

Resilon® Polyurethane O-rings

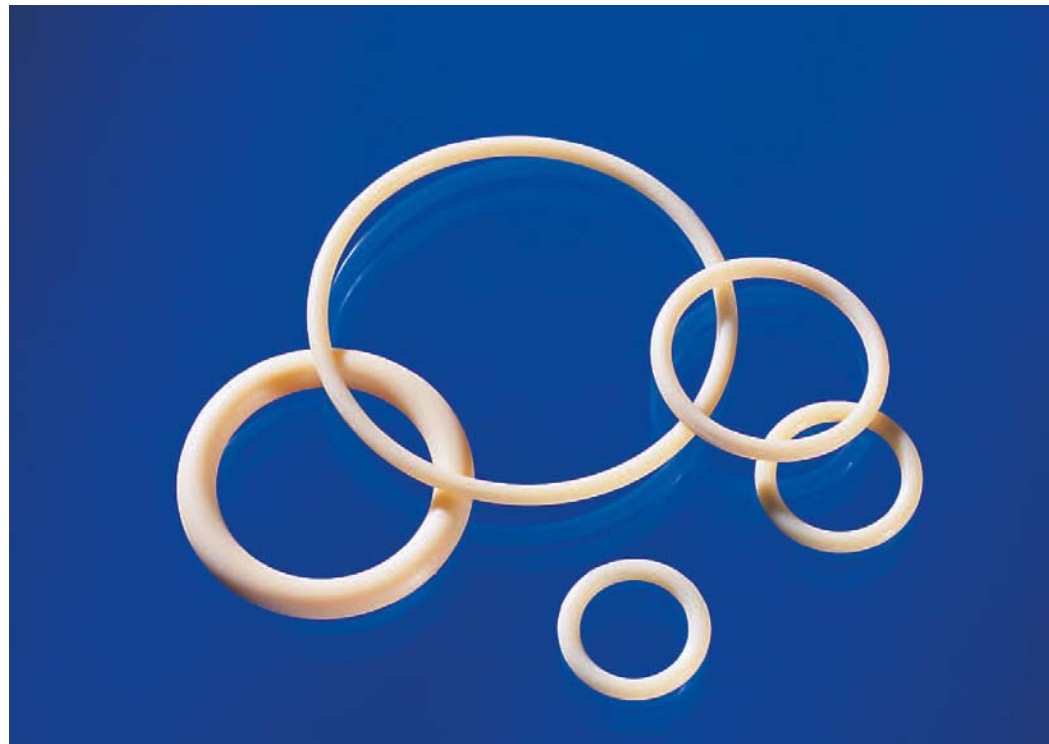
Advanced thermoplastic urethane delivers resilience, strength and thermal stability



High-performance and maximum seal life

Parker polyurethane O-rings, available in standard and custom sizes, offer the material advantages exclusive to the Resilon family of compounds. The unique formulation of Resilon polyurethane not only gives it the strength and abrasion resistance typical of a polyurethane elastomer but also the high resilience and low compression set characteristics of a nitrile polymer. Due to the increased strength and resilience of Resilon 4300 O-rings, the need for back-ups is eliminated — simplifying installation and saving time.

For dynamic and static sealing applications, Resilon polyurethane O-rings deliver cost effective sealing with maximum seal life and reduced down time.



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Product Features:

- Improved strength and wear-resistance extends seal life
- Expanded temperature range (-65°F to +275°F)
- Eliminates need for back-ups
- Simplifies installation
- Reduces damage due to spiral failure
- Dimensions and tolerances match up with AS568B specifications for diameter and cross-section to utilize same grooves
- Water resistant (4301) and extrusion resistant (4304) formulations available



ENGINEERING YOUR SUCCESS.

Resilon® Polyurethane O-rings

568 Profile

Temperature Considerations

When choosing a seal material it is important to consider both system temperature and the temperature range in the immediate O-ring environment (seal interface). In addition, the duration of exposure to any high temperature, whether it involves short bursts or long, sustained exposure must be considered. Resilon 4300 polyurethane performs exceptionally well in this area and is an excellent solution for demanding O-ring applications.

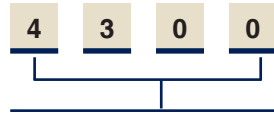
Chemical Compatibility

A major factor in O-ring material selection is the material's ability to resist degradation when exposed to certain chemicals. Therefore, an important step in material selection is to match the application's anticipated media with the material that provides the greatest resistance. Resilon 4300 polyurethane is compatible with most petroleum base fluids, acetic and alkaline solutions under 10% concentration, salts, aliphatic alcohol, hydrocarbons and mixtures containing less than 80% aromatics, oxygen, and ozone.

Resilon polyurethane O-rings are recommended for use in dynamic and static applications such as:

- **Heavy- and medium-duty hydraulic cylinders**
- **Pneumatic cylinders**
- **Valves**
- **Actuators**

Part Number Nomenclature: Resilon Polyurethane 568 Profile, Inch



4 Digit Material Code

Example:

4300 = Resilon 4300



Profile



AS568 O-ring Dash Number

Example:

2-128 = 1.487" I.D. x 0.103" CS

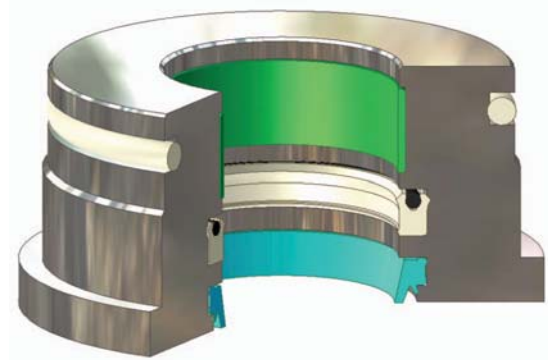
Resilon Polyurethane O-ring Materials

Typical Physical Properties	4300A90	4301A90	4304D60
Hardness (Shore), pts	(A) 92	(A) 90	(D) 55
Tensile Strength at Break (psi)	8625	7129	6521
Ultimate Elongation (%)	560	514	556
100% Modulus (psi)	1793	2029	2940
Compression Set (%), 70 hrs @ 212°F	28.9	24.8	32.2
Rebound (%)	63	45	46
Service Temperature Range (°F)	-65 to +275	-35 to +225	-65 to +275

Suitable for Dynamic and Static Applications



568 installed on Cartridge Valve



568 installed in Static Head Gland