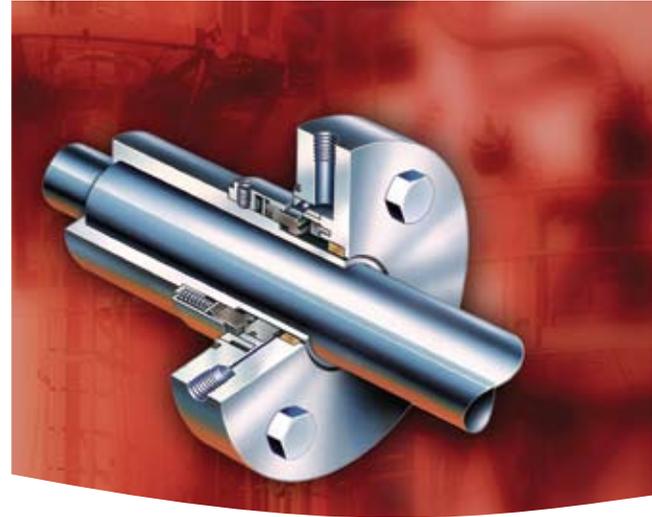


QBU Series

Hot water seals

QBU Series seals are single pusher seals designed specifically for hot water services including moderate pressure boiler feed and circulation pumps. QBU Seals utilize Lube Groove face technology to increase reliability over conventional seals in services where cooling water is not available or when energy savings are desired.



Features and Benefits

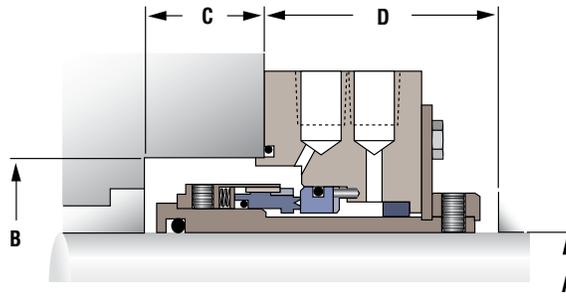
- Lube Groove features in the carbon rotating face create a stable fluid condition on the seal faces that enables the QBU seal to operate at much higher temperatures than conventional flat-face seals.
- No external cooling is required at temperatures up to 170°C (340°F), thus saving energy, maintenance, and hardware costs associated with cooling water and support systems.
- Multiport flush in the seal gland improves heat dissipation for uniform seal face cooling and long seal life.
- Adding a Plan 21 cooling flush for services above 170°C (340°F) is straightforward and requires no seal hardware modifications.
- Compact design is furnished as a cartridge or component assembly for simple and reliable installation on hot water pumps.
- Part interchangeability between conventional QB seals minimizes inventory requirements and allows faster repair cycles.

Operating Parameters

Pressure	Up to 17.6 bar (255 psi)
Vapor Pressure Margin	Minimum 2 bar (30 psi)
Temperature	Plan 11: Up to 170°C (340°F) Plan 21: Up to 204°C (400°F)
Shaft Speed	750 rpm to 20 m/s (65 fps)
Shaft Size	12.7 to 139.7 mm (0.500 to 5.500 inch)

Materials of Construction

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



Dimensional Data in millimeters

in inches

Seal Size	A Min	B Max	C Min	D Min
0875	12.70	43.64	35.71	51.59
0937	14.30	44.45	35.71	51.59
1000	15.88	46.81	35.71	51.59
1125	19.05	49.99	37.29	51.59
1250	20.65	53.16	36.50	52.40
1375	22.23	56.34	36.50	52.40
1500	25.40	59.51	36.50	56.36
1625	28.58	65.86	45.24	56.36
1750	31.75	69.04	45.24	56.36
1875	34.93	72.21	43.64	60.33
2000	38.10	75.30	49.23	63.50
2125	41.28	80.16	50.80	63.50
2250	44.45	83.34	50.80	63.50
2375	47.63	86.51	49.99	65.89
2500	50.80	89.69	49.99	65.89
2625	53.98	97.61	57.15	66.68
2750	57.15	100.8	57.15	66.68
2875	60.33	104.0	57.15	66.68
3000	63.50	107.1	57.15	70.64
3125	66.68	110.3	57.15	70.64
3250	69.85	113.5	57.15	70.64
3375	73.03	116.7	57.15	73.81
3500	76.10	119.0	54.76	76.20
3625	79.38	123.0	54.76	76.20
3750	82.55	126.2	54.76	76.99
3875	85.73	128.6	54.76	76.99
4000	88.90	131.7	54.76	76.99
4125	92.08	141.3	56.34	80.98
4250	95.25	144.4	56.34	80.98
4375	98.43	147.6	56.34	81.76
4500	101.6	150.8	56.34	81.76
4625	104.8	154.0	53.98	84.15
4750	108.0	157.1	53.98	84.15
4875	111.1	160.3	53.98	84.15
5000	114.3	163.5	53.98	84.15
5125	117.5	166.7	53.98	84.15
5250	120.7	176.2	58.72	84.15
5375	123.8	179.4	58.72	84.15
5625	130.2	185.7	58.72	84.15
5750	133.4	188.9	58.72	84.15
5875	136.5	192.1	61.90	90.50
6000	139.7	195.2	61.90	90.50

Seal Size	A Min	B Max	C Min	D Min
0875	0.500	1.718	1.406	2.031
0937	0.563	1.750	1.406	2.031
1000	0.625	1.843	1.406	2.031
1125	0.750	1.968	1.468	2.031
1250	0.813	2.093	1.437	2.063
1375	0.875	2.218	1.437	2.063
1500	1.000	2.343	1.437	2.219
1625	1.125	2.593	1.781	2.219
1750	1.250	2.718	1.781	2.219
1875	1.375	2.843	1.718	2.375
2000	1.500	2.968	1.937	2.500
2125	1.625	3.156	2.000	2.500
2250	1.750	3.281	2.000	2.500
2375	1.875	3.406	1.968	2.594
2500	2.000	3.531	1.968	2.594
2625	2.125	3.843	2.250	2.625
2750	2.250	3.968	2.250	2.625
2875	2.375	4.093	2.250	2.625
3000	2.500	4.218	2.250	2.781
3125	2.625	4.343	2.250	2.781
3250	2.750	4.468	2.250	2.781
3375	2.875	4.593	2.250	2.906
3500	3.000	4.687	2.156	3.000
3625	3.125	4.843	2.156	3.000
3750	3.250	4.968	2.125	3.031
3875	3.375	5.062	2.125	3.031
4000	3.500	5.187	2.125	3.031
4125	3.625	5.562	2.218	3.188
4250	3.750	5.687	2.218	3.188
4375	3.875	5.812	2.218	3.219
4500	4.000	5.937	2.218	3.219
4625	4.125	6.062	2.125	3.313
4750	4.250	6.187	2.125	3.313
4875	4.375	6.312	2.125	3.313
5000	4.500	6.437	2.125	3.313
5125	4.625	6.562	2.125	3.313
5250	4.750	6.937	2.312	3.313
5375	4.875	7.062	2.312	3.313
5625	5.125	7.312	2.312	3.313
5750	5.250	7.437	2.312	3.313
5875	5.375	7.562	2.437	3.563
6000	5.500	7.687	2.437	3.563

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

FSD175eng REV 09-11 Printed in USA

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