

## Style 2900/2950

### MATERIAL PROPERTIES\*:

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

### TYPICAL PHYSICAL PROPERTIES\*:

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

### SEALING CHARACTERISTICS\*

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

#### 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

<sup>1</sup> Based on ANSI RF flanges at our preferred torque. When approaching maximum pressure, continuous operating temperature, minimum temperature or 50% of maximum P x T, consult Garlock Applications Engineering. Minimum temperature rating is conservative.

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

<sup>3</sup> These values are from style 2950. Style 2900 has higher values.

REV: 08/15/2023