

GYLON® Style HP 3561 – Metal Inserted

MATERIAL PROPERTIES*:

Color:	Off-white
Composition:	PTFE with barium sulfate and perforated 316L stainless steel insert
Fluid Services (see chemical resistance guide):	Strong caustics, moderate acids, chlorine, gases, water, steam, cryogenics, hydrocarbons and aluminum fluoride
Temperature ¹ , °F (°C)	
Minimum:	-150 (-100) ²
Maximum:	+500 (+260)
Ideal Operating Limit:	+400 (+204)
Pressure ¹ , psig (bar):	
Minimum:	Full Vacuum
Maximum:	2500 (173)
P x T (max.) ¹ , psig x °F (bar x °C):	
1/32 and 1/16":	700,000 (25,000)
1/8"	450,000 (15,000)
Flammability:	Will Not Support Flame
Bacterial Growth:	Will Not Support
Meets Specifications:	

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility , average, %:	3-7 ⁽³⁾
ASTM F36	Recovery , %:	50 ⁽³⁾
ASTM F38	Creep Relaxation , %:	20 ⁽³⁾
ASTM D1708	Tensile , Across Grain, psi (N/mm ²):	5000 (34) ³
ASTM D792	Specific Gravity:	N/A
ASTM D1708	Modulus @ 100% Elongation , psi (N/mm ²):	N/A
ASTM F433	Thermal Conductivity (K) , W/m ² K (Btu·in./hr·ft. ² ·°F):	0.29-0.38 (2.00-2.65)
ASTM F586	Design Factors	<u>1/16" & Under</u> <u>1/8"</u>
	"m" factor:	5.0 5.0
	"y" factor, psi (N/mm ²):	3500 (24.1) 4000 (27.6)
ROTT	Gasket Constants:	
	1/16"	Gb=72.3 a=0.466 Gs=2.16x10 ⁻¹
	1/8"	N/A

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	DIN 3535 – Nitrogen
Gasket Load , psi (N/mm ²):	1000 (7)	4640 (32)
Internal Pressure , psig (bar):	9.8 (0.7)	580 (40)
Leakage	0.01 ⁽³⁾ ml/hr.	<0.015 ⁽³⁾ cc/min

Notes:

* This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results in accordance with ASTM F-104; properties

¹ Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum PxT, consult Garlock Applications Engineering. Minimum temperature rating is conservative.

² The minimum temperature rating is based on the 316LSS insert material. Many customers successfully use HP GYLON materials in cryogenic services as low as -450°F (-268°C).

³ Test results based on 1/16" thick material

8/15/2023