

D

Designed for sealing high temperature, high pressure boiler feed pumps, the D seal is successful because the seal chamber temperature is kept well below the product's flash point. With API Plan 23 piping, the self-contained pumping/cooling system reduces temperature at the seal faces and requires no injection of cold condensate or make-up water. Primarily for boiler feed service, the D seal is also appropriate in sealing hot hydrocarbons.

Features/Benefits

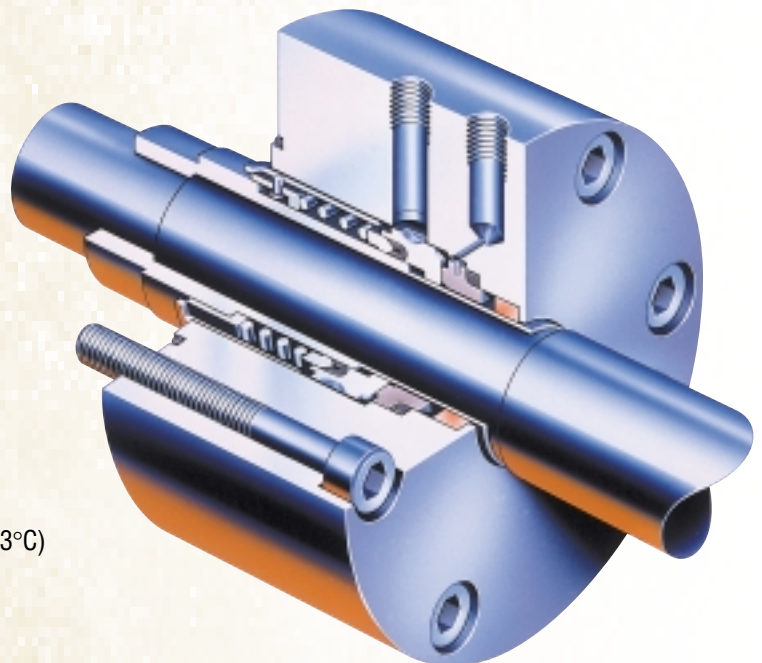
- Balanced pusher seal with a large, low spring rate coil spring - available in cartridge or non-cartridge arrangements.
- Self-contained pumping/cooling system reduces seal face temperatures - minimum wear for long seal life.
- Pumping ring is an integral part of the rotating face - no additional components required and positively sets location of pumping ring to discharge tap in seal gland.
- No condensate injection required - lower equipment cost and energy savings.
- Independent of shaft rotation - full interchangeability of basic seal components to reduce inventory cost.
- Single coil spring enclosed in the springholder to prevent flywheeling - stable operation for extended pump availability.
- High pressure stationary face option (DP) - seals pressures up to 1500 psi (103.4 bar)

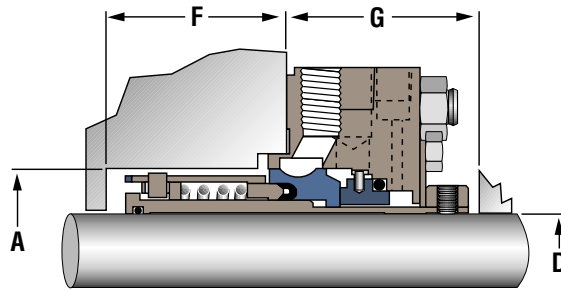
Materials of Construction

- Metal Components: 316 Stainless Steel
- Rotating Face: Tungsten Carbide
- Stationary Face: Carbon
- Gaskets: Nitrile, Fluoroelastomer, Perfluoroelastomer, EPR, PTFE

Operating Parameters

- Maximum Pressure: Up to 1000 psig (6900 kPa)
- Temperature: -100°F to 650°F (-73°C to 343°C)
- Specific Gravity: .45 and higher
- Surface Speed: Up to 75 ft/sec (23 m/sec)
- Shaft Sizes: 7/8" through 5 1/2"
(22.3 mm through 139.7 mm)





Dimensional Data

Seal Size	Inches						Metric (mm)						
	A	D	F	F-1	G	G-1	A	D	F	F-1	G	G-1	
1250	2.063	0.878	2.000	1.875	2.750	2.313	1250	52.4	22.3	50.8	47.6	69.8	58.7
1437	2.438	1.065	1.938	1.813	2.750	2.313	1437	61.9	27.1	49.2	46.0	69.8	58.7
1500	2.375	1.128	2.063	2.031	3.000	2.438	1500	60.3	28.7	52.4	51.6	76.2	61.9
1750	2.938	1.315	2.281	2.156	3.063	2.500	1750	74.6	33.4	57.9	54.8	77.8	63.5
1875	2.813	1.440	2.406	2.343	3.094	2.438	1875	71.4	36.6	61.1	59.5	78.6	61.9
2062	3.125	1.565	2.625	2.438	3.750	2.969	2062	79.4	39.8	66.7	61.9	95.3	75.4
2250	3.250	1.815	2.375	1.875	3.688	2.906	2250	82.5	46.1	60.3	47.6	93.7	73.8
2375	3.500	1.878	3.156	3.188	3.656	2.875	2375	88.9	47.7	80.2	81.0	92.9	73.0
2500	3.750	2.003	3.094	2.813	3.969	3.188	2500	95.2	50.9	78.6	71.4	100.8	81.0
2875	4.063	2.378	2.813	2.438	4.031	3.250	2875	103.2	60.4	71.4	61.9	102.4	82.5
3000	4.438	2.503	2.813	2.531	4.313	3.438	3000	112.7	63.6	71.4	64.3	109.5	87.3
3250	4.563	2.753	2.813	2.469	4.313	3.438	3250	115.9	69.9	71.4	62.7	109.5	87.3
3375	4.938	2.878	2.938	2.688	4.500	3.625	3375	125.4	73.1	74.6	68.3	114.3	92.1
3500	4.938	3.003	2.844	2.563	4.438	3.563	3500	125.4	76.3	72.2	65.1	112.7	90.5
3625	4.938	3.128	3.000	2.688	4.375	3.500	3625	125.4	79.5	76.2	68.3	111.1	88.9
3750	5.188	3.253	3.031	2.781	4.438	3.563	3750	131.8	82.6	77.0	70.6	112.7	90.5
4000	5.250	3.503	3.063	2.813	4.500	3.625	4000	133.3	89.0	77.8	71.4	114.3	92.1
4250	5.625	3.753	3.188	2.938	4.406	3.031	4250	142.9	95.3	81.0	74.6	111.9	77.0
4312	5.750	3.753	3.438	3.125	4.469	3.594	4312	146.0	95.3	87.3	79.4	113.5	91.3
4500	6.063	4.003	3.063	2.750	4.563	3.688	4500	154.0	101.7	77.8	69.8	115.9	93.7
4875	6.313	4.315	3.594	3.375	4.281	3.406	4875	160.3	109.6	91.3	85.7	108.7	86.5
5125	6.625	4.565	3.688	3.375	4.625	3.750	5125	168.3	116.0	93.7	85.7	117.5	95.2
5500	7.125	4.940	3.813	3.500	4.813	3.938	5500	181.0	125.5	96.9	88.9	122.2	100.0
6000	7.750	5.503	3.875	3.563	4.719	3.844	6000	196.8	139.8	98.4	90.5	119.8	97.6

Note: For sizes and conditions not listed, contact your local Flowserve Representative.

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