

# Oldham Couplings

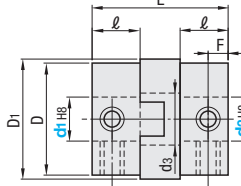
## Set Screw / Spacers

■ **Features:** Hub and spacer can be separated for easy assembly.



RoHS 10

**MCO** (Standard Bore)

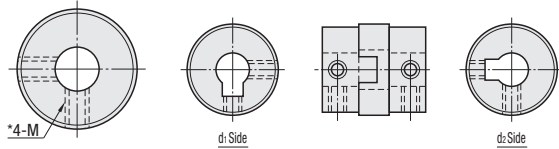


- \* One set screw location for D6 and D8.
- ⚡ Operating Temperature: -40°C ~ 90°C
- ⚠ The lateral, angular, and axial misalignment values shown are for each occurring individually. When multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
- 📄 For the selection criteria and alignment procedures, see **P.1061**

**MCOLK** (Keywayed Bore d1)

**MCORK** (Keywayed Bore d2)

**MCOWK** (Keywayed Bore d1, d2)



Standard Bore	Keywayed Bore			Material		Accessory
	d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)	Hub	Spacer	
MCO	MCOLK	MCORK	MCOWK	SUS304 Sintered Alloy	Carbon Reinforced Resin	Set Screw

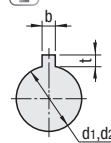
Part Number	Type	No.	d1, d2 Selection (d1≤d2)						D	D1	d3	L	ℓ	F	Set Screw		Unit Price				
			⚡ Keywayed Bore Type is selectable for diameter 6 or larger												M	Tightening Torque (N·m)	MCO	MCOLK MCORK	MCOWK		
MCO MCOLK MCORK MCOWK	6	1	1.5	2				6	6.2	2.4	8.4	3	1.5	M1.6	0.15		-	-			
	8	1	2	3				8	8.2	3.4	9.6	3.5	1.7	M2	0.3		-	-			
	10		2	3	4			10	10.2	4.4	10.2	3.7	1.8	M3	0.7		-	-			
	12		3	4	5			12	12.5	4.0	14.2	5.2	2.5				-	-			
	15		4	5	6	6.35	7	8	14.5	15	5.0	16	5.4	2.6							
	17		5	6	6.35	7	8		16.8	17.5	7.2	19.8	6.7	3.2							
	20		6	6.35	7	8	9.53	10	11	12	20	21	8.2	7	3.4						
	26		6	6.35	7	8	9.53	10	11	12	14	26	27	12.0	25.6	9	4				
	30						8	10	12	14	30	31	13.0	33	12	6					
	34						10	11	12	14	15	16	34	35	13.0	34	13	5.5			
	38						10	12	14	15	16	18	20	38	41	16.0	40	15	7		

Part Number	Type	No.	Allowable Torque (N·m)	Angular Misalignment (°)	Lateral Misalignment (mm)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m²)	Allowable Axial Misalignment (mm)	Mass (g)
MCO MCOLK MCORK MCOWK	6	0.3	0.3	9	1.5x10 <sup>-8</sup>	±0.25	1.5			
	8	0.5	0.4	13	2.2x10 <sup>-8</sup>	±0.3	2.5			
	10	0.8	0.4	21	3.6x10 <sup>-8</sup>	±0.32	4			
	12	1	0.5	44	1.6x10 <sup>-7</sup>	±0.35	8			
	15	1.6	0.8	90	3.5x10 <sup>-7</sup>	±0.45	11			
	17	2.2	1	250	7.8x10 <sup>-7</sup>	±0.55	18			
	20	3.2	1.5	340	1.7x10 <sup>-6</sup>		29			
	26	6	2	420	6500	6.2x10 <sup>-6</sup>	65			
	30	15	2	1200	6200	2x10 <sup>-5</sup>	100	±0.6		
	34	16	2.5	2400	6000	2.5x10 <sup>-5</sup>	155			
	38	28	2.5	3500	5800	8x10 <sup>-5</sup>	240			

⚡ The allowable torque varies depending on temperature. **P.1062**

Ordering Example	Part Number	Shaft Bore Dia. (d1)	Shaft Bore Dia. (d2)
	MCO20	6	6
	MCOLK20	8	12
	MCOWK20	10	12

Keyway Dimension



Shaft Bore Dia. d1, d2	b		t		Key Nominal Dim. b x h
	Reference Dia.	Tolerance	Reference Dia.	Tolerance	
6 ~ 7.9	2		1.0		2x2
8 ~ 10	3	±0.0125	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

Alterations	Part Number	Shaft Bore Dia. (d1)	Shaft Bore Dia. (d2)	(KLH, KRH)
	MCO20	LDC6.5	RDC9	
	MCOWK30	8	10	KRH4

Alterations	Shaft Bore Dia.		Keyway Width																				
	LDC (Left Shaft)	RDC (Right Shaft)	KLH (Left Shaft)	KRH (Right Shaft)																			
Spec.			Keyway Width (b) is changed as the table below. Ordering Code: KLH4 KRH4																				
	<table border="1"> <thead> <tr> <th>Shaft Bore Dia. d1, d2</th> <th>Reference Dia.</th> <th>Tolerance</th> <th>Reference Dia.</th> <th>Tolerance</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>2</td> <td>±0.0125</td> <td>1.0</td> <td></td> </tr> <tr> <td>10</td> <td>4</td> <td></td> <td>1.8</td> <td>+0.1</td> </tr> <tr> <td>12</td> <td>5</td> <td>±0.0150</td> <td>2.3</td> <td>0</td> </tr> </tbody> </table>		Shaft Bore Dia. d1, d2	Reference Dia.	Tolerance	Reference Dia.	Tolerance	8	2	±0.0125	1.0		10	4		1.8	+0.1	12	5	±0.0150	2.3	0	⚠ Cannot be combined with shaft bore change (LDC, RDC) alterations. ⚡ Applicable to Keywayed Bore only.
Shaft Bore Dia. d1, d2	Reference Dia.	Tolerance	Reference Dia.	Tolerance																			
8	2	±0.0125	1.0																				
10	4		1.8	+0.1																			
12	5	±0.0150	2.3	0																			
Code	LDC (Left Shaft)	RDC (Right Shaft)	KLH (Left Shaft)	KRH (Right Shaft)																			

■ **Spacers (for MCO or MCOC)** **P.1088**

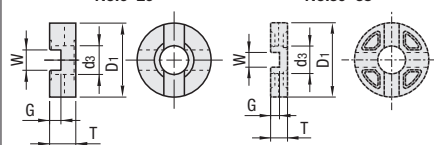


RoHS 10

**MCOS**

No.6~26

No.30~38



⚡ As W dimension is made close, fitting adjustments are required. **M** Material: Carbon Reinforced Resin

Part Number	Type	No.	D1	T	d3	W	G	Applicable Coupling	Unit Price
MCOS	6	6.2	2.2	2.4	1.3	1.3		MCO□□6	
	8	8.2	2.4	3.4	1.6	1.5		MCO□□8	
	10	10.2	2.6	4.4	1.6	1.6		MCO□□10	
	12	12.5	3.8	4.0	3	1.8		MCO□□12	
	15	15	4.8	5.0	3.4	2.3	MCO□□15	MCOC□□15	
	17	17.5	6	7.2	4.6	2.9	MCO□□17	MCOC□□17	
	20	21	6.6	8.2	5.8	3.2	MCO□□20	MCOC□□20	
	26	27	7.2	12.0			MCO□□26	MCOC□□26	
	30	31	8.5	13.0			MCO□□30	MCOC□□30	
	34	35	7.9	13.0			MCO□□34	MCOC□□34	
	38	41	9.4	16.0			MCO□□38	MCOC□□38	

Ordering Example	Part Number
	MCOS15