

RELY ON EXCELLENCE

## BT-C5

### EagleBurgmann BT Mechanical seals



#### Features

- Single pusher-type seal
- Unbalanced, short length (KU)
- Balanced, short length (KB)
- Multiple springs
- Independent of direction of rotation

#### Advantages

The BT-C5 is available in many material combinations with various application opportunities, especially in chemical applications. Torque transmission through set screws. Dimensions according to EN 12756, short length I<sub>1K</sub>.

#### Operating range

Shaft diameter:  
 $d_1 = 18 \dots 100 \text{ mm} (0.71 \dots 3.94 \text{")}$   
 Pressure:  
 Unbalanced type BT-C5.KU  
 $p_1^* = 12 (16) \text{ bar} (174 (232) \text{ PSI})$   
 Balanced type BT-C5.KB  
 $p_1^* = 25 (40) \text{ bar} (360 (580) \text{ PSI})$   
 Temperature:  
 $t^* = -35 \text{ °C} \dots +180 \text{ °C} (-31 \text{ °F} \dots +356 \text{ °F})$   
 Sliding velocity:  $v_g = 20 \text{ m/s} (66 \text{ ft/s})$

\* Dependent on medium, size and material

#### Materials

Seal face: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B)  
 Seat: Aluminium oxide (V), Silicon carbide (Q1)  
 Elastomers:  
 NBR (P), EPDM (E), FKM (V), FFKM (K)  
 Metal parts: CrNiMo steel (G)

#### Standards and approvals

- KTW
- W270
- ACS
- WRAS
- NSF
- FDA
- DM 174/04

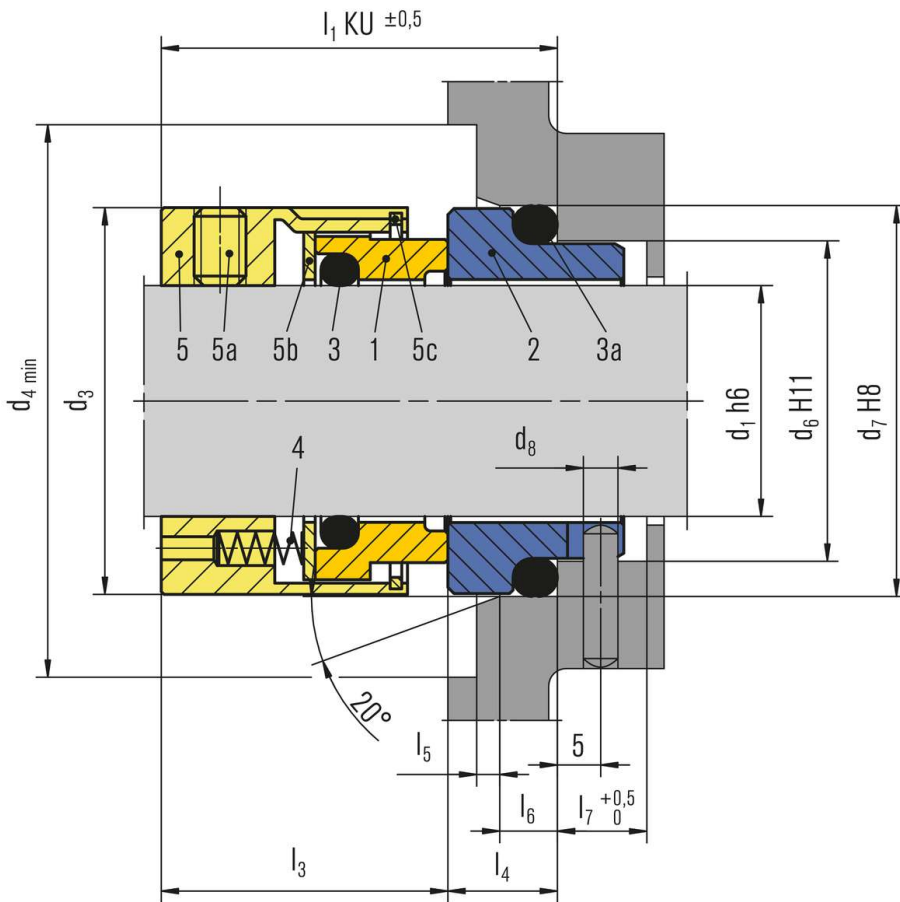
#### Notes

Seat ring of alternative seats can be supplied with short tail or with pin to block the seat and prevent seat rotation.

#### Recommended applications

- Chemical industry
- Pharmaceutical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps

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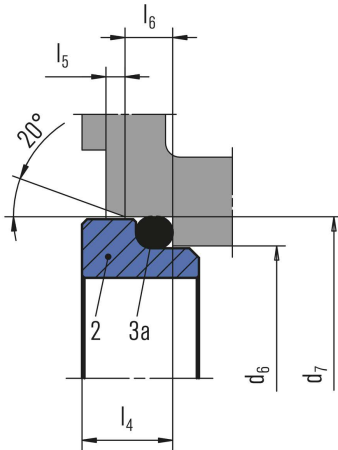
## BT-C5.KU

### Item Description

- 1 Seal face
- 2 Stationary seat
- 3, 3a O-Ring
- 4 Spring
- 5 Collar
- 5a Set screw
- 5b Ring
- 5c Locking ring

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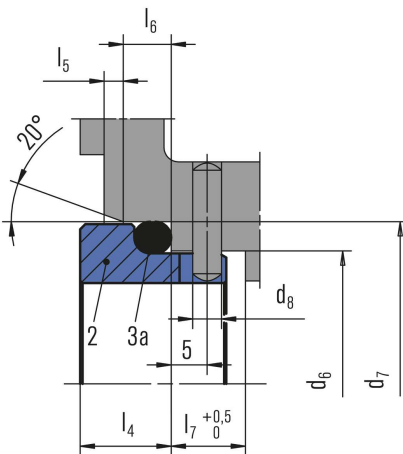
## Seat alternatives



PFL

**Item Description**

- 2 Stationary seat
- 3a O-Ring



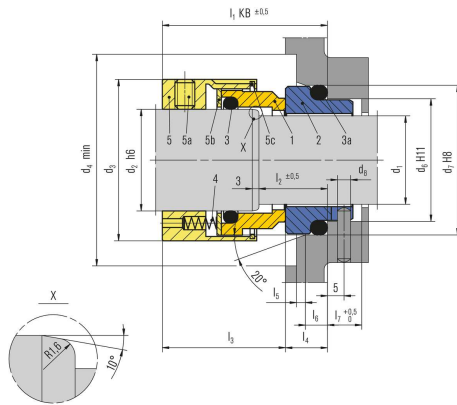
PFL1

**Item Description**

- 2 Stationary seat
- 3a O-Ring

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## Product variants

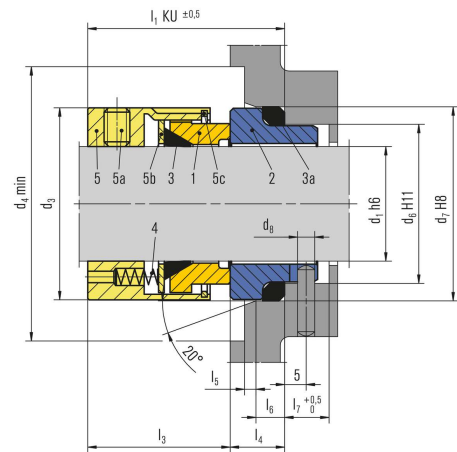


### BT-C5.KB

BT-C5.KB is the balanced version of the BT-C5.KU. Suitable for a higher pressure range. Dimensions according to EN 12756, short length  $l_{1KB}$ .

#### Item Description

- 1 Seal face
- 2 Stationary seat
- 3, 3a O-Ring
- 4 Spring
- 5 Collar
- 5a Set screw
- 5b Ring
- 5c Locking ring

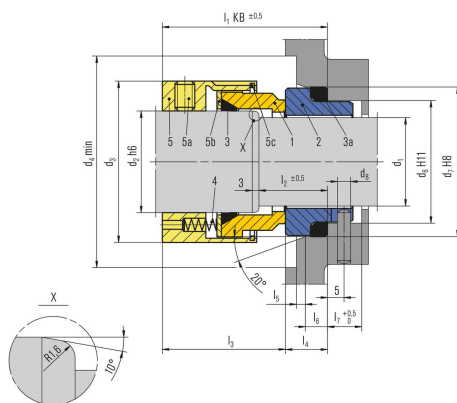


### BT-C56.KU

Product variant with PTFE secondary seal elements instead of elastomers. Mainly used in the chemical industry and for corrosive media.

#### Item Description

- 1 Seal face
- 2 Stationary seat
- 3 Wedge gasket (PTFE)
- 3a Gasket (PTFE)



### BT-C56.KB

Product variant with PTFE secondary seal elements instead of elastomers. Mainly used in the chemical industry and for corrosive media.

#### Item Description

- 1 Seal face
- 2 Stationary seat
- 3 Wedge gasket (PTFE)
- 3a Gasket (PTFE)
- 4 Spring
- 5 Collar
- 5a Set screw
- 5b Ring
- 5c Locking ring

## RELY ON EXCELLENCE

### Dimensions

d <sub>1</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>6</sub>	d <sub>7</sub>	d <sub>8</sub>	l <sub>1KU</sub>	l <sub>1</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>
20	34	36	29	35	3	37.5	34.0	24.0	10.0	2.0	5	9
22	36	38	31	37	3	37.5	34.0	24.0	10.0	2.0	5	9
24	38	40	33	39	3	40.0	37.0	27.0	10.0	2.0	5	9
25	39	41	34	40	3	40.0	37.0	27.0	10.0	2.0	5	9
28	42	44	37	43	3	42.5	40.0	30.0	10.0	2.0	5	9
30	44	46	39	45	3	42.5	40.0	30.0	10.0	2.0	5	9
32	46	48	42	48	3	42.5	40.0	30.0	10.0	2.0	5	9
33	47	49	42	48	3	42.5	40.0	30.0	10.0	2.0	5	9
35	49	51	44	50	3	42.5	40.0	30.0	10.0	2.0	5	9
38	54	58	49	56	4	45.0	43.0	32.0	11.0	2.0	6	9
40	56	60	51	58	4	45.0	43.0	32.0	11.0	2.0	6	9
43	59	63	54	61	4	45.0	43.0	32.0	11.0	2.0	6	9
45	61	65	56	63	4	45.0	43.0	32.0	11.0	2.0	6	9
48	64	68	59	66	4	45.0	43.0	32.0	11.0	2.0	6	9
50	66	70	62	70	4	47.5	47.5	34.5	13.0	2.5	6	9
53	69	73	65	73	4	47.5	47.5	34.5	13.0	2.5	6	9
55	71	75	67	75	4	47.5	47.5	34.5	13.0	2.5	6	9
58	78	83	70	78	4	52.5	52.5	39.5	13.0	2.5	6	9
60	80	85	72	80	4	52.5	52.5	39.5	13.0	2.5	6	9
63	83	88	75	83	4	52.5	52.5	39.5	13.0	2.5	6	9
65	85	90	77	85	4	52.5	52.5	39.5	13.0	2.5	6	9
68	88	93	81	90	4	52.5	52.5	37.5	15.0	2.5	7	9
70	90	95	83	92	4	60.0	60.0	45.0	15.0	2.5	7	9
75	99	104	88	97	4	60.0	60.0	45.0	15.0	2.5	7	9
80	104	109	95	105	4	60.0	60.0	44.5	15.5	3.0	7	9
85	109	114	100	110	4	60.0	60.0	44.5	15.5	3.0	7	9
90	114	119	105	115	4	65.0	65.0	49.5	15.5	3.0	7	9
95	119	124	110	120	4	65.0	65.0	49.5	15.5	3.0	7	9
100	124	129	115	125	4	65.0	65.0	49.5	15.5	3.0	7	9

l<sub>1KU</sub> complies with EN 12756 (short length, unbalanced)

**BT-C5.KU** - Dimensions in millimeter

## RELY ON EXCELLENCE

### Dimensions

d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>6</sub>	d <sub>7</sub>	d <sub>8</sub>	l <sub>1KB</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>
18	22	36	38	27	33	3	45.0	20	35.0	10.0	2.0	5	9
20	24	38	40	29	35	3	45.0	20	35.0	10.0	2.0	5	9
22	26	40	42	31	37	3	45.0	20	35.0	10.0	2.0	5	9
24	28	42	44	33	39	3	47.5	20	37.5	10.0	2.0	5	9
25	30	44	46	34	40	3	47.5	20	37.5	10.0	2.0	5	9
28	33	47	49	37	43	3	50.0	20	40.0	10.0	2.0	5	9
30	35	49	51	39	45	3	50.0	20	40.0	10.0	2.0	5	9
32	38	54	58	42	48	3	50.0	20	40.0	10.0	2.0	5	9
33	38	54	58	42	48	3	50.0	20	40.0	10.0	2.0	5	9
35	40	56	60	44	50	3	50.0	20	40.0	10.0	2.0	5	9
38	43	59	63	49	56	4	52.5	23	41.5	11.0	2.0	6	9
40	45	61	65	51	58	4	52.5	23	41.5	11.0	2.0	6	9
43	48	64	68	54	61	4	52.5	23	41.5	11.0	2.0	6	9
45	50	66	70	56	63	4	52.5	23	41.5	11.0	2.0	6	9
48	53	69	73	59	66	4	52.5	23	41.5	11.0	2.0	6	9
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63	68	88	93	75	83	4	62.5	25	49.5	13.0	2.5	6	9
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75	80	104	109	88	97	4	70.0	28	55.0	15.0	2.5	7	9
80	85	109	114	95	105	4	70.0	28	54.5	15.5	3.0	7	9
85	90	114	119	100	110	4	75.0	28	59.5	15.5	3.0	7	9
90	95	119	124	105	115	4	75.0	28	59.5	15.5	3.0	7	9
95	100	124	129	110	120	4	75.0	28	59.5	15.5	3.0	7	9
100	105	129	134	115	125	4	75.0	28	59.5	15.5	3.0	7	9

l<sub>1KB</sub> complies with EN 12756 (short length, balanced)

BT-C5.KB - Dimensions in millimeter