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.

Pub#2531