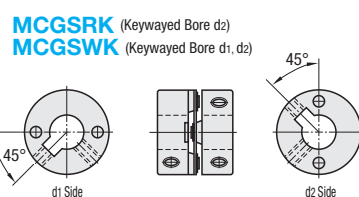
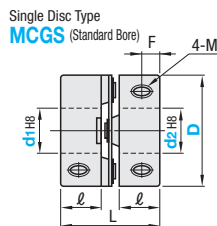
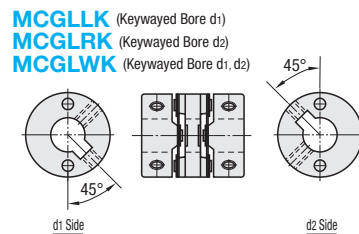
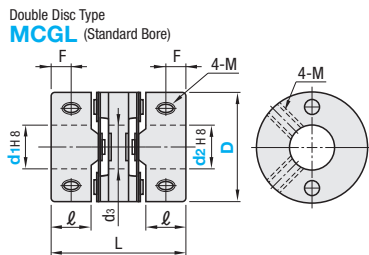


Disc Couplings

Standard Torque, Set Screw

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



Standard Bore	Keyworded Bore			Material		Surface Treatment	Accessory
	d ₁ (One Side)	d ₂ (One Side)	d ₁ , d ₂ (Both Sides)	Main Body	Disc	Main Body	
MCGL	MCGLLK	MCGLRK	MCGLWK	Aluminum	Polyimide	Electroless	Set Screw
MCGS	-	MCGSRK	MCGSWK	Aluminum Diecast		Nickel Plating	

 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		d1, d2 Selection (d1sd2)															ds	L	ℓ	F	Set Screw		Unit Price																					
Type	D	🔑 Keywayed Bore Type is selectable for diameter 6 or larger (D=13 is not available)																			M	Tightening Torque (N · m)	MCGL	MCGLLK MCGLRK	MCGLW																			
Double Disc Type MCGL MCGLLK MCGLRK MCGLW	10	2	3	4													4.1	15	4.2	2	M2	0.3		-	-																			
	13		3	4	5	6													5.5	19	5.5	2.5	M3	0.7		-	-																	
	16		4	5	6	6.35	7	8													6.8	23.2			7	3																		
	20		4	5	6	6.35	7	8	10													8.1			26	7.5	3.7																	
	25			5	6	6.35	7	8	9.53	10	11	12													10.4	30.2	9	4	M4	1.7														
	32				6	6.35	7	8	9.53	10	11	12	14	15	16													15			41	12.4	6											
	40						8	9.53	10	11	12	14	15	16	18	20															19.5	47	15.5	7.8										
	50															14	15	16	18	20	22	24	25													25	53	18	9	M6	7			

Part Number		d1, d2 Selection (d1sd2)														L	ℓ	F	Set Screw		Unit Price				
Type	D	🔑 Keywayed Bore Type is selectable for diameter 6 or larger (D=13 is not available)																	M	Tightening Torque (N · m)	MCGS	MCGSRK	MCGSWK		
Single Disc Type MCGS MCGSRK MCGSWK	10	2	3	4											10.5	4.2	2	M2	0.3		-	-			
	13		3	4	5	6									13.5	5.5	3				-	-			
	16		4	5	6	6.35	7	8						16.5	7	3									
	20		4	5	6	6.35	7	8	10					18.4	7.5	4	M3	0.7							
	25			5	6	6.35	7	8	9.53	10	11	12	21.6	9	4										
	32				6	6.35	7	8	9.53	10	11	12	14	15	16	29			12.4	6					
	40						8	9.53	10	11	12	14	15	16	18	20	35	15.5	7.8	M5	4				
	50											14	15	16	18	20	22	24	25			41	18	9	M6

Double Disc Type

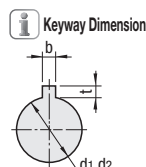
Part Number		Allowable Torque [N · m]	Angular Weisgram (°)	Latent Movement [mm]	Static Torsional Spring Constant [N · m/rad]	Max. Rotational Speed (r/min)	Moment of Inertia [$\text{kg} \cdot \text{m}^2$]	Weisgram Inertia [mm]	Mass [g]
Type	D								
MCGL MCGLLK MCGLRK MCGLWK	10	0.15	3.5	0.3	21	26000	4.6×10^{-8}	± 0.2	3
	13	0.25			44	20000	8.0×10^{-8}	5	
	16	0.4			70	19000	2.4×10^{-7}	± 0.3	9
	20	0.6			130	18000	7.2×10^{-7}	± 0.4	14
	25	1.4		0.4	240	16000	2.2×10^{-6}	± 0.5	27
	32	2.6			560	12000	6.0×10^{-6}	60	
	40	4.4			980	8000	1.7×10^{-5}	± 0.6	104
	50	7.0			1100	6000	4.6×10^{-5}	210	

■ **Single Disc Type**

Part Number		Allowable Torque [N · m]	Angular Displacement (°)	Latent Movement (mm)	Static Torsional Spring Constant (N · m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg · m ²)	Max. (g)	
Type	D	10	0.15						
MCGS MCGSRK MCGSWK	13	0.25	2	0.1	27	26000	4.0x10 ⁻⁸	2	
	16	0.4			60	20000	7.0x10 ⁻⁸	±0.1	7
	20	0.6			90	19000	2.0x10 ⁻⁷		11
	25	1.4			170	18000	6.0x10 ⁻⁷	±0.2	22
	32	2.6		300	16000	1.8x10 ⁻⁶		50	
	40	4.4		700	12000	5.2x10 ⁻⁶		85	
	50	7.0		1200	8000	1.3x10 ⁻⁵	±0.3	170	
					0.15	1450	6000	3.6x10 ⁻⁵	



Alterations	Shaft Bore Dia.	Keyway Width																																									
Spec.	 0.1mm Increment <table><tr><th></th><th>D</th><th>LDC, RDC</th></tr><tr><td>10</td><td>2-4</td></tr><tr><td>13</td><td>2-6</td></tr><tr><td>16</td><td>4-8</td></tr><tr><td>20</td><td>4-10</td></tr><tr><td>25</td><td>5-12</td></tr><tr><td>32</td><td>6-16</td></tr><tr><td>40</td><td>8-20</td></tr><tr><td>50</td><td>14-25</td></tr></table> Ordering Code		D	LDC, RDC	10	2-4	13	2-6	16	4-8	20	4-10	25	5-12	32	6-16	40	8-20	50	14-25	Keyway Width (b) is changed as the table below Ordering Code KLH4 KRH4 <table><tr><th rowspan="2">Shaft Bore Dia. d1, d2</th><th colspan="2">KLH, KRH (b)</th><th rowspan="2">t</th></tr><tr><th>Reference Dia.</th><th>Tolerance</th></tr><tr><td>8</td><td>2</td><td>± 0.0125</td><td>1.0</td></tr><tr><td>10</td><td>4</td><td>± 0.0150</td><td>1.8</td></tr><tr><td>12</td><td>5</td><td>± 0.0150</td><td>2.3</td></tr><tr><td>22</td><td>8</td><td>± 0.0180</td><td>3.3</td></tr></table>  ❌ Cannot be combined with shaft bore change (LDC, RDC) alterations. ➡ Applicable to Keywayed Bore only	Shaft Bore Dia. d1, d2	KLH, KRH (b)		t	Reference Dia.	Tolerance	8	2	± 0.0125	1.0	10	4	± 0.0150	1.8	12	5	± 0.0150	2.3	22	8	± 0.0180	3.3
		D	LDC, RDC																																								
	10	2-4																																									
	13	2-6																																									
	16	4-8																																									
	20	4-10																																									
	25	5-12																																									
	32	6-16																																									
	40	8-20																																									
	50	14-25																																									
Shaft Bore Dia. d1, d2	KLH, KRH (b)		t																																								
	Reference Dia.	Tolerance																																									
8	2	± 0.0125	1.0																																								
10	4	± 0.0150	1.8																																								
12	5	± 0.0150	2.3																																								
22	8	± 0.0180	3.3																																								
Code	LDC (Left Shaft)	RDC (Right Shaft)	KLH (Left Shaft)	KRH (Right Shaft)																																							

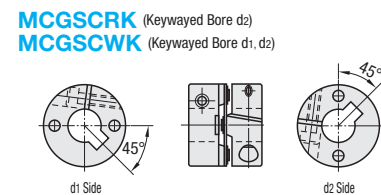
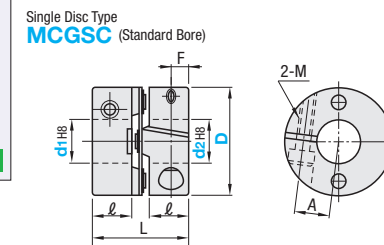
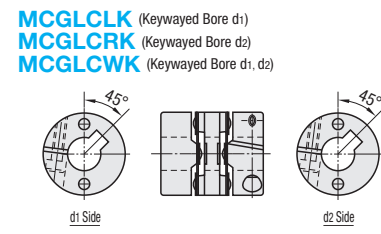
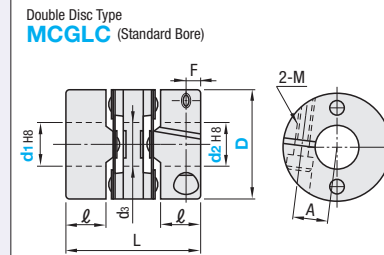


Shaft Bore	b		t		Key Nominal
Dia. d ₁ , d ₂	Reference Dia.	Tolerance	Reference Dia.	Tolerance	Dim. b x h
6-7.9	2	±0.0125	1.0	+0.1 0	2x2
8~10	3		1.4		3x3
10.1~12	4		1.8		4x4
12.1~17	5	±0.0150	2.3		5x5
17.1~22	6		2.8	+0.2 0	6x6
22.1~25	8	+0.0180	3.3		8x7

Disc Couplings

Standard Torque, Clamping

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



Standard Bore	Keywayed Bore			Material		Surface Treatment	Accessory
	d ₁ (One Side)	d ₂ (One Side)	d ₁ , d ₂ (Both Sides)	Main Body	Disc	Main Body	
MCGLC	MCGLCLK	MCGLCRK	MCGLSCWK	Aluminum	Polyimide	Electroless Nickel Plating	Heat Shrink Head Cap
MCGLSC	-	MCGLSCRK	MCGLSCWK	Diecast			Screw

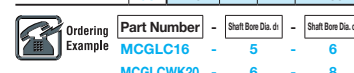
- ⚠ Tolerances for d_1 and d_2 are values before slit machining.
- ⚠ The lateral, angular, and axial misalignment values shown are for each occurring individually. When multiple misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
- ⚠ For the selection criteria and alignment procedures, see  **P1061**

[illegible][illegible]

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

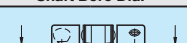
■ **Double Disc Type**

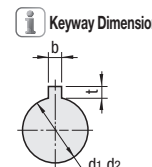
Part Number		Allowable Torque (N·m)	Angular Misalignment (°)	Lateral Misalignment (mm)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m ²)	Max. Heat Dissipation (Watt)	Max. Weight (g)
Type	D								
MCGLC	13	0.25	3.5	0.3	44	12000	8.0x10 ⁻⁶	±0.2	5
	16	0.4			70	9000	2.4x10 ⁻⁷	±0.3	9
	20	0.6			130	7600	7.2x10 ⁻⁷	±0.4	14
	25	1.4			240	6000	2.2x10 ⁻⁶	±0.5	27
	32	2.6		0.4	560	4800	6.0x10 ⁻⁶	±0.5	60
	40	4.4			980	4000	1.7x10 ⁻⁵	±0.6	100
	50	7.9			1400	3600	4.8x10 ⁻⁵	±0.6	210
	60	12.5			1900	3200	1.0x10 ⁻⁴	±0.6	300



Part Number		Allowable Torque (N·m/rad)	Angular Misalignm (°)	Lateral Misalignm (mm)	Static Torstional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m ²)	Max. Inertial Misalignm (mm)	Max (g)	
Type	D									
	13	0.25	2	0.1	60	12000	7.0x10 ⁻⁸	±0.1	4	
MCGSC	16	0.4			90	9000	2.0x10 ⁻⁷		7	
MCGSCRK	20	0.6			170	7600	6.0x10 ⁻⁷		11	
MCGSCWK	25	1.4			300	6000	1.8x10 ⁻⁶		±0.2	22
	32	2.6			700	4800	5.2x10 ⁻⁶		50	
	40	4.4	0.15		1200	4000	1.3x10 ⁻⁵	±0.3	85	
	40	4.4			1450	3500	2.8x10 ⁻⁵		120	
	40	7.0								



Alterations	Shaft Bore Dia.	Keyway Width																																																						
Spec.	 0.1mm Increment <table border="1"> <thead> <tr> <th>Ordering Code</th><th>D</th><th>LDC, RDC</th></tr> </thead> <tbody> <tr><td></td><td>13</td><td>2-5</td></tr> <tr><td>LDC7.8</td><td>16</td><td>4-6</td></tr> <tr><td>RDC9.3</td><td>20</td><td>4-8</td></tr> <tr><td></td><td>25</td><td>5-10</td></tr> <tr><td></td><td>32</td><td>6-14</td></tr> <tr><td></td><td>40</td><td>8-18</td></tr> <tr><td></td><td>50</td><td>14-24</td></tr> </tbody> </table>	Ordering Code	D	LDC, RDC		13	2-5	LDC7.8	16	4-6	RDC9.3	20	4-8		25	5-10		32	6-14		40	8-18		50	14-24	Keyway Width (b) is changed as the table below. <table border="1"> <thead> <tr> <th colspan="3">Ordering Code KLH4 KRH4</th><th colspan="2">t</th></tr> <tr> <th>Shaft Bore Dia. d1, d2</th><th>KLH, KRH(b)</th><th>Tolerance</th><th>Reference Size</th><th>Tolerance</th></tr> </thead> <tbody> <tr><td>8</td><td>2</td><td>± 0.0125</td><td>1.0</td><td>$+0.1$</td></tr> <tr><td>10</td><td>4</td><td>± 0.0150</td><td>1.8</td><td>0</td></tr> <tr><td>12</td><td>5</td><td></td><td>2.3</td><td></td></tr> <tr><td>22</td><td>8</td><td>± 0.0180</td><td>3.3</td><td>$+0.2$</td></tr> </tbody> </table>  ✗ Cannot be combined with shaft bore change (LDC, RDC) alterations. ✗ Applicable to Keywayed Bore on	Ordering Code KLH4 KRH4			t		Shaft Bore Dia. d1, d2	KLH, KRH(b)	Tolerance	Reference Size	Tolerance	8	2	± 0.0125	1.0	$+0.1$	10	4	± 0.0150	1.8	0	12	5		2.3		22	8	± 0.0180	3.3	$+0.2$
Ordering Code	D	LDC, RDC																																																						
	13	2-5																																																						
LDC7.8	16	4-6																																																						
RDC9.3	20	4-8																																																						
	25	5-10																																																						
	32	6-14																																																						
	40	8-18																																																						
	50	14-24																																																						
Ordering Code KLH4 KRH4			t																																																					
Shaft Bore Dia. d1, d2	KLH, KRH(b)	Tolerance	Reference Size	Tolerance																																																				
8	2	± 0.0125	1.0	$+0.1$																																																				
10	4	± 0.0150	1.8	0																																																				
12	5		2.3																																																					
22	8	± 0.0180	3.3	$+0.2$																																																				
Code	LDC(Left Shaft) RDC(Right Shaft)	KLH(Left Shaft) KRH(Right Shaft)																																																						



Shaft Bore	b	t	Key Nomin.
Dia. d ₁ , d ₂	Reference Dia. Tolerance	Reference Dia. Tolerance	Dim. bxn
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