Oldham Couplings

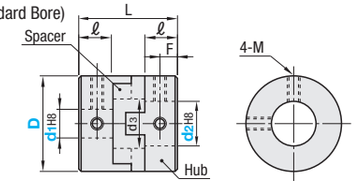
Large Shaft Diameter, Set Screw / Clamping / Spacers

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

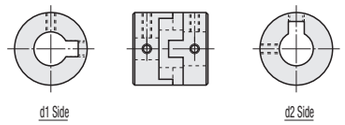
RoHS10

Set Screw

MFJ (Standard Bore)

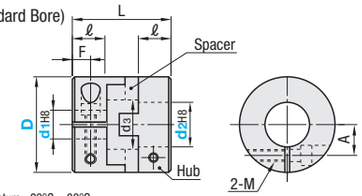


MFJWK (Keyway Bore d_1, d_2)

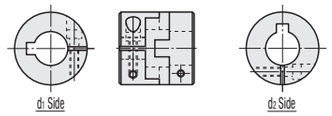


Clamping

MFJC (Standard Bore)



MFJCLK (Keyway Bore d_1)
MFJCRK (Keyway Bore d_2)
MFJCWK (Keyway Bore d_1, d_2)



- 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
- For Keyway dimensions, see P.1092

Shape	Standard Bore	Keyway Bore d_1 (One Side)	Keyway Bore d_2 (One Side)	Keyway Bore d_1, d_2 (Both Sides)	Material: Hub	Material: Spacer	Accessory
Set Screw	MFJ	-	-	MFJWK	Aluminum Alloy	Polyacetal	Set Screw (Hex Socket Head Cap Screw)
Clamping	MFJC	MFJCLK	MFJCRK	MFJCWK			

Set Screw

Part Number Type	D	d_1, d_2 Selection ($d_1 \le d_2$)	d_3	L	ℓ	F	Set Screw M	Set Screw Tightening Torque (N·m)	Unit Price MFJ	Unit Price 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		

Clamping

Part Number Type	D	d_1, d_2 Selection ($d_1 \le d_2$)	d_3	L	ℓ	F	A	Clamp Screw M	Clamp Screw Tightening Torque (N·m)	Unit Price MFJC	Unit Price MFJCLK MFJCRK	Unit Price 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) Set Screw	Allowable Torque (N·m) Clamping	Angular Misalignment (°)	Lateral Misalignment (mm)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia ($kg \cdot m^2$)	Allowable Axial Misalignment (mm)	Mass (g)
Set Screw MFJ MFJWK	Clamping MFJC	44	30	26	2	1	1500	12000	4×10^{-5}	±0.5	140
	MFJCLK MFJCRK	55	45	40		1.5	2800	10000	11×10^{-5}	±0.6	260
	MFJCWK	70	80	72		2	4800	8000	40×10^{-5}	±0.8	450

The allowable torque varies depending on temperature P.1062

Ordering Example

Part Number	Shaft Bore Dia. d_1	Shaft Bore Dia. d_2
MFJ44	15	20
MFJCWK70	22	35

Alterations

Part Number - Shaft Bore Dia. d_1 (LDC) - Shaft Bore Dia. d_2 (RDC) - (KLH, KRH, LK, RK)

MFJ55 - LDC19.5 - RDC21

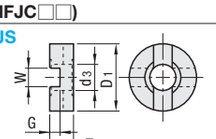
MFJCWK70 - 22 - 35 - KLH8

Alterations	Shaft Bore Dia.	Keyway Width	Keyway
Spec.	LDC H8 / RDC H8; 0.1mm Increment; Ordering Code: LDC19.5, RDC21; D: LDC, RDC; 44: 14~22(20); 55: 18~26(25); 70: 22~38(35); Values in ( ) are for Clamping Type.	Keyway Width (b) is changed as the table below. Ordering Code: KLH8 KRH8. Shaft Bore Dia. d_1, d_2: 22, 30; KLH, KRH(b) Reference Dia.: 8, 10; Tolerance: ±0.0180; t Reference Dia.: 3.3; Tolerance: +0.2 0. Cannot be combined with shaft bore change (LDC, RDC) alterations. Applicable to Keyawayed Bore only.	MFJ M; MFJC A; For Keyway dimensions, see P.1092. Ordering Code: LK5 RK8. Shaft Dia. d_1, d_2: 14~17, 17~22, 22~30, 30~38; LK, RK: 5, 6, 8, 10
Code	LDC (Left Shaft) / RDC (Right Shaft)	KLH (Left Shaft) / KRH (Right Shaft)	LK (Left Shaft) / RK (Right Shaft)

Spacers (for MFJ□□, MFJC□□)

RoHS10

MFJS



M Material: Polyacetal

Part Number Type	No.	D_1	T	d_3	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

Oldham Couplings

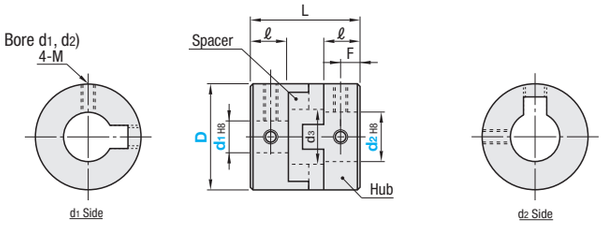
High Rigidity Large Shaft Diameter, Set Screw / Clamping

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

RoHS10

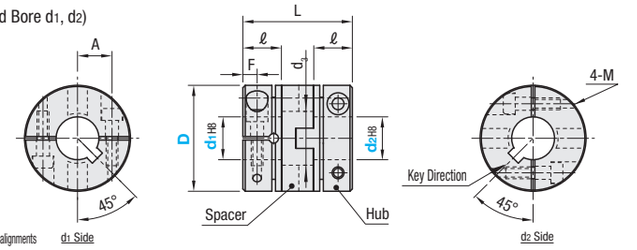
Set Screw

MFJGWK (Keyway Bore d_1, d_2)



Clamping

MFJCGWK (Keyway Bore d_1, d_2)



- 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/angular misalignments, the torque and the rotational speed are over 50% of the allowable values, apply grease with molybdenum disulfide periodically.

Shape	Keyway Bore d_1, d_2 (Both Sides)	Material: Hub	Material: Spacer	Accessory
Set Screw	MFJGWK	Stainless Steel	Aluminum Bronze	Set Screw (Hex Socket Head Cap Screw)
Clamping	MFJCGWK			

Set Screw

Part Number Type	D	d_1, d_2 Selection ($d_1 \le d_2$)	d_3	L	ℓ	F	Set Screw M	Set Screw Tightening Torque (N·m)	Unit Price
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	

Clamping

Part Number Type	D	d_1, d_2 Selection ($d_1 \le d_2$)	d_3	L	ℓ	F	A	Clamp Screw M	Clamp Screw Tightening Torque (N·m)	Unit Price
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.

Set Screw

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 ($kg \cdot m^2$)	Allowable Axial Misalignment (mm)	Mass (g)
MFJGWK	45	60	1	1	65000	10000	1.7×10^{-4}	±0.3	400
	55	90		1.2	100000		3.3×10^{-4}	±0.5	700
	70	160		1.6	180000		11×10^{-4}	±0.6	1300

Ordering Example

Part Number	Shaft Bore Dia. d_1	Shaft Bore Dia. d_2
MFJGWK45	15	20
MFJCGWK55	22	25

Clamping

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 ($kg \cdot m^2$)	Allowable Axial Misalignment (mm)	Mass (g)
MFJCGWK	45	50	1	0.8	35000	5000	1.8×10^{-4}	±0.3	450
	55	75		1.0	52000		3.3×10^{-4}	±0.5	800

Alterations

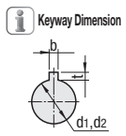
Part Number - Shaft Bore Dia. d_1 (LDC) - Shaft Bore Dia. d_2 (RDC) - (KLH, KRH)

MFJGWK45 - LDC19 - RDC19

MFJCGWK55 - 22 - 25 - KLH8

Alterations	Shaft Bore Dia.	Keyway Width
Spec.	LDC H8 / RDC H8; 1mm Increment; Ordering Code: LDC19, RDC21; D: LDC, RDC; 45: 15~20; 55: 20~25; 70: 25~35	Keyway Width (b) is changed as the table below. Ordering Code: KLH8 KRH8. Shaft Bore Dia. d_1, d_2: 22, 30; KLH, KRH(b) Reference Dia.: 8, 10; Tolerance: ±0.0180; t Reference Dia.: 3.3; Tolerance: +0.2 0. Cannot be combined with shaft bore change (LDC, RDC) alterations.
Code	LDC (Left Shaft) / RDC (Right Shaft)	KLH (Left Shaft) / KRH (Right Shaft)

Keyway Dimension



Shaft Bore Dia. d1, d2	b Reference Dia.	b Tolerance	t Reference Dia.	t Tolerance	Key Nominal Dim. bxh
14~17	5	±0.0150	2.3	+0.1 0	5x5
17.1~22	6		2.8		6x6
22.1~30	8	±0.0180	3.3	+0.2 0	8x7
30.1~38	10				10x8