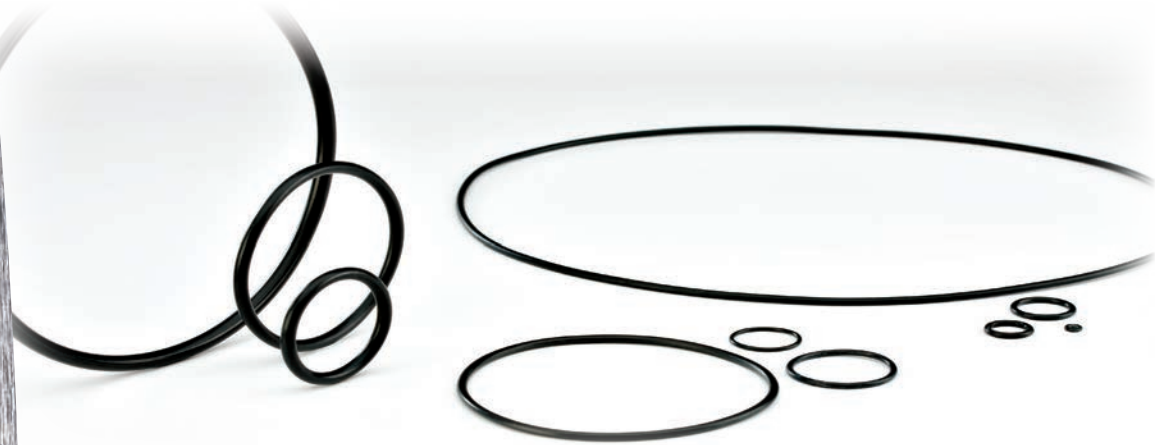


O-Rings



Standard AS-568, JIS-2401 and Metric sizes

1,000's of standard sizes available or custom order

Made of elastomers, plastics or metal. O-Rings seal a passageway and prevent unwanted loss or transfer of fluids. This is achieved by mechanically compressing or placing the O-Ring against the walls of the passageway or gland, creating a zero-clearance for the fluid being sealed. The more pressure applied to the O-Ring, the more effective the seal. O-Rings have the capability to form a static seal, one that's responsible for containing pressure, OR a dynamic seal, one that reciprocates or rotates with the shaft. Choosing the right material depends on a number of selection factors including: chemical compatibility, the application, maximum operating temperature, required lubrication and the sealing pressure.

Common Materials:

- **Nitrile (NBR)** is the most widely used elastomer due to its excellent resistance to petroleum products, operating temperature range (-40°F to +257°F) and one of the best performance-to-cost values.
- **Ethylene-Propylene (EPDM or EPM)** has outstanding resistance to heat, water and steam, alkali, mild acidic and oxygenated solvents, ozone, and sunlight (-40°F to +275°F); but it is not recommended for gasoline, petroleum oil and grease, and hydrocarbon environments.
- **Neoprene® (CR) (-40° to +250°F)** features good resistance to petroleum oils, ozone, sunlight and oxygen aging, relatively low compression set, good resilience and outstanding physical toughness.
- **Fluorosilicone (FMQ) (-75° to +400°F)** combines the good high and low temperature stability of silicones with the fuel, oil, and solvent resistance of fluorocarbons.
- **Fluoroelastomer (FKM) (Viton®)** exhibits exceptional resistance to chemicals, oils, temperature extremes (-13°F to +446°F), low compression set, low gas permeability and excellent aging characteristics.
- **Silicone (VMQ)** In the Silicone family, you will find compounds which are superior as static seals in extreme temperature conditions. Standard compounds handle operating temperatures -85° to +400°F.
- **Custom O-ring coatings available upon request**

The engineers at GBSA can help you determine the proper gland size and which material has the right characteristics for your application. Our integrated engineering service includes complete product testing and evaluation, reverse or design engineering. Color can be provided to distinguish one component from another. Deliveries are among the fastest in the industry. We supply long or short runs with tooling costs that are surprisingly low.

GBSA provides you with a multitude of Value-Added Services. Just-In-Time stocking programs make ordering and tracking inventory shipments easy and at a reduced cost. Kitting leads to a faster receipt of goods and a complete reduction in down time. Custom packaging is always available when required.

For additional information or to submit a quote request, see our website at GBSA.com. You can also call our sales or engineering department at 800.837.4272