



### **Function**

Compact piston seal set, designed to seal the hydraulic fluid between two pressurized spaces, preventing the flow of the fluid to the other side and transforming the pressure force into the movement.

### **Features**

- ⇒ Double acting piston seal, designed with interference on the ID which provides a good static fit in the groove.
- ⇒ Consisting of a sliding ring commonly in PU or PTFE, an elastomere preload element and back-up elements on both sides.
- ⇒ Two sealing edges on the OD for improved media separation
- ⇒ Useable for short and long stroke lengths.
- ⇒ Good static and dynamic sealing performance.
- ⇒ High frictional force.

### **Application**

Reciprocating pistons in hydraulic cylinders.

Universal piston seal for double-acting cylinders.

Dynamic: Max. pressure 400 bar, max. speed 0.5 m/s.

Static: Max. pressure 1500 bar, max. speed 0.2 m/s.\*

### **Installation**

Snap-in installation.

\*) for static application the preload should be increased to 13-15% instead of 10% (dynamic)

### **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**

***Mining Seal***  
***P51A***

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