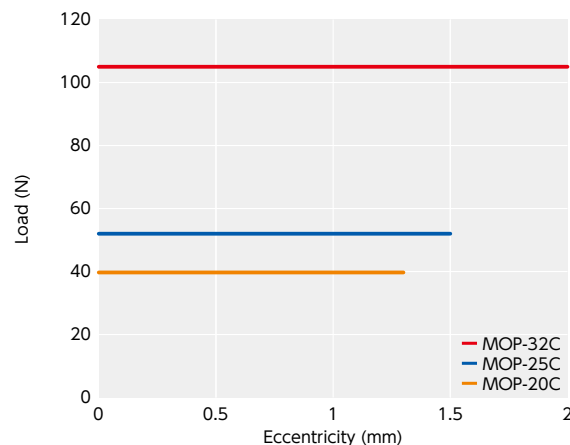


MOP-C Cleanroom / Vacuum / Heat Resistant Couplings - Oldham Type (PEEK)

Cleanroom ✕ Electrical Insulation 🔥 Heat-resistance 🧪 Chemical-proof ⚙️ High Allowable Misalignment

Technical Information

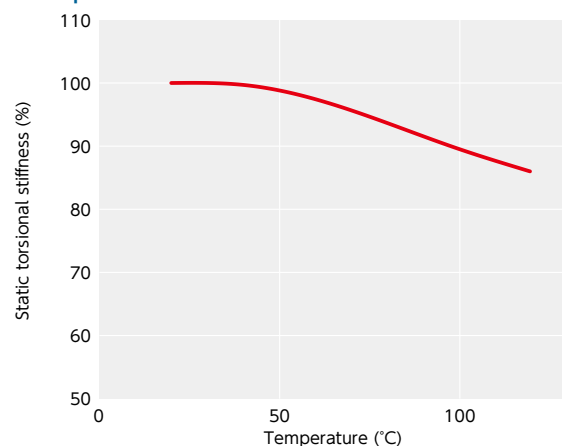
• Eccentric Reaction Force



These are initial slippage load values of hubs and a spacer.

After running-in operation, the slippage load becomes small, the load on the shaft due to misalignment becomes lowered, and the burden on the shaft bearing is reduced.

• Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20°C is 100%.

The change of **MOP-C** in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. If the unit is used under higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

• Analysis of outgas

Unit: (v/v ppm)

Component		Content
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

• Both inorganic gas and organic gas are not more than the lower limit of determined amount and are not detected.

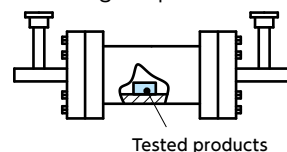
• Measurement Method

Inorganic gas — Gas chromatography (TCD)

Organic gas — Gas chromatography (FID)

• Measurement Conditions

Heating temperature — 100°C



Technical Information

• PEEK's physical property

Property	Test Method	unit	PEEK
Tensile Strength	D638	N/mm ²	97
Tensile Elongation	D638	%	65
Bending Strength	D790	N/mm ²	156
Bending Elastic Modulus	D790	GPa	4.1
Izod Impact Value (with Notch)	D256	J/m	94
Rockwell Hardness	D785	R / M Scale	M99
Deflection Temperature Under Load (1.82MPa)	D648	°C	152
Combustibility	UL94	-	V-0
Dielectric Constant (10 ⁶ Hz)	D150	-	3.3
Dielectric Loss Tangent (10 ⁶ Hz)	D150	-	0.003
Volume Resistivity (x10 ¹⁴)	D257	Ω·m	4.9
Insulation Breakdown Strength	D149	MV/m	17
Arc Resistance	D495	sec	23
Specific Gravity	D792	-	1.30
Water Absorption (in 23°C Water x 24 h)	D570	%	0.500
Content by Percentage of Glass Fiber	-	%	0

• PEEK's chemical resistance

Chemical Name	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	○
Boric Acid	○
Methyl Alcohol	○
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	○

○: Available △: Available depending on conditions ×: Not available

• This is test data with a specimen used at room temperature (23°C). Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.