

GYLON® Style HP 3561 – Metal Inserted

MATERIAL PROPERTIES*:

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|--|--|
| 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 |
| Temperature¹, °F (°C) | |
| Minimum: | -150 (-100) ² |
| Maximum: | +500 (+260) |
| Ideal Operating Limit: | +400 (+204) |
| Pressure¹, 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/mm²): | 5000 (34) ³ |
| ASTM D792 | Specific Gravity: | N/A |
| ASTM D1708 | Modulus @ 100% Elongation, psi (N/mm²): | N/A |
| ASTM F433 | Thermal Conductivity (K), W/m²K (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/mm²): | 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

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