

Reliable shaft seals for large pump series.
High quality made in Italy.

EagleBurgmann®
Rely on excellence

EagleBurgmann BT Mechanical seals



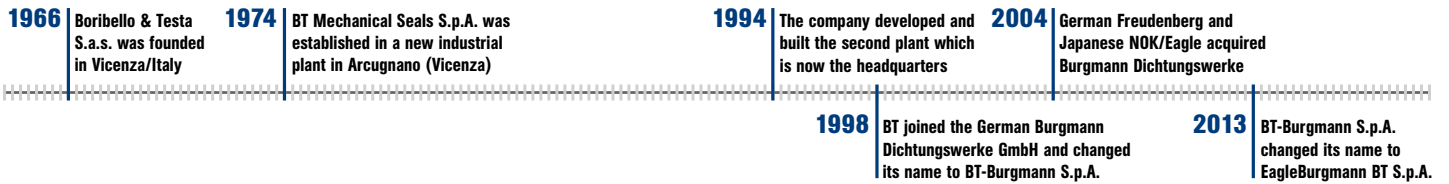
EagleBurgmann BT: The specialist for small shaft seals for large pump series.



EagleBurgmann BT S.p.A. was founded in 1966 to initially satisfy the mechanical seal requirements of Italian pump manufacturers. Today the most valuable customers of EagleBurgmann BT are major European water pump manufacturers, as well as many other well-known worldwide pump producers on the OEM market.

The company has grown continuously with around 70 employees now and produces more than 8 million mechanical seals a year.

Company milestones



Quality and certifications

EagleBurgmann BT is a certified company with highly qualified technical personnel and the most advanced equipment for research, production and control in accordance with the highest international standards.

Our certifications:

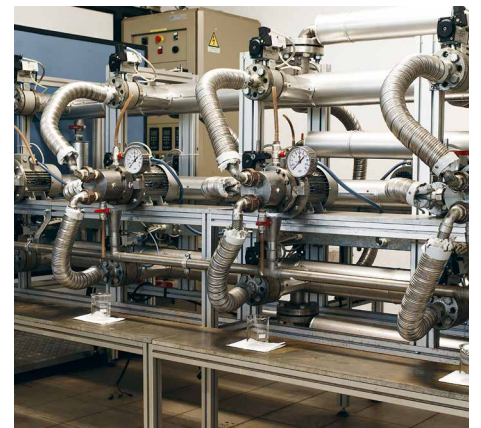
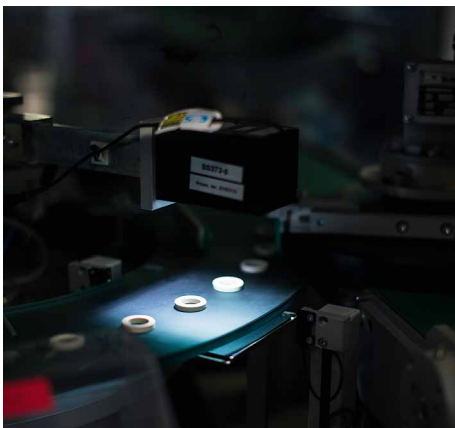
- UNI EN ISO 9001 Quality Management System
- UNI EN ISO 14001 Environment Management System
- OHSAS 18001 Health and Safety Management System
- SA 8000 Corporate Social Responsibility Certification

Production

Large investments in production processes and complete automation of many manufacturing phases allow us to achieve the combined target of reasonable prices and high quality products. EagleBurgmann BT offers automatic quality control for a 100 % production inspection.

Testing facilities

Different test rigs for life-tests and special equipment for pumps ensure quality control as well as continuous development of new products. EagleBurgmann BT can also provide specific tests in accordance with customer requirements.



When BT joined the Burgmann group in 1998, it was initially structured as a small family-owned company with a national market. Over the years, EagleBurgmann BT has developed into a modern company oriented towards a global market with export sales of more than 45 % of turnover, with two plant sites (total area 8.000 square meters) in the industrial area of Arcugnano (Vicenza).

EagleBurgmann BT is the market leader for mass production mechanical seals in clean water applications. Our seals are used regularly in many applications such as:

- Drinking water pumps
- Hot water and water pumps
- Swimming pool pumps
- Massage pumps in whirlpools
- Pumps for garden and ponds
- Submersible pumps
- Submersible well motors
- Waste water pumps
- Circulation pumps for heating systems
- Pumps for dishwashers
- Shower pumps
- Building service systems
- Coffee machine pumps

In addition, the EagleBurgmann BT range of products also includes seals for light chemicals and food industry applications, for abrasive media and for pressures up to 40 bar (580 PSI). Customized solutions can be also provided according to customer needs.



EagleBurgmann BT production site

Research and development

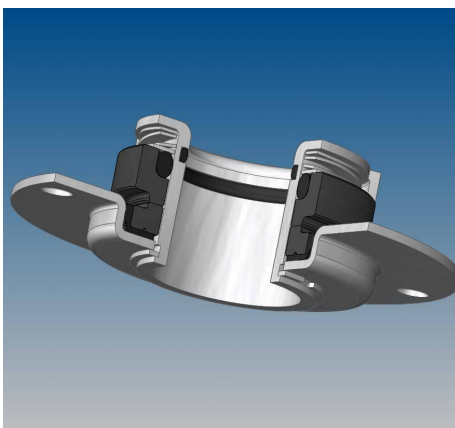
A staff of qualified technicians with in-depth knowledge of seal materials is permanently occupied with developing innovative solutions. Our R&D department works with excellent equipment and advanced technologies:

- Flatness analysis system
- Thermal analysis equipment
- Scanning electron microscope with EDX probe
- FT Infrared spectrometer
- Metallographic microscope
- FEM finite element modelling software
- 3-D CAD system

Seal material approvals

Drinking water approval is one of the requirements of the water market. EagleBurgmann BT continuously invests in qualified seal materials to fulfill the main regulations in the market:

- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA





Mechanical seal for large-series cold water pumps, produced in millions of units per year. The BT-AR owes its success to the wide range of application, the short axial length (this allows for more economic pump construction and saves material), and the best quality/price ratio. The elasticity of the bellows design enables a more robust operation.

The BT-AR can also be used as a multiple seal in tandem or back-to-back arrangement when the product media cannot ensure lubrication, or when sealing media with a higher solids content. Installation proposals can be provided upon request.

Features

- Rubber bellows mechanical seal
- Unbalanced
- Single spring
- Independent of direction of rotation
- Short axial installation length

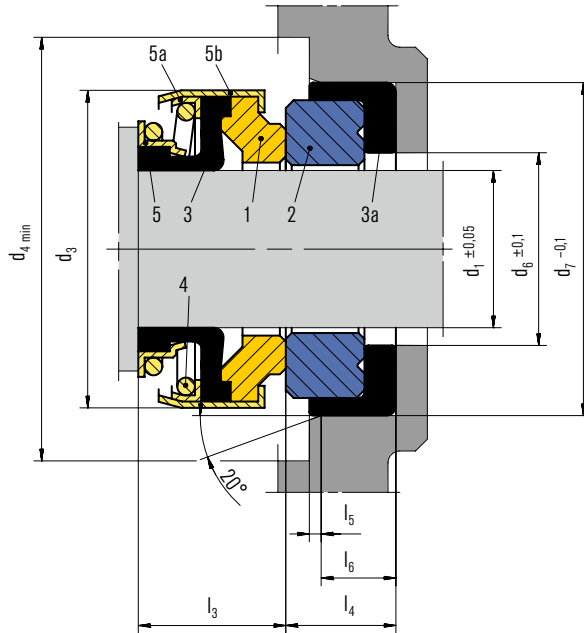
Operating range (see note on page 28)

Shaft diameter: $d_1 = 6 \dots 70 \text{ mm}$ (0.24" ... 2.76")
 Pressure: $p_1^* = 6 \text{ bar}$ (87 PSI),
 vacuum ... 0.5 bar (7.45 PSI)
 up to 1 bar (14.5 PSI) with seat locking
 Temperature: $t^* = -20 \text{ }^\circ\text{C} \dots +120 \text{ }^\circ\text{C}$ (-4 $^\circ\text{F} \dots +248 \text{ }^\circ\text{F}$)
 Sliding velocity: $v_g = 10 \text{ m/s}$ (33 ft/s)

* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Carbon graphite, full carbon (B3), Silicon carbide (Q1, Q6), Tungsten carbide (U), PTFE glass fiber reinforced (Y)
 Seat: Steatite (X), Aluminium oxide (V, V1), Silicon carbide (Q1, Q6, Q7), Tungsten carbide (U), Cr steel (E), CrNi steel (F), CrNiMo steel (G)
 Elastomers: NBR (P), EPDM (E), FKM (V), HNBR (X4)
 Metal parts: CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G), CrNi steel 1.4057 (F1)



Item Description

- | | |
|----|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3 | Bellows |
| 3a | Gasket |
| 4 | Spring |
| 5 | Ring |
| 5a | Locking ring |
| 5b | Collar |

Product variants

BT-AR3

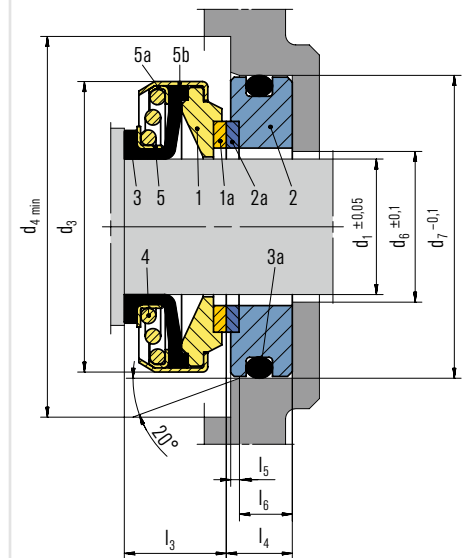
Seal faces with brazed tungsten carbide (U) for abrasive media. Elastomers and diameter range the same as BT-AR. The BT-AR3 is the right choice of seal for use in high duty applications or when abrasives (e.g. waste water) could damage the seal faces.

Recommended applications

- Water and waste water technology
- Pool and spa applications
- Household appliances
- Domestic and garden pumps
- Whirlpool and swimming pool pumps
- Dishwasher pumps
- Submersible motors / pumps
- Water pumps / waste water pumps

Certificates

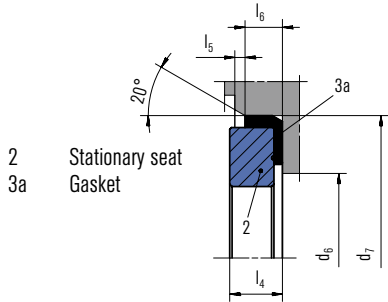
- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA



- | | |
|----|-------------------------|
| 1 | Seal face housing |
| 1a | Brazed seal face |
| 2 | Stationary seat housing |
| 2a | Brazed stationary seat |
| 3 | Bellows |
| 3a | O-Ring |
| 4 | Spring |
| 5 | Ring |
| 5a | Locking ring |
| 5b | Collar |

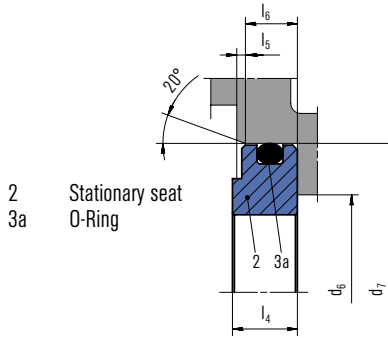
Seat alternatives

PF C



2
3a
Stationary seat
Gasket

PF A



2
3a
Stationary seat
O-Ring

Dimensions BT-AR in mm

Type	d ₁	d ₃	d ₄	d ₆	d ₇	l ₃	tol	l ₄	l ₅	l ₆	Note
6	6	18	23	8	22.0	8.0	+0.5/0	4.0	0.5	3.5	
8S	8	20	23	10	18.0	8.0	+0.5/0	4.8	0.5	3.5	*
8	8	24	27	10	26.0	11.0	+0.5/0	8.0	1.0	6.0	
10	10	24	27	12	26.0	11.0	+0.5/0	5.5	0.5	4.5	*
11	11	24	27	13	26.0	11.0	+0.5/0	8.0	1.0	6.0	
12C	12	24	27	14	26.0	11.0	+0.5/0	5.5	0.5	4.5	*
12	12	24	27	14	26.0	12.8	+0.7/0	8.0	1.0	6.0	
13	13	24	27	15	26.0	12.8	+0.7/0	5.5	0.5	4.5	*
14S	14	28	30	18	25.0	12.8	+0.7/0	5.0	0.5	4.0	*
14L	14	28	30	18	26.0	12.8	+0.7/0	8.0	1.0	6.0	
14	14	32	35	16	29.5	12.8	+0.7/0	7.5	1.0	5.5	*
15	15	32	35	17	29.5	12.8	+0.7/0	8.0	1.0	6.0	
16R	16	32	35	18	30.0	12.8	+0.7/0	6.0	1.0	4.0	*
16	16	32	35	18	29.5	12.8	+0.7/0	8.0	1.0	6.0	
17	17	39	43	18	30.0	12.8	+0.7/0	6.0	1.0	4.0	*
18	18	39	43	20	38.0	12.8	+0.7/0	8.0	1.0	6.0	*
19	19	39	43	21	42.0	12.8	+0.7/0	8.0	1.0	6.0	
20R	20	35	39	22	42.0	12.8	+0.7/0	8.0	1.0	6.0	
20	20	39	43	22	42.0	12.8	+0.7/0	8.0	1.0	6.0	
20S	20	42	47	22	45.0	12.8	+0.7/0	10.0	1.0	8.0	
22	22	42	47	24	50.0	13.5	+1/0	10.0	1.0	8.0	
23	23	47	52	25	50.0	13.5	+1/0	10.0	1.0	8.0	
24	24	47	52	26	50.0	13.5	+1/0	10.0	1.0	8.0	
25R	25	42	52	27	50.0	13.5	+1/0	10.0	1.0	8.0	
25	25	47	52	27	45.0	13.5	+1/0	10.0	1.0	8.0	*
26	26	47	52	29	50.0	13.5	+1/0	10.0	1.0	8.0	
27	27	47	52	30	50.0	13.5	+1/0	10.0	1.0	8.0	
28	28	54	60	31	57.0	15.0	+1/0	10.0	1.0	8.0	
30	30	54	60	33	57.0	15.0	+1/0	10.0	1.0	8.0	
32	32	54	60	35	57.0	15.0	+1/0	10.0	1.0	8.0	
35	35	60	70	38	63.0	16.0	+1/0	10.0	1.0	8.0	
38	38	65	75	41	68.0	18.0	+1/0	12.0	2.0	9.0	
40	40	65	75	43	68.0	18.0	+1/0	12.0	2.0	9.0	
45	45	70	80	48	73.0	20.0	+1/0	12.0	2.0	9.0	
50	50	85	95	53	88.0	23.0	+1/0	15.0	2.0	12.0	
60	60	105	115	63	110.0	30.0	+1/0	15.0	2.0	12.0	
70	70	105	115	73	110.0	32.0	+1/0	15.0	2.0	12.0	

* Alternative seat dimensions

Dimensions BT-AR in inch/mm

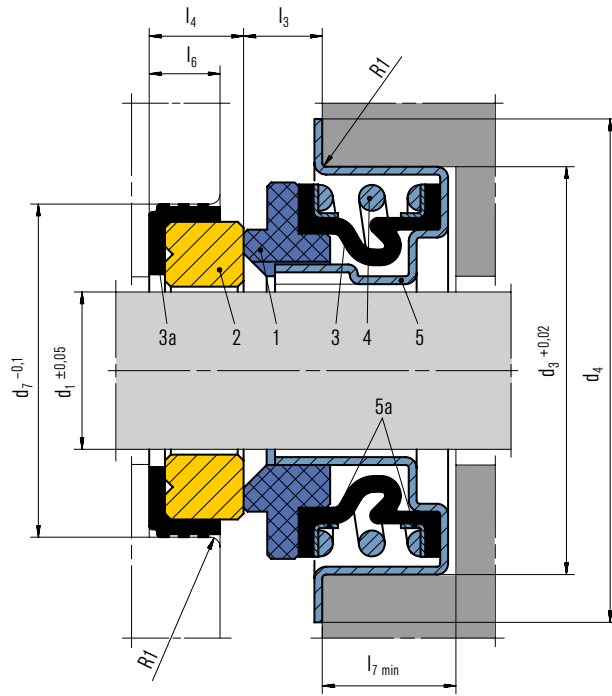
d ₁	d ₁	d ₃	d ₄	d ₆	d ₇	l ₃	tol	l ₄	l ₅	l ₆	Note
0.375"	9.53	24	27	12	25.40	11.0	+0.5/0	5.5	0.5	4.5	
0.500"	12.70	24	27	15	25.40	11.0	+0.5/0	7.5	1.0	5.5	*
0.625"	15.88	32	36	18	31.75	12.8	+0.7/0	10.3	1.0	8.0	

* Alternative seat dimensions

BT-A2



Stationary mechanical seal in inch dimensions. Spread throughout the world, this type of mechanical seal has reached an unsurpassed quality level. The BT-A2 features all carbon or high quality resin impregnated carbon, aluminium oxide 96 %, is stationary and the rubber bellows are glued on collar. Static air pressure test to 100 % production. Excellent solution for swimming pool pumps.



Features

- Rubber bellows mechanical seal
- Unbalanced
- Single spring
- Independent of direction of rotation
- Stationary design

Operating range (see note on page 28)

Shaft diameter: $d_1 = 1/2", 5/8", 3/4"$
 Pressure: $p_1^* = 4 \text{ bar (58 PSI)}$
 Temperature: $t^* = -20^\circ\text{C} \dots +90^\circ\text{C} (-4^\circ\text{F} \dots +194^\circ\text{F})$
 Sliding velocity: $v_g = 10 \text{ m/s (33 ft/s)}$

* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: Carbon graphite resin impregnated (B),
 Carbon graphite, full carbon (B3)
 Seat: Aluminium oxide (V1), Silicon carbide (Q1)
 Elastomers: NBR (P), EPDM (E), FKM (V)
 Metal parts: CrNi steel (F), CrNiMo steel (G)

Recommended applications

- Pool and spa applications
- Household appliances
- Domestic and garden pumps
- Clean water pumps
- Swimming pool pumps
- Whirlpool pumps

Item Description

Item	Description
1	Seal face
2	Seat
3	Bellows
3a	Gasket
4	Spring
5	Collar
5a	L-ring

Dimensions BT-A2 in inch/mm

d_1	d_1	d_3	d_4	d_7	l_3	tol	l_4	l_6	l_7
0.500"	12.70	28.55	35.00	25.40	5.2	+0.5	8.0	6.0	10
0.625"	15.88	36.45	41.00	31.75	6.8	+0.5	10.3	8.5	10
0.750"	19.05	40.00	44.00	34.95	6.5	+0.5	10.3	8.0	11

BT-ARP



BT-ARP mechanical seals are the ideal solution for media which contain solids or are highly viscous. The spring is product-protected, thus preventing sticking or clogging. Reliable for rugged operation in all kind of applications such as waste water treatment. The dimensions can be adapted and additional seats are available. The bellows provides protection across the entire seal length.

Features

- Rubber bellows mechanical seal
- Independent of direction of rotation
- Single spring, product-protected
- Unbalanced

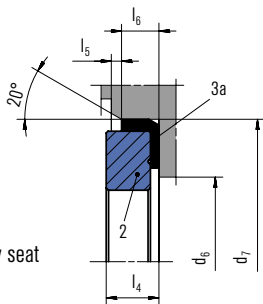
Operating range (see note on page 28)

Shaft diameter: $d_1^{**} = 20 \dots 40 \text{ mm}$ (0.79" ... 1.57")
 Pressure: $p_1^* = 6 \text{ bar}$ (87 PSI)
 Temperature: $t^* = -20 \text{ °C} \dots +90 \text{ °C}$ (-4 °F ... +194 °F)
 Sliding velocity: $v_g = 10 \text{ m/s}$ (33 ft/s)

- * Dependent on medium, size and material
- ** Other diameters upon request

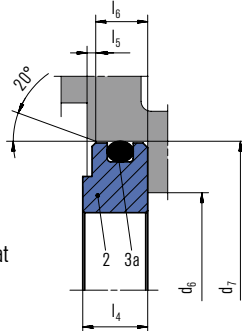
Seat alternatives

PF C

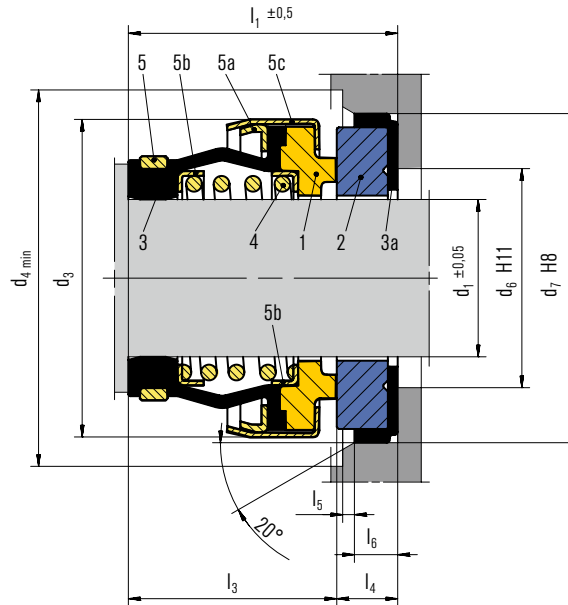


- 2 Stationary seat
- 3a Gasket

PF A



- 2 Stationary seat
- 3a O-Ring



Item Description

- 1 Seal face
- 2 Stationary seat
- 3 Bellows
- 3a Gasket
- 4 Spring
- 5 Drive ring
- 5a Locking ring
- 5b L-ring
- 5c Collar

Materials (see fold-out page 28)

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

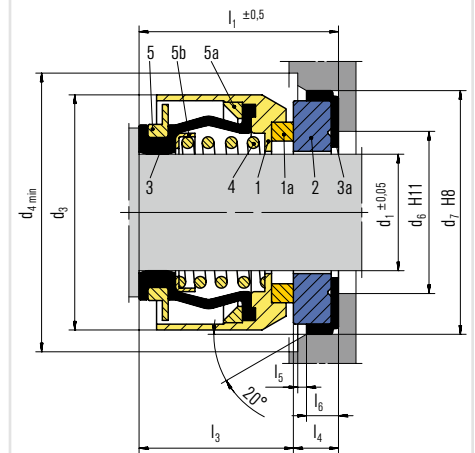
Recommended applications

- Water and waste water technology
- Slurry applications
- Submersible pumps

Product variants

BT-ARPs

Special design - super protected (upon request)



- 1 Seal face housing
- 1a Shrink fitted seal face
- 2 Stationary seat
- 3 Bellows
- 3a Gasket
- 4 Spring
- 5 Drive ring
- 5a Locking ring
- 5b L-ring

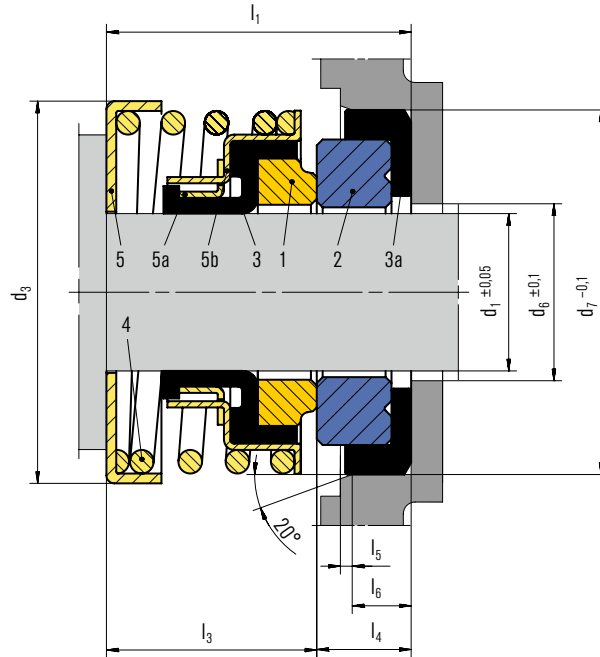
Dimensions BT-ARP in mm

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	5
22	42	47	31	37	29.0	21.5	7.5	2	5
25	45	50	34	40	30.5	23.0	7.5	2	5
30	50	56	39	45	34.0	26.5	7.5	2	5
35	56	62	44	50	36.0	28.5	7.5	2	5
40	60	70	51	58	39.0	30.0	9.0	2	6

BT-PN



The BT-PN is a large series mechanical seal with a simple yet effective design that is easy to assemble. The special spring arrangement allows a short axial installation length. This advantage is combined with an increased working pressure capability of up to 12 bar (174 PSI). The spring is free from torque transmission.



Features

- Rubber bellows mechanical seals
- Unbalanced
- Single spring
- Independent of direction of rotation

Operating range (see note on page 28)

Shaft diameter: $d_1^* = 8 \dots 40 \text{ mm}$ (0.31" ... 1.57")
 Pressure: $p_1^{**} = 12 \text{ bar}$ (174 PSI),
 vacuum ... 0.5 bar (7.45 PSI)
 Temperature: $t^{**} = -20 \text{ °C} \dots +120 \text{ °C}$ (-4 °F ... +248 °F)
 Sliding velocity: $v_g = 10 \text{ m/s}$ (33 ft/s)

Operating limits depend on $p \cdot v_g$ factor

- * Other diameters upon request
- ** Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: Carbon graphite antimony impregnated (A),
 Carbon graphite resin impregnated (B),
 Silicon carbide (Q1, Q6)
 Seat: Aluminium oxide (V), Steatite (X),
 Silicon carbide (Q1, Q6, Q7)
 Elastomers: NBR (P), FKM (V), EPDM (E)
 Metal parts: CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G)

Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- FDA
- DM 174/04

Recommended applications

- Pool and spa applications
- Household appliances
- Water and waste water technology
- Food and beverage industry
- Submersible oil filled motors (4" / 6")
- Submersible pumps, back-to-back installation
- Peripheral pumps for industrial applications
- Domestic and garden pumps
- Coffee machines
- Shower pumps

Item Description

- | | |
|----|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3 | Bellows |
| 3a | Gasket |
| 4 | Spring |
| 5 | Ring |
| 5a | Drive ring |
| 5b | Collar |

Dimensions BT-PN in mm

d_1	d_3	d_6	d_7	l_1	l_3	tol	l_4	l_5	l_6
8.00	23	10	22.0	17.5	13.5	±1	4.0	0.5	3.5
8.00	23	10	25.4	19.0	13.5	±1	5.5	0.5	4.5
9.53	23	12	25.4	19.0	13.5	±1	5.5	0.5	4.5
10.00	23	12	25.4	19.0	13.5	±1	5.5	0.5	4.5
13.00	32	17	29.5	20.8	12.8	+0.7/0	8.0	1.0	6.0
14.00	32	17	29.5	20.8	12.8	+0.7/0	8.0	1.0	6.0
15.00	32	17	29.5	20.8	12.8	+0.7/0	8.0	1.0	6.0
16.00	32	17	29.5	20.8	12.8	+0.7/0	8.0	1.0	6.0
16.00*	32	17	29.5	24.3	16.3	+0.7/0	8.0	1.0	6.0
20.00	44	22	42.0	22.0	14.0	±1	8.0	1.0	6.0
25.00	50	27	45.0	27.0	17.0	±1	10.0	1.0	8.0
30.00	60	33	52.0	34.0	22.0	±1	12.0	1.5	8.5

* 4" submersible motor

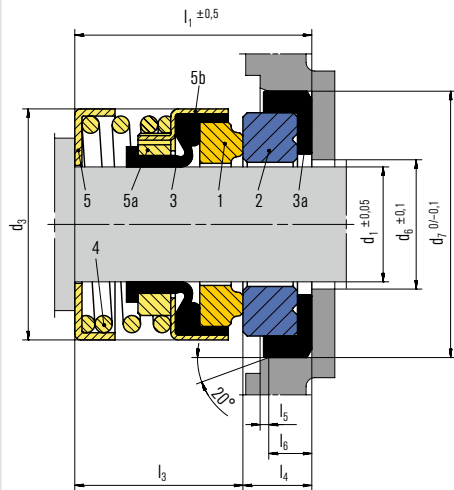
Product variants

BT-PNL

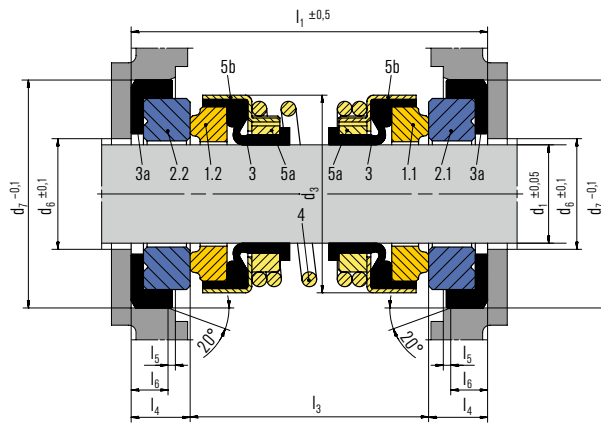
The small outer diameter of the BT-PNL allows installation in small seal compartments. Easy to assemble, the BT-PNL guarantees a long service life due to good product turbulence and the torque transmitted by the rubber bellows.

BT-PN and PNL, double seal (back-to-back arrangement)

Both types of seal can also be used as a multiple seal in back-to-back arrangement. This is advisable when the product media cannot ensure lubrication or the solids content is too high (oil chamber). Installation proposals can be supplied upon request. In this configuration, the operating pressure (product side seal) must be limited to max. 2 bar (29 PSI).



- 1 Seal face
- 2 Stationary seat
- 3 Bellows
- 3a Gasket
- 4 Spring
- 5 Ring
- 5a Drive ring
- 5b Collar



- 1.1 Seal face (product side)
- 1.2 Seal face (motor side)
- 2.1 Stationary seat (product side)
- 2.2 Stationary seat (motor side)
- 3 Bellows
- 3a Gasket
- 4 Spring
- 5a Drive ring
- 5b Collar

Dimensions BT-PNL in mm

d ₁	d ₃	d ₆	d ₇	l ₁	l ₃	l ₄	l ₅	l ₆
10.00	22	14	26.00	21.00	15.5	5.5	0.5	4.5
11.00	22	14	26.00	21.00	15.5	5.5	0.5	4.5
12.00	22	14	26.00	21.00	15.5	5.5	0.5	4.5
13.00	28	17	29.50	26.00	18.0	8.0	1.0	6.0
14.00	28	17	29.50	26.00	18.0	8.0	1.0	6.0
15.00	28	17	29.50	26.00	18.0	8.0	1.0	6.0
16.00	28	17	29.50	26.00	18.0	8.0	1.0	6.0
19.05	32	22	34.95	32.30	22.0	10.3	1.2	7.8
20.00	32	22	42.00	30.00	22.0	8.0	1.0	6.0
25.00	42	27	45.00	37.00	27.0	10.0	1.0	8.0
25.40*	42	29	41.25	38.20	27.0	11.0	1.5	8.5
30.00	52	33	52.00	40.00	28.0	12.0	1.5	8.5
31.75	52	34	47.60	60.20	49.2	11.0	1.5	8.5
40.00	63	45	68.00	47.00	35.0	12.0	1.5	8.5

* 6" submersible motor

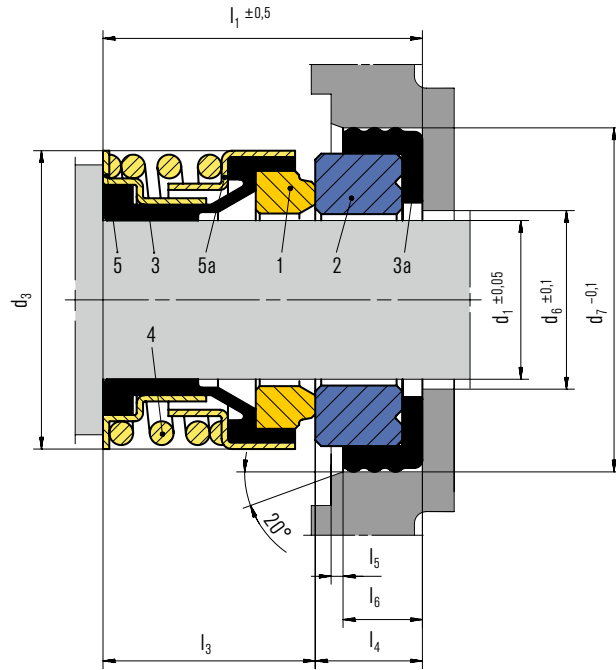
Dimensions BT-PNL double seal in mm

d ₁	d ₃	d ₆	d ₇	l ₁	l ₃	l ₄	l ₅	l ₆
12	22	14	26	39	28	5.5	0.5	4.5
14	24	16	26	34	24	5.0	0.5	4.0
15	28	17	28	38	26	6.0	1.0	4.5
16	28	18	28	38	26	6.0	1.0	4.5
18	32	20	33	45	30	7.5	2.0	5.0
20	32	22	35	45	30	7.5	2.0	5.0
22	39	24	37	46	31	7.5	2.0	5.0
25	42	27	40	47	32	7.5	2.0	5.0

BT-PNT



The main design features of the BT-PNT are the metal joint torque transmission together with the rubber bellows. This prevents torsional effects on the bellows. The shaft is protected across the entire seal length. Easy to assemble, the BT-PNT guarantees a long service life due to good product turbulence.



Features

- Rubber bellows mechanical seal
- Unbalanced
- Single spring
- Independent of direction of rotation

Operating range (see note on page 28)

Shaft diameter: $d_1 = 15 \text{ mm}$, 5/8", 3/4", 1"

Pressure: $p_1^* = 12 \text{ bar}$ (174 PSI)

Temperature: $t^* = -20 \text{ °C} \dots +120 \text{ °C}$ (-4 °F... +248 °F)

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

* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: Carbon graphite resin impregnated (B), Carbon graphite, full carbon (B3), Silicon carbide (Q1)

Seat: Aluminium oxide (V), Silicon carbide (Q1)

Elastomers: NBR (P), EPDM (E), FKM (V)

Metal parts: CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G)

Recommended applications

- Water and waste water technology
- Pool and spa applications
- Household appliances
- Swimming pool pumps
- Cold water pumps
- Pumps for home and garden

Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- FDA
- DM 174/04

Item Description

- | Item | Description |
|------|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3 | Bellows |
| 3a | Gasket |
| 4 | Spring |
| 5 | Driver |
| 5a | Drive collar |

Dimensions BT-PNT in inch/mm

d_1	d_1	d_3	d_6	d_7	l_1	l_3	l_4	l_5	l_6
	15.00	27.0	17	29.50	25.0	17.0	8.0	1.0	6.0
0.625"	15.88	29.8	18	31.75	28.6	18.3	10.3	1.0	8.0
0.750"	19.05	32.0	21	35.00	29.3	19.0	10.3	1.0	8.0
1.000"	25.40	42.0	29	41.25	38.2	27.0	11.0	1.5	8.5

BT-RN



The BT-RN represents the traditionally designed robust pusher seal. This type of mechanical seal is easy to install and covers a wide range of applications; its reliability has been proven by millions of units in worldwide operation. It is a convenient solution for the widest range of applications: for clean water as well as chemical media.

Features

- Single pusher-type seal
- Unbalanced
- Conical spring
- Dependent on direction of rotation

Operating range (see note on page 28)

Shaft diameter:

RN, RN3, RN6: $d_1 = 6 \dots 110 \text{ mm}$ (0.24" ... 4.33"),

RN.NU, RN3.NU: $d_1 = 10 \dots 100 \text{ mm}$ (0.39" ... 3.94"),

RN4: upon request

Pressure: $p_1^* = 12 \text{ bar}$ (174 PSI)

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

Sliding velocity: $v_g = 15 \text{ m/s}$ (49 ft/s)

* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: CrNi steel (F, F1), CrNiMo steel (G), Tungsten carbide (U)

Seat: Carbon graphite antimony impregnated (A),

Carbon graphite resin impregnated (B),

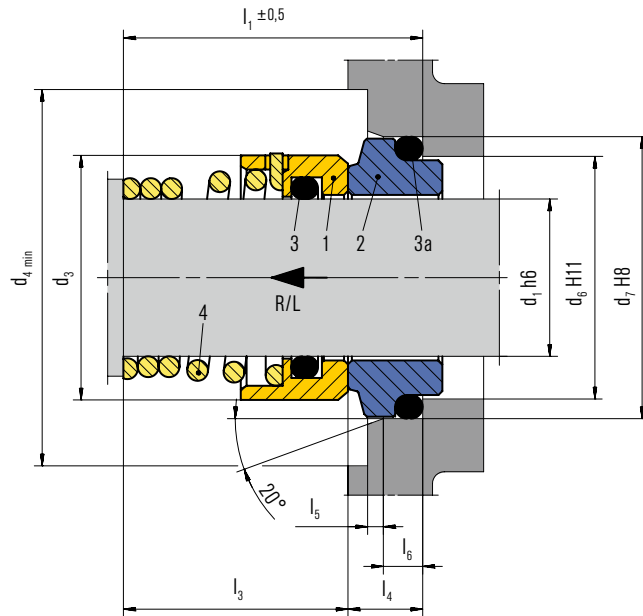
Tungsten carbide (U)

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

Metal parts: CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G)

Recommended applications

- Chemical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps



Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- FDA
- DM 174/04

Item

Description

- | | |
|-------|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3, 3a | O-Ring |
| 4 | Spring |

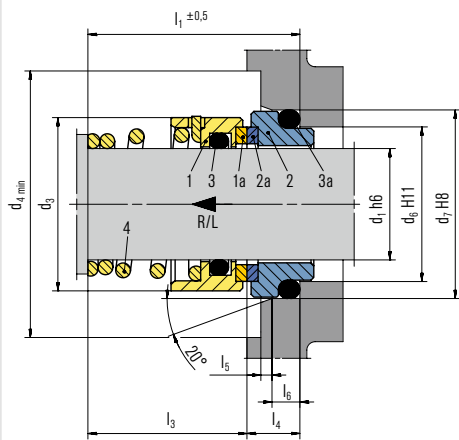
Dimensions BT-RN in mm

d_1	d_3	d_4	d_6	d_7	l_1	l_3	l_4	l_5	l_6
6	12	16	10.0	13.1	19.5	15	4.5	1.2	2
8	16	20	13.0	17.1	20.5	15	5.5	1.2	3
10	20	22	14.0	18.1	20.5	15	5.5	1.2	3
11	20	24	16.5	20.6	23.5	18	5.5	1.2	3
12	22	24	16.5	20.6	23.5	18	5.5	1.2	3
13	22	26	19.0	23.1	28.0	22	6.0	1.2	3
14	24	26	19.0	23.1	28.0	22	6.0	1.2	3
15	24	31	21.0	26.9	29.0	22	7.0	1.5	4
16	26	31	21.0	26.9	30.0	23	7.0	1.5	4
17	26	31	21.0	26.9	30.0	23	7.0	1.5	4
18	32	36	25.0	30.9	32.0	24	8.0	1.5	4
19	32	36	25.0	30.9	33.0	25	8.0	1.5	4
20	34	36	25.0	30.9	33.0	25	8.0	1.5	4
22	36	41	30.0	35.4	33.0	25	8.0	2.0	4
23	36	41	30.0	35.4	35.0	27	8.0	2.0	4
24	38	41	30.0	35.4	35.0	27	8.0	2.0	4
25	39	45	33.0	38.2	35.5	27	8.5	2.0	4
26	39	45	33.0	38.2	35.5	27	8.5	2.0	4
28	42	50	38.0	43.3	38.0	29	9.0	2.0	4
30	44	50	38.0	43.3	39.0	30	9.0	2.0	4
32	46	50	38.0	43.3	39.0	30	9.0	2.0	4
33	47	60	45.0	53.5	50.5	39	11.5	2.0	6
34	48	60	45.0	53.5	50.5	39	11.5	2.0	6
35	49	60	45.0	53.5	50.5	39	11.5	2.0	6
36	50	60	45.0	53.5	50.5	39	11.5	2.0	6
38	54	68	52.0	60.5	50.5	39	11.5	2.0	6
40	56	68	52.0	60.5	50.5	39	11.5	2.0	6
42	59	68	52.0	60.5	50.5	39	11.5	2.0	6
43	59	68	57.0	60.5	52.5	41	11.5	2.0	6
44	60	72	57.0	65.5	52.5	41	11.5	2.0	6
45	61	72	57.0	65.5	52.5	41	11.5	2.0	6
48	64	72	57.0	65.5	52.5	41	11.5	2.0	6
50	66	80	64.0	72.5	56.5	45	11.5	2.0	6
55	71	80	64.0	72.5	58.5	47	11.5	2.0	6
60	80	87	72.0	79.3	60.5	49	11.5	2.0	6
65	85	92	77.0	84.5	62.5	51	11.5	2.0	6
70	90	97	82.0	89.5	62.5	51	11.5	2.0	6
75	99	102	87.0	94.5	68.5	57	11.5	2.0	6
80	104	107	92.0	99.5	70.5	59	11.5	2.0	6
85	109	113	98.0	105.5	72.5	59	13.5	2.5	6
90	114	120	105.0	111.5	75.5	62	13.5	2.5	6
95	119	130	110.0	116.5	75.5	62	13.5	2.5	6
100	124	136	114.0	119.5	88.5	75	13.5	2.5	6
110	143	150	124.0	132.2	92.5	75	17.5	4.0	7

Product variants

BT-RN3

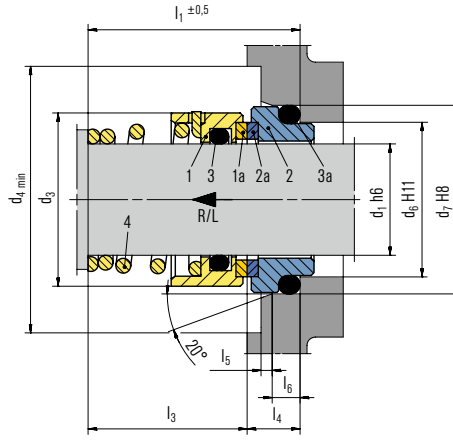
Product variant with seal faces made of brazed tungsten carbide which is suitable for media with medium corrosive and abrasive characteristics.



- 1 Seal face housing
- 1a Brazed seal face
- 2 Stationary seat housing
- 2a Brazed stationary seat
- 3, 3a O-Ring
- 4 Spring

BT-RN4

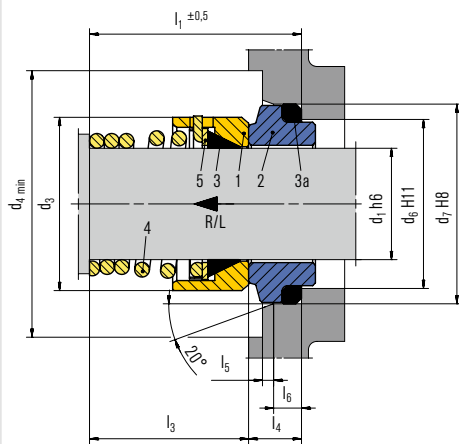
Product variant with SiC seal face shrink-fitted into the seal face carrier.



- 1 Seal face housing
- 1a Shrink fitted seal face
- 2 Stationary seat housing
- 2a Shrink fitted stationary seat
- 3, 3a O-Ring
- 4 Spring

BT-RN6

Product variant with PTFE secondary seal elements instead of elastomers. Mainly used in the chemical industry and for corrosive media.

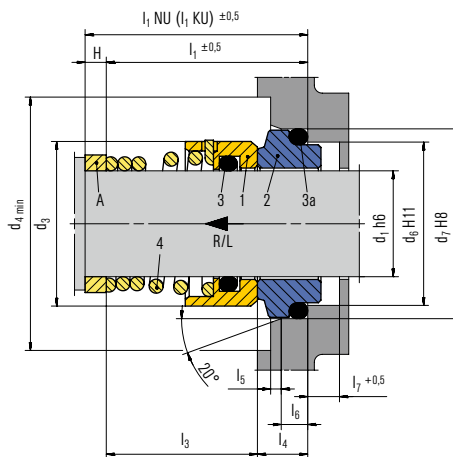


- 1 Seal face
- 2 Stationary seat
- 3 Wedge gasket (PTFE)
- 3a Gasket (PTFE)
- 4 Spring
- 5 Ring

BT-RN.NU / KU

Like the BT-RN/RN3/RN4, but with dimensions in accordance with EN 12756.

BT-RN.NU has an installation length l_{1N} and seat dimensions in accordance with EN 12756 (normal length).
BT-RN.KU has an installation length l_{1K} and seat dimensions in accordance with EN 12756 (short length).

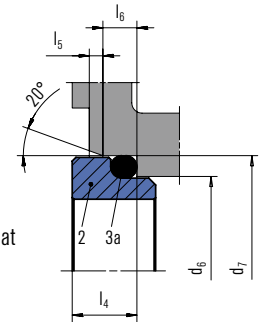


- 1 Seal face
- 2 Stationary seat
- 3, 3a O-Ring
- 4 Spring
- A Spacer (upon request)

Seat alternatives

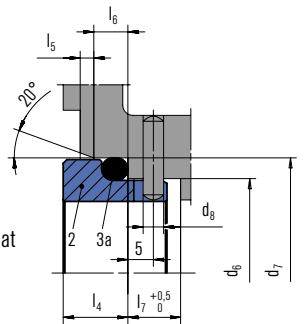
Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.

PF L



- 2 Stationary seat
- 3a O-Ring

PF L1



- 2 Stationary seat
- 3a O-Ring

Dimensions BT-RN.NU / KU in mm

BT-RN.NU													BT-RN.KU		
d ₁	d ₃	d ₄	d ₆	d ₇	d ₈	l _{1NU}	H	l ₁	l ₃	l ₄	l ₅	l ₆	l ₇	l _{1KU}	l ₃
10	20	22	17	21	3	40	18	22	15	7	1.5	4	8.5	32.5	25.5
12	22	24	19	23	3	40	15	25	18	7	1.5	4	8.5	32.5	25.5
14	24	26	21	25	3	40	11	29	22	7	1.5	4	8.5	35.0	28.0
16	26	28	23	27	3	40	10	30	23	7	1.5	4	8.5	35.0	28.0
18	32	34	27	33	3	45	11	34	24	10	2.0	5	9.0	37.5	27.5
20	34	36	29	35	3	45	10	35	25	10	2.0	5	9.0	37.5	27.5
22	36	38	31	37	3	45	10	35	25	10	2.0	5	9.0	37.5	27.5
24	38	40	33	39	3	50	13	37	27	10	2.0	5	9.0	40.0	30.0
25	39	41	34	40	3	50	13	37	27	10	2.0	5	9.0	40.0	30.0
28	42	44	37	43	3	50	11	39	29	10	2.0	5	9.0	42.5	32.5
30	44	46	39	45	3	50	10	40	30	10	2.0	5	9.0	42.5	32.5
32	46	48	42	48	3	55	15	40	30	10	2.0	5	9.0	42.5	32.5
33	47	49	42	48	3	55	6	49	39	10	2.0	5	9.0	42.5	32.5
35	49	51	44	50	3	55	6	49	39	10	2.0	5	9.0	42.5	32.5
38	54	58	49	56	4	55	-	55	42	13	2.0	6	9.0	45.0	32.0
40	56	60	51	58	4	55	-	55	42	13	2.0	6	9.0	45.0	32.0
43	59	63	54	61	4	60	-	60	47	13	2.0	6	9.0	45.0	32.0
45	61	65	56	63	4	60	-	60	47	13	2.0	6	9.0	45.0	32.0
48	64	68	59	66	4	60	-	60	47	13	2.0	6	9.0	45.0	32.0
50	66	70	62	70	4	60	-	60	46	14	2.5	6	9.0	47.5	33.5
53	69	73	65	73	4	70	-	70	56	14	2.5	6	9.0	47.5	33.5
55	71	75	67	75	4	70	-	70	56	14	2.5	6	9.0	47.5	33.5
58	78	83	70	78	4	70	-	70	56	14	2.5	6	9.0	52.5	38.5
60	80	85	72	80	4	70	-	70	56	14	2.5	6	9.0	52.5	38.5
63	83	88	75	83	4	70	-	70	56	14	2.5	6	9.0	52.5	38.5
65	85	90	77	85	4	80	-	80	66	14	2.5	6	9.0	52.5	38.5
68	88	93	81	90	4	80	-	80	64	16	2.5	7	9.0	52.5	36.5
70	90	95	83	92	4	80	-	80	64	16	2.5	7	9.0	60.0	44.0
75	99	104	88	97	4	80	-	80	64	16	2.5	7	9.0	60.0	44.0
80	104	109	95	105	4	90	-	90	72	18	3.0	7	9.0	60.0	42.0
85	109	114	100	110	4	90	-	90	72	18	3.0	7	9.0	60.0	42.0
90	114	119	105	115	4	90	-	90	72	18	3.0	7	9.0	65.0	47.0
95	119	124	110	120	4	90	-	90	72	18	3.0	7	9.0	65.0	47.0
100	124	129	115	125	4	90	-	90	72	18	3.0	7	9.0	65.0	47.0

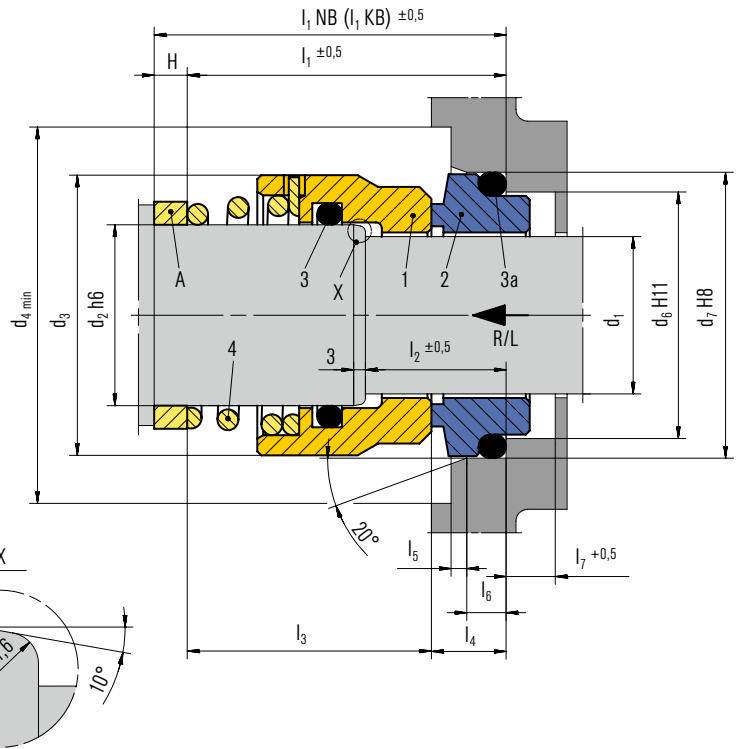
l_{1NU} complies with EN 12756 (normal length, unbalanced)

l_{1KU} complies with EN 12756 (short length, unbalanced)

BT-RN (Balanced version)



The BT-RN.NB/KB represents a traditional pusher seal and is the balanced version of a BT-RN. Designed for high pressure fluids, it is made from the same material range as the BT-RN. The main characteristic is a short design combined with an economical seal solution. Length and dimensions according to EN 12756 (RN.NB normal length, RN.KB short length).



Features

- Single pusher-type seal
- Balanced
- Conical spring
- Dependent on direction of rotation
- Short length (KB)
- Normal length (NB)

Operating range (see note on page 28)

Shaft diameter: $d_1 = 10 \dots 100 \text{ mm}$ (0.39" ... 3.94")
 Pressure: $p_1^* = 25$ (40) bar (363 (580) PSI)
 Temperature: $t^* = -35 \text{ }^\circ\text{C} \dots +180 \text{ }^\circ\text{C}$ (-31 $^\circ\text{F} \dots +292 \text{ }^\circ\text{F}$)
 Sliding velocity: $v_g = 15 \text{ m/s}$ (49 ft/s)

* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: CrNi steel 1.4057 (F1), CrNiMo steel 1.4401 (G), Tungsten carbide (U)
 Seat: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Tungsten carbide (U)
 Elastomers: NBR (P), EPDM (E), FKM (V), FFKM (K)
 Metal parts: CrNiMo steel (G), CrNi steel (F, F1)

Recommended applications

- Chemical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps

Item Description

1	Seal face
2	Stationary seat
3, 3a	O-Ring
4	Spring
A	Spacer (upon request)

BT-RN.NB has an installation length I_{1N} in accordance with EN 12756 (normal length).
 BT-RN.KB has an installation length I_{1K} in accordance with EN 12756 (short length).

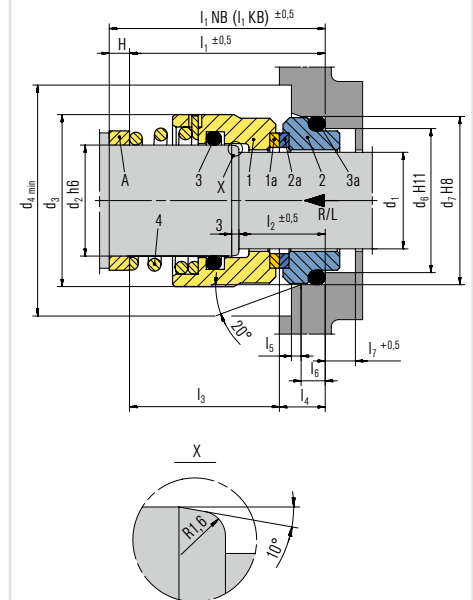
Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- FDA
- DM 174/04

Product variants

BT-RN3.NB / RN3.KB

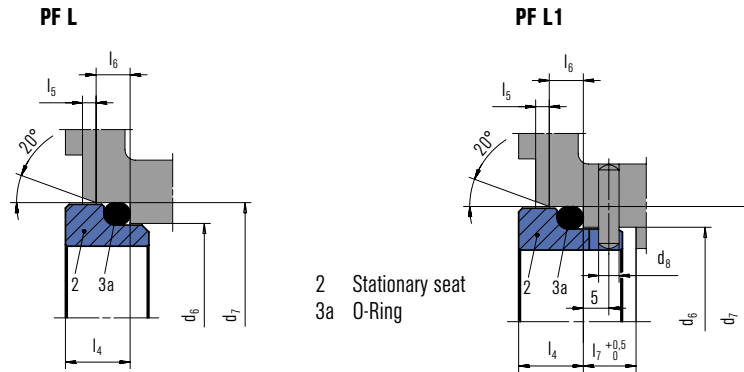
Seal faces made of brazed tungsten carbide which is suitable for media with medium corrosive and abrasive characteristics.



1	Seal face housing
1a	Brazed seal face
2	Stationary seat housing
2a	Brazed stationary seat
3, 3a	O-Ring
4	Spring
A	Spacer (upon request)

Seat alternatives

Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.



2 Stationary seat
3a O-Ring

2 Stationary seat
3a O-Ring

Dimensions BT-RN.NB / KB in mm

BT-RN.NB																	BT-RN.KB	
d ₁	d ₂	d ₃	d ₄	d ₆	d ₇	d ₈	l _{1NB}	H	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	l _{1KB}	l ₃	
10	14	24	26	17	21	3	50	-	50	18	43	7	1.5	4	8.5	40.0	33.0	
12	16	26	28	19	23	3	50	-	50	18	43	7	1.5	4	8.5	40.0	33.0	
14	18	32	34	21	25	3	55	9	46	18	39	7	1.5	4	8.5	42.5	35.5	
16	20	34	36	23	27	3	55	8	47	18	40	7	1.5	4	8.5	42.5	35.5	
18	22	36	38	27	33	3	55	4	51	20	41	10	2.0	5	9.0	45.0	35.0	
20	24	38	40	29	35	3	60	7	53	20	43	10	2.0	5	9.0	45.0	35.0	
22	26	40	42	31	37	3	60	7	53	20	43	10	2.0	5	9.0	45.0	35.0	
24	28	42	44	33	39	3	60	-	60	20	50	10	2.0	5	9.0	47.5	37.5	
25	30	44	46	34	40	3	60	-	60	20	50	10	2.0	5	9.0	47.5	37.5	
28	33	47	49	37	43	3	65	-	65	20	55	10	2.0	5	9.0	50.0	40.0	
30	35	49	51	39	45	3	65	-	65	20	55	10	2.0	5	9.0	50.0	40.0	
32	38	54	58	42	48	3	65	-	65	20	55	10	2.0	5	9.0	50.0	40.0	
33	38	54	58	42	48	3	65	-	65	20	55	10	2.0	5	9.0	50.0	40.0	
35	40	56	60	44	50	3	65	-	65	20	55	10	2.0	5	9.0	50.0	40.0	
38	43	59	63	49	56	4	75	-	75	23	62	13	2.0	6	9.0	52.5	39.5	
40	45	61	65	51	58	4	75	-	75	23	62	13	2.0	6	9.0	52.5	39.5	
43	48	64	68	54	61	4	75	-	75	23	62	13	2.0	6	9.0	52.5	39.5	
45	50	66	70	56	63	4	75	-	75	23	62	13	2.0	6	9.0	52.5	39.5	
48	53	69	73	59	66	4	85	-	85	23	72	13	2.0	6	9.0	52.5	39.5	
50	55	71	75	62	70	4	85	-	85	25	71	14	2.5	6	9.0	57.5	43.5	
53	58	78	83	65	73	4	85	-	85	25	71	14	2.5	6	9.0	57.5	43.5	
55	60	80	85	67	75	4	85	-	85	25	71	14	2.5	6	9.0	57.5	43.5	
58	63	83	88	70	78	4	85	-	85	25	71	14	2.5	6	9.0	62.5	48.5	
60	65	85	90	72	80	4	95	-	95	25	81	14	2.5	6	9.0	62.5	48.5	
63	68	88	93	75	83	4	95	-	95	25	81	14	2.5	6	9.0	62.5	48.5	
65	70	90	95	77	85	4	95	-	95	25	81	14	2.5	6	9.0	62.5	48.5	
70	75	99	104	83	92	4	95	-	95	28	79	16	2.5	7	9.0	70.0	54.0	
75	80	104	109	88	97	4	105	-	105	28	89	16	2.5	7	9.0	70.0	54.0	
80	85	109	114	95	105	4	105	-	105	28	87	18	3.0	7	9.0	70.0	52.0	
85	90	114	119	100	110	4	105	-	105	28	87	18	3.0	7	9.0	75.0	57.0	
90	95	119	124	105	115	4	105	-	105	28	87	18	3.0	7	9.0	75.0	57.0	
95	100	124	129	110	120	4	105	-	105	28	87	18	3.0	7	9.0	75.0	57.0	
100	105	129	134	115	125	4	105	-	105	28	87	18	3.0	7	9.0	75.0	57.0	

l_{1NB} complies with EN 12756 (normal length, balanced)

l_{1KB} complies with EN 12756 (short length, balanced)



The BT-FN combines a spring loaded ceramic seal face and the traditional pusher mechanical seals. The competitive price and the wide range of applications have made the BT-FN seal a success. The seal is produced with punched metal parts that allow an economical design.

BT-FN mechanical seals are also the ideal solution for light chemicals media applications. To ensure the best reliable performance, we recommend a material combination of hard material sliding faces and proper elastomer O-Rings.

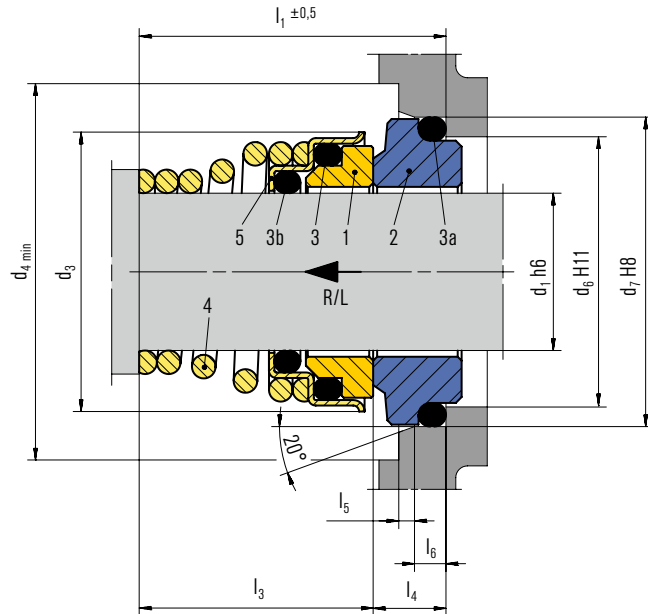
Features

- Single pusher-type seal
- Unbalanced
- Conical spring
- Dependent on direction of rotation

Operating range (see note on page 28)

Shaft diameter: $d_1 = 10 \dots 40 \text{ mm}$ (0.39" ... 1.57")
 Pressure: $p_1^* = 12$ (16) bar (174 (232) PSI)
 Temperature: $t^* = -35 \text{ }^\circ\text{C} \dots +180 \text{ }^\circ\text{C}$ (-31 °F ... +356 °F)
 Sliding velocity: $v_g = 15 \text{ m/s}$ (49 ft/s)

* Dependent on medium, size and material



Materials (see fold-out page 28)

Seal face: Steatite (X), Aluminium oxide (V), Silicon carbide (Q1, Q6), Tungsten carbide (U1)
 Seat: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Silicon carbide (Q1, Q6), Tungsten carbide (U1)
 Elastomers: NBR (P), EPDM (E), FKM (V), FFKM (K)
 Metal parts: CrNi steel 1.4301 (F), CrNiMo steel 1.4401 (G)

Item Description

Item	Description
1	Seal face
2	Stationary seat
3, 3a, 3b	O-Ring
4	Spring
5	Collar

Recommended applications

- Building services industry
- Household appliances
- Centrifugal pumps
- Clean water pumps
- Pumps for domestic applications and gardening

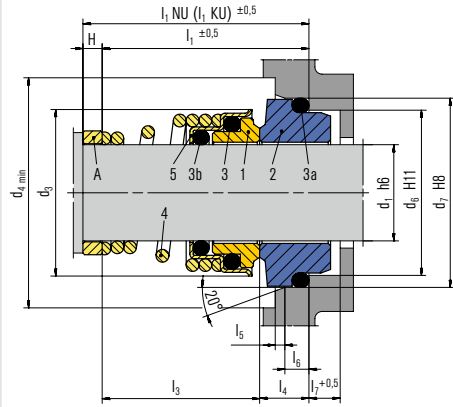
Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA

Product variants

BT-FN.NU / KU

BT-FN.NU has an installation length l_{1N} and dimensions in accordance with EN 12756 (normal length, unbalanced).
BT-FN.KU has an installation length l_{1K} and dimensions in accordance with EN 12756 (short length, unbalanced).

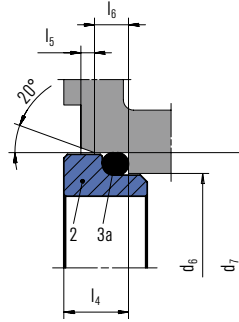


- 1 Seal face
- 2 Stationary seat
- 3, 3a, 3b O-Ring
- 4 Spring
- 5 Collar
- A Spacer (upon request)

Seat alternatives

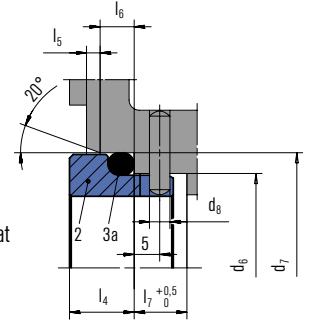
Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.

PF L



- 2 Stationary seat
- 3a O-Ring

PF L1



- 2 Stationary seat
- 3a O-Ring

Dimensions BT-FN in mm

d_1	d_3	d_4	d_6	d_7	l_1	l_3	l_4	l_5	l_6
10	19.5	22	14.0	18.1	20.5	15	5.5	1.2	3
11	22.5	25	16.5	20.6	23.5	18	5.5	1.2	3
12	22.5	25	16.5	20.6	23.5	18	5.5	1.2	3
13	24.5	28	19.0	23.1	28.0	22	6.0	1.2	3
14	24.5	28	19.0	23.1	28.0	22	6.0	1.2	3
15	29.0	32	21.0	26.9	29.0	22	7.0	1.5	4
16	29.0	32	21.0	26.9	30.0	23	7.0	1.5	4
17	29.0	32	21.0	26.9	30.0	23	7.0	1.5	4
18	32.5	36	25.0	30.9	32.0	24	8.0	1.5	4
19	32.5	36	25.0	30.9	33.0	25	8.0	1.5	4
20	32.5	36	25.0	30.9	33.0	25	8.0	1.5	4
22	37.5	42	30.0	35.4	33.0	25	8.0	2.0	4
24	37.5	42	30.0	35.4	35.0	27	8.0	2.0	4
25	40.0	45	33.0	38.2	35.5	27	8.5	2.0	4
28	46.0	51	38.0	43.3	38.0	29	9.0	2.0	4
30	46.0	51	38.0	43.3	39.0	30	9.0	2.0	4
32	46.0	51	38.0	43.3	39.0	30	9.0	2.0	4
35	50.0	55	45.0	53.5	50.5	39	11.5	2.0	6
38	58.0	68	52.0	60.5	50.5	39	11.5	2.0	6
40	58.0	68	52.0	60.5	50.5	39	11.5	2.0	6

Dimensions BT-FN.NU / KU in mm

BT-FN.NU													BT-FN.KU		
d_1	d_3	d_4	d_6	d_7	d_8	l_{1N}	H	l_1	l_3	l_4	l_5	l_6	l_7	l_{1KU}	l_3
10	20.0	22	17	21	3	40	18	22.0	15	7	1.5	4	8.5	32.5	25.5
12	22.5	26	19	23	3	40	15	25.0	18	7	1.5	4	8.5	32.5	25.5
14	24.5	28	21	25	3	40	11	29.0	22	7	1.5	4	8.5	35.0	28.0
16	29.0	32	23	27	3	40	10	30.0	23	7	1.5	4	8.5	35.0	28.0
18	32.5	36	27	33	3	45	11	34.0	24	10	2.0	5	9.0	37.5	27.5
20	32.5	36	29	35	3	45	10	35.0	25	10	2.0	5	9.0	37.5	27.5
22	37.5	40	31	37	3	45	10	35.0	25	10	2.0	5	9.0	37.5	27.5
24	37.5	40	33	39	3	50	13	37.0	27	10	2.0	5	9.0	40.0	30.0
25	40.0	42	34	40	3	50	13	37.0	27	10	2.0	5	9.0	40.0	30.0
28	46.0	48	37	43	3	50	11	39.0	29	10	2.0	5	9.0	42.5	32.5
30	46.0	48	39	45	3	50	10	40.0	30	10	2.0	5	9.0	42.5	32.5
32	46.0	48	42	48	3	55	15	40.0	30	10	2.0	5	9.0	42.5	32.5
35	50.0	53	44	50	3	55	6	49.0	39	10	2.0	5	9.0	42.5	32.5
38	58.0	68	49	56	4	55	3	52.0	39	13	2.0	6	9.0	45.0	32.0
40	58.0	68	51	58	4	55	3	52.0	39	13	2.0	6	9.0	45.0	32.0

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



The BT-FH is a seal for demanding applications where operating conditions in the pump require machined metal parts for the mechanical seal. The seals are available in a full range of diameters from 10 to 100 mm and in the standard diameters specifically for chemical applications.

Features

- Single pusher-type seal
- Unbalanced
- Conical spring
- Dependent on direction of rotation

Operating range (see note on page 28)

Shaft diameter: $d_1 = 10 \dots 100 \text{ mm}$ (0.39" ... 3.94")
 Pressure: $p_1^* = 12 \text{ (16) bar}$ (174 (232) PSI)
 Temperature: $t^* = -35 \text{ }^\circ\text{C} \dots +200 \text{ }^\circ\text{C}$ (-31 °F ... +392 °F)
 Sliding velocity: $v_g = 15 \text{ m/s}$ (49 ft/s)

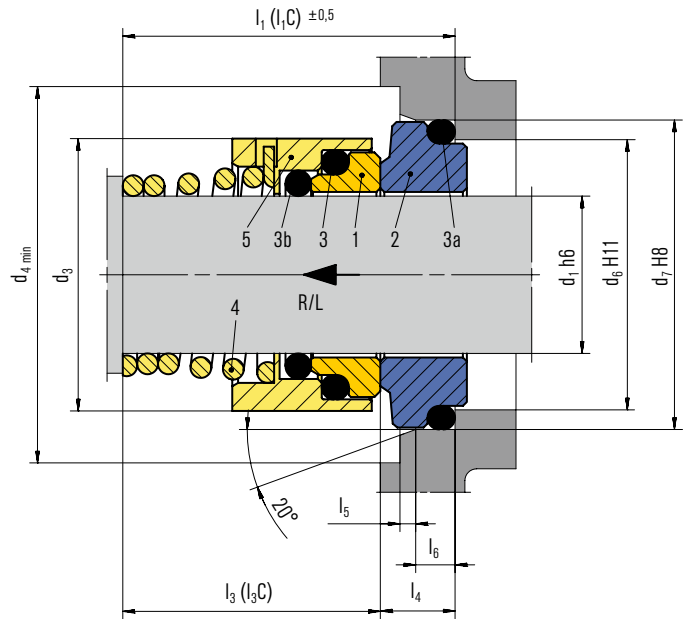
* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: Aluminium oxide (V), Silicon carbide (Q1), Tungsten carbide (U1)
 Seat: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Silicon carbide (Q1), Tungsten carbide (U1)
 Elastomers: NBR (P), EPDM (E), FKM (V), FFKM (K)
 Metal parts: CrNiMo steel 1.4401 (G)

Recommended applications

- Chemical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps



Certificates

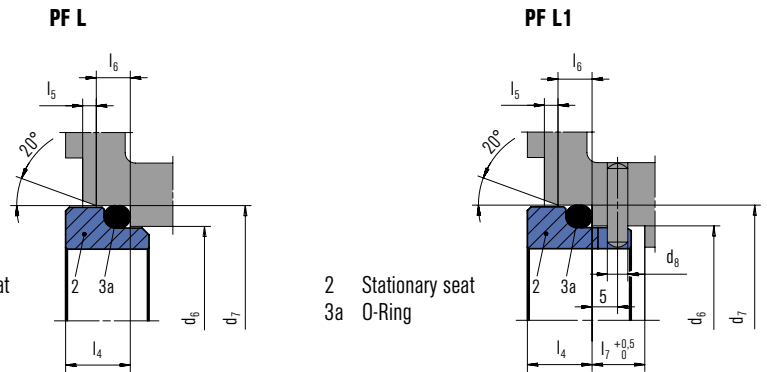
- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA

Item Description

- | Item | Description |
|-----------|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3, 3a, 3b | O-Ring |
| 4 | Spring |
| 5 | Collar |

Seat alternatives

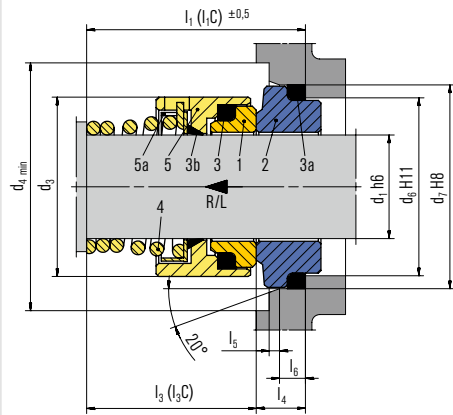
Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.



Product variants

BT-FH6

Like BT-FH but with PTFE secondary seal elements instead of elastomers. Mainly used in the chemical industry and for corrosive media.



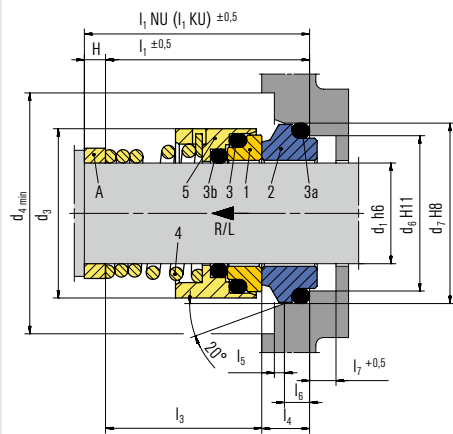
- 1 Seal face
- 2 Stationary seat
- 3, 3a Gasket (PTFE)
- 3b Wedge gasket (PTFE)
- 4 Spring
- 5 Collar
- 5a Ring

BT-FHC

Like BT-FH but with shorter installation length (see l_{3C} in the dimension table). The model BT-FHC has the same installation length as the BT-RN.

BT-FH.NU / KU

BT-FH.NU has an installation length l_{1N} and seat dimensions in accordance with EN 12756 (normal length). BT-FH.KU has an installation length l_{1K} and seat dimensions in accordance with EN 12756 (short length).



- 1 Seal face
- 2 Stationary seat
- 3, 3a, 3b O-Ring
- 4 Spring
- 5 Collar
- A Spacer (upon request)

Dimensions BT-FH / FHC in mm

BT-FH										BT-FHC	
d ₁	d ₃	d ₄	d ₆	d ₇	l ₁	l ₃	l ₄	l ₅	l ₆	l _{1C}	l _{3C}
10	20	22	14.0	18.1	25.5	20	5.5	1.2	3	20.5	15
12	22	25	16.5	20.6	27.5	22	5.5	1.2	3	23.5	18
14	25	28	19.0	23.1	33.0	27	6.0	1.2	3	28.0	22
15	29	32	21.0	26.9	34.0	27	7.0	1.5	4	28.0	22
16	29	32	21.0	26.9	35.0	28	7.0	1.5	4	30.0	23
18	33	36	25.0	30.9	38.0	30	8.0	1.5	4	32.0	24
20	33	36	25.0	30.9	38.0	30	8.0	1.5	4	33.0	25
22	38	41	30.0	35.4	38.0	30	8.0	2.0	4	33.0	25
24	38	41	30.0	35.4	40.0	32	8.0	2.0	4	35.0	27
25	40	45	33.0	38.2	41.5	33	8.5	2.0	4	35.5	27
26	40	45	33.0	38.2	41.5	33	8.5	2.0	4	35.5	27
28	46	50	38.0	43.3	45.0	36	9.0	2.0	4	38.0	29
30	46	50	38.0	43.3	46.0	37	9.0	2.0	4	39.0	30
32	46	50	38.0	43.3	46.0	37	9.0	2.0	4	39.0	30
34	56	62	45.0	53.3	59.5	48	11.5	2.0	6	50.5	39
35	56	62	45.0	53.5	59.5	48	11.5	2.0	6	50.5	39
36	56	62	45.0	53.5	59.5	48	11.5	2.0	6	50.5	39
38	63	70	52.0	60.5	59.5	48	11.5	2.0	6	50.5	39
40	63	70	52.0	60.5	59.5	48	11.5	2.0	6	50.5	39
42	63	70	52.0	60.5	59.5	48	11.5	2.0	6	50.5	39
43	63	70	52.0	60.5	59.5	48	11.5	2.0	6	52.5	41
45	69	75	57.0	65.5	62.5	51	11.5	2.0	6	52.5	41
48	69	75	57.0	65.5	62.5	51	11.5	2.0	6	52.5	41
50	76	83	64.0	72.5	66.5	55	11.5	2.0	6	56.5	45
55	76	83	64.0	72.5	68.5	57	11.5	2.0	6	58.5	47
60	84	90	72.0	79.3	72.5	61	11.5	2.0	6	60.5	49
65	89	96	77.0	84.5	74.5	63	11.5	2.0	6	62.5	51
70	94	101	82.0	89.5	74.5	63	11.5	2.0	6	62.5	51
75	100	106	87.0	94.5	79.5	68	11.5	2.0	6	68.5	57
80	105	111	92.0	99.5	81.5	70	11.5	2.0	6	70.5	59
85	115	125	98.0	105.5	85.5	72	13.5	2.5	6	72.5	59
90	120	132	105.0	111.5	88.5	75	13.5	2.5	6	75.5	62
95	126	137	110.0	116.5	88.5	75	13.5	2.5	6	75.5	62
100	130	143	114.0	119.5	98.5	85	13.5	2.5	6	88.5	75

Dimensions BT-FH.NU / KU in mm

BT-FH.NU												BT-FH.KU		
d ₁	d ₃	d ₄	d ₆	d ₇	l _{1NU}	H	l ₁	l ₃	l ₄	l ₅	l ₆	l ₇	l _{1KU}	l ₃
10	20	22	17	21	40	18	22	15	7	1.5	4	8.5	32.5	25.5
12	22	25	19	23	40	15	25	18	7	1.5	4	8.5	32.5	25.5
14	25	28	21	25	40	11	29	22	7	1.5	4	8.5	35.0	28.0
16	29	32	23	27	40	10	30	23	7	1.5	4	8.5	35.0	28.0
18	33	36	27	33	45	11	34	24	10	2.0	5	9.0	37.5	27.5
20	33	36	29	35	45	10	35	25	10	2.0	5	9.0	37.5	27.5
22	38	41	31	37	45	10	35	25	10	2.0	5	9.0	37.5	27.5
24	38	41	33	39	50	13	37	27	10	2.0	5	9.0	40.0	30.0
25	40	45	34	40	50	13	37	27	10	2.0	5	9.0	40.0	30.0
28	46	50	37	43	50	11	39	27	10	2.0	5	9.0	42.5	32.5
30	46	50	39	45	50	10	40	29	10	2.0	5	9.0	42.5	32.5
32	46	50	42	48	55	15	40	30	10	2.0	5	9.0	42.5	32.5
33	52	56	42	48	55	6	49	39	10	2.0	5	9.0	42.5	32.5
35	56	62	44	50	55	6	49	39	10	2.0	5	9.0	42.5	32.5
38	63	70	49	56	55	-	55	42	13	2.0	6	9.0	45.0	32.0
40	63	70	51	58	55	-	55	42	13	2.0	6	9.0	45.0	32.0
43	63	70	54	61	60	-	60	47	13	2.0	6	9.0	45.0	32.0
45	69	75	56	63	60	-	60	47	13	2.0	6	9.0	45.0	32.0
48	69	75	59	66	60	-	60	47	13	2.0	6	9.0	45.0	32.0
50	76	83	62	70	60	-	60	46	14	2.5	6	9.0	47.5	33.5
53	76	83	65	73	70	-	70	56	14	2.5	6	9.0	47.5	33.5
55	76	83	67	75	70	-	70	56	14	2.5	6	9.0	47.5	33.5
58	82	88	70	78	70	-	70	56	14	2.5	6	9.0	52.5	38.5
60	84	90	72	80	70	-	70	56	14	2.5	6	9.0	52.5	38.5
63	86	93	75	83	70	-	70	56	14	2.5	6	9.0	52.5	38.5
65	89	96	77	85	80	-	80	66	14	2.5	6	9.0	52.5	38.5
68	92	99	81	90	80	-	80	64	16	2.5	7	9.0	52.5	36.5
70	94	101	83	92	80	-	80	64	16	2.5	7	9.0	60.0	44.0
75	100	106	88	97	80	-	80	64	16	2.5	7	9.0	60.0	44.0
80	105	111	95	105	90	-	90	72	18	3.0	7	9.0	60.0	42.0
85	115	125	100	110	90	-	90	72	18	3.0	7	9.0	60.0	42.0
90	120	132	105	115	90	-	90	72	18	3.0	7	9.0	65.0	47.0
95	126	137	110	120	90	-	90	72	18	3.0	7	9.0	65.0	47.0
100	130	143	115	125	90	-	90	72	18	3.0	7	9.0	65.0	47.0

d₃, d₄ 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.NB (Balanced version)



The BT-FH mechanical seal range has been designed for universal application and is ideally suited for standardization. It is a cost-effective version of a balanced seal with the added advantage of only having to replace the wearing faces during overhauls. Installation length in accordance with EN 12756 (L_{1NB}).

Features

- Single pusher-type seal
- Balanced
- Dependent on direction of rotation
- Conical spring
- Length according to EN 12756
- Version NB (normal length, balanced L_{1NB})

Operating range (see note on page 28)

Shaft diameter: $d_1 = 16 \dots 70 \text{ mm}$ (0.63" ... 2.76")
 Pressure: $p_1^* = 25 \text{ bar}$ (363 PSI)
 Temperature: $t^* = -35 \text{ °C} \dots +180 \text{ °C}$ (-31 °F ... +356 °F)
 Sliding velocity: $v_g = 15 \text{ m/s}$ (49 ft/s)

* Dependent on medium, size and material

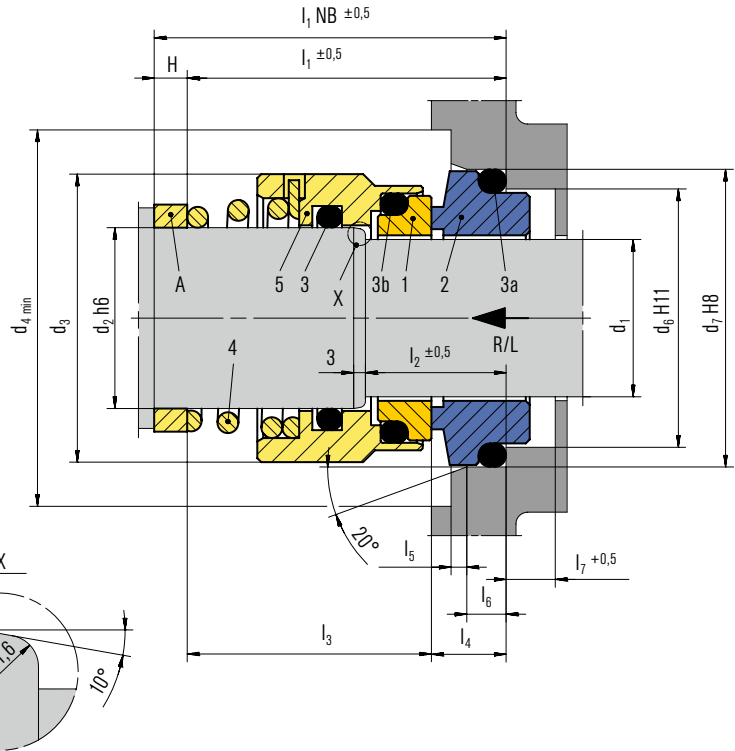
Recommended applications

- Chemical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps

Dimensions BT-FH.NB in mm

d_1	d_2	d_3	d_4	d_6	d_7	d_8	L_{1NB}	H	l_1	l_2	l_3	l_4	l_5	l_6	l_7
16	20	34	36	23	27	3	55	8	47.0	18.0	40.0	7.0	1.5	4.0	8.5
18	22	36	38	27	33	3	55	4	51.0	20.0	41.0	10.0	2.0	5.0	9.0
20	24	38	40	29	35	3	60	7	53.0	20.0	43.0	10.0	2.0	5.0	9.0
22	26	40	42	31	37	3	60	7	53.0	20.0	43.0	10.0	2.0	5.0	9.0
24	28	42	44	33	39	3	60	-	60.0	20.0	50.0	10.0	2.0	5.0	9.0
25	30	44	46	34	40	3	60	-	60.0	20.0	50.0	10.0	2.0	5.0	9.0
28	33	47	49	37	43	3	65	-	65.0	20.0	55.0	10.0	2.0	5.0	9.0
30	35	49	51	39	45	3	65	-	65.0	20.0	55.0	10.0	2.0	5.0	9.0
32	38	54	58	42	48	3	65	-	65.0	20.0	55.0	10.0	2.0	5.0	9.0
33	38	54	58	42	48	3	65	-	65.0	20.0	55.0	10.0	2.0	5.0	9.0
35	40	56	60	44	50	3	65	-	65.0	20.0	55.0	10.0	2.0	5.0	9.0
38	43	59	63	49	56	4	75	-	75.0	23.0	62.0	13.0	2.0	6.0	9.0
40	45	61	65	51	58	4	75	-	75.0	23.0	62.0	13.0	2.0	6.0	9.0
43	48	64	68	54	61	4	75	-	75.0	23.0	63.0	13.0	2.0	6.0	9.0
45	50	66	70	56	63	4	75	-	75.0	23.0	62.0	13.0	2.0	6.0	9.0
48	53	69	73	59	66	4	85	-	85.0	23.0	72.0	13.0	2.0	6.0	9.0
50	55	71	75	62	70	4	85	-	85.0	25.0	71.0	14.0	2.5	6.0	9.0
53	58	78	83	65	73	4	85	-	85.0	25.0	71.0	14.0	2.5	6.0	9.0
55	60	80	85	67	75	4	85	-	85.0	25.0	71.0	14.0	2.5	6.0	9.0
58	63	83	88	70	78	4	85	-	85.0	25.0	71.0	14.0	2.5	6.0	9.0
60	65	85	90	72	80	4	95	-	95.0	25.0	81.0	14.0	2.5	6.0	9.0
63	68	88	93	75	83	4	95	-	95.0	25.0	81.0	14.0	2.5	6.0	9.0
65	70	90	95	77	85	4	95	-	95.0	25.0	81.0	14.0	2.5	6.0	9.0
70	75	99	104	83	92	4	95	-	95.0	28.0	79.0	16.0	2.5	7.0	9.0

L_{1NB} complies with EN 12756 (normal length, balanced)



Item Description

- 1 Seal face
- 2 Stationary seat
- 3, 3a, 3b O-Ring
- 4 Spring
- 5 Collar
- A Spacer (upon request)

Materials (see fold-out page 28)

Seal face: Silicon carbide (Q1)
 Seat: Carbon graphite resin impregnated (B),
 Carbon graphite, full carbon (B3),
 Carbon graphite antimony impregnated (A),
 Silicon carbide (Q1)
 Elastomers: NBR (P), EPDM (E), FKM (V), FFKM (K)
 Metal parts: CrNiMo steel (G)

Certificates

- KTW, W270, ACS, WRAS, NSF, DM 174/04, FDA

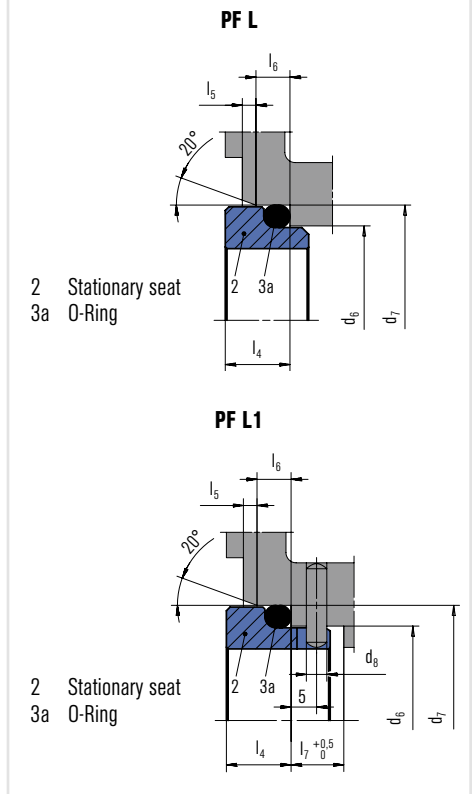
Product variants

BT-FH.NB DV

The BT-FH.NB DV is a variant of the BT-FH.NB with a vertical pin for torque transmission in the conical spring. Same installation length as BT-FH.NB, in accordance with EN 12756 (L_{1NB}).

Seat alternatives

Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.



BT-C5E



The BT-C5E is designed for external mounting and is characterized by a short installation length. The advantage of a seal mounted on the outside is that all metal parts, including springs, are not in contact with the media. Torque transmission via robust axial notches on the metal collar. The collar is fixed on the shaft with set screws. Typical applications are volumetric lobe pumps for food, cosmetics and pharmaceuticals and for sticky and highly viscous media (e.g. paste, paints).

Features

- Single pusher-type seal
- Multiple springs
- Independent of direction of rotation
- External mounting
- For high viscosity media

Operating range (see note on page 28)

Shaft diameter: $d_1 = 20 \dots 80 \text{ mm}$ (0.79" ... 3.15")
 Pressure: $p_1^* = 12 \text{ bar}$ (174 PSI)
 Temperature: $t^* = -35 \text{ °C} \dots +180 \text{ °C}$ (-31 °F ... +356 °F)
 Sliding velocity: $v_g = 15 \text{ m/s}$ (49 ft/s)

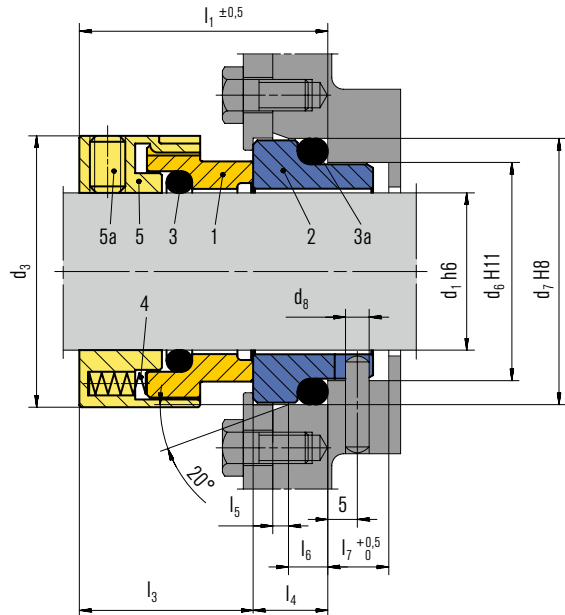
* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B), Tungsten carbide (U), PTFE reinforced (Y1)
 Seat: Aluminium oxide (V), Silicon carbide (Q1), CrNiMo steel (G), Tungsten carbide (U)
 Elastomers: NBR (P), EPDM (E), FKM (V), FFKM (K)
 Metal parts: CrNiMo steel 1.4401 (G)

Dimensions BT-C5E in mm

d_1	d_3	d_6	d_7	d_8	l_1	l_3	l_4	l_5	l_6	l_7
20	36	29	35	3	29.0	19.0	10.0	2.0	5	9
25	41	34	40	3	29.0	19.0	10.0	2.0	5	9
30	46	39	45	3	29.0	19.0	10.0	2.0	5	9
35	51	44	50	3	29.0	19.0	10.0	2.0	5	9
40	59	51	58	4	34.0	23.0	11.0	2.0	6	9
45	60	56	63	4	34.0	23.0	11.0	2.0	6	9
50	66	62	70	4	35.0	22.0	13.0	2.5	6	9
60	80	72	80	4	39.5	26.5	13.0	2.5	6	9
65	86	77	85	4	39.5	26.5	13.0	2.5	6	9
70	92	83	92	4	41.5	26.5	15.0	2.5	7	9
80	105	95	105	4	42.5	26.5	16.0	3.0	7	9



Item Description

Item	Description
1	Seal face
2	Stationary seat
3, 3a	O-Ring
4	Spring
5	Collar
5a	Set screw

Recommended applications

- Chemical industry
- Pharmaceutical industry
- Food and beverage industry
- Centrifugal pumps
- Industrial pumps

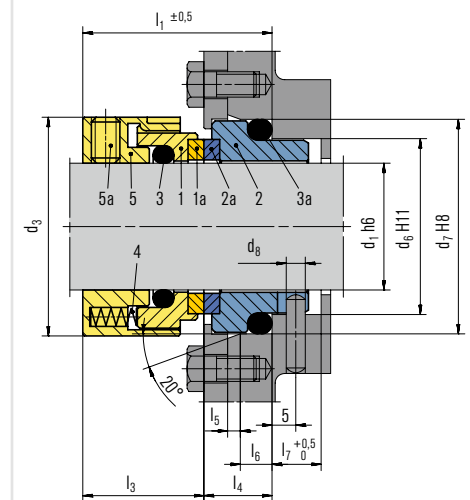
Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA

Product variants

BT-C53E

Seal faces made of brazed tungsten carbide. This version is suitable for media with abrasive characteristics. Installation dimensions same as BT-C5E.



1	Seal face housing
1a	Brazed seal face
2	Stationary seat housing
2a	Brazed stationary seat
3, 3a	O-Ring
4	Spring
5	Collar
5a	Set screw

BT-C5



The BT-C5 is available in many material combinations with various application opportunities, especially in chemical applications. Torque transmission through set screws. Dimensions according to EN 12756, short length l_{1K} .

BT-C5.KB is the balanced version of the BT-C5.KU. Suitable for a higher pressure range. Dimensions according to EN 12756, short length l_{1KB} .

Features

- Single pusher-type seal
- Unbalanced, short length (KU)
- Balanced, short length (KB)
- Multiple springs
- Independent of direction of rotation

Operating range (see note on page 28)

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

Pressure:

unbalanced type BT-C5.KU

$p_1^* = 12$ (16) bar (174 (232) PSI)

balanced type BT-C5.KB

$p_1^* = 25$ (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: $v_g = 20 \text{ m/s}$ (66 ft/s)

* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: Carbon graphite antimony impregnated (A),

Carbon graphite resin impregnated (B)

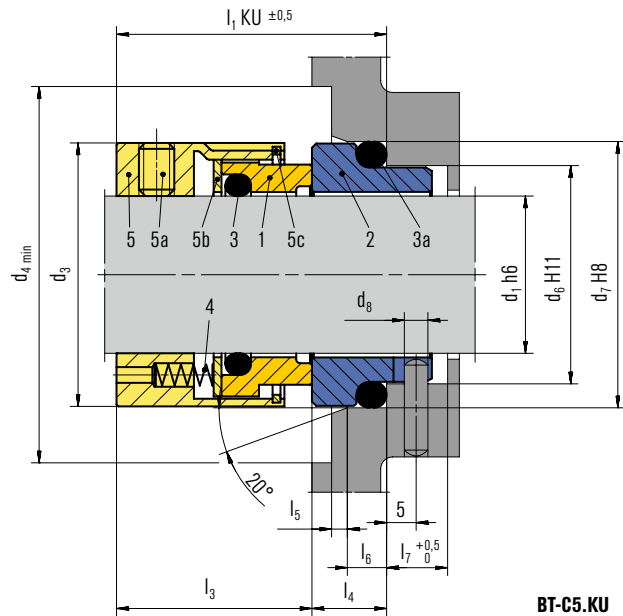
Seat: Aluminium oxide (V), Silicon carbide (Q1)

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

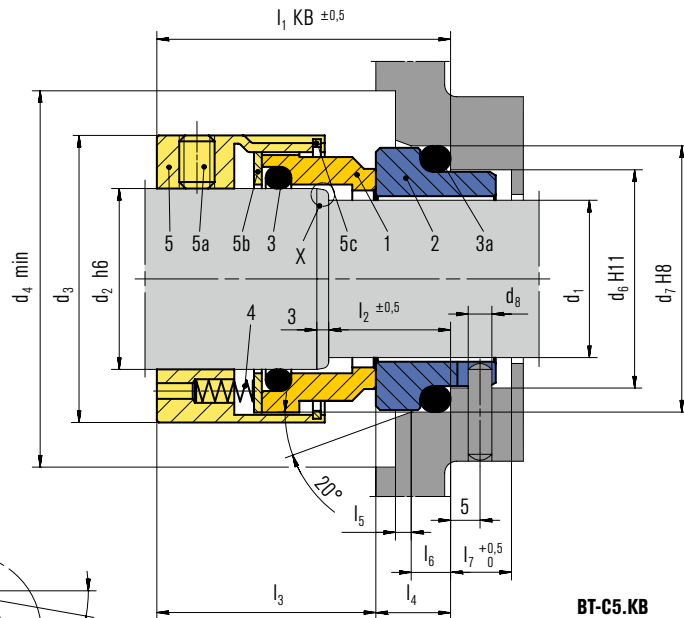
Metal parts: CrNiMo steel (G)

Recommended applications

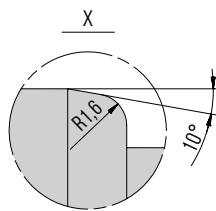
- Chemical industry
- Pharmaceutical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps



BT-C5.KU



BT-C5.KB



Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA

Item

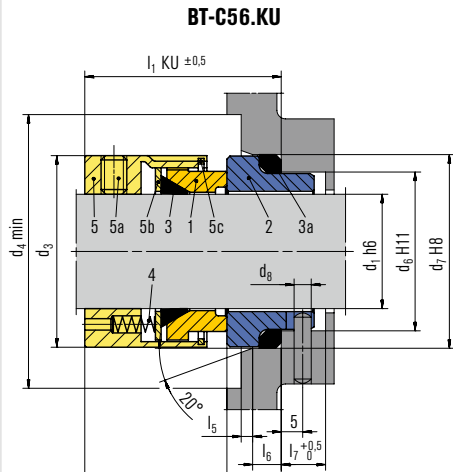
Description

- | Item | Description |
|-------|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3, 3a | O-Ring |
| 4 | Spring |
| 5 | Collar |
| 5a | Set screw |
| 5b | Ring |
| 5c | Locking ring |

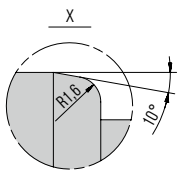
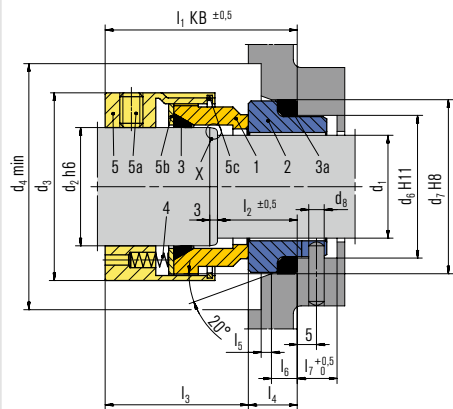
Product variants

BT-C56.KB/KU

Product variant with PTFE secondary seal elements instead of elastomers. Mainly used in the chemical industry and for corrosive media.



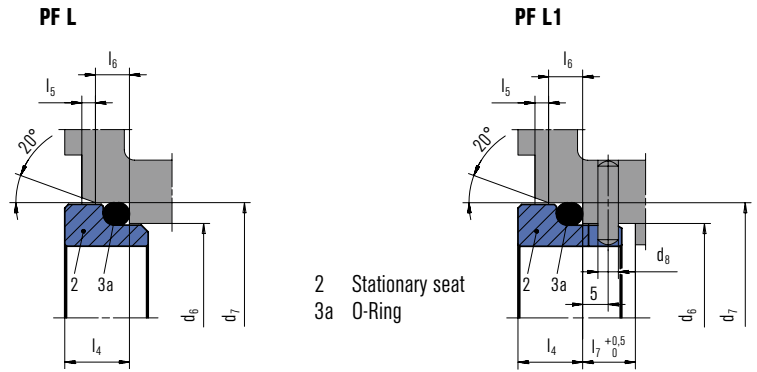
BT-C56.KB



- 1 Seal face
- 2 Stationary seat
- 3 Wedge gasket (PTFE)
- 3a Gasket (PTFE)
- 4 Spring
- 5 Collar
- 5a Set screw
- 5b Ring
- 5c Locking ring

Seat alternatives

Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.



Dimensions BT-C5.KU in mm

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

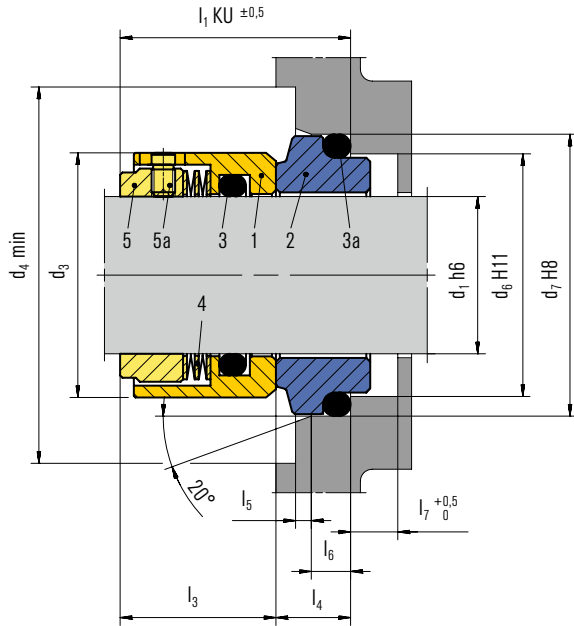
l_{1KU} complies with EN 12756 (short length, unbalanced)

Dimensions BT-C5.KB in mm

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
48	53	69	73	59	66	4	52.5	23	41.5	11.0	2.0	6	9
50	55	71	75	62	70	4	57.5	25	44.5	13.0	2.5	6	9
53	58	78	83	65	73	4	57.5	25	44.5	13.0	2.5	6	9
55	60	80	85	67	75	4	57.5	25	44.5	13.0	2.5	6	9
58	63	83	88	70	78	4	62.5	25	49.5	13.0	2.5	6	9
60	65	85	90	72	80	4	62.5	25	49.5	13.0	2.5	6	9
63	68	88	93	75	83	4	62.5	25	49.5	13.0	2.5	6	9
65	70	90	95	77	85	4	62.5	25	49.5	13.0	2.5	6	9
70	75	99	104	83	92	4	70.0	28	55.0	15.0	2.5	7	9
75	80	104	109	88	97	4	70.0	28	55.0	15.0	2.5	7	9
80	85	109	114	95	105	4	70.0	28	54.5	15.5	3.0	7	9
85	90	114	119	100	110	4	75.0	28	59.5	15.5	3.0	7	9
90	95	119	124	105	115	4	75.0	28	59.5	15.5	3.0	7	9
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-C7



The BT-C7 mechanical seal range has a robust design for universal application. The seal is bi-directional, unaffected by the direction of shaft rotation and is positively driven by set screws. With super-sinus spring.

Features

- Single pusher-type seal
- Unbalanced
- Super-sinus spring
- Independent of direction of rotation
- Short length, according EN 12756 (L_{1KU}).

Operating range (see note on page 28)

Shaft diameter: $d_1 = 16 \dots 100 \text{ mm}$ (0.79" ... 3.94")
 Pressure: $p_1^* = 12$ (16) bar (174 (232) PSI)
 Temperature: $t^* = -35 \text{ }^\circ\text{C} \dots +180 \text{ }^\circ\text{C}$ (-4 °F ... +356 °F)
 Sliding velocity: $v_g = 20 \text{ m/s}$ (66 ft/s)

* Dependent on medium, size and material

Materials (see fold-out page 28)

Seal face: CrNiMo steel (G), Tungsten carbide (U)
 Seat: Carbon graphite resin impregnated (B),
 Carbon graphite antimony impregnated (A),
 Tungsten carbide (U)
 Elastomers: NBR (P), EPDM (E), FKM (V), FFKM (K)
 Metal parts: CrNiMo steel 1.4401 (G)

Recommended applications

- Chemical industry
- Pharmaceutical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps

Certificates

- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA

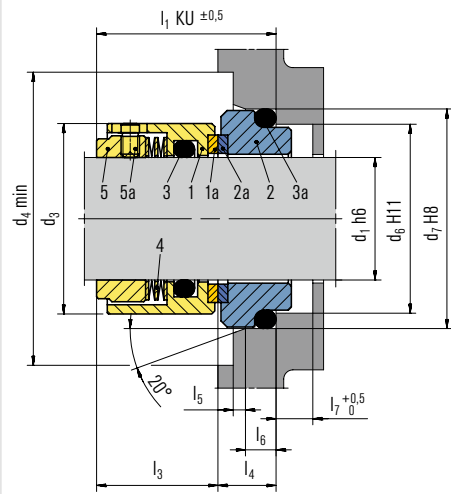
Item Description

- | Item | Description |
|-------|-----------------|
| 1 | Seal face |
| 2 | Stationary seat |
| 3, 3a | O-Ring |
| 4 | Spring |
| 5 | Driver |
| 5a | Set screw |

Product variants

BT-C73

Like the BT-C7, but seal face and seat made of brazen tungsten carbide (U). This version is suitable for media with abrasive characteristics.

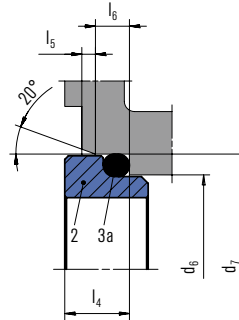


- 1 Seal face housing
- 1a Brazen seal face
- 2 Stationary seat housing
- 2a Brazen stationary seat
- 3, 3a O-Ring
- 4 Spring
- 5 Driver
- 5a Set screw

Seat alternatives

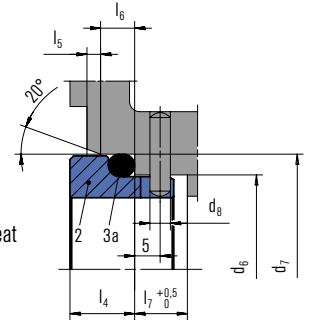
Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.

PF L



- 2 Stationary seat
- 3a O-Ring

PF L1



- 2 Stationary seat
- 3a O-Ring

Dimensions BT-C7.KU in mm

d ₁	d ₃	d ₄	d ₆	d ₇	d ₈	l _{1KU}	l ₃	l ₄	l ₅	l ₆	l ₇
16	26	28	23	27	3	35.0	28.0	7	1.5	4	8.5
18	32	34	27	33	3	37.5	27.5	10	2.0	5	9.0
20	34	36	29	35	3	37.5	27.5	10	2.0	5	9.0
22	36	38	31	37	3	37.5	27.5	10	2.0	5	9.0
24	38	40	33	39	3	40.0	30.0	10	2.0	5	9.0
25	39	41	34	40	3	40.0	30.0	10	2.0	5	9.0
28	42	44	37	43	3	42.5	32.5	10	2.0	5	9.0
30	44	46	39	45	3	42.5	32.5	10	2.0	5	9.0
32	46	48	42	48	3	42.5	32.5	10	2.0	5	9.0
33	47	49	42	48	3	42.5	32.5	10	2.0	5	9.0
35	49	51	44	50	3	42.5	32.5	10	2.0	5	9.0
38	54	58	49	56	4	45.0	32.0	13	2.0	6	9.0
40	56	60	51	58	4	45.0	32.0	13	2.0	6	9.0
43	59	63	54	61	4	45.0	32.0	13	2.0	6	9.0
45	61	65	56	63	4	45.0	32.0	13	2.0	6	9.0
48	64	68	59	66	4	45.0	32.0	13	2.0	6	9.0
50	66	70	62	70	4	47.5	33.5	14	2.5	6	9.0
53	69	73	65	73	4	47.5	33.5	14	2.5	6	9.0
55	71	75	67	75	4	47.5	33.5	14	2.5	6	9.0
58	78	83	70	78	4	52.5	38.5	14	2.5	6	9.0
60	80	85	72	80	4	52.5	38.5	14	2.5	6	9.0
63	83	88	75	83	4	52.5	38.5	14	2.5	6	9.0
65	85	90	77	85	4	52.5	38.5	14	2.5	6	9.0
68	88	93	81	90	4	52.5	36.5	16	2.5	7	9.0
70	90	95	83	92	4	60.0	44.0	16	2.5	7	9.0
75	99	104	88	97	4	60.0	44.0	16	2.5	7	9.0
80	104	109	95	105	4	60.0	42.0	18	3.0	7	9.0
85	109	114	100	110	4	60.0	42.0	18	3.0	7	9.0
90	114	119	105	115	4	65.0	47.0	18	3.0	7	9.0
95	119	124	110	120	4	65.0	47.0	18	3.0	7	9.0
100	124	129	115	125	4	65.0	47.0	18	3.0	7	9.0

l_{1KU} complies with EN 12756 (short length, unbalanced)

BT-C8



The BT-C8 mechanical seal range is designed for universal application and is ideally suited for standardization. The seal is bi-directional, unaffected by the direction of shaft rotation and is positively driven by set screws. With super-sinus spring. The advantages of this mechanical seal are the easily interchangeable seal faces which permit all material combinations.

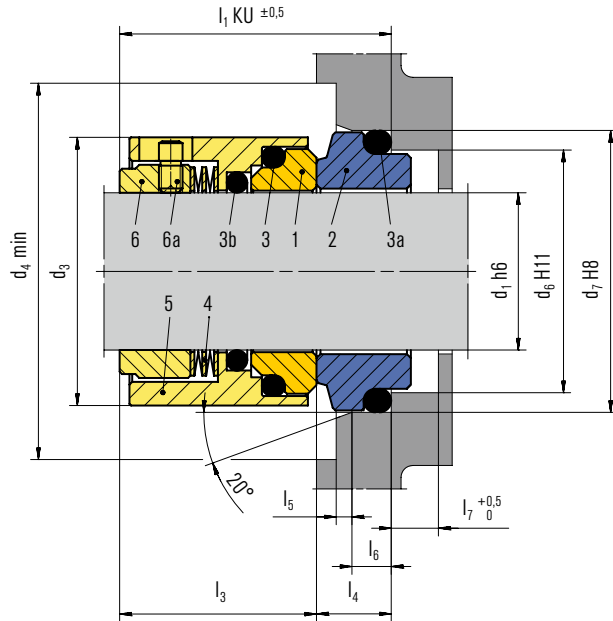
Features

- Single pusher-type seal
- Unbalanced
- Independent of direction of rotation
- Super-sinus spring
- Short installation length, according EN 12756 (L_{1KU}).

Operating range (see note on page 28)

Shaft diameter: $d_1 = 16 \dots 100 \text{ mm}$ (0.79" ... 3.94")
 Pressure: $p_1^* = 12$ (16) bar (174 (232) PSI)
 Temperature: $t^* = -35 \text{ }^\circ\text{C} \dots +180 \text{ }^\circ\text{C}$ (-4 $^\circ\text{F} \dots +356 \text{ }^\circ\text{F}$)
 Sliding velocity: $v_g = 20 \text{ m/s}$ (66 ft/s)

* Dependent on medium, size and material



Materials (see fold-out page 28)

Seal face: Silicon carbide (Q1), Aluminium oxide (V)
 Seat: Carbon graphite resin impregnated (B), Carbon graphite antimony impregnated (A), Silicon carbide (Q1)
 Elastomers: NBR (P), EPDM (E), FKM (V), FFKM (K)
 Metal parts: CrNiMo steel 1.4401 (G)

Recommended applications

- Chemical industry
- Pharmaceutical industry
- Building services industry
- Centrifugal pumps
- Clean water pumps

Certificates

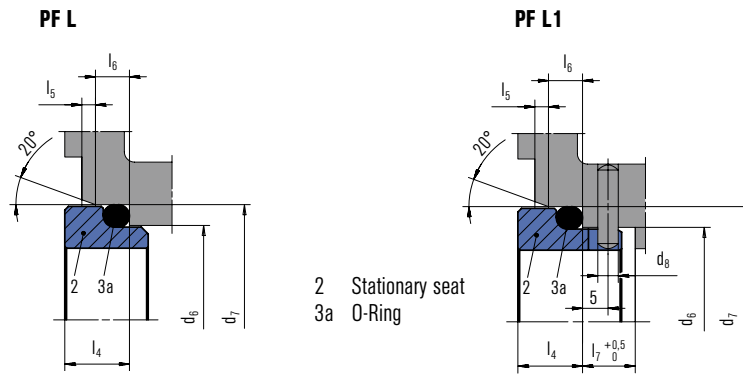
- KTW
- W270
- ACS
- WRAS
- NSF
- DM 174/04
- FDA

Item Description

Item	Description
1	Seal face
2	Stationary seat
3, 3a, 3b	O-Ring
4	Spring
5	Collar
6	Driver
6a	Set screw

Seat alternatives

Seat ring can be supplied with short tail or with pin to block the seat and prevent seat rotation.



Dimensions BT-C8.KU in mm

d ₁	d ₃	d ₄	d ₆	d ₇	d ₈	l _{1KU}	l ₃	l ₄	l ₅	l ₆	l ₇
16	29	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	36	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	45	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	56	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	70	49	56	4	45.0	32.0	13	2.0	6	9.0
40	63	70	51	58	4	45.0	32.0	13	2.0	6	9.0
43	63	70	54	61	4	45.0	32.0	13	2.0	6	9.0
45	69	75	56	63	4	45.0	32.0	13	2.0	6	9.0
48	69	75	59	66	4	45.0	32.0	13	2.0	6	9.0
50	76	83	62	70	4	47.5	33.5	14	2.5	6	9.0
53	76	83	65	73	4	47.5	33.5	14	2.5	6	9.0
55	76	83	67	75	4	47.5	33.5	14	2.5	6	9.0
58	82	88	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	94	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	132	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

d₃, d₄ dimensions not always in accordance with EN 12756
 l_{1KU} complies with EN 12756 (short length, unbalanced)

Table of materials

Material code in accordance with EN 12756

Description

Face materials

Synthetic carbons

"Soft" standard face material with best possible running properties, but only suitable for media without solids content.

A	Carbon graphite, antimony impregnated
B	Carbon graphite, resin impregnated
B3	Carbon graphite without impregnation (full carbon)

Metals

Combined with carbon as a hard/soft combination: good running properties for sealing clean media, including food industry applications

E	Cr steel AISI 420 (1.4021; 1.4028)
F1	CrNi steel AISI 431 (1.4057)
F	CrNi steel AISI 304L (1.4301, 1.4307)
G	CrNiMo steel AISI 316L (1.4401, 1.4404)
S	Special cast CrMo steel (1.4138)

Carbides

Highly wear-resistant materials for chemically aggressive and abrasive media, including high temperatures.

U	Tungsten carbide, Ni-binder, brazed
U1	Tungsten carbide, Ni-binder, solid
Q1	Silicon carbide, sintered pressureless (SiC)
Q6	Silicon carbide, sintered pressureless with carbon (SiC-C)
Q7	Silicon carbide sintered pressureless, controlled porosity (SiC)

Material code in accordance with EN 12756

Description

Metal oxides (Ceramics)

Materials with good chemical resistance, but limited to temperature and thermal shock, typically combined with carbon face material as a "hard/soft" combination.

X	Steatite (Magnesium silicate Mg_2SiO_4)
V	Ceramic (Al-Oxide 99 % Al_2O_3)
V1	Ceramic (Al-Oxide 95 % Al_2O_3)

Plastics

Soft face material, used mainly in chemical pumps. The medium must not contain any solid particles. PTFE is a typical face material for low friction and low duty applications.

Y1	PTFE glass fiber reinforced
Y2	PTFE carbon reinforced

Secondary seal components, Elastomers

P	Nitrile-butadiene-rubber NBR, e.g. Perbunan®
P2	Nitrile-butadiene-rubber NBR (drinking water approved)
X4	Hydrogenated Nitrile-rubber (HNBR), e.g. Therban®
P5	Nitrile-butadiene-rubber NBR (indicated for ozone applications)
V	Fluorocarbon rubber FKM, e.g. Viton®
E	Ethylene-propylene-rubber EPDM, e.g. Nordel®
E2	Ethylene-propylene-rubber EPDM (drinking water approved)
T	Polytetrafluoroethylene PTFE, e.g. Teflon®
K	Perfluorocarbon rubber FFKM, e.g. Kalrez®, Chemraz®
N	Polychloroprene rubber CR, e.g. Neopren®

Material code in accordance with EN 12756

Description

Spring materials

D	C steel
F	CrNi steel AISI 304 (1.4310)
G	CrNiMo steel AISI 316 (1.4401, 1.4571)
M	Ni-base alloy, Hastelloy®

Construction materials


E	Cr steel AISI 420 (1.4021; 1.4028)
F1	CrNi steel AISI 431 (1.4057)
F	CrNi steel AISI 304L (1.4301, 1.4307)
G	CrNiMo steel AISI 316L (1.4401, 1.4404)
G1	CrNiMo steel - Duplex (1.4462)

Please ask for possible drinking water approvals (WRAS, KTW, W270, ACS, NSF, DM 174). Certificates available upon request, not as a standard.

Temperature ranges for application of conventional secondary seal components

Materials		Temperature range	Remarks
Nitrile rubber	P	-20 °C ... +90 °C (-4 °F ... +194 °F)	
Chloroprene	N	-30 °C ... +120 °C (-22 °F ... +284 °F)	
EPDM rubber	E	-40 °C ... +140 °C (-40 °F ... +284 °F)	Not resistant to mineral greases and oils
Fluorocarbon rubber (e.g. Viton®)	V	-20 °C ... +200 °C (-4 °F ... +392 °F)	With hot water only up to a maximum of +90 °C (+194 °F)
Perfluorocarbon rubber (e.g. Kalrez®)	K	-5 ... +270 (+23 °F ... +518 °F)	Fluorine containing solvents may result in swelling
PTFE (e.g. Teflon®)	Y	-200 ... +250 (-328 °F ... +482 °F)	

Color code

	Shaft		Stationary seal parts		Rotary seal parts
	Housing, installation chamber		Stationary seal faces		Rotating seal faces
	Elastomers				

Important note

All the technical specifications are based on extensive tests and our many years of experience. However, the diversity of possible applications means that they can serve as guide values only.

It should be noted that the extremal values of each operating parameter cannot be applied at the same time because of their interaction. Furthermore, the operating range of each specific product depends on the respective shaft diameter, materials used, mode of operation and on the medium to be sealed.

A guarantee can only be given in the individual case if the exact conditions of application are known and these are confirmed in a special agreement. When critical conditions of operation are involved, we recommend consulting with our specialist engineers.

Subject to change.

Certificates

The most recent EagleBurgmann BT certificates can be found on our website: eagleburgmannbt.com/download/certificates



www.icim.it



www.i-net-certification.com

ICIM, the association of the world's first class certification bodies, is the largest provider of management System Certification in the world. ICIM is composed of more than 30 bodies and counts over 150 subsidiaries all over the globe.

CERTIFICATO n. 0620A/0
CERTIFICATE No.

SI CERTIFICA CHE IL SISTEMA DI GESTIONE AMBIENTALE DI
WE HEREBY CERTIFY THAT THE ENVIRONMENTAL MANAGEMENT SYSTEM OPERATED BY

EAGLEBURGMANN BT S.P.A.

UNITÀ OPERATIVE
OPERATIVE UNITS

Sede e Unità Operativa
Via Meucci, 56 - 36057 Arcugnano (VI)

Unità Operativa
Via Leonardo da Vinci, 9 - 36057 Arcugnano (VI)
Italia

E' CONFORME ALLA NORMA
IS IN COMPLIANCE WITH THE STANDARD

UNI EN ISO 14001:2004

PER LE SEGUENTI ATTIVITA'
FOR THE FOLLOWING ACTIVITIES

EA: 18

Progettazione, produzione e commercializzazione di tenute meccaniche rotanti ottenute mediante i processi di stampaggio, tornitura, rettificazione, saldatura ad induzione, lappatura e lucidatura.
Design, production and trading of mechanical seals for rotating shafts obtained by the processes of stamping, turning, grinding, induction welding, lapping and polishing.

Certificazione rilasciata in conformità al Regolamento Tecnico SINCERT RT-09
Il presente certificato è soggetto al rispetto del regolamento per la certificazione dei sistemi di gestione ambientale delle aziende.
The use and the validity of this certificate shall satisfy the requirements of the rules for the certification of company environmental management systems.

<small>Data emissione First issue</small>	<small>Emissione corrente Current issue</small>	<small>Data di scadenza Expiry date</small>
12/10/2013	12/10/2013	11/10/2016



ICIM S.p.A.
PIAZZA DON ENICO MAPPELLI, 75 - 20099 SESTO SAN GIOVANNI (MI)




5522 N° 004A SGA N° 0050 SCS N° 006F SSI N° 0080 SSI N° 0082 SSI N° 0084 SSI N° 0086 SSI N° 0088 SSI N° 0090 SSI N° 0092 SSI N° 0094 SSI N° 0096 SSI N° 0098 SSI N° 0100 SSI N° 0102 SSI N° 0104 SSI N° 0106 SSI N° 0108 SSI N° 0110 SSI N° 0112 SSI N° 0114 SSI N° 0116 SSI N° 0118 SSI N° 0120 SSI N° 0122 SSI N° 0124 SSI N° 0126 SSI N° 0128 SSI N° 0130 SSI N° 0132 SSI N° 0134 SSI N° 0136 SSI N° 0138 SSI N° 0140 SSI N° 0142 SSI N° 0144 SSI N° 0146 SSI N° 0148 SSI N° 0150 SSI N° 0152 SSI N° 0154 SSI N° 0156 SSI N° 0158 SSI N° 0160 SSI N° 0162 SSI N° 0164 SSI N° 0166 SSI N° 0168 SSI N° 0170 SSI N° 0172 SSI N° 0174 SSI N° 0176 SSI N° 0178 SSI N° 0180 SSI N° 0182 SSI N° 0184 SSI N° 0186 SSI N° 0188 SSI N° 0190 SSI N° 0192 SSI N° 0194 SSI N° 0196 SSI N° 0198 SSI N° 0200 SSI N° 0202 SSI N° 0204 SSI N° 0206 SSI N° 0208 SSI N° 0210 SSI N° 0212 SSI N° 0214 SSI N° 0216 SSI N° 0218 SSI N° 0220 SSI N° 0222 SSI N° 0224 SSI N° 0226 SSI N° 0228 SSI N° 0230 SSI N° 0232 SSI N° 0234 SSI N° 0236 SSI N° 0238 SSI N° 0240 SSI N° 0242 SSI N° 0244 SSI N° 0246 SSI N° 0248 SSI N° 0250 SSI N° 0252 SSI N° 0254 SSI N° 0256 SSI N° 0258 SSI N° 0260 SSI N° 0262 SSI N° 0264 SSI N° 0266 SSI N° 0268 SSI N° 0270 SSI N° 0272 SSI N° 0274 SSI N° 0276 SSI N° 0278 SSI N° 0280 SSI N° 0282 SSI N° 0284 SSI N° 0286 SSI N° 0288 SSI N° 0290 SSI N° 0292 SSI N° 0294 SSI N° 0296 SSI N° 0298 SSI N° 0300 SSI N° 0302 SSI N° 0304 SSI N° 0306 SSI N° 0308 SSI N° 0310 SSI N° 0312 SSI N° 0314 SSI N° 0316 SSI N° 0318 SSI N° 0320 SSI N° 0322 SSI N° 0324 SSI N° 0326 SSI N° 0328 SSI N° 0330 SSI N° 0332 SSI N° 0334 SSI N° 0336 SSI N° 0338 SSI N° 0340 SSI N° 0342 SSI N° 0344 SSI N° 0346 SSI N° 0348 SSI N° 0350 SSI N° 0352 SSI N° 0354 SSI N° 0356 SSI N° 0358 SSI N° 0360 SSI N° 0362 SSI N° 0364 SSI N° 0366 SSI N° 0368 SSI N° 0370 SSI N° 0372 SSI N° 0374 SSI N° 0376 SSI N° 0378 SSI N° 0380 SSI N° 0382 SSI N° 0384 SSI N° 0386 SSI N° 0388 SSI N° 0390 SSI N° 0392 SSI N° 0394 SSI N° 0396 SSI N° 0398 SSI N° 0400 SSI N° 0402 SSI N° 0404 SSI N° 0406 SSI N° 0408 SSI N° 0410 SSI N° 0412 SSI N° 0414 SSI N° 0416 SSI N° 0418 SSI N° 0420 SSI N° 0422 SSI N° 0424 SSI N° 0426 SSI N° 0428 SSI N° 0430 SSI N° 0432 SSI N° 0434 SSI N° 0436 SSI N° 0438 SSI N° 0440 SSI N° 0442 SSI N° 0444 SSI N° 0446 SSI N° 0448 SSI N° 0450 SSI N° 0452 SSI N° 0454 SSI N° 0456 SSI N° 0458 SSI N° 0460 SSI N° 0462 SSI N° 0464 SSI N° 0466 SSI N° 0468 SSI N° 0470 SSI N° 0472 SSI N° 0474 SSI N° 0476 SSI N° 0478 SSI N° 0480 SSI N° 0482 SSI N° 0484 SSI N° 0486 SSI N° 0488 SSI N° 0490 SSI N° 0492 SSI N° 0494 SSI N° 0496 SSI N° 0498 SSI N° 0500 SSI N° 0502 SSI N° 0504 SSI N° 0506 SSI N° 0508 SSI N° 0510 SSI N° 0512 SSI N° 0514 SSI N° 0516 SSI N° 0518 SSI N° 0520 SSI N° 0522 SSI N° 0524 SSI N° 0526 SSI N° 0528 SSI N° 0530 SSI N° 0532 SSI N° 0534 SSI N° 0536 SSI N° 0538 SSI N° 0540 SSI N° 0542 SSI N° 0544 SSI N° 0546 SSI N° 0548 SSI N° 0550 SSI N° 0552 SSI N° 0554 SSI N° 0556 SSI N° 0558 SSI N° 0560 SSI N° 0562 SSI N° 0564 SSI N° 0566 SSI N° 0568 SSI N° 0570 SSI N° 0572 SSI N° 0574 SSI N° 0576 SSI N° 0578 SSI N° 0580 SSI N° 0582 SSI N° 0584 SSI N° 0586 SSI N° 0588 SSI N° 0590 SSI N° 0592 SSI N° 0594 SSI N° 0596 SSI N° 0598 SSI N° 0600 SSI N° 0602 SSI N° 0604 SSI N° 0606 SSI N° 0608 SSI N° 0610 SSI N° 0612 SSI N° 0614 SSI N° 0616 SSI N° 0618 SSI N° 0620 SSI N° 0622 SSI N° 0624 SSI N° 0626 SSI N° 0628 SSI N° 0630 SSI N° 0632 SSI N° 0634 SSI N° 0636 SSI N° 0638 SSI N° 0640 SSI N° 0642 SSI N° 0644 SSI N° 0646 SSI N° 0648 SSI N° 0650 SSI N° 0652 SSI N° 0654 SSI N° 0656 SSI N° 0658 SSI N° 0660 SSI N° 0662 SSI N° 0664 SSI N° 0666 SSI N° 0668 SSI N° 0670 SSI N° 0672 SSI N° 0674 SSI N° 0676 SSI N° 0678 SSI N° 0680 SSI N° 0682 SSI N° 0684 SSI N° 0686 SSI N° 0688 SSI N° 0690 SSI N° 0692 SSI N° 0694 SSI N° 0696 SSI N° 0698 SSI N° 0700 SSI N° 0702 SSI N° 0704 SSI N° 0706 SSI N° 0708 SSI N° 0710 SSI N° 0712 SSI N° 0714 SSI N° 0716 SSI N° 0718 SSI N° 0720 SSI N° 0722 SSI N° 0724 SSI N° 0726 SSI N° 0728 SSI N° 0730 SSI N° 0732 SSI N° 0734 SSI N° 0736 SSI N° 0738 SSI N° 0740 SSI N° 0742 SSI N° 0744 SSI N° 0746 SSI N° 0748 SSI N° 0750 SSI N° 0752 SSI N° 0754 SSI N° 0756 SSI N° 0758 SSI N° 0760 SSI N° 0762 SSI N° 0764 SSI N° 0766 SSI N° 0768 SSI N° 0770 SSI N° 0772 SSI N° 0774 SSI N° 0776 SSI N° 0778 SSI N° 0780 SSI N° 0782 SSI N° 0784 SSI N° 0786 SSI N° 0788 SSI N° 0790 SSI N° 0792 SSI N° 0794 SSI N° 0796 SSI N° 0798 SSI N° 0800 SSI N° 0802 SSI N° 0804 SSI N° 0806 SSI N° 0808 SSI N° 0810 SSI N° 0812 SSI N° 0814 SSI N° 0816 SSI N° 0818 SSI N° 0820 SSI N° 0822 SSI N° 0824 SSI N° 0826 SSI N° 0828 SSI N° 0830 SSI N° 0832 SSI N° 0834 SSI N° 0836 SSI N° 0838 SSI N° 0840 SSI N° 0842 SSI N° 0844 SSI N° 0846 SSI N° 0848 SSI N° 0850 SSI N° 0852 SSI N° 0854 SSI N° 0856 SSI N° 0858 SSI N° 0860 SSI N° 0862 SSI N° 0864 SSI N° 0866 SSI N° 0868 SSI N° 0870 SSI N° 0872 SSI N° 0874 SSI N° 0876 SSI N° 0878 SSI N° 0880 SSI N° 0882 SSI N° 0884 SSI N° 0886 SSI N° 0888 SSI N° 0890 SSI N° 0892 SSI N° 0894 SSI N° 0896 SSI N° 0898 SSI N° 0900 SSI N° 0902 SSI N° 0904 SSI N° 0906 SSI N° 0908 SSI N° 0910 SSI N° 0912 SSI N° 0914 SSI N° 0916 SSI N° 0918 SSI N° 0920 SSI N° 0922 SSI N° 0924 SSI N° 0926 SSI N° 0928 SSI N° 0930 SSI N° 0932 SSI N° 0934 SSI N° 0936 SSI N° 0938 SSI N° 0940 SSI N° 0942 SSI N° 0944 SSI N° 0946 SSI N° 0948 SSI N° 0950 SSI N° 0952 SSI N° 0954 SSI N° 0956 SSI N° 0958 SSI N° 0960 SSI N° 0962 SSI N° 0964 SSI N° 0966 SSI N° 0968 SSI N° 0970 SSI N° 0972 SSI N° 0974 SSI N° 0976 SSI N° 0978 SSI N° 0980 SSI N° 0982 SSI N° 0984 SSI N° 0986 SSI N° 0988 SSI N° 0990 SSI N° 0992 SSI N° 0994 SSI N° 0996 SSI N° 0998 SSI N° 1000 SSI N° 1002 SSI N° 1004 SSI N° 1006 SSI N° 1008 SSI N° 1010 SSI N° 1012 SSI N° 1014 SSI N° 1016 SSI N° 1018 SSI N° 1020 SSI N° 1022 SSI N° 1024 SSI N° 1026 SSI N° 1028 SSI N° 1030 SSI N° 1032 SSI N° 1034 SSI N° 1036 SSI N° 1038 SSI N° 1040 SSI N° 1042 SSI N° 1044 SSI N° 1046 SSI N° 1048 SSI N° 1050 SSI N° 1052 SSI N° 1054 SSI N° 1056 SSI N° 1058 SSI N° 1060 SSI N° 1062 SSI N° 1064 SSI N° 1066 SSI N° 1068 SSI N° 1070 SSI N° 1072 SSI N° 1074 SSI N° 1076 SSI N° 1078 SSI N° 1080 SSI N° 1082 SSI N° 1084 SSI N° 1086 SSI N° 1088 SSI N° 1090 SSI N° 1092 SSI N° 1094 SSI N° 1096 SSI N° 1098 SSI N° 1100 SSI N° 1102 SSI N° 1104 SSI N° 1106 SSI N° 1108 SSI N° 1110 SSI N° 1112 SSI N° 1114 SSI N° 1116 SSI N° 1118 SSI N° 1120 SSI N° 1122 SSI N° 1124 SSI N° 1126 SSI N° 1128 SSI N° 1130 SSI N° 1132 SSI N° 1134 SSI N° 1136 SSI N° 1138 SSI N° 1140 SSI N° 1142 SSI N° 1144 SSI N° 1146 SSI N° 1148 SSI N° 1150 SSI N° 1152 SSI N° 1154 SSI N° 1156 SSI N° 1158 SSI N° 1160 SSI N° 1162 SSI N° 1164 SSI N° 1166 SSI N° 1168 SSI N° 1170 SSI N° 1172 SSI N° 1174 SSI N° 1176 SSI N° 1178 SSI N° 1180 SSI N° 1182 SSI N° 1184 SSI N° 1186 SSI N° 1188 SSI N° 1190 SSI N° 1192 SSI N° 1194 SSI N° 1196 SSI N° 1198 SSI N° 1200 SSI N° 1202 SSI N° 1204 SSI N° 1206 SSI N° 1208 SSI N° 1210 SSI N° 1212 SSI N° 1214 SSI N° 1216 SSI N° 1218 SSI N° 1220 SSI N° 1222 SSI N° 1224 SSI N° 1226 SSI N° 1228 SSI N° 1230 SSI N° 1232 SSI N° 1234 SSI N° 1236 SSI N° 1238 SSI N° 1240 SSI N° 1242 SSI N° 1244 SSI N° 1246 SSI N° 1248 SSI N° 1250 SSI N° 1252 SSI N° 1254 SSI N° 1256 SSI N° 1258 SSI N° 1260 SSI N° 1262 SSI N° 1264 SSI N° 1266 SSI N° 1268 SSI N° 1270 SSI N° 1272 SSI N° 1274 SSI N° 1276 SSI N° 1278 SSI N° 1280 SSI N° 1282 SSI N° 1284 SSI N° 1286 SSI N° 1288 SSI N° 1290 SSI N° 1292 SSI N° 1294 SSI N° 1296 SSI N° 1298 SSI N° 1300 SSI N° 1302 SSI N° 1304 SSI N° 1306 SSI N° 1308 SSI N° 1310 SSI N° 1312 SSI N° 1314 SSI N° 1316 SSI N° 1318 SSI N° 1320 SSI N° 1322 SSI N° 1324 SSI N° 1326 SSI N° 1328 SSI N° 1330 SSI N° 1332 SSI N° 1334 SSI N° 1336 SSI N° 1338 SSI N° 1340 SSI N° 1342 SSI N° 1344 SSI N° 1346 SSI N° 1348 SSI N° 1350 SSI N° 1352 SSI N° 1354 SSI N° 1356 SSI N° 1358 SSI N° 1360 SSI N° 1362 SSI N° 1364 SSI N° 1366 SSI N° 1368 SSI N° 1370 SSI N° 1372 SSI N° 1374 SSI N° 1376 SSI N° 1378 SSI N° 1380 SSI N° 1382 SSI N° 1384 SSI N° 1386 SSI N° 1388 SSI N° 1390 SSI N° 1392 SSI N° 1394 SSI N° 1396 SSI N° 1398 SSI N° 1400 SSI N° 1402 SSI N° 1404 SSI N° 1406 SSI N° 1408 SSI N° 1410 SSI N° 1412 SSI N° 1414 SSI N° 1416 SSI N° 1418 SSI N° 1420 SSI N° 1422 SSI N° 1424 SSI N° 1426 SSI N° 1428 SSI N° 1430 SSI N° 1432 SSI N° 1434 SSI N° 1436 SSI N° 1438 SSI N° 1440 SSI N° 1442 SSI N° 1444 SSI N° 1446 SSI N° 1448 SSI N° 1450 SSI N° 1452 SSI N° 1454 SSI N° 1456 SSI N° 1458 SSI N° 1460 SSI N° 1462 SSI N° 1464 SSI N° 1466 SSI N° 1468 SSI N° 1470 SSI N° 1472 SSI N° 1474 SSI N° 1476 SSI N° 1478 SSI N° 1480 SSI N° 1482 SSI N° 1484 SSI N° 1486 SSI N° 1488 SSI N° 1490 SSI N° 1492 SSI N° 1494 SSI N° 1496 SSI N° 1498 SSI N° 1500 SSI N° 1502 SSI N° 1504 SSI N° 1506 SSI N° 1508 SSI N° 1510 SSI N° 1512 SSI N° 1514 SSI N° 1516 SSI N° 1518 SSI N° 1520 SSI N° 1522 SSI N° 1524 SSI N° 1526 SSI N° 1528 SSI N° 1530 SSI N° 1532 SSI N° 1534 SSI N° 1536 SSI N° 1538 SSI N° 1540 SSI N° 1542 SSI N° 1544 SSI N° 1546 SSI N° 1548 SSI N° 1550 SSI N° 1552 SSI N° 1554 SSI N° 1556 SSI N° 1558 SSI N° 1560 SSI N° 1562 SSI N° 1564 SSI N° 1566 SSI N° 1568 SSI N° 1570 SSI N° 1572 SSI N° 1574 SSI N° 1576 SSI N° 1578 SSI N° 1580 SSI N° 1582 SSI N° 1584 SSI N° 1586 SSI N° 1588 SSI N° 1590 SSI N° 1592 SSI N° 1594 SSI N° 1596 SSI N° 1598 SSI N° 1600 SSI N° 1602 SSI N° 1604 SSI N° 1606 SSI N° 1608 SSI N° 1610 SSI N° 1612 SSI N° 1614 SSI N° 1616 SSI N° 1618 SSI N° 1620 SSI N° 1622 SSI N° 1624 SSI N° 1626 SSI N° 1628 SSI N° 1630 SSI N° 1632 SSI N° 1634 SSI N° 1636 SSI N° 1638 SSI N° 1640 SSI N° 1642 SSI N° 1644 SSI N° 1646 SSI N° 1648 SSI N° 1650 SSI N° 1652 SSI N° 1654 SSI N° 1656 SSI N° 1658 SSI N° 1660 SSI N° 1662 SSI N° 1664 SSI N° 1666 SSI N° 1668 SSI N° 1670 SSI N° 1672 SSI N° 1674 SSI N° 1676 SSI N° 1678 SSI N° 1680 SSI N° 1682 SSI N° 1684 SSI N° 1686 SSI N° 1688 SSI N° 1690 SSI N° 1692 SSI N° 1694 SSI N° 1696 SSI N° 1698 SSI N° 1700 SSI N° 1702 SSI N° 1704 SSI N° 1706 SSI N° 1708 SSI N° 1710 SSI N° 1712 SSI N° 1714 SSI N° 1716 SSI N° 1718 SSI N° 1720 SSI N° 1722 SSI N° 1724 SSI N° 1726 SSI N° 1728 SSI N° 1730 SSI N° 1732 SSI N° 1734 SSI N° 1736 SSI N° 1738 SSI N° 1740 SSI N° 1742 SSI N° 1744 SSI N° 1746 SSI N° 1748 SSI N° 1750 SSI N° 1752 SSI N° 1754 SSI N° 1756 SSI N° 1758 SSI N° 1760 SSI N° 1762 SSI N° 1764 SSI N° 1766 SSI N° 1768 SSI N° 1770 SSI N° 1772 SSI N° 1774 SSI N° 1776 SSI N° 1778 SSI N° 1780 SSI N° 1782 SSI N° 1784 SSI N° 1786 SSI N° 1788 SSI N° 1790 SSI N° 1792 SSI N° 1794 SSI N° 1796 SSI N° 1798 SSI N° 1800 SSI N° 1802 SSI N° 1804 SSI N° 1806 SSI N° 1808 SSI N° 1810 SSI N° 1812 SSI N° 1814 SSI N° 1816 SSI N° 1818 SSI N° 1820 SSI N° 1822 SSI N° 1824 SSI N° 1826 SSI N° 1828 SSI N° 1830 SSI N° 1832 SSI N° 1834 SSI N° 1836 SSI N° 1838 SSI N° 1840 SSI N° 1842 SSI N° 1844 SSI N° 1846 SSI N° 1848 SSI N° 1850 SSI N° 1852 SSI N° 1854 SSI N° 1856 SSI N° 1858 SSI N° 1860 SSI N° 1862 SSI N° 1864 SSI N° 1866 SSI N° 1868 SSI N° 1870 SSI N° 1872 SSI N° 1874 SSI N° 1876 SSI N° 1878 SSI N° 1880 SSI N° 1882 SSI N° 1884 SSI N° 1886 SSI N° 1888 SSI N° 1890 SSI N° 1892 SSI N° 1894 SSI N° 1896 SSI N° 1898 SSI N° 1900 SSI N° 1902 SSI N° 1904 SSI N° 1906 SSI N° 1908 SSI N° 1910 SSI N° 1912 SSI N° 1914 SSI N° 1916 SSI N° 1918 SSI N° 1920 SSI N° 1922 SSI N° 1924 SSI N° 1926 SSI N° 1928 SSI N° 1930 SSI N° 1932 SSI N° 1934 SSI N° 1936 SSI N° 1938 SSI N° 1940 SSI N° 1942 SSI N° 1944 SSI N° 1946 SSI N° 1948 SSI N° 1950 SSI N° 1952 SSI N° 1954 SSI N° 1956 SSI N° 1958 SSI N° 1960 SSI N° 1962 SSI N° 1964 SSI N° 1966 SSI N° 1968 SSI N° 1970 SSI N° 1972 SSI N° 1974 SSI N° 1976 SSI N° 1978 SSI N° 1980 SSI N° 1982 SSI N° 1984 SSI N° 1986 SSI N° 1988 SSI N° 1990 SSI N° 1992 SSI N° 1994 SSI N° 1996 SSI N° 1998 SSI N° 2000 SSI N° 2002 SSI N° 2004 SSI N° 2006 SSI N° 2008 SSI N° 2010 SSI N° 2012 SSI N° 2014 SSI N° 2016 SSI N° 2018 SSI N° 2020 SSI N° 2022 SSI N° 2024 SSI N° 2026 SSI N° 2028 SSI N° 2030 SSI N° 2032 SSI N° 2034 SSI N° 2036 SSI N° 2038 SSI N° 2040 SSI N° 2042 SSI N° 2044 SSI N° 2046 SSI N° 2048 SSI N° 2050 SSI N° 2052 SSI N° 2054 SSI N° 2056 SSI N° 2058 SSI N° 2060 SSI N° 2062 SSI N° 2064 SSI N° 2066 SSI N° 2068 SSI N° 2070 SSI N° 2072 SSI N° 2074 SSI N° 2076 SSI N° 2078 SSI N° 2080 SSI N° 2082 SSI N° 2084 SSI N° 2086 SSI N° 2088 SSI N° 2090 SSI N° 2092 SSI N° 2094 SSI N° 2096 SSI N° 2098 SSI N° 2100 SSI N° 2102 SSI N° 2104 SSI N° 2106 SSI N° 2108 SSI N° 2110 SSI N° 2112 SSI N° 2114 SSI N° 2116 SSI N° 2118 SSI N° 2120 SSI N° 2122 SSI N° 2124 SSI N° 2126 SSI N° 2128 SSI N° 2130 SSI N° 2132 SSI N° 2134 SSI N° 2136 SSI N° 2138 SSI N° 2140 SSI N° 2142 SSI N° 2144 SSI N° 2146 SSI N° 2148 SSI N° 2150 SSI N° 2152 SSI N° 2154 SSI N° 2156 SSI N° 2158 SSI N° 2160 SSI N° 2162 SSI N° 2164 SSI N° 2166 SSI N° 2168 SSI N° 2170 SSI N° 2172 SSI N° 2174 SSI N° 2176 SSI N° 2178 SSI N° 2180 SSI N° 2182 SSI N° 2184 SSI N° 2186 SSI N° 2188 SSI N° 2190 SSI N° 2192 SSI N° 2194 SSI N° 2196 SSI N° 2198 SSI N° 2200 SSI N° 2202 SSI N° 2204 SSI N° 2206 SSI N° 2208 SSI N° 2210 SSI N° 2212 SSI N° 2214 SSI N° 2216 SSI N° 2218 SSI N° 2220 SSI N° 2222 SSI N° 2224 SSI N° 2226 SSI N° 2228 SSI N° 2230 SSI N° 2232 SSI N° 2234 SSI N° 2236 SSI N° 2238 SSI N° 2240 SSI N° 2242 SSI N° 2244 SSI N° 2246 SSI N° 2248 SSI N° 2250 SSI N° 2252 SSI N° 2254 SSI N° 2256 SSI N° 2258 SSI N° 2260 SSI N° 2262 SSI N° 2264 SSI N° 2266 SSI N° 2268 SSI N° 2270 SSI N° 2272 SSI N° 2274 SSI N° 2276 SSI N° 2278 SSI N° 2280 SSI N° 2282 SSI N° 2284 SSI N° 2286 SSI N° 2288 SSI N° 2290 SSI N° 2292 SSI N° 2294 SSI N° 2296 SSI N° 2298 SSI N° 2300 SSI N° 2302 SSI N° 2304 SSI N° 2306 SSI N° 2308 SSI N° 2310 SSI N° 2312 SSI N° 2314 SSI N° 2316 SSI N° 2318 SSI N° 2320 SSI N° 2322 SSI N° 2324 SSI N° 2326 SSI N° 2328 SSI N° 2330 SSI N° 2332 SSI N° 2334 SSI N° 2336 SSI N° 2338 SSI N° 2340 SSI N° 2342 SSI N° 2344 SSI N° 2346 SSI N° 2348 SSI N° 2350 SSI N° 2352 SSI N° 2354 SSI N° 2356 SSI N° 2358 SSI N° 2360 SSI N° 2362 SSI N° 2364 SSI N° 2366 SSI N° 2368 SSI N° 2370 SSI N° 2372 SSI N° 2374 SSI N° 2376 SSI N° 2378 SSI N° 2380 SSI N° 2382 SSI N° 2384 SSI N° 2386 SSI N° 2388 SSI N° 2390 SSI N° 2392 SSI N° 2394 SSI N° 2396 SSI N° 2398 SSI N° 2400 SSI N° 2402 SSI N° 2404 SSI N° 2406 SSI N° 2408 SSI N° 2410 SSI N° 2412 SSI N° 2414 SSI N° 2416 SSI N° 2418 SSI N° 2420 SSI N° 2422 SSI N° 2424 SSI N° 2426 SSI N° 2428 SSI N° 2430 SSI N° 2432 SSI N° 2434 SSI N° 2436 SSI N° 2438 SSI N° 2440 SSI N° 2442 SSI N° 2444 SSI N° 2446 SSI N° 2448 SSI N° 2450 SSI N° 2452 SSI N° 2454 SSI N° 2456 SSI N° 2458 SSI N° 2460 SSI N° 2462 SSI N° 2464 SSI N° 2466 SSI N° 2468 SSI N° 2470 SSI N° 2472 SSI N° 2474 SSI N° 2476 SSI N° 2478 SSI N° 2480 SSI N° 2482 SSI N° 2484 SSI N° 2486 SSI N° 2488 SSI N° 2490 SSI N° 2492 SSI N° 2494 SSI N° 2496 SSI N° 2498 SSI N° 2500 SSI N° 2502 SSI N° 2504 SSI N° 2506 SSI N° 2508 SSI N° 2510 SSI N° 2512 SSI N° 2514 SSI N° 2516 SSI N° 2518 SSI N° 2520 SSI N° 2522 SSI N° 2524 SSI N° 2526 SSI N° 2528 SSI N° 2530 SSI N° 2532 SSI N° 2534 SSI N° 2536 SSI N° 2538 SSI N° 2540 SSI N° 2542 SSI N° 2544 SSI N° 2546 SSI N° 2548 SSI N° 2550 SSI N° 2552 SSI N° 2554 SSI N° 2556 SSI N° 2558 SSI N° 2560 SSI N° 2562 SSI N

Algeria · Angola · **Argentina** · **Australia** · **Austria** · Bahrain · Bangladesh · Belarus · **Belgium** · Botswana · **Brazil** · Bulgaria · Cameroon · **Canada** · **Chile** · **China** · **Colombia** · Congo · Cyprus · **Czech Republic** · **Denmark** · **Ecuador** · Egypt · Estonia · Finland · **France** · Gabon · **Germany** · Ghana · **Great Britain** · Greece · **Hungary** · **India** · **Indonesia** · Iraq · Ireland · Israel · **Italy** · Ivory Coast · **Japan** · Jordan · Kazakhstan · Kenya · **Korea** · Kuwait · Latvia · Lebanon · Libya · Lithuania · Madagascar · **Malaysia** · Mauritius · **Mexico** · Morocco · Myanmar · Namibia · **Netherlands** · **New Zealand** · Nigeria · **Norway** · Oman · Pakistan · Paraguay · Peru · **Philippines** · **Poland** · Qatar · Romania · **Russia** · **Saudi Arabia** · Serbia · **Singapore** · Slovak Republic · Slovenia · **South Africa** · **Spain** · Sudan · **Sweden** · **Switzerland** · **Taiwan** · **Thailand** · Trinidad and Tobago · Tunisia · **Turkey** · Ukraine · **United Arab Emirates** · Uruguay · **USA** · **Venezuela** · **Vietnam** · Yemen · Zambia · Zimbabwe · www.eagleburgmann.com/world



BTE / EZ / PDF2 / 04.16 / 9.7.1 © EagleBurgmann Group Marketing, Germany

EagleBurgmann, a joint venture of the German Freudenberg Group and the Japanese Eagle Industry Group, is one of the internationally leading companies for industrial sealing technology. Our products are used everywhere where safety and reliability are important: in the oil and gas industry, refining technology, the petrochemical, chemical and pharmaceutical industries, food processing, power, water, mining, pulp & paper, aerospace and many other spheres. Every day, more than 6,000 employees in more than 60 subsidiaries contribute their ideas, solutions and commitment towards ensuring that customers all over the world can rely on our seals. Our modular TotalSealCare service underlines our strong customer orientation and offers tailor-made services for every application.

EagleBurgmann BT S.p.A

Via Meucci, 58
36057 Arcugnano (Vi), Italy
Phone: +39 0444 288 977
Fax: +39 0444 288 971

info@eagleburgmannbt.com
eagleburgmannbt.com