

# VX065-75

Extreme Low Temperature FKM



## Meeting the Industry Need for -65° F Sealing:

Facing the demanding requirements of the aerospace industry, VX065-75 delivers the extreme low temperature performance needed at high altitudes and during engine startup. With outstanding compression set resistance, VX065-75 significantly extends seal life in low temperature fuel applications where traditionally only fluorosilicone could be used. These characteristics make VX065-75 the ideal material when looking for extended life from a fluorosilicone or lower temperature performance from an FKM.



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## Product Features:

- Wide Temperature Range: -65°F to 400°F (-54°C to 204°C)
- Excellent Compression Set Resistance
- Extreme Low Temperature Performance
- 75 Shore A Durometer
- Excellent Jet Fuel Compatibility
- Excellent HTS Oil Compatibility
- FKM Durability



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# VX065-75 Test Data

## Extreme Low Temperature

Traditionally, FKM exhibits excellent high heat resilience but is still not suitable for some fuel applications, because of its inability to meet low temperature regulatory requirements. However, VX065-75 provides the resiliency needed in these low temperature applications without compromise. The typical fluorocarbon loses resiliency around 15°F below the TR-10 temperature. With a TR-10 value of -50°F, VX065-75 is reliable for -65°F sealing needs.

## Outstanding Compression Set Resistance

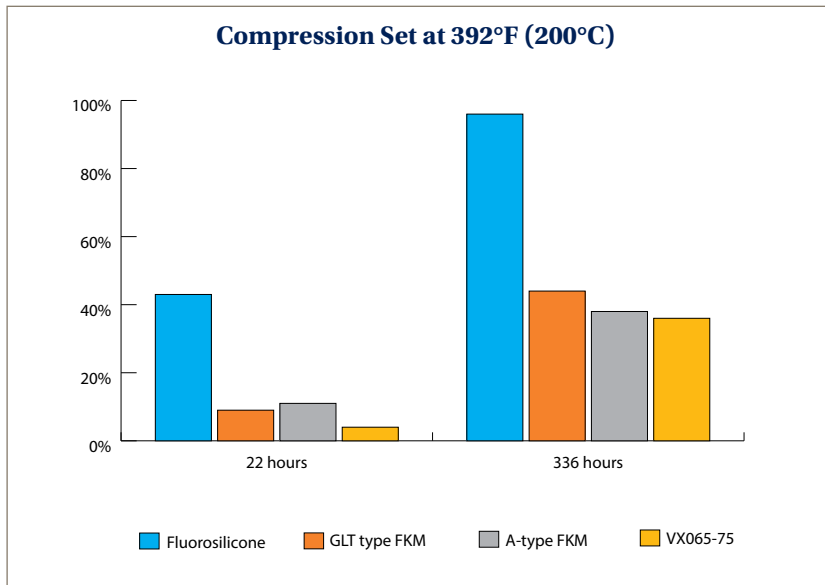
VX065-75 offers dependable compression set resistance under engine applications up to 400°F. Data demonstrates best in class compression set after short and long term exposure.

## Excellent Fluid Resistance

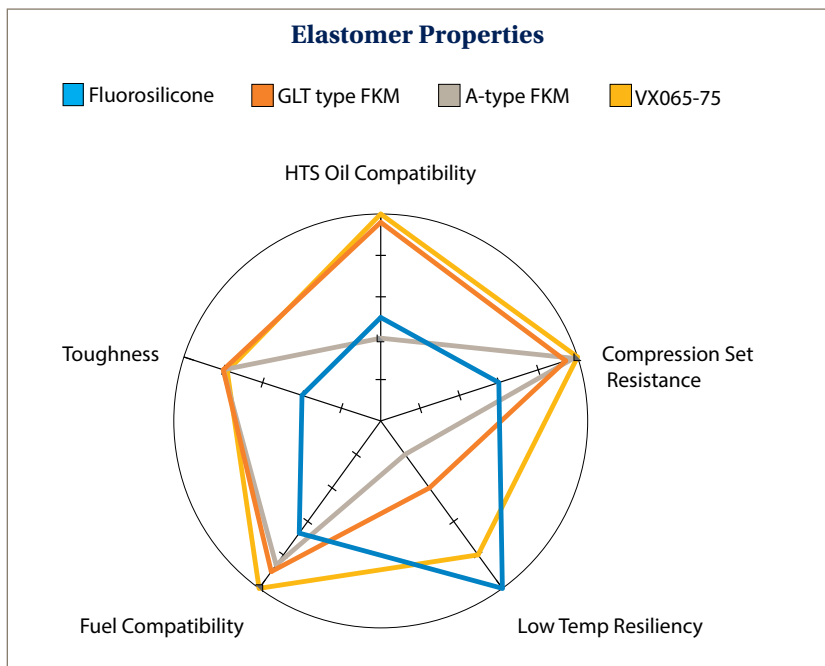
As expected from the FKM class of elastomers, VX065-75 maintains excellent compatibility with aerospace jet fuels, hydrocarbon-based hydraulic fluids and even aggressive HTS oils (MIL-PRF-23699).

## Applications

VX065-75 provides both the high temperature stability of an FKM and the low temperature resilience of a fluorosilicone while delivering a robust sealing solution for fuel, turbine oil and hydrocarbon-based hydraulic fluid environments. This makes VX065-75 the distinct solution when looking to extend the life of



Percent compression set is on various fuel system elastomers. Lower compression set numbers demonstrate improved seal life.



Relative ranking of elastomer properties for various fuel system elastomers.

fluorosilicone or low temperature nitrile materials. It also provides best in class FKM compression set resistance, making it a great choice for applications where A-type and GLT-type FKM's are used while

improving the low temperature resiliency. For interest in a different durometer, please speak to one of our applications engineers at 859-335-5101.

# VX065-75

## AS568-214 Test Data

Property	VX065-75
<b>Original Physical Properties, ASTM D2240, D1414</b>	
Hardness, Shore A pts.	75
Tensile Strength, psi	1403
Ultimate Elongation, %	170
<b>Low Temperature Retraction, ASTM D1329</b>	
TR-10, °F (°C)	-50°F (-46°C)
<b>Compression Set, ASTM D395 Method B</b>	
22 hrs. @ 392°F (200°C), % of original deflection	4
336 hrs. @ 392°F (200°C), % of original deflection	36
<b>Heat Age, 70 hrs @ 527°F (275°C), ASTM D573</b>	
Hardness Change, Shore A pts.	-2
Tensile Change, %, max	-36
Elongation Change, %, max	-15
Weight Loss, %	7
<b>Fluid Immersion, Reference Fuel B, 70 hrs. @ 73°F (23°C), ASTM D471</b>	
Hardness Change, Shore a pts.	-1
Tensile Change, %, max	-22
Elongation Change, %, max	+8
Volume Change, %	+6
<b>Fluid Immersion, Mobil Jet 254, 70 hrs. @ 392°F (200°C), ASTM D471</b>	
Hardness Change, Shore A pts.	0
Tensile Strength Change, %	-2
Ultimate Elongation Change, %	-4
Volume Change, %	+6
Compression Set, ASTM D395 Method B, % of Original Deflection	2





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