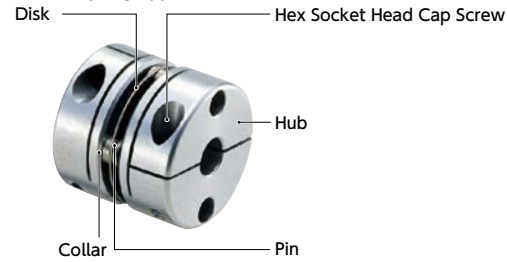


# MDS Flexible Coupling - Single - Disk Type

WEB Selection Tool WEB CAD Download 0 Zero Backlash

## Structure

### ● Clamping type



### ● Applicable motors

	MDS
Servomotor	○
Stepping motor	○
General-purpose motor	○

○: Excellent ○: Very good

### ● Property

	MDS
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 the eccentricity, and angular misalignment, and end-play.

### ● Application

Actuator/XY stage

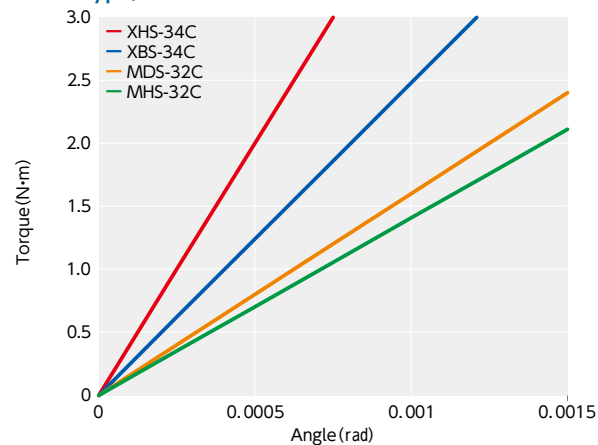
## MDS-C

### ● Material/Finish

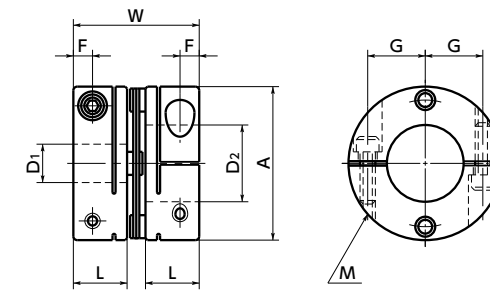
RoHS Compliant

	MDS-C
Hub	A2017 Alumite Treatment
Disk	SUS304
Pin	SUS303
Collar	SUS303
Hex Socket Head Cap Screw	SCM435 Ferrosferric oxide film

### ● Comparison of static torsional stiffness (single disk-type)



## MDS-C



## 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

Unit : mm

Part Number	Standard Bore Diameter																							
	D1 · D2	4	5	6	6.35	7	8	9	10	11	12	14	15	16	17	18	19	20	22	24	25	28	30	
MDS-19C	●	●	●		●	●																		
MDS-25C			●	●		●	●	●	●	●														
MDS-32C						●	●	●	●	●	●	●	●											
MDS-40C							●	●	●	●	●	●	●	●	●	●	●	●						
MDS-50C											●	●	●	●	●	●	●	●	●	●	●	●	●	●
MDS-63C													●	●	●	●	●	●	●	●	●	●	●	●

- All products are provided with hex socket head cap screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.
- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. → P.257

## Performance

Part Number	Max. Bore Diameter (mm)	Rated*1 torque (N·m)	Max.*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	1.5	33000	6.3×10 <sup>-7</sup>	280	0.02	0.7	±0.2	9
MDS-25C	12	1	2	25000	2.1×10 <sup>-6</sup>	630	0.02	0.7	±0.2	19
MDS-32C	15	2.5	5	19000	7.2×10 <sup>-6</sup>	1600	0.02	0.7	±0.2	41
MDS-40C	20	3.5	7	15000	1.3×10 <sup>-5</sup>	2600	0.02	0.7	±0.2	68
MDS-50C	25	9	18	12000	6.1×10 <sup>-5</sup>	3100	0.02	0.7	±0.2	140
MDS-63C	30	12.5	25	10000	1.7×10 <sup>-4</sup>	4200	0.02	0.7	±0.2	250

\*1 Correction of rated torque and max. 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** is compatible with the servomotor with 350% instantaneous max. torque is available.

→ P.74



### ● Part number specification

**MDS-32C-10-12**

1 2

Additional Keyway at Shaft Hole → P.788 Available / Add'l charge  
 Cleanroom Wash & Packaging → P.792 Available / Add'l charge  
 Change to Stainless Steel Screw → P.790 Available / Add'l charge