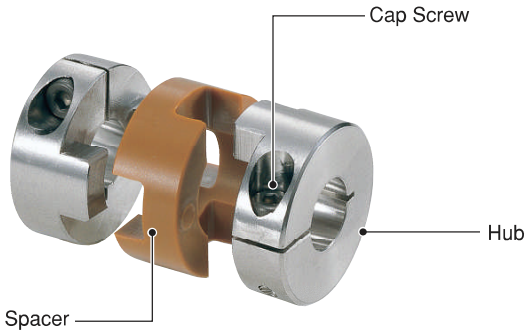
RoHS Compliant

NEW | Stainless Steel | VESPEL® | Bore Modifications

MOHS (VESPEL®)

Configuration



Material & Finish

Hub	SUS303
Spacer	VESPEL®*
Cap Screw	SUSXM7, Molybdenum Disulfide Coating

* Dupont™ and VESPEL® are registered trademarks of E. I. du Pont de Nemours and Company. Color may vary according to the production lot.

*For more detailed information, please refer to pages 10～11.

Features

Merits

- Heat Resistant. Operational Temperature: −20℃～200℃
- Clean
- High Allowable Misalignment

- Can be used in environments used for production of goods requiring cleanliness, heat resistance, and chemical resistance such as FPD and semiconductor production equipment
- Oldham type flexible coupling
- Spacer employs Dupont™'s VESPEL®
  Excellene in heat resistance and chemical resistance
  Microscopic levels of outgas
- Operational Temperature: −20℃～200℃
- Slippage between hubs and spacer allows high parallel and angular misalignments
- Minimized load on shaft caused by misalignments
- High Torsional Stiffness and High Response
- Simple configuration enables ease of assembly
- Protruded spacer design enables high allowable angular misalignment
- Finished products featuring two different end bore diameters available in stock

Application	
Servomotor	–
Stepping Motor	●
General-Purpose Motor	◎
Encoder	–
Special Characteristics	
Zero Backlash	–
High Torsional Stiffness	●
High Torque	●
Allowable Misalignment	◎
Vibration Absorption	●
Electrical Insulation	◎
Clean	◎

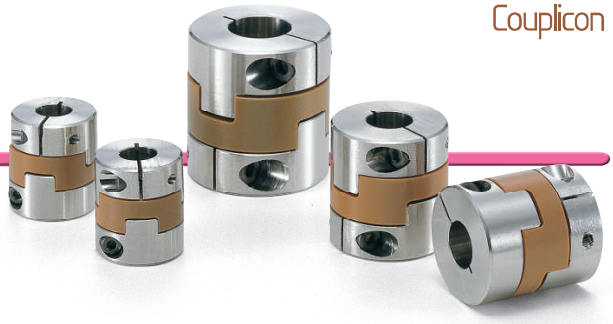
◎ : Excellent ● : Very Good

When Ordering

Specify product code and both bore diameters.

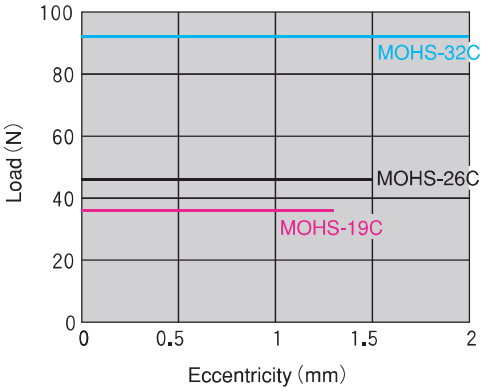
MOHS-19C-6×6

Product Code D_1 D_2



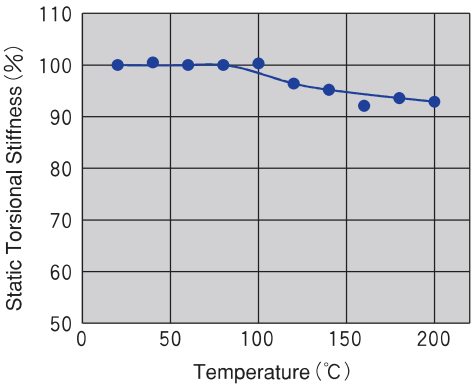
Technical Data

Eccentric Reaction Force



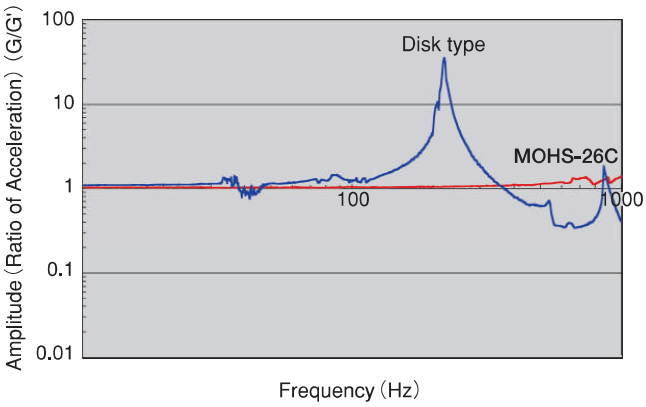
This graph indicates the initial slip load on the hub and spacer.
After the component is broken in, slip load is lessened, axel load caused by misalignment is reduced, and the burden on bearings will be lightened.

Changes in Static Torsional Stiffness Caused by Temperature



100% values represent product performance at 20℃.
Because MOHS 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.

Natural Frequency



MOHS has small amplitude at natural frequency.
＊Data for all sizes can be downloaded from our homepage.

● 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.

Technical Data

● Analysis of Outgas

unit : (v/v ppm)

Component		Contained Amount
Inorganic Gas	Hydrogen	500 or less
	Carbon Monoxide	500 or less
	Carbon Dioxide	500 or less
Organic Gas	Methane	5 or less
	Ethane	5 or less
	Ethylene	5 or less
	Propane	5 or less
	Acetylene	5 or less
	I-butane	5 or less
	n-butane	5 or less
	Propylene	5 or less

Measuring Method:
Inorganic Gas: Gaschromatograph (TCD)
Organic Gas: Gaschromatograph (FID)
Measurement Conditions:
Heating Temperature: 100℃

＊Levels of inorganic gas and organic gas are both below the level of determination and are not detected.

● Characteristics of VESPEL®

Properties	Test Method	Unit	VESPEL®
Tensile Strength	D1708	MPa	160
Tensile Elongation	D1708	%	7
Flexural Strength	D790	MPa	247
Flexural Modulus	D790	GPa	5.7
Izod impact, Notched	D256	J/m	—
Rockwell Hardness	D785	R/M Scale	M100
Deflection Temperature Under Load (1.82MPa)	D648	℃	350
Combustibleness	UL94	—	V-0
Dielectric Constant (10^6Hz)	D150	—	3.3
Dielectric Loss Tangent (10^6Hz)	D150	—	0.001
Volume Resistivity	D257	Ωm	10E14
Dielectric Breakdown Strength	D149	MV/m	—
Specific Gravity	D792	—	1.43
Coefficient of Water Absorption (Water at 23℃×24H)	D570	%	0.08
Fibrous Glass Content	—	%	0

● Chemical Resistance of VESPEL®

Name of Chemical	VESPEL®
10% Hydrochloric Acid	○
10% Sulfuric Acid	○
50% Sulfuric Acid	△
10% Nitric Acid	△
50% Nitric Acid	×
10% Hydrofluoric Acid	△
50% Hydrofluoric Acid	×
Formic Acid	△
10% Acetic Acid	○
Citric Acid	○
Boracic Acid	○
Methanol	△
Glycol	○
Ammonia	△

○ : Usable △ : Usable under certain conditions × : Unusable

● Data from samples tested at room temperature (23℃).
Chemical resistance values will vary according to usage conditions. They should be tested under actual performance conditions prior to use.

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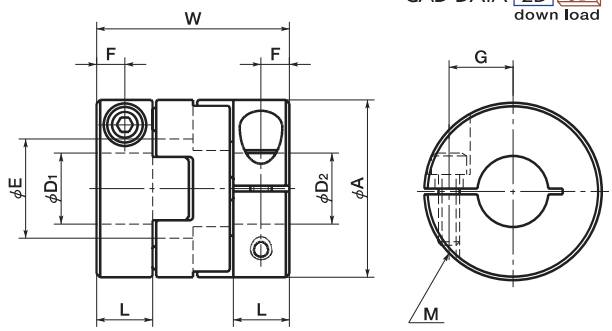
CAD DATA 2D 3D
down load



Dimensions

unit:mm

Product Code			A	L	W	E	F	G	M	Wrench Torque (N·m)
MOHS-19C			19	7	22.1	10	3.5	6.5	M2.5	0.5
MOHS-26C			25.4	8	27.2	14	4	9	M3	0.7
MOHS-32C			31.7	10	33.3	18	5	11	M4	1.2

Product Code	Stock Bore Diameters $D_1 \cdot D_2$						
	5	6	8	10	11	12	14
MOHS-19C	●	●	●				
MOHS-26C			●	●			
MOHS-32C			●	●	●	●	●

- All products come with cap screws.
- 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 ($kg \cdot m^2$)	Static Torsional Stiffness (N·m/rad)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Mass** (g)
MOHS-19C	8	0.4	0.8	900	1.4×10^{-6}	160	1.3	2	28
MOHS-26C	10	1.2	2.4	900	5.5×10^{-6}	220	1.5	2	61
MOHS-32C	14	2.2	4.4	900	1.6×10^{-5}	600	2.0	2	110

＊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.
＊＊Moment of inertia and mass figures based on maximum bore dimensions.