

# Vulcanized O-Rings & O-Ring Cord

Custom spliced and bonded rings for large diameters, prototype quantities, and non-standard sizes

## Overview

When a molded O-ring exceeds standard size tables or when you need a small quantity of a custom size without mold tooling, vulcanized O-rings are the practical solution. We manufacture spliced and bonded O-rings from extruded cord stock, vulcanizing the joint to create a continuous seal.

Vulcanized O-rings are widely used for large diameter static seals such as tank manways, access hatches, flange gaskets, and conveyor systems. They are also the fastest way to prototype a new O-ring size before committing to compression molding tooling. We supply vulcanized rings and continuous cord in NBR, FKM, EPDM, VMQ (Silicone) and PTFE.

## Types

	Best For
Spliced at the ends, and vulcanized under heat and pressure to form a continuous ring. The joint strength approaches the parent material when processed correctly.	Large diameters, prototype quantities, and non-standard sizes
Spliced with uncured rubber compound at the joint, cured in a mold under pressure. Produces a joint with physical properties nearly identical to the cord stock.	Critical applications
Spliced without heat curing. Ideal for emergency repairs, prototype validation, and applications where heat curing is not practical.	Emergency repairs

## Materials

Material	Properties	Best For
NBR Cord	-40 C to +120 C, excellent oil and fuel resistance, economical	Hydraulic tanks, fuel systems, general industrial static seals
FKM Cord	-20 C to +200 C, superior chemical and heat resistance	Chemical tanks, high-temperature flanges, aerospace ground support
EPDM Cord	-50 C to +150 C, excellent water, steam and UV resistance	Water treatment, HVAC, outdoor enclosures, marine hatches
VMQ (Silicone) Cord	-60 C to +230 C, FDA grades available, flexible at extreme temperatures	Food equipment, medical devices, oven and freezer seals
PTFE Cord	-200 C to +260 C, universal chemical resistance, low friction	Chemical processing, cryogenic systems, high-purity static seals

## Sizing

Vulcanized O-rings are made to your exact inside diameter and cross-section requirements. We stock common cord diameters and can splice any size within manufacturing limits.

## Available Size Ranges

Series	Coverage
Standard Cord Diameters	1.50mm, 2.00mm, 2.50mm, 3.00mm, 3.53mm, 4.00mm, 5.00mm, 5.33mm, 6.00mm, 6.99mm, 8.00mm, 10.00mm
Large Diameter Rings	100mm to 3,000mm ID (and larger on request)
Custom	Any cord diameter and ring ID manufactured to specification

## FAQ

**How strong is the joint on a vulcanized O-ring?**

Hot vulcanized joints typically achieve 70-90% of the tensile strength of the parent cord stock. Cold-bonded joints are weaker (30-50%) but sufficient for many static and low-pressure applications.

**Can vulcanized O-rings be used in dynamic applications?**

Vulcanized O-rings are generally recommended for static seals only. The joint is the weakest point and may fail under repeated dynamic motion or high pressure. For dynamic service, specify molded O-rings.

**What is the largest vulcanized O-ring you can make?**

We regularly manufacture vulcanized rings up to 3,000 mm inside diameter. Larger sizes are possible by special arrangement. There is no upper limit for continuous cord supply.

**How fast can you deliver a custom vulcanized O-ring?**

Standard lead time is 3-5 days for common materials and sizes. Emergency same-day or next-day service is available for critical breakdowns.

**Do vulcanized O-rings cost less than molded O-rings?**

For large diameters and low quantities, vulcanized rings are usually more economical because there is no mold tooling cost. For high-volume production of standard sizes, molded O-rings typically have a lower unit price.