

## Material Properties: V75 (FKM)

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

Original Properties	AMS-7276 and MIL-R-83248C Type 1 Class 1	V75
Hardness, Shore A, ASTM D2240	75±5	78
Tensile Strength, psi, ASTM D1414	1400 min.	1985
Elongation, %, ASTM D1414	125 min.	205
Specific Gravity, ASTM D297	as determined	1.84
<b>Temperature Retraction, ASTM D1329</b>		
TR-10, degrees F	+5 or colder	+3
<b>Air Aging ASTM D573, 70 hrs. at 518°F</b>		
Hardness change, Shore A, ASTM D2240	-5 to +10	+2
% Tensile Strength change, ASTM D1414	-35 max.	-17
% Elongation change, ASTM D1414	-15 max.	+15
% Weight loss, ASTM D297	10 max.	3.6
<b>Compression Set, ASTM D395 Method B and ASTM D1414, 22 hrs. at 392°F</b>		
% Permanent set	15 max.	9.9
<b>Compression Set, ASTM D395 Method B and ASTM D1414, 336 hrs. at 392°F</b>		
% of Original Deflection	40 max.	28.5
<b>ARM-200 fluid immersion, ASTM D471 and ASTM D1414, 70 hrs. at 392°F</b>		
Hardness change, Shore A, ASTM D2240	-15 to 0	-7
% Tensile Strength change, ASTM D1414	-35 max.	-2
% Elongation change, ASTM D1414	-20 max.	+18
% Volume change, ASTM D471	+1 to +25	+16.3
<b>Compression Set, ASTM D395 Method B and ASTM D1414, 70 hours at 392°F in ARM-200 fluid</b>		
% Permanent set	10 max.	2.8
<b>ASTM Fuel B immersion, ASTM D471 and ASTM D1414, 70 hrs. at 75°F</b>		
Hardness change, Shore A, ASTM D2240	±5	-1
% Tensile Strength change, ASTM D1414	-20 max.	Nil
% Elongation change, ASTM D1414	-20 max.	+2
% Volume change, ASTM D471	0 to +5	+0.6

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