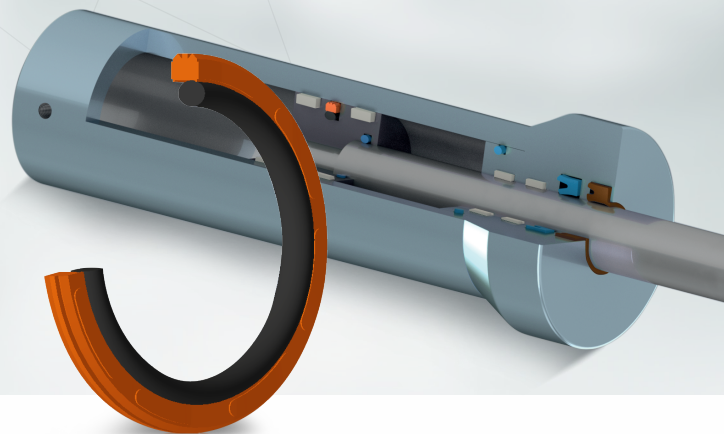




Double-acting Piston Seals for ISO Grooves



- Excellent static and dynamic sealing effect due to high performance material properties
- Outstanding abrasion and extrusion resistance
- Simple groove design, one-piece piston possible
- Suitable for grooves to ISO 7425
- Excellent tightness and energy efficiency
- Simple installation
- Durability and service life time outstanding due to tribologically optimised TPU-material
- Full compatibility with mineral oils. Special material grades tailored for environmentally friendly pressure fluids available

FiPur® double-acting piston seal consisting from a special TPU-based seal ring and an O-ring as energizing element.

The seals unique characteristic is caused by the sealing edge profile. Two preceding seal edges act primarily as pressure borderline from both sides and prevent any risk of hydrodynamic pressure which might built-up over the seal profile as well as avoiding the risk of blow-by effects. Central back-up and sealing bulge increase sealing effectivity. Grooves located on both sides plane surfaces are generating in any case the activation of the O-ring energizer. These ensure direct pressure loading of the seal under all operation conditions.

FiPur®-piston seal is an ideal solution for standardizing cylinder construction. It is an efficient and a very cost-effective sealing solution. Cylinders can be adapted meeting different operating conditions. Therefore gap dimension must be checked.

Application Examples

FiPur® double-acting piston seal is recommended for double acting hydraulic pistons in various sectors, e.g.:

- Mobile- and industrial hydraulics
- Machine tooling
- Forklifts and material handling machinery
- Agriculture
- Industrial hydraulic light to medium duty
- many more application areas

Technical Data*

Pressure	Up to 25 MPa - FiPur® 100 Up to 40 MPa - FiPur® 150
O-ring	NBR 70 Shore A
Speed	Up to 0.5 m/s
Temperature	-35°C to +110°C
Pressure-fluids	based on Mineral oil (HLP/HLPD/HVLP)

* Important Note: All mentioned data are maximum values and cannot be used at the same time. Maximum operating speed depends on material hardness, pressure, temperature and gap size as well as on the pressure fluid.

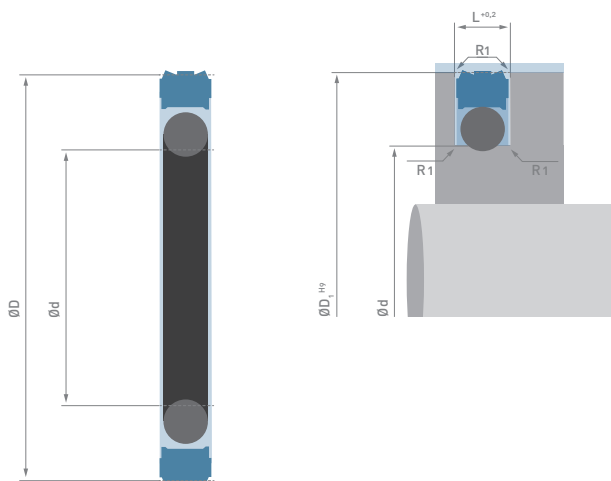


Fig. 1 Cross section of the double-acting piston seal
Fig. 2: Cross section of the installation situation

Installation instructions

The profiles snap into the standardized installation spaces according to ISO 5597 an ISO 7425-1. We recommend to avoid mounting the piston seal over sharp edges. Sharp edges can result in damage of the sealing lips. Please note that the assembly forces with large profile cross-sections increase sharply and therefore assembly aids are needed. If required, you will receive further construction information.

Product Catalog

