

Disc Couplings

Standard Torque, Set Screw

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

Double Disc Type
MCGL (Standard Bore)
MCGLLK (Keywayed Bore d1)
MCGLRK (Keywayed Bore d2)
MCGLWK (Keywayed Bore d1, d2)

Single Disc Type
MCGS (Standard Bore)
MCGSRK (Keywayed Bore d2)
MCGSWK (Keywayed Bore d1, d2)

Standard Bore	Keywayed Bore				Material	Surface Treatment	Accessory
	d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)	Main Body			
MCGL	MCGLLK	MCGLRK	MCGLWK	Aluminum Diecast	Polyimide	Electroless Nickel Plating	Set Screw
MCGS	MCGSRK	MCGSWK					

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

Part Number	Type	D	d1, d2 Selection (d1≠d2)			Set Screw		Unit Price		
			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	10	2	3	4	M2	0.3	-	-	-
	MCGSRK	13	3	4	5	M2	0.3	-	-	-
	MCGSWK	16	4	5	6	M3	0.7	-	-	-
		20	4	5	6	M3	0.7	-	-	-
		25	5	6	6.35	M4	1.7	-	-	-
		32	6	6.35	7	M4	1.7	-	-	-
		40	8	9.53	10	M5	4	-	-	-
	50	14	15	16	M6	7	-	-	-	

■ 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 ²)	Allowable Misalignment (mm)	Mass (g)
MCGL	10	0.15	21	26000	4.6x10 ⁻⁸	±0.2	3	5		
MCGLLK	13	0.25	44	20000	8.0x10 ⁻⁸	±0.3	9	14		
MCGLRK	16	0.4	70	19000	2.4x10 ⁻⁷	±0.4	14	27		
MCGLWK	20	0.6	130	18000	7.2x10 ⁻⁷	±0.5	27	104		
	25	1.4	240	16000	2.2x10 ⁻⁶	±0.6	60	104		
	32	2.6	560	12000	6.0x10 ⁻⁶	±0.6	104	210		
	40	4.4	980	8000	1.7x10 ⁻⁵	±0.6	104	210		
	50	7.0	1100	6000	4.6x10 ⁻⁵	±0.6	104	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 ²)	Allowable Misalignment (mm)	Mass (g)
MCGS	10	0.15	27	26000	4.0x10 ⁻⁸	±0.1	2	4		
MCGSRK	13	0.25	60	20000	7.0x10 ⁻⁸	±0.1	4	7		
MCGSWK	16	0.4	90	19000	2.0x10 ⁻⁷	±0.2	11	22		
	20	0.6	170	18000	6.0x10 ⁻⁷	±0.2	22	50		
	25	1.4	300	16000	1.8x10 ⁻⁶	±0.3	50	85		
	32	2.6	700	12000	5.2x10 ⁻⁶	±0.3	85	170		
	40	4.4	1200	8000	1.3x10 ⁻⁵	±0.3	85	170		
	50	7.0	1450	6000	3.6x10 ⁻⁵	±0.3	85	170		

Ordering Example

Part Number - Shaft Bore Dia. d1 - Shaft Bore Dia. d2

MCGL20 - 5 - 10

MCGLRK25 - 8 - 12

Alterations

Part Number - Shaft Bore Dia. d1 (LDC) - Shaft Bore Dia. d2 (RDC) - (KLH, KRH)

MCGL20 - LDC6.5 - RDC9 - (KLH, KRH)

MCGLWK32 - 8 - 10 - KRH4

Alterations

Shaft Bore Dia. Keyway Width

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

Ordering Code KLH4 KRH4

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

Spec. 0.1mm Increment

Ordering Code	D	LDC, RDC
LDC7.8	10	2-4
RDC9.3	13	3-6
	16	4-8
	20	4-10
	25	5-12
	32	6-16
	40	8-20
	50	14-25

Code LDC (Left Shaft) RDC (Right Shaft) KLH (Left Shaft) KRH (Right Shaft)

Keyway Dimension

Shaft Bore Dia. d1, d2	Reference Dia.	Tolerance	Reference Dia.	Tolerance	Key Nominal Dim. b, h
6-7.9	2	±0.0125	1.0		2x2
8-10	3	±0.0125	1.4		3x3
10.1-12	4	±0.0150	1.8		4x4
12.1-17	5	±0.0150	2.3		5x5
17.1-22	6	±0.0180	2.8		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.

Double Disc Type
MCGLC (Standard Bore)
MCGLCLK (Keywayed Bore d1)
MCGLCRK (Keywayed Bore d2)
MCGLCWK (Keywayed Bore d1, d2)

Single Disc Type
MCGSC (Standard Bore)
MCGSCRK (Keywayed Bore d2)
MCGSCWK (Keywayed Bore d1, d2)

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

Part Number	Type	D	d1, d2 Selection (d1≠d2)						Clamp Screw			Unit Price				
			Keywayed Bore Type is selectable for diameter 6 or larger						M	Tightening Torque (N·m)	MCGLC	MCGLCLK	MCGLCRK			
Double Disc Type	MCGLC	13	*3	4	5	5.5	19	5.5	4.1	2.5	M2	0.42	-	-	-	
	MCGLCLK	16	*4	5	6	6.8	23.2	7	5	3	M2.5	1	-	-	-	
	MCGLCRK	20	*4	5	6	8.1	26	7.5	6.5	3.7	M2.5	1	-	-	-	
	MCGLCWK	25	*5	6	6.35	7	8	10.4	30.2	9	4	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	16	18	19.5	47	15.5	13.1	7.8
		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)			Clamp Screw		Unit Price		
			Keywayed Bore Type is selectable for diameter 6 or larger			M	Tightening Torque (N·m)	MCGSC	MCGSCRK	MCGSCWK
Single Disc Type	MCGSC	13	*3	4	5	M2	0.42	-	-	-
	MCGSCRK	16	*4	5	6	M2.5	1	-	-	-
	MCGSCWK	20	*4	5	6	M2.5	1	-	-	-
		25	*5	6	6.35	M3	1.7	-	-	-
		32	8	9.53	10	M4	2.5	-	-	-
		40	8	9.53	10	M5	7	-	-	-
		50	14	15	16	M6	12	-	-	-

■ 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 ²)	Allowable Misalignment (mm)	Mass (g)
MCGLC	13	0.25	44	12000	8.0x10 ⁻⁸	±0.2	5	9		
MCGLCLK	16	0.4	70	9000	2.4x10 ⁻⁷	±0.3	9	14		
MCGLCRK	20	0.6	130	7600	7.2x10 ⁻⁷	±0.4	14	27		
MCGLCWK	25	1.4	240	6000	2.2x10 ⁻⁶	±0.5	27	60		
	32	2.6	560	4800	6.0x10 ⁻⁶	±0.5	60	104		
	40	4.4	980	4000	1.7x10 ⁻⁵	±0.6	104	210		
	50	7.0	1100	3500	4.6x10 ⁻⁵	±0.6	104	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 ²)	Allowable Misalignment (mm)	Mass (g)
MCGSC	13	0.25	60	12000	7.0x10 ⁻⁸	±0.1	4	7		
MCGSCRK	16	0.4	90	9000	2.0x10 ⁻⁷	±0.1	7	11		
MCGSCWK	20	0.6	170	7600	6.0x10 ⁻⁷	±0.2	22	50		
	25	1.4	300	6000	1.8x10 ⁻⁶	±0.2	22	50		
	32	2.6	700	4800	5.2x10 ⁻⁶	±0.3	50	85		
	40	4.4	1200	4000	1.3x10 ⁻⁵	±0.3	85	170		
	50	7.0	1450	3500	3.6x10 ⁻⁵	±0.3	85	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 - (KLH, KRH)

MCGLCWK32 - 10 - 10 - KLH4

Alterations

Shaft Bore Dia. Keyway Width

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

Ordering Code KLH4 KRH4

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

Spec. 0.1mm Increment

Ordering Code	D	LDC, RDC
LDC7.8	16	4-8
RDC9.3	20	4-10
	25	5-12
	32	6-14
	40	8-14
	50	14-24

Code LDC (Left Shaft) RDC (Right Shaft) KLH (Left Shaft) KRH (Right Shaft)

Keyway Dimension

Shaft Bore Dia. d1, d2	Reference Dia.	Tolerance	Reference Dia.	Tolerance	Key Nominal Dim. b, h
6-7.9	2	±0.0125	1.0		2x2
8-10	3	±0.0125	1.4		3x3
10.1-12	4	±0.0150	1.8		4x4
12.1-17	5	±0.0150	2.3		5x5
17.1-22	6	±0.0180	2.8		6x6
22.1-24	8	±0.0180	3.3		8x7