

Disc Couplings

High Torque, Clamping

Features: Couplings with carbon fiber discs have higher torque ratings than the polyimide discs, and are more lateral/angular misalignment tolerant than stainless steel.

Double Disc Type
MCKLC (Standard Bore)

MCKLCLK (Keywayed Bore d1)
MCKLCRCK (Keywayed Bore d2)
MCKLCWK (Keywayed Bore d1, d2)

Single Disc Type
MCKSC (Standard Bore)

MCKSCWK (Keywayed Bore d1, d2)

RoHS 10

⚠ 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 **REF P1061**

	Keywayed Bore				Material	Surface Treatment		Accessory
	d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)	Main Body		Disc	Main Body	
Standard Bore	MCKLC	MCKLCLK	MCKLCRCK	MCKLCWK	Aluminum Diecast	Carbon Fiber	Electroless Nickel Plating	Hex Socket Head Cap Screw
	MCKSC	-	-	MCKSCWK				

Part Number	Type	D	d1, d2 Selection (d1≠d2)						Clamp Screw					Unit Price				
			⚠ Keywayed Bore Type is selectable for diameter 6 or larger						d3	L	ℓ	A	F	M	Tightening Torque (N·m)	MCKLC	MCKLCLK MCKLCRCK	MCKLCWK
Double Disc Type MCKLC MCKLCLK MCKLCRCK MCKLCWK	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	8.93	10.4	30.2	9	8.5	4	M3	1.7				
	32		8	8.93	10	11	12	14	15	41	12.4	10	6	M4	2.5			
	40		8	8.93	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)						Clamp Screw					Unit Price	
			⚠ Keywayed Bore Type is selectable for diameter 6 or larger						L	ℓ	A	F	M	Tightening Torque (N·m)	MCKSC
Single Disc Type MCKSC MCKSCWK	13	*3	4	5				13.5	5.5	4.1	2.5	M2	0.42		
	16	*4	5	6				16.5	7	5	3				
	20	*4	5	6	6.35	7	8	18.4	7.5	6.5	3.7	M2.5	1		
	25	*5	6	6.35	7	8	8.93	21.6	9	8.5	4	M3	1.7		
	32		8	8.93	10	11	12	29	12.4	10	6	M4	2.5		
	40		8	8.93	10	11	12	35	15.5	13.1	7.8	M5	7		
	50		14	15	16	18	20	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 ²)	Weighted Misalignment (mm)	Mass (g)
MCKLC MCKLCLK MCKLCRCK MCKLCWK	13	0.35	0.35	2.5	0.2	80	12000	8.0x10 ⁻⁸	±0.2	5
	16	0.6	130			9000	2.4x10 ⁻⁷	14		
	20	0.9	220			7600	7.2x10 ⁻⁷	19		
	25	2.2	440			6000	2.2x10 ⁻⁶	27		
	32	3.8	960			4800	6.0x10 ⁻⁶	60		
	40	6.8	1900			4000	1.7x10 ⁻⁵	104		
	50	11.0	2250			3500	4.6x10 ⁻⁵	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)	Weighted Misalignment (mm)	Mass (g)
MCKSC MCKSCWK	13	0.35	0.35	1	0.05	100	12000	7.0x10 ⁻⁸	±0.1	4
	16	0.6	160			9000	2.0x10 ⁻⁷	7		
	20	0.9	290			7600	6.0x10 ⁻⁷	11		
	25	2.2	550			6000	1.8x10 ⁻⁶	22		
	32	3.8	1200			4800	5.2x10 ⁻⁶	50		
	40	6.8	2200			4000	1.3x10 ⁻⁵	85		
	50	11.0	2600			3500	3.6x10 ⁻⁵	170		

Part Number - Shaft Bore Dia. (d) - Shaft Bore Dia. (d)

MCKLC16	-	5	-	6
MCKLCWK40	-	12	-	15

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

MCKLC20	-	LDC6.2	-	RDC6.9	-	KLH4	-	KRH4
MCKLCWK32	-	10	-	10	-	KLH4	-	KRH4

Alterations	Shaft Bore Dia.		Keyway Width				Keyway Machining	
	LDC (Left Shaft)	RDC (Right Shaft)	Keyway Width (b) is changed as the table below.				Keyway Machining	
Spec.			Ordering Code				Shaft Dia. d1, d2	
			KLH4 KRH4				LK, RK	
			Reference Dia. Tolerance				Reference Dia. Tolerance	
			8 2 ±0.0125 1.0				6-8 2	
			10 4 ±0.0150 1.8				8-10 3	
			12 5 ±0.0180 2.3				10-12 4	
22 8 ±0.0180 3.3				12-17 5				
				17-22 6				
				22-24 8				
				Ordering Code				
				LK3				
				RK4				
				⚠ Keyway machining is available for Ø6 ~.				

Keyway Dimension

Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. bwh
6-7.9	2	1.0	2x2
8-10	3	±0.0125 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	6x6
22.1-24	8	±0.0180 3.3	8x7