

Modern design of axially accessible mounting area:

We have evolved this highly advantageous system for rod sealing and sliding in consultation with our clients (drawing N°. 3). It is designed to aid slip-in type of assembly of all guiding and sealing parts of the rod as necessary.



This proven variation of the open mounting area offers the following advantage over the conventional design with closed groove:

- Simple and cost effective manufacture of connecting piece head
- Optimal control of surface areas at the static sealing site and component accuracy to size
- Safe and fast assembly of sealing and guiding elements without the danger of damage to sealing edges
- Automatic assembly possible
- Variable design of guide lengths
- Service friendly: some components of the sealing system can be quickly and easily replaced
- Optimal protection against split extrusion of rod sealing through additional support ring.

General assembly hints:

To avoid assembly related damage and to enhance the service life of seals, please follow the advice given below:

To avoid assembly related damage, carefully remove sharp edges, burr and all likely sources of contamination.

Adequate lead-in bevels simplify the assembly process and reduce possibility of damage. The following formula gives required lead-in bevel:

$$L = \frac{D - d}{4}$$

L: Length of lead-in bevel D: nominal external diameter d: nominal internal diameter



- During assembly over threads, insert adequate protection between the sealing and the thread.
- Preassembled seals must never be subject to unilateral loads prior to assembly since this may cause deformation.
- Moderate heating of seals up to 60°C in hydraulic oils and application of mineral fat to seals and assembly components simplifies montage.

Guidelines for assembly of PTFE piston seals

To ensure a safe and proper assembly please adhere to the specified measurements, tolerances and surface areas strictly. Initially the O-ring is inserted in the groove. Piston seals of up to 100 mm nominal diameter and radial thickness of over 1.6 mm are stretched apart carefully using assembly tools and snap fit into the groove (see drawing).

Piston seals of over 100 mm nominal diameter can also be prised apart and fitted by hand taking care that the profile thickness is maintained as uniform as possible.

Lead in grooves that occur incidentally can be bridged by sheet metal or plastic strips or bands. We recommend the use of a stretching housing to overcome assembly problems related to short lead-ins and large amount of stretching (see drawing).

Assembly tools are to be fabricated preferably from metals or polyamide.

