GRAPH-LOCK® Style 3124/3126

MATERIAL PROPERTIES*:

Color:	Black
Composition:	Graphite with a wire insert -Laminated layers of purified natural graphite flake that have been acid washed, expanded under heat, and then compressed into sheets with a minimum graphite content of 98%. This sheet contains a 0.0075" thick 316 stainless steel wire mesh (24 mesh) insert, bonded with a proprietary adhesive. This adhesive comprises less than 1% of the total laminated weight.
Temperature[1], °F (°C)	
Minimum:	-450 (-268)
Continuous Max:	+850 (+454)
Pressure[1], psig (bar):	
Maximum:	2000 (138)
Minimum:	Full Vacuum
Ideal Operating Limit:	750 (52)
P x T (max.)[1], psig x °F (bar x °C):	
1/32 and 1/16":	700,000 (25,000)
1/8"	350,000 (12,000)
Meets Specifications:	Fire Safe

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	**Compressibility**, average, %:	35	
ASTM F36	**Recovery**, %:	20	
ASTM F38	**Creep Relaxation,** %:	20	
ASTM F152	**Tensile**, Across Grain, psi (N/mm^2):	2300 (15.8)	
DIN 52913	**Load Retention**, %:	90	
ASTM F1315	**Density**, lbs./ft.^{3} (grams/cm^3):	70 (1.12)	
ASTM F586	**Design Factors**	1/16"	1/8"
	"m" factor:	2.0	2.0
	"y" factor, psi (N/mm^2):	2500 (17.2)	2500 (17.2)

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	ASTM F37B - Nitrogen	DIN 3535 – Nitrogen
Gasket Load, psi (N/mm2):	500 (3.5)	3000 (20.7)	4640 (32)
Internal Pressure, psig (bar):	9.8 (0.7)	30 (2)	580 (40)
Leakage	**1.0 ml/hr.**	**1.5 ml/hr.**	**0.4 cc/min**

CHEMICAL IMPURITY DATA

Chemical Limits			
Leachable Levels Max., ppm	**ppm**	**Total Chemical Limits**, Max., ppm	**ppm**
Chlorides:	30	**Total Sulfur:**	1000
Fluorides:	30		

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.

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