

Disc Couplings

High Torque, Set Screw

■ **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
MCKL (Standard Bore)

MCKLLK (Keywayed Bore d1)
MCKLRK (Keywayed Bore d2)
MCKLWK (Keywayed Bore d1, d2)

Single Disc Type
MCKS (Standard Bore)

MCKSRK (Keywayed Bore d2)
MCKSWK (Keywayed Bore d1, d2)

Standard Bore

	d1 (One Side)	d2 (One Side)	d1, d2 (Both Sides)	Main Body	Disc	Material	Surface Treatment	Accessory
MCKL		MCKLRK	MCKLWK	Aluminum Diecast	Carbon Fiber	Electroless Nickel Plating		Set Screw
MCKS	-	MCKSRK	MCKSWK					

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⚠ 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](#)

Part Number		d1, d2 Selection (d1≤d2)										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)	MCKL	MCKLLK MCKLRK	MCKLWK
Double Disc Type MCKL MCKLLK MCKLRK MCKLWK	10	2	3	4												
	13	3	4	5	6											
	16	4	5	6	6.35	7	8									
	20	4	5	6	6.35	7	8	10								
	25		5	6	6.35	7	8	9.53	10	11	12					
	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					8	9.53	10	11	12	14	15	16	18	20	

Part Number		d1, d2 Selection (d1≤d2)										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)	MCKS	MCKSRK	MCKSWK
Single Disc Type MCKS MCKSRK MCKSWK	10	2	3	4												
	13	3	4	5	6											
	16	4	5	6	6.35	7	8									
	20	4	5	6	6.35	7	8	10								
	25		5	6	6.35	7	8	9.53	10	11	12					
	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					8	9.53	10	11	12	14	15	16	18	20	

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·m²)	Allowable Axial Misalignment (mm)	Mass (g)
MCKL MCKLLK MCKLRK MCKLWK	10	0.25	2.5	0.2	31	32000	4.6x10 ⁻⁸	±0.2	3
	13	0.35			80	24000	8.0x10 ⁻⁸		5
	16	0.6			130	23000	2.4x10 ⁻⁷	±0.3	9
	20	1.0			220	22000	7.2x10 ⁻⁷		14
	25	2.2			440	19000	2.2x10 ⁻⁶	±0.4	27
	32	3.8	0.3	0.3	960	15000	6.0x10 ⁻⁶		60
	40	6.8			1900	10000	1.7x10 ⁻⁵	±0.5	104
	50	11.0			2250	8000	4.6x10 ⁻⁵		210

Part Number	Shaft Bore Dia. d1	Shaft Bore Dia. d2
MCKL20	5	10
MCKLWK25	10	12

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·m²)	Allowable Axial Misalignment (mm)	Mass (g)
MCKS MCKSRK MCKSWK	10	0.25	1	0.05	40	32000	4.0x10 ⁻⁸		2
	13	0.35			100	24000	7.0x10 ⁻⁸	±0.1	4
	16	0.6			160	23000	2.0x10 ⁻⁷		7
	20	1.0			290	22000	6.0x10 ⁻⁷		11
	25	2.2			550	19000	1.8x10 ⁻⁶	±0.2	22
	32	3.8	0.1	0.1	1200	15000	5.2x10 ⁻⁶		50
	40	6.8			2200	10000	1.3x10 ⁻⁵	±0.2	85
	50	11.0			2600	8000	3.6x10 ⁻⁵		170

Part Number	Shaft Bore Dia. d1	Shaft Bore Dia. d2	Keyway Width
MCKL20	5	10	KLH4
MCKLWK32	8	10	KRH4

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·m²)	Allowable Axial Misalignment (mm)	Mass (g)
MCKL MCKLLK MCKLRK MCKLWK	10	0.25	2.5	0.2	31	32000	4.6x10 ⁻⁸	±0.2	3
	13	0.35			80	24000	8.0x10 ⁻⁸		5
	16	0.6			130	23000	2.4x10 ⁻⁷	±0.3	9
	20	1.0			220	22000	7.2x10 ⁻⁷		14
	25	2.2			440	19000	2.2x10 ⁻⁶	±0.4	27
	32	3.8	0.3	0.3	960	15000	6.0x10 ⁻⁶		60
	40	6.8			1900	10000	1.7x10 ⁻⁵	±0.5	104
	50	11.0			2250	8000	4.6x10 ⁻⁵		210

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·m²)	Allowable Axial Misalignment (mm)	Mass (g)
MCKL MCKLLK MCKLRK MCKLWK	10	0.25	2.5	0.2	31	32000	4.6x10 ⁻⁸	±0.2	3
	13	0.35			80	24000	8.0x10 ⁻⁸		5
	16	0.6			130	23000	2.4x10 ⁻⁷	±0.3	9
	20	1.0			220	22000	7.2x10 ⁻⁷		14
	25	2.2			440	19000	2.2x10 ⁻⁶	±0.4	27
	32	3.8	0.3	0.3	960	15000	6.0x10 ⁻⁶		60
	40	6.8			1900	10000	1.7x10 ⁻⁵	±0.5	104
	50	11.0			2250	8000	4.6x10 ⁻⁵		210

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)
MCKLCRK (Keywayed Bore d2)
MCKLCWK (Keywayed Bore d1, d2)

Single Disc Type
MCKSC (Standard Bore)

MCKSCWK (Keywayed Bore d1, d2)

Standard Bore

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

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⚠ 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](#)

Part Number		d1, d2 Selection (d1≤d2)										Clamp Screw		Unit Price		
Type	D	⚠ Keywayed Bore Type is selectable for diameter 6 or larger										M	Tightening Torque (N·m)	MCKLC	MCKLCLK MCKLCRK	MCKLCWK
Double Disc Type MCKLC MCKLCLK MCKLCRK MCKLCWK	13	*3	4	5												
	16		*4	5	6											
	20		*4	5	6	6.35	7	8								
	25			*5	6	6.35	7	8	9.53	10						
	32				8	9.53	10	11	12	14						
	40					8	9.53	10	11	12	14	15	16	18		
	50						8	9.53	10	11	12	14	15	16	18	

Part Number		d1, d2 Selection (d1≤d2)										Clamp Screw		Unit Price		
Type	D	⚠ Keywayed Bore Type is selectable for diameter 6 or larger										M	Tightening Torque (N·m)	MCKSC	MCKSCWK	
Single Disc Type MCKSC MCKSCWK	13	*3	4	5												
	16		*4	5	6											
	20		*4	5	6	6.35	7	8								
	25			*5	6	6.35	7	8	9.53	10						
	32				8	9.53	10	11	12	14						
	40					8	9.53	10	11	12	14	15	16	18		
	50						8	9.53	10	11	12	14	15	16	18	

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

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·m²)	Allowable Axial Misalignment (mm)	Mass (g)
MCKLC MCKLCLK MCKLCRK MCKLCWK	13	0.35	0.2	0.05	80	12000	8.0x10 ⁻⁸	±0.2	5
	16	0.6			130	9000	2.4x10 ⁻⁷	±0.3	9
	20	0.9			220	7600	7.2x10 ⁻⁷		14
	25	2.2			440	6000	2.2x10 ⁻⁶	±0.4	27
	32	3.8			960	4800	6.0x10 ⁻⁶		60
	40	6.8	0.3	0.1	1900	4000	1.7x10 ⁻⁵	±0.5	104
	50	11.0			2250	3500	4.6x10 ⁻⁵		210

Part Number	Shaft Bore Dia. d1
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