



NINGBO HUAQIU INDUSTRY AND TRADE CO.,LTD

NingBo HuaQiang Mechanical Seal Factory



2025 HQ Catalogue 3-A

(O.E.M.Seals)

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DESCRIPTION

Standard Mechanical Seals.....Catalogue-1

Cartridge, Metal Bellow Seals.....Catalogue-2

O.E.M Seals(A.B.S., Alfa Laval, APV, Andritz, Compressor, Fristam, Flygt,
Grundfos, Hilge, Lowara, K.S.B., Sulzer, Tsurumi Seals and so on).....Catalogue-3

Seat Series.....Catalogue-4

Mixer and Agitator, Kettle, Desulfurization, Slurry Seals, Nozzle, Rotary Joint....Catalogue-5



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ABS-01(195P,Upper Seal)

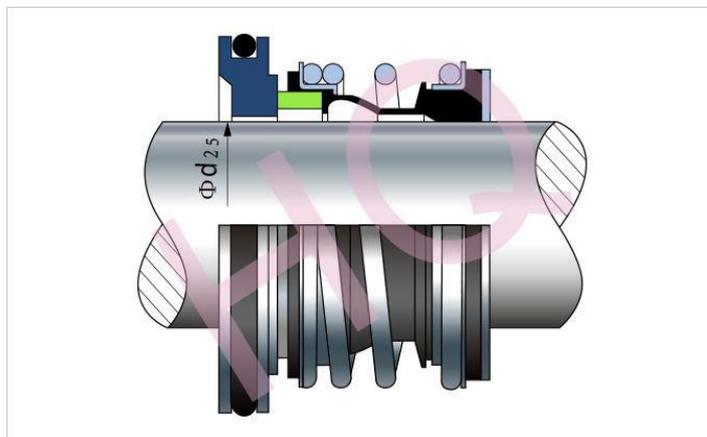


Type: Used with ABS-02,Suit for A.B.S. submersible Pumps,including JUMBO,SP and RP Series.

Replacement: Vulcan 195P(Upper Seal) Temperature: -20°C to +120°C

Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



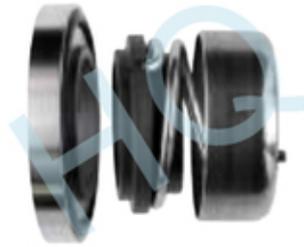
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ABS-02(820,Lower Seal)



Type: Used with ABS-01, Suit for A.B.S. submersible pumps, Including JUMBO, SP and RP Series

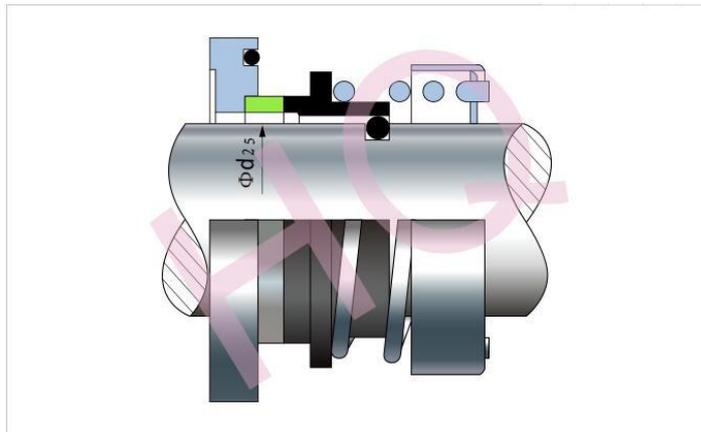
Replacement: Vulcan 820(Lower Seal)

Temperature: -20°C to $+120^{\circ}\text{C}$

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: B, A1, Q1, Q2, U2, P, E, N, V, F, G



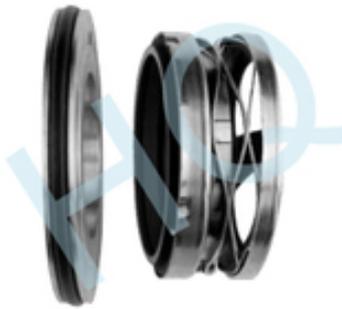
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ABS-03(S2)



Type: Suit for ABS Pumps
Temperature: -20°C to +140°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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ABS-04 (1577)



Type: Suit ABS AFP Pumps

Replacement: Vulcan 1577

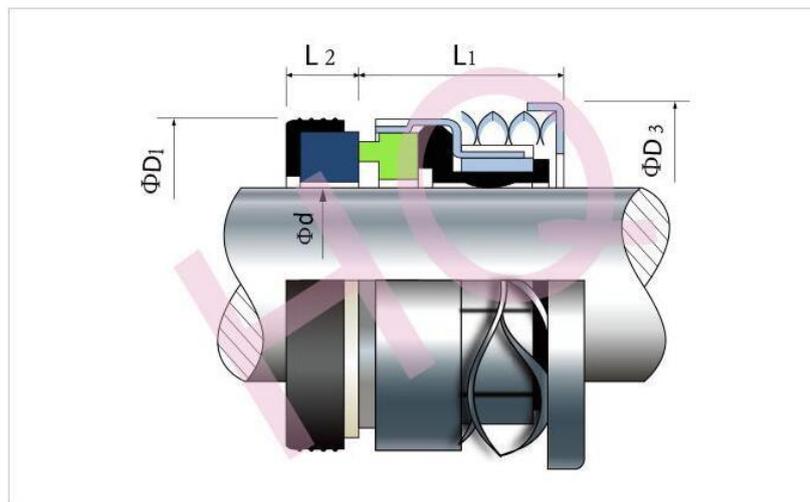
Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material:

B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2	O.E.M.Part Number
50	72	66.1	19	10	11100083
65	85	86.5	27	13	11110173



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ABS-05(1632)



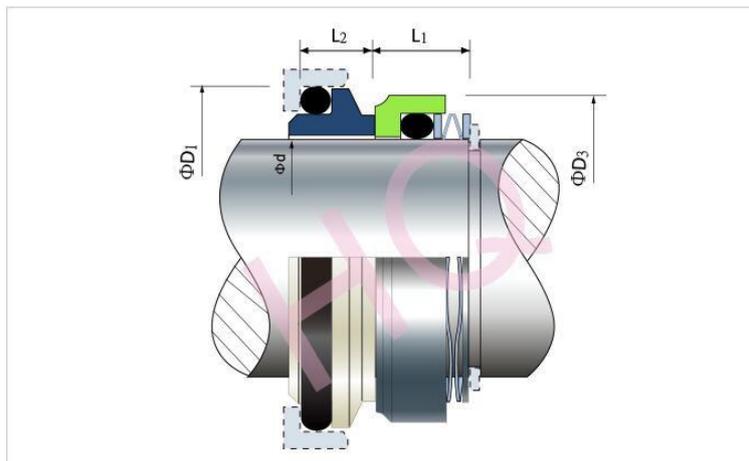
Type: Suit ABS AFP-Series submersible pumps
 Replacement: Vulcan 1632, AES W14, Burgmann MS30/MS32

Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2	O.E.M.Part Number
20	52	31	13.5	6.0	11100066
48	67	62	15.8	14.5	11100058
65	86	79	17.8	15.3	11100059
80	104	98	19.5	16.3	11100053
90	114	105	19.5	16.3	11100055
100	123	116	21.0	17.1	11100052



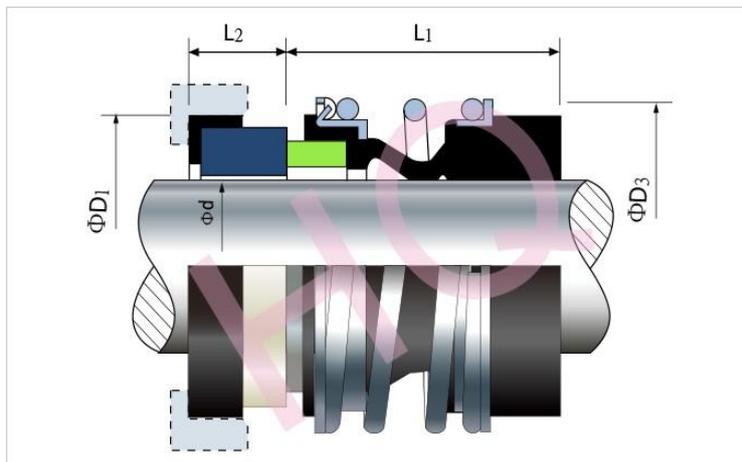
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Type: Suit for A.B.S pumps
 Replacement: Lidering 107
 Temperature: -20 to +120°C
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3	L1	L2
22	37	37.0	30.0	7.5
28	43	49.0	42.5	7.5
38	56	59.0	46.0	9.0
48	66	70.5	51.0	9.0



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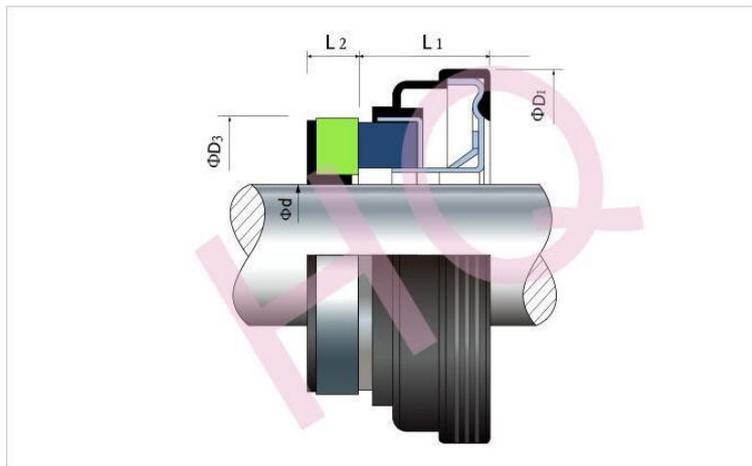


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ABS-07(282)



Type: Suit for ABS AF and PIRANHA Series
Pumps
Replacement: Vulcan 282
Temperature: -20°C to +120°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,A,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2	O.E.M.Part Number
25	52	41.3	12	5.0	11100027&28
30	57	41.3	12	5.5	11100029



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ABS-08(1578)



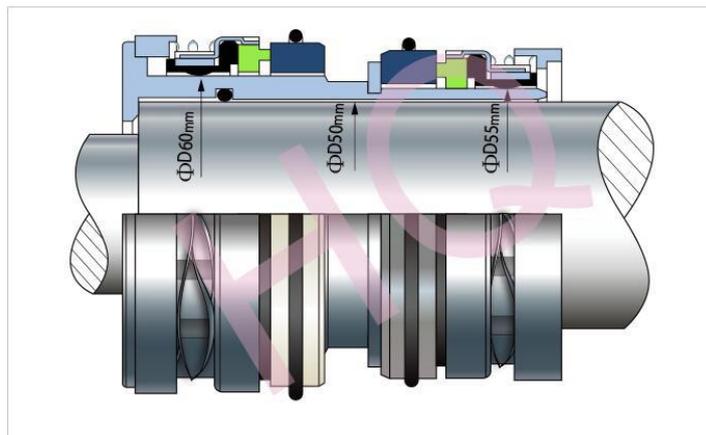
Type: Suit for ABS K-Series Pumps
Replacement: Vulcan 1578

Temperature: -20 to +140°C

Pressure: $\leq 1.4\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,Q2,U2,P,E,N,V,F,G,Alfa



This is equal to Vulcan 1578.

Suit for A.B.S K-Series Pumps.

d=50mm



ABS-08(1578)



Type: Suit for ABS AFP-Series Pumps

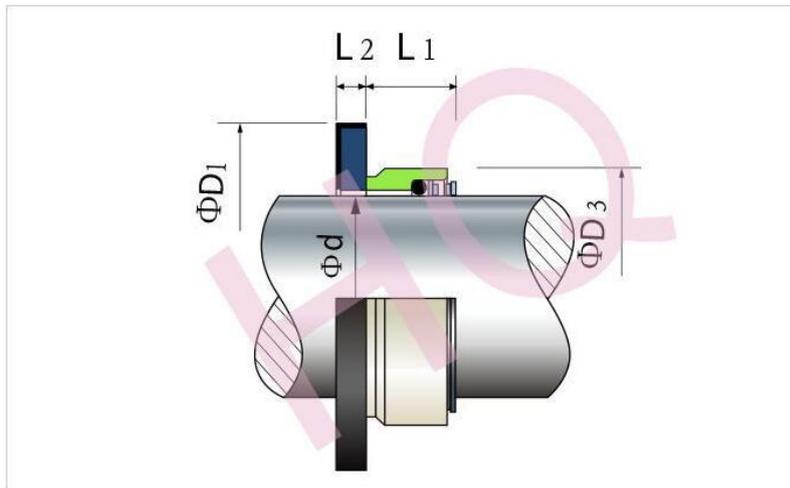
Replacement: Vulcan 1632

Temperature: -20 to +140°C

Pressure: $\leq 1.4\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3	L1	L2	O.E.M Part Number
20	52	31	13.5	6.0	11100066
48	67	62	15.8	14.5	11100058
65	86	79	17.8	15.3	11100059
80	104	98	19.5	16.3	11100053
90	114	105	19.5	16.3	11100055
100	123	116	21.0	17.1	11100052

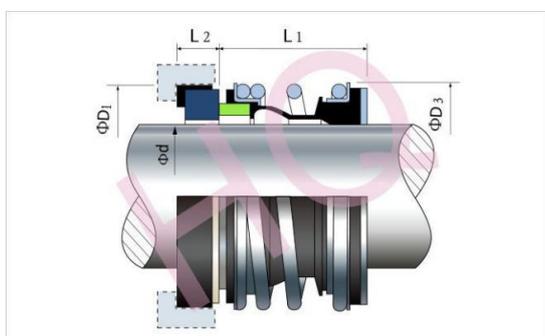
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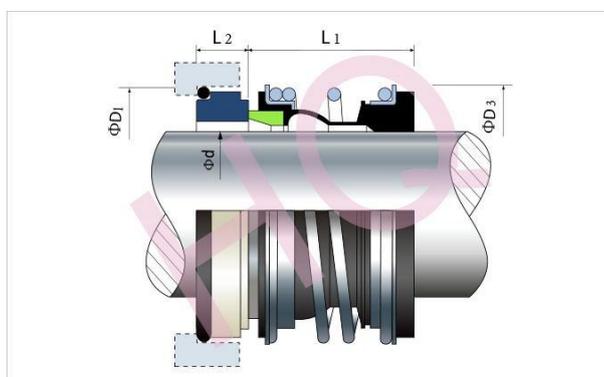
ABS-10(195)



Type: Suit A.B.S. AFP series pumps
 Replacement: Vulcan 195
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2	O.E.M.Part Number
15	35.0	28.0	17.0	4.0	11110172
20	35.0	36.0	21.5	7.5	11110001
25	40.5	41.0	22.5	8.5	11110095
30	50.8	47.0	24.0	9.5	11110096
40	58.0	60.0	33.5	11.0	11110144
45	65.5	64.3	30.5	12.5	11110093
55	76.2	78.0	37.5	13.5	11110135
80	104.0	106.5	40.0	15.0	11110051



d (mm)	D1	D3	L1	L2	O.E.M.Part Number
40	58.0	60	33.5	11.0	11110055
48	67.0	69	30.5	10.0	11110003
65	86.0	90	39.0	12.0	11110050
90	114.0	125	46.3	13.0	11110052
100	123.3	130	46.0	13.3	11110053



Type: ABS Pump Seals
Temperature: -20 to +180°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Suit ABS series pumps



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ABS-13(WP03)



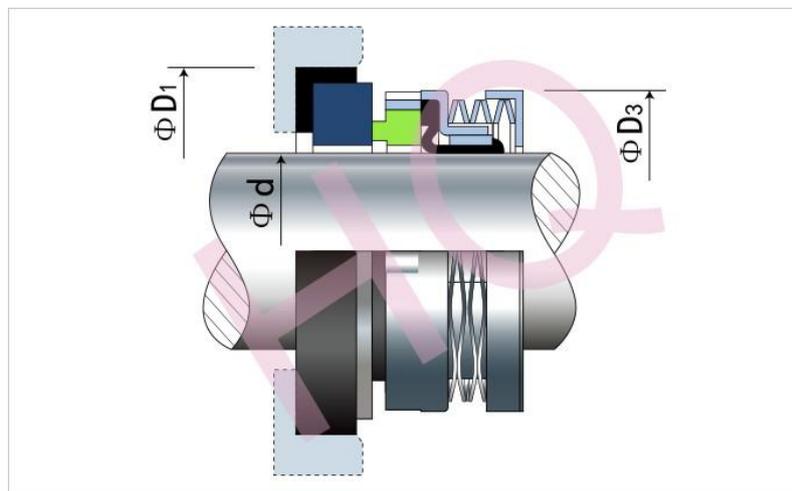
Type: ABS Pump Seal, Suit for ABS 11100083
 Replacement: AES WP03

Temperature: -20 to +180°C

Pressure: $\leq 1.0\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3
50	72	66.4
d (inch)	D1	D2
1.969	2.835	2.614



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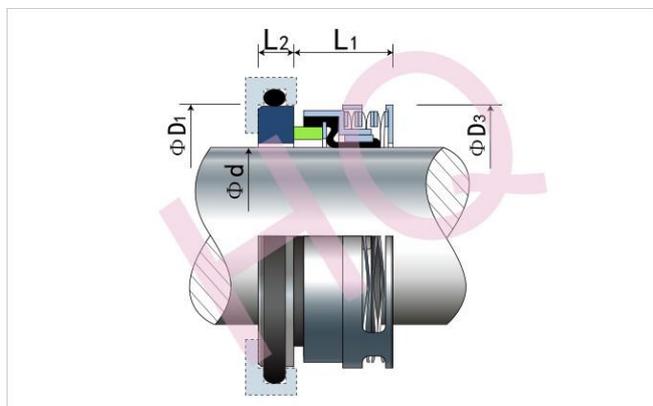


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ABS-14(WP03S)



Type: ABS Pump Seal
 Replacement: AES WP03S
 Temperature: -20 to +160°C
 Pressure: $\leq 1.4\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



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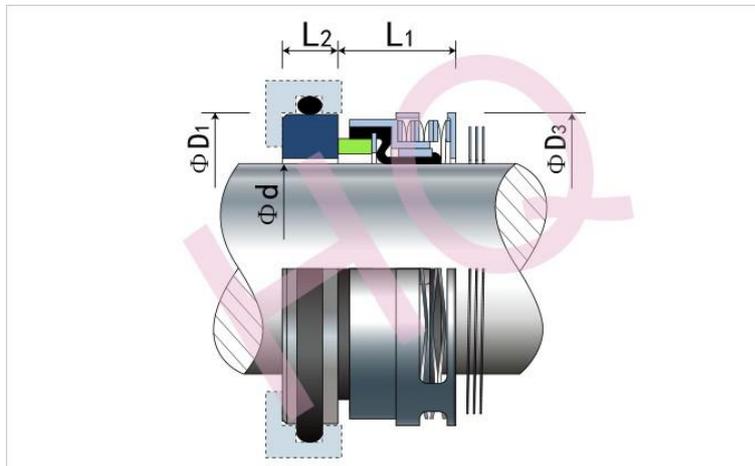
d (mm)	D1	D3	L1	L2
32	46.5	47.6	20.0	5.4
40	56.0	57.9	20.0	6.8
48	67.0	62.0	15.6	14.5
55	72.0	73.4	20.0	7.9
60	75.0	80.5	21.0	10.9
75	93.2	97.2	26.8	9.9

d (inch)	D1	D3	L1	L2
1.260	1.831	1.874	0.787	0.213
1.575	2.205	2.280	0.787	0.268
1.890	2.638	2.441	0.614	0.571
2.165	2.835	2.890	0.787	0.311
2.362	2.953	3.169	0.827	0.429
2.953	3.669	3.82	1.055	0.390

ABS-15(WP03SX)



Type: ABS Pump Seal
 Replacement: AES WP03SX
 Temperature: -20 to +180°C
 Pressure: $\leq 1.4\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3	L1	L2
55	72	73.4	20	11.2
d (inch)	D1	D2	L1	L2
2.165	2.835	2.890	0.787	0.441



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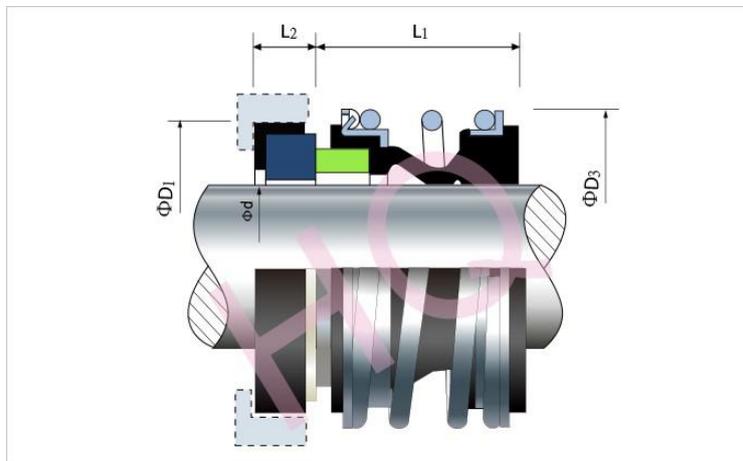


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EMU-01(B02X)



Type: Suit for ABS/EMU/WILO Pumps
 Replacement: AES B02X, Burgamnn MG1S
 Temperature: -20°C to +120°C
 Pressure: ≤1.2Mpa
 Speed: ≤10m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
15.0	35.0	28.0	17.0	3.9
17.0	33.0	31.0	19.5	7.5
20.0	36.5	36.0	21.5	12.0
25.0	40.0	41.0	22.5	7.5
30.0	50.8	47.0	23.0	9.5
32.0	48.0	51.0	40.0	7.5
32.0(B)	50.8	51.0	33.7	12.6
40.0	50.8	60.0	30.0	12.7
45.0	65.0	65.0	30.0	12.5



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EMU-02(B02XS)

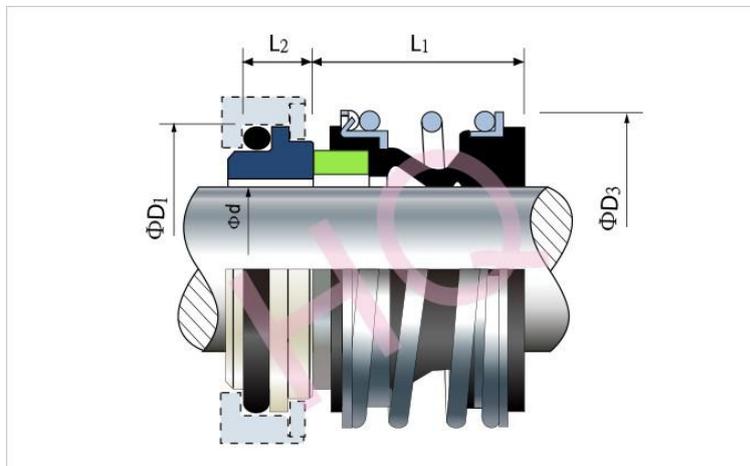


Type: Suit for ABS/EMU/WILO Pumps
 Replacement: AES B02XS , Burgamnn MG1S
 Temperature: -20°C to +120°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
48.0	67.0	69.0	30.5	10.3
65.0	86.0	90.0	38.0	13.5
100.0	123.3	136.0	44.7	14.0



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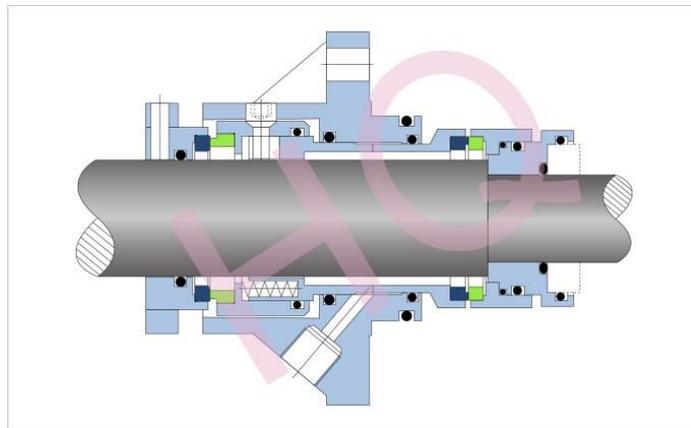
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HQCS-J43(SE2)



Type: Double Cartridge Seal, Suit Sulzer Process Pumps
 Replacement: Crane SE2 Series
 Temperature: -40 to +180°C
 Pressure: $\leq 1.5\text{Mpa}$
 Speed: $\leq 30\text{m/s}$
 Material: Q1, Q2, U2, T, V, M1, F, G, M



Details :

Type SE2 double face cartridge seal

Type SE2 double face cartridge seal is the replacement of original John Crane type SE2 cartridge seal. But our seal has some change on the seal shell, but has the same installation dimension with the original seal.

The Safeseal Type SE2 is a customer-fitted (OEM standard) dual, balanced cartridge seal designed for the severe applications found in the pulp and paper industry and slurry applications. This seal is typically used in pumps for abrasive and environmentally hazardous liquids in cooking, evaporation and causticizing facilities in pulp mills. It is designed as a dual-pressurized (double) seal, but incorporates a patented double-balance feature which also allows it to be used as an unpressurized (tandem) dual seal arrangement. The Type SE2-AP seal is especially designed for the Sulzer APP pump series.

Features:

Seal faces are installed using a patented heat shrink process, ensuring correct, distortion-free face alignment at all recommended temperatures.

The springs are located in the stationary body of the seal in the seal water (barrier fluid). The seal water washes the springs, preventing corrosion by process chemicals and reducing the risk of the springs becoming clogged.

Shaft misalignment does not vibrate or wear out the O-rings. The piston design permits free axial movement.

It allows $\pm 2\text{mm}$ axial movement. Impeller adjustments do not affect face stress or spring strength. PTFE slot rings replace the traditional O-rings in places where they are exposed to the product, preventing sticking. Protected faces, the seal face carriers are driven by machined fits, preventing metal stress from distorting the face.

Patented double-balanced design allows the use of both pressurized and un-pressurized seal water (barrier/buffer fluid) and prevents face overload.

Parameters:

TEMPERATURE LIMITS:



HQCS-J45(SEW)



Type: Single Cartridge Seal,Suit Sulzer Process
Pumps
Replacement: Crane SEW,Suit for Sulzer,ABS Pumps
Temperature: -40 to +180°C
Pressure: $\leq 1.5\text{Mpa}$
Speed: $\leq 20\text{m/s}$
Material: Q1,Q2,U2,T,V,M1,F,G,M



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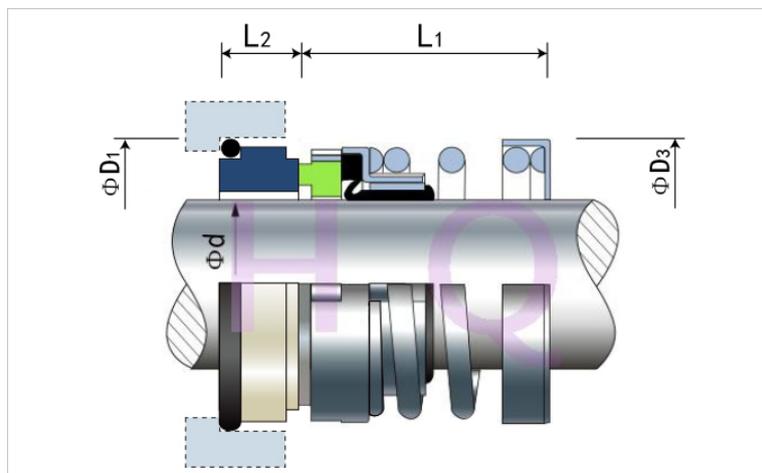


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ABS-11(215)



Type: Suit ABS JUMBO J-Series and Piranha Series Pumps.
 Replacement: Vulcan 215
 Temperature: -20 to +120°C
 Pressure: ≤1.2Mpa
 Speed: ≤10m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



d		D1		D3		L1		L2		O.E.M Part Number
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
20	0.787	35	1.378	34	1.339	22.0	0.866	7.2	0.283	11 110086
25	0.984	38	1.496	38	1.496	24.5	0.965	9.5	0.374	11 110087
30	1.181	45	1.772	44	1.732	25.0	0.984	10.5	0.413	11 110088
45	1.771	64	2.520	61	2.402	37.2	1.465	13.6	0.535	11 110089



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21



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AL-01(P07-22A)



Type: Suit for Alfa Laval MR166A,MR166B and
MR166E Pumps

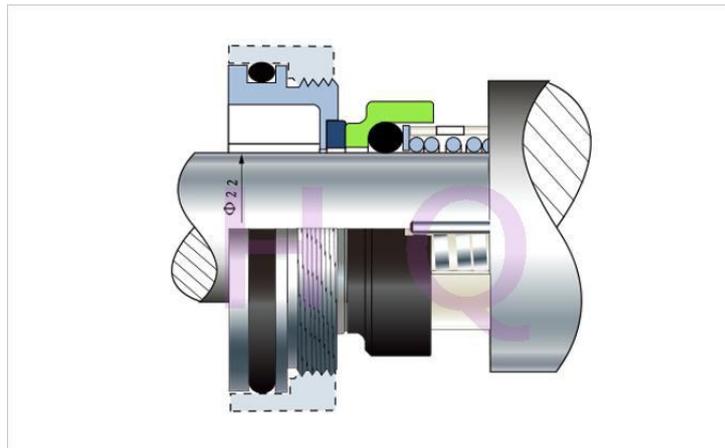
Replacement: AES P07-22C,Vulcan 93,Billi
BB13C(22mm)

Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F,G,Q22,U22,B,V,P,E,F,G



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AL-02(P07-22B)



Type: Suit for Alfa Laval

ME155AE,GM1,GM1A,GM2 and
GM2A,MR166E Pumps

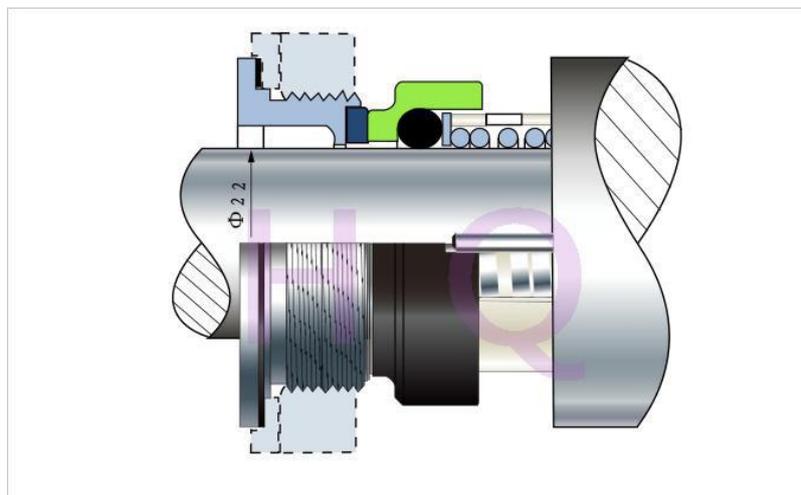
Replacement: AES P07-22D,Vulcan 93B,Billi
BB13D(22mm)

Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F,G,Q22,U22,B,V,P,E,F,G



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AL-03(P07-22C)

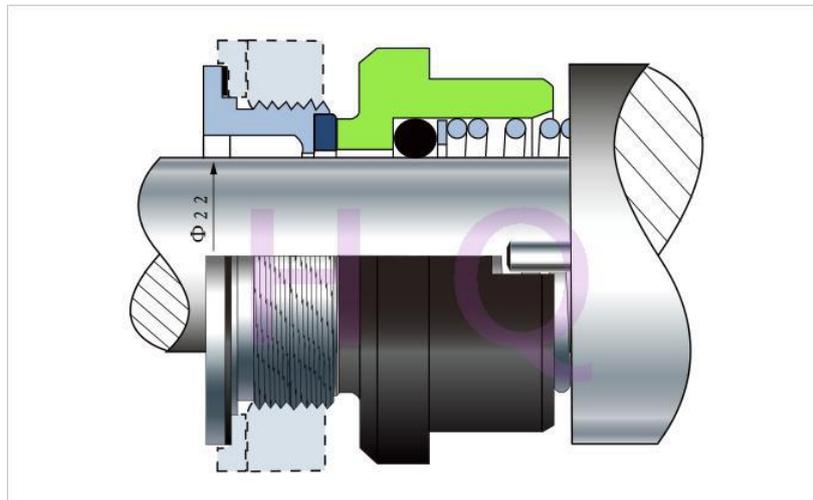


Type: Suit for Alfa Laval CM & EM Series Pumps
Replacement: AES P07-22A,Billi BB13A(22mm)
Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F,G,Q22,U22,B,V,P,E,F,G



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AL-04(P07-22D)



Type: Suit for Alfa Laval

FMO,FMOS,FM1A,FM2A,FM3A and
FM4A Pumps

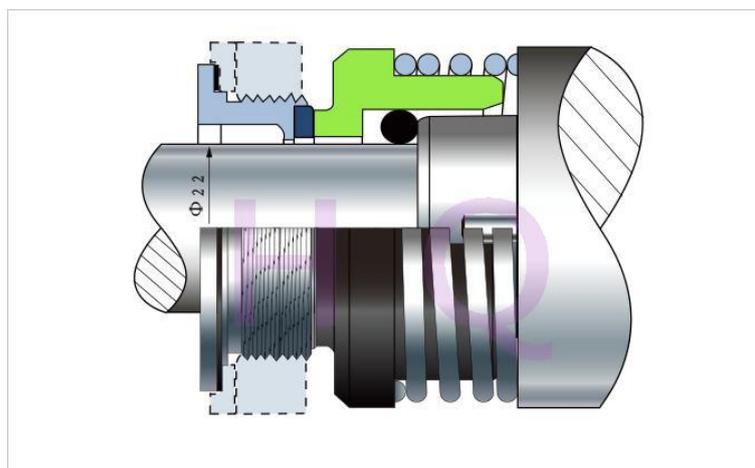
Replacement: AES P07-22B,Vulcan
91B,BilliBB13B(22mm)

Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F,G,Q22,U22,B,V,P,E,F,G



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AL-05(P07-27)



Type: Suit for Alfa Laval MR185A and MR200A

Pumps

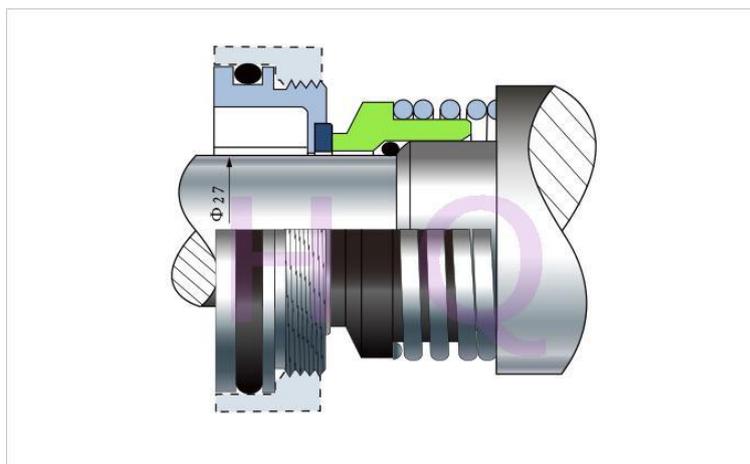
Replacement: AES P07-27, Vulcan 92, Billi BB13E(27mm)

Temperature: -20°C to $+140^{\circ}\text{C}$

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F, G, Q22, U22, B, V, P, E, F, G



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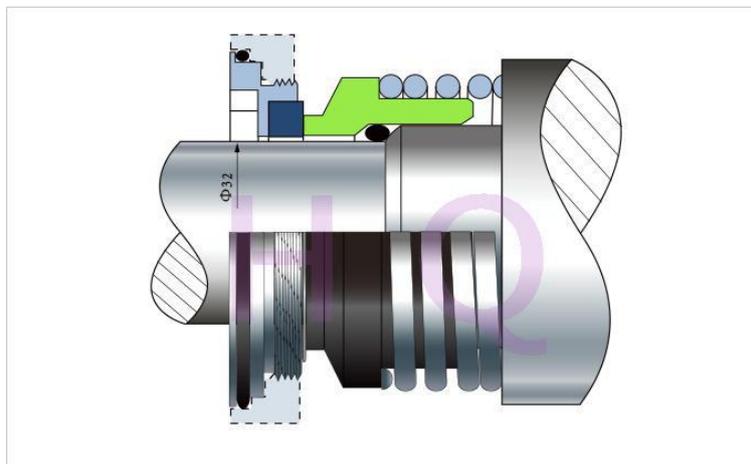


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AL-06(P07-32)



Type: Suit for Alfa Laval LKH Series Pumps
Replacement: Vulcan 92,Billi BB13F(32mm,42mm)
Temperature: -20°C to +140°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: F,G,Q22,U22,B,V,P,E,F,G



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AL-06B(P07-32B/42B)



Type: Double Seal,Suit for Alfa Laval LKH Series
Pumps with a Flushed Seal Chamber and
double seals

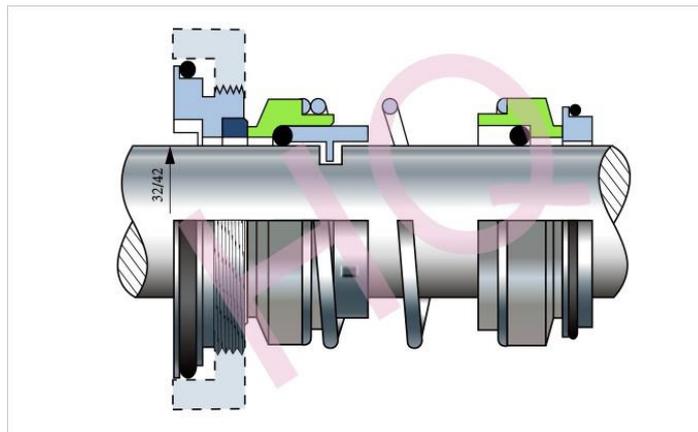
Replacement: Vulcan 92D,Billi BB13FD(32mm,42mm)

Temperature: -20°C to $+140^{\circ}\text{C}$

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F,G,Q22,U22,B,V,P,E,F,G



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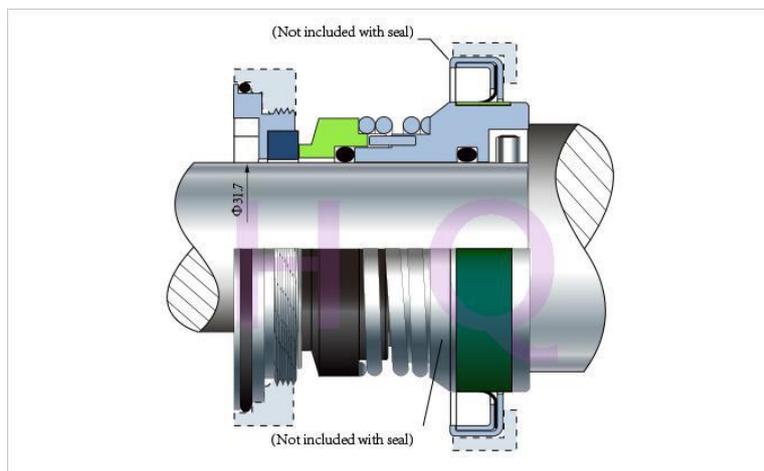


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AL-07(P07-35A)



Type: Suit for Alfa Laval LKH Series Pumps with
Flushed Seal Chamber and PTFE Lip Seal
Replacement: AES P07-O-YS-0350(35mm),Billi 13FC
Temperature: -20°C to +140°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: F,G,Q22,B,Q2,V,P,E



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AL-08(P07-35B)



Type: Suit for Alfa Laval LKH Series Pumps, with a flushed seal chamber

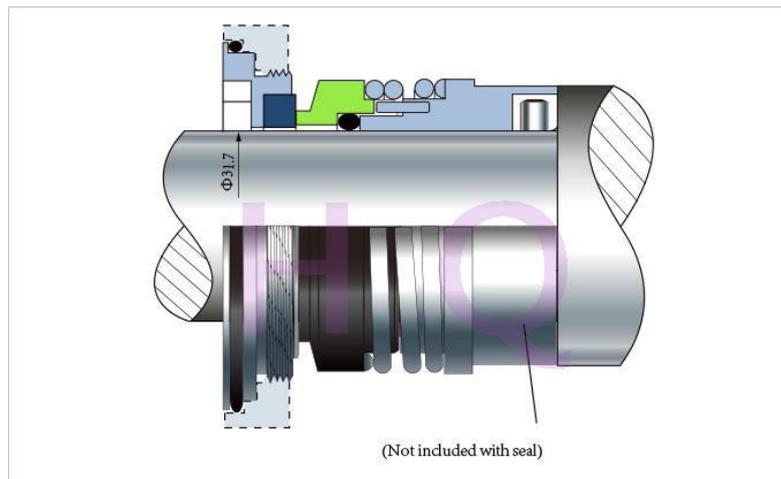
Replacement: AES P07-E-S-0350(35mm,42mm), Vulcan 92B, Billi BB13G(32mm,42mm)

Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F,G,Q22,B,Q2,V,P,E



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AL-09(P07-35C)

Type: Double Seal,Suit for Alfa Laval LKH Series

Pumps

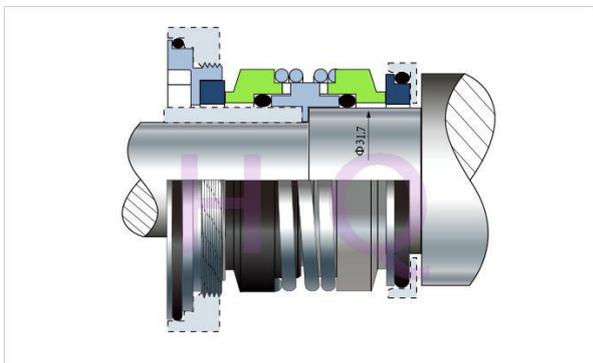
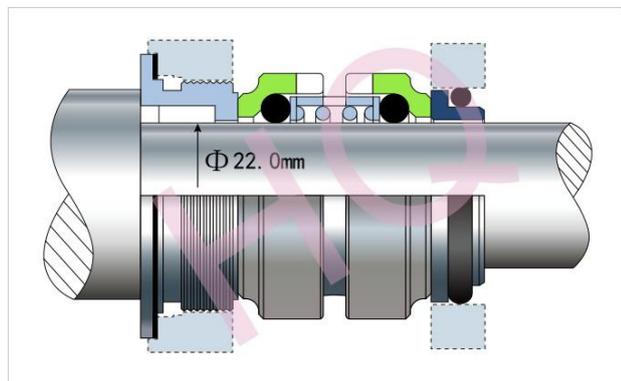
Replacement: AES P07-0350(22mm,35mm,42mm)

Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

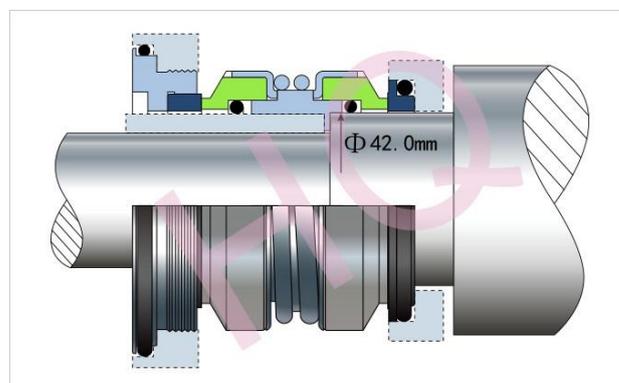
Material: F,G,Q22,B,Q2,V,P,E



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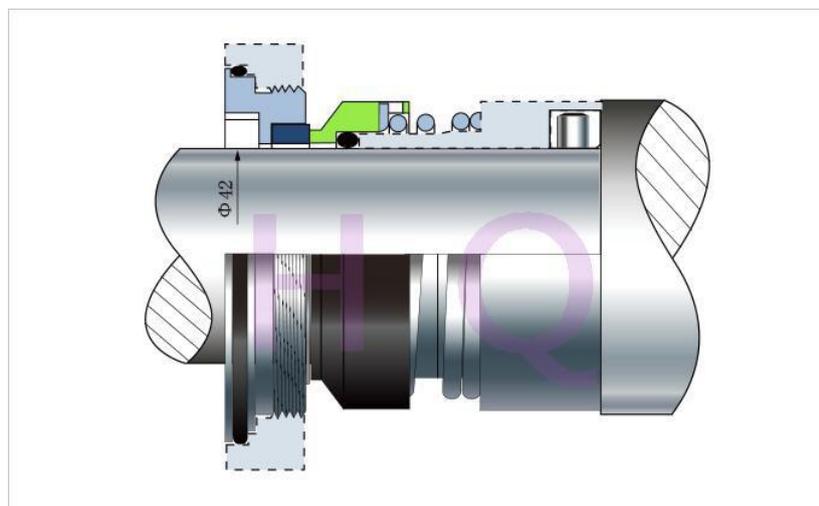
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AL-10(P07-42)



Type: Suit for Alafa Laval LKH Series Pumps
Replacement: AES P07-42(42mm)
Temperature: -20°C to +140°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: F,G,Q22,U22,B,V,P,E,F,G



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AL-11(P07-53)



Type: Suit for Alfa Laval ALC Series Pumps with a flushed Seal Chamber , For Non-Flushed ALC Series Pumps , Please choose the Style AL-18

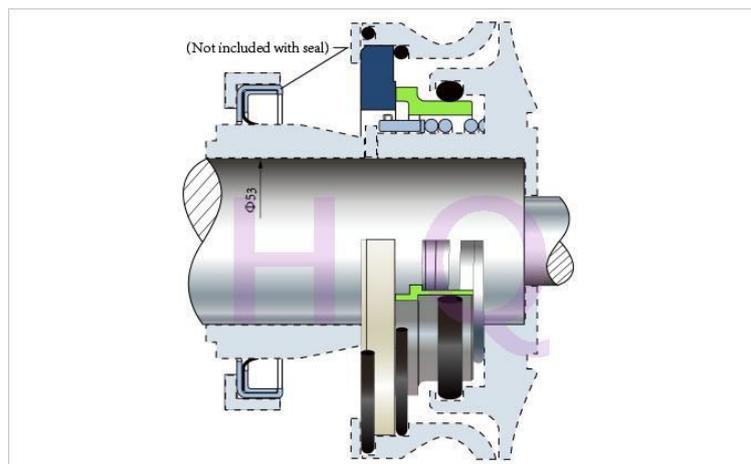
Replacement: AES P07-53,Vulcan 90,Billi BB13(53mm)

Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: F,G,Q22,U22,B,V,P,E,F,G



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AL-12(W03)



Type: Suit for Alfa Laval SRU(SSP,SR),NMOG Pumps

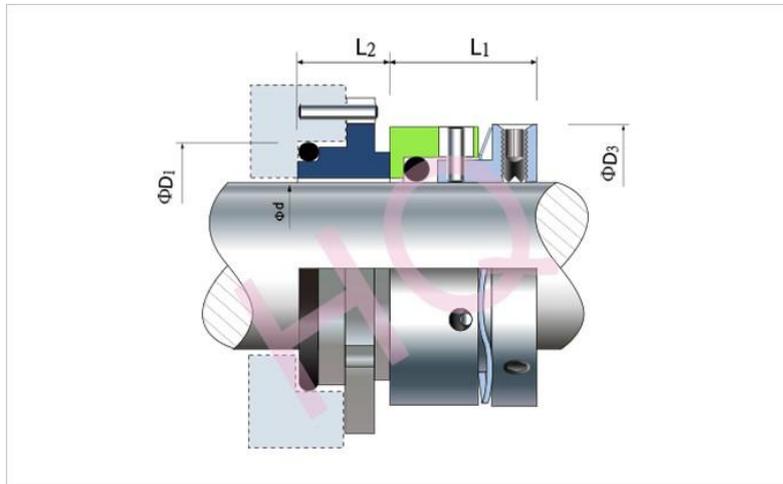
Replacement: AES W03, Vulcan 1688W, Crane 87(EI/EC)

Temperature: -40°C to +200°C

Pressure: $\leq 0.8\text{Mpa}$

Speed: $\leq 18\text{m/s}$

Material: A,B,Q1,Q2,P,E,V,F,G



PUMP ref:	Size (Metric)	D1	D3	L1	L2
SR1	20	30	31.0	19.1	10.7
SR2	30	41	41.0	19.1	10.9
SR3	35	47	45.5	21.1	12.2
SR4	45	58	58.2	21.1	11.6
SR5	55	70	72.0	22.1	13.0
SR6	75	92	96.0	25.8	14.5



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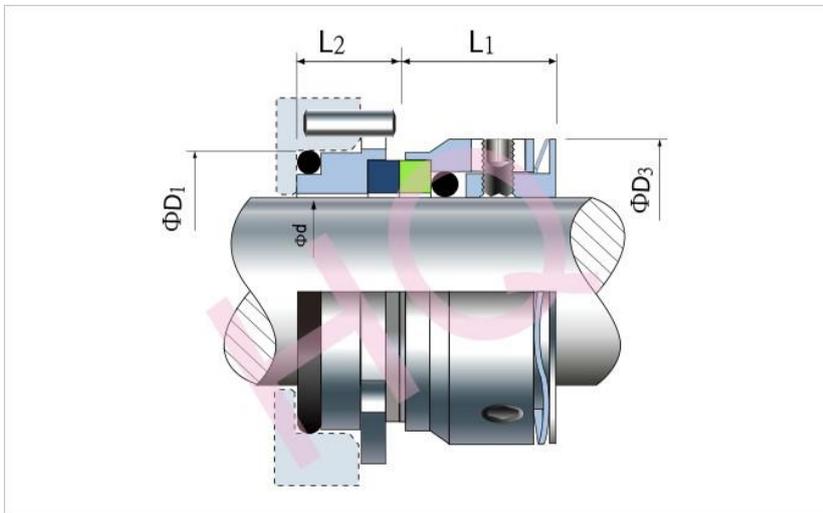
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AL-13(W03S)



Type: Suit for Alfa Laval SRU(SSP SR),NMOG
Pumps
Replacement: AES W03S, Vulcan 1682, Crane 87(EI/EC)
Temperature: -40°C to +200°C
Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 18\text{m/s}$
Material: B,A1,Q1,Q2,U2,E,N,V



PUMP ref:	Size	D1	D3	L1	L2
SR1	20	30.0	32.4	20.0	10.7
SR2	30	41.3	44.0	21.4	10.9
SR3	35	47.0	50.8	22.0	12.2
SR4	45	58.3	62.4	22.9	11.6
SR5	55	69.6	76.0	29.3	13.0
SR6	75	92.2	99.2	31.1	14.5



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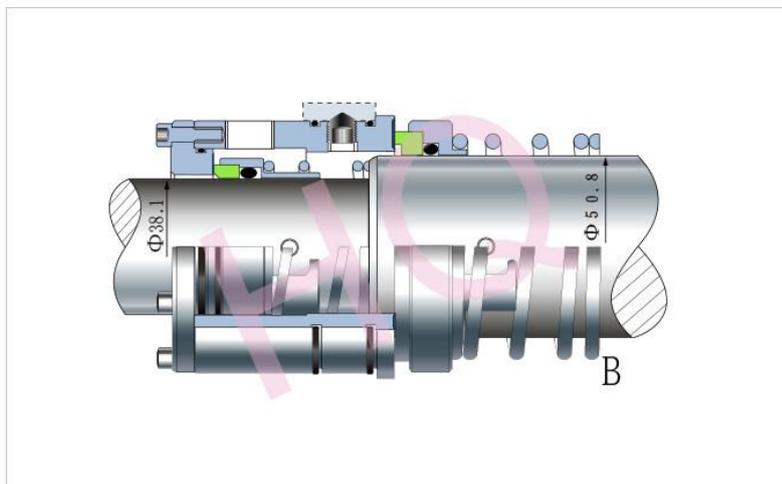
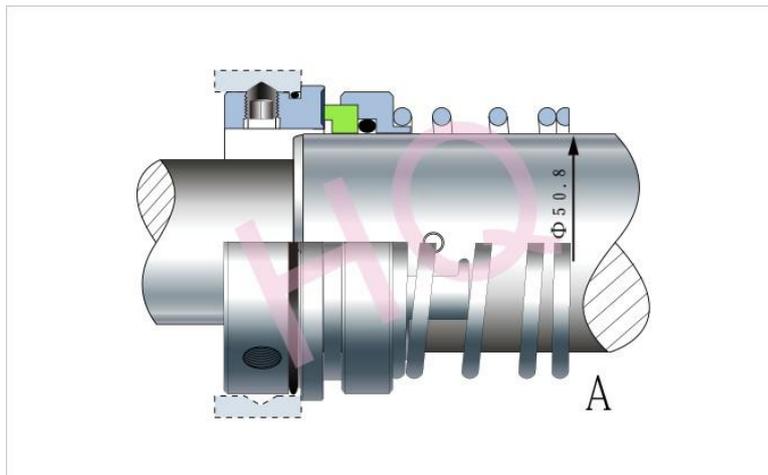


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3AL-14(SOZ)

Type: Suit for Alfa Laval CONTHERM Scraped-
surface heat exchangers
Replacement: AES SOZ, Billi BB12
Temperature: -45°C to +150°C
Pressure: $\leq 3.5\text{Mpa}$
Speed: $\leq 5\text{m/s}$
Material: A,B,F,G,P,E,V





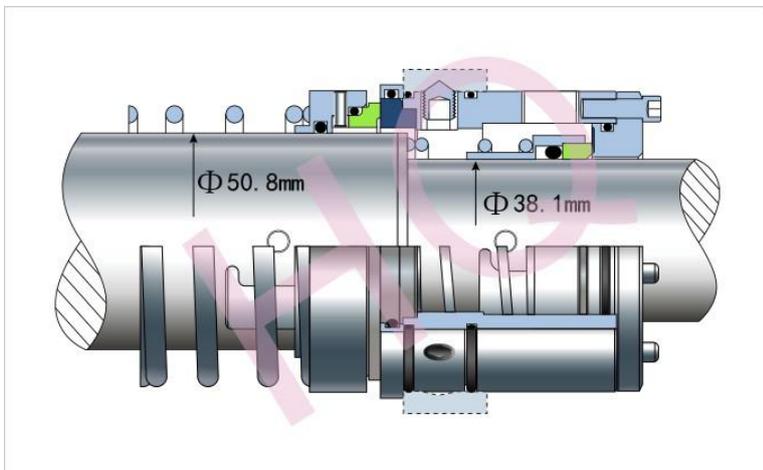
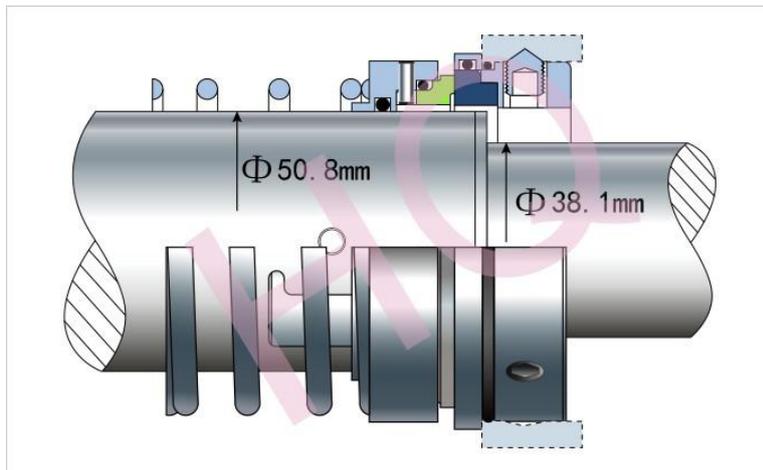
AL-14A(SOZX)

Type: Suit for Alfa Laval Contherm Pump
Replacement: AES SOZX
Temperature: -40 to +150°C

Pressure: $\leq 2.5\text{Mpa}$

Speed: $\leq 5\text{m/s}$

Material: B,A,Q1,Q2,U2,E,V,K,F,G,M



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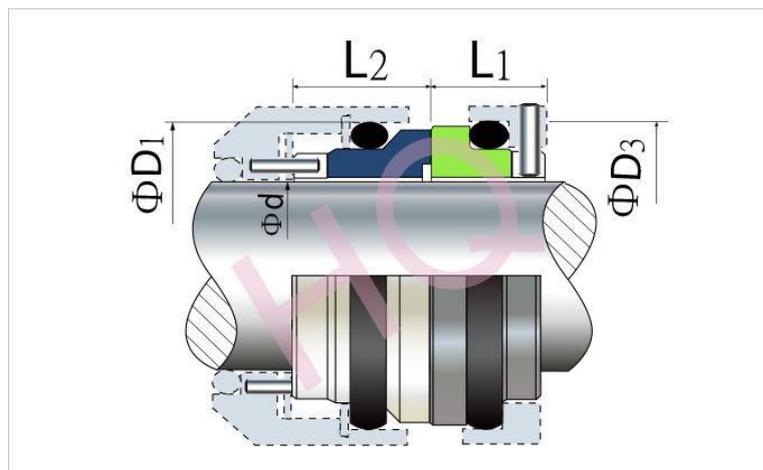


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AL-17(MP07)



Type: Suit for Alfa Laval LKHI,
LKHSP,LKHSP,LKH110,LKH112,LKH113,L
KH114 Series Multi-Stage Series Pumps
Replacement: AES MP07,Vulcan 912,Billi BB13KIT
Temperature: -20°C to +140°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,A1,Q1,Q2,U2,E,N,V



ALFA LAVAL Pump Seals.

Shaft Size: 32mm,42mm.



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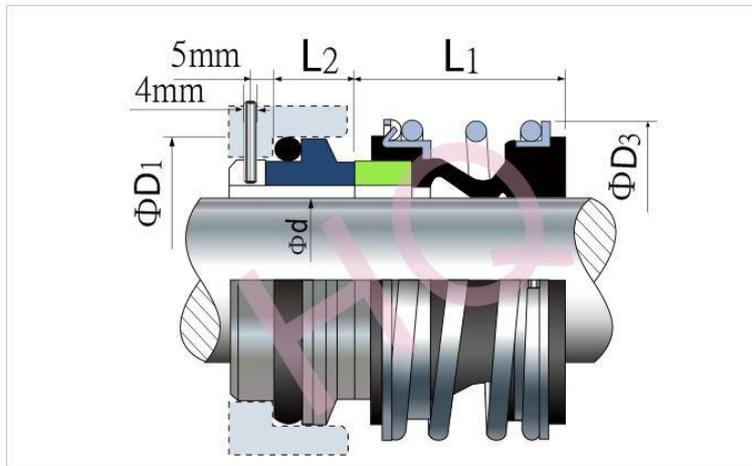
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AL-18(B02D)



Type: Suit for Alfa Laval ALC (D Series) Pumps
 Replacement: AES B02D, Vulcan 19C, Burgmann
 MG1/G9, Flowserve ALC, Billi BB3-AL
 Temperature: -20°C to +120°C

Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: A,B,Q1,Q2,P,E,V,F,G



d (mm)	D1	D3	L1	L2
40	58	60	30	14
53	73	76	33	15
60	80	85	38	15

d (inch)	D1	D3	L1	L2
1.575	2.283	2.362	1.181	0.551
2.087	2.875	2.992	1.299	0.591



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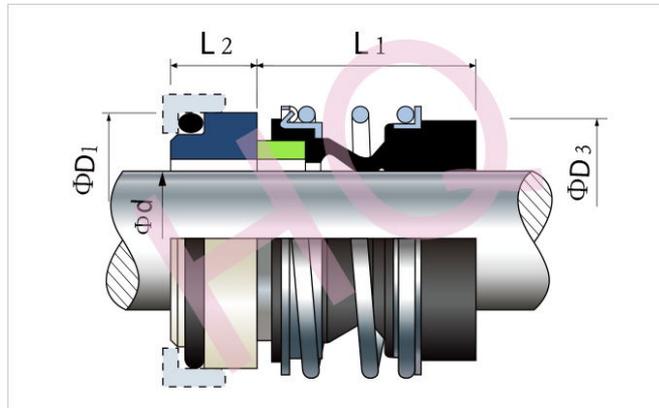
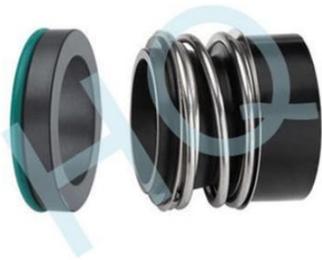
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AL-20(MG13)

Type: Suit for ALFA LAVAL ALC Pumps
 Replacement: Burgmann G13
 Temperature: -20°C to +120°C

Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: F,G,Q22,B,Q2,V,P,E

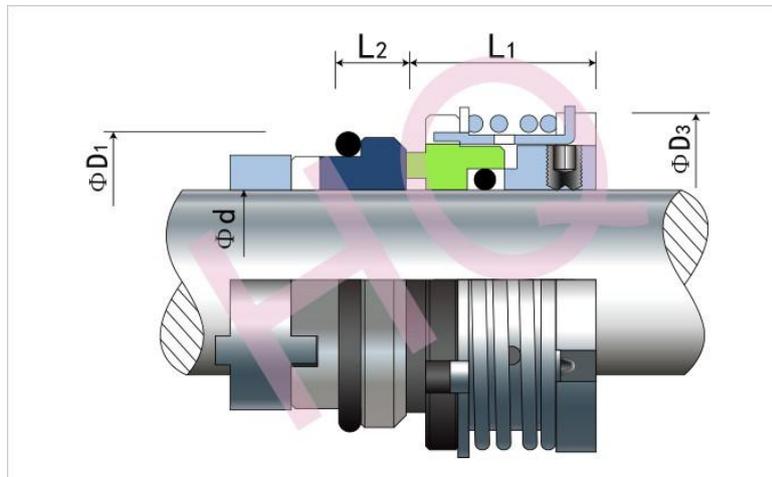


d (mm)	D1	D3	L1	L2
10	21	22.5	25	6.6
12	23	25.0	25	6.6
14	25	28.5	25	6.6
15	-	28.5	25	-
16	27	28.5	25	6.6
18	33	32.0	25	7.5
19	-	37.0	25	-
20	35	37.0	25	7.5
22	37	37.0	25	7.5
24	39	42.5	25	7.5
25	40	42.5	25	7.5
28	43	49.0	33	7.5
30	45	49.0	33	7.5
32	48	53.5	33	7.5
33	48	53.5	33	7.5
35	50	57.0	33	7.5
38	56	59.0	33	9.0
40	58	62.0	33	9.0
42	-	65.5	41	-
43	61	65.5	41	9.0
45	63	68.0	41	9.0
48	66	70.5	41	9.0
50	70	74.0	41	9.0
53	73	78.5	41	11.0
55	75	81.0	41	11.0
58	78	85.5	41	11.0
60	80	88.5	41	11.0
65	85	93.5	49	11.0
68	90	96.5	49	11.3
70	92	99.5	49	11.3
75	97	107.0	52	11.3
80	105	112.0	56	12.0
85	110	120.0	56	14.0
90	115	127.0	59	14.0

AL-21



Type: ALFA LAVAL ,IMO ACE3 Pump Seal
Replacement: LIDERING AL-N-22
Temperature: -20 to +120°C
Pressure: $\leq 1.6\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: A,B,Q1,Q2,U1,U2,T,V,Graphite,T6,F,G,M



It is equal to LIDERING AL-N-22,
Suit for IMO ACE3 Screw pumps.
d=22mm.



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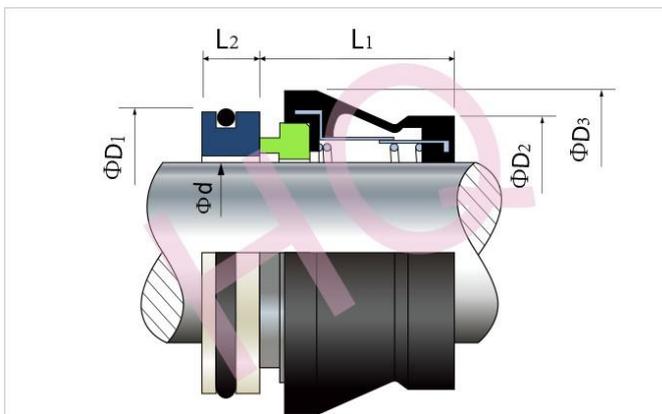
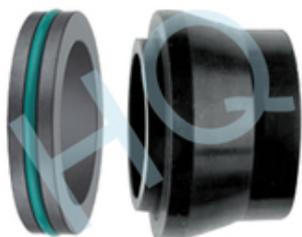
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AL-24(BHCH)

Type: Suit for Alfa Laval LKR Series Agitators
 Replacement: AES BHCH, Vulcan 17B
 Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,A,Q1,Q2,E,N,V,G



d (mm)	D1	D3	L1	L2
20	35.7	40	27	10.3
25	40.5	45	27	9.5
30	50.8	53	27	11.5
35	53.9	62	35	11.5
40	60.4	65	35	11.5
45	63.5	70	42	11.5
50	69.9	77	42	13.5
60	79.4	85	42	15.0

d (inch)	D1	D3	L1	L2
0.787	1.406	1.575	1.063	0.406
0.984	1.594	1.772	1.063	0.374
1.181	2.000	2.087	1.063	0.453
1.378	2.125	2.441	1.378	1.453
1.575	2.375	2.559	1.378	0.453
1.772	2.500	2.756	1.654	0.453
1.969	2.750	3.031	1.654	0.531
2.362	3.125	3.346	1.654	0.591



AL-26(W09)



Type: Suit for Alfa Laval MOG

600,1000,2000,3000 Series,(SSP 12,M2)

Pumps

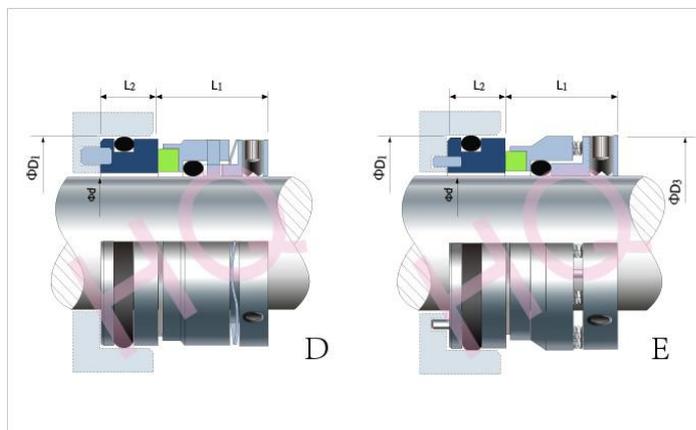
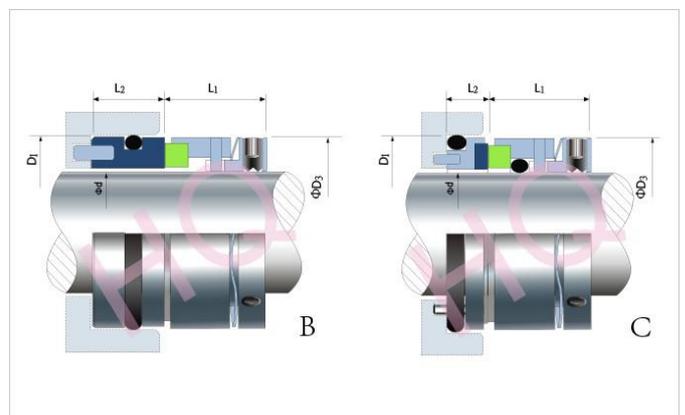
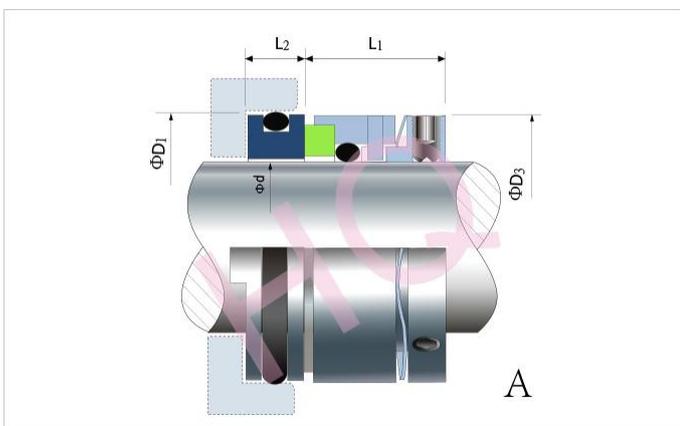
Replacement: AES W09

Temperature: -45°C to +150°C

Pressure: $\leq 3.5\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: F,G,P,E,V



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Type	d	D1	D3	L1	L2
A	15.0	27.0	26.0	20.9	9.3
B	30.1	42.0	40.9	20.6	14.0
B	34.9	47.6	46.7	20.6	15.8
C	34.9	47.6	46.7	20.6	7.9
D	50.8	66.6	65.4	23.8	11.9
E	76.2	95.2	98.6	39.7	11.9

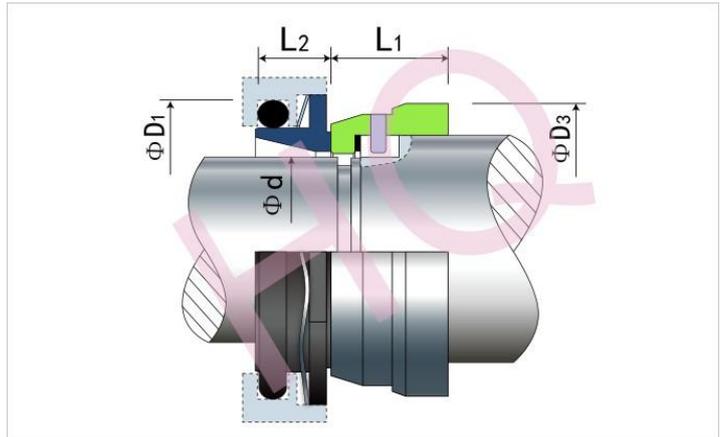
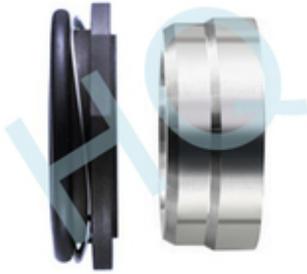
AL-30(W016U)

Type: Suit for Alfa Laval SRU Hyclean Pumps
 Replacement: AES W016U,Billi BB7K-AL2-NEU
 Temperature: -20°C to +200°C

Pressure: $\leq 0.8\text{Mpa}$

Speed: $\leq 18\text{m/s}$

Material: B,A,Q1,Q2,U2,E,V,K,F,G,M



d (mm)	D1	D3	L1	L2
20	37.0	32.0	21.9	12.6
30	49.3	45.0	21.0	14.5
35	58.4	54.9	22.0	14.3
45	74.0	64.9	24.5	17.2
55	84.0	74.9	26.9	16.9
67	100.0	89.7	37.0	20.0

d (inch)	D1	D3	L1	L2
0.787	1.457	1.260	0.862	0.496
1.181	1.939	1.772	0.827	0.571
1.378	2.299	2.161	0.866	0.563
1.772	2.913	2.555	0.965	0.677
2.165	3.307	2.949	1.059	0.665
2.638	3.937	3.531	1.457	0.787



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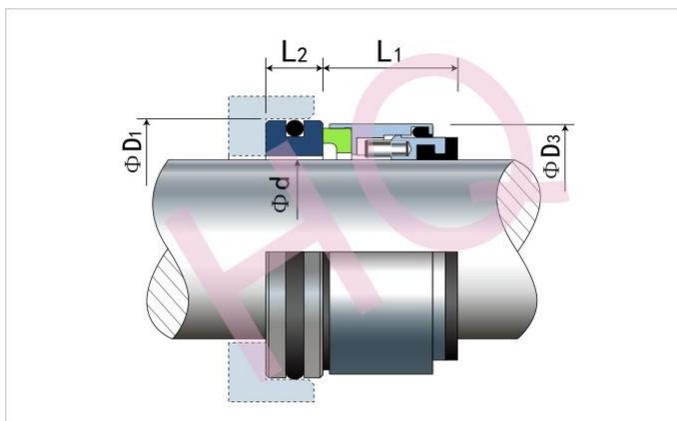
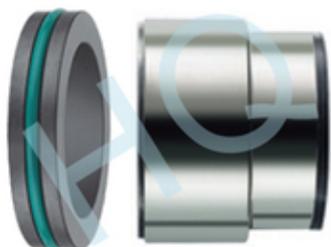


AL-31(MOHCH)

Type: Suit for ALFA LAVAL LKR-5 Pumps
 Replacement: AES MOHCH
 Temperature: -40 to +150°C

Pressure: $\leq 3.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$

Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3	L1	L2
25	40.5	39.0	27	9.5
30	50.8	44.0	27	11.5
35	53.9	49.0	35	11.5
40	60.3	55.9	35	11.5
60	79.3	85.0	42	15.0

d (inch)	D1	D3	L1	L2
0.984	1.594	1.535	1.063	0.374
1.181	2.000	1.732	1.063	0.453
1.378	2.122	1.929	1.378	0.453
1.575	2.375	2.201	1.375	0.453
2.362	3.122	3.346	1.654	0.591

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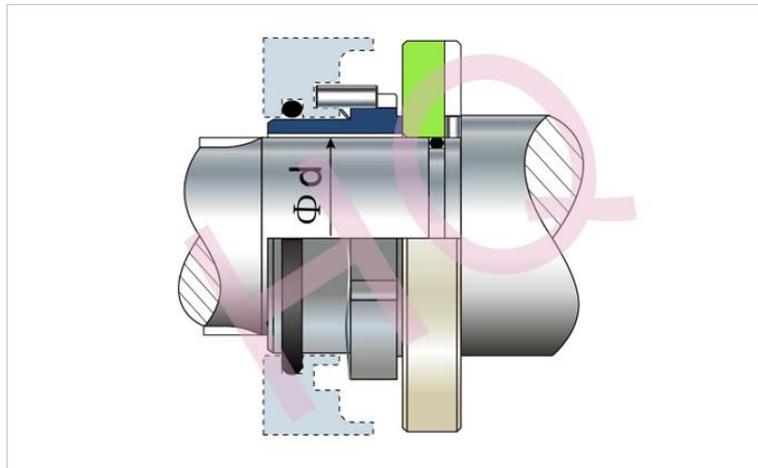
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AL-32(W13U)

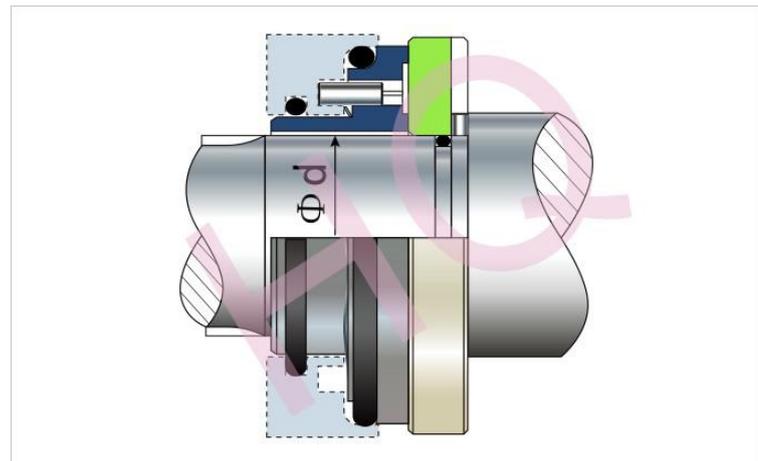


Type: Suit for Alfa Laval S CPP1 Pumps
 Replacement: AES W13
 Temperature: -20°C to +140°C
 Pressure: $\leq 1.1\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,A,Q1,Q2,U2,E,V,K,G,F,G,M5,T6

W13U Single Seal



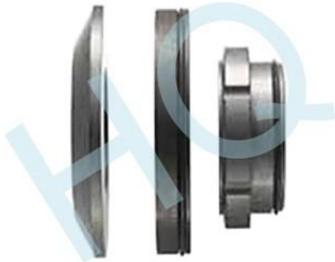
W13U Double Seal



d=30.10mm, 38.10mm, 47.60mm, 69.80mm.
 1.185", 1.500", 1.875", 2.750".

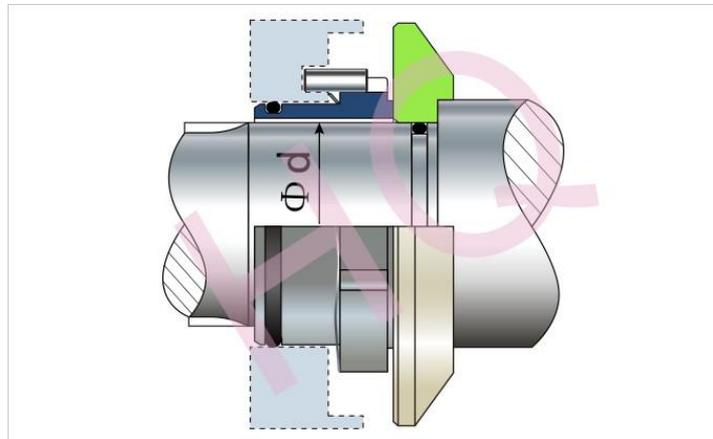


AL-33(W13SU)

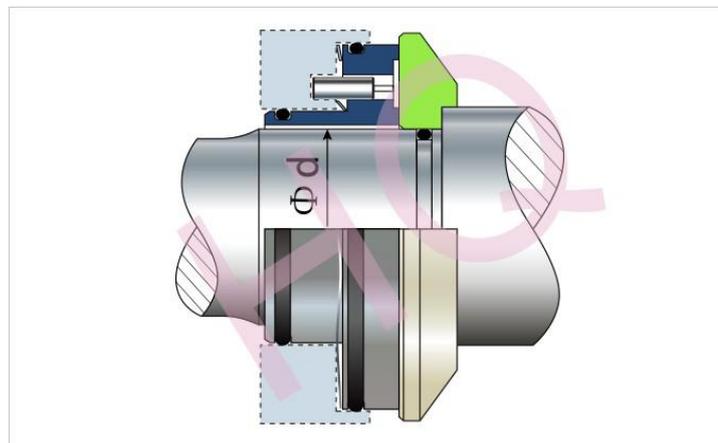


Type: Suit for Alfa Laval SCPP2 Pumps
 Replacement: AES W13S
 Temperature: -20°C to +160°C
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,A,Q1,Q2,T,V,K,F,G,M

W13SU Single Seal



W13SU Double Seal



d=31.7mm, 41.2mm, 50.8mm, 69.8mm, 76.2mm。

1.250", 1.625, 2.000", 2.750", 3.000".



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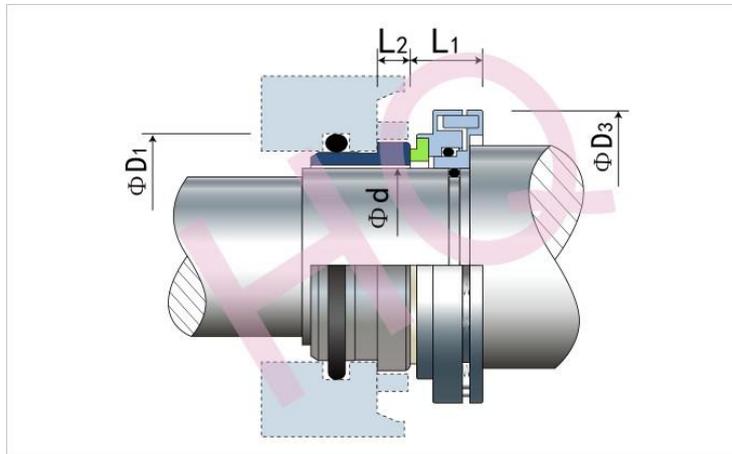


AL-34(M09)



Type: Suit for Alfa Laval SCPP1 Pumps
 Replacement: AES M09
 Temperature: -20°C to +150°C

Pressure: $\leq 1.1\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3	L1	L2
38.1	53.6	80.8	11.6	3.0
47.6	66.1	79.0	19.4	8.9
d (inch)	D1	D3	L1	L2
1.500	2.110	3.175	0.457	0.118
1.875	2.602	3.110	0.763	0.350



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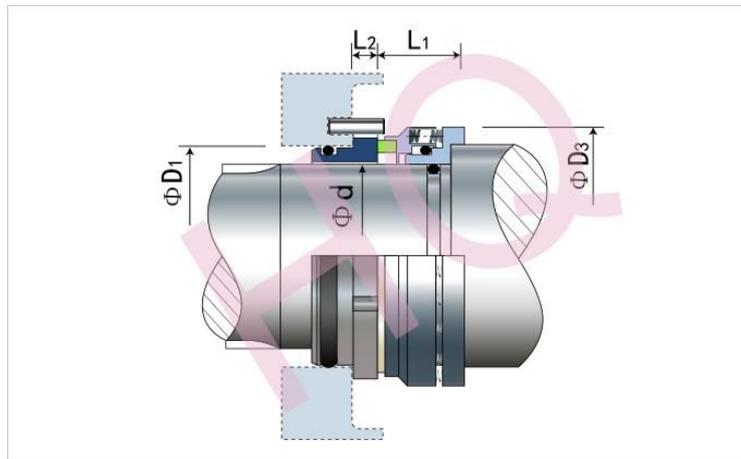
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AL-35(M09S)



Type: Suit for Alfa Laval SCPP2 Pumps
 Replacement: AES M09S
 Temperature: -20°C to +140°C
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3	L1	L2
69.8	83.3	93.4	24	5.1
d (inch)	D1	D3	L1	L2
2.750	3.280	3.675	0.945	0.201

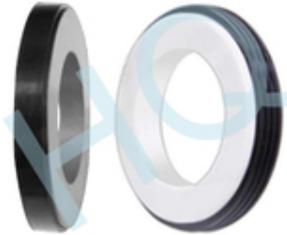


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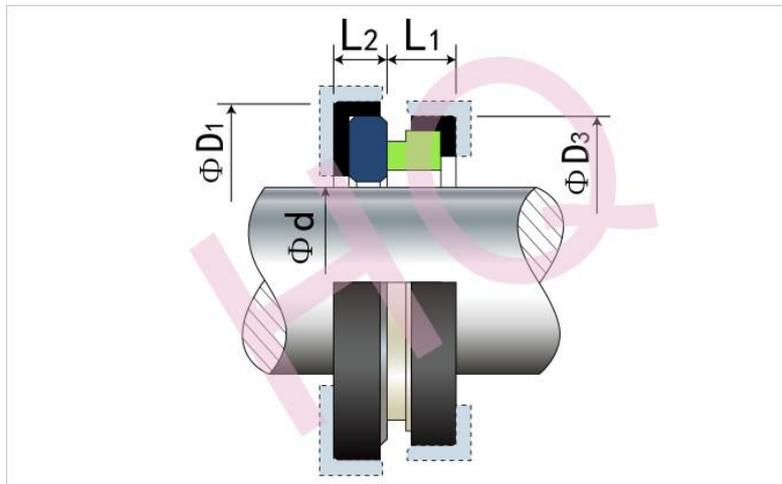


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AL-37(ALXU)



Type: Suit for Alfa Lava
 MRPX,HMRPX514,714,718,818 Pumps
 Replacement: AES ALXU
 Temperature: -20°C to +140°C
 Pressure: 1.2Mpa
 Speed: ≤10m/s
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D3	L1	L2
40	64.0	60.0	11.4	9.1
50	74.0	70.0	11.0	9.3
60	82.6	82.6	10.0	8.0
d (inch)	D1	D3	L1	L2
1.575	2.520	2.362	0.449	0.358
1.969	2.913	2.756	0.433	0.366
2.362	3.252	3.252	0.394	0.315



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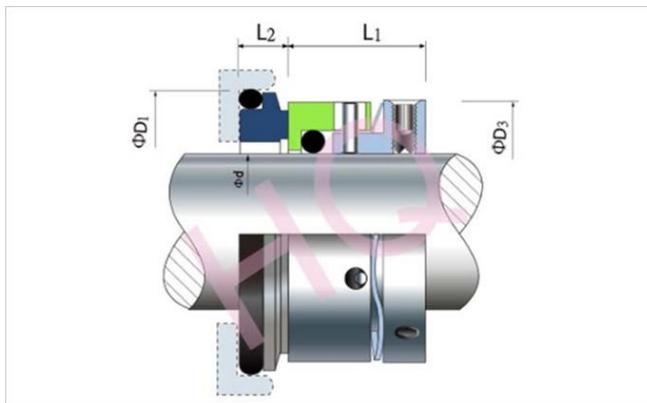
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AL-38(W01)



Type: Suit for Alfa Laval SSP AP,GP,NDM and Johnson Pumps
 Replacement: AES W01
 Temperature: -20°C to +200°C
 Pressure: ≤0.8Mpa
 Speed: ≤18m/s
 Material: A,B,U1,U2,V,G,M5



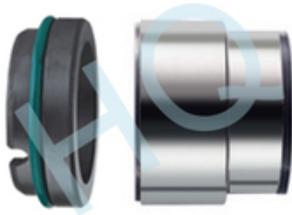
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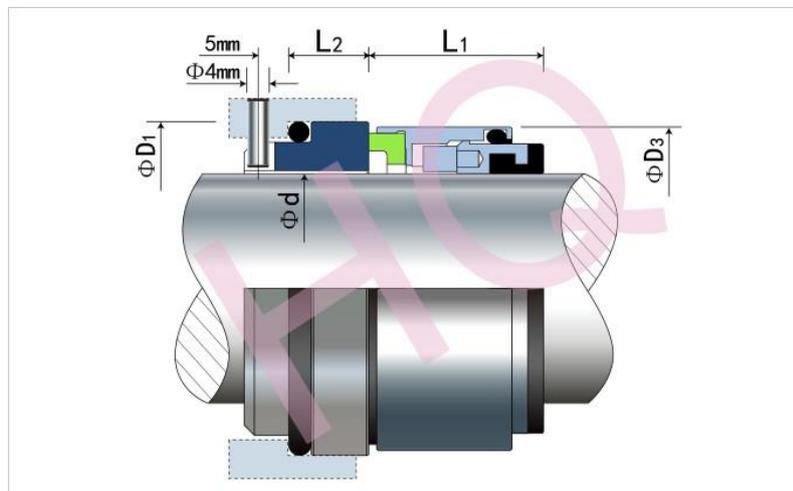
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d		D1		D3		L1		L2	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
15.8	0.622	28.6	1.126	27.0	1.063	19.1	0.752	6.3	0.248
16.0	0.63	28.6	1.126	27.0	1.063	19.1	0.752	6.3	0.248
19.1	0.752	31.7	1.248	30.0	1.181	19.1	0.752	6.3	0.248
24.0	0.945	35.4	1.394	34.1	1.343	19.1	0.752	0.6	0.299
28.0	1.102	42.0	1.654	40.0	1.575	19.1	0.752	0.6	0.299
28.6	1.126	41.2	1.622	39.5	1.555	19.1	0.752	0.6	0.299
30.0	1.181	42.7	1.681	41.0	1.614	19.1	0.752	0.6	0.299
31.7	1.248	44.2	1.74	42.4	1.669	19.1	0.752	0.6	0.299
32.0	1.26	44.4	1.748	42.4	1.669	19.1	0.752	0.6	0.299
34.9	1.374	47.6	1.874	45.5	1.791	19.1	0.752	0.6	0.299
35.0	1.378	47.6	1.874	45.5	1.791	19.1	0.752	0.6	0.299
38.0	1.496	53.9	2.122	51.8	2.039	21.1	0.831	8.1	0.319
38.1	1.500	53.9	2.122	51.8	2.039	21.1	0.831	8.1	0.319
44.4	1.748	60.3	2.374	58.2	2.291	21.1	0.831	8.1	0.319
47.6	1.874	63.5	2.500	61.4	2.417	21.1	0.831	8.1	0.319
50.0	1.969	63.9	2.516	61.9	2.437	21.1	0.831	8.1	0.319
50.8	2.000	66.6	2.622	64.6	2.543	22.1	0.870	9.6	0.378
53.9	2.122	73.0	2.874	71.0	2.795	22.1	0.870	9.6	0.378
54.0	2.126	73.9	2.909	71.0	2.795	22.1	0.870	9.6	0.378
54.6	2.15	75.0	2.953	72.0	2.835	22.1	0.870	9.6	0.378
55.0	2.165	75.0	2.953	72.0	2.835	22.1	0.870	9.6	0.378
63.0	2.48	83.0	3.268	79.3	3.122	25.8	1.016	9.1	0.358
63.5	2.500	88.9	3.500	79.3	3.122	25.8	1.016	9.1	0.358
69.8	2.748	95.2	3.748	88.9	3.500	25.8	1.016	9.1	0.358
73.0	2.874	98.4	3.874	94.0	3.701	25.8	1.016	9.1	0.358
75.0	2.953	100.4	3.953	96.0	3.780	25.8	1.016	9.1	0.358
80.0	3.150	104.0	4.094	101.0	3.976	25.8	1.016	9.1	0.358

AL-39(M010X)



Type: Multi Spring Mechanical Seal, Suit for Alfa
 Laval ALC(D Series) Pumps
 Replacement: AES M010X
 Temperature: -20°C to +140°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B, A1, Q1, Q2, U2, P, E, N, V, F, G, Alfa



d (mm)	D1	D3	L1	L2
40	58	55.8	30	14
53	73	68.5	33	15
d (inch)	D1	D3	L1	L2
1.575	2.286	2.197	1.181	0.551
2.087	2.874	2.697	1.299	0.591



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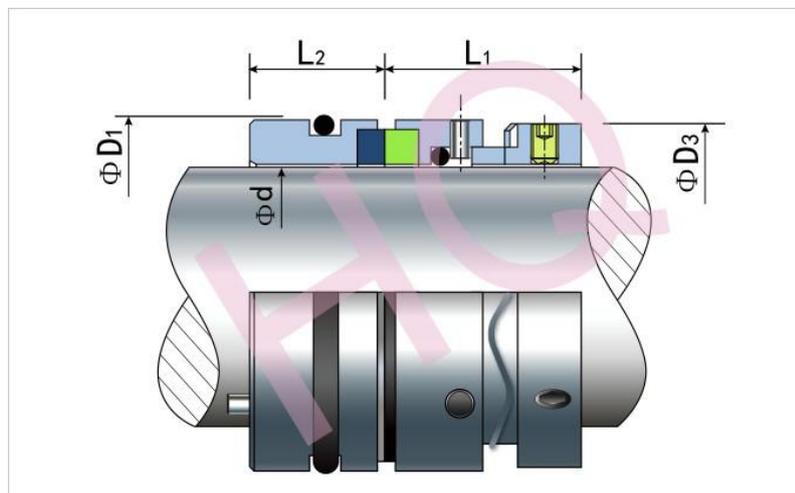


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AL-19(1655)



Type: Suit for ALAFA LAVAL MOG,
ALP Lobe Pumps
Replacement: Vulcan 1655, Billi BB55
Temperature: -20°C to +140°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: A,Q1,Q2,U2,P,E,V,F,G



d (inch)	D1	D3	L1	L2
1.187	41.7	41.00	22.2	14.0
1.375	47.6	46.75	20.6	15.8
2.000	66.6	65.40	23.8	12.0
3.000	95.2	98.60	39.7	12.0

AL-19(1655)

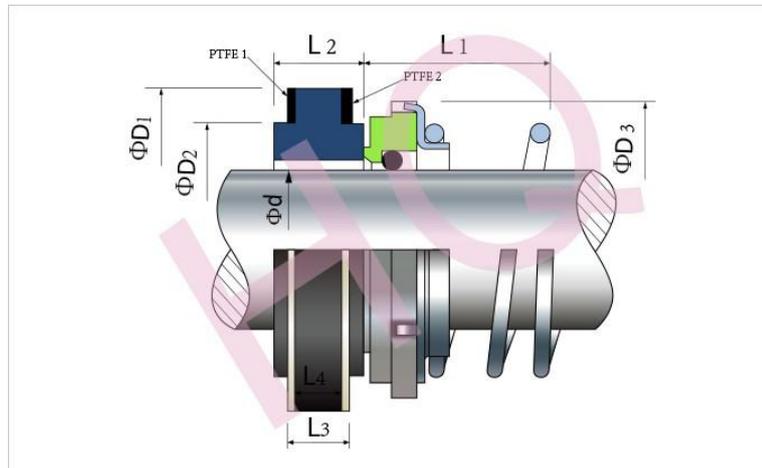


Type: Suit for Alfa Laval Tri-Clover Pumps
 Replacement: Vulcan 293, Billi BB93
 Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: B,A,Q1,Q2,T



d (inch)	D1	D2	D3	L1	L2	L3	L4	O.E.M. Seal Code
1.125	57.1	47.45	54.0	39.0	20.69	14.3	9.7	C216
1.500	69.8	56.90	66.6	33.5	22.25	14.3	9.7	C218, C328



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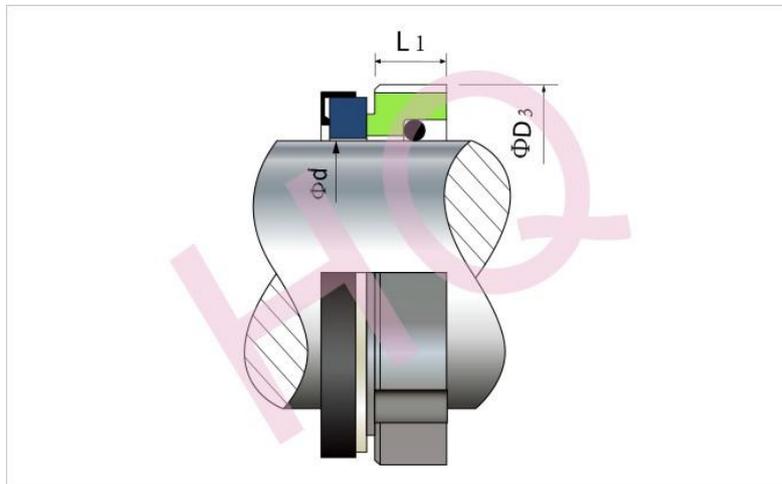
AL-19(1655)



Type: Suit for Alfa Laval Tri-Clover Pumps
 Replacement: Vulcan 1628, Billi BB93KIT
 Temperature: -20°C to +140°C

Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$

Material: B,A,Q1,Q2,E,N,V



d		D3		L1		O.E.M
mm	inch	mm	inch	mm	inch	Seal Code
44.45	1.75	79.38	3.125	10.32	0.406	2045, 2065, 2085, 2105



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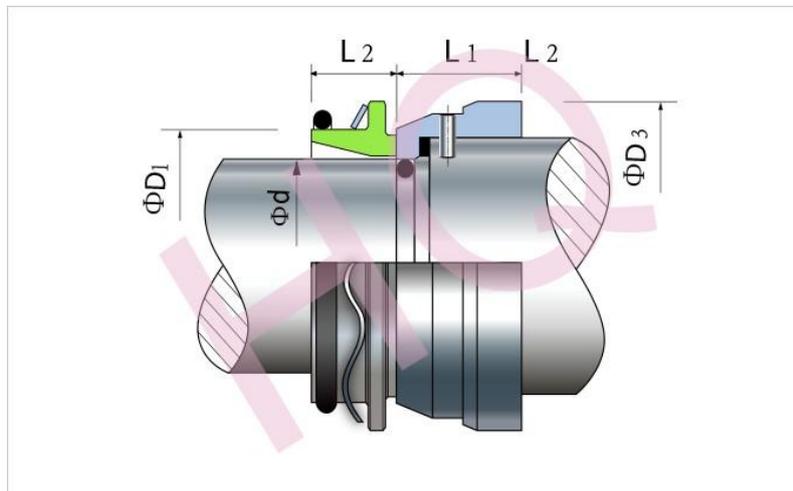


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AL-19(1655)



Type: Suit for ALFA LAVAL LKPL,
NMOG and SRU Lobe Pumps
Replacement: Vulcan 1680
Temperature: -20°C to +140°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: A,B,Q1,Q2,U1,U2,P,E,V,F,G



d (inch)	D1	D3	L1	L2
1.187	36.4	45	21.5	14.5
1.375	46.0	55	22.0	14.0
1.813	59.4	65	25.0	16.0
2.187	69.0	75	26.9	17.0



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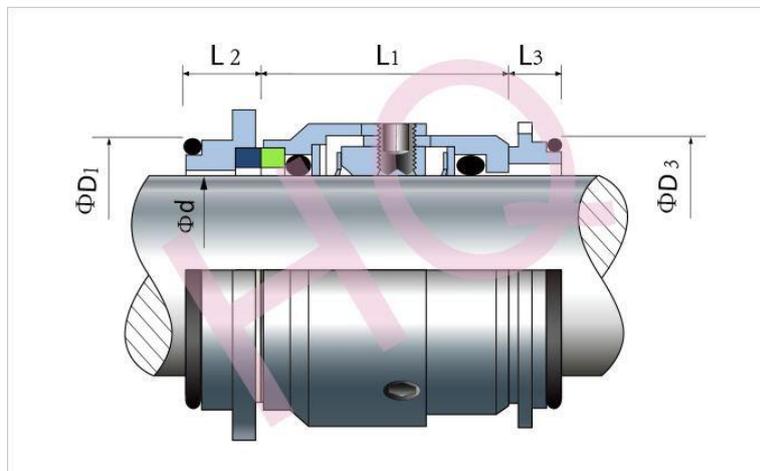


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AL-19(1655)



Type: Suit for Alfa Laval SR Lobe Rotor Pumps
 Replacement: Vulcan 1694
 Temperature: -45°C to +150°C
 Pressure: $\leq 3.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: F,G,P,E,V



d (mm)	D1	L1	L2	L3
30	41.30	34.2	10.5	11.1
45	58.26	37.7	11.3	11.3
55	69.55	46.2	12.5	11.5
75	92.20	46.6	14.5	14.5

AL-29(13M)



Type: Suit for Alfa Laval and C.S.F, Inox
AS and CS Centrifugal Series Pumps

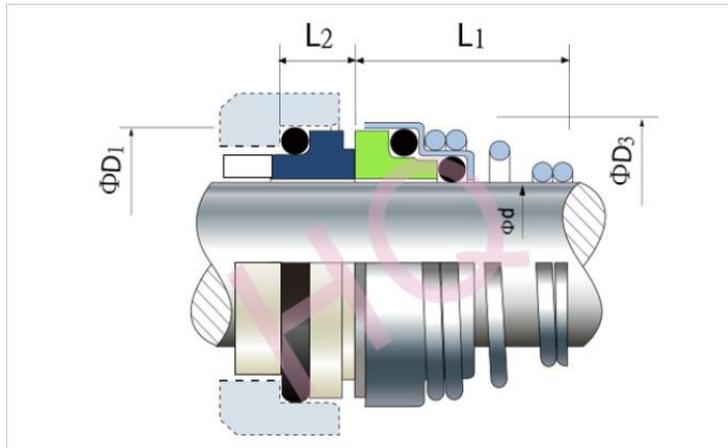
Replacement: Vulcan 13M, Billi BB5

Temperature: -20°C to +120°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: A, Q2, U2, P, E, V, F, G



d (mm)	D1	D3	L1	L2
28	43	45.5	29	9.5



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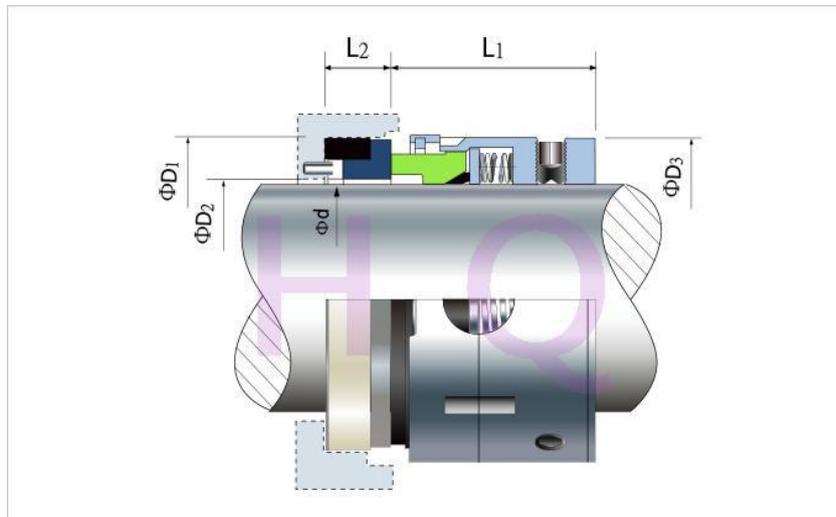
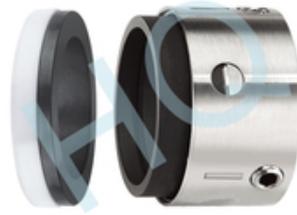
AL-40(9+23)

Type: Multi Spring Mechanical Seal
 Replacement: Vulcan 1645, AES M05, Crane 9-T
 Temperature: -40°C to +250°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: V1,Q1,Q2,U2,B,A,P,E,V,M1,M2,F,G,M



Size (Inch)	d	D3	D2	D1	L1	L2
0.500	12.7	23.80	13.4	25.40	23.80	7.9
0.625	15.8	26.97	16.6	31.75	23.80	10.3
0.750	19.0	30.15	19.7	34.93	23.80	10.3
0.875	22.2	33.32	22.9	38.10	23.80	10.3
1.000	25.4	36.50	26.1	41.28	25.40	11.1
1.125	28.5	39.67	29.3	44.45	25.40	11.1
1.250	31.7	42.85	32.4	47.63	25.40	11.1
1.375	34.9	49.20	35.6	50.80	34.93	11.1
1.500	38.1	49.20	38.8	53.98	28.58	11.1
1.625	41.2	57.15	42.4	60.33	29.36	12.7
1.750	44.4	58.72	45.5	63.50	34.93	12.7
1.875	47.6	63.50	48.7	66.68	34.93	12.7
2.000	50.8	66.68	51.9	69.85	34.93	12.7



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Type: Alfa Laval Pumps
Replacement: CHT-718
Temperature: $\leq 150^{\circ}\text{C}$

Pressure: 1.0Mpa
Speed: $\leq 10\text{r/min}$

Material: Q1,Q2,A,B,U1,U2,P,E,V,T,F,G,T2,M5

*Product description

This product is exclusive to the alfa laval centrifuge, model cht-718.

*Product features

Convenient installation, good sealing effect and long service life.

Good quality, high precision and stable quality.

Wear resistance, corrosion resistance, high temperature resistance.

*Product parameters

Temperature: 150°C

Wash:

Speed: 10 r/min

*Application industry: thermal power generation fine chemical water treatment.

*Working condition pump position: circulating pump desulphurization pump.



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AL-15.



Type: ALFA LAVAL Pump Seal

Replacement: Suit for ALFA LAVAL SR, LOBE Series
Rotary Lobe Pumps

Temperature: -20°C to +120°C

Pressure: ≤ 1.4 Mpa

Speed: ≤ 10 m/s

Material: A, Q2, U2, P, E, V, F, G



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AL-16.



Type: ALFA LAVAL Pump Seal
Replacement: Suit for ALFA LAVAL MOG,ALP Series
Rotary Lobe Pumps
Temperature: -20°C to +120°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: A,Q2,U2,P,E,V,F,G



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Type: Alfa Laval Pump Seal
Replacement: Lidering AL-F-55,AL-F-75
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

***Product features**

Single mechanical seal

Balanced

Wave springs seal

This seal has compact structure,good compatibility and easy installation.

***Product parameters**

Medium: boiler water

Temperature: -20 to 180°C Pressure:

1.2mpa

Rinse: External flushing circulation

Speed: 15 m/s

Diameter: 20,30,35,45,55,75mm

***Applicable industries:**

Food and beverage industry,Coal chemical industry, Salt making Chemical industry,Alumina industry.

Suitable pump:

Alfa Laval pump .



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AL-49



Type: Alfa Laval Pump Seal
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 2\text{Mpa}$
Speed: $\leq 300\text{r/min}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Double mechanical shaft seal for Alfa Laval rotary spray pump.

*Apply to the host

Alfa Laval Pump Company

*Product features

Duble mechanical shaft seal

*Product parameters

Temperature: -20 to 150°C

Pressure: 2.0Mpa

Rinse: External flushing circulation

Speed: 10 m/s

Diameter: mm

*Applicable industries:

Food and beverage industry, Coal chemical industry, Salt making Chemical industry, Alumina industry.

Suitable pump:

Alfa Laval rotary spray pump.



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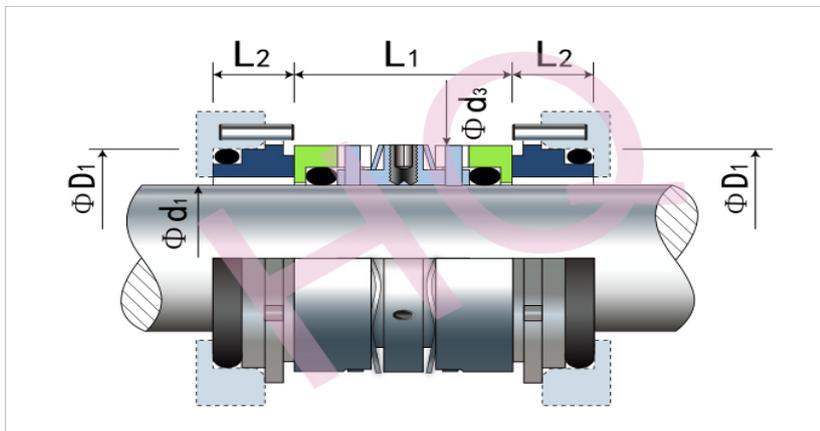


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AL-36(W03DU)



Type: Suit for Alfa Laval SRU,NMOG Pump
 Replacement: AES W03DU,CRANE 87(EI/EC)
 Temperature: -20°C to +200°C
 Pressure: ≤1.0Mpa
 Speed: ≤10m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa

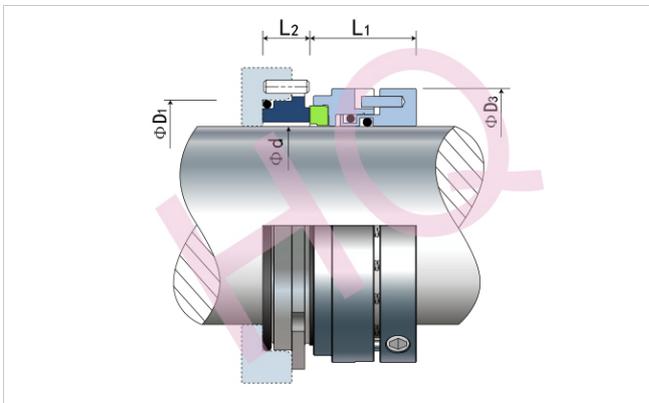


d (mm)	D1	D3	L1	L2
30	41.2	41.0	31.2	10.9
35	47.0	45.5	31.3	12.2
45	58.3	58.2	35.3	11.6
55	69.6	72.0	43.7	13.0
75	92.2	96.0	46.6	14.5
d (inch)	D1	D3	L1	L2
1.181	1.622	1.614	1.228	0.429
1.378	1.85	1.791	1.224	0.480
1.772	2.295	2.291	1.389	0.457
2.165	2.740	2.835	1.720	0.512
2.953	3.630	3.780	1.835	0.571

AL-41(W03SU)



Type: Suit Alfa Laval SRU,NMOG Pumps
 Replacement: AES W03SU
 Temperature: -40 to +250°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 18\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



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d (mm)	D1	D3	L1	L3
20	30.0	32.4	20.0	10.7
30	41.2	44.0	21.4	10.9
35	47.0	50.8	22.0	12.2
45	58.3	62.4	22.9	11.6
55	69.6	76.0	29.3	13.0
75	92.2	99.2	31.1	14.5

d (inch)	D1	D3	L1	L3
0.787	1.181	1.276	0.787	0.421
1.181	1.622	1.732	0.843	0.429
1.378	1.850	2.000	0.866	0.480
1.772	2.295	2.457	0.902	0.457
2.165	2.740	2.992	1.154	0.512
2.953	3.630	3.906	1.224	0.571



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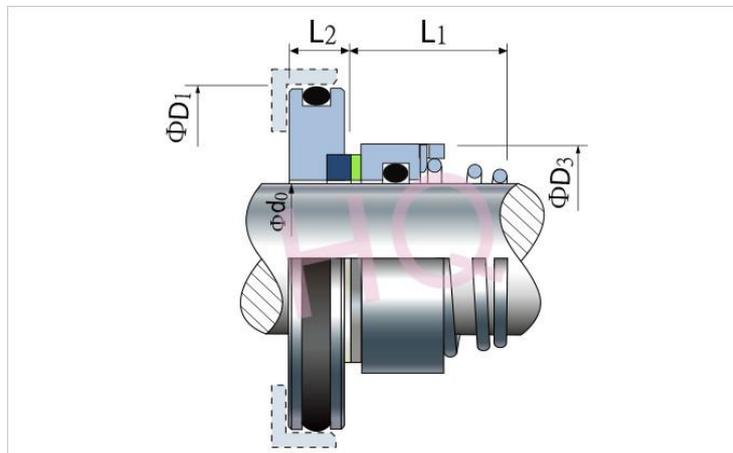


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AWL-01(8W)



Type: Allweiller SPF10 and SPF20 Pumps Seal
 Replacement: Vulcan 8W, AES T01A, Billi BB23,
 Burgmann Special
 Temperature: -20 to +150°C
 Pressure: $\leq 1.4\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B, Q2, U2, P, E, N, V, F, G, Alfa



d	D1	D3	L1	L2
15	38	24	15.0	8.0
20	45	31	19.5	8.5
0.591	1.496	0.945	0.591	0.315
0.787	1.772	1.220	0.768	0.335



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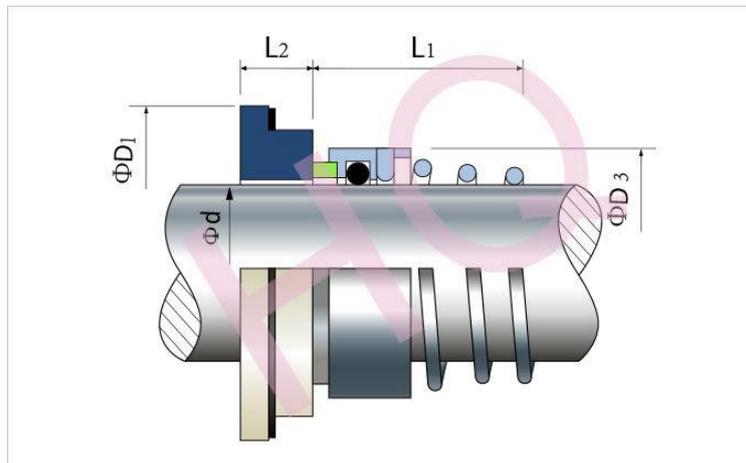


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AWL-02(8X)



Type: Allweiler SOB and SOH series Pumps Seal
 Replacement: Vulcan 8X
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
22	44	33	21.5	11.25



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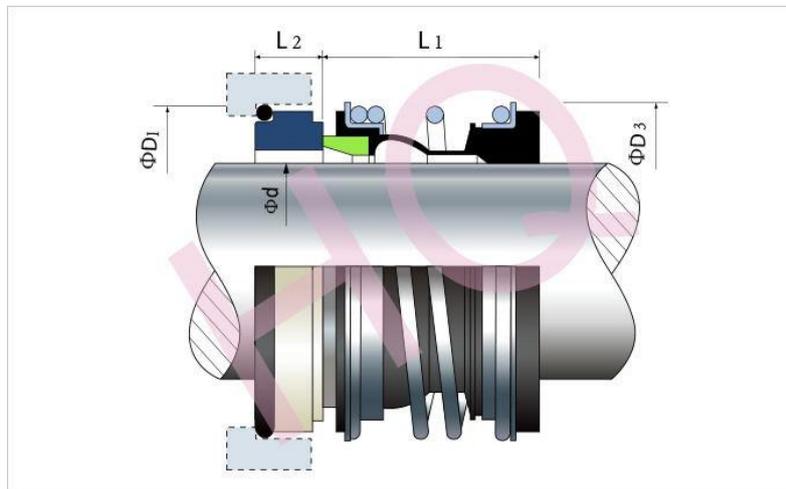


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AWL-03(198)



Type: Allweiler and Andritz "S" Series Centrifugal
 Pump Seals
 Replacement: Vulcan 198
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
38	56	57.3	36.0	9
48	66	69.0	36.0	9
53	73	76.0	36.5	11
65	85	90.0	41.5	11
90	115	126.0	51.0	14



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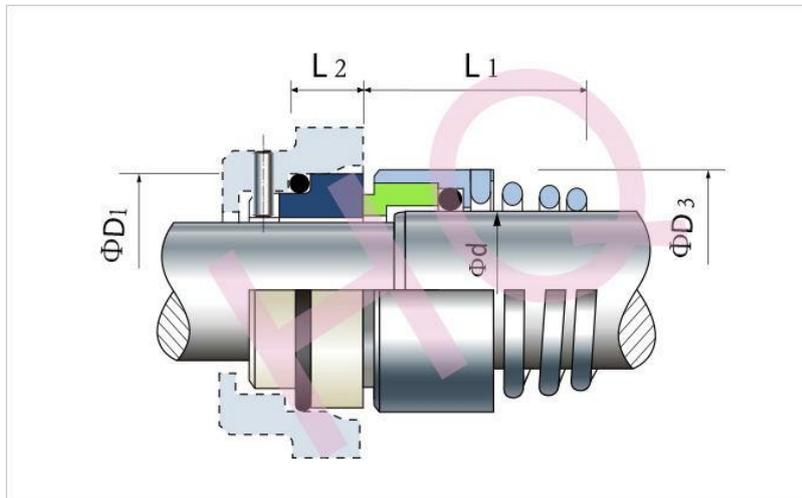


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AWL-04(82A)



Type: Allweiler L and LV series Pumps Seal
 Replacement: Vulcan 82A
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
28	43	46	39.5	8.5
30	45	49	39.5	9.0
45	63	66	55.0	9.0



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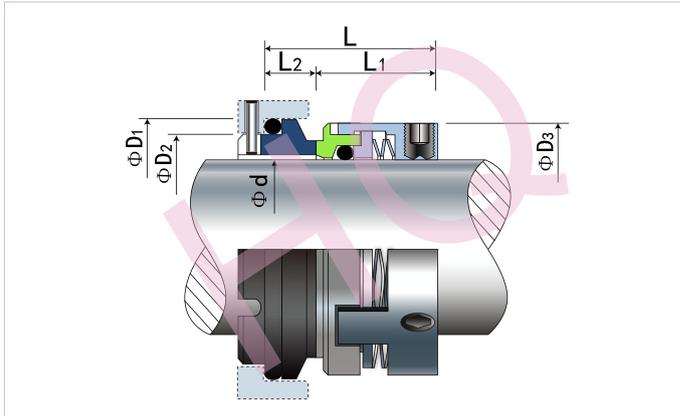


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AWL-05(1677M)



Type: Suit Allweiler Pumps
 Replacement: Vulcan 1677M
 Temperature: -40 to +200°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



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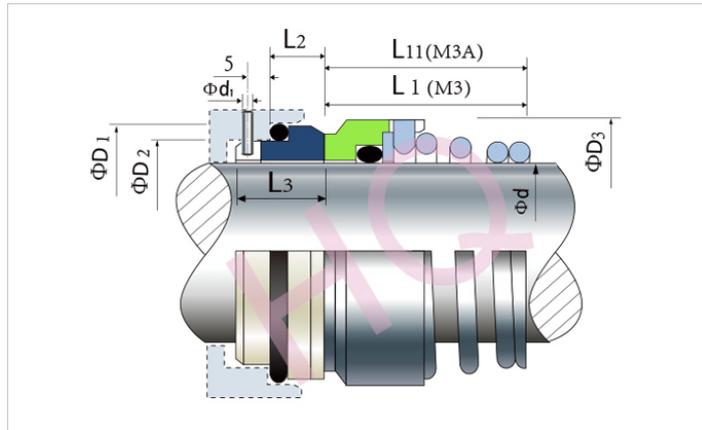
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d (mm)	D1	D2	D3	L	L1	L2
14	25	21	24	35.0	25.0	10.0
16	27	23	26	35.0	25.0	10.0
18	33	27	32	37.5	26.0	11.5
20	35	29	34	37.5	26.0	11.5
22	37	31	36	37.5	26.0	11.5
24	39	33	38	40.0	28.5	11.5
25	40	34	39	40.0	28.5	11.5
28	43	37	42	42.5	31.0	11.5
30	45	39	44	42.5	31.0	11.5
32	48	42	46	42.5	31.0	11.5
33	48	42	47	42.5	31.0	11.5
35	50	44	49	42.5	31.0	11.5
38	56	49	54	45.0	31.0	14.0
40	58	51	56	45.0	31.0	14.0
43	61	54	59	45.0	31.0	14.0
45	63	56	61	45.0	31.0	14.0
48	66	59	64	45.0	31.0	14.0
50	70	62	66	47.5	32.5	15.0
53	73	65	69	47.5	32.5	15.0
55	75	67	71	47.5	32.5	15.0
58	78	70	78	52.5	37.5	15.0
60	80	72	80	52.5	37.5	15.0
63	83	75	83	52.5	37.5	15.0
65	85	77	85	52.5	37.5	15.0
68	90	81	88	52.5	34.5	18.0
70	92	83	90	60.0	42.0	18.0
75	97	88	99	60.0	42.0	18.0
80	105	95	104	60.0	41.8	18.2
85	110	100	109	60.0	41.8	18.2
90	115	105	114	65.0	46.8	18.2
95	120	110	119	65.0	47.8	17.2
100	125	115	124	65.0	47.8	17.2

HQM3N



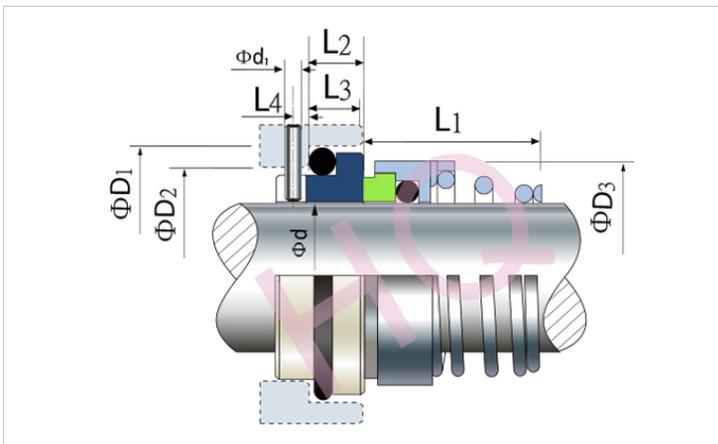
Type: O-Ring Mechanical Seal
 Replacement: Burgmann M3N
 Temperature: -20°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 1\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: S, A, B.



HQM32N



Type: O-Ring Mechanical Seal
 Replacement: Burgmann M32N/M377GN, Vulcan 8.DIN, AES T01D, Flowserve38D
 Temperature: -20°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 1\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: A, B, Q1, Q2, S

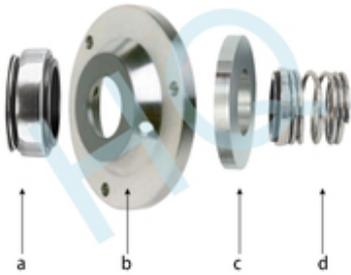


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APV-01A(P06)



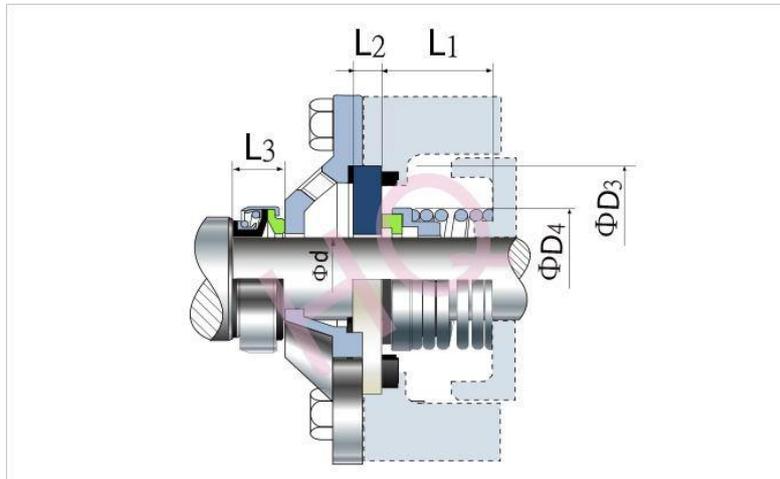
Type: Suit for APV PUMA Pumps
 Replacement: AES P06, Vulcan 26, Crane ROSR,
 Roten 37,Flowerve APU

Temperature: -20°C to +140°C

Pressure: ≤ 3.0 Mpa

Speed: ≤ 5 m/s

Material: B,F,G,Q2,V,F,P



d (inch)	d (mm)	D3	D4	L1	L2	L3
1.000	25.4	68.2	41.2	25.4	7.8	14
1.500	38.1	80.1	55.7	33.3	9.0	17

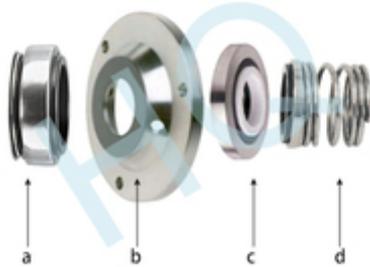


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APV-01B(P06)

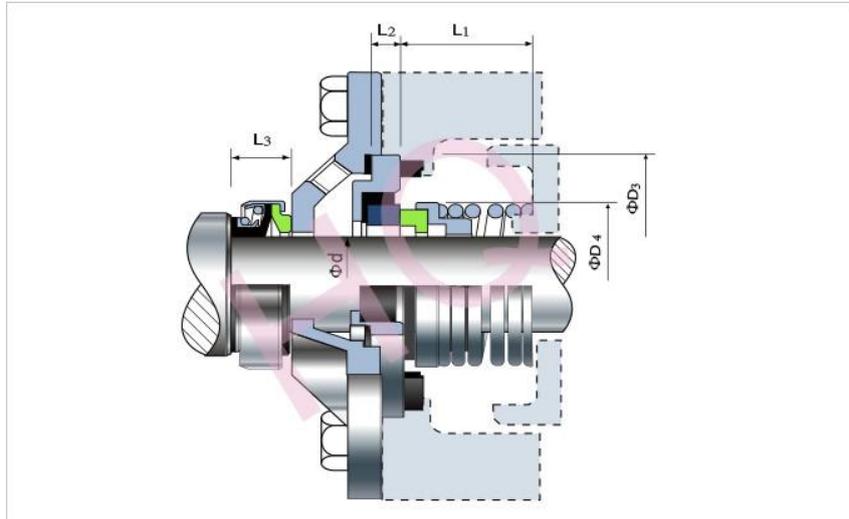


Type: Suit for APV PUMA Pumps
 Replacement: AES BP06, Vulcan 26
 Temperature: -20°C to +140°C

Pressure: ≤ 3.5 Mpa

Speed: ≤ 5 m/s

Material: B, F, G, Q2, V, F, P



d (inch)	d (mm)	D3	D4	L1	L2	L3
1.000	25.4	68.2	41.2	25.4	7.8	14
1.500	38.1	80.1	55.7	33.3	9.0	17

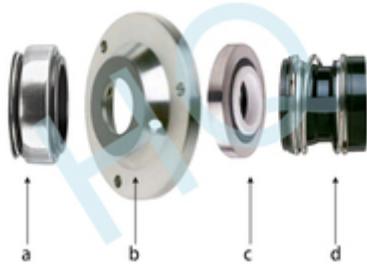


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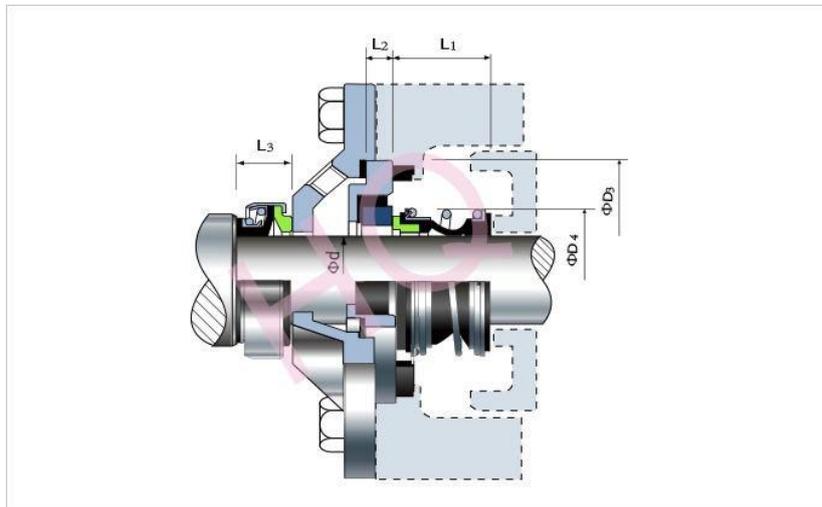


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APV-02A(BP06)



Type: Suit for APV PUMA Pumps
 Replacement: AES BP06, Vulcan 26
 Temperature: -20°C to +140°C
 Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,F,G,Q2,V,F,P



d (inch)	d(mm)	D3	D4	L1	L2	L3
1.000	25.4	68.2	41.2	25.4	7.8	14
1.500	38.1	80.1	55.7	33.3	9.0	17

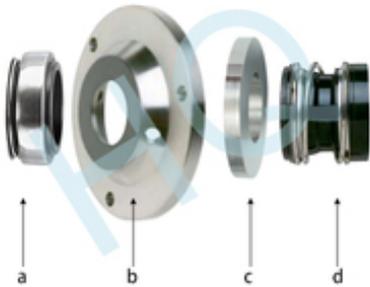


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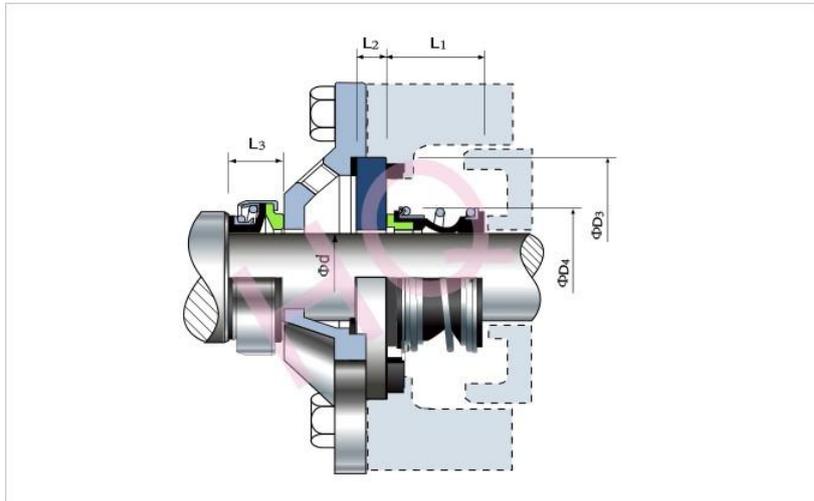


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APV-02B(BP06)



Type: Suit for APV PUMA Pumps
 Replacement: AES BP06,Vulcan 26
 Temperature: -20°C to +140°C
 Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 5\text{m/s}$
 Material: B,F,G,Q2,V,F,P



d (inch)	d (mm)	D3	D4	L1	L2	L3
1.000	25.4	68.2	41.2	25.4	7.8	14
1.500	38.1	80.1	55.7	33.3	9.0	17



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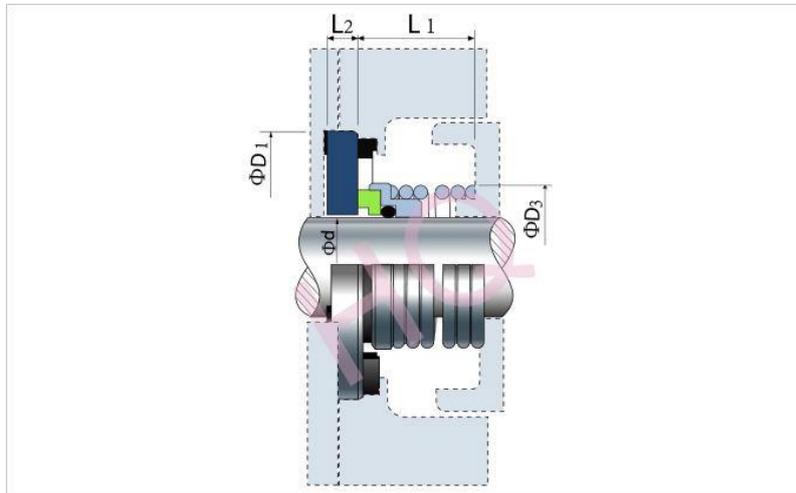
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APV-01C(522)



Type: Suit for APV PUMA Pumps
 Replacement: Vulcan 26
 Temperature: -20°C to +140°C

Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 5\text{m/s}$
 Material: B,F,G,Q2,V,F,P



d	D1	D3	L1	L2
25.4	68.2	41.2	25.4	7.8
38.1	80.1	55.7	33.3	9.0
1.000	2.685	1.622	1.000	0.307
1.500	3.154	2.193	1.310	0.354

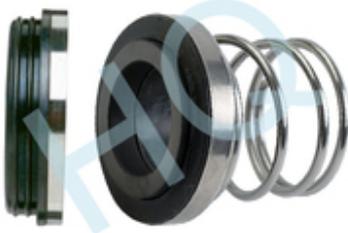


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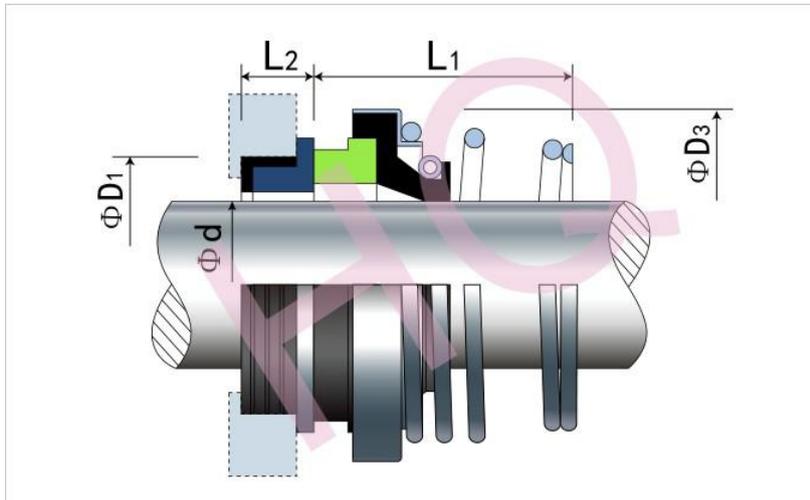


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APV-04(TOR)



Type: Suit for APV ZMA,ZMB,ZMD,ZMH,ZMK
and ZMS Pumps
Replacement: AES TOR,Vulcan 29,Roten L/P/3P
Temperature: -40°C to +180°C
Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: Q2,F,B,P,E,V,G



d (mm)	D1	D3	L1	L2	O.E.M Pump Model
20	30	40.6	30	9.8	ZMA,ZMB,ZMH1&2,ZMK1&2
25	35	45.4	31	9.8	ZMS3,ZMS4
30	42	57.0	40	13.0	ZMH4, ZMK3, ZMD



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APV-06(TOW)

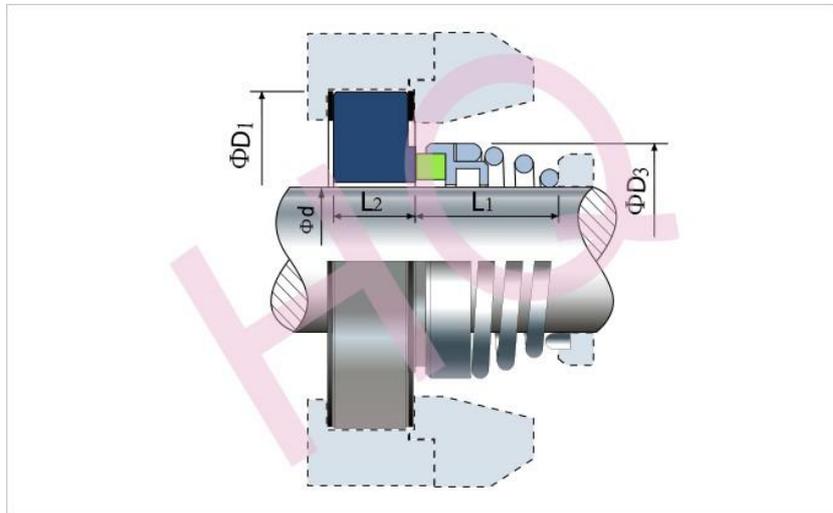


Type : Suit for APV W Pumps, single seal
 Replacement : AES TOW,Vulcan 16,Flowerve AWS
 Temperature : -40°C to +180°C

Pressure : $\leq 0.8\text{Mpa}$

Speed : $\leq 15\text{m/s}$

Material : Q2,F,B,P,E,V,G



d (mm)	D1	D3	L1	L2
25	52.0	38.2	16	25.4
35	62.5	49.5	16	33.3



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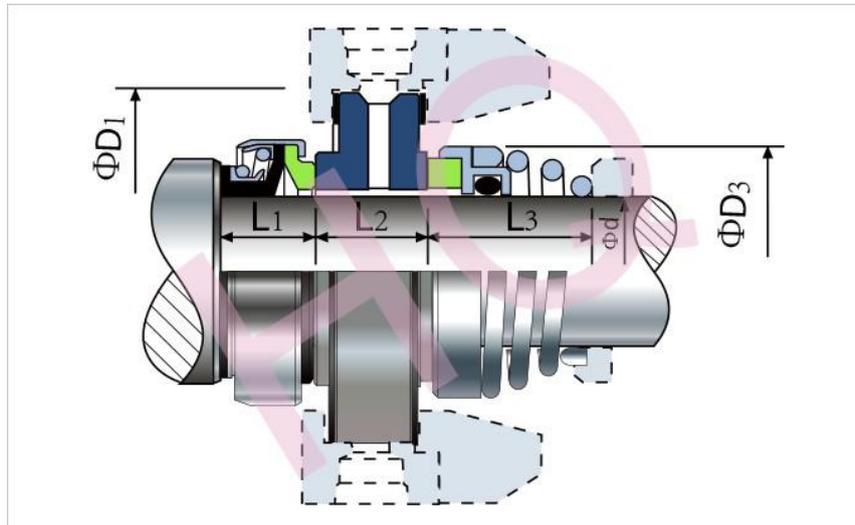


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APV-07(TOWD)



Type: Suit for APV W Pumps, Double Seal
 Replacement: AES TOWD, Vulcan 16. DOUB, Flowerve AWD
 Temperature: -40°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 0.8\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: Q2, F, B, P, E, V, G



d (mm)	D1	D3	L1	L2
25	52.0	38.2	16	25.4
35	62.5	49.5	16	33.3



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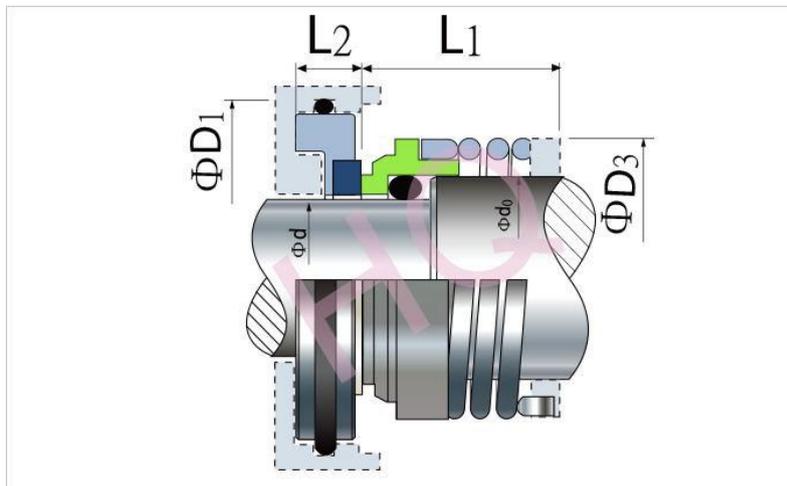


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APV-08(TOWS)



Type: Suit for APV Sim 20/30-220 Pumps
Replacement: AES TOWS
Temperature: -20°C to $+140^{\circ}\text{C}$
Pressure: $\leq 3.0\text{Mpa}$
Speed: $\leq 5\text{m/s}$
Material: Q2,F,B,P,E,V,G



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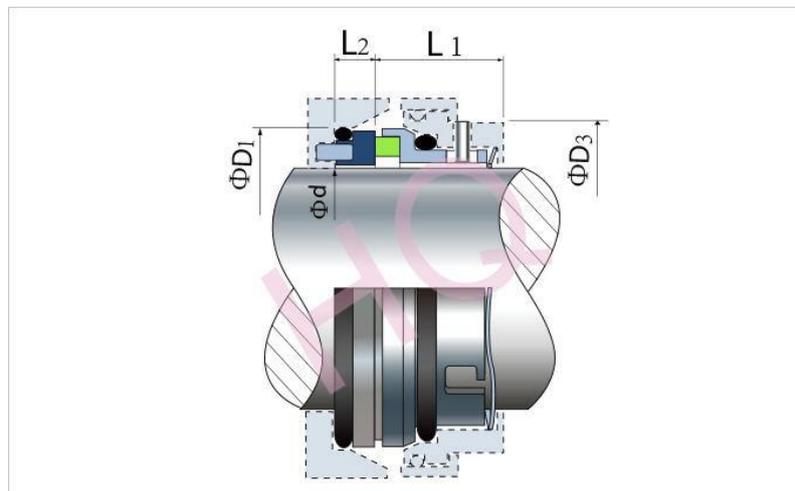
APV-09(W08)



Type: Suit for APV ZMS-5/6 Pumps
Replacement: AES W08
Temperature: 0°C to +100°C

Pressure: $\leq 3.0\text{Mpa}$
Speed: $\leq 10\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d=48mm,54mm

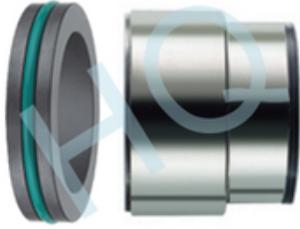


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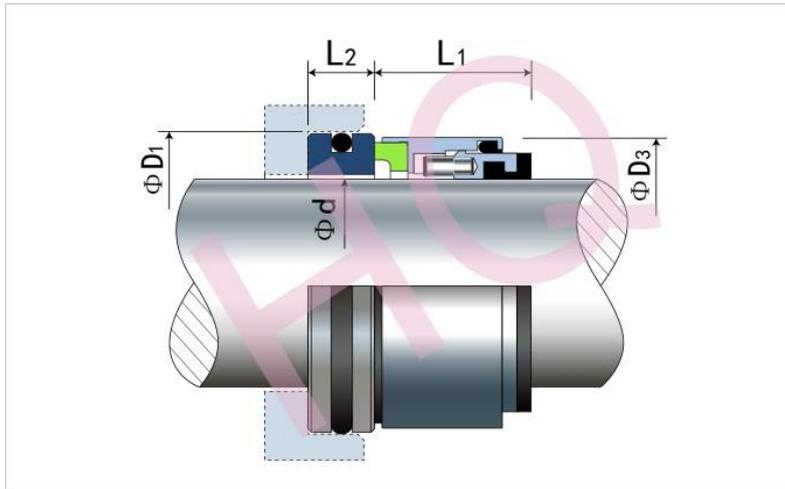


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APV-10(MOHCH)



Type: Suit for APV RCN Pump
 Replacement: AES MOHCH
 Temperature: -40°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: Q2,V2,F,G,TEFLON



d (mm)	D1	D3	L1	L2
25	40.5	39.0	27	9.5
30	50.8	44.0	27	11.5
35	53.9	49.0	35	11.5
40	60.3	55.9	35	11.5
60	79.3	85.0	42	15.0

d (inch)	D1	D3	L1	L2
0.984	1.594	1.535	1.063	0.374
1.181	2.000	1.732	1.063	0.453
1.378	2.122	1.929	1.378	0.453
1.575	2.375	2.201	1.375	0.453
2.362	3.122	3.346	1.654	0.591



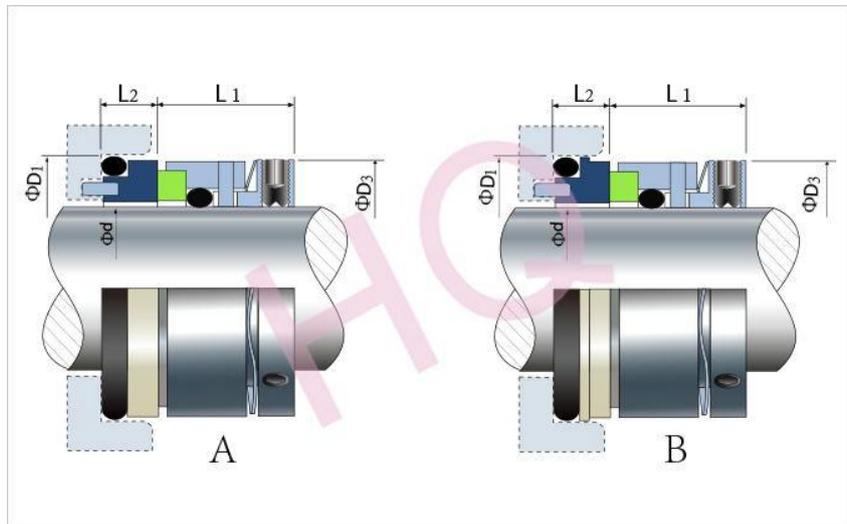
APV-11(W09-CL)



Type: Suit for APV HOWARD CL Pumps
 Replacement: AES W09-CL
 Temperature: 0°C to +100°C

Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 10\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,



Type	d	D1	D3	L1	L2
A	28.6	41.2	40.2	20.6	7.0
A	53.9	73.0	70.5	24.6	7.2
B	47.6	63.5	60.4	21.4	9.3



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APV-12(W010)



Type: Wave Spring Mechanical Seal.Suit for A.P.V.

Clean Line(Howard
CLO,CL1,CL2,CL3,MC1,MC2,MC3)
Pumps

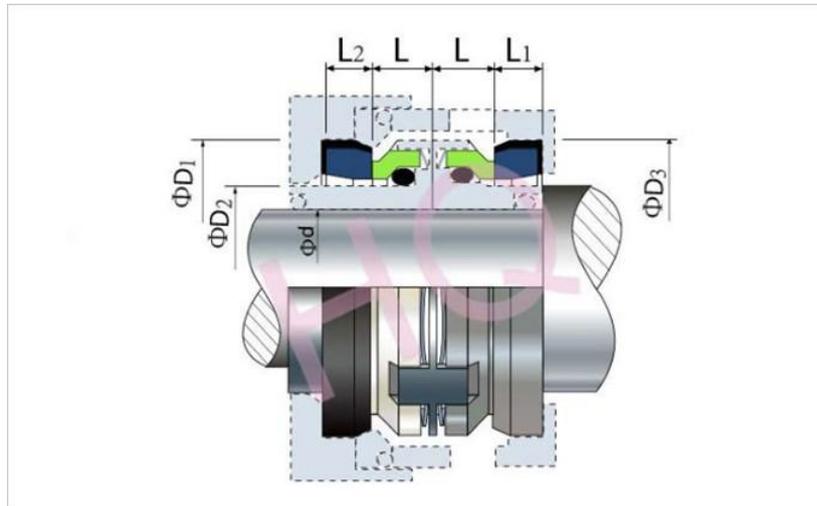
Replacement: AES W010

Temperature: 0 to +150°C

Pressure: ≤ 2.5 Mpa

Speed: ≤ 10 m/s

Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (inch)	d (mm)	D1	D3	L	L1/L2
1.125	28.6	42	41.20	7.7	7.7
1.875	47.6	66	63.50	8.3	9.0
2.125	53.9	74	73.03	9.3	12.3



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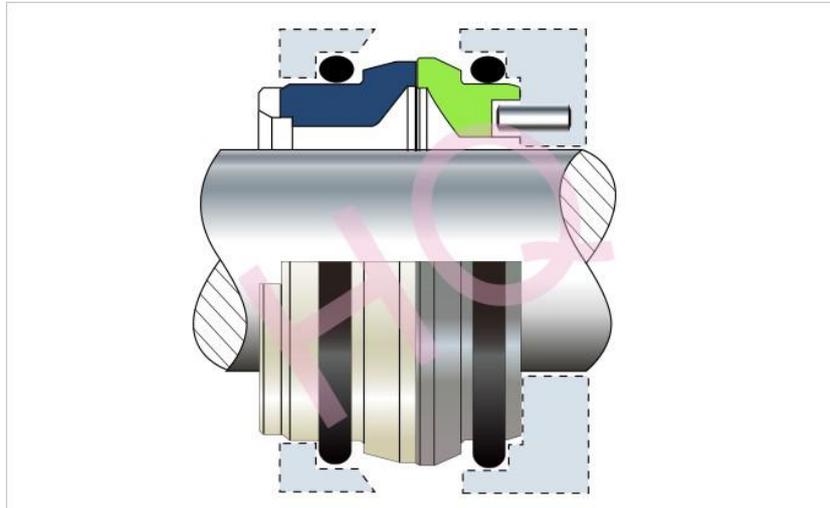


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APV-13(TOWP)



Type: Suit for APV W Plus Pumps
 Replacement: AES TOWP, Vulcan 16.PLUS, Flowserve AWP
 Temperature: 0°C to +100°C
 Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B, Q2, V, P, E



d (mm)	D8	L1	L2
25	84	11.5	17.5
35	88	11.5	17.5



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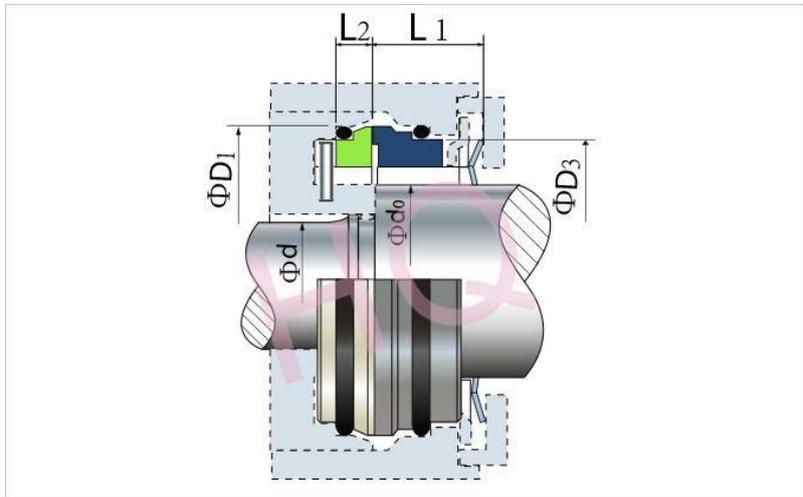


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APV-14(TOWDW)



Type: Suit for APV DW Lobe Rotor Pumps
 Replacement: AES TOWDW, Vulcan 297
 Temperature: -40°C to +180°C
 Pressure: $\leq 0.8\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,Q2,V,P,E



d (mm)	D1	D3	L1	L2	O.E.M(Model)
28	40	32	8.5	13.5	DW1
38	50	41	8.5	13.5	DW2
48	59	50	9.0	14.5	DW3
58	68	59	9.0	14.5	DW4



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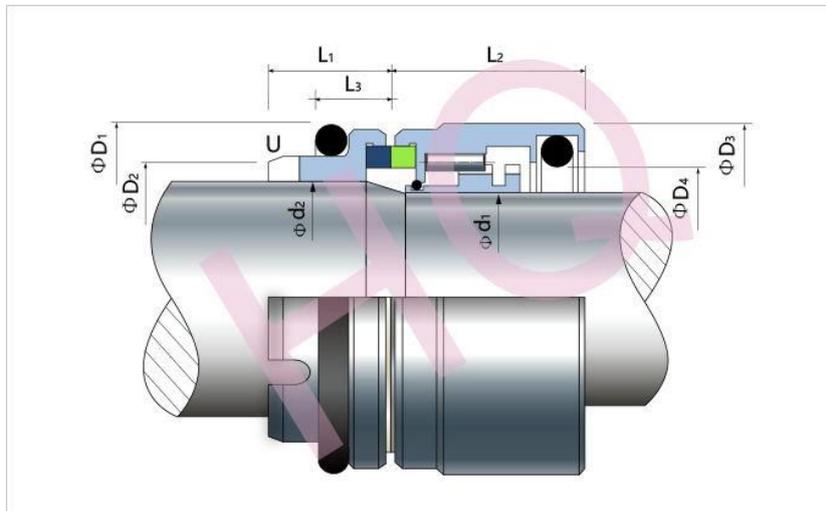


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APV-17(M010S5)



Type: Suit for APV-W140/50 Pumps
 Replacement: AES M010S5
 Temperature: -20°C to +140°C
 Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 5\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
35	56	57.5	12.3	31.5
d (inch)	D1	D3	L1	L2
1.378	2.205	2.264	0.484	1.240



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APV-05(HTOCU)



Type: Suit for APV Osborne Craig(Hayward Tyler)

Side Entry Mixer MkIII Pumps

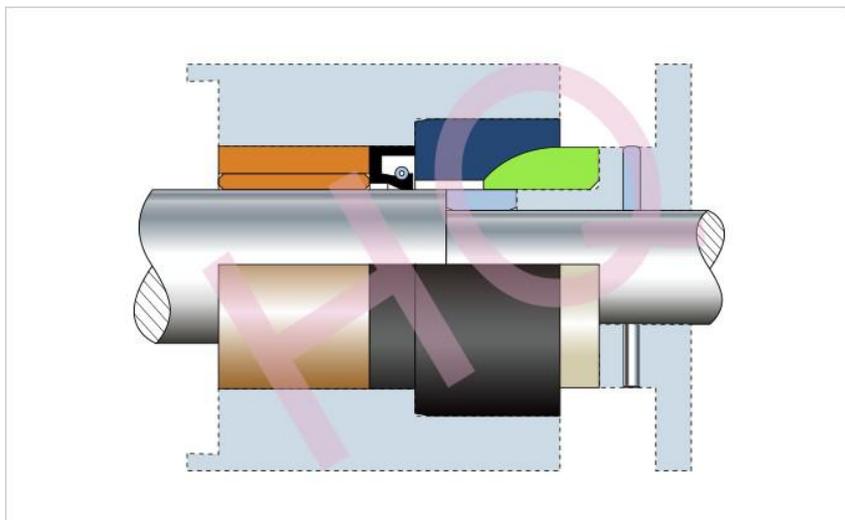
Replacement: AES HTOCU

Temperature: -20°C to $+180^{\circ}\text{C}$

Pressure: $\leq 0.8\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A,X



d=28.6mm,1.125"

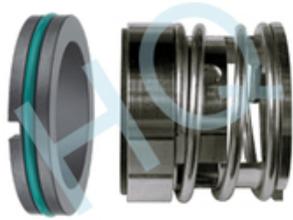


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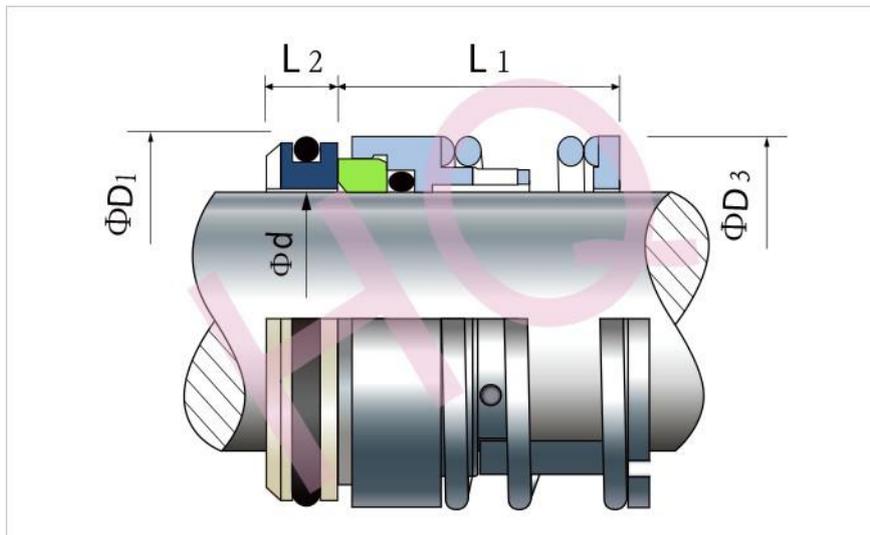


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APV-16(962)



Type: Suit for Wild Indag Mixer Pumps
 Replacement: Vulcan 962
 Temperature: -45°C to +150°C
 Pressure: ≤ 5.0 Mpa
 Speed: ≤ 5 m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (inch)	D1	D3	L1	L2
1.187	41.20	39	25.4	11.3
1.500	49.21	49	36.5	8.0
1.875	60.3	60	38.1	7.7



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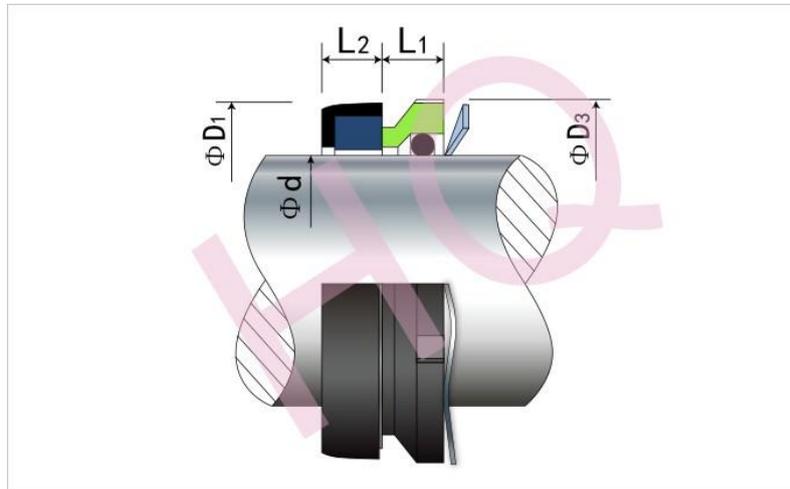
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APV-20(294)



Type: Suit for APV Clean line Pumps
 Replacement: Vulcan 294
 Temperature: 0°C to +100°C

Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: Q2,F,B,P,E,V,G



d (inch)	D1	D3	L1	L2	O.E.M Pump Model
1.125	42	42	7.7	7.7	CL 0,CL 2
1.875	64	66	9.0	8.3	CL 2
2.125	73	74	12.3	9.3	CL 3



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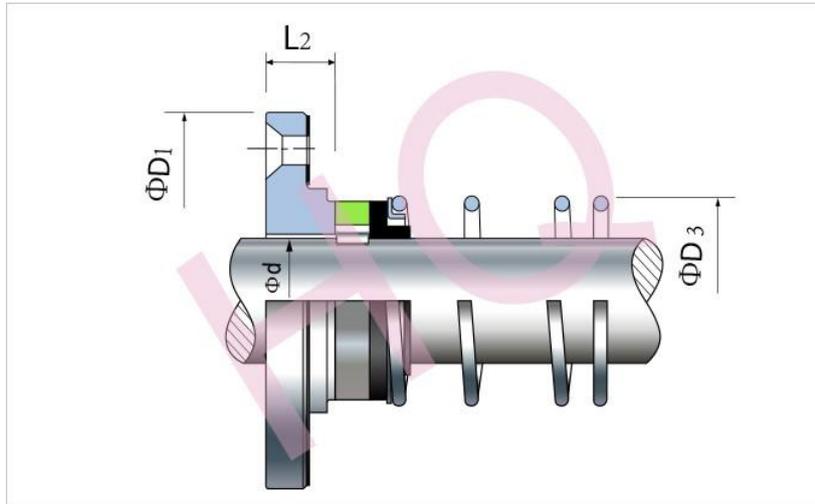


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APV-21(272)



Type: Suit for APV Former D.D.M.M
 Kolding and Pasilic Centrifugal Pumps
 Replacement: Vulcan 272
 Temperature: -45°C to +150°C
 Pressure: $\leq 5.0\text{Mpa}$
 Speed: $\leq 5\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L2
20.00	35.00	75.00	14.00
25.00	40.00	75.00	14.00



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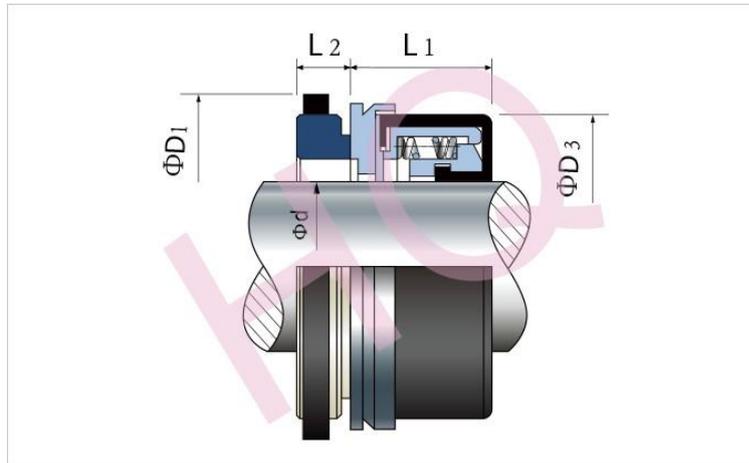


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APV-22(1644)



Type: Suit for Common Positive Displacement Pumps
 Replacement: Vulcan 1644
 Temperature: -45°C to +150°C
 Pressure: $\leq 8.0\text{Mpa}$
 Speed: $\leq 18\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (inch)	d	D1	D3	L1	L2
1.500	38.10	65.00	75.70	33.33	14.00



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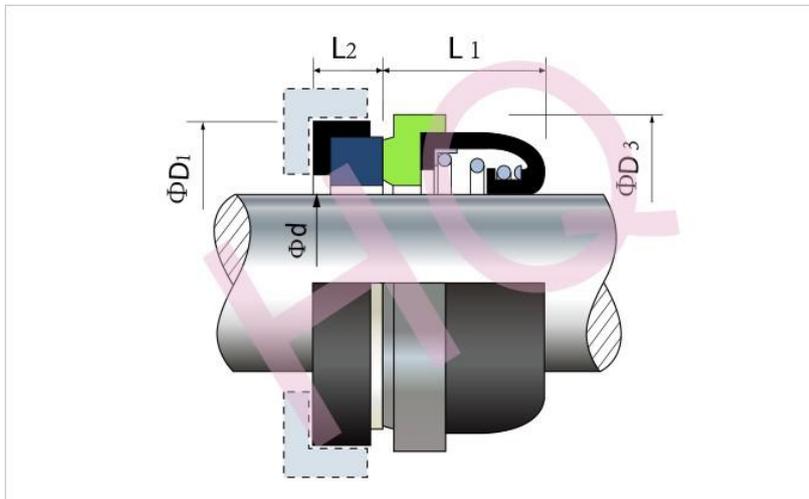
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APV-23(66)



Type: Suit for A.P.V.Agitators
 Replacement: Vulcan 66
 Temperature: -20°C to $+140^{\circ}\text{C}$

Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 2\text{m/s}$
 Material: V,A,P,E,V



d (inch)	d	D1	D3	L1	L2
1.000	25.40	47.63	48.50	15.85	11.99



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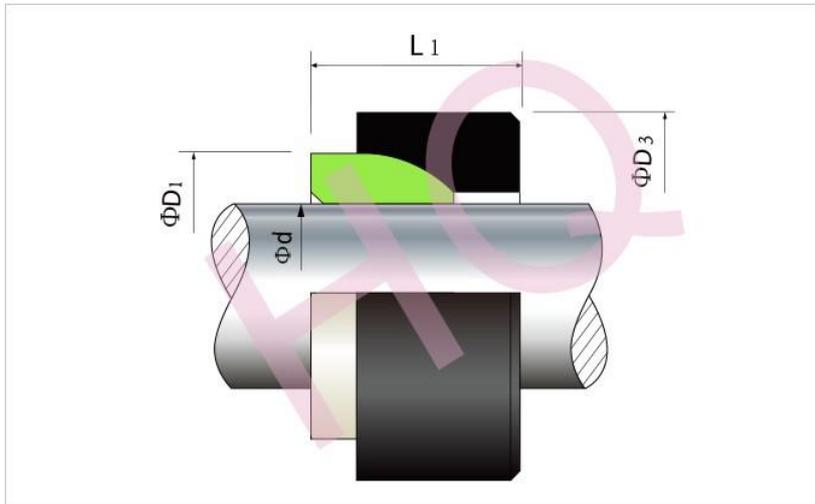
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APV-24(292)



Type: Suit for APV Osborne Craig Agitators
 Replacement: Vulcan 292
 Temperature: -20°C to +140°C
 Pressure: $\leq 3.0\text{Mpa}$
 Speed: $\leq 2\text{m/s}$
 Material: A,T



d (inch)	d	D1	D3	L1
1.125	28.60	57.00	44.40	32.50



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APV-25(1655)



Type: Suit for A.P.V.Howard CL Pumps
 Replacement: Vulcan 1655
 Temperature: -45°C to +150°C
 Pressure: ≤8.0Mpa
 Speed: ≤2m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G

d (mm)	Size code	Seal OD	Seat OD	Working Length
30.16	0300	40.75	42.7	10.0
34.90	0349	46.75	47.6	15.8
50.80	0508	65.40	66.6	11.5
76.20	0762	98.60	101.6	11.5
d (mm)	Size code	Seal OD	Seat OD	Working Length
1.188	0300	1.604	1.681	0.394
1.375	0349	1.841	1.874	0.622
2.000	0508	2.575	2.622	0.453
3.000	0762	3.882	4.000	0.453



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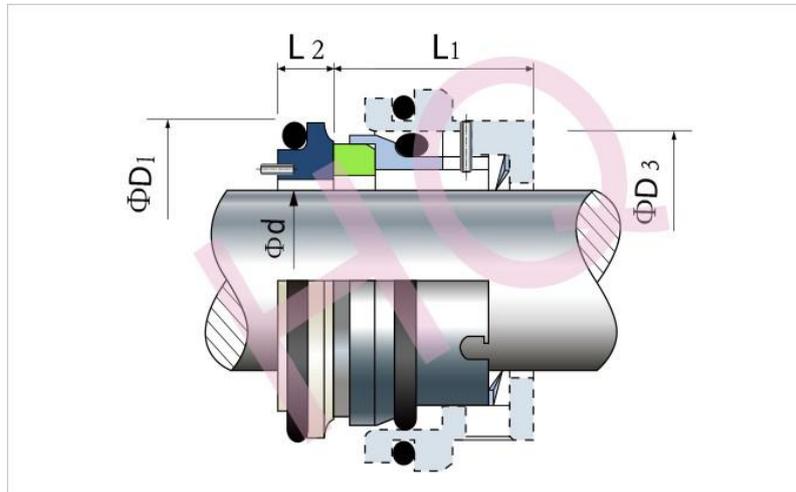


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APV-26(295)



Type: Suit for A.P.V. Pasilac Rosista
 ZM-series Pumps
 Replacement: Vulcan 295
 Temperature: -45°C to +150°C
 Pressure: ≤5.0Mpa
 Speed: ≤5m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (inch)	D1	D3	L1	L2	O.E.M Pump Model
1.875	63.5	63.5	23.0	7.9	ZMS 5
2.125	73.0	73.0	26.4	7.9	ZMS 6



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APV-18(HCH)



Type: Suit for APV PUMA Pumps
Replacement: Lidering AP-HCH-60
Temperature: -20°C to +200°C
Pressure: $\leq 5.0\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G

Multi spring Seal.

Suit for A.P.V. PUMA Pump.

d=60mm.



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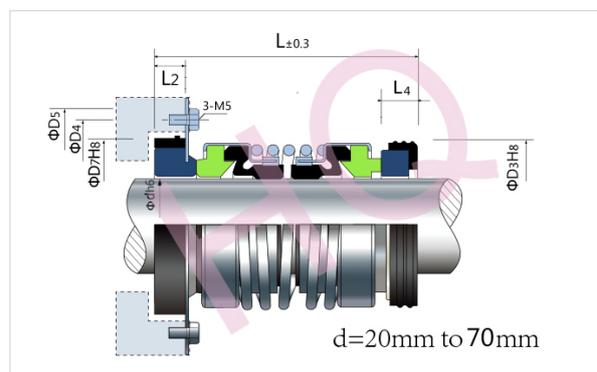
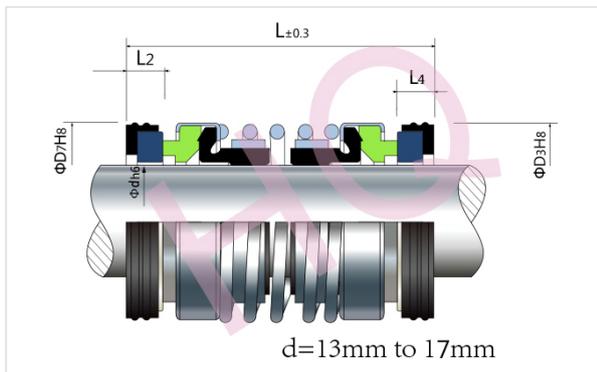


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TS-02



Type: Suit for TSURUMI Pumps
 Replacement: Burgmann ED560, Vulcan 260B, Lidering TS-W/H
 Temperature: -40°C to +150°C
 Pressure: ≤0.8Mpa
 Speed: ≤10m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



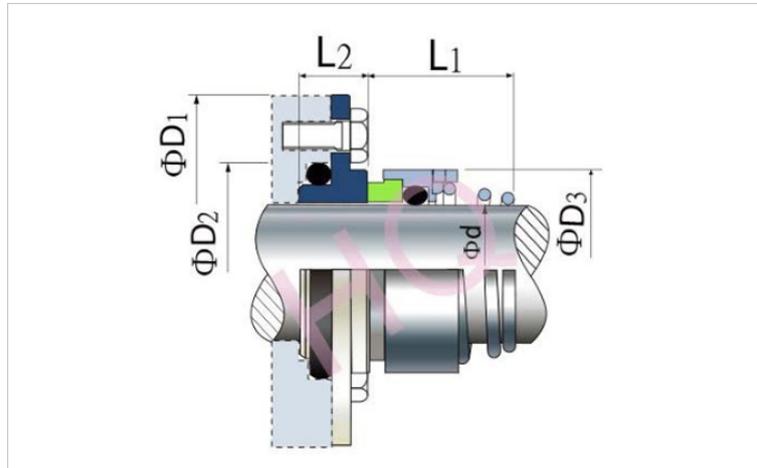
d (mm)	D3	D4	D5	D7	L	L2	L4
13	25	/	/	25	36	5.0	5.0
14	30	/	/	30	36	5.0	5.0
15	30	/	/	30	34/36	4/5.0	4/5.0
16	30	/	/	30	34/36	4/5.0	4/5.0
17	33	/	/	33	36	5.0	5.0
20	38	(50)/60	(62)/72	(38)/44	50	7.5	7.5
25	44	60	72	50	51	8.0	7.5
30	44/50	(60)/70	(72)/80	(50)/57	59	9.0	8.5
35	58	(70)/80	(82)/92	(58)/64	61	9.0	10.0
40	64	85	100	70	65	11.0	10.0
45	66	85	100	70	65	10.0	9.0
50	72	95	109	80	69	10.0	10.0
60	80	105	120	95	85	13.0	14.0
70	95	120	135	105	85	13.0	14.0



OP-17



Type: Suit Anema ZA Pumps
 Replacement: AES T01X, Vulcan 8Y
 Temperature: -20 to +150°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B, Q2, U2, P, E, N, V, F, G, Alfa



d (mm)	D1	D2	D3	L1	L2
30	77.5	38.7	43	24.5	15
35	77.5	45.8	49	28.0	15

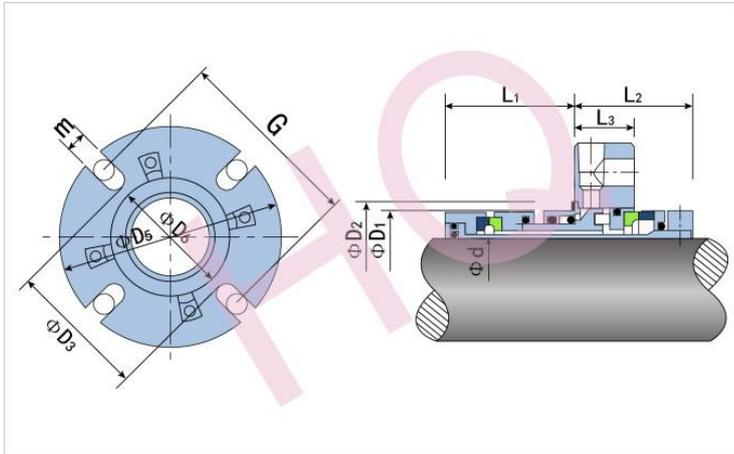


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HQCS-J31(SB2)



Type: Double Cartridge Seal
 Replacement: Crane SB2
 Temperature: -40 to +220°C
 Pressure: ≤ 2.5 Mpa
 Speed: ≤ 20 m/s
 Material: Q1, Q2, V, K, E, P, G, M5, M6, T4

d (mm)	D1	D2	D3	D5	D6	G	L2	L1	L3	m
35	58	79	68	130	62	91	49	57	20	13
38	62	86	72	130	66	98	52	59	23	13
40	62	86	72	130	66	98	52	59	23	13
43	67	89	77	130-150	70	101	52	59	23	13
45	69	93	79	130-150	75	105	52	59	23	13
48	72	93	82	140-150	75	105	53	60	23	13
50	74	99	84	140-170	77	111/115	53	60	23	13/17
53	76	99	86	140-170	80	111	53	60	24	13
55	79	99	89	150-170	82	111/115	53	64	24	13/17
58	83	99	93	150	84	111	53	64	24	13
60	85	111	95	150	87	123/127	53	64	24	13/17
63	90	111	99	160	90	127	60	72	25	17
65	93	111	102	160-170	92	127	60	72	25	17
68	95	111	104	170	95	127	60	72	25	17
70	95	139	105	170-220	98	155	60	72	25	17
80	109	139	118	200-220	111	155	65	74	29	17
85	114	149	123	200-220	111	165	70	78	30	17
90	119	149	128	200-220	120	165	70	78	30	17
95	125	149	134	200	125	165	70	76	30	17
100	129	159	138	220	130	175	76	76	34	17
105	135	169	144	220	134	175	76	76	34	17
110	140	169	149	230	139	175	76	76	34	17
115	150	179	160	230	150	185	76	76	34	17
120	157	188	170	145	158	194	76	76	34	17
125	160	189	175	270	170	194	76	76	34	17
130	166	194	180	280	174	210	86	84	36	17
135	172	199	185	280	179	215	86	84	36	17
140	178	206	192	280	187	222	86	84	36	17

HQCS-J46(JCS1)



Type: Single Cartridge Seal
Replacement: Crane JCS1
Temperature: -40 to +180°C
Pressure: $\leq 1.4\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: Q1,Q2,U2,T,V,M1,F,G,M

The JCS1 is originally designed for Sulzer AHLSTARUP pumps and later expanded to cover Andritz process pumps and other equipment.



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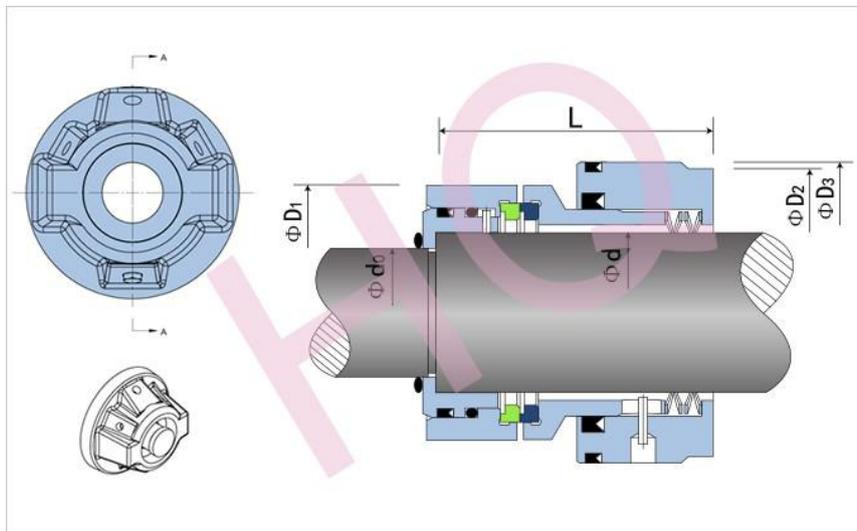
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HQCS-J47(JCS1A)



Type: Single Cartridge Seal
Replacement: Crane JCS1A
Temperature: -40 to +180°C
Pressure: $\leq 5.0\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: Q1,Q2,U2,T,V,M1,F,G,M



JCS1A - Single application specific seal for Sulzer liquid ring pumps
and Andritz ACP pumps



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HQCS-J48(JCS1F)



Type: Single Cartridge Seal
Replacement: Crane JCS1F
Temperature: -40 to +180°C
Pressure: ≤ 2.5 Mpa
Speed: ≤ 10 m/s
Material: Q1, Q2, U2, T, V, M1, F, G, M

CS1F - Single application-specific seal with flush into the medium



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HQCS-J49(JCS2)



Type: Double Cartridge Seal,
Suit for Sulzer Process Pumps

Replacement: Crane JCS2

Temperature: -40 to +180°C

Pressure: ≤ 15 Mpa

Speed: ≤ 15 m/s

Material: Q1, Q2, U2, T, V, M1, F, G, M

Features:

1. The seal is fully integrated into the pump.
2. No measurements required for installation, reducing risk for error.
3. Shaft misalignment does not pulsate the spring or wear out the O-ring.
4. Torque transmission with super elastic devices, combined with no drive pins at seals faces. This eliminates possible start-up failures.
5. Seal utilizes the integrated and advanced SmartFlow seal water control technology, reducing more than 90% seal water savings usage.

Parameters:

Temperature: 120/350C

Pressure Limits:

Process pressure: 350 psi(g)/25 bar(g)

Seal water pressure: 215 psi(g)/15 bar(g)

Speed Limits:

65fps/20m/s

Standard Materials

Seal faces: SiC/SiC or SiC/SiC

O-rings: PTFE (product side), EPDM, Viton

Metal parts: EN 1.4436/1.4460 (AISI 316/329)

Springs: EN 1.4436 (AISI 316)



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HQCS-J51(SAF)



Type: Double Cartridge Seal,Suit Sulzer,
Andritz Process Pumps
Replacement: Crane SAF
Temperature: -40 to +180°C
Pressure: ≤ 2.5 Mpa
Speed: ≤ 10 m/s
Material: Q1,Q2,U2,T,V,M1,F,G,M

* Product description:

This series mechanical seal is my company in the late 1990 s for mud pump design of a container type mechanical seal, mechanical seal for module focuses on medium containing solid particles, change of the mechanical seal material can also be used for metallurgy, mining, chemical and other industries of high solid content condition.

* Apply to the host:

Andritz pressure screden mechanical seal.

* Product features

Dual face structure, no leakage.

The particle medium has little effect on spring performance.

High temperature resistance, corrosion resistance and wear resistance.

* Product parameters

Temperature: ≤ 150 °C

Pressure: ≤ 0.8 Mpa

Wash:

Speed: ≤ 10 r/min

Specification: 40mm, 50mm, 60mm, 70mm, 90mm.



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HQMA-05(AEB-60WS)



Type: Water-free Mechanical Seal with Bearing
Replacement: Suit for Sulzer,KSB,Andritz Pumps
Temperature: $\leq 150^{\circ}\text{C}$

Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 1800\text{rpm}$
Material: Q1,Q2,U2,T,V,M1,F,G,M

*Product description:

Single cartridge mechanical seal for replacemente Lightnin blender application.The product is based on the original AEB-60 model has been improved on, it will play the role of a stable positioning of the bearing portion and the sealing .

*Apply to the host

ITT
Sulzer
KSB
FLOWSERVE
Andritz
DuCHTING (Germany) pump company



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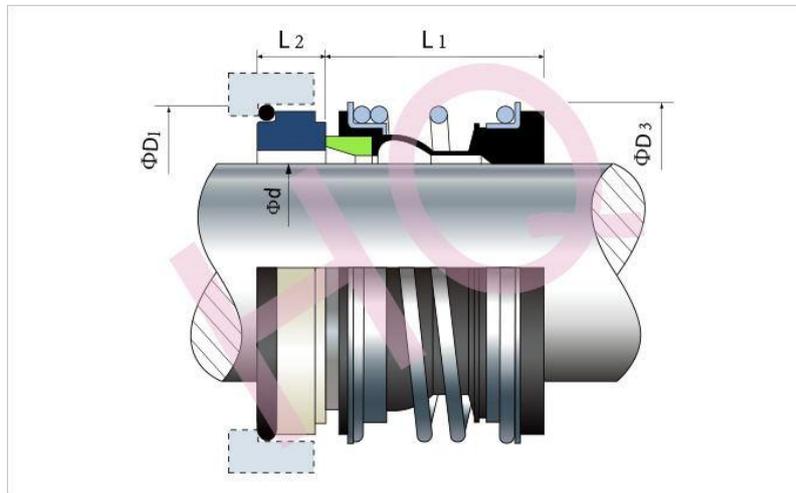


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AWL-03(198)



Type: Allweiler and Andritz "S" Series
Centrifugal Pump Seals
Replacement: Vulcan198
Temperature: -20°C to +120°C
Pressure: $\leq 1.0\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
38	56	57.3	36.0	9
48	66	69.0	36.0	9
53	73	76.0	36.5	11
65	85	90.0	41.5	11
90	115	126.0	51.0	14

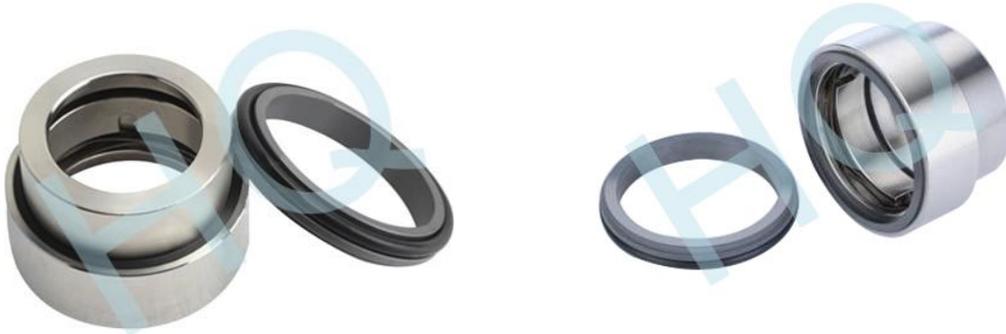


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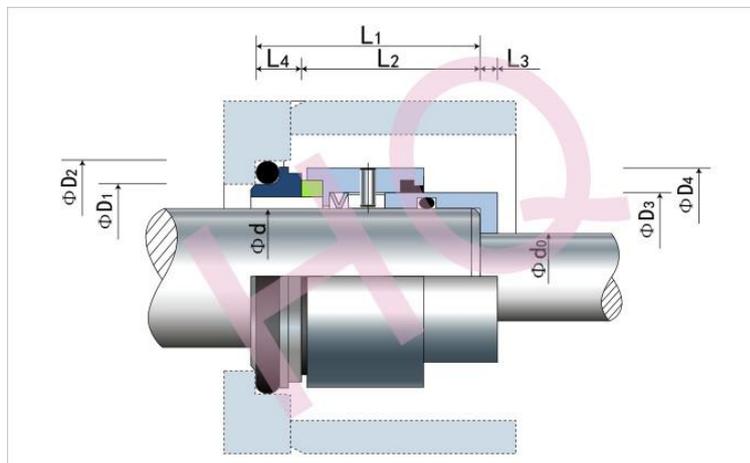


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AD-01



Type: Addritz,Sulzer Pump Seal
Replacement: Burgmann AK5M
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 0.60\text{Mpa}$
Speed: $\leq 1600\text{r/min}$
Material: Q1,Q2,A,B,U1,U2,P,E,V,T,F,G,T2,M5



*** Product description:**

Single component mechanical seal for replacement Andritz pump application.



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Type: Paper Stock Pump Mechanical Seal
Replacement: Suit for ANDRITZ Paper Stock Pumps
Temperature: $\leq 150^{\circ}\text{C}$

Pressure: 1.5Mpa
Speed: $\leq 10\text{r/min}$

Material: Q1,Q2,A,B,U1,U2,P,E,V,T,F,G,T2,M5

* **Product description:** the andritz pulp pump s8-100-350.3 DD double end face bulk mechanical seal, simple structure, easy installation.

Please contact our company if you need more high temperature and high pressure.

* **Apply to the host**

Andritz .

* **Product features**

In bulk, easy to install.

* **Product parameters**

Medium: paper plant black liquor, lye.

Temperature: $\leq 150^{\circ}\text{C}$

Pressure: $\leq 1.5\text{Mpa}$

Wash: P54

Speed: $\leq 10\text{ r/min}$

Axis: 33, 38, 53, 65, 90 mm.



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AD-04 (M7N)



Type: Mechanical Seal
Replacement: Siut for Andritz,KSB,Sulzer Pumps
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 0.80\text{Mpa}$
Speed: $\leq 1800\text{r/min}$
Material: Q1,Q2,A,B,U1,U2,P,E,V,T,F,G,T2,M5

* Product description:

Burgmann general type M7N, simple mechanical seal, single end face non assembled structure, can be installed in a suitable pump seal chamber alone for use, or two sets in series to form a double end face mechanical seal.

* Apply to the hos

Sulzer .

KSB.

Andritz.

* Product features

Single terminal non-set type, rotary non-equilibrium type.

Multiple springs, free rotation.

Horizontal mounting, screw fastening drive.

YWN8/SiC/ graphite, 2Cr13/ 304/316l, fluorine rubber.

There is no water.



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AD-05



Type: Pressure Screen Mechanical Seal
Replacement: ANDRITZ LP-D-140
Temperature: $\leq 205^{\circ}\text{C}$
Pressure: $\leq 4\text{Mpa}$
Speed: $\leq 2100\text{r/min}$
Material: Q1,Q2,A,B,U1,U2,P,E,V,T,F,G,T2,M5

* Apply to the host

Andritz .

* Structural features:

Double cartridge mechanical seal. Easy to install and use. Equilibrium, arbitrary rotation.

* Applicable medium:

Medium with high impurity content such as paper slurry.

* Working parameters:

Fixed content: $\leq 30\%$

The temperature: 200°C or less

Pressure force: 4 mpa or less

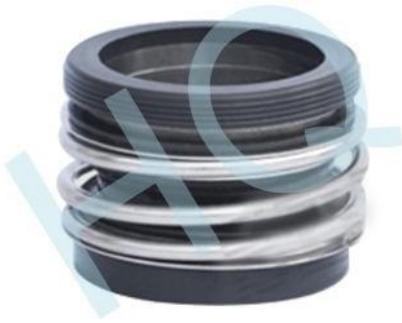
The shaft diameter: 55-150 - mm



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Type: Universal Corrosion Mechanical Seal
Replacement: Burgmann MG12S,
Siuf for ANDRITZ Pumps
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 0.80\text{Mpa}$
Speed: $\leq 2900\text{r/min}$
Material: Q1,Q2,A,B,U1,U2,P,E,V,T,F,G,T2,M5

*** Product description:**

Universal corrosion resistant mechanical seal.

*** Apply to the host:**

Andritz .

*** Product features**

Single terminal non-set type, rotary non-equilibrium type.

Rubber bellows, single spring, free rotation.

Horizontal installation, clamping type transmission.

YWN8/SiC/ graphite, 304/316l, fluorine rubber.

There is no water



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AD-07(MG1)



Type: Mechanical Seals
Replacement: Burgmann MG1
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 2100\text{r/min}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

* Product description:

Mechanical seal, equivalent to Burgmann MG1.

* Apply to the host

Andritz .

* Product features

Single terminal non-set, rotary balance type.

Single spring/free rotation, rubber bellows/free spin.

Horizontal installation, clamping type transmission.

YWN8/SiC, 304/316l, fluoro rubber/silicone rubber.



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Type: Pressure Screen Mechanical Seal

Replacement: Suit for ANDRITZ Pumps

Temperature: $\leq 150^{\circ}\text{C}$

Pressure: 0.8Mpa

Speed: $\leq 2500\text{r/min}$

Material: Q1,Q2,A,B,U1,U2,P,E,V,T,F,G,T2,M5

* **Product description:** Taiwan chuan jia pressure screen mechanical seal, andritz pressure screen mechanical seal.

* **Apply to the host**

ANDRITZ Pumps

* **Product features**

Single end face set, static balance type.

Multiple springs, free rotation.

Horizontal installation, clamping type transmission.

YWN8/SiC, 2Cr13/ 304/316L, fluoro rubber/silicone rubber.

There is no water

d=30-150 mm.

* **Applicable industry:**

Fine chemical industry, paper industry, chemical fiber, chemical fertilizer.

* **Applicable pump:**

Centrifugal pump, feed pump, pulp pump, chemical pump.



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Type: Double Mechanical Seal
Replacement: Suit for ANDRITZ Pumps
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: Q1,Q2,U2,T,V,M1,F,G,M

* **Product description:** mainly used in petroleum and natural gas, hydrocarbon processing industry, electric power, pulp and paper, general industry, chemical process, water and sewage and other industries.

* **Apply to the host:**

Andritz

* **Product features:**

Dual face non-set, static balance type.

Single spring, free rotation.

Horizontal mounting, screw fastening and clamping type transmission. Hard alloy, 2Cr13/ 304/316l, fluoro rubber/silicone rubber.

Outside circulation flushing



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AD-10



Type: Mechanical Seal
Replacement: Suit For Andritz Pumps
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Mechanical seal for Andritz S range pump seal :

Pump Model: S80-265/S100-265/S125-265/S100-350/S125-350
/S150-330/125-400/S150-400/S200-380/S150-470/S200-470
/S250-430/S350-470/S500-600

Mechanical seal for Andritz SP centrifugal pumps :

Pump model:SP32-200/SP40-200/SP50-200/SP40-250/SP50-250/
SP60-250/SP 65-250//SP100-250/SP125-250/SP40-315/SP50-315
/S65-315/SP100-315/SP125-315/SP125-400/SP150-315/SP100-500
/SP150-400/SP200-400/SP150-450/SP200-450/SP250-500/SP300-400
SP200-500/SP250-600/SHP300-600/SHP350-500/SP450-550/SHP600-700



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Type: SAF-110G Pressure Screen
Mechanical Seal

Replacement: Andritz Mechanical Seal
Temperature: $\leq 100^{\circ}\text{C}$

Pressure: $\leq 1.0\text{Mpa}$
Speed: $\leq 500\text{r/min}$

Material: Q1,Q2,U2,T,V,M1,F,G,M

*Product description:

Product is SAF pressure screen mechanical seal series, sealing ring has excellent self-lubrication, easy installation, low error rate. The super elastic device delivers torque, no drive pin on the sealing surface, and reduces startup failure. Widely used in the paper industry.

*Apply to the host

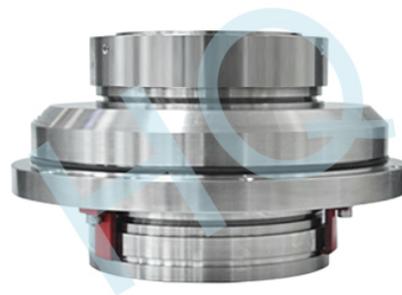
Andritz

*Product features

Double end pack corrosion resistance.

*Application:

paper making.



*Operating pump position:

Pressure screen.



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Type: Cartridge seal
Replacement: SE1-AP-100
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 1600\text{r/mim}$
Material: Q1,Q2,U2,T,V,M1,F,G,M

*Product description:

ANDRITZ pulp pump S3-80-265 / S3-100-265/S3-125-265 mechanical seal

*Product parameters:

Medium: oil products, slag slurry

Temperature: 150

Pressure: 0.8 Mpa

Wash: P62

Speed: 1600 r/min

Diameter of axle: 48 mm



*Application industry:

Paper making, petrochemical industry, chemical industry, coal chemical industry.



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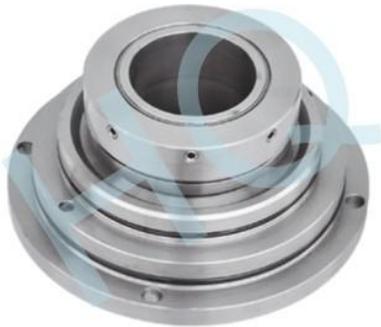
Type: Andritz Pump Seal
Temperature: -20 to +200°C
Pressure: $\leq 1.6\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: Q1,Q2,U2,T,V,M1,F,G,M



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Type: Pressure Screen Cartridge Mechanical Seal
Replacement: Suit for Andritz Pumps
Temperature: $\leq 150^{\circ}\text{C}$
Pressure: $\leq 1\text{Mpa}$
Speed: $\leq 10\text{r/min}$
Material: Q1,Q2,U2,T,V,M1,F,G,M

*Product description

This series mechanical seal is a kind of packaged mechanical seal designed by our company for mud pump at the end of 1990s. The modified mechanical seal is mainly for medium containing solid particles. Changing the material of mechanical seal can also be used in metallurgical, mining, chemical and other industries with high solid content. There are 40, 50, 60, 70, 90 and other specifications

*Apply to the host

Andritz Pump Company



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Type: KSB,WARMAN,SULZER,ANDRITZ

Mechanical Seal

Replacement: Suit KSB,Sulzer and Sulzer Pumps

Temperature: -20 to +180°C

Pressure: $\leq 0.8\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: A,B,Q1,Q2,U1,U2,T,T6,V,G,F,M,M1

*Product description

Big shaft mechanical seal. Cartridge type mechanism for easy installation and replacement warman slurry pumps.

*Apply to the host

Warman Pump Company



*Product features

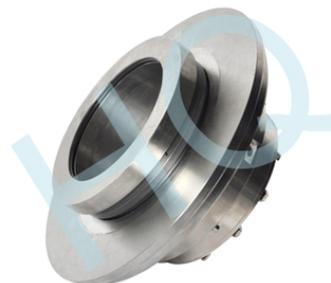
Single cartridge seal

Pusher

Multiple springs seal

Independent of direction of rotation

Admissible axial movement ± 1



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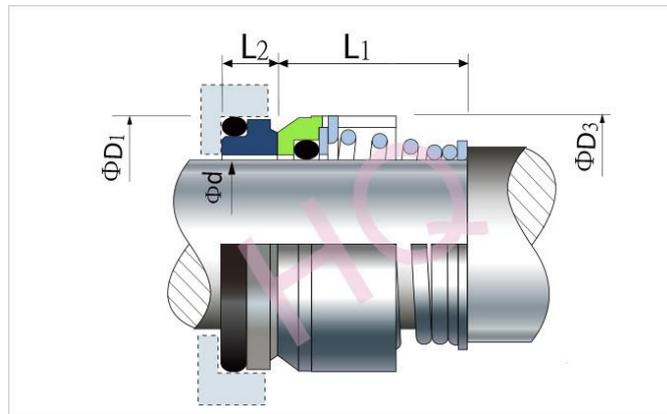
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CO-SA1



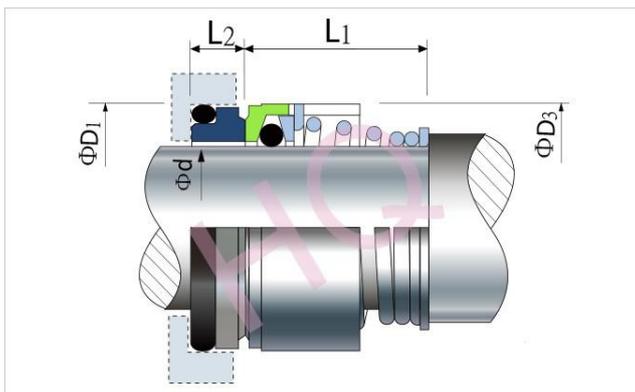
Type: Suit SABROE SMC 4-65,6-65,8-65 and 10-65(MK1) Compressors
 Replacement: AES SAB-50, Billi SAB 3
 Temperature: 50°C to +200°C
 Pressure: $\leq 1\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



CO-SA2



Type: Suit SABROE SMC 4,6,8,12 and 16-100(Mk1) Compressors,SABROE SMC 104,106,108,112 and 116(Mk2) Compressors,SABROE TSMC 8,16-100(Mk1) and 108,116(Mk2) Compressors
 Replacement: AES SAB-75B, Billi SAB 4
 Temperature: 50°C to +200°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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Type: Suit SABROE SAB 128 MK1,2,3 and 4
Compressors

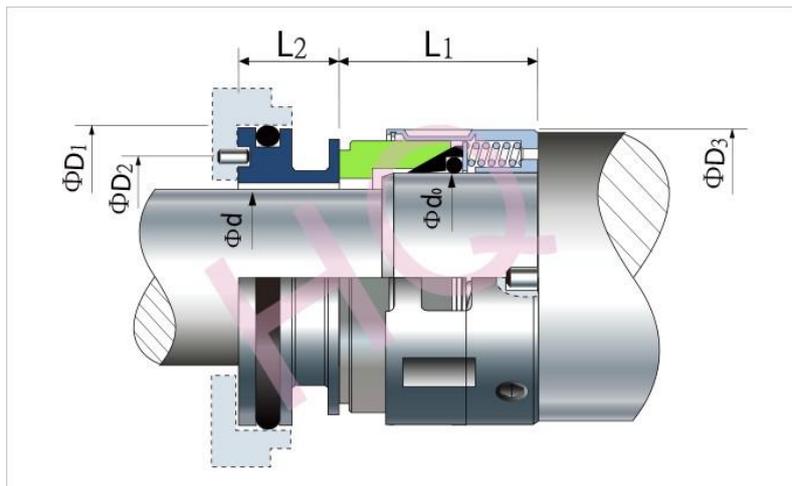
Replacement: AES M04H, Billi HOW 2P

Temperature: -20°C to $+180^{\circ}\text{C}$

Pressure: $\leq 2.5\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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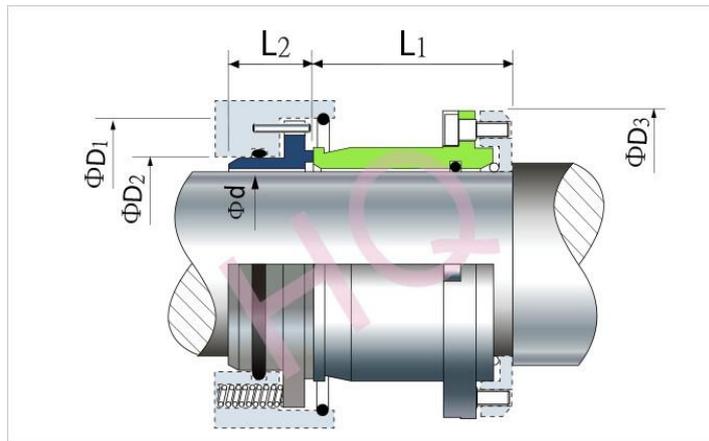
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CO-SA4



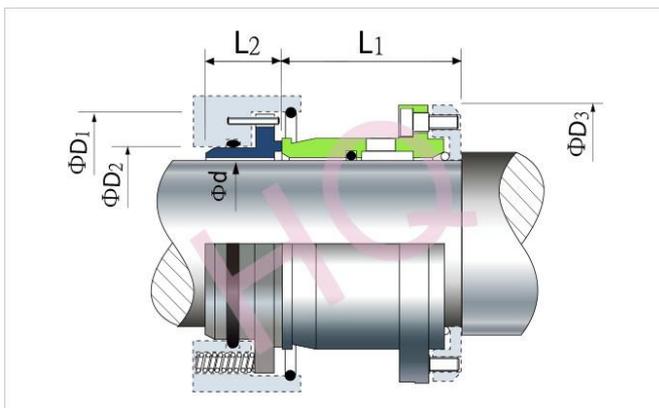
Type: Suit SABROE CMO 24,26 and 28(Mk2) Compressors,SABROE HPO 24,26 and 28(Mk2) Compressors,SABROE TCMO 24,26 and 28(Mk2) Compressors
 Replacement: AES SAB-55, Billi SAB
 Temperature: -20°C to +180°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



CO-SA5



Type: Suit SABROE HPC 104,106 and 108(Mk3 and 4) Compressors,SABROE SMC 104,106,108,112 and 116 (Mk3 and 4) Compressors,SABROE TCMC 108 and 116 (Mk3 and 4) Compressors
 Replacement: AES SAB-75, Billi SAB 6
 Temperature: -20°C to +180°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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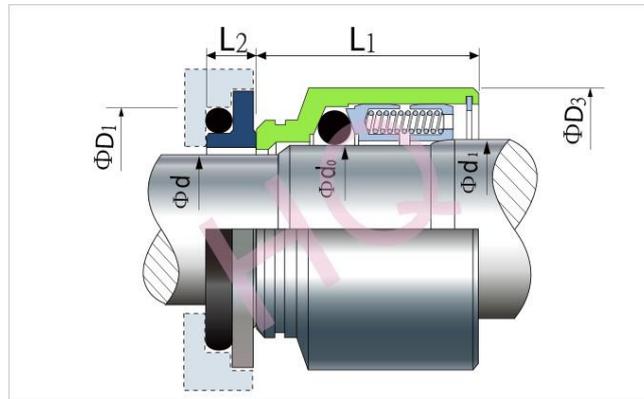
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CO-SA6



Type: Suit SABRORE CMO14,16and 18(MK1)
Compressors
Replacement: AES SAB-52, Billi STAL 7
Temperature: -20°C to +180°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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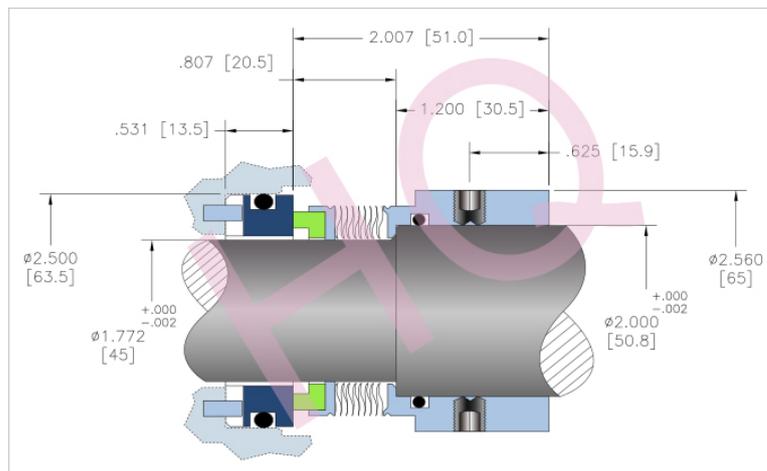
CO-SA7



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Type: Suit SABROE SAB 163 Compressors
Temperature: -25 to +150°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa



CO-MYM-01



Type: Suit Mycom Pumps
Replacement: Lidering My-MD-28
Temperature: -25 to +150°C
Pressure: ≤ 2.5 Mpa
Speed: ≤ 15 m/s
Material: B, Q2, U2, P, E, N, V, F, G, Alfa

Equal to Lidering My-MSA

Suit Mycan Pumps

d=55mm

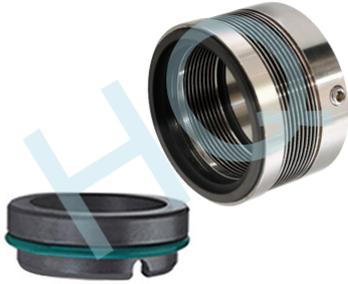


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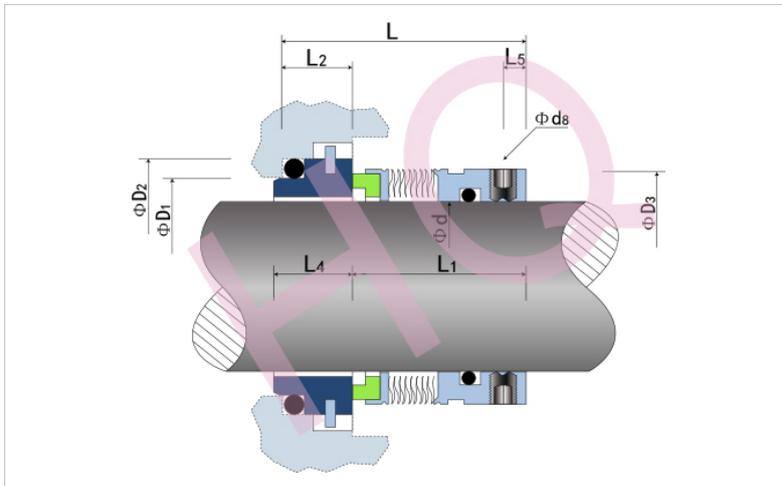


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CO-MYM-02



Type: Suit Mycom 160,200,250,320 Compressors
 Temperature: -75 to +200°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 23\text{m/s}$
 Material: Q1,Q2,U2,T,P,M1,F,G,M



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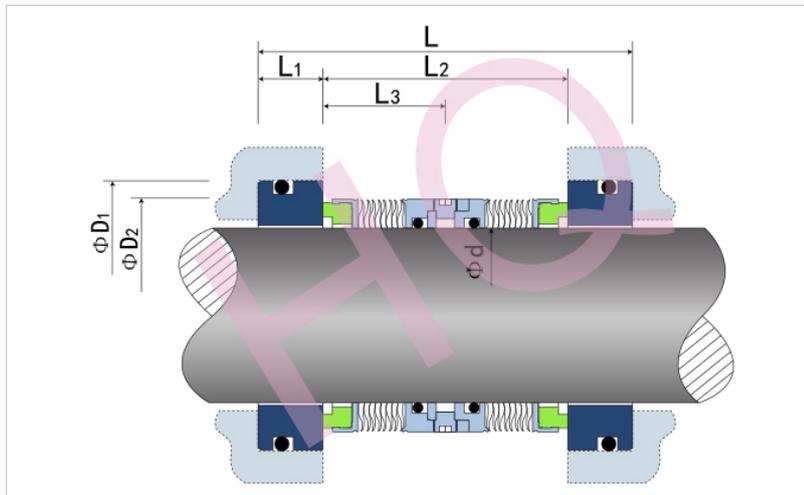
Type NO.	d (mm)	d8	D1	D2	D3	L	L1	L2	L4	L5
MY02-160	50	3xM6	61.5	70.0	65.1	57.0	41.0	16	18.0	6.5
MY02-200	60	3xM6	75.5	85.0	74.6	55.5	39.5	17	20.0	4.8
MY02-250	70	3xM6	85.5	95.0	87.3	60.0	44.7	18	18.0	4.8
MY02-320	90	3xM6	110.4	120.6	108.0	67.0	49.3	20	20.5	4.8

Type NO.	d (inch)	d8	D1	D2	D3	L	L1	L2	L4	L5
MY02-160	1.969	3xM6	2.421	2.756	2.562	2.244	1.614	0.630	0.709	0.256
MY02-200	2.362	3xM6	2.972	3.346	2.937	2.185	1.555	0.669	0.787	0.188
MY02-250	2.756	3xM6	3.366	3.740	3.437	2.362	1.760	0.709	0.709	0.188
MY02-320	3.543	3xM6	4.346	4.748	4.250	2.638	1.941	0.787	0.807	0.188

CO-MYM-03



Type: Suit Mycom 320 Compressor
 Temperature: -75 to +200°C
 Pressure: ≤ 2.0 Mpa
 Speed: ≤ 23 m/s
 Material: Q1,Q2,U2,T,V,M1,F,G,M



d	D1	D2	L	L1	L2	L3
90	120	107.95	116	19.91	76.2	38.1
3.543	4.724	4.250	4.567	0.784	3.000	1.500



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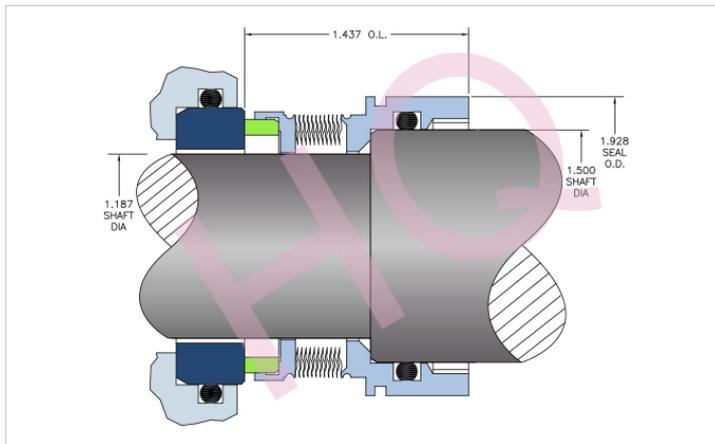


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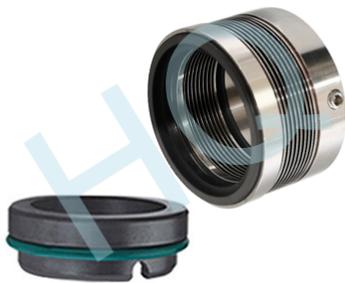
CO-TMK-01



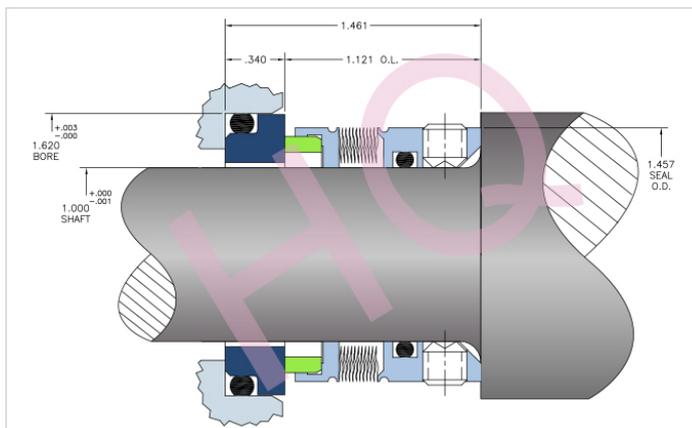
Type: Suit Thermo King 22-1101 Compressors
 Temperature: -75 to +200°C
 Pressure: ≤ 2.0 Mpa
 Speed: ≤ 23 m/s
 Material: Q1, Q2, U2, T, V, M1, F, G, M



CO-TMK-02



Type: Suit Thermo King 22-751 Compressors
 Temperature: -75 to +200°C
 Pressure: ≤ 2.0 Mpa
 Speed: ≤ 23 m/s
 Material: Q1, Q2, U2, T, V, M1, F, G, M



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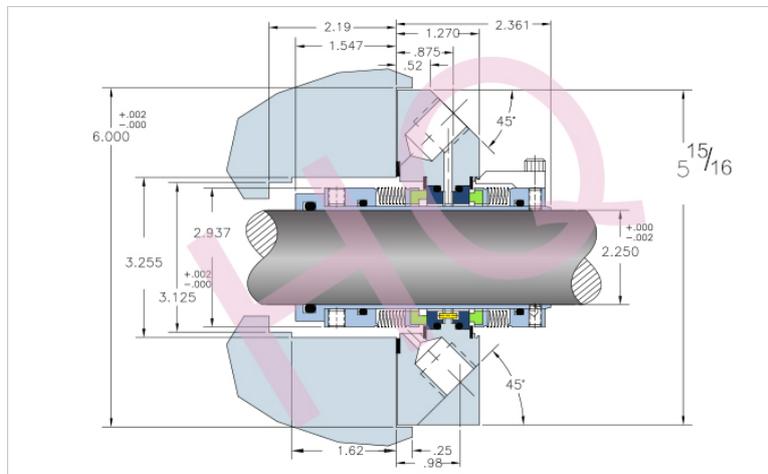


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CO-NS-01



Type: Suit NASH SC-4 & SC-5 Compressors
 Temperature: -15 to +210°C
 Pressure: ≤ 2.5 Mpa
 Speed: ≤ 20 m/s
 Material: Q1, Q2, U2, T, V, M1, F, G, M



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CO-HO 1



Type: Suit Howden WRV 204 MK1,2,3 and 4
Compressors, WRV255 Mk1,2,3,4 and 5
Compressor

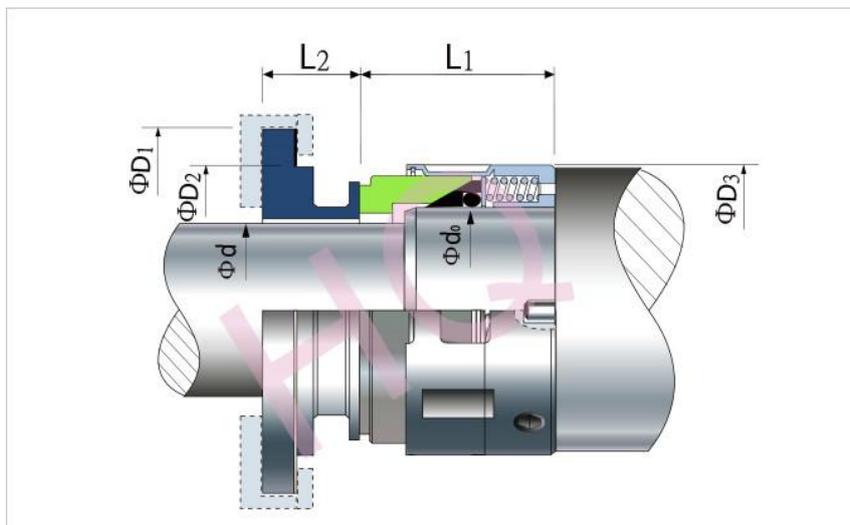
Replacement: AES M02J, HOW 1P

Temperature: -20°C to $+180^{\circ}\text{C}$

Pressure: $\leq 2.5\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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CO-HO 2

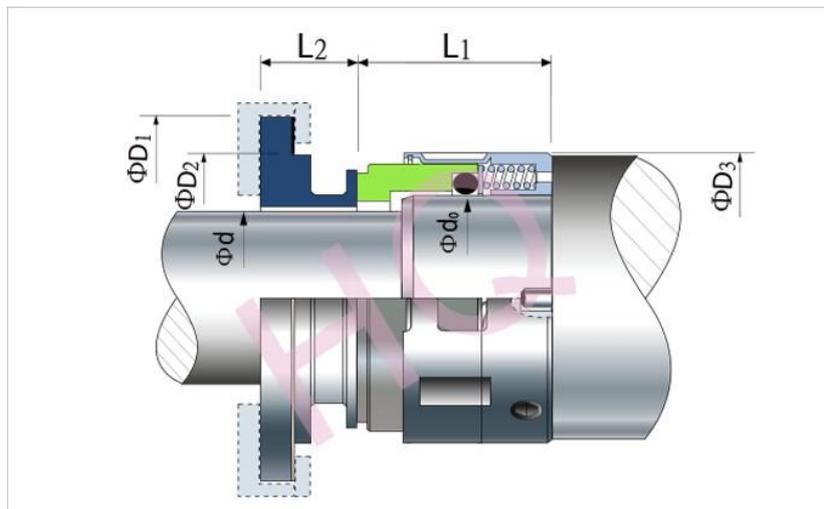


Type: Suit Howden WR321 Compressors
Replacement: AES M02SJ, Billi HOW 1
Temperature: -20°C to $+180^{\circ}\text{C}$

Pressure: $\leq 2.5\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



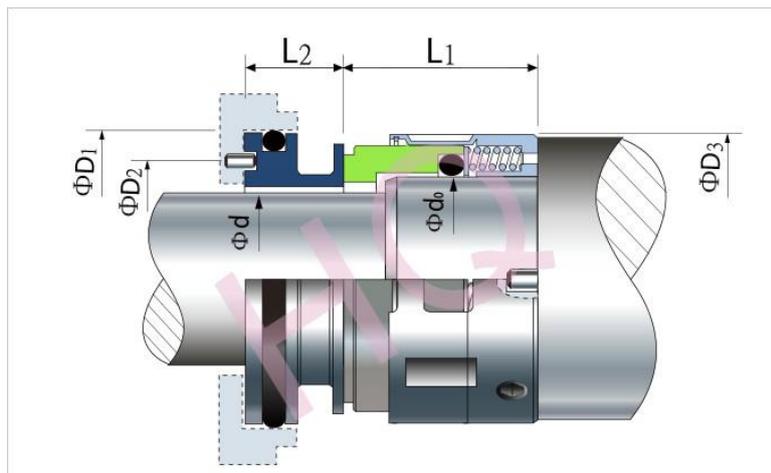
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Type: Suit Howden WRV163,204 MK6,205 and
255 MK6, Compressors,Howden
XRV163,204 Compressors
Replacement: AES M02SH, Billi HOW 2
Temperature: -20°C to $+180^{\circ}\text{C}$
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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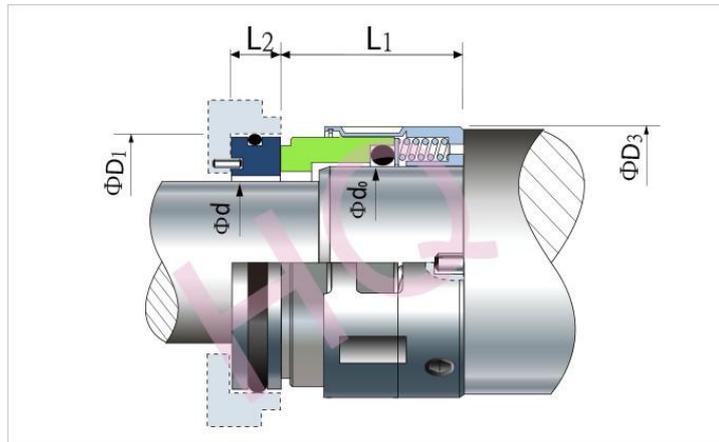


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CO-HO 4



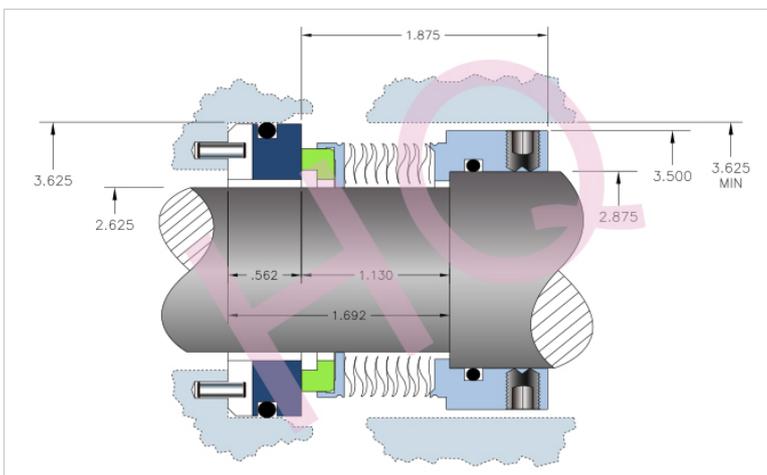
Type: Suit Howden WRV204 MK5 Compressors
 Replacement: AES M02S7, Billi HOW 3
 Temperature: -20°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



CO-HO 5



Type: Suit Howden WRV-H Screw Compressors
 Temperature: -20 to $+220^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: Q1,Q2,U2,T,V,M1,F,G,M



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CO-HA2



Type: Suit J&E Hall V127 MK1,2,3,4 and 5
Compressors

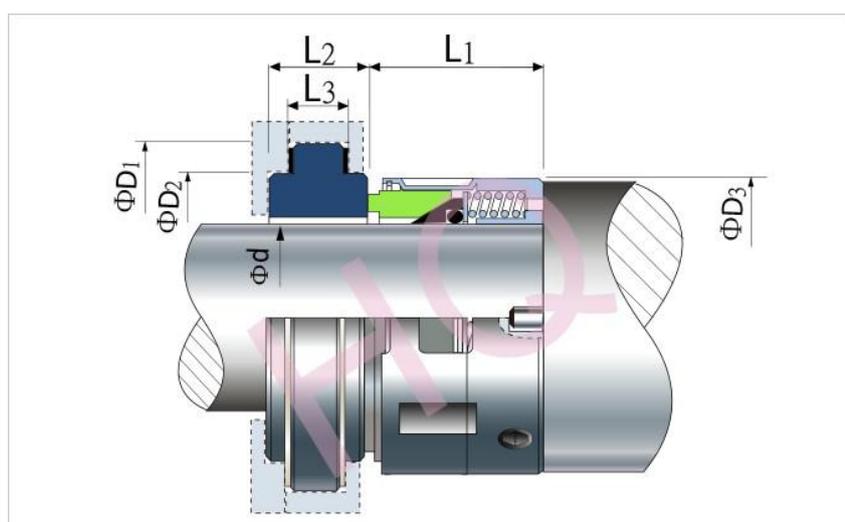
Replacement: AES M018, Billi HAL 1-5P

Temperature: -20°C to $+180^{\circ}\text{C}$

Pressure: $\leq 2.5\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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CO-HA3



Type: Suit J&E Hall HS92,V92,VF92,and V127

Mk6 Compressors

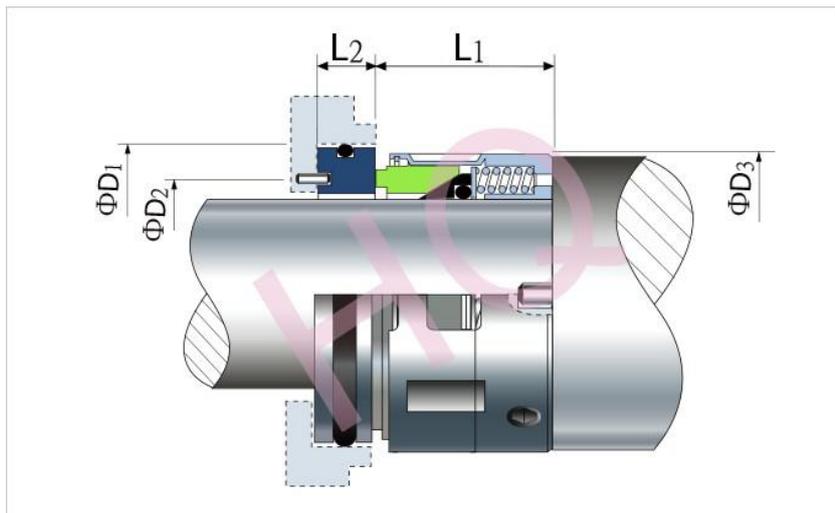
Replacement: AES M017S, Billi HAL P

Temperature: -20°C to $+180^{\circ}\text{C}$

Pressure: $\leq 2.5\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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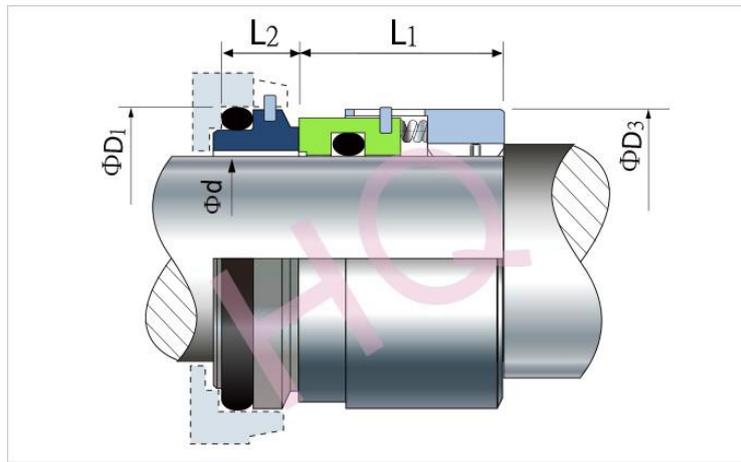


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CO-GR1



Type: Suit Grasso RC11 Compressors
 Replacement: AES MOG, Billi GRA
 Temperature: -20°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



CO-GR2



Type: Suit Grasso Pumps
 Replacement: Lidering GS-MS-65
 Temperature: -25 to $+150^{\circ}\text{C}$
 Pressure: $\leq 1.4\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa

Equal to Lidering GS-MS-65

Suit Grasso Pumps

$d=65\text{mm}$



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CO-PO2C



Type: Suit Carrier 05G,5F20,30,40,and 60

Compressors 5H40,46,60,66,80and 86

Compressors

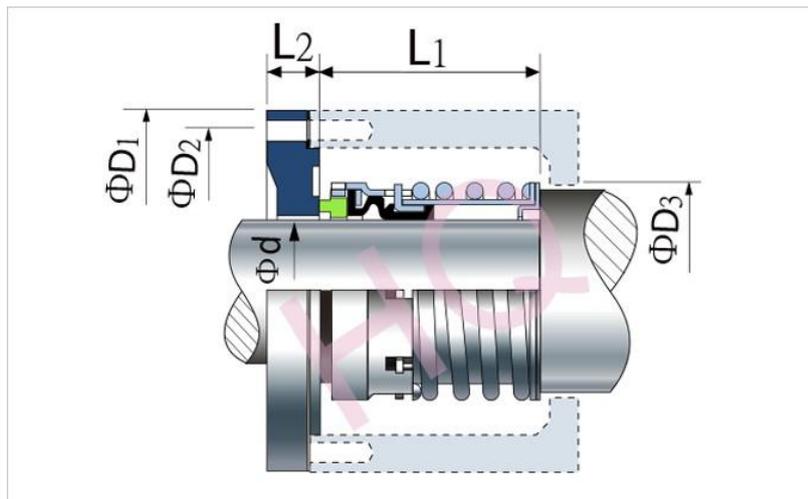
Replacement: AES PO2C, Billi CAR

Temperature: 50°C to +200°C

Pressure: $\leq 1\text{Mpa}$

Speed: $\leq 20\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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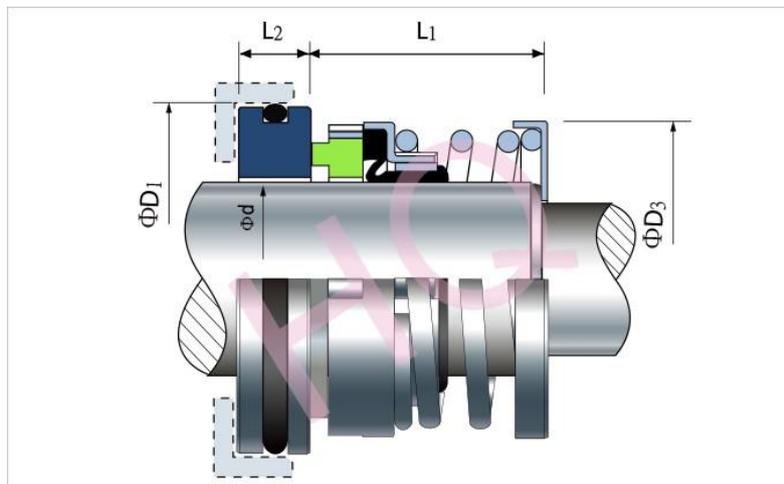


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CO-P02G



Type: Suit for Goman Rupp T3,T4 and T6 Pumps.
Replacement: AES P02G
Temperature: 20°C to +120°C
Pressure: $\leq 1.1\text{Mpa}$
Speed: $\leq 20\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa



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CO-P02S



Type: Suit Stal P2C,P24,P28,P42,PK6,PK8 and
PK24 Compressors

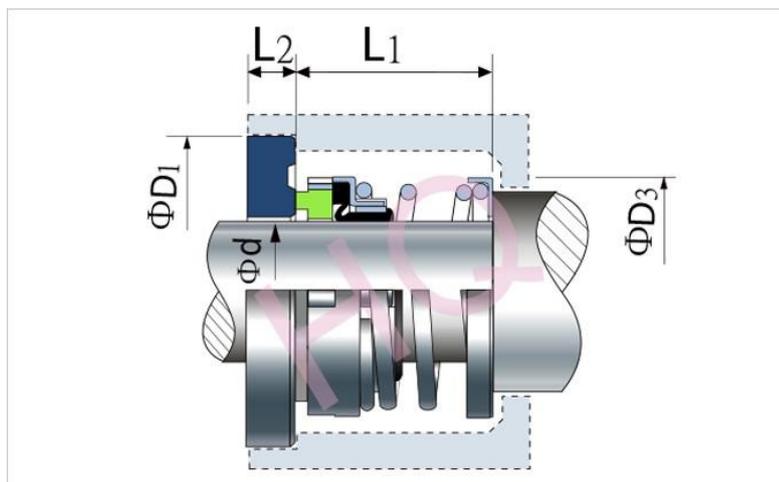
Replacement: AES P02S, Billi STAL

Temperature: 50°C to +200°C

Pressure: ≤ 1 Mpa

Speed: ≤ 20 m/s

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



CO-P08D



Type: Suit J&E Hall V54(4, 6 and 8Cylinder)

Compressors V92(2 and 4 Cylinder)

Compressors

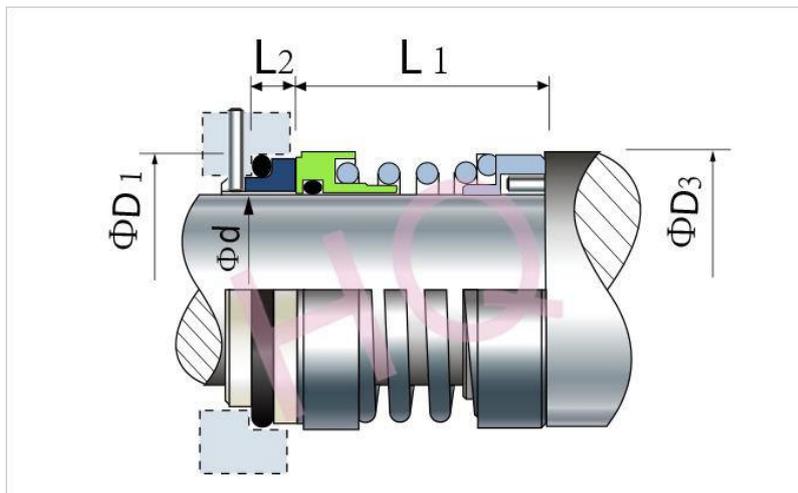
Replacement: AES PO8D, Billi 26D

Temperature: 50°C to +200°C

Pressure: $\leq 1\text{Mpa}$

Speed: $\leq 20\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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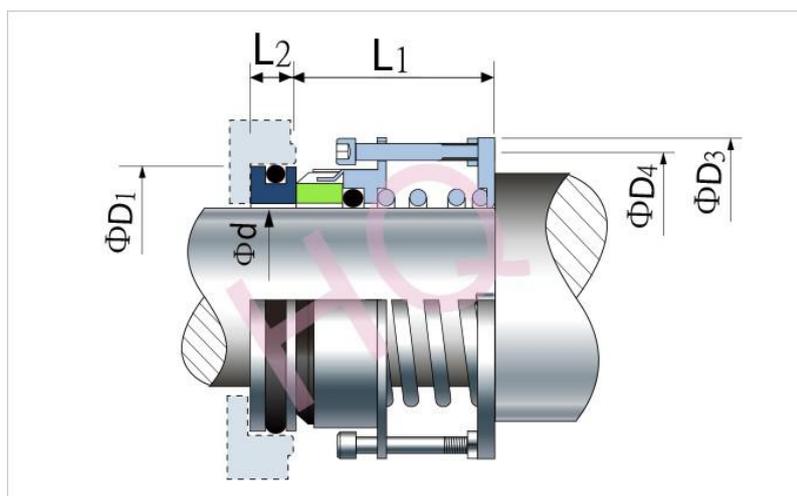


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CO-POB



Type: Suit Bitzer 4H.2 and 6F.2 Compressors
Replacement: AES POB, Billi BIT1
Temperature: 50°C to +200°C
Pressure: $\leq 1\text{Mpa}$
Speed: $\leq 20\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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CO-POBO



Type: Suit Bock F4 and F5 (BFO 4 and BFO 5)

Compressors

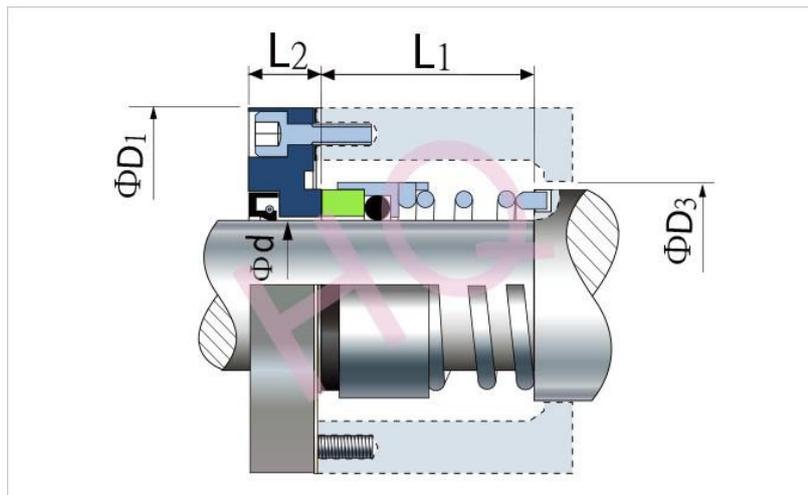
Replacement: AES POBO, Billi SAB 5

Temperature: 50°C to +200°C

Pressure: $\leq 1\text{Mpa}$

Speed: $\leq 20\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



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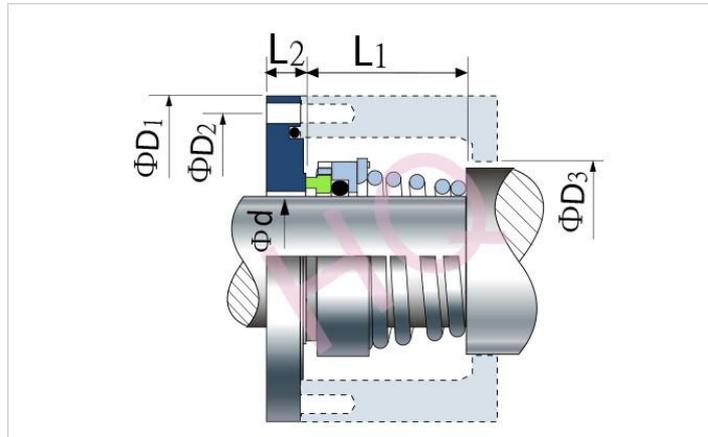


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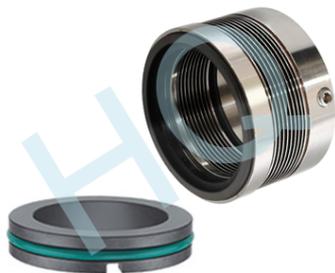
CO-TOC



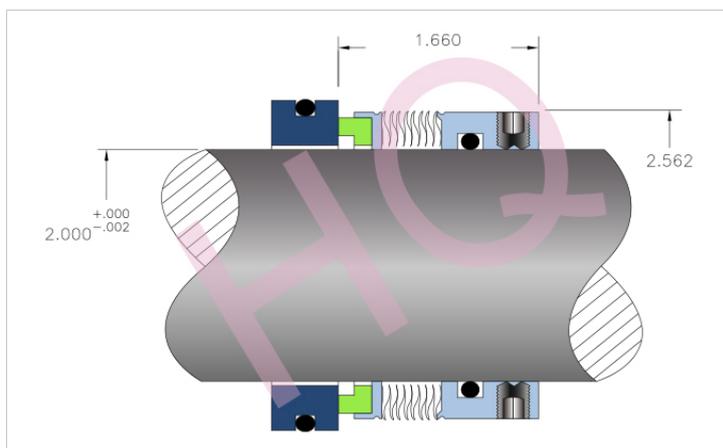
Type: Suit Copeland 4CC,6CC and 8CC Compressors
 Replacement: AES TOC, Billi COP
 Temperature: 50°C to +200°C
 Pressure: $\leq 1\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



CO-CAR-01



Type: Suit Carrier 5H40 Compressor
 Temperature: -25 to +150°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: Q1,Q2,Graphite,V,M5,M6,G



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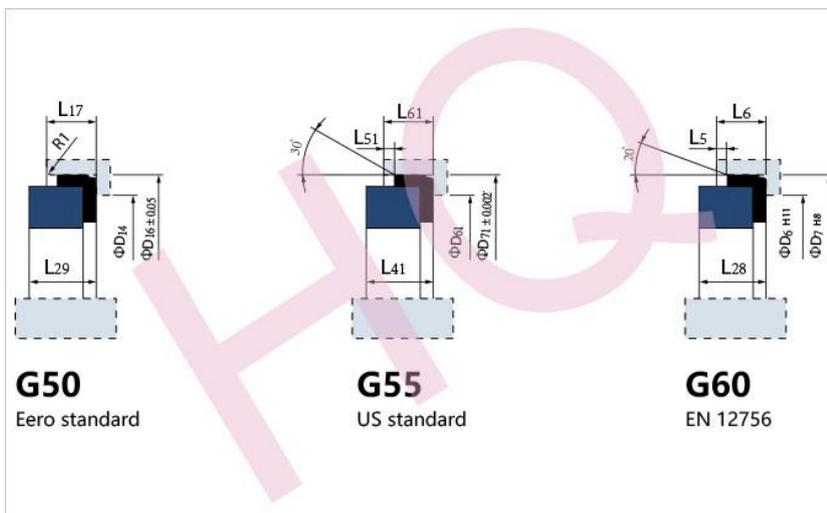
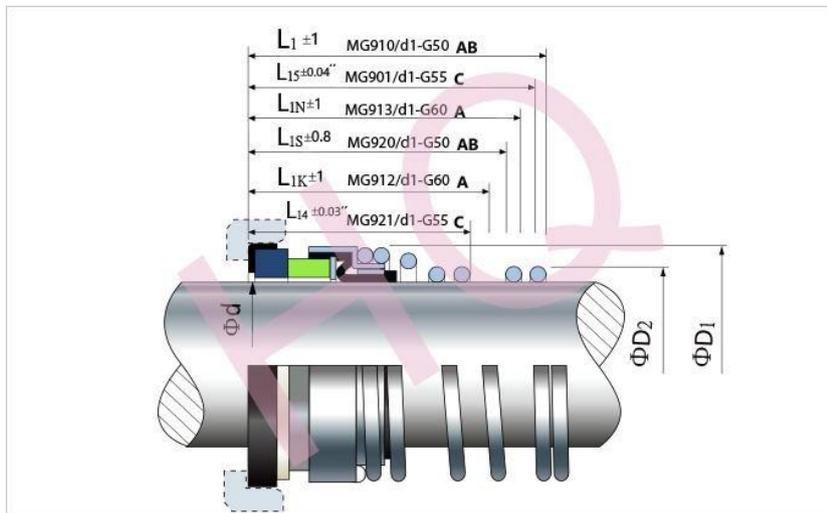
HQMG9(901/910/912/913/920/921)



Type: Elastomeric bellow mechanical seal
 Replacement: Burgmann MG9(901/910/912/913/920/921)
 Temperature: -20°C to +120°C

Pressure: $\leq 1\text{Mpa}$
 Speed: $\leq 15\text{m/s}$

Material: V,Q1,Q2,U2,U1,B,A,P,E,V,F,G





HQMG1/MG12/MG13/MGS20



Type: Elastomeric bellows mechanical seal, Suit for Grundfos, Hilge Pumps

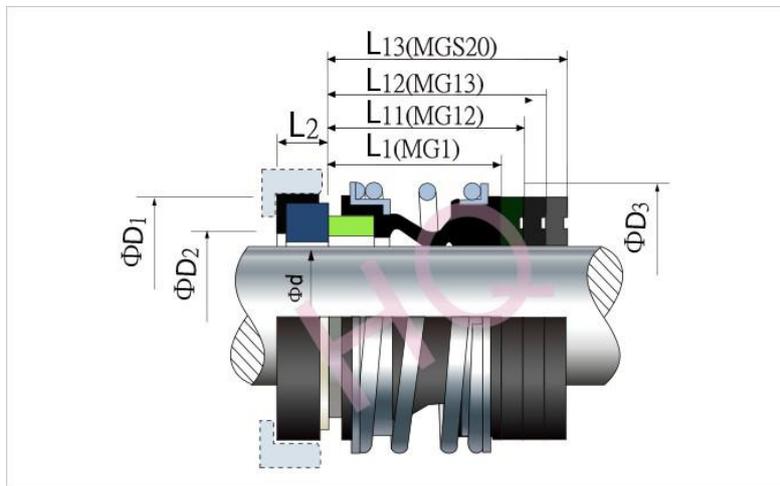
Replacement: Burgmann MG1/12/13/S20, AES B02/B012/B01, Vulcan 191/192/193, Roten L3/L3K/L3N, Flowserve 190/192/193

Temperature: -20°C to +120°C

Pressure: ≤1Mpa

Speed: ≤15m/s

Material: V, Q1, Q2, U2, U1, B, A, P, E, V, F, G



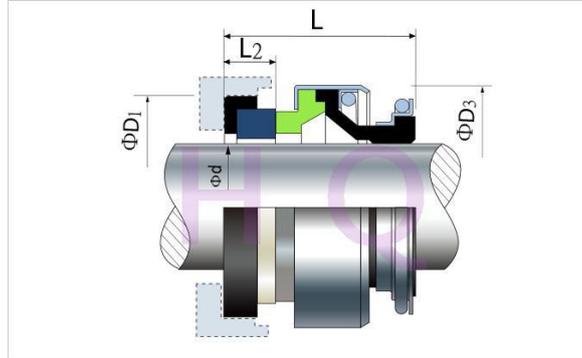
Siz (mm)	d	D3	D2	D1	L1	L11	L12	L13	L2
10	10	22.5	17	21	14.5	25.9	33.4	25	6.6
12	12	25.0	19	23	15.0	25.9	33.4	25	6.6
14	14	28.5	21	25	17.0	28.4	33.4	25	6.6
15	15	28.5	-	-	17.0	28.4	33.4	25	-
16	16	28.5	23	27	17.0	28.4	33.4	25	6.6
18	18	32.0	27	33	19.5	30.0	37.5	25	7.5
19	19	37.0	-	-	21.5	30.0	37.5	25	-
20	20	37.0	29	35	21.5	30.0	37.5	25	7.5
22	22	37.0	31	37	21.5	30.0	37.5	25	7.5
24	24	42.5	33	39	22.5	32.5	42.5	25	7.5
25	25	42.5	34	40	23.0	32.5	42.5	25	7.5
28	28	49.0	37	43	26.5	35.0	42.5	33	7.5
30	30	49.0	39	45	26.5	35.0	42.5	33	7.5



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Type: Elastomeric bellows mechanical seal
 Replacement: AES B01, Vulcan 18, Crane PR/DR,
 Burgmann BT-AR, Flowserve 118
 Temperature: -20°C to +120°C

Pressure: $\leq 0.6\text{Mpa}$
 Speed: $\leq 10\text{m/s}$

Material: V,Q1,Q2,U2,U1,B,A,P,E,V,F,G

Size (mm)	d	D3	D1	L	L2
6	6	18	18	14.0	4.0
8S	8	18	22	15.0	4.0
8M	8	20	22/26	15.0	4/5.5
8L	8	24	26	15.0	5.5
10	10	24	26	21.0	8.0
11	11	24	26	21.0	8.0
12	12	24	25/26	21.0	8.0
13	13	24	26	19.5	5.5/8
13L	13	28	28	21.0	8.0
13H	13	32	29.5	30.5	8.0
14	14	28	28/28.5	21.0	8.0
14L	14	32	29.5	21.0	8.0
15S	15	28	28.5/30	21.0	8.0
15M	15	32	30/29.5	21.0	8.0
15L	15	39	38	21.0	8.0
16S	16	28	29.5/30	21.0	8.0
16M	16	32	29.5	21.0	8.0
16L	16	39	38	21.0	8.0
16H	16	32	30	21.0	10.0
17	17	39	42	21.0	8.0
18	18	39	42	21.0	8.0
19	19	39	42	21.0	8.0
20	20	39	42	21.0	8.0



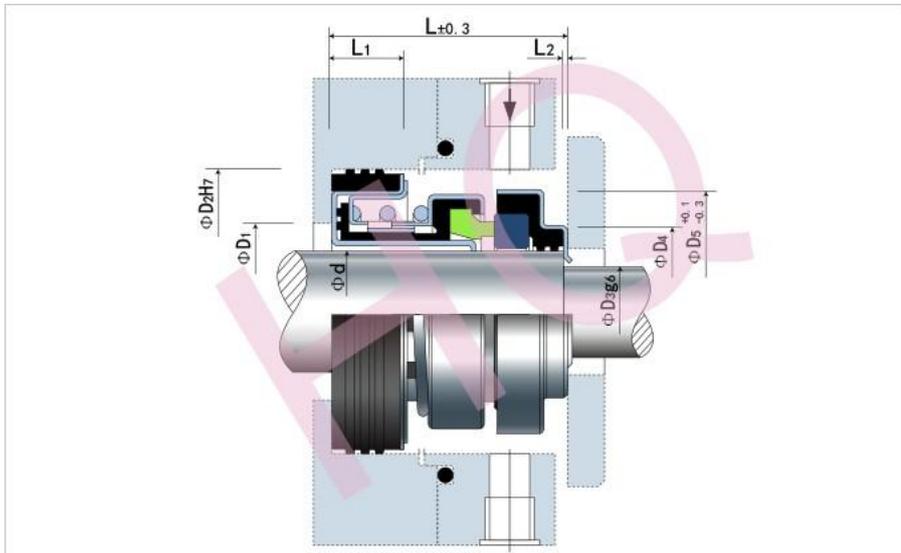
HQ700(EH700)



Type: Elastomer Bellow Seal, Suit Ebara Pumps
 Replacement: Burgmann EH700
 Temperature: -20 to +100°C

Pressure: ≤15 Bar
 Speed: ≤10m/s

Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d (mm)	D1	D2	D3	D4	D5	L	L1	L2
15	22	41	12	22.0	34	29.5	9.5	0.6
20	30	45	12	27.2	45	31.0	11.0	0.6
25	35	52	22	33.6	52	37.0	11.5	0.8
35	45	66	32	43.6	66	41.6	12.5	0.8



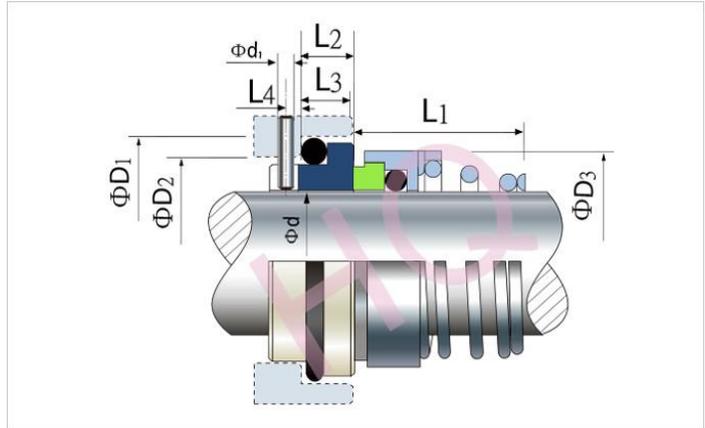
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HQM32N/M377N



Type: O-Ring Mechanical Seal
 Replacement: Burgmann M32N/M377N, Vulcan 8.DIN,
 AES T01D, Flowserve38D

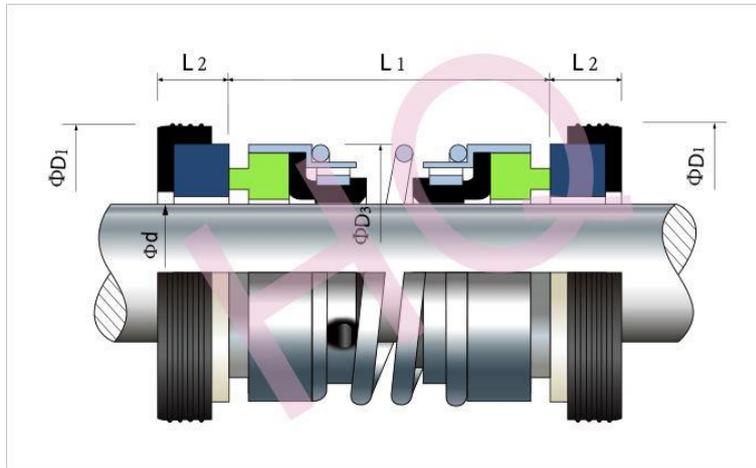
Temperature: -20°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 1\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: Q2.U2,B,V1,P,E,V,F,G

d (mm)	d1	D1	D2	D3	L1	L2	L3	L4
10	3	21	17	19	15.5	10.0	5.5	5
12	3	23	19	21	16.0	10.0	5.5	5
14	3	25	21	23	16.5	10.0	5.5	5
16	3	27	23	26	18.0	10.0	5.5	5
18	3	33	27	29	19.5	11.5	7.0	5
20	3	35	29	31	21.5	11.5	7.0	5
22	3	37	31	33	21.5	11.5	7.0	5
24	3	39	33	35	23.5	11.5	7.0	5
25	3	40	34	36	26.5	11.5	7.0	5
28	3	43	37	40	26.5	11.5	7.0	5
30	3	45	39	43	26.5	11.5	7.0	5
32	3	48	42	46	28.5	11.5	7.0	5
35	3	50	44	49	28.5	11.5	7.0	5
38	4	56	49	53	33.5	14.0	8.0	5
40	4	58	51	56	36.0	14.0	8.0	5
43	4	61	54	59	38.5	14.0	8.0	5
45	4	63	56	61	39.5	14.0	8.0	5
48	4	66	59	64	45.0	14.0	8.0	5
50	4	70	62	66	45.0	15.0	8.5	5

EB-01(260A)



Type: EBARA BEST-,RIGHT- and DW- series pumps
 Replacement: Vulcan 260A
 Temperature: -20°C to +120°C
 Pressure: ≤1.0Mpa
 Speed: ≤15m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
14	30	20	26	5
15	30	20	26	5
16	30	20	26	5



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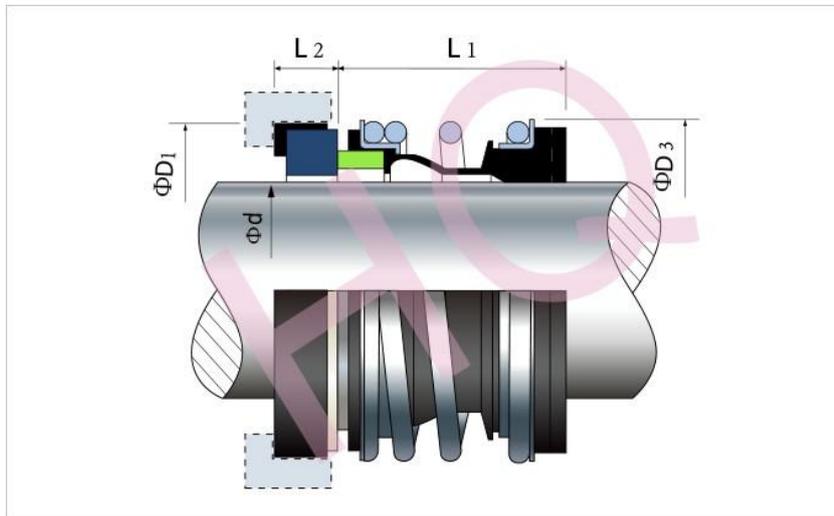


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EB-02(198)



Type: EBRABA EVM- and EVMW- series pumps
 Replacement: Vulcan 198
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d	D1	D2	L1	L2
0.500	23	24.0	15.0	8.6
16	26	27.1	17.0	10.0
20	35	36.0	21.5	11.5
28	43	47.0	26.5	10.0



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EB-05



Type: Double Cartridge Seal, Suit for EBRABA

Pumps

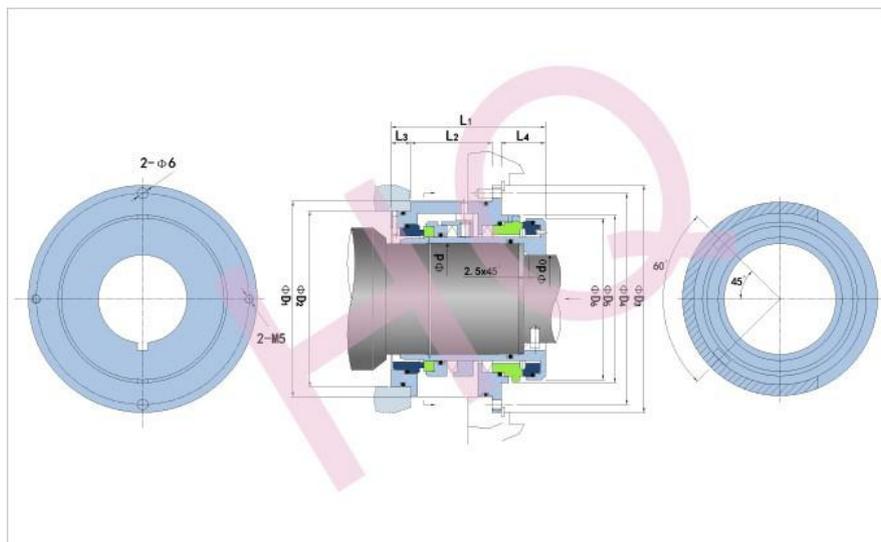
Replacement: Ebara pump (submersible pump)

Temperature: -20 to +180°C

Pressure: $\leq 2.5\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



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Type: Ebara Pump Seal
Temperature: -15 to +150°C
Pressure: $\leq 1.2\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Suit for Ebara Pumps



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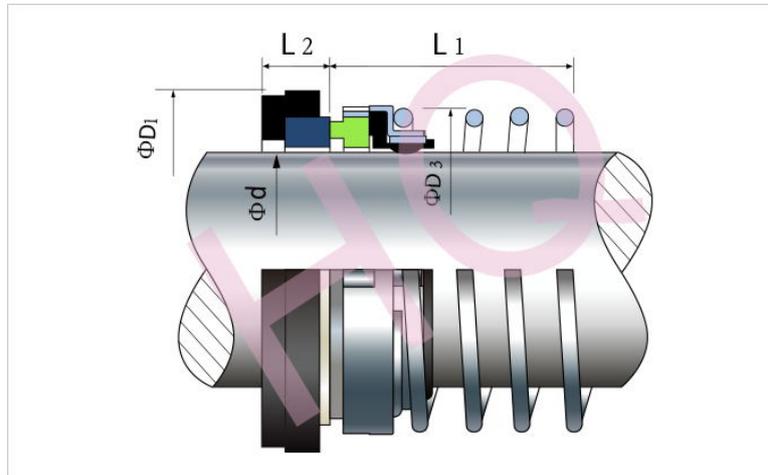


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EB-03(278)



Type: Suit EUREKA CAC,CAV and CAX series pumps
 Replacement: Vulcan 278
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (inch)	D1	D3	L1	L2
2.375	79.4	82	82.6	13.5



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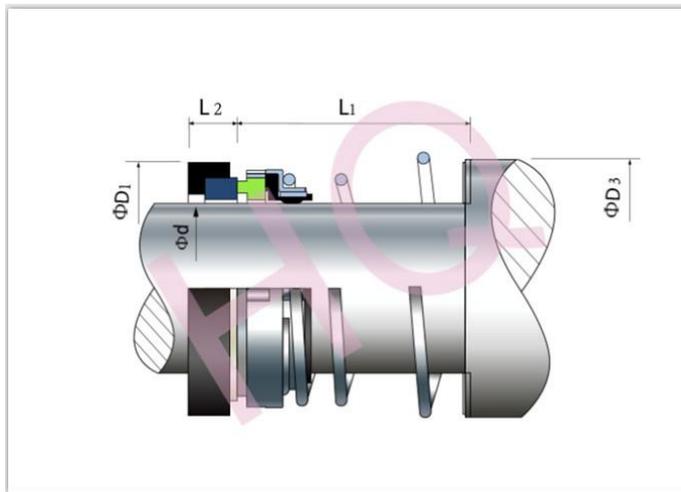


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EB-04(277)



Type: Suit EUREKA CG- series pumps
 Replacement: Vulcan 277
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2	O.E.M REF.
29	47.63	46.0	32.0	11.99	CGA
35	53.98	53.0	31.5	11.99	CGB
41	60.35	59.3	32.5	11.99	CGC
48	66.70	66.0	38.5	11.99	CGD
54	73.05	70.0	41.0	13.50	CGE



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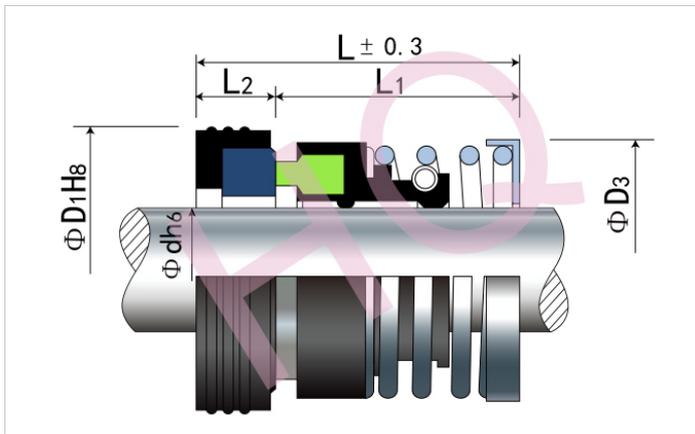
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EB-07(156)



Type: Suit Ebara Pumps
 Temperature: -20 to +100°C
 Pressure: ≤0.5Mpa
 Speed: ≤0.5m/s
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



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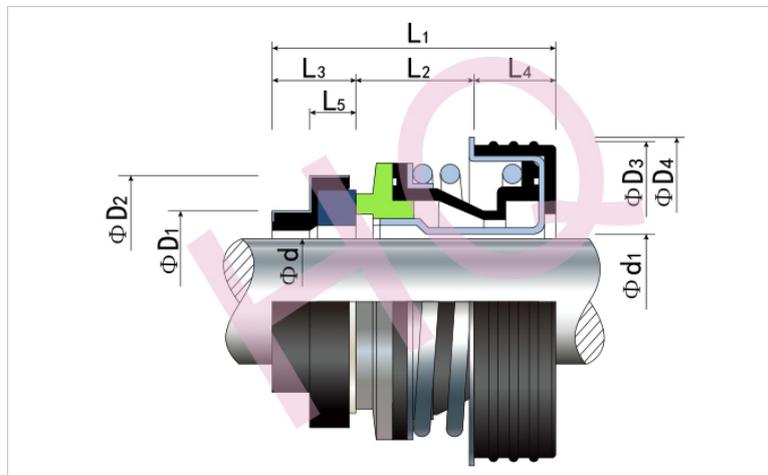
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Model	d (mm)	D1	D3	L	L1	L2
8	8	18	17.0	18	13.5	4.5
8A	8	21	17.0	18	13.0	5.0
9	9	21	18.5	22	16.0	6.0
10	10	22	21.0	23	17.0	6.0
11	11	24	21.0	23	16.5	6.5
12	12	26	23.0	24	17.5	6.5
13	13	26	23.5	24	17.5	6.5
14	14	28	25.0	25	18.5	6.5
15	15	28	25.0	25	18.5	6.5
16	16	32	28.5	27	19.0	8.0
20	20	38	33.5	31	23.0	8.0
25	25	44	37.5	33	24.0	9.0
30	30	50	47.5	35	25.5	9.5

EB-08U



Type: Auto Cooling Pump Seal, Suit EBARA Pumps
 Replacement: Upper seal, Use together with EB-09L
 Temperature: -20 to +180°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: Q1, Q2, U2, T, V, M1, F, G, M



d (mm)	d1	D1	D2	D3	D4	L1	L2	L3	L4	L5
16	18.2	23.0	33.0	41	41.5	26.5	7.5	10	9.0	5.0
20	21.2	27.0	38.0	45	43.8	29.0	7.0	10	12.0	5.0
25	26.4	30.5	47.0	52	51.0	34.5	7.0	13	14.5	8.5
40	41.2	50.5	65.0	75	75.0	48.6	12.0	21	15.6	13.0
45	46.3	55.5	73.8	80	80.0	53.0	16.0	21	16.0	13.0



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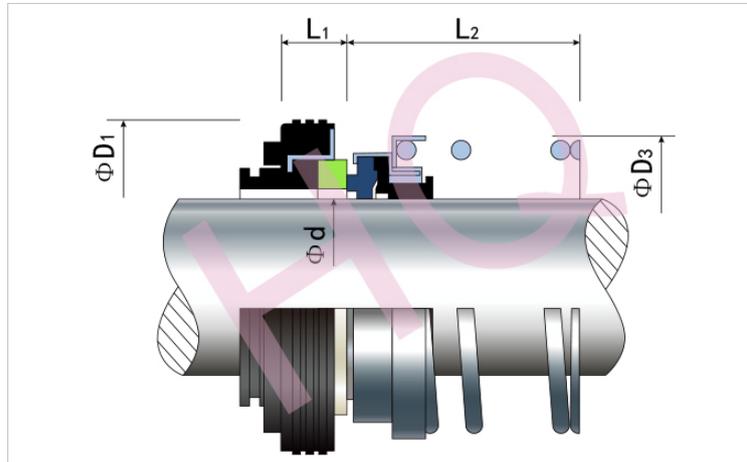


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EB-08L



Type: Suit EBARA Pumps
Replacement: Lower Seal, Use together with EB-08U
Temperature: -15 to +180°C
Pressure: $\leq 1.0\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



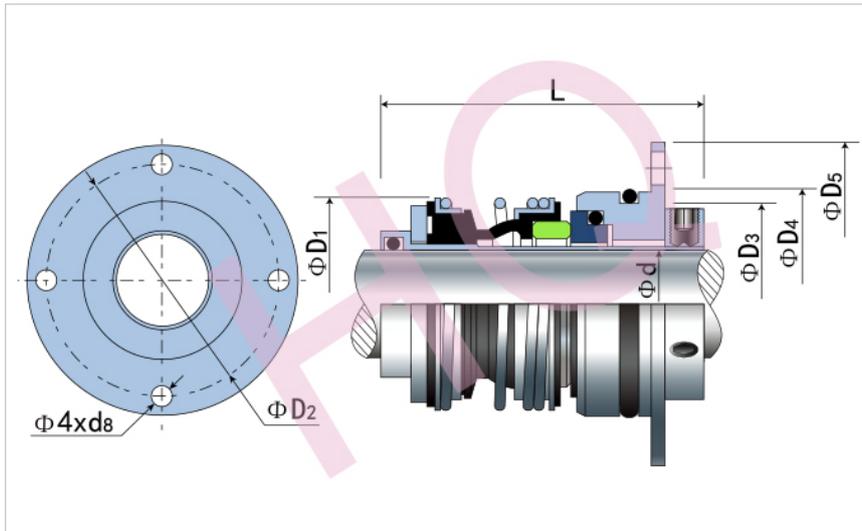
Suit EBARA TSURUMI PUMP.

d= 40mm/45mm

EB-09



Type: Suit EBARA Pumps
Temperature: -15 to +180°C
Pressure: $\leq 1.0\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa



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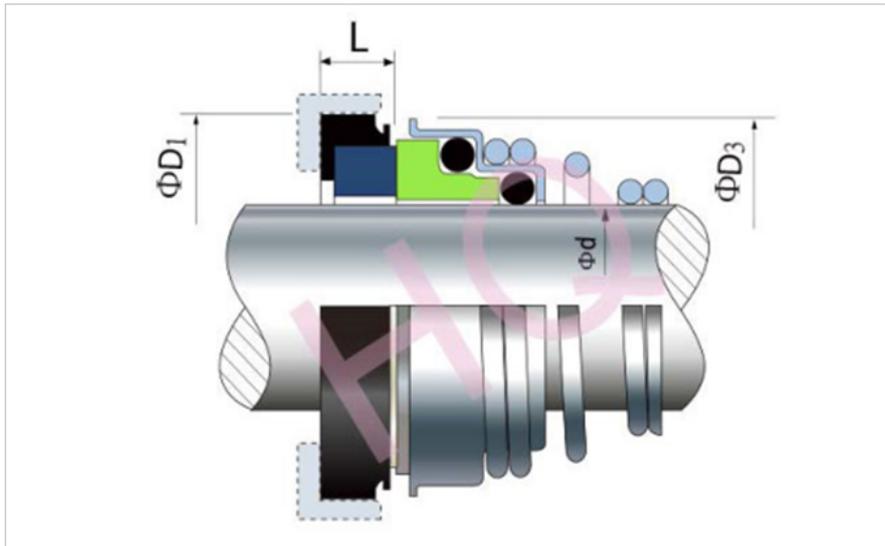


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EB-10



Type: Suit EBARA Pumps
Replacement: Burgmann BT-FN/Cup Seat
Temperature: -15 to +200°C
Pressure: $\leq 1.0\text{Mpa}$
Speed: $\leq 23\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



EMU-01(B02X)

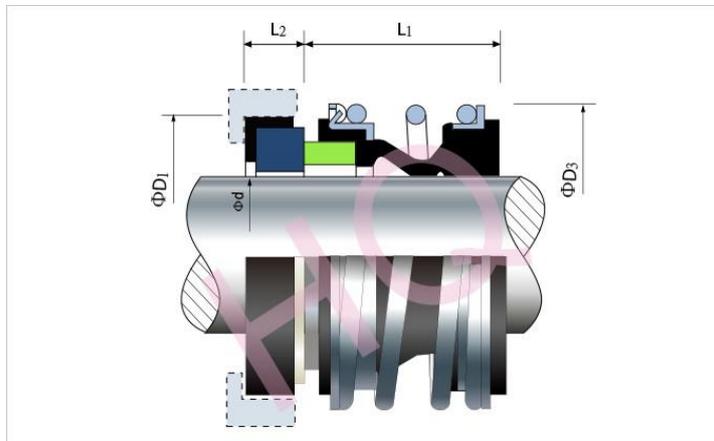


Type: Suit for ABS/EMU/WILO Pumps
 Replacement: AES B02X, Burgamnn MG1S
 Temperature: -20°C to +120°C

Pressure: $\leq 1.2\text{Mpa}$

Speed: $\leq 10\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
15.0	35.0	28.0	17.0	3.9
17.0	33.0	31.0	19.5	7.5
20.0	36.5	36.0	21.5	12.0
25.0	40.0	41.0	22.5	7.5
30.0	50.8	47.0	23.0	9.5
32.0	48.0	51.0	40.0	7.5
32.0(B)	50.8	51.0	33.7	12.6
40.0	50.8	60.0	30.0	12.7
45.0	65.0	65.0	30.0	12.5



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EMU-02(B02XS)

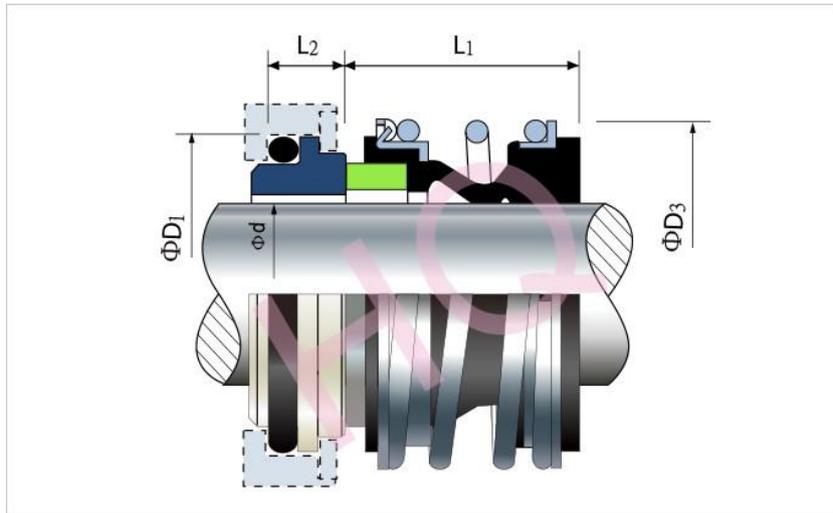


Type : Suit for ABS/EMU/WILO Pumps
 Replacement : AES B02XS , Burgamnn MG1S
 Temperature : -20°C to +120°C

Pressure : $\leq 1.2\text{Mpa}$

Speed : $\leq 10\text{m/s}$

Material : B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
48.0	67.0	69.0	30.5	10.3
65.0	86.0	90.0	38.0	13.5
100.0	123.3	136.0	44.7	14.0



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EMU-03 (1640/1642)



Type: Suit for EMU/Wilo Submersible Pump and MIXERS

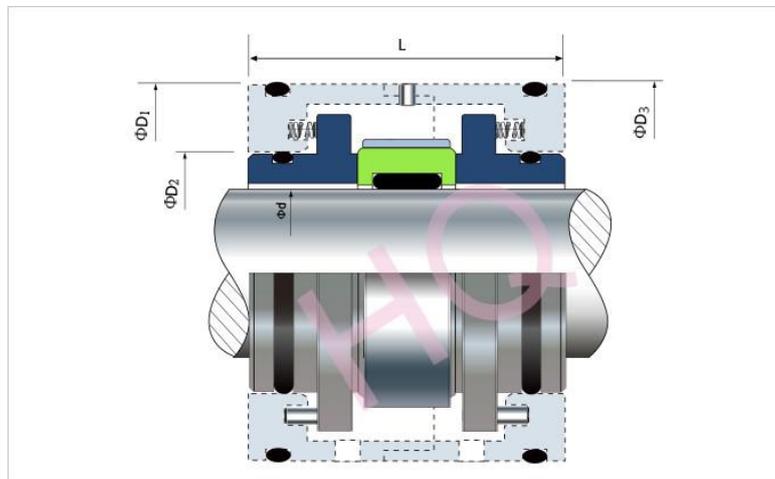
Replacement: Vulcan1640/1642,AES SOE

Temperature: -40°C to +204°C

Pressure: $\leq 1.1\text{Mpa}$

Speed: $\leq 15\text{m/s}$

Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



Vulcan 1640

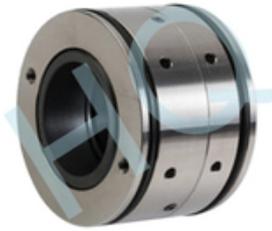
d (mm)	D1	D2	D3	L
35	72	47	72	47
50	92	63	90	52
75	130	95	128	75

Vulcan 1642

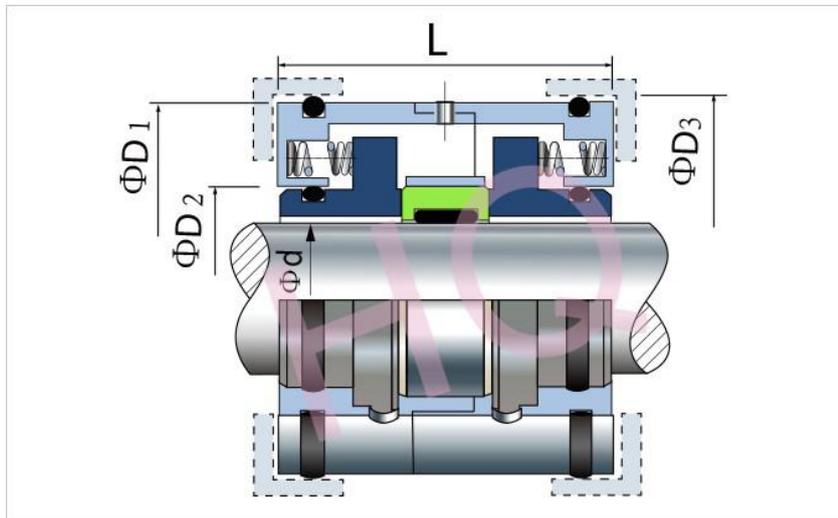
d (mm)	D1	D2	D3	L
35	72	49	72	47
50	92	65	90	52



EMU-04(SOEC)



Type: Suit for EMU/Wilo Pumps and MIXERS
 Replacement: AES SOEC
 Temperature: -40°C to $+200^{\circ}\text{C}$
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	Code	D3	D2	D1	L
35	0.35	72	47	72	47
50	0.50	92	63	90	52
75	0.75	130	95	128	75



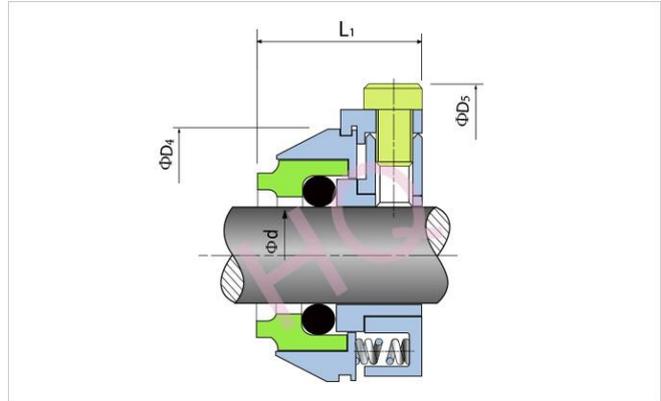
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EMU-05(CS)



Type: Suit for EMU Pumps and MIXERS
 Replacement: AES CS
 Temperature: -50°C to +204°C
 Pressure: $\leq 1.1\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,V,E,P,K,F,G

d	L1	D4	D5
20	27.91	45.3	59.8
22	27.91	47.3	61.8
24	27.9	49.3	63.8
25	27.9	50.3	64.8
28	27.91	53.3	67.8
30	27.91	55.3	69.8
32	27.91	57.3	71.8
33	27.9	58.3	72.8
35	27.91	60.3	74.8
38	27.91	63.3	77.8
40	27.91	65.3	79.8
42	27.9	67.3	81.8
43	27.9	68.3	82.8
45	27.91	70.3	84.8
48	27.91	73.3	87.8
50	27.9	75.3	89.8
53	27.91	78.3	92.8
55	27.9	80.3	94.8
60	27.9	85.3	99.7
65	30.3	96.5	111
70	30.28	101.5	116
75	30.28	106.5	121
80	30.28	111.5	126
85	30.28	116.5	131
90	30.28	121.5	136
95	30.3	126.5	141
100	30.28	131.5	146

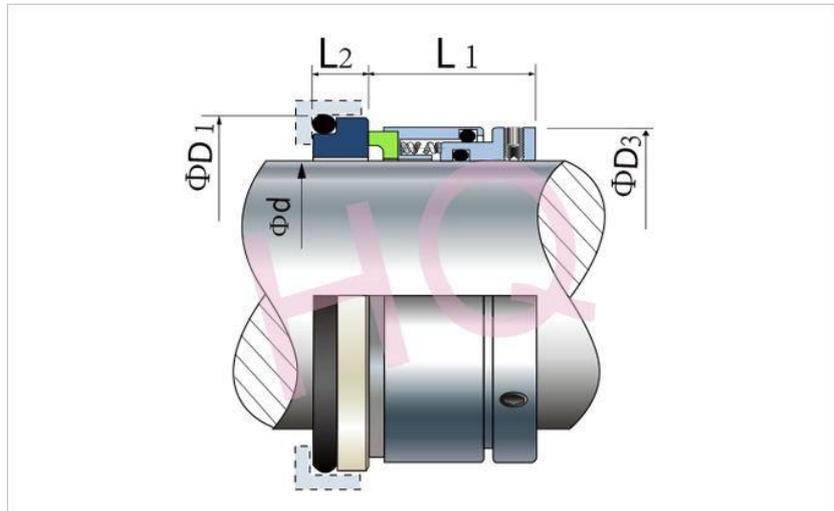
d	L1	D4	D5
0.625	1.098	1.622	2.192
0.75	1.098	1.747	2.317
0.875	1.098	1.872	2.442
1	1.098	1.997	2.567
1.125	1.098	2.122	2.692
1.25	1.098	2.247	2.817
1.375	1.098	2.372	2.942
1.5	1.098	2.497	2.067
1.625	1.098	2.622	3.192
1.75	1.098	2.747	3.317
1.875	1.098	2.872	3.442
2	1.098	2.997	3.567
2.125	1.098	3.122	3.692
2.25	1.098	3.247	3.817
2.375	1.098	3.372	3.942
2.5	1.098	3.497	4.067
2.625	1.192	3.866	4.436
2.75	1.192	3.991	4.561
2.875	1.192	4.116	4.686
3	1.192	4.241	4.811
3.125	1.192	4.366	4.936
3.25	1.192	4.491	5.061
3.375	1.192	4.616	5.186
3.5	1.192	4.741	5.311
3.625	1.192	4.866	5.436
3.75	1.192	4.991	5.561
3.875	1.192	5.116	5.686
4	1.192	5.241	5.811

d (Inch)	L1	D4	D5
0.625	1.098	1.622	2.192
0.75	1.098	1.747	2.317
0.875	1.098	1.872	2.442
1	1.098	1.997	2.567
1.125	1.098	2.122	2.692
1.25	1.098	2.247	2.817
1.375	1.098	2.372	2.942
1.5	1.098	2.497	2.067
1.625	1.098	2.622	3.192
1.75	1.098	2.747	3.317
1.875	1.098	2.872	3.442
2	1.098	2.997	3.567
2.125	1.098	3.122	3.692
2.25	1.098	3.247	3.817
2.375	1.098	3.372	3.942
2.5	1.098	3.497	4.067
2.625	1.192	3.866	4.436
2.75	1.192	3.991	4.561
2.875	1.192	4.116	4.686
3	1.192	4.241	4.811
3.125	1.192	4.366	4.936
3.25	1.192	4.491	5.061
3.375	1.192	4.616	5.186
3.5	1.192	4.741	5.311
3.625	1.192	4.866	5.436
3.75	1.192	4.991	5.561
3.875	1.192	5.116	5.686
4	1.192	5.241	5.811

EMU-06(SAIE)



Type: Suit for EMU Pumps
 Replacement: AES SAIE
 Temperature: -40°C to $+200^{\circ}\text{C}$
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
85.0	109.0	103.2	44.2	14.8
105.0	134.3	129.0	36.5	14.8



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Cross Referance Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
A.B.S. Pump Seals								
ABS-01				195P				
ABS-02				820				
ABS-04				1577				
ABS-05				1632				
ABS-07				282				
ABS-08				1578				
ABS-09				1632				
ABS-10				195				
Allweiler Pump Seals								
AWL-01		T01A		8W				
AWL-02				8X				
AWL-03				198				
AWL-04				82A				
Andritz Pump Seals								
HQCS-J51			SAF					
HQCS-J46			JCS1					
HQCS-J49			JCS2					
AD-04	M7N							
AD-06	MG12							
AD-07	MG1							
E.M.U Pump Seals								
EMU-01	MG1S	B02X						
EMU-02	MG1S	B02XS						
EMU-03		SOE						
EMU-04		SOEC						
EMU-05		SC						
EMU-06		SAIE						
Ebara/Eureka Pump Seals								
EB-01				260A				
EB-02				198				
EB-03				278				
EB-04				277				

Cross Referance Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
ALFA LAVAL Pump Seals								
AL-01		P07						
AL-02	-	P07	-	-	-	-		
AL-03	-	P07	-	-	-	-		
AL-04	-	P07	-	-	-	-		
AL-05	-	P07	-	-	-	-		
AL-06	-	P07						
AL-07	-	P07	-	-	-	-		
AL-08	-	P07	-	-	-	-		
AL-09	-	P07	-	-	-	-		
AL-10	-	P07	-	-	-	-		
AL-11	-	P07	-	-	-	-		
AL-12	-	W03	87(EI/EC)	1688W	-			
AL-13	-	W03S	87(EI/EC)	1688W	-			
AL-14	-	SOZ	-	-	-	-		
AL-17	-	MP07	-		-	-		
AL-18	MG1-G9	B02D				ALC		
AL-19				1655				
AL-20	MG13							
AL-21							AL-N-22	
AL-22				293				
AL-23								
AL-24		BHCH						
AL-25				1628				
AL-26		W09						
AL-27				1680				
AL-28				1694				
AL-29				13M				
AL-30		W016U						
AL-31		MOHCH						
AL-32		W13U						
AL-33		W13SU						
AL-34		M09						
AL-35		M09S						
AL-36		W03DU						
AL-37		ALXU						
AL-38		W01						



Cross Referance Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
ALFA LAVAL Pump Seals								
AL-39		M010X						
AL-40		9T/23						
AL-42		S02X						
APV Pump Seals								
APV-01A		P06	ROSR	26	37	APU		
APV-01B		P06	ROSR	26	37	APU		
APV-02A		BP06						
APV-02B		BP06						
APV-03		P06BT						
APV-01C	-		-	26	-	-		
APV-04	-	TOR	-	-	L/P/3P	-		
APV-05	-	MOHCH	-	-				
APV-06	-	TOW	-	-	-	AWS		
APV-07	-	TOWD	-	-	-	AWD		
APV-08	-	TOWS	-					
APV-09	-	W08	-		-	-		
APV-10		MOHCH						
APV-11	-	W09-CL	-		-	-		
APV-12	-	W010	-		-	-		
APV-13	-	TOWP	-		-	AWP		
APV-14	-	TOWDW	-		-	-		
APV-16				962				
APV-17		M010S5						
APV-18								
APV-20				294				



Cross Referance Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
APV Pump Seals								
APV-21				272				
APV-22				1644				
APV-23				66				
APV-24				292				
APV-25				1655				
APV-26				295				

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
Comprosser Seals								
CO-SA1		SAB-50						
CO-SA2		SAB-75B						
CO-SA3		M04H						
CO-SA4		SAB-55						
CO-SA5		SAB-75						
CO-SA6		SAB-52						
CO-HO1		M02J						
CO-HO2		M02SJ						
CO-HO3		M02SH						
CO-HO4		M02S7						
CO-HA2		M018						
CO-HA3		M017S						
CO-GR1		MOG						
CO-P02C		P02C						
CO-P02G		P02G						
CO-P02S		P02S						
CO-P08D		P08D						
CO-POB		POB						
CO-POBO		POBO						
CO-TOC		TOC						

Material Codes

Metal Materials			
Type	Material Description	Symbol	Code
	Normal Stainless Steel	2Cr13	F2
	Stainless Steel	304	F
	Stainless Steel	304L	F1
	Stainless Steel	316	G
	Stainless Steel	316L	G1
	Hastelloy C-4 Alloy	Hast C4	M
	Hastelloy B-2 Alloy	Hast B2	M1
	Carpenter	Carp.20	M3
	Monel	Monel.K50	M4
	Hastelloy C-4C-276 Alloy	Hast.C-276	M5
	Pure Titanim	TA2	T2
	Carpenter	Carp.42	T4
	Deposit induration Stainless Steel	Am350	T6
	08F Coated with Chrome	Q235-A	C
	Brass	H62	H
Secondary Seal Materials			
Type	Material Description	Symbol	Code
Rubber	Nitrile(NBR)	NBR	P
	Ethylene Propylene(EPDM)	EPR	E
	Fluorocarbon Rubber(Viton)	FPM	V
	Silicon Rubber	SI	S
	Chloroprene Rubber	CR	N
	Hydrogen Nitrile	HNBR	H
	Perfluoroelastomer(Kalrez,Chemraz)	FFKM	K
PTFE	Pure PTFE	PTFE	T
	PTFE, glassfibre reinforced		T2
	PTFE,Carbon Reinforced		T3
PTFE Wrapped	FPM,with PTFE wrapped	PTFE+FPM	M1
	EPR,with PTFE wrapped	PTFE+EPR	M2
	MVQ,with PTFE wrapped	PTFE+MVQ	M3
Expended graphite	Expanded Graphite		G



Seal Ring Materials			
Type	Material Description	Symbol	Code
SIC	Silicon Carbide,Sintered Pressureless	SSIC	Q1
	Silicon Carbide,Sintered Pressureless(shrunk-in)		Q12
	Silicon Carbide,Reaction bonded	RBSIC	Q2
	Silicon Carbide,Reaction bonded(shrunk-in)		Q22
	Reaction Silicon Carbide with graphite		Q3
	Sintered Silocon Carbide with SB		Q4
AL203	Ceramic(Alumina)	99.5% AL203	V
	Ceramic(Alumina)	99% AL203	V1
	Ceramic(Alumina)	95% AL203	V2
	Cermet	Fe+AL203	V3
TC	Co-binder Tungsten Carbide	YG6,GY8	U1
	Co-binder Tungsten Carbide(shrunk-in)		U12
	Ni-binder Tungsten Carbide	M106,M108	U2
	Ni-binder Tungsten Carbide(shrunk-in)		U22
	NiCrmo-binder Tungsten Carbide		U3
	NiCrmo-binder Tungsten Carbide(shrunk-in)		U32
Carbon	Antimony Impreg,Carbon Graphite		A
	Babbit Alloy Impreg,Carbon Graphite		A1
	Copper Impreg,Carbon Graphite		A2
	Resin Impregnated Carbon Graphite(Furan)		B
	Resin Impregnated Carbon Graphite(Epoxy)		B1
	Resin Impregnated Carbon(Phedol-formaldehyde)		B2
	Hot-pressing Carbon		B5
Metal	Stainless Steel	304	F
	Stainless Steel	304L	F1
	Stainless Steel	316	G
	Stainless Steel	316L	G1
	Tin bronze	ZQSn6-6-3	S1
	High silicon cast iron		S2
	High nickel cast iron		S3
Plastic	PTFE,glassfibre reinforced		Y1
	PTFE,carbon reinforced		Y2
Spring Materials			
Type	Material Description	Symbol	Code
	Hastelloy C-4 Alloy	Hast.C4	M
	Stainless Steel	304	F
	Stainless Steel	304L	F1
	Stainless Steel	316	G
	Stainless Steel	316L	G1
	65Mn Coated with Chrome	65Mn	G8