

**MBS100
Metal Bellows
Seals**



MBS100. The new metal bellows mechanical seal from EagleBurgmann

MBS 100

- Single seal
- Balanced
- Independent of direction of rotation
- Metal bellows
- Conforms to EN 12756-3

The EagleBurgmann MBS100 combines the optimum bellows geometry with maximum chemical resistance. This product represents outstanding value for money and because the materials which are used in its manufacture are highly resistant to chemical attack, it has a wide range of applications in numerous industries. The MBS100 is suitable for use as a basic seal in pumps used in the chemicals, pulp and paper industry, refrigeration engineering and wherever you would like to make use of the technical advantages offered by metal bellows seal technology. The MBS100 is equally ideal for standardization purposes. Since we use the latest manufacturing methods and state of the art facility and have years of experience in the development and manufacture of metal bellows, the high quality and functional reliability of our MBS metal bellows seals are guaranteed.

Economical benefits

- Wide field of application
- Ideal for standardization
- Simplified stock control
- Outstanding value for money
- Simple to handle and install due to robust, compact design

Technical advantages

- No dynamic O-ring (deposits on the shaft are insignificant for the movement of the bellows)
- Non-hardened bellows with optimum spring characteristics
- The special bellows geometry provides very favorable force distribution and also inhibits natural resonances and vibrations
- Vibration dampers inside the seal face housing ensure stable, quiet running characteristics (important if there is any risk of dry running and the stick-slip effect)
- The rotary bellows are self-cleaning so full movement and elasticity is ensured.
- Inherently pressure balanced
- Installation dimensions according to EN 12756

Applications

The EagleBurgmann MBS100 mechanical seal is designed for use in pumps which operate in the middle pressure and temperature range. They are particularly suitable for aggressive media and media loaded with suspended solids and are highly resistant to chemicals.

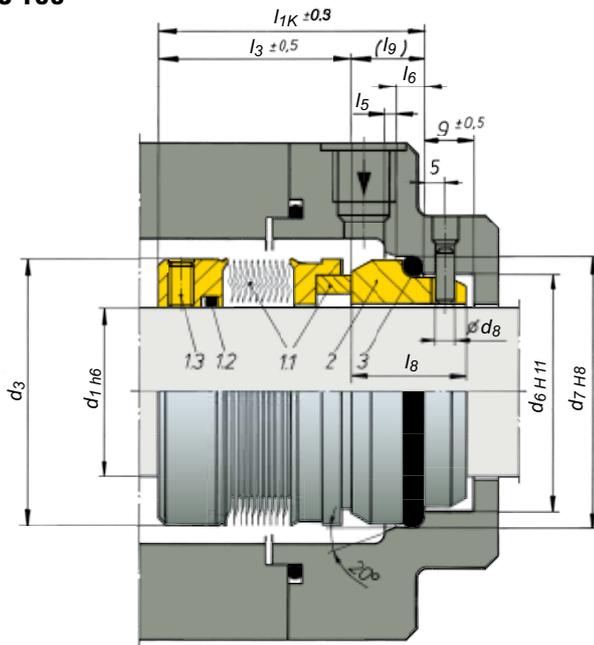
Operating limits

d_1	= 20 ... 100 mm (0.75 ... 4")
p_1	= ... 25 (16*) bar ... 300 (230*) PSI
t	= -40 ... 220 (160)* °C -40 ... 428 (320)* °F
v_g	= 20 m/s (66 ft/s)
*) operating limits for material combination Q1/ Q1	

Materials

Bellows: Inconel® 625
Components: 1.4462 (G1)
O-Ring: Fluorinated polymer e.g. Viton® (V)
Seal face: Carbon graphite (A)
Silicon carbide (Q1)
Seat: Silicon carbide (Q1)

MBS 100



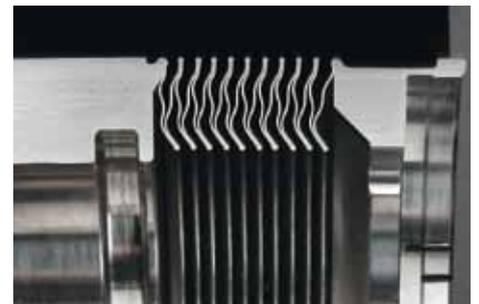
Item	Designation
1.1	Seal face with bellows unit
1.2	O-ring
1.3	Set screw
2	Seat type G9
3	O-ring

Dimensions (mm)

d ₁	d ₃	d ₆	d ₇	d ₈	l _{1k}	l ₃	l ₅	l ₆	l ₈	l ₉
20	33.3	29	35	3	37.5	30.5	2.0	5	15.0	7.0
22	36.5	31	37	3	37.5	30.5	2.0	5	15.0	7.0
24	39.0	33	39	3	40.0	28.5	2.0	5	19.5	11.5
25	39.0	34	40	3	40.0	28.5	2.0	5	19.5	11.5
28	42.0	37	43	3	42.5	31.0	2.0	5	19.5	11.5
30	44.0	39	45	3	42.5	31.0	2.0	5	19.5	11.5
32	46.0	42	48	3	42.5	31.0	2.0	5	19.5	11.5
33	47.0	42	48	3	42.5	31.0	2.0	5	19.5	11.5
35	49.2	44	50	3	42.5	31.0	2.0	5	19.5	11.5
38	52.4	49	56	4	45.0	31.0	2.0	6	22.0	14.0
40	55.6	51	58	4	45.0	31.0	2.0	6	22.0	14.0
43	58.7	54	61	4	45.0	31.0	2.0	6	22.0	14.0
45	58.7	56	63	4	45.0	31.0	2.0	6	22.0	14.0
48	61.9	59	66	4	45.0	31.0	2.0	6	22.0	14.0
50	65.1	62	70	4	47.5	32.5	2.5	6	23.0	15.0
53	68.3	65	73	4	47.5	32.5	2.5	6	23.0	15.0
55	69.7	67	75	4	47.5	32.5	2.5	6	23.0	15.0
58	74.6	70	78	4	52.5	37.5	2.5	6	23.0	15.0
60	74.6	72	80	4	52.5	37.5	2.5	6	23.0	15.0
65	84.1	77	85	4	52.5	37.5	2.5	6	23.0	15.0
70	87.3	83	92	4	60.0	42.0	2.5	7	26.0	18.0
75	95.3	88	97	4	60.0	42.0	2.5	7	26.0	18.0
80	98.4	95	105	4	60.0	41.8	3.0	7	26.2	18.2
85	104.8	100	110	4	60.0	41.8	3.0	7	26.2	18.2
90	108.0	105	115	4	65.0	46.8	3.0	7	26.2	18.2
95	114.3	110	120	4	65.0	47.8	3.0	7	25.2	17.2
100	120.7	115	125	4	65.0	47.8	3.0	7	25.2	17.2



Vibration dampers in the area of the seal face ensure stable, quiet running characteristics.



The special bellows geometry provides very favorable force distribution.



All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications means, however, that they can serve only as guide values. We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. Subject to change.

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EagleBurgmann is one of the leading international companies for industrial sealing technology. Our products are used everywhere that safety and reliability are important: In the oil and gas industries, petroleum refining, pharmacy, chemicals, energy, food, paper, water, marine applications, aerospace and mining. Every day, more than 5,270 employees contribute their ideas, solutions and commitment to ensuring that customers all over the world can rely on our seals. Our modular seal service, TotalSealCare™, underlines our commitment to customer orientation and our provision of tailor-made services for every application.

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