



The profile PZ pneumatic piston seal has been developed for use in pneumatic cylinders and in valves. The double-acting piston seal requires only small housing dimensions.

- Due to application-optimized geometry and compounds suitable for use in oiled as well as in oil-free air (after initial lubrication on assembly).
- Good sealing performance in extremely small assembly conditions.
- Can also be used for single-acting applications.
- Good wear resistance.
- Low static and dynamic friction thanks to miniaturized design.
- Smooth running due to optimum lubricant-retaining sealing lip geometry.
- Suitable for fully automatic installation
- Assembly on one-part piston is possible.
- High temperature resistance in case of suitable compound selection.
- Excellent media resistance in case of suitable compound selection.
- Short axial assembly length.
- Installation in closed housings.

## Range of application

|                     |   |
|---------------------|---|
| Working pressure    | ≤ 12 bar  |
| Working temperature | -20 °C to +80 °C  |
| Surface speed       | ≤ 1 m/s   |
| Media               | Oiled as well as oil-free compressed air (after initial lubrication during assembly). |

## Compounds

Standard: N3571, NBR compound (≈ 70 Shore A)  
for low temperatures: N8602, NBR compound (≈ 70 Shore A)  
for high temperatures: V3681, FKM compound (≈ 80 Shore A)

## Installation

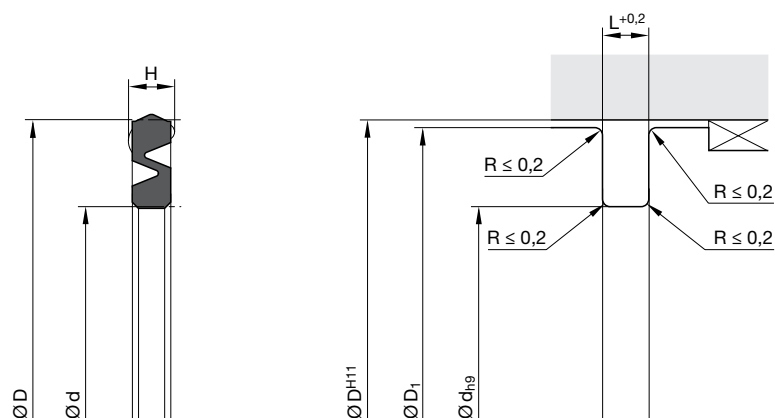
The profile PZ pneumatic piston seals can be easily mounted into the grooves by simply pulling them over the piston.

To avoid damaging the seal, sharp edges should be removed from the piston and the cylinder tube.

For oil-free conditions, it is important to obtain a full lubrication film inside the cylinder tube prior to assembly to ensure long service life of the seal.

For piston guidance, we recommend our profile F2 piston guidance tape. For dimensions of pistons and clearances, please refer to our profile F2.

In case of special operating conditions (specific pressure loads, temperature, speed, use in water, HFA, HFB fluids etc.), please contact our consultancy service for a selection of the material and design best suiting your particular application requirements.



For surface finish, lead in chamfer and other installation dimensions see "General installation guidelines".

| D   | d   | H   | L   | D <sub>1</sub> | Order code    |
|-----|-----|-----|-----|----------------|---------------|
| 10  | 6.5 | 1.4 | 1.8 | 9.6            | PZ 1006 N3571 |
| 12  | 7   | 2   | 2.5 | 11.6           | PZ 1207 N3571 |
| 16  | 9   | 2.1 | 2.5 | 15.6           | PZ 1605 N3571 |
| 20  | 13  | 2.1 | 2.5 | 19.6           | PZ 2013 N3571 |
| 25  | 18  | 2.1 | 2.5 | 24.6           | PZ 2518 N3571 |
| 28  | 19  | 2.5 | 3   | 27.6           | PZ 2819 N3571 |
| 30  | 21  | 2.5 | 3   | 29.6           | PZ 3021 N3571 |
| 32  | 23  | 2.5 | 3   | 31.6           | PZ 3210 N3571 |
| 35  | 26  | 2.5 | 3   | 34.5           | PZ 3520 N3571 |
| 40  | 31  | 2.5 | 3   | 39.5           | PZ 4031 N3571 |
| 45  | 36  | 2.5 | 3   | 44.5           | PZ 4520 N3571 |
| 50  | 41  | 2.5 | 3   | 49.5           | PZ 5010 N3571 |
| 63  | 51  | 3.4 | 4   | 62.5           | PZ 6051 N3571 |
| 80  | 68  | 3.4 | 4   | 79.5           | PZ 8010 N3571 |
| 100 | 88  | 3.4 | 4   | 99.4           | PZ A008 N3571 |
| 125 | 110 | 4.4 | 5   | 124.4          | PZ C050 N3571 |

Further sizes on request.