The profile Z5 pneumatic piston seal is a double U-ring with an integral guiding surface for double-acting pistons.

- Due to application-optimized geometry and compounds suitable for use in oiled as well as in oil-free air (after initial lubrication on assembly).
- Multi-functional sealing element. The guiding area at the sealing element performs the guiding function in the cylinder. However, due to its geometry the sealing element is not suitable for absorption of high radial forces or long strokes.
- Prevents metallic contact between the piston and cylinder. Ideal for light-metal and plastic cylinders (ridging).
- Good wear resistance.
- Smooth running due to optimum lubricant-retaining sealing lip geometry.
- Easier 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.
- Installation in open housings with retaining collar.

Range of Application

Working pressure	≤ 16 bar
Working temperature	-30 °C to +80 °C
Surface speed	≤ 1 m/s
Media	Oiled as well as oil-free compressed air (after initial lubrication during assembly).

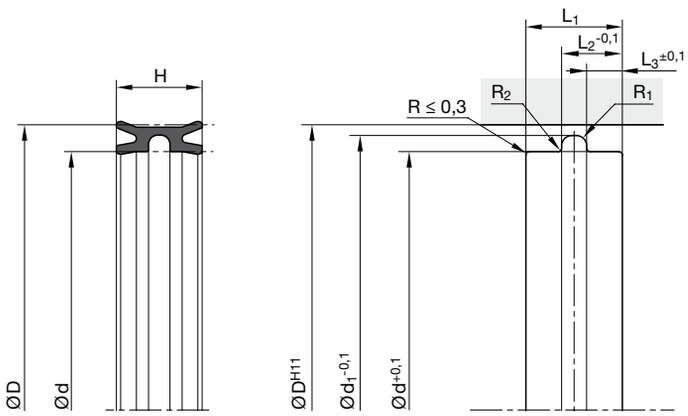
Compounds

Standard: N3578, NBR compound (≈ 75 Shore A)
or low temperatures: N8602, NBR compound (≈ 70 Shore A)
for high temperatures: V8550, FKM compound (≈ 80 Shore A)

Installation

The profile Z5 pneumatic cylinder seals can be easily mounted by pulling them over the one-piece piston.
Care should be taken that all edges are chamfered to avoid seal damage.

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	d_1	L_1	L_2	L_3	R_1	R_2	Order code
16	10	10.5	13.5	12	3	4.5	0.9	0.2	Z5 1610 N3578
18	12	10.5	15.5	12	3	4.5	0.9	0.2	Z5 1812 N3578
20	14	10.5	17.5	12	3	4.5	0.9	0.2	Z5 2014 N3578
25	18	12	22.5	13	3	5	1.3	0.2	Z5 2518 N3578
28	22	10.5	25.5	12	3	4.5	0.9	0.2	Z5 2822 N3578
30	23	12	27.5	13	3	5	1.3	0.2	Z5 3023 N3578
32	25	12	29.5	13	3	5	1.3	0.2	Z5 3225 N3578
35	28	12	32.5	13	3	5	1.3	0.2	Z5 3528 N3578
40	33	12	37.5	13	3	5	1.3	0.2	Z5 4033 N3578
45	38	12	42.5	13	3	5	1.3	0.2	Z5 4538 N3578
50	43	12	47.5	13	3	5	1.3	0.2	Z5 5043 N3578
54	46	13	51.5	15	4	5.5	1.3	0.2	Z5 5446 N3578
63	53	17	60	19	5	7	1.6	0.3	Z5 6353 N3578
63	56	12	60.5	13	3	5	1.3	0.3	Z5 6356 N3578
70	62	13	67.5	15	4	5.5	1.6	0.3	Z5 7007 N3578
76	66	18	73	20	6	7	1.6	0.3	Z5 7666 N3578
80	72	13	77.4	15	4	5.5	1.6	0.3	Z5 8067 N3578
80	70	18	77	20	6	7	1.6	0.3	Z5 8070 N3578
100	88	21	96.5	23	8	7.5	1.6	0.4	Z5 A088 N3578
100	90	16	97	18	4	7	1.6	0.3	Z5 A089 N3578
125	113	15	122	17	5	6	1.6	0.4	Z5 C511 N3578
125	113	21	121.5	23	8	7.5	1.6	0.4	Z5 C513 N3578
130	120	17	127	19	5	7	1.6	0.3	Z5 D017 N3578
140	128	21	136.5	23	8	7.5	1.6	0.4	Z5 E028 N3578
150	140	17	147	19	5	7	1.6	0.3	Z5 F014 N3578
160	145	26	155.5	29	10	9.5	1.6	0.4	Z5 G045 N3578
200	185	26	195.5	29	10	9.5	1.6	0.4	Z5 L085 N3578

Further sizes on request.