

HOVA

MECHANICAL SEALS



SEAL PARTS



COMPLETE SEALS

HOVA Your alternative source

HOVA mechanical seal parts are a direct replacement of existing OEM seal parts, fully interchangeable into your existing seal of the following brands:

John Crane[®] - Borg Warner/Flowserve[®] - Pacific Wietz/Flowserve[®]

COMPANY PROFILE

Aims of the Company:

To provide the petrochemical, chemical and other related industries with an economical choice of spare parts and services, delivered consistently in a timely manner and to the highest quality standards.

Overview

HOVA was founded in 1980 in Lossburg, Germany and is an independent manufacturer and supplier of compressor parts, mechanical seals, and pump parts. For more than 35 years, HOVA has been servicing customers in over 30 countries in the world.

The company's core competency is the supply and manufacturing of spare parts and equipment for the petrochemical, chemical, power plants, pipelines, fertilizers and other related industries. HOVA offers a large inventory of spare- and replacement parts for reciprocating compressors, mechanical seals (as well as complete seals) and pumps.

In addition, HOVA provides a wide range of engineering, re-engineering and technical services as well as the refurbishment of major parts (such as crankshafts, impellers, rotors, bearings, etc.).

HOVA is a fully independent manufacturer and supplier - not associated with any Original Equipment Manufacturer (OEM) - ISO 9001:2008 certified.

HOVA's Key Competencies:

- * Compressor spare parts
- * Complete compressor units
- * Mechanical seals
- * Mechanical seal spare parts
- * Pump spare parts
- * Customized manufactured parts
- * Re-engineering / refurbishing

HOVA's network of associated partner companies allows for access to a wide range of products and services, provided through well experienced specialists, always ensuring the highest flexibility at the highest possible quality.

HOVA's Standards:

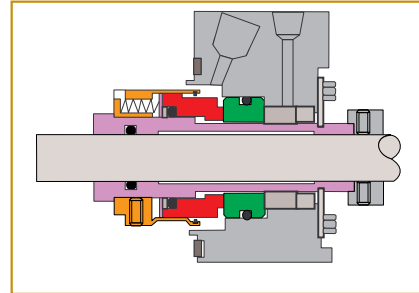
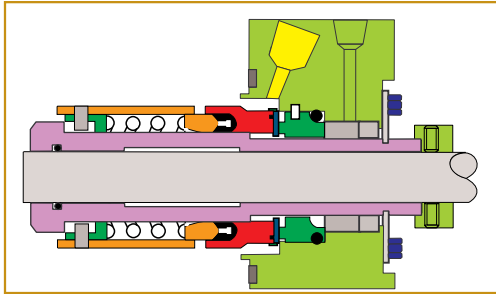
HOVA produces according to international quality standards like EN, DIN, API etc. Raw materials are based on ASTM, JIS, BS, DIN and other international standards required. Major components are according to OEM and sub-vendor engineering drawings. All parts are quality tested and warranted. Third party inspections are welcome.

Location:

HOVA GmbH, Bahnhofstrasse 31, 72290 Lossburg, Germany
Phone: +49 / 7446 / 9511-0, Email: info@hova-gmbh.com,
Internet: www.hova-gmbh.com

MECHANICAL SEALS

HOVA is an Independent manufacturer of mechanical seals and mechanical seal replacement parts for certain models of:



Seals and Parts for Borg Warner (Flowserve)

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Seals and Parts for John Crane

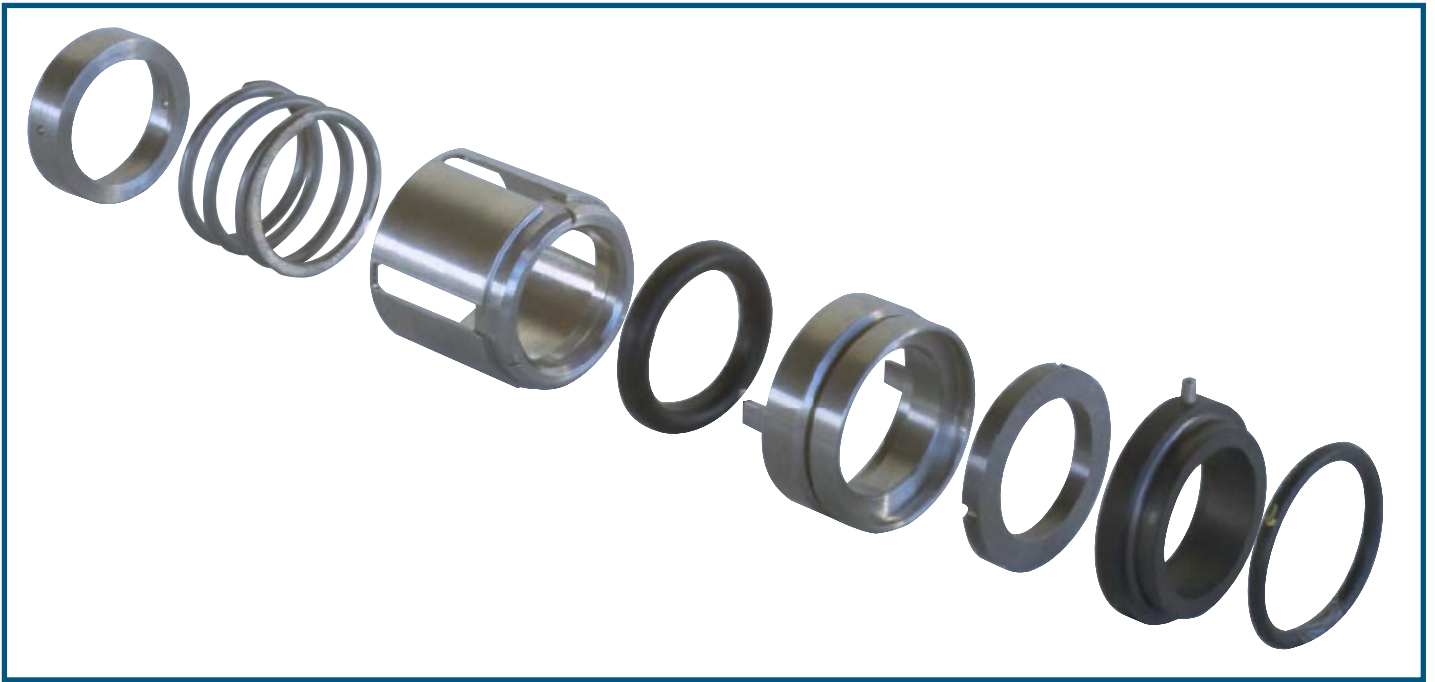
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Seals and Parts for Pacific-Wietz (Flowserve)

"Allpac"
"Europac"

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**Seals and Replacement Parts for
BORG WARNER (Flowserve®)**





Product Description

Compact seal design to fit most API and ANSI pumps. Suitable for mixers and agitators as well. A large variety of elastomers allows the use for most common industrial fluids. With additional back-up ring for higher pressure applications. Easy to repair on site or at our workshop, where it also can be converted to a wedge type design. Standard seat type is O-ring type with all common alternatives.

Technical Features

Single acting, balanced, bi-directional, multiple springs

Performance Capabilities

Shaft sizes: 1".....6"
(25,4.....152,4 mm)

Operating pressure: max. 83 bar(1200 PSIG)

Operating temperature: -40 C - +204 C
(-40 F - +400 F)

Speed: max. 25 m/sec.
(max. 75 ft/sec.)

Materials

Seal rings

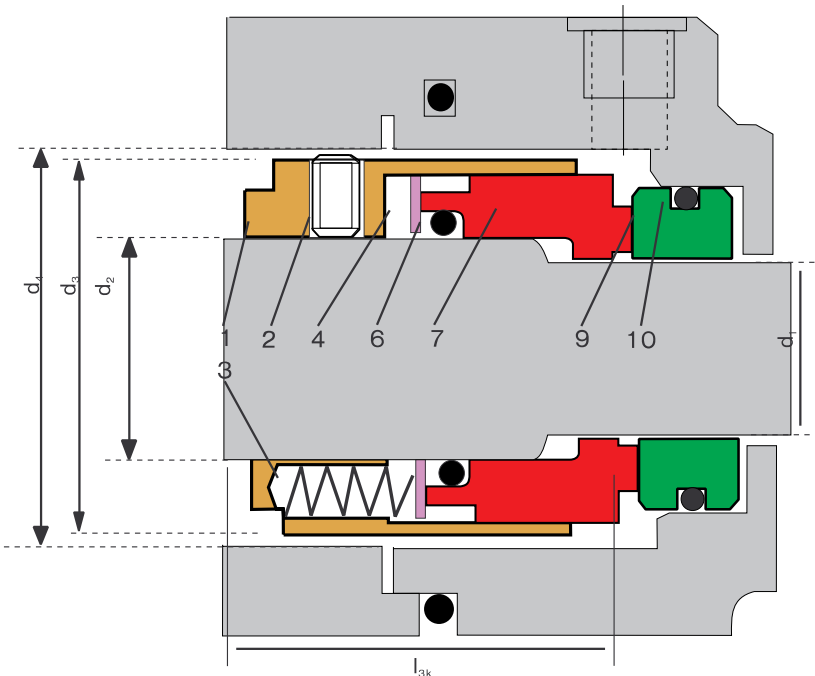
Carbon (general service)
Carbon (antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Seats

Chromium cast
Steel (stellited)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)
Ceramic

Secondary seals

Buna-N
Fluoroelastomer
Perfluoroelastomer
Ethylene Propylene
Neoprene
Silicone



Item Identification

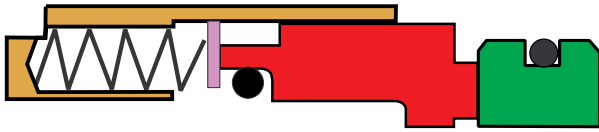
- 1 = Retainer
- 2 = Set Screw
- 3 = Springs
- 4 = Thrust Ring
- 6 = O-Ring
- 7 = Rotating Face
- 9 = Stationary Face
- 10 = Seat Ring

Typical Industrial Applications

Chemical industry
Food and beverage industry
Marine applications
Process industry
Water and waste water applications

General application
Corrosive media
Some acids
Oils

Design Variations



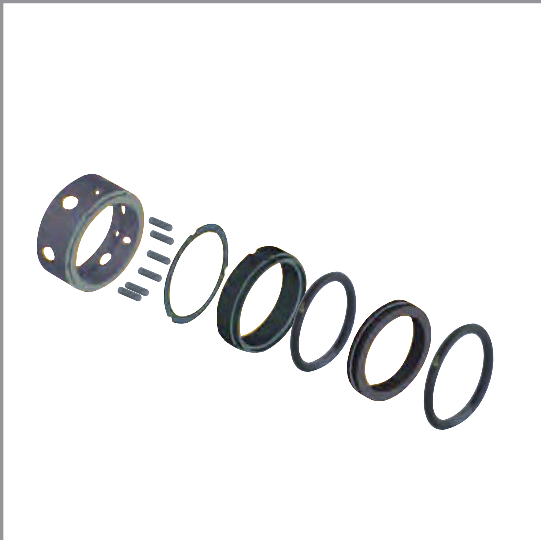
H-QB Seal



H-QBT Seal







Dimensions

NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm
1000	1,000	25,40	39,70	42,90	33,30
1125	1,125	28,57	42,90	46,00	34,90
1250	1,250	31,75	46,00	49,20	34,90
1375	1,375	34,92	49,20	52,40	34,90
1500	1,500	38,10	52,40	55,60	34,90
1625	1,625	41,27	58,70	63,50	42,90
1750	1,750	44,45	61,90	66,70	42,90
1875	1,875	47,62	65,10	69,80	42,90
2000	2,000	50,80	68,30	73,00	42,90
2125	2,125	53,97	71,40	76,20	42,90
2250	2,250	57,15	76,40	79,40	42,90
2375	2,375	60,32	77,80	82,50	42,90
2500	2,500	63,50	81,00	85,70	42,90
2625	2,625	66,67	88,90	95,20	50,80
2750	2,750	68,26	92,10	98,40	50,80
2875	2,875	73,02	95,20	101,60	50,80
3000	3,000	76,20	98,40	104,80	50,80
3125	3,125	79,37	101,60	109,50	50,80
3250	3,250	82,55	104,80	112,70	50,80
3375	3,375	85,27	107,90	115,90	50,80
3500	3,500	88,99	111,10	119,10	50,80
3625	3,625	92,07	114,30	122,20	50,80
3750	3,750	95,25	117,50	125,40	50,80
3875	3,875	98,42	120,60	128,60	50,80
4000	4,000	101,60	123,80	131,80	50,80
4125	4,150	104,77	130,20	139,70	52,40
4250	4,250	107,95	142,90	142,90	52,40
4375	4,375	111,12	136,50	146,00	52,40
4500	4,500	114,30	139,70	149,20	52,40
4625	4,625	117,47	142,90	152,40	52,40
4750	4,750	120,65	146,00	155,60	52,40
4875	4,875	123,82	149,20	158,70	52,40
5000	5,000	127,00	152,40	161,90	52,40
5125	5,125	130,17	155,60	165,10	52,40
5250	5,250	133,35	165,10	174,60	57,10
5375	5,375	136,52	168,30	177,80	57,10
5500	5,500	139,70	171,40	181,00	57,10
5625	5,625	142,87	174,60	184,10	57,10
5750	5,750	146,05	177,80	187,30	57,10
5875	5,875	149,22	181,00	190,50	57,10
6000	6,000	152,40	184,10	193,70	57,10

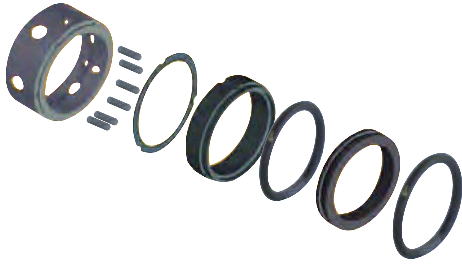


Replacement-/Repair-Parts for Borg Warner Seals

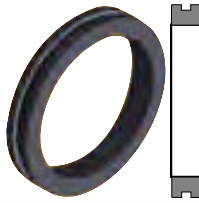

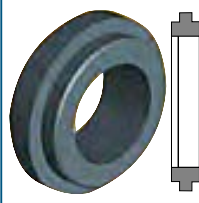

Parts for Rotating Units for Models QB, QBT

											
	Spring Holder		Set Screws (UNC)		Springs		Retaining Ring		Rotating Face		Rot. Face Gasket
Seal Size	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	AN Number
1000	154744	1000/RE221	4R0426	CP63x63	668753	SP221	668768	1000/DR221	154742	1000/FR222	568120
1125	154747	1125/RE221	4R0426	CP63x63	668769	SP222	668773	1125/DR221	154745	1125/FR222	568122
1250	154750	1250/RE221	4R0426	CP63x63	668769	SP222	668781	1250/DR221	154748	1250/FR222	568124
1375	154753	1375/RE221	4R0426	CP63x63	668769	SP222	668786	1375/DR221	154751	1375/FR222	568126
1500	154756	1500/RE221	4R0426	CP63x63	668769	SP222	668791	1500/DR221	154754	1500/FR222	568128
1625	154759	1625/RE221	4R0432	CP79x95	668796	SP223	668797	1625/DR221	154757	1625/FR222	568223
1750	154762	1750/RE221	4R0432	CP79x95	668796	SP223	668803	1750/DR221	154760	1750/FR222	568224
1875	154765	1875/RE221	4R0432	CP79x95	668796	SP223	668808	1875/DR221	154763	1875/FR222	568225
2000	154768	2000/RE221	4R0432	CP79x95	668796	SP223	668813	2000/DR221	154766	2000/FR222	568226
2125	154771	2125/RE221	4R0432	CP79x95	668796	SP223	668819	2125/DR221	154769	2125/FR222	568227
2250	154774	2250/RE221	4R0432	CP79x95	668818	SP224	668824	2250/DR221	154772	2250/FR222	568228
2375	154777	2375/RE221	4R0432	CP79x95	668818	SP224	668828	2375/DR221	154775	2375/FR222	568229
2500	154780	2500/RE221	4R0432	CP79x95	669124	SP225	668833	2500/DR221	154778	2500/FR222	568230
2625	154783	2625/RE221	4R0437	CP95x95	668838	SP226	668839	2625/DR221	154781	2625/FR222	568231
2750	154786	2750/RE221	4R0437	CP95x95	668838	SP226	668844	2750/DR221	154784	2750/FR222	568232
2875	154789	2875/RE221	4R0437	CP95x95	668838	SP226	668848	2875/DR221	154787	2875/FR222	568233
3000	154792	3000/RE221	4R0437	CP95x95	668838	SP226	668853	3000/DR221	154790	3000/FR222	568234
3125	154795	3125/RE221	4R0437	CP95x95	668859	SP227	668860	3125/DR221	154793	3125/FR222	568235
3250	154798	3250/RE221	4R0437	CP95x95	668859	SP227	668865	3250/DR221	154796	3250/FR222	568236
3375	154801	3375/RE221	4R0437	CP95x95	668859	SP227	668869	3375/DR221	154799	3375/FR222	568237
3500	154804	3500/RE221	4R0437	CP95x95	668859	SP227	668874	3500/DR221	154802	3500/FR222	568238
3625	154807	3625/RE221	4R0437	CP95x95	668859	SP227	668879	3625/DR221	154805	3625/FR222	568239
3750	154810	3750/RE221	4R0437	CP95x95	668838	SP226	668884	3750/DR221	154808	3750/FR222	568240
3875	154813	3875/RE221	4R0437	CP95x95	668838	SP226	668889	3875/DR221	154811	3875/FR222	568241
4000	154816	4000/RE221	4R0437	CP95x95	658838	SP226	668894	4000/DR221	154814	4000/FR222	568242
4125	154819	4125/RE221	4R0438	CP95x127	669515	SP227	668919	4125/DR221	154817	4125/FR222	568243
4250	154822	4250/RE221	4R0438	CP95x127	669515	SP227	668924	4250/DR221	154820	4250/FR222	568244
4375	154825	4375/RE221	4R0438	CP95x127	669515	SP227	668929	4375/DR221	154823	4375/FR222	568245
4500	154828	4500/RE221	4R0438	CP95x127	669515	SP227	668934	4500/DR221	154826	4500/FR222	568246
4625	154831	4625/RE221	4R0438	CP95x127	669515	SP227	668939	4625/DR221	154829	4625/FR222	568247
4750	154834	4750/RE221	4R0438	CP95x127	669515	SP227	668944	4750/DR221	154832	4750/FR222	568248
4875	154837	4875/RE221	4R0438	CP95x127	669515	SP227	668950	4875/DR221	154935	4875/FR222	568249
5000	154840	5000/RE221	4R0438	CP95x127	669515	SP227	668956	5000/DR221	154838	5000/FR222	568250
5125	154843	5125/RE221	4R0438	CP95x127	669515	SP227	668962	5125/DR221	154841	5125/FR222	568251
5250	154846	5250/RE221	4R0438	CP95x127	669515	SP227	668968	5250/DR221	154844	5250/FR222	568252
5375	154849	5375/RE221	4R0438	CP95x127	669516	SP228	668974	5375/DR221	154847	5375/FR222	568432
5500	154852	5500/RE221	4R0438	CP95x127	669516	SP228	668980	5500/DR221	154850	5500/FR222	568433
5625	154855	5625/RE221	4R0438	CP95x127	669516	SP228	669465	5625/DR221	154853	5625/FR222	568434
5750	154858	5750/RE221	4R0438	CP95x127	669516	SP228	669471	5750/DR221	154856	5750/FR222	568435
5875	154861	5875/RE221	4R0438	CP95x127	669516	SP228	669477	5875/DR221	154859	5875/FR222	568436
6000	154864	6000/RE221	4R0438	CP95x127	669516	SP228	669483	6000/DR221	154862	6000/FR222	568437

Replacement-/Repair-Parts
for Borg Warner Seals



Stationary Faces for
Models QB, QBT

									
		Stationary Face "QB"		Seat Ring "QB"		Stationary Face "QBT"		Seat Ring "QBT"	
Seal Size	OEM Reference	Part Number	AN Number	OEM Reference	Part Number	OEM Reference	Part Number		
1000	668750	1000/FS221	568218	688752	1000/FS222	668751	1000/SR222		
1125	668765	1125/FS221	568220	688767	1125/FS222	668766	1125/SR222		
1250	668775	1250/FS221	568222	668777	1250/FS222	668776	1250/SR222		
1375	668770	1375/FS221	568222	668772	1375/FS222	668771	1375/SR222		
1500	668778	1500/FS221	568223	668780	1500/FS222	668779	1500/SR222		
1625	668783	1625/FS221	568224	668785	1625/FS222	668784	1625/SR222		
1750	668788	1750/FS221	568225	668790	1750/FS222	668789	1750/SR222		
1875	668793	1875/FS221	568227	668795	1875/FS222	668794	1875/SR222		
2000	668799	2000/FS221	568228	668801	2000/FS222	668800	2000/SR222		
2125	668805	2125/FS221	568229	668807	2125/FS222	668806	2125/SR222		
2250	668810	2250/FS221	568230	668812	2250/FS222	668811	2250/SR222		
2375	668815	2375/FS221	568232	668817	2375/FS222	668816	2375/SR222		
2500	668821	2500/FS221	568233	668823	2500/FS222	668822	2500/SR222		
2625	668825	2625/FS221	568234	668827	2625/FS222	668826	2625/SR222		
2750	668830	2750/FS221	568235	668832	2750/FS222	668831	2750/SR222		
2875	668835	2875/FS221	568235	668837	2875/FS222	668836	2875/SR222		
3000	668841	3000/FS221	568236	668843	3000/FS222	668842	3000/SR222		
3125	668845	3125/FS221	568238	668847	3125/FS222	668846	3125/SR222		
3250	668850	3250/FS221	568239	668852	3250/FS222	668851	3250/SR222		
3375	668856	3375/FS221	568240	668858	3375/FS222	668857	3375/SR222		
3500	668862	3500/FS221	568241	668864	3500/FS222	668863	3500/SR222		
3625	668866	3625/FS221	568242	668868	3625/FS222	668867	3625/SR222		
3750	668871	3750/FS221	568243	668873	3750/FS222	668872	3750/SR222		
3875	668875	3875/FS221	568244	668877	3875/FS222	668876	3875/SR222		
4000	668881	4000/FS221	568245	668883	4000/FS222	668882	4000/SR222		
4125	668886	4125/FS221	568246	668888	4125/FS222	668887	4125/SR222		
4250	668891	4250/FS221	568247	668893	4250/FS222	668892	4250/SR222		
4375	668917	4375/FS221	568249	668918	4375/FS222	668916	4375/SR222		
4500	668922	4500/FS221	568250	668923	4500/FS222	668921	4500/SR222		
4625	668927	4625/FS221	568251	668928	4625/FS222	668926	4625/SR222		
4750	668932	4750/FS221	568252	668933	4750/FS222	668931	4750/SR222		
4875	668937	4875/FS221	568253	668938	4875/FS222	668936	4875/SR222		
5000	668942	5000/FS221	568254	668943	5000/FS222	668941	5000/SR222		
5125	668948	5125/FS221	568255	668949	5000/FS222	668947	5000/SR222		
5250	668954	5250/FS221	568256	668955	5000/FS222	668953	5000/SR222		
5375	668960	5375/FS221	568257	668961	5000/FS222	668959	5000/SR222		
5500	668966	5500/FS221	568258	668967	5000/FS222	668965	5000/SR222		
5625	668972	5625/FS221	568258	668973	5000/FS222	668971	5000/SR222		
5750	668978	5750/FS221	568259	668979	5000/FS222	668977	5000/SR222		
5875	668984	5875/FS221	568259	669464	5000/FS222	668983	5000/SR222		
6000	669469	6000/FS221	568260	669470	5000/FS222	669468	5000/SR222		



Product Description

Compact seal design to fit most API and ANSI pumps. A large variety of elastomers allows the use for most common industrial fluids. The O-Ring mounted rotating face allows free axial movement on the shaft. Easy to repair on site or at our workshop. Standard seat type is O-ring type with all common alternatives.

Technical Features

Single acting, unbalanced, multiple springs

Performance Capabilities

Shaft sizes: 1".....6"
(25,4.....152,40 mm)

Operating pressure: max.10,3 bar(150 PSIG)

Operating temperature: 0 C - +135 C(+32 F- 275F)
(water or water solutions)
-40 C - +204 C
(-40 F - +400 F)
(other liquids)

Speed: max. 23 m/sec.
(max. 75 ft/sec..)

Materials

Seal rings

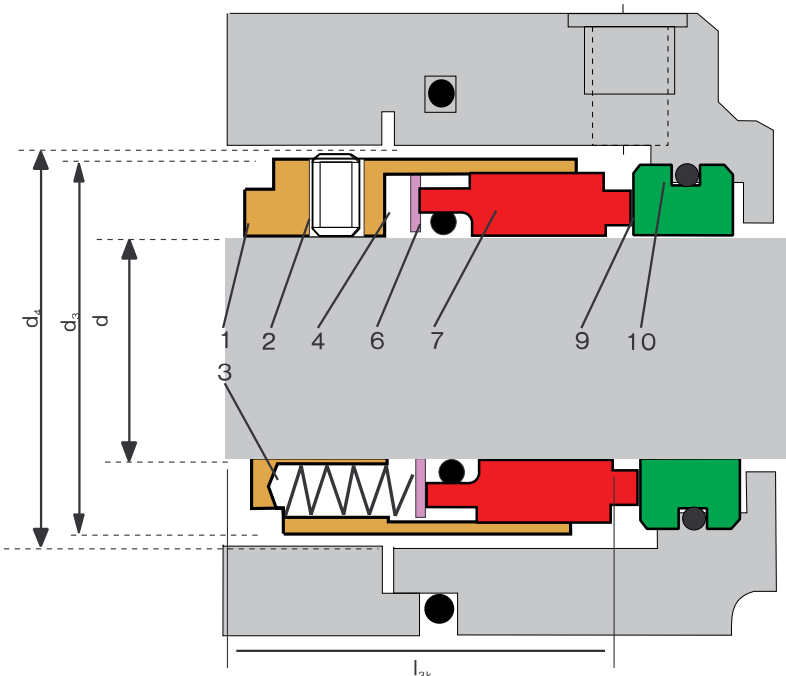
Carbon (general service)
Carbon (antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Seats

Chromium cast
Steel (stellite)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)
Ceramic

Secondary seals

Buna-N
Fluoroelastomer
Perfluoroelastomer
Ethylene Propylene
Neoprene
Silicone



Item Identification

- 1 = Retainer
- 2 = Set Screw
- 3 = Springs
- 4 = Thrust Ring
- 6 = O-Ring
- 7 = Rotating Face
- 9 = Stationary Face
- 10 = Seat Ring

Typical Industrial Applications

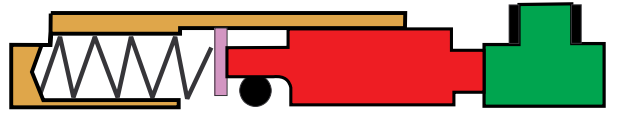
Chemical industry
Food and beverage industry
Marine applications
Process industry
Water and waste water applications

General application
Corrosive media
Some acids
Oils

Design Variations



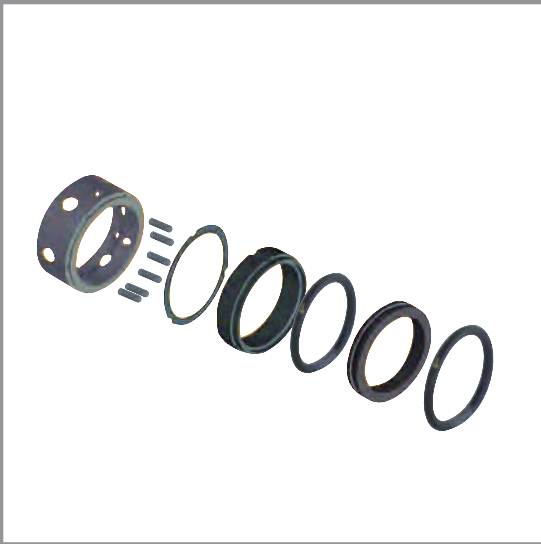
H-Q Seal



H-QT Seal



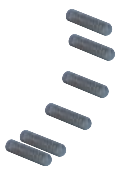



Dimensions

NOM-SIZE	d inch	d mm	d ₃ mm	d _{4min} mm	l _{3k} mm
1000	1,000	25,40	39,70	42,90	33,30
1125	1,125	28,57	42,90	46,00	34,90
1250	1,250	31,75	46,00	49,20	34,90
1375	1,375	34,92	49,20	52,40	34,90
1500	1,500	38,10	52,40	55,60	34,90
1625	1,625	41,27	58,70	63,50	42,90
1750	1,750	44,45	61,90	66,70	42,90
1875	1,875	47,62	65,10	69,80	42,90
2000	2,000	50,80	68,30	73,00	42,90
2125	2,125	53,97	71,40	76,20	42,90
2250	2,250	57,15	76,40	79,40	42,90
2375	2,375	60,32	77,80	82,50	42,90
2500	2,500	63,50	81,00	85,70	42,90
2625	2,625	66,67	88,90	95,20	50,80
2750	2,750	68,26	92,10	98,40	50,80
2875	2,875	73,02	95,20	101,60	50,80
3000	3,000	76,20	98,40	104,80	50,80
3125	3,125	79,37	101,60	109,50	50,80
3250	3,250	82,55	104,80	112,70	50,80
3375	3,375	85,27	107,90	115,90	50,80
3500	3,500	88,99	111,10	119,10	50,80
3625	3,625	92,07	114,30	122,20	50,80
3750	3,750	95,25	117,50	125,40	50,80
3875	3,875	98,42	120,60	128,60	50,80
4000	4,000	101,60	123,80	131,80	50,80
4125	4,150	104,77	130,20	139,70	52,40
4250	4,250	107,95	142,90	142,90	52,40
4375	4,375	111,12	136,50	146,00	52,40
4500	4,500	114,30	139,70	149,20	52,40
4625	4,625	117,47	142,90	152,40	52,40
4750	4,750	120,65	146,00	155,60	52,40
4875	4,875	123,82	149,20	158,70	52,40
5000	5,000	127,00	152,40	161,90	52,40
5125	5,125	130,17	155,60	165,10	52,40
5250	5,250	133,35	165,10	174,60	57,10
5375	5,375	136,52	168,30	177,80	57,10
5500	5,500	139,70	171,40	181,00	57,10
5625	5,625	142,87	174,60	184,10	57,10
5750	5,750	146,05	177,80	187,30	57,10
5875	5,875	149,22	181,00	190,50	57,10
6000	6,000	152,40	184,10	193,70	57,10

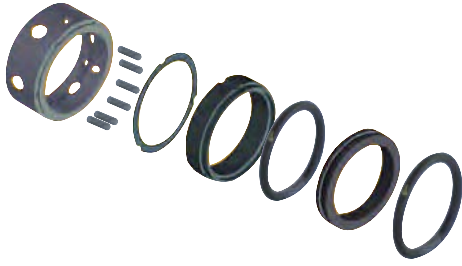


Replacement-/Repair-Parts for Borg Warner Seals

Parts for Rotating Units for Models Q, QT

Seal Size											
	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	AN Number
1000	154744	1000/RE221	4R0426	CP63x63	668753	SP221	668768	1000/DR221	154743	1000/FR221	568120
1125	154747	1125/RE221	4R0426	CP63x63	668769	SP222	668773	1125/DR221	154746	1125/FR221	568122
1250	154750	1250/RE221	4R0426	CP63x63	668769	SP222	668781	1250/DR221	154749	1250/FR221	568124
1375	154753	1375/RE221	4R0426	CP63x63	668769	SP222	668786	1375/DR221	154752	1375/FR221	568126
1500	154756	1500/RE221	4R0426	CP63x63	668769	SP222	668791	1500/DR221	154755	1500/FR221	568128
1625	154759	1625/RE221	4R0432	CP79x95	668796	SP223	668797	1625/DR221	154758	1625/FR221	568223
1750	154762	1750/RE221	4R0432	CP79x95	668796	SP223	668803	1750/DR221	154761	1750/FR221	568224
1875	154765	1875/RE221	4R0432	CP79x95	668796	SP223	668808	1875/DR221	154764	1875/FR221	568225
2000	154768	2000/RE221	4R0432	CP79x95	668796	SP223	668813	2000/DR221	154767	2000/FR221	568226
2125	154771	2125/RE221	4R0432	CP79x95	668796	SP223	668819	2125/DR221	154770	2125/FR221	568227
2250	154774	2250/RE221	4R0432	CP79x95	668818	SP224	668824	2250/DR221	154773	2250/FR221	568228
2375	154777	2375/RE221	4R0432	CP79x95	668818	SP224	668828	2375/DR221	154776	2375/FR221	568229
2500	154780	2500/RE221	4R0432	CP79x95	669124	SP225	668833	2500/DR221	154779	2500/FR221	568230
2625	154783	2625/RE221	4R0437	CP95x95	668838	SP226	668839	2625/DR221	154782	2625/FR221	568231
2750	154786	2750/RE221	4R0437	CP95x95	668838	SP226	668844	2750/DR221	154785	2750/FR221	568232
2875	154789	2875/RE221	4R0437	CP95x95	668838	SP226	668848	2875/DR221	154788	2875/FR221	568233
3000	154792	3000/RE221	4R0437	CP95x95	668838	SP226	668853	3000/DR221	154791	3000/FR221	568234
3125	154795	3125/RE221	4R0437	CP95x95	668859	SP227	668860	3125/DR221	154794	3125/FR221	568235
3250	154798	3250/RE221	4R0437	CP95x95	668859	SP227	668865	3250/DR221	154797	3250/FR221	568236
3375	154801	3375/RE221	4R0437	CP95x95	668859	SP227	668869	3375/DR221	154800	3375/FR221	568237
3500	154804	3500/RE221	4R0437	CP95x95	668859	SP227	668874	3500/DR221	154803	3500/FR221	568238
3625	154807	3625/RE221	4R0437	CP95x95	668859	SP227	668879	3625/DR221	154806	3625/FR221	568239
3750	154810	3750/RE221	4R0437	CP95x95	668838	SP226	668884	3750/DR221	154809	3750/FR221	568240
3875	154813	3875/RE221	4R0437	CP95x95	668838	SP226	668889	3875/DR221	154812	3875/FR221	568241
4000	154816	4000/RE221	4R0437	CP95x95	658838	SP226	668894	4000/DR221	154815	4000/FR221	568242
4125	154819	4125/RE221	4R0438	CP95x127	669515	SP227	668919	4125/DR221	154818	4125/FR221	568243
4250	154822	4250/RE221	4R0438	CP95x127	669515	SP227	668924	4250/DR221	154821	4250/FR221	568244
4375	154825	4375/RE221	4R0438	CP95x127	669515	SP227	668929	4375/DR221	154824	4375/FR221	568245
4500	154828	4500/RE221	4R0438	CP95x127	669515	SP227	668934	4500/DR221	154827	4500/FR221	568246
4625	154831	4625/RE221	4R0438	CP95x127	669515	SP227	668939	4625/DR221	154830	4625/FR221	568247
4750	154834	4750/RE221	4R0438	CP95x127	669515	SP227	668944	4750/DR221	154833	4750/FR221	568248
4875	154837	4875/RE221	4R0438	CP95x127	669515	SP227	668950	4875/DR221	154836	4875/FR221	568249
5000	154840	5000/RE221	4R0438	CP95x127	669515	SP227	668956	5000/DR221	154839	5000/FR221	568250
5125	154843	6125/RE221	4R0438	CP95x127	669515	SP227	668962	5125/DR221	154842	5125/FR221	568251
5250	154846	5250/RE221	4R0438	CP95x127	669515	SP227	668968	5250/DR221	154845	5250/FR221	568252
5375	154849	5375/RE221	4R0438	CP95x127	669516	SP228	668974	5375/DR221	154848	5375/FR221	568432
5500	154852	5500/RE221	4R0438	CP95x127	669516	SP228	668980	5500/DR221	154851	5500/FR221	568433
5625	154855	5625/RE221	4R0438	CP95x127	669516	SP228	669465	5625/DR221	154854	5625/FR221	568434
5750	154858	5750/RE221	4R0438	CP95x127	669516	SP228	669471	5750/DR221	154857	5750/FR221	568435
5875	154861	5875/RE221	4R0438	CP95x127	669516	SP228	669477	5875/DR221	154860	5875/FR221	568436
6000	154864	6000/RE221	4R0438	CP95x127	669516	SP228	669483	6000/DR221	154863	6000/FR221	568437

Replacement-/Repair-Parts
for Borg Warner Seals



Stationary Faces for
Models Q, QT

Seal Size	Stationary Face "Q"		Seat Ring "Q"	Stationary Face "QT"		Seat Ring "QT"	
	OEM Reference	Part Number	AN Number	OEM Reference	Part Number	OEM Reference	Part Number
1000	668765	1000/FS221	568220	688767	1000/FS222	668766	1000/SR222
1125	668770	1125/FS221	568222	668772	1125/FS222	668771	1125/SR222
1250	668778	1250/FS221	568223	668780	1250/FS222	668779	1250/SR222
1375	668783	1375/FS221	568224	668785	1375/FS222	668784	1375/SR222
1500	668788	1500/FS221	568225	668790	1500/FS222	668789	1500/SR222
1625	668793	1625/FS221	568227	668795	1625/FS222	668794	1625/SR222
1750	668799	1750/FS221	568228	668801	1750/FS222	668800	1750/SR222
1875	668805	1875/FS221	568229	668807	1875/FS222	668806	1875/SR222
2000	668810	2000/FS221	568230	668812	2000/FS222	668811	2000/SR222
2125	668815	2125/FS221	568232	668817	2125/FS222	668816	2125/SR222
2250	668821	2250/FS221	568233	668823	2250/FS222	668822	2250/SR222
2375	668825	2375/FS221	568234	668827	2375/FS222	668826	2375/SR222
2500	668830	2500/FS221	568235	668832	2500/FS222	668831	2500/SR222
2625	668835	2625/FS221	568235	668837	2625/FS222	668836	2625/SR222
2750	668841	2750/FS221	568236	668843	2750/FS222	668842	2750/SR222
2875	668845	2875/FS221	568238	668847	2875/FS222	668846	2875/SR222
3000	668850	3000/FS221	568239	668852	3000/FS222	668851	3000/SR222
3125	668856	3125/FS221	568240	668858	3125/FS222	668857	3125/SR222
3250	668862	3250/FS221	568241	668864	3250/FS222	668863	3250/SR222
3375	668866	3375/FS221	568242	668868	3375/FS222	668867	3375/SR222
3500	668871	3500/FS221	568243	668873	3500/FS222	668872	3500/SR222
3625	668875	3625/FS221	568244	668877	3625/FS222	668876	3625/SR222
3750	668881	3750/FS221	568245	668883	3750/FS222	668882	3750/SR222
3875	668886	3875/FS221	568246	668888	3875/FS222	668887	3875/SR222
4000	668891	4000/FS221	568247	668893	4000/FS222	668892	4000/SR222
4125	668917	4125/FS221	568249	668918	4125/FS222	668916	4125/SR222
4250	668922	4250/FS221	568250	668923	4250/FS222	668921	4250/SR222
4375	668927	4375/FS221	568251	668928	4375/FS222	668926	4375/SR222
4500	668932	4500/FS221	568252	668933	4500/FS222	668931	4500/SR222
4625	668937	4625/FS221	568253	668938	4625/FS222	668936	4625/SR222
4750	668942	4750/FS221	568254	668943	4750/FS222	668941	4750/SR222
4875	668948	4875/FS221	568255	668949	4875/FS222	668947	4875/SR222
5000	668954	5000/FS221	568256	668955	5000/FS222	668953	5000/SR222
5125	668960	5125/FS221	568257	668961	5000/FS222	668959	5000/SR222
5250	668966	5250/FS221	568258	668967	5000/FS222	668965	5000/SR222
5375	668972	5375/FS221	568258	668973	5000/FS222	668971	5000/SR222
5500	668978	5500/FS221	568259	668979	5000/FS222	668977	5000/SR222
5625	668984	5625/FS221	568259	669464	5000/FS222	668983	5000/SR222
5750	669469	5750/FS221	568260	669470	5000/FS222	669468	5000/SR222
5875	669475	5875/FS221	568261	669476	5000/FS222	669474	5000/SR222
6000	669481	6000/FS221	568262	669482	5000/FS222	669480	5000/SR222



Product Description

Easy and precise installation with positive connection of rotating unit through keys increases durability. Retention pins, installed radial, guarantees fixing of stationary rings. A large number of different secondary seals (O-Rings, U-Cup) allows the application for many different media. Even for high temperature and special chemical conditions. As the seal consists of only few single parts, maintenance and stockkeeping is most economical.

Technical Features

Single acting, balanced, duo directional, single spring, API Seal

All components of raw materials are strictly according to API 610. Highest quality and latest technologies are guaranteed.

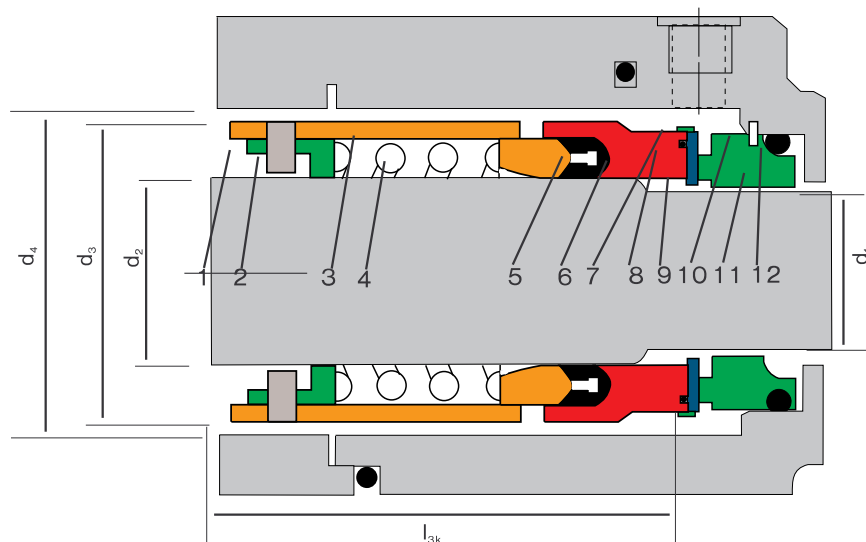
Performance Capabilities

Shaft sizes: 1 1/4".....6"
(31,75.....152,4 mm)

Operating pressure: max.70 bar(1000 PSIG)

Operating temperature: 0 C - +66 C(+32 F-+150 F)
(water or water solutions)
-73 C - +260 C
(-100 F - +500 F)
(other liquids)

Speed: max. 22 m/sec.
max. 4500 ft/min.



Materials

Rotating Faces

Steel (stellite)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Stationary Faces

Carbon (general service)
Carbon (antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Secondary Seals

Buna-N
Fluoroelastomer
Ethylene Propylene
Neoprene
Silicone
Perfluorelastomer

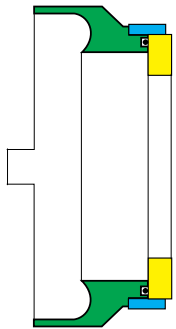
Item Identification

- 1 = Seal Drive
- 2 = Key
- 3 = Spring Holder
- 4 = Spring
- 5 = U-Cup
- 6 = Rotating Face Body
- 7 = Lock-Ring
- 8 = O- Ring
- 9 = Seal Ring
- 10 = Pin
- 11 = Stat. Face
- 12 = O-Ring

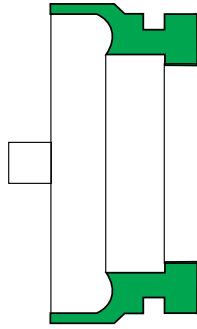
Typical Industrial Applications

Common application including process pumps.
Water
Chemicals
Oils
Corrosive media

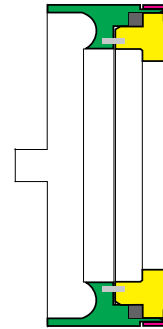
Design Variations



O-Ring Mounted
Mod. H-UO, H-UKO



Solid Face, stellite
Mod. H-U, H-UK



Canned Assy
Mod. H-UC, H-UKC

Dimensions

NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm
1250	1,250	31,75	47,62	54,00	59,53
1312	1,312	33,34	49,21	55,60	62,71
1375	1,375	34,92	50,80	57,20	64,29
1437	1,437	36,51	52,39	58,80	61,12
1500	1,500	38,10	53,97	60,30	62,71
1625	1,625	41,27	60,32	66,70	85,70
1750	1,750	44,45	61,91	68,30	69,06
1875	1,875	47,62	65,09	71,50	69,65
2000	2,000	50,80	73,82	80,20	96,84
2062	2,062	52,40	69,85	76,20	73,82
2125	2,125	53,97	76,20	82,60	86,52
2250	2,250	57,15	74,62	81,00	69,06
2375	2,375	60,32	84,15	90,50	96,85
2500	2,500	63,50	85,72	92,10	96,85
2625	2,625	66,67	87,32	94,70	80,17
2687	2,687	68,26	92,07	98,40	96,85
2875	2,875	73,02	95,25	101,60	88,11
3000	3,000	76,20	101,60	108,00	92,07
3125	3,125	79,37	104,77	111,10	93,66
3250	3,250	82,55	104,77	111,10	92,07
3375	3,375	85,27	112,72	119,10	94,46
3500	3,500	88,99	114,30	120,70	89,69
3625	3,625	92,07	114,30	120,70	90,49
3750	3,750	95,25	120,65	127,00	98,42
3813	3,813	96,84	127,00	133,40	100,02
4000	4,000	101,60	125,42	131,80	96,04
4250	4,250	107,95	131,76	138,10	96,84
4312	4,312	109,54	136,92	142,90	95,25
4500	4,500	114,30	141,29	147,70	94,46
4875	4,875	123,82	149,22	155,60	104,77
5125	5,125	130,17	158,75	165,10	113,51
5500	5,500	139,70	169,87	176,20	112,71
6000	6,000	152,40	187,32	193,70	117,47



Product Description

Pumping ring integrated into rotating face. For high temperature applications. The self containing cooling/pumping system reduces temperature on the seal faces. Longer lifetime. Reduced inventory cost, since the seal consists of only a few single parts and the basic seal parts are identical to U-type. Therefore, maintenance and stockkeeping is most economical.

Technical Features

Single acting, balanced, duo directional, single spring, API Seal

All components of raw materials are strictly according to API 610. Highest quality and latest technologies are guaranteed.

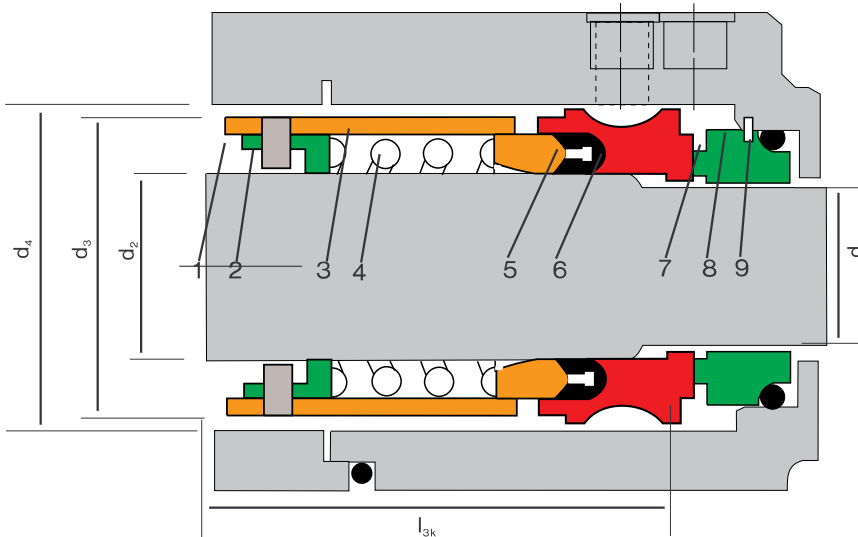
Performance Capabilities

Shaft sizes: 1 1/4".....5 1/8"
(31,75.....130,17 mm)

Operating pressure: max.70 bar(1000 PSIG)

Operating temperature: 0 C - 274 C(+32 F-+525 F)
(water or water solutions)
-73 C - +343 C
(-100 F - +650 F)
(other liquids)

Speed: max. 22 m/sec.
max. 4500 ft/min.



Materials

Rotating Faces

Steel (stellite)
Silicon Carbide (SiC-Si)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Stationary Faces

Carbon (general service)
Carbon (antimon)
Silicon Carbide (SiC-Si)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Secondary Seals

Buna-N
Fluoroelastomer
Ethylene Propylene
Neoprene
Silicone
Perfluorelastomer

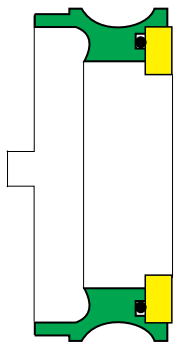
Item Identification

- 1 = Seal Drive
- 2 = Key
- 3 = Spring Holder
- 4 = Spring
- 5 = U-Cup
- 6 = Rotating Face
- 7 = Stationary Face
- 8 = Pin
- 9 = O-Ring

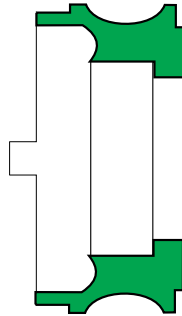
Typical Industrial Applications

Boiler Feedwater Pumps
Common application including process pumps.
Water
Chemicals
Oils
Corrosive media

Design Variations



O-Ring Mounted
Mod. H-D



Solid Face, stellite
Mod. H-D

Dimensions

NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm
1250	1,250	31,75	47,62	54,00	59,53
1312	1,312	33,34	49,21	55,60	62,71
1375	1,375	34,92	50,80	57,20	64,29
1437	1,437	36,51	52,39	58,80	61,12
1500	1,500	38,10	53,97	60,30	62,71
1625	1,625	41,27	60,32	66,70	85,70
1750	1,750	44,45	61,91	68,30	69,06
1875	1,875	47,62	65,09	71,50	69,65
2000	2,000	50,80	73,82	80,20	96,84
2062	2,062	52,40	69,85	76,20	73,82
2125	2,125	53,97	76,20	82,60	86,52
2250	2,250	57,15	74,62	81,00	69,06
2375	2,375	60,32	84,15	90,50	96,85
2500	2,500	63,50	85,72	92,10	96,85
2625	2,625	66,67	87,32	94,70	80,17
2687	2,687	68,26	92,07	98,40	96,85
2875	2,875	73,02	95,25	101,60	88,11
3000	3,000	76,20	101,60	108,00	92,07
3125	3,125	79,37	104,77	111,10	93,66
3250	3,250	82,55	104,77	111,10	92,07
3375	3,375	85,27	112,72	119,10	94,46
3500	3,500	88,99	114,30	120,70	89,69
3625	3,625	92,07	114,30	120,70	90,49
3750	3,750	95,25	120,65	127,00	98,42
3813	3,813	96,84	127,00	133,40	100,02
4000	4,000	101,60	125,42	131,80	96,04
4250	4,250	107,95	131,76	138,10	96,84
4312	4,312	109,54	136,92	142,90	95,25
4500	4,500	114,30	141,29	147,70	94,46
4875	4,875	123,82	149,22	155,60	104,77
5125	5,125	130,17	158,75	165,10	113,51



Replacement-/Repair-Parts
for Borg Warner Seals

Parts for Models
U, UK, UC, UKC, UO,
UKO, D

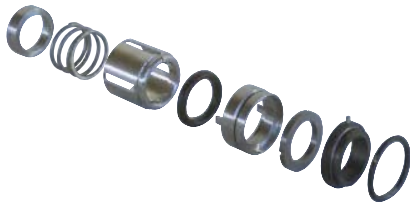
Seal Size	Seal Drive		Drive Pin/Key		Spring		Spring Holder		U-Cup		Stationary Face		Seat Ring	
	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number
1187	620029	1187/SD201	620030	1187/PI201	620034	1187/SP201	620035	1187/RE201	620031	1187/UC201	620032	1187/FS201	568222	568222
1250	619383	1250/SD201	614467	1250/PI201	614699	1250/SP201	614703	1250/RE201	614702	1250/UC201	614705	1250/FS201	568222	568222
1375	620225	1375/SD201	614467	1375/PI201	614699	1375/SP201	620224	1375/RE201	620221	1375/UC201	620222	1375/FS201	568326	568326
1437	619392	1437/SD201	614467	1437/PI201	614460	1437/SP201	614466	1437/RE201	614462	1437/UC201	614464	1437/FS201	616175	1437/OR201
1500	620214	1500/SD201	614467	1500/PI201	614460	1500/SP201	620213	1500/RE201	620210	1500/UC201	620211	1500/FS201	568327	568327
1625	619393	1625/SD201	614588	1625/PI201	614473	1625/SP201	614468	1625/RE201	614474	1625/UC201	614476	1625/FS201	568328	568328
1750	615173	1750/SD201	615573	1750/PI201	615372	1750/SP201	615170	1750/RE201	615179	1750/UC201	615172	1750/FS201	568329	568329
1875	619347	1875/SD201	614467	1875/PI201	614611	1875/SP201	614605	1875/RE201	614610	1875/UC201	614608	1875/FS201	568330	568330
2000	619387	2000/SD201	614306	2000/PI201	614300	2000/SP201	614301	2000/RE201	614308	2000/UC201	614304	2000/FS201	614303	2000/OR201
2062	619360	2062/SD201	614588	2062/PI201	614720	2062/SP201	614718	2062/RE201	614716	2062/UC201	614715	2062/FS201	614712	2062/OR201
2125	615184	2125/SD201	615409	2125/PI201	615188	2125/SP201	107519	2125/RE201	615182	2125/UC201	615185	2125/FS201	615187	2125/OR201
2250	660904	2250/SD201	614467	2250/PI201	617718	2250/SP201	617712	2250/RE201	617717	2250/UC201	617715	2250/FS201	617716	2250/OR201
2375	619391	2375/SD201	614306	2375/PI201	614740	2375/SP201	107181	2375/RE201	614747	2375/UC201	614746	2375/FS201	614743	2375/OR201
2500	660859	2500/SD201	615307	2500/PI201	615308	2500/SP201	107481	2500/RE201	615309	2500/UC201	615311	2500/FS201	615312	2500/OR201
2625	621866	2625/SD201	615307	2625/PI201	620065	2625/SP201	111368	2625/RE201	621316	2625/UC201	621867	2625/FS201	616817	2625/OR201
2687	619365	2687/SD201	614306	2687/PI201	614876	2687/SP201	614862	2687/RE201	614860	2687/UC201	614864	2687/FS201	614859	2687/OR201
2875	660872	2875/SD201	623627	2875/KE201	616268	2875/SP201	260186	2875/RE201	616267	2875/UC201	107965	2875/FS201	616274	2875/OR201
3000	621349	3000/SD201	621663	3000/KE201	616101	3000/SP201	260185	3000/RE201	616097	3000/UC201	107878	3000/FS201	618639	3000/OR201
3125	660894	3125/SD201	622700	3125/KE201	618556	3125/SP201	260202	3125/RE201	618300	3125/UC201	109040	3125/FS201	618925	3125/OR201
3250	660898	3250/SD201	621552	3250/KE201	618556	3250/SP201	260204	3250/RE201	618555	3250/UC201	109205	3250/FS201	568342	3250/OR201
3375	660867	3375/SD201	622700	3375/KE201	660865	3375/SP201	260179	3375/RE201	615390	3375/UC201	615386	3375/FS201	619292	3375/OR201
3500	660888	3500/SD201	621348	3500/KE201	617292	3500/SP201	260197	3500/RE201	617293	3500/UC201	617295	3500/FS201	618947	3500/OR201
3625	623823	3625/SD201	621552	3625/KE201	623825	3625/SP201	260237	3625/RE201	626993	3625/UC201	623824	3625/FS201	618947	3625/OR201
3750	660932	3750/SD201	623810	3750/KE201	660773	3750/SP201	260214	3750/RE201	621179	3750/UC201	621180	3750/FS201	631104	3750/OR201
4000	112967	4000/SD201	624444	4000/KE201	624480	4000/SP201	208231	4000/RE201	626740	4000/UC201	112968	4000/FS201	624440	4000/OR201
4250	660592	4250/SD201	621348	4250/KE201	619766	4250/SP201	208612	4250/RE201	619767	4250/UC201	625564	4250/FS201	568426	4250/568426
4312	621643	4312/SD201	621348	4312/KE201	616492	4312/SP201	260188	4312/RE201	616493	4312/UC201	616495	4312/FS201	618900	4312/OR201
4500	660912	4500/SD201	623810	4500/KE201	619992	4500/SP201	260211	4500/RE201	619991	4500/UC201	110111	4500/FS201	661354	4500/OR201
4875	111836	4875/SD201	621348	4875/KE201	615996	4875/SP201	207510	4875/RE201	615993	4875/UC201	150650	4875/FS201	568431	4875/568431
5125	626486	5125/SD201	622674	5125/KE201	626490	5125/SP201	626491	5125/RE201	626488	5125/UC201	626497	5125/FS201	568433	5125/568433
5500	112689	5500/SD201	622545	5500/KE201	623988	5500/SP201	260086	5500/RE201	662668	5500/UC201	660340	5500/FS201	568437	5500/568437
6000	108394	6000/SD201	622545	6000/KE201	617031	6000/SP201	661730	6000/RE201	108393	6000/UC201	205526	6000/FS201	568440	6000/568440

Standard Parts - Other Parts on request

How to order: Seal size + Part group (1875/FR201 for OEM part 614607)

All manufacturer's names, numbers, symbols and descriptions are used for reference purposes only and is not implied, that parts listed must be a product of these manufacturers.

Replacement-/Repair-Parts for Borg Warner Seals



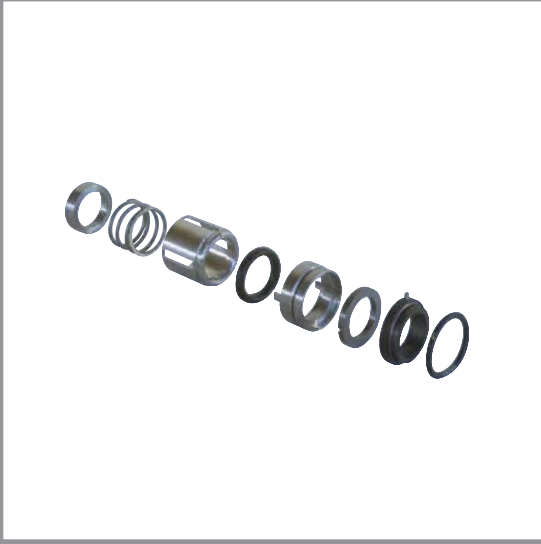
Rotating Faces for Models U, UK, UC, UKC, UO, UKO, UZ, UZO, UZC

		U, UK, UZ		UC, UKC, UZC		UO, UKO, UZO						
		Rotating Face		Rotating Face		Body		Lock Ring		Face		O-Ring
Seal Size	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	AN Number	
1187	620033	1187/FR201	-----	1187/FR202	156587	1187/FR203	665928	1187/FR204	665927	1187/FR205	568027	
1250	614704	1250/FR201	4R9861	1250/FR202	156319	1250/FR203	665942	1250/FR204	665941	1250/FR205	568028	
1375	620223	1375/FR201	4R9863	1375/FR202	156128	1375/FR203	665183	1375/FR204	665182	1375/FR205	568029	
1437	614457	1437/FR201	4R9864	1437/FR202	155702	1437/FR203	666170	1437/FR204	665948	1437/FR205	568029	
1500	620212	1500/FR201	4R9865	1500/FR202	156466	1500/FR203	665954	1500/FR204	665955	1500/FR205	568030	
1625	614469	1625/FR201	4R9866	1625/FR202	154988	1625/FR203	666009	1625/FR204	666010	1625/FR205	568031	
1750	615171	1750/FR201	4R9867	1750/FR202	158448	1750/FR203	665656	1750/FR204	665655	1750/FR205	568032	
1875	614607	1875/FR201	4R9868	1875/FR202	156129	1875/FR203	665245	1875/FR204	665312	1875/FR205	568033	
2000	614307	2000/FR201	4R9869	2000/FR202	156575	2000/FR203	665668	2000/FR204	665667	2000/FR205	568138	
2062	616386	2062/FR201	4R9870	2062/FR202	156136	2062/FR203	665189	2062/FR204	665188	2062/FR205	568035	
2125	615181	2125/FR201	4R9871	2125/FR202	157110	2125/FR203	665189	2125/FR204	665188	2125/FR205	568035	
2250	617714	2250/FR201	4R9872	2250/FR202	154989	2250/FR203	665134	2250/FR204	665568	2250/FR205	568036	
2375	614745	2375/FR201	4R9873	2375/FR202	3R0433	2375/FR203	666029	2375/FR204	666030	2375/FR205	568144	
2500	615310	2500/FR201	4R9874	2500/FR202	155320	2500/FR203	665437	2500/FR204	665436	2500/FR205	568038	
2625	621868	2625/FR201	4R9875	2625/FR202	156177	2625/FR203	665683	2625/FR204	665684	2625/FR205	568039	
2687	614861	2687/FR201	4R9876	2687/FR202	157330	2687/FR203	666057	2687/FR204	666058	2687/FR205	568040	
2875	107963	2875/FR201	4R9850	2875/FR202	154651	2875/FR203	665319	2875/FR204	665320	2875/FR205	568041	
3000	107879	3000/FR201	4R9877	3000/FR202	156269	3000/FR203	665065	3000/FR204	666074	3000/FR205	568152	
3125	109041	3125/FR201	4R9878	3125/FR202	156090	3125/FR203	666075	3125/FR204	666076	3125/FR205	568152	
3250	109206	3250/FR201	4R9879	3250/FR202	156046	3250/FR203	665583	3250/FR204	665582	3250/FR205	568042	
3375	107508	3375/FR201	4R9830	3375/FR202	156091	3375/FR203	666077	3375/FR204	666078	3375/FR205	568153	
3500	108501	3500/FR201	4R9880	3500/FR202	156263	3500/FR203	665864	3500/FR204	665863	3500/FR205	568154	
3625	114563	3625/FR201	4R9881	3625/FR202	156092	3625/FR203	665864	3625/FR204	666079	3625/FR205	568044	
3750	110802	3750/FR201	4R9882	3750/FR202	155918	3750/FR203	666067	3750/FR204	665691	3750/FR205	568155	
4000	115204	4000/FR201	4R9884	4000/FR202	156137	4000/FR203	665938	4000/FR204	665937	4000/FR205	568045	
4250	109962	4250/FR201	4R9885	4250/FR202	156821	4250/FR203	665799	4250/FR204	665798	4250/FR205	568157	
4312	108102	4312/FR201	4R9886	4312/FR202	3R2001	4312/FR203	665799	4312/FR204	665798	4312/FR205	568047	
4500	110109	4500/FR201	4R9887	4500/FR202	156489	4500/FR203	665697	4500/FR204	665696	4500/FR205	568158	
4875	205213	4875/FR201	4R9888	4875/FR202	154998	4875/FR203	666039	4875/FR204	666040	4875/FR205	568159	
5125	151071	5125/FR201	4R9889	5125/FR202	3R2002	5125/FR203	666041	5125/FR204	666042	5125/FR205	568160	
5500	664233	5500/FR201	4R9890	5500/FR202	156645	5500/FR203	666043	5500/FR204	666044	5500/FR205	568161	
6000	205527	6000/FR201	4R9891	6000/FR202	3R2003	6000/FR203	666080	6000/FR204	666081	6000/FR205	568163	

Standard Parts - Other Parts on request

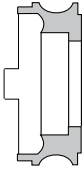

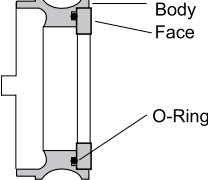
How to order: Seal size + Part group (1875/FR201 for OEM part 614607)

All manufacturer's names, numbers, symbols and descriptions are used for reference purposes only and is not implied, that parts listed must be a product of these manufacturers.



Replacement-/Repair-Parts for Borg Warner Seals

Rotating Faces for Models "D"

Seal Size	D		D		UO, UKO, UZO		
							
	Rotating Face, solid		Rotating Face Body		Face		O-Ring
OEM Reference		OEM Reference	Part Number	OEM Reference	Part Number	AN Number	
1250	626585	1250/FR210	153966	1250/ FR211	665941	1250/ FR205	568126
1437	112747	1437/FR210	153398	1437/ FR211	665948	1437/ FR205	568129
1500	112979	1500/FR210	153805	1500/ FR211	665955	1500/ FR205	568030
1750	111513	1750/FR210	153795	1750/ FR211	665655	1750/ FR205	568033
1875	113114	1875/FR210	153542	1875/ FR211	665312	1875/ FR205	568033
2062	111647	2062/FR210	153476	2062/ FR211	665188	2062/ FR205	568140
2250	625630	2250/FR210	153141	2250/ FR211	665568	2250/ FR205	568143
2375	113026	2375/FR210	153923	2375/ FR211	666030	2375/ FR205	568146
2500	111635	2500/FR210	153340	2500/ FR211	665436	2500/ FR205	568146
2875	112345	2875/FR210	153287	2875/ FR211	665320	2875/ FR205	568151
3000	113766	3000/FR210	153564	3000/ FR211	666074	3000/ FR205	568152
3250	111109	3250/FR210	153567	3250/ FR211	665582	3250/ FR205	568152
3375	110981	3375/FR210	153471	3375/ FR211	666078	3375/ FR205	568153
3500	207388	3500/FR210	153370	3500/ FR211	665863	3500/ FR205	568240
3625	112464	3625/FR210	154063	3625/ FR211	666079	3625/ FR205	568154
3750	207882	3750/FR210	261135	3750/ FR211	665691	3750/ FR205	568155
4000	112969	4000/FR210	153119	4000/ FR211	665937	4000/ FR205	568155
4250	260152	4250/FR210	3R0462	4250/ FR211	665798	4250/ FR205	568156
4312	207471	4312/FR210	261181	4312/ FR211	665798	4312/ FR205	568157
4500	111430	4500/FR210	153126	4500/ FR211	665696	4500/ FR205	568158
4875	207867	4875/FR210	261206	4875/ FR211	666040	4875/ FR205	568250
5125	209049	5125/FR210	261207	5125/ FR211	666042	5125/ FR205	568160
5500	260087	5500/FR210	261208	5500/ FR211	666044	5500/ FR205	568161
6000	260612	6000/FR210	2R3311	6000/ FR211	666081	6000/ FR205	568165

Standard Parts - Other Parts on request

How to order: Seal size + Part group (1875/FR201 for OEM part 614607)

All manufacturer's names, numbers, symbols and descriptions are used for reference purposes only and is not implied, that parts listed must be a product of these manufacturers.



Product Description

Seal with short axial length, easy and precise installation with positive connection of rotating unit through keys increases durability.

Retention pins, installed radial, guarantees fixing of stationary rings. Compensates minor misalignments on the shaft and bearings. Flexibility is provided by U-Cup and seat gasket.

Even for high temperature and special chemical conditions.

As the seal consists of only few single parts, maintenance and stockkeeping is most economical.

Technical Features

Single acting, balanced, duo directional, single spring, API Seal

All components of raw materials are strictly according to API 610.

Highest quality and latest technologies are guaranteed.

Performance Capabilities

Shaft sizes: 1 1/4".....3 3/4"
(31,75.....95,25 mm)

Operating pressure: max.70 bar(1000 PSIG)
Operating temperature: 0 C - +66 C(+32 F-+150 F)
(water or water solutions)
-40 C - +204 C
(-40 F - +400 F)
(other liquids)
Speed: max. 22 m/sec.
max. 4500 ft/min.

Materials

Rotating Faces

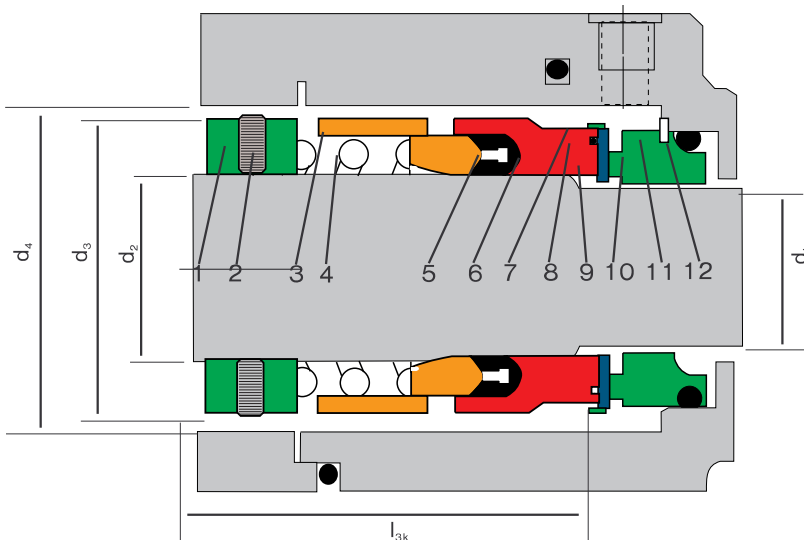
Steel (stellite)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Stationary Faces

Carbon (general service)
Carbon (antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Secondary Seals

Buna-N
Fluoroelastomer
Ethylene Propylene
Neoprene
Silicone
Perfluorelastomer



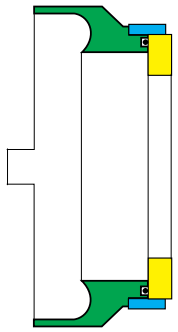
Item Identification

- 1 = Seal Drive
- 2 = Set Screw
- 3 = U-Cup Follower
- 4 = Spring
- 5 = U-Cup
- 6 = Rotating Face Body
- 7 = Lock-Ring
- 8 = O- Ring
- 9 = Seal Ring
- 10 = Pin
- 11 = Stat. Face
- 12 = O-Ring

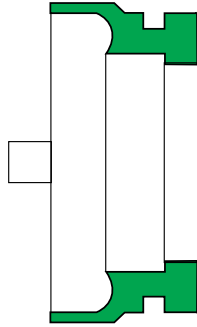
Typical Industrial Applications

Common application including process pumps.
Water
Chemicals
Oils
Corrosive media

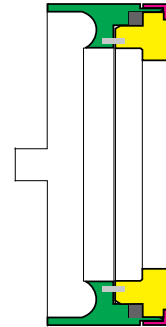
Design Variations



O-Ring Mounted
Mod. H-UZO



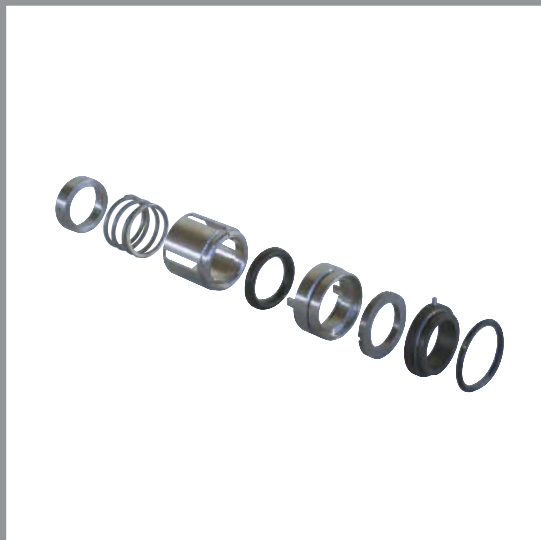
Solid Face, stellite
Mod. H-UZ



Canned Assy
Mod. H-UZC

Dimensions

NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm
1250	1,250	31,75	47,62	54,00	37,49
1375	1,375	34,92	50,80	57,20	41,40
1437	1,437	36,51	52,39	58,80	40,67
1500	1,500	38,10	53,97	60,30	41,38
1625	1,625	41,27	60,32	66,70	50,85
1750	1,750	44,45	61,91	68,30	42,27
1875	1,875	47,62	65,09	71,50	44,45
2000	2,000	50,80	73,82	80,20	58,79
2062	2,062	52,40	69,85	76,20	50,06
2125	2,125	53,97	76,20	82,60	58,79
2250	2,250	57,15	74,62	81,00	53,95
2375	2,375	60,32	84,15	90,50	59,67
2500	2,500	63,50	85,72	92,10	62,05
2625	2,625	66,67	87,32	94,70	55,59
2687	2,687	68,26	92,07	98,40	64,43
2875	2,875	73,02	95,25	101,60	64,32
3000	3,000	76,20	101,60	108,00	66,89
3125	3,125	79,37	104,77	111,10	68,57
3250	3,250	82,55	104,77	111,10	73,25
3375	3,375	85,27	112,72	119,10	67,37
3500	3,500	88,99	114,30	120,70	69,26
3625	3,625	92,07	114,30	120,70	72,25
3750	3,750	95,25	120,65	127,00	84,35



Replacement-/Repair-Parts for Borg Warner Seals

Parts for Models UZ, UZC, UZO (Rotating Faces see Mod. "HU.")

Seal Size	Seal Drive		Set Screw		Spring		U-Cup Follower		U-Cup		Stationary Face		Seat Ring	
	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number	OEM Ref.	Part Number
1250	667734	1250/SD203	4R0423	CP48x79	667551	1250/SP203	667698	1250/RE203	614702	1250/UC201	614705	1250/FS201	568222	568222
1375	667736	1375/SD203	4R0427	CP63x79	667553	1375/SP203	667700	1375/RE203	620221	1375/UC201	620222	1375/FS201	568326	568326
1437	667737	1437/SD203	4R0427	CP63x79	667554	1437/SP203	667701	1437/RE203	614462	1437/UC201	614464	1437/FS201	616175	1437/OR201
1500	667738	1500/SD203	4R0427	CP63x79	667555	1500/SP203	667702	1500/RE203	620210	1500/UC201	620211	1500/FS201	568327	568327
1625	667739	1625/SD203	4R0428	CP63x95	667556	1625/SP203	667703	1625/RE203	614474	1625/UC201	614476	1625/FS201	568328	568328
1750	667740	1750/SD203	4R0427	CP63x79	667557	1750/SP203	667704	1750/RE203	615179	1750/UC201	615172	1750/FS201	568329	568329
1875	667741	1875/SD203	4R0432	CP79x95	667558	1875/SP203	667705	1875/RE203	614610	1875/UC201	614608	1875/FS201	568330	568330
2000	667742	2000/SD203	4R0433	CP79x95	667559	2000/SP203	667706	2000/RE203	614308	2000/UC201	614304	2000/FS201	614303	2000/OR201
2062	667743	2062/SD203	4R0432	CP79x95	667559	2062/SP203	667707	2062/RE203	614716	2062/UC201	614715	2062/FS201	614712	2062/OR201
2125	667744	2125/SD203	4R0433	CP79x95	667560	2125/SP203	667708	2125/RE203	615182	2125/UC201	615185	2125/FS201	615187	2125/OR201
2250	667745	2250/SD203	4R0427	CP63x79	667561	2250/SP203	667709	2250/RE203	617717	2250/UC201	617715	2250/FS201	617716	2250/OR201
2375	667746	2375/SD203	4R0433	CP79x95	667562	2375/SP203	667710	2375/RE203	614747	2375/UC201	614746	2375/FS201	614743	2375/OR201
2500	667747	2500/SD203	4R0432	CP79x95	667563	2500/SP203	667711	2500/RE203	615309	2500/UC201	615311	2500/FS201	615312	2500/OR201
2625	667748	2625/SD203	4R0433	CP79x95	667564	2625/SP203	667712	2625/RE203	621316	2625/UC201	621867	2625/FS201	616817	2625/OR201
2687	667749	2687/SD203	4R0433	CP79x95	667565	2687/SP203	667713	2687/RE203	614860	2687/UC201	614864	2687/FS201	614859	2687/OR210
2875	667750	2875/SD203	4R0433	CP79x95	667566	2875/SP203	667714	2875/RE203	616267	2875/UC201	107965	2875/FS201	616274	2875/OR201
3000	667751	3000/SD203	4R0438	CP95x127	667567	3000/SP203	667715	3000/RE203	616097	3000/UC201	107878	3000/FS201	618639	3000/OR201
3125	667752	3125/SD203	4R0438	CP95x127	667568	3125/SP203	667716	3125/RE203	618300	3125/UC201	109040	3125/FS201	618925	3125/OR201
3250	667753	3250/SD203	4R0437	CP95x95	667569	3250/SP203	667717	3250/RE203	618555	3250/UC201	109205	3250/FS201	568342	3250/OR201
3375	667754	3375/SD203	4R0438	CP95x127	667570	3375/SP203	667718	3375/RE203	615390	3375/UC201	615386	3375/FS201	619292	3375/OR201
3500	667755	3500/SD203	4R0438	CP95x127	667571	3500/SP203	667719	3500/RE203	617293	3500/UC201	617295	3500/FS201	618947	3500/OR201
3625	667756	3625/SD203	4R0437	CP95x95	667572	3625/SP203	667720	3625/RE203	626993	3625/UC201	623824	3625/FS201	618947	3625/OR201
3750	667757	3750/SD203	4R0438	CP95x127	667473	3750/SP203	667721	3750/RE203	621179	3750/UC201	621180	3750/FS201	631104	3750/OR201

Standard Parts - Other Parts on request

How to order: Seal size + Part group (1875/FR201 for OEM part 614607)

All manufacturer's names, numbers, symbols and descriptions are used for reference purposes only and is not implied, that parts listed must be a product of these manufacturers.



Product Description

Easy and precise installation with positive connection of rotating unit through keys increases durability. Retention pins, installed radial, guarantees fixing of stationary rings. A large number of different secondary seals (O-Rings, U-Cup) allows the application for many different media. Even for high temperature and special chemical conditions. As the seal consists of only few single parts, maintenance and stockkeeping is most economical.

Technical Features

Single acting, balanced, duo directional, single spring, API Seal, like "U" seal but with smaller outer diameter or shorter length

All components of raw materials are strictly according to API 610. Highest quality and latest technologies are guaranteed.

Performance Capabilities

Shaft sizes: 1 5/8".....2 1/4"
(41,27.....57,15 mm)

Operating pressure: max.70 bar(1000 PSIG)
Operating temperature: 0 C - +66 C(+32 F-+150 F)
(water or water solutions)
-73 C - +260 C
(-100 F - +500 F)
(other liquids)

Speed: max. 22 m/sec.
max. 4500 ft/min.

Materials

Rotating Faces

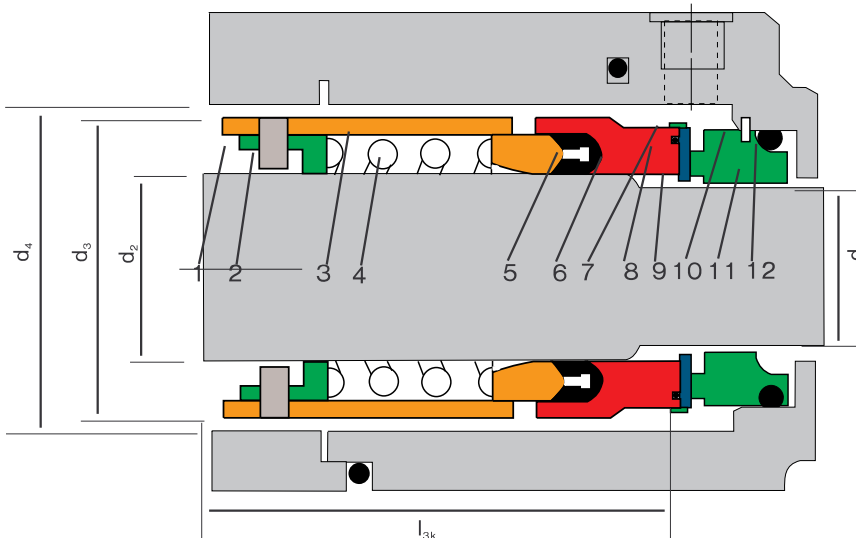
Steel (stellite)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Stationary Faces

Carbon (general service)
Carbon (antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Secondary Seals

Buna-N
Fluoroelastomer
Ethylene Propylene
Neoprene
Silicone
Perfluorelastomer



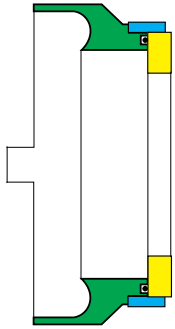
Item Identification

- 1 = Seal Drive
- 2 = Key
- 3 = Spring Holder
- 4 = Spring
- 5 = U-Cup
- 6 = Rotating Face Body
- 7 = Lock-Ring
- 8 = O- Ring
- 9 = Seal Ring
- 10 = Pin
- 11 = Stat. Face
- 12 = O-Ring

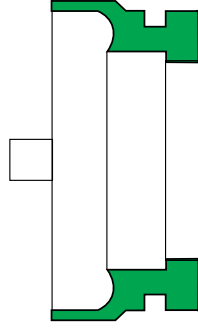
Typical Industrial Applications

Common application including process pumps.
Water
Chemicals
Oils
Corrosive media

Design Variations



O-Ring Mounted
Mod. H-UXO



Solid Face, stellited
Mod. H-UX






Dimensions

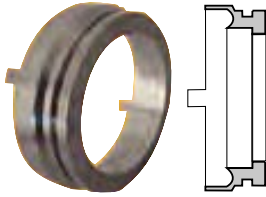
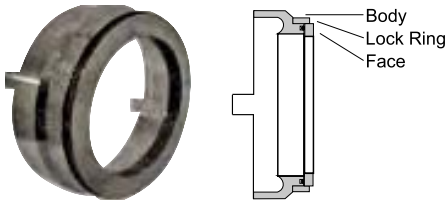
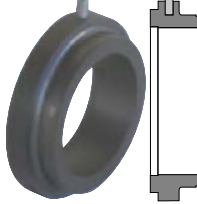

NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm
1625	1,625	41,27	60,33	63,50	61,28
1750	1,750	44,45	61,92	66,67	63,70
1875	1,875	47,62	65,09	68,26	63,50
2062	2,062	52,40	69,85	74,62	75,40
2125	2,125	53,97	68,27	73,02	72,25



Replacement-/Repair-Parts for Borg Warner Seals

Parts for Models UX, UXO

										
	Seal Drive		Drive Pin/Key		Spring		Spring Holder		U-Cup	
Seal Size	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number
1625	619395	1625/SD202	614467	1625/PI201	614891	1625/SP202	614885	1625/RE202	614890	1625/UC202
1750	616215	1750/SD202	616214	1750/PI201	616213	1750/SP202	107928	1750/RE202	616216	1750/UC202
1875	616117	1875/SD202	616115	1875/PI201	616109	1875/SP202	107873	1875/RE202	614610	1875/UC201
2062	619360	2062/SD202	614588	2062/PI201	614720	2062/SP202	614718	2062/RE202	614716	2062/UC201
2125	620254	2125/SD202	616214	2125/PI201	620278	2125/SP202	620255	2125/RE202	620253	2125/UC202

	UX		UXO										
													
	Rotating Face		Rotating Face							Stationary Face		Seat Ring	
Seal Size	OEM Reference	Part Number	Body		Lock Ring		Face		O-Ring	OEM Reference	Part Number	OEM Ref.	Part Number
			OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	AN Number				
1625	614887	1625/FR206	156820	FR207	666020	FR208	666021	FR209	568031	614888	1625/FS202	614889	OR202
1750	616217	1750/FR206	3R1999	FR207	665986	FR208	665987	FR209	568032	616211	1750/FS202	568328	568328
1875	616116	1875/FR206	156243	FR207	665245	FR208	665312	FR209	568033	614608	1875/FS201	568330	568330
2062	616386	2062/FR206	156136	FR207	665189	FR208	665188	FR209	568035	616387	2062/FS202	614712	OR202
2125	620256	2125/FR206	156131	FR207	666022	FR208	666023	FR209	568035	620257	2125/FS202	568331	568331

Standard Parts - Other Parts on request

How to order: Seal size + Part group (1875/FR201 for OEM part 614607)

All manufacturer's names, numbers, symbols and descriptions are used for reference purposes only and is not implied, that parts listed must be a product of these manufacturers.



Product Description

High pressure heat exchangers are used to cool process/barrier fluids in seal supply circuits. Designed as a dual coil type heat exchanger. The case can be easily removed for tube coil cleaning.

Technical Features

- One piece tube
- O-Ring gasket for case
- Foot mounting

Typical Industrial Applications

- Chemical industry
- Petrochemical industry
- Oil and Gas industry
- Refinery
- Power plants
- General application
- Corrosive media

Performance Capabilities

- Max. Temp. tube side: 260 C
- Max. Pressure at 30 C: 10,3 bar
- Tube volume: 0,378/9,07/17,77 liter
- Case volume: 0,87/1,5/4,3 liter
- Cooling area: 0,16/0,32/0,54 m2

Materials

Tube

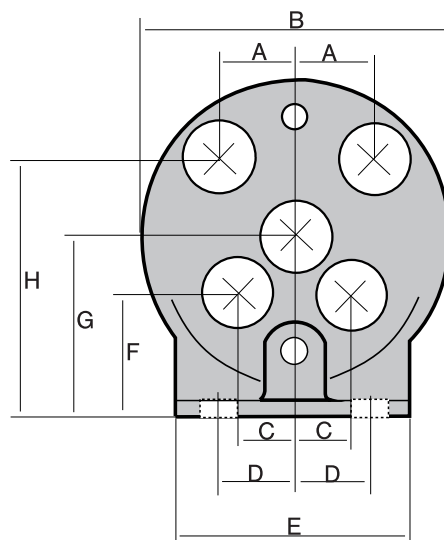
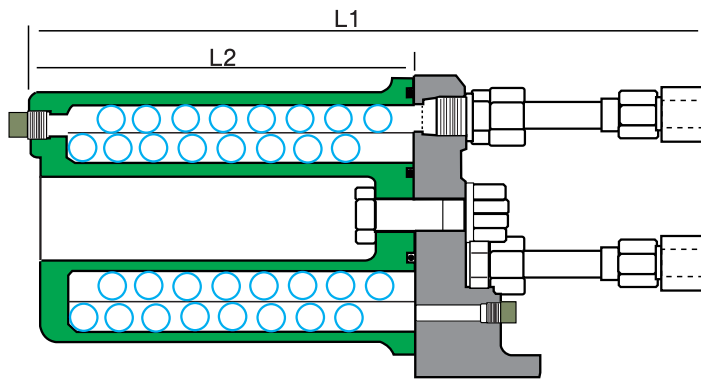
- Steel 304
- Stainless steel 316
- Copper
- Inconel
- Monel

Case

- Cast iron
- Carbon steel

Others

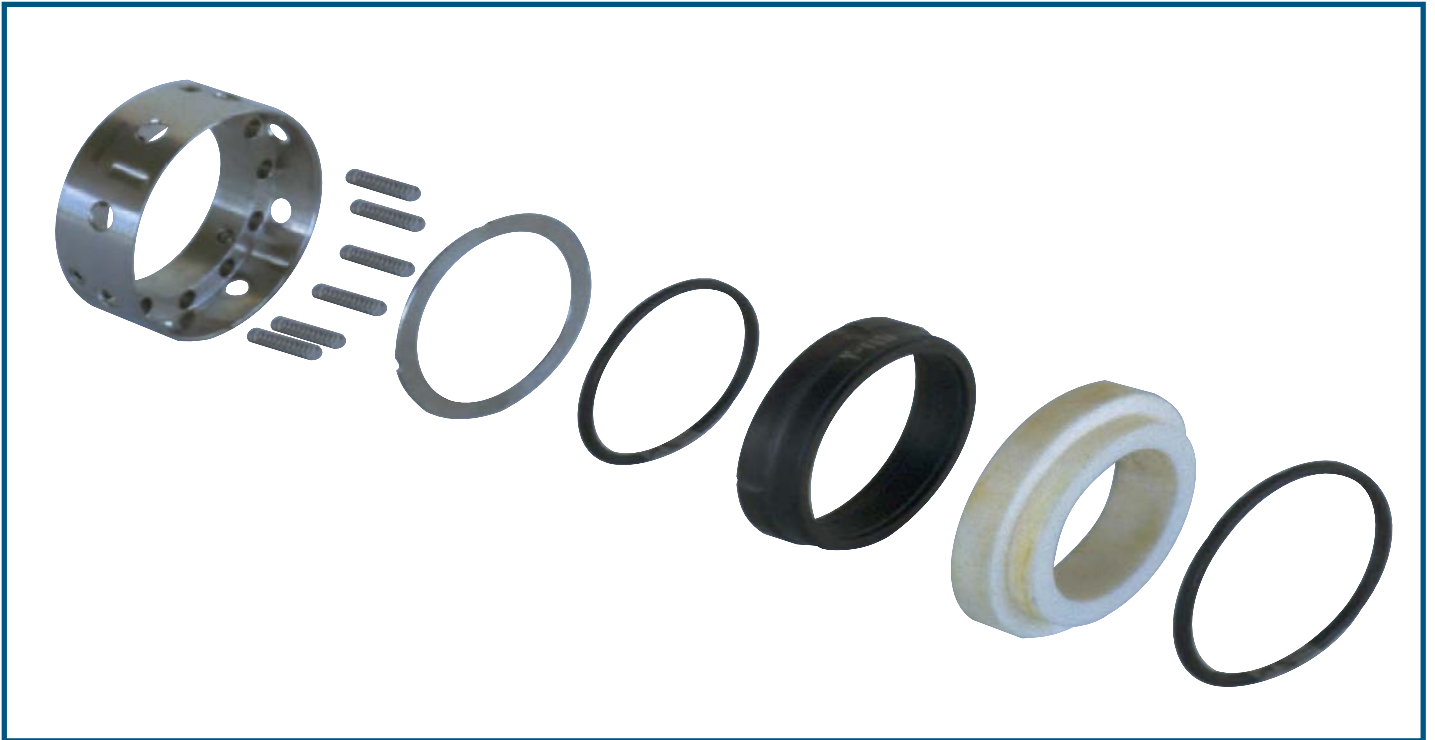
- Flex. conn. - Brass
- Flex. conn. (high temp.) - 316
- O-Ring case - Viton
- Bolt + Nut for case - Alloy steel
- Coil separator - 18.8

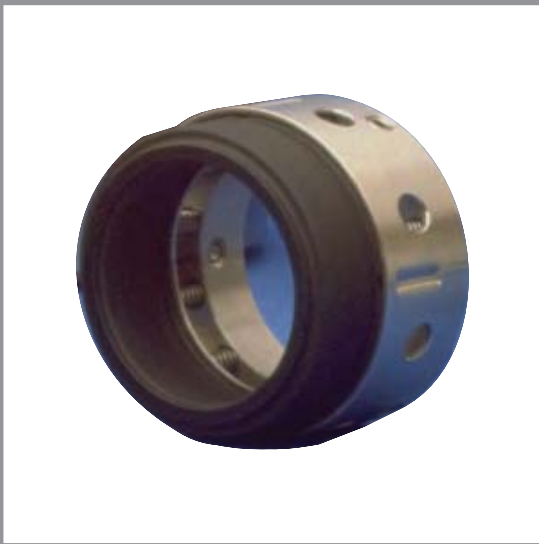


Dimensions

Tube Size		A	B	C	D	E	F	G	H	L1	L2	NPT
1/2"	HE 500	41,3	168,3	31,8	42,9	127,0	65,9	98,4	139,7	377,8	192,1	1/2"1
5/8"	HE 625	44,5	181,0	33,3	44,5	146,1	71,4	104,8	149,2	438,1	252,4	3/4"
3/4"	HE 750	57,1	222,2	42,9	57,1	184,1	83,3	127,0	184,9	610,2	406,4	1"

**Seals and Replacement Parts for
JOHN CRANE®**





Product Description

Compact seal design to fit most API and ANSI pumps. For Petrochemical, refinery and pipeline application. A large variety of elastomers allows the use for most common industrial fluids. With additional back-up ring for higher pressure applications. Easy to repair on site or at our workshop. Standard seat type is O-ring type with all common alternatives.

Technical Features

Single acting, balanced, bi-directional, multiple springs with anti-extrusion ring, permits use in higher pressures. Also suitable for mixers.

Performance Capabilities

Shaft sizes: 1 1/4 ".....6"
(31,7.....152,4 mm)

Operating pressure: max. 83 bar(1200 PSIG)

Operating temperature: -40 C - +260 C
(-40 F - +500 F)

Speed: max. 25 m/sec.
(max. 75 ft/sec.)

Materials

Seal rings

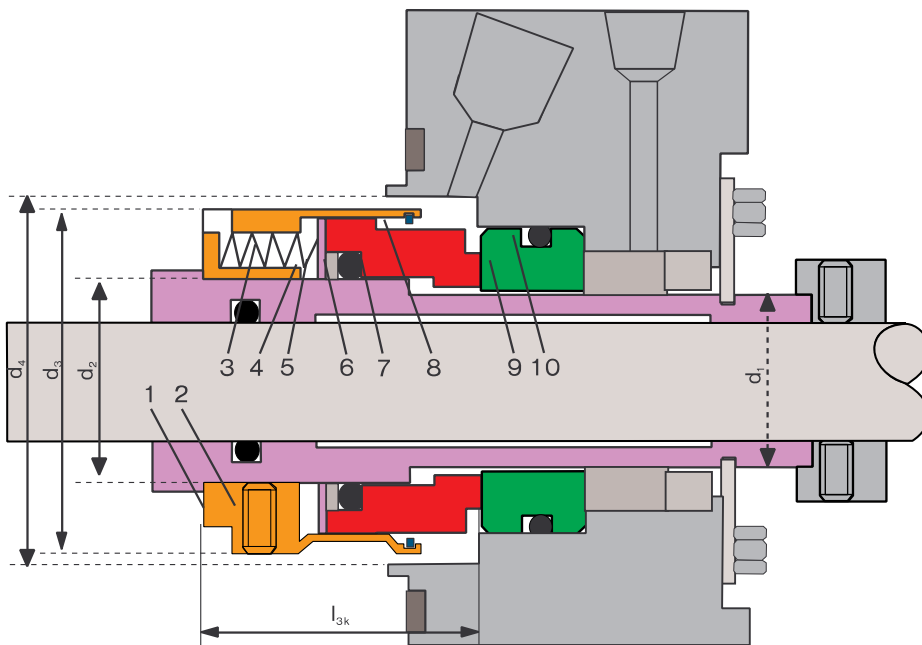
Carbon (General Service)
Carbon (Antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Seats

Chromium Cast
Steel (Stellited)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)
Ceramic

Secondary Seals

Buna-N
Fluoroelastomer
Perfluoroelastomers
Ethylene Propylene
Neoprene
Silicone
Teflon®
Aflas®



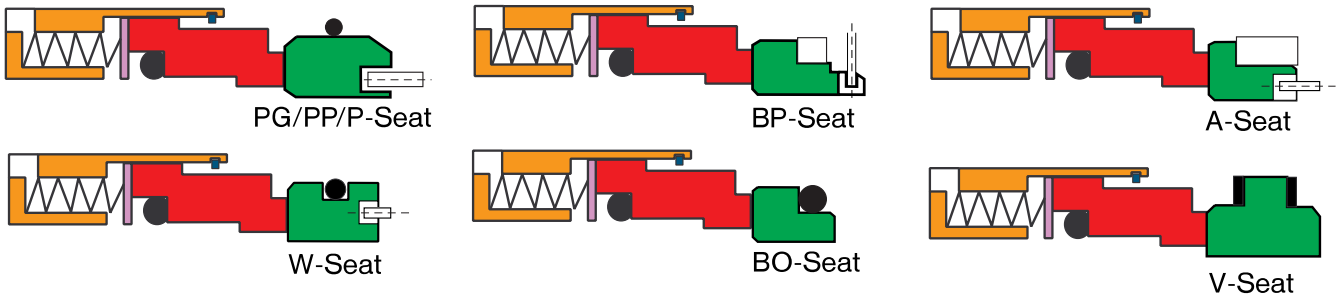
Item Identification

- 1 = Retainer
- 2 = Set Screw
- 3 = Springs
- 4 = Thrust Ring
- 5 = Back up Ring
- 6 = O- Ring
- 7 = Rotating Face
- 8 = Snap Ring
- 9 = Seat (Mating Ring)
- 10 = Seat Ring

Typical Industrial Applications

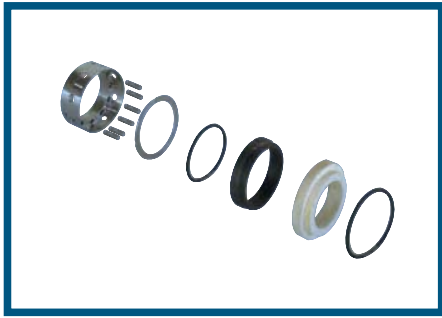
Pipeline
Chemical Industry
Petrochemicals
Refineries
Process Industry
Marine Applications
Food and Beverage Industry
Water and Waste Water Applications
General Application

Seat Variations



Dimensions

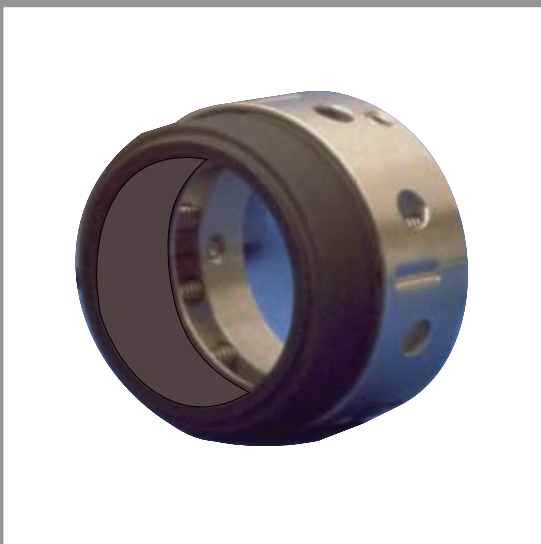
NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm	
1250	1,250	31,75	47,60	50,80	34,90	1250
1375	1,375	34,92	50,80	54,00	36,50	1375
1500	1,500	38,10	54,00	57,20	36,50	1500
1625	1,625	41,27	60,30	63,50	44,45	1625
1750	1,750	44,45	63,50	66,70	44,45	1750
1875	1,875	47,62	66,70	69,85	44,45	1875
2000	2,000	50,80	69,90	73,00	44,45	2000
2125	2,125	53,97	76,20	79,40	52,40	2125
2250	2,250	57,15	79,40	82,50	52,40	2250
2375	2,375	60,32	82,60	82,50	52,40	2375
2500	2,500	63,50	85,75	89,00	52,40	2500
2625	2,625	66,67	89,00	92,00	52,40	2625
2750	2,750	68,26	92,10	95,25	52,40	2750
2875	2,875	73,02	95,25	98,50	52,40	2875
3000	3,000	76,20	96,90	101,60	52,40	3000
3125	3,125	79,37	100,00	103,20	52,40	3125
3250	3,250	82,55	104,80	108,00	52,40	3250
3375	3,375	85,27	108,00	111,20	52,40	3375
3500	3,500	88,99	111,10	114,30	52,40	3500
3625	3,625	92,07	114,30	117,50	52,40	3625
3750	3,750	95,25	117,50	120,70	52,40	3750
3875	3,875	98,42	120,60	123,80	52,40	3875
4000	4,000	101,60	123,80	127,00	52,40	4000
4250	4,250	107,95	133,40	136,50	52,40	4250
4500	4,500	114,30	139,70	142,90	52,40	4500
4750	4,750	120,65	146,00	149,20	52,40	4750
4875	4,875	123,82	149,20	152,40	52,40	4875
5000	5,000	127,00	152,40	155,60	52,40	5000
5250	5,250	133,35	165,10	168,30	60,30	5250
5500	5,500	139,70	171,50	174,60	60,30	5500
5625	5,625	142,87	174,60	177,80	60,30	5625
5750	5,750	146,05	177,80	181,00	60,30	5750
6000	6,000	152,40	184,10	187,30	60,30	6000



Replacement-/Repair-Parts for John Crane Seals

Parts for Rotating Unit for Model 8B-1

Seal Size	Retainer		Set Screws		Springs		Thrust Ring		Snap Ring		Back-Up Ring		O-Ring		Rotating Face	
	OEM Reference	Part Number	OEM Reference	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	Part Number	OEM Reference	Part Number		
1250	0317/090	1250/RE301	7870/305	1651/092	1250/SP301	0317/093	1250/DR301	0317/096	1250/SN301	0317/946	1250/BR301	AN568219	0317/939	1250/FR305		
1375	0349/090	1375/RE301	7870/305	1651/092	1375/SP301	0349/093	1375/DR301	0349/096	1375/SN301	0349/946	1375/BR301	AN568220	0349/939	1375/FR305		
1500	0381/090	1500/RE301	7870/305	1651/092	1500/SP301	0381/093	1500/DR301	0381/096	1500/SN301	0381/946	1500/BR301	AN568222	0381/939	1500/FR305		
1625	0412/090	1625/RE301	8008/305	0852/092	1625/SP302	0412/093	1625/DR301	0412/096	1625/SN301	0412/946	1625/BR301	AN568223	0412/939	1625/FR305		
1750	0444/090	1750/RE301	8008/305	0852/092	1750/SP302	0444/093	1750/DR301	0444/096	1750/SN301	0444/946	1750/BR301	AN568224	0444/939	1750/FR305		
1875	0476/090	1875/RE301	8008/305	0852/092	1875/SP302	0476/093	1875/DR301	0476/096	1875/SN301	0476/946	1875/BR301	AN568225	0476/939	1875/FR305		
2000	0508/090	2000/RE301	8008/305	0852/092	2000/SP302	0508/093	2000/DR301	0508/096	2000/SN301	0508/946	2000/BR301	AN568226	0508/939	2000/FR305		
2125	0539/090	2125/RE301	8008/305	0672/092	2125/SP303	0539/093	2125/DR301	0539/096	2125/SN301	0539/946	2125/BR301	AN568227	0539/939	2125/FR305		
2250	0571/090	2250/RE301	8008/305	0672/092	2250/SP303	0571/093	2250/DR301	0571/096	2250/SN301	0571/946	2250/BR301	AN568228	0571/939	2250/FR305		
2375	0603/090	2375/RE301	8008/305	0672/092	2375/SP303	0603/093	2375/DR301	0603/096	2375/SN301	0603/946	2375/BR301	AN568229	0603/939	2375/FR305		
2500	0635/090	2500/RE301	8008/305	0672/092	2500/SP303	0635/093	2500/DR301	0635/096	2500/SN301	0635/946	2500/BR301	AN568230	0635/939	2500/FR305		
2625	0666/090	2625/RE301	8008/305	0672/092	2625/SP303	0666/093	2625/DR301	0666/096	2625/SN301	0666/946	2625/BR301	AN568231	0666/939	2625/FR305		
2750	0698/090	2750/RE301	8008/305	0672/092	2750/SP303	0698/093	2750/DR301	0698/096	2750/SN301	0698/946	2750/BR301	AN568232	0698/939	2750/FR305		
2875	0730/090	2875/RE301	8110/305	0672/092	2875/SP303	0730/093	2875/DR301	0730/096	2875/SN301	0730/946	2875/BR301	AN568233	0730/939	2875/FR305		
3000	0762/090	3000/RE301	8110/305	0812/092	3000/SP304	0762/093	3000/DR301	0762/096	3000/SN301	0762/946	3000/BR301	AN568234	0762/939	3000/FR305		
3125	0793/090	3125/RE301	8110/305	0812/092	3125/SP304	0793/093	3125/DR301	0793/096	3125/SN301	0793/946	3125/BR301	AN568235	0793/939	3125/FR305		
3250	0825/090	3250/RE301	8110/305	8322/092	3250/SP305	0825/093	3250/DR301	0825/096	3250/SN301	0825/946	3250/BR301	AN568236	0825/939	3250/FR305		
3375	0857/090	3375/RE301	8110/305	8322/092	3375/SP305	0857/093	3375/DR301	0857/096	3375/SN301	0857/946	3375/BR301	AN568237	0857/939	3375/FR305		
3500	0889/090	3500/RE301	8110/305	8322/092	3500/SP305	0889/093	3500/DR301	0889/096	3500/SN301	0889/946	3500/BR301	AN568238	0889/939	3500/FR305		
3625	0920/090	3625/RE301	8110/305	8322/092	3625/SP305	0920/093	3625/DR301	0920/096	3625/SN301	0920/946	3625/BR301	AN568239	0920/939	3625/FR305		
3750	0952/090	3750/RE301	8110/305	8322/092	3750/SP305	0952/093	3750/DR301	0952/096	3750/SN301	0952/946	3750/BR301	AN568240	0952/939	3750/FR305		
3875	0984/090	3875/RE301	8110/305	8322/092	3875/SP305	0984/093	3875/DR301	0984/096	3875/SN301	0984/946	3875/BR301	AN568241	0984/939	3875/FR305		
4000	1016/090	4000/RE301	8110/305	8322/092	4000/SP305	1016/093	4000/DR301	1016/096	4000/SN301	1016/946	4000/BR301	AN568242	1016/939	4000/FR305		
4250	1079/090	4250/RE301			4250/SP305	1079/093	4250/DR301	1079/096	4250/SN301	1079/946	4250/BR301		1079/939	4250/FR305		
4500	1143/090	4500/RE301			4500/SP305	1143/093	4500/DR301	1143/096	4500/SN301	1143/946	4500/BR301		1143/939	4500/FR305		
4750	1206/090	4750/RE301			4750/SP305	1206/093	4750/DR301	1206/096	4750/SN301	1206/946	4750/BR301		1206/939	4750/FR305		
4875	1238/090	4875/RE301			4875/SP305	1238/093	4875/DR301	1238/096	4875/SN301	1238/946	4875/BR301		1238/939	4875/FR305		
5000	1270/090	5000/RE301			5000/SP305	1270/093	5000/DR301	1270/096	5000/SN301	1270/946	5000/BR301		1270/939	5000/FR305		
5250	1333/090	5250/RE301			5250/SP305	1333/093	5250/DR301	1333/096	5250/SN301	1333/946	5250/BR301		1333/939	5250/FR305		
5500	1397/090	5500/RE301			5500/SP305	1397/093	5500/DR301	1397/096	5500/SN301	1397/946	5500/BR301		1397/939	5500/FR305		
5625	1428/090	5625/RE301			5625/SP305	1428/093	5625/DR301	1428/096	5625/SN301	1428/946	5625/BR301		1428/939	5625/FR305		
5750	1460/090	5750/RE301			5750/SP305	1460/093	5750/DR301	1460/096	5750/SN301	1460/946	5750/BR301		1460/939	5750/FR305		
6000	1524/090	6000/RE301			6000/SP305	1524/093	6000/DR301	1524/096	6000/SN301	1524/946	6000/BR301		1524/939	6000/FR305		



Product Description

Compact seal design to fit most API and ANSI pumps. For Petrochemical, refinery and pipeline application. A large variety of elastomers allows the use for most common industrial fluids. With additional back-up ring for higher pressure applications. Easy to repair on site or at our workshop. Standard seat type is O-ring type with all common alternatives.

Technical Features

Single acting, unbalanced, bi-directional, multiple springs. Also suitable for mixers.

Performance Capabilities

Shaft sizes: 1 1/4 ".....6"
(31,7.....152,4 mm)

Operating pressure: max. 24 bar(350 PSIG)

Operating temperature: -40 C - +260 C
(-40 F - +500 F)

Speed: max. 25 m/sec.
(max. 75 ft/sec.)

Materials

Seal rings

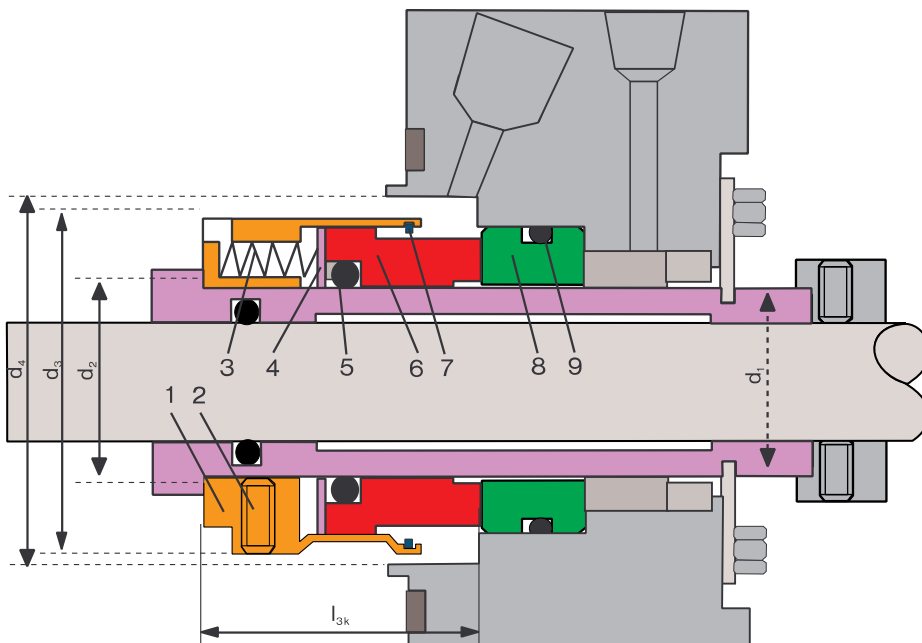
Carbon (General Service)
Carbon (Antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Seats

Chromium Cast
Steel (Stellited)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)
Ceramic

Secondary Seals

Buna-N
Fluoroelastomer
Perfluoroelastomers
Ethylene Propylene
Neoprene
Silicone
Teflon®



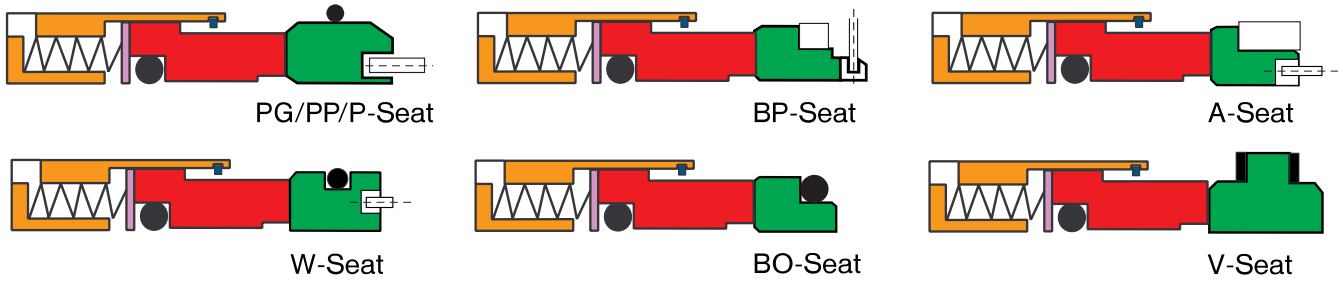
Item Identification

- 1 = Retainer
- 2 = Set Screw
- 3 = Springs
- 4 = Thrust Ring
- 5 = O- Ring
- 6 = Rotating Face
- 7 = Snap Ring
- 8 = Seat (Mating Ring)
- 9 = Seat Ring

Typical Industrial Applications

Pipeline
Chemical Industry
Petrochemicals
Refineries
Process Industry
Marine Applications
Food and Beverage Industry
Water and Waste Water Applications
General Application

Seat Variations

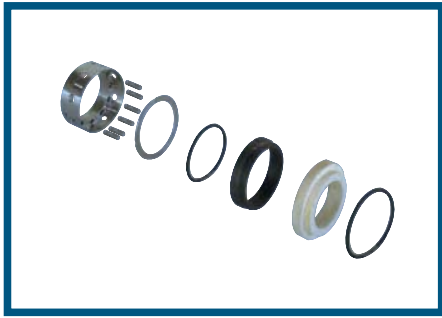


Dimensions

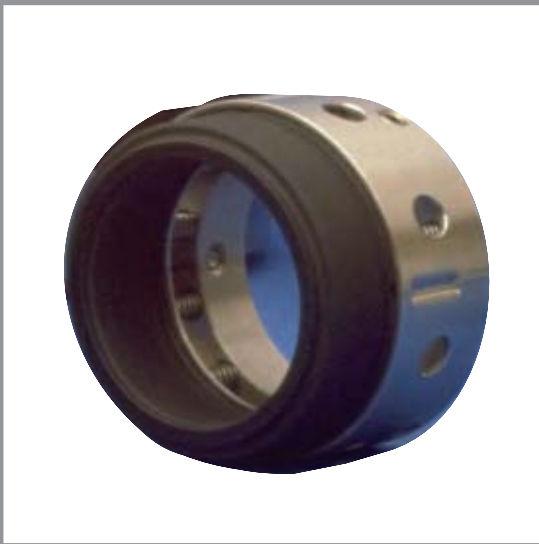
NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm	
1250	1,250	31,75	47,60	50,80	27,00	1250
1375	1,375	34,92	50,80	54,00	28,60	1375
1500	1,500	38,10	54,00	57,20	28,60	1500
1625	1,625	41,27	60,30	63,50	34,90	1625
1750	1,750	44,45	63,50	66,70	34,90	1750
1875	1,875	47,62	66,70	69,85	34,90	1875
2000	2,000	50,80	69,90	73,00	34,90	2000
2125	2,125	53,97	76,20	79,40	42,85	2125
2250	2,250	57,15	79,40	82,50	42,85	2250
2375	2,375	60,32	82,60	82,50	42,85	2375
2500	2,500	63,50	85,75	89,00	42,85	2500
2625	2,625	66,67	89,00	92,00	42,85	2625
2750	2,750	68,26	92,10	95,25	42,85	2750
2875	2,875	73,02	95,25	98,50	42,85	2875
3000	3,000	76,20	96,90	101,60	42,85	3000
3125	3,125	79,37	100,00	103,20	42,85	3125
3250	3,250	82,55	104,80	108,00	42,85	3250
3375	3,375	85,27	108,00	111,20	42,85	3375
3500	3,500	88,99	111,10	114,30	42,85	3500
3625	3,625	92,07	114,30	117,50	42,85	3625
3750	3,750	95,25	117,50	120,70	42,85	3750
3875	3,875	98,42	120,60	123,80	42,85	3875
4000	4,000	101,60	123,80	127,00	42,85	4000
4250	4,250	107,95	133,40	136,50	42,85	4250
4500	4,500	114,30	139,70	142,90	42,85	4500
4750	4,750	120,65	146,00	149,20	42,85	4750
4875	4,875	123,82	149,20	152,40	42,85	4875
5000	5,000	127,00	152,40	155,60	42,85	5000
5250	5,250	133,35	165,10	168,30	50,80	5250
5500	5,500	139,70	171,50	174,60	50,80	5500
5625	5,625	142,87	174,60	177,80	50,80	5625
5750	5,750	146,05	177,80	181,00	50,80	5750
6000	6,000	152,40	184,10	187,30	50,80	6000

Replacement-/Repair-Parts for John Crane Seals

Parts for Rotating Unit for Model 8B-1



Seal Size	Retainer		Set Screws		Springs		Thrust Ring		Snap Ring		O-Ring		Rotating Face	
	OEM Reference	Part Number	OEM Reference	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	
1250	0317/090	1250/RE301	7870/305	1651/092	1250/SP301	0317/093	1250/DR301	0317/096	1250/SN301	2190/123	AN568219	0317/938	1250/FR301	
1375	0349/090	1375/RE301	7870/305	1651/092	1375/SP301	0349/093	1375/DR301	0349/096	1375/SN301	2200/123	AN568220	0349/938	1375/FR301	
1500	0381/090	1500/RE301	7870/305	1651/092	1500/SP301	0381/093	1500/DR301	0381/096	1500/SN301	2220/123	AN568222	0381/938	1500/FR301	
1625	0412/090	1625/RE301	8008/305	0852/092	1625/SP302	0412/093	1625/DR301	0412/096	1625/SN301	2230/123	AN568223	0412/938	1625/FR301	
1750	0444/090	1750/RE301	8008/305	0852/092	1750/SP302	0444/093	1750/DR301	0444/096	1750/SN301	2240/123	AN568224	0444/938	1750/FR301	
1875	0476/090	1875/RE301	8008/305	0852/092	1875/SP302	0476/093	1875/DR301	0476/096	1875/SN301	2250/123	AN568225	0476/938	1875/FR301	
2000	0508/090	2000/RE301	8008/305	0852/092	2000/SP302	0508/093	2000/DR301	0508/096	2000/SN301	2260/123	AN568226	0508/938	2000/FR301	
2125	0539/090	2125/RE301	8008/305	0672/092	2125/SP303	0539/093	2125/DR301	0539/096	2125/SN301	2270/123	AN568227	0539/938	2125/FR301	
2250	0571/090	2250/RE301	8008/305	0672/092	2250/SP303	0571/093	2250/DR301	0571/096	2250/SN301	2280/123	AN568228	0571/938	2250/FR301	
2375	0603/090	2375/RE301	8008/305	0672/092	2375/SP303	0603/093	2375/DR301	0603/096	2375/SN301	2290/123	AN568229	0603/938	2375/FR301	
2500	0635/090	2500/RE301	8008/305	0672/092	2500/SP303	0635/093	2500/DR301	0635/096	2500/SN301	2300/123	AN568230	0635/938	2500/FR301	
2625	0666/090	2625/RE301	8008/305	0672/092	2625/SP303	0666/093	2625/DR301	0666/096	2625/SN301	2310/123	AN568231	0666/938	2625/FR301	
2750	0698/090	2750/RE301	8008/305	0672/092	2750/SP303	0698/093	2750/DR301	0698/096	2750/SN301	2320/123	AN568232	0698/938	2750/FR301	
2875	0730/090	2875/RE301	8110/305	0672/092	2875/SP303	0730/093	2875/DR301	0730/096	2875/SN301	2330/123	AN568233	0730/938	2875/FR301	
3000	0762/090	3000/RE301	8110/305	0812/092	3000/SP304	0762/093	3000/DR301	0762/096	3000/SN301	2340/123	AN568234	0762/938	3000/FR301	
3125	0793/090	3125/RE301	8110/305	0812/092	3125/SP304	0793/093	3125/DR301	0793/096	3125/SN301	2350/123	AN568235	0793/938	3125/FR301	
3250	0825/090	3250/RE301	8110/305	8322/092	3250/SP305	0825/093	3250/DR301	0825/096	3250/SN301	2360/123	AN568236	0825/938	3250/FR301	
3375	0857/090	3375/RE301	8110/305	8322/092	3375/SP305	0857/093	3375/DR301	0857/096	3375/SN301	2370/123	AN568237	0857/938	3375/FR301	
3500	0889/090	3500/RE301	8110/305	8322/092	3500/SP305	0889/093	3500/DR301	0889/096	3500/SN301	2380/123	AN568238	0889/938	3500/FR301	
3625	0920/090	3625/RE301	8110/305	8322/092	3625/SP305	0920/093	3625/DR301	0920/096	3625/SN301	2390/123	AN568239	0920/938	3625/FR301	
3750	0952/090	3750/RE301	8110/305	8322/092	3750/SP305	0952/093	3750/DR301	0952/096	3750/SN301	2400/123	AN568240	0952/938	3750/FR301	
3875	0984/090	3875/RE301	8110/305	8322/092	3875/SP305	0984/093	3875/DR301	0984/096	3875/SN301	2410/123	AN568241	0984/938	3875/FR301	
4000	1016/090	4000/RE301	8110/305	8322/092	4000/SP305	1016/093	4000/DR301	1016/096	4000/SN301	2420/123	AN568242	1016/938	4000/FR301	
4250	1079/090	4250/RE301			4250/SP305	1079/093	4250/DR301	1079/096	4250/SN301				4250/FR301	
4500	1143/090	4500/RE301			4500/SP305	1143/093	4500/DR301	1143/096	4500/SN301				4500/FR301	
4750	1206/090	4750/RE301			4750/SP305	1206/093	4750/DR301	1206/096	4750/SN301				4750/FR301	
4875	1238/090	4875/RE301			4875/SP305	1238/093	4875/DR301	1238/096	4875/SN301				4875/FR301	
5000	1270/090	5000/RE301			5000/SP305	1270/093	5000/DR301	1270/096	5000/SN301				5000/FR301	
5250	1333/090	5250/RE301			5250/SP305	1333/093	5250/DR301	1333/096	5250/SN301				5250/FR301	
5500	1397/090	5500/RE301			5500/SP305	1397/093	5500/DR301	1397/096	5500/SN301				5500/FR301	
5625	1428/090	5625/RE301			5625/SP305	1428/093	5625/DR301	1428/096	5625/SN301				5625/FR301	
5750	1460/090	5750/RE301			5750/SP305	1460/093	5750/DR301	1460/096	5750/SN301				5750/FR301	
6000	1524/090	6000/RE301			6000/SP305	1524/093	6000/DR301	1524/096	6000/SN301				6000/FR301	



Product Description

Compact seal design to fit most API and ANSI pumps. For use where expensive and corrosive liquids are being processed. Wedge construction of the secondary seal virtually eliminates leakage. A large variety of elastomers allows the use for most common industrial fluids. Easy to repair on site or at our workshop. Standard seat type is O-ring type or seat ring type with all common alternatives.

Technical Features

Single acting, balanced, bi-directional, multiple springs with wedge sealing ring, permits use in higher temperature and for extremely corrosive media.

Performance Capabilities

Shaft sizes: 1 1/4 ".....6"
(31,7.....152,4 mm)

Operating pressure: max. 52 bar(750 PSIG)

Operating temperature: -100 C - +500 C
(-150 F - +930 F)

Speed: max. 25 m/sec.
(max. 75 ft/sec.)

Materials

Seal rings

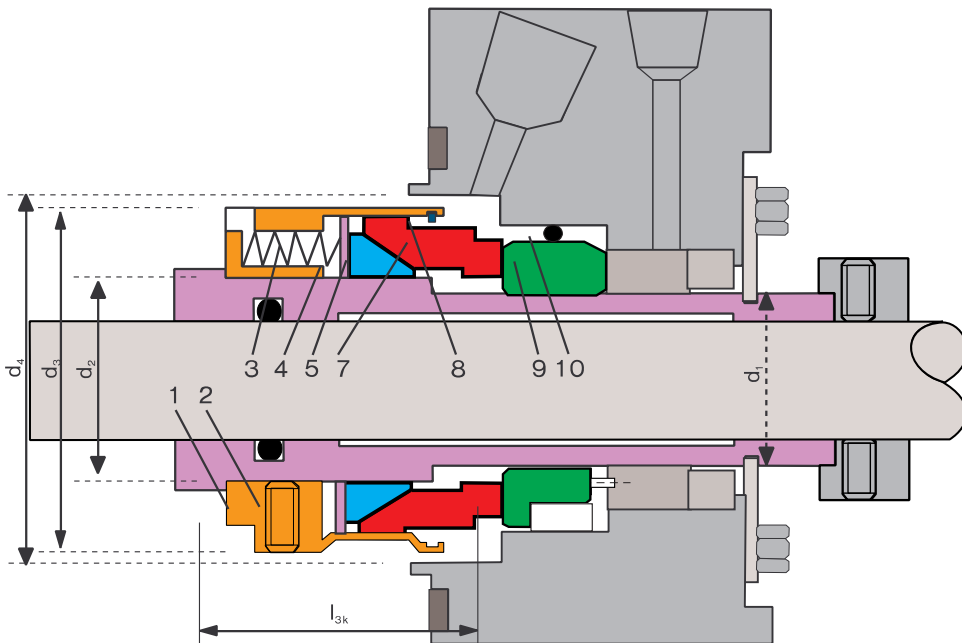
Carbon (General Service)
Carbon (Antimon)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)

Seats

Chromium Cast
Steel (Stellited)
Silicon Carbide (SiC-SI)
Silicon Carbide (SiC)
Tungsten Carbide (CO)
Tungsten Carbide (NI)
Ceramic

Secondary Seals

Buna-N
Fluoroelastomer
Perfluoroelastomers
Ethylene Propylene
Neoprene
Silicone
Teflon®
Teflon® Glass filled



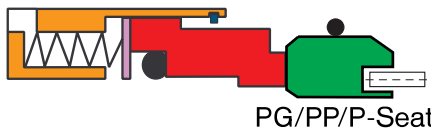
Item Identification

- 1 = Retainer
- 2 = Set Screw
- 3 = Springs
- 4 = Thrust Ring
- 5 = Wedge
- 6 = O- Ring
- 7 = Rotating Face
- 8 = Snap Ring
- 9 = Seat (Mating Ring)
- 10 = Seat Ring

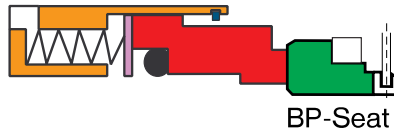
Typical Industrial Applications

Chemical Industry
Food and Beverage Industry
Marine Applications
Process Industry
Water and Waste Water Applications
Refineries
General Application
Corrosive Media
Cryogenics

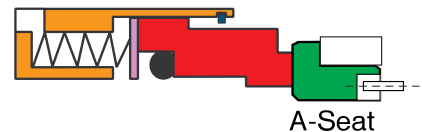
Seat Variations



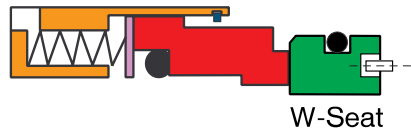
PG/PP/P-Seat



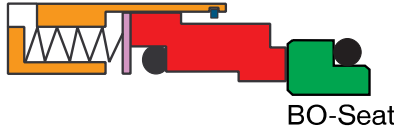
BP-Seat



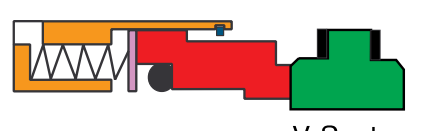
A-Seat



W-Seat



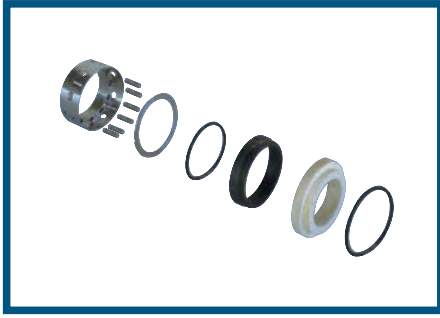
BO-Seat



V-Seat

Dimensions

NOM-SIZE	d ₂ inch	d ₂ mm	d ₃ mm	d _{4min} mm	l _{3k} mm
1250	1,250	31,75	47,60	50,80	34,90
1375	1,375	34,92	50,80	54,00	36,50
1500	1,500	38,10	54,00	57,20	36,50
1625	1,625	41,27	60,30	63,50	44,45
1750	1,750	44,45	63,50	66,70	44,45
1875	1,875	47,62	66,70	69,85	44,45
2000	2,000	50,80	69,90	73,00	44,45
2125	2,125	53,97	76,20	79,40	52,40
2250	2,250	57,15	79,40	82,50	52,40
2375	2,375	60,32	82,60	82,50	52,40
2500	2,500	63,50	85,75	89,00	52,40
2625	2,625	66,67	89,00	92,00	52,40
2750	2,750	68,26	92,10	95,25	52,40
2875	2,875	73,02	95,25	98,50	52,40
3000	3,000	76,20	96,90	101,60	52,40
3125	3,125	79,37	100,00	103,20	52,40
3250	3,250	82,55	104,80	108,00	52,40
3375	3,375	85,27	108,00	111,20	52,40
3500	3,500	88,99	111,10	114,30	52,40
3625	3,625	92,07	114,30	117,50	52,40
3750	3,750	95,25	117,50	120,70	52,40
3875	3,875	98,42	120,60	123,80	52,40
4000	4,000	101,60	123,80	127,00	52,40
4250	4,250	107,95	133,40	136,50	52,40
4500	4,500	114,30	139,70	142,90	52,40
4750	4,750	120,65	146,00	149,20	52,40
4875	4,875	123,82	149,20	152,40	52,40
5000	5,000	127,00	152,40	155,60	52,40
5250	5,250	133,35	165,10	168,30	60,30
5500	5,500	139,70	171,50	174,60	60,30
5625	5,625	142,87	174,60	177,80	60,30
5750	5,750	146,05	177,80	181,00	60,30
6000	6,000	152,40	184,10	187,30	60,30

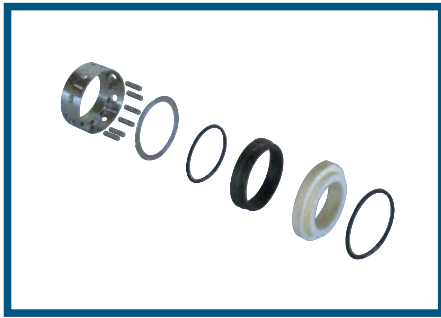


Replacement-/Repair-Parts for John Crane Seals

Parts for Rotating Unit for Models 9B, 109B, 909B

Seal Size	Retainer		Set Screws		Springs		Thrust Ring		Snap Ring		Wedge		Rotating Face	
	OEM Reference	Part Number	OEM Reference	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	
1250	0317/090	1250/RE301	7870/305	1651/092	1250/SP301	0317/093	1250/DR301	0317/096	1250/SN301	0317/032	1250/WE302	0317/910	1250/FR307	
1375	0349/090	1375/RE301	7870/305	1651/092	1375/SP301	0349/093	1375/DR301	0349/096	1375/SN301	0349/032	1375/WE302	0349/910	1375/FR307	
1500	0381/090	1500/RE301	7870/305	1651/092	1500/SP301	0381/093	1500/DR301	0381/096	1500/SN301	0381/032	1500/WE302	0381/910	1500/FR307	
1625	0412/090	1625/RE301	8008/305	0852/092	1625/SP302	0412/093	1625/DR301	0412/096	1625/SN301	0412/032	1625/WE302	0412/910	1625/FR307	
1750	0444/090	1750/RE301	8008/305	0852/092	1750/SP302	0444/093	1750/DR301	0444/096	1750/SN301	0444/032	1750/WE302	0444/910	1750/FR307	
1875	0476/090	1875/RE301	8008/305	0852/092	1875/SP302	0476/093	1875/DR301	0476/096	1875/SN301	0476/032	1875/WE302	0476/910	1875/FR307	
2000	0508/090	2000/RE301	8008/305	0852/092	2000/SP302	0508/093	2000/DR301	0508/096	2000/SN301	0508/032	2000/WE302	0508/910	2000/FR307	
2125	0539/090	2125/RE301	8008/305	0672/092	2125/SP303	0539/093	2125/DR301	0539/096	2125/SN301	0539/032	2125/WE302	0539/910	2125/FR307	
2250	0571/090	2250/RE301	8008/305	0672/092	2250/SP303	0571/093	2250/DR301	0571/096	2250/SN301	0571/032	2250/WE302	0571/910	2250/FR307	
2375	0603/090	2375/RE301	8008/305	0672/092	2375/SP303	0603/093	2375/DR301	0603/096	2375/SN301	0603/032	2375/WE302	0603/910	2375/FR307	
2500	0635/090	2500/RE301	8008/305	0672/092	2500/SP303	0635/093	2500/DR301	0635/096	2500/SN301	0635/032	2500/WE302	0635/910	2500/FR307	
2625	0666/090	2625/RE301	8008/305	0672/092	2625/SP303	0666/093	2625/DR301	0666/096	2625/SN301	0666/032	2625/WE302	0666/910	2625/FR307	
2750	0698/090	2750/RE301	8008/305	0672/092	2750/SP303	0698/093	2750/DR301	0698/096	2750/SN301	0698/032	2750/WE302	0698/910	2750/FR307	
2875	0730/090	2875/RE301	8110/305	0672/092	2875/SP303	0730/093	2875/DR301	0730/096	2875/SN301	0730/032	2875/WE302	0730/910	2875/FR307	
3000	0762/090	3000/RE301	8110/305	0812/092	3000/SP304	0762/093	3000/DR301	0762/096	3000/SN301	0762/032	3000/WE302	0762/910	3000/FR307	
3125	0793/090	3125/RE301	8110/305	0812/092	3125/SP304	0793/093	3125/DR301	0793/096	3125/SN301	0793/032	3125/WE302	0793/910	3125/FR307	
3250	0825/090	3250/RE301	8110/305	8322/092	3250/SP305	0825/093	3250/DR301	0825/096	3250/SN301	0825/032	3250/WE302	0825/910	3250/FR307	
3375	0857/090	3375/RE301	8110/305	8322/092	3375/SP305	0857/093	3375/DR301	0857/096	3375/SN301	0857/032	3375/WE302	0857/910	3375/FR307	
3500	0889/090	3500/RE301	8110/305	8322/092	3500/SP305	0889/093	3500/DR301	0889/096	3500/SN301	0889/032	3500/WE302	0889/910	3500/FR307	
3625	0920/090	3625/RE301	8110/305	8322/092	3625/SP305	0920/093	3625/DR301	0920/096	3625/SN301	0920/032	3625/WE302	0920/910	3625/FR307	
3750	0952/090	3750/RE301	8110/305	8322/092	3750/SP305	0952/093	3750/DR301	0952/096	3750/SN301	0952/032	3750/WE302	0952/910	3750/FR307	
3875	0984/090	3875/RE301	8110/305	8322/092	3875/SP305	0984/093	3875/DR301	0984/096	3875/SN301	0984/032	3875/WE302	0984/910	3875/FR307	
4000	1016/090	4000/RE301	8110/305	8322/092	4000/SP305	1016/093	4000/DR301	1016/096	4000/SN301	1016/032	4000/WE302	1016/910	4000/FR307	
4250	1079/090	4250/RE301			4250/SP305	1079/093	4250/DR301	1079/096	4250/SN301	1079/032	4250/	1079/910	4250/FR307	
4500	1143/090	4500/RE301			4500/SP305	1143/093	4500/DR301	1143/096	4500/SN301	1143/032	4500/WE302	1143/910	4500/FR307	
4750	1206/090	4750/RE301			4750/SP305	1206/093	4750/DR301	1206/096	4750/SN301	1206/032	4750/WE302	1206/910	4750/FR307	
4875	1238/090	4875/RE301			4875/SP305	1238/093	4875/DR301	1238/096	4875/SN301	1238/032	4875/WE302	1238/910	4875/FR307	
5000	1270/090	5000/RE301			5000/SP305	1270/093	5000/DR301	1270/096	5000/SN301	1270/032	5000/WE302	1270/910	5000/FR307	
5250	1333/090	5250/RE301			5250/SP305	1333/093	5250/DR301	1333/096	5250/SN301	1333/032	5250/WE302	1333/910	5250/FR307	
5500	1397/090	5500/RE301			5500/SP305	1397/093	5500/DR301	1397/096	5500/SN301	1397/032	5500/WE302	1397/910	5500/FR307	
5625	1428/090	5625/RE301			5625/SP305	1428/093	5625/DR301	1428/096	5625/SN301	1428/032	5625/WE302	1428/910	5625/FR307	
5750	1460/090	5750/RE301			5750/SP305	1460/093	5750/DR301	1460/096	5750/SN301	1460/032	5750/WE302	1460/910	5750/FR307	
6000	1524/090	6000/RE301			6000/SP305	1524/093	6000/DR301	1524/096	6000/SN301	1524/032	6000/WE302	1524/910	6000/FR307	

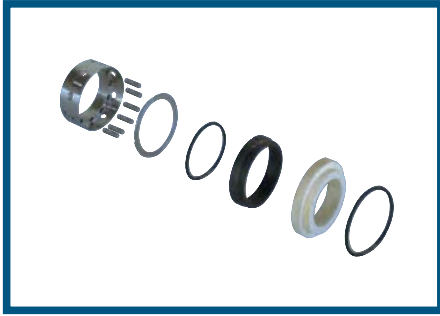
Replacement-/Repair-Parts for John Crane Seals









Seats (Mating Rings) for all models

	P-Seat		PP-Seat		PG-Seat		A-Seat					
	Mating Ring		Seat Ring for P, PP, PG		Mating Ring		Mating Ring				Seat Ring	
Size	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number
1250	0317/129	1250/FS304	2250/123	AN568225	0317/229	1250/FS305	0317/D99	1250/FS307	0317/031	1250/FS301	0317/036	1250/SR301
1375	0349/129	1375/FS304	2260/123	AN568226	0349/229	1375/FS305	0349/D99	1375/FS307	0349/031	1375/FS301	0349/036	1375/SR301
1500	0381/129	1500/FS304	2270/123	AN568227	0381/229	1500/FS305	0381/D99	1500/FS307	0381/031	1500/FS301	0381/031	1500/SR301
1625	0412/129	1625/FS304	2290/123	AN568229	0412/229	1625/FS305	0412/D99	1625/FS307	0412/031	1625/FS301	0412/036	1625/SR301
1750	0444/129	1750/FS304	2300/123	AN568230	0444/229	1750/FS305	0444/D99	1750/FS307	0444/031	1750/FS301	0444/036	1750/SR301
1875	0476/129	1875/FS304	2310/123	AN568231	0476/229	1875/FS305	0476/D99	1875/FS307	0476/031	1875/FS301	0476/036	1875/SR301
2000	0508/129	2000/FS304	2320/123	AN568232	0508/229	2000/FS305	0508/D99	2000/FS307	0508/031	2000/FS301	0508/036	2000/SR301
2125	0539/129	2125/FS304	2340/123	AN568234	0539/229	2125/FS305	0539/D99	2125/FS307	0539/031	2125/FS301	0539/036	2125/SR301
2250	0571/129	2250/FS304	2350/123	AN568235	0571/229	2250/FS305	0571/D99	2250/FS307	0571/031	2250/FS301	0571/036	2250/SR301
2375	0603/129	2375/FS304	2360/123	AN568236	0603/229	2375/FS305	0603/D99	2375/FS307	0603/031	2375/FS301	0603/036	2375/SR301
2500	0635/129	2500/FS304	2370/123	AN568237	0635/229	2500/FS305	0635/D99	2500/FS307	0635/031	2500/FS301	0635/036	2500/SR301
2625	0666/129	2625/FS304	2370/123	AN568237	0666/229	2625/FS305	0666/D99	2625/FS307	0666/031	2625/FS301	0666/036	2625/SR301
2750	0698/129	2750/FS304	2380/123	AN568238	0698/229	2750/FS305	0698/D99	2750/FS307	0698/031	2750/FS301	0698/036	2750/SR301
2875	0730/129	2875/FS304	2400/123	AN568240	0730/229	2875/FS305	0730/D99	2875/FS307	0730/031	2875/FS301	0730/036	2875/SR301
3000	0762/129	3000/FS304	2410/123	AN568241	0762/229	3000/FS305	0762/D99	3000/FS307	0762/031	3000/FS301	0762/036	3000/SR301
3125	0793/129	3125/FS304	2420/123	AN568242	0793/229	3125/FS305	0793/D99	3125/FS307	0793/031	3125/FS301	0793/036	3125/SR301
3250	0825/129	3250/FS304	2430/123	AN568243	0825/229	3250/FS305	0825/D99	3250/FS307	0825/031	3250/FS301	0825/036	3250/SR301
3375	0857/129	3375/FS304	2440/123	AN568244	0857/229	3375/FS305	0857/D99	3375/FS307	0857/031	3375/FS301	0857/036	3375/SR301
3500	0889/129	3500/FS304	2450/123	AN568245	0889/229	3500/FS305	0889/D99	3500/FS307	0889/031	3500/FS301	0889/036	3500/SR301
3625	0920/129	3625/FS304	2460/123	AN568246	0920/229	3625/FS305	0920/D99	3625/FS307	0920/031	3625/FS301	0920/036	3625/SR301
3750	0952/129	3750/FS304	2470/123	AN568247	0952/229	3750/FS305	0952/D99	3750/FS307	0952/031	3750/FS301	0952/036	3750/SR301
3875	0984/129	3875/FS304	2480/123	AN568248	0984/229	3875/FS305	0984/D99	3875/FS307	0984/031	3875/FS301	0984/036	3875/SR301
4000	1016/129	4000/FS304	2490/123	AN568249	1016/229	4000/FS305	1016/D99	4000/FS307	1016/031	4000/FS301	1016/036	4000/SR301
4250	1079/129	4250/FS304			1079/229	4250/FS305	1079/D99	4250/FS307	1079/031	4250/FS301	1079/036	4250/SR301
4500	1143/129	4500/FS304			1143/229	4500/FS305	1143/D99	4500/FS307	1143/031	4500/FS301	1143/036	4500/SR301
4750	1206/129	4750/FS304			1206/229	4750/FS305	1206/D99	4750/FS307	1206/031	4750/FS301	1206/036	4750/SR301
4875	1238/129	4875/FS304			1238/229	4875/FS305	1238/D99	4875/FS307	1238/031	4875/FS301	1238/036	4875/SR301
5000	1270/129	5000/FS304			1270/229	5000/FS305	1270/D99	5000/FS307	1270/031	5000/FS301	1270/036	5000/SR301
5250	1333/129	5250/FS304			1333/229	5250/FS305	1333/D99	5250/FS307	1333/031	5250/FS301	1333/036	5250/SR301
5500	1397/129	5500/FS304			1397/229	5500/FS305	1397/D99	5500/FS307	1397/031	5500/FS301	1397/036	5500/SR301
5625	1428/129	5625/FS304			1428/229	5625/FS305	1428/D99	5625/FS307	1428/031	5625/FS301	1428/036	5625/SR301
5750	1460/129	5750/FS304			1460/229	5750/FS305	1460/D99	5750/FS307	1460/031	5750/FS301	1460/036	5750/SR301
6000	1524/129	6000/FS304			1524/229	6000/FS305	1524/D99	6000/FS307	1524/031	6000/FS301	1524/036	6000/SR301

Replacement-/Repair-Parts for John Crane Seals



Seats (Mating Rings) for all models

		BP-Seat				BO-Seat				V-Seat				J-Seat	
															
		Mating Ring		Seat Ring		Mating Ring				Mating Ring		Seat Ring V + J Seat		Mating Ring	
Size	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number	Size	OEM Reference	Part Number	OEM Reference	Part Number	OEM Reference	Part Number		
0250	0250/500	0250/FS306	0250/501	0250/SR303	0250/902	0250/FS309	1250	0317/098	1250/FS302	0317/097	1250/SR302	0317/099	1250/FS303		
0280	0280/500	0280/FS306	0280/501	0280/SR303	0280/902	0280/FS309	1375	0349/098	1375/FS302	0349/097	1375/SR302	0349/099	1375/FS303		
0300	0300/500	0300/FS306	0300/501	0300/SR303	0300/902	0300/FS309	1500	0381/098	1500/FS302	0381/097	1500/SR302	0381/099	1500/FS303		
0320	0320/500	0320/FS306	0320/501	0320/SR303	0320/902	0320/FS309	1625	0412/098	1625/FS302	0412/097	1625/SR302	0412/099	1625/FS303		
0330	0330/500	0330/FS306	0330/501	0330/SR303	0330/902	0330/FS309	1750	0444/098	1750/FS302	0444/097	1750/SR302	0444/099	1750/FS303		
0350	0350/500	0350/FS306	0350/501	0350/SR303	0350/902	0350/FS309	1875	0476/098	1875/FS302	0476/097	1875/SR302	0476/099	1875/FS303		
0380	0380/500	0380/FS306	0380/501	0380/SR303	0380/902	0380/FS309	2000	0508/098	2000/FS302	0508/097	2000/SR302	0508/099	2000/FS303		
0400	0400/500	0400/FS306	0400/501	0400/SR303	0400/902	0400/FS309	2125	0539/098	2125/FS302	0539/097	2125/SR302	0539/099	2125/FS303		
0430	0430/500	0430/FS306	0430/501	0430/SR303	0430/902	0430/FS309	2250	0571/098	2250/FS302	0571/097	2250/SR302	0571/099	2250/FS303		
0450	0450/500	0450/FS306	0450/501	0450/SR303	0450/902	0450/FS309	2375	0603/098	2375/FS302	0603/097	2375/SR302	0603/099	2375/FS303		
0480	0480/500	0480/FS306	0480/501	0480/SR303	0480/902	0480/FS309	2500	0635/098	2500/FS302	0635/097	2500/SR302	0635/099	2500/FS303		
0500	0500/500	0500/FS306	0500/501	0500/SR303	0500/902	0500/FS309	2625	0666/098	2625/FS302	0666/097	2625/SR302	0666/099	2625/FS303		
0530	0530/500	0530/FS306	0530/501	0530/SR303	0530/902	0530/FS309	2750	0698/098	2750/FS302	0698/097	2750/SR302	0698/099	2750/FS303		
0550	0550/500	0550/FS306	0550/501	0550/SR303	0550/902	0550/FS309	2875	0730/098	2875/FS302	0730/097	2875/SR302	0730/099	2875/FS303		
0580	0580/500	0580/FS306	0580/501	0580/SR303	0580/902	0580/FS309	3000	0762/098	3000/FS302	0762/097	3000/SR302	0762/099	3000/FS303		
0600	0600/500	0600/FS306	0600/501	0600/SR303	0600/902	0600/FS309	3125	0793/098	3125/FS302	0793/097	3125/SR302	0793/099	3125/FS303		
0630	0630/500	0630/FS306	0630/501	0630/SR303	0630/902	0630/FS309	3250	0825/098	3250/FS302	0825/097	3250/SR302	0825/099	3250/FS303		
0650	0650/500	0650/FS306	0650/501	0650/SR303	0650/902	0650/FS309	3375	0857/098	3375/FS302	0857/097	3375/SR302	0857/099	3375/FS303		
0680	0680/500	0680/FS306	0680/501	0680/SR303	0680/902	0680/FS309	3500	0889/098	3500/FS302	0889/097	3500/SR302	0889/099	3500/FS303		
0700	0700/500	0700/FS306	0700/501	0700/SR303	0700/902	0700/FS309	3625	0920/098	3625/FS302	0920/097	3625/SR302	0920/099	3625/FS303		
0750	0750/500	0750/FS306	0750/501	0750/SR303	0750/902	0750/FS309	3750	0952/098	3750/FS302	0952/097	3750/SR302	0952/099	3750/FS303		
0800	0800/500	0800/FS306	0800/501	0800/SR303	0800/902	0800/FS309	3875	0984/098	3875/FS302	0984/097	3875/SR302	0984/099	3875/FS303		
0850	0850/500	0850/FS306	0850/501	0850/SR303	0850/902	0850/FS309	4000	1016/098	4000/FS302	1016/097	4000/SR302	1016/099	4000/FS303		
0900	0900/500	0900/FS306	0900/501	0900/SR303	0900/902	0900/FS309	4250	1079/098	4250/FS302	1079/097	4250/SR302	1079/099	4250/FS303		
0950	0950/500	0950/FS306	0950/501	0950/SR303	0950/902	0950/FS309	4500	1143/098	4500/FS302	1143/097	4500/SR302	1143/099	4500/FS303		
1000	1000/500	1000/FS306	1000/501	1000/SR303	1000/902	1000/FS309	4750	1206/098	4750/FS302	1206/097	4750/SR302	1206/099	4750/FS303		
							4875	1238/098	4875/FS302	1238/097	4875/SR302	1238/099	4875/FS303		
							5000	1270/098	5000/FS302	1270/097	5000/SR302	1270/099	5000/FS303		
							5250	1333/098	5250/FS302	1333/097	5250/SR302	1333/099	5250/FS303		
							5500	1397/098	5500/FS302	1397/097	5500/SR302	1397/099	5500/FS303		
							5625	1428/098	5625/FS302	1428/097	5625/SR302	1428/099	5625/FS303		
							5750	1460/098	5750/FS302	1460/097	5750/SR302	1460/099	5750/FS303		
							6000	1524/098	6000/FS302	1524/097	6000/SR302	1524/099	6000/FS303		



All necessary infrastructural conditions and facilities are available.



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