

## **Garlock Graph-Lock® Style 3125-SS**

<b>Temperature:</b>	-400°F (-240°C) to +850°F (+454°C) <sup>1</sup> in atmosphere; +1200°F (+650°C) in steam;
<b>Pressure (max.):</b>	2000psig (70 bar)
<b>P x T (max.)<sup>2</sup>:</b>	700,000 (25,000) 1/16" and 1/32" 350,000 (12,000) 1/8"

<u>ASTM TEST METHOD</u>	<u>PHYSICAL PROPERTIES</u>	<u>TYPICAL RESULTS</u>
ASTM F-37B	Sealability ml/hr. Leakage, <b>ASTM Fuel A (isooctane):</b> Gasket Load, 500 psi (3.5 N/mm <sup>2</sup> ) Internal Pressure, 9.8 psig (.7 bar) <b>Nitrogen:</b> Gasket Load, 3000 psi (20.7 N/mm <sup>2</sup> ) Internal Pressure, 30 psig (2 bar)	0.1    0.5
ASTM F-36	<b>Recovery, %</b>	20
ASTM F-36	<b>Compressibility, %</b>	35
ASTM F-38	<b>Creep Relaxation, %</b>	12
ASTM F-152	<b>Tensile Strength (psi)</b> Across Grain, psi (N/mm <sup>2</sup> ):	5000
DIN 3535 Part 4	<b>Gas Permeation, cc/min.:</b> <b>Nitrogen:</b> Internal pressure: 580 psig (40 bar) Gasket Load: 4640 psi (32 N/mm <sup>2</sup> )	0.2

NOTE: This is a general guide and should not be the sole means of selecting or rejecting this material. ASTM test results are in accordance with ASTM F104; properties based on 1/32" (0.8 mm) sheet thickness (except as noted).

<sup>1</sup> Maximum temperature of +1000°F (540°C) for GRAPH-LOCK® HT.

<sup>2</sup> P x T, max. = psig x °F (bar x °C). Based on ANSI RF flanges at our preferred torque. Consult Garlock Applications Engineering when approaching maximum pressure or 50% of maximum P x T.

# ***Garlock Graph-Lock<sup>®</sup>***

## ***Style 3125-SS***

Garlock Style 3125-SS is laminated from .015" thick layers of purified natural graphite flake that has been acid washed, expanded under heat, and then compressed into sheets with a minimum graphite content of 98%. This sheet contains a .002" thick 316 Stainless Steel Foil, bonded with a proprietary adhesive, and inserted in the middle of the graphite layers. This adhesive comprises less than 1% of the total laminated weight.

Sheet Thickness: 1/32", 1/16", 1/8"

Sheet Size: 40" x 40", 59.4" x 60"

Bulk Density: 70.0 lb/cu. ft. (1.1 grams/cm<sup>3</sup>)

### **Chemical Impurity Data:**

Leachable Chlorides: 100 ppm max.

Total Chlorides: 500 ppm max.

Total Fluorides: 300 ppm max.

Total Sulfur: 1000 ppm max.