

Oldham Couplings

Large Shaft Diameter, Set Screw / Clamping / Spacers

Oldham Couplings

High Rigidity Large Shaft Diameter, Set Screw / Clamping

■ Features: Large tolerance for lateral and angular misalignments covers up to Ø38 max. shafts.

■ Set Screw
MFJ (Standard Bore)

■ Clamping
MFJC (Standard Bore)

■ Set Screw
MFJWK (Keywayed Bore d1, d2)

■ Clamping
MFJCLK (Keywayed Bore d1)
MFJCRK (Keywayed Bore d2)
MFJCWK (Keywayed Bore d1, d2)

Operating Temperature: -20°C ~ 80°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.
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

Shape	Standard Bore	Keywayed Bore				Material	Accessory
		d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)	Hub	Spacer	
Set Screw	MFJ	-	-	MFJWK	Aluminum Alloy	Polyacetal	Set Screw
Clamping	MFJC	MFJCLK	MFJCRK	MFJCWK			Hex Socket Head Cap Screw

For Keyway dimensions, see P.1092

Part Number		d1, d2 Selection (d1 ≤ d2)										Set Screw		Unit Price	
Type	D											M	Tightening Torque (N·m)	MFJ	MFJWK
MFJ MFJWK	44	14	15	16	18	20	22	22.5	46	15	7.5	M 6	7.0		
	55	18	20	22	25	26	28	57	19	9.5	M 8	15.0			
	70	22	25	28	30	35	38	39	77	25	12.5	M10	30.0		

Part Number		d1, d2 Selection (d1 ≤ d2)										Clamp Screw		Unit Price		
Type	D											M	Tightening Torque (N·m)	MFJC	MFJCLK MFJCRK	MFJCWK
MFJC MFJCLK MFJCRK MFJCWK	44	14	15	16	18	20	22.5	46	15	7.5	14.5	M5	*8.4			
	55	18	20	22	25	28	57	19	9.5	17	M6	*14.4				
	70	22	25	28	30	35	39	77	25	12.5	24	M8	*30.0			

* When the shaft diameter is small, clamp screw tightening torque should be higher than the prescribed value to prevent shaft slipping. The above tightening torque is for reference.

Part Number	Type	D	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)	
Set Screw MFJ MFJWK	Clamping MFJC MFJCLK MFJCRK MFJCWK	44	30	26	1	1500	12000	4 × 10 ⁻⁵	±0.5	140	
		55	45	40	2	1.5	2800	10000	11 × 10 ⁻⁵	±0.6	260
		70	80	72	2	4800	8000	40 × 10 ⁻⁵	±0.8	450	

⊕ The allowable torque varies depending on temperature P.1062

Alterations

Part Number	Shaft Bore Dia. (LDC)	Shaft Bore Dia. (RDC)	Keyway (KLH, KRH)
MFJ55	LDC19.5	RDC21	-
MFJCWK70	22	35	KLH8

Spec.	Shaft Bore Dia.		Keyway Width		Keyway	
	LDC (Left Shaft)	RDC (Right Shaft)	KLH (Left Shaft)	KRH (Right Shaft)	LK (Left Shaft)	RK (Right Shaft)
0.1mm Increment Ordering Code LDC19.5 RDC21 Values in () are for Clamping Type.	D	LDC, RDC	Keyway Width (b) is changed as the table below.		MFJ MFJC Ordering Code LK5 RK8 Shaft Dia. d1, d2 Reference Dia. Tolerance 14~17 5 17~22 6 22~30 8 30~38 10	t Reference Dia. Tolerance 3.3 +0.2 0
	44	14~22(20)	KLH, KRH(b)			
	55	18~26(25)	Reference Dia. Tolerance			
	70	22~38(35)	22 8 ±0.0180 3.3 +0.2 0	30 10 ±0.0180 3.3 +0.2 0		

■ Spacers (for MFJ□□, MFJC□□)

Part Number	Type	D1	T	d3	W	G	Applicable Coupling	Unit Price
MFJS	44	44.3	14	22.5	10.4	9	MFJ□□44 MFJC□□44	
	55	55	17	28	13	11	MFJ□□55 MFJC□□55	
	70	69	25	39	15	16.5	MFJ□□70	
							MFJC□□70	

Ordering Example Part Number MFJS70

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

■ Set Screw
MFJGWK (Keywayed Bore d1, d2)

■ Clamping
MFJCGWK (Keywayed Bore d1, d2)

Operating Temperature: -20°C ~ 80°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.
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
When the lateral/axial misalignments, the torque and the rotational speed are over 50% of the allowable values, apply grease with molybdenum disulfide periodically.

Shape	Keywayed Bore	Material	Accessory
	d1, d2 (Both Sides)	Hub	Spacer
Set Screw	MFJGWK	Stainless Steel	Aluminum Bronze
Clamping	MFJCGWK	Stainless Steel	Aluminum Bronze

Set Screw Hex Socket Head Cap Screw

Part Number		d1, d2 Selection (d1 ≤ d2)										Set Screw		Unit Price	
Type	D											M	Tightening Torque (N·m)	MFJGWK	MFJCGWK
MFJGWK	45	15	16	18	20	22.5	43.6	15	7.5	M 5	3.6				
	55	20	22	24	25	29	49.4	17	8.5	M 6	6.0				
	70	25	28	30	35	36	57.0	20	10	M 8	14.0				

Part Number		d1, d2 Selection (d1 ≤ d2)										Clamp Screw		Unit Price	
Type	D											M	Tightening Torque (N·m)	MFJCGWK	MFJGWK
MFJCGWK	45	15	16	18	20	22.5	46	16.2	6	14.5	M5	*10			
	55	20	22	24	25	29	57	20.8	7	18.5	M6	*15			

* When the shaft diameter is small, clamp screw tightening torque should be higher than the prescribed value to prevent shaft slipping. The above tightening torque is for reference.

Ordering Example

Part Number	Type	D	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)
MFJGWK45	45	60	1	65000	10000	1.7 × 10 ⁻⁴	±0.3	400		
MFJGWK55	55	90	1	100000	10000	3.3 × 10 ⁻⁴	±0.5	700		
MFJGWK70	70	160	1	180000	10000	11 × 10 ⁻⁴	±0.6	1300		

Ordering Example

Part Number	Shaft Bore Dia. d1	Shaft Bore Dia. d2
MFJGWK45	15	20
MFJGWK55	22	25

Ordering Example

Part Number	Type	D	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)
MFJCGWK45	45	50	0.8	35000	5000	1.8 × 10 ⁻⁴	±0.3	450		
MFJCGWK55	55	75	1.0	52000	5000	3.3 × 10 ⁻⁴	±0.5	800		

Alterations

Part Number	Shaft Bore Dia. d1 (LDC)	Shaft Bore Dia. d2 (RDC)	Keyway (KLH, KRH)
MFJGWK45	LDC19	RDC19	-
MFJCGWK55	22	25	KLH8

Spec.	Shaft Bore Dia.		Keyway Width	
	LDC (Left Shaft)	RDC (Right Shaft)	KLH (Left Shaft)	KRH (Right Shaft)
1mm Increment Ordering Code LDC19 RDC21 Values in () are for Clamping Type.	D	LDC, RDC	Keyway Width (b) is changed as the table below.	
	45	15~20	KLH, KRH(b)	
	55	20~25	Reference Dia. Tolerance	
	70	25~35	22 8 ±0.0180 3.3 +0.2 0	30 10 ±0.0180 3.3 +0.2 0

Keyway Dimension

Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. b×h
14~17	5	2.3	5×5
17.1~22	6	2.8	6×6
22.1~30	8	±0.180 +0.2	8×7
30.1~38	10	±0.180 3.3 0	10×8