EagleBurgmann
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RELY ON EXCELLENCE

BT-FH

Mechanical Seals | Mechanical seals for pumps | Pusher seals

Features

- Single seal
- For plain shafts
- Unbalanced
- Conical spring rotating
- Dependent on direction of rotation
- Torque transmission via conical spring

Notes

Alternative seat ring can be supplied with short tail or long tail with slot for pin (to prevent seat rotation).

Advantages

- Universal application opportunities
- Reliable design
- High flexibility due to extended selection of materials
- No damage of the shaft by set screws
- Dimensions can be customized
- Alternative seats available

Operating range

Shaft diameter:
d1 = 10 ... 100 mm (0.39" ... 3.94")
Pressure: p1*= 12 (16) bar (174 (232) PSI)
Temperature:
t* = -35 °C ... +200 °C (-31 °F ... +392 °F)
Sliding velocity: vg = 15 m/s (50 ft/s)

* Dependent on medium, size and material

Materials

Seal face:
Al-oxide (V), Silicon carbide (Q1), Tungsten carbide (U)
Seat:
Carbon graphite antimony impregnated (A),
Carbon graphite resin impregnated (B),
Carbon graphite, full carbon (B3),
Silicon carbide (Q1, Q6, Q7),
Tungsten carbide (U)
PTFE glass fiber reinforced (Y1),
PTFE carbon reinforced (Y2)
Elastomers:
NBR (P), EPDM (E), FKM (V), FFKM (K)
Metal parts:
CrNiMo steel 1.4401 (G)

Standards and approvals

- Various material approvals available, e.g. WRAS, UBA, ACS, NSF, FDA (depending on type and material combinations). Please enquire!
- EN 12756 (FH.NU, FH.KU)

Recommended applications

- Water and wastewater technology
- Chemical industry
- Building services industry
- Food and Beverage industry
- Low solid content media
- Centrifugal pumps
- Multistage vertical pumps
- Cooling water pumps
- Hot water pumps

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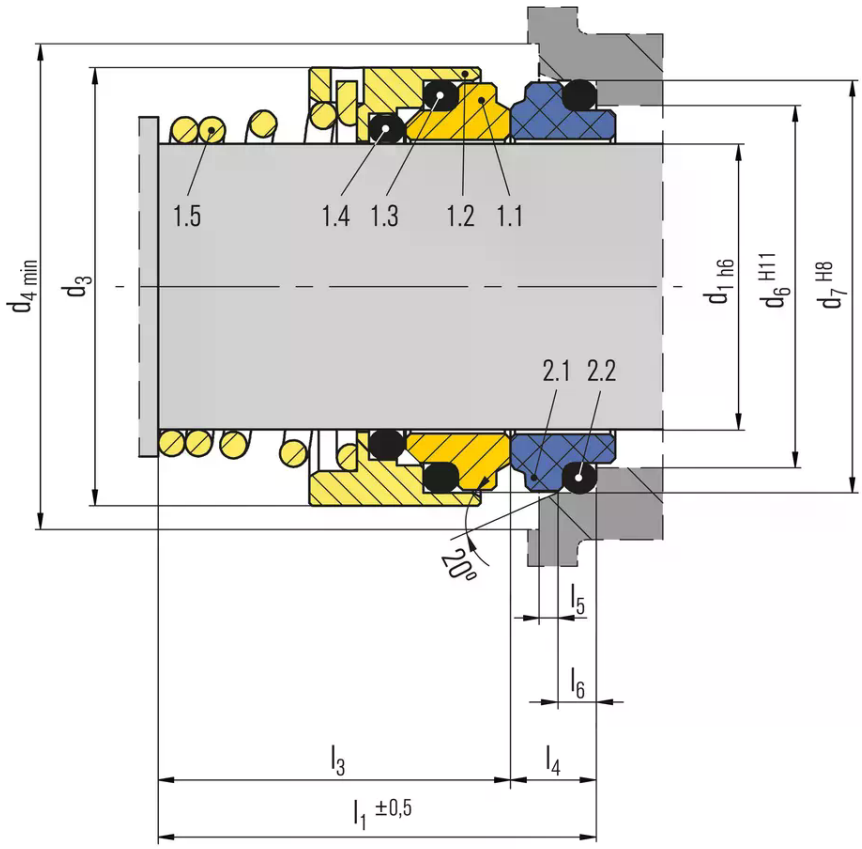
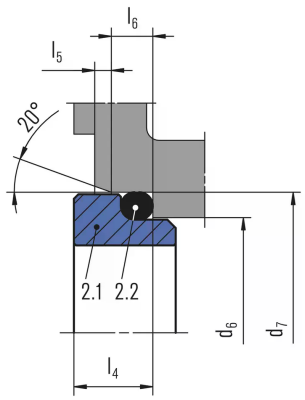


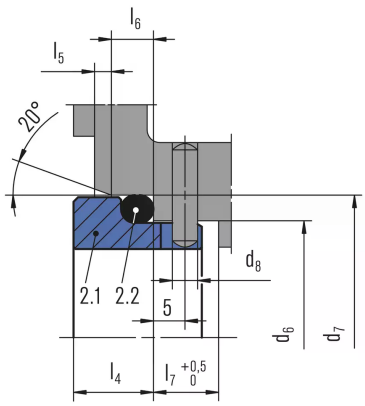
Item	Description
1.1	Seal face
1.2	Collar
1.3	O-Ring
1.4	O-Ring
1.5	Spring
2.1	Stationary seat
2.2	O-Ring

Seat alternatives



PF L

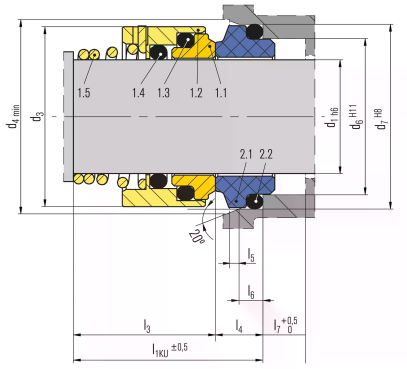
Item Description
2.1 Stationary seat
2.2 O-Ring



PF L1

Item Description
2.1 Stationary seat
2.2 O-Ring

Product variants

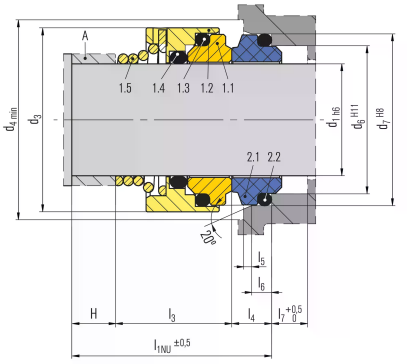


BT-FH.KU

Items and designations are the same as for BT-FH, but with installation length l1K according to EN 12756 (Short, Unbalanced).

Item Description

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

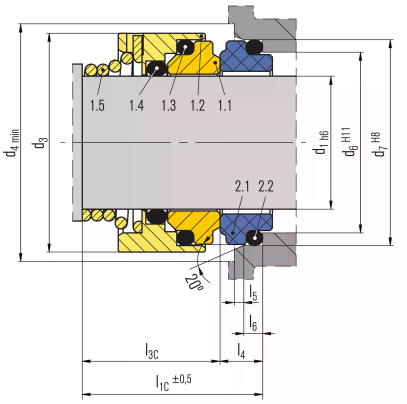


BT-FH.NU

Items and designations are the same as for BT-FH, but with installation length l1K according to EN 12756 (Short, Unbalanced).

Item Description

1.1 Seal face
1.2 Colalr
1.3 O-Ring
1.4 O-Ring
1.5 Spring
2.1 Stationary seat
2.2 O-Ring



BT-FHC

Items and designations are the same as for BT-FH, but with shorter installation length l3C (see dimension table). Same installation length as the BT-RN.

Item Description

1.1 Seal face
1.2 Colalr
1.3 O-Ring
1.4 O-Ring
1.5 Spring
2.1 Stationary seat
2.2 O-Ring

Dimensions

BT-FH	BT-FHC
d₁	d₃
10	20
12	22
14	25
15	29
16	29
18	33
20	33
22	38
24	38
25	40
28	46
30	46
32	46
35	50
38	63
40	63
42	63
43	63
45	69
48	69
50	76
55	76
60	82
65	89
70	94
75	100
80	105
85	115
90	120
95	126
100	130

BT-FH, BT-FHC - Dimensions in millimeters

BT-FH.NU
d₁
10
12
14
16
18
20
22
24
25
28
30

BT-FH.NU
32
33
35
38
40
43
45
48
50
53
55
58
60
63
65
68
70
75
80
85
90
95
100

d~3~, d~4~ dimensions not always in accordance with EN 12756 l~1NU~ complies with EN 12756 (normal length, unbalanced) l~1KU~ complies with EN 12756 (short length, unbalanced) BT-FH.NU / KU - Dimensions in millimeters