



### **Function**

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

### **Features**

- ⇒ Asymmetrical, single acting piston seal, designed with interference on the ID which provides a good static fit in the groove.
- ⇒ Dynamic sealing lip shorter than static lip to avoid drag pressure.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Useable for long stroke lengths.
- ⇒ Negligible tendency to “stick-slip” effect above a speed of 0.15 m/s.  
For lower speeds the dynamic lip should be redesigned (shorter, stiffer).
- ⇒ Activated back-up rings prevent and reduce gap extrusion.

### **Application**

Reciprocating pistons in hydraulic cylinders, plungers.  
 Universal piston seal for small extrusion gaps and minor load impacts.  
 Max. pressure 700 bar, max. speed 0.5 m/s.

### **Installation**

Snap-in installation.

#### **Seal housing recommendation**

<b>Tolerances</b>	<b>[mm]</b>	
L < 10mm	+ 0.2	
L ≥ 10mm	+ 0.3	
∅ NA	H9	
∅ NI	h10	
<b>Surface roughness</b>	<b>Rtmax [μ]</b>	<b>Ra [μ]</b>
Bottom of groove	≤ 6.3	≤ 1.6
Face of groove	≤ 15	≤ 3
<b>Sliding surface</b>	<b>Rtmax [μ]</b>	<b>Ra [μ]</b>
PU, elastomeres	≤ 2.5	≤ 0.1-0.5
PTFE	≤ 2	≤ 0.05-0.3

#### **Profile description**

***Piston Seal***  
***PS02***