

RELY ON EXCELLENCE

## BT-ARP

Mechanical Seals | Mechanical seals for pumps | Elastomer bellows seals



### Features

- For plain shafts
- Elastomer bellows rotating
- Unbalanced
- Single seal
- Independent of direction of rotation
- protected spring

### Advantages

- Especially design for solid containing media
- Spring is protected from the product, thus preventing sticking or clogging
- Dimension adaptations and additional seats available
- Reliable for rugged operation such as wastewater treatment
- Shaft protection over entire seal length

### Operating range

Shaft diameter:

d1\*\* = 20 ... 50 mm (0.79" ... 1.57")

Pressure: p1\* = 6 bar (87 PSI)

Temperature:

t\* = -20 °C ... +90 °C (-4 °F ... +194 °F)

Sliding velocity: v<sub>g</sub> = 10 m/s (33 ft/s)

\* Dependent on medium, size and materials

\*\* Other diameters upon request

### Materials

Seal face\*: Silicon carbide (Q1, Q6),

Tungsten carbide (U)

Seat: Silicon carbide (Q1, Q6, Q7),

Tungsten carbide (U)

Elastomers:

NBR (P), FKM (V), HNBR (X4)

Metal parts:

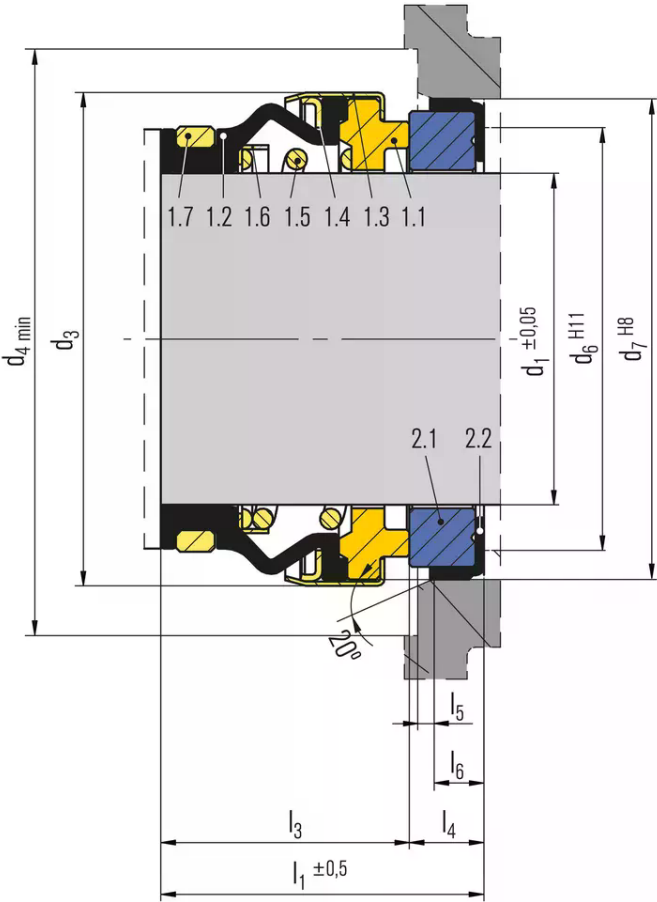
CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G)

\* Seal face available in solid or shrink fit/brazed version

### Recommended applications

- Water and waste water technology
- Raw sludge, sewage slurries
- Contaminated, abrasive and solid containing media
- Submersible pumps
- Raw sludge pumps

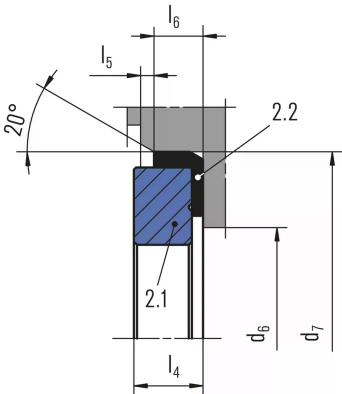
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Item	Description
1.1	Seal face
1.2	Bellows
1.3	Collar
1.4	Locing ring
1.5	Spring
1.6	L-ring
1.7	Drive ring
2.1	Seat
2.2	Gasket

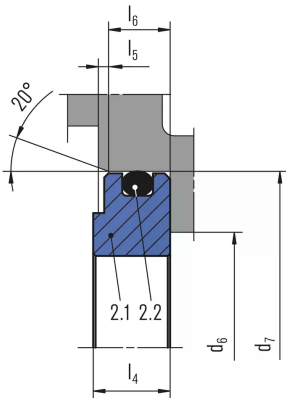
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### Seat alternatives



**PF C**

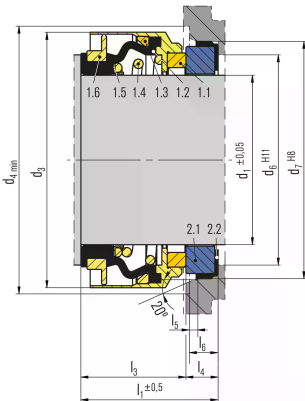
**Item Description**  
 2.1 Stationary seat  
 2.2 Gasket



**PF A**

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

### Product variants



**BT-ARPs**

Special design - super protected  
 (upon request)

**Item Description**  
 1.1 Seal face  
 1.2 Bellows  
 1.3 Locking ring  
 1.4 Spring  
 1.5 L-ring  
 1.6 Drive ring  
 2.1 Seat  
 2.2 Gasket

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## Dimensions

d <sub>1</sub>	d <sub>3</sub>	d <sub>4</sub>	d <sub>6</sub>	d <sub>7</sub>	l <sub>1</sub>	l <sub>3</sub>	l <sub>4</sub>	l <sub>5</sub>	l <sub>6</sub>
20	39	43	29	35	29.0	21.5	7.5	2.0	5
22	42	47	31	37	29.0	21.5	7.5	2.0	5
25	42	50	34	40	30.5	23.0	7.5	2.0	5
28	47	51	37	43	34.0	23.0	7.5	2.0	5
30	54	60	39	45	34.0	26.5	7.5	2.0	5
35	57	63	44	50	36.0	28.5	7.5	2.0	5
38	60	65	49	56	39.0	30.0	9.0	2.0	6
40	60	70	51	58	39.0	30.0	9.0	2.0	6
43	65	70	54	61	39.0	30.0	9.0	2.0	6
45	70	75	56	60	39.0	30.0	9.0	2.0	6
50	75	79	62	70	40.0	30.5	9.0	2.5	6
60	87	91	72	80	49.0	38.0	11.0	2.5	6
90	124	130	105	115	59.0	45.0	14.0	3.0	7

BT-ARP - Dimension in millimeter