

Oldham Couplings

Set Screw / Spacers



Oldham Couplings

High Rigidity, Set Screw

Feature: Hub and spacer can be separated for easy assembly. For Clamping Type **P.957**

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 more than one misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
 * For the selection criteria and alignment procedures **P.941**

Standard Bore	Keywayed Bore				Material		Accessories
	d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)	Hub	Spacer		
MCO	MCOLK	MCORK	MCOWK	304 Stainless Steel (Sintered)	Carbon Reinforced Resin	Set Screw	

Part Number	Type	No.	d1, d2 (d1≤d2)						D	D1	d3	L	ℓ	F	Set Screw	Unit Price		
			* Keywayed Bore Type is selectable for diameter 6 or larger.													M	MCOLK	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	M2	0.3	-	-	-				
12		3	4	5	12	12.5	4.0	14.2	5.2	M3	0.7	-	-	-				
15		4	5	6	15	14.5	5.0	16	5.4	M3	0.7	-	-	-				
17		5	6	6.35	17	16.8	7.2	19.8	6.7	M3	0.7	-	-	-				
20		6	6.35	7	20	20	8.2	21.4	7	M4	1.7	-	-	-				
26		6	6.35	7	26	26	12.0	25.6	9	M4	1.7	-	-	-				
30		8	10	12	30	30	13.0	33	12	M4	1.7	-	-	-				
34		10	11	12	34	34	13.0	34	13	M5	4.0	-	-	-				
38		10	12	14	38	38	16.0	40	15	M5	4.0	-	-	-				

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-m²)	Allowable Axial Misalignment (mm)	Mass (g)
6	0.3	0.3	9	1.5x10 ⁻⁸	±0.25	1.5	1.5	
8	0.5	0.4	13	2.2x10 ⁻⁸	±0.3	2.5	2.5	
10	0.8	0.4	21	3.6x10 ⁻⁸	±0.32	4	4	
12	1	0.5	44	1.6x10 ⁻⁷	±0.35	8	8	
15	1.6	0.8	90	3.5x10 ⁻⁷	±0.45	11	11	
17	2.2	1	250	7.8x10 ⁻⁷	±0.55	18	18	
20	3.2	1.5	340	1.7x10 ⁻⁶	±0.6	29	29	
26	6	2	420	6.2x10 ⁻⁶	±0.6	65	65	
30	15	2	1200	6.2x10 ⁻⁶	±0.6	100	100	
34	16	2.5	2400	2.5x10 ⁻⁵	±0.6	155	155	
38	28	2.5	3500	8x10 ⁻⁵	±0.6	240	240	

Keyway Dimension

Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. bsh
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.941**

Ordering Example

Part Number - Shaft Bore Dia. d1 - Shaft Bore Dia. d2

MCO20 - 6 - 6

MCOLK20 - 8 - 12

MCOWK20 - 10 - 12

Alterations

Part Number - Shaft Bore Dia. d1(LDC) - Shaft Bore Dia. d2(RDC) - (KLH, KRH)

MCO20 - LDC6.5 - RDC9

MCOWK30 - 8 - 10 - KRH4

[Configure Online](#)

Alterations	Shaft Bore Dia.		Keyway Width	
	No.	Dimension	Dimension	Dimension
Spec.	6	6	2	1.0
	8	8	3	1.4
	10	10	4	1.8
	12	12	5	2.3

Keyway Width (b) is changed as the table below.

Ordering Code: KLH4 KRH4

Shaft Bore Dia. d1, d2 Dimension Tolerance Dimension Tolerance

8 2 ±0.0125 1.0 +0.1

10 4 ±0.0150 1.8 0

12 5 ±0.0150 2.3 0

* Cannot be combined with shaft bore change (LDC, RDC) alterations.

* Applicable to Keywayed Bore only.

Spacers (for MCO or MCOC P.957)

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
6	6	6.2	2.2	2.4	1.3	1.3		MCO_6	
8	8	8.2	2.4	3.4	1.5	1.5		MCO_8	
10	10	10.2	2.6	4.4	1.6	1.6		MCO_10	
12	12	12.5	3.8	4.0	3	1.8		MCO_12	
15	15	15	4.8	5.0	3.4	2.3		MCO_15MCOC_15	
17	17	17.5	6	7.2	4.6	2.9		MCO_17MCOC_17	
20	20	21	6.6	8.2	5.8	3.2		MCO_20MCOC_20	
26	26	27	7.2	12.0		4		MCO_26MCOC_26	
30	30	31	8.5	13.0		7		MCO_30MCOC_30	
34	34	35	7.9	13.0		4.2		MCO_34MCOC_34	
38	38	41	9.4	16.0				MCO_38MCOC_38	

Ordering Example Part Number **MCOS15** [Configure Online](#)

Price [Configure Online](#)

Feature: Aluminum bronze is used for spacer and it has allowable torque twice as much as Resin Type. For Clamping Type **P.958**

MCOG (Standard Bore)

MCOGRK (Keywayed Bore d2)
MCOGWK (Keywayed Bore d1, d2)

* 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 to 1/2.
 * For the selection criteria and alignment procedures **P.941**

Standard Bore	Keywayed Bore				Material		Accessories
	d2 (One Side)	d1, d2 (Both Sides)	Hub	Spacer			
MCOG	MCOGRK	MCOGWK	304 Stainless Steel (Sintered)	Aluminum Bronze (Solid Lubricant Embedded)	Set Screw		

Part Number	Type	No.	d1, d2 (d1≤d2)						D	D1	d3	L	ℓ	F	Set Screw	Unit Price		
			* Keywayed Bore Type is selectable for diameter 6 or larger.													M	MCOG	MCOGRK
15	4	5	6	6.35	7	8	14.5	15	7.2	16	5.4	2.6	M3	0.7	-	-	-	
17	5	6	6.35	7	8		16.8	17.5	8.2	19.8	6.7	3.2	M4	1.7	-	-	-	
20		6	6.35	7	8	9.53	20	21	9	21.4	7	3.4	M4	1.7	-	-	-	
26		6	6.35	7	8	9.53	26	27	12	25.6	9	4	M4	1.7	-	-	-	
30		8	10	12	14		30	31	14	33	12	6	M4	1.7	-	-	-	
34		10	11	12	14	15	34	35	14	34	13	5.5	M5	4.0	-	-	-	
38		10	12	14	15	16	38	41	17	39.5	15	7	M5	4.0	-	-	-	

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-m²)	Allowable Axial Misalignment (mm)	Mass (g)
15	3	1.5	0.5	800	8000	4 x10 ⁻⁸	±0.1	15
17	5	1.5	0.5	1000	7000	1 x10 ⁻⁷	±0.1	25
20	7	1.5	0.5	2200	6000	2 x10 ⁻⁸	±0.1	37
26	10	1.5	0.8	4000	5000	6 x10 ⁻⁸	±0.2	79
30	30	1	1	5500	5000	2.5x10 ⁻⁵	±0.3	120
34	32	1	1	8000	4000	4 x10 ⁻⁵	±0.2	180
38	50	1	1	11000	4000	1x10 ⁻⁴	±0.3	256

* Excellent in 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 rotations.

Ordering Example Part Number - Shaft Bore Dia. d1 - Shaft Bore Dia. d2

MCOG20 - 6 - 6

MCOGRK20 - 8 - 12

MCOGWK20 - 10 - 12

Alterations Part Number - Shaft Bore Dia. d1(LDC) - Shaft Bore Dia. d2(RDC) - (KLH, KRH)

MCOG20 - LDC6.5 - RDC9

MCOGWK30 - 8 - 10 - KRH4

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Days to Ship [Configure Online](#)

Price [Configure Online](#)

Alterations	Shaft Bore Dia.		Keyway Width	
	No.	Dimension	Dimension	Dimension
Spec.	6	6	2	1.0
	8	8	3	1.4
	10	10	4	1.8
	12	12	5	2.3

Keyway Width (b) is changed as the table below.

Ordering Code: KLH4 KRH4

Shaft Bore Dia. d1, d2 Dimension Tolerance Dimension Tolerance

8 2 ±0.0125 1.0 +0.1

10 4 ±0.0150 1.8 0

12 5 ±0.0150 2.3 0

* Cannot be combined with shaft bore change (LDC, RDC) alterations.

* Applicable to Keywayed Bore only.