



**COMPOUND:** 711FF

**POLYMER:** Polytetrafluoroethylene (PTFE)

**DESCRIPTION:** 25% Carbon-Graphite Filled PTFE, Compression & Auto Molded Stock Shapes and Machined parts

Property	Test Method	Internal Specification Values	Typical Values	Units
Specific Gravity	ASTM D792	2.06 – 2.12	2.09	-
Hardness	ASTM D2240	60 - 70	63	SHORE-D
Tensile Strength at Break	ASTM D1708	2,175 (14.99) Minimum	2,570 (17.72)	PSI (MPa)
Elongation at Break	ASTM D1708	100 Minimum	160	%
Compressive Strength	ASTM D695		7,144 (49.26) Axial 7,969 (54.94) Radial	PSI (MPa)
Coefficient of Linear Thermal Expansion, Transverse 70 - 200 °F (21.1 – 93.3 °C) 70 - 300 °F (21.1 – 148.9 °C) 70 - 400 °F (21.1 – 204.4 °C) 70 - 500 °F (21.1 – 260.0 °C)	ASTM E861		5.09 (9.16) 5.52 (9.94) 6.23 (11.21) 7.34 (13.20)	X 10 <sup>-5</sup> °F <sup>-1</sup> (°C <sup>-1</sup> )
Coefficient of Linear Thermal Expansion, Axial 70 - 200 °F (21.1 – 93.3 °C) 70 - 300 °F (21.1 – 148.9 °C) 70 - 400 °F (21.1 – 204.4 °C) 70 - 500 °F (21.1 – 260.0 °C)	ASTM E861		6.93 (12.47) 7.69 (13.84) 8.61 (15.51) 10.09 (18.16)	X 10 <sup>-5</sup> °F <sup>-1</sup> (°C <sup>-1</sup> )
Deformation Under Load, 24 HRS @ 2,000 PSI, 73 °F Permanent Deformation after 24 HRS Relaxation	ASTM D621		2.61 (Axial) 2.02 (Radial) 1.10 (Axial) 1.70 (Radial)	%

**REVISION HISTORY**

REV. NONE – Initial Release, 8-22-2019 BRC

REV. A – Added Compressive Strength and CTE test data. Modified Deformation under load test data. Deleted Applications/Compliance table. Updated data sheet format, 10-02-2020 RSK