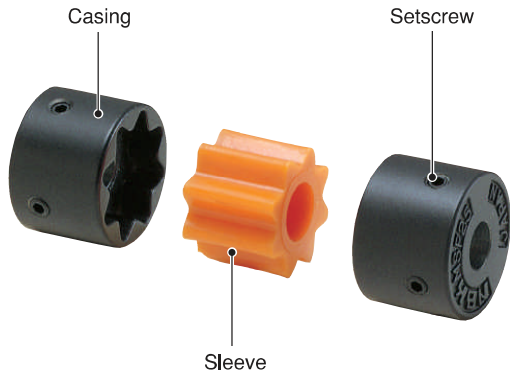


MSF

Configuration



Features

- Merits**
- Simple configuration
 - Reasonable price

- Simply constructed serration type coupling transmits torque by casing-sleeve engagement
- Excellent flexibility, high levels of parallel and angular misalignment allowance, torsional vibration absorption
- Operational Temperature: $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$

Material & Finish

Code	MSF-16~25	MSF-32
Casing	ZDC2, Cathodic Electrode* Position Coating	SMF4040, Steam Treatment
Sleeve	Polyurethane	
Setscrew	SCM435, Black Oxide Coating **	

*To meet RoHS compliance, surface treatment on casing has been changed.
 **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.

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

◎: Excellent ●: Very Good

When Ordering

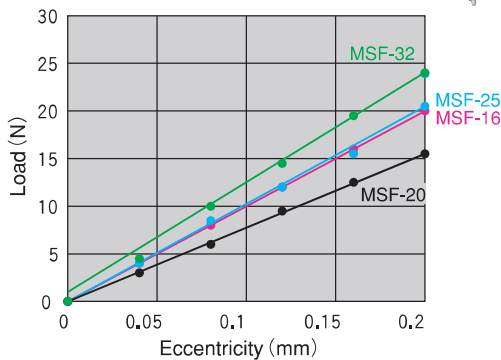
Specify product code and both bore diameters.

MSF 20 6×8

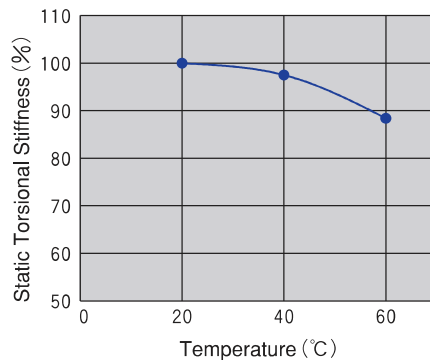
Product Code D₁ D₂

Technical Data

Eccentric Reaction Force



Changes in Static Torsional Stiffness Caused by Temperature

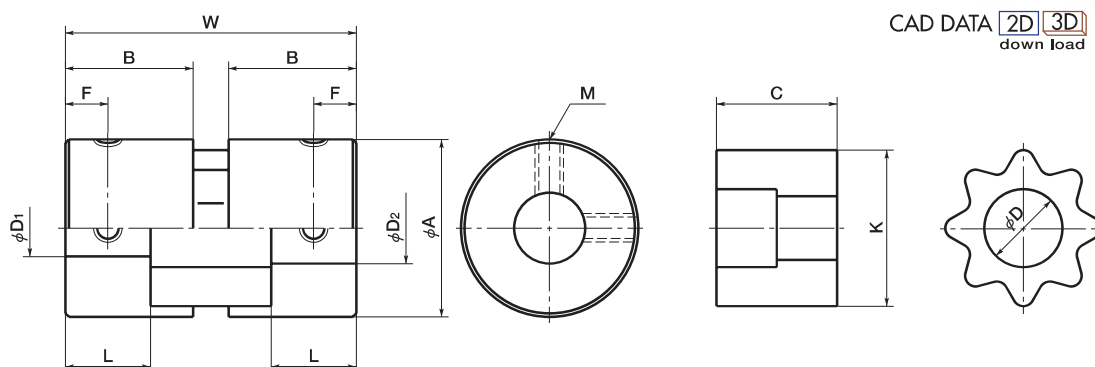


100% values represent product performance at 20°C.

Because MSF 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.



CAD DATA [2D](#) [3D](#)
down load



Dimensions

unit:mm

Product Code	A	B	L	W	F	M	Wrench Torque (N·m)	Sleeve			Stock Bore Diameters D1 · D2 (Tolerance H8)									
								C	K	D	3	4	5	6	6 ^{·35}	8	10	12	14	
											●	●	●	●	●	●	●	●	●	●
MSF-16	16	12	8	27	4	M3	0.7	11	14	6/ 6	●	●	●	●	●	●				
MSF-20	20	15	10	34	5	M3	0.7	14	18	8/ 8			●	●	●	●	●			
MSF-25	25	18	12	41	6	M4	1.7	17	22	10/10				●	●	●	●	●		
MSF-32	32	21	14	48	7	M4	1.7	20	29	12/14						●	●	●	●	

- All products come with setscrews.
- Hubs with shaft bore diameters of $\phi 4$ or less have one setscrew.
- Recommended tolerance for 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 ⁻¹)	Moment** of Inertia (kg·m ²)	Static Torsional Stiffness (N·m/rad)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Mass** (g)
MSF-16	8	0.5	1	39000	9.0×10^{-7}	4.4	0.20	2	22
MSF-20	10	1	2	31000	2.7×10^{-6}	9.5	0.20	2	42
MSF-25	12	1.5	3	25000	8.1×10^{-6}	20	0.20	2	81
MSF-32	15	3	6	19000	2.5×10^{-5}	52	0.20	2	150

* Adjustment of rated and maximum torque specifications for load fluctuations is not required. However, if operating temperature exceeds 30°C, please adjust rated torque and maximum torque as detailed in the table below. For more detailed information, please refer to For Better Drive on page 34.
 ** * Moment of inertia and mass figures based on maximum bore dimensions.

Air Temperature	Correction Factor
-20°C ~ 30°C	1.00
30°C ~ 40°C	0.80
40°C ~ 60°C	0.70