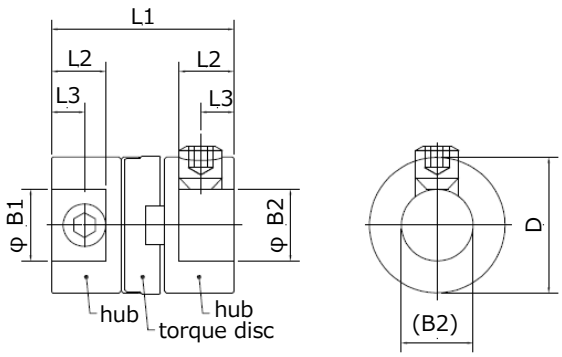
MJ type

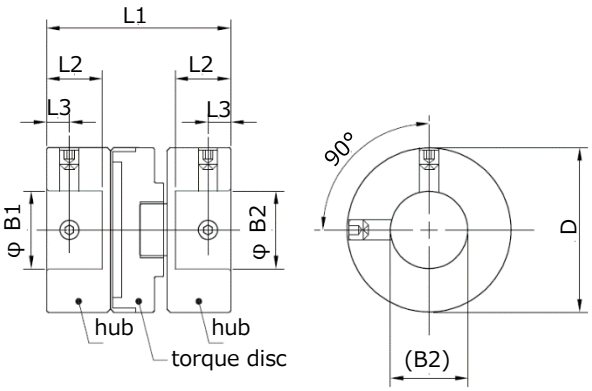
- **Set screw style**
- Zero backlash
- **Maximum lateral misalignment: 0.8 - 7 mm**
- Inner diameter: 2 - 30 mm
- Maximum transmittable torque: 0.06 - 37.5 Nm
- **Size 50 and 57 with key ways standard** (JIS B1301 - 1996)

Blind hub

●MJ-6, -9

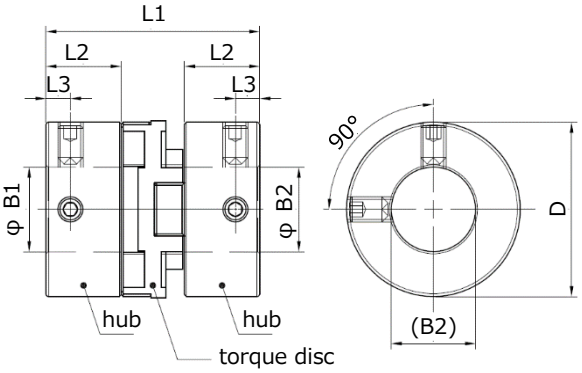


●MJ-13, -19, -25

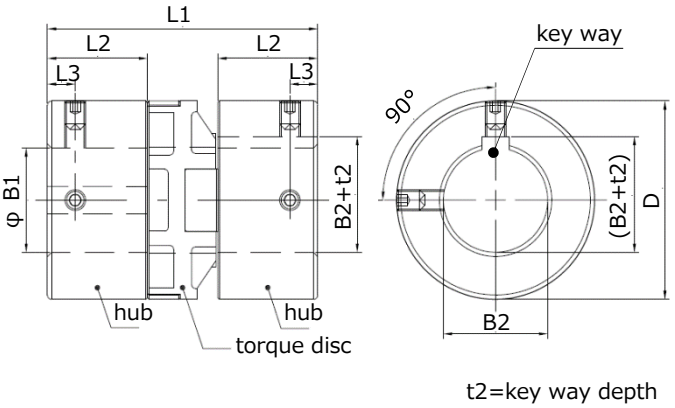


Through hub

●MJ-19L, 33, -41



●MJ-50, -57 with key way



- A coupling consists of two hubs and one torque disc.

Service Factors

Select a size of coupling where the maximum transmittable torque* exceeds the "Maximum application torque × Service factor."

Load	Service factors
Uniform, steady state	1
Non-uniform, periodical, stop/start, reversing	2
Shock	3
Heavy shock, repeated impulsive, reversing	4
Servomotor	2.5 - 3.0

Specifications of MJ type

MJ				Coupling size of MJ-									
				6	9	13	19	19L	25	33	41	50	57
Maximum transmittable torque*		Blank disc	Nm	0.06	0.21	0.5	1.7	1.7	4	10	17	30	37.5
		Thro' disc (TB)		-	-	-	-	-	-	10	17	30	37.5
Torsional stiffness	Static stregth	Blank disc	Nm	0.7	2	4	10	10	13	59	62	89	117
		Thro' disc (TB)		-	-	-	-	-	-	59	62	89	117
	Spring constant	Blank disc	Nm/rad.	10	30	65	115	115	205	166	185	570	575
		Thro' disc (TB)		-	-	-	-	-	-	107	241	235	624
Maximum compressive load			N	13	25	52	120	120	170	200	550	600	660
Electrical isolation between shafts			kV DC	3.8	4.1	4.5	6.8	6.8	7.7	8.1	11.4	13.8	16.2
Moment of inertia (Values apply with maximum bores)			$kgm^2 \times 10^{-8}$	6	18	26	67	59	252	1,133	3,177	7,550	12,410
Misalignment	Angular		°	1									
	Lateral		mm	0.8	1.3	1.6	2.4	2.4	3	3.8	5	6	7
	Axial			0.1			0.2			0.3		0.4	
Clearance between hub and torque disc**			mm	0.05			0.1			0.15		0.2	
Mass (Values apply with maximum bores)			$kg \times 10^{-3}$	2.5	4	11	12	15	31	79	127	209	347
Outer diameter		D	mm	6.4	9.5	12.7	19.1	19.1	25.4	33.3	41.3	50.0	57.0
Overall length		L1	mm	12.7	12.7	15.9	22.0	26.0	28.4	48.0	50.8	59.7	77.8
Mounting length*** (shaft depth, bore depth)		L2	mm	3.8	3.8	4.3	6.3	9.4	8.6	15.0	18.1	20.8	28.8
Distance	from hub end to screw	L3	mm	2.3	2.3	2.3	2.7	3.6	3.5	5.0	5.8	7.0	8.0
Set screws****	Size			M3				M4		M6			
	Recommended tightening torque		Nm	0.7				1.7		6.0			
Inner diameter (see tbl below)	Metric (min - max)	B1, B2	mm	2-3	3-5	3-6	4-8	3-8	6-12	8-20	8-20	10-25	12-30
	Inch (min - max)	B1, B2	in	1/8	1/8-3/16	1/8-1/4	3/16-5/16	3/16-5/16	1/4-3/8	3/8-1/2	3/8-1/2	-	-
Torque disc		Blank disc		standard									
		Thro' disc (TB)		-	-	-	make to order			standard			

** Please make clearance of 0.05 - 0.2 mm between torque disc and hubs respectively. The clearance absorbs axial misalignment and thermal expansion of shaft.

*** Shafts must not penetrate beyond L2 when installation.

**** Steel screws are standard, stainless steel screws are option.

Bores for MJ type

Inner diameter			Coupling size of MJ-									
			6	9	13	19	19L	25	33	41	50	57
Solid hub		HS	■	■	■	■		■	■	■		
B1, B2 (+0.03/ 0 [mm])	Metric [mm]	2	●									
		2.5	●									
		3	●	●	●		○					
		4		●	●	●	○					
		4.5		●	●	●	○					
		5		●	●	●	○					
		6			●	●	○	●				
		7				●	○	●				
		8				●	○	●	○	○		
		9						●	○	○		
		9.5						●	○	○		
		10						●	○	○	○	
		11						●	○	○	○	
		12						●	○	○	○	○
		13							○	○	○	○
		14							○	○	○	○
		15								○	○	○
		16								○	○	○
		17								○	○	○
		18								○	○	○
		19								○	○	○
		20								○	○	○
		22									○	○
		24									○	○
		25									○	○
		28										○
		30										○
	Inch [in]	1/8	●	●	●							
		3/16		●	●	●	○					
		1/4			●	●	○	●				
		5/16				●	○	●				
		3/8						●	○	○		
		1/2							○	○		

■HS: Solid hubs

●Blind hubs

○Through hubs

Ordering Example

Type	-	Coupling size	-	Inner diameter, small	×	Inner diameter, large
MJ	-	25	-	8	×	12

Please email us for further assistance: product@mighty-corp.co.jp

CAUTION!

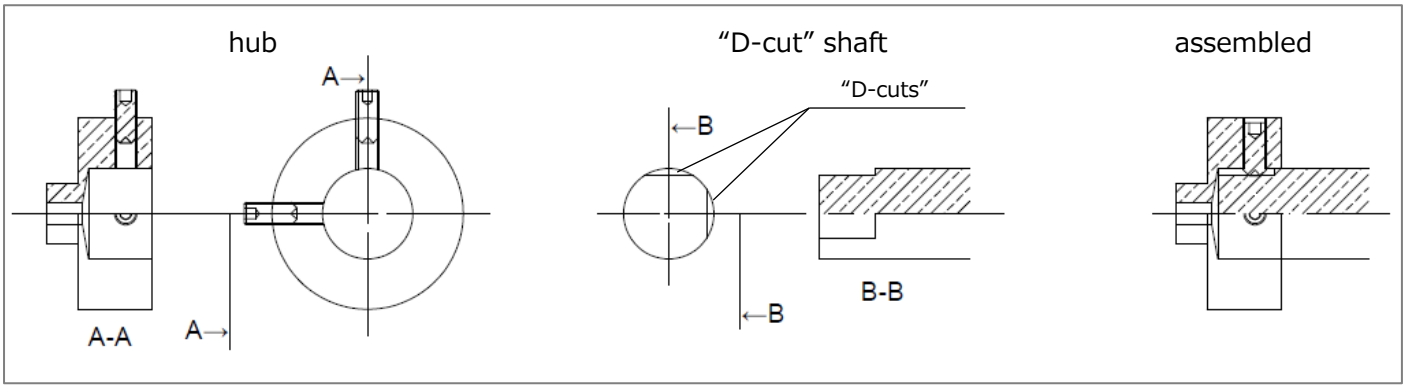
MJ type couplings hold the shafts with attached set screws. The shafts are pressed against the inner wall of bores with the cup points of set screws. This installation mechanism may cause burrs on the shafts. Shafts may not be able to be removed from the hubs when dismounting due to the burrs. See examples below to avoid the problem. We recommend MJC type with clamp style to solve this problem.

Example 1

Make “D-cuts” at the position where the cup points of set screws sit. Stabilize the cup points on “D-cuts.”

Advantage: shafts do not slip in a rotational manner easily

Disadvantage: shafts can slip axially

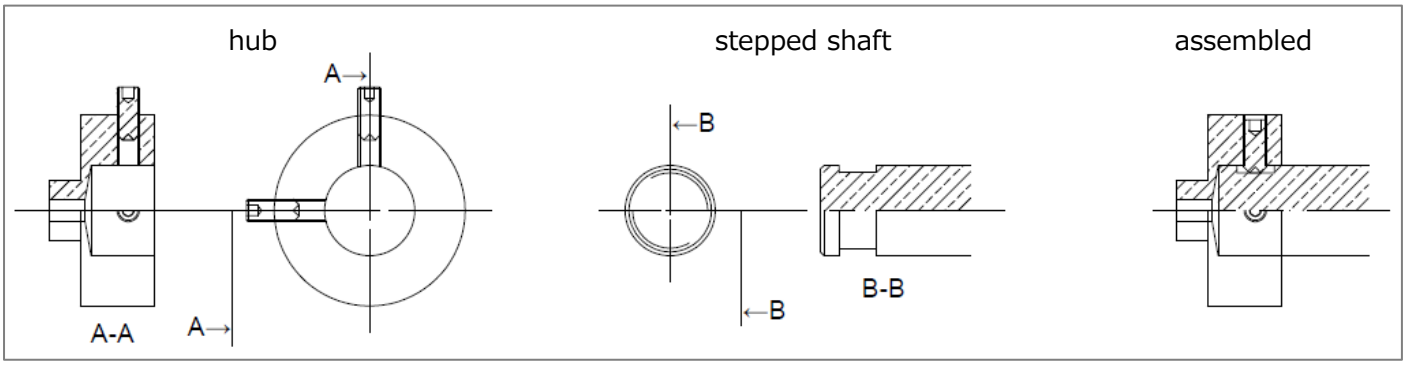


Example 2

Make a step on the shaft. Stabilize the cup points of set screws on the step.

Advantage: shafts do not slip axially easily

Disadvantage: shafts can slip in a rotational manner



Please note that clearance between the shaft and the hub can cause misalignment with either method.