

Oldham Couplings

High Rigidity, Set Screw

■ **Features:** Aluminum bronze is used for spacer and it has allowable torque twice as much as Resin Type.

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 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 **P1061**

Standard Bore	Keywayed Bore		Material		Accessory
	d1 (One Side)	d2 (Both Sides)	Hub	Spacer	
MCOG	MCOGRK	MCOGWK	SUS304 Sintered Alloy	Aluminum Bronze (Sold Lubricant Embedded)	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)	MCOG	MCOGRK	MCOGWK	
MCOG MCOGRK MCOGWK	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	10	11	12	20	21	9			21.4	7	3.4			
	26	6	6.35	7	8	9.53	10	11	12	14	26	27	12	25.6	9	4				
	30		8	10	12	14	30	31	14	33	12	6								
	34		10	11	12	14	15	16	34	35	14	34	13	5.5	M5	4.0				
	38		10	12	14	15	16	18	20	38	41	17	39.5	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·m ²)	Allowable Axial Misalignment (mm)	Mass (g)
MCOG MCOGRK MCOGWK	15	3	0.5	800	8000	4 × 10 ⁻⁵	±0.1	15		
	17	5	0.5	1000	7000	1 × 10 ⁻⁷	±0.1	25		
	20	7	0.5	2200	6000	2 × 10 ⁻⁵	±0.1	37		
	26	10	0.8	4000	5000	6 × 10 ⁻⁵	±0.2	79		
	30	30	1	5500	5000	2.5 × 10 ⁻⁵	±0.3	120		
	34	32	1	8000	4000	4 × 10 ⁻⁵	±0.2	180		
38	50	1	11000	4000	1 × 10 ⁻⁴	±0.3	256			

Keyway Dimension

Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. b×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

⚠ Excellent in high torque / high speed rotation 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

Alterations	Shaft Bore Dia.	Keyway Width	
		KLH, KRH(b)	t
Spec.		KLH, KRH(b)	t
		Shaft Bore Dia. d1, d2	Reference Dia. Tolerance
		8	2 ±0.0125 1.0
		10	4 ±0.0150 1.8
		12	5 ±0.0150 2.3

⚠ Cannot be combined with shaft bore change (LDC, RDC) alterations.
⚠ Applicable to Keywayed Bore only.

Oldham Couplings

High Rigidity, Clamping

■ **Features:** Aluminum bronze is used for spacer and it has allowable torque twice as much as Resin Type.

MCOCG (Standard Bore)

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

⚠ 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 **P1061**

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

Part Number	Type	No.	d1, d2 Selection (d1≤d2)						D	D1	D2	d3	L	ℓ	A	F	Clamp Screw		Unit Price				
			⚠ Keywayed Bore Type is selectable for diameter 6 or larger														M	Tightening Torque (N·m)	MCOCG	MCOCGLK	MCOCGRK	MCOCGWK	
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								
	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			8.5	6	M5	8.0				
	34		10	11	12	14	15	16	34	35	37	14	34	13	11	9		M4	4.5				
	38		10	12	14	15	16	18	20	38	41	41	17	39.5	15	11.5	7	M5	8.0				

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

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·m ²)	Allowable Axial Misalignment (mm)	Mass (g)
MCOCG MCOCGLK MCOCGRK MCOCGWK	15	3	0.5	800	8000	6 × 10 ⁻⁷	±0.1	17		
	17	5	0.5	1000	7000	1.2 × 10 ⁻⁵	±0.1	30		
	20	7	0.5	2200	6000	3 × 10 ⁻⁵	±0.1	48		
	26	10	0.8	4000	5000	1 × 10 ⁻⁵	±0.2	90		
	30	30	1	5500	5000	2.5 × 10 ⁻⁵	±0.3	120		
	34	32	1	8000	4000	4 × 10 ⁻⁵	±0.2	172		
38	50	1	11000	4000	1 × 10 ⁻⁴	±0.3	246			

⚠ Excellent in high torque / high speed rotation 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

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

Alterations	Shaft Bore Dia.	Keyway Width	
		KLH, KRH(b)	t
Spec.		KLH, KRH(b)	t
		Shaft Bore Dia. d1, d2	Reference Dia. Tolerance
		8	2 ±0.0125 1.0
		10	4 ±0.0150 1.8
		12	5 ±0.0150 2.3

⚠ Cannot be combined with shaft bore change (LDC, RDC) alterations.
⚠ Applicable to Keywayed Bore only.