



- Enhanced sealing performance in non-pressurized conditions.
- Good wear resistance.
- Insensitive to pressure peaks.
- High temperature resistance in case of suitable compound selection.
- Improved lubrication due to pressure medium deposit in the dynamic contact area.
- High extrusion resistance.
- Excellent media resistance in case of suitable compound selection.
- Suitable compounds available for special requirements of the chemical process industry.
- Suitable compounds available for special requirements of the food processing industry.
- Dimensions according to ISO 5597.
- Installation in closed and undercut housings.

The profile R3 rod seal is a sealing element of compact design with a special anti-extrusion ring.

The main advantages of this combination are smooth running, excellent sealing performance and high wear resistance, even under exceptionally hard working conditions.

These rod seals guarantee a leakfree performance even at low pressures or when rod movement occurs without pressure.

Range of Application

Seals for piston rods in hydraulic cylinders.

Working pressure	≤ 315 bar
Working temperature	-30 °C to +100 °C
Surface speed	≤ 0.5 m/s

Compounds

Rubber part

- standard: N3544, NBR compound (≈ 88 Shore A)
- for high temperatures: V3664, FKM compound (≈ 85 Shore A)

Glide ring

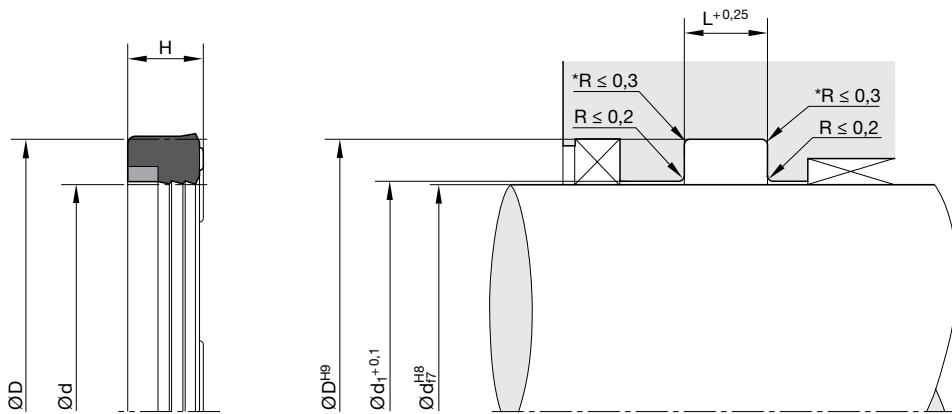
Polon® 062, modified PTFE + 60 % bronze

Installation

This rod seal profile R3 is manufactured with a slightly oversized outer diameter, thus ensuring a tight fit in the groove. The preload at the inner diameter necessary for the functioning of the seal will only be generated after installation.

The working life of the seal is mainly influenced by the max. gap at the pressure-opposite of the sealing element.

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.



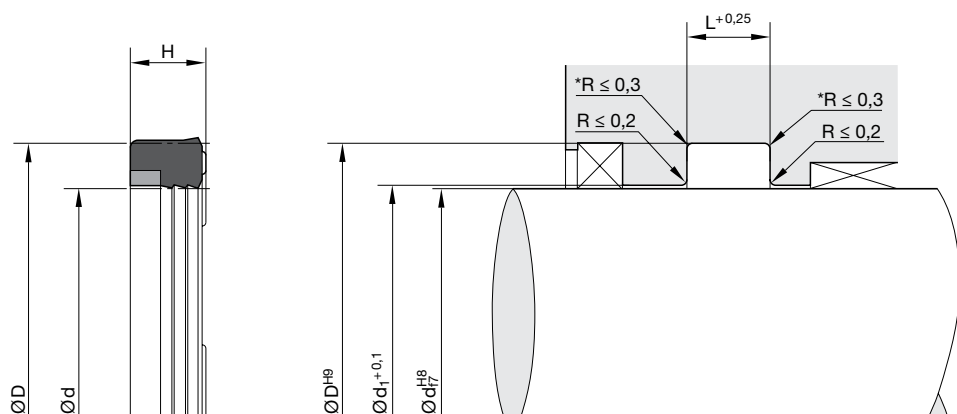
* In the case of designs according to ISO standard, the radii given there should be used.

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

d	D	H	L	d ₁	ISO ¹⁾	Order code
10	18	5.8	6.3	10.2	•	R3 0010 00252
12	20	5.8	6.3	12.2	•	R3 0012 00252
12	20	7	7.5	12.2		R3 0013 00252
14	22	5.8	6.3	14.2	•	R3 0015 00252
14	22	7	7.5	14.2		R3 0009 00252
14	24	7.5	8	14.2	•	R3 0016 00252
15	24	7	7.5	15.2		R3 0008 00252
16	24	5.8	6.3	16.2	•	R3 0017 00252
16	26	7.5	8	16.2	•	R3 0018 00252
18	25	7	7.5	18.2		R3 0019 00252
18	26	5.8	6.3	18.2	•	R3 0020 00252
20	28	5.8	6.3	20.3	•	R3 0022 00252
20	30	7.5	8	20.3	•	R3 0023 00252
20	30	8	9	20.3		R3 0024 00252
22	30	5.8	6.3	22.3	•	R3 0025 00252
22	30	7	7.5	22.3		R3 0026 00252
22	32	7.5	8	22.3	•	R3 0028 00252
25	33	5.8	6.3	25.3	•	R3 0029 00252
25	33	7	7.5	25.3		R3 0030 00252
25	35	7.5	8	25.3	•	R3 0031 00252
25	37	10	11	25.3		R3 0032 00252
25	40	10	11	25.3		R3 0531 00252
28	36	7	7.5	28.3		R3 0034 00252
28	38	7.5	8	28.3	•	R3 0035 00252
28	38	8	9	28.3		R3 0036 00252
28	40	9	10	28.3		R3 0027 00252
30	38	7	7.5	30.3		R3 0033 00252
30	40	10	11	30.3		R3 0004 00252
32	42	7.5	8	32.3	•	R3 0038 00252
32	44	10	11	32.3		R3 0039 00252
32	45	10	11	32.3		R3 0049 00252
35	43	7	7.5	35.3		R3 0535 00252
35	45	8.5	9.5	35.3		R3 0050 00252
36	44	7	7.5	36.3		R3 0042 00252

d	D	H	L	d ₁	ISO ¹⁾	Order code
36	44	8	9	36.3		R3 0043 00252
36	46	7.5	8	36.3	•	R3 0044 00252
36	46	10	11	36.3		R3 0045 00252
36	51	11.5	12.5	36.3	•	R3 0047 00252
40	48	7.5	8	40.4		R3 0540 00251
40	50	7.5	8	40.4	•	R3 0040 00251
40	50	10	11	40.4		R3 0050 00251
40	55	10	11	40.4		R3 0006 00252
42	54	10	11	42.4		R3 0037 00251
45	53	5.8	6.3	45.4	•	R3 0076 00251
45	53	8	9	45.4		R3 0073 00251
45	55	7.5	8	45.4	•	R3 0053 00251
45	55	10	11	45.4		R3 0054 00251
45	60	11	12.5	45.4	•	R3 0055 00251
50	60	7.5	8	50.4	•	R3 0056 00251
50	62	10	11	50.4		R3 0057 00251
50	65	10	11	50.4	•	R3 0007 00252
50	65	11.5	12.5	50.4	•	R3 0058 00251
52	68	12	13	52.4		R3 0052 00252
55	63	7	7.5	55.4		R3 0064 00251
56	68	10	11	56.4		R3 0077 00251
56	71	12	12.5	56.4	•	R3 0059 00251
56	76	15	16	56.4		R3 0060 00251
60	68	8	9	60.4		R3 0066 00251
60	70	7.5	8	60.4		R3 0067 00251
60	72	10	11	60.4		R3 0061 00251
60	75	12	13	60.4		R3 0065 00251
60	80	16	17	60.4		R3 0071 00251
63	78	11.5	12.5	63.4	•	R3 0062 00251
70	82	10	11	70.4		R3 0068 00251
70	85	12	12.5	70.4	•	R3 0069 00251
70	90	15	16	70.4		R3 0070 00251
80	92	10	11	80.4		R3 0079 00251
80	95	12	12.5	80.4	•	R3 0080 00251

1) ISO 5597
Further sizes on request.



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d	D	H	L	d ₁	ISO ¹⁾	Order code
90	105	12	12.5	90.4	•	R3 0090 00251
90	110	15	16	90.4	•	R3 0091 00251
100	115	12	13	100.4		R3 0100 00251
100	120	15	16	100.4	•	R3 0101 00251
100	125	19	20	100.4		R3 0102 00251
110	130	15	16	110.4	•	R3 0110 00251
125	145	15	16	125.4	•	R3 0125 00251
130	150	15	16	130.4		R3 0130 00251
140	160	15	16	140.4	•	R3 0140 00251
160	185	19	20	160.4	•	R3 0160 00251
180	205	19	20	180.4	•	R3 0180 00251
200	225	19	20	200.4	•	R3 0200 00251
280	310	23	25	280.4	•	R3 0280 00251
320	360	30	32	320.4	•	R3 0320 00252
360	400	30	32	360.4	•	R3 0360 00252

1) ISO 5597
Further sizes on request.