

RELY ON EXCELLENCE

Class P balanced seals P03, P04, P13, P14

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
- Circlip design for ease of assembly in P13 / P14 seals
- Independent of direction of rotation
- Available as single, dual and tandem arrangements

Advantages

- Ideal for general purpose 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 are interchangeable with P class unbalanced version (P01, P02, P11, P12).

Operating range

Shaft diameter: $d = 25 \dots 100 \text{ mm}$ (1" ... 3.94")

Pressure: $p = \text{vacuum to } 35 \text{ bar}$ (508 PSI)

Temperature:

$t = -75 \text{ }^\circ\text{C} \dots +260 \text{ }^\circ\text{C}$ (-103 °F ... +500 °F)

Sliding velocity: $v_g = 25 \text{ m/s}$ (82 ft/s)

Axial movement: $\pm 0.5 \text{ mm}$

Materials

(Consult EB for applications outside above limits). 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

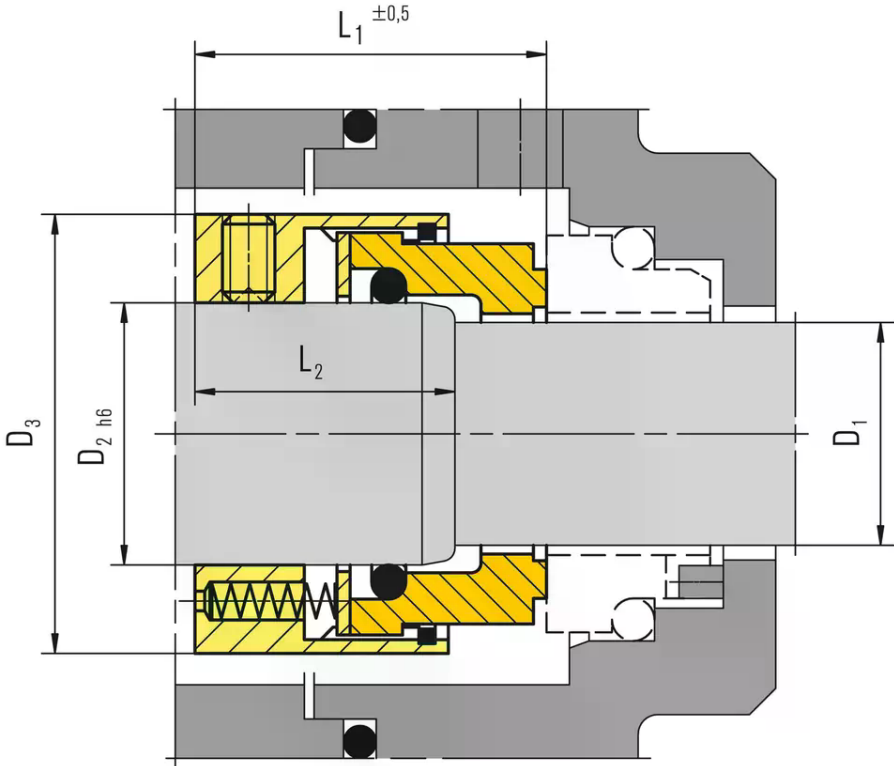
- Process industry
- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Power plant technology
- Water and waste water technology
- Building services industry
- Food and beverage industry
- Sugar industry
- Horizontal and vertical pumps,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

Recommended piping plans

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

RELY ON EXCELLENCE

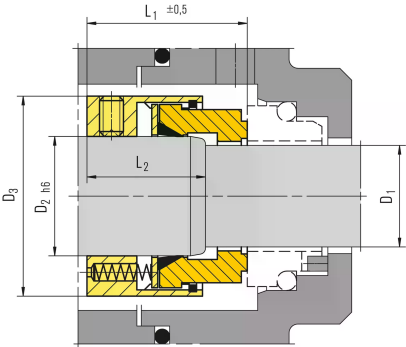
Drawing shows
P13 balanced seal with O-Ring



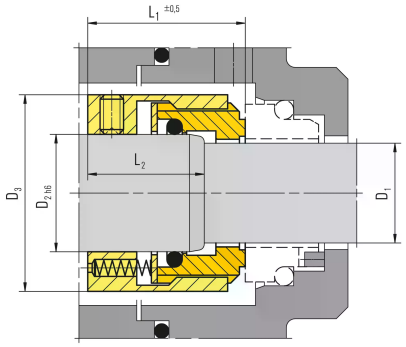
RELY ON EXCELLENCE

Product variants

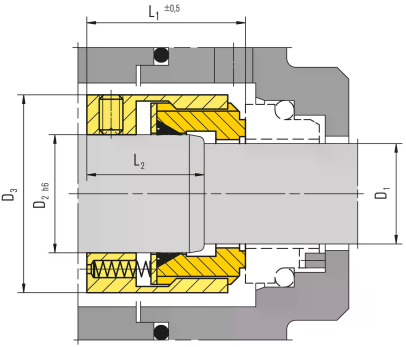
P14 balanced seal with wedge



P03 balanced seal with O-Ring



P04 balanced seal with wedge



RELY ON EXCELLENCE

Dimensions

Dash Size	D1	D2	D3	L1	L2
D016	22.23	25.40	36.5	33.5	26
D018	25.40	28.58	39.7	35.5	26
D020	28.58	31.75	42.9	35.5	26
D022	28.58	34.93	49.2	36.5	27
D024	31.75	38.10	52.4	36.5	27
D026	34.93	41.28	55.6	37.3	27
D028	38.10	44.45	58.7	38.1	27
D030	41.28	47.63	63.5	38.1	27
D032	44.45	50.80	66.7	38.1	27
D034	47.62	53.98	71.4	38.1	27
D036	50.80	57.15	72.2	44.5	34
D038	53.98	60.32	76.2	44.5	34
D040	57.15	63.50	79.4	44.5	34
D042	60.32	66.67	82.6	46.8	34
D044	63.50	69.85	85.7	46.8	34
D046	66.67	73.02	94.7	46.8	34
D048	69.85	76.20	96.8	46.8	34
D050	73.02	79.37	101.6	46.8	34
D052	76.20	82.55	104.8	46.8	34
D054	79.37	85.72	108.0	46.8	34
D056	82.55	88.90	111.1	46.8	34
D058	85.72	92.08	114.3	46.8	34
D060	88.90	95.25	117.5	46.8	34
D062	92.08	98.43	120.7	46.8	34
D064	95.25	101.06	123.8	46.8	34

Imperial size

Seal Size	D1	D2	D3	L1	L2
0025	25	30	44	37.5	27.5
0028	28	33	47	40.0	30.0
0030	30	35	49	40.0	30.0
0032	32	38	54	40.0	30.0
0033	33	38	54	40.0	30.0
0035	35	40	56	40.0	30.0
0038	38	43	59	41.5	29.5
0040	40	45	61	41.5	29.5
0043	43	48	64	41.5	29.5
0045	45	50	66	41.5	29.5
0048	48	53	69	41.5	29.5
0050	50	55	71	44.5	32.5
0053	53	58	78	44.5	32.5
0055	55	60	80	44.5	32.5
0058	58	63	83	49.5	37.5
0060	60	65	85	49.5	37.5
0063	63	68	88	49.5	37.5
0065	65	70	90	49.5	37.5
0070	70	75	99	54.7	42.0

RELY ON EXCELLENCE

Seal Size	D1	D2	D3	L1	L2
0075	75	80	104	54.7	42.0
0080	80	85	109	54.7	42.0
0085	85	90	114	59.3	47.0
0090	90	95	119	59.3	47.0
0095	95	100	124	59.3	47.0
0100	100	105	129	59.3	47.0

Metric size