

Oldham Couplings

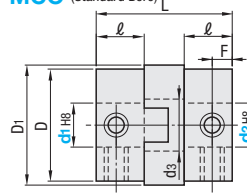
Set Screw / Spacers

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

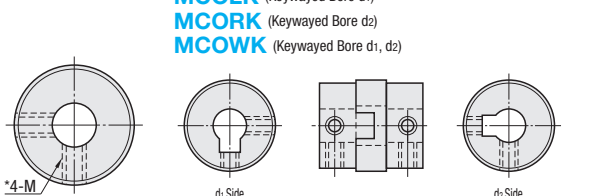


RoHS 10

MCO (Standard Bore)



MCOLK (Keywayed Bore d1)
MCORK (Keywayed Bore d2)
MCOWK (Keywayed Bore d1, d2)

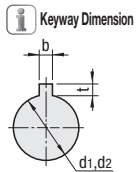


* One set screw location for D6 and D8.
* Operating Temperature: -40°C ~ 90°C
* The lateral, angular, and axial misalignment values shown are for each occurring individually. When multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
* For the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

Standard Bore		Keywayed Bore				Material		Accessory	
		d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)		Hub	Spacer		
MCO		MCOLK	MCORK	MCOWK		EN 1.4301 Equi. Sintered Alloy	Carbon Reinforced Resin	Set Screw	

Part Number		d1, d2 Selection (d1≤d2)										D	D1	d3	L	ℓ	F	Set Screw		Unit Price		
Type	No.	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			-	-	
	10			2	3	4						10	10.2	4.4	10.2	3.7	1.8	M2	0.3		-	-
	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	M3	0.7			
	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			M4	1.7			
	26							6	6.35	7	8	9.53	10	11	12	14						
	30								8		10	12	14									
	34									10	11	12	14	15	16							
	38										10	12	14	15	16	18	20	M5	4.0			

Part Number		Allowable	Angular	Lateral	Static Torsional	Max.	Moment of	Axial	Mass (g)
Type	No.	Torque (N·m)	Misalignment (°)	Misalignment (mm)	Spring Constant (N·m/rad)	Rotational Speed (r/min)	Inertia (kg·m²)	Misalignment (mm)	
MCO MCO LK MCO RCK MCO WK	6	0.3	3	0.3	9	12000	1.5x10 ⁻³	±0.25	1.5
	8	0.5		0.4	13		2.2x10 ⁻³	±0.3	2.5
	10	0.8		0.4	21		3.6x10 ⁻³	±0.32	4
	12	1		0.5	44		1.6x10 ⁻²	±0.35	8
	15	1.6		0.8	90	3.5x10 ⁻²	±0.45	11	
	17	2.2		1	250	7.8x10 ⁻²	±0.55	18	
	20	3.2		1.5	340	8000	1.7x10 ⁻¹	±0.6	29
	26	6		2	420	6500	6.2x10 ⁻¹		65
	30	15		2	1200	6200	2x10 ⁻¹		100
	34	16		2.5	2400	6000	2.5x10 ⁻¹		155
	38	28		2.5	3500	5800	8x10 ⁻¹		240

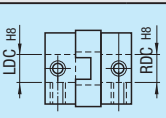
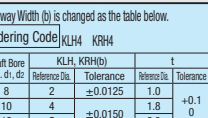


Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. b x h
6 ~ 7.9	2	1.0	2x2
8 ~ 10	3	1.4	3x3
10.1 ~ 12	4	1.8	4x4
12.1 ~ 17	5	2.3	5x5
17.1 ~ 20	6	2.8	6x6

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

Part Number	Shaft Bore Dia. d1	Shaft Bore Dia. d2
MCO20	6	12
MCOLK20	8	12
MCOWK20	10	12

Part Number	Shaft Bore Dia. d1 (LDC)	Shaft Bore Dia. d2 (RDC)	(KLH, KRH)
MCOC20	LDC6.5	RDC9	
MCOWK30	8	10	KRH4

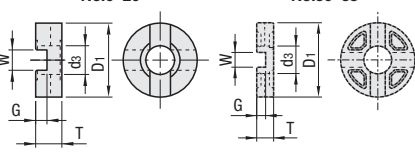
Alterations	Shaft Bore Dia.	Keyway Width
Spec.		
	0.1mm Increment Ordering Code LDC7.8 RDC9.3	Keyway Width (b) is changed as the table below. Ordering Code: KLH4 KRH4
	No. D LDC, RDC	No. D LDC, RDC
	6 6 1~2 17 16.8 5~ 8	8 8 1~3 20 20 6~12
Code	LDC (Left Shaft)	RDC (Right Shaft)
	KLH (Left Shaft)	KRH (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.

Material: Carbon Reinforced Resin

Part Number	D1	T	d3	W	G	Applicable Coupling	Unit Price
Type	No.						
6	6.2	2.2	2.4	1.3	1.3	MCO 6	
8	8.2	2.4	3.4	1.5	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		4	MCO 26 MCOC 26	
30	31	8.5	13.0	7		MCO 30 MCOC 30	
34	35	7.9			4.2	MCO 34 MCOC 34	
38	41	9.4	16.0			MCO 38 MCOC 38	

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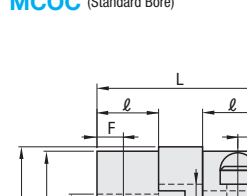
Clamping

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



RoHS 10

MCOC (Standard Bore)



MCOCLK (Keywayed Bore d1)
MCOCRK (Keywayed Bore d2)
MCOCWK (Keywayed Bore d1, d2)



* Operating Temperature: -40°C ~ 90°C
* Tolerances for d1 and d2 are values before slit machining.
* 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**

Standard Bore		Keywayed Bore				Material		Accessory	
		d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)		Hub	Spacer		
MCOC		MCOCLK	MCOCRK	MCOCWK		EN 1.4301 Equi. Sintered Alloy	Carbon Reinforced Resin	Hex Socket Head Cap Screw	

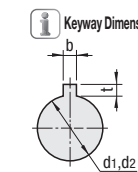
Part Number		d1, d2 Selection (d1≤d2)										D	D1	D2	d3	L	ℓ	A	F	Clamp Screw		Unit Price				
Type	No.	Keywayed Bore Type is selectable for diameter 6 or larger																		M	Tightening Torque (N·m)	MCOC	MCOCLK MCOCRK	MCOCWK		
MCOC MCOCLK MCOCRK MCOCWK	15	4	5	6								14.5	15	16	5.0	18.4	6.6	4.5	3.2	M2.5	1.0					
	17		5	6	6.35							16.8	17.5	19	7.2	24.4	9	5	4	M3	1.8					
	20			6	6.35	7	8	9.53	10		20	21	23	8.2	27.2	10	7	4.5								
	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					
	30					8				10		30	31	32	13.0	33	12	8.5	6	M5	8.0					
										12	14							9		M4	4.5					
	34							10	11	12	14	15	16	34	35	37	13.0	34	13	11	6	M5	8.0			
	38								10	12	14	15	16		38	41	41	16.0	40	15	11.5 13.7	7	M5	8.0		
												18	20													

* Clamping screw tightening torque for shaft diameter 16mm (d1, d2) of MCOC34 is 5.4 (N·m).

Part Number		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 · m ²)	Allowable Axial Misalignment (mm)	Mass (g)
Type	No.								
MCOC MCOCCLK MCOCGRK MCOCWK	15	1.6	3	0.8	90	10000	5.0x10 ⁻⁷	±0.45	15
	17	2.2		1	250		1.0x10 ⁻⁶	±0.55	28
	20	3.2		1.5	340	8000	2.4x10 ⁻⁶		40
	26	6		2	420	6500	8.0x10 ⁻⁶		85
	30	15		2	1200	6200	2.0x10 ⁻⁵	±0.6	100
	34	16		2.5	2400	6000	2.5x10 ⁻⁵		155
	38	28		2.5	3500	5800	8.0x10 ⁻⁵		240

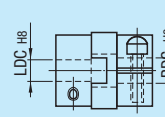
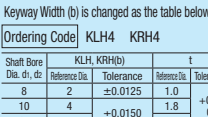
* The allowable torque varies depending on temperature. **P.1062**

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



Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. b x h
6~7.9	2	1.0	2x2
8~10	3	1.4	3x3
10.1~12	4	1.8	4x4
12.1~17	5	2.3	5x5
17.1~20	6	2.8	6x6

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

Alterations	Shaft Bore Dia.	Keyway Width
Spec.		
	0.1mm Increment Ordering Code LDC7.8 RDC9.3	Keyway Width (b) is changed as the table below. Ordering Code: KLH4 KRH4
	No. D LDC, RDC	No. D LDC, RDC
	15 14.5 4~ 6	17 16.8 5~ 6.3
Code	LDC (Left Shaft)	RDC (Right Shaft)
	KLH (Left Shaft)	KRH (Right Shaft)