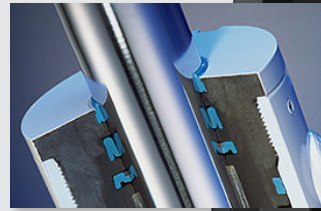
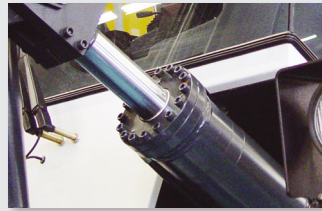
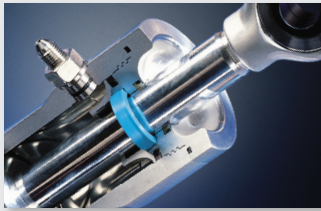


# Elastomeric Dualseal

ONE-PIECE DESIGN FOR STATIC HYDRAULIC APPLICATIONS



**A unique one-piece design provides an alternative to O-Rings and Back-up Rings in standard groove sizes for static hydraulic sealing applications.**

Developed to address a need in the fluid power industry, the Elastomeric Dualseal is a one-piece alternative to O-Rings and Back-up Rings for static sealing. As a single component, it can easily retrofit existing standard ISO 3601-1/AS 568 O-Ring groove sizes and provides the advantage of improved performance in most applications.

As an addition to Trelleborg Sealing Solutions wide range of technically superior time-saving products for the fluid power industry, Elastomeric Dualseal is recommended for heavy duty applications in cylinders and valves. Easy to install, the seal's features and benefits contribute to a long service life and ultimately increase reliability in applications.

## Application Examples

- Fork Lifts
- Industrial Hydraulics
- Mobile Hydraulics
- Machine Tools
- Cartridge Valves
- Hydraulic Press
- Injection Molding Presses

## Features and Benefits

- One-piece design ideal for automated assembly eliminates the risk of installing the wrong size
- Excellent sealing performance
- Compatible with the latest hydraulic fluids
- Extended service life
- Cost optimization
- Resistant to twisting post-installation
- Stability at pulsating pressures
- Low contamination risk

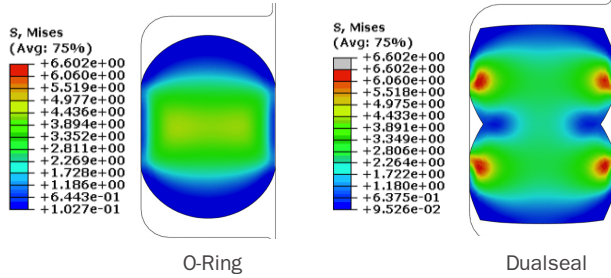
# Elastomeric Dualseal

## Product Focus

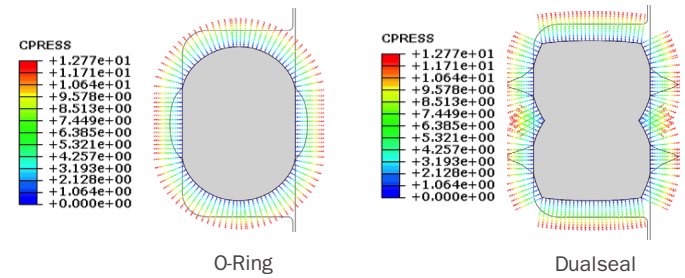
Static Pressure	Temperature Range	Extrusion Gap	Media
0-21 MPa 0-3,000 psi	-30°C to 100°C -22° F to 212° F	0.15 mm max. radial .006 in. max. radial	Petroleum Based Hydraulic Fluids (Reference the Chemical Compatability Guide to verify material applicability)

Note: The above data are maximum values and cannot be used at the same time. E.g. the maximum operating speed depends on material type, pressure, temperature and gap value. Temperature range also dependent on medium.

## Mises Stresses (0 MPa)



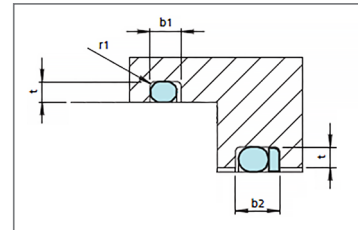
## Contact Stress (0 PSI)



## Hardware Guidelines

- Zero Back-up Dualseal (DUR00B\*\*\*) is designed to replace an O-Ring (ISO 3601-1/AS568\*\*\*) in industry standard grooves
- Custom groove can be utilized with the same design considerations for squeeze and occupancy as standard O-Rings
- Take into consideration that the DUR00B\*\*\* has a volume approximately 7.5% larger than the corresponding O-Ring
- In applications with groove occupancy calculated over 85% for the O-Ring, expected high swell, or high temperature, additional care should be taken for groove design
- One Back-up Dualseal (DUR10B\*\*\*), is designed to replace an O-Ring (ISO 3601-1/AS568\*\*\*) and a concave back-up ring made of NBR90 Shore A in industry standard grooves

Custom grooves can be utilized following the squeeze and area guidelines in the following table.



## Groove Recommendations

ISO3601-1/AS568 Sizes	Cross-Section mm IN	Groove Depth (t) mm IN		0 Back-up Groove Area Minimum (t x b <sup>2</sup> )	1 Back-up Groove Area Minimum (t x b <sup>2</sup> )
		Minimum	Maximum	mm <sup>2</sup> IN <sup>2</sup>	mm <sup>2</sup> IN <sup>2</sup>
004 through 050	1.78 0.070	1.25 0.049	1.58 0.062	3.00 0.0047	4.45 0.0069
102 through 178	2.62 0.103	1.97 0.078	2.42 0.095	7.32 0.0113	8.94 0.0139
201 through 284	3.53 0.139	2.65 0.104	3.33 0.131	13.39 0.0208	14.90 0.0231
309 through 395	5.33 0.210	4.00 0.157	5.13 0.202	30.82 0.0478	34.11 0.0529
425 through 475	6.99 0.275	5.24 0.206	6.79 0.267	54.68 0.0848	59.49 0.0922

## Standard Surface Quality Specifications

- TSS TBS-00051
- AQL 1.0 ISO2859-1, general inspection level II, normal



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