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2023

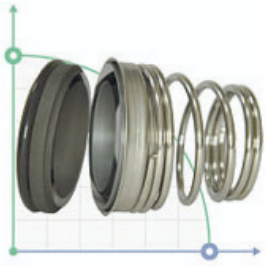
Catalog

of mechanical seals

Analogue of mechanical seals:
Burgmann, Anga, Vulcan, AESSEAL, Roten, NIPPON PILLAR, Chesterton, Latty, Corropac, SEPCO, JOHN CRANE, Flowserve, M. T. U. Europa, Sealol, Roplan, STERLING, Us Seal, Fluiten, Tekhniseal

Application in pumps:
Lowara, Alfa Laval, Wilo, Ebara, Grundfos, Calpeda, Allweiler, KSB, Inoxpa, DAB, Saer, Speroni and many others

Mechanical seal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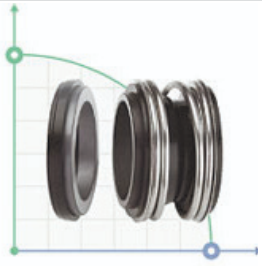
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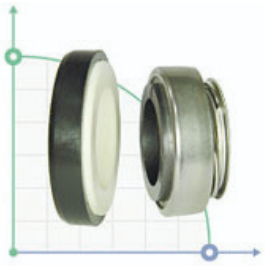
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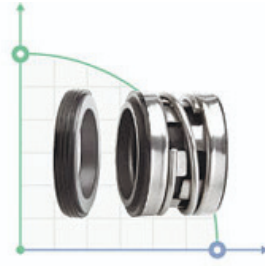
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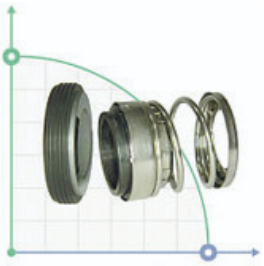
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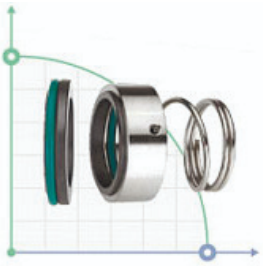
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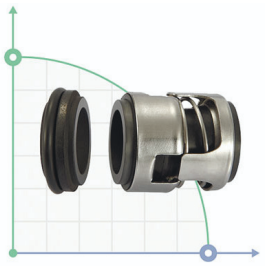
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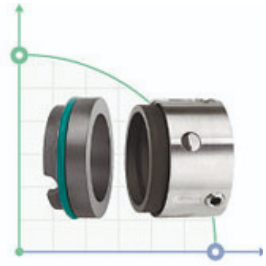
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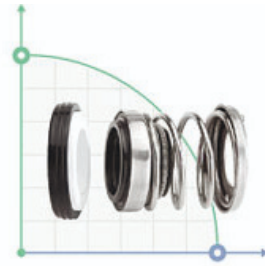
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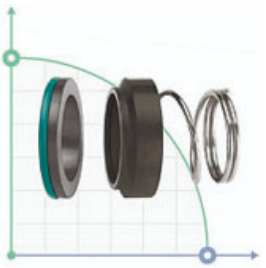
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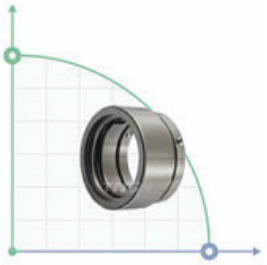
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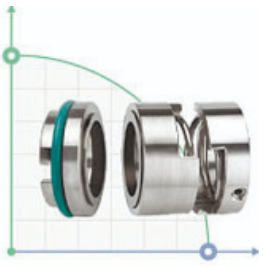
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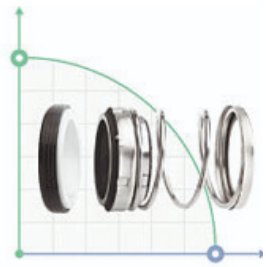
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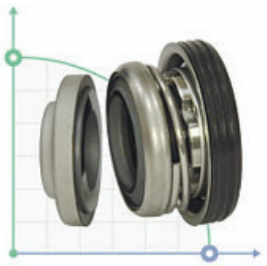
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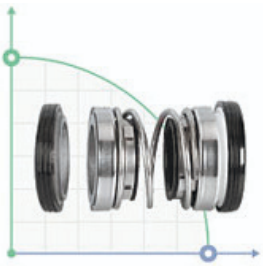
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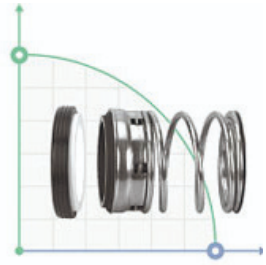
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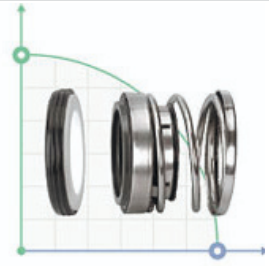
Mechanical seal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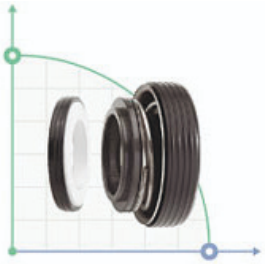
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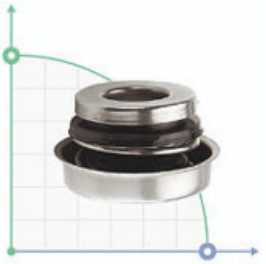
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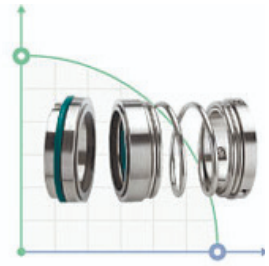
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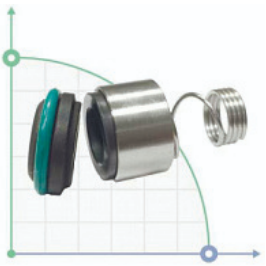
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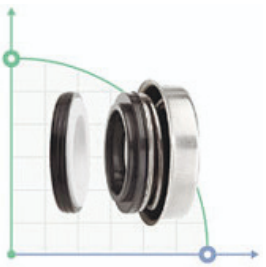
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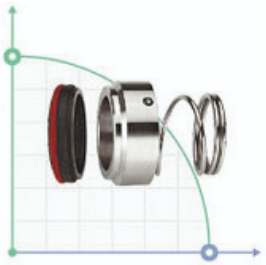
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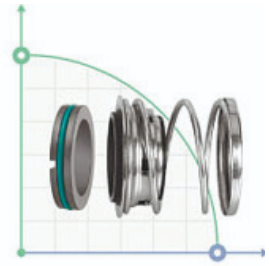
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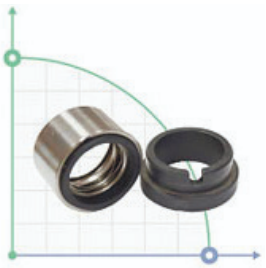
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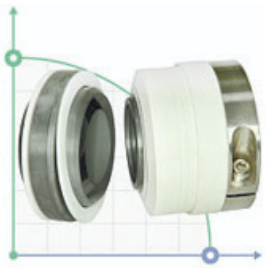
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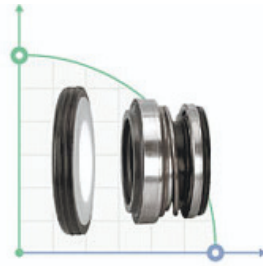
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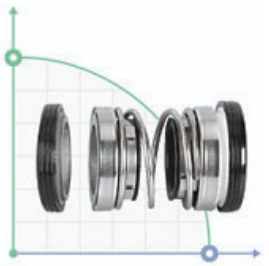
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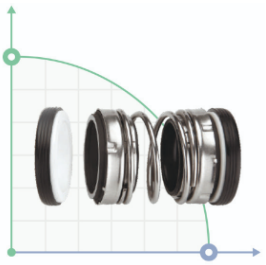
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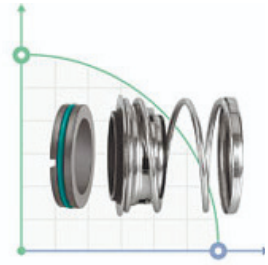
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R-706L

LWR

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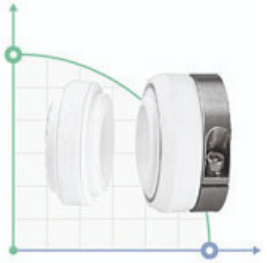
Mechanical seal



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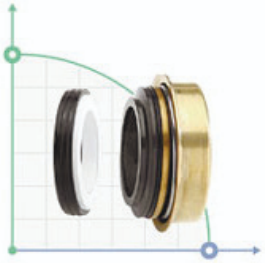

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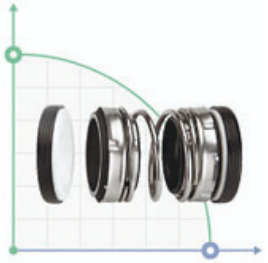

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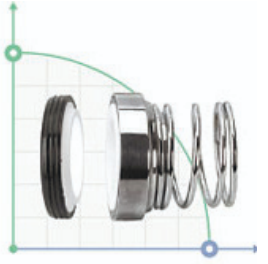

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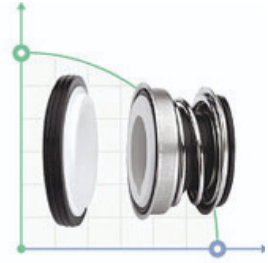

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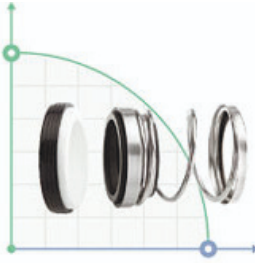

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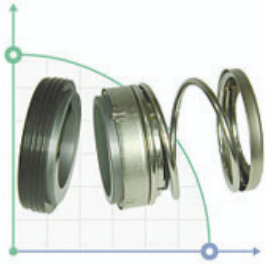

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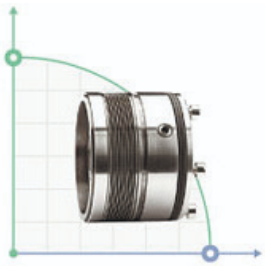

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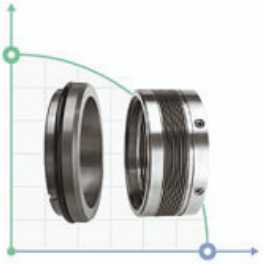

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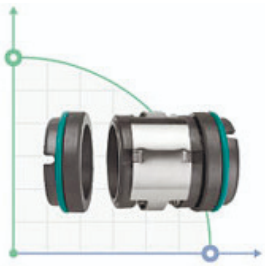

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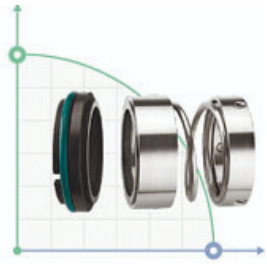

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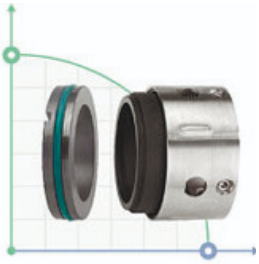

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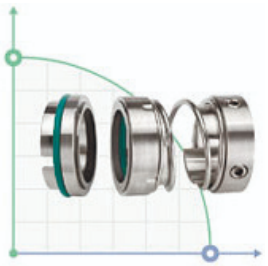

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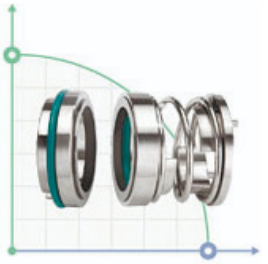

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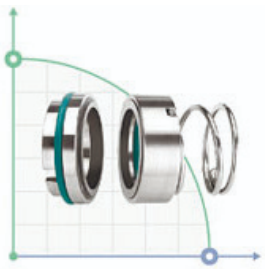


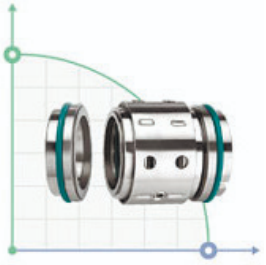
R-120/120P

R-124

R-125

R-58B/59B

Mechanical seal



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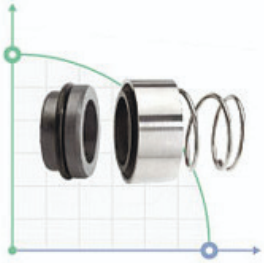

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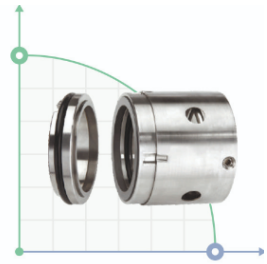

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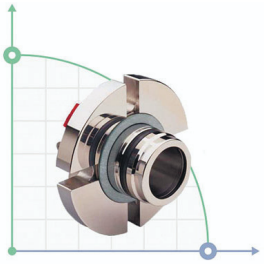

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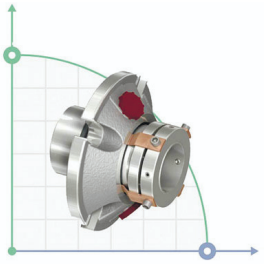

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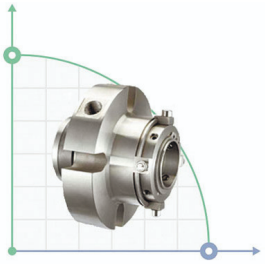

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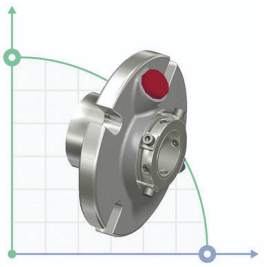

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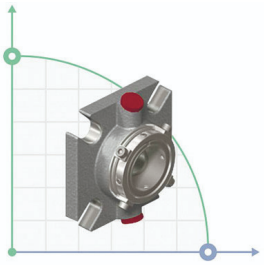

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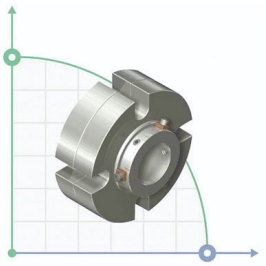
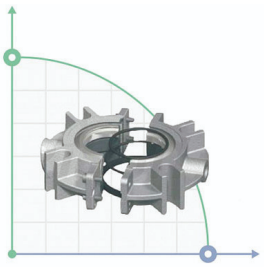
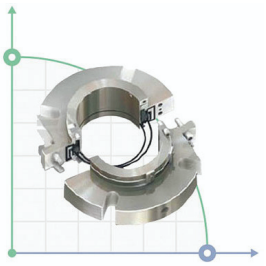


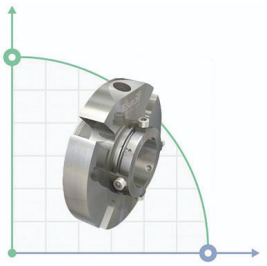
R-TSSC-C03



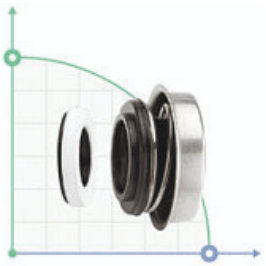
R-TSSP-CO1



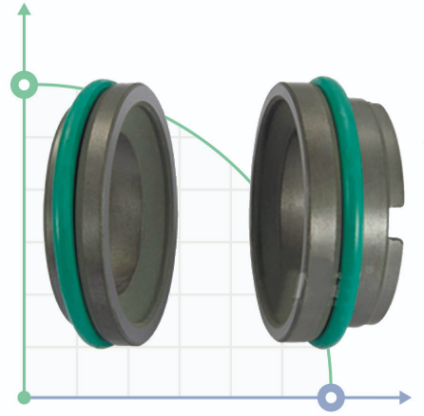
R-TSSP-FA01



R-TSMB-B07



R-6A



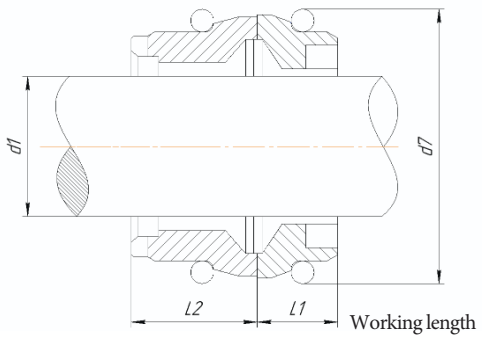
Mechanical seal **R-APV**

Temperature: -20⁰~150⁰
Pressure: ≤0.8 mPa
Speed: ≤15 m/sec

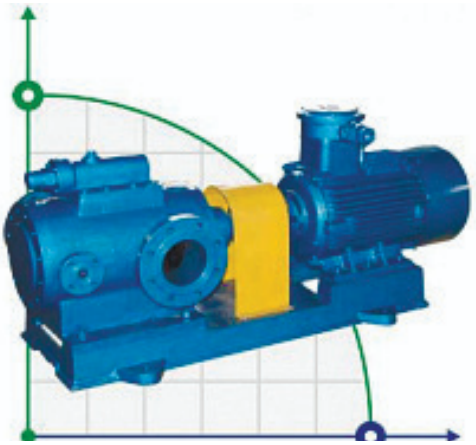
Materials
1. *Rotary ring: SiC.*
2. *Stationary ring: Carbon/SiC.*
3. *Bellows: EPDM.*

R-APV	d1 (H6)	d7 (h8)	L1	L2
25	46	11.5	17,5
35	56	11.5	17,5

It is applied for APV W+ pump series



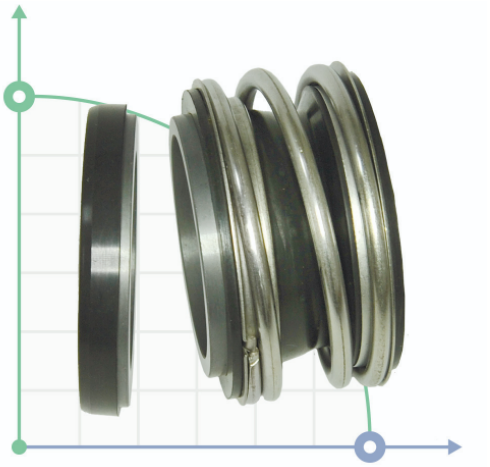
Bitumen pumps



The bitumen pump is designed to transfer amorphous and viscous substances, usually of organic origin: flux oil, fuel oil, tar, mineral oils, refined products. All these components are used in the production of ruberoid, mastic, insulation rolled material, asphalt and many others. Composition of bitumen: solid particles, organic oils and resins. At medium temperatures, such a mass, which has a high viscosity, solidifies quickly, so it must be heated for pumping. Natural bitumen with asphaltene impurities or bituminous oil are difficult to develop. Most often, industrial bitumen is used in industry - derivatives and products of oil refining. The composition of both natural and artificial bitumen is similar: solid particles-resins-oils.

As a result, bitumens are absolutely non-hygroscopic. The hydrophobic properties of bitumen are extremely high. Which, together with the plasticity of the properties of this material, depends on the temperature regime and determines its widest application. The bitumen pumps, pumps for bitumen, gear pumps, screw pumps are widely used for such products. The properties of the pumped liquids form the design features of bitumen pumps. The main features of such units is the presence of a heating jacket.

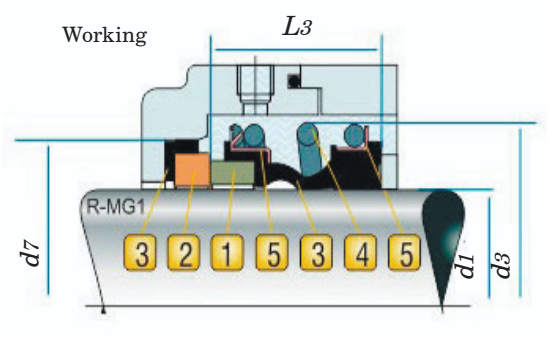
Mechanical seal **R-MG1**



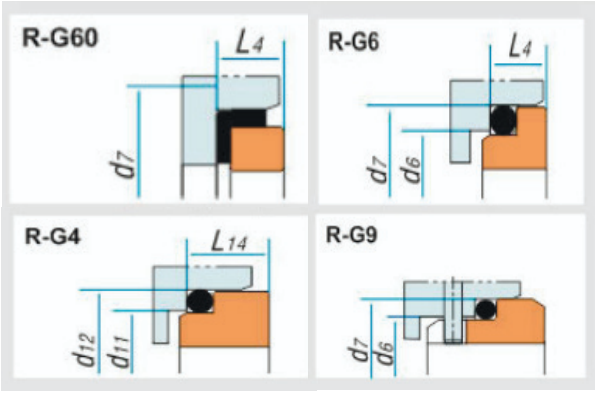
Temperature: -20⁰~140⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: .Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring



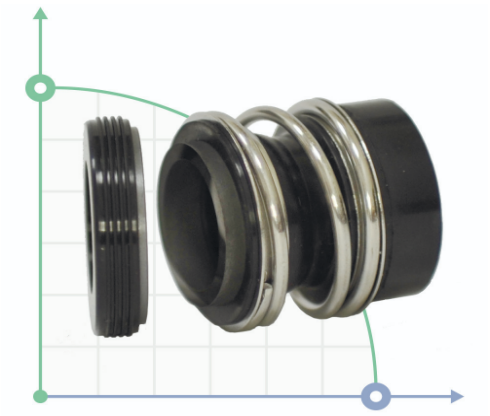
Single end seal (pump cup) MG1, with an elastomeric bellows, unloaded, with a c!entral spring, independent of the direction of rotation of the shaft.

Used in centrifugal pumps, mixers, and other equipment that includes rotating mechanisms for water and drainage water.

It can be used for Alfa Laval, Ebara (3M, DWO), Lowara, KSB (Etanorm, Etachrom), WILO (MVI, MHI, IPL/DPL), Grundfos (CDM), Saer (IP) pumps and many others.

Analog of mechanical seals: Burgmann MG1, AESSEAL B02, Flowserve PacSeal 190, ROTEN L3, Vulcan Type 19, ANGA A1, Sterling SMG1, Hermetica 212.N2

d1 (h6)	d3 (Max)	d7 H8	L3 (±0.5)	L4	d12 (H8)	L14
8	21.0	21	14.0	6.0		
10	22,5	21	14,5	6,6	19,2	6,6
12	25,0	23	15,0	6,6	21,6	5,6
14	28,5	25	17,0	6,6	24,6	5,6
15	28,5	27	17,0	6,6	24,6	6,6
16	28,5	27	17,0	6,6	28,0	7,5
18	32,0	33	19,5	7,5	30,0	8,0
19	36,5	35	21,5	7,5	35,0	7,5
20	37,0	35	21,5	7,5	35,0	7,5
22	37,0	37	21,5	7,5	35,0	7,5
24	42,5	39	22,5	7,5	38,0	7,5
25	42,5	40	23,0	7,5	38,0	7,5
28	49,0	43	26,5	7,5	42,0	9,0
30	49,0	45	26,5	7,5	45,0	10,5
32	53,5	48	27,5	7,5	48,0	10,5
33	53,5	48	27,5	7,5	50,0	11,0
35	57,0	50	28,5	7,5	52,0	11,0
38	59,0	56	30,0	9,0	55,0	10,3
40	62,0	58	30,0	9,0	58,0	10,8
42	65,5	61	30,0	9,0	62,0	12,0
43	65,5	61	30,0	9,0	62,0	12,0
45	68,0	63	30,0	9,0	64,0	11,6
48	70,5	66	30,5	9,0	68,4	11,6
50	74,0	70	30,5	9,5	69,3	11,6
53	78,5	73	33,0	11,0	72,3	12,3
55	81,0	75	35,0	11,0	75,4	13,3
58	85,5	78	37,0	11,0	78,4	13,3
60	88,5	80	38,0	11,0	80,4	13,3
65	93,5	85	40,0	11,0	85,4	13,0
68	96,5	90	40,0	11,3	91,5	13,7
70	99,5	92	40,0	11,3	92,0	13,0
75	107,0	97	40,0	11,3	99,0	14,0
80	112,0	105	40,0	12,0	104,0	15,0
85	120,0	110	41,0	14,0	109,0	14,8
90	127,0	115	45,0	14,0	114,0	14,8
95	132,0	120	46,0	14,0	120,3	15,8
100	137,0	125	47,0	14,0	123,3	15,8



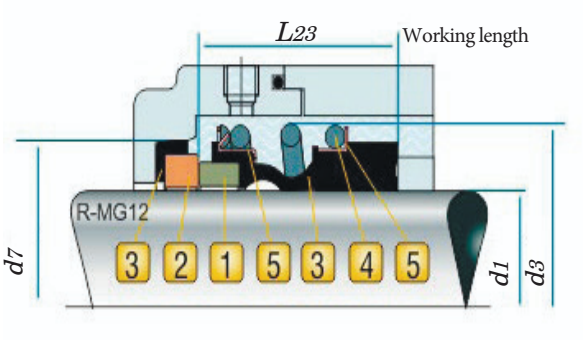
Mechanical seal **R-MG12**

Temperature: -20⁰~140⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

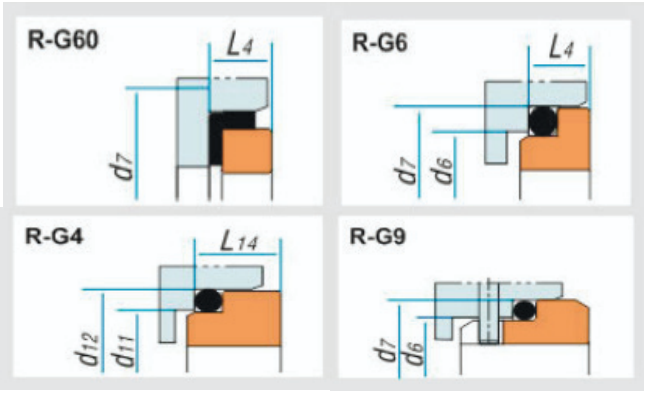
Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1 (h6)	d3 (Max)	d7 (H8)	L23 (±0.5)	L4	d12 (H8)	L14
10	22,5	21,0	25,9	6,6	19,2	6,6
12	25,0	23,0	25,9	6,6	21,6	5,6
14	28,5	25,0	28,4	6,6	24,6	5,6
15	28,5	27,0	28,4	6,6	24,6	6,6
16	28,5	27,0	28,4	6,6	28,0	7,5
18	32,0	33,0	30,0	7,5	30,0	8,0
19	36,5	35,0	30,0	7,5	35,0	7,5
20	37,0	35,0	30,0	7,5	35,0	7,5
22	37,0	37,0	30,0	7,5	35,0	7,5
24	42,5	39,0	32,5	7,5	38,0	7,5
25	42,5	40,0	32,5	7,5	38,0	7,5
28	49,0	43,0	35,0	7,5	42,0	9,0
30	49,0	45,0	35,0	7,5	45,0	10,5
32	53,5	48,0	35,0	7,5	48,0	10,5
33	53,5	48,0	35,0	7,5	50,0	11,0
35	57,0	50,0	35,0	7,5	52,0	11,0
38	59,0	56,0	36,0	9,0	55,0	10,3
40	62,0	58,0	36,0	9,0	58,0	10,8
42	65,5	61,0	36,0	9,0	62,0	12,0
43	65,5	61,0	36,0	9,0	62,0	12,0
45	68,0	63,0	36,0	9,0	64,0	11,6
48	70,5	66,0	36,0	9,0	68,4	11,6
50	74,0	70,0	38,0	9,5	69,3	11,6
53	78,5	73,0	36,5	11,0	72,3	12,3
55	81,0	75,0	36,5	11,0	75,4	13,3
58	85,5	78,0	41,5	11,0	78,4	13,3
60	88,5	80,0	41,5	11,0	80,4	13,3
65	93,5	85,0	41,5	11,0	85,4	13,0
68	96,5	90,0	41,2	11,3	91,5	13,7
70	99,5	92,0	48,7	11,3	92,0	13,0
75	107,0	97,0	48,7	11,3	99,0	14,0
80	112,0	105,0	48,0	12,0	104,0	15,0
85	120,0	110,0	46,0	14,0	109,0	14,8
90	127,0	115,0	51,0	14,0	114,0	14,8
95	132,0	120,0	51,0	14,0	120,3	15,8
100	137,0	125,0	51,0	14,0	123,3	15,8



Type of counter ring



Single mechanical seal R-MG12

Used in pumps: Alfa Laval, Ebara (3M, DWO), Lowara, KSB (Etanorm, Etachrom), WILO (MVI, MHI, IPL/DPL), Grundfos (CDM), Saer (IP), and many others.

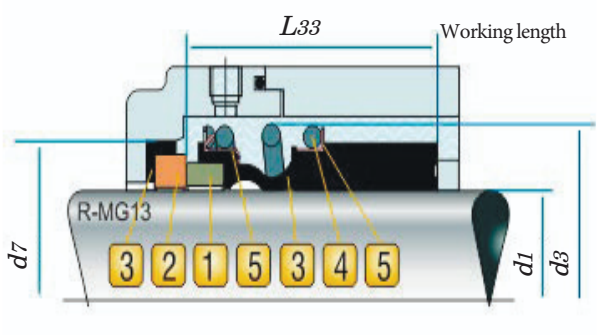
Analogue: Burgmann MG12, AESSEAL B012, Flowserve Pac-Seal 192, ROTEN 3, Vulcan Type 192, ANGA A1, Sterling SMG12, Hermetica 212.

Mechanical seal **R-MG13**

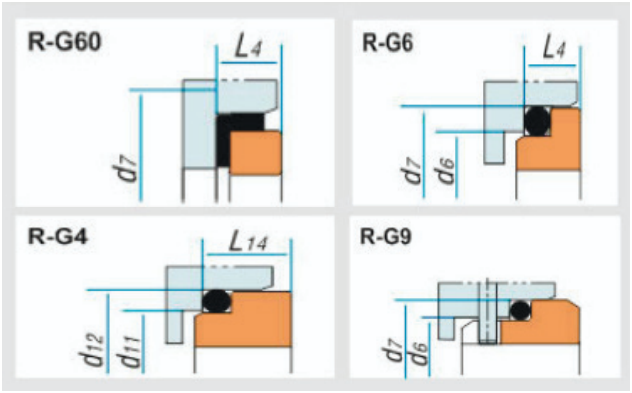
Temperature: -20⁰~140⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Ceramic/ SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring

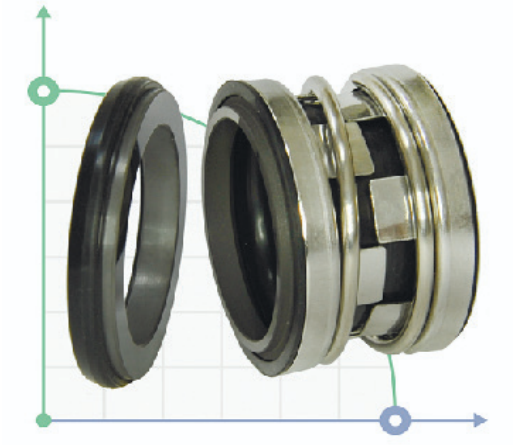


Single mechanical seal R-MG13

Used in pumps: Alfa Laval, Ebara (3M, DWO), Lowara, KSB (Etanorm, Etachrom), WILO (MVI, MHI, IPL/DPL), Grundfos (CDM), Saer (IP), and many others.

Analogue: Burgmann MG13, AESSEAL B02, Flowserve Pac-Seal 193, ROTEN L3, Vulcan Type 193, ANGA A1, Sterling SMG13, Hermetica 212.

d1 H6	d3 (Max)	d7	L33 (±0 5)	L4	d12 (H8)	114
10	22,5	21	33,4	6,6	19,2	6,6
12	25,0	23	33,4	6,6	21,6	5,6
14	28,5	25	33,4	6,6	24,6	5,6
15	28,5	27	33,4	6,6	24,6	6,6
16	28,5	27	33,4	6,6	28,0	7,5
18	32,0	33	37,5	7,5	30,0	8
19	36,5	35	37,5	7,5	35,0	7,5
20	37,0	35	37,5	7,5	35,0	7,5
22	37,0	37	37,5	7,5	35,0	7,5
24	42,5	39	42,5	7,5	38,0	7,5
25	42,5	40	42,5	7,5	38,0	7,5
28	49,0	43	42,5	7,5	42,0	9
30	49,0	45	42,5	7,5	45,0	10,5
32	53,5	48	47,5	7,5	48,0	10,5
33	53,5	48	47,5	7,5	50,0	11
35	57,0	50	47,5	7,5	52,0	11
38	59,0	56	46,0	9	55,0	10,3
40	62,0	58	46,0	9	58,0	10,8
42	65,5	61	51,0	9	62,0	12
43	65,5	61	51,0	9	62,0	12
45	68,0	63	51,0	9	64,0	11,6
48	70,5	66	51,0	9	68,4	11,6
50	74,0	70	50,5	9,5	69,3	11,6
53	78,5	73	59,0	11	72,3	12,3
55	81,0	75	59,0	11	75,4	13,3
58	85,5	78	59,0	11	78,4	13,3
60	88,5	80	59,0	11	80,4	13,3
65	93,5	85	69,0	11	85,4	13
68	96,5	90	68,7	11,3	91,5	13,7
70	99,5	92	68,7	11,3	92,0	13
75	107,0	97	68,7	11,3	99,0	14
80	112,0	105	78,0	12	104,0	15
85	120,0	110	76,0	14	109,0	14,8
90	127,0	115	76,0	14	114,0	14,8
95	132,0	120	76,0	14	120,3	15,8
100	137,0	125	76,0	14	123,3	15,8



Mechanical seal **R-2100**

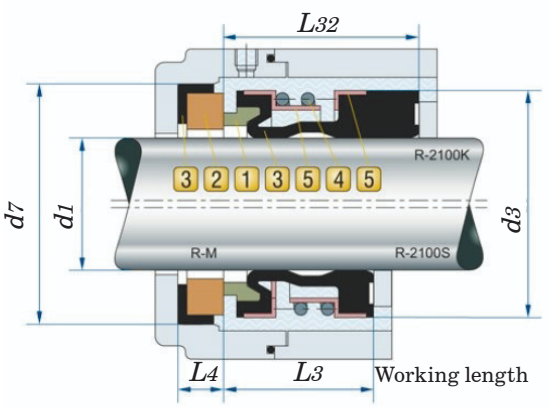
Temperature: -20⁰~140⁰
Pressure: ≤1.6 mPa
Speed: ≤10 m/sec

Materials

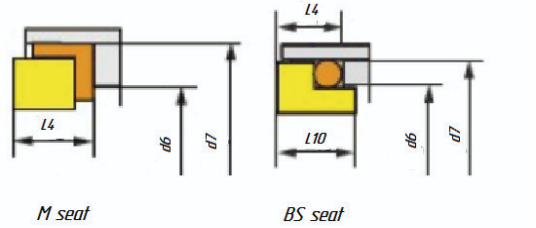
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-2100

	d1 (H6)	d3	d7 (Max)	L3 (h8)	L32 (±0.5)	L4
	10	20,0	21,0	15,0	27,5	5,0
	12	22,0	23,0	15,0	26,5	6,0
	14	24,0	25,0	15,0	29,0	6,0
	15	25,0	26,0	15,0	29,0	6,0
	16	26,0	27,0	15,0	29,0	6,0
	18	32,0	33,0	20,0	31,5	6,0
	20	34,0	35,0	20,0	31,5	6,0
	22	36,0	37,0	20,0	31,5	6,0
	24	38,0	39,0	20,0	34,0	6,0
	25	39,0	40,0	20,0	34,0	6,0
	28	42,0	43,0	26,0	36,5	6,0
	30	44,0	45,0	26,0	35,5	7,0
	32	46,0	48,0	26,0	35,5	7,0
	33	47,0	48,0	26,0	35,5	7,0
	35	49,0	50,0	26,0	34,5	8,0
	38	54,0	56,0	30,0	37,0	8,0
	40	56,0	58,0	30,0	37,0	8,0
	43	59,0	61,0	30,0	37,0	8,0
	45	61,0	63,0	30,0	37,0	8,0
	48	64,0	66,0	30,0	35,0	10,0
	50	66,0	70,0	30,0	37,5	10,0
	53	69,0	73,0	30,0	37,5	10,0
	55	71,0	75,0	30,0	37,5	10,0
	58	78,0	78,0	33,0	42,5	10,0
	60	80,0	80,0	33,0	40,5	12,0
	63	83,0	83,0	33,0	40,5	12,0
	65	85,0	85,0	33,0	40,5	12,0
	68	88,0	90,0	33,0	40,5	12,0
	70	90,0	92,0	33,0	48,0	12,0
	75	99,0	97,0	40,0	48,0	12,0



Type of counter ring

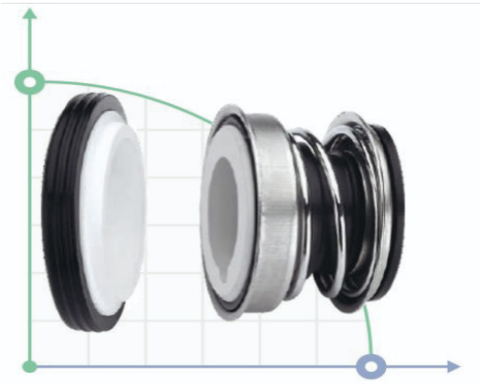


The rubber bellows shaft seal R-2100 is a compact mechanical seal with a single central spring and a rubber elastomeric bellows that ensures maximum efficiency and performance of your equipment in all conditions.

It can be used for Gorman-Rupp, Ebara (3M), WILO, ONC, SNC, ONC pumps and many others.

Analog of mechanical seals: John Crane 2100, 2100S, 2100K, Flowserve Pac-Seal 140 / 142 / 143, ANGA A4 / A41, Vulcan Type 14 / 142 / 143, Sterling 540 / 542 / 543, AESSEAL B09U

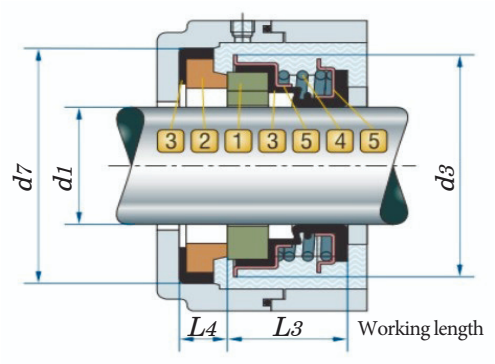
Mechanical seal **R-102**



Temperature: -20⁰~80⁰
Pressure: ≤0.3 mPa
Speed: ≤3000 rpm

Materials

1. *Rotary ring: Ceramic*
2. *Stationary ring: Ceramic*
3. *Bellows: NBR .*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



R-102

d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4	L7
14	33	35	17.5	7	13
18	37	40	17.5	7	13
20	38	40	18.0	7	15

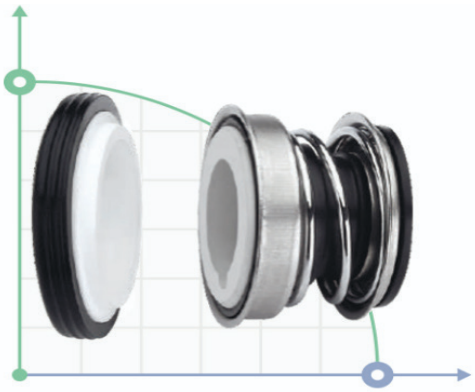
Hydroponics, peristaltic pump

Peristaltic pump for continuous monitoring of the pH level in the solution. Applications: greenhouse, hydroponics. The pH Control Pump is a peristaltic pump that makes cultivation easier and enjoyable. It allows you to maintain the desired pH level in the water for your plants. To do this, place the device in a tank with irrigation water. Although it is perhaps one of the most overlooked aspects, pH is very important in hydroponic and organic as well as regular soil gardening. pH is measured on a scale of 1-14 with 7 being neutral. The use of a pH control pump ensures that the seedlings absorb nutrients better. The pH control pump operates fully automatically, you do not need to perform any additional manipulations or complex actions, just set the desired value and that's it.

General characteristics:

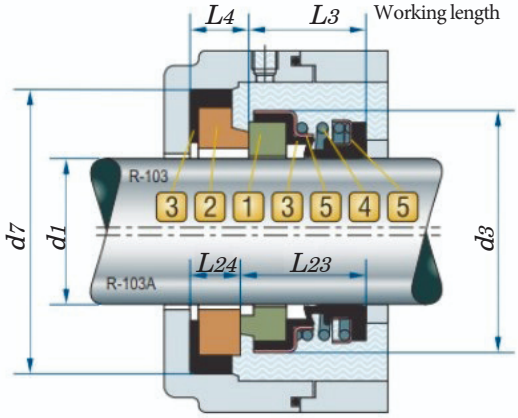
- Power supply 100-240V in AC currents.
- 4-bit 7-segment display screen for information.
- BNC connector for connecting the pH probe.
- Switch, 3 positions: charging, switching on, waiting.
- Refer to the product label for the speed and pressure of the peristaltic pump.
- PH measurement range: 0-14 pH (sensitivity: 0.1 pH).

Mechanical seal **R-103/103A**



Temperature: -20⁰~120⁰
Pressure: ≤0.4 mPa
Speed: ≤3000 rpm

Materials
1. *Rotary ring: Car/Cer/SIC*
2. *Stationary ring: Ceramic/SIC*
3. *Bellows: NBR/EPDM .*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

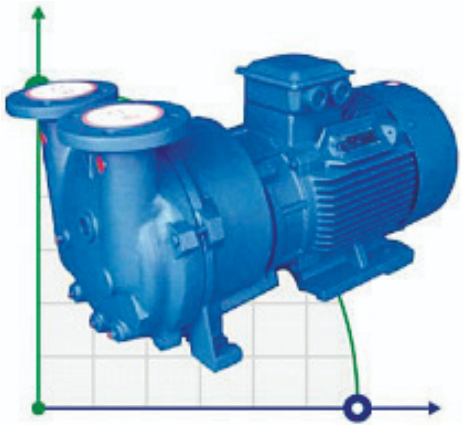


R-103/103A

d1	d3	d7	L3	L4	L23	L24
10	22	26	15	5,5	15,5	5
12	23,5	26	15	5,5	15,5	5
12	23,5	26	15	8	15	8
14	27	30	13,5	7	15	5,5
17	30	35	14	7	15,2	5,8
18	30	35	14	7	15,2	5.8

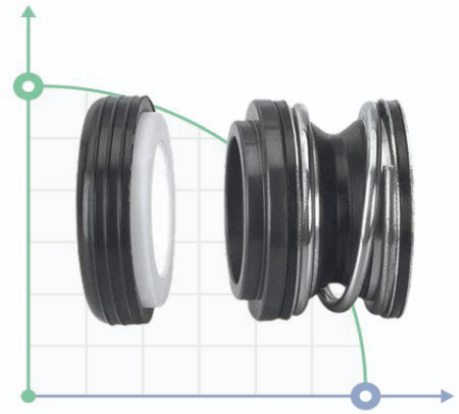
Mechanical seal R-102/103/103A
Applicable to *Alfa Laval, Ebara, Lowara, KSB (Etanorm, Etachrom), WILO (MVI)*
Analog *Flowserve 16, SEALOL 6, US SEAL.*

Vacuum pumps



A vacuum pump is a vacuum system unit designed to create and maintain a vacuum.
The main parameters of vacuum pumps include the following:
- the lowest residual pressure that can be created by a pump;
- gas pumping rate per unit of time – pump capacity (l / s, cubic meters / hour)

Vacuum pumps are classified both by type of vacuum and by device. According to the type of vacuum, pumps can be divided into low (105...102 PA), medium (102...10-1 PA), high (10-1...10-5) and ultra-high (10-5 PA and below) vacuum pumps.
By the constructive attribute pumps can be mechanical, piston (including mercury-piston), diaphragm, rotary vane (including water ring), screw, Roots, spool, spiral, magnetic, jet, diffusion, steam-oil, booster, sorption, cryogenic.
Applications of vacuum drying with the help of pumps: drying of gas and oil pipelines; Drying of electronic chips; Drying of mineral building materials (tiles, bricks, facing panels) Production of foamed polymers (Styrofoam, foam, etc.) Drying of lumber Drying of food products Freeze-drying in the food and pharmaceutical industry, etc.



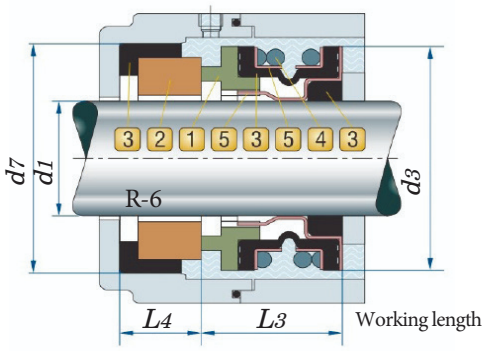
Mechanical seal **R-6**

Temperature: -20⁰~150⁰
Pressure: ≤0.5 mPa
Speed: ≤3600 rpm

Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: Ceramic / SIC .*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-6	d1	d1(mm)	d2	d3	d7	L3	L4
	0.375	**9,53**	20,60	27,00	25,40	16,66	7,92
	0.437	**11,10**	20,60	27,00	25,40	16,66	7,92
	0.500	**12,70**	20,60	27,00	25,40	16,66	7,92
	0.500S	**12,70**	20,60	27,00	25,40	16,66	6,35
	0.562	**14,27**	23,80	30,90	31,75	18,24	10,31
	0.625	**15,87**	23,80	30,90	31,75	18,24	10,31
	0.687	**17,45**	27,00	34,10	34,93	18,24	10,31
	0.750	**19,05**	27,00	34,10	34,93	18,24	10,31
	0.875	**22,22**	33,30	42,80	38,10	20,62	10,31
	1.000	**25,40**	33,30	42,80	41,28	20,62	11,10



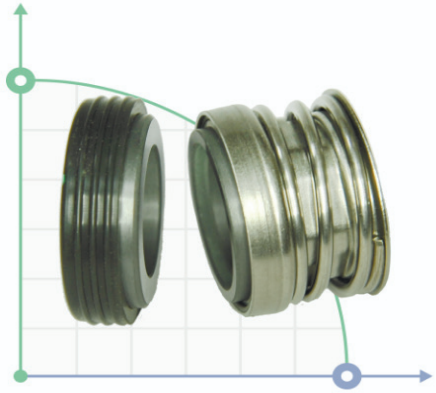
Drum pumps

The material of manufacture: PP, PVDF, PPHT, PTFE, AL, SS304, SS316L Performance: from 70 to 200 liters per minute.
Characteristics
The Set consists of:

- Electromotor
- Pipe pumping part
- Digital flow meter (optional)

BTS-HD barrel pumps combine modern manufacturing technology with proven and reliable constructive features. They are convenient and efficient mean of transferring and distributing of majority liquid chemicals from drums, canisters and eurocubes.. These pumps are available in an assortment of engineered plastics or polished SS 316, which provides a wide range of chemical compatibility.

Pumps are available in lengths, corresponding to your needs, all pumps can be used interchangeably with any electric or pneumatic motor. They can quickly be changed in accordance with the specific requirements to the pump or engine. The delivery of acids, alkalis, and reagents in barrels and IBC containers has become a common practice. The specified container is often returnable, which means that it must be quickly and carefully emptied and returned to the sender. Since bottom-drain containers have become banned in many countries due to the risk of spillage, the only way to drain the liquid is to use the hole in the lid. Drum pumps became the most suitable equipment for this job.



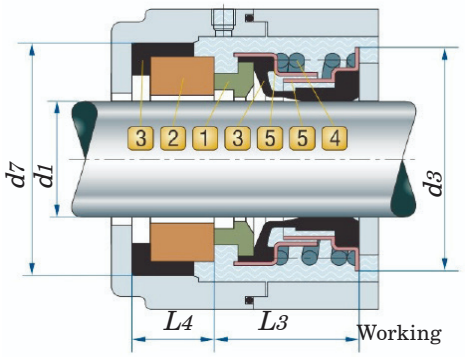
Mechanical seal **R-16**

Temperature: -20⁰~150⁰
Pressure: ≤0.5 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: Ceramic / SIC .*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

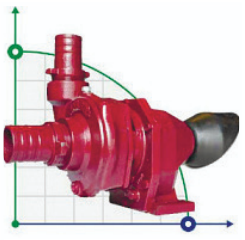
R-16	d1	d1(mm)	d3	d7	L3	L4
	0.375	**9,53**	23,60	22,23	16,66	7,14
	0.375S	**9,53**	23,60	22,23	16,66	6,35
	0.437	**11,10**	23,60	25,40	16,66	7,92
	0.500	**12,70**	23,60	25,40	16,66	7,92
	0.500S	**12,70**	23,60	25,40	16,66	6,35
	0.625	**15,87**	30,10	31,75	18,24	10,31
	0.750	**19,05**	33,10	34,93	18,24	10,31
	0.875	**22,22**	36,30	38,10	20,62	10,31
	1.000	**25,40**	39,40	41,28	20,62	11,10

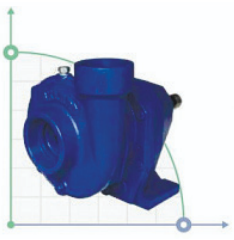


Mechanical seal R-6/16
Applied to Alfa Laval, Ebara, Lowara, KSB (Etanorm, Etachrom), WILO
Analog: John Crane Type 6, PacType 16

Tractor PTO pumps

PTO pump is for :
- water withdrawal for irrigation systems
- pumping out water during floods
- extinguishing fires, supplying water from canals, lakes and storage facilities
- refueling of special equipment or by direct supply through high-pressure hoses to the place of ignition or fire.
- Watering, inter-row and drip
- preparation of the herbicide solution (mixing) before filling the sprayers (to prevent stratification of water and herbicide)
- preparation of water solutions (mixing in the tank) by the pump from the PTO drive (power take-off shaft)



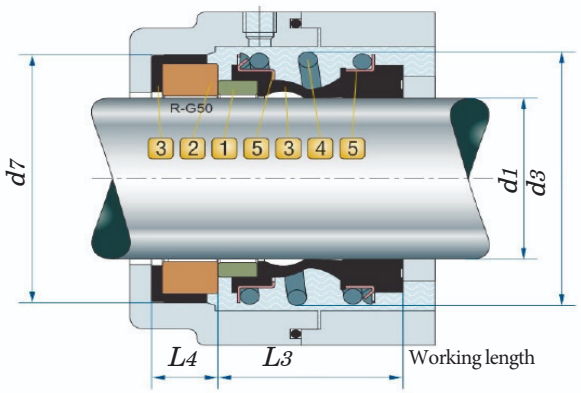


Mechanical seal **R-MG1S20**

Temperature: -20⁰~140⁰
Pressure: ≤1.6 mPa
Speed: ≤10 m/sec

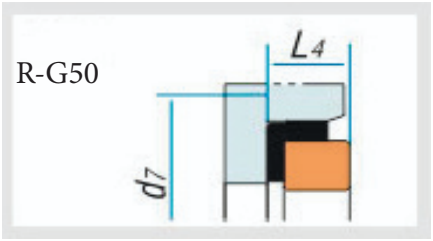
Materials

1. *Rotary ring: Carbon / SIC*
2. *Stationary ring:Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring

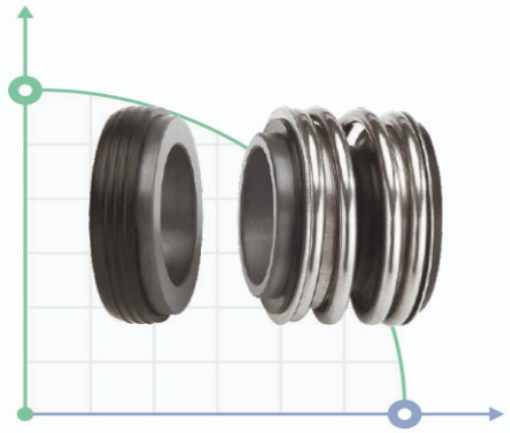
R-MG1S20



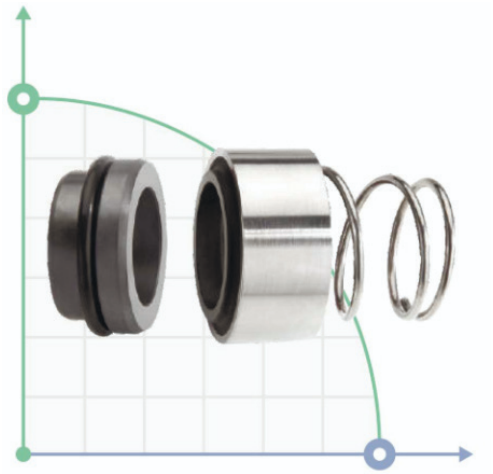
Single mechanical seal R-MG1S20

Used in pumps: Alfa Laval, Ebara, Lowara, KSB (Etanorm, Etachrom), WILO (MVI, MHI, IPL/DPL), Grundfos (CDM), Saer (IP), and many others.

Analogue: Burgmann MG1S20



d1 H6	d3 (Max)	d7	L3 (±0 5)	L4
10	22,50	24,60	25,40	8,74
12	25,00	27,79	25,40	8,74
13	25,00	27,79	25,40	8,74
14	28,50	30,95	25,40	10,32
15	28,50	30,95	25,40	10,32
16	28,50	30,95	25,40	10,32
18	32,00	34,15	25,40	10,32
19	37,00	34,15	25,40	10,32
20	37,00	35,70	25,40	10,32
22	37,00	37,30	25,40	10,32
24	42,50	40,50	25,40	10,32
25	42,50	40,50	25,40	10,32
28	49,00	47,63	33,34	11,99
30	49,00	50,80	33,34	11,99
32	53,50	50,80	33,34	11,99
33	53,50	53,98	33,34	11,99
34	57,00	53,98	33,34	11,99
35	57,00	53,98	33,34	11,99
38	59,00	57,15	33,34	11,99
40	62,00	60,35	33,34	11,99
42	65,50	63,50	40,48	11,99
43	65,50	63,50	40,48	11,99
44	68,00	63,50	40,48	11,99
45	68,00	63,50	40,48	11,99
48	70,50	66,70	40,48	11,99
50	74,00	69,85	40,48	11,99
53	78,50	73,05	41,00	13,50
55	81,00	76,20	41,00	13,50
58	85,50	79,40	41,00	13,50
60	88,50	79,40	41,00	13,50
63	90,50	82,55	49,00	13,50
65	93,50	92,10	49,00	15,90
68	96,50	95,25	49,00	15,90
70	99,50	95,25	49,00	15,90
73	104,00	98,45	49,00	15,90
75	107,00	101,65	49,00	15,90
80	112,00	114,30	56,00	20,00
85	120,00	117,50	56,00	20,00
90	127,00	123,85	59,00	20,00
95	132,00	127,00	59,00	20,00
100	137,00	133,35	62,00	20,00



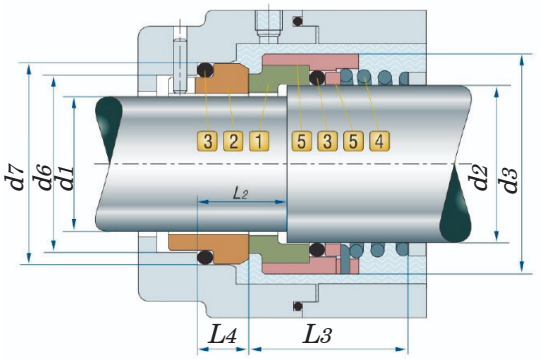
Mechanical seal **R-H12N**

Temperature: -40⁰~220⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

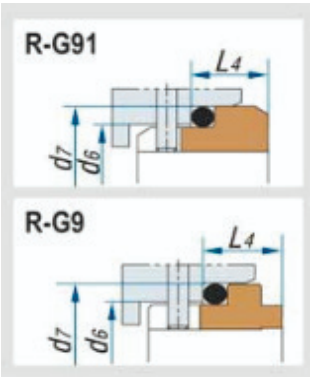
Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: Carbon/SUS/ SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1 H6	d2	d3 (MAX)	d6	d7 (H8)	L2	L3 (±0.5)	L4
12	16,00	26,00	19,00	23,00	18,00	26,50	10,00
14	18,00	31,00	21,00	25,00	18,00	29,50	10,00
16	20,00	34,00	23,00	27,00	18,00	31,00	10,00
18	22,00	36,00	27,00	33,00	20,00	32,50	11,50
20	24,00	38,00	29,00	35,00	20,00	32,50	11,50
22	26,00	40,00	31,00	37,00	20,00	32,50	11,50
24	28,00	42,00	33,00	39,00	20,00	32,50	11,50
25	30,00	44,00	34,00	40,00	20,00	33,50	11,50
28	33,00	47,00	37,00	43,00	20,00	35,50	11,50
30	35,00	49,00	39,00	45,00	20,00	35,50	11,50
32	38,00	54,00	42,00	48,00	20,00	39,50	11,50
33	38,00	54,00	42,00	48,00	20,00	39,50	11,50
35	40,00	56,00	44,00	50,00	20,00	43,50	11,50
38	43,00	59,00	49,00	56,00	23,00	46,00	14,00
40	45,00	61,00	51,00	58,00	23,00	48,00	14,00
43	48,00	64,00	54,00	61,00	23,00	51,00	14,00
45	50,00	66,00	56,00	63,00	23,00	55,00	14,00
48	53,00	69,00	59,00	66,00	23,00	55,00	14,00
50	55,00	71,00	62,00	70,00	25,00	58,00	15,00
53	58,00	78,00	65,00	73,00	25,00	60,00	15,00
55	60,00	79,00	67,00	75,00	25,00	60,00	15,00
58	63,00	83,00	70,00	78,00	25,00	60,00	15,00
60	65,00	85,00	72,00	80,00	25,00	60,00	15,00
63	68,00	88,00	75,00	83,00	25,00	60,00	15,00
65	70,00	90,00	77,00	85,00	25,00	61,00	15,00
70	75,00	98,00	83,00	92,00	28,00	63,00	18,00
75	80,00	103,00	88,00	97,00	28,00	68,00	18,00
80	85,00	109,00	95,00	105,00	28,00	68,00	18,20



Type of counter ring



Single mechanical end unit with conical spring R-H12N

Apply to Hecker HN 430N pumps, CR, NBG, Grundfos, TP, NKG, CLM, CRN series pumps and so on.

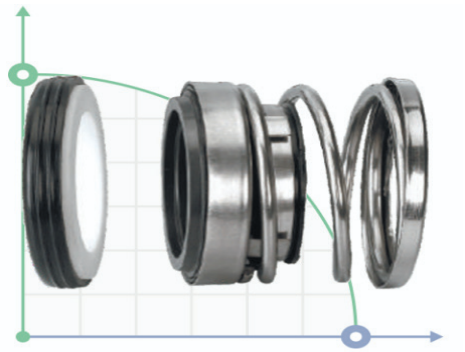
Analogue: Burgmann H12N/H17GN, Flowserve 43D seal,Latty T901D seal, Roplan R62D seal, Roten, AESSEAL T01DB.

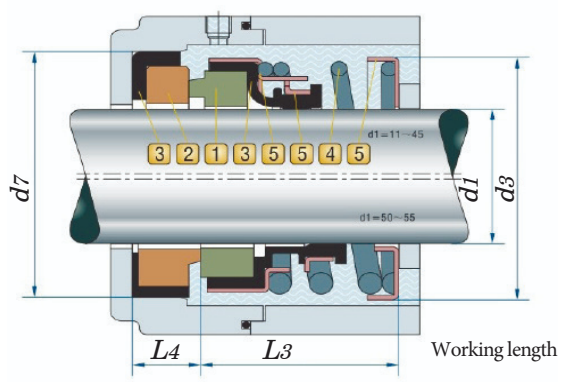
Mechanical seal **R-108**

Temperature: -20⁰~180⁰
Pressure: ≤0.6 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: Carbon/SIC/TC/Ceramic.*
2. *Stationary ring: Ceramic/SIC/TC .*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

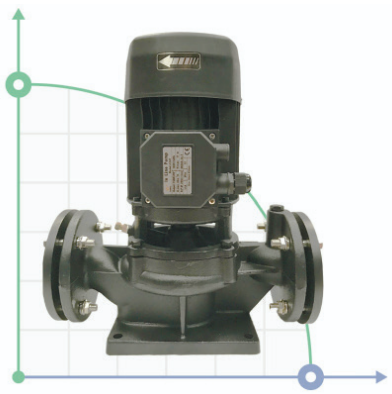




R-108	d1 (H6)	d3 (Max)	d7 (h8)	L3	L4
	8	17,00	15,00	14,70	5,30
	8	17,00	21,00	14,70	5,30
	9	21,00	21,00	14,70	5,30
	10	21,00	21,00	14,70	5,30
	11	23,00	24,00	14,70	5,30
	12	23,00	26,00	14,70	5,30
	14	25,50	26,00	19,70	5,30
	15	27,50	27,00	19,70	5,30
	16	27,50	27,00	19,70	5,30
	17	32,50	33,00	19,70	5,30
	17	32,50	35,00	19,70	5,30
	18	32,50	33,00	19,70	5,30
	19	33,00	35,00	19,20	5,80
	20	33,00	35,00	19,20	5,80
	22	38,00	37,00	21,80	6,20
	25	40,00	40,00	25,00	7,50
	28	43,00	43,00	27,00	8,00
	30	45,50	45,00	27,00	8,00
	35	51,00	50,00	29,00	8,00
	40	57,50	58,00	30,50	9,50
	45	63,00	63,00	30,50	9,50
	50	71,00	70,00	33,50	11,50
	55	75.50	75,00	33.50	11,50

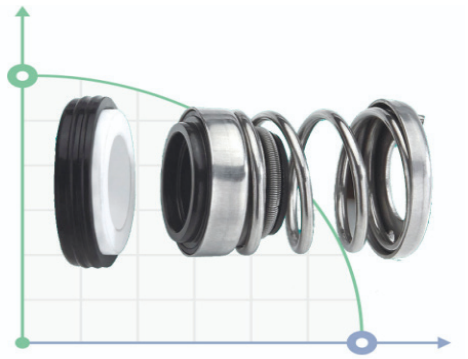
Single mechanical mechanical seal R-108
Used in Hidrostal,Wilo, Inbeat, Grundfos, Haigh, Hilde, INOX, Inoxpa, Jabsco, Johnson and another pumps.
Analogue: Burgmann MG910/ D1-G50, John Crane 1A (N SEAT), 100 Flowserve, Latty T100, Roten 51.

Pumps for heating systems



Circulation pumps are a modified component in heating and water supply circuits. They got their name due to their function of circulating liquid in closed circuits. A distinctive feature of the circulation pumps are extremely low power consumption, relatively small size of the overall structure and low noise level. The combination of these factors makes the choice of these devices the most optimalal for private homes and multi-apartment households. Pumps with optional power control can be used in open and closed systems. Application:

- operation of the system of heated floors;
- operation in air-conditioning systems and filtration circuits;
- operation in heating systems and water supply structures;
- circulation in heating and hot water systems.

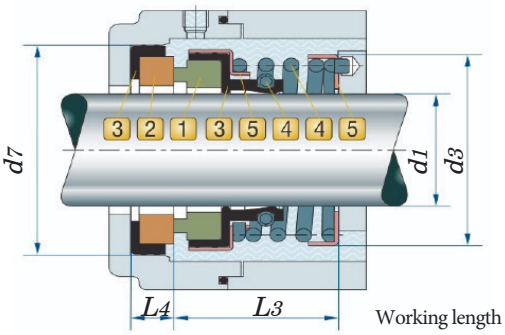


Mechanical seal **R-156**

Temperature: -20⁰~80⁰
Pressure: ≤0.4 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: Carbon.*
2. *Stationary ring: Ceramic.*
3. *Bellows: NBR / EPDM / VITON*



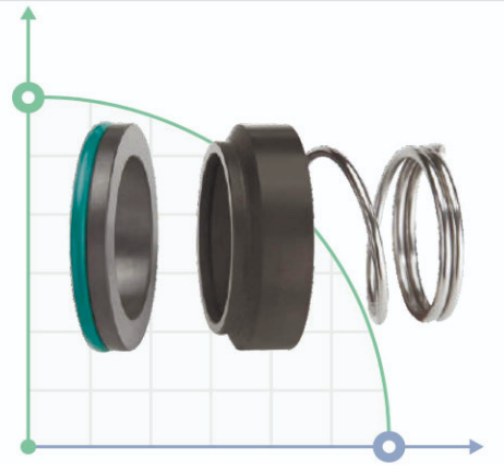
R-156

d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	l4
8	16,00	18,00	11,50	6,50
9	20,00	21,00	16,50	6,50
10	20,00	22,00	16,50	6,50
11	20,00	24,00	16,50	6,50
12	22,50	26,00	17,50	6,50
13	22,50	26,00	17,00	7,00
14	24,50	28,00	18,00	7,00
15	24,50	28,00	18,00	7,00
16	28,50	32,00	19,00	8,00

Decanter centrifuge

HAUS produces decanter centrifuges and separators for the treatment of waste and drinking water, for the oil industry, drilling industry, bev-erage production, processing of animal and vegetable fats, mining in-dustry, for the production of starch, as well as for the chemical and pharmaceutical industry.
The main goal of the HAUS company is to produce high-quality mech-anisms that are based on modern technologies and install them at the highest level in order to meet the wishes of the buyer. In this vein, in order to achieve these goals, Hakki Usta supports its employees with motivation and constant training.
HAKKI USTA has been focused on building a global HAUS brand with exports and a wide network of dealers since 2010. HAUS is classified as HAUS Centrifuge Technologies Co. for sales of industrial equipment, and HAUS Food Co. for sales of equipment for milk and oil Applications of decanter centrifuges:

- Waste water and sludge from chemical and biological plants.
- Cleaning of petroleum products.
- The waste water of industrial facilities.
- Separation from the waste oil impurities.



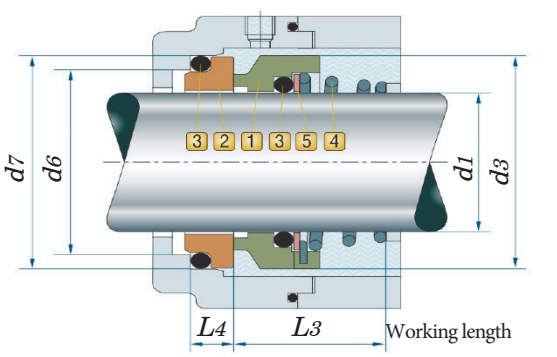
Mechanical seal **R-M2N**

Temperature: -20⁰~180⁰
Pressure: ≤1.0 mPa
Speed: ≤15 m/sec

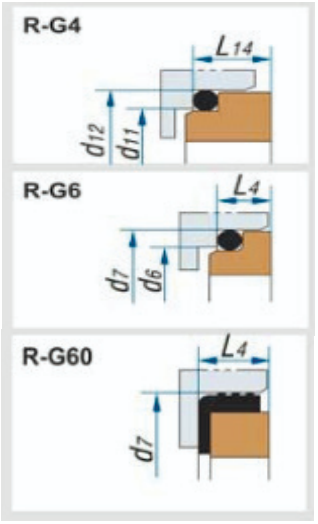
Materials

1. *Rotary ring: Ceramic / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC/SUS.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1 (h6)	d3 (Max)	d7 (H8)	L3 (±0 .5)	L4	d11	d12 (H8)	d14
10	20,00	21,00	17,50	6,60	15,50	19,20	6,60
12	22,00	23,00	17,50	6,60	17,50	21,60	7,00
14	25,00	25,00	17,50	6,60	20,50	24,60	7,00
15	27,00	27,00	19,50	6,60	20,50	24,60	6,60
16	27,00	27,00	19,50	6,60	22,00	28,00	7,50
18	30,00	33,00	20,50	7,50	24,00	30,00	8,00
20	32,00	35,00	22,00	7,50	29,50	35,00	7,50
22	35,00	37,00	23,50	7,50	29,50	35,00	7,50
24	38,00	39,00	25,00	7,50	32,00	38,00	7,50
25	40,00	40,00	26,50	7,50	32,00	38,00	7,50
28	43,00	43,00	26,50	7,50	36,00	42,00	9,00
30	47,00	45,00	26,50	7,50	39,20	45,00	10,50
32	48,00	48,00	28,50	7,50	42,20	48,00	10,50
35	53,00	50,00	28,50	7,50	46,20	52,00	11,00
38	56,00	56,00	33,50	9,00	49,20	55,00	10,30



Type of counter ring



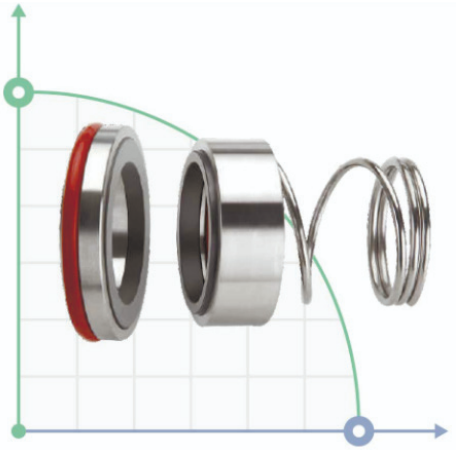
Single mechanical end seal with conical spring R-M2N.
Used in various pumps, compressors, blending and mixing machines.
Analogue: AESSEAL T07 / T07D / T07X, Burgmann M2N, Roten UNITEN 22, Hecker HN 400A.

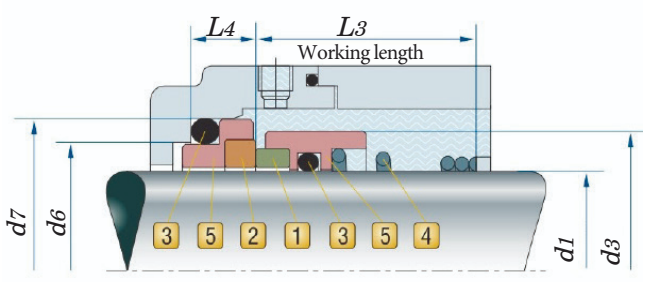
Mechanical seal **R-BT-RN**

Temperature: -20⁰~200⁰
Pressure: ≤1.0 mPa
Speed: ≤15 m/sec

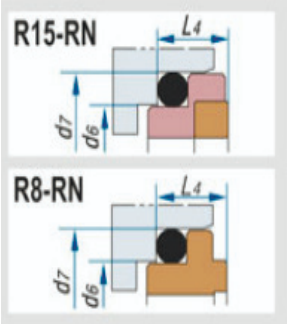
Materials

1. *Rotary ring: SUS/ SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





Type of counter ring



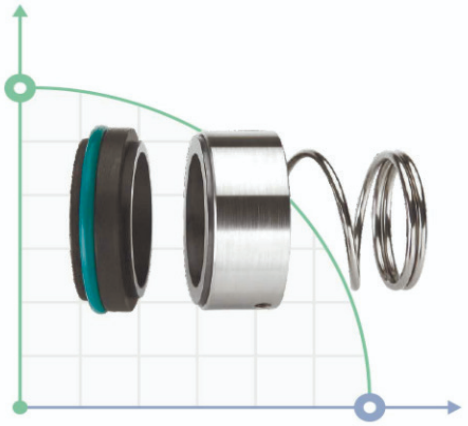
Single mechanical seal R-BT-RN

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetze, etc.

Analogue: Burgmann BT-RN seal, Flowserve 42 seal, Latty T900 seal, Roten 2 seal, Sterling SR2 seal.

R-BT-RN

d1	d3 (Max)	d6	d7 (h8)	L3 (±0.5)	L4
8	16	13	17,1	15	5,5
10	20	14	18,1	15	5,5
12	21	16,5	20,6	18	5,5
14	23	19	23,1	22	6,0
15	24	21	26,9	22	7,0
16	26	21	26,9	23	7,0
17	26	21	26,9	23	7,0
18	29	25	30,9	24	8,0
19	29	25	30,9	25	8,0
20	31	25	30,9	25	8,0
22	33	30	35,4	25	8,0
24	35	30	35,4	27	8,0
25	36	33	38,2	27	8,5
26	36	33	38,2	27	8,5
28	40	38	43,3	29	9,0
30	43	38	43,3	30	9,0
32	46	38	43,3	30	9,0
33	47	45	53,5	39	11,5
35	49	45	53,5	39	11,5
38	53	52	60,5	39	11,5
40	56	52	60,5	39	11,5
42	59	52	60,5	39	11,5
43	59	52	60,5	39	11,5
45	61	57	65,5	41	11,5
48	64	57	65,5	41	11,5
50	66	64	72,5	45	11,5
55	71	64	72,5	47	11,5
60	78	72	79,3	49	11,5
65	84	77	84,5	51	11,5
70	90	82	89,5	51	11,5
75	98	87	94,5	57	11,5
80	100	92	99,5	59	11,5
85	109	98	105,5	59	13,5
90	114	105	111,5	62	13,5
95	119	110	116,5	62	13,5
100	124	114	119,5	75	13,5



Mechanical seal **R-BT-RN3**

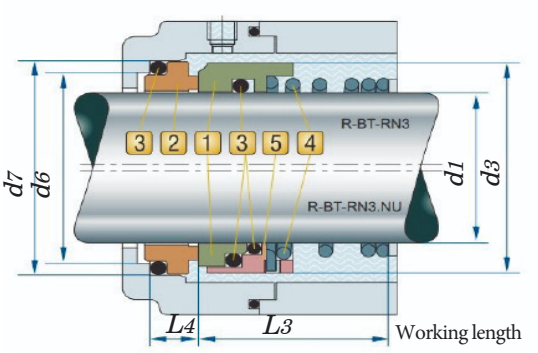
Temperature: -20⁰~180⁰
Pressure: ≤1.0 mPa
Speed: ≤15 m/sec

Materials

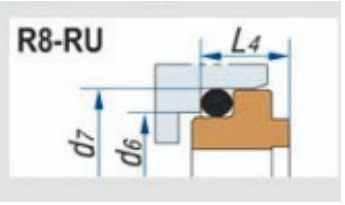
1. *Rotary ring: SUS/ SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-BT-RN3

d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)
10	19	17	21	15	7
12	21	19	23	18	7
14	23	21	25	22	7
16	26	23	27	23	7
18	29	27	33	24	10
20	31	29	35	25	10
22	33	31	37	25	10
24	35	33	39	27	10
25	36	34	40	27	10
28	40	37	43	29	10
30	43	39	45	30	10
32	46	42	48	30	10
33	46	42	48	39	10
35	49	44	50	39	10
38	53	49	56	42	13
40	56	51	58	42	13
43	59	54	61	47	13
45	61	56	63	47	13
48	64	59	66	47	13
50	66	62	70	46	14
53	69	65	73	56	14
55	71	67	75	56	14
58	76	70	78	56	14
60	78	72	80	56	14
63	81	75	83	56	14
65	84	77	85	66	14
68	88	81	90	64	16
70	90	83	92	64	16
75	98	88	97	64	16
80	100	95	105	72	18
85	107	100	110	72	18
90	111	105	115	72	18
95	119	110	120	72	18
100	124	115	125	72	18



Type of counter ring



Mechanical seal R-BT-RN3

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetze, etc.

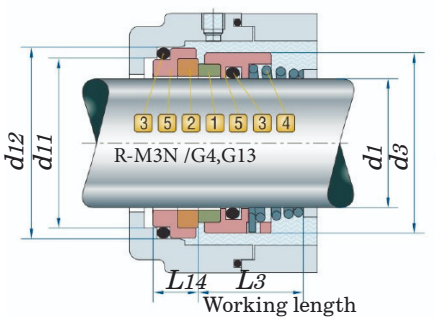
Analogue: Burgmann BT-RN3 seal, Flowserve 42 seal, Latty T900 seal, Sterling SR2 seal.

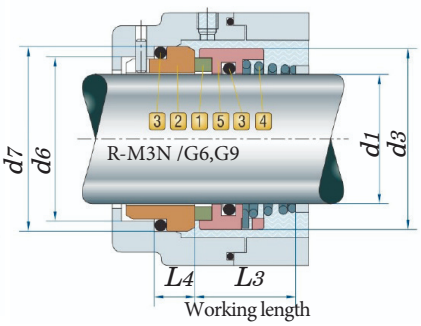
Mechanical seal **R-M3N**

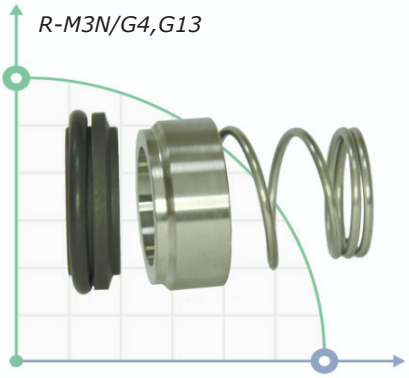
Temperature: -20⁰~180⁰
Pressure: ≤1.2 mPa
Speed: ≤15 m/sec

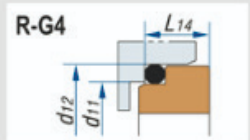
Materials

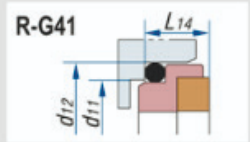
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Carbon/Ceramic/SIC/SUS.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

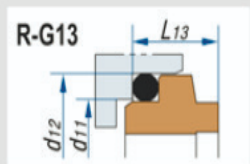


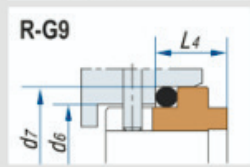


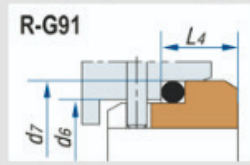


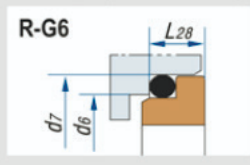




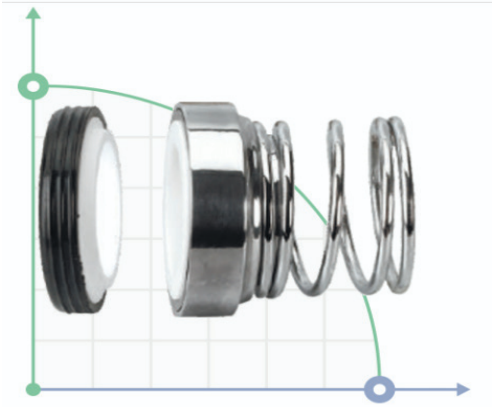








d1 (h6)	d2	d3 (min)	d7 H8	d12	L2 (±0.5)	L3 (±0.5)	L4	L13	L14	L28
12	21	21	23	21,6	15,5	16.0	10.0	7,6	5,6	6,6
14	23	23	25	24,6	15,5	16,5	10.0	7,6	5,6	6,6
15	24	-	-	24,6	15,5	-	-	8,6	6,6	-
16	26	26	27	28.0	17,5	18.0	10.0	9.0	7,5	6,6
18	29	29	33	30.0	18,5	19,5	11,5	10.0	8.0	7,5
19	-	31	-	31.0	20.0	-	-	8.6	7.5	-
20	31	31	35	35.0	20.0	22.0	11,5	9,5	7,5	7,5
22	33	33	37	35.0	21.5	21,5	11,5	9,5	7,5	7,5
24	35	35	39	38.0	23.0	23,5	11,5	9,5	7,5	7,5
25	36	36	40	38.0	24.5	26,5	11,5	9,5	7,5	7,5
26	-	37	-	40.0	24.5	-	-	10.0	8.0	-
28	40	40	43	42.0	24,5	26,5	11,5	11.0	9.0	7,5
30	43	43	45	45.0	24,5	26,5	11,5	11.0	10.5	7,5
32	46	46	48	48.0	28.0	28,5	11,5	11.0	10.5	7,5
33	-	47	48	-	-	28,5	11,5	-	-	7,5
35	49	49	50	52.0	28.0	28,5	11,5	11.5	11.0	7,5
38	53	53	56	55.0	31.0	33,5	14	11,5	11.0	9.0
40	56	56	58	58.0	34.0	36.0	14	11,5	10,8	9.0
42	-	59	-	62.0	35.0	-	-	14.3	12.0	-
43	59	59	61	62.0	35.0	38,5	14	14,3	12.0	9.0
45	61	61	63	64.0	36.5	39,5	14	14,3	11.6	9.0
48	64	64	66	68.4	42.0	46.0	14	14,3	11.6	9.0
50	66	66	70	69.3	43.0	45.0	15	14,3	11,6	9,5
53	-	69	73	-	-	47.0	15	15,3	-	11.0
55	71	71	75	75.4	47.0	49.0	15	15.3	13,3	11.0
58	76	76	78	78.4	50.0	55.0	15	15,3	13,3	11.0
60	78	78	80	80,4	51.0	55.0	15	15,3	13,3	11.0
63	-	83	83	-	-	55.0	15	-	13,3	11.0
65	84	84	85	85,4	52.0	55.0	15	15,3	13.0	11.0
68	88	88	90	91,5	53.0	55.0	18	16.0	13,7	11,3
70	90	90	92	92.0	54.0	57.0	18	15,3	13.0	11,3
75	98	98	97	99.0	55.0	62.0	18	15,3	14.0	11,3
80	100	100	105	104.0	58.0	61,8	18,2	16,3	15.0	11,3



Mechanical seal **R-101**

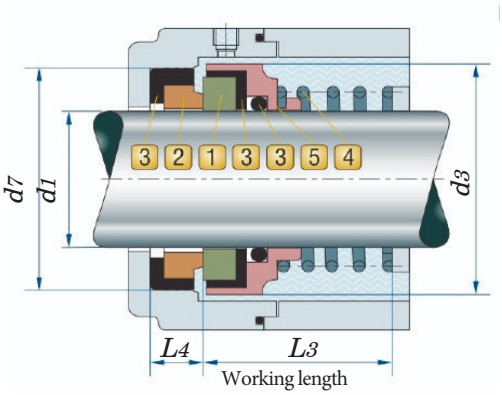
Temperature: -20⁰~80⁰
Pressure: ≤0.4 mPa
Speed: ≤3000 rpm

Materials

1. *Rotary ring: Ceramic / SIC .*
2. *Stationary ring: Car / SIC .*
3. *Bellows: NBR / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

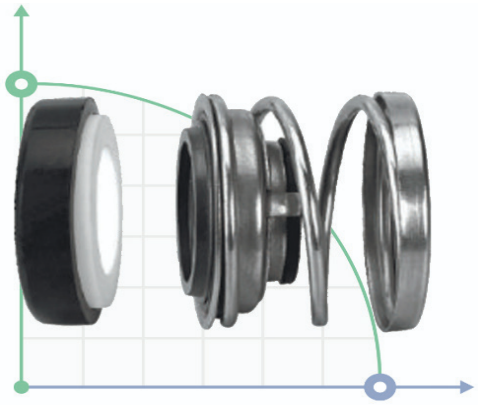
R-101	d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)
	16	30.0	23.0	35	22	8
	25	42.5	29.5	41	31	9
	35	54.0	41.0	52	36	9

Single mechanical end seal with conical spring R-101.
Used in various pumps, compressors, blending and mixing machines.
Analog: AESSEAL T07 / T07D / T07X, Roten UNITEN 22, Hecker HN 400A.



Spiral heat exchangers

Our company has been working with spiral heat exchangers for more than 20 years and has experience in designing and operating spiral heat exchangersfor many enterprises.
Spiral heat exchanger for a wort, heatexchanger for bards, spiral heat exchanger for kneading, a helical heat exchanger for oil ,heat exchanger for juices' heat recuperation, spiral heat exchanger, fat, spiral heat exchanger for DDGS. Recently, more than two dozen projects have been implemented with the replacement of heat exchangers equipment, as well as the design and putting the new facilities into operation in the alcohol industry, agricultural processing enterprises, chemical production and heat power enterprises. Spiral heat exchangers are used for: recuperation of process cycles where liquids contain impurities and inclusions, for example : batch cooling cycle for the production of bioethanol and alcohol. Cooling of fermentative vats, fermentation vats (so-called remote spiral heat exchangers)
In cycles of recuperation of contaminated liquids, recuperation of hot effluents of municipal enterprises and industrial enterprises. Revolving closed cooling technologies in the presence of natural resources, in compliance with the rules of ecology and safety (rver, lake, etc)



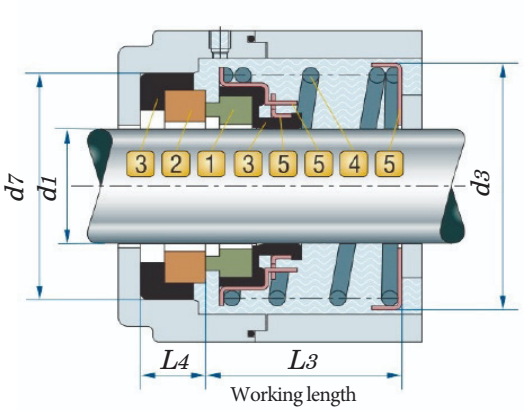
Mechanical seal **R-110**

Temperature: -40⁰~150⁰
Pressure: ≤0.4 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: Carbon/SIC/TC*
2. *Stationary ring: Ceramic/SIC/TC.*
3. *Bellows: NBR / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

Size	d1 (h6)	d3 (Max)	d7 (H8)	L3 (±0.5)	L4
13	13	31,5	29,5	24,0	8,0
14	14	31,5	29,5	24,0	8,0
15	15	31,5	29,5	18,0	8,0
15H	15	31,5	29,5	24,0	8,0
16	16	31,5	29,5	18,0	8,0
16H	16	31,5	29,5	24,0	8,0
20	20	37,0	35,0	14,5	5,5
25	25	44,2	40,0	16,0	6,0
30	30	48,6	45,0	17,5	6,5
35	35	54,0	50,0	19,0	7,0
40	40	60,4	58,0	20,0	8,0

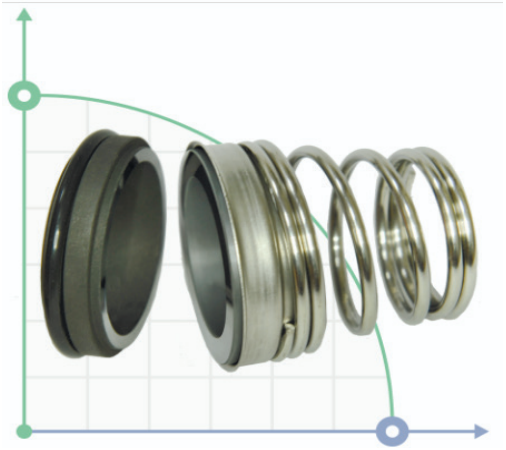


Pressure boosting pumps

Multistage pumps are designed to increase the pressure in the existing water supply network, ensure circulation of liquid in heating systems, air conditioning, ventilation, water treatment, and increase the pressure in technological processes. Multistage pumps can be horizontal or vertical. To improve the water pressure, you need to buy a pressure pump, but not in cases where the water pipes are clogged with a corrosive build-up. The price of such a device is determined by its power, the maximum temperature of the pumped liquid, and other parameters. Characteristics of pressure boosting pumps. Water pressure in every Ukrainian apartment may vary due to the height of the uplift, so you have to choose a pump to increase the pressure of water with a certain capacity.

The selection range and price in our online store allows you to make a choice without interruption, because each manufacturer produces several models of similar units with different parameters. Popular models of Aquatica brand, they have excellent prices, they are compact, with ergonomic design and absolutely silent. Each model is powered by a voltage of 220V.

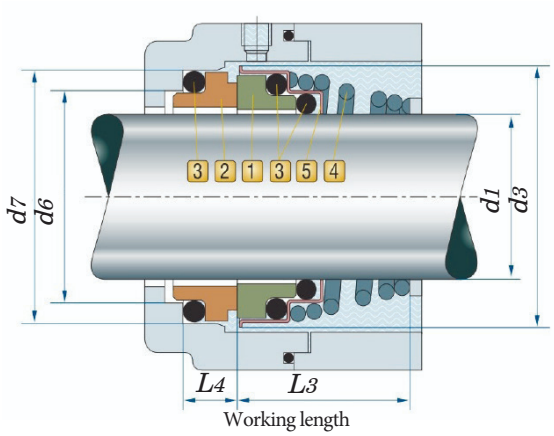
Mechanical seal **R-BT-FN/BT-FN.NU**



Temperature: -20⁰~180⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Ceramic / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

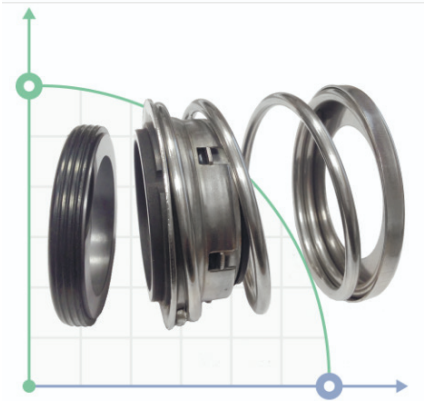


Mechanical seal R-BT-FN.

It can be used in pumps: Lowara (CEA120), Calpeda (NM, MXH, MPC, GXC/GXV), Ebara (CDX, 2CDX, CDXM), Pedrolo (F) and many others.

Analog of mechanical seals: Burgmann BT - FN, Roten 3, Vulcan 13. DIMER TCO.15-7, Lidering

R-BT-FN	d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)
	10	20,0	14,0	18,1	15,0	5,5
	11	22,0	16,5	20,6	18,0	5,5
	12	22,0	16,5	20,6	18,0	5,5
	13	25,0	18,5	23,1	22,0	6,0
	14	25,0	18,5	23,1	22,0	6,0
	15	29,0	21,5	26,9	23,0	7,0
	16	29,0	21,5	26,9	23,0	7,0
	17	29,0	21,5	26,9	23,0	7,0
	18	33,0	24,5	30,9	24,0	8,0
	19	33,0	26,0	30,9	25,0	8,0
	20	33,0	26,0	30,9	25,0	8,0
	21	38,0	29,0	35,4	25,0	8,0
	22	38,0	29,0	35,4	25,0	8,0
	23	38,0	29,0	35,4	27,0	8,0
	24	38,0	29,0	35,4	27,0	8,0
	25	40,0	31,5	38,2	27,0	8,5
	28	46,0	37,5	43,3	30,0	9,0
	29	46,0	37,5	43,3	30,0	9,0
	30	46,0	37,5	43,3	30,0	9,0
	32	46,0	37,5	43,3	30,0	9,0
	33	48,0	45,0	53,5	39,0	11,5
	35	50,0	45,0	53,5	39,0	11,5
	38	58,0	52,0	60,5	39,0	11,5
	40	58,0	52,0	60,5	39,0	11,5
R-BT-FN.NU						
	d1 (H6)	**d3** (Max)	**d6** (h8)	**d7** (±0.5)	**L3**	**L4** (h8)
	10	20,0	17,0	21,0	15,0	7,0
	12	22,0	19,0	23,0	18,0	7,0
	14	25,0	21,0	25,0	22,0	7,0
	16	29,0	23,0	27,0	23,0	7,0
	18	33,0	27,0	33,0	24,0	10,0
	20	33,0	29,0	35,0	25,0	10,0
	22	38,0	31,0	37,0	25,0	10,0
	24	38,0	33,0	39,0	27,0	10,0
	25	40,0	34,0	40,0	27,0	10,0
	28	46,0	37,0	43,0	29,0	10,0
	30	46,0	39,0	45,0	30,0	10,0
	32	46,0	42,0	48,0	30,0	10,0
	33	48,0	42,0	48,0	39,0	10,0
	35	50,0	44,0	50,0	39,0	10,0
	38	58,0	49,0	56,0	42,0	13,0
	40	58,0	51,0	58,0	42,0	13,0



Mechanical seal **R-T2 /FBD**

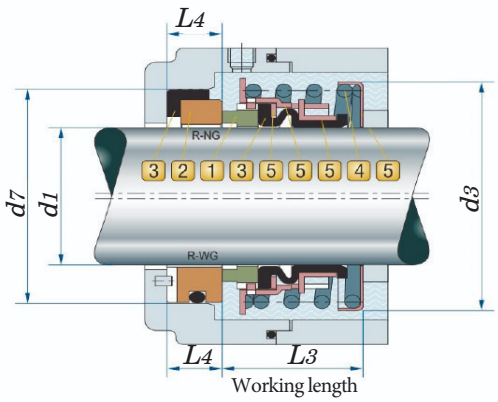
Temperature: -20⁰~200⁰
Pressure: ≤1.7 mPa
Speed: ≤13 m/sec

Materials

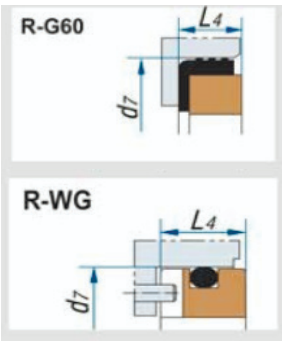
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-T2	d(icnh)	d1(mm)	d3	d7	L3	L4
	0.750	19,05	36,50	34,92	22,22	10,30
	0.875	22,23	39,60	38,10	23,80	10,30
	1.000	25,40	46,00	41,27	25,40	11,10
	1.125	28,58	49,20	44,45	26,97	11,10
	1.250	31,75	52,40	47,62	26,97	11,10
	1.375	34,93	57,20	50,80	28,58	11,10
	1.500	38,10	60,30	53,97	28,58	11,10
	1.625	41,28	66,70	60,33	34,93	12,70
	1.750	44,45	69,90	63,50	34,93	12,70
	1.875	47,63	73,00	66,68	38,10	12,70
	2.000	50,80	76,20	69,85	38,10	12,70
	2.125	53,98	82,60	76,20	42,85	14,30
	2.250	57,15	85,70	79,37	42,85	14,30
	2.375	60,33	88,90	82,55	46,02	14,30
	2.500	63,50	92,10	85,72	46,02	14,30
	2.625	66,68	98,40	85,73	49,20	15,90
	2.750	69,85	101,60	88,90	49,20	15,90
	2.875	73,03	104,80	95,25	52,37	15,90

R-FBD	d1	d3	d7	L3	L4
	16	34,00	30,00	25,00	8,00
	18	36,80	32,00	25,00	8,00
	20	38,80	34,00	25,00	8,00
	22	41,50	36,00	25,00	8,00
	25	44,80	39,00	26,00	8,00
	28	48,50	43,00	26,00	8,00
	30	52,00	48,00	26,00	8,00
	35	57,00	53,00	30,00	10,00
	40	67,00	58,00	34,00	10,00
	45	73,00	63,00	36,00	10,00
	50	79,00	68,00	41,00	10,00
	55	84,00	73,00	41,00	12,00
	60	90,00	79,00	41,00	12,00
	65	98,50	86,00	49,00	12,00
	70	103,50	91,00	49,00	12,00
	75	110,50	96,00	52,00	12,00
	80	120,00	105,00	56,00	14,00
	85	125,00	110,00	56,00	14,00
	90	132,00	115,00	56,00	14,00
	95	137,00	120,00	59,00	14,00



Type of counter ring



Mechanical seal R-T2/R-FBD

Applicable to KSB Omega, RDLO, Amarex N, Ama, Etaline, HGM, CHTC, CHTD

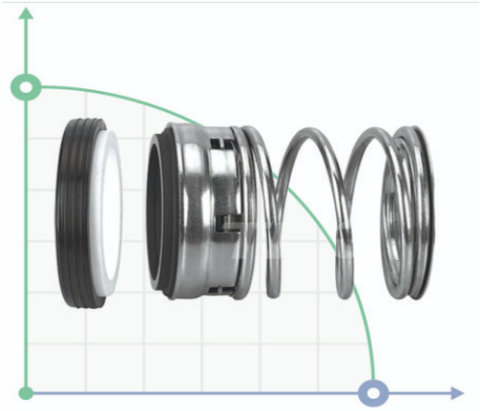
Analog John Crane Type 2 (US standart), Vulcan A5 / A5J.

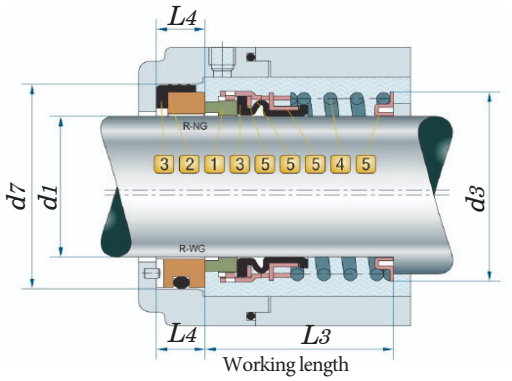
Mechanical seal **R-T1/FBC**

Temperature: -40⁰~200⁰
Pressure: ≤1.7 mPa
Speed: ≤13 m/sec

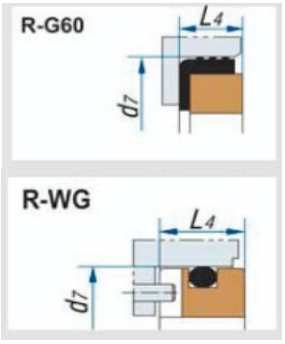
Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





Type of counter ring



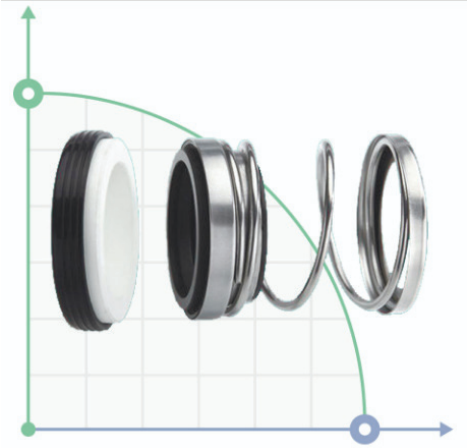
Mechanical seal R-T1/R-FBC.

Applicable to KSB Omega, RDLO, Amarex N, Ama, Etaline, HGM, CHTC, CHTD.

Analog John Crane Type 1, Vulcan A5 / A5J.

R-FBC	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
	16	29,00	30,00	34,00	8,00
	18	31,00	32,00	34,00	8,00
	20	33,00	34,00	34,00	8,00
	22	35,00	36,00	34,00	8,00
	25	38,00	39,00	37,00	8,00
	28	42,00	43,00	38,00	8,00
	30	45,00	48,00	38,00	8,00
	35	49,00	53,00	39,00	10,00
	40	57,00	58,00	44,00	10,00
	45	62,00	63,00	47,00	10,00
	50	67,00	68,00	54,00	10,00
	55	72,00	73,00	54,00	12,00
	60	78,00	79,00	55,50	12,00
	65	84,00	86,00	55,50	12,00
	70	89,00	91,00	57,00	12,00
	75	94,00	96,00	63,00	12,00
	80	103,00	105,00	62,00	14,00
	85	108,00	110,00	68,00	14,00
	90	113,00	115,00	68,00	14,00
	95	118,00	120,00	68,00	14,00
	100	123,00	125,00	68,00	14,00

R-T1	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
	0.750	19,05	30,90	34,92	33,32	10,30
	0.875	22,23	34,10	38,10	34,93	10,30
	1.000	25,40	38,10	41,27	39,67	11,10
	1.125	28,58	41,30	44,45	41,28	11,10
	1.250	31,75	46,00	47,62	41,28	11,10
	1.375	34,93	47,60	50,80	42,85	11,10
	1.500	38,10	50,80	53,97	42,85	11,10
	1.625	41,28	57,20	60,33	50,80	12,70
	1.750	44,45	60,30	63,50	50,80	12,70
	1.875	47,63	63,50	66,68	53,98	12,70
	2.000	50,80	66,70	69,85	53,98	12,70
	2.125	53,98	71,40	76,20	60,33	14,30
	2.250	57,15	74,60	79,37	60,33	14,30
	2.375	60,33	77,80	82,55	63,50	14,30
	2.500	63,50	80,90	85,72	63,50	14,30
	2.625	66,68	85,70	85,73	69,85	15,90
	2.750	69,85	88,90	88,90	69,85	15,90
	2.875	73,03	92,10	95,25	73,03	15,90
	3.000	76,20	95,30	98,42	73,03	15,90



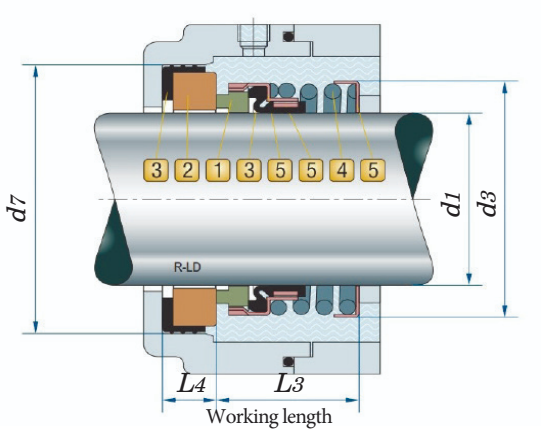
Mechanical seal **R-560C/BIA**

Temperature: -20º~150º
Pressure: ≤1.5 mPa
Speed: ≤13 m/sec

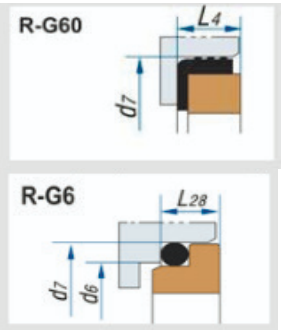
Materials

1. *Rotary ring: Carbon / SIC .*
2. *Stationary ring: Ceramic / SIC / TC .*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-560C (mm)	d1	d3	d7	L3	L4
	10	20,50	21,00	23,90	8,60
	12	22,50	23,00	23,90	8,60
	14	24,50	25,00	26,40	8,60
	16	26,50	27,00	26,40	8,60
	18	30,50	33,00	27,50	10,00
	20	34,00	35,00	27,50	10,00
	22	36,00	37,00	27,50	10,00
	24	40,00	39,00	30,00	10,00
	25	40,00	40,00	30,00	10,00
	28	42,00	43,00	32,50	10,00
	30	45,00	45,00	32,50	10,00
	32	47,00	48,00	32,50	10,00
	33	47,00	48,00	32,50	10,00
	35	50,00	50,00	32,50	10,00
	38	55,00	56,00	34,00	11,00
	40	57,00	58,00	34,00	11,00
	43	59,00	61,00	34,00	11,00
	45	61,50	63,00	34,00	11,00
	48	65,50	66,00	34,00	11,00
	50	67,50	70,00	34,50	13,00
	53	70,50	73,00	34,50	13,00
	55	72,00	75,00	34,50	13,00
	58	78,50	78,00	39,50	13,00
	60	80,00	80,00	39,50	13,00
	63	83,00	83,00	39,50	13,00
	65	84,50	85,00	39,50	13,00
	68	88,00	90,00	37,20	15,30
	70	90,00	92,00	44,70	15,30
	75	99,00	97,00	44,70	15,30
	80	104,00	105,00	44,30	15,70
R-BIA (mm)	**d1**	**d3**	**d7**	**L3**	**L4**
	14	24,50	30,00	18,70	5,00
	16	26,50	32,00	21,00	5,00
	18	30,50	35,00	22,50	7,50
	20	34,00	35,00	21,00	8,00
	24	40,00	39,00	25,50	8,00
	25	40,00	40,00	25,50	8,00
	28	42,00	43,00	25,50	8,00
	30	45,00	45,00	25,50	9,00
	32	47,00	48,00	33,50	9,00
	33	47,00	48,00	33,50	9,00
	35	50,00	50,00	33,50	9,00
	38	55,00	56,00	33,50	9,00
	40	57,00	58,00	33,50	9,00
	45	61,50	63,00	38,00	9,50
	48	65,50	66,00	38,00	9,50
	50	67,50	70,00	38,00	9,50
	53	70,50	73,00	41,00	9,50
	55	72,00	75,00	41,00	9,50
	58	78,50	78,00	42,00	9,50
	60	80,00	80,00	42,00	9,50
	65	84,50	85,00	43,00	9,50
	70	90,00	92,00	45,00	11,00
	75	99,00	97,00	48,00	12,00
	80	104,00	104,00	55,00	12,00
	65	84,50	85,00	39,50	13,00
	68	88,00	90,00	37,20	15,30
	70	90,00	92,00	44,70	15,30
	75	99,00	97,00	44,70	15,30
	80	104,00	105,00	44,30	15,70



Type of counter ring

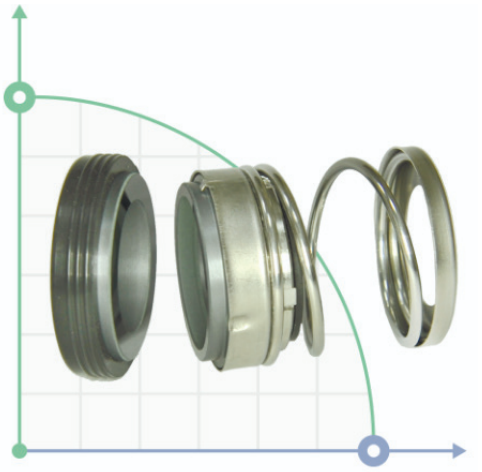


Mechanical seal R-560C/BIA

It is applied to pumps of the Haigh, Hidrostal, Hilge, Inbeat, INOX series and another pumps.

Analogue: Burgmann MG920/ D1-G50 seal. Crane 2 (N SEAT) seal.Flowserve 200 seal Latty T200

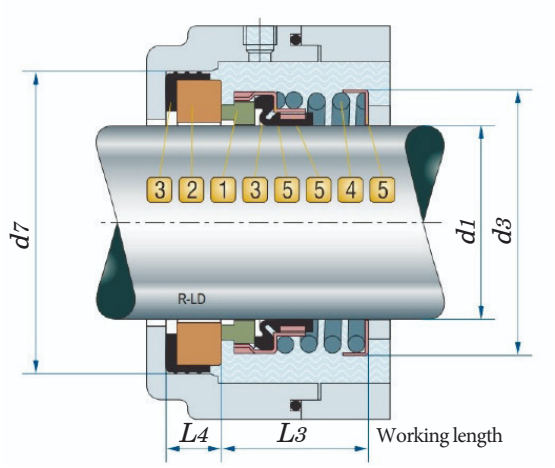
Mechanical seal **R-560A**



Temperature: -20⁰~150⁰
Pressure: ≤1.5 mPa
Speed: ≤13 m/sec

Materials

1. *Rotary ring: Carbon / SIC .*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



The mechanical end seal R-560A

The seals are capable of self-regulation due to the freely inserted rotaty ring, as well as the high axial mobility of the bellows. The R-560A end seals adapt themselves to shaft deflections and misalignments.

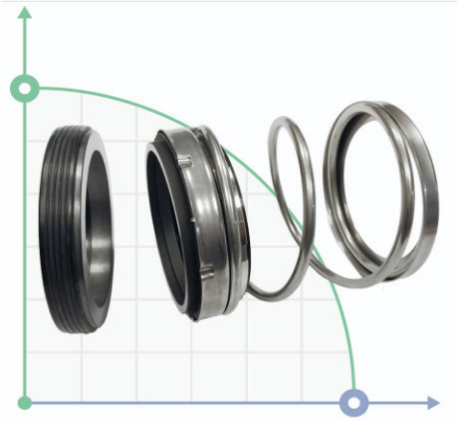
Areas of application: processing and chemical industry, water supply and wastewater treatment systems, glycols, oils, submersible pumps, motor pumps, circulation pumps.

It is applied to pumps of the Haigh, Hidrostal, Hilge, Inbeat, INOX series and another pumps.

Analogue: EA560A Burgmann, John Crane 6, AESSEAL B04

R-560A

d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
8	20,50	21,00	11,50	6,50
9	20,50	24,00	16,50	6,50
10	20,50	24,00	16,50	6,50
11	22,50	24,00	16,50	6,50
12	22,50	26,00	17,50	6,50
13	24,50	26,00	17,50	6,50
14	24,50	28,00	18,50	6,50
15	26,50	28,00	18,50	6,50
16	26,50	32,00	20,00	7,00
17	26,50	32,00	20,00	7,00
18	30,50	35,00	20,00	7,00
19	30,50	35,00	20,00	7,00
20	34,00	38,00	19,50	8,50
22	36,00	40,00	19,50	8,50
24	40,00	44,00	20,50	8,50
25	40,00	44,00	20,50	8,50
28	42,00	46,00	21,00	9,00
30	45,00	50,00	22,00	9,00
32	47,00	54,00	24,00	9,00
35	50,00	58,00	25,50	10,50
38	55,00	60,00	26,50	10,50
40	57,00	64,00	27,00	11,00
45	61,50	66,00	29,00	11,00
48	65,50	67,00	31,00	11,00
50	67,50	72,00	31,00	11,00
54	72,00	76,20	42,80	14,20
55	72,00	79,40	42,80	14,20
58	78,50	79,40	42,80	14,20
60	80,00	82,50	45,80	14,20
65	84,50	85,70	49,00	16,00
70	90,00	88,90	49,00	16,00
73	94,00	95,30	53,00	16,00
75	99,00	98,40	53,00	16,00



Mechanical seal **R-21**

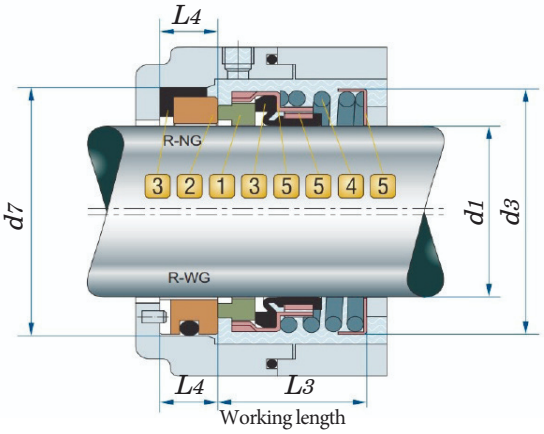
Temperature: -20⁰~145⁰
Pressure: ≤1.5 mPa
Speed: ≤13 m/sec

Materials

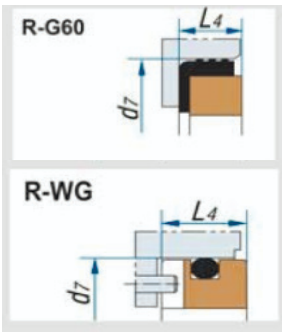
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-21	d1	d3	d7	L3	L4
	10	20,50	24,60	25,40	8,74
	12	22,50	27,79	25,40	8,74
	14	26,50	30,95	25,40	10,32
	16	26,50	30,95	25,40	10,32
	18	34,00	34,15	25,40	10,32
	20	36,00	35,70	25,40	10,32
	22	36,00	37,30	25,40	10,32
	24	40,00	40,50	25,40	10,32
	25	40,00	40,50	25,40	10,32
	28	42,00	47,63	33,34	11,99
	30	45,00	50,80	33,34	11,99
	32	47,00	50,80	33,34	11,99
	33	50,00	53,98	33,34	11,99
	35	50,00	53,98	33,34	11,99
	38	55,00	57,15	33,34	11,99
	40	57,00	60,35	33,34	11,99
	42	59,00	63,50	40,48	11,99
	43	59,00	63,50	40,48	11,99
	45	65,50	63,50	40,48	11,99
	48	67,50	66,70	40,48	11,99
	50	67,50	69,85	40,48	11,99
	53	72,00	73,05	41,00	13,50
	55	78,50	76,20	41,00	13,50
	58	80,00	79,40	41,00	13,50
	60	80,00	79,40	41,00	13,50
	63	83,00	82,55	41,00	13,50
	65	88,00	92,10	49,00	15,90
	70	90,00	95,25	49,00	15,90
	73	94,00	98,45	49,00	15,90
	75	99,00	101,65	49,00	15,90

R-21(Inch)	d1	d3	d7	L3	L4
0.375	**9,53**	20,50	24,60	25,40	8,74
0.500	**12,70**	22,50	27,79	25,40	8,74
0.625	**15,87**	26,50	30,95	25,40	10,32
0.750	**19,05**	34,00	34,15	25,40	10,32
0.875	**22,23**	36,00	37,30	25,40	10,32
1.000	**25,40**	40,00	40,50	25,40	10,32
1.125	**28,58**	42,00	47,63	33,34	11,99
1.250	**31,75**	47,00	50,80	33,34	11,99
1.375	**34,93**	50,00	53,98	33,34	11,99
1.500	**38,10**	55,00	57,15	33,34	11,99
1.625	**41,28**	57,00	60,35	33,34	11,99
1.750	**44,45**	61,50	63,50	40,48	11,99
1.875	**47,63**	65,50	66,70	40,48	11,99
2.000	**50,80**	67,50	69,85	40,48	11,99
2.125	**53,98**	72,00	73,05	41,00	13,50
2.250	**57,15**	78,50	76,20	41,00	13,50
2.375	**60,33**	80,00	79,40	41,00	13,50
2.500	**63,50**	83,00	82,55	41,00	13,50
2.625	**66,68**	88,00	92,10	49,00	15,90
2.750	**69,85**	90,00	95,25	49,00	15,90
2.875	**73,03**	94,00	98,45	49,00	15,90
3.000	**76,20**	99,00	101,65	49,00	15,90



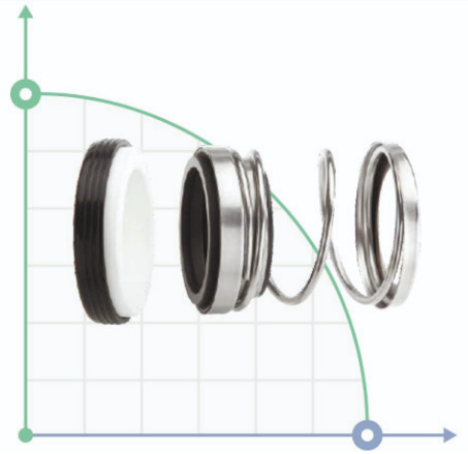
Type of counter ring



Mechanical seal R-21

It is applied to pumps of the Haigh, Hidrostal, Hilge, Inbeat, INOX series and another pumps.

Analogue: Burgmann MG920/ D1-G50 seal. Crane 21 (N SEAT) seal. Flowserve 200 seal, Latty T200 seal, Roten RB02 seal, Roten 21 seal, Sealol 43 CE short seal,Sterling 212 seal, V ulcan 20 seal.



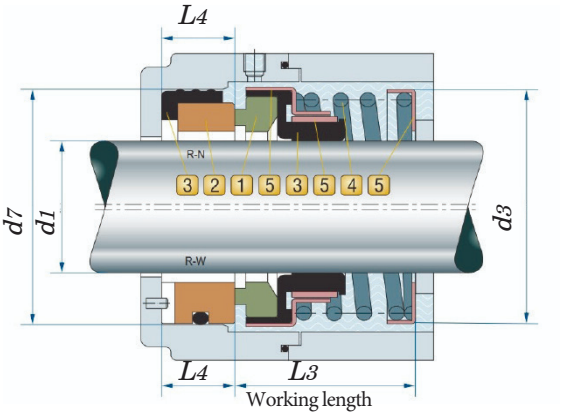
Mechanical seal **R-31K/31U**

Temperature: -20⁰~150⁰
Pressure: ≤1.5 mPa
Speed: ≤13 m/sec

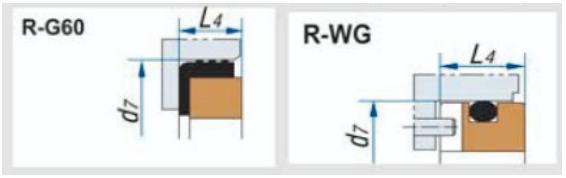
Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-31K (Inch)	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
0.500	12,70	23,3	27,79	25,40	8,74
0.625	15,87	30,1	30,95	25,40	10,32
0.750	19,05	33,1	34,15	25,40	10,32
0.875	22,23	36,3	37,30	25,40	10,32
1.000	25,40	39,4	40,50	25,40	10,32
1.125	28,58	44,5	47,63	33,34	11,99
1.250	31,75	47,6	50,80	33,34	11,99
1.375	34,93	50,8	53,98	33,34	11,99
1.500	38,10	54.0	57,15	33,34	11,99
1.625	41,28	60,3	60,35	33,34	11,99
1.750	44,45	60,3	63,50	40,48	11,99
1.875	47,63	63,9	66,70	40,48	11,99
2.000	50,80	66,7	69,85	40,48	11,99
2.125	53,98	74,6	73,05	41.00	13,50
2.250	57,15	74,6	76,20	41.00	13,50
2.375	60,33	82.0	79,40	41.00	13,50
2.500	63,50	86,1	82,55	41.00	13,50
2.625	66,68	86,1	92,10	49.00	15,90
2.750	69,85	88,9	95,25	49.00	15,90
2.875	73,03	96,5	98,45	49.00	15,90
3.000	76,20	96,5	101,65	49.00	15,90
R-31U (Inch)	**d1 (H6)**	**d3 (Max)**	**d7 (h8)**	**L3 (±0.5)**	**L4**
0.500	12,70	23,3	25,40	20,62	7,9
0.625	15,87	30,1	31,75	22,22	10,3
0.750	19,05	33,1	34,93	22,22	10,3
0.875	22,23	36,3	38,10	23,80	10,3
1.000	25,40	39,4	41,28	25,40	11,1
1.125	28,58	44,5	44,45	26,97	11,1
1.250	31,75	47,6	47,63	26,97	11,1
1.375	34,93	50,8	50,80	28,58	11,1
1.500	38,10	54.0	53,98	28,58	11,1
1.625	41,28	60,3	60,33	34,93	12,7
1.750	44,45	60,3	63,50	34,93	12,7
1.875	47,63	63,9	66,68	38,10	12,7
2.000	50,80	66,7	69,85	38,10	12,7
2.125	53,98	74,6	76,20	42,85	14,3
2.250	57,15	74,6	79,38	42,85	14,3
2.375	60,33	82.0	82,55	46,02	14,3
2.500	63,50	86,1	85,73	46,02	14,3
2.625	66,68	86,1	85,73	49,20	15,9
2.750	69,85	88,9	88,90	49,20	15,9
2.875	73,03	96,5	95,25	52,37	15,9
3.000	76,20	96,5	98,43	52,37	15,9



Type of counter ring

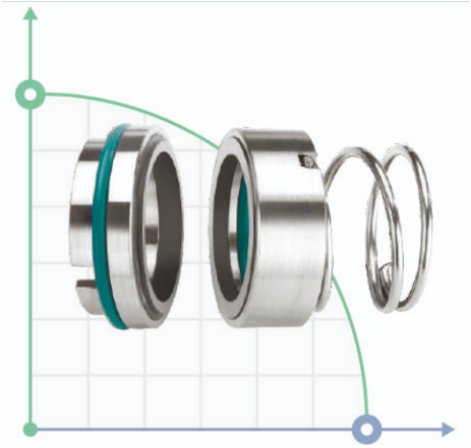


Mechanical seal R-31K/31U

It is applied to pumps of the Haigh, Hidrostal, Hilge, Inbeat, INOX series and another pumps.

Analogue: Burgmann MG920/ D1-G50 seal. Crane 2 (N SEAT) seal, Flowserve 200 seal,Latty T200 seal, Pac type 21/31 (UK standart, US standart), Roplan RB02, Roten 21, Sterling 212, Vulcan 20.

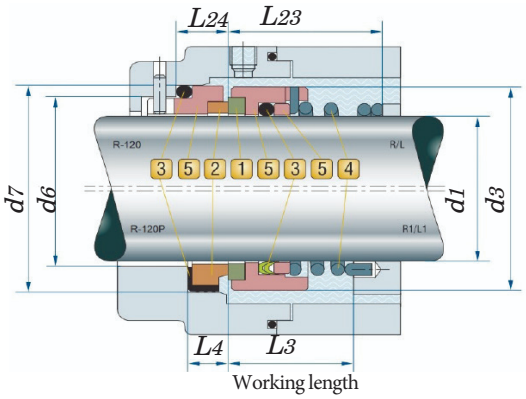
Mechanical seal **R-120/120P**



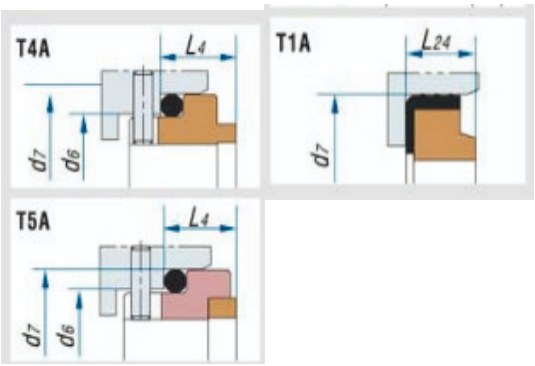
Temperature: -40⁰~180⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring

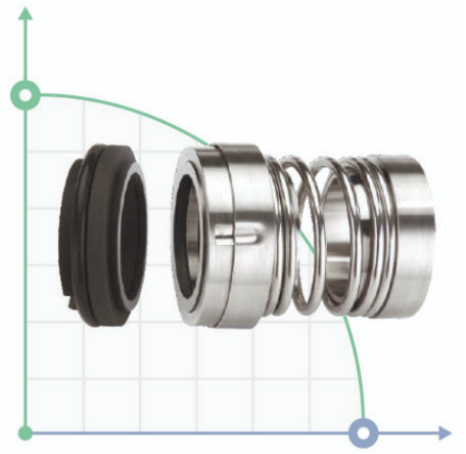


d1 (H6)	d3 (Max)	d6 (h8)	d7	L3 (±0.5)	L4	L23 (±0.5)	L24
18	32	27	33	26.0	10.0	18.5	6.5
20	34	29	35	26.5	10.0	18.5	6.5
22	36	31	37	27.5	10.5	19.0	6.5
25	39	34	40	29.5	10.5	29.0	8.0
28	42	37	43	28.5	11.5	28.5	8.5
30	44	39	45	31.5	11.5	28.5	8.5
35	49	44	50	34.5	11.5	28.5	8.5
38	54	49	56	37.0	13.0	30.5	9.5
40	56	51	58	37.0	13.0	30.5	9.5
45	61	56	63	41.0	13.0	30.5	9.5
50	66	62	70	41.0	14.0	34.5	10.5
55	71	67	75	43.0	14.0	34.5	10.5
60	80	72	80	44.0	14.0		
65	85	77	85	46.0	14.0		
70	90	83	92	46.0	17.0		
75	99	88	97	48.0	17.0		
80	104	95	105	48.0	17.0		

Single end seal R-120/R-120P

Applicable for Alfa Laval pumps CN, EM, FM, GM, LKH, ME, MR and ALC

Analogue: Burgmann M3N/M3/M32/M37G/M37, Aesseal T01/T01D/T02, Roten 2/22/5/L4B, Anga A3



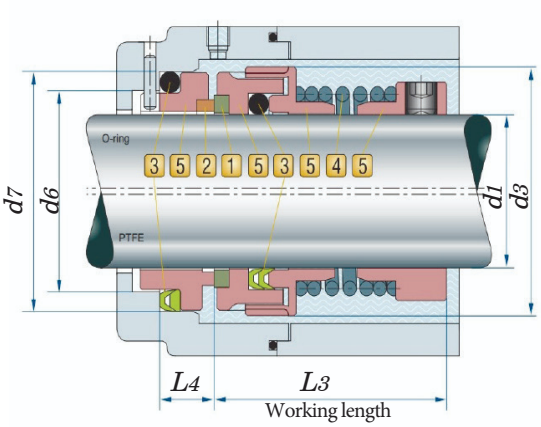
Mechanical seal **R-JB103**

Temperature: -20⁰~80⁰
Pressure: ≤0.8 mPa
Speed: ≤15 m/sec

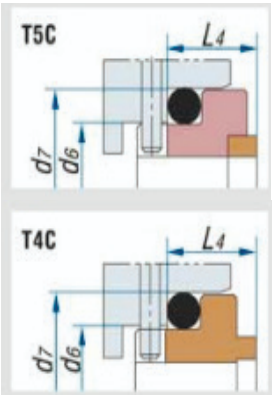
Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*

R-JB103	d1 (H6)	d3 (Max)	d6 (h8)	d7	L3 (±0.5)	L4
	16	33	25,5	33	40	12
	18	35	28,5	36	44	12
	20	37	30,5	40	44	14
	22	39	32,5	42	48	14
	25	42	35,5	45	48	14
	28	45	38,5	48	50	14
	30	52	40,5	50	56	14
	35	57	45,5	55	60	14
	40	62	50,5	60	64	14
	45	67	55,5	65	71	14
	50	72	60,5	70	75	14
	55	77	65,5	75	77	14
	60	82	70,5	80	77	14
	65	92	80,5	90	89	17
	70	97	85,5	97	91	19
	75	102	90,5	102	91	19
	80	107	95,5	107	98	19
	85	112	100,5	112	100	19
	90	117	105,5	117	101	19
	95	122	110,5	122	101	19
	100	127	115,5	127	101	19
	110	141	130,5	142	126	21
	120	151	140,5	152	126	21



Type of counter ring

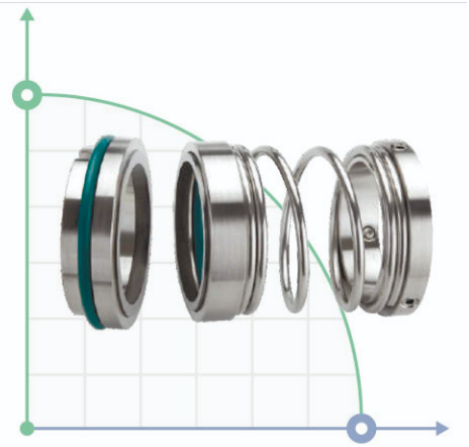


Single mechanical end seal R-JB103 with a central spring regardless of the direction of entry.

Application in pumps Wilo, ABS, Alfa laval, Allweiler, APV, Calpeda, DAB, Ebara, EMU, Flugt, Fristam.

Analog of mechanical seals: John Crane, Burgmann, AESSEAL, Latty, Roplan, Roten, Sealol, Sterling.

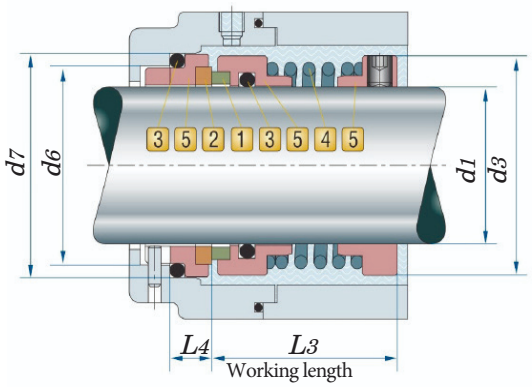
Mechanical seal **R-1527**



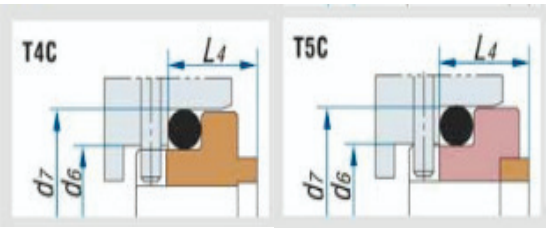
Temperature: -20⁰~150⁰
Pressure: ≤1.0 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*



Type of counter ring

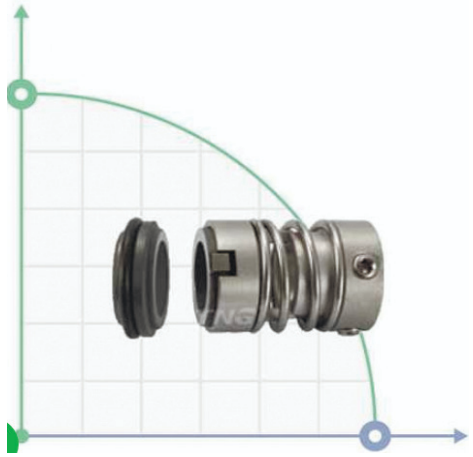


Single mechanical seal R-1527

Is applicable to the series pumps: MDM, DAB DIVERTRON, DIVER, MICRA HS, IDEA, D-SUB and another pumps.

Analogue: Vidmap to MG912/ D1-G60 seal, Crane 521 seal Flowserve 240 seal, Latty

R-1527	d1 (H6)	d3 (Max)	d6	d7 (h8)	L3 (±0.5)	L4
	18	32	27	33	35.0	10.0
	20	34	29	35	35.0	10.0
	22	36	31	37	35.0	10.0
	24	38	33	39	40.0	10.0
	25	39	34	40	40.0	10.0
	28	42	37	43	40.0	10.0
	30	44	39	45	40.0	10.0
	32	46	42	48	45.0	10.0
	33	47	42	48	45.0	10.0
	35	49	44	50	45.0	10.0
	38	54	49	56	44.0	11.0
	40	56	51	58	44.0	11.0
	43	59	54	61	49.0	11.0
	45	61	56	63	49.0	11.0
	48	64	59	66	49.0	11,0
	50	66	62	70	47.0	13.0
	53	69	65	73	57.0	13.0
	55	71	67	75	57.0	13.0
	58	78	70	78	57.0	13.0
	60	80	72	80	57.0	13.0
	63	83	75	83	57.0	13.0
	65	85	77	85	67.0	13.0
	68	88	81	90	64.7	15.3
	70	90	83	92	64.7	15.3
	75	99	98	97	64.7	15.3
	80	104	95	105	74.3	15.7
	85	109	100	110	74.3	15.7
	90	114	105	115	74.3	15.7
	95	119	110	120	74.3	15.7
	100	124	115	125	74.3	15.7



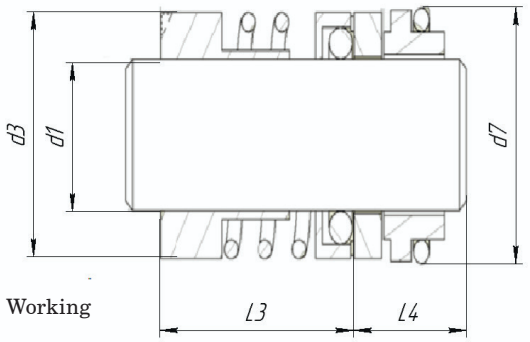
Mechanical seal **R-706E**

Temperature: -20⁰~180⁰
Pressure: ≤1.7 mPa
Speed: ≤15 m/sec

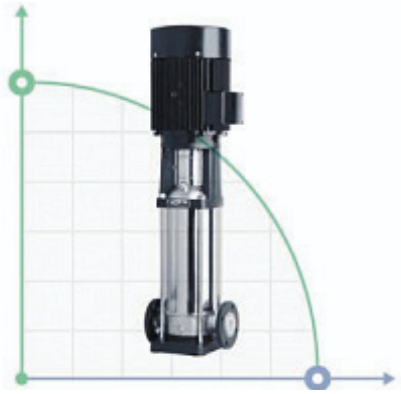
Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	l4
R-706E	**12**	22	23	32	7
R-706E	**16**	26	27	33.5	7



Feed pumps for steam boilers



Pump for Viessmann Vitomax 200, Vitoplex 100 Steam boiler E1 / 9; E-1,0-0,9; E-1,6-0,9; E-2,5-0,9, DKVR Steam boiler-2,5; 4; 6,5; 10; 20 ,DKVR boiler-2,5; 4; 6,5; 10; 20
Feed pump for the steam boiler KE-2,5; 4,0; 6,5; 10; 25 pump for steam generator steam boiler RI-5M1P; centrifugal pump for steam boiler MZK-7AG, MZK-7AZH-2
KV-300 steam boiler feed pump-boiler pump .Steam boiler D-900, D-721 water supply pump Steam boiler D-900, D-721 pumps for BOILERS ERENSAN, NEOTERM S. R. L., GIBERTI S. R. L. RO IMPIANTI S. R. L. C. M. T. S. R. L. A. T. I. INDUSTRIALE DI CIRTO-LI, ANDREARO IMPIANTI S. R. L. GIBERTI S. R. L. BONO ENER - GIA SPA MIMSAN GRUP, SELNIKEL ENERGY, HEAT, AIR TECHNICS, AZOVOBSCHEMASH, PJSC BROVARSKY PLANT of MUNICIPAL EQUIPMENT, ODO, BU-RAN-PROGRESS, LLC, VULKAN-TEPLOENERGO, LLC, DANIKO, LLC, pump for KP-300 boilers, PTC "Leader-5m", feed pumps for boilers Monastyrishchensky plant of boiler equipment, pumps for steam Generators electric, Solid fuel boiler TITANIUM- circulation pumps, feed (pressure pumps) for Steam boilers Ferroli (FERROLI), boilers Idmar (Idmar),TESI (Tesi), Titanium (Titan), BAHR' UNO boilers.

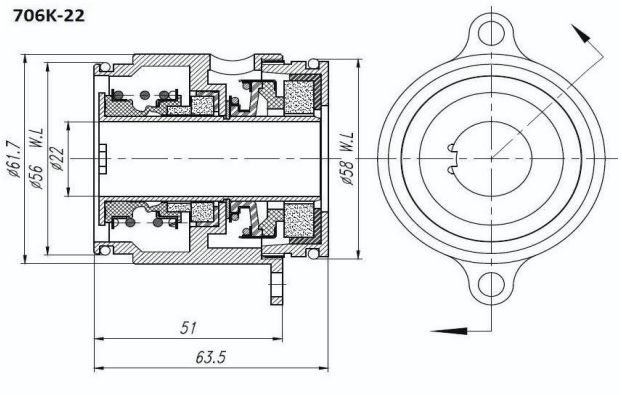
Mechanical seal **R-706K**

Temperature: -20⁰~180⁰
Pressure: ≤3.0 mPa
Speed: ≤15 m/sec

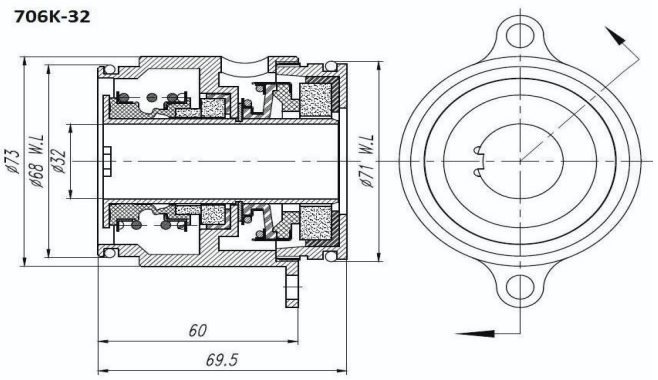
Materials

1. *Rotary ring: NBR/EPDM/VITON*
2. *Stationary ring: Carbon/SIC/TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*

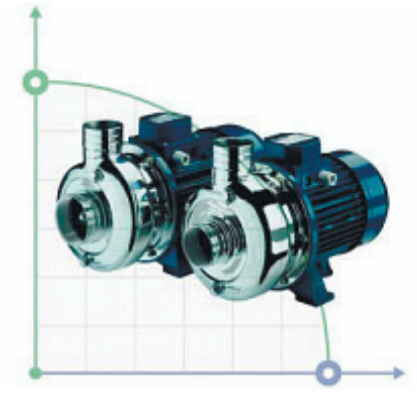
706K-22



706K-32

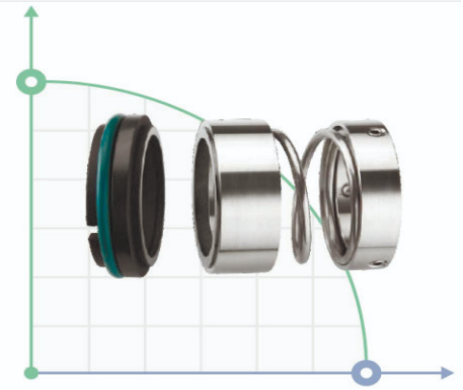


Pumps for carbomide-ammonium mixtures



Carbomide-ammonium mixtures are an explosive and fire-proof fertilizer, so it can be transported using electric pumps with a motor in general purpose industrial version, however, the flow part of such pumps ought to be made of a material resistant to ammonia and nitric acid derivatives. These materials are stainless steel and plastics (PP, PVDF). For pumping ready-made carbomide-ammonia mixtures, our company offers pumps with a stainless flow part for CAM — ait is a mixture of aqueous solutions of carbamide (in the ratio of 35.4% carbamide, 44.3% saltpeter, 19.4% water, 0.5% ammonia water). The density of the product up to 1.34 kg/m3. The only nitrogen fertilizer that contains three forms of nitrogen: nitrate - provides in-stant action of ammonium nitrification process is transferred in the form of nitrate, amide - as a result of activities changes in soil microbial ammonium form and then to ni-trate. Thus, the CAM provides prolonged nutrition of plants with nitrogen. Due to the absence of free ammonia in the CAM composition, it does not evaporate into the atmosphere when applied, but the presence of an ammonium form still makes minimal sealing desirable, especially in the conditions of temperatures and the absence of precipitation after application.

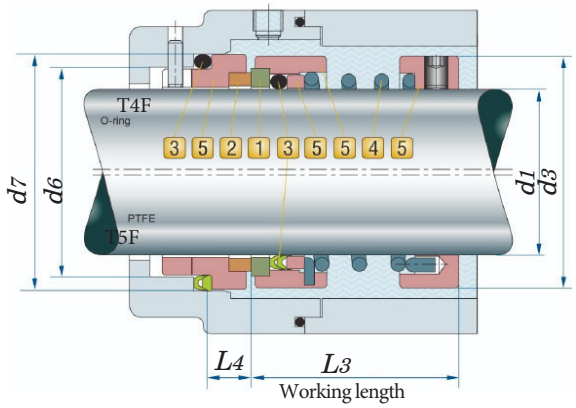
Mechanical seal **R-108U**



Temperature: -20⁰~150⁰
Pressure: ≤0.6 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: SUS / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON/PTFE.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*



d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4
35	49	44	50	42	13
40	56	50	58	42	13
45	61	55	63	47	13
50	66	62	70	47	13
55	71	67	75	57	13
60	80	72	80	57	13
65	85	77	85	65	15
70	90	84	92	65	15
75	99	87	97	65	15
80	104	95	105	73	17
85	109	100	110	73	17

Pumps for sewage pumping stations

Sewage pumping stations are designed for pumping household, drain and industrial waste water, when transportation of liquids is not pos-sible. sewage pumping stations help to optimize and reduce the cost of materials, construction and installation work, it allows you to use pipes of smaller diameter in pressure pipelines than in somatic collectors, which in turn allows you to reduce the final cost by two or three times.

The pumps for sewage stations. The height of sewage pumping stations is dialed from 1.5 m to the required height by the customer and consists of pipes D 1200 mm - d 3000 mm, which are made of concrete class B-30, B-35, waterproof w6 and w8,

frost-resistant F100, equipped with an internal polyethylene liner (PE80), which improves the waterproofing properties of structures and extends their service life.

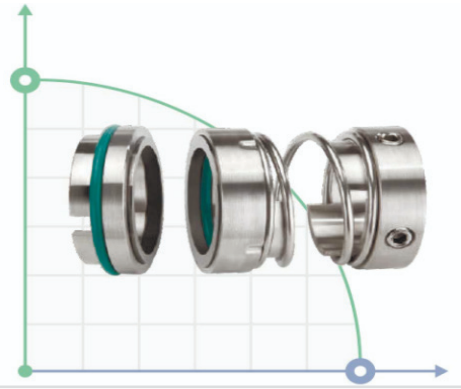
To select the optimal variant of the sewage pumping station, you must define: the depth of laying the supply manifold; the required capacity and pressure; the volume of waste water that enters the pumping station; the type of pumped liquid; conditions of hydrogeology of construction

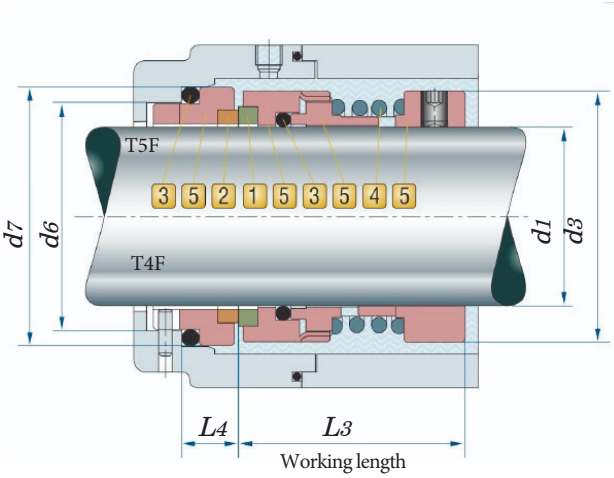
Mechanical seal **R-112**

Temperature: -20⁰~140⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

Materials

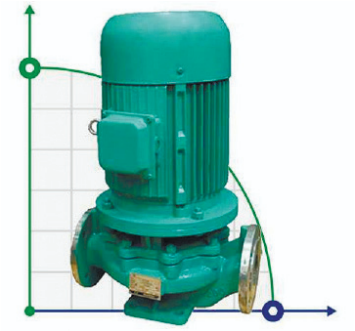
1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*





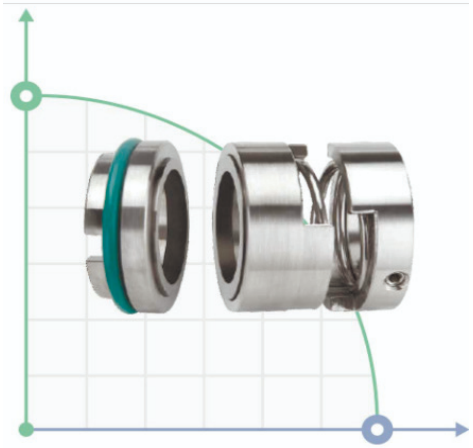
d1 (H6)	d3 (Max)	d4 (h8)	d7	L3 (±0.5)	L4
20	34	29	35	26,5	10.0
22	36	31	37	37.5	10,5
25	39	34	40	39.5	10,5
28	42	37	43	43.5	11,5
30	44	39	45	43.5	11,5
35	49	44	50	43.5	11,5
38	54	49	56	52.0	13.0
40	56	51	58	52.0	13.0
45	61	56	63	52.0	13.0
50	66	62	70	56.0	14.0
55	71	67	75	56.0	14.0
60	80	72	80	61.0	14.0
65	85	77	85	61.0	14.0
70	90	83	92	63.0	17.0
75	99	88	97	63.0	17.0
80	104	95	105	68.0	17.0

Pumps for mash wort, distillery dreg, brew



Pumps for distillery dreg and brew are made of stainless steel. IHG and SM centrifugal pumps have performed well in the alcohol industry, in particular for pumping distillery dreg and brew. IHG series of pumps for distillery dreg and brew are equipped with an explosion-proof engine according to the Ex dIIBT4 standard, which allows them to be used in industrial premises of the corresponding category of explosion and fire hazard. The pump motor is standard asynchronous, placed vertically, which prevents the engine from filling with the pumped liquid in emergency situations.

Pumps of this series are used for pumping liquids that are not aggressive for the materials of which the pump is made and do not contain abrasive impurities. These pumps are widely used in the oil, chemical, metallurgical, electrical, paper, and medical industries.



Mechanical seal **R-128/128P**

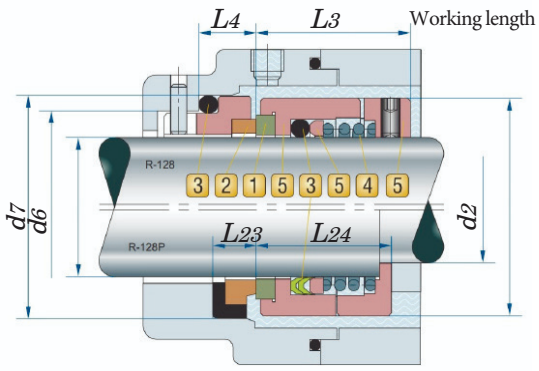
Temperature: -20º~200º
Pressure: ≤0.8 mPa
Speed: ≤10 m/sec

Materials

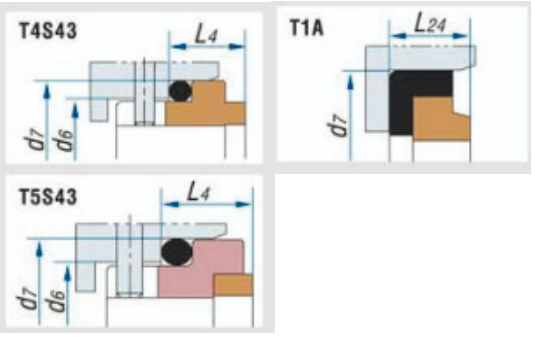
1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*

R-128	d1	d3 (Max)	d6	d7 (H8)	L3 (±0.5)	L4
	20	34	29	35	35.0	10.0
	22	36	31	37	35.0	10.0
	25	39	34	40	40.0	10.0
	28	42	37	43	40.0	10.0
	30	44	39	45	40.0	10.0
	35	49	44	50	45.0	10.0
	38	54	49	56	44.0	11.0
	40	56	51	58	44.0	11.0
	45	61	56	63	49.0	11.0
	50	66	62	70	47.0	13.0
	55	71	67	75	57.0	13.0
	60	80	72	80	57.0	13.0
	65	85	77	85	67.0	13.0
	70	90	83	92	64,7	15,3
	75	99	88	97	64,7	15,3

R-128P	d1	d2	d3 (Max)	d6	d7 (H8)	L23 (±0.5)	L24
	18	14	32	27	33	19,5	6,5
	20	16	34	29	35	19,5	6,5
	22	18	36	31	37	22.0	6,5
	25	20	39	34	40	25.0	8.0
	28	23	42	37	43	27,5	8,5
	30	25	44	39	45	27,5	8,5
	35	30	49	44	50	29,5	8,5
	38	33	54	49	56	30,5	9,5
	40	35	56	51	58	30,5	9,5
	45	40	61	56	63	30,5	9,5



Type of counter ring

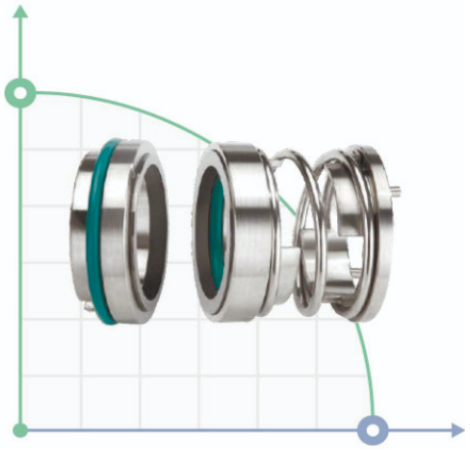


Single mechanical end seal R-128/R-128P

Is applicable to the series pumps: SNM7N, Grundfos, Calpeda and another pumps.

Analog: W011U, Aesseal W07D/W07DM, Flowserve Pac-Seal

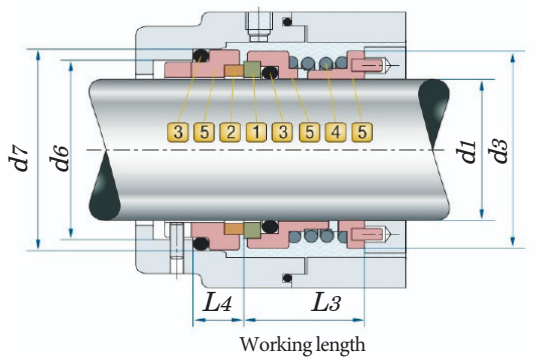
Mechanical seal **R-113**



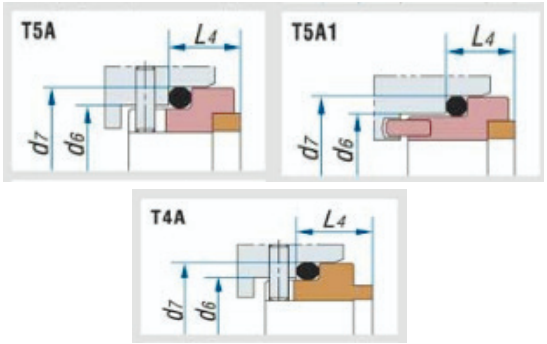
Temperature: -40⁰~150⁰
Pressure: ≤0.6 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows:EPDM / VITON.*
4. *Spring: SS304 .*
5. *Metal parts: SS304 / SS316.*



Type of counter ring

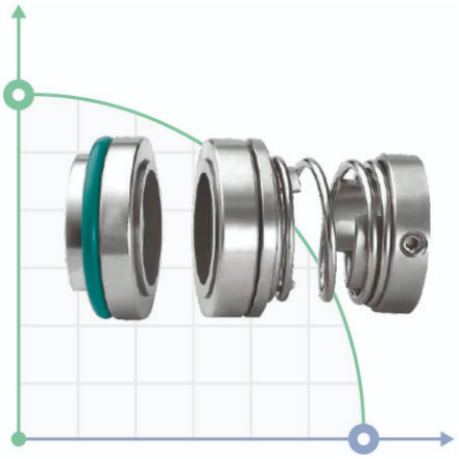


d1 (H6)	d3 (Max)	d6	d7 (h8)	L3 (±0.5)	L4
20	34	29	35	23.0	10.0
22	36	31	37	24.5	10.5
25	39	34	40	24.5	10.5
28	42	37	43	27.5	11.5
30	44	39	45	27.5	11.5
35	49	44	50	27.5	11.5
38	54	49	56	31.0	13.0
40	56	51	58	31.0	13.0
45	61	56	63	31.0	13.0
50	66	62	70	35.0	14.0
55	71	67	75	35.0	14.0
60	80	72	80	46.0	14.0
65	85	77	85	46.0	14.0
70	90	83	92	48.0	17.0
75	99	88	97	48.0	17.0
80	104	95	105	53.0	17.0

The mechanical seal R-113 is used in centrifugal pumps, mixers and pumping stations.

Application in pumps Wilo, ABS, Alfa laval, Allweiler, APV, Calpeda, DAB, Ebara, EMU, Flugt, Fristam, Grundfos, Haigh, Hidrostal, Hilde, Inbeat, INOX, Inoxpa, GEA Tuchenhagen.

Analog of mechanical seals: AESSEAL, Flowserve Pac - Seal, ROTEN.



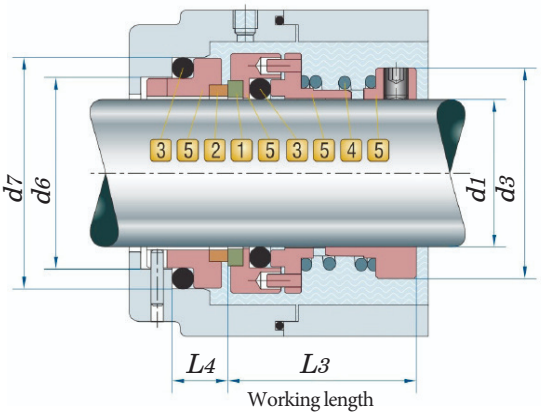
Mechanical seal **R-124**

Temperature: -20⁰~180⁰
Pressure: ≤1.2 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*

d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)	L8
20	34	28,5	36	31.0	15	20
25	39	34,5	42	34.0	15	20
30	49	40,5	50	36.0	15	20
35	57	45,5	55	46,5	15	20
40	62	50,5	60	49,5	15	20
45	67	55,5	65	54,5	15	20
50	72	60,5	70	57,5	16	21
55	77	65,5	75	59,5	16	21
60	82	70,5	80	59,5	16	21
65	91	79,5	89	64,5	17	22
70	96	84,5	94	66,5	17	22
75	101	89,5	99	66,5	17	22
80	106	94,5	104	71,5	17	22
85	111	99,5	109	74,5	17	22
90	116	104,5	114	75,5	17	22
95	121	109,5	119	75,5	17	22

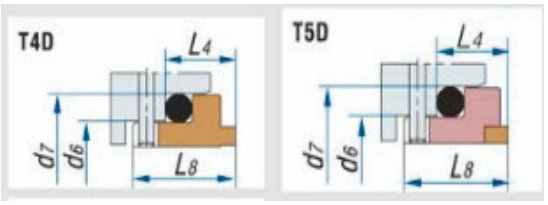


Single mechanical end seal R-124

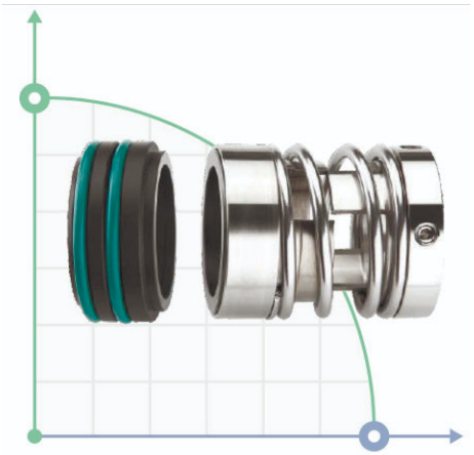
Is applicable to the series of pumps: SPERONI, Hydrostal, Grundfos. It is used at temperatures from -40 to + 120 degrees Celsius, with a pressure of up to 1.2 MPa and rotation speed of up to 15 m / sec.

Analogue: Burgman, Aesseal , Roten.

Type of counter ring



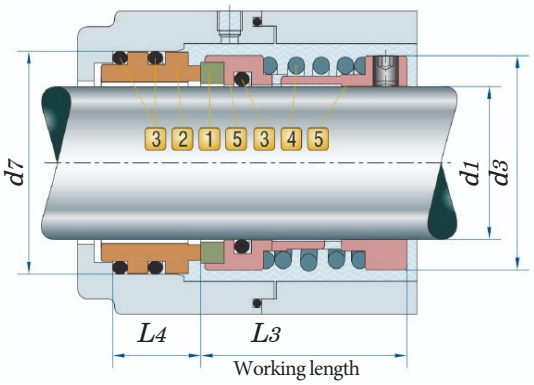
Mechanical seal **R-125**



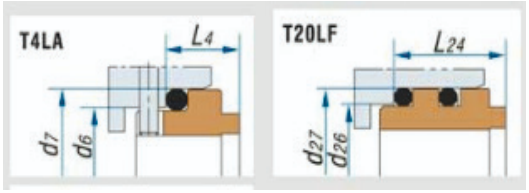
Temperature: -20⁰~180⁰
Pressure: ≤1.2 mPa
Speed: ≤25 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC .*
3. *Bellows: NBR / EPDM / VITON / MVQ.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

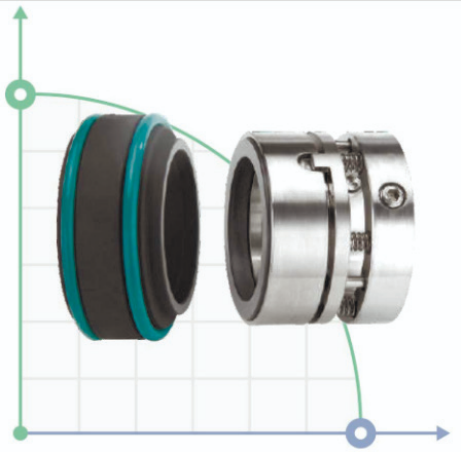


Type of counter ring



Single mechanical seal R-125
Is used in centrifugal, sludge, and chemical pumps.

d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)	d27	L24
20	34	29	35	41	13	37	23
22	36	31	37	41	13	39	23
24	38	33	39	43	13	-	-
25	39	34	40	43	13	40	23
28	42	37	43	45	13	44	23
30	44	39	45	45	13	47	24
33	47	42	48	45	13	48	24
35	49	44	50	49	13	51	24
38	54	50	56	53	13	54	24
40	56	52	58	55	13	57	24
43	59	55	61	55	13	-	-
45	61	57	63	55	13	61	24
48	64	60	66	55	13	64	24
50	66	62	68	60	13	67	24
53	69	65	71	61	13	-	-
55	71	67	73	61	13	73	24
58	76	70	79	63	16	76	24
60	78	72	81	63	16	80	26
63	81	75	84	63	16	83	26
65	83	77	86	67	16	86	26
70	90	83	92	68	16	89	26
75	95	88	97	72	16	95	26
80	100	96	105	72	16	99	26
85	105	101	110	77	16	108	26
90	110	106	115	77	16	111	26
95	115	111	120	82	16	114	26
100	120	116	125	82	16	118	26



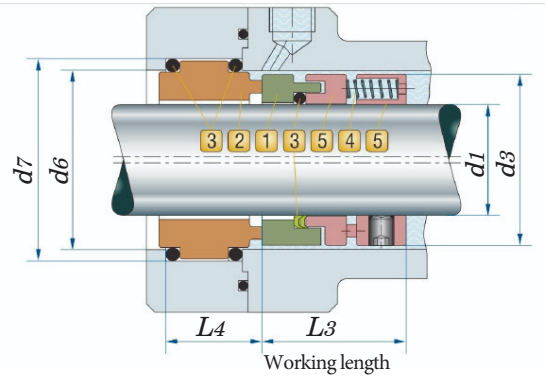
Mechanical seal **R-960**

Temperature: -20⁰~200⁰
Pressure: ≤1.2 mPa
Speed: ≤20 m/sec

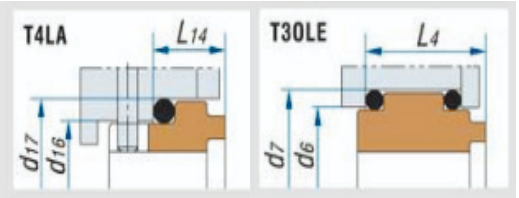
Materials

1. *Rotary ring: SUS / SIC / TC.*
2. *Stationary ring: Carbon / SIC .*
3. *Bellows: NBR / EPDM / VITON/PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)	d17	L14
20	34	36	42	35	23	35	13
22	36	38	44	35	23	37	13
24	38	40	46	35	23	39	13
25	39	41	47	35	23	40	13
28	42	44	50	35	23	43	13
30	44	46	52	35	23	45	13
32	46	48	54	35	23	48	13
33	47	49	55	35	23	48	13
35	49	51	57	35	23	50	13
38	54	58	64	38	25	56	13
40	56	60	66	38	25	58	13
43	59	63	69	38	25	61	13
45	61	65	71	38	25	63	13
48	64	68	74	38	25	66	13
50	66	70	76	38	25	68	13
53	69	73	79	40	25	71	13
55	71	75	81	40	25	73	13
58	76	83	89	41	28	79	16
60	78	85	91	41	28	81	16
63	81	88	94	41	28	84	16
65	83	90	96	41	28	86	16
68	86	93	99	41	30	90	16
70	90	95	101	41	30	92	16
75	95	104	110	42	30	97	16
80	100	109	115	42	31	105	16
85	105	114	120	42	31	110	16
90	110	119	125	45	31	115	16
95	115	124	130	45	31	120	16
100	120	129	135	45	31	125	16



Type of counter ring

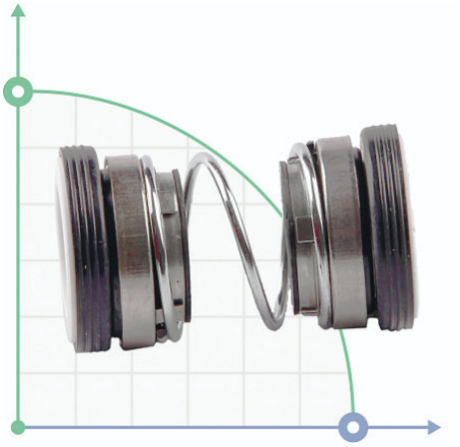


Single mechanical end seal R-960

Is applicable to the series pumps:
centrifugal, food, submersible etc.

Analogue: Burgman, Aesseal , Roten.

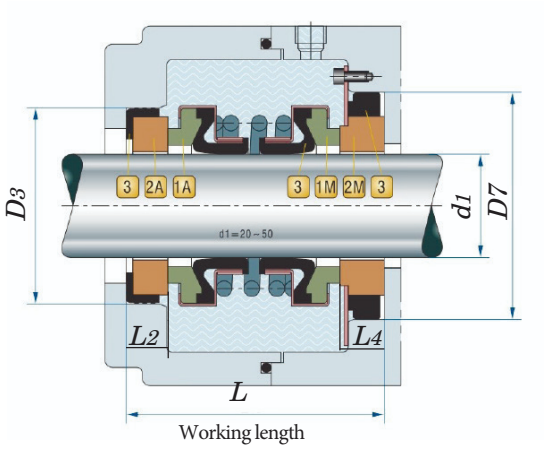
Mechanical seal **R-560D**

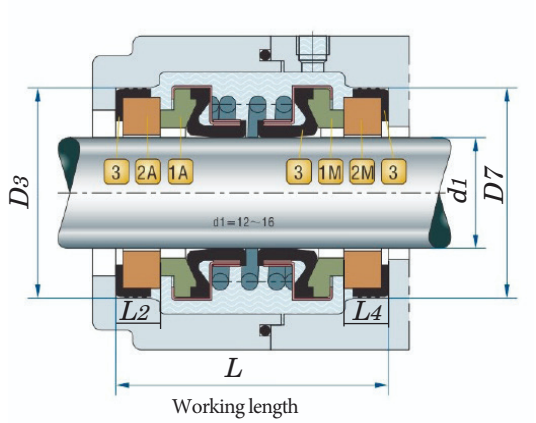


Temperature: -20⁰~80⁰
Pressure: ≤0.3 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: Ceramic/SIC.*
3. *Bellows: NBR/VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





R-560D

d1 (H6)	D3 (Max)	D7 (h8)	L (±0.5)	L2	L4
13	25	25	36	5	5
14	30	30	37	5	5
15	30	30	37	5	5
16	30	30	37	5	5
18	35	38	49	7	10
19	35	38	49	7	10
20	38	44	49	7	7
25	44	50	51	7	7
30	50	57	59	9	8
35	58	64	61	9	9
40	64	70	64	11	9
45	66	70	65	10	9
50	72	80	69	10	9

Mechanical seal R-560D

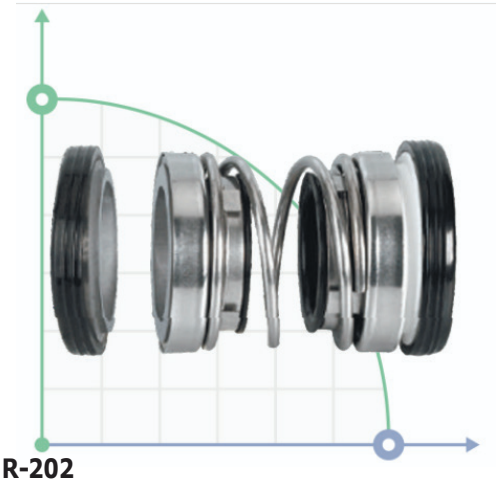
It is used in drainage and sewage pumps.

Analogue: EA560D Burgmann, John Crane 6, AESSEAL B04

The double end seal is an **analogue of the Burgmann seal** and fully corresponds to it in terms of technical characteristics, quality and reliability.

This type of seal is used in pumps, compressors, equipment for the food and chemical industries, etc. - it means wherever it is necessary to provide high-quality sealing of rotating shafts.

High reliability of the double face seal is provided by the design of the unit with two seals – primary and secondary. The main lubricant for the assembly operation is the product itself, with which the equipment works.



Mechanical seal **R-202/208**

Temperature: -20⁰~80⁰
Pressure: ≤0.16 mPa
Speed: ≤15 m/sec

Materials

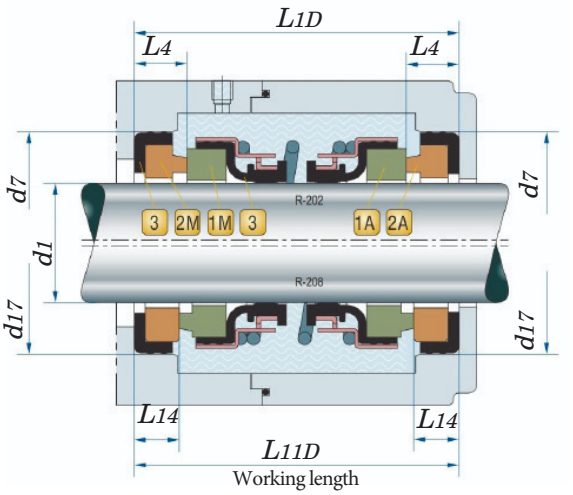
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Carbon / Ceramic/ SIC / TC.*
3. *Bellows: NBR / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-202

d1 (H6)	d3 (Max)	d7 (h8)	L10D (±0.5)	L4
14	25.5	26/28	38/42	7.0
16	27.5	28/30	38/45	7.0
17	32.5	34/35	38/43/48	7.0
18	32.5	34/35	38/43/48	7.0
20	33.0	36	40/42/47	7.0
22	38.0	38	45	7.0
25	40.0	41	51	9.0
30	45.5	46	51	9.0
35	51.0	51	51	9.0
40	57.5	60	61	10.5
45	63.0	65	61	10.5

R-208

d1 (H6)	d3 (Max)	D17 (h8)	L11D (±0.5)	L14
10	21.0	21	30	5.3
12	23.0	23/24/26	32	5.3
14	25.5	25/26/28	35/38/42	5.3
15	27.5	27/28/30	38/45	5.3
16	27.6	27/28/30	38/45	5.3
17	32.5	33/34/35	38/43/48	5.3
18	32.5	33/34/35	38/43/48	5.3
20	33.0	35/36	40/42/47	5.8
22	38.0	37/38	45	6.2
25	40.0	40/41	48/51	7.5
28	43.0	43	51	8.0
30	45.5	45	51	8.0
35	51 .0	50	51	8.0
40	57.6	58	61	9.5
45	63.0	63	61	9.5

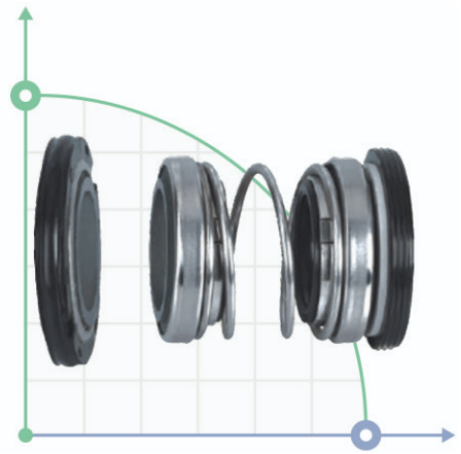


Double-sided mechanical seal R-202/R-208

Is applicable to the series pumps: Haigh, Hidrostal, Hilde, Inbeat, INOX, Inoxpa, Jabsco, Johnson, KSB, Lowara, Mouvex, Nissin, KSB, Lowara, Mouvex, Nissin, and another pumps.

Analogue: EA560D Burgmann, John Crane 6, AESSEAL B04

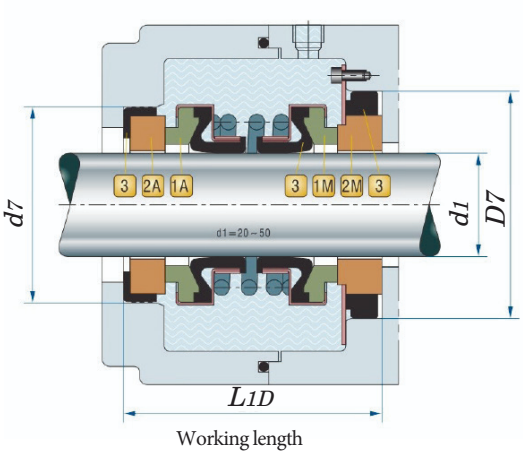
Mechanical seal **R-4702**



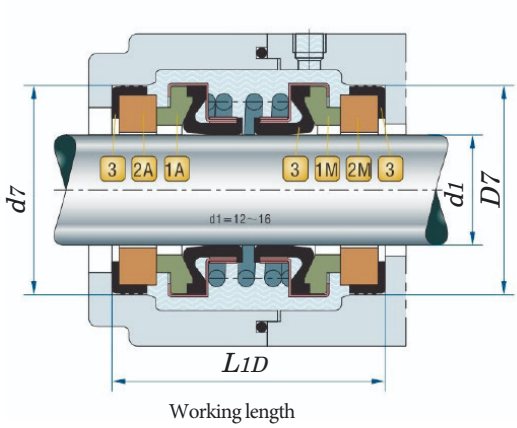
Temperature: -20⁰~70⁰
Pressure: ≤0.3 mPa
Speed: ≤20 m/sec

Materials

1. *Rotary ring: Carbon / SIC .*
2. *Stationary ring: Ceramic/ SIC .*
3. *Bellows: NBR / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Working length



Working length

R-4702

d1 (H6)	d7 (Max)	D7 (h8)	L1D (±0.5)	L4	LI4
12	25	25	36,0	5	5
13	25	25	36,0	5	5
14	30	30	38,0	5	5
15	30	30	38,0	5	5
16	30	30	38,0	5	5
18	35	38	49,0	7	7
19	35	38	49,0	7	7
20	38	44	49,0	7	7
25	44	50	51,0	7	7
30	50	57	59,0	9	8
35	58	64	61,0	9	9
40	64	70	64,5	11	9
45	66	70	65,0	10	9
50	72	80	69.5	10	9

Double-sided mechanical seal R-4702

Is applicable to the series of pumps: Haigh, Hidrostal, Hilde, Inbeat, INOX, Inoxpa, Jabsco, Johnson, KSB, Lowara, Mouvex, Nissin, KSB, Lowara, Mouvex, Nissin, and another pumps.

Analogue: EA560D Burgmann, John Crane 6, AESSEAL B04

Mechanical seal **R-M74D**

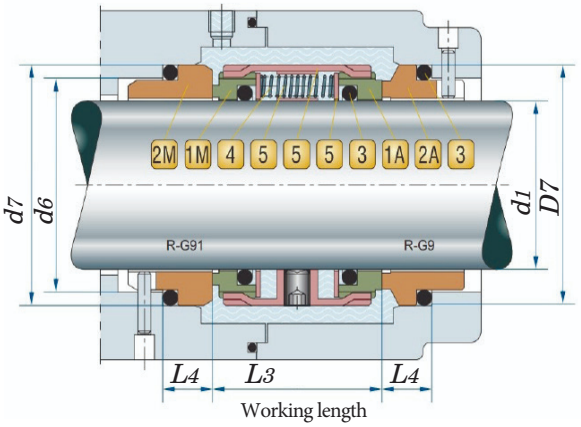
Temperature: -20⁰~200⁰
Pressure: ≤1.6 mPa
Speed: ≤20 m/sec

Materials

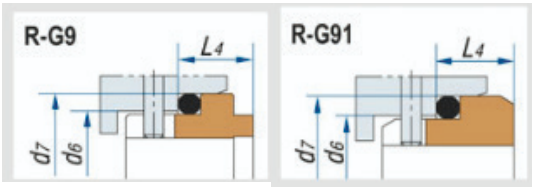
1. *Rotary ring: Car / SIC / TC.*
2. *Stationary ring: Car / SIC / TC..*
3. *Bellows: EPDM / VITON / NBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-M74D

d1 (H6)	d3 (Max)	d6	d7 (h8)	L3 (±0.5)	L4
18	33	27	33	38.0	11.5
20	35	29	35	38.0	11.5
22	37	31	37	38.0	11.5
24	39	33	39	38.0	11.5
25	40	34	40	38.0	11.5
28	43	37	43	39.0	11.5
30	45	39	45	39.0	11.5
32	47	42	48	39.0	11.5
33	48	42	48	39.0	11.5
35	50	44	50	39.0	11.5
38	55	49	56	41.0	14.0
40	57	51	58	42.0	14.0
43	60	54	61	42.0	14.0
45	62	56	63	42.0	14.0
48	65	59	66	42.0	14.0
50	67	62	70	43.0	15.0
53	70	65	73	43.0	15.0
55	72	67	75	43.0	15.0
58	79	70	78	56.0	15.0
60	81	72	80	56.0	15.0
63	84	75	83	55.0	15.0
65	86	77	85	55.0	15.0
68	89	81	90	55.0	18.0
70	91	83	92	56.0	18.0
75	99	88	97	56.0	18.0
80	104	95	105	56.0	18.2
85	109	100	110	56.0	18.2



Type of counter ring



The R-M74D double face seal

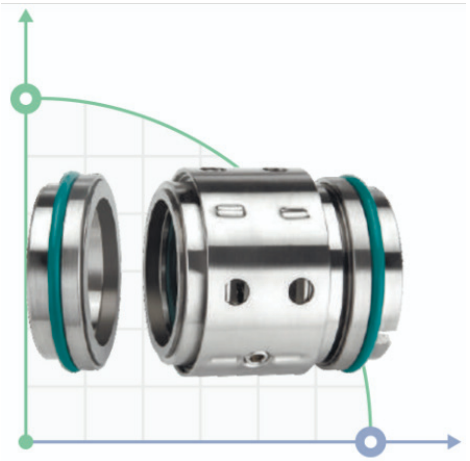
Used in fecal and submersible pumps for sewage, dirty water, or low-aggressive liquids.
Analogue: Burgmann M74D, Anga VD

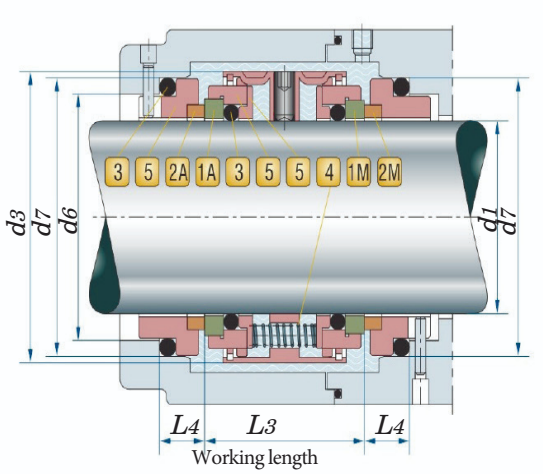
Mechanical seal **R-802**

Temperature: -20⁰~180⁰
Pressure: ≤0.5 mPa
Speed: ≤12 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

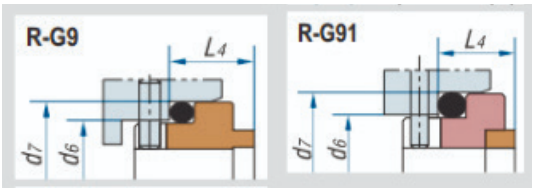




R-802

d1 (H6)	d3 (Max)	d6	d7 (h8)	L3 (±0.5)	L4
20	38	29	35	39	11,5
25	43	34	40	39	11,5
30	48	39	45	39	11,5
35	53	44	50	40	11,5
40	61	51	58	45	14
45	66	56	63	45	14
50	73	62	70	46	15
55	78	67	75	46	15
60	83	72	80	56	15
65	88	77	85	56	15
70	95	83	92	58	18
75	100	88	97	58	18
80	108	95	105	58	18,2

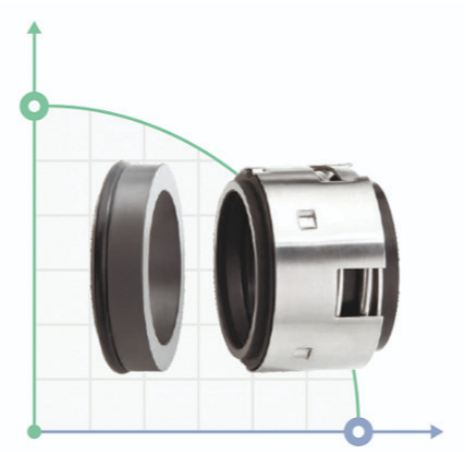
Type of counter ring



Double mechanical seal R-802

It is applied to fecal and submersible pumps for sewage, turbid water or slightly aggressive liquids with solid particles

Analogue: Crane 87 (EI/ EC) seal, Roplan RTH87/ R90



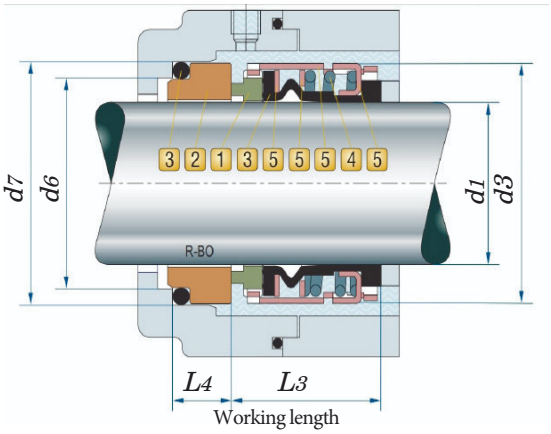
Mechanical seal **R-502**

Temperature: -40⁰~200⁰
Pressure: ≤2.8 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: Ceramic / SIC / TC .*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-502	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
	14	24	25	23.0	12.0
	16	26	27	23.0	12.0
	18	32	33	24.0	13.5
	20	34	35	24.0	13.5
	22	36	37	24.0	13.5
	24	38	39	26,7	13.3
	25	39	40	27.0	13.0
	28	42	43	30.0	12.5
	30	44	45	30.5	12.0
	32	46	48	30.5	12.0
	33	47	48	30.5	12.0
	35	49	50	30.5	12.0
	38	54	56	32.0	13.0
	40	56	58	32.0	13.0
	43	59	61	32.0	13.0
	45	61	63	32.0	13.0
	48	64	66	32.0	13.0
	50	66	70	34.0	13.5
	53	69	73	34.0	13.5
	55	71	75	34.0	13.5
	58	78	78	39.0	13.5
	60	80	80	39.0	13.5
	63	83	83	39.0	13.5
	65	85	85	39.0	13.5
	68	88	90	39.0	13.5
	70	89	92	45.5	14.5
	75	96	97	45.5	14.5
	80	104	105	45.0	15.0
	85	108	110	45.0	15.0
	90	114	115	50.0	15.0
	95	118	120	50.0	15.0
	100	124	125	50.0	15.0



Single mechanical seal R-502

Application in pumps Wilo, ABS, Alfa laval, Allweiler, GEA Tuchenhagen, INOX, Inoxpa, Jabsco, Johnson, KSB and another pumps.

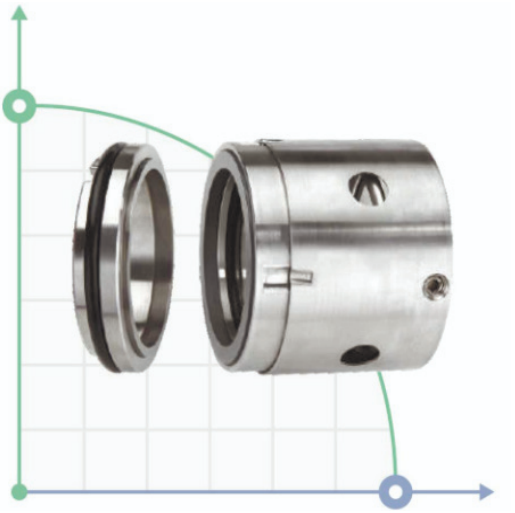
Analogue: John Crane 502B, 8-1, Asseal B092SSU/SLU, STERLING 502,VULCAN 1724

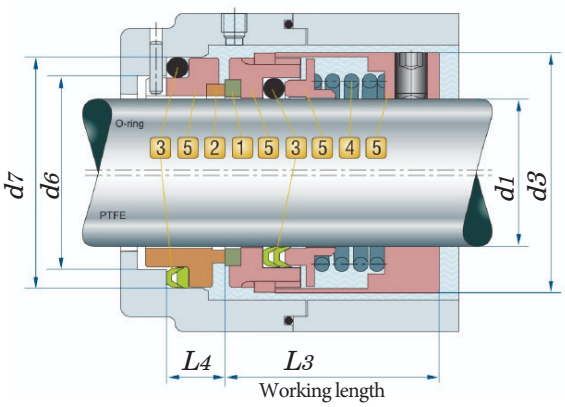
Mechanical seal **R-JB104**

Temperature: -20º~80º
Pressure: ≤0.8 mPa
Speed: ≤15 m/sec

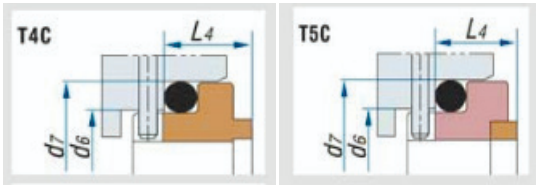
Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON / PTFE.*
4. *Spring: SS304 .*
5. *Metal parts: SS304.*





Type of counter ring



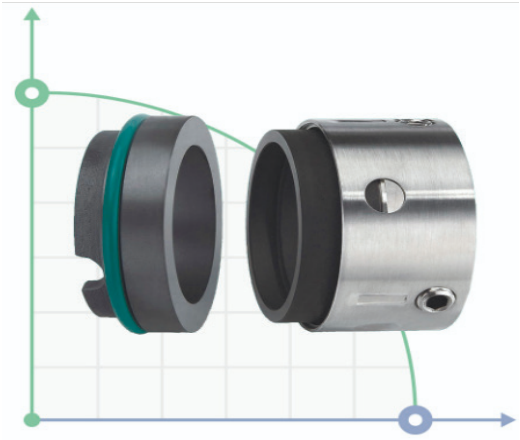
Single mechanical seal R-JB104

Applicable in pumps Hidrostal,Inbeat, Grundfos, Haigh, Hilde, INOX, Inoxpa, Jabsco, Johnson and another pumps.

Analogue: Burgmann, John Crane, Flowserve, Latty, Roten, Sealol.

R-JB104

d1 (H6)	d3 (Max)	d6 (h8)	d7	L3 (±0.5)	L4
16	33	25,5	33	37	12
18	35	28,5	36	40	12
20	37	30,5	40	40	14
22	39	32,5	42	43	14
25	42	35,5	45	43	14
28	45	38,5	48	44	14
30	52	40,5	50	49	14
35	57	45,5	55	51	14
40	62	50,5	60	54	14
45	67	55,5	65	60	14
50	72	60,5	70	63	14
55	77	65,5	75	65	14
60	82	70,5	80	65	14
65	92	80,5	90	74	17
70	97	85,5	97	76	19
75	102	90,5	102	76	19
80	107	95,5	107	81	19
85	112	100,5	112	82	19
90	117	105,5	117	83	19
95	122	110,5	122	83	19
100	127	115,5	127	83	19
110	141	130,5	142	105	21
120	151	140,5	152	105	21



Mechanical seal **R-58U/59U**

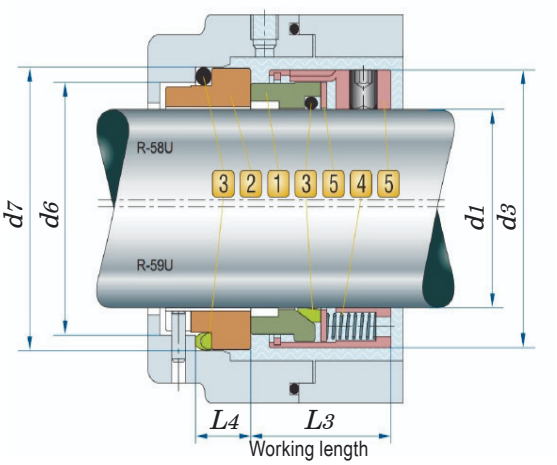
Temperature: -40⁰~200⁰
Pressure: ≤1.7 mPa
Speed: ≤25 m/sec

Materials

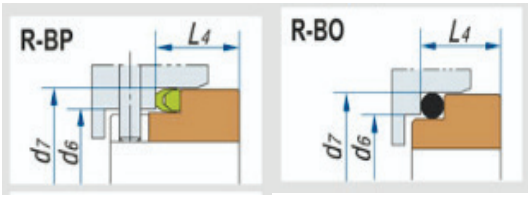
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: SIC / TC / SUS .*
3. *Bellows: EPDM / VITON / PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-58U/59U

d1 (H6)	d3 (Max)	d6	d7 (h8)	L3 (±0.5)	L4
18	32	27	33	24.0	13.5
20	34	29	35	24.0	13.5
22	36	31	37	24.0	13.5
24	38	33	39	26.7	13.3
25	39	34	40	27.0	13.0
28	42	37	43	30.0	12.5
30	44	39	45	30.5	12.0
32	46	42	48	30.5	12.0
33	47	42	48	30.5	12.0
35	49	44	50	30.5	12.0
38	54	49	56	32.0	13.0
40	56	51	58	32.0	13.0
43	59	54	61	32.0	13.0
45	61	56	63	32.0	13.0
48	64	59	66	32.0	13.0
50	66	62	70	34.0	13.5
53	69	65	73	34.0	13.5
55	71	67	75	34.0	13.5
58	78	70	78	39.0	13.5
60	80	72	80	390	13.5
63	83	75	83	39.0	13.5
65	85	77	85	39.0	13.5
68	88	81	90	39.0	13.5
70	90	83	92	45.5	14.5
75	95	88	97	45.5	14.5
80	104	95	105	45.5	15.0
85	109	100	110	45.5	15.0
90	114	105	115	50.0	15.0
95	119	110	120	50.0	15.0
100	124	115	125	50.0	15.0



Type of counter ring

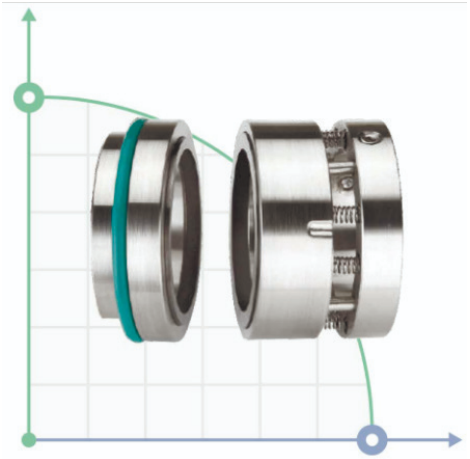


Single mechanical seal series R-59U, R-58U

Is applicable to the pumps of Ebara, Lowara, Colfax, Houttuin series.

Analogue: John Crane T109, T9, T909 seal Roten 90 seal Sealol T seal Sterling 290 seal, Vulcan 1659.

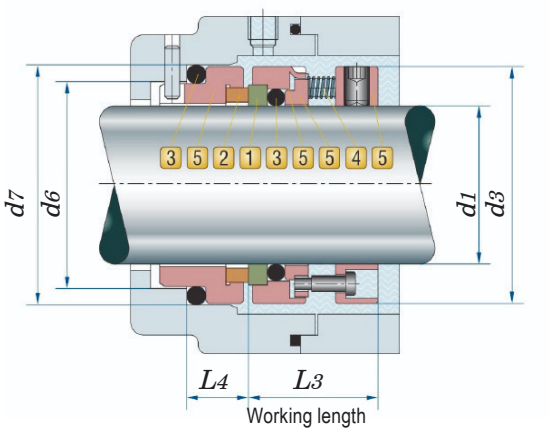
Mechanical seal **R-102U**



Temperature: -30⁰~180⁰
Pressure: ≤1.2 mPa
Speed: ≤10 m/sec

Materials

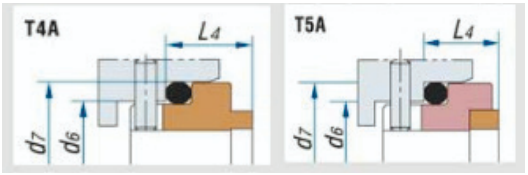
1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



R-102U

	d1 (H6)	d3 (Max)	d6	d7 (h8)	L3 (±0.5)	L4
25	40	34	40	26.0	10.5	
28	43	37	43	26.0	11.5	
30	45	39	45	26.0	11.5	
35	50	44	50	30.0	11.5	
40	56	51	58	35.0	13.0	
45	62	56	63	37.0	13.0	
50	69	62	70	38.0	14.0	
55	74	67	75	38.0	14.0	
60	79	72	80	38.0	14.0	
65	84	77	85	39.0	14.0	
70	91	83	92	39.0	17.0	
75	96	88	97	42.0	17.0	
80	104	95	105	42.0	17.0	
85	109	100	110	42.0	17.0	

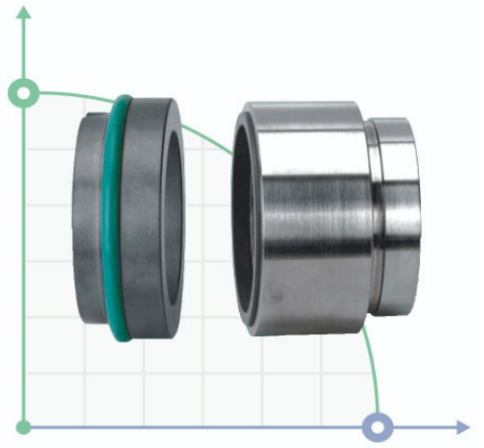
Type of counter ring



Single end seal R-120U

It is used in pumps of the Sarlin, Tuchenhagen, Hilge, HM, HMS series and etc. It is used at temperatures from -40 to + 120 degrees Celsius, with a pressure of up to 1.2 MPa and rotation speed of up to 10 m/sec.

Analogue: John Crane T109, T9, T909 seal Roten 90 seal, Sealol T seal, Sterling 290 seal.



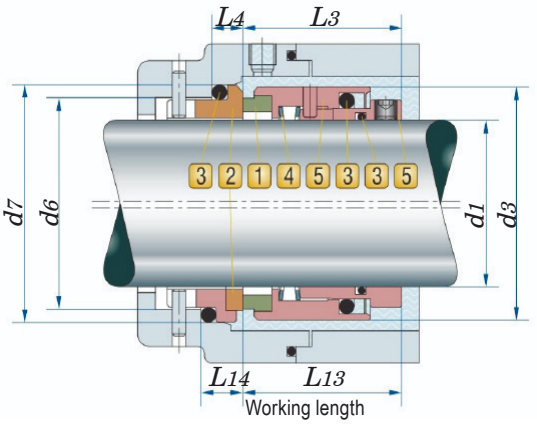
Mechanical seal **R-HJ92N**

Temperature: -20⁰~200⁰
Pressure: ≤2.5 mPa
Speed: ≤25m/sec

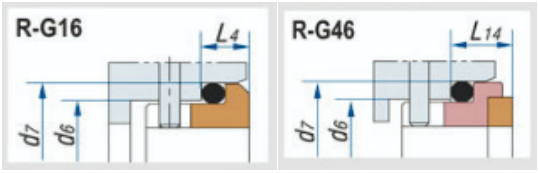
Materials

1. *Rotary ring: Carbon / SIC*
2. *Stationary ring: SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1 (H6)	d3 (Max)	d6 (h8)	d7	L3 (±0.5)	L4	L13	L14
18	32	27	33	30.5	7.0	28.5	9.0
20	34	29	35	30.5	7.0	28.5	9.0
22	36	31	37	30.5	7.0	28.5	9.0
24	38	33	39	33.0	7.0	31.0	9.0
25	39	34	40	33.0	7.0	31.0	9.0
28	42	37	43	35.5	7.0	33.0	9.5
30	44	39	45	35.5	7.0	33.0	9.5
32	47	42	48	35.5	7.0	33.0	9.5
33	47	42	48	35.5	7.0	33.0	9.5
35	49	44	50	35.5	7.0	33.0	9.5
38	54	49	56	37.0	8.0	34.5	10.5
40	56	51	58	37.0	8.0	34.5	10.5
43	59	54	61	37.0	8.0	34.5	10.5
45	61	56	63	37.0	8.0	34.5	10.5
48	64	59	66	37.0	8.0	34.5	10.5
50	66	62	70	38.0	9.5	35.5	12.0
53	69	65	73	38.0	9.5	35.5	12.0
55	71	67	75	38.0	9.5	35.5	12.0
58	78	70	78	42.0	10.5	39.5	13.0
60	80	72	80	42.0	10.5	39.5	13.0
63	83	75	83	42.0	10.5	39.5	13.0
65	85	77	85	42.0	10.5	39.5	13.0
68	88	81	90	41.5	11.0	39.0	13.5
70	90	83	92	48.5	11.5	46.0	14.0
75	99	88	97	48.5	11.5	46.0	14.0
80	104	95	105	48.5	11.5	46.0	14.0
85	109	100	110	48.5	11.5	46.0	14.0
90	114	105	115	52.0	13.0	49.5	15.5
95	119	110	120	52.0	13.0	49.5	15.5
100	124	115	125	52.0	13.0	49.5	15.5



Type of counter ring

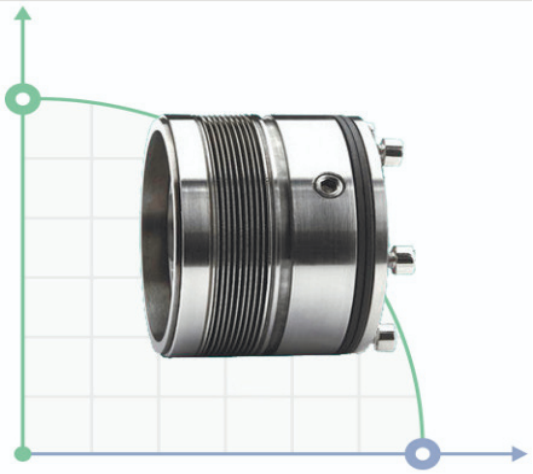


Single end seal R-HJ92N

It is used for Alfa Laval, Ebara (3M, DWO), Lowara, KSB (Etanorm, Etachrom), WILO (MVI, MHI, IPL/DPL), Grundfos (CDM), Saer (IP), and (IP), Calpeda (GM, MXS), Hecker HN 410SU pumps.

Analogue: SHJ97 Burgmann HJ92N seal, Roten seal EHS3, AESSEAL MO10.

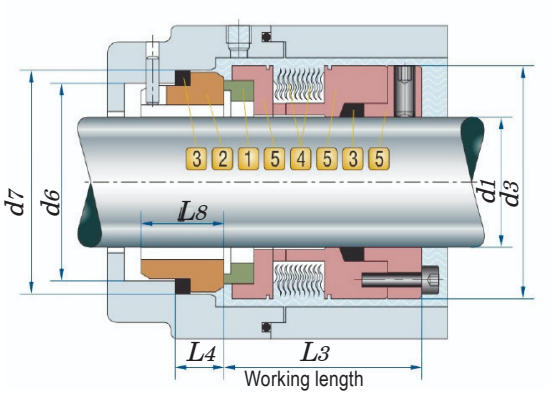
Mechanical seal **R-606**



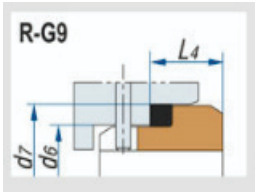
Temperature: -20⁰~400⁰
Pressure: ≤2.5 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon/ SIC / TC.*
2. *Stationary ring: SIC / SUS / TC.*
3. *Bellows: M6 / T6.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring

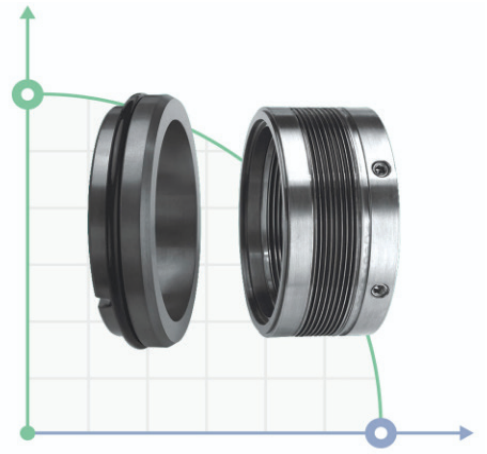


Mechanical end seal R-606 with metal welded bellows.

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetze, etc.

Analogue: Burgmann MBS100, MFLWT 80, MFLCT.

d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)	L8
18	40	31	37	46.5	11.5	19.5
20	42	34	40	46.5	11.5	19.5
22	44	37	43	46.5	11.5	19.5
24	46	37	43	46.5	11.5	19.5
25	47	39	45	46.5	11.5	19.5
28	50	42	48	46.5	11.5	19.5
30	52	44	50	46.5	11.5	19.5
32	54	49	56	46.5	14,0	22.0
33	55	49	56	46.5	14.0	22.0
35	57	51	58	46.5	14.0	22.0
38	60	54	61	46.5	14.0	22.0
40	66	56	63	47.5	14.0	22.0
43	69	59	66	47.5	14.0	22.0
45	71	62	70	47.5	15.0	23.0
48	74	65	73	47.5	15.0	23.0
50	76	67	75	47.5	15.0	23.0
53	79	70	78	47.5	15.0	23.0
55	81	72	80	47.5	15.0	23.0
58	85	75	83	53.0	15.0	23.0
60	87	77	85	53.0	15.0	23.0
63	90	81	90	53.0	18.0	26.0
65	92	83	92	53.0	18.0	26.0
68	95	88	97	53.0	18.0	26.0
70	97	88	97	53.0	18.0	26.0
75	102	95	105	52.8	18,2	26.2
80	107	100	110	52.8	18.2	26.2
85	112	105	115	52.8	18,2	26.2
90	117	110	120	53.8	17.2	25.2
95	122	115	125	53.8	17,2	25.2
100	127	122	134.3	54.0	20.0	30.0



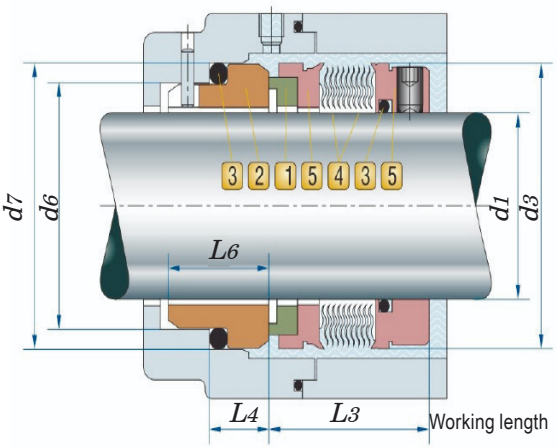
Mechanical seal **R-MFL85N**

Temperature: -20⁰~260⁰
Pressure: ≤2.5 mPa
Speed: ≤15 m/sec

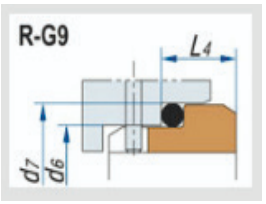
Materials

1. *Rotary ring: Carbon / SIC / TC*
2. *Stationary ring: SIC / SUS / TC.*
3. *Bellows: M4 / T6 / M3.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1 (H6)	d3 (Max)	d6 (h8)	d7	L3 (±0.5)	L4	L6 (h8)
18	32.0	27	33	30.5	7.0	14.0
20	33.5	29	35	30.5	7.0	14.0
22	36.5	31	37	30.5	7.0	14.0
24	39.0	33	39	28.5	11.5	19.5
25	39.6	34	40	28.5	11.5	19.5
28	42.8	37	43	31.0	11.5	19,5
30	45.0	39	45	31.0	11.5	19.5
32	46.0	42	48	31.0	11.5	19.5
33	48.0	42	48	31.0	11.5	19.5
35	49.2	44	50	31.0	11.5	19.5
38	52.3	49	56	31.0	14.0	22.0
40	55.5	51	58	31.0	14.0	22.0
43	57.5	54	61	31.0	14.0	22.0
45	58.7	56	63	31.0	14.0	22.0
48	61.9	59	66	31.0	14.0	22.0
50	65.0	62	70	32.5	15.0	23.0
53	68,2	65	73	32.5	15.0	23.0
55	70.0	67	75	32.5	15.0	23.0
58	71.7	70	78	37.5	15.0	23.0
60	74.6	72	80	37.5	15.0	23.0
63	79.0	75	83	37.5	15.0	23.0
65	84.1	77	85	37.5	15.0	23.0
68	87.3	81	90	34.5	18.0	26.0
70	87.3	83	92	42.0	18.0	26.0
75	95.0	88	97	42.0	18.0	26.0
80	98.4	95	105	41.8	18.2	26.2
85	104.7	100	110	41,8	18.2	26.2
90	111.0	105	115	46.8	18.2	26.2
95	114.0	110	120	47.8	17.2	25.2
100	117.4	115	125	47.8	17.2	25.2



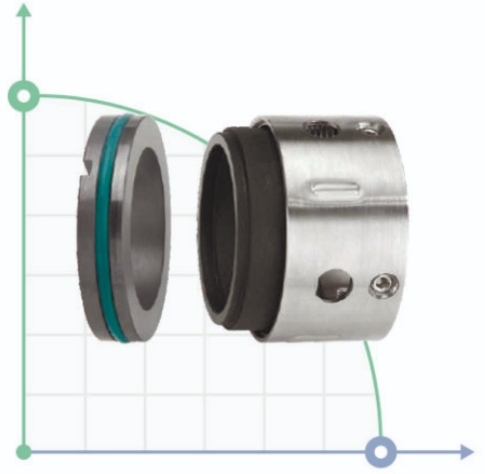
Type of counter ring



Single mechanical end seal R-MFL85N

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetze, etc.

Analogue: Burgmann MFL85N, MFLWT, MFLCT



Mechanical seal **R-109/8U**

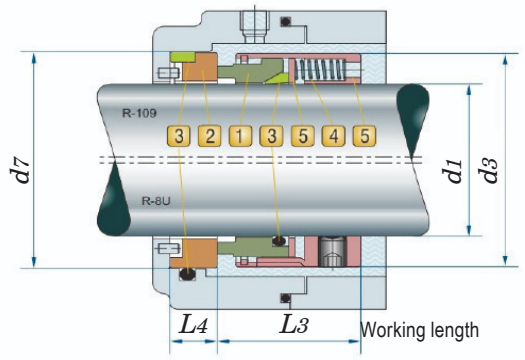
Temperature: -40⁰~200⁰
Pressure: ≤2.4 mPa
Speed: ≤25 m/sec

Materials

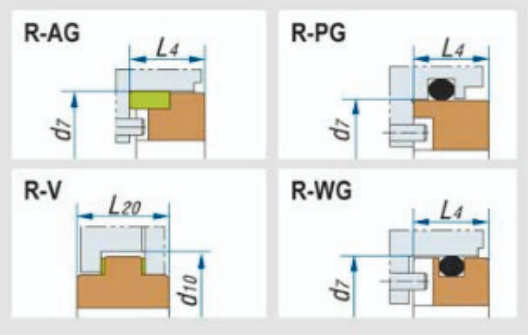
1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: SIC / TC.*
3. *Bellows: EPDM / VITON / PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-109 (Inch)

	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4	D10 (h8)	L20
0.750	**19.05**	34.0	34.93	22.2	10.3	48.0	17.6
0.875	**22.23**	37.2	38.10	23.8	10.3	51.0	17.6
1.000	**25.40**	40.3	41.28	25.4	11.1	54.0	17.6
1.125	**28.58**	43.5	44.45	27.0	11.1	62.0	27.0
1.250	**31.75**	48.3	47.63	27.0	11.1	68.0	27.0
1.375	**34.93**	51.5	50.80	28.6	11.1	71.0	27.0
1.500	**38.10**	54.6	53.98	28.6	11.1	78.0	27.0
1.625	**41.28**	61.0	60.33	35.0	12.7	81.0	27.0
1.750	**44.45**	64.2	63.50	35.0	12.7	84.0	27.0
1.875	**47.63**	67.3	66.68	35.0	12.7	87.0	27.0
2.000	**50.80**	70.5	69.85	35.0	12.7	97.0	33.3
2.125	**53.98**	76.9	76.20	43.0	14.3	100.0	33.3
2.250	**57.15**	80.0	79.38	43.0	14.3	103.0	33.3
2.375	**60.33**	83.2	82.55	43.0	14.3	106.0	33.3
2.500	**63.50**	86.4	85.73	43.0	14.3	110.0	33.3
2.625	**66.68**	89.6	85.73	43.0	15.9	113.0	33.3
2.750	**69.85**	92.7	88.90	43.0	15.9	116.0	33.3
2.875	**73.03**	98.9	95.25	43.0	15.9	117.0	33.3
3.000	**76.02**	97.5	98.43	43.0	15.9	121.0	33.3
3.125	**79.38**	100.7	101.60	43.0	19.8	-	33,3
3.250	**82.55**	105.4	104.78	43.0	19.8	132.0	33.3
3.375	**85.73**	108.6	107.95	43.0	19.8	-	33.3
3.500	**88.90**	111.8	111.13	43.0	198	138.0	33.3
3.625	**92.08**	115.0	114.30	43.0	19.8	-	33.3
3.750	**95.25**	118.1	117.48	43.0	19.8	144.0	33.3
3.875	**98.43**	121.3	120.65	43.0	19.8	-	33.3
4.000	**101.60**	124.5	123.83	43.0	19.8	151.0	33.3



Type of counter ring



Single mechanical end seal R-109/R-8U

The mechanical seals of this series have a compact structure and high resistance to aggressive media.

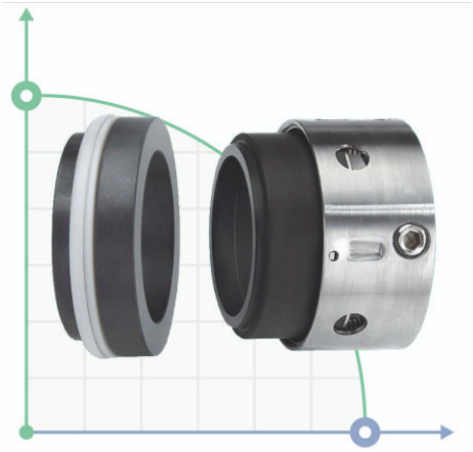
Analogue: John Crane 109, 8-1, Asseal.

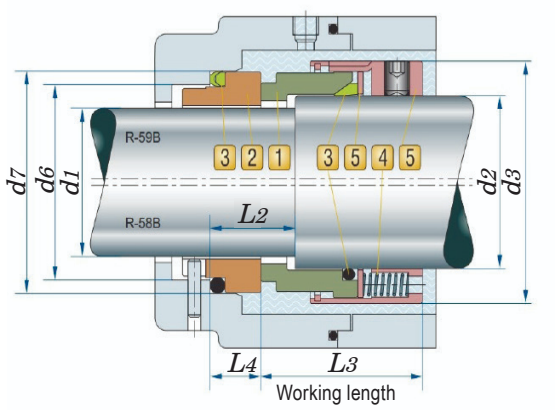
Mechanical seal **R-58B/59B**

Temperature: -40⁰~200⁰
Pressure: ≤2.5 mPa
Speed: ≤25 m/sec

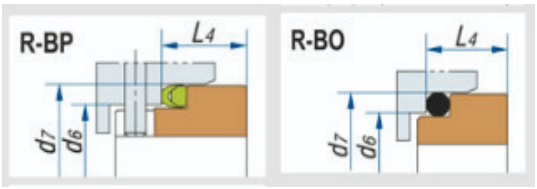
Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: SIC / TC / SUS .*
3. *Bellows: EPDM / VITON / PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





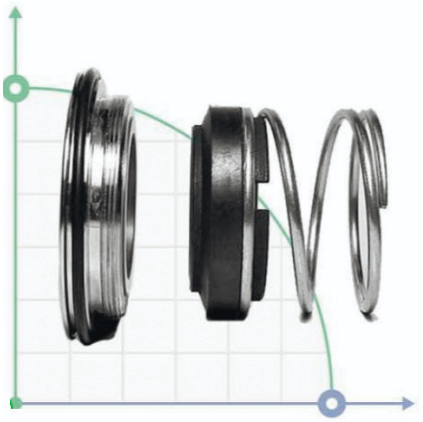
Type of counter ring



Single mechanical seal of R-59B, R-58B series is **applied to the pumps of the following series:** Ebara, Hidrostal, Godwin and etc.

Analogue: John Crane T109, T9, T909 seal Roten 90 seal, Sealol T seal, Sterling 290 seal.

d1 (H6)	**d2** (Max)	**d3** (h8)	**d6** (±0.5)	**d7**	**L2** (h8)	**L3**	**L4**
16	20	34	23	27	18	30.5	12.0
18	22	36	27	33	20	31.5	13.5
20	24	38	29	35	20	31.5	13.5
22	26	40	31	37	20	31.5	13.5
24	28	42	33	39	20	34.2	13.3
25	30	44	34	40	20	34.5	13.0
28	33	47	37	43	20	37.5	12.5
30	35	49	39	45	20	38.0	12.0
32	38	54	42	48	20	38.0	12.0
33	38	54	42	48	20	38.0	12.0
35	40	56	44	50	20	38.0	12.0
38	43	59	49	56	23	39.5	13.0
40	45	61	51	58	23	39.5	13.0
43	48	64	54	61	23	39.5	13.0
45	50	66	55	63	23	39.5	13.0
48	53	69	59	66	23	39.5	13.0
50	55	71	62	70	25	44.0	13.5
53	58	78	65	73	25	44.0	13.5
55	60	80	67	75	25	44.0	13.5
58	63	83	70	78	25	49.0	13.5
60	65	85	72	80	25	49.0	13.5
63	68	88	75	83	25	49.0	13.5
65	70	90	77	85	25	49.0	13.5
70	75	95	83	92	28	55.5	14.5
75	80	104	88	97	28	55.5	14.5
80	85	109	95	105	28	55.0	15.0
85	90	114	100	110	28	60.0	15.0
90	95	119	105	115	28	60.0	15.0
95	100	124	110	120	28	60.0	15.0
100	105	129	115	125	28	60.0	15.0



Mechanical seal **R-AL**

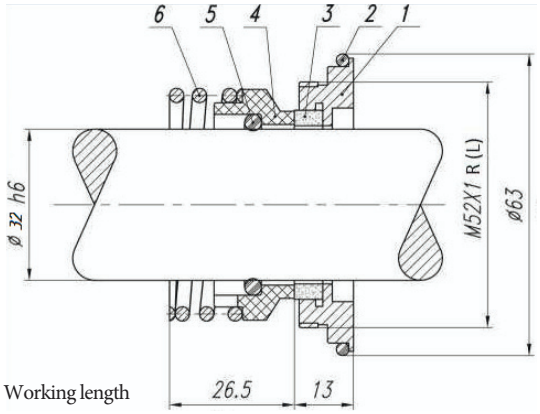
Temperature: -20⁰~150⁰
Pressure: ≤0.6 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon*
2. *Stationary ring: SIC / TC.*
3. *Bellows:EPDM .*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

Single mechanical end seal R-AL

Application in ALFA LAVAL LKH Series pump
Analog: AESSEAL T07 / T07D / T07X, Burgmann M2N, Roten UNITEN 22, Hecker HN 400A.



Pumps for alcohol

The pumps in this series are made of Ex explosion-proof equipment. Explosion protection of electrical equipment is based on the principle of cooling the explosion products and limiting the flame by means of gaps to a temperature at which the ignition of an explosive mixture located outside the equipment shell is excluded. The main enterprises that have explosive zones are petrochemical, chemical, oil refining, wood processing, paint and varnish, production and transportation of powdered sugar, wood flour, and coal dust. Designed for: increasing the pressure in the existing liquid supply system, which requires an explosion-proof version of the pump unit, the EX version of the pump.

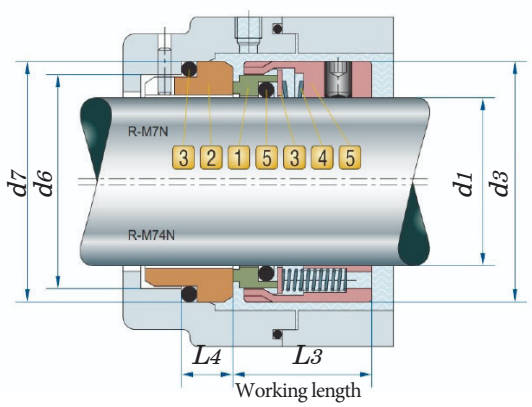
The impeller that guides the impeller of a pump and all parts that come in contact with the liquid are made of stainless steel by stamping and casting, which means that the flow path is smooth and prevents contamination. The shaft and coupling are made of high quality hard alloy and have an end seal that serves for a long time and does not leak. Multistage pumps are made of stainless steel. Reliable, silent and easy-to-operate pumps are used in municipal, industrial and agricultural facilities. For example, in fire extinguishing systems, booster systems, water treatment systems, irrigation systems

Mechanical seal **R-M7N/M74N**

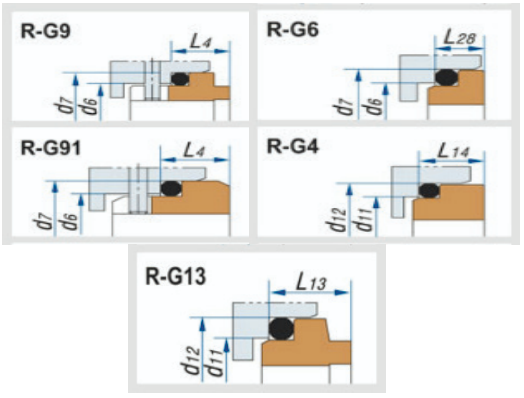
Temperature: -20⁰~200⁰
Pressure: ≤1.6 mPa
Speed: ≤20 m/sec

Materials

1. *Rotary ring: Carbon / SIC / SUS.*
2. *Stationary ring: Carbon/SIC/SUS.*
3. *Bellows: EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring

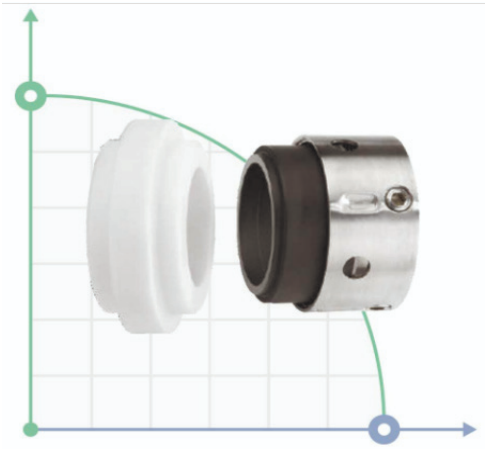


Single mechanical seal R-M7N / M74N

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetze, etc.

Analogue: Burgmann M7N, M74, Aesseal W07DM, W07DMB, Vulcan 1677.

d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4	L28	d12 (h8)	L13	L14
16	27	27	25.0	10.0	6.6	28.0	9.0	7.5
18	33	33	26.0	11.5	7.5	30.0	10.0	8.0
20	35	35	26.0	11.5	7.5	35.0	9.5	7.5
22	37	37	26.0	11.5	7.5	35.0	9.5	7.5
24	39	39	28.5	11.5	7.5	38.0	9.5	7.5
25	40	40	28.5	11.5	7.5	38.0	9.5	7.5
28	43	43	31.0	11.5	7.5	42.0	11.0	9.0
30	45	45	31.0	11.5	7.5	45.0	11.0	10,5
32	47	48	31.0	11.5	7.5	48.0	11.0	10,5
33	48	48	31.0	11.5	7.5	50.0	11.5	10,5
35	50	50	31.0	11.5	9.0	52.0	11.5	11.0
38	55	56	31.0	14.0	9.0	55.0	11.5	10.3
40	57	58	31.0	14.0	9.0	58.0	11.5	10.8
43	60	61	31.0	14.0	9.0	62.0	14.3	12.0
45	62	63	31.0	14.0	9.0	64.0	14.3	11.6
48	65	66	31.0	14.0	9.0	68.4	14.3	11.6
50	67	70	32.5	15.0	9.5	69.3	14.3	11.6
53	70	73	32.5	15.0	11.0	72.3	14.3	12.3
55	72	75	32.5	15.0	11.0	75.4	15.3	13.3
60	81	80	37.5	15.0	11.0	80.4	15.3	13.3
63	84	83	37.5	15.0	11.0	83.4	15.3	13.3
65	86	85	37.5	15.0	11.0	85.4	15.3	13.0
68	89	90	34.5	18.0	11.3	91.5	16.0	13.7
70	91	92	42.0	18.0	11.3	92.0	15.3	13.0
75	99	97	42.0	18.0	11.3	99.0	15.3	14.8
80	104	105	41.8	18.2	12.0	104.0	16.3	14.8
85	109	110	41.8	18.2	14.0	109.0	16.3	14.8
90	114	115	46.8	18.2	14.0	114.0	16.3	14.8
95	119	120	47.8	17.2	14.0	120.3	17.3	15.8
100	124	125	47.8	17.2	14.0	123.3	17.3	15.8
105	138	134.3	47.0	20.0	-	-	-	-
110	143	140.3	47.0	20.0	-	-	-	-
115	148	148.3	47.0	20.0	-	-	-	-
120	153	150.3	47.0	20.0	-	-	-	-
125	158	154.3	47.0	20.0	-	-	-	-



Mechanical seal **R-109B/8B-1**

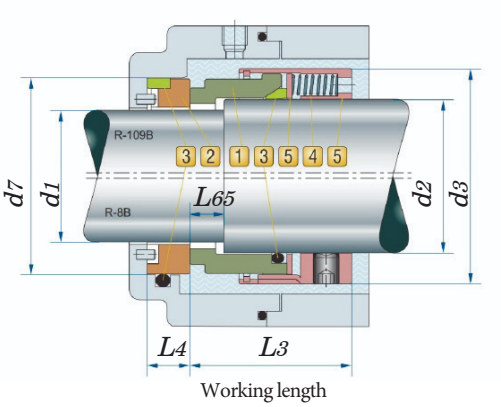
Temperature: -40⁰~200⁰
Pressure: ≤5.8 mPa
Speed: ≤25 m/sec

Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: SIC / TC.*
3. *Bellows: EPDM / VITON / PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

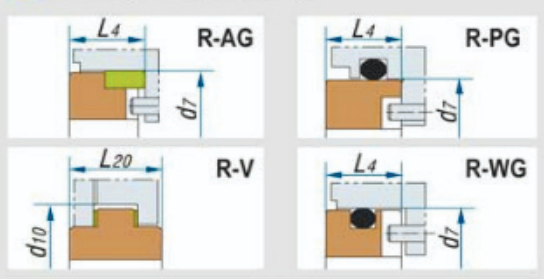
R-109B/8B-1

	d1 (H6)	d2 (Max)	d3 (h8)	d7	L3 (±0.5)	L65 (h8)	L4
1.000	22.2	25.40	40.3	41.28	33	6.4	11.1
1.125	25.4	28.58	43,15	44,45	35	7.9	11.1
1.250	28.6	31.75	48.3	47.63	35	7.9	11.1
1.375	28.6	34.93	51.5	50.80	37	8.7	11.1
1.500	31.8	38.10	54.6	53.98	37	8.7	11,1
1.625	34.9	41.28	61.0	60.33	45	8.7	12.7
1.750	38.1	44.45	64.0	63.50	45	9.5	12.7
1.875	41.3	47.63	67.3	66.68	45	9.5	12.7
2.000	44.5	50.80	70.5	69.85	45	9.5	12.7
2.125	47.6	53.98	76.9	76.20	52	11.1	14.3
2.250	50.8	57.15	80.0	79.38	52	11.1	14.3
2.375	54.0	60.33	83.2	82.55	52	11.1	14.3
2.500	57.2	63.50	86.4	85.73	52	11.1	14.3
2.625	60.3	66.68	89.6	85.73	52	11.1	15.9
2.750	63.5	69.85	92.7	88.90	52	11.1	15.9
2.875	66.7	73.03	95.9	95.25	52	11.1	15.9
3.000	69.9	76,02	975	98.43	52	11.1	15.9
3.125	73.0	79.38	100.7	101.60	52	11.1	19.8
3.250	76.2	82.55	105.4	104.78	52	14.3	19.8
3.375	79.4	85.73	108.6	107.95	52	14.3	19.8
3.500	82.6	88.90	111.8	111.13	52	14.3	19.8
3.625	85.7	92.08	115.0	114.30	52	14.3	19.8
3.750	88.9	95.25	118.1	117.48	52	14.3	19.8
3.875	92.1	98.43	121.3	120.65	52	14.3	19.8
4.000	95.3	101.60	124.5	123.83	52	14.3	19.8



Working length

Type of counter ring

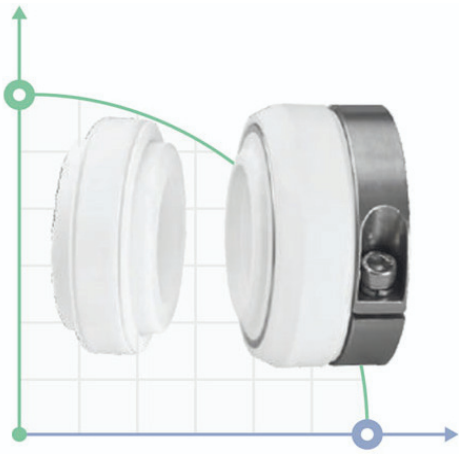


Single mechanical seal R-109B/8B-1

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetze, etc.

Analogue: John Crane type 109B, Vulcan 1609B, John Crane type 8B-1, Vlcan 1609 BS.

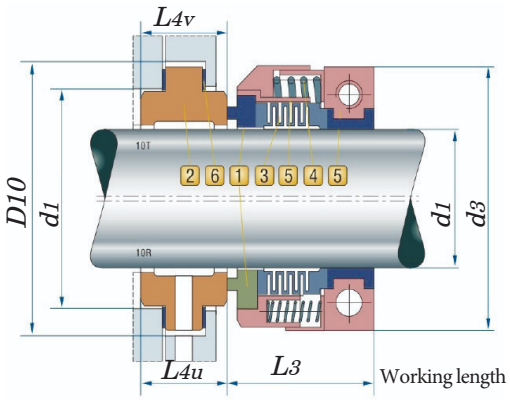
Mechanical seal **R-10T/10R**



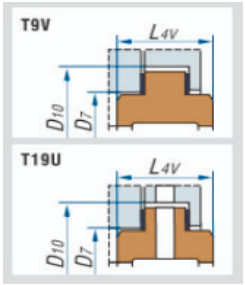
Temperature: -20⁰~120⁰
Pressure: ≤0.8 mPa
Speed: ≤13 m/sec

Materials

1. *Rotary ring: Carbon / SIC.*
2. *Stationary ring: SIC / TC / Ceramic/ SUS.*
3. *Bellows: PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring



Single mechanical seal R-10T/R-10R

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetz, etc.

Analogue: John Crane 10T / 10R. Anga A10 / 11, R-162 (T/R), R-WB2 (T/R)

R-10T/10R (Inch)

	d1 (H6)	d3 (Max)	d7 (h8)	D10	L3 (±0.5)	L4v	L4u (h8)
0.750	19,05	54	36,51	48	31	17,6	28,65
0.875	22,23	57	39,69	51	31	17,6	28,65
1.000	25,40	61	42,86	54	33	17,6	28,65
1.125	28,58	67	50,8	65	36	27.0	38,25
1.250	31,75	70	53,98	68	37	27.0	38,25
1.375	34,93	73	57,15	71	38	27.0	38,25
1.500	38,10	76	63,5	78	38	27.0	38,25
1.625	41,28	80	66,68	81	40	27.0	38,25
1.750	44,45	83	69,85	84	40	27.0	38,25
1.875	47,63	86	73,03	87	43	27.0	38,25
2.000	50,80	89	79,38	97	43	33.30	47,58
2.125	53,98	103	82,55	100	53	33.30	47,58
2.250	57,15	107	85,73	103	53	33.30	47,58
2.375	60,33	110	88,9	106	53	33.30	47,58
2.500	63,50	113	92,08	110	53	33.30	47,58
2.625	66,68	116	95,25	113	53	33.30	47,58
2.750	69,85	118	98,43	116	53	33.30	47,58
2.875	73,03	122	100,01	117	53	33.30	47,58
3.000	76,20	126	103,19	121	53	33.30	47,58
3.250	82,55	150	114,3	132	73	33.30	47,58
3.500	88,90	156	120,65	138	73	33.30	47,58
3.750	95,25	163	127	144	73	33.30	47,58
4.000	101,6	169	133,35	151	73	33.30	47,58

PTFE seals are designed for use in extremely aggressive environments: strong acids, organic compounds, salt solutions, and chemically active compounds.

- The mechanical seal design prevents slipping on the shaft and premature wear.
- Flexible PTFE bellows design. Maximum corrosion resistance. Eliminates the possibility of misalignment of the bellows.

Mechanical seal **R-152**

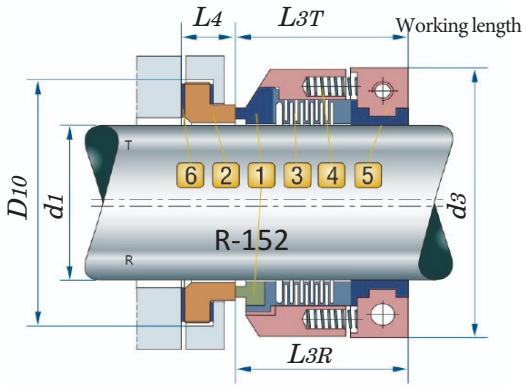
Temperature: -20⁰~120⁰
Pressure: ≤0.5 mPa
Speed: ≤3000 rpm

Materials

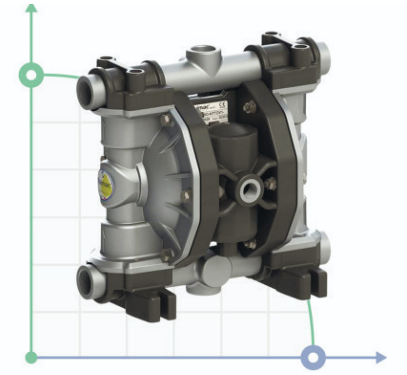
1. *Rotary ring: Ceramic / SIC / PTFE.*
2. *Stationary ring: Carbon / SIC / AL.*
3. *Bellows: PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-152 (T/R)

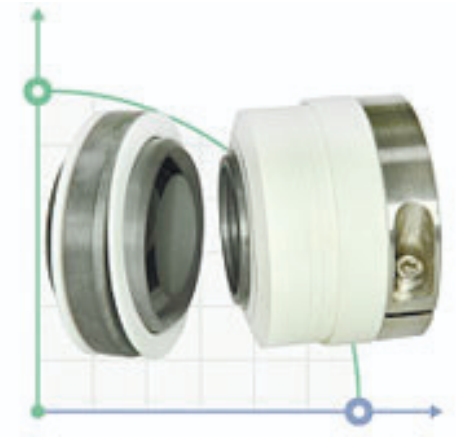
d1 (H6)	d3 (Max)	D10 (h8)	L3T	L3R (±0.5)	L4 (h8)
25	60	48	42	45	13
30	67	53	42	45	13
35	72	58	42	45	13
40	78	63	42	45	13
45	84	68	44	46	16
50	88	73	46	46	16
55	95	78	46	46	16
60	100	83	46	46	17
65	105	88	46	46	17



Pneumatic diaphragm pumps



Pneumatic diaphragm pumps are designed for pumping abrasive, shear-sensitive and high-viscosity liquids. Perfectly cope with heavy and flowing liquids. Buy pneumatic diaphragm pumps for pumping chemical, food, pharmaceutical and cosmetic liquids and explosive atmospheres. By contacting our specialists, you will get a high-quality selection of a pneumatic diaphragm pumps and consultation. We will be happy to help with the solution! Phoenix series of pneumatic diaphragm pumps manufactured by the Italian company FLUI-MAC are represented by a wide range of models for solving production tasks of any complexity. PHOENIX membrane pumps, with an innovative air distribution system, pump chamber geometry and valve system allow pumping a wide range of aggressive products (concentrated acids, alkalis, solvents, varnishes, adhesives, liquids with suspended particles up to 10 mm in size, abrasive products, etc.) with a viscosity from 6000 to 55000 SPZ.THE flow part of Phoe - NIX membrane pumps is made of materials such as PVDF, Alu, POMc, PP, and AISI316. The main working elements (membranes, ball valves, valve seats) are made of PVDF, Alu, POMc, PP, AISI316, PTFE, NBR, PE, SANTOPRENE, HYTREL.



Single mechanical seal R-152/WB2

Mechanical seal **WB2**

Temperature: -20⁰~120⁰
Pressure: ≤0.5 mPa
Speed: ≤3000 rpm

Materials

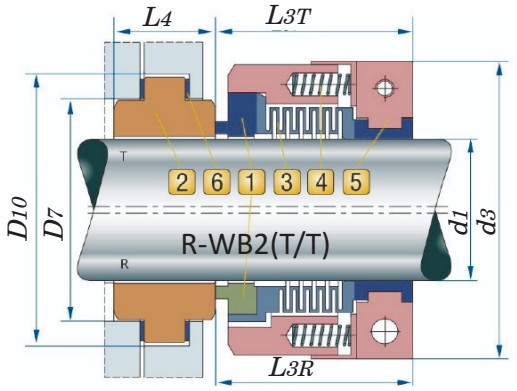
1. *Rotary ring: Ceramic / SIC / PTFE.*
2. *Stationary ring: Carbon / SIC / AL.*
3. *Bellows: PTFE.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

Used in pumps: Lowara, Ebara (3M), EMU, Flugt, Fristam, GEA Tuchenhagen, Goetze, etc.

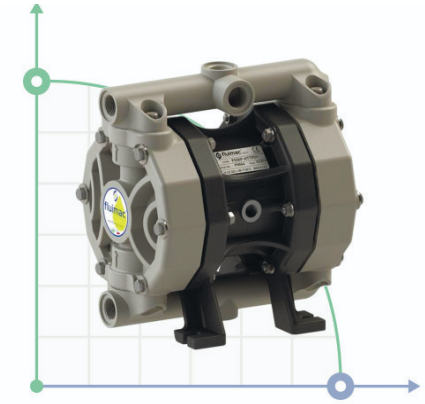
Analogue: John Crane 10T / 10R. Anga A10 / 11, R-162 (T/R), R-WB2 (T/R)

R-WB2(T/R)

d1 (H6)	d3 (Max)	D10 (h8)	d7	L3T (±0.5)	L3R (h8)	L4
25	60	60	47	42	45	27
30	67	67	53	42	45	27
35	72	70	57	42	45	27
40	78	76	62	42	45	27
45	84	82	67	44	46	27
50	88	86	72	46	46	27
55	95	90	77	46	46	27
60	100	95	82	46	46	27
65	105	100	87	46	46	27

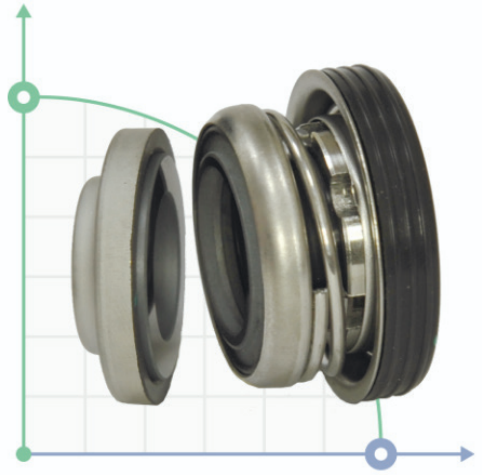


Pneumatic diaphragm pumps



Fluimac diaphragm air pumps of Phoenix series are low-cost pumps manufactured in Europe. They allow you to pump not only clean, but also aggressive, abrasive, sticky and viscous media. Like other diaphragm pumps, they do not have an electric motor and are powered by compressed air energy. The performance of the models is regulated by the air consumption of the connected compressor. Pumps are represented by P7 models-18-30-50- 65-100-160-250-500-700 certified according to strict industry standards, including ATEX. They have a classic two-membrane design with two peripheral working cameras. Fluimac Phoenix, among other membrane pumps, is favourably distinguished by economic prices, on the background of its high technical indicators. Fluimac positions the Phoenix series as an innovative new-generation product. For example, P7 - 18-50 pumps are equipped with an internal pneumatic exchanger, this is when a single air valve controls the supply of air to the diaphragms. On P models-65-100-160-250-500-700 there is a two-way air valve (external air exchange), which controls both the supply and the flow.

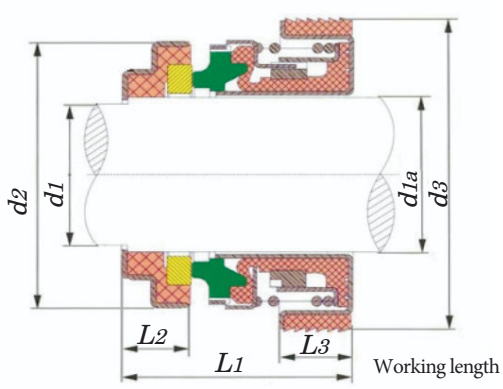
Mechanical seal **R-LPS**



Temperature: -20⁰~150⁰
Pressure: ≤0.6 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



R-LPS

d1	d1a (H6)	d2	d3 (h8)	L1 (±0.5)	L2	L3 (h8)
15	**12**	34	41	29,5	10	10

Ex Pumps

Ex pumps are designed for pumping flammable, aggressive, toxic, ex-plosive, easily volatile liquid in petrochemical and chemical industries, most often in the environmental industry. Used in the manufacture of solvents, alkalis, acids, paints and varnishes. In its design, it has a shielded motor and a spiral casing. It is made of lined or stainless steel; a chemically resistant polymer, rubber, and other material with increased chemical inertness, to avoid reacting with the pumped mass. The series has a built-in explosion protection system and it is manufactured in accordance with European ATEX certificates and has been designed to be particularly suitable for heavy-duty vehicles, i.e. for those demanding fleets that need to distribute fuel such as petrol, diesel or kerosene quickly.

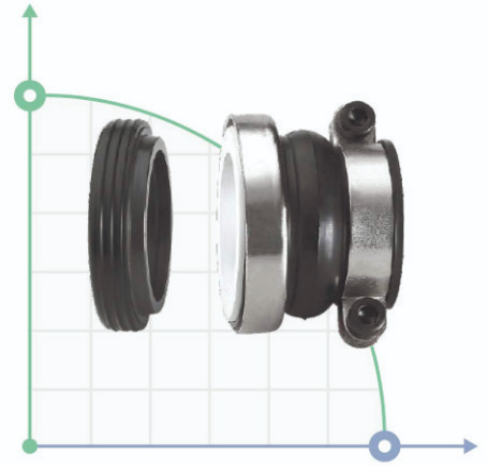
Very important accessories are available for the entire line of new EX pumps, including: a remote control kit, a remote control of an electrical unit with a nozzle connection, and mounting feet that are compatible with many applications.

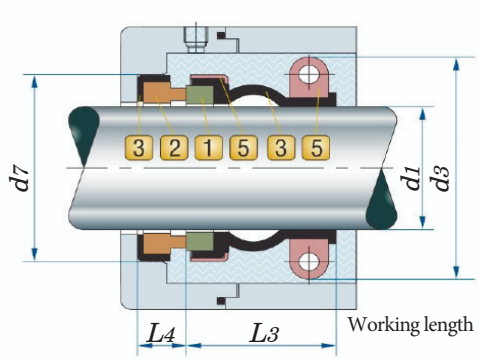
Mechanical seal **R-XB**

Temperature: -20⁰~120⁰
Pressure: ≤0.4 mPa
Speed: ≤3000 rpm

Materials

1. *Rotary ring: Ceramic / SIC .*
2. *Stationary ring: Carbon / SIC .*
3. *Bellows: NBR / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

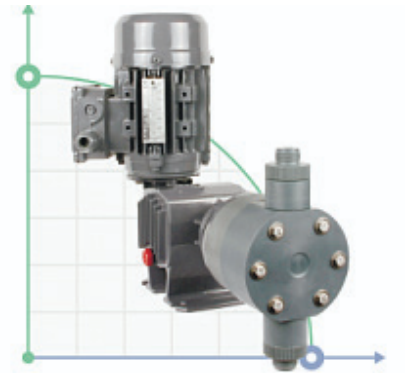




R-XB

d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
25	50.0	41.0	30.0	12.0
30	56.5	47.5	30.0	12.0
35	63.5	53.0	32.2	12.5

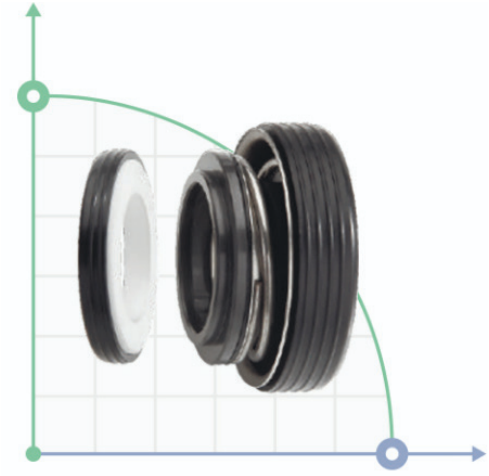
Plunger pump



Plunger pumps are dosing pumps, one of the types of volumetric pumps, the displacing body of which has a plunger that carries out reciprocating motion. The pump casing is made of cast aluminum, protected by epoxy, anti-acid paint. The pump performance is controlled by a micrometer knob that controls the length of the plunger stroke. The performance can be adjusted while the pump is running. The pump is driven by a vertically positioned motor. The transmission operates on the principle of idling (return of the piston occurs by means of a return spring). Standard versions:

- configuration AA / AISI - pump head - stainless steel AISI 316L, O-ring - NBR, plunger - stainless steel AISI 316L
- configuration AP - pump head - stainless steel AISI 316L, O-ring-FPM, plunger - stainless steel AISI 316L
- configuration BA / PVC - pump head - PVC, O-ring - FPM, plunger - Ceramic

These new series have been fully developed, designed and manufactured using only high-quality materials that are manufactured in Italy using cutting-edge CAD design.



Mechanical seal **R-6SB/SB**

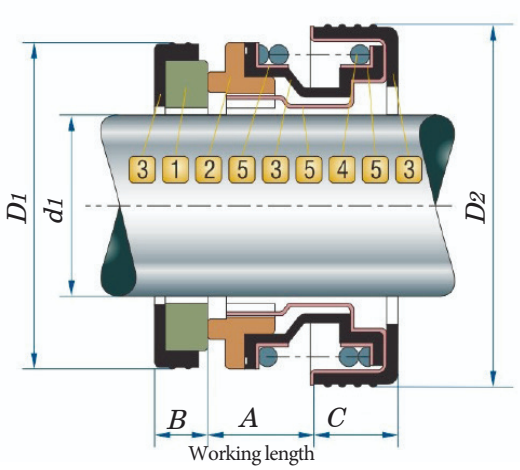
Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 m/sec

Materials

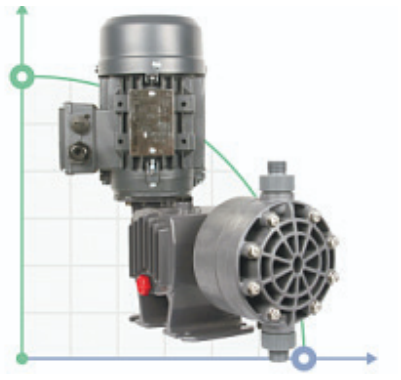
1. *Rotary ring: Ceramic / SIC*
2. *Stationary ring: Carbon/Sic*
3. *Bellows: NBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-6SB	d1 (H6)	D1 (Max)	D2 (h8)	A (±0.5)	B	C (h8)
	12	25	32	5.2	5	9.0
	16	31	41	6,8	5	10.0
	20	35	45	6.0	5	11,5
	25	44	52	8,5	7	11,5
	30	48	58	8,8	8	12,5

R-SB	d1 (H6)	D1 (Max)	D2 (h8)	A (±0.5)	B	C (h8)
	12	25	30	6.0	5	8,5
	17	31	35	9.0	7	9,5
	20	36	40	12.0	7	9,5
	25	42	50	10,5	8	13,5
	28	45	54	10.0	8	11,5
	30	48	54	10.0	8	11,5

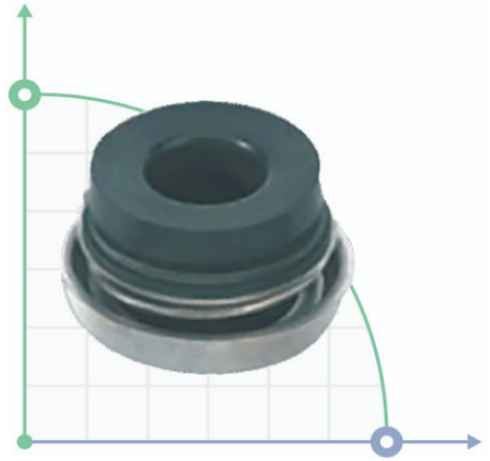


Diaphragm pumps



Diaphragm pumps-volumetric dosing pumps, the working body of which is a flexible membrane fixed at the edges. Membrane pumps creates a low pressure, used for dosing chemicals. The pump body is made of cast aluminum, protected by epoxy, anti-acid paint.
The pump performance is controlled by a micrometer knob that controls the length of the plunger stroke. The performance can be adjusted while the pump is running. The pump is driven by a vertically positioned motor. Box
the transmission operates on the principle of idling (the return of the piston occurs using the return spring).Standard versions:

- configuration AA / AISI - pump head - stainless steel AISI 316L, O-ring - NBR, plunger - stainless steel AISI 316L
- configuration AP - pump head - stainless steel AISI 316L, O-ring - FPM, membrane - PTFE.
- configuration BA / PVC - pump head - PVC, O-ring - FPM, membrane - PTFE.

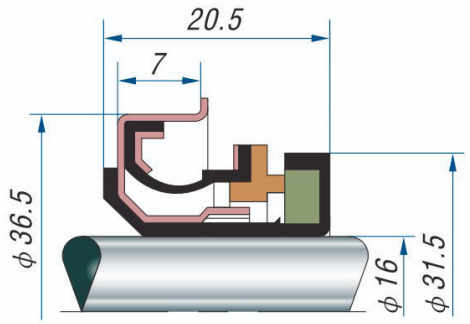


Mechanical seal **R-6CK-16**

Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 rpm

Materials

1. *Rotary ring: Ceramic/Sic*
2. *Stationary ring: Carbon/Sic*
3. *Bellows: NBR .*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Mechanical seal R-6CK16

Is applicable to pumps for pumping water, oil and middle corrosive environments, etc.

Analogue: Burgmann, John Crane, Roten, AESSEAL, Anga, Vulcan, Lidering, DIMER, Flowserve.

Valve plate EDV

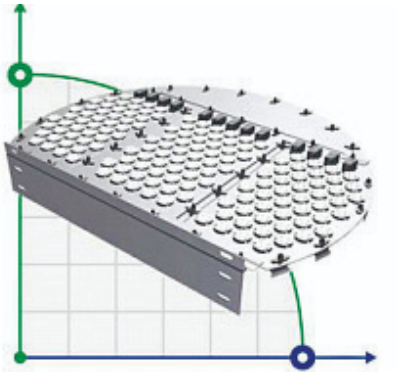


Plate contact devices of rectification and absorption devices are classified:

- by the number of flows
- by the types and design of contact elements;
- by the nature of the phase interaction in the contact zone;
- by the organization of liquid overflow, etc.

According to the number of threads (drains), plates perform one -, two -, and multithreaded. They also use multi-spillage plates with evenly distributed plums and plates with a cascading arrangement of the web. Multithreaded and multi spillage plates are used in large diameter columns and at significant liquid consumption. Such plates ensure a more even liquid level and steam distribution over the area of contact devices. In the contact zone, depending on the direction of the vapor and liquid phases movement, are distinguished direct-flow, counter-flow and cross-flow plates. According to the organization of liquid overflow, plates are divided into overflow and non-overflow (fail-ure type).
According to the type of contact elements, the plates are divided into:

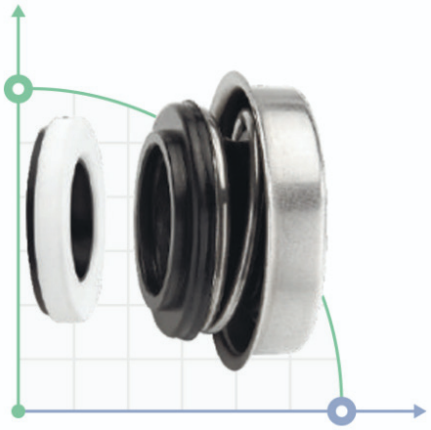
- caps (with capsule and tunnel caps);
- with S-shaped elements;
- strainers with rebound elements;
- strainer-valve;
- valve (single-and double-flow);
- valve ballast;
- latticed;
- louver-valve;
- jet-directed (scaly).

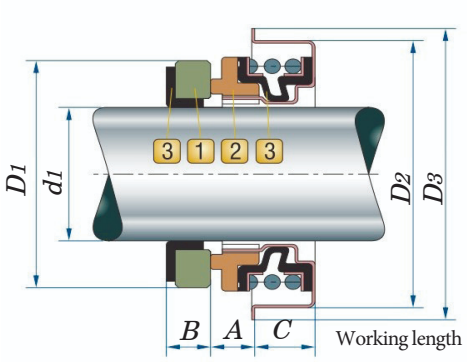
Mechanical seal **R-6A**

Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 rpm

Materials

1. *Rotary ring: Ceramic/SIC.*
2. *Stationary ring: Ceramic/SIC.*
3. *Bellows: NBR/HNBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

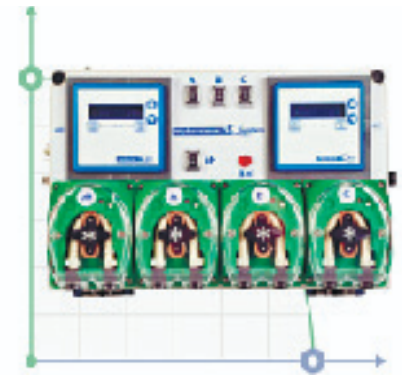




R-6A	d1 (H6)	D1 (Max)	D2 (h8)	D3 (±0.5)	A	B	C
0.500	**12,70**	23,47	28,58	34,9	5,2	5,41	8,74
0.625	**15,88**	28,58	36,50	41,3	6,7	5,41	8,59
0.750	**19,05**	30,15	40,00	43,6	6.0	5,54	9,53

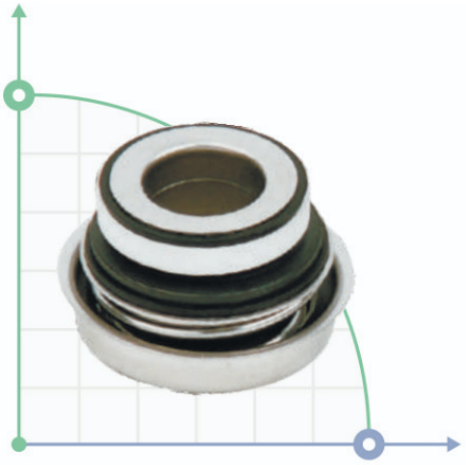
R-6A	d1 (H6)	D1 (Max)	D2 (h8)	D3 (±0.5)	A	B	C
	12	24	30,0	35,0	5,2	5,0	8,0
	15	29,5	36,5	41,3	6,7	5,0	8,0
	16	29,5	36,5	41,3	6,7	5,0	8,0
	20	34,0	40,0	43,6	6,0	5,0	9,5

Hydroponics



Metering control stations for hydroponic systems. Hydroponics is a method of growing plants in artificial environments without soil. Plant nutrition is obtained from a nutrient solution prepared from nutrients by dosing pumps of a particular substance and nutrients. Hydroponics allows you to regulate the growing conditions of plants-to create a diet that fully meets the needs of plants in nutrients. Metering control stations for hydroponic systems. The root system of plants is developed when growing them using the hydroponic method on solid substrates that have no nutritional value, in water or in humid air Aeroponics. An example of an organic substrate is coconut fiber: this is ground coconut shell and bast from which the iron and magnesium salts are washed. In the natural environment, coconut fiber serves as the initial soil for the roots of a newborn palm tree. Coconut fiber is lighter than water, so when watering, it does not sink like a soil, but swells, filling with air. Each fiber contains a large number of pores and tubules in its thickness. By the force of surface tension, the tubules are filled with a working solution, but the root hair drinks the contents, sprouting nearby. The smooth surface of the fiber allows the root to slide freely from the drunk to the next.

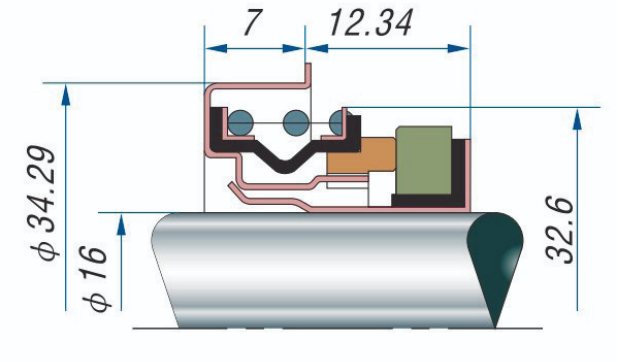
Mechanical seal **R-6-CH-16**



Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 m/sec

Materials

1. *Rotary ring: Ceramic / SIC*
2. *Stationary ring: Carbon/Sic*
3. *Bellows: NBR / HNBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

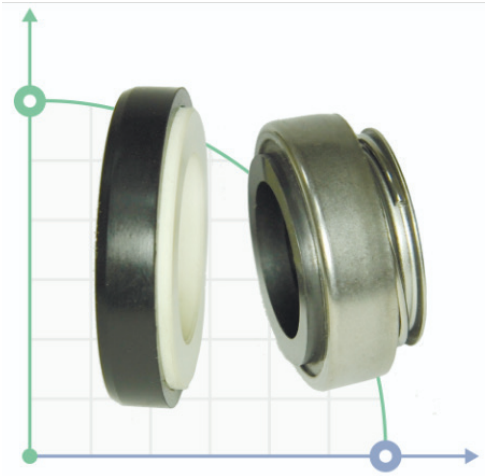


Is applicable to pumps for pumping water, oil and middle corrosive environments, and so on.

Dosing systems for swimming pools

Automatic dosing and control systems for swimming pools. Problems of waterdisinfection in swimming pools. Sodium hypochlorite makes the water alkaline, soapy by touch, and people who have bathed in such water will have dry skin and red eyes. To restore an acceptable pH 72, you need to add acid at the same time.

For disinfection of the pool with a volume of 1000 m3 for one day, you will need from 30 to 80 liters of 17% hypochlorite. To adjust the pH, you need to use 3 to 20 liters of sulfuric acid. As you know, it is not possible just to pour a canister of hypochlorite and a bottle of sulfuric acid into the pool. This will be a disaster! That is why we need automatic dosing. The amount of added disinfectants must be strictly dosed. Dosage "be feel" means adding reagents to the pool and manual "test tube" measurement of water parameters in a certain period of time. For professional dosing of disinfection products, pool owners install automatic eTWIN dosing stations - a compact, easy-to-use equipment consisting of two dosing pumps and two controllers for 2 parameters. Controllers can measure chemical values in pools, such as pH, redox potential Rx (mV), or CL chloroform concentration (ppm). The materials used in eTWIN are suitable for dispensing the most popular products that are used in the pool industry.



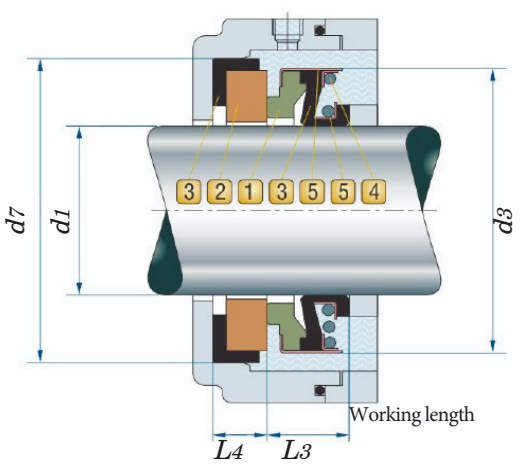
Mechanical seal **R-BT-AR**

Temperature: -20⁰~150⁰
Pressure: ≤0.4 mPa
Speed: ≤10 m/sec

Materials

1. *Rotary ring: Carbon / SIC .*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
R-BT-AR-6	**6**	18.0	18.0	10.0	4.0
R-BT-AR-8S	**8**	18.0	22.0	11.0	4.0
R-BT-AR-8M	**8**	20.0	21.0	13.0	6.0
R-BT-AR-8L	**8**	24.0	26.0	11.0	8.0
R-BT-AR-10	**10**	24.0	26.0	11.0	8.0
R-BT-AR-11	**11**	24.0	26.0	13.0	8.0
R-BT-AR-12	**12**	24.0	26.0	13.0	8.0
R-BT-AR-13	**13**	24.0	26.0	13.0	5,5
R-BT-AR-13H	**13**	24.0	26.0	13.0	8.0
R-BT-AR-14S	**14**	26.0	28.0/28.5	13.0	8.0
R-BT-AR-14M	**14**	28.0	28.0/28.5	13.0	8.0
R-BT-AR-14L	**14**	32.0	29.5/38.0	13.0	8.0
R-BT-AR-15S	**15**	28.0	30.0	13.0	8.0
R-BT-AR-15M	**15**	32.0	29,5	13.0	8.0
R-BT-AR-15L	**15**	39.0	38.0	13.0	8.0
R-BT-AR-16S	**16**	28.0	30.0	13.0	8.0
R-BT-AR-16M	**16**	32.0	29,5	13.0	8.0
R-BT-AR-16L	**16**	39.0	42.0	13.0	8.0
R-BT-AR-17	**17**	39.0	42.0	13.0	8.0
R-RT-AR-18	**18**	39.0	42.0	13.0	8.0
R-BT-AR-19	**19**	39.0	42.0	13.0	8.0
R-BT-AR-20S	**20**	35.0	38.0	13.0	8.0
R-BT-AR-20M	**20**	39.0	42.0	13.0	8.0
R-BT-AR-20L	**20**	42.0	45.0	13.0	10.0
R-BT-AR-22S	**22**	39.0	42.0	13.0	8.0
R-BT-AR-22	**22**	42.0	45.0	13.0	10.0
R-BT-AR-23	**23**	47.0	50.0	13,5	10.0
R-BT-AR-24	**24**	47.0	50.0	13,5	10.0
R-BT-AR-25	**25**	47.0	50.0	13,5	10.0
R-BT-AR-25S	**25**	41,5	45/50	13,5	10.0
R-BT-AR-26	**26**	47.0	50.0	13,5	10.0
R-BT-AR-27	**27**	47.0	50.0	13,5	10.0
R-BT-AR-28	**28**	54.0	57.0	15.0	10.0
R-BT-AR-30	**30**	54.0	57.0	15.0	10.0
R-BT-AR-32	**32**	54.0	57.0	15.0	10.0
R-BT-AR-35	**35**	60.0	63.0	16.0	10.0
R-BT-AR-38	**38**	65.0	68.0	18.0	12.0
R-BT-AR-40	**40**	65.0	68.0	18.0	12.0
R-BT-AR-45	**45**	70.0	73.0	20.0	12.0
R-BT-AR-50	**50**	85.0	88.0	23.0	15.0
R-BT-AR-55	**55**	85.0	88.0	23.0	15.0
R-BT-AR-60	**60**	105.0	110.0	30.0	15.0
R-BT-AR-65	**65**	105.0	110.0	30.0	15.0
R-BT-AR-70	**70**	105.0	110.0	32.0	15.0



Mechanical seal R-BT-AR

Used in pumps AL-KO, Calpeda (MXP, MGP, NGL), Kripsol, Pedrolo (JCR, PRO-NGA 1A), Grundfos JP Basic 4 PT and in another pumps.

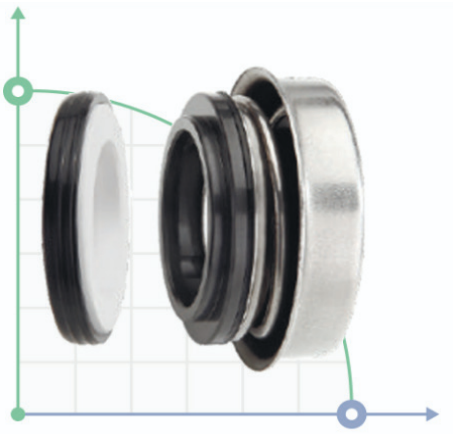
Analog of mechanical seals: Burgmann BT-AR, AESSEAL B01, Vulcan 18, Anga C10.

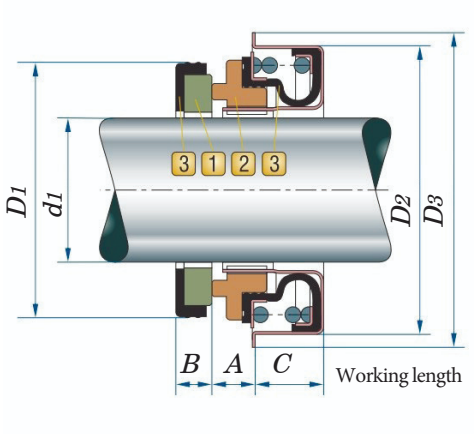
Mechanical seal **R-6B**

Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 rpm

Materials

1. *Rotary ring: Ceramic/SIC.*
2. *Stationary ring: Ceramic/SIC.*
3. *Bellows: NBR/HNBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





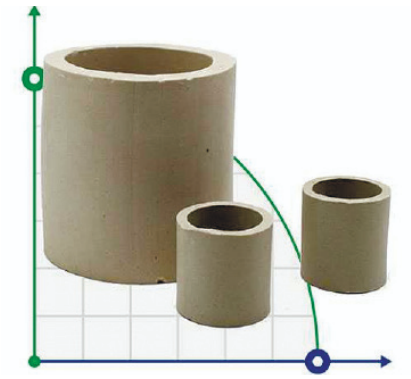
R-6B (Inch)

d1 (H6)	D1 (Max)	D2 (h8)	D3	A	B (±0.5)	C
9,53	22,23	28,58	31,8	4,1	7,92	7,92
12,70	25,40	28,58	34,9	5,2	7,92	8,74
15,88	31,75	36,50	41,3	6,7	10,31	8,59
19,05	34,93	40.00	43,8	6.0	10,31	9,53

R-6B (Ci)

d1 (H6)	D1 (Max)	D2 (h8)	D3	A	B (±0.5)	C
10	23	24.00	29.0	4,1	4	8.0
12	25	28,58	32.0	5,2	5	8.0
12M	24	30.00	35.0	5,2	5	8.0
16	31	36,50	41,5	6,7	5	8.0
20	35	40.00	43,8	6.0	5	9,5
25	44	47.00	51.0	8.0	7	10.0
30	48	52.00	57.0	8.0	8	11.0

Tower packing



Inert ceramic balls d 12 mm are widely used as a catalyst and supporting material of the absorbent layer in the oil refining, petrochemical, gas processing industries and are characterized by incomparably high impact resistance, temperature resistance and high crushing strength.

Bulk density-1380 kg / cubic meter
Void ratio - to 40%
Available sizes: 1.5 mm, 3mm, 6mm, 10mm, 13mm, 16mm, 19mm, 25mm, 30mm, 38mm, 50mm, 75mm.

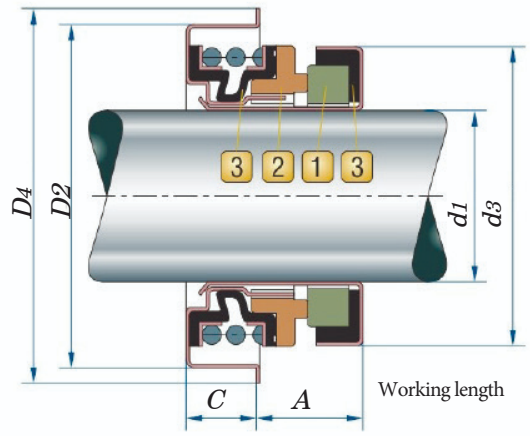
Rashig 15 mm ceramic rings are designed to fill the working volumes of packing columns and devices in order to increase the intensity of heat and mass transfer processes in the equipment of chemical, petrochemical, Sewerage and water supply systems, production of ammonia and mineral fertilizers. Rashig ceramic rings are irregular attachments and have a surface 30% larger than cylinders and balls. Rashig rings are made of carbon steel, stainless steel, PP, PVC, PVDF, and ceramics.

Mechanical seal **R-6C**

Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 rpm

Materials

1. *Rotary ring: Ceramic/Sic.*
2. *Stationary ring: Carbon/Sic.*
3. *Bellows: NBR / HNBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



R-6C	d1 (H6)	d3 (Max)	D2 (h8)	D4 (±0.5)	A	C (h8)
R-6C-12	**12**	25	30,0	35,0	9,7	8,0
R-6C-12S	**12**	25	28,58	32,0	9,7	8,0
R-6C-12L	**12**	25	33,4	38,0	8,4	6,7
R-6C-13	**13**	25	30,0	35,0	9,7	8,0
R-6C-15	**15**	30	36,5	41,5	11,5	8,5
R-6C-16	**16**	30	36,5	41,5	11,5	8,5
R-6C-16L	**16**	30	38,1	41,5	11,5	8,5
R-6C-20S	**20**	37	38,0	43,7	12,5	9,5
R-6C-20	**20**	37	40,0	43,7	12,5	9,5

Metering pumps

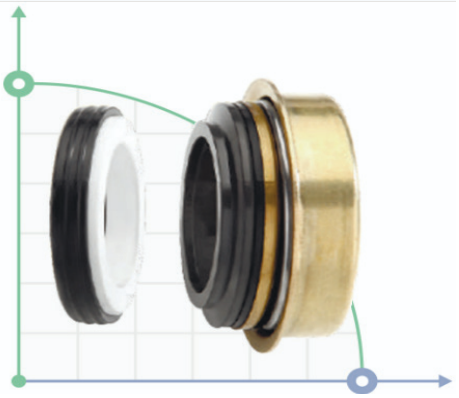
Metering pumps are characterized by impeccable quality that meets European standards. The equipment is certified according to the tech-nical regulations of the CU, regulating the safety and electromagnetic compatibility of devices. It is one of the leading suppliers of metering pumps. Metering pumps are widely used in the field of water treat-ment, as well as in food, chemical, pharmaceutical and other indus-tries. We are a representative of manufacturers of metering pumps, so we offer a full range of products at minimum prices. We also provide services for maintenance and repair of equipment. Applications: Hypochlorite pump, alkali pump, acid pump, flocculant pump, chemistry pump, pool pump, water treatment pump, food additives pump, glue pump, additive pump, enzyme pump, sulfate pump, solvent pump. Pumps for calcium hydroxide Ca (OH)2 (lime milk) acid, aggressive medium, aggressive liquid, chemical solution, lime milk chemical liquid, sulfuric acid pump, hydrochloric acid pump

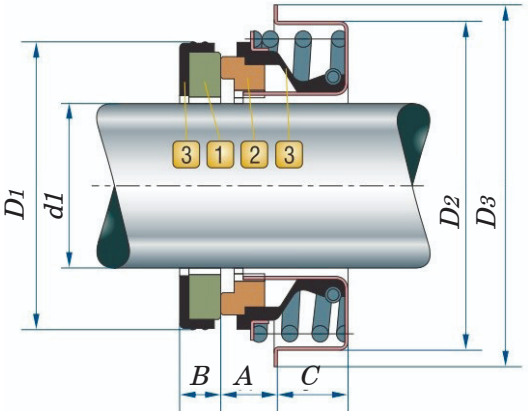
Mechanical seal **R-6BG**

Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 m/sec

Materials

1. *Rotary ring: Ceramic/Sic*
2. *Stationary ring: Carbon/Sic.*
3. *Bellows: NBR / HNBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





R-6BG

	d1 (H6)	D1 (Max)	D2 (h8)	D3 (±0.5)	A	B (h8)	C
16	29,5	36,5	42	7,8	5	10.0
20	35.0	40.0	44	6,9	5	8,6
25	44.0	47,2	53	11,7	7	10,8

Pumps for distillery dreg, brew

Pumps for distillery dreg and brew made of stainless steel. IHG and SM centrifugal pumps have performed well in the alcohol industry, in particular for pumping distillery dreg and brew. IHG series pumps for distillery dreg and brew are equipped with an explosion-proof engine according to the Ex dIIBT4 standard, which allows them to be used in industrial premises of the corresponding category of explosion and fire hazard. Brew pump, wort pump, food pump, abrasive fluid pump, paint pump, acid pump, alkali pump, caustic pump, SIP flushing pump, coagulant pump, oil pump. IHG series chemical centrifugal pump with a single impeller with a direct motor-pump connection and a common shaft. The pump casing has a suction and delivery bell of the same diameter and located on the same shaft. This feature makes it very easy to install the pump on the pipeline. The pump motor is standard asynchronous, placed vertically, which prevents the engine from filling with the pumped liquid in emergency situations. In addition, the pumps in this series are equipped with an explosion-proof engine according to the Ex dIIBT4 standard.

R-706H(CR)

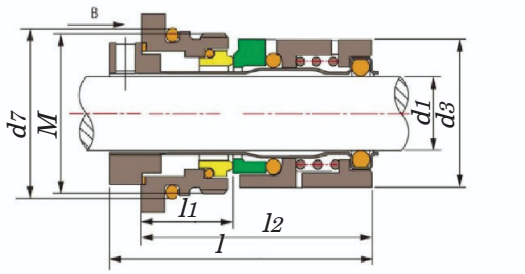
Mechanical seal **R-706H (CR)**

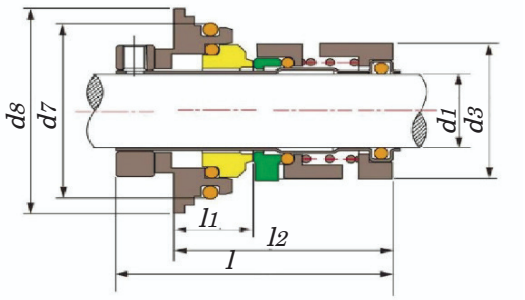
Temperature: -20⁰~150⁰
Pressure: ≤2.0 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

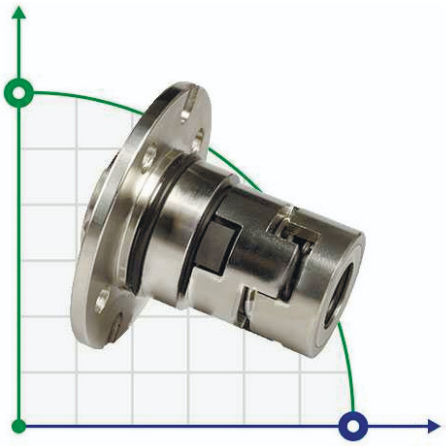
d1	d3 (H6)	d7 (Max)	d8 (h8)	M (±0.5)	L	L1 (h8)	L2	d8
12	25,00	29,00	\	M28X1.5	55,00	19,00	49,00	35,80
16	30,50	34,00	\	M35X1.5	57,50	20,00	50,50	40,80
22	39,50	50,00	59,00	\	71,00	20,00	57,00	\





Metering pumps

Metering pumps are characterized by impeccable quality that meets European standards. The equipment is certified according to the tech-nical regulations of the CU, regulating the safety and electromagnetic compatibility of devices. it is one of the leading suppliers of metering pumps. Metering pumps are widely used in the field of water treat-ment, as well as in food, chemical, pharmaceutical and other industries. We are a representative of manufacturers of metering pumps, so we offer a full range of products at minimum prices. We also provide services for maintenance and repair of equipment. Applications: Hypochlorite pump, alkali pump, acid pump, flocculant pump, chemistry pump, pool pump, water treatment pump, food additives pump, glue pump, additive pump, enzyme pump, sulfate pump, solvent pump. Pumps for calcium hydroxide Ca (OH)2 (lime milk) acid, aggressive medium, aggressive liquid, chemical solution, lime milk chemical liquid, sulfuric acid pump, hydrochloric acid pump



Mechanical seal **R-706L**

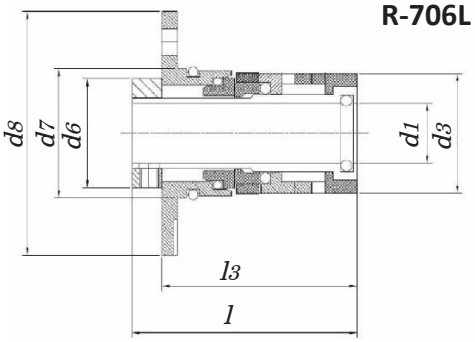
Temperature: -20⁰~150⁰
Pressure: ≤2.0 mPa
Speed: ≤15 m/sec

Materials

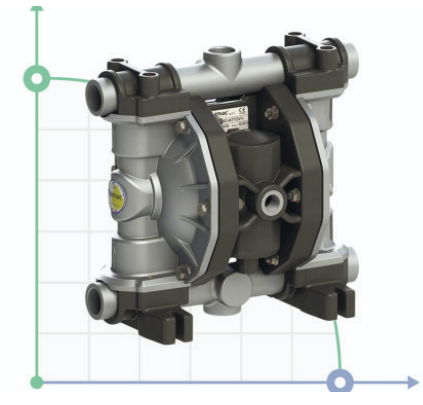
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-706L	d1	d3	d6	d7	d8	L3	L
	12	25	25	31	58	31	57
	16	32	29	34,5	65	52	57,5
	22	39,5	39	49,7	90	38	70

R-706L



Pumps for viscous products



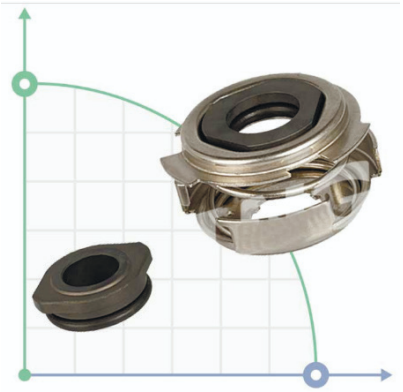
For pumping viscous products, including food products, our company offers membrane and gear pumps with a wide range of models. Membrane pumps, with an innovative air distribution system, pump chamber geometry and valve system, allow pumping a wide range of aggressive products (concentrated acids, alkalis, solvents, varnishes, adhesives, liquids with suspended particles up to 10 mm in size, abrasive products, etc.) with a viscosity of 6000 to 55000 SPZ. Gear pumps have a wide range of applications due to their simple design and reliability. Pumps of this type are successfully used for pumping of mineral oils, fuel oils, oil solutions, and gear pumps in stainless steel can pump cream, condensed milk, cheese, meat, syrup, sourdough bread, vegetable and fruit purees, tomato paste, jam, marmalade, pastry mass, etc. Diaphragm pumps PHOENIX, with its innovative air distribution system, the pumping chambers geometry and the valves allow you to pump a wide range of corrosive substances (strong acids, alkalis, solvents, varnishes, glues) liquids with suspended particles up to 10 mm, abrasive products, etc.)

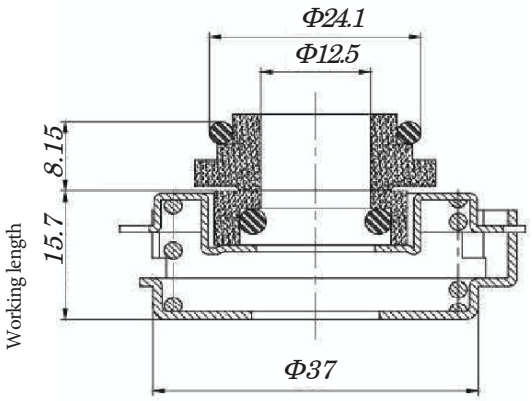
Mechanical seal **R-706D**

Temperature: -20⁰~150⁰
Pressure: ≤1.5 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Ceramic / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





Used in Grundfos pumps: CM, CME, CMV
1/3/5/10/15/25 - AQQE/V - 96932392

Grundfos CM mechanical seal

Mechanical seals for Grundfos pumps are used in these types of Grundfos pumps: JP, Ch8, Ch12, CRK (|) 2, CRK (|) 4 series. SPK1, SPK2, SPK4, SPK8 series. Cr2, Cr4 series.

Part number of Grundfos: 96932392 / 96932350.
CM 1/3/5 - AQQE/V-96932392

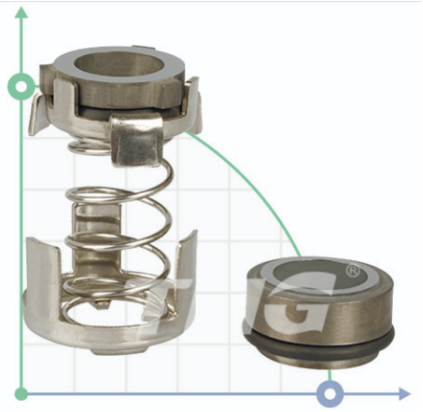
The CM pump is a compact horizontal pump multistage centrifugal pump with: 1-phase, 220-240 V, 50 Hz, foot-mounted electric motor. Pump with an axial suction channel and a radial outlet channel, including a special design shaft seal in AQQE design. The shaft, impellers, chambers and plugs of the filling holes are made of stainless steel. The suction and discharge pipes are made of Stainless steel.

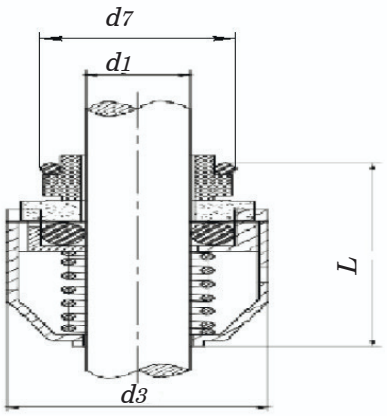
Mechanical seal **R-706F**

Temperature: -40⁰~180⁰
Pressure: ≤1.7 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





R-706F

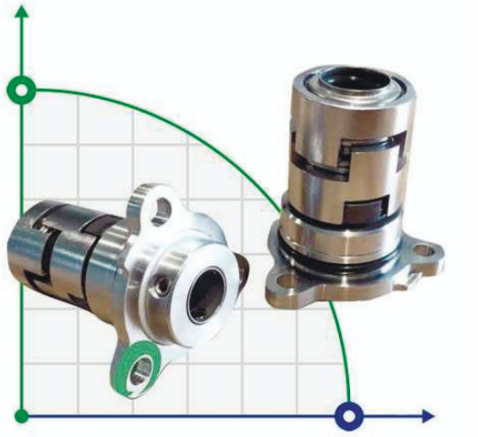
	d1 (H6)	d3 (Max)	d7 (h8)	L (±0.5)
R-706E-12	**12**	29	23	40
R-706E-16	**16**	34	27	38,6

Used in Grundfos pumps: JP, Ch8, Ch12, CRK (|) 2, CRK (|) 4 series. SPK1, SPK2, SPK4, SPK8 series. Cr2, Cr4, CRN2, Ch4, LM, CM series.

Grundfos CRK mechanical seal

Mechanical seal of R-706F type is designed for the Grundfos pump.
R-706F-12mm: Item Number of Grundfos 985167 / 405145 / 405009 / 96513598.
R-706F-16 mm. Item Number of Grundfos: 985204 / 339701 / 96521638 .
Grundfos pump repair kits, such as shaft seal kit 985167, 985737, 985164, 415080, 69632394.

1. Kit, shaft seal RUUE/V, 985737, suitable for CH, CHV 2, 4, EAN code: 5700392254122
2. Kit, AUUE/V shaft seal, 985167, suitable for CR(N)2/4, EAN code: 5700392251343
3. Kit, shaft seal CVBE/V, 985164, suitable for CHV/CH2/4, EAN code: 5700392251305
4. Kit, shaft seal AUUV, 415080, suitable for CRK2/4, EAN code: 5700392118219

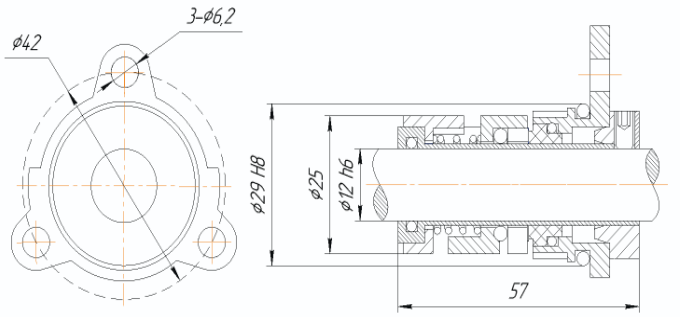


Mechanical seal **R-706A**

Temperature: -20⁰~150⁰
Pressure: ≤1.5 mPa
Speed: ≤15 m/sec

Materials

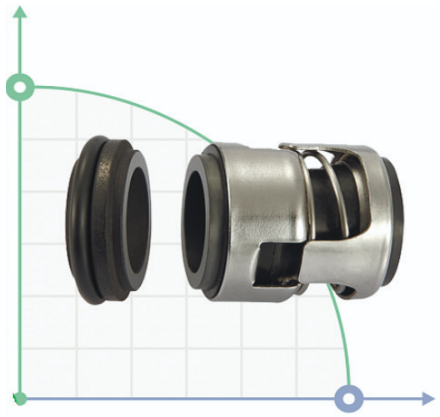
1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Grundfos CR mechanical seal

The R-706A mechanical seal is used in Grundfos vertical multistage centrifugal pumps made of stainless steel.
They are suitable for use in Grundfos pumps:
Water pump: CR1 / CR3 / CR5 / CR10 / CR15 / CR20 / CR32 / CR45 / CR64 / CR90
Water pump: CRN1 / CRN3 / CRN5 / CRN10 / CRN15 / CRN20 / CRN32 / CRN45 / CRN64 / CRN90

Grundfos Kit, EPDM module for standard pump
Item number: 96509609 is a service kit for repairing Grundfos pumps. You can find detailed information, service videos and details (explosive diagrams) for all Grundfos pump models in the spare parts section. Also, you can always contact us by phone or e-mail for quick selection of spare parts needed to repair the pump. Please note that for the correct selection of spare parts, it is desirable to provide a photo of the pump nameplate



Mechanical seal **R-706B**

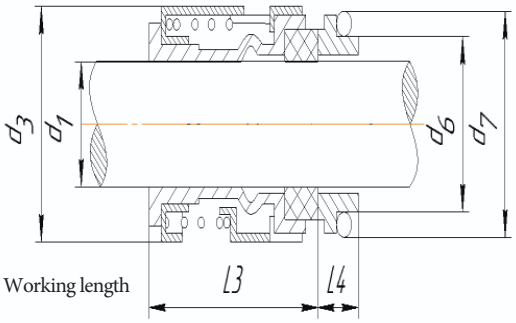
Temperature: -20º~150º
Pressure: ≤2.0 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon / SIC*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304.*
5. *Metal parts: SS304.*

	d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	L3	L4 (h8)
R-706B	**12**	22	19	23	24	8.5
R-706B long	**12**	22	19	23	39	8.5
R-706B	**16**	26	23	27	25	9
R-706B long	**16**	26	23	27	30	9

It is used in these types of Grundfos pumps: CH, CHI, CHE, CRK, SPK, TP, AP series. CR, CRN, NK, TP series. LM (D) / LP(D), NM / NP, DNM / DNP series.



Grundfos TP mechanical seal

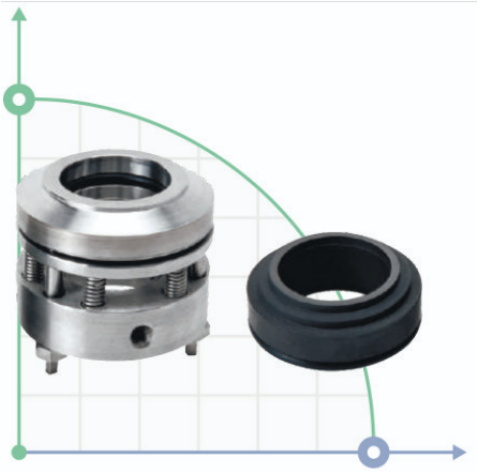
The R-706B mechanical seal is used in Grundfos pumps: CH/CHI / CHE / CRK / SPK / TP APCR / CRN / NK pumps series
TP / LM (D) / LP (D) / NM / NP / DNM / DNP pumps series.
Standard shaft size: 12 mm, 16 mm, 22 mm
R-706B-12mm
Item number of Grundfos: 96409293/96409263 00405096 / 00405097.
R-706B-16mm: Item number of Grundfos: 96409265 / 00485351 / 00425062 / 00425063 / 00425063. The Grundfos pumps of TP, TD series are Designed specially for pumping working fluids in circulation systems with a constant flow rate. For variable flow systems, are usually used models with TPE and TPED frequency converters. The standard sizes of these pumps are available in single TP and double TPD versions.

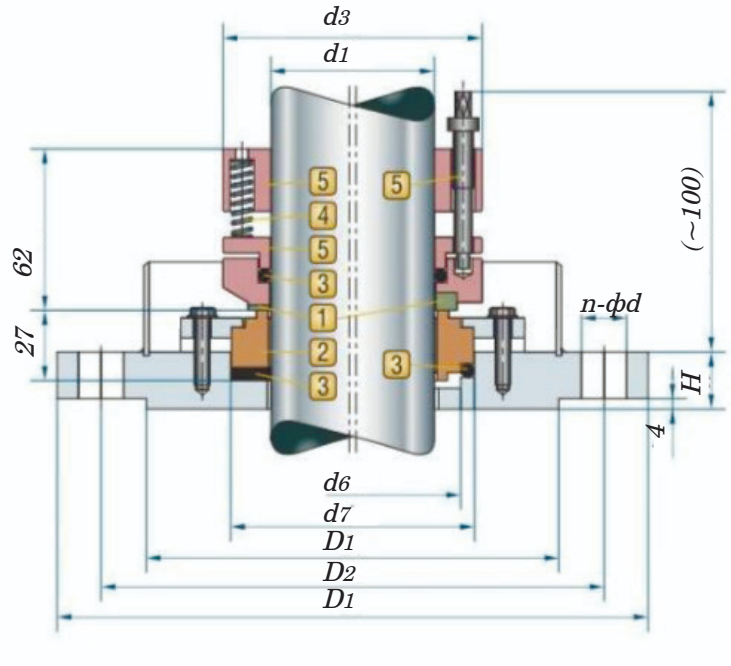
Mechanical seal **R-HG202**

Temperature: -40⁰~200⁰
Pressure: ≤0.25 mPa
Speed: ≤500 rpm

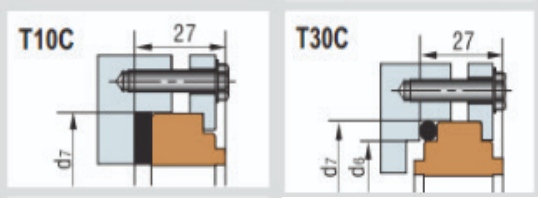
Materials

1. *Rotary ring: SIC/TC*
2. *Stationary ring: Carbon*
3. *Bellows:EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





Type of counter ring



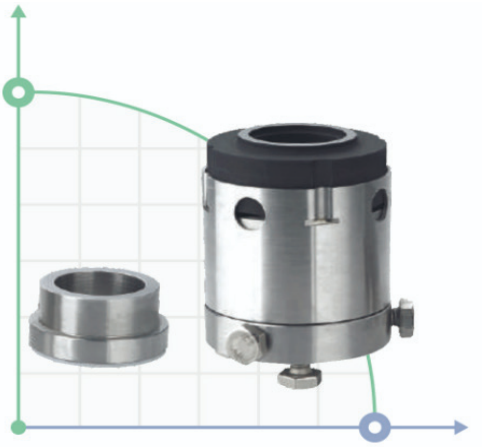
Single face seal R-HG202

Applicable to Alfa Laval, APV, Calpeda,Inoxpa, KSB, Lowara, Grundfos, Hilge, Ebara pumps series

Analogue: Burgmann, John Crane, Roten, AESSEAL, Anga, Vulcan, Lidering, DIMER

d1 (H6)	d3 (Max)	d6 (h8)	d7 (±0.5)	D1	D2 (h8)	D	H	n-ф
30	66	51	60	116	150	185	20	4-18
40	76	61	70	135	170	205	20	4-18
50	88	71	80	164	200	235	22	4-18
65	103	86	97	164	200	235	22	8-18
80	118	102	112	188	225	260	22	12-18
95	135	117	127	220	255	290	24	12-18
110	150	132	142	245	280	315	24	12-18

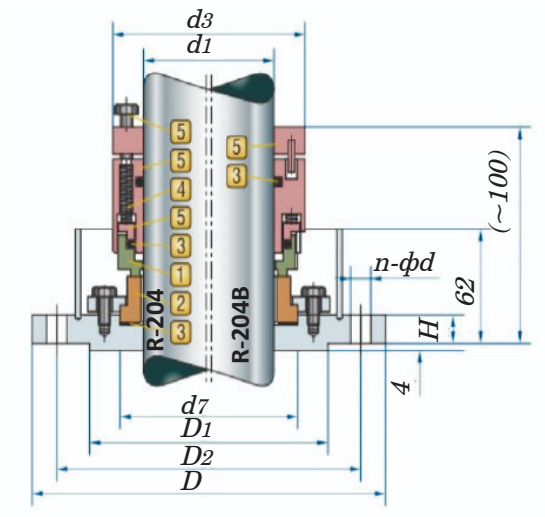
Mechanical seal **R-HG204/204B**



Temperature: -20⁰~200⁰
Pressure: ≤0.6 mPa
Speed: ≤500 rpm

Materials

1. *Rotary ring: SIC/TC/Carbon.*
2. *Stationary ring: Carbon/TC.*
3. *Bellows: EPDM/VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



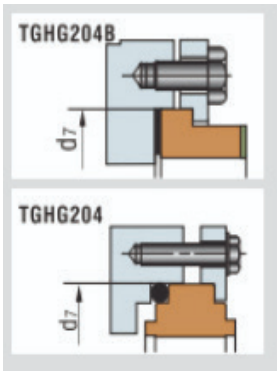
R-HG204B

d1 (H6)	d3 (Max)	d7 (h8)	D1 (±0.5)	D2	D (h8)	H	n-4
30	67	50	116	150	185	20	4-18
40	77	64	135	170	205	20	4-18
50	87	74	164	200	235	20	8-18
60	98	85	164	200	235	20	8-18
65	103	91	164	200	235	20	8-18
80	118	110	188	225	260	20	12-18
95	128	119	220	255	290	20	12-18
100	138	132	245	280	315	20	12-18
110	148	140	245	280	315	20	12-18
120	158	158	245	280	315	26	12-18
130	168	168	245	280	315	26	12-18
140	178	180	245	280	315	26	12-18
150	188	190	285	320	360	29	12-18

R-HG204

d1 (H6)	d3 (Max)	d7 (h8)	D1 (±0.5)	D2	D (h8)	H	n-4
30	66,00	60,00	116,00	150,00	185,00	20,00	4-18
40	76,00	70,00	135,00	170,00	225,00	20,00	4-18
50	88,00	80,00	164,00	200,00	235,00	20,00	8-18
65	103,00	97,00	164,00	200,00	235,00	22,00	8-18
80	118,00	112,00	188,00	225,00	260,00	22,00	12-18
95	135,00	127,00	220,00	255,00	290,00	24,00	12-18
110	150,00	142,00	245,00	280,00	315,00	24,00	12-18

Type of counter ring

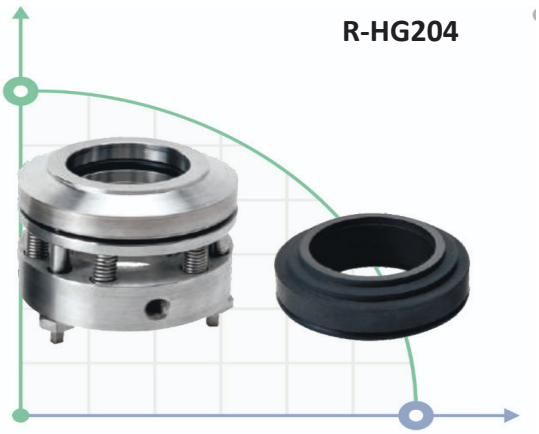


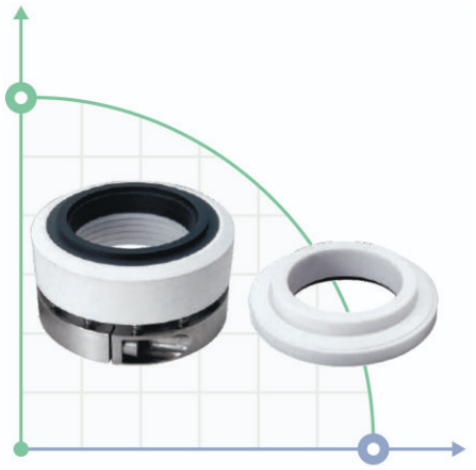
Single end seal R-HG204

Applicable to Alfa Laval, APV, Calpeda, Inoxpa, KSB, Lowara, Grundfos, Hilge, Ebara pumps series

Analogue: Burgmann, John Crane, Roten, AESSEAL, Anga, Vulcan, Lidering, DIMER

R-HG204





Mechanical seal **R-HG212**

Temperature: -20⁰~120⁰
Pressure: ≤0.5 mPa
Speed: ≤500 rpm

Materials

1. *Rotary ring: Glass Filled PTFE.*
2. *Stationary ring: Aluminium Oxide/SIC*
3. *Bellows: PTFE*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

R-HG212-A

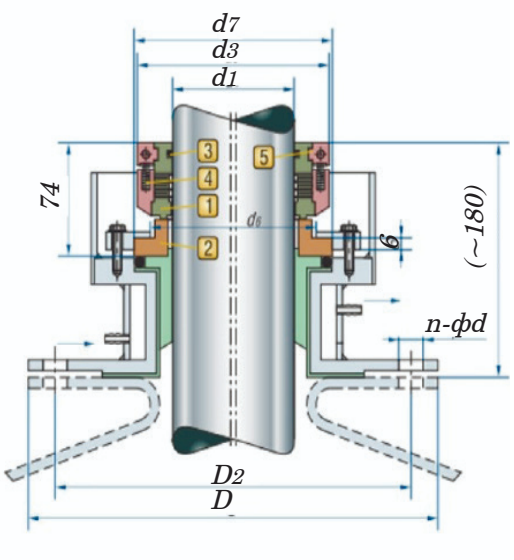
d1	d3	d6	d7	D2	D	n-4
40	87	72	87	130	160	4-18
50	98	80	100	150	190	4-18
60	110	90	105	170	210	4-18
65	115	95	115	170	210	8-18
70	120	100	115	200	240	8-18
75	130	110	130	200	240	8-18
80	130	110	130	200	240	8-18
90	140	120	140	225	265	12-18
95	145	125	150	225	265	12-18
100	150	130	150	250	280	12-18
110	162	140	165	280	320	12-18
120	172	150	175	280	320	12-18
130	182	162	177	335	375	12-18
140	192	170	195	335	375	12-18
150	202	180	205	335	375	12-18

R-HG212-B

d1	d3	d6	d7	D2	D	n- ϕ
40	90	72	88	130	160	4-18
50	100	80	101	150	185	4-18
65	115	95	116	170	205	4-18
80	130	110	131	200	235	8-18
95	150	125	151	200	235	8-18
102	150	130	156	255	290	8-18

R-HG212-C

d1	d3	d6	d7	D2	D	n- ϕ
42	90	72	80	140	170	6-15
50	100	80	101	170	200	8-15
60	110	90	110	190	220	10-15
70	120	100	121	250	280	16-15
76	130	110	131	250	280	16-15
80	130	110	131	250	280	16-15
89	140	120	141	250	280	16-15
95	150	125	151	300	330	20-15

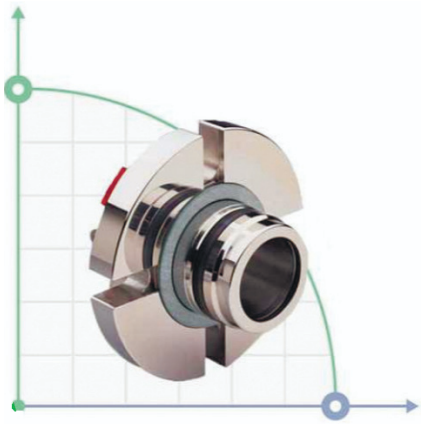


Single mechanical seal R-HG212

Used in highly concentrated mediums such as acids, alkalis, oil abrasives for reactors and mixers. Fits for chemical, oil processing and pharmaceutical industry.

Is applicable to the Alfa pumps series: Laval, APV, Calpeda, Inoxpa, KSB, Lowara, Grundfos, Hilge, Ebara

Analogue: Burgmann, John Crane, Roten, AESSEAL, Anga, Vulcan, Lidering, DIMER.

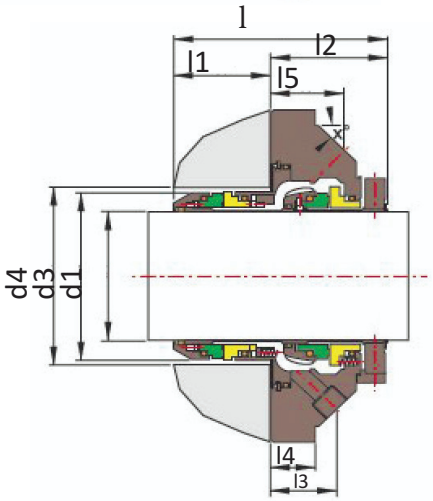


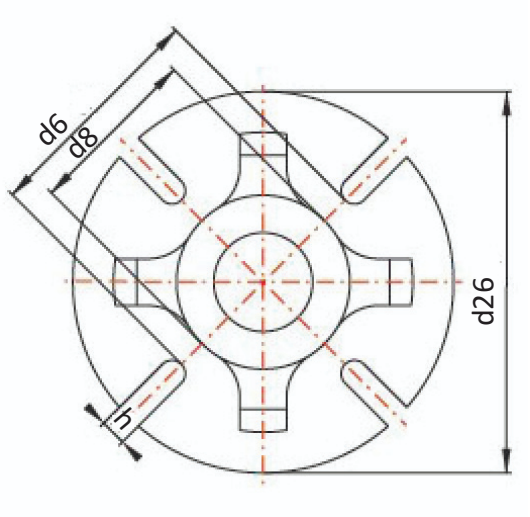
Mechanical seal **R-TSDC-A03**

Temperature: -20⁰~200⁰
Pressure: ≤2.1 mPa
Speed: ≤25 m/sec

Materials

1. *Rotary ring: SIC / TC/CAR.*
2. *Stationary ring: SIC / TC.*
3. *Bellows: PTFE/EPDM/VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





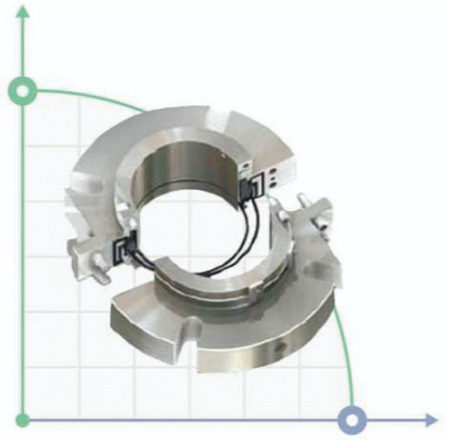
d1	d2	d4		d6	d8	d26	1	l1	l2	l3	l4	l5	h	x
		min	max											
24	40.8	43.0	48.0	57.7	50.4	105.0	92.0	53.1	38.9	28,20	19,20	29.20	14.00	20°
25	41.8	44.0	51.0	62.0	51.0	105.0	92.0	53.1	38.9	27,80	19,20	29.20	14.00	20°
28	45.4	47.0	54.0	65.0	55.5	111.0	92.0	53.1	38.9	27,50	19,20	29,40	14.00	20°
30	46.8	49.0	54.0	64.6	56.4	105.0	92.0	53.1	38.9	27,40	19,20	29,70	14.00	20°
32	49.8	51.0	57.0	66.5	59.4	105.0	92.0	53.1	38.9	28,40	21,50	30,90	14.00	25°
33	49.8	51.0	57.0	66.5	59.4	105.0	92.0	53.1	38.9	28,40	21,50	30,90	14.00	25°
35	51.8	53.0	59.0	68.5	61.4	120.0	92.0	53.1	38.9	29,30	20,70	29,30	14.00	15°
40	57.6	59.0	70.5	80.7	70.8	135.0	93.2	53.1	40.1	30,10	21,30	30,10	14.00	20°
43	58.6	61.0	70.5	80.7	70.8	135.0	93.2	53.1	40.1	26,70	21,30	29,80	14.00	15°
45	62.0	64.0	75	84.6	73.8	139.0	93.2	53.1	40.1	30,50	21,90	30,50	14.00	20°
50	68.0	70.0	78.0	87.6	78.9	150.0	93.2	53.1	40.1	30,50	21,60	30,50	17,50	20°
53	71.6	73.0	87.0	97.0	85.0	150.0	93.2	53.1	40.1	25,70	21,30	29,50	17,50	15°
55	71.6	73.0	87.0	97.0	85.0	150.0	93.2	53.1	40.1	25,70	21,30	29,50	17,50	15°
60	77.9	80.0	92.0	102.4	88.0	164.5	93.2	53.1	40.1	30,50	21,60	30,50	17,50	20°
63	81.1	83.0	98.5	108.7	94.4	171.0	93.2	53.1	40.1	29,80	21,60	29,80	17,50	15°
65	84.3	86.0	98.5	108.7	94.4	171.0	93.2	53.1	40.1	29,40	21,30	29,40	17,50	15°
70	87.4	89.0	100.0	112.0	98.3	180.5	93.2	53.1	40.1	29,70	21,30	29,70	17,50	20°
75	98.0	101.6	117.5	131.4	116.5	189.3	115.9	63.5	52.4	25,00	25,80	36.30	17,50	20°
80	104.4	108.0	127.0	142.5	126.0	201.9	115.9	63.5	52.4	25,00	25,80	36.30	21.00	20°
85	107.6	111.1	127.0	142.5	126.0	201.9	115.9	63.5	52.4	25,00	25,80	36.30	21.00	20°
90	113.9	117.5	136.5	152.0	135.5	214.6	115.9	63.5	52.4	26,20	25,80	36.30	21.00	20°
95	117.1	120.0	136.5	152.0	135.5	214.6	115.9	63.5	52.4	26,20	25,80	36.30	21.00	20°
100	123.4	127.0	139.7	155.2	138.7	227.3	115.9	63.5	52.4	26,20	25,80	36.30	21.00	20°
105	129.8	133.4	152.4	167.9	151.4	240.0	115.9	63.5	52.4	36,00	23,80	40.10	21.00	45°
110	136.1	139.7	152.4	167.9	151.4	240.0	115.9	63.5	52.4	36,00	23,80	40.10	21.00	45°
115	142.5	146.1	165.1	180.6	164.1	252.7	115.9	63.5	52.4	36,00	23,80	40.10	24.00	45°
120	142.5	146.1	165.1	180.6	164.1	252.7	115.9	63.5	52.4	36,00	23,80	40.10	24.00	45°
125	148.8	152.4	165.1	180.6	164.1	252.7	115.9	63.5	52.4	36.00	23,80	40.10	24.00	45°

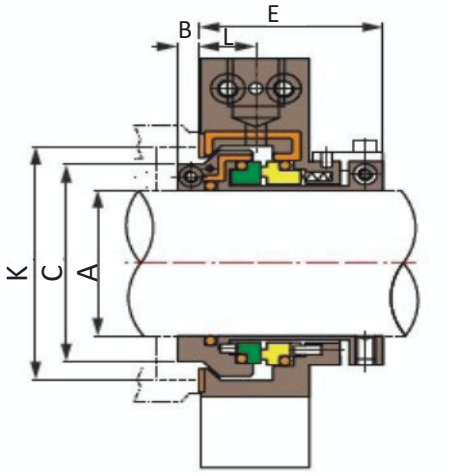
Mechanical seal **R-TSSP-FA01**

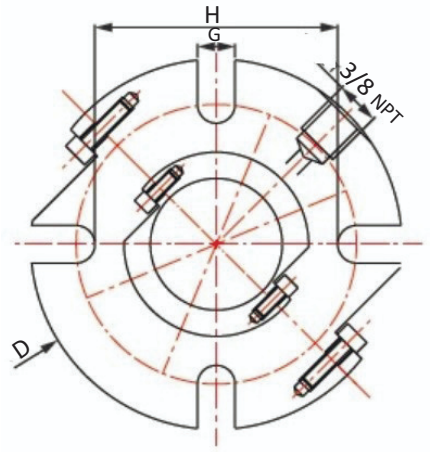
Temperature: -20º~200º
Pressure: ≤1.6 mPa
Speed: ≤3600 rpm

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC .*
3. *Bellows: Viton / EPDM.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

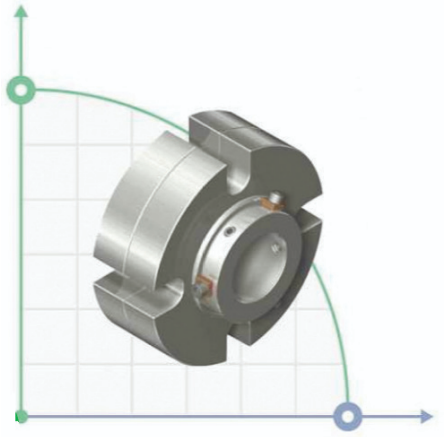






R-TSSP-FA01

A	B	C	D	E	F	G	H	J	K	L
1,500	0,250	2,187	5,250	2,125	2,500	0,562	3,125	2,250	2,625	0,656
1,687	0,250	2,437	5,500	2,125	2,500	0,562	3,375	2,500	2,875	0,656
1,750	0,250	2,437	5,500	2,125	2,500	0,562	3,375	2,500	2,875	0,656
1,875	0,250	2,562	5,500	2,125	2,500	0,562	3,344	2,625	3,000	0,656
1,937	0,250	2,625	5,440	2,125	2,500	0,562	3,563	2,687	3,125	0,656
2,000	0,250	2,687	5,440	2,125	2,500	0,562	3,563	2,750	3,125	0,656
2,125	0,250	2,812	6,000	2,125	2,500	0,687	3,688	2,875	3,375	0,656
2,188	0,250	2,937	6,250	2,125	2,500	0,687	3,813	3,000	3,375	0,656
2,250	0,250	3,062	6,250	2,125	2,500	0,687	3,937	3,125	3,500	0,656
2,375	0,250	3,188	6,250	2,125	2,500	0,687	4,062	3,250	3,500	0,656
2,438	0,250	3,188	6,440	2,125	2,500	0,687	4,125	3,375	3,625	0,656
2,500	0,250	3,188	6,440	2,125	2,500	0,687	4,125	3,375	3,625	0,656
2,625	0,250	3,347	6,440	2,125	2,500	0,687	4,438	3,500	3,875	0,656
2,688	0,250	3,562	7,820	2,125	2,500	0,687	4,438	3,625	4,125	0,656
2,750	0,250	3,562	7,820	2,125	2,500	0,687	4,438	3,625	4,125	0,656
2,875	0,250	3,687	7,820	2,125	2,500	0,687	4,812	3,812	4,250	0,656
2,938	0,250	3,812	7,880	2,125	2,500	0,687	4,938	3,937	4,375	0,656
3,000	0,250	3,812	7,880	2,125	2,500	0,687	4,938	3,937	4,375	0,656
3,250	0,281	4,188	8,250	2,437	2,812	0,812	5,188	4,250	4,750	0,812
3,375	0,281	4,312	8,250	2,437	2,812	0,812	5,313	4,375	4,875	0,812
3,438	0,281	4,437	8,500	2,437	2,812	0,812	5,437	4,500	5,000	0,812
3,500	0,281	4,437	8,500	2,437	2,812	0,812	5,437	4,500	5,000	0,812
3,625	0,281	4,562	8,630	2,437	2,812	0,812	5,562	4,625	5,125	0,812
3,750	0,281	4,625	8,820	2,437	2,812	0,812	5,688	4,687	5,125	0,812
3,875	0,281	4,812	8,820	2,437	2,812	0,812	5,813	4,875	5,250	0,812
4,000	0,281	4,937	8,820	2,437	2,812	0,812	5,813	5,000	5,370	0,812
4,250	0,281	5,188	9,250	2,437	2,812	0,812	6,063	5,250	5,750	0,812
4,375	0,281	5,312	9,250	2,437	2,812	0,812	6,437	5,375	5,875	0,812
4,500	0,281	5,406	9,690	2,437	2,812	0,812	6,500	5,500	6,000	0,812
4,750	0,281	5,656	9,750	2,437	2,812	0,812	6,938	5,750	6,250	0,812
4,938	0,375	6,188	*10.75	3,062	2,812	0,937	7,312	6,312	6,750	0,923
5,000	0,375	6,188	*10.75	3,062	2,812	0,937	7,312	6,312	6,750	0,923
5,125	0,375	6,375	*11.00	3,062	2,812	0,937	7,812	6,500	7,250	0,923
5,250	0,375	6,375	*11.00	3,062	2,812	0,937	7,812	6,500	7,250	0,923
5,500	0,375	6,688	*11.50	3,062	2,812	0,937	7,813	6,812	7,375	0,923
5,750	0,375	6,938	*12.00	3,062	2,812	0,937	8,156	7,062	7,625	0,923
6,000	0,375	7,188	*12.25	3,062	2,812	0,937	8,437	7,312	7,875	0,923
6,250	0,375	7,438	*12.50	3,062	2,812	0,937	8,656	7,562	8,125	0,923
6,500	0,375	7,688	*12.25	3,062	2,812	0,937	8,813	7,812	8,375	0,923
6,750	0,375	7,938	*12.50	3,250	4,000	0,937	9,312	8,062	8,625	0,923
7,000	0,375	8,188	*12.75	3,250	4,000	0,937	9,562	8,312	8,750	0,923
8,500	0,375	9,688	14,250	3,250	4,000	1,000	11,000	9,812	10,250	0,923



Mechanical seal **R-TSSC-C03**

Temperature: -20⁰~200⁰
Pressure: ≤4.0 mPa
Speed: ≤20 m/sec

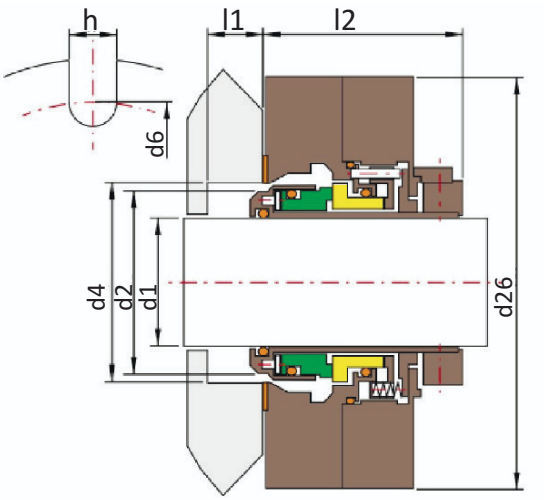
Materials

1. *Rotary ring: Sic /TC.*
2. *Stationary ring: Carbon / TC / Sic.*
3. *Bellows: Aflas / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

Working length

d1 (mm)	d2 max	d4	d6	d26	3/8″	l2 1/2″	5/8″	h
45	73	18	13	139	49	95	97	43
48	73	18	13	139	49	95*	97*	43
50	78	18	13	139	49	100	102	43
53	87	18	17	152	49	109	111	43
55	83	18	17	152	49	105	107	43
58	91	18	17	152	49	114	116	43
60	91	18	17	152	49	114	116	43
65	103	22	17	164	64	127	131	45
70	111	22	17	196	64	137	141	45
75	119	22	17	202	64	143	147	45
80	122	22	17	203	64	150	154	45
85	128	22	21	211	64	152	156	45
90	132	22	21	214	64	160	164	45
95	137	22	21	221	64	161	165	45
100	144	22	21	228	64	168	172	45
110	154	22	21	237	64	178	182	45
120	164	22	21	266	64	187	191	45

d1 (inch)	d2 max	d4	d6	d26	3/8″	l1 1/2″	5/8″	h
1,750	2,81	0,69	0,57	5,49	3,62	3.75′	-	1,27
1,875	2,94	0,69	0,57	5,49	3,75	3.87*	-	1,27
2.000	3,19	0,69	0,57	5,49	4.00	4,13	-	1,27
2,125	3,44	0,69	0,69	5,99	4,25	4,38	4,50	1,27
2,250	3,56	0,69	0,69	5,99	4,37	4,5	4,62	1,27
2,375	3,59	0,69	0,69	5,99	4,43	4,56	4,68	1,27
2,500	3,81	0,69	0,69	6,49	4,62	4,75	4,87	1,27
2,625	4,04	0,88	0,69	6,45	5,02	5,15	-	1,77
2,750	4,38	0,88	0,69	7,7	5,42	5,55	-	1,77
2,875	4,5	0,88	0,69	7,83	5,50	5,62	-	1,77
3.000	4,69	0,88	0,69	7,94	5,65	5,77	-	1,77
3,125	4,81	0,88	0,69	7,99	5,80	5,92	-	1,77
3,250	4,94	0,88	0,69	8,19	5,93	6,05	-	1,77
3,375	5,06	0,88	0,81	8,3	6,02	6,14	6,27	1,77
3,500	5,19	0,88	0,81	8,44	6,18	6,31	6,43	1,77
3,625	5,31	0,88	0,81	8,49	6,31	6,44	6,56	1,77
3,750	5,39	0,88	0,81	8,71	6,38	6,51	6,63	1,77
3,875	5,51	0,88	0,81	8,84	6,52	6,64	6,77	1,77
4.000	5,69	0,88	0,81	8,96	6,66	6,78	6,91	1,77
4,125	5,81	0,88	0,81	8,99	6.79	6,9	7,03	1,77
4,250	5,94	0,88	0,81	8,99	6,91	7,04	7,16	1,77
4,375	6,06	0,88	0,81	9,33	7,03	7,15	7,28	1,77
4,500	6,19	0,88	0,81	9,49	7,18	7,3	7,43	1,77
4,625	6,31	0,88	0,81	9,49	7,28	7,4	7,53	1,77
4,750	6,47	0,88	0,81	10,49	7,40	7,53	7,65	1,77



Double cartridge mechanical seal R-TSSC-C03

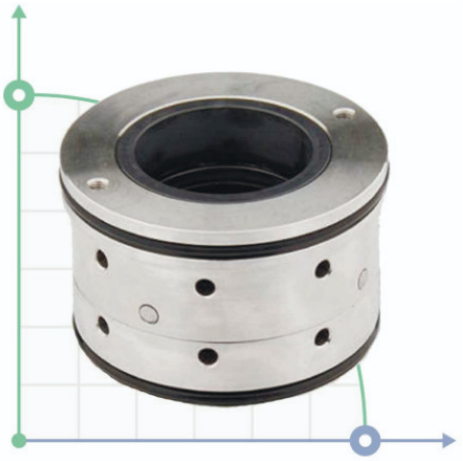
Use at a pressure of up to 4 MPa, a speed of up to 20 m/s and a temperature of -40 degrees Celsius to +204 degrees Celsius.

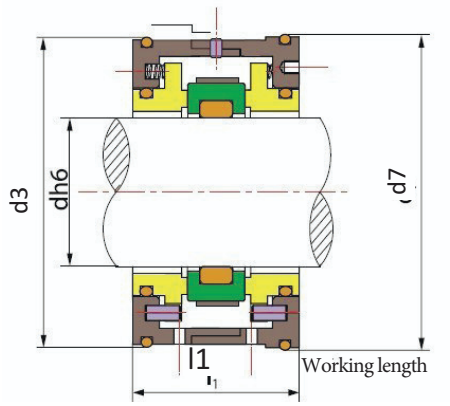
Mechanical seal **R-TSWE**

Temperature: -20⁰~200⁰
Pressure: ≤1.5 mPa
Speed: ≤20 m/sec

Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: SIC .*
3. *Bellows: NBR / VITON / EPDM.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

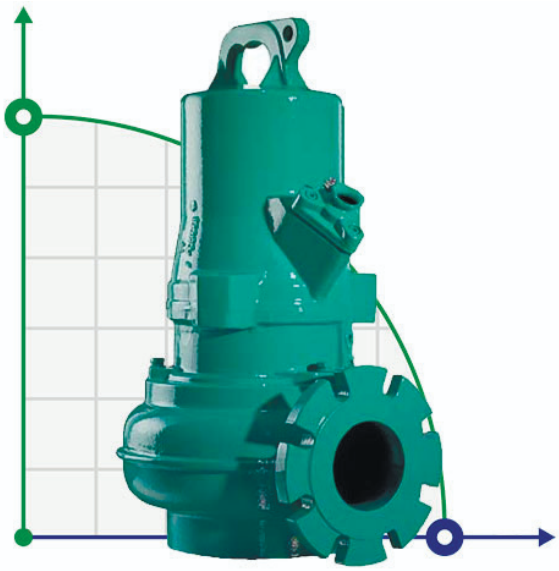




R-TSWE

dh6 (H6)	d3 (Max)	d7 (h8)	L1 (±0.5)
30	62	65	46
35	67	70	46
40	72	75	46
50	90	92	52
60	92	99	46
75	128	130	75

Mechanical seal WILO - EMU FA



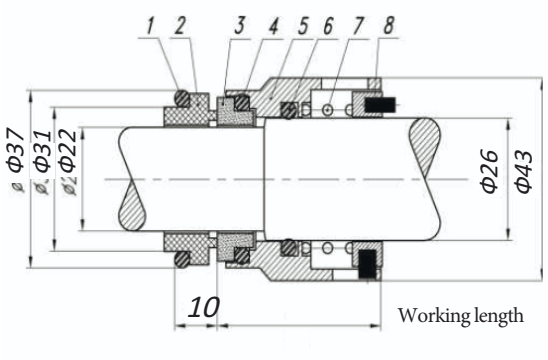
Mechanical cartridge double seal R-TSWE for WILO EMU pump.
replacement seals for Wilo EMU pumps, shaft size: 30mm, 35mm, 40mm, 50mm, 60mm, 75mm
Replaceable seals for EBS double cartridge seals and S0ECU insert double seal.
VGM-2961---- 6037442
VGM-2962 ---- 6037443
VGM-2963 ---- 6037444
VULCAN type 1640,1642
Wilo EMU FA is designed as a block unit for stationary and mobile installations in the submerged state. The discharge pipe is horizontal with a flanged connection.
There is a possibility to select the impeller, - it can be either a free-swirl (W) or a single-channel working wheel (E). All hydraulic parts with single-blade impellers are equipped with a fixed and rotating ring of a slot seal made of hardened material.

Mechanical seal **R-LWR-22**

Temperature: -20⁰~140⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Ceramic / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



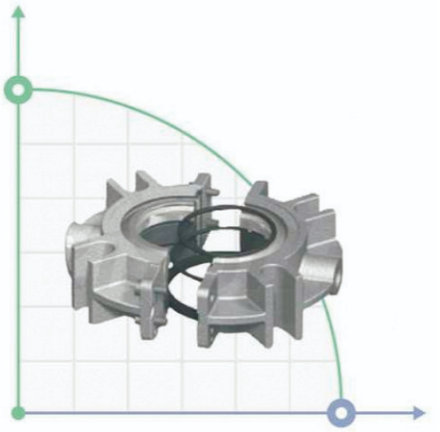
Single mechanical face seal R-LWR

Application in pumps Lowara SVI 33, 46, 66, 92

Analogue: AESSEAL T07 / T07D / T07X, Burgmann M2N, Roten UNITEN 22, Hecker HN 400A.

Lowara mechanical seals

Face seals and spare parts for LOWARA pumps (Lowara) Lowara SVI 33, 46, 66, 92.
Q1BVGG KL01AC2
Q1Q1VGG KL01AC3
Q1Q1EGG KL01AC1
Q1Q1TGG KL01AC6
Q1CTGG KL01AC5
Q1Q1TGG KL01AC6
Lowara SVI is a vertical multistage centrifugal pump with a submerged hydraulic part designed for pumping liquid media without containing abrasive inclusions. The Lowara SVI 1602S pump casing is made of durable and corrosion-resistant chrome-nickel steel, and the end seal is made of a composite material, which includes graphite, elastomers, and tungsten compounds, which provide maximum tightness and wear resistance.

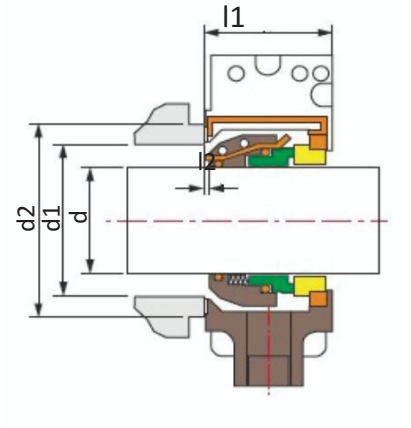


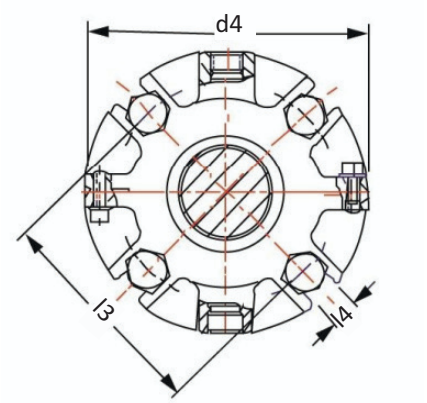
Mechanical seal **R-TSSP-CO1**

Temperature: -20⁰~200⁰
Pressure: ≤4.0 mPa
Speed: ≤3600 rpmчё

Materials

1. *Rotary ring: Carbon/ SIC / TC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





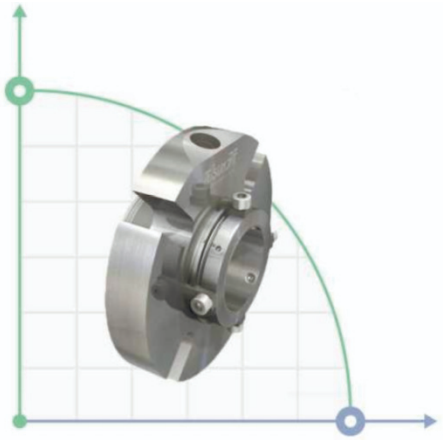
d	L1		L3					d412	d2	d1		14
(Inches)			3/8	1/2	5/8	3/4	7/8			Nom	max	
1,500	2,00	3,38	3,50	\	\	\	5,00	1/16	2,75	2,25	2,50	0.56
1,625	2,00	3,50	3,63	\	\	\	5,00	1/16	2,88	2,38	2,63	0.56
1,688	2,00	3,63	3,75	\	\	\	5,00	1/16	3,00	2,50	2,75	0.56
1,750	2,00	3,63	3,75	\	\	\	5,00	1/16	3,00	2,50	2,75	0.56
1,875	2,00	3,75	3,88	\	\	\	5,00	1/16	3,13	2,63	2,88	0.56
1,937	2,00	3,94	4,06	\	\	\	5,00	1/16	3,25	2,75	3,00	0.56
2,000	2,00	3,94	4,06	\	\	\	5,00	1/16	3,25	2,75	3,00	0.56
2,125	2,00	4,06	4,19	4,32	\	\	6,00	1/16	3,38	2,88	3,13	0.69
2,250	2,00	4,19	4,32	4,44	\	\	6,25	1/16	3,50	3,00	3,25	0.69
2,375	2,00	4,50	4,62	4,75	\	\	6,50	1/16	3,63	3,13	3,38	0.69
2,437	2,00	4,57	4,70	4,82	\	\	6,50	1/16	4,00	3,25	3,75	0.69
2,500	2,00	4,57	4,70	4,82	\	\	6,50	1/16	4,00	3,25	3,75	0.69
2,750	2,50	\	5,56	5,68	\	\	7,75	1/8	4,75	3,75	4,25	0.69
3,000	2,50	\	5,82	5,95	\	\	8,00	1/8	5,00	4,00	4,50	0.72
3,250	2,50	\	6,13	6,25	\	\	8,25	1/8	5,25	4,25	4,75	0.72
3,500	2,50	\	4,32	6,45	6,57	\	8,50	1/8	5,50	4,50	5,00	0.81
3,750	2,50	\	4,50	6,63	6,75	\	8,75	1/8	5,75	4,75	5,25	0.81
4,000	2,50	\	6,82	6,95	7,07	\	9,00	1/8	6,00	5,00	5,50	0.81
4,250	2,50	\	7,00	7,13	7,25	\	9,25	1/8	6,25	5,25	5,75	0.81
4,500	2,50	\	7,25	7,38	7,50	\	9,50	1/8	6,50	5,50	6,00	0.81
4,750	2,50	\	7,50	7,63	7,75	\	9,75	1/8	6,75	5,75	6,25	0.81
5,000	3,75	\	\	8,32	8,45	8,57	11,00	1/8	7,50	6,25	7,00	0.94
5,500	3,75	\	\	8,82	8,95	9,07	11,50	1/8	8,00	6,75	7,50	0.94
6,000	3,75	\	\	9,32	9,45	9,57	12,00	1/8	8,50	7,25	8,00	0.94
6,500	3,75	\	\	9,82	9,95	10,07	12,50	1/8	9,00	7,75	8,50	0.94
7,000	3,75	\	\	10,32	10,45	10,57	13,00	1/8	9,50	8,25	9,00	0.94
7,250	3,75	\	\	10,57	10,70	10,82	13,25	1/8	9,75	8,50	9,25	0.94
7,500	3,75	\	\	10,82	10,95	11,07	13,50	1/8	10,00	8,75	9,50	0.94
7,750	3,75	\	\	11,07	11,20	11,32	13,75	1/8	10,25	9,00	9,75	0.94

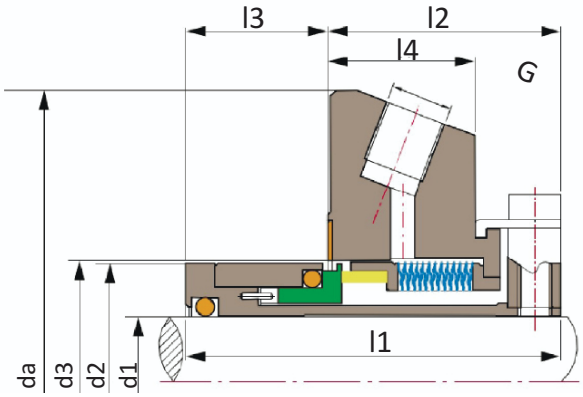
Mechanical seal **R-TSMB-B07**

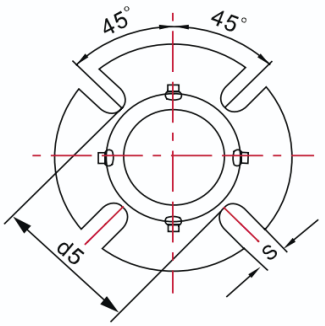
Temperature: -40º~200º
Pressure: ≤2.0 mPa
Speed: ≤25 m/sec

Materials

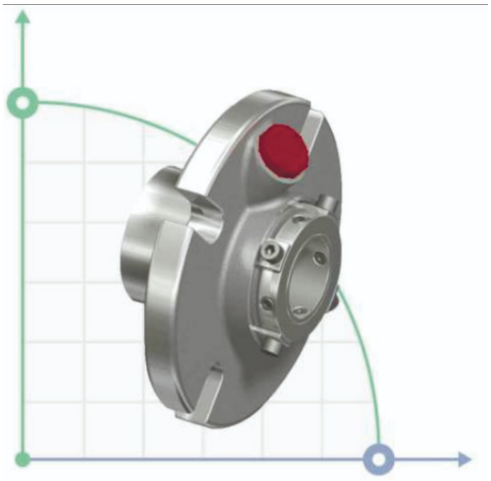
1. *Rotary ring: SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: PTFE / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*







d1	d2	d3		da	l1	l2	l3	l4	S	G	d5
		min	max							(Inches)	
25	43.0	44.0	51.0	105	67	42.4	24,6	25,4	14,00	1/4″	62
28	46.0	47.0	52.0	105	67	42.4	24,6	25,4	14,00	1/4″	62
30	48.0	49.0	56.0	105	67	42.4	24,6	25,4	14,00	1/4″	65
32	49.8	51.0	57.0	110	67	42.4	24,6	25,4	14,00	1/4″	67
33	49.8	51.0	57.0	110	67	42.4	24,6	25,4	14,00	1/4″	67
35	53.0	54.0	61.5	113	67	42.4	24,6	25,4	14,00	1/4″	71
38	56.0	57.0	66.0	123	67	42.4	24,6	25,4	14,00	1/4″	76
40	58.0	59.0	68.0	123	67	42.4	24,6	25,4	16,00	3/8″	76
42	60.5	61.5	69.5	133	67	42.4	24,6	25,4	16,00	3/8″	80
43	60.5	61.5	70.5	133	67	42.4	24,6	25,4	16,00	3/8″	80
45	62.5	64.0	73.0	138	67	42.4	24,6	25,4	16,00	3/8″	83
48	65.6	67.0	75.0	138	67	42.4	24,6	25,4	16,00	3/8″	85
50	68.0	69.0	78.0	148	67	42.4	24,6	25,4	16,00	3/8″	88
53	72.0	73.0	83.0	148	67	42.4	24,6	25,4	18,00	3/8″	98
55	73.0	74.0	87.0	148	67	42.4	24,6	25,4	18,00	3/8″	97
60	78.0	79.0	91.0	157	67	42.4	24,6	25,4	18,00	3/8″	102
65	83.0	84.5	98.5	163	67	42.4	24,6	25,4	18,00	3/8″	109
70	93.0	95.0	108.0	178	67	42.4	24,6	25,4	18,00	3/8″	118
75	100.0	101.6	118.0	190	84	57.4	26,6	28.0	18,00	3/8″	129
80	106.4	108.0	124.0	195	84	57.4	26,6	28.0	18,00	3/8″	135
85	109.5	111.1	128.0	198	84	57.4	26,6	28.0	22,00	3/8″	139
90	115.9	117.5	135.0	205	84	57.4	26,6	28.0	22,00	3/8″	145
95	119.1	120.7	138.0	208	84	57.4	26,6	28.0	22,00	3/8″	148
100	125.4	127.0	144.0	218	84	57.4	26,6	28.0	22,00	3/8″	154



Mechanical seal **R-TSSC-A04**

Temperature: -40º~200º
Pressure: ≤2.5 mPa
Speed: ≤15 m/sec

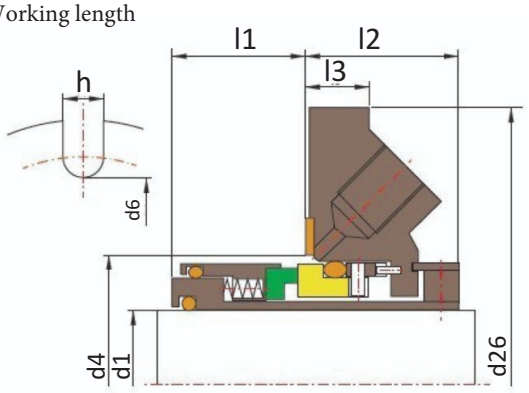
Materials

1. *Rotary ring: SIC / TC/ Carbon.*
2. *Stationary ring: SIC / TC.*
3. *Bellows: Aflas / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1	d4		d6	d26	l1	l2	l3	h
(mm)	min	max						max
24	40.0	46.0	52.4	101.6	26,8	34.4	12,5	14,30
25	41.0	49.2	55.6	104.8	26,8	34.4	12,5	14,30
28	44.0	52.4	58.7	108.0	26,8	34.4	12,5	14,30
30	46.0	55.6	61.9	111.0	26,8	34.4	12,5	14,30
32	48.0	55.6	61.9	111.0	26,8	34.4	12,5	14,30
33	49.0	55.6	61.9	111.0	26,8	34.4	12,5	14,30
35	50.8	58.7	66.7	111.0	26,8	34.4	16,4	14,30
38	57.2	63.5	73.0	127.0	27,7	35.4	16,04	14,30
40	57.2	63.5	73.0	127.0	27,7	35.4	16,04	14,30
43	60.3	63.5	73.0	127.0	27,7	35.4	16,04	14,30
45	63.5	66.7	76.2	133.4	27,7	35.4	16,04	14,30
48	66.7	76.2	84.1	139.7	27,7	35.4	16,04	14,30
50	66.7	76.2	84.1	139.7	27,7	35.4	16,04	14,30
53	69.9	76.2	84.1	139.7	29.2	35.9	16,04	14,30
55	73.0	84.1	93.7	146.0	29.2	35.9	16,04	14,30
58	76.2	84.1	93.7	146.0	29.2	35.9	16,04	17,50
60	79.4	90.5	100	152.4	29.2	35.9	16,04	17,50
63	85.7	93.7	106.4	158.8	30,5	35.9	16,04	17,50
65	88.9	95.3	106.4	158.8	30,5	35.9	16,04	17,50
70	92.1	98.4	106.4	158.8	30,5	35.9	16,04	17,50

d1	d4		d6	d26	l1	l2	l3	h
(inch)	min	max						max
1.000	1.625	1.937	2.187	4.125	1.055	1.354	0.492	0.562
1.125	27395	2.062	2.312	4.250	1.055	1.354	0.492	0.562
1.250	1.875	2.187	2.437	4.375	1.055	1.354	0.492	0.562
1.375	2.000	2.312	2.625	4.375	1.055	1.354	0.492	0.562
1.500	2.250	2.500	2.875	5.000	1.090	1.393	0.644	0.562
1.625	2.375	2.500	2.875	5.000	1.090	1.393	0.644	0.562
1.750	2.500	2.625	3.000	5.250	1.090	1.393	0.644	0.562
1.875	2.625	3.000	3.312	5.500	1.090	1.393	0.644	0.562
2.000	2.750	3.000	3.312	5.500	1.150	1.413	0.644	0.562
2.125	2.875	3.312	3.687	5.750	1.150	1.413	0.644	0.687
2.250	3.000	3.312	3.687	5.750	1.150	1.413	0.644	0.687
2.375	3.125	3.562	3.937	6.000	1.150	1.413	0.644	0.687
2.500	3.375	3.687	4.187	6.250	1.199	1.413	0.644	0.687
2.625	3.500	3.750	4.187	6.250	1.199	1.413	0.644	0.687
2.750	3.625	3.875	4.187	6.250	1.199	1.413	0.644	0.687

Working length

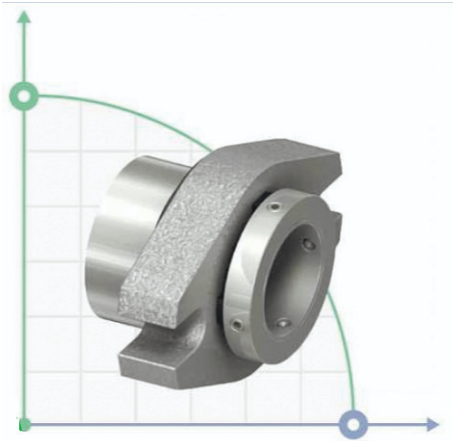


Cartridge seal R-TSSC-A04 for agitators, reactors and mixers.

The design allows to compensate a larger radial runout of the shaft than for standard single seals. Channels are provided for supplying and draining the cooling liquid. The orientation can be horizontal or vertical.

Used at pressures up to 2.3 MPa, speeds up to 23 m/s, and temperature from -30 degrees Celsius to +200 degrees Celsius.

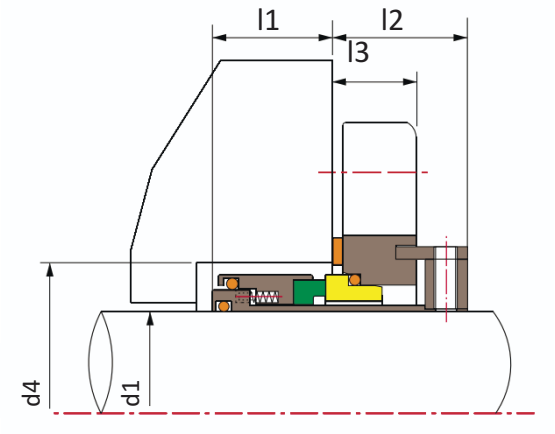
Mechanical seal **R-TSSC-A01**

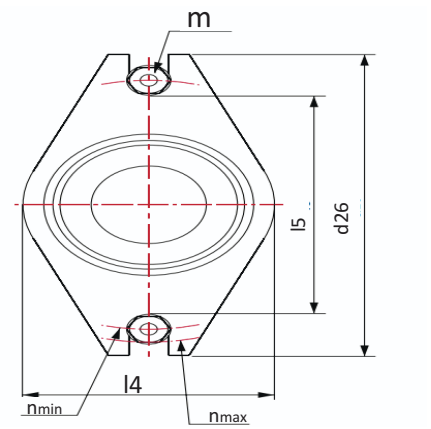


Temperature: -40⁰~200⁰
Pressure: ≤2.5 mPa
Speed: ≤20 m/sec

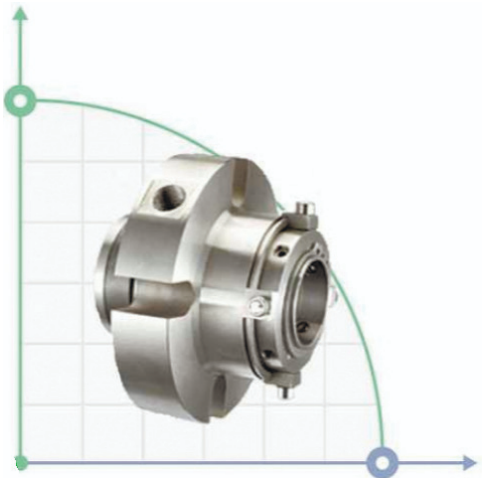
Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





d	d26	l5	l3	l4	d1		n		m	l1	l2
					min	max	min	max			
24	101,60	55,60	20,70	56,10	40,00	48,00	69,90	88,90	12,00	28,60	31,80
25	101,60	55,60	20,70	56,10	41,00	48,00	69,90	88,90	12,00	28,60	31,80
28	104,80	58,80	20,70	59,30	44,00	50,00	73,10	92,10	12,00	28,60	31,80
30	108,00	61,90	20,70	62,40	46,00	54,00	76,20	95,30	12,00	28,60	31,80
32	108,00	61,90	20,70	62,40	48,00	54,00	76,20	95,30	12,00	28,60	31,80
33	108,00	61,90	20,70	62,40	49,00	55,00	76,20	95,30	12,00	28,60	31,80
35	108,00	66,70	20,70	67,20	51,00	59,00	81,00	95,30	12,00	28,60	31,80
38	114,30	71,50	22,30	72,00	57,20	62,00	85,80	101,60	12,00	28,60	33,40
40	114,30	71,50	22,30	72,00	58,00	64,00	85,80	101,60	12,00	28,60	33,40
43	120,70	74,60	22,30	75,10	61,00	67,00	88,90	108,00	12,00	28,60	33,40
45	127,00	77,80	23,80	78,30	63,50	69,00	92,10	114,30	12,00	30,20	35,00
48	133,40	81,00	23,80	81,50	66,70	72,00	95,30	120,70	12,00	30,20	35,00
50	133,40	81,00	23,80	81,50	68,00	74,00	95,30	120,70	12,00	30,20	35,00
53	139,70	84,20	25,40	84,70	71,00	77,00	101,60	123,90	16,00	30,20	36,50
55	146,10	87,30	25,40	87,80	74,00	79,00	104,80	130,20	16,00	30,20	36,50
58	165,10	95,30	25,40	98,90	79,40	85,70	115,90	146,00	20,00	30,20	36,50
60	165,10	95,30	25,40	98,90	79,40	85,70	115,90	146,00	20,00	30,20	36,50
63	177,80	111,20	25,40	121,20	85,80	101,60	131,80	158,70	20,00	28,60	41,20
65	177,80	111,20	25,40	121,20	88,90	101,60	131,80	158,70	20,00	28,60	41,20
68	177,80	111,20	25,40	121,20	92,10	101,60	131,80	158,70	20,00	28,60	41,20
70	177,80	111,20	25,40	121,20	92,10	101,60	131,80	158,70	20,00	28,60	41,20
75	190,50	125,40	31,70	130,70	98,50	114,30	146,10	171,40	20,00	30,20	50,80
80	190,50	125,40	31,70	130,70	101,60	114,30	146,10	171,40	20,00	30,20	50,80
85	203,20	135,00	31,70	140,20	108,00	123,80	155,60	184,10	20,00	30,20	50,80
90	215,90	144,50	31,70	149,70	114,30	133,30	165,10	196,80	20,00	30,20	50,80
95	215,90	144,50	31,70	149,70	117,50	133,30	165,10	196,80	20,00	30,20	50,80
100	228,60	154,00	31,70	156,10	123,90	139,70	174,70	209,50	20,00	30,20	50,80

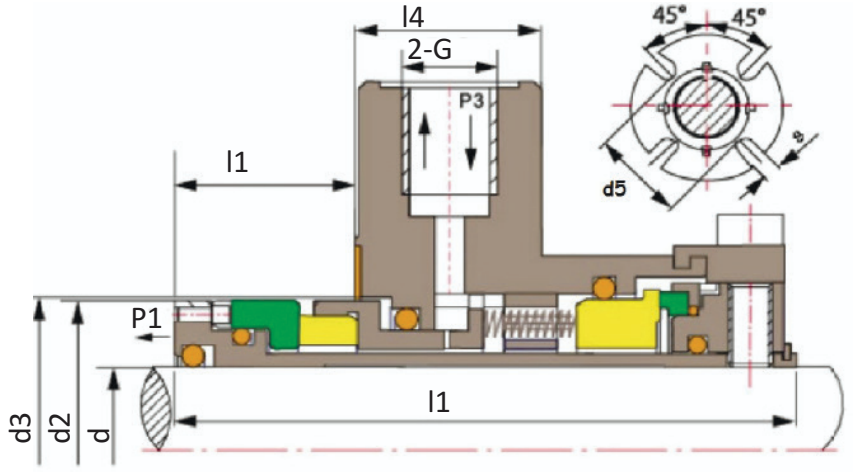


Mechanical seal **R-TSDC-B01**

Temperature: -20⁰~200⁰
Pressure: ≤1.3 mPa
Speed: ≤16 m/sec

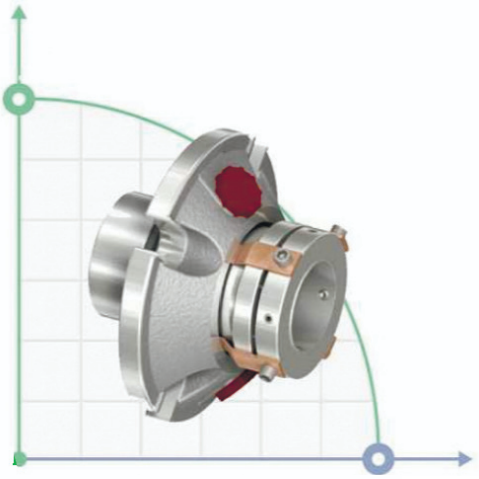
Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: SIC / TC / Carbon.*
3. *Bellows: PTFE / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



R-TSDC-B01	d(mm)	d2	d3 min	d3 max	d4	d5	l1	l3	l4	S	G (inches)
	25	43.0	44.0	51.0	105	62	86.5	24	25,40	14	1/4"
	28	46.0	47.0	52.0	105	62	86.5	24	25,40	14	1/4"
	30	48.0	49.0	56.0	105	65	86.5	24	25,40	14	1/4"
	33	50.0	51.0	57.0	110	67	86.5	24	25,40	14	1/4"
	35	53.0	54.0	61.0	113	70	86.5	24	25,40	14	1/4"
	38	56.0	57.0	66.0	123	75	86.5	24	25,40	14	3/8"
	40	58.0	59.0	68.0	123	78	86.5	24	25,40	16	3/8"
	43	60.0	61.5	70.5	133	80	86.5	24	25,40	16	3/8"
	45	62.5	64.0	73.0	138	81	86.5	24	25,40	16	3/8"
	48	65.5	67.0	75.0	138	84	86.5	24	25,40	16	3/8"
	50	68.0	69.0	78	148	87	86.5	24	25,40	16	3/8"
	55	73.0	74.0	83.0	148	90	86.5	24	25,40	18	3/8"
	60	78.0	79.0	91.0	157	102	86.5	24	25,40	18	3/8"
	65	83.0	84.5	98.5	163	109	86.5	24	25,40	18	3/8"
	70	93.0	95.0	108.0	178	118	86.5	24	25,40	18	3/8"
	75	100.0	101.6	118.0	190	129	108.0	30	28.0	18	3/8"
	80	106.4	108.0	124.0	195	135	108.0	30	28.0	18	3/8"
	85	109.5	111.1	128.0	198	139	108.0	30	28.0	22	3/8"
	90	115.9	117.5	135.0	205	145	108.0	30	28.0	22	3/8"
	95	119.1	120.7	138.0	208	148	108.0	30	28.0	22	3/8"
	100	125.4	127.0	144.0	218	154	108.0	30	28.0	22	3/8"

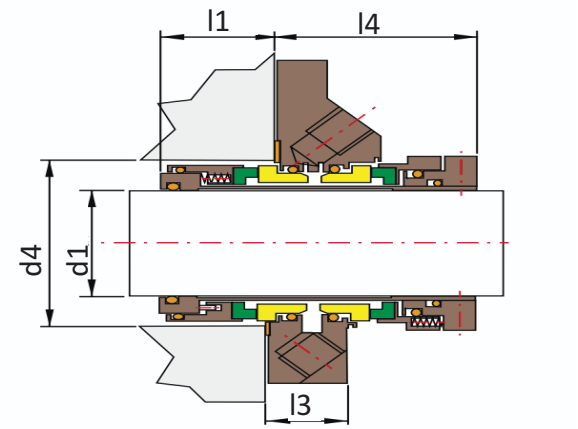
Mechanical seal **R-TSDC-A04**

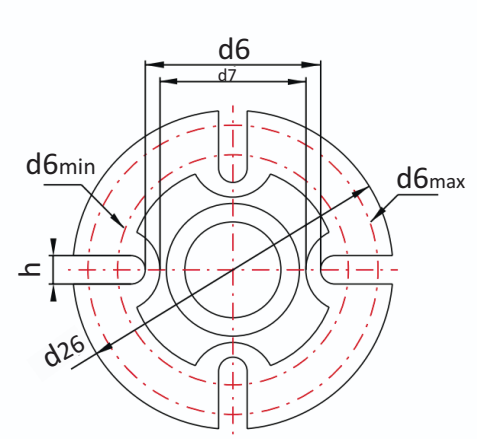


Temperature: -20⁰~200⁰
Pressure: ≤2.1 mPa
Speed: ≤25 m/sec

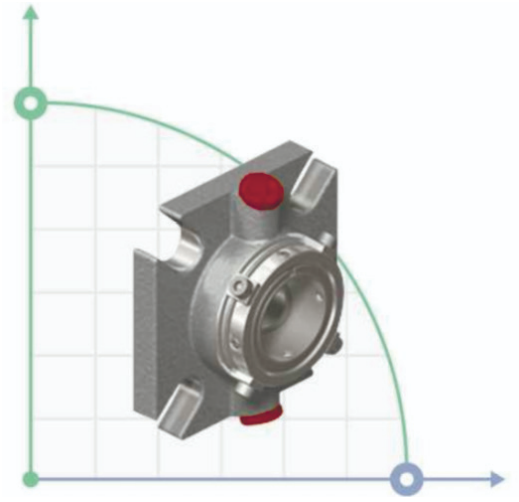
Materials

1. *Rotary ring: SIC / TC.*
2. *Stationary ring: SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





R-TSDC-A04	d1	d4	d6	d7	d26	l1	l2	l3	h
	24	40.0	74,6	60,3	104,8	30,7	51,3	23,5	12
	25	41.0	74,6	60,3	104,8	30,7	51,3	23,5	12
	28	44.0	74,6	60,3	108.0	30,7	51,3	23,5	12
	30	46.0	77,8	63,5	111.0	30,7	51,3	23,5	12
	32	48.0	77,8	63,5	111.0	30,7	51,3	23,5	12
	33	49.0	77,8	63,5	111.0	30,7	51,3	23,5	12
	35	50,8	80,9	66,7	111.0	30,7	51,3	23,5	12
	38	57,2	85,7	71,9	127.0	27,7	56,5	21,6	12
	40	57,2	85,7	71,9	127.0	27,7	56,5	21,6	12
	43	60,3	85,7	71,9	127.0	27,7	56,5	21,6	12
	45	63,5	90,5	76,7	133,4	27,7	56,5	21,6	12
	48	66,7	90,5	76,7	133,4	27,7	56,5	21,6	12
	50	68.0	90,5	76,7	133,4	27,7	56,5	21,6	12
	53	71.0	100.0	86.0	139,7	29,2	57,2	21,6	12
	55	73.0	111,1	93,7	146.0	29,2	57,2	21,6	16
	58	76,2	111,1	93,7	146.0	29,2	57,2	21,6	16
	60	79,4	117,5	100.0	152,4	29,2	57,2	21,6	16
	63	85,7	127.0	109,5	177,8	31,8	63,8	23,5	16
	65	88,9	127.0	109,5	177,8	31,8	63,8	23,5	16
	70	92,1	127.0	109,5	177,8	31,8	63,8	23,5	16
	75	98,5	142,9	125,4	190,5	31,8	63,8	23,5	16
	80	101,6	142,9	125,4	190,5	31,8	63,8	23,5	16
	85	108.0	152,4	135.0	203,2	31,8	63,8	23,5	16
	90	114,3	171,5	150,8	215,9	31,8	47,7	19,6	20
	95	117,5	171,5	150,8	215,9	31,8	47,7	19,6	20
	100	123,9	188,9	168,3	228,6	31,8	47,7	19,6	20



Mechanical seal **R-TSSC-A05**

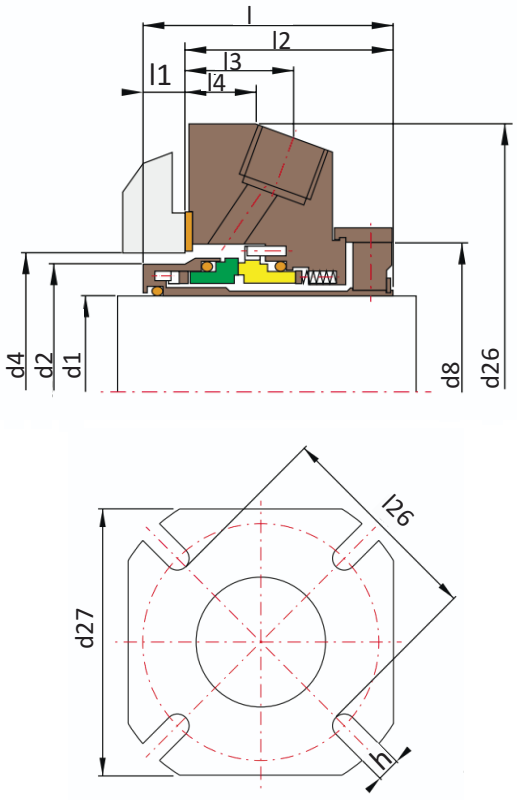
Temperature: -20⁰~200⁰
Pressure: ≤2.3 mPa
Speed: ≤25 m/sec

Materials

1. *Rotary ring: SIC / TC / Carbon.*
2. *Stationary ring: SIC / TC.*
3. *Bellows: Kalrez / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

d1	d4		d26	d27	l	l1	l3	l4
(inch)	min	max						
1,000	1,625	2,000	4,134	3,90	2,194	0,394	0,807	0,469
1,125	1,750	2,125	4,375	4,00	2,194	0,394	0,800	0,469
1,250	1,875	2,250	4,134	3,90	2,194	0,394	0,835	0.551
1,375	2,000	2,312	4,375	4,10	2,194	0,394	0,846	0.551
1,500	2,250	2,750	5,315	4,50	2,269	0,394	0,970	0.551
1,625	2,375	2,750	5,315	4,50	2,269	0,394	0,807	0,610
1,750	2,500	2,937	5,475	4,625	2,269	0,394	0,957	0,630
1,875	2,625	2,937	5,475	4,625	2,269	0,394	0,957	0,630
2,000	2,750	3,062	5,906	4,90	2,269	0,394	0,970	0,630
2,125	2,875	3,437	5,906	5,375	2,269	0,394	0,970	0,610
2,250	3,000	3,625	6,475	5,50	2,269	0,394	0,970	0,630
2,375	3,125	3,625	6,475	5,50	2,269	0,394	0,970	0,630
2,500	3,250	3,875	6,725	5,80	2,269	0,394	0,933	0,630
2,625	3,375	3,875	6,725	5,80	2,269	0,394	0,933	0,630
2,750	3,500	3,937	7,100	6,00	2,269	0,394	0,957	0,630

d1	d4		d26	d27	l	l1	l3	l4
(mm)	min	max						
24	40,0	48,0	105,0	99,0	55,7	10	20,5	11,9
25	41,0	51,0	105,0	101,6	55,7	10	20,5	11,9
28	44,0	54,0	111,0	99,0	55,7	10	20,3	11,9
30	46,0	54,0	105,0	97,8	55,7	10	20,3	11,9
32	49,0	57,0	105,0	99,0	55,7	10	21,2	14,0
33	49,0	57,0	105,0	99,0	55,7	10	21,2	14,0
35	51,0	59,0	111,0	104,1	55,7	10	21,5	13,2
38	57,0	70,0	135,0	114,3	57,6	10	24,6	16,0
40	59,0	70,5	135,0	114,3	57,6	10	24,6	16,0
43	61,0	70,5	135,0	114,3	57,6	10	20,5	15,5
45	64,0	75,0	139,0	117,5	57,6	10	24,3	16,0
48	66,6	75,0	139,0	117,5	57,6	10	24,3	16,0
50	70,0	78,0	150,0	124,5	57,6	10	24,3	16,0
53	73,0	87,0	150,0	136,5	57,6	10	22,5	15,5
55	73,0	87,0	150,0	136,5	57,6	10	22,5	15,5
58	76,2	92,0	164,5	139,7	57,6	10	24,6	16,0
60	80,0	92,0	164,5	139,7	57,6	10	24,6	16,0
63	83,0	98,5	171,0	147,4	57,6	10	23,7	16,0
65	86,0	98,5	171,0	147,4	57,6	10	23,7	16,0
70	89,0	100,0	180,5	152,4	57,6	10	24,3	16,0



Mechanical seal R-TSSC-A05

The design includes the inner part of the mechanical seal with a rotating bellows and the outer part with an impeller for forced cooling. Designed for sealing the product at very high temperatures. Channels for supplying and draining cooling liquid are provided.

Applied to Hecker HN 430N pumps, CR, NBG, Grundfos, TP, NKG, CLM, CRN series pumps and another.

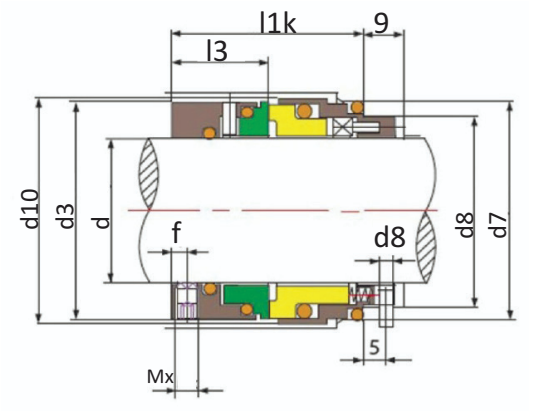
Analogue: AESSEAL BDFI & BDFC

Mechanical seal **R-HRN**

Temperature: -20⁰~220⁰
Pressure: ≤2.5mPa
Speed: ≤20 m/sec

Materials

1. *Rotary ring: Ceramic / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



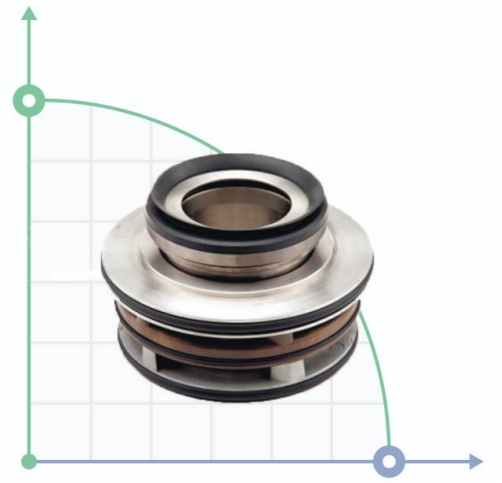
Single mechanical end seal R-HRN
- seal with a non-rotating movable ring.

It is suitable for contaminated media with abrasive particles and waste water. Can be used as part of a tandem. The non-rotating multi-spring unit is isolated from the product, which prevents sticking and clogging.

Applicable to Alfa Laval, Ebara Lowara, KSB (Etanorm, Etachrom), WILO (MVI, MHI, IPL), Grundfos (CDM), Saer (IP), Calpeda (GM, MXS), Hecker HN 410SU pumps

Analogs: Burgmann HRN, Roten EHS3 seal

d	d3	d6	d7	d8	d10	I1k	I3	f	Mx
18	33	27	33	3	34,7	37,5	19,5	3	4
20	35	29	35	3	36,7	37,5	19,5	3	4
22	37	31	37	3	38,7	37,5	19,5	3	4
24	39	33	39	3	40,7	40	20,5	3,5	5
25	40	34	40	3	41,7	40	20,5	3,5	5
28	43	37	43	3	44,7	42,5	21,5	3,5	5
30	45	39	45	3	46,7	42,5	21,5	3,5	5
32	48	42	48	3	49,7	42,5	21,5	3,5	5
33	48	42	48	3	49,7	42,5	21,5	3,5	5
35	50	44	50	3	51,7	42,5	21,5	3,5	5
38	56	49	56	4	57,7	45	24	4	6
40	58	51	58	4	59,7	45	24	4	6
43	61	54	61	4	62,7	45	24	4	6
45	63	56	63	4	64,7	45	24	4	6
48	66	59	66	4	67,7	45	24	4	6
50	70	62	70	4	71,7	47,5	25	4	6
53	73	65	73	4	74,7	47,5	25	4	6
55	75	67	75	4	76,7	47,5	25	4	6
58	78	70	78	4	80,5	52,5	28	4	6
60	80	72	80	4	82,5	52,5	28	4	6
63	83	75	83	4	85,5	52,5	28	4	6
65	85	77	85	4	87,5	52,5	28	4	6
68	90	81	90	4	92,5	52,5	28	4	6
70	92	83	92	4	94,5	60	34	6	8
75	97	88	97	4	100,5	60	34	6	8
80	105	95	105	4	108,5	60	34	6	8
85	110	100	110	4	113,5	60	34	6	8
90	115	105	115	4	118,5	65	39	10	8
95	120	110	120	4	123,5	65	39	10	8
100	125	115	125	4	128,5	65	39	10	8

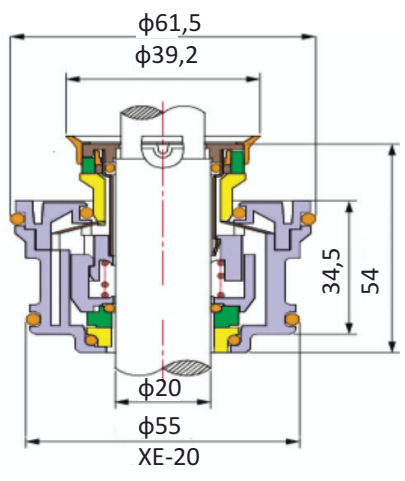


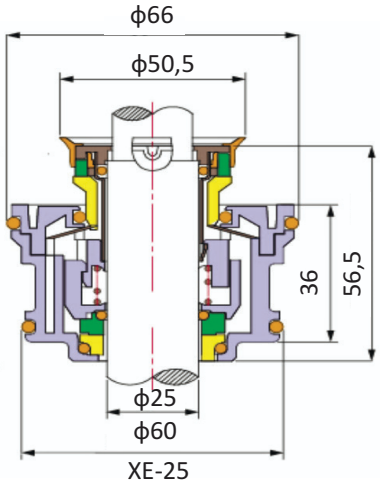
Mechanical seal **R-TS-XE**

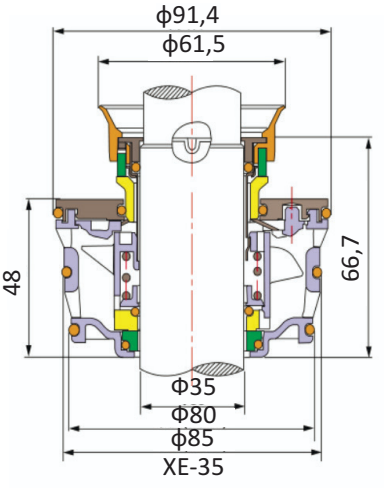
Temperature: -20⁰~180⁰
Pressure: ≤1.4 mPa
Speed: ≤15 m/sec

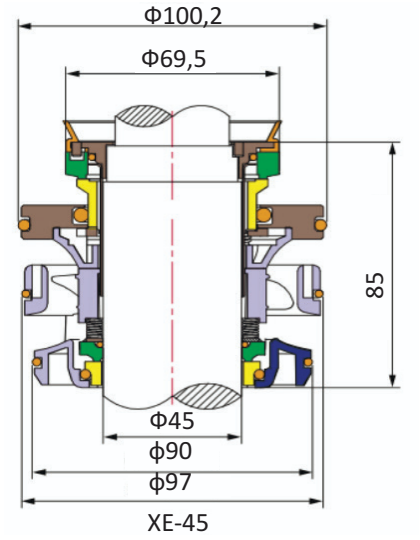
Materials

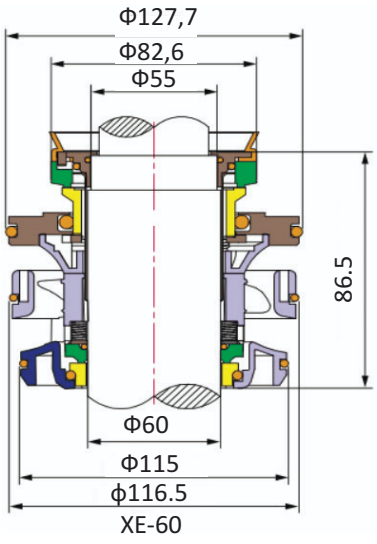
1. *Rotary ring: TC.*
2. *Stationary ring: TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



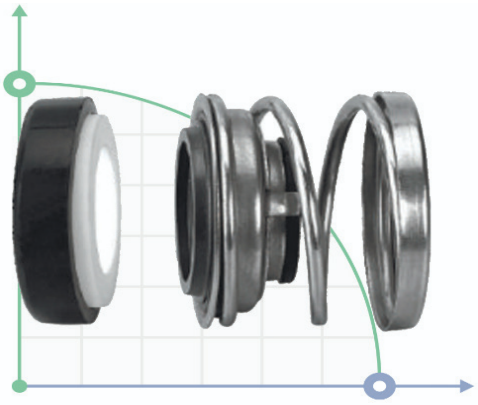








Mechanical seal R-TS-XE
Used in Flygt pumps and Grindex
Analogue: ITT



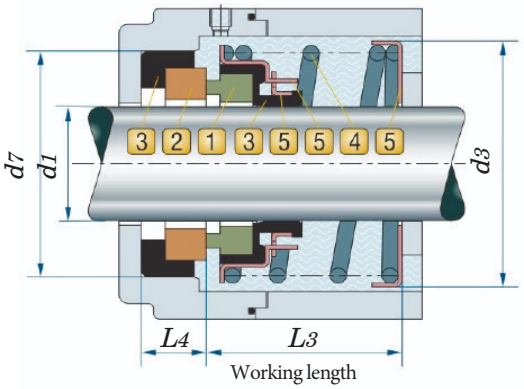
Mechanical seal **R-110**

Temperature: -40⁰~150⁰
Pressure: ≤0.4 mPa
Speed: ≤10 m/sec

Materials

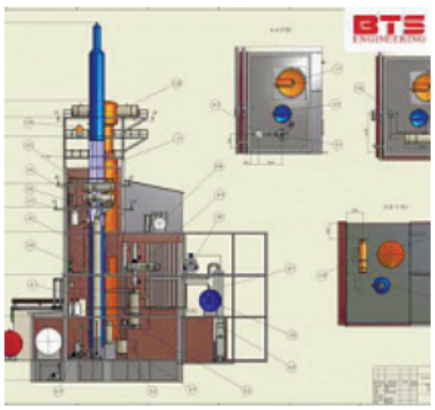
1. *Rotary ring: Carbon/SIC/TC*
2. *Stationary ring: Ceramic/SIC/TC.*
3. *Bellows: NBR / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

Size	d1 (h6)	d3 (Max)	d7 (H8)	L3 (±0.5)	L4
13	**13**	31,5	29,5	24,0	8,0
14	**14**	31,5	29,5	24,0	8,0
15	**15**	31,5	29,5	18,0	8,0
15H	**15**	31,5	29,5	24,0	8,0
16	**16**	31,5	29,5	18,0	8,0
16H	**16**	31,5	29,5	24,0	8,0
20	**20**	37,0	35,0	14,5	5,5
25	**25**	44,2	40,0	16,0	6,0
30	**30**	48,6	45,0	17,5	6,5
35	**35**	54,0	50,0	19,0	7,0
40	**40**	60,4	58,0	20,0	8,0



Alcohol bioethanol plant

- Design of alcohol-bioethanol plants from 1000 dal per day
- Project support on the "Customer" side, technological expertise
- Adaptation of EU, EAEU, USA, China projects
- Energy-saving technologies for the production of bioethanol, alcohol
- Complex supply of equipment for the production of alcohol, bioethanol
- Installation and adjustment of equipment for the production of alcohol and bioethanol
- Experienced operation, training of personnel
- Service and warranty service

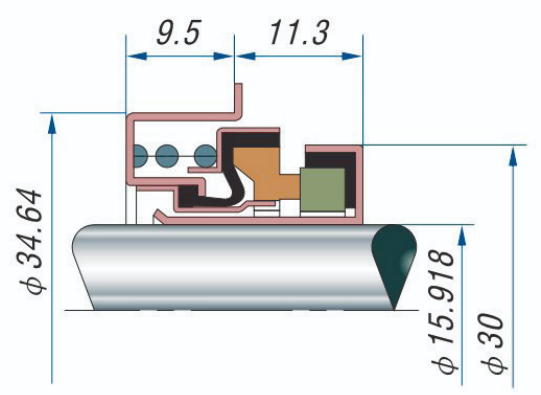


Mechanical seal **R-6CF-16**

Temperature: -20⁰~100⁰
Pressure: ≤0.3 mPa
Speed: ≤5000 rpm

Materials

1. *Rotary ring: Ceramic/Sic.*
2. *Stationary ring: Carbon/SIC.*
3. *Bellows: NBR.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



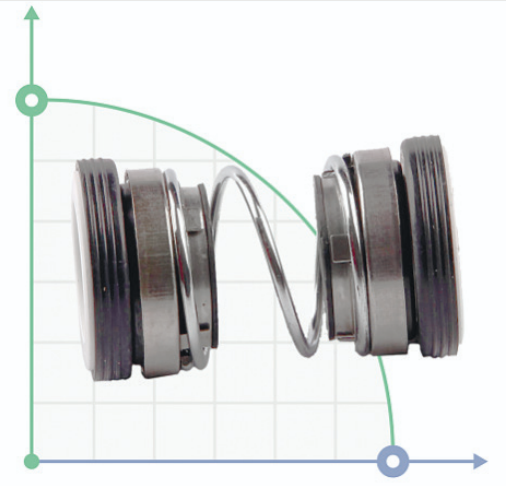
Analog: Burgmann, John Crane, Roten, AESSEAL, Anga, Vulcan, Lidering, DIMER, Flowserve.

Sensors and electrodes

The electrodes/sensors are highly accurate. Sensors and electrodes for determining various water parameters: pH and RedOx (ORP) levels; turbidity; suspended particle concentrations; presence and level of free and total chlorine; carbon content; hydrocarbon content; electrical conductivity; temperature; reagent level; output flow, and others.
Sensors (electrodes) of the RedOx (redox potential) or Rx (ORP) level. The sensor housing is made of epoxy plastic. Max. pressure-6 bar. Max. temperature: up to 60°C.
Measurement range: -1000...+1000 mV.

Rx sensors (ORP) are supplied:
— with a 0.5 m coaxial cable and a BNC plug.

Reliable and inexpensive Rx level sensors (orps).



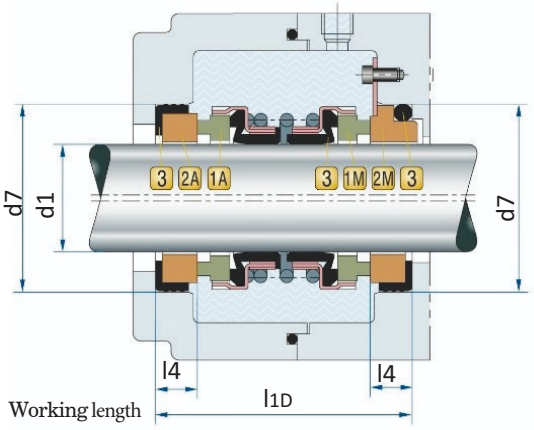
Mechanical seal **R-4701**

Temperature: -20~80
Pressure: ≤0.3 mPa
Speed: ≤3000 rpm

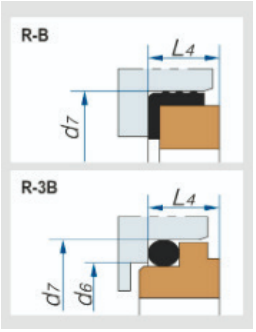
Materials

1. *Rotary ring: Carbon/SIC*
2. *Stationary ring: Carbon/SIC*
3. *Bellows: NBR/VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*

	d1 d6	d3 Max	d7 H8	L1D ±0.5	L4
R-560D-16	16,00	26,50	32,00	36,00	5,00
R-560D-18	18,00	30,50	35,00	36,00	7,50
R-560D-20	20,00	34,00	35,00	49,00	8,00
R-560D-22	22,00	36,00	37,00	49,00	8,00
R-560D-24	24,00	40,00	39,00	49,00	8,00
R-560D-25	25,00	40,00	40,00	51,00	8,00
R-5600-28	28,00	42,00	43,00	51,00	8,00
R-560D-30	30,00	45,00	45,00	59,00	9,00
R-560D-32	32,00	47,00	48,00	61,00	9,00
R-560D-33	33,00	47,00	48,00	61,00	9,00
R-560D-35	35,00	50,00	50,00	61,00	9,00
R-560D-38	38,00	55,00	56,00	61,00	9,00
R-560D-40	40,00	57,00	58,00	64,50	9,00
R-560D-43	43,00	59,00	61,00	65,00	9,50
R-560D-45	45,00	61,50	63,00	65,00	9,50
R-560D-48	48,00	65,50	66,00	65,00	9,50
R-560D-50	50,00	67,50	70,00	69,50	9,50
R-560D-53	53,00	70,50	73,00	69,50	9,50
R-560D-55	55,00	72,00	75,00	71,00	9,50



Type of counter ring



Pumps for disinfection of pool water

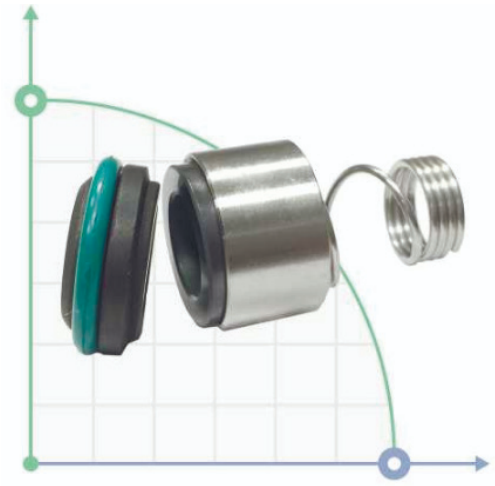
Applications: Hypochlorite pump, alkali pump, acid pump, flocculant pump, chemistry pump, HMIC pump, pool pump, water treatment pump, food additives pump, glue pump, additive pump, enzyme pump, sulfate pump, solvent pump. Pumps for calcium hydroxide Ca(OH)2 (lime milk) acid, aggressive medium, aggressive liquid, chemical solution, chemical liquid of lime milk, sulfuric acid pump, hydrochloric acid pump, nitric acid pump, hydrochloric acid pump, acetic acid pump.

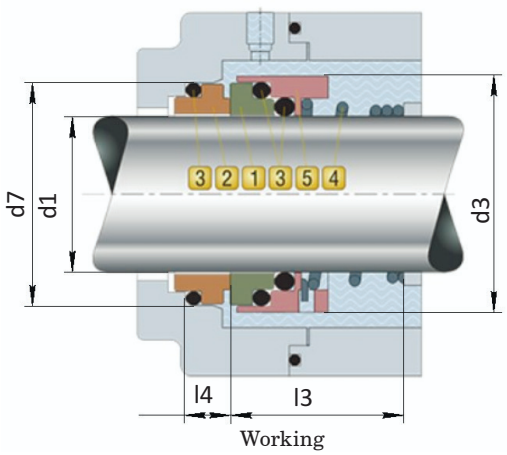
Mechanical seal **R-LW**

Temperature: -20⁰~220⁰
Pressure: ≤0.5mPa
Speed: ≤20 m/sec

Materials

1. *Rotary ring: Carbon*
2. *Stationary ring: SIC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





	d1	d3	d6	d7	L3	L4
	d6	Max		H8	±0.5	
R-LW-12	12	22	19	23	25.5	7
R-LW-16	16	29	23	27	28	7

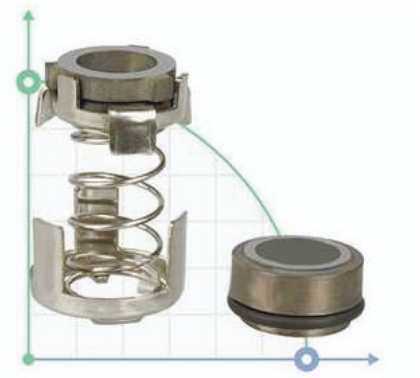
Mechanical seal R-LW

Used in Lowara pumps of the SV, e-SV series.

Oil pumps, radial piston

Axial-piston pump HA
HA...74M pumps are designed for operating with mineral oils with viscosity from 21 to 265 mm²/s (cSt) with an oil temperature from +10 to +50 °C and with ambient temperature from 0 to +50 °C. Recommended working fluids - mineral oils VNII NP-403 GOST 16728-78, IGP-30, IGP-38 according to TU 38-101413-97.
The nominal fineness of the oil filtration is 40 microns. Purity class of the working fluid is 14 according to GOST 17216-71.

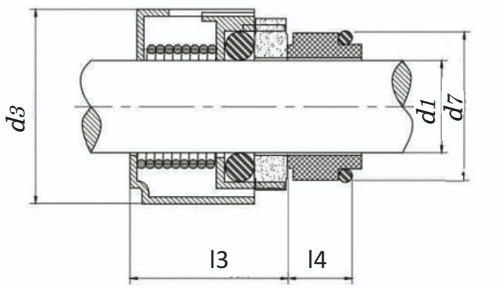
Mechanical seal **R-706F**

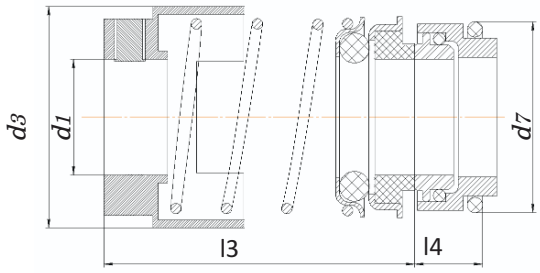


Temperature: -40~180
Pressure: ≤1.7 mPa
Speed: ≤15 m/sec

Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Carbon / SIC / TC.*
3. *Bellows: EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*





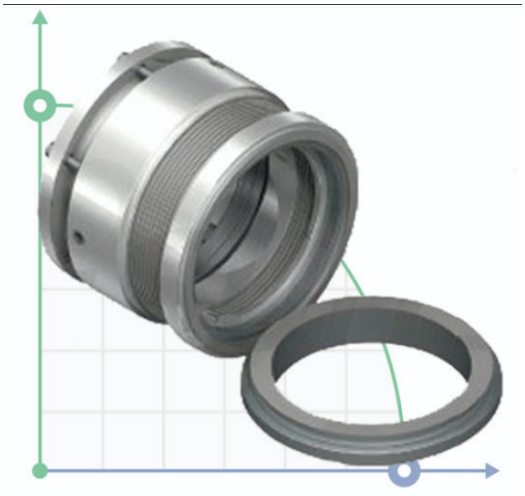
R-706F

	d1 (H6)	d3 (Max)	d7 (h8)	L3 (±0.5)	L4
R-706F-12	**12**	29	23	40	7.5
R-706F-16	**16**	34	27	38,6	11.5
R-706F-22	**22**	43	37	37	16

Used in pumps Grundfos: JP, Ch8, Ch12, CRK(|)2, CRK (|) 4 series. SPK1, SPK2, SPK4, SPK8 series. Cr2, Cr4 , CRN2, Ch4, LM, CM series.

Flocculant pumps

Pumps for flocculant pumping from 1 l/h to 1027 l/h. Flocculant pumps are used for the following purposes:
- Wastewater treatment of industrial and agricultural enterprises
- Preparation of drinking water for public utilities
- Consolidation of soils
- Ait's used as a thickener for drilling and waterproofing solutions
- Mineral processing



Mechanical seal **R-609**

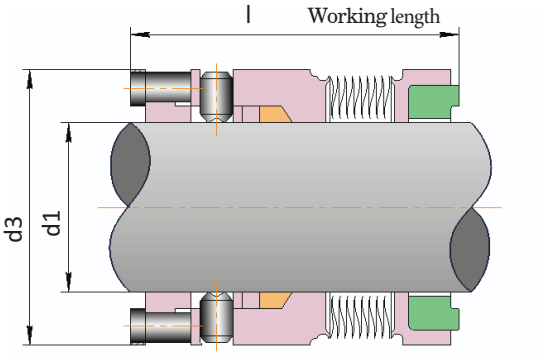
Temperature: -75~425
Pressure: ≤6.9 mPa
Speed: ≤25 m/sec

Materials

1. *Rotary ring: SiC / Carbon / TC*
2. *Stationary ring: SiC / TC*
3. *Bellows: NBR/VITON.*
4. *Spring: SUS316L/AM350/Inconel718/Titanium/ Hastelloy-C/AIIoy-20.*
5. *Metal parts: SUS304/SUS316/Titanium/Hastelloy-C*

R-609 (inches)	d1	d3	L
1,000	1,000	1,625	1,531
1,125	1,125	1,750	1,562
1,250	1,250	1,875	1,593
1,375	1,375	2,000	1,593
1,500	1,500	2,125	1,593
1,625	1,625	2,500	1,593
1,750	1,750	2,375	1,625
1,875	1,875	2,500	1,625
2,000	2,000	2,625	1,656
2,125	2,125	2,750	1,656
2,250	2,250	2,875	1,719
2,375	2,375	3,000	1,719
2,500	2,500	3,250	1,750
2,625	2,625	3,375	1,781
2,750	2,750	3,500	1,781
2,875	2,875	3,687	1,875
3,000	3,000	3,812	1,875
3,125	3,125	4,000	1,875
3,250	3,250	4,125	1,875
2,375	3,375	4,250	1,875
3,500	3,500	4,375	1,875
3,625	3,625	4,500	1,875
3,750	3,750	4,625	1,875
3,875	3,875	4,750	1,875
4,000	4,000	4,875	1,875

R-609(mm)	d1	d3	L
25	25,00	41,28	38,89
28	28,00	44,45	39,67
32	32,00	47,63	40,46
35	35,00	50,80	40,46
38	38,00	53,98	40,46
40	40,00	57,15	40,46
45	45,00	60,33	41,28
48	48,00	63,50	41,28
50	50,00	66,68	42,06
55	55,00	69,85	42,06
60	60,00	76,20	43,66
65	65,00	82,55	44,45
70	70,00	88,90	45,24
75	75,00	96,82	47,63
80	80,00	101,60	47,63
85	85,00	107,95	47,63
90	90,00	111,13	47,63
95	95,00	117,48	47,63
100	100,00	123,83	47.63



Mechanical seal R-609

Mechanical end seal

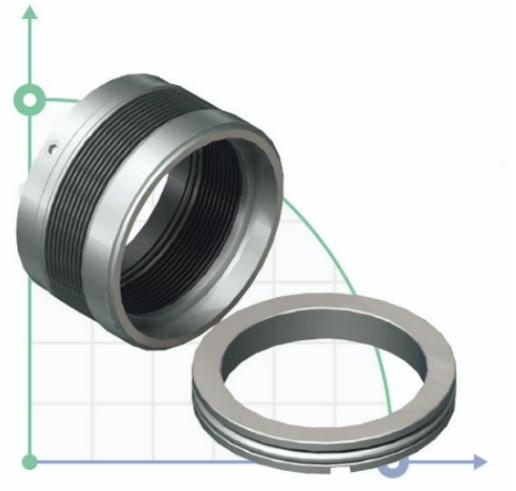
The R-609 is designed for use at high temperatures (up to 425 ° C / 800 ° F) in in pumps without expensive and time-consuming seal chamber modifications. ***Applications*** include hot hydrocarbons, aqueous solutions, aromatic fractionation products, crude oil fractionation products, and heat carriers.

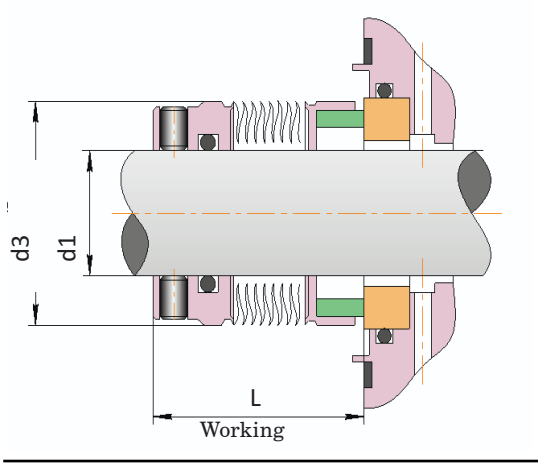
Mechanical seal **R-680**

Temperature: -20~200
Pressure: ≤2.1mPa
Speed: ≤25 m/sec

Materials

1. *Rotary ring: SiC/Carbon/TC*
2. *Stationary ring: SiC/TC*
3. *Bellows: VITON/Encapsulated Ring/PTFE.*
4. *Spring: SUS316L/AM350/Inconel718/Titanum/ Hastelloy-C/AIIoy-20.*
5. *Metal parts: SUS304/SUS316/Titanium/Hastelloy-C*





Mechanical end seal R-680 (676/ 670/ 680)

Mechanical seal *type R-680 with a rotating bellows made of AM350 alloy provides resistance to corrosion in aggressive media with high levels of abrasives. Its design is intended for use in chemical, tap and waste water, pulp and paper and municipal industries. The o-ring does not have a compensating function, so the bellows can move without moisture.*

R-608(inch)	d1	d3	L
0.750	0.750	1.312	1.250
0.875	0.875	1.437	1.250
0.937	0.937	1.500	1.250
1.000	1.000	1.562	1.250
1.125	1.125	1.687	1.250
1.250	1.250	1.812	1.312
1.375	1.375	1.937	1.437
1.500	1.500	2.062	1.437
1.625	1.625	2.187	1.437
1.750	1.750	2.312	1.437
1.875	1.875	2.437	1.500
2.000	2.000	2.562	1.500
2.125	2.125	2.687	1.500
2.250	2.250	2.812	1.562
2.375	2.375	2.937	1.562
2.500	2.500	3.187	1.562
2.625	2.625	3.312	1.625
2.750	2.750	3.437	1.625
2.875	2.875	3.625	1.687
3.000	3.000	3.750	1.687

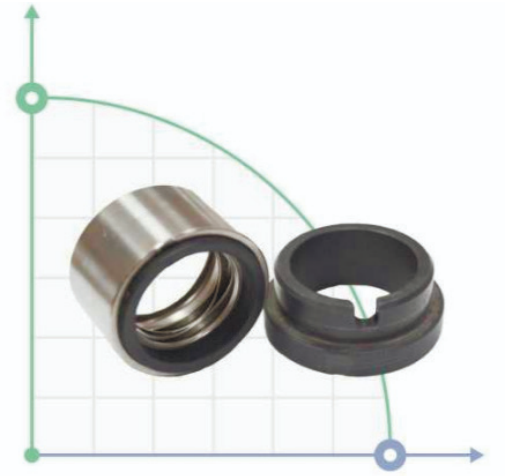
R-680 (mm)	d1	d3	d7
18,00	18,00	32.0	27,50
20,00	20,00	33.3	27,50
22,00	22,00	36.0	27,50
24,00	24,00	38.1	30.0
25,00	25,00	39.0	30.0
28,00	28,00	42.0	32.5
30,00	30,00	44.0	32.5
32,00	32,00	46.0	32.5
33,00	33,00	47.0	32.5
35,00	35,00	49.2	32.5
38,00	38,00	52.4	34.0
40,00	40,00	55.6	34.0
43,00	43,00	58.7	34.0
45,00	45,00	58.7	34.0
48,00	48,00	61.9	34.0
50,00	50,00	65.1	34.5
53,00	53,00	68.3	34.5
55,00	55,00	71.0	34.5
60,00	60,00	74.6	39.5
65,00	65,00	84.1	39.5
70,00	70,00	87.3	45.0
75,00	75,00	95.3	45.0

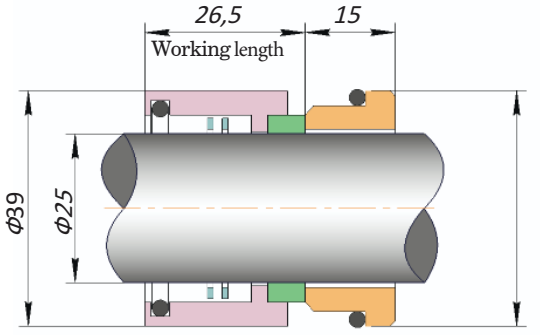
Mechanical seal **R-GEA**

Temperature: -20~200
Pressure: ≤2.5mPa
Speed: ≤25 m/sec

Materials

1. *Rotary ring: SiC/Carbon*
2. *Stationary ring: SiC/TC*
3. *Bellows: VITON/EPDM/NBR.*
4. *Spring: SUS304/SUS316*
5. *Metal parts: SUS304/SUS316*



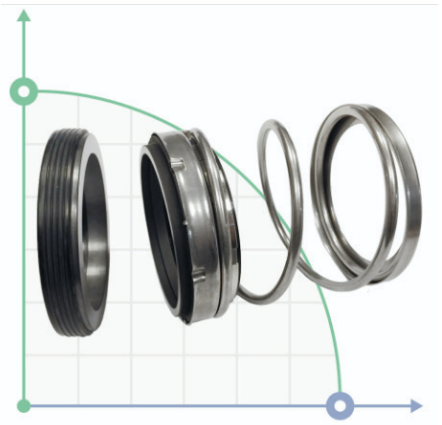


Seal with arbitrary rotation direction R-GEA

Seal for high-viscosity media. The springs of the BSH series end seals are reliably protected from contact with the medium, so these seals are ideal for highly viscous media and media with solid particles, for example in the sugar and paper industry or waste water. Strong, reliable, without sticking and clogging of springs.

Analog of mechanical seals: Burgmann HJ92N, Anga US.

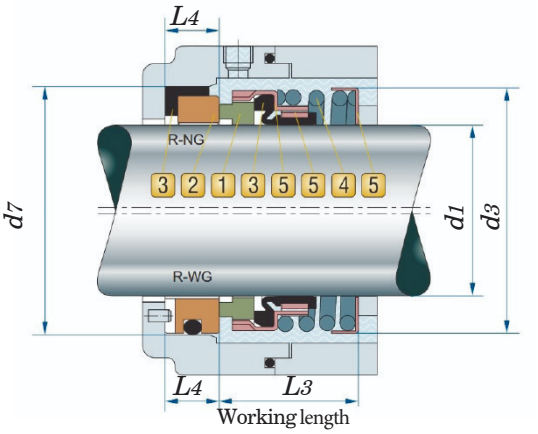
Mechanical seal **R-21**



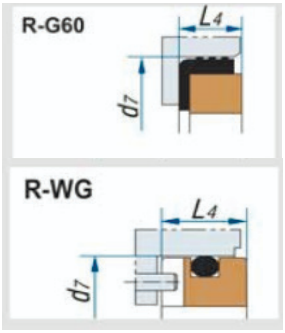
Temperature: -2º~145
Pressure: ≤1.5 mPa
Speed: ≤13 m/sec

Materials

1. *Rotary ring: Carbon / SIC / TC.*
2. *Stationary ring: Ceramic / SIC / TC.*
3. *Bellows: NBR / EPDM / VITON.*
4. *Spring: SS304 / SS316.*
5. *Metal parts: SS304 / SS316.*



Type of counter ring



Mechanical seal R-21

It is applied to pumps of the Haigh, Hidrostal, Hilge, Inbeat, INOX series and another.

Analogue: Burgmann MG920/ D1-G50 seal. Crane 21 (N SEAT) seal. Flowserve 200 seal, Latty T200 seal, Roten RB02 seal, Roten 21 seal, Sealol 43 CE short seal,Sterling 212 seal, V ulcan 20 seal.

R-21	d1	d3	d7	L3	L4
10	10	20,5	22,23	20,62	7,2
12	12	22,5	25,40	20,62	7,9
14	14	26,5	31,75	22,22	10,3
16	16	26,5	31,75	22,22	10,3
18	18	34,0	34,93	22,22	10,3
20	20	36,0	38,10	23,80	10,3
22	22	36,0	38,10	23,80	10,3
24	24	40,0	41,28	25,40	11,1
25	25	40,0	41,28	25,40	11,1
28	28	42,0	44,45	26,97	11,1
30	30	45,0	47,63	26,97	11,1
32	32	47,0	47,63	26,97	11,1
33	33	50,0	50,80	28,58	11,1
35	35	50,0	50,80	28,58	11,1
38	38	55,0	53,98	28,58	11,1
40	40	57,0	60,33	34,93	12,7
43	43	59,0	63,50	34,93	12,7
45	45	65,5	66,68	38,10	12,7
48	48	67,5	69,85	38,10	12,7
50	50	67,5	69,85	38,10	12,7
53	53	72,0	76,20	42,85	14,3
55	55	78,5	79,38	42,85	14,3
58	58	80,0	82,55	46,02	14,3
60	60	80,0	82,55	46,02	14,3
63	63	83,0	85,73	46,02	14,3
65	65	88,0	85,73	49,20	15,9
68	68	90,0	88,90	49,20	15,9
70	70	90,0	88,90	49,20	15,9
73	73	94,0	95,25	52,37	15,9
75	75	99,0	98,43	52,37	15,9

R-21(Inch)	d1	d3	d7	L3	L4
0.375	9,53	20,50	22,23	20,62	7,9
0.437	11,10	22,50	25,40	20,62	7,9
0.500	12,70	22,50	25,40	20,62	7,9
0.625	15,87	26,50	31,75	22,22	10,3
0.750	19,05	34,00	34,93	22,22	10,3
0.875	22,23	36,00	38,10	23,80	10,3
1.000	25,40	40,00	41,28	25,40	11,1
1.125	28,58	42,00	44,45	26,97	11,1
1.250	31,75	47,00	47,63	26,97	11,1
1.375	34,93	50,00	50,80	28,58	11,1
1.437	36,50	55,00	53,98	28,58	11,1
1.500	38,10	55,00	53,98	28,58	11,1
1.625	41,28	57,00	60,33	34,93	12,7
1.750	44,45	61,50	63,50	34,93	12,7
1.875	47,63	65,50	66,68	38,10	12,7
2.000	50,80	67,50	69,85	38,10	12,7
2.125	53,98	72,00	76,20	42,85	14,3
2.250	57,15	78,50	79,38	42,85	14,3
2.375	60,33	80,00	82,55	46,02	14,3
2.437	61,90	80,00	82,55	46,02	14,3
2.500	63,50	83,00	85,73	46,02	14,3
2.625	66,68	88,00	85,73	49,20	15,9
2.750	69,85	90,00	88,90	49,20	15,9
2.875	73,03	94,00	95,25	52,37	15,9
3.000	76,20	99,00	98,43	52,37	15,9