

Style 2900/2950

MATERIAL PROPERTIES*:

Color:	2900 Black, 2950 Green
Composition:	Aramid fibers with a nitrile binder
Fluid Services (see chemical resistance guide):	Water, aliphatic hydrocarbons, oils and gasoline
Temperature¹, °F (°C)	
Minimum:	-100 (-75)
Continuous Max:	+400 (+205)
Maximum:	+700 (+371)
Pressure¹, psig (bar):	1000 (70)
Maximum:	1000 (70)
Minimum:	Full Vacuum
Ideal Operating Limit:	750 (52)
P x T (max.)¹, psig x °F (bar x °C):	
1/32 and 1/16":	350,000 (12,000)
1/8"	250,000 (8,600)

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility , average, %:	8	
ASTM F36	Recovery , %:	50	
ASTM F38	Creep Relaxation , %:	25	
ASTM F152	Tensile , Across Grain, psi (N/mm ²):	1500 (10)	
ASTM F1315	Density , lbs./ft. ³ (grams/cm ³):	105 (1.68)	
ASTM F433	Thermal Conductivity (K) , W/m ² K (Btu·in./hr·ft. ² ·°F):	0.29-0.38 (2.00-2.65)	
ASTM D149	Dielectric Properties , range, volts/mil.		
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>
	3 hours at 250°F	342 ⁽²⁾	254 ⁽²⁾
	96 hours at 100% Relative Humidity:	26	28
ASTM F586	Design Factors	1/16" & Under	<u>1/8"</u>
	"m" factor:	4.5 ⁽³⁾	7.0 ⁽³⁾
	"y" factor, psi (N/mm ²):	3000 ⁽³⁾ (20.7)	4000 ⁽³⁾ (27.6)

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	ASTM F37B - Nitrogen
Gasket Load , psi (N/mm ²):	500 (3.5)	3000 (20.7)
Internal Pressure , psig (bar):	9.8 (0.7)	30 (2)
Leakage	0.5 ml/hr.	1.0 ml/hr.

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 based on 1/16" (1.6mm) sheet thickness unless otherwise mentioned. Values do not constitute specification Limits

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.

² Indicates current arced around and not through gasket. Dielectric higher than indicated unless otherwise mentioned.

³ These values are from style 2950. Style 2900 has higher values.

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