


# Disc Couplings

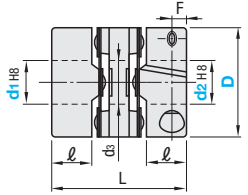
## Standard Torque, Clamping

■ **Features:** Couplings with polyimide discs highly tolerant on lateral and angular misalignments.

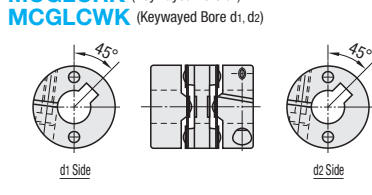


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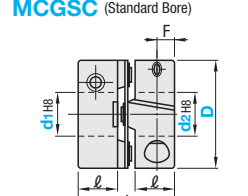
**Double Disc Type**  
**MCGLC** (Standard Bore)



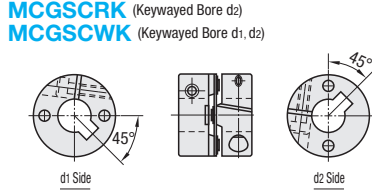
**MCGLCLK** (Keyway Bore d1)  
**MCGLCRK** (Keyway Bore d2)  
**MCGLCWK** (Keyway Bore d1, d2)



**Single Disc Type**  
**MCGSC** (Standard Bore)



**MCGSCRK** (Keyway Bore d2)  
**MCGSCWK** (Keyway Bore d1, d2)



Standard Bore	Keyway Bore				Material	Surface Treatment	Accessory
	d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)	Main Body			
MCGLC	MCGLCLK	MCGLCRK	MCGLCWK	Aluminum	Polyimide	Electroless Nickel Plating	Hex Socket Head Cap Screw
MCGSC	-	MCGSCRK	MCGSCWK	Diecast	-	-	-

⚠ 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 P.1061

Part Number	Type	D	d1, d2 Selection (d1≤d2)						ds	L	ℓ	A	F	Clamp Screw		Unit Price			
			⚠ Keyway Bore Type is selectable for diameter 6 or larger											M	Tightening Torque (N·m)	MCGLC	MCGLCLK MCGLCRK	MCGLCWK	
Double Disc Type <b>MCGLC</b> <b>MCGLCLK</b> <b>MCGLCRK</b> <b>MCGLCWK</b>	13	*3	4	5				5.5	19	5.5	4.1	2.5	M2	0.42					
	16	*4	5	6				6.8	23.2	7	5	3	M2.5	1					
	20	*4	5	6	6.35	7	8	8.1	26	7.5	6.5	3.7							
	25		*5	6	6.35	7	8	9.53	10	10.4	30.2	9	8.5	M3	1.7				
	32			8	9.53	10	11	12	14	15	41	12.4	10	6	M4	2.5			
	40			8	9.53	10	11	12	14	15	47	15.5	13.1	7.8	M5	7			
	50			14	15	16	18	20	22	24	25	53	18	16.7	9	M6	12		

Part Number	Type	D	d1, d2 Selection (d1≤d2)						L	ℓ	A	F	Clamp Screw		Unit Price			
			⚠ Keyway Bore Type is selectable for diameter 6 or larger										M	Tightening Torque (N·m)	MCGSC	MCGSCRK	MCGSCWK	
Single Disc Type <b>MCGSC</b> <b>MCGSCRK</b> <b>MCGSCWK</b>	13	*3	4	5				13.5	5.5	4.1	2.5	M2	0.42					
	16	*4	5	6				16.5	7	5	3	M2.5	1					
	20	*4	5	6	6.35	7	8	18.4	7.5	6.5	3.7							
	25		*5	6	6.35	7	8	9.53	10	21.6	9	8.5	4	M3	1.7			
	32			8	9.53	10	11	12	14	29	12.4	10	6	M4	2.5			
	40			8	9.53	10	11	12	14	35	15.5	13.1	7.8	M5	7			
	50			14	15	16	18	20	22	41	18	16.7	9	M6	12			

⚠ When d1 is \*3, \*4, \*5, use with the load torque 50% or less than that shown in the table to prevent slipping.

### ■ Double Disc Type

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 <sup>2</sup> )	Max. Axial Misalignment (mm)	Mass (g)
<b>MCGLC</b> <b>MCGLCLK</b> <b>MCGLCRK</b> <b>MCGLCWK</b>	13	0.25	0.3	3.5	0.4	44	12000	8.0x10 <sup>-8</sup>	±0.2	5
	16	0.4				70	9000	2.4x10 <sup>-7</sup>	±0.3	9
	20	0.6				130	7600	7.2x10 <sup>-7</sup>	±0.4	14
	25	1.4	0.4	0.4	240	6000	2.2x10 <sup>-6</sup>	±0.5	27	
	32	2.6			560	4800	6.0x10 <sup>-6</sup>	±0.5	60	
	40	4.4			980	4000	1.7x10 <sup>-5</sup>	±0.6	104	
	50	7.0			1100	3500	4.6x10 <sup>-5</sup>	±0.6	210	

### ■ Single Disc Type

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 <sup>2</sup> )	Max. Axial Misalignment (mm)	Mass (g)
<b>MCGSC</b> <b>MCGSCRK</b> <b>MCGSCWK</b>	13	0.25	0.1	2	0.15	60	12000	7.0x10 <sup>-8</sup>	±0.1	4
	16	0.4				90	9000	2.0x10 <sup>-7</sup>	±0.1	7
	20	0.6				170	7600	6.0x10 <sup>-7</sup>	±0.2	11
	25	1.4	0.15	0.15	300	6000	1.8x10 <sup>-6</sup>	±0.2	22	
	32	2.6			700	4800	5.2x10 <sup>-6</sup>	±0.3	50	
	40	4.4			1200	4000	1.3x10 <sup>-5</sup>	±0.3	85	
	50	7.0			1450	3500	3.6x10 <sup>-5</sup>	±0.3	170	

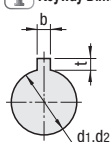


Ordering Example  
**Part Number** - Shaft Bore Dia. d1 - Shaft Bore Dia. d2  
**MCGLC16** - 5 - 6  
**MCGLCWK20** - 6 - 8



Alterations  
**Part Number** - Shaft Bore Dia. d1 (LDC) - Shaft Bore Dia. d2 (RDC) - (KLH, KRH)  
**MCGLC20** - LDC6.5 - RDC6.9 - KLH4  
**MCGLCWK32** - 10 - 10 - KLH4

### 1 Keyway Dimension



Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. b x t
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
17.1~22	6	2.8	6x6
22.1~24	8	3.3	8x7

Alterations	Shaft Bore Dia.		Keyway Width	
		LDC (Left Shaft)	RDC (Right Shaft)	KLH (Left Shaft)

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

Ordering Code				
Shaft Bore Dia. d1, d2	KLH, KRH (b)	t	Reference Dia.	Tolerance
8	2	±0.0125	1.0	+0.1
10	4	±0.0150	1.8	0
12	5	±0.0150	2.3	0
22	8	±0.0180	3.3	+0.2

Ordering Code: **KLH4 KRH4**

Spec. 0.1mm Increment  
 Ordering Code: LDC7.8, RDC9.3

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