

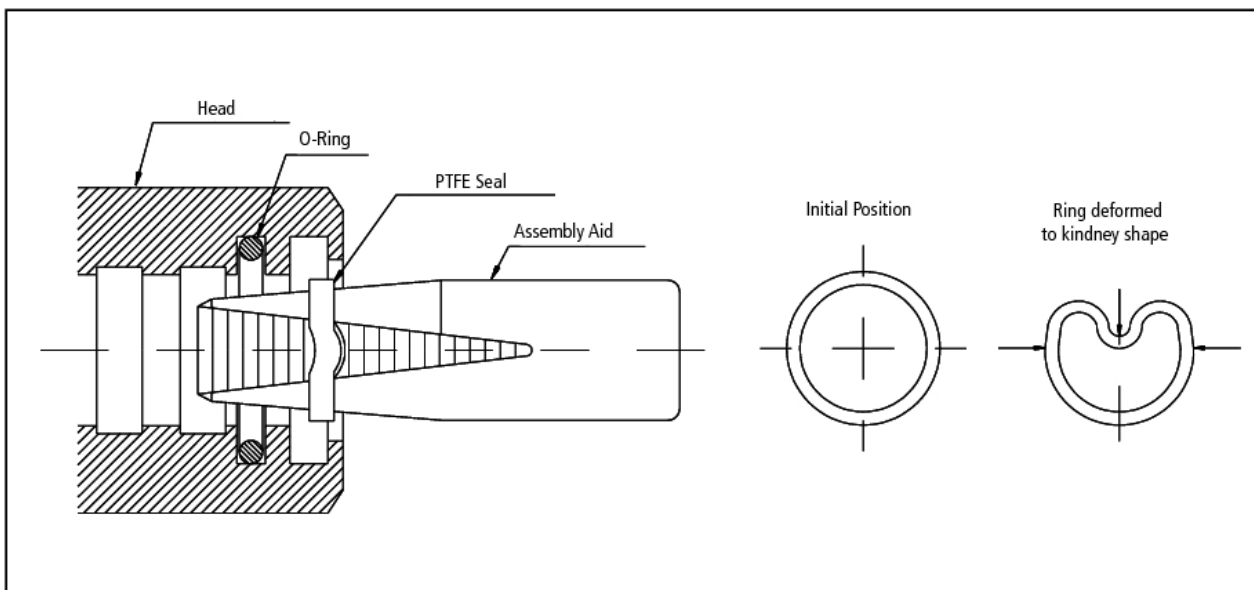
Guidelines for assembly of PTFE rod seals

To provide safe and proper assembly, please adhere to the company specified measurements, tolerances and surface areas strictly.

Initially the O-ring is inserted in the groove (for rod thicknesses up to 30 mm nominal diameter we recommend the use of axially accessible storing space).

The rod seal is now carefully bent to a kidney shape, inserted in the groove and resized with a suitable mandrel.

A metallic conical mandrel can also be used to deform the profile sealing ring. The mandrel contains a wedge shaped recess at the front end. A recess can be pre-cut into the ring. The ring can subsequently be inserted into the groove as specified above. Here, profile thickness must be resized even after removal of mandrel.



Storage of rubber products

(Also refer DIN 7716)

During storage, vulcanized rubber products tend to undergo a change in their physical characteristics subject to influence of oxygen, ozone, light, heat and/or moisture. Careless storage can damage rubber products leading to hardening, softening, cracks etc. which render the product useless. Careful compliance to the following suggestions can reduce the damage to rubber components providing improved life.

Temperature

Store room temperature may not exceed +25°C. Constant exposure to low temperatures (also below 0°C) does not harm rubber products. If rubber articles need to be taken out of the store room at sub zero temperatures, they should first be warmed to +20°C.

Oxygen - Ozone

Whenever possible, vulcanized rubber products must be protected from ambient environment using suitable packaging such as storage in air-tight foils. This specifically applies to rubber articles with larger surface area and volume. Ozone attacks rubber, therefore the storage room must never contain electrical equipment that promotes the generation of ozone.

Ambient Air

Humidity should be maintained at 65% in a preferably dust free environment.

Light

Rubber products must be protected from direct sun and artificial light sources with high UV content. If articles are not packed in opaque containers or special foils, it is essential that store room windows be coated with anti UV material.

Deformation

If possible, store these products free from pressure elongation and deformation to avoid deformation. Preferably retain these products in their original packaging.

Contact with Fluids and Semifluid Media

Rubber articles should not have contact to fluid or semifluid media during storage. Contact with solvents, oils and fats or greases should be avoided.

Contact with Metals

Metals like manganese, steel, copper and its alloys can destroy rubber products when in direct contact. A simple protective partition from paper, polyethylene sheet etc, may be used to isolate the seals.

Contact with Non-Metals

Contact with other kinds of rubber or PVC is to be avoided.

Storage Duration

Keep storage time to a minimum and follow the principle of "first-in-first-out" in using the seals.

Cleaning

Cleansing of rubber products, if necessary, can be carried out with water, soap or methanol. Organic cleaning solvents like trichloro ethylene, carbon tetrachloride or petroleum are not to be used. All parts must be dried at room temperature before use.

Storage Time

The polymer incorporated in the rubber product determines its service life. Following table gives shelf life under optimal conditions. The following criteria should be strictly checked prior to first use and after the initial storing time.

- 1.) recognizable mechanical destruction
- 2.) permanent deformations and changes
- 3.) check for hairline cracks or changed surface morphology
- 4.) check for undue softening or surface hardening.

Basic Polymer	First Time Storage	Storage after Inspection (2nd)
Fluoroelastomer /GFPM Fluorosilicones Chlorosulphonated PE	10 years	4 years
Neoprene (CR) Ethylene-Propylene-Diene (EPDM) Nitrile/PVC blend	5 years	2 years
Natural Rubber Nitrile (NBR) Butyl Rubber Polyurethan (PU) Styrol Butadiene Rubber (SBR)	3 years	2 years

WARNING: Limits of application stated herein are standard values. They could be individually transgressed with due consideration to respective service conditions. In the event of a large duty cycle, pulsating operation and other complex operational conditions, simultaneous transgression of these values is not recommended. Due to a large variety of service conditions that may arise in course of actual use, the company does not take responsibility of or guarantee the functional accuracy of the individual components. Rights for changes are reserved.

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