

RELY ON EXCELLENCE

BT-ARP

Mechanical Seals | Mechanical seals for pumps | Elastomer bellow 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:

$d1^{**} = 20 \dots 50 \text{ mm (0.79" ... 1.57")}$

Pressure: $p1^* = 6 \text{ bar (87 PSI)}$

Temperature:

$t^* = -20 \text{ °C ... } +90 \text{ °C (-4 °F ... } +194 \text{ °F)}$

Sliding velocity: $v_g = 10 \text{ m/s (33 ft/s)}$

* 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:

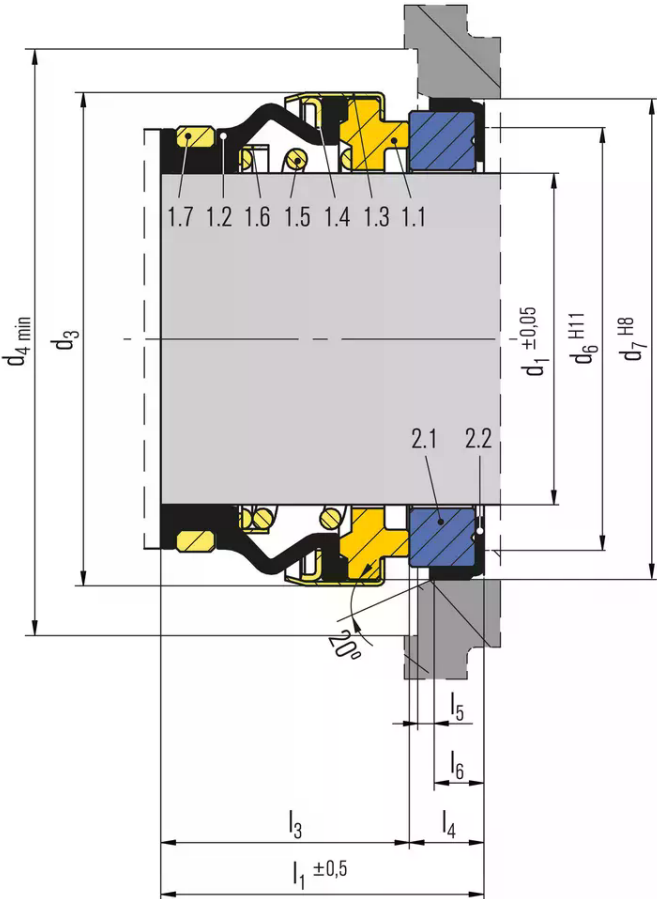
CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G)

* 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

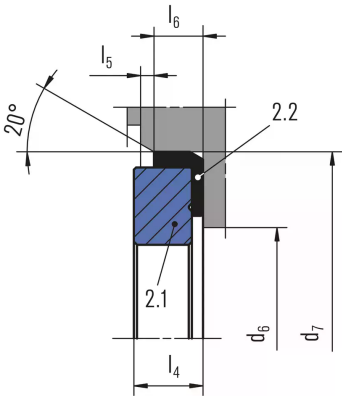
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Item	Description
1.1	Seal face
1.2	Bellows
1.3	Collar
1.4	Locing ring
1.5	Spring
1.6	L-ring
1.7	Drive ring
2.1	Seat
2.2	Gasket

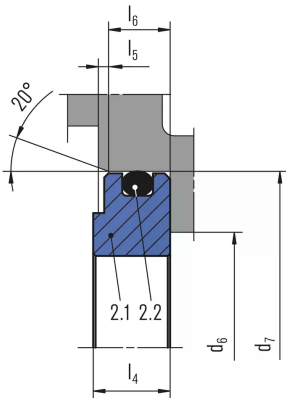
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Seat alternatives



PF C

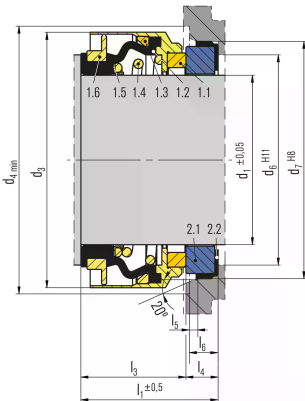
Item Description
 2.1 Stationary seat
 2.2 Gasket



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 ₁	d ₃	d ₄	d ₆	d ₇	l ₁	l ₃	l ₄	l ₅	l ₆
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