



Fluorocarbon Seals AMS 7259 / Parco 9009-90



Corporate Headquarters
4015 Casilio Parkway
Clarence, New York 14031
Ph: 716-759-2222 • Fax 716-759-6425



Canadian Division
5511 Steeles Ave West • Unit 5
North York, Ontario M9L 1S7
Ph: 416-741-0750 • Fax: 416-741-0230

Viton AMS 7259 / Parco 9009-90 Fluorocarbon Seals

General Characteristics

1. Excellent resistance to compression set.

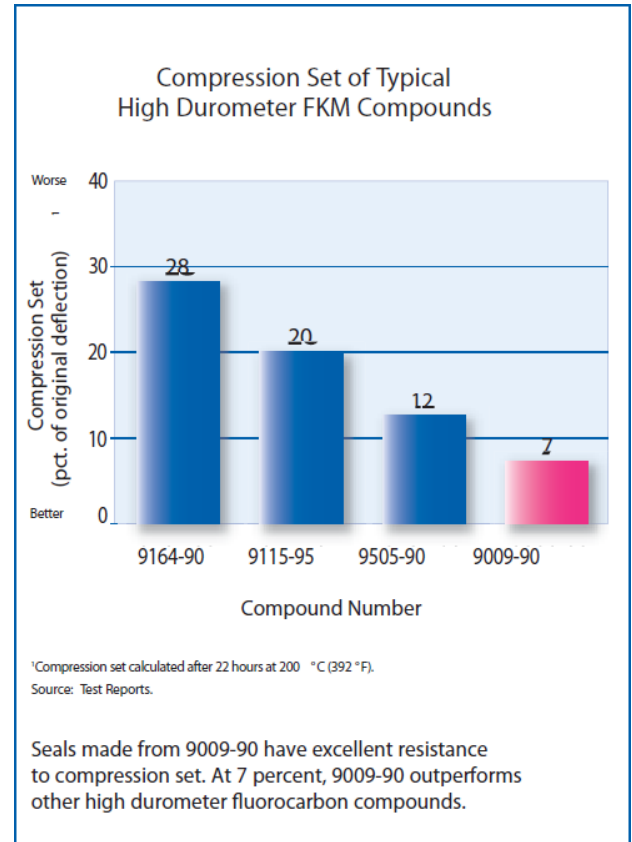
When installed, seals must resist taking a set from compression after being installed. When a seal takes a set, it no longer exerts force on the mating surfaces, resulting in leakage. A compound with low compression set, like our 90-durometer Fluorocarbon compound 9009-90, better maintains its elastomeric properties and original thickness, preserving seal integrity. Seals made from the 9009-90 compound provide excellent resistance to compression set at higher temperatures (see graph on right). After testing 9009-90 for 22 hours at 392°F, it had a compression set of only 7 percent.

2. Outstanding resistance to fuel.

Parco's 9009-90 seals offer outstanding performance in fuel, including gasoline and diesel. Exposure to such fluids can cause seals to swell significantly. Our 9009-90 seals had volume swell of only 2 percent after 70 hours at 73 °F in Reference Fuel C.

3. Exceeds AMS 7259

Seals made from our 9009-90 compound exceed the requirements of Aerospace Material Specification (AMS) 7259. 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 9009-90, rest assured that you've made the right choice.



Key Features

- **Excellent resistance to compression set:**
Parco 9009-90 seals have a compression set of only 7 percent after 22hrs at 392°F
- **Outstanding resistance to fuel, including gasoline and diesel:**
Parco 9009-90 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 7259.
- **Wide range of service temperatures:**
Parco 9009-90 seals are suitable for applications ranging from -20 to +400°F.

Typical Values for Compound 9009-90
90-durometer fluorocarbon for AMS 7259

Section of Spec.	Physical Property	Requirement	Typical Value	ASTM Test Method
Z1	Original Properties			
	Hardness, Shore A	90 ± 5	89	D2240
	Tensile strength, MPa (psi), min.	10(1450)	16.8(2437)	D412
	Ultimate elongation,%, min.	100	139	D412
	Modulus at 100%, elongation psi, min	Report	1715	D412
Basic	Fluid Aging, IRM 903 Oil 70hrs at 150 °C (302 °F)			
	Volume change, %	10	1	D471
A1-11	Heat Aging 70hrs at 250 °C (482°F)			
	Hardness change, pts, Shore A max.	10	1	D573
	Tensile strength change, % max.	-25	-5	
	Ultimate elongation change, % max	-25	-3	
B38	Compression Set, Plied 22hrs at 200°C (392°F)			
	% of original deflection, max.	50	7	D395 Method B
EF31	Fluid Aging, Fuel C 70hrs at 23°C (73°F)			
	Hardness change, pts. Shore A	± 5	-3	D471
	Tensile strength change, % max	-25	-1	
	Ultimate elongation change, % max	-20	7	
	Volume change, %	0 to 10	2	
EO78	Fluid Aging, Service Liquid No. 101 70hrs at 200°C (392°F)			
	Hardness change, pts. Shore A	-15 to 5	-7	D471
	Tensile strength change, % max	-40	-13	
	Ultimate elongation change, % max	-20	-13	
	Volume change, %	0 to 15	8	
Z2	Low Temperature Property TR-10 °C(°F)	Report	-18(0)	D1329

Compound 9009-90 meets the requirements shown above for ASTM D2000 M3HK910 A1-10 B38 EF31 EO78 Z1 Z2