

RELY ON EXCELLENCE

SP series split seals SP1, SP2

Mechanical Seals | Mechanical seals for pumps | Split seals



Features

- Stationary pusher seal
- Few parts to assemble
- Disc loaded seal faces instead of coil spring
- Independent of direction of rotation
- Ideal for large size pumps, mixers and agitators

Advantages

- Can be installed quickly without dismantling the equipment
- Unique disc design eliminate clogging or corrosion of spring
- Over 35 years of running reference in the field
- Easy accessibility as outside mounted seal
- Reduced downtime
- Increased sleeve life
- Increased MTBF of bearings
- Can be used with shut-off seal

Operating range

Shaft diameter:

$d = 45 \dots 165 \text{ mm (1.771" } \dots 6.496\text{")}$

Pressure: $p = \text{vacuum to } 13 \text{ bar (188 PSI)}$

Temperature: $t = +120 \text{ }^\circ\text{C (+248 }^\circ\text{F)}$

Sliding velocity: $v_g = 10 \text{ m/s (33 ft/s)}$

(Consult EB for applications outside above limits).

Materials

SP1 seal

Seal ring: Carbon graphite resin impregnated,
Carbon graphite antimony impregnated
Mating ring: Silicon carbide

SP2 seal

Seal ring: Bronze
Mating ring: Cast iron

Secondary seals: FKM, NBR, FFKM, PTFE
Metal parts: SS 316, other materials on request.

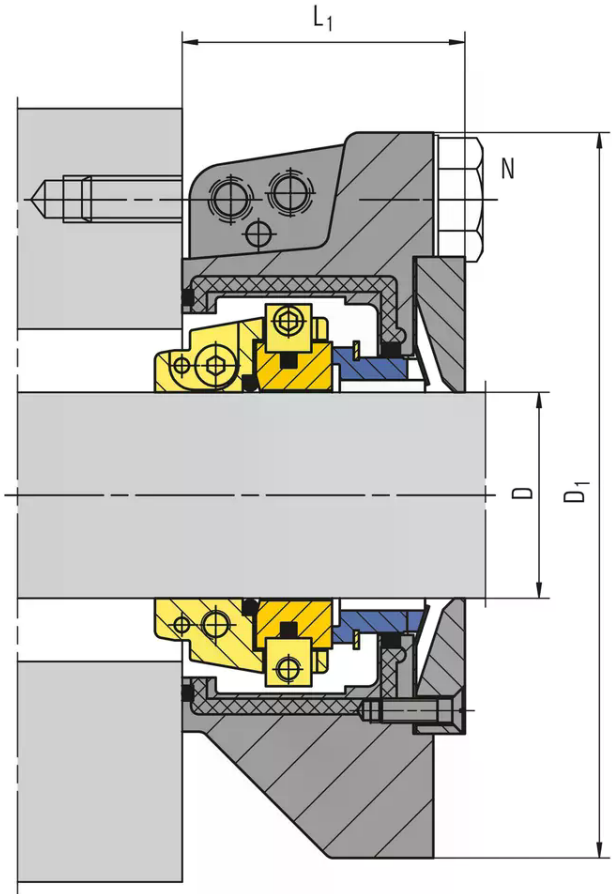
Recommended applications

- 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
- CW pumps
- CE pumps
- Side entry mixers
- Submarine propeller shafts

Recommended piping plans

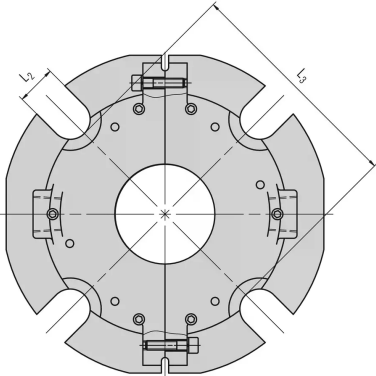
API Plans 01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 31, 32, 41

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Installation, details, options

Seal cover



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Dimensions

Dash size	D	L1	D1	L3	N
D028	44.45	47.7	134.2	82.6	4 X M12
D032	50.80	50.9	140.0	87.0	4 X M12
D038	60.32	57.0	165.0	105.0	4 X M16
D040	63.50	57.0	170.0	110.0	4 X M16
D044	69.85	57.2	175.0	115.0	4 X M16
D048	76.20	63.5	197.0	135.0	4 X M16
D052	82.55	63.5	197.0	135.0	4 X M16
D054	85.73	63.5	202.0	140.0	4 X M16
D060	95.25	64.0	229.0	156.0	4 X M20
D064	101.60	64.0	229.0	156.0	4 X M20
D068	107.95	64.0	229.0	160.0	4 X M20
D076	120.65	83.0	268.0	185.0	4 X M20
D080	127.00	83.0	273.0	190.0	4 X M20
D082	130.17	83.0	278.0	195.0	4 X M20
D096	152.40	93.5	295.0	215.0	4 X M20
D104	165.10	110.7	311.0	246.0	4 X M20

Imperial size

Seal size	D	L1	D1	L3	N
0045	45.0	47.7	134.2	82.6	4 X M12
0050	50.0	50.9	140.0	87.0	4 X M12
0060	60.0	57.0	165.0	105.0	4 X M16
0065	65.0	57.0	170.0	110.0	4 X M16
0070	70.0	57.2	175.0	115.0	4 X M16
0075	75.0	63.5	197.0	135.0	4 X M16
0080	80.0	63.5	197.0	135.0	4 X M16
0085	85.0	63.5	202.0	140.0	4 X M16
0095	95.0	64.0	229.0	156.0	4 X M20
0100	100.0	64.0	229.0	156.0	4 X M20
0110	110.0	64.0	229.0	160.0	4 X M20
0120	120.0	83.0	268.0	185.0	4 X M20
0125	125.0	83.0	273.0	190.0	4 X M20
0130	130.0	83.0	278.0	195.0	4 X M20
0150	150.0	93.5	295.0	215.0	4 X M20
0165	165.0	110.7	311.0	246.0	4 X M20

Metric size