

HBrinker Mechanical Seal

Metal Bellows seals Mechanical Seal HBE400



Mechanical Seal HBE400

Operating range

Pressure (single ply bellows): $p = \text{vacuum} \dots 20 \text{ bar}$ (... 290 PSI)

Pressure (two ply bellows): $p = \text{vacuum} \dots 35 \text{ bar}$ (... 508 PSI)

Temperature: $t = -240 \text{ }^\circ\text{C} \dots +425 \text{ }^\circ\text{C}$ (-400 °F ... +797 °F)

Sliding velocity: $v_g = \dots 50 \text{ m/s}$ (164 ft/s)

Viscosity: ... 1 Pa·s

Materials

- Seal face: High density carbon graphite
- Seat: Silicon carbide (Q2)
- Bellows: Inconel® 718 (M6)
- Secondary seals: Graphite
- Metal parts: 1.4404, Carpenter® 42 (T4)

Features

- For unstepped shafts
- Single Seal
- √Balanced
- Independent of direction of rotation
- Metal bellows rotating

Advantages

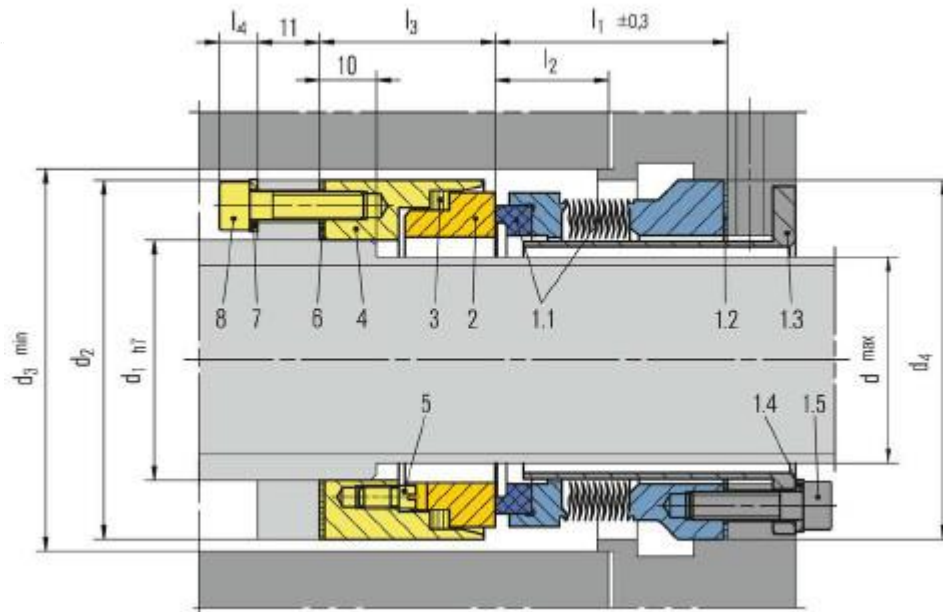
- For high or low temperature applications

Recommended applications

- Refining technology
- Power plant technology
- Chemical industry
- High and low temperature hydrocarbon services
- Residual oil
- Gas oil
- Low temperature ethylene
- Pumps
- Special rotating equipment

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Item	Description
1	Stationary unit
1.1	Bellows unit
1.2	Gasket
1.3	Clamp sleeve
1.4	Spring washer
1.5	HSH cap screw
2	Seat
3	Secondary seal
4	Seat housing
5	Drive pin
6	Gasket
7	Spring washer
8	HSH cap screw

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Dimension Table in millimeter

Size code	d	d ₁	d ₂	d ₃	d ₄	l ₁	l ₂	l ₃	l ₄
X14	18	21	42	47	44	36	15	31	6.3
X16	21	26	47	50	47	38	17	31	6.3
X18	24	29	50	53	50	38	17	31	6.3
X20	27.5	32	53	56	53	38	17	31	6.3
X22	31	36	57	60	57	38	17	31	6.3
X24	33	39	60	64	60	41	20	31	6.3
X26	36	42	63	67	63	41	20	31	6.3
X28	39	45	66	70	66	41	20	31	6.3
X30	42	48	69	73	69	41	20	31	6.3
X32	45	51	72	76	72	41	20	31	6.3
X34	4.5	54	75	80	76	43	22	31	6.3
X36	50	58	79	83	79	43	22	31	6.3
X38	53	61	82	86	82	43	22	31	6.3
X40	55	64	85	89	85	51	30	31	6.3
X42	58.5	67	89	92	88	51	30	31	6.3
X44	62.5	71	92	96	92	51	30	31	6.3
X46	64	74	96	99	95	55	34	31	6.3
X48	67	77	99	102	98	55	34	31	6.3
X50	70	81	102	105	101	55	34	31	6.3
X52	73	84	105	108	104	55	34	31	6.3
X54	75.5	87	109	111	107	55	34	31	6.3
X56	78.5	90	113	116	111	58	37	31	6.3
X58	82	93	116	120	114	58	37	31	6.3
X60	85	96	119	122	117	58	37	31	6.3
X62	88	99	122	125	120	58	37	31	6.3
X64	91	103	125	128	123	58	37	31	6.3
X70	100	111	138	142	134	60	39	31	6.3
X78	110	116	147	152	145	60	39	41	7.5
X90	129	137	168	173	166	63	42	41	7.5