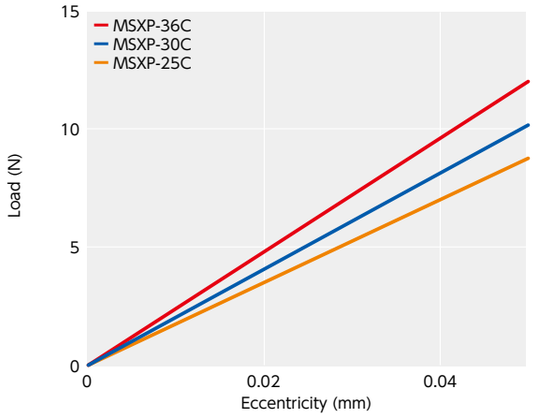
MSXP-C Cleanroom / Vacuum / Heat Resistant Couplings - Slit Type (PEEK)

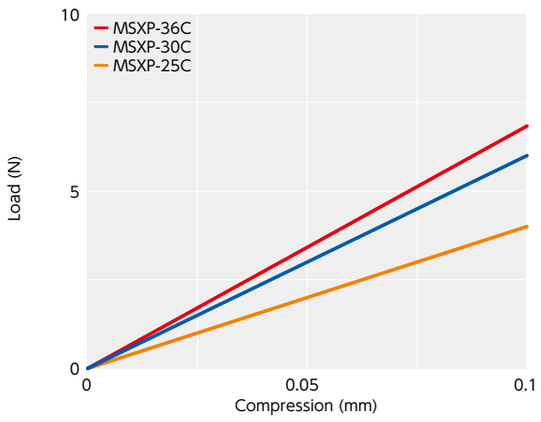
Zero Backlash | Cleanroom | Electrical Insulation | Chemical-proof

Technical Information

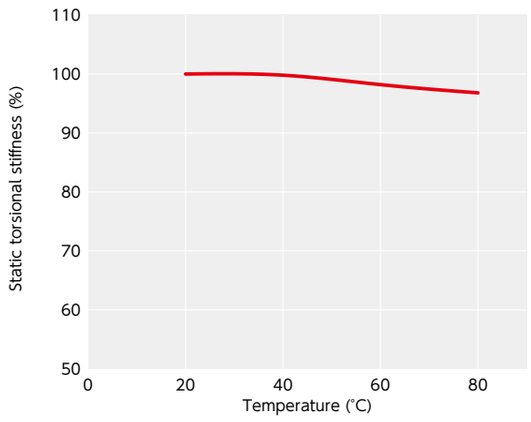
● Eccentric Reaction Force



● Thrust Reaction Force



● Change in static torsional stiffness due to temperature



● Analysis of outgas

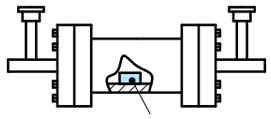
Unit : (v/v ppm)

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℃



Technical Information

● PEEK's physical property

Property	Test Method	unit	PEEK
Tensile Strength	D638	N/mm²	97
Tensile Elongation	D638	%	65
Bending Strength	D790	N/mm²	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	℃	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℃ Water × 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℃). Chemical resistance changes with performance conditions. Always carry out tests under performance conditions similar to actual conditions in advance.

● Slip Torque

As in the table below, the clamping type **MSXP-C** has different slip torque according to the bore diameter. Take care during selection.

Unit : N・m

Part Number	Bore Diameter (mm)					
	6	8	10	12	14	15
MSXP-25C	0.5	0.6	0.7			
MSXP-30C		0.8	1.1	1.5		
MSXP-36C			0.7	1.2	1.8	2.2

● These are test values based on the conditions of shaft dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in **MSXP-C** dimension tables. They are not guaranteed values.

● Slip torque changes with usage conditions. Carry out tests under conditions similar to actual conditions in advance.

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