



- Enhanced sealing performance in non-pressurized conditions.
- Robust seal profile for harshest operating conditions.
- Extreme wear resistance.
- Insensitive to extreme pressure peaks.
- Extremely 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.
- Dimensions according to ISO 7425-1.
- Short axial assembly length.
- Installation in closed and undercut housings.
- Low compression set.
- Machined small-volume series and samples available with short lead times.

The profile BU Ultrathan® rod seal is a compact seal with an integrated anti-extrusion ring. A typical application of this seal profile is its use as a buffer seal in sealing systems (picture) often found on construction machinery cylinders. These cylinders operate under extreme conditions where pressures up to 1000 bar are not unusual.

The Ultrathan® rod seal profile BU is used to protect the secondary seal from this load. Due to its special form the seal is in a position to transfer pressure, which develops between the primary and secondary seal, back into the system. Single as well as tandem configurations of this seal profile are possible.

## Range of Application

Primarily for sealing cylinders in mobile hydraulics.

Working pressure	≤ 500 bar
Pressure peaks	≤ 1000 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 Shore A hardness of approx. 93.

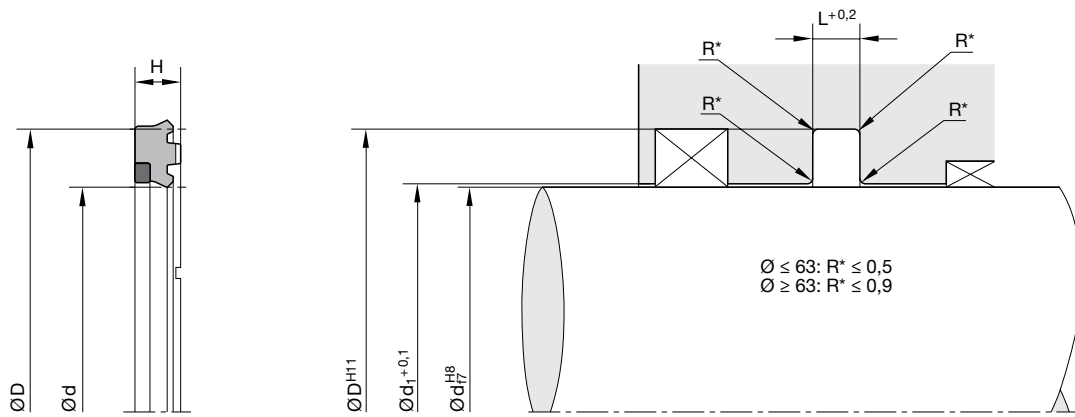
Back-up ring compound: W5019

## 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.

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.


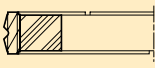
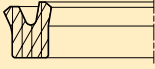
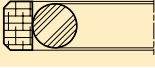


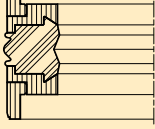


For surface finish, lead in chamfer and other installation dimensions see "General installation guidelines".

d	D	H	L	d <sub>1</sub>	ISO <sup>1)</sup>	ISO <sup>2)</sup>	Order code
55	70	8.5	9.5	55.5			BU 0055 00600
56	71	8.5	9.5	56.5	•		BU 0056 00600
60	75	8.5	9.5	60.5			BU 0060 00600
60	75.1	6.1	6.3	60.5			BU 0061 00656
63	78.1	6.1	6.3	63.4			BU 0063 00656
65	80	8.5	9.5	65.4			BU 0065 00600
65	80.5	6.1	6.3	65.4		•	BU 0066 00656
70	85	8.5	9.5	70.5	•		BU 0070 00600
70	85.1	6.1	6.3	70.5			BU 0071 00656
75	90	8.5	9.5	75.5			BU 0075 00600
80	95	8.5	9.5	80.5	•		BU 0080 00600
80	95.1	6.1	6.3	80.5			BU 0084 00656
80	95.5	6.1	6.3	80.4		•	BU 0082 00656
85	100.5	6.1	6.3	85.4		•	BU 0085 00656
90	105	8.5	9.5	90.5	•		BU 0090 00600
90	105.5	6.1	6.3	90.4		•	BU 0091 00656
95	110.5	6.1	6.3	95.4		•	BU 0094 00656
100	115.5	6.1	6.3	100.4		•	BU 0104 00656
100	120	11.4	12.5	100.6	•		BU 0100 00600
110	125.5	6.1	6.3	110.4		•	BU 0118 00656
110	130	11.4	12.5	110.6	•		BU 0110 00600
120	140	11.4	12.5	120.6	•		BU 0120 00600
130	150	14.5	16	130.6			BU 0130 00600
140	160	14.5	16	140.6	•		BU 0140 00600
150	170	14.5	16	150.6	•		BU 0150 00600
160	180	14.5	16	160.6			BU 0160 00600
170	190	10.3	11	170.6			BU 0170 00656
180	205	14.5	16	180.8	•		BU 0180 00600
200	225	14.5	16	200.8	•		BU 0200 00600
220	250	18.2	20	220.8	•		BU 0220 00600
250	280	18.2	20	250.8	•		BU 0250 00600

1) Standard sizes for housings according to ISO 5597.  
2) Standard sizes for housings according to ISO 7425-2.  
Further sizes on request.

KOLVAN S.r.l.

Profile cross-section	Profile reference	Pressure max.	Page
Piston seals			
	C2	160	94
	KR	300	97
	B7	400	100
	OE	400	103
	OG	400	108
	OK	800	113
	ZW	400	116