



### **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).

### **Application**

Reciprocating pistons in hydraulic cylinders, plungers.  
Universal piston seal for small extrusion gaps and minor load impacts.  
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            |               |
| ø NA                     | H9               |               |
| ø 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    |

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