



Garlock BLUE-GARD 3400

MATERIAL PROPERTIES*

Color:	Grey-black
Composition:	Aramid fibers with a SBR binder
Fluid Services¹:	Water, saturated steam ³ , inert gases
Temperature², °F (°C)	
Minimum:	-100 (-73)
Continuous Max:	+400 (+205)
Maximum:	+700 (+371)
Pressure², Maximum, psig (bar):	1200 (83)
P x T (max.)², 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 , range, %:	7-17	
ASTM F36	Recovery , %:	50	
ASTM F38	Creep Relaxation , %:	18	
ASTM F152	Tensile , Across Grain, psi (N/mm ²):	2250 (15)	
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):	0.29-0.38 (2.00-2.65)	
ASTM D149	Dielectric Properties , range, volts/mil.		
	Sample conditioning	1/16"	1/8"
	3 hours at 250°F:	603	422
	96 hours at 100% Relative Humidity:	101	58
ASTM F586	Design Factors	1/16" & Under	1/8"
	"m" factor:	3.5	6.6
	"y" factor, psi (N/mm ²):	2100 (14.5)	3000 (20.7)
ASTM F104	Line Call Out:	F712902A9B4E45K5L102M9 ⁽⁴⁾	

SEALING CHARACTERISTICS*

	ASTM F37B Fuel A	ASTM F37B Nitrogen	DIN 3535- 4 Gas Permeability
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	0.1 ml/hr.	0.4 ml/hr.	0.03 cc/min

IMMERSION PROPERTIES* - ASTM F146 Fluid Resistance after Five Hours

	ASTM #1 Oil 300°F (150°C)	ASTM IRM #903 300°F (150°C)	ASTM Fuel A 70-85°F (20-30°C)	ASTM Fuel B 70-85°F (20-30°C)
Thickness Increase , (%)	0-10	15-30	0-15	5-20
Weight Increase , (%)	<20	-	<25	<30
Tensile Loss , (%)	-	<70	-	-