

# GYLON® Style HP 3560 - Metal Inserted

### **MATERIAL PROPERTIES\*:**

Color: Fawn
Composition: PTFE with silica and a perforated 316L stainless steel insert
Fluid Services (see chemical resistance guide): Strong acids (except hydrofluoric), solvents, hydrocarbons, water,

steam, chlorine and cryogenics

Temperature<sup>1</sup>, °F (°C)

Minimum:  $-150 (-100)^2$ Maximum: +500 (+260)Ideal Operating Limit: +400 (+204)

Pressure<sup>1</sup>, psig (bar):

Minimum: Full Vacuum Maximum: 2500 (173)

 $P \times T (max.)^1$ , 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, %:                            | 4-9 <sup>(3)</sup>       |             |
|-------------------|---------------------------------------------------------|--------------------------|-------------|
| ASTM F36          | Recovery, %:                                            | 45 <sup>(3)</sup>        |             |
| ASTM F38          | Creep Relaxation, %:                                    | 20 <sup>(3)</sup>        |             |
| <b>ASTM D1708</b> | Tensile, Across Grain, psi (N/mm²):                     | 5000 (34) <sup>3</sup>   |             |
| <b>ASTM D792</b>  | Specific Gravity:                                       | N/A                      |             |
| <b>ASTM D1708</b> | Modulus @ 100% Elongation, psi (N/mm <sup>2</sup> ):    | N/A                      |             |
| ASTM F433         | Thermal Conductivity (K), W/m°K (Btu.·in./hr.·ft.².°F): | 0.36-0.45 (2.50-3.15)    |             |
| ASTM F586         | Design Factors                                          | <u>1/16" &amp; Under</u> | <u>1/8"</u> |
|                   | "m" factor:                                             | 5.0                      | 5.0         |
|                   | "y" factor, psi (N/mm²):                                | 3500 (24.1)              | 4000 (27.6) |
| ROTT              | Gasket Constants:                                       |                          |             |
|                   | 1/16"                                                   | N/A                      |             |
|                   | 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                        | 0.02 <sup>(3)</sup> ml/hr. | <0.015 <sup>(3)</sup> cc/min |

#### Notes

8/15/2023



<sup>\*</sup> 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

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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).

<sup>&</sup>lt;sup>3</sup> Test results based on 1/16" thick material