

# Couplings

-Oldham, Clamping-

CAD DATA Folder Name : 14\_Couplings

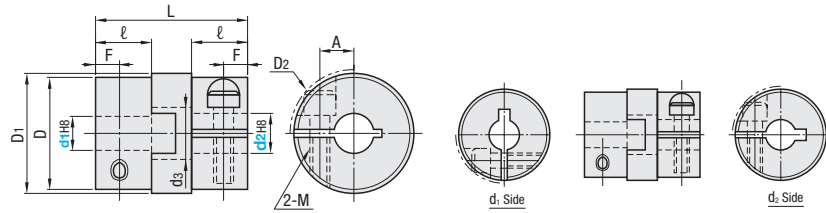
Features: Hub and spacer can be separated, and assembly is easy. For Set Screw Type AND Spacers, see P.975

## STOCK ITEM

PRINTED IN NAVY



MCOC (Standard Bore)



- Operating Temperature -40°C~90°C
- d1, d2 tolerances are values before slits are machined.
- The lateral, angular, and axial misalignment values shown are for each occurring separately alone. If more than one misalignment are occurring simultaneously, allowable value will be reduced to 1/2 each.
- For the selection criteria and alignment procedures, see P.961

Standard Bore	Keywayed Bore				Material		Accessory
	d1 (One Side)	d2 (One Side)	d1, d2 (Both sides)	Hub	Spacers		
MCOC	MCOCLK	MCOCRK	MCOCWK	SUS304 Sintered Alloy	Carbon reinforced resin	Hexagon Socket Head Cap Screw	

MCOCLK (Keywayed Bore d1)

MCOCRK (Keywayed Bore d2)

MCOCWK (Keywayed Bore d1, d2)

Part Number	Type	No.	d1, d2 select (must be d1 ≤ d2)										D	D1	D2	d3	L	l	A	F	Clamp Screw	Unit Price		
			Keywayed bore type is selectable in diameter 6 or larger.																			M	Tightening Torque (Nm)	MCOCG
MCOC MCOCLK MCOCRK MCOCWK	15	4 5 6	14.5	15	16	5.0	18.4	6.6	4.5	3.2	M2.5	1.0	678	906	1,133									
	17	5 6 6.35	16.8	17.5	19	7.2	24.4	9	5	4	M3	1.8	719	947	1,174									
	20	6 6.35 7 8 9.53 10	20	21	23	8.2	27.2	10	7	4.5	M4	3.0	779	1,006	1,234									
	26	6 6.35 7 8 9.53 10 11 12	26	27	29	12.0	30.4	11.5	8.4	5	M4	3.0	901	1,129	1,356									
	30	8 10	30	31	32	13.0	33	12	8.5	6	M5	8.0	992	1,220	1,447									
	34	10 11 12 14 15 16	34	35	37	13.0	34	13	11	6	M5	8.0*	1,088	1,315	1,543									
38	10 12 14 15 16	38	41	41	16.0	40	15	11.5	7	M5	8.0	1,820	2,048	2,503										

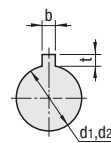
Clamping screw tightening torque for shaft diameter 16mm (d1, d2) MCOCG is 5.4 (Nm).

Type	No.	Allowable Torque (Nm)	Allowable Eccentricity (mm)	Static Torsional Spring Constant (Nm/rad)	Max Rotational Speed (r/min)	Moment of Inertia (Kg-m <sup>2</sup> )	Allowable End Play (mm)	Mass (g)
MCOC MCOCLK MCOCRK MCOCWK	15	1.6	0.8	90	10000	5.0x10 <sup>-7</sup>	±0.45	15
	17	2.2	1	250		1.0x10 <sup>-6</sup>	±0.55	28
	20	3.2	1.5	340	8000	2.4x10 <sup>-6</sup>		40
	26	6	2	420	6500	8.0x10 <sup>-6</sup>		85
	30	15	2	1200	6200	2.0x10 <sup>-5</sup>	±0.6	100
	34	16	2.5	2400	6000	2.5x10 <sup>-5</sup>		155
38	28	2.5	3500	5800	8.0x10 <sup>-5</sup>		240	

The allowable torque will change according to temperature. See P.961

### Keyway Dimension

Shaft Bore Dia. d1, d2	b		t		Keyway Dims. b x t
	Reference Dia.	Tolerance	Reference Dia.	Tolerance	
6~7.9	2	±0.0125	1.0		2x2
8~10	3		1.4		3x3
10.1~12	4		1.8	+0.1	4x4
12.1~17	5	±0.0150	2.3	0	5x5
17.1~20	6		2.8		6x6



Order Example

Part Number	-	Shaft Bore Dia. d1	-	Shaft Bore Dia. d2
MCOC20	-	6	-	6
MCOCLK20	-	6	-	8
MCOCWK20	-	8	-	10

Alterations

Part Number	-	Shaft Bore Dia. d1 (LDC)	-	Shaft Bore Dia. d2 (RDC)	-	(KLH, KRH)
MCOC20	-	LDC6.5	-	RDC9	-	
MCOCWK30	-	8	-	10	-	KRH4

7 Days Express service is not available.

Delivery

- MCOC: 1 Day
- Standard Bore: 7 Days
- Express A: 100 Baht/piece P.88

A flat charge of 250 Baht for 3 or more identical pieces.

Keywayed Bore: 7 Days Express service is not available.

Alterations

Shaft Bore Dia. d1, d2	Keyway Width (b)	
	KLH, KRH (b)	t
8	2	±0.0125
10	4	±0.0150
12	5	±0.0150

Spec. 0.1mm Increment

No.	D	LDC, RDC
15	14.5	4~6
17	16.8	5~7
20	20	6~10
26	26	6~12
30	30	8~14
34	34	10~16
38	38	10~20

Code: LDC (Left Shaft), RDC (Right Shaft), KLH (Left Shaft), KRH (Right Shaft)

Price Adder: 228, 228, Free of Charge

Volume Discount Rate (Round up to the Baht) P.87

Quantity	1~9	10~14	15~19	20~29
Rate	Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

# Couplings

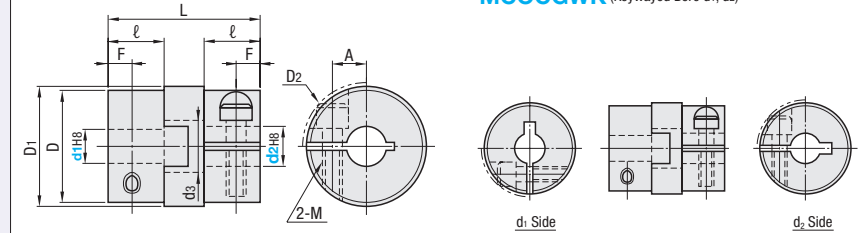
-High Rigidity Oldham, Clamping-

CAD DATA Folder Name : 14\_Couplings

Features: Aluminum bronze is used for spacer and it has allowable torque twice as much as Resin Type. For Set Screw Type, See P.976



MCOCG (Standard Bore)



- d1, d2 tolerances are values before slits are machined.
- The allowable lateral/angular/axial misalignment values shown are for each to be singularly occurring at a time. If all three are to be occurring simultaneously, allowable max. value of each will be 1/2.
- For the selection criteria and alignment procedures, see P.961

Standard Bore	Keywayed Bore				Material		Accessory
	d1 (One Side)	d2 (One Side)	d1, d2 (Both sides)	Hub	Spacers		
MCOCG	MCOCGLK	MCOCGRK	MCOCGWK	SUS304 Sintered Alloy	Aluminum Bronze (Sold Lubricant Embedded)	Hexagon Socket Head Cap Screw	

Part Number	Type	No.	d1, d2 select (must be d1 ≤ d2)										D	D1	D2	d3	L	l	A	F	Clamp Screw	Unit Price		
			Keywayed bore type is selectable in diameter 6 or larger.																			M	Tightening Torque (Nm)	MCOCG
MCOCG MCOCGLK MCOCGRK MCOCGWK	15	4 5 6	14.5	15	16	7.2	18.4	6.6	4.5	3.2	M2.5	1.0	1,161	1,388	1,616									
	17	5 6 6.35	16.8	17.5	19	8.2	24.4	9	5	4	M3	1.8	1,274	1,502	1,729									
	20	6 6.35 7 8 9.53 10	20	21	23	9	27.2	10	7	4.5	M4	3.0	1,566	1,793	2,021									
	26	6 6.35 7 8 9.53 10 11 12	26	27	29	12	30.4	11.5	8.4	5	M4	3.0	1,711	1,939	2,166									
	30	8 10	30	31	32	13	33	12	8.5	6	M5	8.0	1,884	2,112	2,339									
	34	10 11 12 14 15 16	34	35	37	14	34	13	11	6	M4	4.5	2,057	2,285	2,512									
38	10 12 14 15 16	38	41	41	17	39.5	15	11.5	7	M5	8.0	2,435	2,662	2,890										

Clamping screw tightening torque for shaft diameter 16mm (d1, d2) MCOCG is 5.4 (Nm).

Type	No.	Allowable Torque (Nm)	Allowable Eccentricity (mm)	Static Torsional Spring Constant (Nm/rad)	Max Rotational Speed (r/min)	Moment of Inertia (Kg-m <sup>2</sup> )	Allowable End Play (mm)	Mass (g)
MCOCG MCOCGLK MCOCGRK MCOCGWK	15	3	0.5	800	8000	6 x 10 <sup>-7</sup>	±0.1	17
	17	5	0.5	1000	7000	1.2x10 <sup>-6</sup>	±0.1	30
	20	7	0.5	2200	6000	3 x 10 <sup>-6</sup>	±0.1	48
	26	10	0.8	4000	5000	1 x 10 <sup>-5</sup>	±0.2	90
	30	30	1	5500	5000	2.5x10 <sup>-5</sup>	±0.3	120
	34	32	1	8000	4000	4 x 10 <sup>-5</sup>	±0.2	172
38	50	1	11000	4000	1x10 <sup>-4</sup>	±0.3	246	

Excellent in high torque and speed applications.

When lateral misalignment is more than 0.1, spacer wear will be in proportion to the amount of: load torque, lateral misalignment, and the number of revolutions.

Order Example

Part Number	-	Shaft Bore Dia. d1	-	Shaft Bore Dia. d2
MCOCG20	-	6	-	6
MCOCGLK30	-	8	-	12
MCOCGWK38	-	10	-	12

Alterations

Part Number	-	Shaft Bore Dia. d1 (LDC)	-	Shaft Bore Dia. d2 (RDC)	-	(KLH, KRH)
MCOCG20	-	LDC6.5	-	RDC9	-	
MCOCGWK30	-	8	-	10	-	KRH4

7 Days Express service is not available.

Delivery

- Standard Bore: 7 Days
- Express A: 100 Baht/piece P.88

A flat charge of 250 Baht for 3 or more identical pieces.

Keywayed Bore: 7 Days Express service is not available.

Alterations

Shaft Bore Dia. d1, d2	Keyway Width (b)	
	KLH, KRH (b)	t
8	2	±0.0125
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12	5	±0.0150

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Code: LDC (Left Shaft), RDC (Right Shaft), KLH (Left Shaft), KRH (Right Shaft)

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