

Disc Couplings

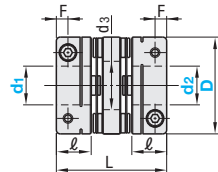
Clamping

For Servo Motors
(CPDW and CPDT only)

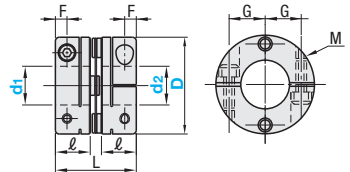
For more compact and rigid alternatives, see "Servo-Fine" Couplings **P943**



CPDW (Double Disc Type)



CPDT (Single Disc Type)



⚠ CPDT cannot tolerate lateral misalignment.
⚠ The lateral, angular, and axial misalignment values shown are for each occurring individually. When more than one misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
⚠ For the selection criteria and alignment procedures **P941**

Parts	M Material	S Surface Treatment	A Accessories
Body	Aluminum Alloy	Clear Anodize	Hex Socket Head
Disc, Pin	Stainless Steel	-	Cap Screw

Part Number Type	D	d1, d2 (d1 ≤ d2)								L		Clamp Screw M Tightening Torque (N·m)	Unit Price									
		4	5	6	7	8	CPDW	CPDT	l	d3	F		G	CPDW	CPDT							
CPDW CPDT	19	4	5	6	7	8	27	20	8	8.5	2.5	6.5	M2	0.5								
	25	6	6.35	8	10	11	31	24	10	12.5	3.5	9	M2.5	1								
	32	8	10	11	12	14	40	29	12	16	4	11	M3	1.5								
	40	8	10	11	12	14	15	16	17	18	19	20	44	33	14	21	5	15	M4	2.5		
	50	14	15	16	17	18	19	20	22	24	25	57	42	18	26	6	18	M5	7			

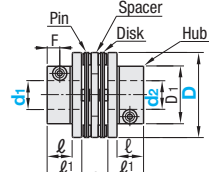
Part Number Type	Allowable Torque (N·m)	Angular Misalignment (°)	Lateral Misalignment (mm)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m²)	Allowable Axial Misalignment (mm)	Compression Factor	Mass (g)
19	0.7	0.12	1.0	200	33000	6.3x10 ⁻⁷	±0.5	1	18
25	1			450	25000	2.7x10 ⁻⁶			25
32	2.5	0.15	1.5	1100	19000	9.6x10 ⁻⁶	±0.2	1	60
40	3.5			1400	15000	1.9x10 ⁻⁵			100
50	9			2200	12000	8.1x10 ⁻⁵			210

Part Number Type	Allowable Torque (N·m)	Angular Misalignment (°)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m²)	Allowable Axial Misalignment (mm)	Compression Factor	Mass (g)			
									CPDT		
19	0.7	0.7	280	33000	6.3x10 ⁻⁷	±0.2	1	9			
25	1							630	25000	2.1x10 ⁻⁶	19
32	2.5	1	1600	19000	7.2x10 ⁻⁶	±0.2	1	41			
40	3.5							2600	15000	1.3x10 ⁻⁵	68
50	9							3100	12000	6.1x10 ⁻⁵	140

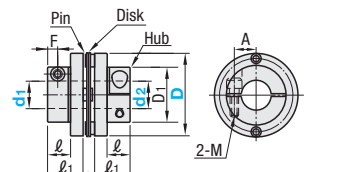
⚠ Single Disc Type cannot tolerate lateral misalignment.



CPDD (Double Disc Type)



CPDS (Single Disc Type)



⚠ CPDS cannot tolerate lateral misalignment.
⚠ The lateral, angular, and axial misalignment values shown are for each occurring individually. When more than one misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
⚠ For the selection criteria and alignment procedures **P941**

Parts	M Material	S Surface Treatment	A Accessories
Body	Aluminum Alloy	Clear Anodize	Hex Socket Head
Disc, Pin	Stainless Steel	-	Cap Screw

Part Number Type	D	d1, d2 (d1 ≤ d2)								L		Clamp Screw M Tightening Torque (N·m)	A	F	Unit Price		
		6	8	10	11	12	14	CPDD	CPDS	l	l1				D1	CPDD	CPDS
CPDD CPDS	32	6	8	10	40	32	9	13.7	22	M3	1.5	8	4				
	40	8	10	11	12	14	46	38	12	M4	2.5	10.5	6				
	50	12	14	15	16	18	19	20	52	44	15	19.4	39	M5	7	14.8	7
	63	15	16	18	19	20	25	58	50	18	M6	12	17	8			

Part Number Type	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)	Compression Factor	Mass (g)
32	2	0.15	1000	19000	6.2x10 ⁻⁶	±0.4	±0.5	1	48
40	4								1500
50	7.5	0.2	2000	12000	4.6x10 ⁻⁵	±0.6	±0.6	1	150
63	10								2500

Part Number Type	Allowable Torque (N·m)	Angular Misalignment (°)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m²)	Allowable Axial Misalignment (mm)	Compression Factor	Mass (g)
32	2	1	1300	19000	4.5x10 ⁻⁶	±0.2	1	38
40	4							2800
50	7.5	1	3700	12000	3.7x10 ⁻⁵	±0.2	1	120
63	10							5000

⚠ Single Disc Type cannot tolerate lateral misalignment.

Ordering Example: Part Number - Shaft Bore Dia. d1 - Shaft Bore Dia. d2
CPDW40 - 12 - 14

Days to Ship: Configure Online

Price: Configure Online

Keyway Dimension

Shaft Bore Dia. d1, d2	LK, RK	b	Dimension	Tolerance	Dimension	t	Tolerance	Key Nominal Dim. b x h
8, 10	3	3	±0.0125	1.4	+0.1	3x3		
11, 12	4	4	±0.0150	1.8	0	4x4		
14-17	5	5	±0.0150	2.3	0	5x5		
18-22	6	6	±0.0150	2.8	0	6x6		
24, 25	8	8	±0.0180	3.3	±0.02	8x7		

Alterations: Part Number - Shaft Bore Dia. d1 (LDC) - Shaft Bore Dia. d2 (RDC) - (LK, RK)
CPDD40 - LDC8.5 - 14 - RK5

Configure Online

Alterations: Shaft Bore Dia. Keyway

D	LDC, RDC	LDC, RDC	LDC, RDC	LK, RK	LK, RK
19	4-8	32	6-10	8, 10	3
25	8-12	40	8-14	11, 12	4
32	8-15	50	12-20	14-17	5
40	8-20	63	15-25	18-22	6
50	14-25			24, 25	8

Spec. LDC 15.2 RDC 21.7 CPDW, CPDT CPDD, CPDS

Code LDC (Left Shaft) RDC (Right Shaft) LK (Left Shaft) RK (Right Shaft)

Price Adder

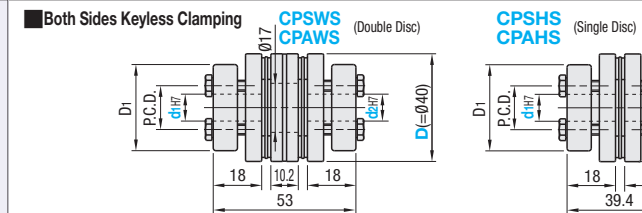
Disc Couplings

High Rigidity (O.D. 40), Keyless Clamping / Keywayed Bore

For Servo Motors

The stainless discs of this product have sharp edges that may cause injuries. Use of thick protective gloves is recommended.

Feature: Compact and highly rigid couplings for servo motors selectable in keyless clamping and keywayed bore.



⚠ Keyless clamping flange has two screw holes for removal. For installation and removal of Keyless Clamping Type couplings **P940**
⚠ The lateral, angular, and axial misalignment values shown are for each occurring individually. When more than one misalignments are occurring simultaneously, the allowable maximum value of each will be reduced to 1/2.
⚠ Shipped after center-aligned and assembled.
⚠ For the selection criteria and alignment procedures **P941**

Type	Both Sides Keyless Clamping	Both Sides Keywayed Bore	One Side Keyless Clamping, One Side Keywayed Bore	Body		Disc		Accessories	
				M Material	S Surface Treatment	M Material	A Accessories		
CPSWS	-	-	-	Aluminum	Clear Anodize	301	Stainless Steel	Locking Screw, Set	Screw
CPSWSK	-	-	-	Aluminum	Clear Anodize	301	Stainless Steel	Locking Screw, Set	Screw

Part Number Type	D	d1, d2			P.C.D.	Locking Screw (Keyless Clamping) Size	Tightening Torque (N·m)	Unit Price			
		d1,d2	D1	Both Sides Keyless Clamping				Both Sides Keywayed Bore	One Side Keyless Clamping, One Side Keywayed Bore		
Double Disc Type Both Sides Keyless Clamping Both Sides Keywayed Bore One Side Keyless Clamping, One Side Keywayed Bore	40	10	12	14	15	16	14,15	38	27	M4x18	3.5
							16	39	28		

Part Number Type	D	d1, d2			P.C.D.	Locking Screw (Keyless Clamping) Size	Tightening Torque (N·m)	Unit Price	
		d1,d2	D1	Both Sides Keyless Clamping				CPAHS	
Single Disc Type Both Sides Keyless Clamping	40	10	12	14	15	16	14,15	38	27
							16	39	28

Part Number Type	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)	Compression Factor	Mass (g)
8	7.43x10 ⁻³	1	0.2	6300	10000	2.65x10 ⁻⁵	±0.5	1.5	329
6	2.65x10 ⁻⁵								117
40	7.73x10 ⁻⁵								332
8	7.58x10 ⁻⁵								331

⚠ Static torsional spring constant, inertia moment, and mass values are for cases of maximum shaft diameter.

Part Number Type	Allowable Torque (N·m)	Angular Misalignment (°)	Static Torsional Spring Constant (N·m/rad)	Max. Rotational Speed (r/min)	Moment of Inertia (kg·m²)	Allowable Axial Misalignment (mm)	Compression Factor	Mass (g)
8	5.48x10 ⁻⁵	1	15000	10000	1.96x10 ⁻⁵	±0.25	1.5	246
40	1.96x10 ⁻⁵							88

⚠ Single Disc Type cannot tolerate lateral misalignment.

Ordering Example: Part Number - Shaft Bore Dia. d1 - Shaft Bore Dia. d2
CPSW1-9 Tool Steel - 10 - 16

Days to Ship: Configure Online

Price: Configure Online

Keyway Dimension

Shaft Bore Dia. d1, d2	b	t	Key Nominal Dim. b x h	Set Screw Size	Set Screw Tightening Torque (N·m)
10	3	±0.0125	1.4	3x3	M2 0.3
12	4	±0.0150	1.8	4x4	M3 0.7
14, 15, 16	5	±0.0150	2.3	5x5	M4 1.7