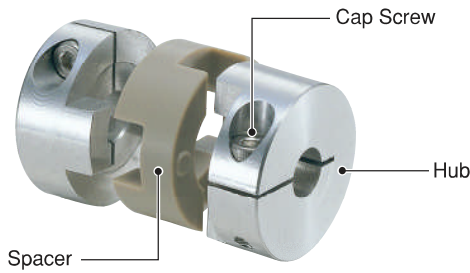


MOP(PEEK*)



Configuration



Material & Finish

Hub	A2017
Spacer	PEEK*: Polyetheretherketone
Cap Screw	SUSXM7

*PEEK® is a registered trademark of Victrex, PLC.
Color may vary according to production lot.

Features

Merits

- Microscopic Levels of Outgas
- Clean
- High Allowable Misalignment

- Can be used with heat and chemical resistant applications and clean environment such as FPD and semiconductor production equipment and devices
- Oldham type flexible coupling
- Introduce VESPEL® for spacer
Excellent Heat Resistance and chemical resistance with microscopic level of outgas
- Operational Temperature: -20°C ~ 120°C
- 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



We will clean your order and ship it dust free.



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

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

◎ : Excellent ● : Very Good

When Ordering

Specify product code and both bore diameters.

MOP-25C-8×8

Product Code

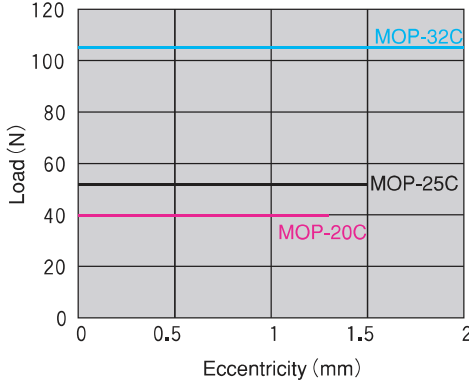
D₁

D₂



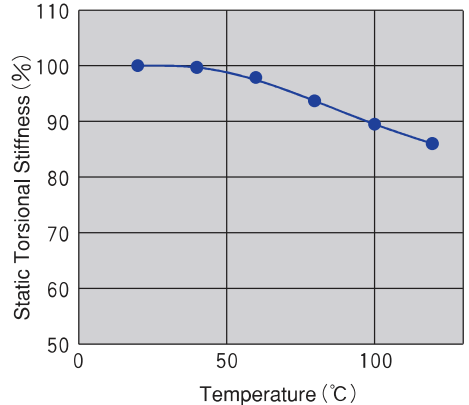
Technical Data

Eccentric Reaction Force



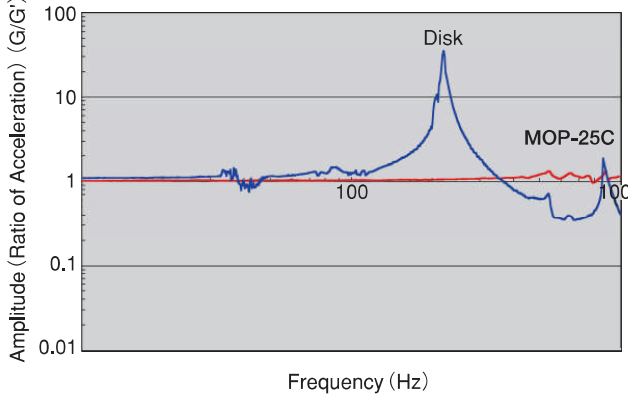
This graph indicates the slip load between the hub and spacer. After test operation, the slip load will small, and it minimize shaft load generated by misalignment and reduce load to bearing and so on.

Changes in Static Torsional Stiffness Caused by Temperature



100% values represent product performance at 20°C. Because [MOP] 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



[MOP] 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°C

* Both inorganic gas and organic gas is less than minimum limit of determination and not detected.

● Characteristics of PEEK®

Properties	Test Method	Unit	PEEK®
Tensile Strength	D638	MPa	91
Tensile Elongation	D638	%	50~120
Flexural Strength	D790	MPa	147
Flexural Modulus	D790	GPa	3.9
Izod Impact, Notched	D256	J/m	88
Rockwell Hardness	D785	R/M Scale	R126
Deflection Temperature Under Load (1.82MPa)	D648	°C	152
Combustiblness	UL94	—	V-0
Dielectric Constant (10 ⁶ Hz)	D150	—	3.3
Dielectric Loss Tangent (10 ⁶ Hz)	D150	—	0.004
Volume Resistivity	D257	Ωcm	4.9
Dielectric Breakdown Strength	D149	MV/m	17
Arc Resistance	D495	sec	23
Specific Gravity	D792	—	1.30
Coefficient of Water Absorption (Water at 23°C*24H)	D570	%	0.500
Fibrous Glass Content	—	%	0

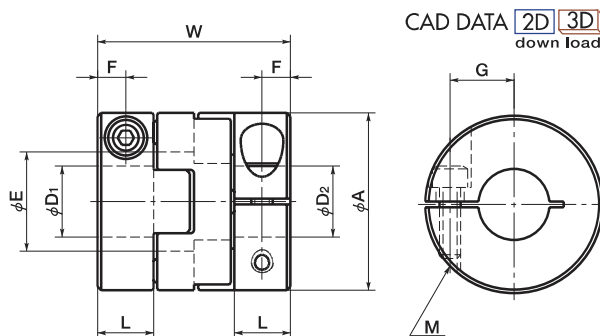
● Chemical Resistance of PEEK®

Name of Chemical	PEEK®
10% Hydrochloric Acid	○
10% Sulfuric Acid	○
50% Sulfuric Acid	×
10% Nitric Acid	○
50% Nitric Acid	×
50% Hydrofluoric Acid	×
10% Phosphoric Acid	○
Formic Acid	△
10% Acetic Acid	○
Citric Acid	○
Chromic Acid	○
Boracic Acid	○
Methanol	○
Glycol	○
Ammonia	○
10% Sodium Hydroxide	○
10% Potassium Hydroxide	○
Calcium Hydroxide	○
Hydrogen Sulfide (Gas)	○
Sulfur Dioxide	○
Ammonium Nitrate	○
Sodium Nitrate	○
Calcium Carbonate	○
Calcium Chloride	○
Magnesium Chloride	○
Magnesium Sulfate	○
Zinc Sulfate	○
Hydrogen Peroxide	○

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

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

● 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)
MOP-20C			20	7	22,1	10	3,5	6,5	M2,5	1
MOP-25C			25	8	27,2	14	4	9	M3	1,5
MOP-32C			32	10	33,3	18	5	11	M4	2,5

Product Code	Stock Bore Diameters						
	D1 · D2						
	5	6	8	10	11	12	14
MOP-20C	●	●	●				
MOP-25C			●	●			
MOP-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·m ²)	Static Torsional Stiffness (N·m/rad)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Mass** (g)
MOP-20C	8	0.7	1.4	31000	7,4×10 ⁻⁷	93	1.3	2	13
MOP-25C	10	1.2	2.4	25000	2,2×10 ⁻⁶	140	1.5	2	24
MOP-32C	14	2.8	5.6	19000	7,3×10 ⁻⁶	350	2.0	2	48

* 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.