

Encapsulated Rings (FEPs)

An encapsulated O-ring comprises of an elastomer core which has been seamlessly encapsulated in a jacket of Teflon® fluoropolymer. The core is either Viton® (FKM), Silicone (VMQ) or EPDM, and the jacket FEP or PFA.

Encapsulated O-rings are recommended when a standard O-ring has inadequate chemical resistance for an application and a solid PTFE O-ring does not have the elasticity for reliable, long term fluid sealing.

They are often used in the chemical, petrochemical, food and pharmaceutical industries, where chemical resistance and / or hygiene are required.

We can provide practically any size of encapsulated rings, with many sizes held in stock. We can offer both solid and hollow core styles as well as Cam and Groove gaskets.

Encapsulated O-rings are available in Cross Sections from 1.78mm - 25.4mm. The only limits to size are with the smaller ID's, please check our website for size limitation chart as the diameter of the cord dictates the smallest possible ID.

FEP Encapsulated O-rings offer excellent resistance to a wide range of chemicals and typical temperature ranges of:

- -60°C to +200°C with Silicone core
- -20°C to +200°C with Viton® core

They offer low friction and low 'stick-slip' effect.

PFA Encapsulated O-rings offer extra abrasion resistance and when combined with the Silicone core offer a flexible temperature range of -60°C to +260°C.

We also supply PFA Encapsulated O-rings with a Viton® core that offer a variable temperature range of -20°C to +200°C. Viton® core PFA Encapsulated O-rings provide extra abrasion resistance.

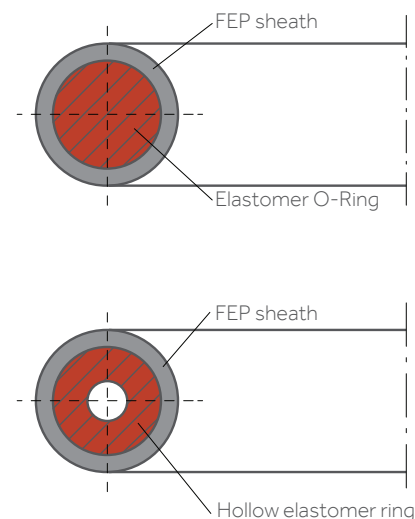


Figure 1.1 Different versions of FEP O-ring

“ We supply a wide range of custom **encapsulated O-rings available on short lead times**, and can provide **bespoke CSD profiles / shapes** for our encapsulated seals. ”