

# HY79

HY79 is premium material formulated specifically for demanding air compression applications in lubricated or non-lubricated service, exhibiting higher stiffness and less tendency for extrusion than traditional filled PTFE based materials.

## Physical Properties

Property	Method	Value
COTE - Radial x 10 <sup>-6</sup> /C (20-200 °C)	ASTM D696	49
COTE - Axial x 10 <sup>-6</sup> /C (20-200 °C)	ASTM D696	65.5
Density (g/cm <sup>3</sup> )	ASTM D792	3.91
Shore D Hardness	ASTM D2240	64
Tensile strength at break (MPa)	ASTM D638	14
Elongation at break (%)	ASTM D638	7

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	165	100	-	50	-

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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