

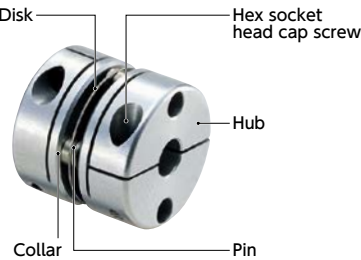
# MDS-C Flexible Couplings - Single - Disk Type

Zero Backlash

## Structure

- Clamping Type

### MDS-C



- Applicable motors

	MDS-C
Servomotor	○
Stepping Motor	○
General-purpose Motor	●

○: Excellent ●: Available

- Property

	MDS-C
Zero Backlash	○
Allowable Misalignment	○

○: Excellent ○: Very good

- This is a disk type flexible coupling.
- It has compact design with short entire length.
- The stainless steel disk allows eccentricity, and angular misalignment, and end-play.

- Application

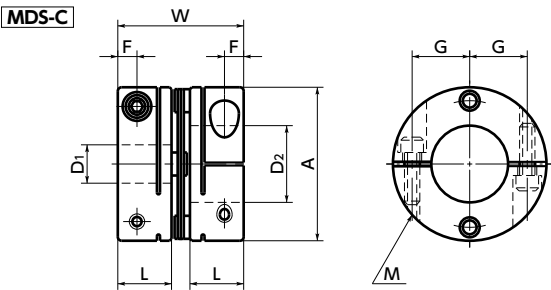
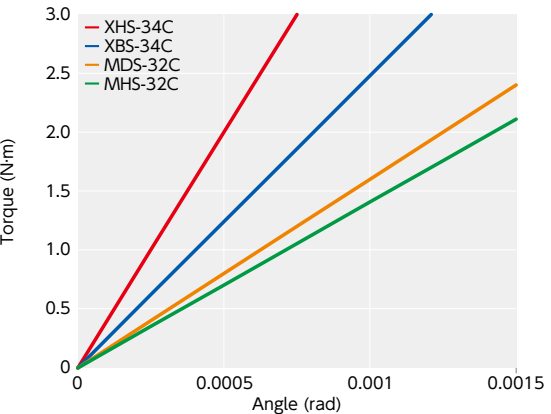
Actuator / XY stage

- Material/Finish

	MDS-C
Hub	A2017 Anodized*1
Disk	SUS304
Pin	SUS303
Collar	SUS303
Hex Socket Head Cap Screw	SCM435 Ferrosioferric Oxide Film (Black)

\*1 : Due to manufacturing process requirements, couplings may have bores with or without surface treatment. This does not affect the performance of the couplings.

- Comparison of static torsional stiffness (Single Disk Type)



## Dimensions

Part Number	A	L	W	F	G	M	Screw Tightening Torque (N・m)
MDS-19C	19	8	20	2.5	6.5	M2	0.5
MDS-25C	25	10	24	3.5	9	M2.5	1
MDS-32C	32	12	29	4	11	M3	1.5
MDS-40C	40	14	33	5	15	M4	2.5
MDS-50C	50	18	42	6	18	M5	7
MDS-63C	63	20	46	7	24	M6	12

Part Number	Standard Bore Diameter D1/D2																		
	4	5	6	7	8	6.35	9	10	11	12	14	15	16	17	18	19	20	22	24
MDS-19C	●	●	●	●	●														
MDS-25C			●		●	●	●	●	●	●									
MDS-32C					●			●	●	●	●	●							
MDS-40C					●			●	●	●	●	●	●	●	●	●	●		
MDS-50C											●	●	●	●	●	●	●	●	●
MDS-63C												●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended tolerance for shaft diameters is h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft.
- For the shaft insertion amount to the coupling, see Mounting/maintenance.

## Performance

Part Number	Max. Bore Diameter (mm)	Rated *1 Torque (N・m)	Max. Rotational Frequency (min <sup>-1</sup> )	Moment *2 of Inertia (kg・m <sup>2</sup> )	Static Torsional Stiffness (N・m/rad)	Max. Lateral Misalignment (mm)	Max. Angular Misalignment (°)	Max. Axial Misalignment (mm)	Mass *2 (g)
MDS-19C	8	0.7	33000	6.3×10 <sup>-7</sup>	280	0.02	0.7	±0.2	9
MDS-25C	12	1	25000	2.1×10 <sup>-6</sup>	630	0.02	0.7	±0.2	19
MDS-32C	15	2.5	19000	7.2×10 <sup>-6</sup>	1600	0.02	0.7	±0.2	41
MDS-40C	20	3.5	15000	1.3×10 <sup>-5</sup>	2600	0.02	0.7	±0.2	68
MDS-50C	25	9	12000	6.1×10 <sup>-5</sup>	3100	0.02	0.7	±0.2	140
MDS-63C	30	12.5	10000	1.7×10 <sup>-4</sup>	4200	0.02	0.7	±0.2	250

\*1 : Correction of rated torque due to load fluctuation is not required.

\*2 : These are values with max. bore diameter.

- Related Products

The Single-Disk type Flexible Coupling [XHS-C] is compatible with the servomotor with 350% instantaneous max. torque is available.



- Part number specification

MDS-32C-10-12

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