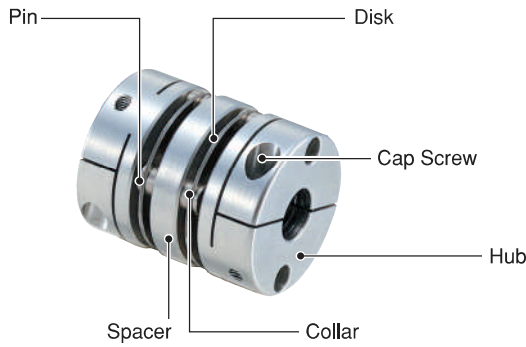


# MDW



## Configuration



## Material & Finish

Hub	A2017, Anodized Aluminum Coating
Spacer	A2017, Anodized Aluminum Coating
Disk	SUS304
Pin	SUS303
Collar	SUS303
Cap Screw	SCM435, Black Oxide Coating *

\* Stock screws can be replaced with stainless steel screws. Please take advantage of our stainless steel screw option. For more information please refer to page 16.

- For the ultimate high torque, high torsional stiffness, high response performance, take a look at the flexible disk coupling **XBW**.



**XBW** (P.38~P.41)

## Features

### Merits

- High Torsional Stiffness, High Response
- Zero Backlash

- Disk type flexible coupling
- Double stainless steel disks absorb parallel, angular misalignments and shaft end-play
- Identical clockwise and counter-clockwise rotational characteristics
- Finished products featuring two different end bore diameters available in stock

Application	
Servomotor	◎
Stepping Motor	◎
General-purpose Motor	—
Encoder	—
Features	
Zero Backlash	◎
High Torsional Stiffness	◎
High Torque	●
Absorption of Misalignment	●
Vibration Absorption	—
Electrical Insulation	—
Corrosion Resistant (All Stainless Steel)	—

◎ : Excellent    ● : Very Good

### When Ordering

Specify product code and both bore diameters.

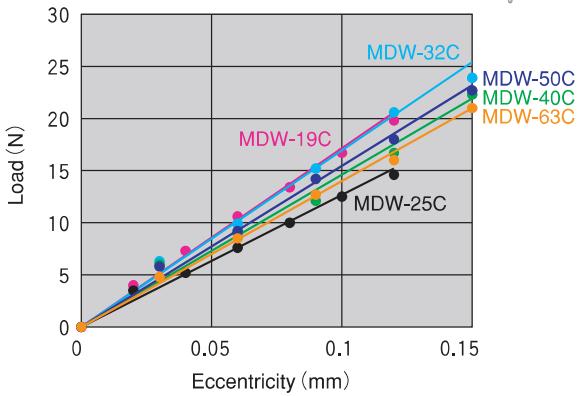
**MDW-25C-6×8**

Product Code
D<sub>1</sub>
D<sub>2</sub>

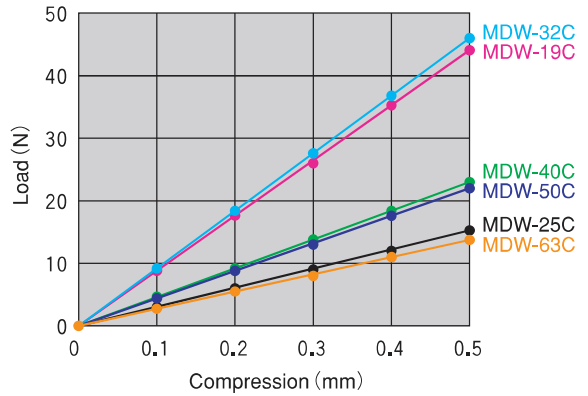


## Technical Data

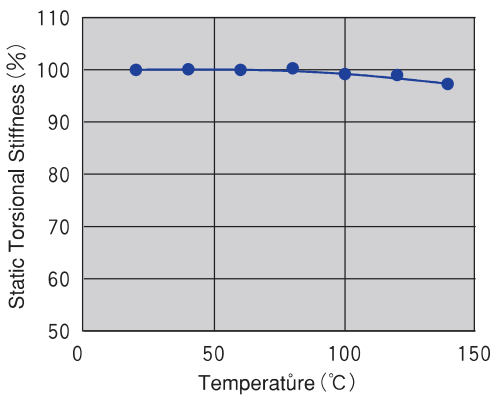
### Eccentric Reaction Force



### Thrust Reaction Force

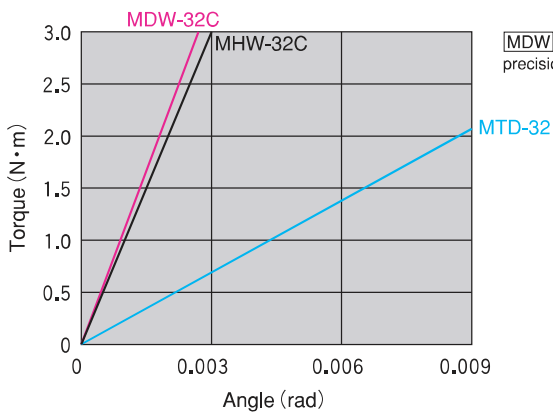


### Changes in Static Torsional Stiffness Caused by Temperature



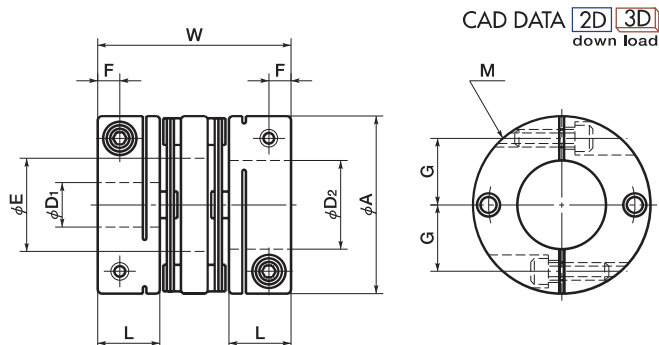
100% values represent product performance at 20°C. Because MDW experiences very little change in static torsional stiffness caused by temperature, the effect on response is minimal. However, please take into consideration that operating at high temperatures may lead to misalignment due to shaft distortion or elongation from thermal expansion.

### Static Torsional Stiffness Comparisons



MDW has a high torsional stiffness and excellent response. Ideal for servomotors' high speed, high precision positioning.

● The technical data contained in this catalog is for convenient reference, but they are not guaranteed values. More detailed technical data can be downloaded from our homepage.



## Dimensions

unit:mm

Product Code	A	L	W	E	F	G	M	Wrench Torque (N·m)
MDW-19C	19	8	27	8,5	2,5	6,5	M2	0,5
MDW-25C	25	10	31	12,5	3,5	9	M2,5	1
MDW-32C	32	12	40	16	4	11	M3	1,5
MDW-40C	40	14	44	21	5	15	M4	2,5
MDW-50C	50	18	57	26	6	18	M5	7
MDW-63C	63	20	61	35	7	24	M6	12

Product Code	Stock Bore Diameters																				
	D1 · D2																				
	4	5	6	6 <sup>35</sup>	7	8	9	10	11	12	14	15	16	17	18	19	20	22	24	25	28
MDW-19C	●	●	●		●	●															
MDW-25C			●	●		●	●														
MDW-32C						●	●	●	●	●											
MDW-40C						●		●	●	●	●	●	●	●	●	●	●				
MDW-50C										●	●	●	●	●	●	●	●	●	●	●	●
MDW-63C											●	●	●	●	●	●	●	●	●	●	●

- All products come with cap screws.
- Recommended tolerance on shaft diameters is h6 and h7.
- Bore and keyway modifications are available on request. Please take advantage of our bore modification services. For more information please refer to pages 17~19.

## Specifications

Product Code	Max. Bore (mm)	Rated* Torque (N·m)	Max.* Torque (N·m)	Max. Rotational Frequency (min <sup>-1</sup> )	Moment of Inertia (kg·m <sup>2</sup> )	Static Torsional Stiffness (N·m/rad)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Errors of Shaft End-Play (mm)	Mass** (g)
MDW-19C	8	0.7	1.5	33000	$8.7 \times 10^{-7}$	200	0.12	1.5	±0.5	18
MDW-25C	12	1	2	25000	$2.7 \times 10^{-6}$	450	0.12	1.5	±0.5	25
MDW-32C	15	2.5	5	19000	$9.6 \times 10^{-6}$	1100	0.15	1.5	±0.5	60
MDW-40C	20	3.5	7	15000	$1.9 \times 10^{-5}$	1400	0.15	1.5	±0.5	100
MDW-50C	25	9	18	12000	$8.1 \times 10^{-5}$	2200	0.15	1.5	±0.5	210
MDW-63C	30	12.5	25	10000	$2.1 \times 10^{-4}$	3000	0.15	1.5	±0.5	340

\* Adjustment of rated and maximum torque specifications for load fluctuations is not required. For more detailed information, please refer to For Better Drive on page 34.

\*\* \* Based on the maximum shaft bores.