

RELY ON EXCELLENCE

BT-C5

Mechanical seals | Mechanical seals for pumps | Pusher seals



Features

- Single seal
- For plain shafts
- Unbalanced
- Multiple springs, rotating
- Independent of direction of rotation

Advantages

- Designed for external mounting
- Positive torque transmission between seal face and drive collar
- For high viscosity media
- Insensitive to low solid content

Operating range

Shaft diameter:

$d_1 = 18 \dots 100 \text{ mm (0.71" } \dots 3.94\text{")}$

Pressure:

Unbalanced type BT-C5.KU

$p_1^* = 12 \text{ (16) bar (174 (232) PSI)}$

Balanced type BT-C5.KB

$p_1^* = 25 \text{ (40) bar (360 (580) PSI)}$

Temperature:

$t^* = -35 \text{ }^\circ\text{C } \dots +180 \text{ }^\circ\text{C (-31 }^\circ\text{F } \dots +356 \text{ }^\circ\text{F)}$

Sliding velocity: $v_g = 20 \text{ m/s (50 ft/s)}$

* Dependent on medium, size and material

Materials

Seal face: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), PTFE reinforced (Y1), Tungsten Carbide (U), Silicon Carbide (Q1)
Seat: CrNiMo steel (G), Al-Oxide (V), Tungsten Carbide (U), Silicon Carbide (Q1)

Elastomers:

NBR (P), EPDM (E), FKM (V), FFKM (K)

Metal parts: CrNiMo steel (G)

Standards and approvals

Various material approvals e.g. WRAS, UBA, ACS, NSF, FDA available (depending on type and material combinations). Please inquire!

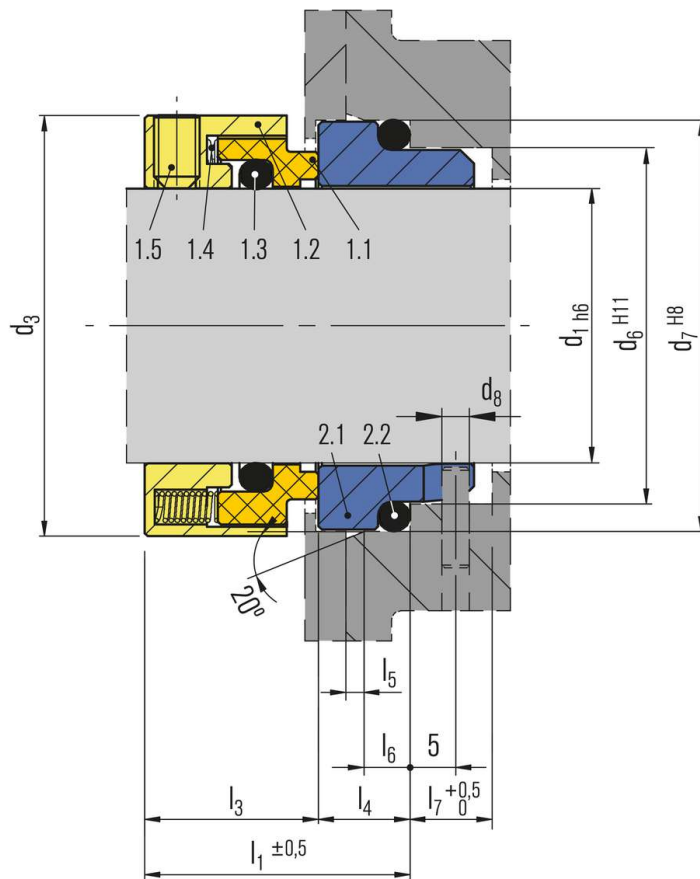
Notes

Assembly aid (seat plate and fixing screws) not supplied with the mechanical seal, but available.

Recommended applications

- Water and wastewater technology
- Chemical industry
- Process industry
- Food and beverage industry
- Low solid content media
- Gear pumps
- Lobe pumps
- Centrifugal pumps

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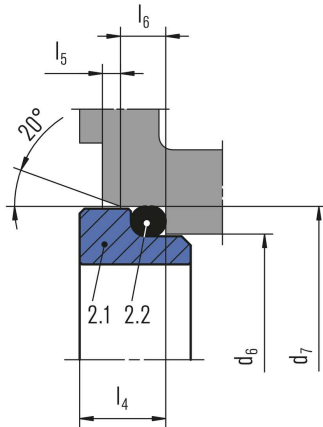
BT-C5.KU

Item Description

- 1.1 Seal face
- 1.2 Collar
- 1.3 O-Ring
- 1.4 Spring
- 1.5 Set screw
- 2.1 Stationary seat
- 2.2 O-ring

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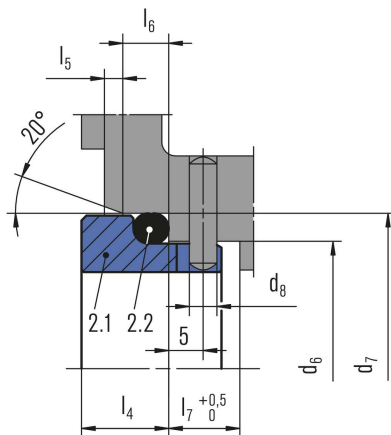
Seat alternatives



PF L

Item Description

- 2.1 Stationary seat
- 2.2 O-Ring



PF L1

Item Description

- 2.1 Stationary seat
- 2.2 O-Ring

Product variants

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Dimensions

d ₁	d ₃	d ₄	d ₆	d ₇	d ₈	l _{1KU}	l ₁	l ₃	l ₄	l ₅	l ₆	l ₇
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_{1KU} complies with EN 12756 (short length, unbalanced)

BT-C5.KU - Dimensions in millimeter

RELY ON EXCELLENCE

Dimensions

d ₁	d ₂	d ₃	d ₄	d ₆	d ₇	d ₈	l _{1KB}	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇
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
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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_{1KB} complies with EN 12756 (short length, balanced)

BT-C5.KB - Dimensions in millimeter