



The profile B3 Ultrathan® rod seal is a lipseal which fits in the groove. These seals may be used for all applications where the physical properties of normal or fabric reinforced elastomers are insufficient.

- Robust seal profile for harshest operating conditions.
- Extreme wear resistance.
- Easier installation.
- Insensitive to pressure peaks.
- 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.
- Low compression set.
- Machined small-volume series and samples available with short lead times.

## Range of Application

Mainly for the sealing of piston rods and plungers in heavy duty applications in mobile and stationary hydraulics. The dimensions mainly conform to the requirements of ISO 5597 and ISO 3320 for housing and diameters respectively.

Working pressure	≤ 400 bar
Working temperature	-35 °C to +110 °C
Surface speed	≤ 0.5 m/s
Media	Mineral-oil based hydraulic oils.

## Compounds

The P5008 compound is a Parker material based on polyurethane with a hardness of approx. 93 Shore A. Its main advantages in comparison with other polyurethane materials currently available on the market are the increased heat resistance and the lower compression set.

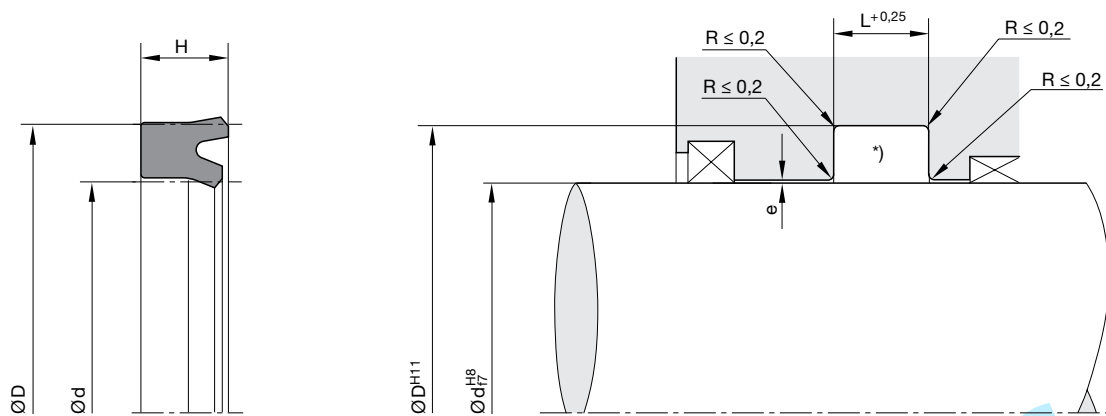
For media containing water, we recommend our hydrolysis resistant Polyurethane compound P5001.

## Installation

The seals should have an axial clearance (see columns H and L). To avoid damage at the sealing lips, the seals should not be pulled over sharp edges during installation.

Normally these seals may be snapped into closed grooves. Where access is restricted special assembly tools may be required. Proposals for the design of such tools will be provided on request. Tolerance guidelines H8/f7. At the back of the seal a larger gap "e" is permissible.

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.



\* In the case of designs according to ISO standard, the radii given there should be used.  
"e" see chapter "Maximum gap allowance"

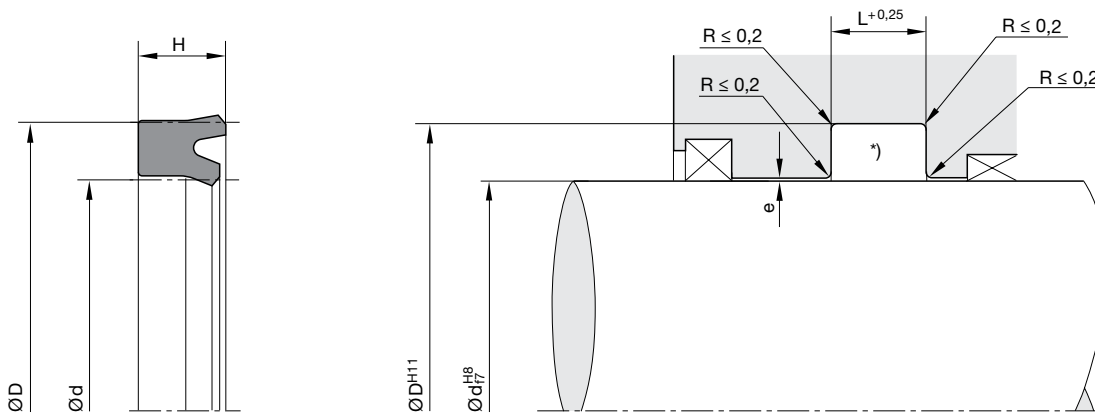
For surface finish, lead in chamfer and other installation dimensions see "General installation guidelines".

d	D	H	L	ISO <sup>1)</sup>	ISO <sup>2)</sup>	Order code	d	D	H	L	ISO <sup>1)</sup>	ISO <sup>2)</sup>	Order code
4	12	6	7			B3 0412 P5008	22	29	5	5.6	•	•	B3 2229 P5008
6	13	5	5.6			B3 0613 P5008	22	30	5.7	6.3		•	B3 2230 P5008
6	14	5.7	6.3		•	B3 0614 P5008	22	32	7.3	8		•	B3 2232 P5008
8	14	5	5.6			B3 0814 P5008	25	32	6	7			B3 2525 P5008
8	16	5.7	6.3		•	B3 0816 P5008	25	33	5.7	6.3		•	B3 2532 P5008
9	14.5	5	5.6			B3 0914 P5008	25	33	6.5	7.3			B3 2533 P5008
9	16	5.7	6.3			B3 0916 P5008	25	33	8	9			B3 2534 P5008
10	14	3.7	4.2			B3 1015 P5008	25	35	7.3	8		•	B3 2535 P5008
10	16	4.5	5.2			B3 1016 P5008	25	40	10	11			B3 2537 P5008
10	17	5.7	6.3			B3 1017 P5008	25	40	11	12			B3 2539 P5008
10	18	5.7	6.3		•	B3 1018 P5008	28	36	5.7	6.3	•	•	B3 2836 P5008
12	19	5	5.6	•	•	B3 1211 P5008	28	36	8	9			B3 2837 P5008
12	20	5.7	6.3		•	B3 1212 P5008	28	38	7.3	8		•	B3 2038 P5008
12	22	7.3	8		•	B3 1222 P5008	28	38	10	11			B3 2838 P5008
14	21	5	5.6	•	•	B3 1421 P5008	28	43	11.4	12.5			B3 2843 P5008
14	22	7.3	8			B3 1422 P5008	30	38	5.7	6.3			B3 3003 P5008
14	24	7.3	8		•	B3 1424 P5008	30	38	8	9			B3 3002 P5008
14	24	8	9			B3 1425 P5008	30	40	7.3	8		•	B3 3040 P5008
14.28	20.7	3.5	3.9			B3 1428 P5008	30	40	10	11			B3 3005 P5008
15	25	6	6.7			B3 1515 P5008	30	45	10	11			B3 3015 P5008
15	25	8	9			B3 1525 P5008	32	40	6	7			B3 3206 P5008
16	22	5	5.6			B3 1620 P5008	32	40	6.7	7.5			B3 3240 P5008
16	24	5.7	6.3		•	B3 1624 P5008	32	42	7.3	8		•	B3 3242 P5008
16	26	7.3	8		•	B3 1626 P5008	32	42	10	11			B3 3243 P5008
18	24	5	5.6			B3 1824 P5008	32	45	10	11			B3 3245 P5008
18	25	5	5.6	•	•	B3 1826 P5008	32	47	10	11			B3 3020 P5008
18	26	5.7	6.3			B3 1825 P5008	34.9	47.6	9.9	11			B3 3490 P5008
18	28	7.3	8		•	B3 1827 P5008	35	43	6	6.7			B3 3506 P5008
18	28	8	9			B3 1828 P5008	35	45	7	8			B3 3544 P5008
19.05	25.4	6.35	7.14			B3 1905 P5008	35	45	10	11			B3 3545 P5008
20	26	5	5.6			B3 2026 P5008	36	44	5.7	6.3	•	•	B3 3644 P5008
20	28	5.7	6.3		•	B3 2028 P5008	36	46	7.3	8		•	B3 3646 P5008
20	30	7.3	8		•	B3 2030 P5008	38	50	10	11			B3 3800 P5008
22	28	5	5.6			B3 2225 P5008	38.1	50.8	9.53	10.3			B3 3801 P5008

1) For housings according to ISO 5597 for ISO 6020-2 cylinders.

2) Standard sizes for housings according to ISO 5597.

Further sizes on request.



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"e" see chapter "Maximum gap allowance"

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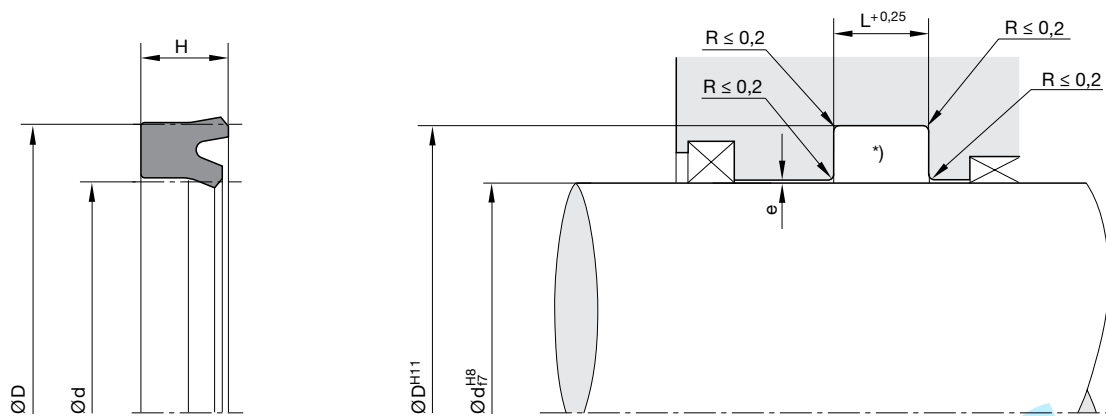
d	D	H	L	ISO <sup>1)</sup>	ISO <sup>2)</sup>	Order code
40	48	5.7	6.3			B3 4002 P5008
40	48	8	9			B3 4003 P5008
40	50	7.3	8		•	B3 4004 P5008
40	50	8	9			B3 4006 P5008
40	50	10	11			B3 4005 P5008
41.22	50.8	8.3	9.1			B3 4022 P5008
42	52	7.3	8			B3 5242 P5008
42.25	52	9.5	10.5			B3 4043 P5008
45	53	5.6	6.3	•	•	B3 4050 P5008
45	53	8	9			B3 4502 P5008
45	53	10	11			B3 4553 P5008
45	55	5.8	6.5			B3 4554 P5008
45	55	7.3	8		•	B3 4555 P5008
45	55	10	11			B3 4556 P5008
45	57	9	10			B3 4557 P5008
45	60	11.4	12.5		•	B3 4560 P5008
50	58	8	9			B3 5002 P5008
50	60	7.3	8		•	B3 5004 P5008
50	60	10	11			B3 5006 P5008
50	63	10	11			B3 050L P5008
50	65	11.4	12.5		•	B3 5065 P5008
50	70	14	15.5			B3 5067 P5008
50.8	63.5	9.5	10.3			B3 5008 P5008
55	63	8	9			B3 5555 P5008
55	65	7.3	8			B3 5563 P5008
55	65	10	11			B3 5565 P5008
55	65	12	13			B3 5570 P5008
55	70	10	11			B3 5070 P5008
56	66	6.5	7.5	•	•	B3 5666 P5008
56	71	8.6	9.5			B3 5668 P5008
56	71	11.4	12.5		•	B3 5671 P5008
57.15	69.85	9.53	10.3			B3 5077 P5008
58	68	7.3	8			B3 5868 P5008
60	68	8	9			B3 6068 P5008

d	D	H	L	ISO <sup>1)</sup>	ISO <sup>2)</sup>	Order code
60	70	10	11			B3 6070 P5008
60	75	10	11			B3 6074 P5008
60.33	73.03	9.53	10.3			B3 6033 P5008
63	73	6.5	7.3			B3 6372 P5008
63	73	12	13			B3 6373 P5008
63	75	10	11			B3 6375 P5008
63	78	10	11			B3 6377 P5008
63	78	11.4	12.5		•	B3 6378 P5008
63.5	76.2	9.53	10.3			B3 6064 P5008
65	73	8	9			B3 6502 P5008
65	75	7	8			B3 6076 P5008
65	75	12	13			B3 6075 P5008
65	78	10	11			B3 065C P5008
65	80	12	13			B3 6504 P5008
69.8	82.6	9.75	10.5			B3 6980 P5008
70	78	8	9			B3 7070 P5008
70	80	6.5	7.5			B3 7079 P5008
70	80	7	7.8			B3 7078 P5008
70	80	12	13			B3 7080 P5008
70	82	8.7	9.7			B3 7082 P5008
70	85	11.4	12.5		•	B3 7085 P5008
75	85	7	8			B3 7585 P5008
75	85	12	13			B3 7586 P5008
75	88	10	11			B3 7588 P5008
75	90	10	11			B3 7590 P5008
75	90	12	13			B3 7591 P5008
76	88	6	7			B3 076A P5008
76.2	88.9	9.53	10.3			B3 7620 P5008
78	86	8.5	9.5			B3 7800 P5008
80	90	7	8			B3 8088 P5008
80	90	10	11			B3 8089 P5008
80	90	12	13			B3 8090 P5008
80	95	10	11			B3 8093 P5008
80	95	11.4	12.5		•	B3 8094 P5008

1) For housings according to ISO 5597 for ISO 6020-2 cylinders.

2) Standard sizes for housings according to ISO 5597.

Further sizes on request.



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d	D	H	L	ISO <sup>1)</sup>	ISO <sup>2)</sup>	Order code	d	D	H	L	ISO <sup>1)</sup>	ISO <sup>2)</sup>	Order code
80	100	12	13			B3 8099 P5008	125.1	140.5	9.8	10.9			B3 C224 P5008
80	105	12	13			B3 085C P5008	130	150	12	13			B3 D049 P5008
85	100	9	10			B3 8509 P5008	130	150	15	16			B3 D050 P5008
85	100	12	13			B3 8510 P5008	139.7	155.58	9.53	10.3			B3 D097 P5008
85	105	12	13			B3 8505 P5008	140	150	6	7			B3 140E P5008
88.9	101.6	9.53	10.3			B3 8889 P5008	140	155	9.6	10.6	•	•	B3 E055 P5008
90	100	6.5	7.5	•	•	B3 9001 P5008	140	160	14.5	16		•	B3 E060 P5008
90	102	9	10			B3 9002 P5008	145	165	14.5	16			B3 E065 P5008
90	105	9	10			B3 9004 P5008	150	170	15	16			B3 F070 P5008
90	105	11.4	12.5			B3 9006 P5008	152.4	171.45	12.7	13.49			B3 F072 P5008
90	105	11.4	12.5		•	B3 9005 P5008	160	180	15	16			B3 G080 P5008
90	110	12	13			B3 9009 P5008	160	185	18.2	20		•	B3 G085 P5008
90	110	14.5	16			B3 9010 P5008	170	200	18.2	20			B3 H020 P5008
92	105	9.5	10.6			B3 9210 P5008	180	200	15	16			B3 J020 P5008
95	110	9	10			B3 9505 P5008	180	205	18.2	20		•	B3 J005 P5008
95	110	10	11			B3 095B P5008	190	210	15	16			B3 K005 P5008
95	115	12	13			B3 095C P5008	200	220	12	13			B3 200A P5008
100	115	9	10			B3 A015 P5008	200	225	18.2	20		•	B3 L025 P5008
100	120	11.5	12.5			B3 A018 P5008	200	230	18	19			B3 L030 P5008
100	120	14.5	16		•	B3 A020 P5008	210	230	15	16			B3 L110 P5008
101.6	117.48	9.53	10.3			B3 A060 P5008	220	250	22.7	25		•	B3 M050 P5008
105	120	10	11			B3 A503 P5008	225	250	18	19			B3 M070 P5008
105	120	11.4	12.5			B3 A511 P5008	250	280	22.7	25		•	B3 N580 P5008
105	125	14.5	16			B3 A505 P5008	280	300	15	16			B3 P005 P5008
110	125	9	10			B3 B024 P5008	280	310	22.7	25		•	B3 P010 P5008
110	125	9.6	10.6	•	•	B3 B025 P5008	390	420	22.7	25			B3 Q420 P5008
110	130	12	13			B3 B029 P5008							
110	130	14.5	16		•	B3 B030 P5008							
114.3	130.18	9.53	10.3			B3 B044 P5008							
115	135	11.5	12.5			B3 B052 P5008							
120	135	14.5	16			B3 C017 P5008							
120	140	15	16			B3 C040 P5008							
125	145	12	13			B3 C244 P5008							
125	145	14.5	16		•	B3 C245 P5008							

1) For housings according to ISO 5597 for ISO 6020-2 cylinders.

2) Standard sizes for housings according to ISO 5597.

Further sizes on request.