

# Parco

## 4900-90 Nitrile Back-up Rings

### Need Nitrile Back-up Rings Tomorrow?

Parco is committed to being the leader in low-cost, general-purpose, 90-durometer nitrile back-up rings. In addition to our low prices, we've increased our inventory four fold and cut our minimums in half. So when you need nitrile back-up rings, you no longer have to check multiple sources for available inventory and competitive prices. Make Parco your first choice for 90-durometer nitrile back-up rings.

#### 4900-90 Meets Your Needs

##### 1. Excellent Physical Properties

Parco's 4900-90 nitrile back-up rings have excellent physical properties (see test report on reverse side). We also provide traceability by batch number and cure date with every shipment. For nearly 25 years, 4900-90 back-up rings have been used in a wide variety of applications with great results. So when you specify 4900-90, rest assured that you've made the right choice.

##### 2. Exceptional Prices

Parco's 4900-90 prices are among the lowest in the industry. We work with the best suppliers, buy in large volumes, and sell in standard-quantity bags. Those features allow us to provide you with 90-durometer nitrile back-up rings at a great price.

##### 3. Huge Inventory

We stock over 2.5 million pieces of 4900-90 back-up rings in all 346 Parco standard sizes. We've also made it easy to check stock. Using our web site, you can view our inventory 24 hours a day. If we receive your order before 2:30 p.m. Pacific Time, you can receive your parts as soon as the next business day.

#### Rely on Parco

Parco is a leading manufacturer of high-performance seals. We specialize in developing proprietary elastomeric compounds and bonding techniques. Parco's seals are available in more than 500 compounds.

Founded in 1941, Parco was the first manufacturer to specialize in O-rings. Our modern 154,000 square-foot facility is one of the largest plants in the world making molded rubber seals. Parco also makes custom-molded elastomeric products, including rubber-to-metal bonded parts. In addition, Parco imports and resells molded rubber seals.

For more information on Parco's 4900-90 back-up rings or to obtain samples, please contact a Parco customer service representative.

## Key Features

Parco's 4900-90 nitrile back-up rings are ideal for use in high-pressure applications. Key features include the following:

- **Lower cost:**  
Parco 4900-90 back-up rings cost much less than leather or teflon back-up rings.
- **Broader machining tolerances:**  
Parco 4900-90 back-up rings permit broader machining tolerance and clearances of mating parts.
- **Easy installation:**  
Parco 4900-90 back-up rings are easier to assemble than leather or teflon because they may be stretched up to 50 percent.
- **Broader machining tolerances:**  
Parco 4900-90 back-up rings are suitable for applications ranging from -30 to +212°F.

## Chemical Resistance

USE WITH	DO NOT USE WITH
Gasoline Military Aircraft Hydraulic Fluid	Automatic Transmission Fluid Hot Air Ultraviolet Light

## Typical Values for Compound 4900-90 General-purpose 90-durometer nitrile

Section of Spec.	Physical Property	Requirement <sup>1</sup>	Typical Value	ASTM <sup>2</sup> Test Method
	<b>Original Properties</b>			
	Hardness, Shore A	90 ± 5	89	D2240
	Tensile strength, MPa (psi), min.	10(1450)	13(1870)	D412
	Ultimate elongation, pct., min.	100	155	D412
Basic	<b>Heat Aging</b> <b>70 hours at 125°C (257°F)</b>			D865
	Hardness change, pts., Shore A	±15	4	
	Tensile strength change, pct.	±30	5	
	Ultimate elongation change, pct., max.	-50	-32	
B14	<b>Compression Set, Solid</b> <b>22 hours at 100°C (212°F)</b> pct. of original deflection, max.	25	20	D395 Method B
EO15	<b>Fluid Aging, ASTM Oil No. 1</b> <b>70 hours at 125°C (257°F)</b>			D471
	Hardness change, pts., Shore A	0 to 10	4	
	Tensile strength change, pct., max.	-20	-6	
	Ultimate elongation change, pct., max.	-35	-29	
	Volume change, pct.	-15 to 5	-8	
EO35	<b>Fluid Aging, IRM<sup>3</sup> 903 Oil</b> <b>70 hours at 125°C (257°F)</b>			D471
	Hardness change, pts., Shore A	±10	-5	
	Tensile strength change, pct., max	-15	-11	
	Ultimate elongation change, pct., max	-30	-21	
	Volume change, pct.	0 to 25	7	
F16	<b>Low Temperature Property</b> Nonbrittle after 3 minutes at -35°C	Pass	Pass	D2137

<sup>1</sup>Compound 4900-90 meets the requirements shown above for ASTM D2000 M4CH910 B14 EO15 EO35 F16 Z1. <sup>2</sup>ASTM is the acronym for the American Society for Testing and Materials. <sup>3</sup>IRM is the acronym for Industry Reference Material.

Source: Parco Test Report 7320C.

⚠ This brochure is intended as a guideline and reference. Appropriate testing and validation by users having technical expertise is necessary for proper use of Parco products.

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