

Material Properties: V115 (FKM)

NOTE - All testing done on AS568-214 size O-rings

Original Properties	AMS-R-83485 Type 1 and MIL-R-83485/1	V115
Hardness, Shore A, ASTM D2240	75±5	74
Tensile Strength, psi, ASTM D1414	1600 min.	2042
Ultimate Elongation, %, ASTM D1414	120 min.	196
Specific Gravity, g/cc, ASTM D297	Report	1.77
Temperature Retraction, ASTM D1329		
TR-10, degrees F	-20 max.	-22
Heat Aged, ASTM D573, 70 hrs. at 528°F		
Hardness change, Shore A, ASTM D2240	±5	-2
% Tensile Strength change, ASTM D1414	-35 max.	-19
% Elongation change, ASTM D1414	-25 max.	-5
% Weight loss, ASTM D297	-12 max.	-5.6
Compression Set, ASTM D395 Method B and ASTM D1414, Times and Temperatures as indicated		
% Permanent set, 70 hrs. at 75°F	25 max.	6
% Permanent set, 166 hrs. at 347°F	25 max.	17
% Permanent set, 22 hrs. at 392°F	20 max.	10
TT-S-735 Type III Fuel Immersion, ASTM D471 and ASTM D1414, 22 hrs. at 75°F		
Hardness change, Shore A, ASTM D2240	±5	-1
% Tensile Strength change, ASTM D1414	-30 max.	-6
% Elongation change, ASTM D1414	-20 max.	-10
% Volume change, ASTM D471	+1 to +10	+2
AMS 3021 fluid immersion, ASTM D471 and ASTM D1414, 70 hrs. at 392°F		
Hardness change, Shore A, ASTM D2240	-15 to 0	-5
% Tensile Strength change, ASTM D1414	-35 max.	-23
% Elongation change, ASTM D1414	-20 max.	-10
% Volume change, ASTM D471	+1 to +20	+14
Compression Set, ASTM D395 Method B and ASTM D1414, 70 hours at 392°F in AMS 3021 fluid		
% Permanent set	10 max.	0

NOTE - International Seal, Co. (ISC) is a wholly owned subsidiary of Freudenberg-NOK.

The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

Pub#2531
© Copyright FNGP 2007