

Style 5500

MATERIAL PROPERTIES*:

Color:	Gray
Composition:	Inorganic fibers with a nitrile binder
Fluid Services (see chemical resistance guide):	Saturated steam ² , most refrigerants, water, oils, gasoline & aliphatic hydrocarbons
Temperature¹, °F (°C)	
Minimum:	-100 (-73)
Continuous Max:	+550 (+288)
Maximum:	+800 (+427)
Pressure¹, Maximum, psig (bar):	1200 (83)
P x T (max.)¹, psig x °F (bar x °C):	
1/32 and 1/16":	400,000 (14,000)
1/8"	275,000 (9,600)
Meets Specifications:	ABS (American Bureau of Shipping) and Fire Safe

TYPICAL PHYSICAL PROPERTIES*:

ASTM F36	Compressibility , average, %:	10	
ASTM F36	Recovery , %:	50	
ASTM F38	Creep Relaxation , %:	15	
ASTM F152	Tensile , Across Grain, psi (N/mm ²):	1500 (10)	
ASTM F1315	Density , lbs./ft. ³ (grams/cm ³):	100 (1.60)	
ASTM F433	Thermal Conductivity (K) , W/m ² K (Btu·in./hr·ft. ² ·°F):	0.43-0.53 (3.00-3.65)	
ASTM D149	Dielectric Properties , range, volts/mil.		
	Sample conditioning	<u>1/16"</u>	<u>1/8"</u>
	3 hours at 250°F	284	245
	96 hours at 100% Relative Humidity:	-	-
ASTM F586	Design Factors	<u>1/16" & Under</u>	<u>1/8"</u>
	"m" factor:	6.6	6.6
	"y" factor, psi (N/mm ²):	2600 (17.9)	3300 (22.8)
ROTT	Gasket Constants , 1/16":	Gb=1,247	a=0.249 Gs=11.0

SEALING CHARACTERISTICS*

	ASTM F37B – Fuel A	ASTM F37B - Nitrogen	DIN 3535 – Nitrogen
Gasket Load , psi (N/mm ²):	500 (3.5)	3000 (20.7)	4640 (32)
Internal Pressure , psig (bar):	9.8 (0.7)	30 (2)	580 (40)
Leakage	0.3 ml/hr.	1.0 ml/hr.	0.05 cc/min

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.

² Minimum recommended assembly stress = 4,800psi. Preferred assembly stress = 6,000-10,000psi. Gasket thickness of 1/16" strongly preferred. Retorque the bolts/studs prior to pressurizing the assembly. For saturated steam above 150psig or superheated steam, consult Garlock Engineering.

REV: 10/11/2016