



Function

Piston seals are designed to seal the pressurized hydraulic fluid against the atmosphere or between two pressurized spaces.

Features

- ⇒ Symmetrical, double acting piston seal, designed with interference of the preload element on the ID and slight interference of the PTFE glide ring on the OD.
- ⇒ High pressure force because of a machined rubber preload element.
Less relative movement of the rubber part compared to an O-Ring giving the seal a higher wear resistance.
- ⇒ Excellent sealing performance in low and high speeds.
- ⇒ Suitable for positioning functions.
- ⇒ Negligible tendency to “stick-slip” effect, good sliding properties.
- ⇒ Low break-away load after long standstills.
- ⇒ Excellent gap extrusion resistance.
- ⇒ Can be used in grooves where no O-Ring is possible.

Application

Reciprocating pistons in hydraulic cylinders, plungers in heavy-duty applications.
Max. pressure 400 bar, max. speed 10 m/s.

Installation

Snap-in installation.
Attention: PTFE glide rings needs calibration after installation!

Seal housing recommendation

Tolerances	[mm]	
L < 10mm	+ 0.2	
L ≥ 10mm	+ 0.3	
∅ NA	H8	
∅ NI	h8	
Surface roughness	Rtmax [μ]	Ra [μ]
Bottom of groove	≤ 6.3	≤ 1.6
Face of groove	≤ 15	≤ 3
Sliding surface	Rtmax [μ]	Ra [μ]
PU, elastomeres	≤ 2.5	≤ 0.1-0.5
PTFE	≤ 2	≤ 0.05-0.3

Profile description

Piston Seal
PS81