The profile BS Ultrathan® rod seal is a lip seal with a secondary sealing lip and tight fit at the outer diameter. Wear and dry run are largely prevented by the additional lubricant retained under the seal, created by the secondary lip. In some cases this second sealing lip may even act as a substitute for a costly tandem-arrangement when complete sealing under certain working conditions can only be achieved by two seals placed one behind the other in separate housings.

For telescopic cylinders, we recommend the version with a 4-mm profile width.

- Excellent sealing performance due to elongated contact area and multiple sealing lips.
- Exceptionally high static and dynamic sealing performance.
- Enhanced sealing performance in non-pressurized conditions.
- Penetration of air into the system is largely prevented.
- Robust seal profile for harshest operating conditions.
- Extreme wear resistance.
- Easier installation.
- Insensitive to pressure peaks.
- 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.
- Short radial assembly depth.
- 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.

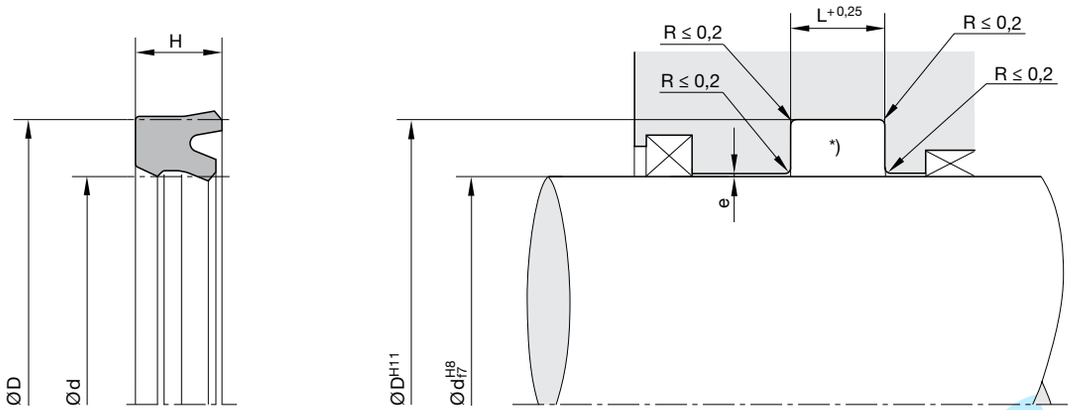
Compounds

The compound P5008 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-resistent 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 (see chapter “Maximum gap allowance”).

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.

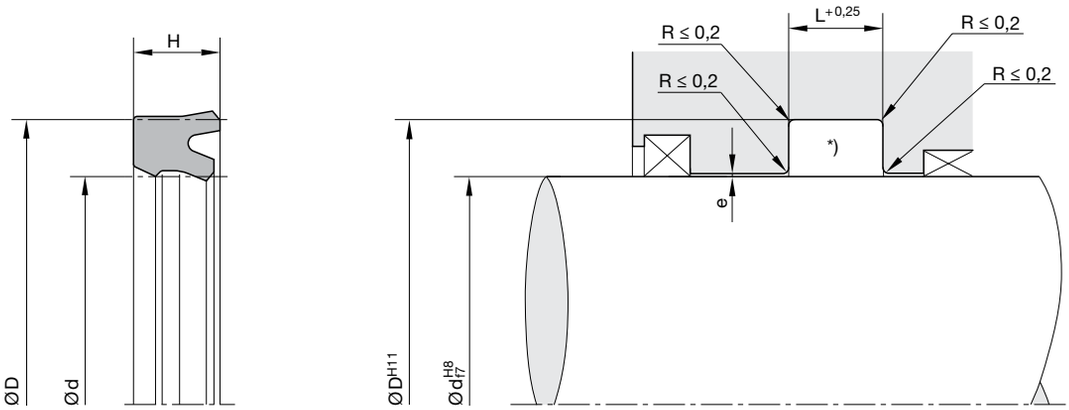


* In the case of designs according to ISO standard, the radii given there should be used.
"e" see chapter "Maximum gap allowance"

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

d	D	H	L	ISO[1]	ISO[2]	Order code
8	16	5.7	6.3		•	BS 0816 P5008
9	16	5.7	6.3			BS 0916 P5008
10	16	4.5	5.3			BS 1016 P5008
10	17	5.7	6.3			BS 1017 P5008
10	18	5.7	6.3		•	BS 1018 P5008
12.7	19.05	4.5	5.3			BS 1270 P5008
14	20	5.7	6.3			BS 1420 P5008
14	22	5.7	6.3		•	BS 1422 P5008
14	24	7.3	8		•	BS 1424 P5008
16	24	5.8	6.3		•	BS 1624 P5008
16	26	7.3	8		•	BS 1626 P5008
18	28	7.3	8		•	BS 1827 P5008
20	30	7.3	8		•	BS 2030 P5008
22	32	7.3	8		•	BS 2232 P5008
25	33	6.5	7.3			BS 2533 P5008
25	35	7.3	8		•	BS 2535 P5008
26	36	10	11			BS 2605 P5008
28	36	7	7.5			BS 2836 P5008
28	38	7.3	8		•	BS 2838 P5008
30	40	10	11			BS 3005 P5008
30	45	10	11			BS 3030 P5008
32	42	7.3	8		•	BS 3242 P5008
32	42	10	11			BS 3243 P5008
32	45	10	11			BS 3245 P5008
35	45	10	11			BS 3545 P5008
35	50	10	11			BS 3550 P5008
36	46	7.3	8		•	BS 3646 P5008
36	48	10	11			BS 3649 P5008
36	51	10	11			BS 3651 P5008
37	47	10	11			BS 3747 P5008
40	48	11.5	12.5			BS 4004 P5008
40	49.52	9.6	10.5			BS 4049 P5008
40	50	10	11			BS 4005 P5008
40	52	7.4	8			BS 5608 P5008
40	52	8	9			BS 4008 P5008
40	55	11.4	12.5		•	BS 4007 P5008
43	53	7.3	8			BS 4051 P5008
45	53	5.6	6.3	•	•	BS 4553 P5008
45	55	7.3	8		•	BS 4555 P5008
45	55	10	11			BS 4556 P5008
45	57.7	9.6	10.5			BS 4557 P5008
45	60	10.5	11.5			BS 4562 P5008
45	60	11.4	12.5		•	BS 4561 P5008
46	56	10	11			BS 4605 P5008
48	56	11.5	12.5			BS 4856 P5008
50	60	7.3	8		•	BS 5004 P5008
50	60	10	11			BS 5006 P5008
50	62.7	9.6	10.5			BS 5062 P5008
50	65	10	11			BS 5064 P5008
50	65	11.4	12.5		•	BS 5065 P5008
50.8	63.5	9.5	10.3			BS 5085 P5008
52	62	10	11			BS 5203 P5008
55	65	10	11			BS 5564 P5008
55	65	11	12			BS 5565 P5008
55	67	10	11			BS 5567 P5008
56	71	11.4	12.5		•	BS 5609 P5008
58	66	11.5	12.5			BS 5866 P5008
60	68	13	14			BS 6068 P5008
60	70	7.5	8.5			BS 6069 P5008
60	70	10	11			BS 6070 P5008
60	75	10	11			BS 6074 P5008
63	71	8	9			BS 6371 P5008
63	78	10	11			BS 6377 P5008
63	78	11.4	12.5		•	BS 6378 P5008
65	73	11.5	12.5			BS 6573 P5008
65	75	12	13			BS 6075 P5008
65	85	11.4	12.5			BS 6578 P5008
68	78	12	13			BS 6805 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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For surface finish, lead in chamfer and other installation dimensions see "General installation guidelines".

d	D	H	L	ISO[1]	ISO[2]	Order code
70	80	12	13			BS 7080 P5008
70	85	10	11			BS 7084 P5008
70	85	11.4	12.5		•	BS 7085 P5008
74	82	11.5	12.5			BS 7482 P5008
75	85	11.5	12.5			BS 7585 P5008
75	88	10	11			BS 7588 P5008
75	90	10	11			BS 7590 P5008
77	87	11.5	12.5			BS 7787 P5008
78	86	11.5	12.5			BS 7804 P5008
80	88	11.5	12.5			BS 8088 P5008
80	90	12	13			BS 8090 P5008
80	95	11.4	12.5		•	BS 8095 P5008
80	100	12	13			BS 8099 P5008
81	89	11.5	12.5			BS 8150 P5008
82.55	95.25	9.53	10.3			BS 8255 P5008
85	93	11.5	12.5			BS 8593 P5008
85	100	12	13			BS 8510 P5008
90	98	11.5	12.5			BS 9098 P5008
90	105	11.4	12.5		•	BS 9005 P5008
92	107	11.4	12.5			BS 9203 P5008
95	115	12	13			BS 9515 P5008
97	105	13	14			BS 9705 P5008
100	108	12	13			BS A008 P5008
100	120	12	13			BS A019 P5008
100	120	14.5	16		•	BS A020 P5008
105	113	11.5	12.5			BS A513 P5008
105	117	9.1	10			BS A517 P5008
107	115	11.5	12.5			BS A715 P5008
110	125	14.5	16			BS B025 P5008
110	130	14.5	16		•	BS B030 P5008
118	126	13	14			BS B805 P5008
120	128	11.5	12.5			BS C028 P5008
120	130	14	15			BS C030 P5008
125	133	11.5	12.5			BS C233 P5008

d	D	H	L	ISO[1]	ISO[2]	Order code
128	136	9.1	10			BS C836 P5008
128	140	9.1	10			BS C840 P5008
130	145	12	13			BS D045 P5008
140	160	14.5	16		•	BS E060 P5008
143	151	13	14			BS E305 P5008
145	153	11.5	12.5			BS E050 P5008
150	170	15	16			BS F070 P5008
152	160	9.1	10			BS F252 P5008
152	164	9.1	10			BS F264 P5008
160	185	18.2	20		•	BS G085 P5008
167	175	11.5	12.5			BS G704 P5008
167	176	11.5	12.5			BS G705 P5008
170	200	18	19			BS H020 P5008
171	179	13	14			BS H105 P5008
176	186	12	13			BS H160 P5008
177.7	195	9.73	11.3			BS H169 P5008
180	188	9.1	10			BS J080 P5008
180	188	11.5	12.5			BS J088 P5008
180	192	9.1	10			BS J092 P5008
193	201	11.5	12.5			BS K003 P5008
200	211	12	13			BS L005 P5008
200	225	18.2	20		•	BS L025 P5008
209.55	226.77	9.73	11.3			BS L008 P5008
212	220	9.1	10			BS L012 P5008
212	224	9.1	10			BS L024 P5008
220	228	11.5	12.5			BS M028 P5008
220	250	22.7	25		•	BS M050 P5008
223	231	11.5	12.5			BS M060 P5008
228.5	246	9	10			BS M085 P5008
230	260	22.7	25			BS M110 P5008
250	280	22.7	25		•	BS N580 P5008
266.7	284	9.73	11.3			BS O005 P5008
280	310	18	19			BS P008 P5008

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