



# Fluorocarbon Seals AMS 7276 / Parco 9009-75



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## Viton AMS 7276 / Parco 9009-75 Fluorocarbon Seals

### General Characteristics

#### 1. Excellent resistance to compression set.

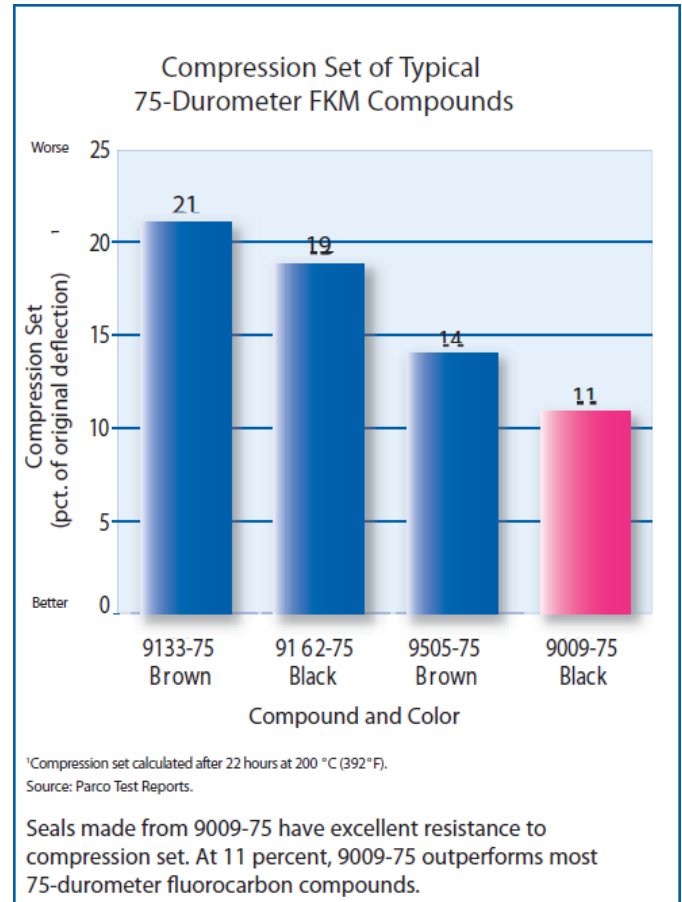
To perform properly, seals must resist taking a set from compression after being installed. When a seal takes a set, it no longer exerts force on the mating surfaces, resulting in leakage. A compound with low compression set, like our 75-durometer fluorocarbon compound 9009-75, better maintains its elastomeric properties and original thickness, preserving seal integrity. Seals made from 9009-75 compound provide excellent resistance to compression set at higher temperatures (see graph at right). After testing 9009-75 for 22 hours at 392°F, it had a compression set of only 11 percent.

#### 2. Outstanding resistance to fuel.

Parco's 9009-75 seals offer outstanding performance in fuel, including gasoline and diesel. Exposure to such fluids can cause seals to swell significantly. Our 9009-75 seals had volume swell of only 2 percent after 70 hours at 73°F in Reference Fuel C.

#### 3. Exceeds AMS 7276

Seals made from our 9009-75 compound exceed the requirements of Aerospace Material Specification (AMS) 7276. Seal & Design supplies seals to 65 military and aerospace specifications. We are also one of only a few manufacturers approved to supply Qualified Products List (QPL) rubber seals. Our quality system is certified to ISO/TS 16949 and AS9100. So when you specify 9009-75, rest assured that you've made the right choice.



### Key Features

- **Excellent resistance to compression set:**  
Parco 9009-75 seals have a compression set of only 11 percent after 22hrs at 392°F
- **Outstanding resistance to fuel, including gasoline and diesel:**  
Parco 9009-75 seals have volume swell of only 2 percent after 70 hours at 73°F in Reference Fuel C.
- **Meets popular aerospace specification:**  
Parco 9000-90 seals exceed the requirements of AMS 7276.
- **Wide range of service temperatures:**  
Parco 9009-75 seals are suitable for applications ranging from -20 to +400°F.

**Typical Values for Compound 9009-75**  
**75-durometer fluorocarbon for AMS 7276**

Section of Spec.	Physical Property	Requirement	Typical Value	ASTM Test Method
	<b>Original Properties</b>			
Z1	Hardness, Shore A	75 ± 5	76	D2240
	Tensile strength, MPa (psi), min.	10(1450)	17(2463)	D412
Z2	Ultimate elongation,%, min.	175	213	D412
	Modulus at 100%, elongation psi, min	Report	850	D412
Basic	<b>Fluid Aging, IRM 903 Oil 70hrs at 150 °C (302 °F)</b>			
	Volume change, %	10	1	D471
A1-11	<b>Heat Aging 70hrs at 250 °C (482°F)</b>			
	Hardness change, pts, Shore A max.	10	0	D573
	Tensile strength change, % max.	-40	-10	
	Ultimate elongation change, % max	-20	-9	
B38	<b>Compression Set, Plied 22hrs at 200°C (392°F)</b>			
	% of original deflection, max.	50	11	D395 Method B
EF31	<b>Fluid Aging, Fuel C 70hrs at 23°C (73°F)</b>			
	Hardness change, pts. Shore A	± 5	-8	D471
	Tensile strength change, % max	-25	-15	
	Ultimate elongation change, % max	-20	-7	
	Volume change, %	0 to 10	2	
EO78	<b>Fluid Aging, Service Liquid No. 101 70hrs at 200°C (392°F)</b>			
	Hardness change, pts. Shore A	-15 to 5	-8	D471
	Tensile strength change, % max	-40	-3	
	Ultimate elongation change, % max	-20	12	
	Volume change, %	0 to 15	10	
Z3	<b>Low Temperature Property TR-10 °C(°F)</b>	Report	-16(4)	D1329

Compound 9009-75 meets the requirements shown above for ASTM D2000 M4HK710 A1-11 B38 EF31 EO78 Z1 Z2 Z3.

Compound 9009-75 also meets the requirements for Aerospace Material Specification (AMS) 7276, Rings, Sealing, Fluorocarbon(Fkm) Rubber High-Temperature-Fluid Resistant Low Compression Set 70 to 80.