

Floating Joints Integrated Type

Miniature

FLCM

Part Number		Material		Surface Treatment		Accessory	
Type	M-Pitch	Main Body	Thread	Material	Surface Treatment	Accessory	Material
FLCM	3-0.5	See P.1548.	EN 1.4301 Equiv.	Hex Nut (Trivalent Bright Chromate)			
	4-0.7						
	5-0.8						
	6-1.0						

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	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			7	7		8.1	8.1			~5.4(53)	9		
	5-0.8		11	12.5	4		3.2			8	8		9.2				~12.3(121)	21		
	6-1.0		14	15.5		17	3.6			14	14		16.2	11.5		7		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

Part Number		Material		Surface Treatment		Accessory	
Type	M-Pitch	Main Body	Thread	Material	Surface Treatment	Accessory	Material
FLCT	8-1.0	See P.1548.	EN 1.0038 Equiv.	Trivalent Bright Chromate		Hex Nut (Trivalent Bright Chromate)	
	10-1.25						
	12-1.5						
	14-1.5						

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	Volume Discount Rate
FLCT	8-1.0	8	6			30	30	14	13	16.2	0.5	~60(588)	0.12		5~10
	10-1.25	10	9	12	3	36	36	19	17	22	0.75	~120(1177)	0.19		
	12-1.5								19				0.20		
	14-1.5	13	14		6	49	45	23	23	26.6	1	~540(5296)	0.40		
	16-1.5			24					29	33.5			0.50		
	18-1.5	15	24			59	61	35	29	40.4			1.10		

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

Flange Mounting

FLCF

• M8-M12

• M14-M26

Part Number		Material		Surface Treatment		Accessory	
Type	M-Pitch	Main Body	Thread	Material	Surface Treatment	Accessory	Material
FLCF	8-1.0	See P.1548.	EN 1.0038 Equiv.	Trivalent Bright Chromate		Hex Nut (Trivalent Bright Chromate)	
	10-1.25						
	12-1.5						
	14-1.5						

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	Volume Discount Rate
FLCF	8-1.0	8	6	6		36.5	30	5.5		40	10	14	16.2	0.5	~60(588)	0.14		
	10-1.25	10	9	7	3	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					64						29	33.5			0.60		
	18-1.5	15	24									35	40.4		~780(7644)	1.10		

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

Bracket Mounting

FLCL

• M8

• M10-M12

• M14-M26

Part Number		Material		Surface Treatment		Accessory	
Type	M-Pitch	Main Body	Thread	Material	Surface Treatment	Accessory	Material
FLCL	8-1.0	See below	EN 1.0038 Equiv.	Trivalent Bright Chromate		Hex Nut (Trivalent Bright Chromate)	
	10-1.25						
	12-1.5						
	14-1.5						

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	Volume Discount Rate	
FLCL	8-1.0	8	6	10	23.5	39.5		30	5.5	31	16		16	14	16.2	0.5	~60(588)	0.16		5~10	
	10-1.25	10	9	12	28.5	49.5	3	36	6.5	43	20		19	19	22	0.75	~120(1177)	0.27			
	12-1.5																	0.28			
	14-1.5	13	14		70	35		14	51	7	51	28	35	26	23	26.6	1	~540(5296)	0.80		
	16-1.5			27		45								29	33.5			0.90			
	18-1.5	15	24			59			62	9	62	36	46	32	35	40.4	1.5	~780(7644)	1.50		

⚠ 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)

Part Number	Part Name	Material
①	Stud	EN 1.4301 Equiv.
②	Nut	EN 1.0038 Equiv.
③	Case	EN CW614N Equiv.
④	Ball Holder	EN CW614N Equiv.
⑤	Ball Joiner	EN CW614N Equiv.
⑥	Socket	EN CW614N Equiv.
⑦	Rod Tip Nut	JIS-SWCH8R

Part Number	Part Name	Material
①	Rod Tip Socket	EN 1.0038 Equiv. (M26 to EN 1.1191 Equiv.)
②	Cap	EN 1.3505 Equiv.
③	Radial Direction Clearance	-
④	Steel Ball Retainer	EN 1.3505 Equiv.
⑤	Rubber Steel Ball Retainer Plate	Nitrile Rubber
⑥	Steel Ball	-
⑦	Ball Holder	EN 1.3505 Equiv.
⑧	Case	EN-JL 1030 Equiv.

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