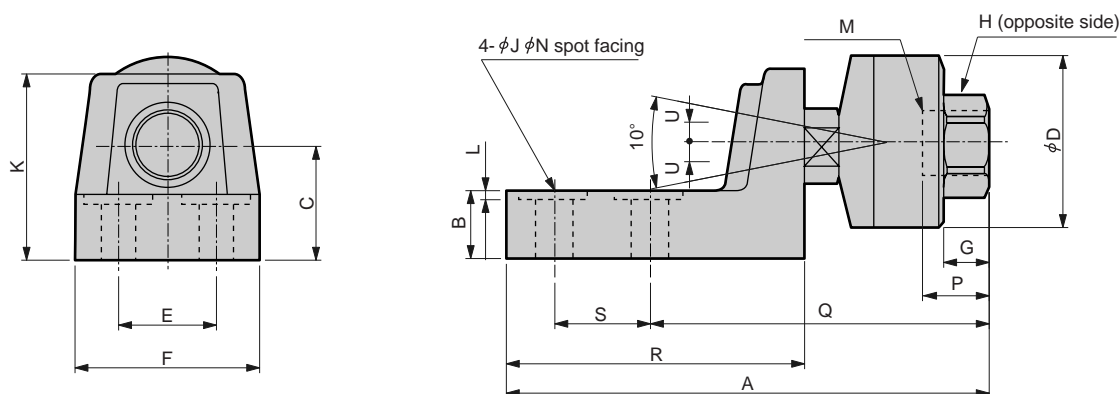
- FJ-L-8 to 12 (*section of FJ-12, width across four sides)



- FJ-L-14



- FJ-L-16 to 45 (*section, width across four sides)



Model no.	Applicable cylinders	M		A	B	C	D	E	F	G	H	J	K	L	N	P	Q	R	S	Eccentricity U	Max. working tensile compressive force kN	Weight kg
		Nominal dim.	Pitch																			
FJ-L-8	CMA2/CMK2/CKV-20/JSK2/JSM2-20	8	1.0	54.6	3.2	15	21	26	44	9	17	9	25	-	-	12	45.6	25	-	0.75	1.08	0.1
8-1.25	SMD2-25/SSD-20-N/ SCM-20	8	1.25	54.6	3.2	15	21	26	44	9	17	9	25	-	-	12	45.6	25	-	0.75	1.08	0.1
10	CMA2-30/SMD2-32/CMK2/ SCG/CKV2-25/32/FCD-25-N/ SSD-25-N/SCM-25/32/ JSK2-25/32/JSM2-30	10	1.25	64.5	5	19	24	26	44	10	19	9	32	-	-	12	54.5	30	-	0.75	2.45	0.18
12	CMA2/CMK2/CKV2-40/JSK2/JSM2-40	12	1.5	64.6	5	19	27	26	44	10	21	9	32	-	-	11.8	54.6	30	-	0.75	2.45	0.19
12-1.25	-	12	1.25	64.6	5	19	27	26	44	10	21	9	32	-	-	11.8	54.6	30	-	0.75	2.45	0.19
14	SCG-40/SCA2-40/FCD-32/40-N/ SSD-32/40-N/SCM-40/JSC3-40	14	1.5	95.5	10	22	32	32	60	13	27	11	38	1.5	23	16.6	79.5	50	-	1.0	5.88	0.43
16	CAV2-50 COV2-50	16	1.5	140.2	14	28	43	32	60	14	27	11	46	1.5	23	16.9	93.1	85	32	1.5	10.8	0.4
18	SCG-50/63/SCA2-50/63/ FCD-50/63-N/SSD-50/63-N/ SCM-50/63/JSC3-50/63	18	1.5	140.2	14	28	43	32	60	14	27	11	46	1.5	23	16.9	93.1	85	32	1.5	10.8	1.1
22	SCG-80/SSD-80-N/SCA2-80/ SCM-80/JSC3-80	22	1.5	163.5	19	35	53	36	68	17	32	14	55	1.5	26	17.2	110.5	95	36	2.0	17.6	2.1
26	SCG-100/SCA2-100/SSD-100-N/ SCM-100/JSC3-100	26	1.5	179.6	24	42	69	36	68	20	41	14	64	1.5	26	20.8	126.6	100	36	3.0	27.5	2.9
30	SCS-125/140/JSC3-125/140	30	1.5	217.2	35	55	90	46	82	21	46	18	80	1.5	32	26	152.2	122	46	3.0	60.8	5.6
36	SCS-160/JSC3-160	36	1.5	254.5	41	67	108	56	100	22	55	22	97	-	-	25	177	148	56	4.0	87.3	8.9
40	SCS-180/JSC3-180	40	1.5	254.5	41	67	108	56	100	22	55	22	97	-	-	25	177	148	56	4.0	87.3	8.8
45	SCS-200	45	1.5	294	41	70	118	66	125	24	60	26	103	-	-	35	203	166	66	4.0	108	13.2

- RRC
- GRC
- RV3*
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- HR
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- HAP
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- BHA/
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- LHA
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HLBG
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- HCP
- HMF
- HMFb
- HFP
- HLC
- HGP
- FH500
- HLB
- HDL
- HMD
- HJL
- BHE
- CKG
- CK
- CKA
- CKS
- CKF
- CKJ

- CKL2
- CKL2
*-HC
- CKH2
- CKLB2
- NCK/
SCK/FCK
- FJ**
- FK

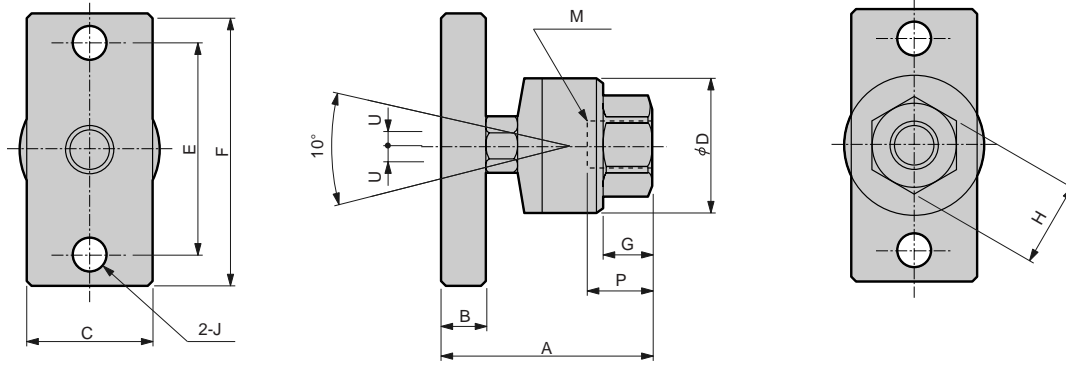
Ending

Floating joint
Related products

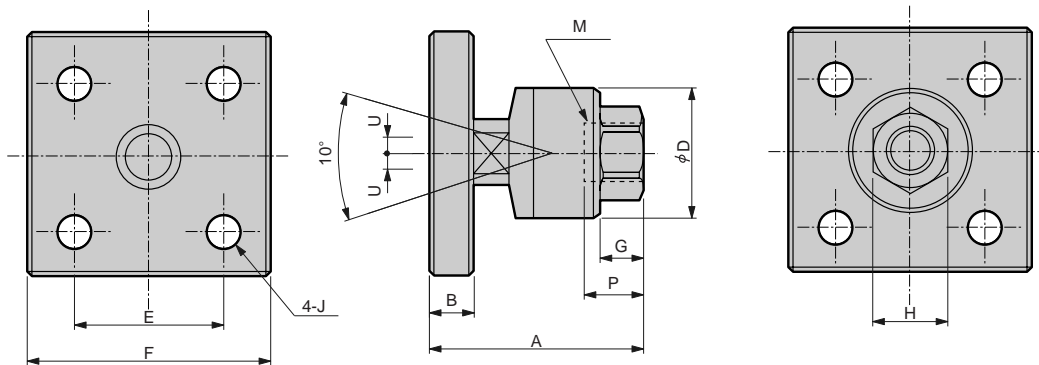
Dimensions: Flange type



● FJ-F-8 to 14 (*section of FJ-12/14, 4 plane width)



● FJ-F-16 to 45 (*section of FJ-36/40/45, hexagon nut)



Model no.	Applicable cylinders	M		A	B	C	D	E	F	G	H	J	P	Eccentricity U	Max. working tensile and compressive force kN	Weight kg
		Nominal dim.	pitch													
FJ-F- 8	CMA2/CMK2/CKV-20/ JSK2/JSM2-20	8	1.0	35.6	6	19	21	40	52	9	17	6.6	12	0.75	1.08	0.11
8-1.25	SMD2-25/SSD-20-N/ SCM-20	8	1.25	35.6	6	19	21	40	52	9	17	6.6	12	0.75	1.08	0.11
10	CMA2-30/SMD2-32/CMK2/ SCG/CKV2-25/32/FCD-25-N/ SSD-25-N/SCM-25/32/ JSK2-25/32/JSM2-30	10	1.25	43.2	9	25	24	44	56	10	19	6.6	12	0.75	2.45	0.18
12	CMA2/CMK2/CKV2-40/ JSK2/JSM2-40	12	1.5	43.6	9	25	27	44	56	10	21	6.6	11.8	0.75	2.45	0.19
12-1.25	-	12	1.25	43.6	9	25	27	44	56	10	21	6.6	11.8	0.75	2.45	0.19
14	SCG-40/SCA2-40/FCD-32/40-N/ SSD-32/40-N/SCM-40/JSC3-40	14	1.5	57.5	12	32	32	60	80	13	27	11	16.5	1.0	5.88	0.56
16	CAV2-50/COV2-50	16	1.5	71.2	16	-	43	50	75	14	27	11	16.9	1.5	10.8	1.1
18	SCG-50/63/SCA2-50/63/ FCD-50/63-N/SSD-50/63-N/ SCM-50/63/JSC3-50/63	18	1.5	71.2	16	-	43	50	75	14	27	11	16.9	1.5	10.8	1.1
22	SCG-80/SCA2-80/SSD-80-N/ SCM-80/JSC3-80	22	1.5	87.5	19	-	53	62	100	17	32	14	17.2	2.0	17.6	1.9
26	SCG-100/SCA2-100/SSD-100-N/ SCM-100/JSC3-100	26	1.5	101.6	22	-	69	70	100	20	41	14	20.8	3.0	27.5	2.8
30	SCS-125/140/JSC3-125/140	30	1.5	120.2	25	-	90	90	125	21	46	18	26	3.0	60.8	5.6
36	SCS-160/JSC3-160	36	1.5	135	29	-	108	114	150	22	55	22	25	4.0	87.3	9.4
40	SCS-180/JSC3-180	40	1.5	135	29	-	108	114	150	22	55	22	25	4.0	87.3	9.3
45	SCS-200	45	1.5	159	32	-	118	132	175	24	60	26	35	4.0	108	13.4