

Floating Joints Integrated Type

Miniature

FLCM

Material	Accessory
Main Body See P.1548.	Hex Nut (Trivalent Bright Chromate)
Thread SUS304	

Part Number Type	M-Pitch	ℓ	ℓ ₁	ℓ ₂	ℓ ₃	L	T	D	B	B ₁	B ₂	(C)	(C ₁)	(C ₂)	Allowable Misalignment U	Working Load kgf (N)	Mass (g)	Unit Price	Volume Discount Rate	
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						8.1	8.1			~5.4(53)	9		
	5-0.8	6	11	12.5	4	17	3.2	14	14	8	7	16.2	9.2	7			~12.3(121)	21		
	6-1.0		14	15.5			3.6						11.5				22			

⚠ Excessively (6mm or more) tightening the screw (Tapped) might prevent the ball inside from moving. ⚠ For orders larger than indicated quantity, please check with WOS.

Screw-In

FLCT • M8-M12

• M14-M26

Material	Surface Treatment	Accessory
Main Body See P.1548.	Trivalent Bright Chromate	Hex Nut (Trivalent Bright Chromate)
Thread (M8-M18)	SPCC	
Mounting Part (M22, 26)	FC200 Equivalent	Manganese Phosphate Coating Treatment

⚠ Thread for M8 ~ M12 has no surface treatment. ⚠ For orders larger than indicated quantity, please check with WOS.

Part Number Type	M-Pitch	ℓ	ℓ ₁	ℓ ₂	ℓ ₃	L	D	B	B ₁	(C)	Allowable Misalignment U	Working Load kgf (N) for Push and Pull	Mass (kg)	Unit Price	Volume Discount Rate
FLCT	8-1.0	8	6	12	3	30	30	14	13	16.2	0.5	~60(588)	0.12	1-4 pc(s)	5~10
	10-1.25	10	9			36	36	19	17	22	0.75	~120(1177)	0.19		
	12-1.5	13	14	24	6	49	45	23	26.6	1	~540(5296)	0.40			
	14-1.5					59	29	33.5	0.50						
	16-1.5	15	24	32	11.5	75	61	35	29	40.4	1.5	~780(7644)	1.10	1-4 pc(s)	5~10
	22-1.5	31.5	32												
26-1.5	22	33	42	15	84	69	41	35	47.3		~1380(13524)	1.80			

⚠ For orders larger than indicated quantity, please check with WOS.

Flange Mounting

FLCF

• M8-M12

• M14-M26

Material	Surface Treatment
Main Body See P.1548.	Trivalent Bright Chromate
Thread (M8-M12)	SPCC
Mounting Part (M14-M26)	FC200

⚠ For orders larger than indicated quantity, please check with WOS.

Part Number Type	M-Pitch	ℓ	ℓ ₁	ℓ ₂	t	L	D	d	A	P	(Q)	B	(C)	Allowable Misalignment U	Working Load kgf (N) for Push and Pull	Mass (kg)	Unit Price	Volume Discount Rate
FLCF	8-1.0	8	6	6	3	36.5	30	5.5		40	10	14	16.2	0.5	~60(588)	0.14	1-4 pc(s)	5~10
	10-1.25	10	9	7		43.5	36	6.5		48	14	19	22	0.75	~120(1177)	0.20		
	12-1.5	13	14	12	54	49	7	60	43			23	26.6	1	~540(5296)	0.54		
	14-1.5				64				29	33.5	0.60							
	16-1.5	15	24	32	11.5	75	61	9	76	55	35	40.4	1.5	~780(7644)	1.10	1-4 pc(s)	5~10	
	22-1.5	31.5	32															75
26-1.5	22	33	42	16	88	69	11	90	64			41	47.3		~1380(13524)	1.80		

⚠ For orders larger than indicated quantity, please check with WOS.

Bracket Mounting

FLCL

• M8

• M10-M12

• M14-M26

Material	Surface Treatment
Main Body See below	Trivalent Bright Chromate
Thread (M8-M12)	SPCC
Mounting Part (M14-M26)	FC200

⚠ For orders larger than indicated quantity, please check with WOS.

Part Number Type	M-Pitch	ℓ	ℓ ₁	ℓ ₂	L	L ₁	T	D	d	W	P	P ₁	H	B	(C)	Allowable Misalignment U	Working Load kgf (N) for Push and Pull	Mass (kg)	Unit Price	Volume Discount Rate
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	1-4 pc(s)	5~10
	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	13	14	27	70	35	14	51	7	51	28	35	26	23	26.6	1	~540(5296)	0.80		
	14-1.5																			
	16-1.5	15	24	32	11.5	75	61	35	29	40.4	1.5	~780(7644)	1.50							
	18-1.5	31.5	34																	
22-1.5	22	33	42	112	61	22	69	11	69	40	54	37	41	47.3		~1380(13524)	2.30			

⚠ For orders larger than indicated quantity, please check with WOS.

Ordering Example

Part Number
FLCM3-0.5
FLCT10-1.25

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	M8~M26	FLCT (Screw-In), FLCF (Flange Mounting), FLCL (Bracket Mounting)

Miniature (M3 ~ M6) FLCM

Part Number	Part Name	Material
①	Stud	SUS304
②	Nut	SS400
③	Case	C3604
④	Ball Holder	C3604
⑤	Ball Joiner	C3604
⑥	Socket	C3604
⑦	Rod Tip Nut	SWCH8R

Standard (M8 ~ M26) FLCT / FLCF / FLCL

Part Number	Part Name	Material
①	Rod Tip Socket	SS400 Equivalent (M26 is S45C)
②	Cap	SUJ2
③	Radial Direction Clearance	-
④	Steel Ball Retainer	SUJ2
⑤	Rubber Steel Ball Retainer Plate	Nitrile Rubber
⑥	Steel Ball	-
⑦	Ball Holder	SUJ2
⑧	Case	FC200 Equivalent

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)

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.

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.

Example

Thrust Motion Free, Radial Motion Free