

Material Properties

Low Temp FKM (V75LT, Viton® 75 Duro)

Material code: 204

For applications where the service starting temp could be below the freezing mark, it is highly suggested to use materials that can accommodate those low temperature ratings to prevent failure from cracking. The Low Temp FKM material is functional at temperatures as low as -40°F.

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

Original Properties	AMS-7276 and MIL-R-83248 Type 1 Class 1	Typical Values
Hardness, Shore A, ASTM D2240	75 ±5	74
Tensile Strength, psi, ASTM D1414	1600 min.	2042
Elongation, %, ASTM D1414	120 min.	196
Specific Gravity, ASTM D297	As determined	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		
% 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
Compression Set, ASTM D395 Method B and ASTM D1414, 70 hours at 392°F in AMS 3021 fluid		
% Permanent set	10 max.	0
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

Note: Property values should be interpreted as typical rather than minimum value. All technical information and recommendations are presented in good faith, and based upon laboratory and real-world tests believe to be reliable and practical. However, K.C. Seals, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customers' responsibility to determine product suitability to any given application.

