EagleBurgmann
a member of EKK and FREUDENBERG

RELY ON EXCELLENCE

Class P balanced seals
P23, P24, P31

Mechanical Seals | Mechanical seals for pumps | Pusher seals

Features

- Rotating multi-spring pusher seals
- Balanced
- Compact in length
- Available as O-Ring or wedge variants
- Uniform seal face loading
- Self-balanced seal with spring outside product design (P31)
- Independent of direction of rotation
- Available as single, dual and tandem arrangements

Advantages

- Ideal for process applications
- Over 35 years of running reference in the field
- Narrow cross-section allows the seal fitment in narrow stuffing boxes
- Lower inventory since all parts except seal ring composite are interchangeable with Class P balanced seals (P21, P22).
- No spring clogging in case of solids in media

Operating range

Shaft diameter: d = 25 ... 100 mm (1" ... 3.94")
Pressure: p = vacuum to 50 bar (725 PSI)
Temperature:
t = -75 °C ... +260 °C (-103 °F ... +500 °F)
Sliding velocity: vg = 25 m/s (82 ft/s)
Axial movement: ±0.5 mm

(Consult EB for applications outside above limits).

Materials

Seal ring: Carbon graphite resin impregnated, Carbon graphite antimony impregnated
Mating ring: Silicon carbide, Tungsten carbide, Ceramic
Secondary seals: FKM, NBR, FFKM, PTFE
Springs: Hastelloy® C-4
Metal parts: SS 316, other materials on request.

Recommended applications

- Process industry
- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Power plant technology
- Water and waste water technology
- Building services industry
- Food and beverage industry
- Sugar industry
- Horizontal and vertical pumps, agitators, mixers

Recommended piping plans

API Plan 01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 31, 32, 41, 52, 53A, 53B, 53C, 54, 55, 61, 62, 65A, 65B, 66

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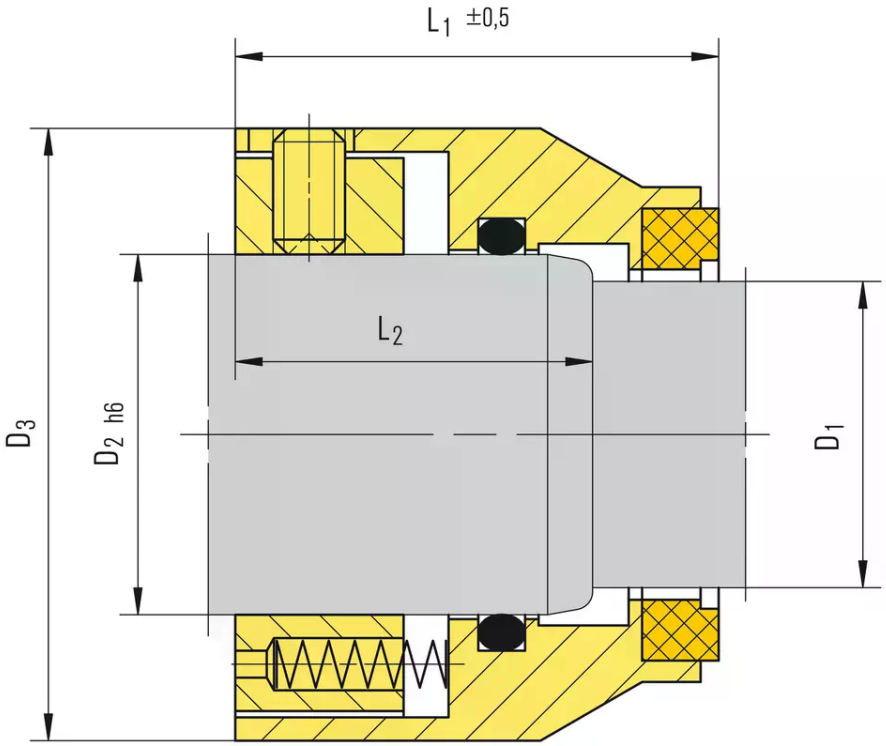
All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications means, however, that they can serve only as guide values.
We must be notified of the exact conditions of application before we can provide any guarantee for a specific case.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

Drawing shows
P23 balanced O-Ring seal



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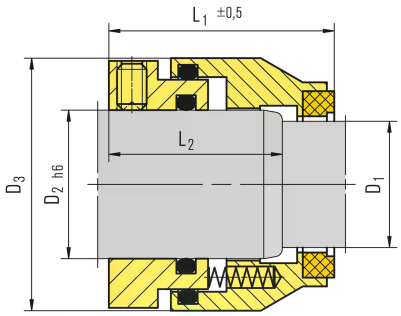
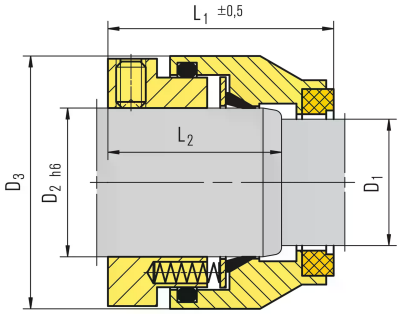
Product variants

P31 Self-balanced, spring outside mounted seal



P24 Balanced wedge seal



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Dimensions

Dash size	D1	D2	D3	L1	L2
D016	22.23	25.40	38.0	33.5	26.0
D018	25.40	28.58	41.0	33.5	26.0
D020	28.58	31.75	45.0	33.5	26.0
D022	28.58	34.93	48.2	36.5	27.0
D024	31.75	38.10	54.0	36.5	27.0
D026	34.93	41.28	57.0	37.5	27.0
D028	38.10	44.45	60.3	38.0	27.0
D030	41.28	47.63	63.5	38.0	27.0
D032	44.45	50.80	66.7	38.0	27.0
D034	47.62	53.98	70.0	38.0	27.0
D036	50.80	57.15	73.0	44.5	34.0
D038	53.98	60.32	76.2	44.5	34.0
D040	57.15	63.50	79.4	44.5	34.0
D042	60.32	66.68	89.0	47.0	34.0
D044	63.50	69.85	92.0	47.0	34.0
D046	66.67	73.02	95.3	47.0	34.0
D048	69.85	76.20	98.5	47.0	34.0
D050	73.02	79.38	101.6	47.0	34.0
D052	76.20	82.55	104.8	47.0	34.0
D054	79.37	85.72	108.0	47.0	34.0
D056	82.55	88.90	111.0	47.0	34.0
D058	85.72	92.07	114.3	47.0	34.0
D060	88.90	95.25	117.5	47.0	34.0
D062	92.08	98.42	120.7	47.0	34.0
D064	95.25	101.6	126.0	47.0	34.0

Imperial size

Seal size	D1	D2	D3	L1	L2
0025	25.0	30.0	44.0	37.5	27.5
0028	28.0	33.0	47.0	40.0	30.0
0030	30.0	35.0	49.0	40.0	30.0
0032	32.0	38.0	54.0	40.0	30.0
0033	33.0	38.0	54.0	40.0	30.0
0035	35.0	40.0	56.0	40.0	30.0
0038	38.0	43.0	59.0	41.5	29.5
0040	40.0	45.0	61.0	41.5	29.5
0043	43.0	48.0	64.0	41.5	29.5
0045	45.0	50.0	66.0	41.5	29.5
0048	48.0	53.0	69.0	41.5	29.5
0050	50.0	55.0	71.0	44.5	32.5
0053	53.0	58.0	78.0	44.5	32.5
0055	55.0	60.0	80.0	44.5	32.5
0058	58.0	63.0	83.0	49.5	37.5
0060	60.0	65.0	85.0	49.5	37.5
0063	63.0	68.0	88.0	49.5	37.5
0065	65.0	70.0	90.0	49.5	37.5
0068	68.0	-	-	-	-

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Seal size	D1	D2	D3	L1	L2
0070	70.0	75.0	99.0	54.7	42.0
0075	75.0	80.0	104.0	54.7	42.0
0080	80.0	85.0	109.0	54.3	42.0
0085	85.0	90.0	114.0	59.3	47.0
0090	90.0	95.0	119.0	59.3	47.0
0095	95.0	100.0	124.0	59.3	47.0
0100	100.0	105.0	129.0	59.3	47.0

Metric size

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