



### **Function**

Symmetrical piston/rod seals are designed to seal the pressurized hydraulic fluid against the atmosphere or between two pressurized spaces.

### **Features**

- ⇒ Symmetrical, single acting piston/rod seal, no interference on the ID or OD.
- ⇒ Increased preload due to an additional O-Ring.
- ⇒ Sharp lips for use in high viscosity media.
- ⇒ Excellent static and dynamic sealing performance.
- ⇒ Good performance in all pressure ranges.
- ⇒ Used for short pulsating strokes.
- ⇒ No reverse leakage when changing direction.
- ⇒ Recommended for positioning or holding under pressure.

### **Application**

Reciprocating pistons/rods in hydraulic cylinders, plungers etc.  
 Switching or clamping functions.  
 Replacement for rubber fabric seals.  
 Max. pressure 400 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 (rod groove)	H10	
∅ NI (rod diam.)	f8	
∅ NA (cylinder diam.)	H9	
∅ NI (piston groove)	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-/Rod Seal***  
***PRS18***