



The profile Z8 cylinder seal is a single-acting lip seal for pistons in pneumatic cylinders and valves. It requires small housing dimensions. The standard series of profile Z8 conforms to the cylinder diameters of ISO 3320 and CETOP RP 52 P, RP 43 P and RP 53 P.

- 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.
- Good wear resistance.
- Low static and dynamic friction thanks to miniaturized design.
- Smooth running due to optimum lubricant-retaining sealing lip geometry.
- Easier installation.
- High temperature resistance in case of suitable compound selection.
- Excellent media resistance in case of suitable compound selection.
- Installation in closed and undercut housings.

Range of application

Working pressure

≤ 16 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: N3580, a special NBR-based SFR® elastomer (≈ 80 Shore A). This compound offers excellent running properties, especially in the semi-frictional area.

for low temperatures: N8602, NBR compound (≈ 70 Shore A)

for high temperatures: V8550, FKM compound (≈ 80 Shore A)

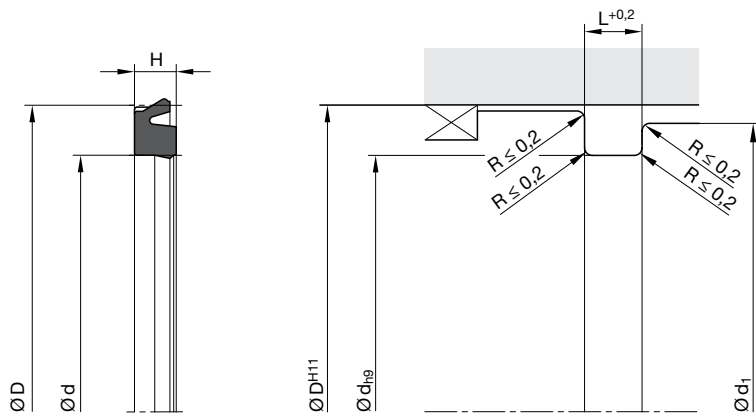
Installation

Profile Z8 piston seals can be easily mounted into the grooves by simply pulling them over the piston. To avoid damaging the seals sharp edges should be removed from the piston and the cylinder tube.

For oil-free operating conditions, it is important to obtain a full lubrication film inside the cylinder tube before 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 suited to your particular application requirements.



d_1 = minimum piston diameter on pressure side

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

D	d	H	L	d_1	Order code
4	1.5	1.5	2	3.6	Z8 0415 N3580
5	2.5	1.5	2	4.6	Z8 0504 N3580
6	3	2	2.5	5.6	Z8 0630 N3580
7.5	4.9	2	2.5	7.1	Z8 0750 N3580
8	4	2.55	3	7.6	Z8 0804 N3580
8	4.8	2.3	2.7	7.6	Z8 0806 N3580
8	5.45	2.3	2.8	7.6	Z8 0810 N3580
10	3	3.5	4	9.6	Z8 1003 N3580
10	6	2.55	3	9.6	Z8 1006 N3580
11	6	2.55	3	10.6	Z8 1106 N3580
12	7	2.55	3	11.6	Z8 1207 N3580
13	8	2.55	3	12.6	Z8 1030 N3580
14	8	2.55	3	13.6	Z8 1421 N3580
15	9	2.55	3	14.6	Z8 1509 N3580
16	10	2.55	3	15.6	Z8 1610 N3580
16	11	2.55	3	15.6	Z8 1611 N3580
18	12	2.55	3	17.6	Z8 1812 N3580
20	14	2.55	3	19.6	Z8 2014 N3580
21	15	2.55	3	20.4	Z8 2115 N3580
22	16	2.55	3	21.4	Z8 2216 N3580
24	18	3.25	3.5	23.4	Z8 2418 N3580
25	19	3.25	3.5	24.4	Z8 2519 N3580
28	22	3.25	3.5	27.4	Z8 2822 N3580
30	22	3.25	3.5	29.4	Z8 3022 N3580
30	22.5	4.8	5.2	29.4	Z8 3023 N3580
32	24	3.25	3.5	31.4	Z8 3224 N3580
35	27	3.25	3.5	34.4	Z8 3527 N3580
36	28	3.25	3.5	35.4	Z8 3628 N3580
37	29	3.25	3.5	36.4	Z8 3729 N3580
38	30	3.25	3.5	37.4	Z8 3818 N3580
40	32	3.25	3.5	39.4	Z8 4032 N3580
42	34	3.25	3.5	41.4	Z8 4234 N3580
45	37	3.25	3.5	44.4	Z8 4522 N3580
50	42	3.25	3.5	49.4	Z8 5042 N3580

D	d	H	L	d_1	Order code
52	42	4.25	4.5	51.4	Z8 5205 N3580
57	50.5	3.25	3.5	56.4	Z8 5705 N3580
58	48	4.25	4.5	57.4	Z8 5816 N3580
63	53	4.25	4.5	62.4	Z8 6353 N3580
80	70	4.25	4.5	79.4	Z8 8070 N3580
90	80	4.25	4.5	89.4	Z8 9080 N3580
100	90	4.25	4.5	99.4	Z8 A090 N3580
125	105	8.25	8.5	123.8	Z8 C505 N3580
150	130	8.25	8.5	148.8	Z8 F113 N3580
160	140	8.25	8.5	158.8	Z8 G014 N3580
200	180	8.25	8.5	198.8	Z8 L018 N3580

Further sizes on request.



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- Good sealing performance in extremely small assembly conditions.
- Extreme wear resistance.
- Low static and dynamic friction thanks to miniaturized design.
- Smooth running due to optimum lubricant-retaining sealing lip geometry.
- Easier installation.
- Excellent media resistance in case of suitable compound selection.
- Installation in closed and undercut housings.
- Low compression set.

Range of application

Working pressure	≤ 16 bar
Working temperature	-35 °C to +80 °C
Surface speed	≤ 1 m/s
Media	Oiled as well as oil-free compressed air (after initial lubrication during assembly).

Compounds

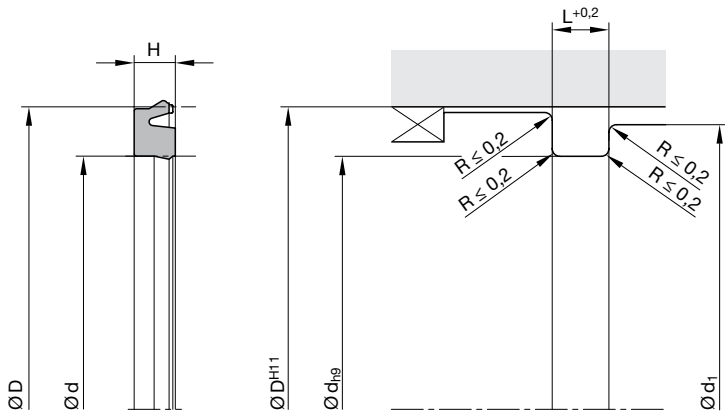
Standard: P5007, PUR compound (≈ 82 Shore A)
for low temperatures: P5075, PUR compound (≈ 80 Shore A)

Installation

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D	d	H	L	d_1	Order code
8	4	2.55	3	7.6	Z8 0804 P5007
8	4.8	2.55	3	7.6	Z8 0807 P5007
10	6	2.55	3	9.6	Z8 1006 P5007
12	7	2.55	3	11.6	Z8 1207 P5007
12.6	7.5	2.55	3	12.2	Z8 1260 P5007
16	10	2.55	3	15.6	Z8 1610 P5007
20	14	2.55	3	19.6	Z8 2014 P5007
25	19	3.25	3.5	24.4	Z8 2519 P5007
25	19	4	4.5	24.4	Z8 2520 P5007
28	22	3.25	3.5	27.4	Z8 2822 P5007
30	21	2.75	3.2	29.4	Z8 3021 P5007
32	24	3.25	3.5	31.4	Z8 3224 P5007
40	32	3.25	3.5	39.4	Z8 4032 P5007
50	42	3.25	3.5	49.4	Z8 5042 P5007
63	53	4.25	4.5	62.4	Z8 6353 P5007
80	70	4.25	4.5	79.4	Z8 8070 P5007
100	90	4.25	4.5	99.4	Z8 A090 P5007
125	105	8.25	8.5	123.8	Z8 C505 P5007
160	140	8.25	8.5	158.8	Z8 G014 P5007
200	180	8.25	8.5	198.8	Z8 L018 P5007

Further sizes on request.