

## Technical Datasheet

**Applied Seal's specialized manufacturing produces the only black Perfluoroelastomer O-Rings such as PERFREZ® XL18 in a dedicated clean room**

As one of a specialized line of Perfluoroelastomers developed for the harsh environments of the Semiconductor Industry, PERFREZ® XL18 will outlast standard materials that impact process integrity.

This material is designed for strength, resiliency and relative cleanliness. PERFREZ® XL18 is an all-purpose material that can be an upgrade to most of the standard, less suitable sealing elements not acceptable for the stringent requirements of the Semiconductor, Solar and 'Clean' industries.



### Features and Benefits

- High Temperature capabilities
- Peroxide Curing System
- Exceptional Heat Resistance
- Broad Chemical Resistance



### Semiconductor Applications

- Deposition: CVD, APCVD,
- HDPCVD, RPCVD, SACVD
- Plasma Etch: oxide and metal
- Ashing
- Ion Implant
- RTP
- Lamp Anneal

## Physical Properties

<b>Color</b>	Black	
<b>PROPERTIES</b>	<b>ASTM</b>	<b>VALUE</b>
Hardness, (Shore A)	D2240	80-/+5
Tensile Strength psi, (MPa), min	D1414	2683 (18.5)
Elongation, %, min	D1414	155
Modulus at 100% psi, (MPa), min	D1414	1638 (11.3)
Minimum Operating Temperature	-30°C	
Maximum Operating Temperature	280°C	

**\*\*EVEN THOUGH ELONGATION PROPERTY IS INDICATED, MOST PERFLUROELASTOMER MATERIALS SHOULD NOT BE STRETCHED FOR OPTIMAL PERFORMANCE.**

*Note: color variations may be observed in parts. Variations are considered to be cosmetic and inherent as a result of curing process, not indicative for foreign matter and is not expected to have an adverse effect on the performance of the part in service.*



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