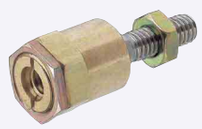
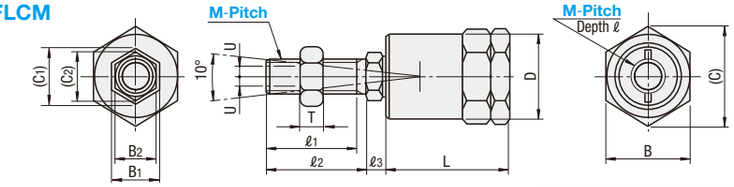
Floating Joints Solid Type

■Miniature



FLCM



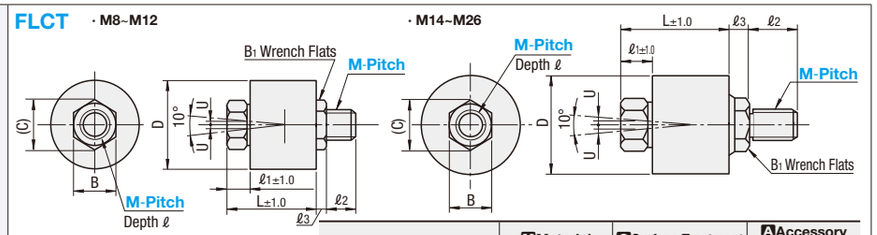
	Material	Accessories
Main Body	Please see P.1418.	Hex Nut (Trivalent Bright Chromate)
Thread	304 Stainless Steel	

Part Number Type	M-Pitch	ℓ	ℓ1	ℓ2	ℓ3	L	T	D	B	B1	B2	(C)	(C1)	(C2)	Allowable Misalignment U	Working Load kgf (N)	Mass (g)	Unit Price 1~9 pc(s).	Volume Discount Rate 10~20
FLCM	3-0.5	4.5	8	8	3	12	1.8	11	11	5.5	5.5	12.7	6.4	6.4	0.5	~1.9 (19)	8		
	4-0.7		10	10			2.4			7	7		8.1	8.1		~5.4 (53)	9		
	5-0.8	6	11	12.5	4	17	3.2	14	14	8	6	16.2	9.2	7		~12.3 (121)	21		
	6-1.0		14	15.5			3.6			10			11.5				22		

Excessively (6mm or more) tightening the screw (Tapped) might prevent the ball inside from moving.

■Screw-In

FLCT · M8~M12 · M14~M26



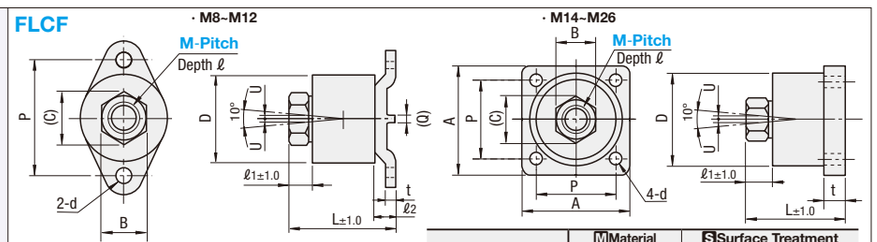
		Material	Surface Treatment	Accessory (M14 ~ 26 only)
Main Body		Please see P.1418.	Trivalent Bright Chromate	Hex Nut (Trivalent Bright Chromate)
Thread		1018 Carbon Steel		
Mounting Part	(M8~M18)	Low Carbon Steel		
	(M22, 26)	Cast Iron Class No.30 Equivalent	Manganese Phosphate Coating Treatment	

Thread for M8~M12 has no surface treatment.

Part Number Type	M-Pitch	ℓ	ℓ1	ℓ2	ℓ3	L	D	B	B1	(C)	Allowable Misalignment U	Working Load kgf (N) for Push and Pull	Mass (kg)	Unit Price 1~4 pc(s).	Volume Discount Rate 5~10
FLCT	8-1.0	8	6	12	3	30	30	14	13	16.2	0.5	~60 (588)	0.12		
	10-1.25	10	9			36	36	19	17	22	0.75	~120 (1177)	0.19		
	12-1.5								19				0.20		
	14-1.5	13	14	24	6	49	45	23	23	26.6	1	~540 (5296)	0.40		
	16-1.5														
	18-1.5	15	24			59		29		33.5			0.50		
	22-1.5	22	31.5	32	11.5	75	61	35	29	40.4	1.5	~780 (7644)	1.10		
	26-1.5		33	42	15	84	69	41	35	47.3		~1380 (13524)	1.80		

■Flange Mounting

FLCF · M8~M12 · M14~M26

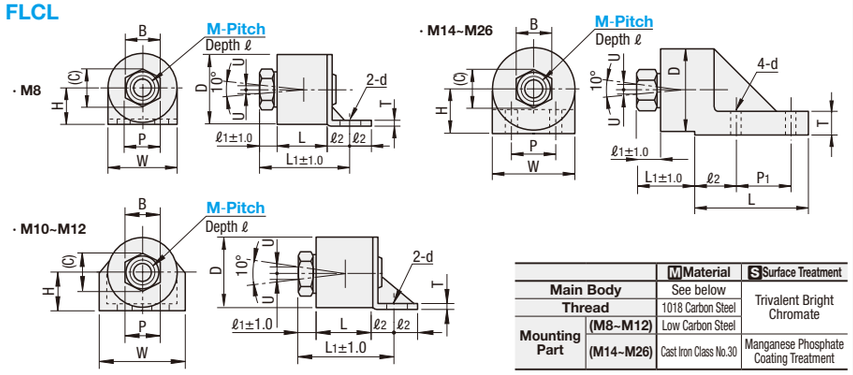


		Material	Surface Treatment
Main Body		Please see P.1418.	Trivalent Bright Chromate
Thread		1018 Carbon Steel	
Mounting Part	(M8~M12)	Low Carbon Steel	
	(M14~M26)	Cast Iron Class No.30	Manganese Phosphate Coating Treatment

Part Number Type	M-Pitch	ℓ	ℓ1	ℓ2	t	L	D	d	A	P	(Q)	B	(C)	Allowable Misalignment U	Working Load kgf (N) for Push and Pull	Mass (kg)	Unit Price 1~4 pc(s).	Volume Discount Rate 5~10
FLCF	8-1.0	8	6	6	3	36.5	30	5.5	-	40	10	14	16.2	0.5	~60 (588)	0.14		
	10-1.25	10	9	7		43.5	36	6.5		48	14	19	22	0.75	~120 (1177)	0.20		
	12-1.5																	
	14-1.5	13	14	-	12	54	49	7	60	43	-	23	26.6	1	~540 (5296)	0.54		
	16-1.5																	
	18-1.5	15	24			64						29	33.5			0.60		
	22-1.5	22	31.5		15	78.5	61	9	76	55		35	40.4	1.5	~780 (7644)	1.10		
	26-1.5		33		16	88	69	11	90	64		41	47.3		~1380 (13524)	1.80		

■Bracket Mounting

FLCL



		Material	Surface Treatment
Main Body		See below	Trivalent Bright Chromate
Thread		1018 Carbon Steel	
Mounting Part	(M8~M12)	Low Carbon Steel	
	(M14~M26)	Cast Iron Class No.30	Manganese Phosphate Coating Treatment

Part Number Type	M-Pitch	ℓ	ℓ1	ℓ2	L	L1	T	D	d	W	P	P1	H	B	(C)	Allowable Misalignment U	Working Load kgf (N) for Push and Pull	Mass (kg)	Unit Price 1~4 pc(s).	Volume Discount Rate 5~10
FLCL	8-1.0	8	6	10	23.5	39.5	3	30	5.5	31	16	-	16	14	16.2	0.5	~60 (588)	0.16		
	10-1.25	10	9	12	28.5	49.5		36	6.5	43	20		19	19	22	0.75	~120 (1177)	0.27		
	12-1.5																	0.28		
	14-1.5	13	14	27	72	36	14	51	7	51	28	35	26	23	26.6	1	~540 (5296)	0.80		
	16-1.5																			
	18-1.5	15	24			47								29	33.5			0.90		
	22-1.5	22	31.5	34	90	55.5	18	62	9	62	36	46	32	35	40.4	1.5	~780 (7644)	1.50		
	26-1.5		33	42	112	61	22	69	11	69	40	54	37	41	47.3		~1380 (13524)	2.30		

Ordering Example Part Number
FLCM3-0.5
FLCT10-1.25

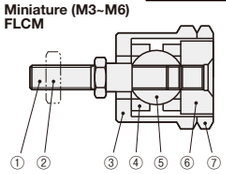
Days to Ship Configure Online

Overview
· The tip inside the connector is spherical, and absorption of misalignment is possible. Shaft alignment and parallelism setting in cylinder mounting can thus be achieved merely by visual estimation.
· Due to integration of connector and holder, selecting is easy, and at the same time, number of parts is reduced.
· For Miniature Type (FLCM), screws with sizes M3 to M6 are provided for small cylinders.
· For Standard Type, three mounting variations are offered: Screw-In Type (FLCT), Flange Mounting Type (FLCF) and Bracket Mounting Type (FLCL).

■Components

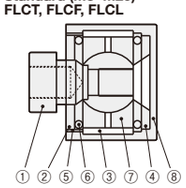
Thread Dia.		Type (How to Mount)
Miniature	M3~M6	FLCM (Screw-In)
Standard Type	M8~M26	FLCT (Screw-In), FLCF (Flange Mounting), FLCL (Bracket Mounting)

Miniature (M3~M6) FLCM



Part Number	Part Name	Material
①	Stud	304 Stainless Steel
②	Nut	1018 Carbon Steel
③	Case	C36000 Brass
④	Ball Holder	C36000 Brass
⑤	Ball Joiner	C36000 Brass
⑥	Socket	C36000 Brass
⑦	Rod Tip Nut	SWCH Carbon Steel8R Carbon Wire Steel (JIS)

Standard (M8~M26) FLCT, FLCF, FLCL

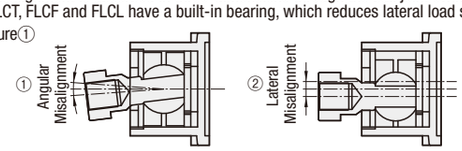


Part Number	Part Name	Material
①	Rod Tip Socket	1018 Carbon Steel (M26 is 1045 Carbon Steel)
②	Cap	52100 Bearing Steel
③	Radial Direction Clearance	-
④	Steel Ball Retainer	52100 Bearing Steel
⑤	Rubber Steel Ball Retainer Plate	Nitrile Rubber
⑥	Steel Ball	-
⑦	Ball Holder	52100 Bearing Steel
⑧	Case	Cast Iron Class No.30

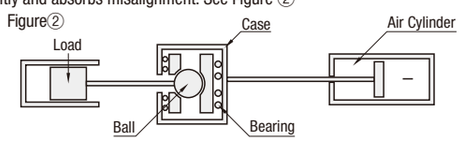
■Features

· Misalignment is absorbed in three-dimensions through the ball joint swing A and misalignment motion B. See Figure ①
· FLCT, FLCF and FLCL have a built-in bearing, which reduces lateral load significantly and absorbs misalignment. See Figure ②

Figure①



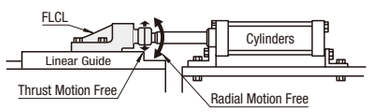
Figure②



■Benefits

The following benefits are obtained by installing on the cylinder rod.
· Prevents one end of cylinder rod from getting worn out. Prevents breakage of the gasket.
· Enables operation at low pressure. Prevents thrust decline.

Example



■Precautions for Use

· Although the screw is rotatable, the connector cannot be used as a rotating joint.
· Non-reusable after disassembled.
· Grease filled to eliminate oiling.
· The applied load shown is static. Note that the applied load value for repeated impact load will be lower than shown.