

HY509

HY509 is a traditional glass/moly filled PTFE material; addition of moly improves lubrication in dry conditions. HY509 is BAM (Bundesanstalt für Materialforschung und –prüfung) certified for use in oxygen gas compression.

Physical Properties

Property	Method	Value
COTE - Radial x 10-6/C (20-200 °C)	ASTM D696	73.9
COTE - Axial x 10-6/C (20-200 °C)	ASTM D696	105.1
Maximum operating temperature (°C)	-	200
Density (g/cm ³)	ASTM D792	2.26
Shore D Hardness	ASTM D2240	58
Tensile strength at break (MPa)	ASTM D638	26
Elongation at break (%)	ASTM D638	210

Operating range

Max. Gas Temperature (°C)		Max. Pressure (bar)			
Discharge	Design	Packing Discharge		Cylinder Ring Diff.	
		Non-Lube	Lube	Non-Lube	Lube
200	150	#	350	50	100

Operating limits in oxygen service

Max. Temperature (°C)	Max. Oxygen Pressure (bar)	Compression Ratio
175	100	≤3

Tested according to DIN EN 1797 and ISO 21010

Air

Industrial Gases

Natural Gas

Refinery

Olefins

Alcohols

Chemicals

Refrigeration