

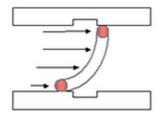
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## <u>Installation Guide</u> O-rings FEP Encapsulated Silicone and Viton

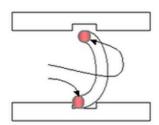
The correct installation of FEP is essential in order to obtain prolonged seal life. 90% of reported seal failures turn out to be fitting or housing design problems.

## **Internal Groove**

To fit an FEP into a groove in a bore can be difficult as the seal needs to be collapsed. This is best done by immersing the ring in hot water (60-70 C) for ten minutes. Quickly remove the ring from the water and insert into the bore passing the leading edge carefully past the groove.

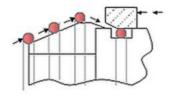


Then, after locating the trailing edge of the ring firmly down into the groove, pull back the leading edge and the ring will snap into place. Insert the shaft immediately while the ring is still warm and flexible.



## **External Piston**

It is possible to fit FEP's to certain solid piston head type grooves by utilising a `fitting cone'. Once again the ring must be immersed in hot water and quickly and evenly pushed along the cone until the ring drops into the groove.



It may be necessary to help the ring return to its correct diameter by applying external pressure to the ring with the aid of a 'resizing ring'. This is produced like the cone from brass or hard plastic with great care taken to smooth any edges or corners. These aids like the groove corners will cause premature failure of the O Rings if they are not perfectly free from burrs and sharp edges.

It should be emphasised that FEP's will only stretch and collapse to a very small degree and the difficulties involved with fitting would be avoided if the housings are of split design.