

RELY ON EXCELLENCE

## BT-C8.KU

Mechanical Seals | Mechanical seals for pumps | Pusher seals



### Features

- Single seal
- For plain shafts
- Unbalanced
- Super-sinus spring rotating
- Independent of direction of rotation

### 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
- Insensitive to low solid content
- Torque transmission by set screws

### Operating range

Shaft diameter:

d1 = 16 ... 100 mm (0.63" ... 3.94")

Pressure: p1\* = 12 bar (16 bar) (174 PSI)

Temperature:

t\* = -35 °C ... +180 °C (-31 °F ... +356 °F)

Sliding velocity: vg = 20 m/s (66 ft/s)

\* Dependent on medium, size and material

### Materials

Seal face:

Silicon carbide (Q1), Al-oxide (V)

Seat:

Carbon graphite antimony impregnated (A),

Carbon graphite resin impregnated (B), Silicon carbide (Q1, Q6, Q7)

Elastomers:

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

Metal parts: CrNiMo steel 1.4401 (G)

### Standards and approvals

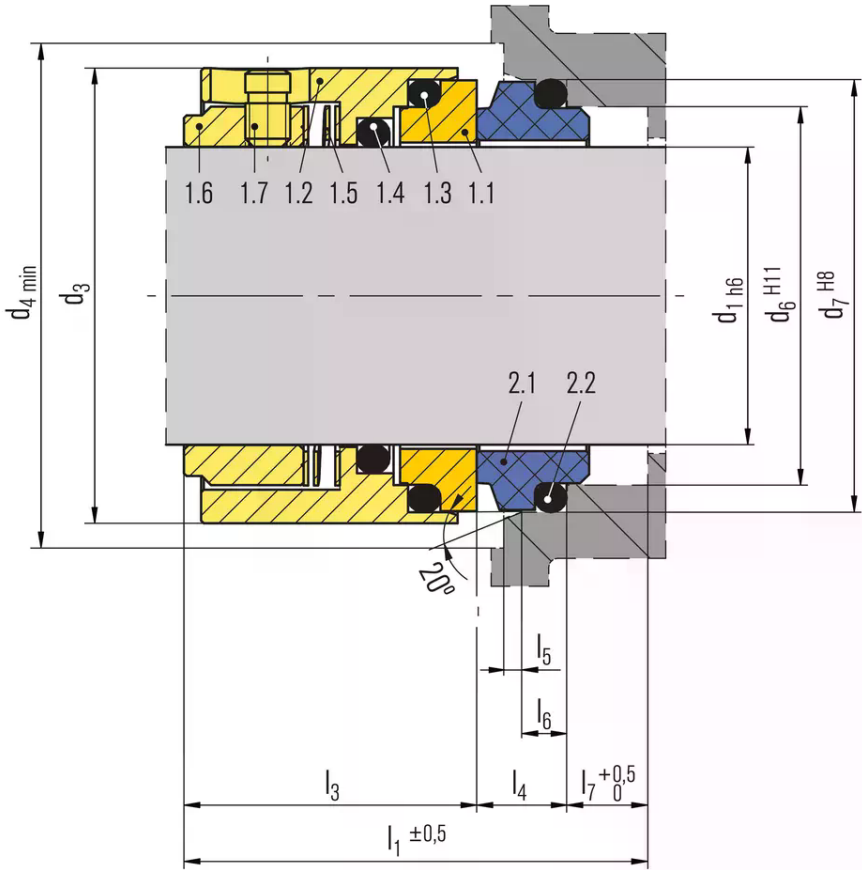
Various material approvals are available, depending on the type of material combinations, e.g. WRAS, UBA, ACS, NSF, FDA. Please inquire!

- EN 12756

### Recommended applications

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

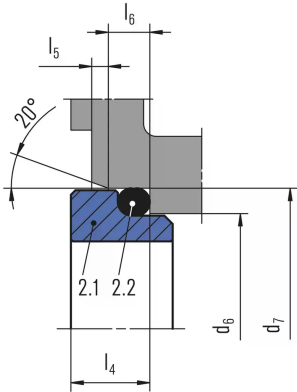
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| Item | Description |
|------|-------------|
| 1.1  | Seal face   |
| 1.2  | Collar      |
| 1.3  | O-Ring      |
| 1.4  | O-Ring      |
| 1.5  | Spring      |
| 1.6  | Driver      |
| 1.7  | Set screw   |
| 2.1  | Seat        |
| 2.2  | O-ring      |

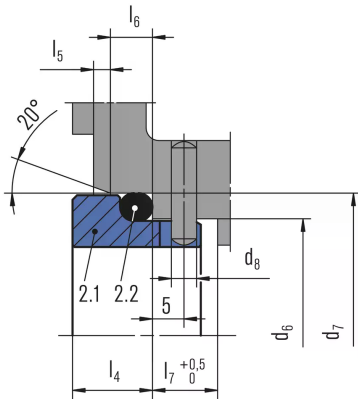
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### Seat alternatives



**PF L**

**Item Description**  
 2.1 Stationary seat  
 2.2 O-Ring



**PF L1**

**Item Description**  
 2.1 Stationary seat  
 2.2 O-Ring

## 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>3</sub> | l <sub>4</sub> | l <sub>5</sub> | l <sub>6</sub> | l <sub>7</sub> |
|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|----------------|----------------|----------------|
| 12             | 23             | 26             | 19             | 23             | 3              | 32.5             | 25.5           | 7              | 1.5            | 4              | 8.5            |
| 14             | 26             | 28             | 21             | 25             | 3              | 35.0             | 28.0           | 7              | 1.5            | 4              | 8.5            |
| 16             | 30             | 32             | 23             | 27             | 3              | 35.0             | 28.0           | 7              | 1.5            | 4              | 8.5            |
| 18             | 33             | 36             | 27             | 33             | 3              | 37.5             | 27.5           | 10             | 2.0            | 5              | 9.0            |
| 20             | 33             | 37             | 29             | 35             | 3              | 37.5             | 27.5           | 10             | 2.0            | 5              | 9.0            |
| 22             | 38             | 41             | 31             | 37             | 3              | 37.5             | 27.5           | 10             | 2.0            | 5              | 9.0            |
| 24             | 38             | 41             | 33             | 39             | 3              | 40.0             | 30.0           | 10             | 2.0            | 5              | 9.0            |
| 25             | 40             | 43             | 34             | 40             | 3              | 40.0             | 30.0           | 10             | 2.0            | 5              | 9.0            |
| 28             | 46             | 50             | 37             | 43             | 3              | 42.5             | 32.5           | 10             | 2.0            | 5              | 9.0            |
| 30             | 46             | 50             | 39             | 45             | 3              | 42.5             | 32.5           | 10             | 2.0            | 5              | 9.0            |
| 32             | 46             | 50             | 42             | 48             | 3              | 42.5             | 32.5           | 10             | 2.0            | 5              | 9.0            |
| 33             | 52             | 57             | 42             | 48             | 3              | 42.5             | 32.5           | 10             | 2.0            | 5              | 9.0            |
| 35             | 56             | 62             | 44             | 50             | 3              | 42.5             | 32.5           | 10             | 2.0            | 5              | 9.0            |
| 38             | 63             | 67             | 49             | 56             | 4              | 45.0             | 32.0           | 13             | 2.0            | 6              | 9.0            |
| 40             | 63             | 67             | 51             | 58             | 4              | 45.0             | 32.0           | 13             | 2.0            | 6              | 9.0            |
| 43             | 63             | 67             | 54             | 61             | 4              | 45.0             | 32.0           | 13             | 2.0            | 6              | 9.0            |
| 45             | 69             | 73             | 56             | 63             | 4              | 45.0             | 32.0           | 13             | 2.0            | 6              | 9.0            |
| 48             | 69             | 73             | 59             | 66             | 4              | 45.0             | 32.0           | 13             | 2.0            | 6              | 9.0            |
| 50             | 76             | 80             | 62             | 70             | 4              | 47.5             | 33.5           | 14             | 2.5            | 6              | 9.0            |
| 53             | 76             | 80             | 65             | 73             | 4              | 47.5             | 33.5           | 14             | 2.5            | 6              | 9.0            |
| 55             | 76             | 80             | 67             | 75             | 4              | 47.5             | 33.5           | 14             | 2.5            | 6              | 9.0            |
| 58             | 82             | 87             | 70             | 78             | 4              | 52.5             | 38.5           | 14             | 2.5            | 6              | 9.0            |
| 60             | 84             | 90             | 72             | 80             | 4              | 52.5             | 38.5           | 14             | 2.5            | 6              | 9.0            |
| 63             | 86             | 93             | 75             | 83             | 4              | 52.5             | 38.5           | 14             | 2.5            | 6              | 9.0            |
| 65             | 89             | 96             | 77             | 85             | 4              | 52.5             | 38.5           | 14             | 2.5            | 6              | 9.0            |
| 68             | 92             | 99             | 81             | 90             | 4              | 52.5             | 36.5           | 16             | 2.5            | 7              | 9.0            |
| 70             | 95             | 101            | 83             | 92             | 4              | 60.0             | 44.0           | 16             | 2.5            | 7              | 9.0            |
| 75             | 100            | 106            | 88             | 97             | 4              | 60.0             | 44.0           | 16             | 2.5            | 7              | 9.0            |
| 80             | 105            | 111            | 95             | 105            | 4              | 60.0             | 42.0           | 18             | 3.0            | 7              | 9.0            |
| 85             | 115            | 125            | 100            | 110            | 4              | 60.0             | 42.0           | 18             | 3.0            | 7              | 9.0            |
| 90             | 120            | 130            | 105            | 115            | 4              | 65.0             | 47.0           | 18             | 3.0            | 7              | 9.0            |
| 95             | 126            | 137            | 110            | 120            | 4              | 65.0             | 47.0           | 18             | 3.0            | 7              | 9.0            |
| 100            | 130            | 143            | 115            | 125            | 4              | 65.0             | 47.0           | 18             | 3.0            | 7              | 9.0            |

d~3~, d~4~ dimensions not always in accordance with EN 12756 I1KU complies with EN 12756 (short length, unbalanced) \*\*BT-C8.KU\*\* - Dimensions in millimeter