


Couplings (Oldham)

Clamping

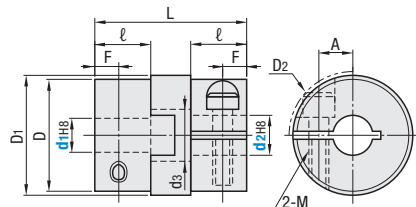
For set screw type and spacers, see P.1106.

Couplings – Oldham, Clamping

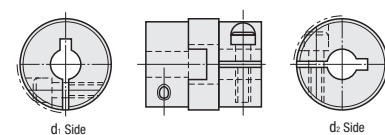


RoHS 10

MCOC (Standard Bore)



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



Operating Temperature -40–90°C
Tolerance values for d₁, d₂, are applied before slit is machined.
The lateral, angular, and axial misalignment values shown are for each occurring individually. When more than one misalignments are occurring simultaneously, the allowable maximum value of each will be reduced by 1/2.
For the selection criteria and alignment procedures, see P.1091, 1093.

Standard Bore	Keywayed Bore			Material		Accessories
	d ₁ (One Side)	d ₂ (One Side)	d ₁ , d ₂ (Both Sides)	Hub	Spacers	
MCOC	MCOCLK	MCOCRK	MCOCWK	304 Stainless Steel (Sintered)	Carbon Reinforced Resin	Hex Socket Head Cap Screw

Part Number	Type	No.	Keywayed Bore Type is selectable for diameter 6 or larger	D	D ₁	D ₂	d ₃	L	l	A	F	Clamp Screw	
												M	Tightening Torque (N-m)
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	M4	3.0
	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	9	6	M5	8.0
	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	7	M5	8.0
										13.7			

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

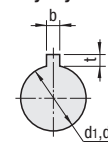
Part Number	Allow. Torque (N-m)	Angular Misalign. (°)	Lateral Misalign. (mm)	Static Torsional Spring Constant (N-m/rad)	Max Rotational Speed (r/min)	Moment of Inertia (Kg-m ²)	Allow. Axial Misalign. (mm)	Mass (g)
15	1.6	3	0.8	90	10000	5.0 x 10 ⁻⁷	±0.45	15
17	2.2		1	250	8000	1.0 x 10 ⁻⁶	±0.55	28
20	3.2		1.5	340	6500	2.4 x 10 ⁻⁶	±0.6	40
26	6		2	420	6000	8.0 x 10 ⁻⁶	±0.6	85
30	15		2	1200	6200	2.0 x 10 ⁻⁵	±0.6	100
34	16		2.5	2400	6000	2.5 x 10 ⁻⁵	±0.6	155
38	28		2.5	3500	5800	8.0 x 10 ⁻⁵	±0.6	240

The allowable torque varies depending on temperature. See P.1091

Part Number Example

Part Number	Shaft Bore Dia. d ₁	Shaft Bore Dia. d ₂
MCOC20	6	6
MCOCLK20	6	8
MCOCWK20	8	10

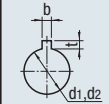
Keyway Dimension



Shaft Bore Dia. d ₁ , d ₂	b		t		Keyway Dims. b x h
	Dim.	Tol.	Dim.	Tol.	
6–7.9	2	±0.0125	1.0	+0.1 0	2 x 2
8–10	3	±0.0150	1.4		3 x 3
10.1–12	4		1.8		4 x 4
12.1–17	5	±0.0150	2.3	5 x 5	
17.1–20	6		2.8	6 x 6	

Part Number Alterations

Part Number	Shaft Bore Dia. d ₁ (LDC)	Shaft Bore Dia. d ₂ (RDC)	(KLH-KRL)
MCOC20	LDC6.5	RDC9	KLH4, KRH4
MCOCWK30	8	10	KLH4, KRH4


Alterations	Shaft Bore Dia.	Keyway Width																										
		Keyway Width (b) is changed as table below. Ordering Code: KLH4, KRH4																										
Spec.	0.1 mm Increment Ordering Code: LDC7.8 RDC9.3	<table border="1"> <thead> <tr> <th rowspan="2">Shaft Bore Dia. d₁, d₂</th> <th colspan="2">KLH, KRH (b)</th> <th colspan="2">t</th> </tr> <tr> <th>Dim.</th> <th>Tol.</th> <th>Dim.</th> <th>Tol.</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>2</td> <td>±0.0125</td> <td>1.0</td> <td>+0.1</td> </tr> <tr> <td>10</td> <td>4</td> <td rowspan="2">±0.0150</td> <td>1.8</td> <td>0</td> </tr> <tr> <td>12</td> <td>5</td> <td>2.3</td> <td>0</td> </tr> </tbody> </table>				Shaft Bore Dia. d ₁ , d ₂	KLH, KRH (b)		t		Dim.	Tol.	Dim.	Tol.	8	2	±0.0125	1.0	+0.1	10	4	±0.0150	1.8	0	12	5	2.3	0
		Shaft Bore Dia. d ₁ , d ₂	KLH, KRH (b)		t																							
			Dim.	Tol.	Dim.	Tol.																						
		8	2	±0.0125	1.0	+0.1																						
10	4	±0.0150	1.8	0																								
12	5		2.3	0																								
 <p>Cannot be combined with Shaft Bore Change (LDC, RDC) alteration. Applicable to Keywayed Bore only</p>																												
Code	LDC (Left Shaft) RDC (Right Shaft)	KLH (Left Shaft)	KRH (Right Shaft)																									

Couplings (High Rigidity Oldham)

Clamping

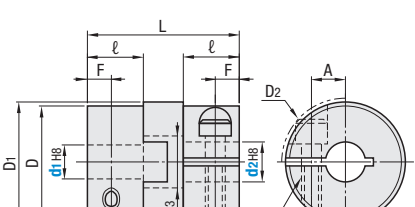
Features: Spacer is made of aluminum bronze, allowable torque is twice that as resin type. For set screw type, see P.1107.

Couplings – High Rigidity Oldham, Clamping

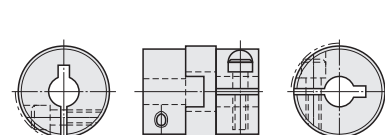


RoHS 10

MCOCG (Standard Bore)



MCOCGLK (Keywayed Bore d₁)
MCOCGRK (Keywayed Bore d₂)
MCOCGWK (Keywayed Bore d₁, d₂)



Tolerance values for d₁, d₂, are applied before slit is machined.
The lateral, angular, and axial misalignment values shown are for each occurring individually. When more than one misalignments are occurring simultaneously, the allowable maximum value of each will be reduced by 1/2.
For the selection criteria and alignment procedures, see P.1091, 1093.

Standard Bore	Keywayed Bore			Material		Accessories
	d ₁ (One Side)	d ₂ (One Side)	d ₁ , d ₂ (Both Sides)	Hub	Spacers	
MCOCG	MCOCGLK	MCOCGRK	MCOCGWK	304 Stainless Steel (Sintered)	Aluminum Bronze (Sold Lubricant Embedded)	Hex Socket Head Cap Screw

Part Number	Type	No.	Keywayed Bore Type is selectable for diameter 6 or larger	D	D ₁	D ₂	d ₃	L	l	A	F	Clamp Screw	
												M	Tightening Torque (N-m)
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
	17	5 6 6.35		16.8	17.5	19	8.2	24.4	9	5	4	M3	1.8
	20	6 6.35 7 8 9.53 10		20	21	23	9	27.2	10	7	4.5	M4	3.0
	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
	30	8 10		30	31	32	13	33	12	9	6	M5	8.0
	34	10 11 12 14 15 16		34	35	37	14	34	13	11	6	M5	8.0*
	38	10 12 14 15 16		38	41	41	17	39.5	15	11.5	7	M5	8.0
										13.7			

*Clamping screw tightening torque for shaft diameter 16mm (d₁, d₂) of MCOCG34 is 5.4 (N-m).

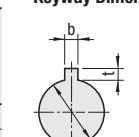
Part Number	Allow. Torque (N-m)	Angular Misalign. (°)	Lateral Misalign. (mm)	Static Torsional Spring Constant (N-m/rad)	Max Rotational Speed (r/min)	Moment of Inertia (Kg-m ²)	Allow. Axial Misalign. (mm)	Mass (g)
15	3	1.5	0.5	800	8000	6 x 10 ⁻⁷	±0.1	17
17	5		0.5	1000	7000	1.2 x 10 ⁻⁶	±0.1	30
20	7		0.5	2200	6000	3 x 10 ⁻⁶	±0.1	48
26	10		0.8	4000	5000	1 x 10 ⁻⁵	±0.2	90
30	30		1	5500	5000	2.5 x 10 ⁻⁵	±0.3	120
34	32		1	8000	4000	4 x 10 ⁻⁵	±0.2	172
38	50		1	11000	4000	1 x 10 ⁻⁴	±0.3	246

Excellent in high torque and high 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 rotations.

Part Number Example

Part Number	Shaft Bore Dia. d ₁	Shaft Bore Dia. d ₂
MCOCG20	6	6
MCOCGLK30	8	12
MCOCGWK38	10	12

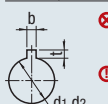
Keyway Dimension



Shaft Bore Dia. d ₁ , d ₂	b		t		Key Nom. Dim. b x h
	Dim.	Tolerance	Dim.	Tolerance	
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MCOCG20	LDC6.5	RDC9	KLH4, KRH4
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Alterations	Shaft Bore Dia.	Keyway Width																										
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		Shaft Bore Dia. d ₁ , d ₂	KLH, KRH (b)		t																							
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