

Floating Joint Series

Parameter information

F - M22 X 150 F

① ② ③ ④

① Accessories code

② Screw thread

M3

M4

M5

M6

M8

M10

M12

M14

M16

M18

M20

M22

M26

M27

M36

③ Thread pitch

050:0.5mm

070:0.7mm

080:0.8mm

100:1.0mm

125:1.25mm

150:1.5mm

200:2.0mm

④ Code

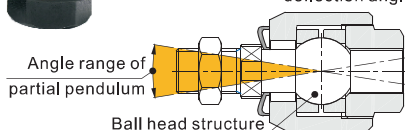
F: Floating joint



Effectively dissolving the extra external force caused by eccentricity

Internal use of ball head structure

The internal use of ball head structure, flexible swing; axial no gap, deflection angle wide.



Angle range of partial pendulum

Ball head structure

Various thread type specifications

Thread type

M3X0.5	M8X1.25	M16X1.5	M22X1.5
M4X0.7	M10X1.25	M18X1.5	M26X1.5
M5X0.8	M12X1.25	M20X1.5	M27X2.0
M6X1.0	M14X1.5		M36X2.0

Thread type can be matched with a variety of series cylinders



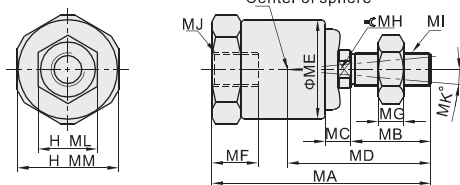
Table for floating joint and cylinder

Cylinder	PB	MI	MA	MF	MBL
Accessory	4 6 10 12 16 8	10 12 16 20 25 32 40	16 20 25 32 40 50 63	20 25 32 40 50 63	20 25 32 40 50 63
F-M3X050F	•				
F-M4X070F		•			
F-M5X080F		•			
F-M6X100F		•			
F-M8X125F		•			
F-M10X125F		•			
F-M12X125F		•			
F-M14X150F		•			

Cylinder	ACQ
Accessory	12 16 20 25 32 40 50 63 80 100
F-M8X125F	•
F-M10X125F	•
F-M12X125F	•
F-M14X150F	•
F-M16X150F	•
F-M18X150F	•
F-M20X150F	•
F-M22X150F	•
F-M26X150F	•

Cylinder	SG/SGC	SE	SAI	SAI/SC	SC/SAU	JSI
Accessory	125 160 200 250	32 40 50 63 80 100 125	32 40 50 63 80 100	125 160 200	32 40 50 63 80 100	32 40 50 63 80 100 125
F-M10X125F		•			•	
F-M12X125F		•			•	
F-M14X150F		•			•	
F-M16X150F		•			•	
F-M18X150F		•			•	
F-M20X150F		•			•	
F-M22X150F		•			•	
F-M26X150F		•			•	
F-M27X200F	•				•	
F-M36X200F	•				•	

Dimensions

M6 and below Note: Angle compensation: $\pm 5^\circ$. Radial direction compensation: 0.5

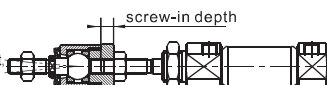
Type/Item	MA	MB	MC	MD	ME	MF	MG	MH	MI/MJ	ML	MM
F-M3X050F	23.5	7.5	3	15	12.8	5	2.4	4	M3×0.5	5.5	13
F-M4X070F	26	9.5	3	17	12.8	5.5	3	4	M4×0.7	7	13
F-M5X080F	34.5	13.5	3.5	22.8	13.8	7.5	4	6	M5×0.8	8	14
F-M6X100F	34.5	13.5	3.5	22.8	13.8	7.5	4	6	M6×1.0	10	14

Instructions

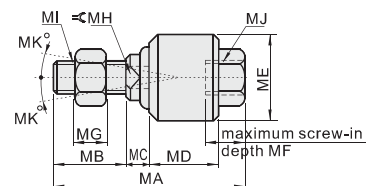
[Note]:

For installation, do not screw the male threads of the rod into the female threads of the socket to the bottom. If the floating joint is used with its rod bottomed out, the floating joint will not be able to float, thus causing damage.

For maximum screw-in depth, please refer to dimension MF (maximum screw-in depth).

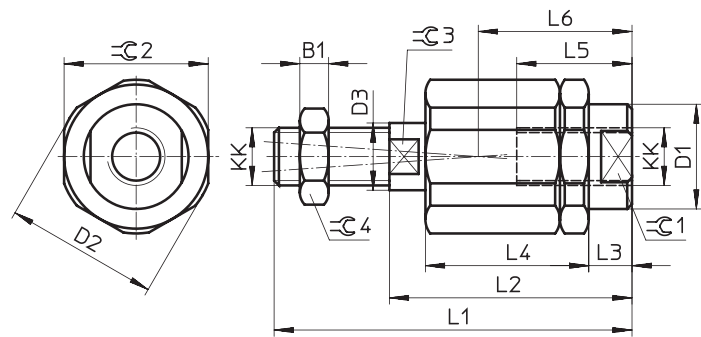


M8 and above

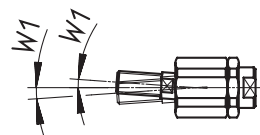


Type/Item	MA	MB	MC	MD	ME	MF	MG	MH	MI/MJ	MK
F-M8X125F	51	20	6	17	24	10.5	6	8	M8×1.25	13
F-M10X125F	58	22	7	21	26	11	6	10	M10×1.25	12
F-M12X125F	58	22	8	21	28	11	7	12	M12×1.25	12
F-M14X150F	70	22.5	8.5	28	34.5	16	8	15	M14×1.5	12
F-M16X150F	90	27	10	41	44.5	19	8	17	M16×1.5	7
F-M18X150F	92	27	10	41	44.5	21	11	18	M18×1.5	7
F-M20X150F	102	29	13	46	53	22	10	22	M20×1.5	10
F-M22X150F	108	32	13	46	53	25	13	22	M22×1.5	5
F-M26X150F	120	32	14.5	52.5	59.5	28	13	27	M26×1.5	5
F-M27X200F	136.5	40	14.5	52.5	59.5	35	13.5	27	M27×2.0	5
F-M36X200F	194.5	60	20.5	77.5	84	50	18	36	M36×2.0	5

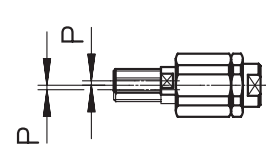
Self-aligning rod coupler FK



Angle compensation



Radial compensation of central axis



Dimensions and ordering data

KK	B1	D1 Ø	D2 Ø	D3 Ø	L1	L2	L3	L4	L5	L6	W1 [°]	≡C1	≡C2
M4	2.2	—	—	3.8	33	24	4.5	16.5	12.5	16	4	11	11
M5	2.7	8.5	14.5	5.8	38.5	25	4.4	17.5	11.5	15.7	4	7	13
M6	3.2	8.5	14.5	5.8	37	25	4.4	17.5	11.5	15.7	4	7	13
M8	4	12.5	19	7.8	49	34	6	23.5	14	20.5	4	10	17
M10	5	21.4	32.5	13.8	67.5	49.5	9	34	23	31	4	19	30
M10x1.25					69.5						4		
M12	6	21.4	32.5	13.8	70.5	49.5	9	34	23	31	4	19	30
M12x1.25					74.5						4		
M16	8	33.8	45	22	97	71	10	53	32	44.5	4	30	41
M16x1.5					103						4		
M20x1.5	10	33.8	45	22	120	80	19	53	41	53.5	4	30	41
M27x2	13.5	62	62	28	157	103	12.2	79	42	62.5	4	55	55
M36x2	18	80	80	38	251	179	22	136	78	110	4	75	75

KK	≡C3	≡C4	Max. permissible tensile and compressive load [N]	Axial play [mm]	Radial compensation P [mm]	CRC ¹⁾	Type
M4	3.2	7	750	0.04 ... 0.2	±0.5	2	FK-M4
M5	5	8	1200	0.04 ... 0.2	±0.5	2	FK-M5
M6	5	10	1200	0.04 ... 0.2	±0.5	2	FK-M6
M8	7	13	2500	0.04 ... 0.2	±0.5	2	FK-M8
M10	12	17	5000	0.05 ... 0.25	±0.7	2	FK-M10
M10x1.25			5000	0.05 ... 0.25	±0.7	2	FK-M10x1.25
M12	12	19	5000	0.05 ... 0.25	±0.7	2	FK-M12
M12x1.25			5000	0.05 ... 0.25	±0.7	2	FK-M12x1.25
M16	19	24	10000	0.05 ... 0.25	±1	2	FK-M16
M16x1.5			10000	0.05 ... 0.25	±1	2	FK-M16x1.5
M20x1.5	19	30	10000	0.05 ... 0.25	±1	2	FK-M20x1.5
M27x2	24	41	30000	0.05 ... 0.25	±1	2	FK-M27x2
M36x2	32	55	40000	0.05 ... 0.25	±1	2	FK-M36x2