

GRAPH-LOCK® Typical Physical Properties*

	3124 / 3126	3123/3125	3125 SS	3125 TC	HOCHDRUCK® 3128
Description	316SS Wire Inserted	Homogeneous/ Laminated	0.002" 316SS Foil Inserted	0.004" 316SS Tang Inserted	Reinforced Graphite
Temperature¹ , Minimum Max. in atmosphere Max. in steam Continuous in reducing or inert media	-400°F (-240°C) +850°F (+454°C) +1200°F (+650°C) —	-400°F (-240°C) +850°F (+454°C) +1200°F (+650°C) +5,432°F (+3,000°C)	-400°F (-240°C) +850°F (+454°C) +1200°F (+650°C) —	-400°F (-240°C) +850°F (+454°C) +1200°F (+650°C) —	-400°F (-240°C) +850°F (+454°C) +1200°F (+650°C)
Pressure, max.¹ psig (bar)	2,000 (140)	2,000 (140)	2,000 (140)	2,000 (140)	2,000 (140)
P x T, max.¹ (psig x °F): 1/32", 1/16" (bar x °C): (0.8 mm, 1.6 mm) 1/8" (3.2 mm)	700,000 (25,000) 350,000 (12,000)	700,000 (25,000) 350,000 (12,000)	700,000 (25,000) 350,000 (12,000)	700,000 (25,000) 350,000 (12,000)	700,000 (25,000) 350,000 (12,000)
Sealability (ASTM F37B)² ASTM Fuel A ml/hr Nitrogen ml/hr	1.5 ³ 0.2	0.2/0.3 0.5	0.25 0.2	0.3 ³ 0.3	0.2 0.1
Gas Permeability cc/min. (DIN 3535 Part 4) ⁴	0.1	0.4	0.4	0.4	0.4
Creep Relaxation % (ASTM F38)	17	5/10	12	15	10
Compressibility % (ASTM F36)	40	40	35	35	30-40
Recovery (ASTM F36) %	>12	>15	>20	>20	20
Tensile Strength psi (ASTM F152) (N/mm ²)	3,300 (23)	600 (4)	4,500 (31)	3,500 (24)	4,500 (31)

Notes:

¹ Based on ANSI RF flanges at our preferred torque. Maximum temperature of +1,000°F (+540°C) for GRAPH-LOCK® HT. Consult Garlock Applications Engineering when approaching maximum pressure or 50% of maximum PxT.

² ASTM F37B Sealability, milliliters/hour (1/32" thick)
ASTM Fuel A (isooctane): Gasket load = 500 psi (3.5 N/mm²),
Internal pressure = 9.8 psig (0.7 bar)
Nitrogen: Gasket load = 3,000 psi (20.7 N/mm²),
Internal pressure = 30 psig (2 bar)

³ 1,000 psi gasket load

⁴ DIN 3535 Part 4 Gas Permeability, cc/min. (1/16" thick)
Nitrogen: Gasket load = 4,640 psi (32 N/mm²),
Internal pressure = 580 psig (40 bar)

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 based on 1/32" (0.8mm) sheet thickness.

All styles furnished with an anti-stick parting agent as standard.

* **Values do not constitute specification limits**

HOCHDRUCK® Installation

Easy to Cut



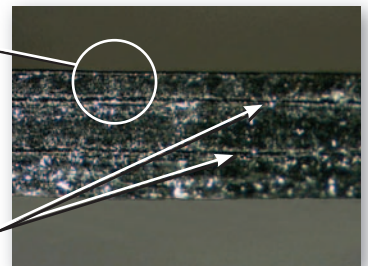
Easy to Install



Easy to Seal

Graphite Blocking
Agent Throughout

316L Stainless
Steel Inserts



Dovetail Installation Instructions

After mating the matching dovetail sections together, wrap a length of either Garlock Smooth Finished or Garlock Diamond Textured Graphite tape (0.010" thick) around dovetail area. Width of graphite tape must be at least 1/2" greater than dovetail area. Wrap tape one full revolution around gasket in dovetail area. Be sure

to overlap tape by approximately 1/2" and cut tape. DO NOT attempt to open or move tape at this point - it will damage the tape. With a smooth piece of metal that is greater in area than the dovetail area, softly tap with a hammer and blend the tape into the gasket. Place flanges together and follow normal installation procedures.