FF158-90

High Strength/Extrusion Resistance with Broad Chemical Compatibility

Extend Seal Life with FF158:

Parker's ULTRA FFKM FF158 delivers long seal life and reduces cost of ownership for end-users while providing high value. FF158 offers high strength, extrusion resistance, excellent chemical compatibility, and compression set resistance up to 527°F. The material is suited for use in a wide range of industries including Oil & Gas, Chemical Processing, General Industrial, etc.

High strength materials are critical for demanding applications like those experienced in the oil and gas industry. FF158 offers good elongation while possessing best in class tensile strength

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Product Features:

- 90 Shore A Hardness
- Broad Chemical Resistance
- Maximum Operating Temperature Up To 527°F
- ISO23936-2 RGD Resistance
- Cost Effective Sealing Solution
- Available in O-Rings and Custom Molded Shapes

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Property	FF158-90
Original physical properties	Test Results
Hardness, shore A, pts., ASTM D2240	88
Tensile strength, psi, ASTM D412 Die C	3404
Elongation, %, ASTM D412 Die C	111
100% Modulus, psi, ASTM D412 Die C	3152
Compression set, ASTM D395 Method B (Solid)	
Air, 70 hrs. @ 232°C, Solid, % Original Deflection, %	15
Air, 168 hrs. @ 232°C, Solid, % Original Deflection, %	20
Air, 500 hrs. @ 232°C, Solid, % Original Deflection, %	34
Heat Resistance, ASTM D573; Air, 70 hrs. @ 232°C	
Hardness change, pts.	No Change
Tensile Strength Change, %	-3
Elongation Change, %	7
100% Modulus Change, %	-9
Fluid Resistance, ASTM D471; Water, Distilled, 70hrs. @232°C	
Hardness Change, points, Type A	-4
Tensile Strength Change, %	-17
Elongation Change, %	2
100% Modulus Change, %	-19
Volume Change, %	5
180°Bend	Pass
Fluid Resistance, ASTM D471; Diesel Fuel #2 Pump, 70 hrs. @ 150°C	
Hardness Change, points, Type A	-4
Tensile Strength Change, %	-19
Elongation Change, %	-8
100% Modulus Change, %	-13
Volume Change, %	4
Fluid Resistance, ASTM D471; Cesium Formate (2.04g/cm3, pH=10.3), 168 hrs. @ 225°C	
Hardness Change, points, Type A	-1
Tensile Strength Change, %	-24
Elongation Change, %	-13
100% Modulus Change, %	-18
Volume Change, %	-1
180°Bend	Pass
Glass Transition Temperature, ASTM D7426	
Tg Inflection, °C	-1

and high modulus which helps resist extrusion in high pressure applications. Along with high strength, FF158 exhibits excellent resistance to aggressive media such as Sour Gas (H_2S), acids, amines, ketones, aromatic hydrocarbons, and many more. FF158 also meets the requirements of industry standard ISO23936-2 rapid gas decompression testing for elastomers to be used in high pressure gases.

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