

# HY22

HY22 is a high performance carbon and graphite filled PTFE. It produces the lowest wear rate in the range of medium to high filled grades. This premium grade provides enhanced performance in both lubricated and non-lubricated environments where conventional PTFE materials fail by extrusion. Low thermal expansion and good creep characteristics make it the first choice for low pressure air and hydrocarbon compressor duties.

## Physical Properties

Property	Method	Value
COTE - Radial x 10 <sup>-6</sup> /C (20-200 °C)	ASTM D696	49.8
COTE - Axial x 10 <sup>-6</sup> /C (20-200 °C)	ASTM D696	62.2
Density (g/cm <sup>3</sup> )	ASTM D792	2.03
Shore D Hardness	ASTM D2240	62
Tensile strength at break (MPa)	ASTM D638	12.5
Elongation at break (%)	ASTM D638	11

Air

Industrial Gases

Natural Gas

Refinery

Olefins

Alcohols

Chemicals

Refrigeration

## Operating range

Max. Gas Temperature (°C)		Max. Pressure (bar)			
Discharge	Design	Packing Discharge		Cylinder Ring Diff.	
		Non-Lube	Lube	Non-Lube	Lube
200	150	100	175	50	100

Operating restriction for oxygen-service: Compression ratio up to 3

All values are approximate and subject to change without notification.

The maximum material design temperature is calculated by considering suction and discharge conditions, machine speed, cooling and loading. Typically:  $T_{design} = T_{suction} + 2/3(T_{discharge} - T_{suction})$ . Additional operating conditions need to be considered when making material selections. The data presented are guidelines only; consult HOERBIGER to ensure the correct material is specified.

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