

GSD

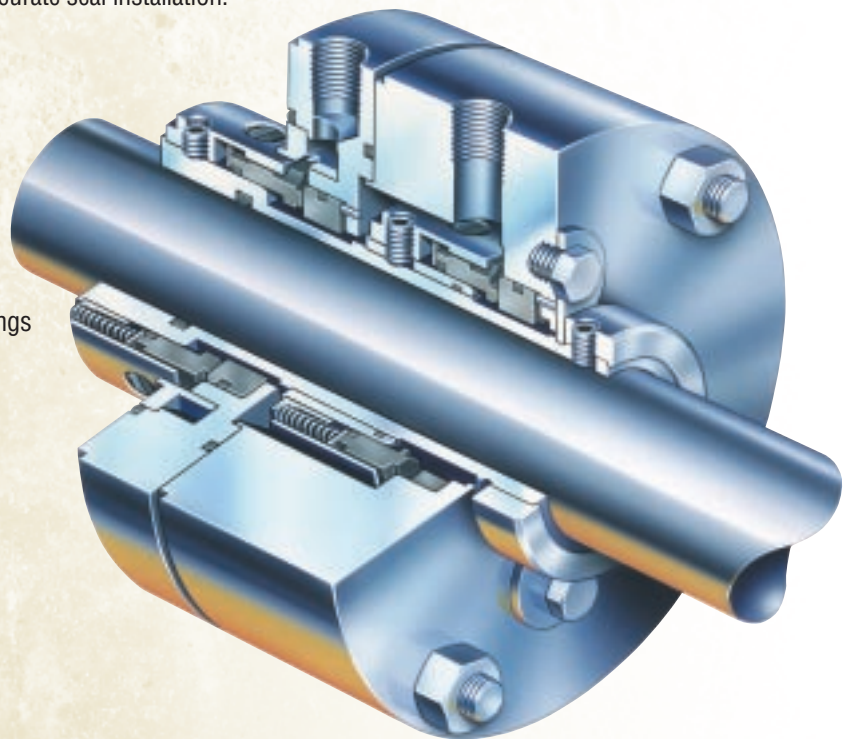
Dry running back up seal for reliable containment seal performance in hydrocarbon services.

Features/Benefits

- No barrier fluid required - simplifies operation in dual unpressurized applications.
- Standard QB series seal metal components - maximizes interchangeability to reduce inventory cost.
- High pressure performance in liquid operation - allows for convenient shut down of equipment and secondary containment safety required by some users in light hydrocarbon service.
- Reduces heat generation through optimized design - extends seal life.
- Low emission design - combines the seal division's low emission primary seal in a package that helps to meet today's most stringent emission requirements.
- Remote installation monitoring - reduces product spillage and signals operator of primary seal failure.
- Available as a cartridge - for simple and accurate seal installation.

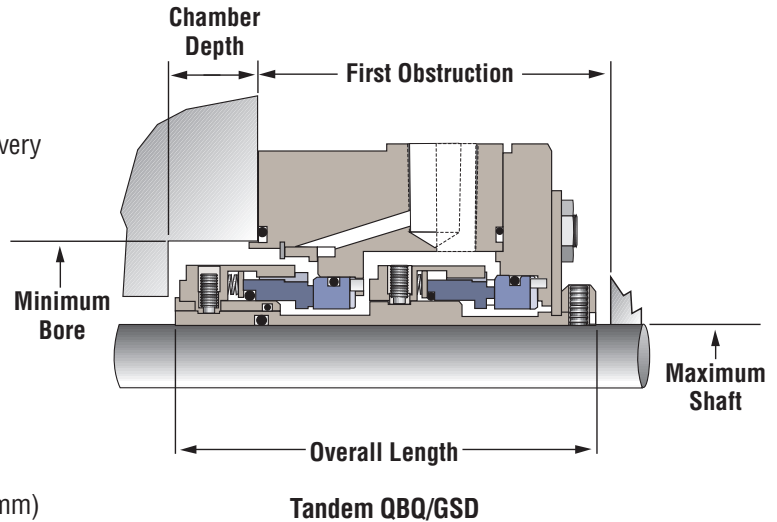
Materials of Construction

- Metal Components: 316 Stainless Steel
with Alloy C-276 Springs
- Rotating Face: Carbon
- Stationary Face: Silicon Carbide
- Gaskets: Fluoroelastomer
Perfluoroelastomer



Operating Parameters

- Design Gas/Tandem Pressure: 0 to normal vapor recovery system pressure
- Maximum Liquid Pressure: 0 to 600 psi (0 to 41.4 bar)
- Seal Chamber Temperature: -40°F to 400°F (40°C to 204°C)
- Minimum Specific Gravity: .45 liquid
- Surface Speed: 75 ft/sec (23 m/sec)
- Shaft Sizes: 1.000" through 3.500" (25.4mm through 88.9mm)



Dimensional Data

Max. Shaft	Min. Bore	Inches			Seal Size	Max. Shaft	Min. Bore	Metric (mm)		
		Chamber Depth	First Obstr.	Overall Length				Chamber Depth	First Obstr.	Overall Length
1.000	2.463	1.188	4.000	4.938	1500	25.40	62.56	30.16	101.60	125.41
1.125	2.776	1.500	4.188	5.438	1625	28.58	70.50	38.10	106.36	138.11
1.250	2.901	1.500	4.188	5.438	1750	31.75	73.67	38.10	106.36	138.11
1.375	3.026	1.563	4.281	5.594	1875	34.93	76.85	39.69	108.74	142.74
1.500	3.151	1.563	4.469	5.781	2000	38.10	80.02	39.69	113.51	146.84
1.625	3.276	1.625	4.469	5.844	2125	41.28	83.20	41.28	113.51	148.43
1.750	3.401	1.625	4.469	5.844	2250	44.45	86.37	41.28	113.51	148.43
1.875	3.526	1.750	4.594	6.094	2375	47.63	89.55	44.45	116.68	154.78
2.000	3.651	1.750	4.594	6.094	2500	50.80	92.72	44.45	116.68	154.78
2.125	3.953	2.063	4.906	6.719	2625	53.98	100.39	52.39	124.62	170.66
2.250	4.078	2.063	4.906	6.719	2750	57.15	103.57	52.39	124.62	170.66
2.375	4.203	2.063	4.906	6.719	2875	60.33	106.74	52.39	124.62	170.66
2.500	4.328	2.063	5.063	6.875	3000	63.50	109.92	52.39	128.59	174.63
2.625	4.453	2.063	5.063	6.875	3125	66.68	113.09	52.39	128.59	174.63
2.750	4.578	2.063	5.063	6.875	3250	69.85	116.27	52.39	128.59	174.63
2.875	4.703	2.188	5.188	7.125	3375	73.03	119.44	55.56	131.76	180.98
3.000	4.818	2.188	5.188	7.125	3500	76.20	122.36	55.56	131.76	180.98
3.125	4.953	2.188	5.188	7.125	3625	79.38	125.79	55.56	131.76	180.98
3.250	5.078	2.188	5.188	7.125	3750	82.55	128.97	55.56	131.76	180.98
3.375	5.193	2.188	5.188	7.125	3875	85.73	131.89	55.56	131.76	180.98
3.500	5.318	2.188	5.188	7.125	4000	88.90	135.06	55.56	131.76	180.98

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

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