

Garlock Graph-Lock® Style 3125

Temperature:	-400°F (-240°C) to +850°F (+454°C) ¹ in atmosphere; +1200°F (+650°C) in steam; +5432°F (+3000°C) cont. in reducing or inert media
Pressure (max.):	2000psig (70 bar)
P x T (max.)²:	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, ASTM Fuel A (isooctane): Gasket Load, 500 psi (3.5 N/mm ²) Internal Pressure, 9.8 psig (.7 bar) Nitrogen: Gasket Load, 3000 psi (20.7 N/mm ²) Internal Pressure, 30 psig (2 bar)	0.2 0.5
ASTM F-36	Recovery, %	17
ASTM F-36	Compressibility, %	40
ASTM F-38	Creep Relaxation, %	9
ASTM F-152	Tensile Strength (psi) Across Grain, psi (N/mm ²):	600
DIN 3535 Part 4	Gas Permeation, cc/min.: Nitrogen Internal pressure: 580 psig (40 bar) Gasket Load: 4640 psi (32 N/mm ²)	0.4

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).

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

² 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.

Graph-Lock[®] Style 3125

Garlock Style 3125 is composed of a purified natural graphite flake that has been acid washed, expanded under heat, then compressed into sheets with a minimum graphite content of 98%.

Chemical impurity Data Sheet

This specification covers a laminated graphite sheet material with the following typical physical properties.

Leachable Chlorides	100 ppm max.
Leachable Fluorides	100 ppm max.
Leachable Sulfur	200 ppm max.
Total Chlorides	500 ppm max.
Total Fluorides	500 ppm max.
Total Sulfur	1200 ppm max.

Note: In services requiring data on heavy metals, please specify style 3120 or 3122.

Sheet Thickness:	1/64", 1/32", 1/16", 1/8"
Sheet Size:	24" x 24", 40" x 40", 59.4" x 60"
Bulk Density:	70.0 lb/cu. ft. (1.1 grams/cm ³)