



NINGBO HUAQIU INDUSTRY AND TRADE CO.,LTD

NingBo HuaQiang Mechanical Seal Factory



2025 HQ Catalogue 3-B

(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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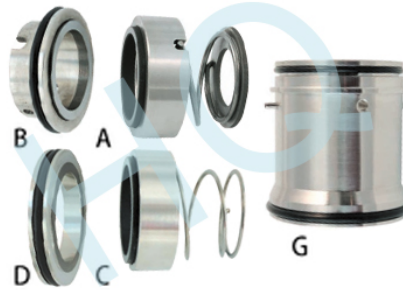


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FR-01(W-2201/1)

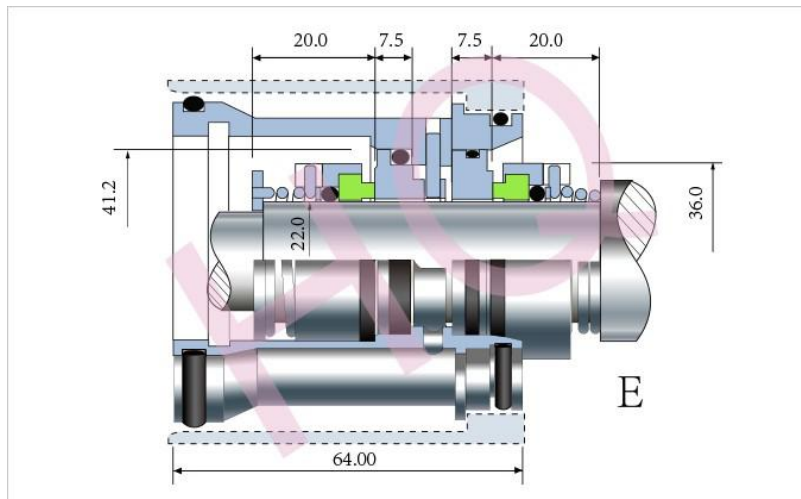


Type: Suit for FRISTAM Pumps
 Replacement: AES T01F(22mm)
 Temperature: -20°C to +180°C

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



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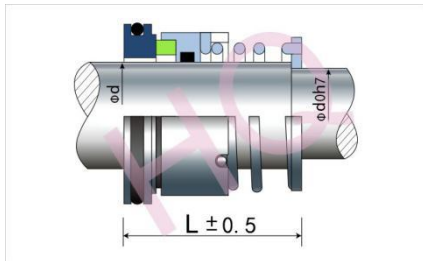


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Type: Suit for FRISTAM Pumps
 Replacement: AES T01F(22mm,30mm,35mm)
 Temperature: -20°C to +180°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G

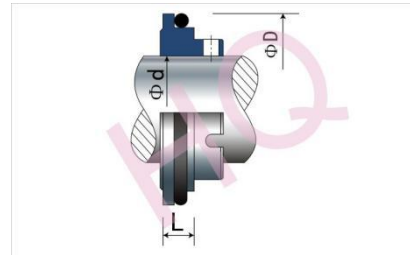


FR-02-A+D(Vulcan W-XX08/12)



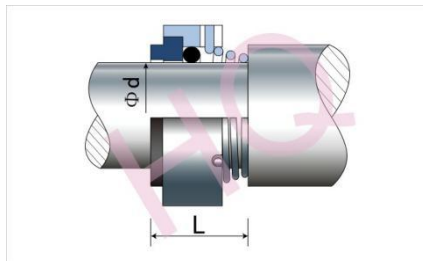
d (mm)	d0	L	Model	Pump type
22	18	22	FR-08-A22	FP/FL/FT
30	22	24	FR-08-A30	
35	30	26	FR-08-A35	

FR-02-B(Vulcan W-XX06/61)



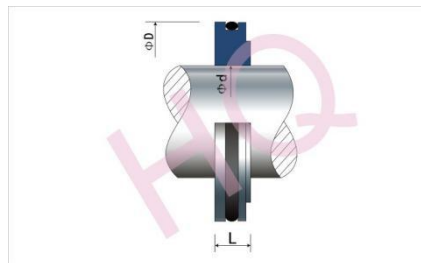
d (mm)	D	L	Model	Pump type
22	41.2	7.5	FR-08-B22	FP/FL/FT
30	48.0	7.6	FR-08-B30	
35	55.5	8.6	FR-08-B35	

FR-02-C(Vulcan W-XX08/12B)



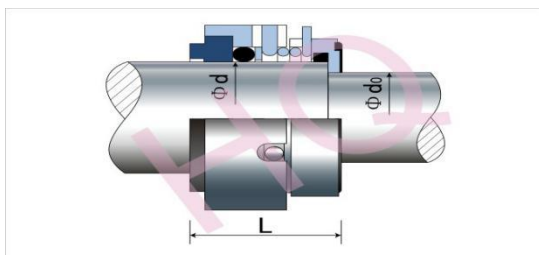
d(mm)	L	Model	Spring	Pump type
22	20	FR-08-C22	LEFT	FP/FL/FT
30	22	FR-08-C30	LEFT	
35	26	FR-08-C35	LEFT	
			RIGHT	

FR-02-D(Vulcan W-XX05/6)



d (mm)	D	L	Model	Pump type
22	41.2	7.5	FR-08-C22	FP/FL/FT
30	48.0	7.6	FR-08-C30	
35	55.5	8.6	FR-08-C35	

FR-02-E(Vulcan Y-XX08/2)



d (mm)	d0	L	Model	Pump type
22	18	18	FR-08-E22	FP/FL/FT
30	22	22	FR-08-E30	
35	28	28	FR-08-E35	



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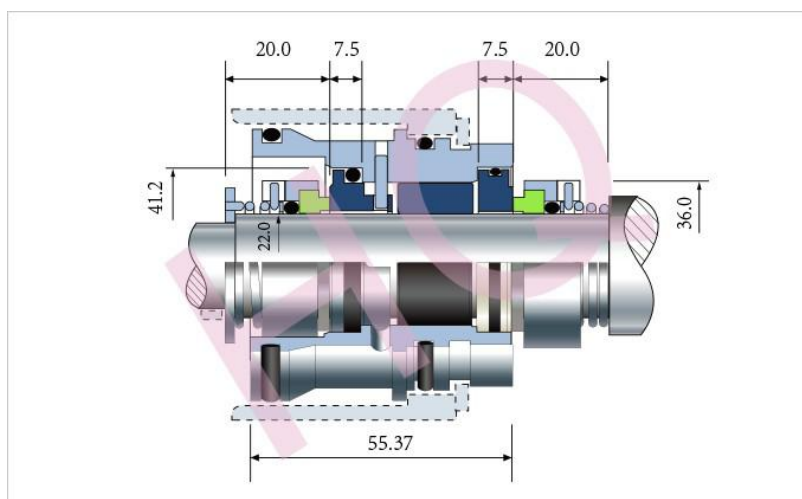


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FR-3(W2201/3)



Type: Suit for FRISTAM Pumps
 Replacement: AES T01F(22mm)
 Temperature: -20°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G

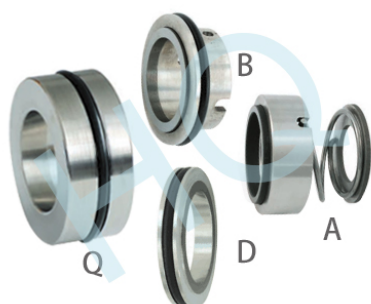


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FR-4(W2201/3)



Type: Suit for FRISTAM Pumps

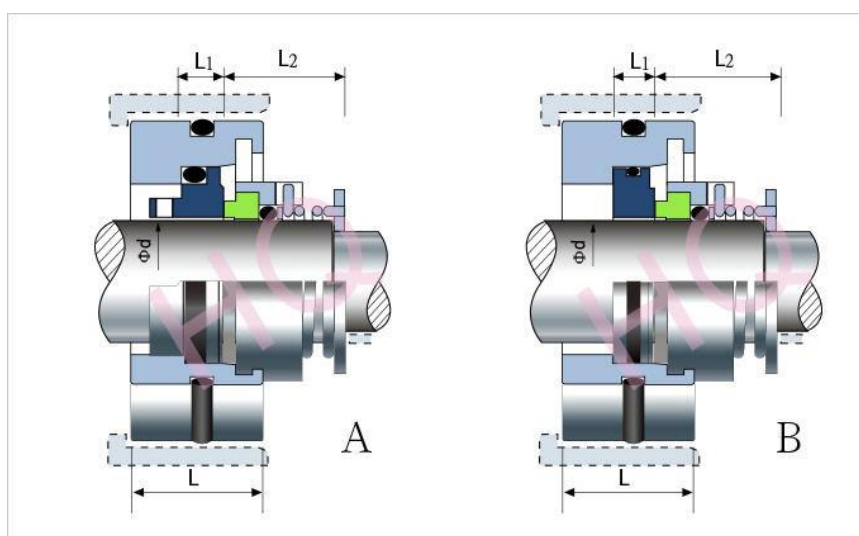
Replacement: AES T01F(22mm)

Temperature: -20°C 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



d (mm)	L	L1	L2
22	24	7.5	20

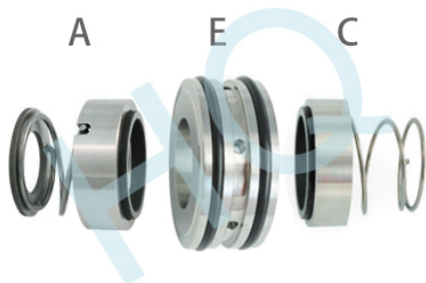


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FR-5(W-3X01/2)



Type: Suit for FRISTAM Pumps

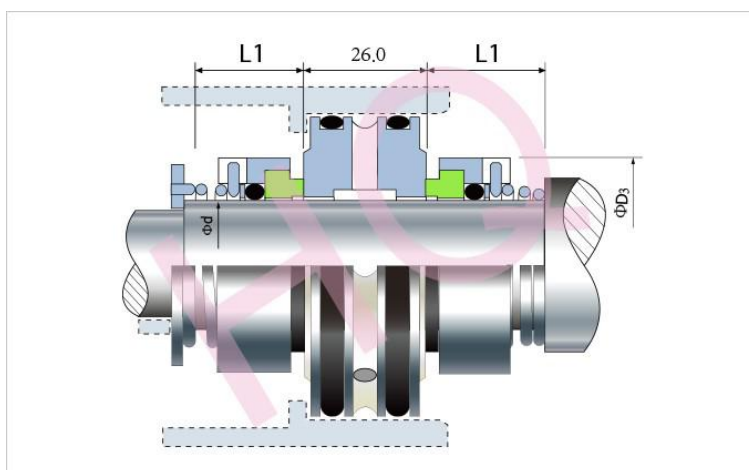
Replacement: AES T01F(30mm,35mm)

Temperature: -20°C 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



d (mm)	D3	L
30	60	26
35	70	26

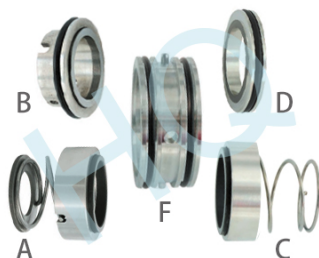


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FR-6(W-3X01/2)



Type: Suit for FRISTAM Pumps

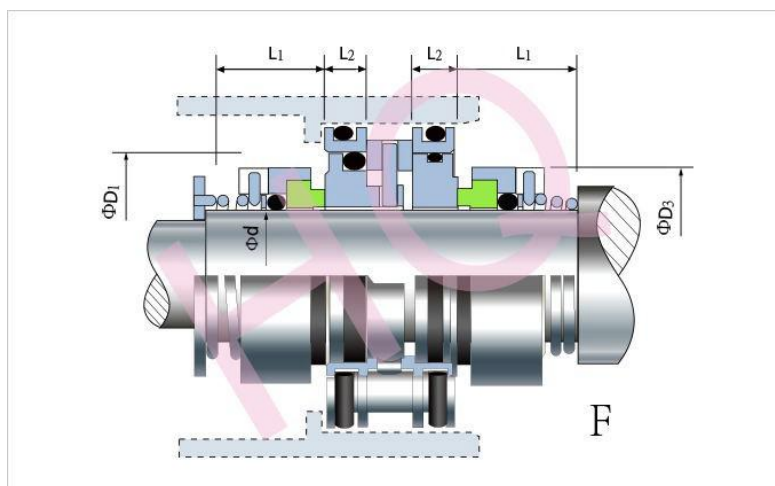
Replacement : AES T01F(30mm,35mm)

Temperature: -20°C 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



d (mm)	D1	D3	L1	L2
30	48	43.8	22	7.6
35	55.5	48.9	26	8.6



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FR-07(T01F)



Type: Suit for FRISTAM Pumps

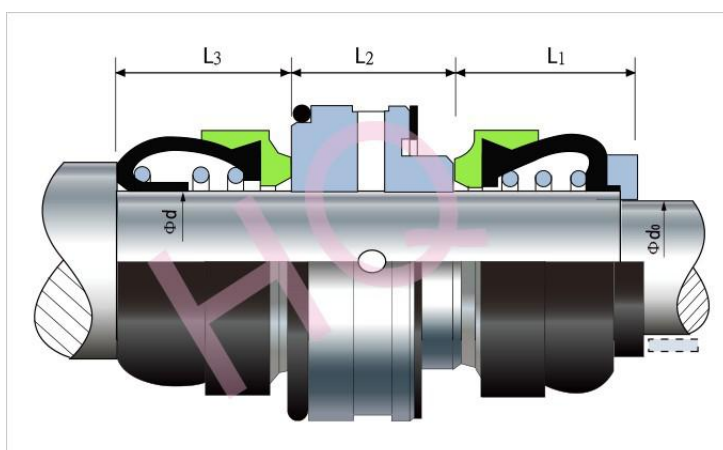
Replacement: AES T01F

Temperature: -20°C 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



d (mm)	d0	D	L1	L2	L3
22	18	50	22	22.5	20



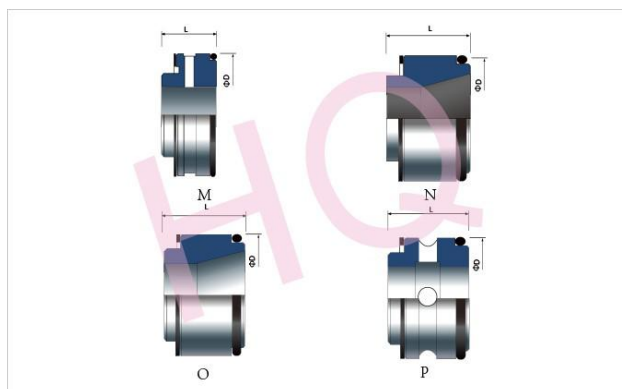
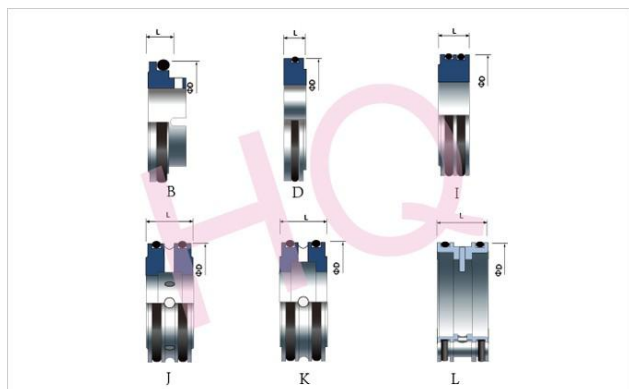
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FR-9(T01F)

Type: Suit for FRISTAM Pumps
 Replacement: AES T01F
 Temperature: -20°C to +180°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: F,G,P,E,V,



Type	d (mm)	D	L
B	22	41.2	7.5
	30	48.0	7.6
	35	55.5	8.6
D	22	41.2	7.5
	30	48.0	7.6
	35	55.5	8.6
I	30	50.0	14.0
J	22	50.0	20.0
	30	60.0	26.0
	35	70.0	26.0
K	22	45.0	20.0
L	30	60.0	25.0
	35	70.0	25.0
M	22	50.0	22.5
N	30	60.0	27.0
O	22	45.0	30.0
	30	60.0	27.0
P	22	45.0	30.0
	30	60.0	26.0
	35	64.0	30.0



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FR-10(T01F)

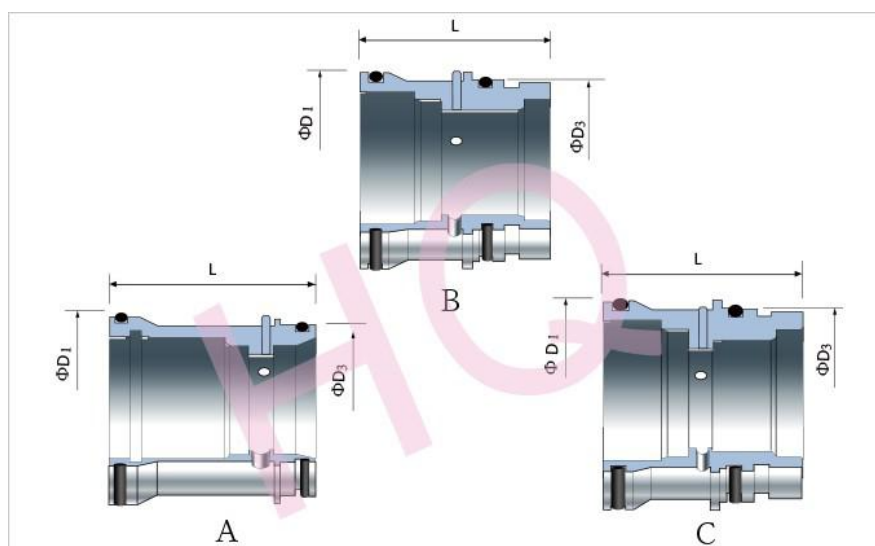


Type: Suit for FRISTAM Pumps
Replacement: AES T01F
Temperature: -20°C to +180°C

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

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

Material: F,G,P,E,V



Type	D1	D3	L
A	60	54	64.0
B	59	54	55.4
C	59	54	55.4



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FR-11(T01F)



Type: Used for Food, Beverage
and Dairy in dustries

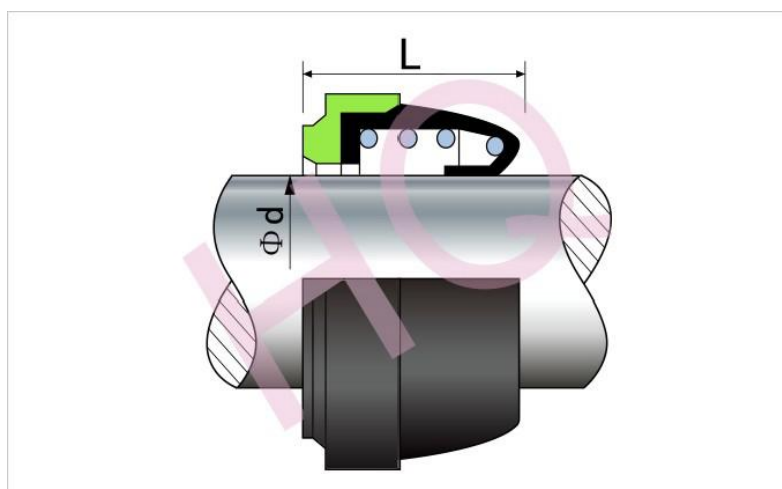
Replacement: Vulcan 2209/1, Billi BB14A

Temperature: -20°C to +180°C

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

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

Material: B, E, F, G



d (mm)	L	Pump type
22	20	FP/FL/FT
30	22	



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FR-12(T01F)



Type: Used for Food, Beverage
and Dairy industries

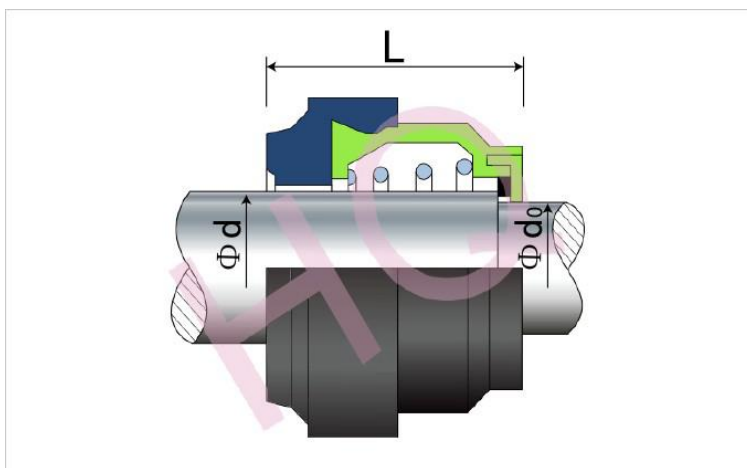
Replacement: Vulcan 2209/2, Billi BB14B

Temperature: -20°C to +180°C

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

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

Material: B, E, F, G



d (mm)	d0	L	Pump type
22	15	22	FP/FL/FT
30	22	24	



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FR-13(T01F)



Type: Used for Food,Beverage

and Dairy in dustries

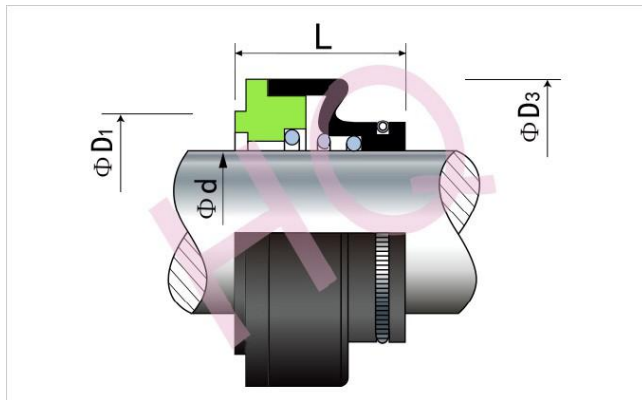
Replacement: Vulcan 2209/3,Billi BB14C

Temperature: -20°C to +180°C

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

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

Material: B,E,F,G



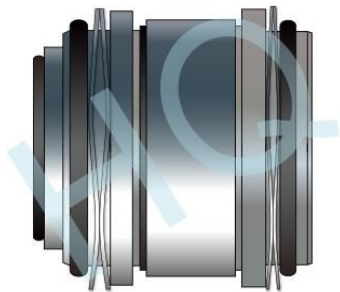
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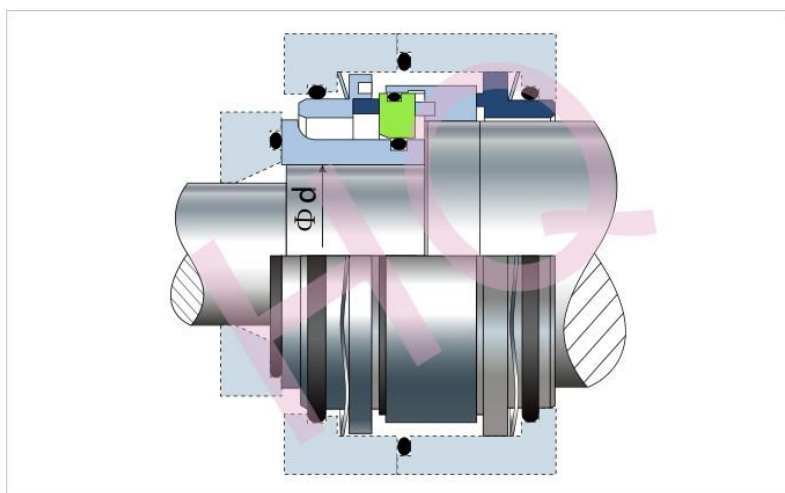
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d (mm)	D1	D3	L	pump type
6	13.0	18.0	10	FP/FL/FT
10	19.0	24.0	16	
12	21.0	26.0	16	
14	23.0	28.0	16	
15	24.0	30.0	16	
16	26.0	33.0	18	
18	28.5	36.0	18	
20	31.0	38.0	18	
22	33.0	40.0	20	
24	35.5	43.0	20	
25	36.0	44.0	20	
28	39.5	47.0	22	
30	43.0	50.0	22	
32	45.5	53.0	26	
35	48.0	56.5	26	
38	52.0	59.0	26	
40	54.0	61.0	26	
45	61.0	73.0	26	
50	67.0	78.0	26	
65	84.0	95.0	30	
70	90.0	100.0	30	

FR-8(WOF)



Type: Fristam Pump Seals
 Replacement: AES WOF
 Temperature: -20 to +180°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=25mm,30mm,40mm,52mm,0.984",1.181",1.575",2.047".



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FR-14(WOFA)

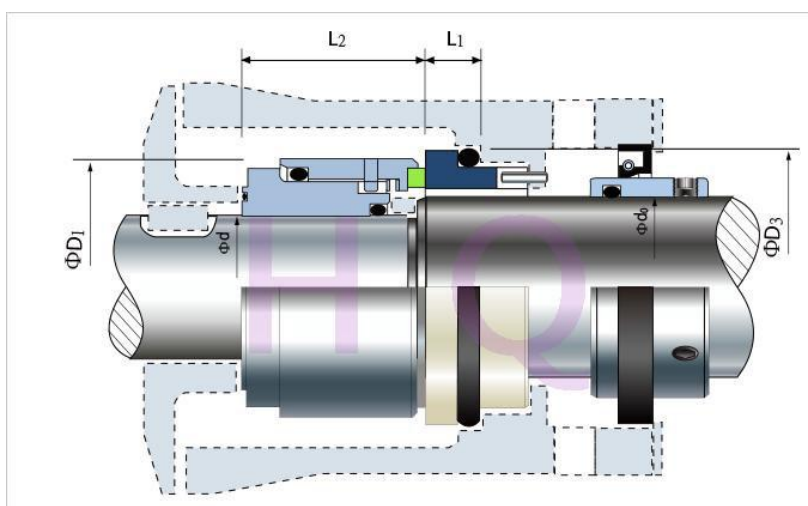


Type: Suit for FRISTAM FM,FPH,FPH Pumps
 Replacement: AES WOFA,Billi BB14-8
 Temperature: -40°C to $+250^{\circ}\text{C}$

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

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

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



d (mm)	d0	D1	D3	L1	L2
32	43	59	61	14	40



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FR-15(WOFC)

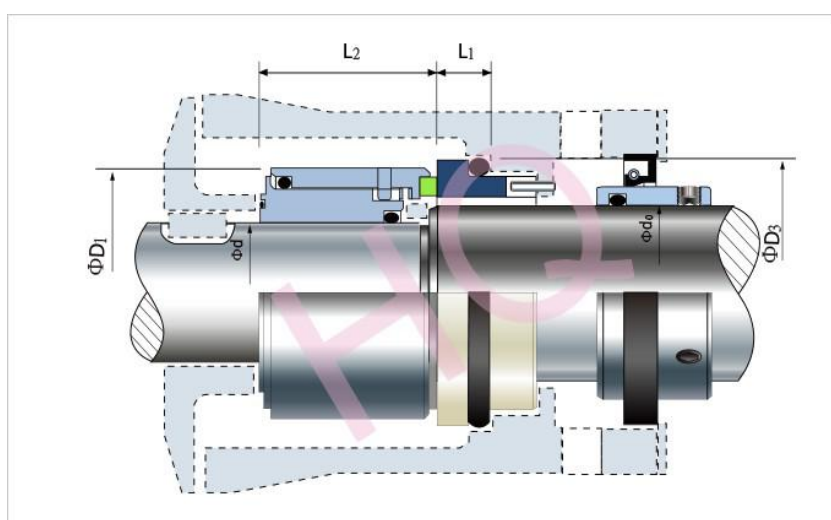


Type: Suit for FRISTAM FM 312,322,342 Pumps
 Replacement: AES WOFC
 Temperature: -40°C to $+250^{\circ}\text{C}$

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

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

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



d (mm)	d0	D1	D3	L1	L2
35	43	59	61	14	30



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FR-16(WOFB)



Type: Suit for FRISTAM FKF,FKFN,FLF
FLFN,FLV Pumps

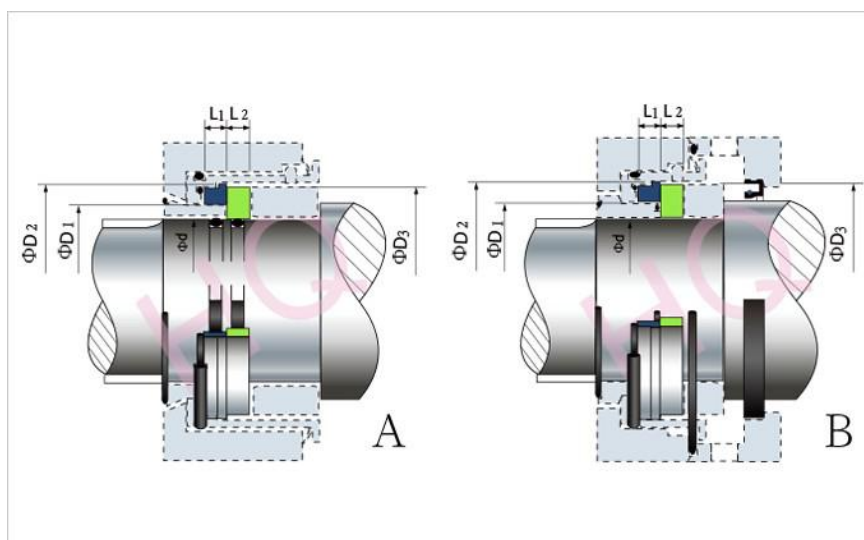
Replacement: AES WOFB,Billi BB14-FK-FL-KIT

Temperature: -40°C to $+250^{\circ}\text{C}$

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

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

Material: F,G



d (mm)	Size Code	O.E.M PUMP model
20	0200	FL55, FLF55
31	0300	FL75, FLF75
38	0380	FL100, FLF100
52	0500	FL130, FLF130



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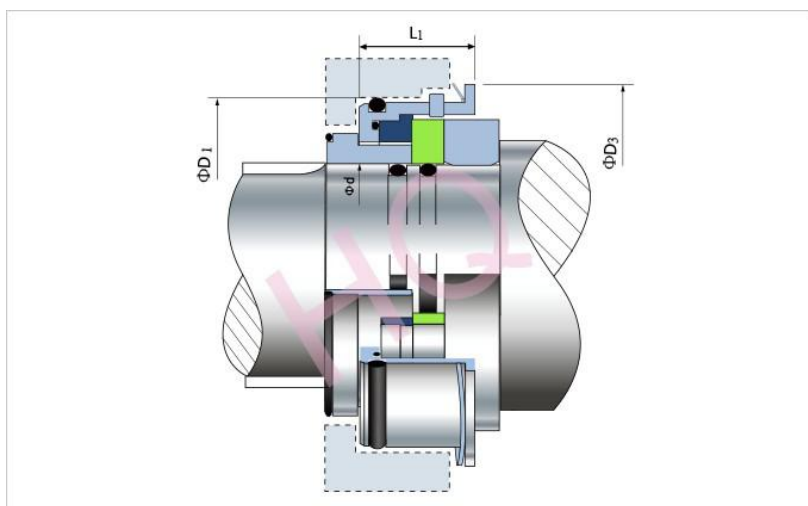


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FR-18(MOFBC)



Type: Suit for FRISTAM FLF55
and FLFN 55 Pumps
Replacement: AES WOFBC,Billi BB14-FL
Temperature: -40°C to $+250^{\circ}\text{C}$
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	Size Code	O.E.M PUMP Model
20	0200	FL55, FLF55
31	0300	FL75, FLF75
38	0380	FL100, FLF100

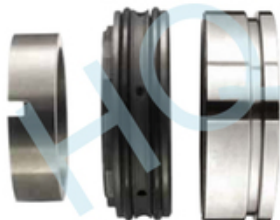


<http://www.hqseal.com>

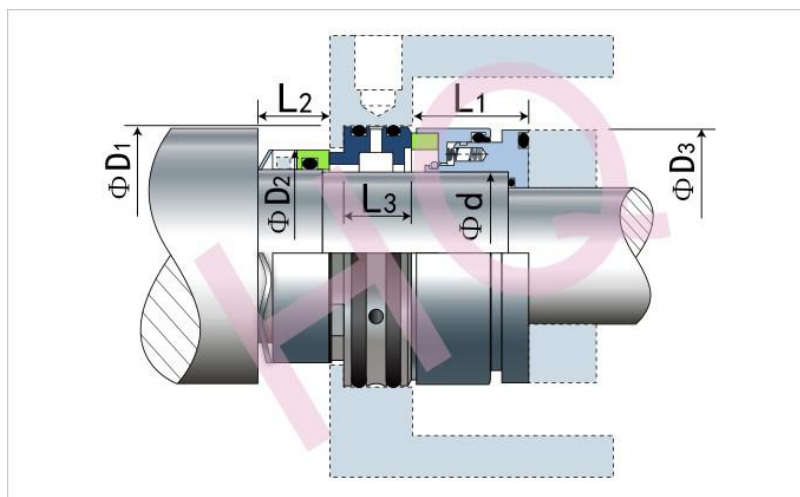


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FR-18(MOFC)



Type: Suit for Fristam FPR Pumps
 Replacement: AES MOFC
 Temperature: -20°C to $+140^{\circ}\text{C}$
 Pressure: $\leq 2.1\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: A,G,Y



d (mm)	D1	D3	L1	L2	L3
37.5	47	56.5	26	15.6	15.2
d (inch)	D1	D3	L1	L2	L3
1.476	1.85	2.224	1.024	0.616	0.600

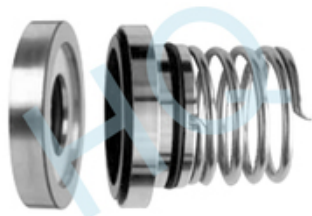


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FR-19(P09)

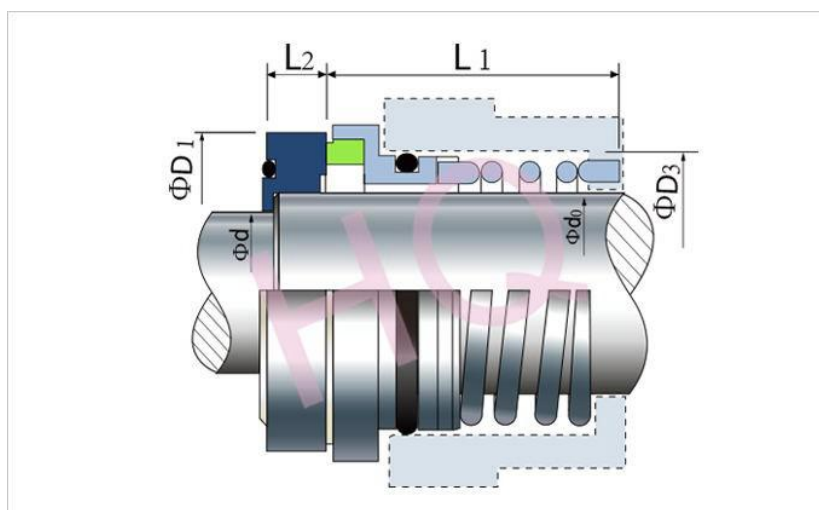


Type: Suit for FRISTAM Pumps
 Replacement: AES P09, Burgmann MR,
 Vulcan 94, Lidering FR-Z-21
 Temperature: -20°C to $+200^{\circ}\text{C}$

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

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

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



d (mm)	d0	D1	D3
21	25	59	50



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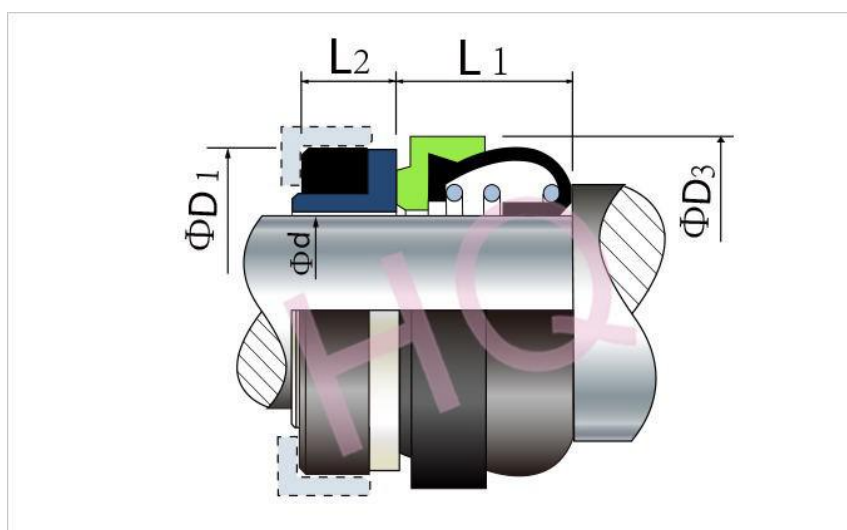
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FR-20(BOH)



Type: Suit for FRISTAM Pumps
 Replacement: AES BOH, Crane 6J
 Temperature: -20°C to $+200^{\circ}\text{C}$

Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,A,P,E,N,V



d (inch)	D1	D3	L1	L2
22.2	40.5	44.5	16	10.5

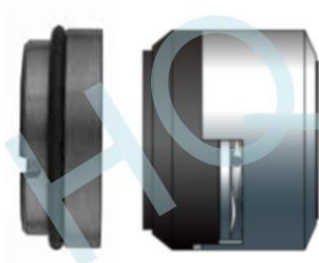


<http://www.hqseal.com>

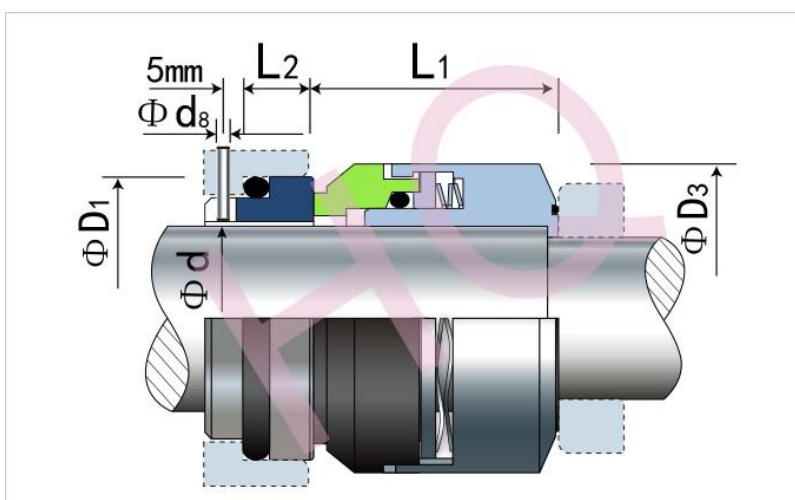


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FR-26(W07DMBFU)



Type: Suit for FRISTAM FPH Pumps
 Replacement: AES W07DMBFU
 Temperature: -40 to +200°C
 Pressure: $\leq 2.0\text{Mpa}$
 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
35	50	56	44.5	11.5
d (inch)	D1	D3	L1	L2
1.378	1.969	2.205	1.752	0.453

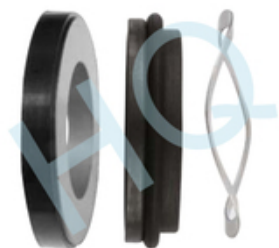


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FR-27(WOFD)



Type: Fristam Pump Seals

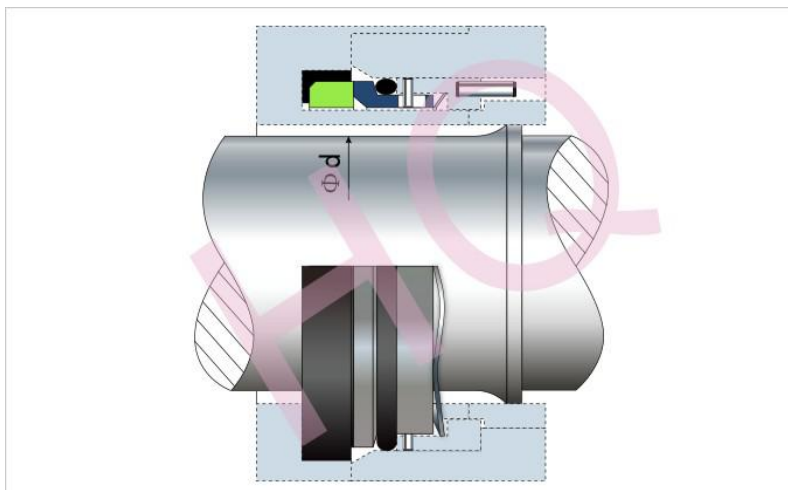
Replacement: AES WOFD

Temperature: -20 to +120°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=52mm, 2.047 "

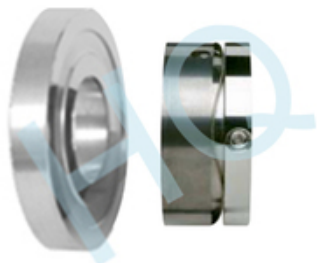


<http://www.hqseal.com>

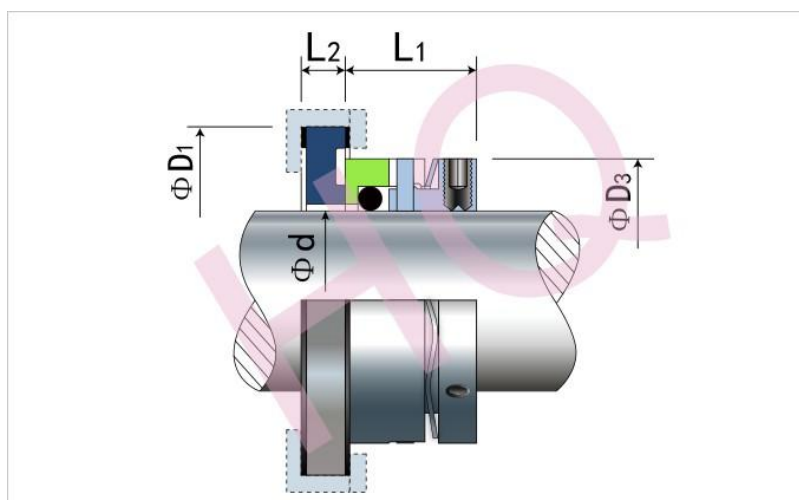


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FR-28(W01FU)



Type: Suit for FRISTAM Pumps
 Replacement: AES W01FU
 Temperature: -20°C to $+200^{\circ}\text{C}$
 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



d (mm)	D1	D3	L1	L2
22	45	33.0	19.1	8
38	62	51.8	21.1	8
d (inch)	D1	D3	L1	L2
0.866	1.771	1.300	0.750	0.315
1.496	2.441	2.039	0.831	0.315



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FR-29(W025)

Type: Suit for FRISTAM FKL50 Pumps
 Replacement: AES W025 Double/Single Seal
 Temperature: -20°C to +180°C

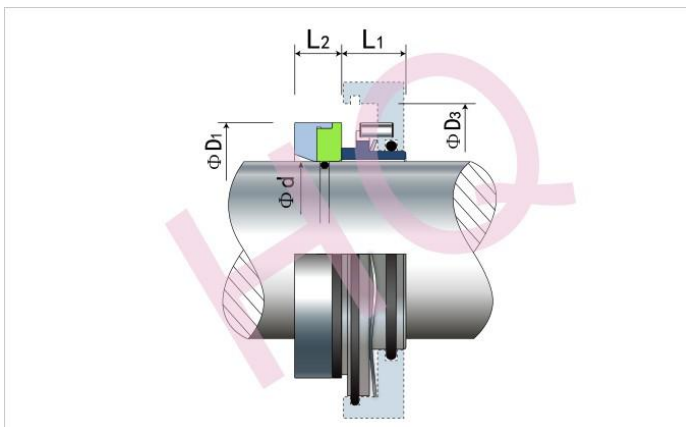
Pressure: $\leq 15.0\text{Mpa}$

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

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

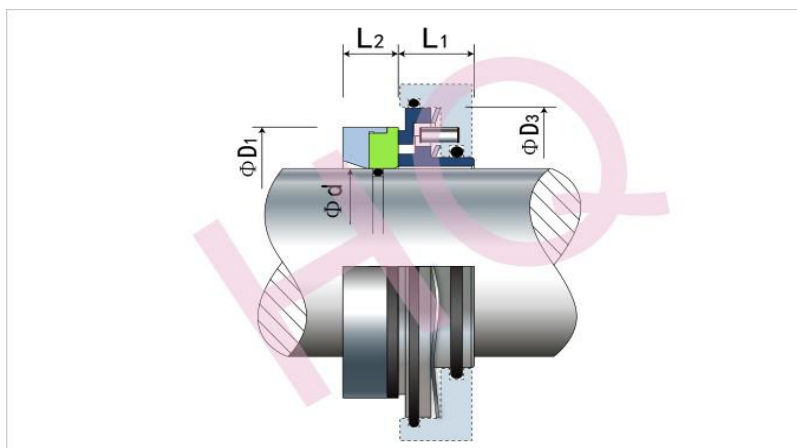


Single Seal



d (mm)	D1	D3	L1	L2
48	69	64	18	12.7
d (inch)	D1	D3	L1	L2
1.890	2.717	2.520	0.709	0.500

Double Seal



d (mm)	D1	D3	L1	L2
48	69	78	18	12.7
d (inch)	D1	D3	L1	L2
1.890	2.717	3.071	0.709	0.500

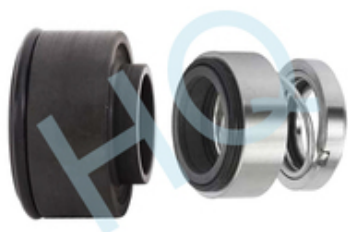


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FR-21(Y-V9018)

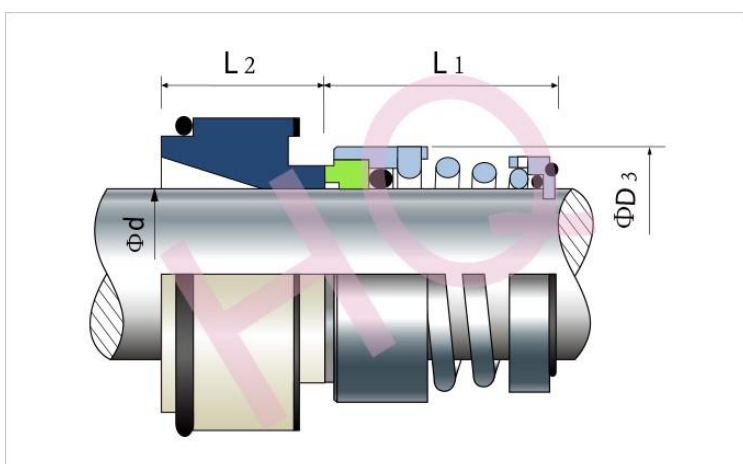


Type: Suit for non-flush Fristam FPX Pumps
 Replacement: Vulcan Y+V9018,Billi14-9018
 Temperature: -30°C to $+175^{\circ}\text{C}$

Pressure: $\leq 5.0\text{Mpa}$

Speed: $\leq 2\text{m/s}$

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



d (mm)	D3	L1	L2
22	45	22	30
30	60	24	27



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FR-22(V9200)



Type: Suit for Fristam FT200 & FT400 series

Pumps

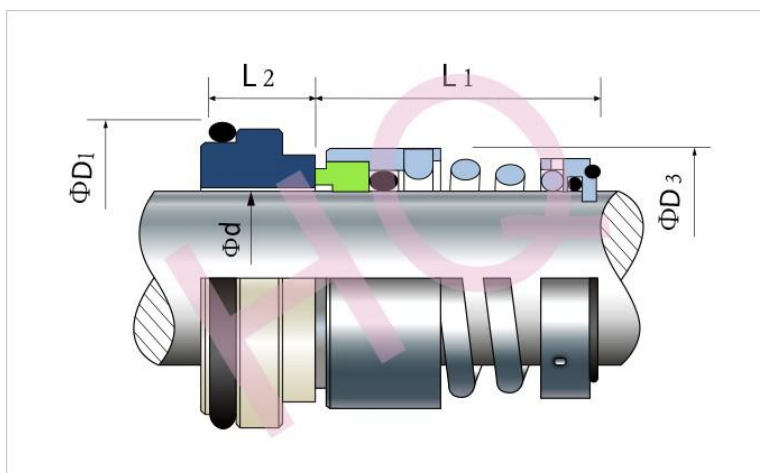
Replacement: Vulcan V9200, Billi BB14-9200

Temperature: -45°C to $+150^{\circ}\text{C}$

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
30	54.5	44	24	12



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FR-23(W-XX02)



Type: Suit for Fristam FLII series Lobe Rotor

Pumps

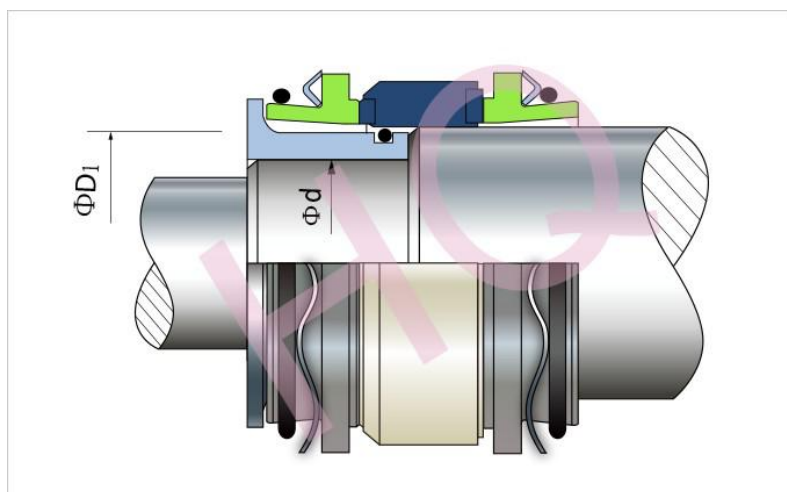
Replacement: Vulcan W-XX02,Billi BB14-FLII

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



Sleeve O.D. D1	Size Code d	O.E.M PUMP Model
28	0200	FLII 55
38	0300	FLII 75
50	0400	FLII 100
62	0520	FLII 130

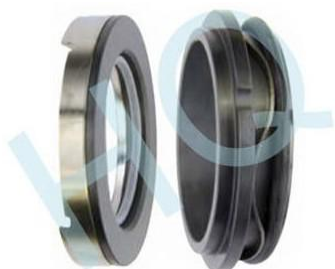


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FR-24(W-4820)



Type: Suit for Fristam

FKL50,FZX2100,FZX2150,

FZX2200,FZX2250 Pumps

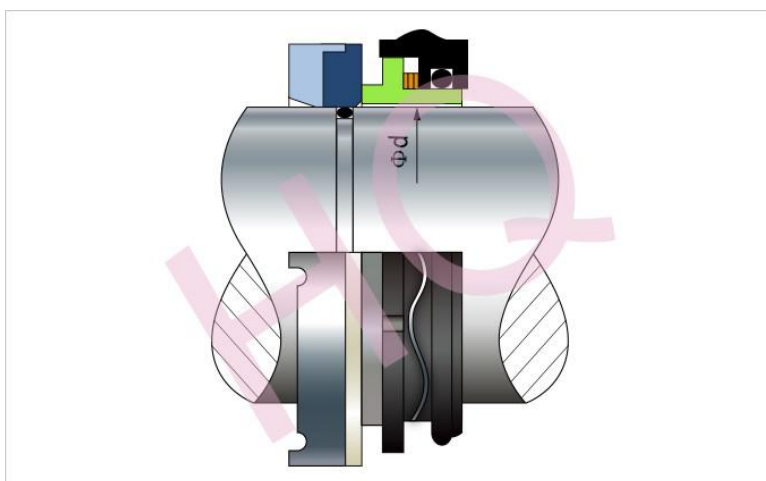
Replacement: Vulcan W-4820,Billi BB14-FKL50

Temperature: -40°C to +180°C

Pressure: $\leq 15.0\text{Mpa}$

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

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



d (mm)	O.E.M PUMP Model
48.00	FKL50,FZX2100,FZX2150,FZX2200,FZX2250

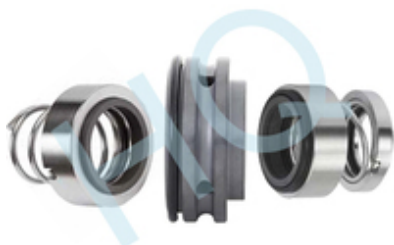


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FR-25(Y-V9019)

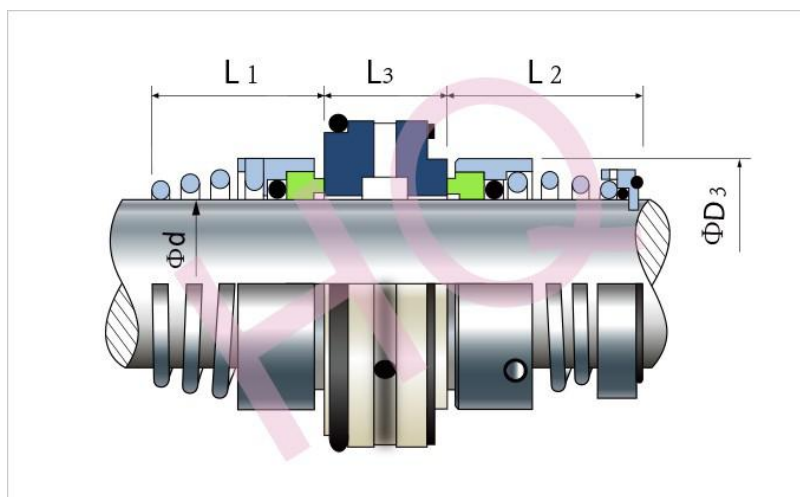


Type: Suit for flushed Fristam FPX Pumps
 Replacement: VulcanY+V9019,Billi BB14-FPXD
 Temperature: -45°C to +150°C

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)	D3	L1	L2	L3
22	45	20	22	22
30	60	22	24	28
35	64	26	26	30



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FR-30(1676)



Type: Suit for Fristam Multi-stage
FM,FPE,FPH,FPH Pumps

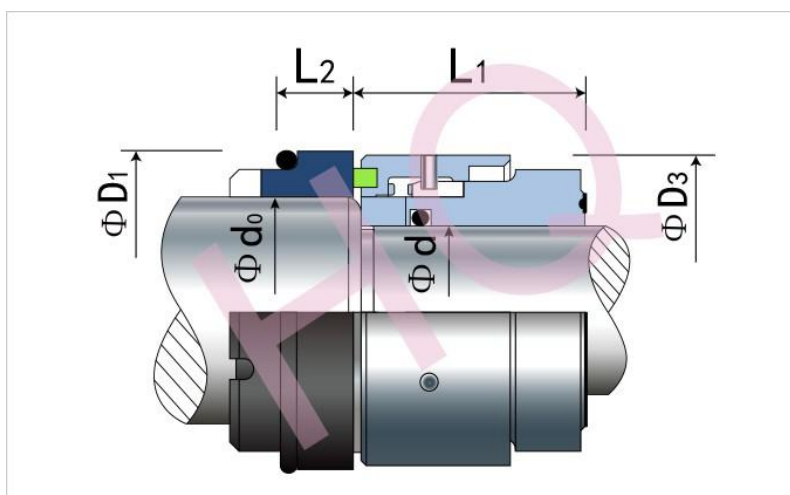
Replacement: Vulcan 1676

Temperature: -30 to +150°C

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

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

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



d (mm)	Size Code	d0	D1	D3	L1	L1
18	0220	22	37	36	32.5	9
32	0430	43	61	59	40.0	14
35	0350	43	61	59	30.0	14

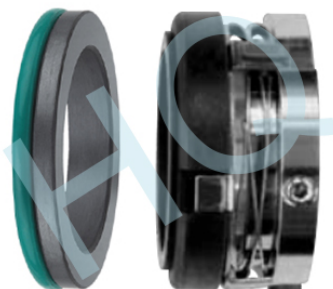


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FR-31-1 (1696.E.C.)



Type: Fristam Multi-Stage Pumps Seals
Replacement: Vulcan 1696 E.C
Temperature: -30 to +150°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 5\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

d=22mm,38mm.



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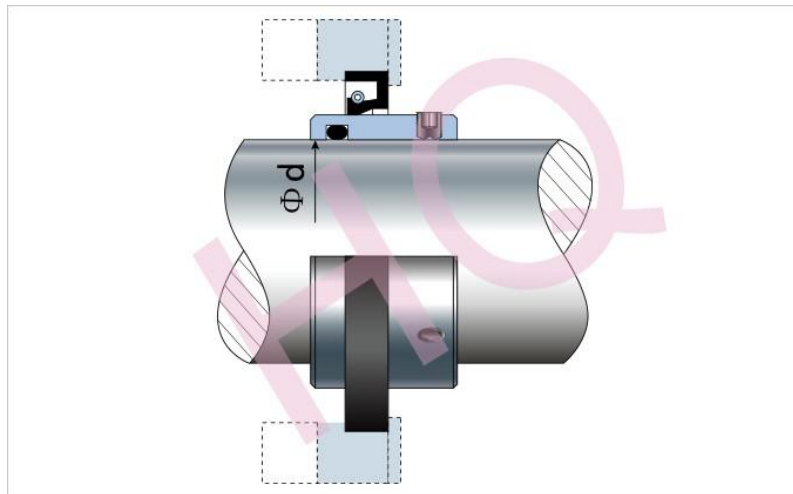


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FR-31-2(1696.E.N/A)



Type: Suit for Fristam Multi-Stage Pumps, to be
used with 1676 for Flushed configuration
Replacement: Vulcan 1696, AES T01FSLV
Temperature: -30°C to $+150^{\circ}\text{C}$
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 5\text{m/s}$
Material: Q1, Q2, U2, T, V, M1, F, G, M



$d=18\text{mm}, 32\text{mm}, 35\text{mm}, 22\text{mm}, 38\text{mm}.$

Used with 1676 or 1696 for flushed configuration.



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GR-Z6



Type: Suit for Grundfos,FRISTAM

FP,FPE,FPX,FR,FT,FZ Pumps

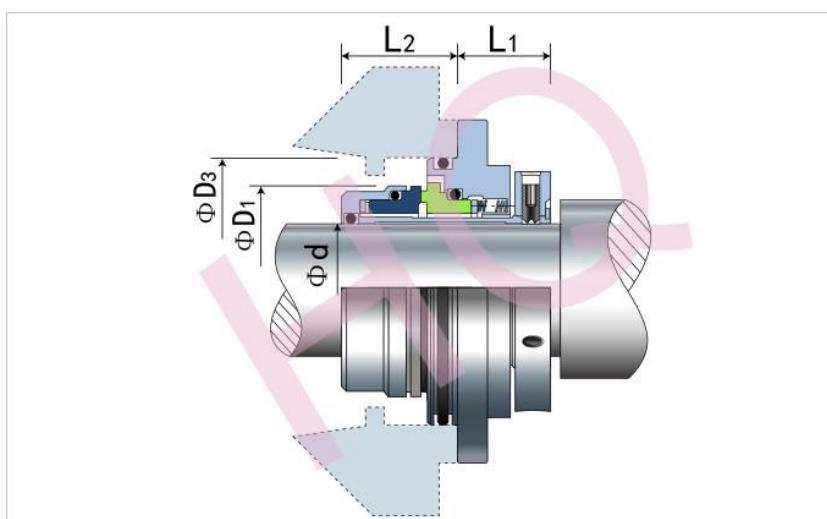
Replacement: AES MOGCE

Temperature: -20 to +180°C

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

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

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



d (mm)	D1	D3	L1	L2
30	46.8	60	24.9	30.9
d (inch)	D1	D3	L1	L2
1.181	1.843	2.362	0.978	1.216



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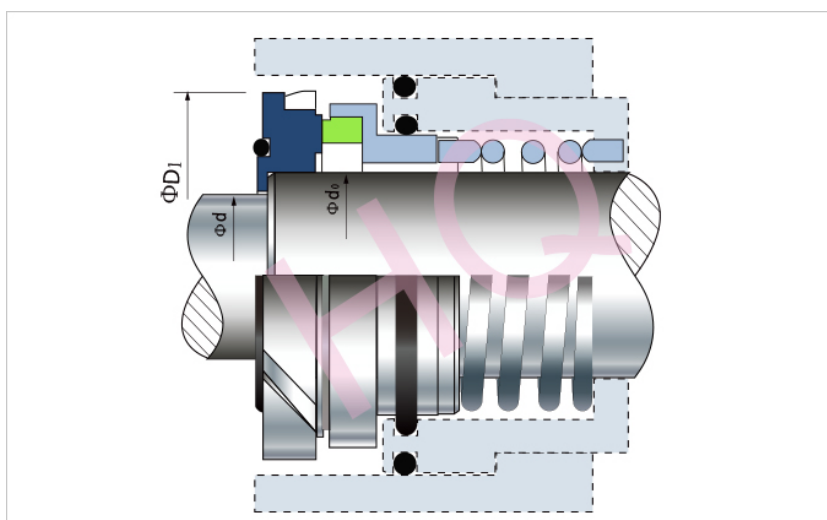


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TH-02(P09S)



Type: Suit for Tuchenhagen VPB,VPC,VPD
Pumps
Replacement: AES P09S, Vulcan B94,Burgmann MR,
Latty TN2, Lidering ZB
Temperature: -20°C to +200°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 20\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	d0	D1
18	22.0	52.0
22	30.0	66.0
30	35.0	66.0



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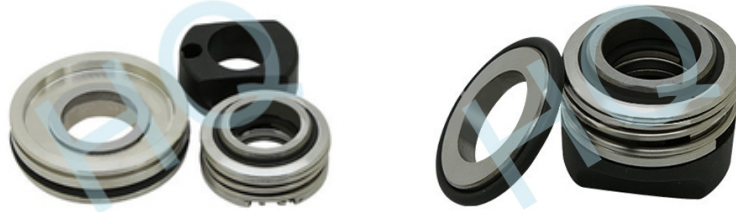


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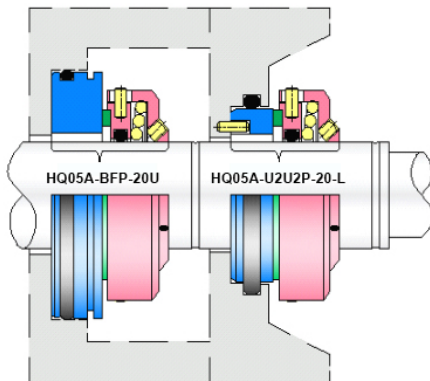
HQ05 A-L20/U20(new type)



Type: Flygt Pump Seal
Replacement: AES T05 A(new Type)

Flygt Pump Mechanical Seals

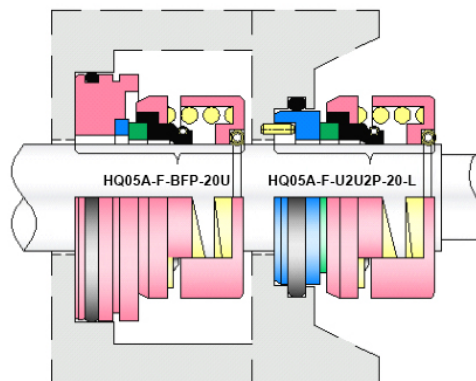
HQ05A



HQ05A seal instead of AES T05A seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation

HQ05A-F



HQ05A-F seal instead of original Flygt seal
used for Flygt pump no: 2024/2066/2075/21
01/3065/3080/Ready 24

- Monolithic stationary faces
- Supplied with removable setting clip



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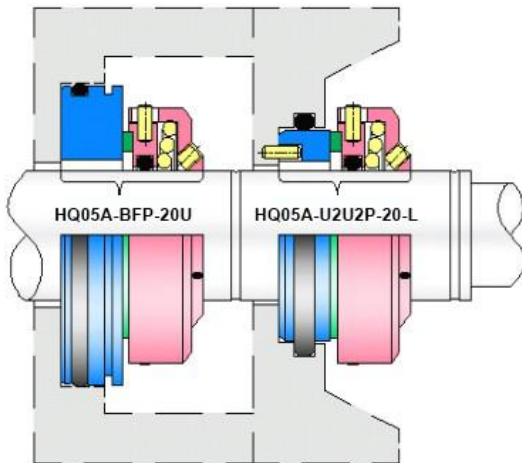
HQ05 A-L20/U20



Type: Flygt Pump Seal
Replacement: AES T05 A

Flygt Pump Mechanical Seals

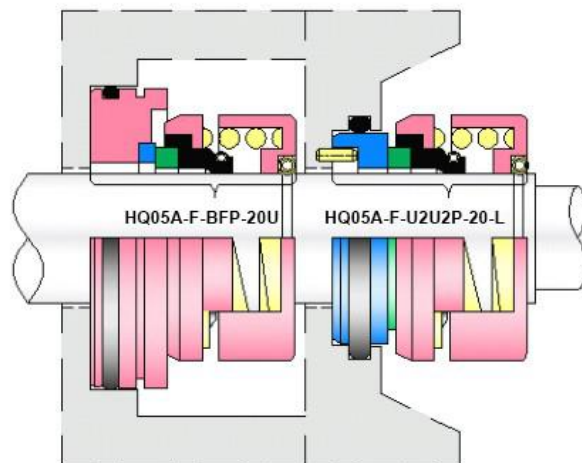
HQ05A



HQ05A seal instead of AES T05A seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation

HQ05A-F



HQ05A-F seal instead of original Flygt seal
used for Flygt pump no: 2024/2066/2075/2101/3065/3080/Ready 24

- Monolithic stationary faces
- Supplied with removable setting clip



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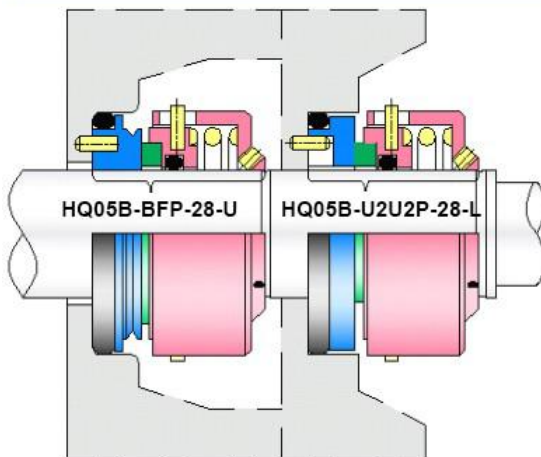
HQ05 B-L28/U28



Type: Flygt Pump Seal
Replacement: AES T05 B

Flygt Pump Mechanical Seals

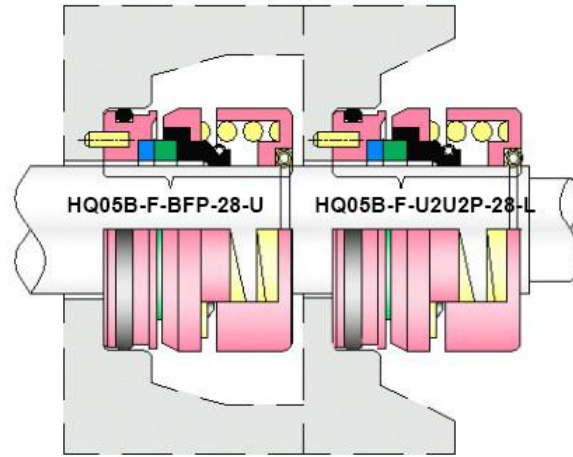
HQ05B



HQ05B seal instead of AES T05B seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation

HQ05B-F



HQ05B-F seal instead of original Flygt seal

- used for Flygt pump no: 3101
- Monolithic stationary faces
- Supplied with removable setting clip



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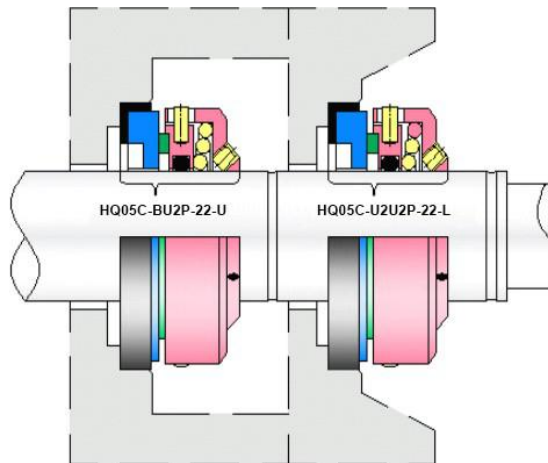
HQ05 C-L22/U22



Type: Flygt Pump Seal
Replacement: AES T05 C

Flygt Pump Mechanical Seals

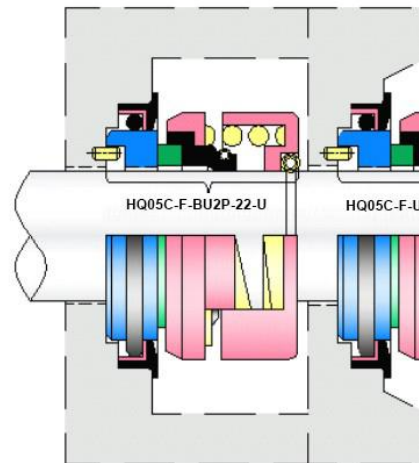
HQ05C



HQ05C seal instead of AES T05C seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- Unitised rotary, no loose faces to fall out during installation
- Monolithic stationary faces

HQ05C-F



HQ05C-F seal instead of original used for Flygt pump no:2040/2102

- 2-041/2102-220/Ready 40/Ready
- Seats designed to replace original wear protector
- Supplied with removable setting
- No plastic parts



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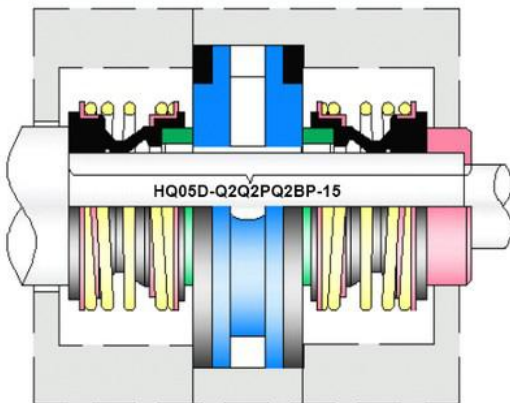
HQ05 D-15



Type: Flygt Pump Seal
Replacement: AES T05 D

Flygt Pump Mechanical Seals

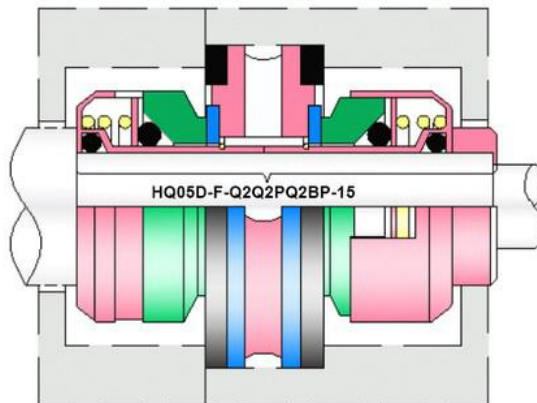
HQ05D



HQ05D seal instead of AES T05D seal

- Enclosed Bellows rotary design
- Stainless Steel metal parts
- Monolithic stationary face
- Supplied with setting collar

HQ05D-F



HQ05D-F seal instead of original Flygt seal
used for Flygt pump no: 2004/2008/2012/20
16/2050/2052/Ready 4/Ready 8/Ready 12/
Ready 16



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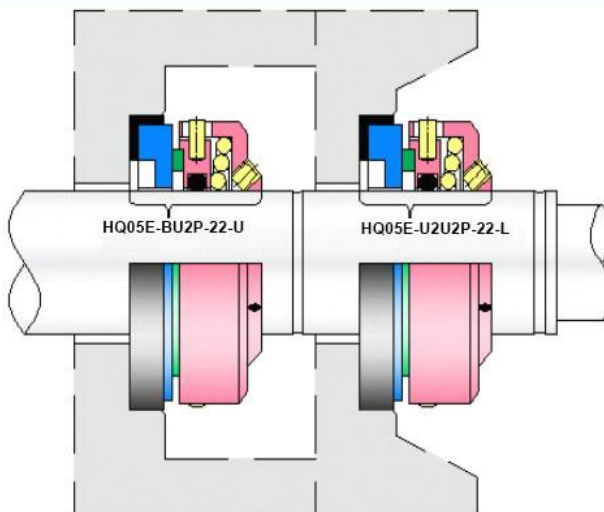
HQ05 E-L22/U22



Type: Flygt Pump Seal
Replacement: AES T05 E

Flygt Pump Mechanical Seals

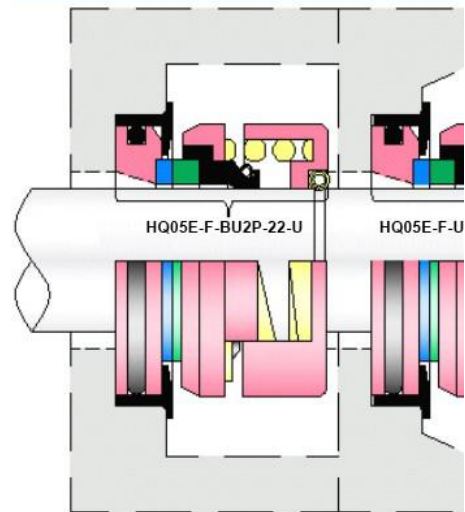
HQ05E



HQ05E seal instead of AES T05E seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation

HQ05E-F



HQ05E-F seal instead of original f
used for Flygt pump no: 2070/2102

- Monolithic stationary faces
- Supplied with removable setting



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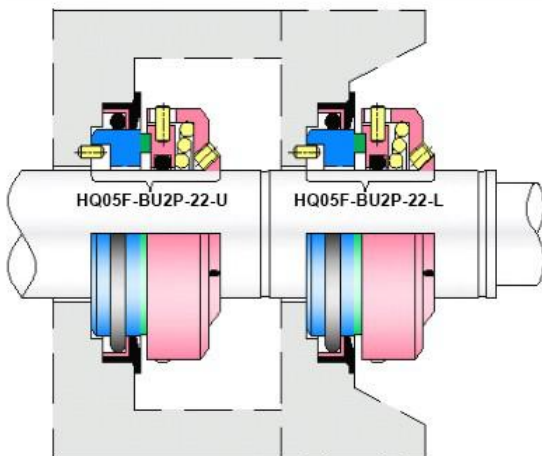
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HQ05 F-L22/U22



Type: Flygt Pump Seal
Replacement: AES T05 F

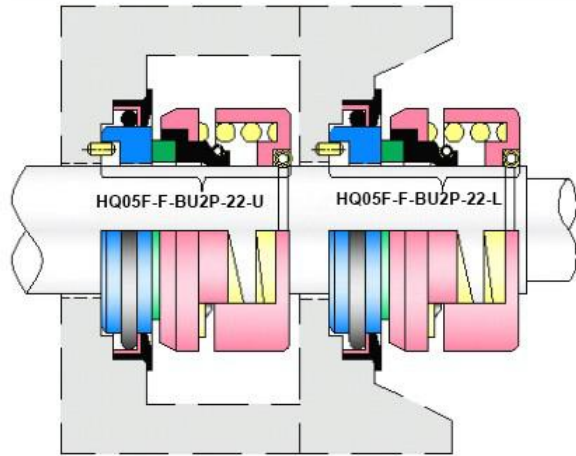
Flygt Pump Mechanical Seals HQ05F



HQ05F seal instead of AES T05F seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation

HQ05F-F



HQ05F-F seal instead of original Flygt seal
used for Flygt pump no: 2040/2071/2102-210/2102-041/2102-220/Ready 40/Ready 56

- Monolithic stationary faces
- Supplied with removable setting clip



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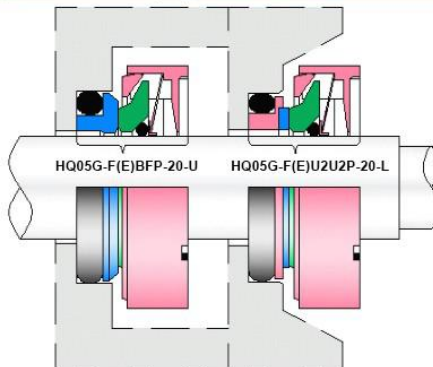
hq@hqseal.com

HQ05 G-L20/U20

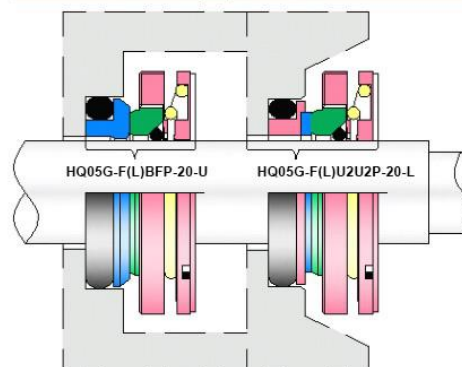
Type: Flygt Pump Seal
Replacement: AES T05 G



Flygt Pump Mechanical Seals HQ05G-F(E)

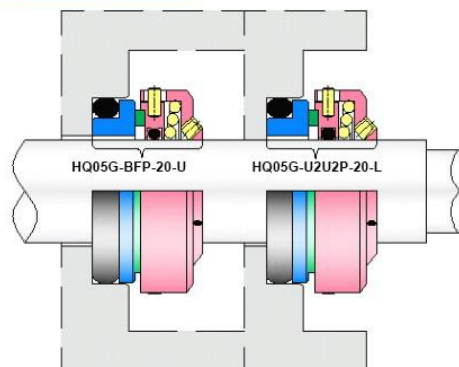


HQ05G-F(L)



HQ05G-F(E) seal and HQ05G-F(L) seal instead of original Flygt seal used for Flygt pump no: 2060/3041-171/3041-180/3041-281/3057/3060/3066/3067-890/3067-690/3067-590/3067-250/3067-170/3067-090/3067-180/3068/3085-091/3085-092/3085-120/3085-170/3085-171/3085-172/3085-180/3085-181/3085-182/3085-890/3085-891/Steady 7

HQ05G



HQ05G seal instead of AES T05G sea

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Monolithic stationary faces
- Supplied with removable setting clip
- No special fitting tool required



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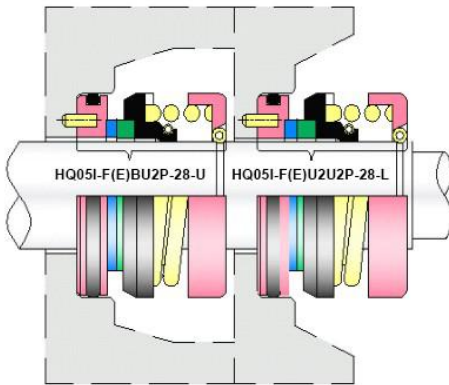
HQ05 I-L28/U28

Type: Flygt Pump Seal
Replacement: AES T05 I

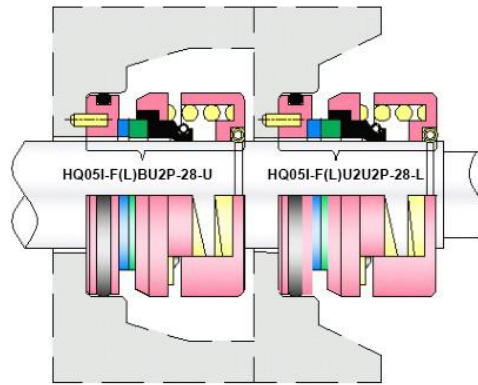


Flygt Pump Mechanical Seals

HQ05I-F(E)

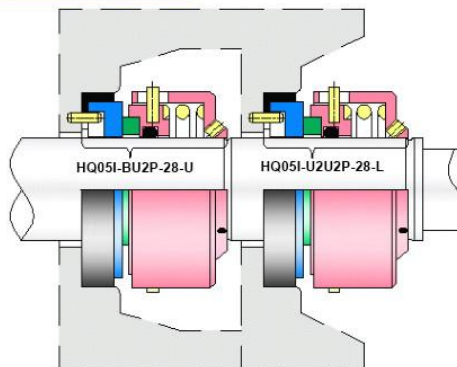


HQ05I-F(L)



HQ05I-F(E) seal and HQ05I-F(L) seal instead of original Flygt seal used for Flygt pump
no: 2082/2090/2125/2140/Ready 90

HQ05I



- HQ05I seal instead of AES T05I seal
- Robust & compact rotary design
 - Grub/set screwed (Allen Key included)
 - Stainless Steel metal parts
 - No plastic parts
 - Unitised rotary, no loose faces to fall out during installation
 - Monolithic stationary faces
 - Boot mounted seats for improved sealing in worn or corroded housings
 - Supplied with removable setting clip



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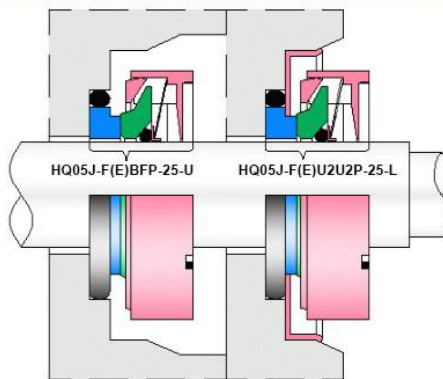
hq@hqseal.com

HQ05 J-L25/U25

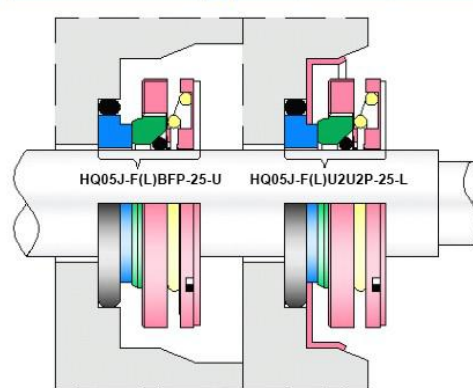
Type: Flygt Pump Seal
Replacement: AES T05 J



HQ05J-F(E)

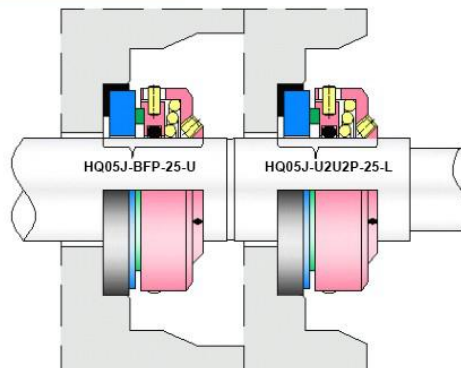


HQ05J-F(L)



HQ05J-F(E) seal and HQ05J-F(L) seal instead of original Flygt seal used for Flygt pump
no: 3102

HQ05J



HQ05J seal instead of AES T05J seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Monolithic stationary faces
- Boot mounted seats for improved sealing in worn or corroded housings
- Supplied with removable setting clip
- No special fitting tool required



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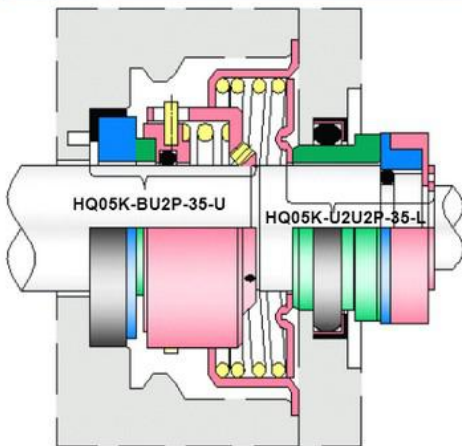
HQ05 K-L35/U35



Type: Flygt Pump Seal
Replacement: AES T05 K

Flygt Pump Mechanical Seals

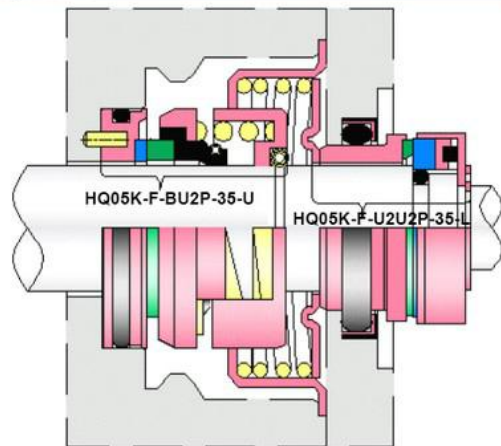
HQ05K



HQ05K seal instead of AES T05K seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation
- Monolithic stationary face

HQ05K-F



HQ05K-F seal instead of original Flygt seal
used for Flygt pump no: 2151-010/3126-090
/3126-180

- Boot mounted seat for improved sealing in worn or corroded housings
- Stainless Steel metal parts
- No pressed steel parts
- Monolithic seal faces



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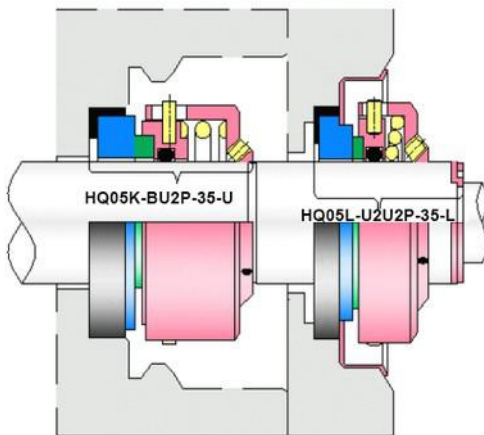
HQ05 KL-L35/U35



Type: Flygt Pump Seal
Replacement: AES T05KL

Flygt Pump Mechanical Seals

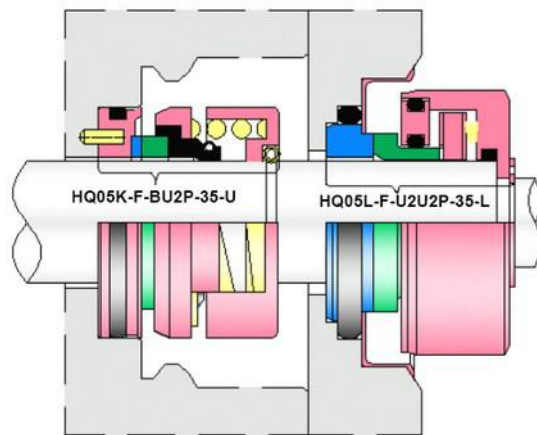
HQ05KL



HQ05KL seal instead of AES T05KL seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- Unitised rotary, no loose faces to fall out during installation
- No plastic parts
- Monolithic stationary faces

HQ05KL-F



HQ05KL-F seal instead of original Flygt seal used for Flygt pump no:2084/ 2135/2151-01 1/2151-050

- Boot mounted seats for improved sealing in worn or corroded housings
- Supplied with removable setting clip



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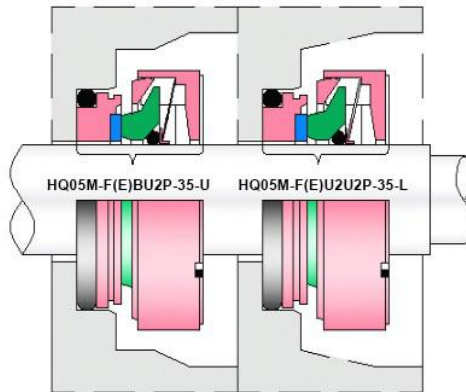
HQ05 M-L35/U35

Type: Flygt Pump Seal
Replacement: AES T05 M

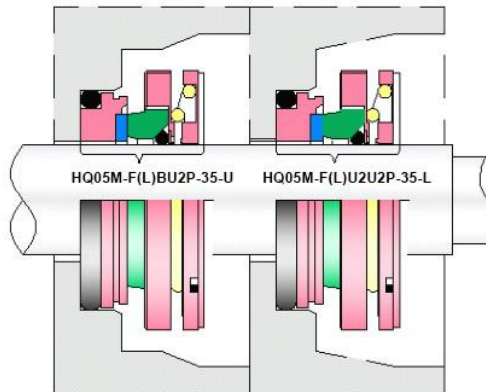


Flygt Pump Mechanical Seals

HQ05M-F(E)

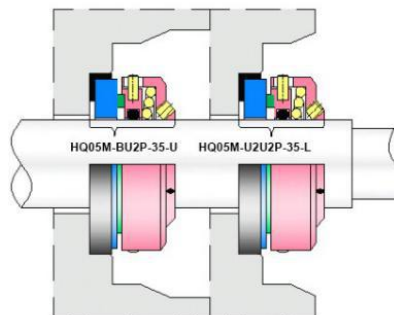


HQ05M-F(L)



HQ05M-F(E) seal and HQ05M-F(L) seal instead of original Flygt seal used for Flygt pump
no: 3126-181/3127/4440/5530

HQ05M



HQ05M seal instead of AES T05M seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Monolithic stationary faces
- Boot mounted seats for improved sealing in worn or corroded housings
- Supplied with removable setting clip
- No special fitting tool required



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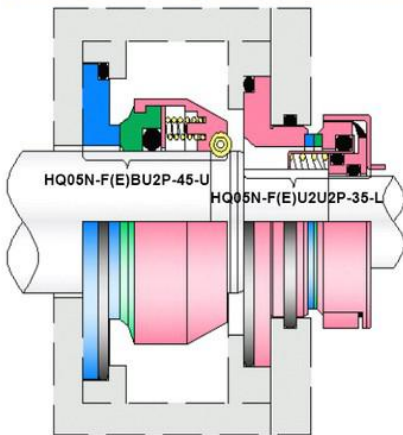
HQ05 N-L35/U45

Type: Flygt Pump Seal
Replacement: AES T05 N

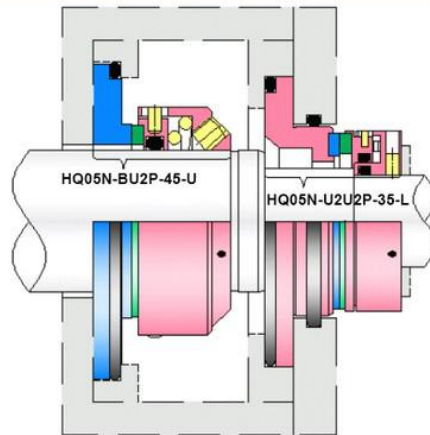


Flygt Pump Mechanical Seals

HQ05N-F(E)

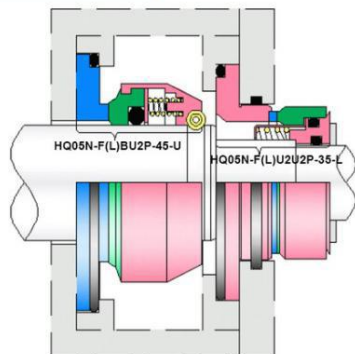


HQ05N-F(L)



HQ05N-F(E) seal and HQ05N-F(L) seal instead of original Flygt seal used for Flygt pump
no:2201-430/2201-320/2201-480/2201-590/2201-690

HQ05N



- HQ05N seal instead of AES T05N seal
- Robust & compact rotary design
 - Grub/set screwed (Allen Key included)
 - Stainless Steel metal parts
 - No plastic parts
 - Unitised rotary, no loose faces to fall out during installation
 - Supplied with removable setting clip (Upper)



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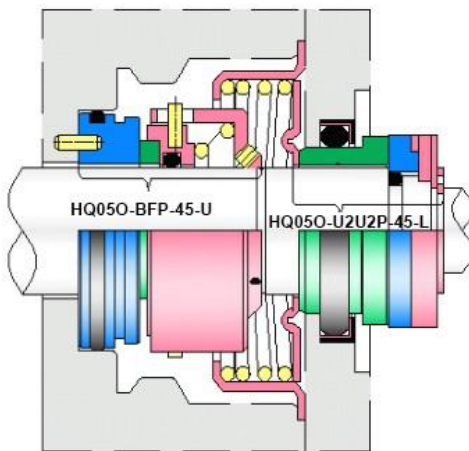
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Type: Flygt Pump Seal
Replacement: AES T05 O

Flygt Pump Mechanical Seals

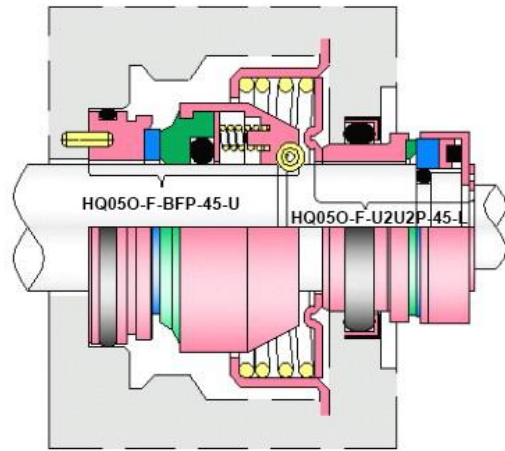
HQ05O



HQ05O seal instead of AES T05O seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No plastic parts
- Monolithic stationary face
- Supplied with removable setting clip

HQ05O-F



HQ05O-F seal instead of original Flygt seal
used for Flygt pump no:2201-011 LT/3140/3
152/4650/4660

- Unitised rotary, no loose faces to fall out during installation
- Stainless Steel metal parts
- No pressed steel parts
- Monolithic seal faces



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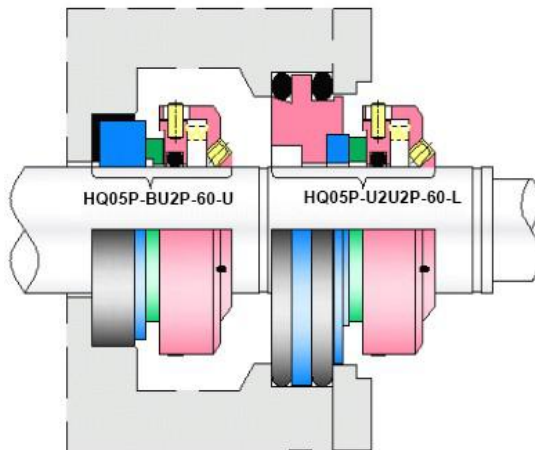
HQ05 P-L60/U60



Type: Flygt Pump Seal
Replacement: AES T05 P

Flygt Pump Mechanical Seals

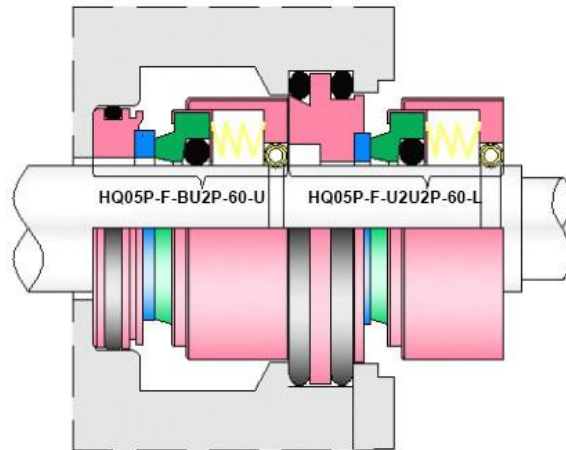
HQ05P



HQ05P seal instead of AES T05P seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No pressed Steel parts
- Monolithic Stationary face (Upper)

HQ05P-F



HQ05P-F seal instead of original Flygt seal
used for Flygt pump no:2250/2290/3200

- Boot mounted seat for improved sealing in worn or corroded housings (Upper)
- Supplied with removable setting clip



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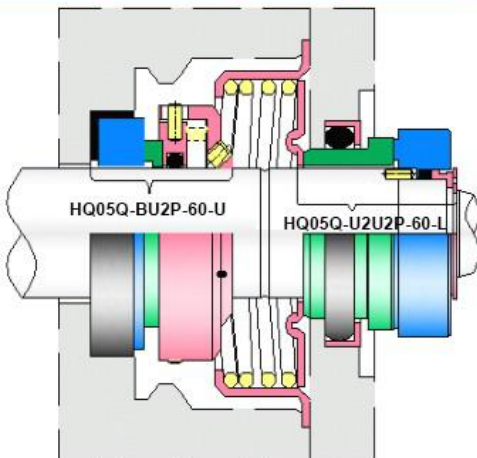
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Type: Flygt Pump Seal
Replacement: AES T05 Q

Flygt Pump Mechanical Seals

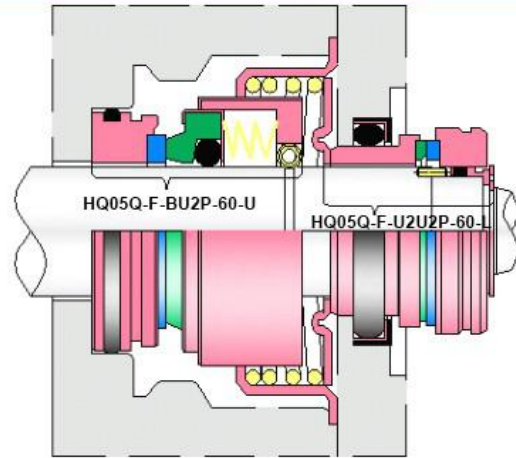
HQ05Q



HQ05Q seal instead of AES T05Q seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No pressed Steel parts
- Monolithic stationary face
- Boot mounted seat for improved sealing in worn or corroded housings

HQ05Q-F



HQ05Q-F seal instead of original Flygt seal
used for Flygt pump no:600/3170/3201/467
0/4680/7045

- Supplied with removable setting clip
- Stainless Steel metal parts
- Monolithic seal faces



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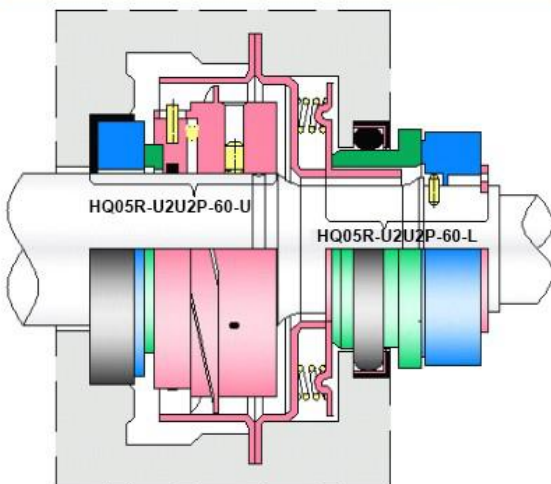
HQ05 R-L60/U60



Type: Flygt Pump Seal
Replacement: AES T05 R

Flygt Pump Mechanical Seals

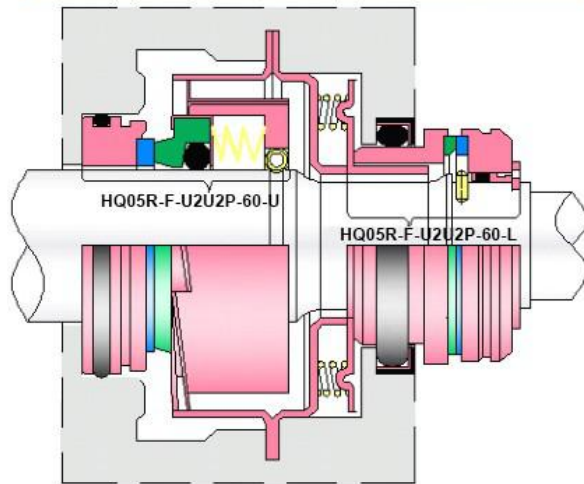
HQ05R



HQ05R seal instead of AES T05R seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No pressed Steel parts
- Fully machined impeller
- Monolithic stationary face

HQ05R-F



HQ05R-F seal instead of original Flygt seal
used for Flvat pump no:2400

- Boot mounted seat for improved sealing in worn or corroded housings
- Supplied with removable setting clip
- Stainless Steel metal parts
- Monolithic seal faces



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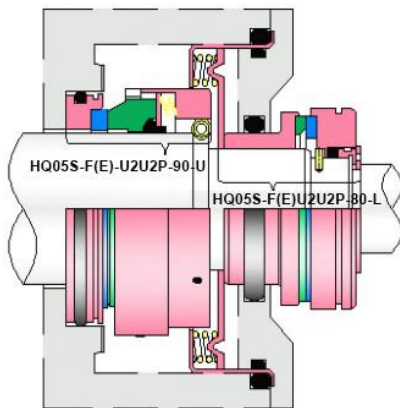
HQ05 S-L80/U90

Type: Flygt Pump Seal
Replacement: AES T05 S

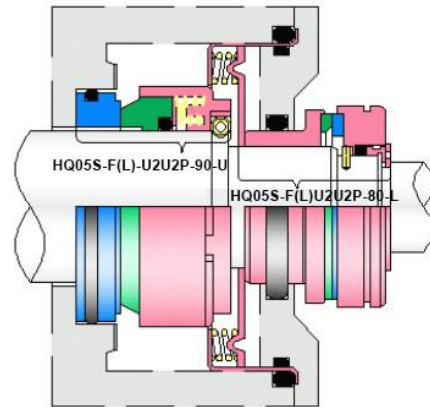


Flygt Pump Mechanical Seals

HQ05S-F(E)

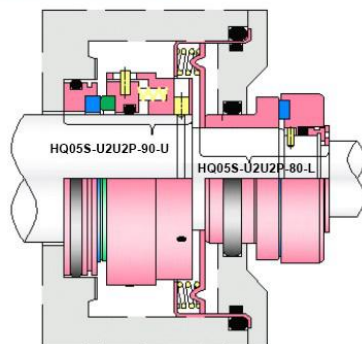


HQ05S-F(L)



HQ05S-F(E) seal and HQ05S-F(L) seal instead of original Flygt seal used for Flygt pump
no:605/615/665/670/680/705/715/720/721/735/745/760/765/770/775/820/840/841/860/
880/881/900/3230/3300-091/3300-181/3300-280/3300-980/3305/3355/3356/3357/7050/
7051/7055/7060/7061/7076/70807556

HQ05S



- HQ05S seal instead of AES T05S seal
- Robust & compact rotary design
 - Grub/set screwed (Allen Key included)
 - Stainless Steel metal parts
 - No pressed Steel parts
 - No plastic parts
 - Unitised rotary, no loose faces to fall out during installation
 - Stainless Steel metal parts
 - Monolithic stationary face



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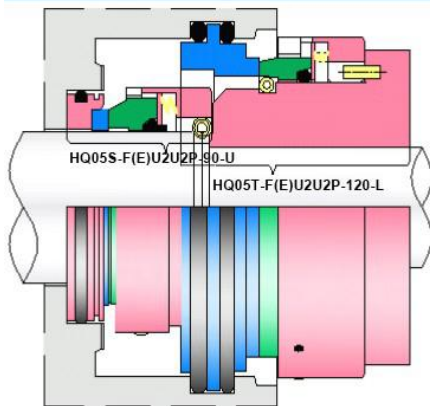
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HQ05 ST-L120/U90

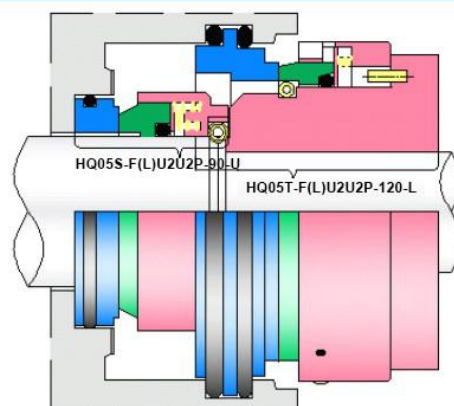
Type: Flygt Pump Seal
Replacement: AES T05 ST



Flygt Pump Mechanical Seals HQ05ST-F(E)

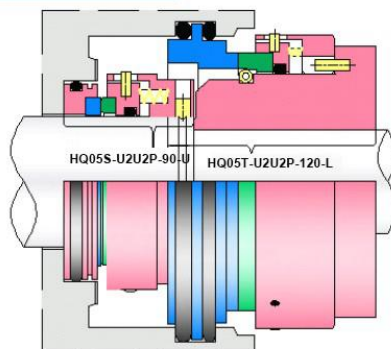


HQ05ST-F(L)



HQ05ST-F(E) seal and HQ05ST-F(L) seal instead of original Flygt seal used for Flygt pump
no:705/715/720/721/735/745/760/765/770/775/820/840/841/860/880/881/900/3310/3311/
3312/3350/3351/3500/3501/3530/3531/3600/3601/3602/7080/7115/7570/7585

HQ05ST



HQ05ST seal instead of AES T05ST seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No pressed Steel parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation
- Robust & compact rotary design
- Stainless Steel metal parts
- No pressed Steel parts
- Unitised rotary, no loose faces to fall out during installation
- Monolithic stationary face



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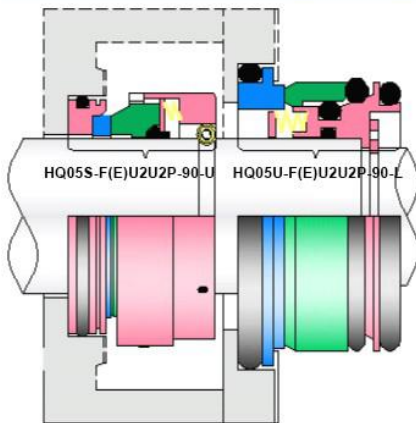
hq@hqseal.com

HQ05 SU-L90/U90

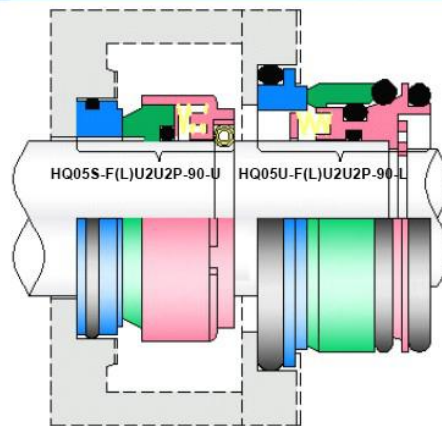
Type: Flygt Pump Seal
Replacement: AES T05 SU



Flygt Pump Mechanical Seals HQ05SU-F(E)

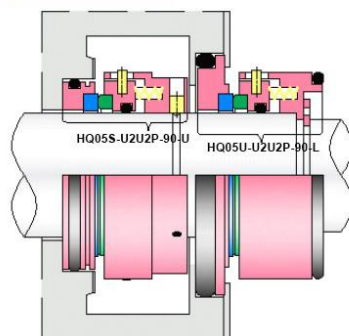


HQ05SU-F(L)



HQ05SU-F(E) seal and HQ05SU-F(L) seal instead of original Flygt seal used for Flygt pump
no:705/715/720/721/735/745/760/765/770/775/820/840/841/860/880/881/900/3400/7081/
7101

HQ05SU



HQ05SU seal instead of AES T05SU seal

- Robust & compact rotary design
- Grub/set screwed (Allen Key included)
- Stainless Steel metal parts
- No pressed Steel parts
- No plastic parts
- Unitised rotary, no loose faces to fall out during installation



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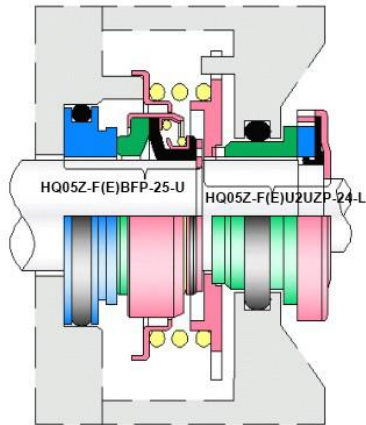
HQ05 Z-L25/U24

Type: Flygt Pump Seal
Replacement: AES T05 Z

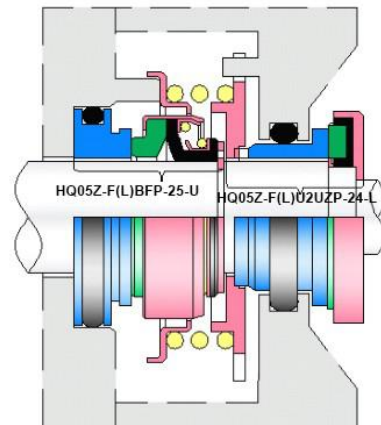


Flygt Pump Mechanical Seals

HQ05Z-F(E)

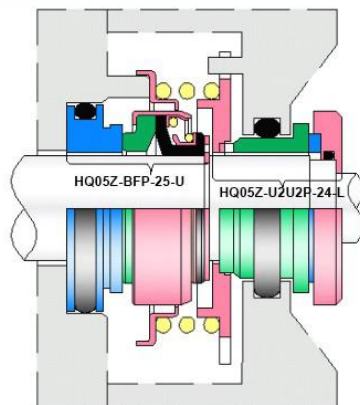


HQ05Z-F(L)



HQ05Z-F(E) seal and HQ05SU-F(L) seal instead of original Flygt seal used for Flygt pump
no: All other pumps

HQ05Z



HQ05Z seal instead of AES T05Z seal

- Simple & compact rotary design
- Stainless Steel metal parts
- Monolithic stationary faces
- Unitised rotary, no loose faces to fall out during installation



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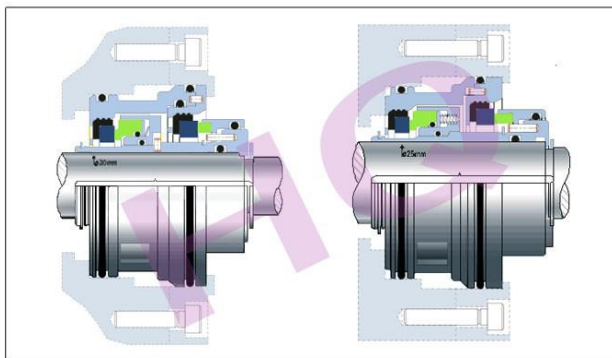


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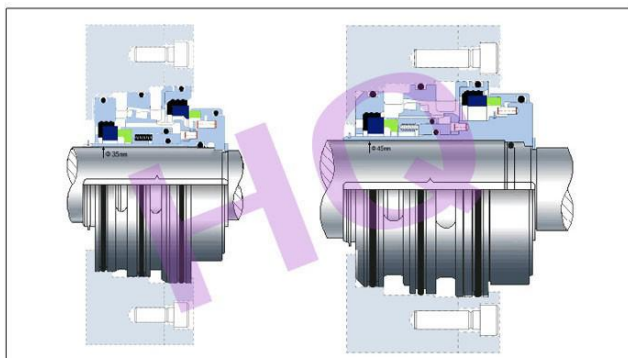
HQLZ Series

Type: Flygt Pump Seals
Replacement: AES T05VC

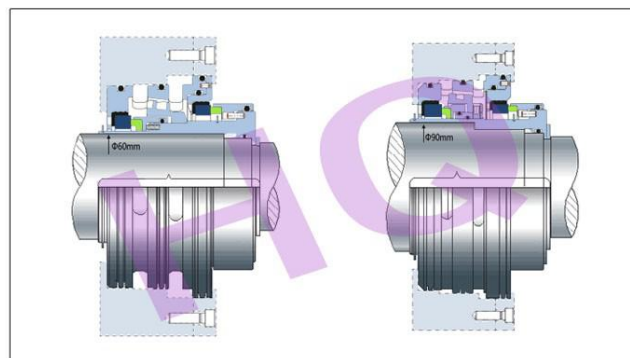
LZ-20mm, 25mm



LZ-35mm, 45mm



LZ-60mm, 90mm



HQ Seal Code	Size	Material	Fits Flygt Pumps/Mixers
LZ20	20mm	TC/TC-TC/CER/V	2610, 2620, 2630, 2640, 4610 & 4620
LZ25	25mm	TC/TC-TC/CER/V	2660, 4630 & 4640
LZ35	35mm	TC/TC-TC/TC/V	2670, 3153, 5100.210, 5100.211, 5100.220 & 5100.221
LZ45	45mm	TC/TC-TC/TC/V	3171, 4650, 4660, 5100.250, 5100.251, 5100.260 & 5100.261
LZ60	60mm	TC/TC-TC/TC/V	3202, 4670, 4680, 5100.300, 5100.310, 5150.300 & 5150.310
LZ90	90mm	TC/TC-TC/TC/V	3301, 5150.350 & 5150.360



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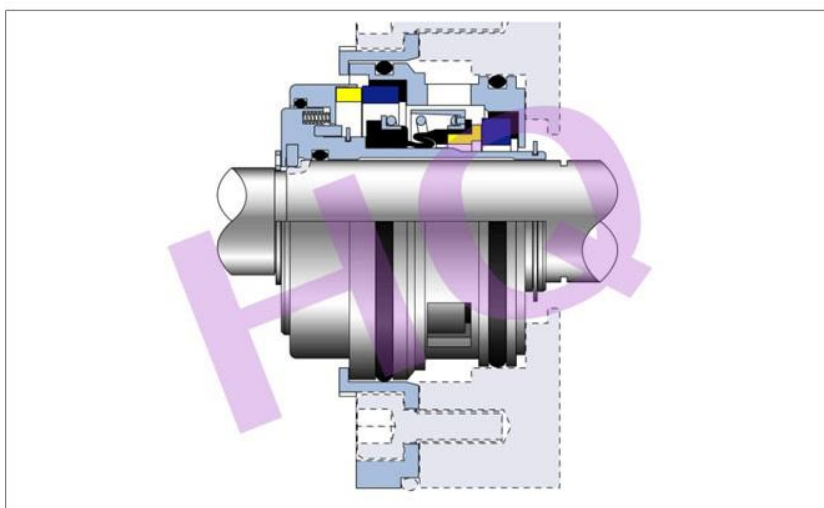


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HQLT Series



Type: Flygt Pump Seals
Replacement: AES T05VC



HQ Seal Code	Size	Material	Fits Flygt Pumps/Mixers
LT20	20mm	TC/TC-TC/CER/V	2610, 2620, 2630, 2640, 4610 & 4620
LT25	25mm	TC/TC-TC/CER/V	4630 & 4640
LT35	35mm	TC/TC-TC/TC/V	2670, 3153, 5100.210, 5100.211, 5100.220 & 5100.221
LT45	45mm	TC/TC-TC/TC/V	3171, 4650, 4660, 5100.250, 5100.251, 5100.260 & 5100.261
LT60	60mm	TC/TC-TC/TC/V	3202, 4670, 4680, 5100.300, 5100.310, 5150.300 & 5150.310
LT90	90mm	TC/TC-TC/TC/V	3301, 5150.350 & 5150.360



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HQ05 Series Cross Reference Charts and Drawing

HQ05 Series



HQ05M - U2U2P - 35 - L			
Seal Type		Size Code	Position
Rotary Material		Elastomer Material	
Seat Material			
MATERIAL CODE (Rotary & Seat)	MATERIAL CODE (Elastomer)	SIZE CODE	POSITION
B=Carbon	P=Nitrile	35=35mm	L=Lower
Q2=Silicon Carbide			U=Upper
F=Stainless Steel			
U2=Tungsten Carbide			



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HQ05 Series Cross Reference Charts

(Flygt/Grindex Pump Seals)

Flygt Unit Type Model Version	HQSEAL Alternative Upper (Inner)	Size	HQSEAL Alternative Lower (outer)	Size		Flygt Unit Type Model Version	HQSEAL Alternative Upper (Inner)	Size	HQSEAL Alternative Lower (outer)	Size
600	HQ05Q	60mm	HQ05Q	60mm		881	HQ05S	90mm	HQ05S	80mm
605	HQ05S	90mm	HQ05S	80mm		881	HQ05S	90mm	HQ05T	120mm
615	HQ05S	90mm	HQ05S	80mm		881	HQ05S	90mm	HQ05U	90mm
665	HQ05S	90mm	HQ05S	80mm		900	HQ05S	90mm	HQ05S	80mm
670	HQ05S	90mm	HQ05S	80mm		900	HQ05S	90mm	HQ05T	120mm
680	HQ05S	90mm	HQ05S	80mm		900	HQ05S	90mm	HQ05U	90mm
705	HQ05S	90mm	HQ05S	80mm		905	--	--	HQ05T	120mm
705	HQ05S	90mm	HQ05T	120mm		935	--	--	HQ05T	120mm
705	HQ05S	90mm	HQ05U	90mm		2004	HQ05D	15mm	N/A	--
715	HQ05S	90mm	HQ05S	80mm		2008	HQ05D	15mm	N/A	--
715	HQ05S	90mm	HQ05T	120mm		2012	HQ05D	15mm	N/A	--
715	HQ05S	90mm	HQ05U	90mm		2016	HQ05D	15mm	N/A	--
720	HQ05S	90mm	HQ05S	80mm		2024	HQ05A	20mm	HQ05A	20mm
720	HQ05S	90mm	HQ05S	120mm		2040	HQ05C or HQ05F	22mm	HQ05C or HQ05F	22mm
720	HQ05S	90mm	HQ05S	90mm		2050	HQ05D	15mm	N/A	--
721	HQ05S	90mm	HQ05S	80mm		2052	HQ05D	15mm	N/A	--
721	HQ05S	90mm	HQ05T	120mm		2060	HQ05G	20mm	HQ05G	20mm
721	HQ05S	90mm	HQ05U	90mm		2066	HQ05A	20mm	HQ05A	20mm
735	HQ05S	90mm	HQ05S	80mm		2070	HQ05E	22mm	HQ05E	22mm
735	HQ05S	90mm	HQ05T	120mm		2071	HQ05F	22mm	HQ05F	22mm



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HQ05 Series Cross Reference Charts

(Flygt/Grindex Pump Seals)

735	HQ05S	90mm	HQ05U	90mm		2075	HQ05A	20mm	HQ05A	20mm
745	HQ05S	90mm	HQ05S	80mm		2082	HQ05I	28mm	HQ05I	28mm
745	HQ05S	90mm	HQ05T	120mm		2084	HQ05K	35mm	HQ05L	35mm
745	HQ05S	90mm	HQ05U	90mm		2090	HQ05I	28mm	HQ05I	28mm
760	HQ05S	90mm	HQ05S	80mm		2101	HQ05A	20mm	HQ05A	20mm
760	HQ05S	90mm	HQ05T	120mm		2102-210	HQ05C or HQ05F	22mm	HQ05C or HQ05F	22mm
760	HQ05S	90mm	HQ05U	90mm		2102-040	HQ05E	22mm	HQ05E	22mm
765	HQ05S	90mm	HQ05S	80mm		2102-041	HQ05C or HQ05F	22mm	HQ05C or HQ05F	22mm
765	HQ05S	90mm	HQ05T	120mm		2102-220	HQ05C or HQ05F	22mm	HQ05C or HQ05F	22mm
765	HQ05S	90mm	HQ05U	90mm		2125	HQ05I	28mm	HQ05I	28mm
770	HQ05S	90mm	HQ05S	80mm		2135	HQ05K	35mm	HQ05L	35mm
770	HQ05S	90mm	HQ05T	120mm		2140	HQ05I	28mm	HQ05I	28mm
770	HQ05S	90mm	HQ05U	90mm		2151-010	HQ05K	35mm	HQ05K	35mm
775	HQ05S	90mm	HQ05S	80mm		2151-011	HQ05K	35mm	HQ05L	35mm
775	HQ05S	90mm	HQ05T	120mm		2151-050	HQ05K	35mm	HQ05L	35mm
775	HQ05S	90mm	HQ05U	90mm		2201-430	HQ05N	45mm	HQ05N	35mm
805	--	--	HQ05T	120mm		2201-320	HQ05N	45mm	HQ05N	35mm
820	HQ05S	90mm	HQ05S	80mm		2201-010	HQ05O	45mm	HQ05K	35mm
820	HQ05S	90mm	HQ05T	120mm		2201-011HT	HQ05O	45mm	HQ05N	35mm



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HQ05 Series Cross Reference Charts

(Flygt/Grindex Pump Seals)

820	HQ05S	90mm	HQ05U	90mm		2201-011LT	HQ05O	45mm	HQ05O	45mm
835	--	--	HQ05T	120mm		2201-011MT	HQ05O	45mm	HQ05N	35mm
840	HQ05S	90mm	HQ05S	80mm		2201-480	HQ05N	45mm	HQ05N	35mm
840	HQ05S	90mm	HQ05T	120mm		2201-590	HQ05N	45mm	HQ05N	35mm
840	HQ05S	90mm	HQ05U	90mm		2201-690	HQ05N	45mm	HQ05N	35mm
841	HQ05S	90mm	HQ05S	80mm		2250	HQ05P	60mm	HQ05P	60mm
841	HQ05S	90mm	HQ05T	120mm		2290	HQ05P	60mm	HQ05P	60mm
841	HQ05S	90mm	HQ05U	90mm		2400	HQ05R	60mm	HQ05R	60mm
860	HQ05S	90mm	HQ05S	80mm		2540	--	--	HQ05R	60mm
860	HQ05S	90mm	HQ05T	120mm		3041-171	HQ05G	20mm	HQ05G or HQ05H	20mm
860	HQ05S	90mm	HQ05U	90mm		3041-180	HQ05G	20mm	HQ05G or HQ05H	20mm
865	--	--	HQ05T	120mm		3041-281	HQ05G	20mm	HQ05G	20mm
880	HQ05S	90mm	HQ05S	80mm		3057	HQ05G	20mm	HQ05G or HQ05H	20mm
880	HQ05S	90mm	HQ05T	120mm		3060	HQ05G	20mm	HQ05G	20mm
880	HQ05S	90mm	HQ05U	90mm		3065	HQ05A Lower	20mm	HQ05A	20mm



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HQ05 Series Cross Reference Charts

(Flygt/Grindex Pump Seals)

Flygt Unit Type Model Version	HQSEAL Alternative Upper (Inner)	Size	HQSEAL Alternative Lower (outer)	Size		Flygt Unit Type Model Version	HQSEAL Alternative Upper(Inner)	Size	HQSEAL Alternative Lower(outer)	Size
3066	HQ05Q	20mm	HQ05G or HQ05H	20mm		3501	HQ05S	90mm	HQ05T	120
3067- 890	HQ05Q	20mm	HQ05G or HQ05H	20mm		3530	HQ05S	90mm	HQ05T	120
3067- 690	HQ05Q	20mm	HQ05G or HQ05H	20mm		3531	HQ05S	90mm	HQ05T	120
3067- 590	HQ05Q	20mm	HQ05G or HQ05H	20mm		3600	HQ05S	90mm	HQ05T	120
3067- 250	HQ05Q	20mm	HQ05G	20mm		3601	HQ05S	90mm	HQ05T	120
3067- 170	HQ05Q	20mm	HQ05G	20mm		3602	HQ05S	90mm	HQ05T	120
3067- 090	HQ05Q	20mm	HQ05G or HQ05H	20mm		4351	HQ05G	20mm	HQ05H	20
3067- 180	HQ05Q	20mm	HQ05G or HQ05H	20mm		4352	HQ05G	20mm	HQ05H	20
3068	HQ05Q	20mm	HQ05G	20mm		4400	HQ05G	20mm	HQ05H	20
3080	HQ05A	20mm	HQ05A	20mm		4410	N/A	--	HQ05Q	60
3082	HQ05E	20mm	HQ05E	22mm		4430	N/A	--	HQ05Q	60
3085- 290	HQ05Q	20mm	HQ05H	20mm		4440	HQ05M	35mm	HQ05M	35



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HQ05 Series Cross Reference Charts

(Flygt/Grindex Pump Seals)

3085-280	HQ05Q	20mm	HQ05H	20mm		4650	HQ05O	45mm	HQ05O	45
3085-091	HQ05Q	20mm	HQ05G	20mm		4660	HQ05O or HQ05Q	45mm	HQ05O	45
3085-092	HQ05Q	20mm	HQ05G or HQ05H	20mm		4670	HQ05Q	60mm	HQ05Q	60
3085-120	HQ05Q	20mm	HQ05G or HQ05H	20mm		4680	HQ05Q	60mm	HQ05Q	60
3085-170	HQ05Q	20mm	HQ05G or HQ05H	20mm		5100	HQ05O	45mm	--	--
3085-171	HQ05Q	20mm	HQ05G or HQ05H	20mm		5520	--	--	HQ05J	25
3085-172	HQ05Q	20mm	HQ05G or HQ05H	20mm		5530	HQ05M	35mm	HQ05M	35
3085-180	HQ05Q	20mm	HQ05G or HQ05H--	20mm		5540	HQ05O	45mm	--	--
3085-181	HQ05Q	20mm	HQ05G-- or HQ05H	20mm		5550	HQ05Q	60mm	--	--
3085-182	HQ05Q	20mm	HQ05G or HQ05H	20mm		5560	HQ05S	90mm	--	--
3085-890	HQ05Q	20mm	HQ05G	20mm		7045	HQ05Q	60mm	HQ05Q	60
3085-891	HQ05G	20mm	HQ05G or HQ05H	20mm		7050	HQ05S	90mm	HQ05S	80
3101	HQ05B	28mm	HQ05B	28mm		7051	HQ05S	90mm	HQ05S	80
3102	HQ05J	25mm	HQ05J	25mm		7055	HQ05S	90mm	HQ05S	80



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HQ05 Series Cross Reference Charts

(Flygt/Grindex Pump Seals)

3126-290	HQ05K	35mm	HQ05M	35mm		7060	HQ05S	90mm	HQ05S	80
3126-280	HQ05K	35mm	HQ05M	35mm		7061	HQ05S	90mm	HQ05S	80
3126-181	HQ05M	35mm	HQ05M	35mm		7076	HQ05S	90mm	HQ05S	80
3126-090	HQ05K	35mm	HQ05K1	35mm		7080	HQ05S	90mm	HQ05S	80
3126-091	HQ05K	35mm	HQ05M	35mm		7080	HQ05S	90mm	HQ05T	120
3126-190	HQ05K	35mm	HQ05K	35mm		7081	HQ05S	90mm	HQ05U	90
3127	HQ05M	35mm	HQ05M	35mm		7101	HQ05S	90mm	HQ05U	90
3140	HQ05O	45mm	HQ05O	45mm		7115	HQ05S	90mm	HQ05T	120
3152	HQ05O	45mm	HQ05O	45mm		7556	HQ05S	90mm	HQ05S	80
3170	HQ05Q	60mm	HQ05Q	60mm		7570	HQ05S	90mm	HQ05T	120
3200	HQ05P	60mm	HQ05P	60mm		7585	HQ05S	90mm	HQ05T	120
3201	HQ05Q	60mm	HQ05Q	60mm		Ready 4	HQ05D	15mm	N/A	--
3230	HQ05S	90mm	HQ05S	80mm		Ready 8	HQ05D	15mm	N/A	--
3300-091	HQ05S	90mm	HQ05S	80mm		Ready 12	HQ05D	15mm	N/A	--
3300-181	HQ05S	--	HQ05S	80mm		Ready 16	HQ05D	15mm	N/A	--
3300-280	HQ05S	90mm	HQ05S	80mm		Ready 24	HQ05A	20mm	HQ05A	20
3300-980	HQ05S	90mm	HQ05S	80mm		Ready 40	HQ05C or HQ05F	22mm	HQ05C or HQ05F	22
3305	HQ05S	90mm	HQ05S	80mm		Ready 56	HQ05C or HQ05F	22mm	HQ05C or HQ05F	22



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HQ05 Series Cross Reference Charts

(Flygt/Grindex Pump Seals)

3310	HQ05S	90mm	HQ05T	120mm		Ready 90	HQ05I	28mm	HQ05I	28
3311	HQ05S	90mm	HQ05T	120mm		Ready 7	HQ05G	20mm	HQ05G	20
3312	HQ05S	90mm	HQ05T	120mm						
3350	HQ05S	90mm	HQ05T	120mm						
3351	HQ05S	90mm	HQ05T	120mm						
3355	HQ05S	90mm	HQ05S	80mm		Grindex Pump	HQ SEAL		HQ SEAL	
3356	--	--	HQ05S	80mm			Alternative Upper(inner)		Alternative Lower(outer)	
3357	HQ05S	90mm	HQ05S	80mm						
3400	HQ05S	90mm	HQ05U	90mm		Maxi	HQ05O		HQ05N	
3500	HQ05S	90mm	HQ05T	120mm		All other pumps	HQ05Z		HQ05Z	



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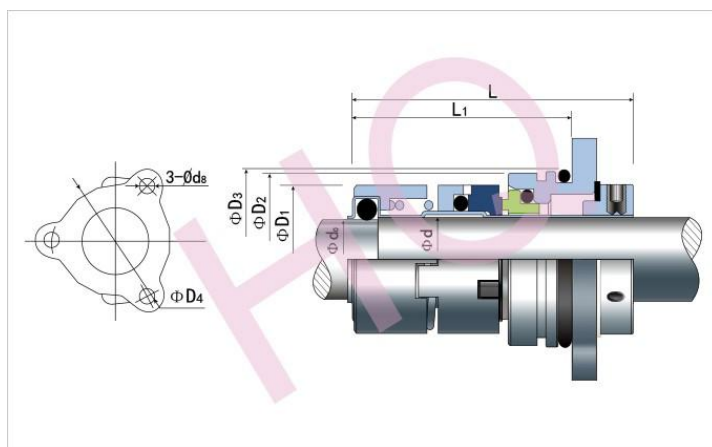
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Type: Grundfos Pump Seal
 Temperature: -30°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: Q1,Q2,A,B,U1,U2,P,E,V,
 T,F,G,T2,M5



$d=12\text{mm}, 16\text{mm}, 43\text{mm}, 48\text{mm}.$

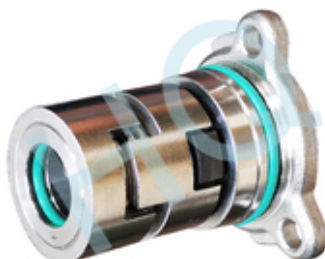
Suitable for use in Grundfos pumps: CR1, CR3, CR5, CR10, CR15, CR20, CR32, CR45, CR64, CR90 water pumps, O-ring assembly type CRN1, CRN3, CRN5, CRN10, CRN15, CRN20, CRN32, CRN



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Type: Grundfos Pump Seal
Temperature: -30°C to +180°C
Pressure: $\leq 1.0\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: Q1,Q2,A,B,U1,U2,P,E,V,
T,F,G,T2,M5

d=12mm,16mm,43mm,48mm.

Suitable for use in Grundfos pumps:CR1, CR3, CR5, CR10, CR15, CR20, CR32, CR45, CR64, CR90 water pumps, O-ring assembly type CRN1, CRN3, CRN5, CRN10, CRN15, CRN20, CRN32, CRN



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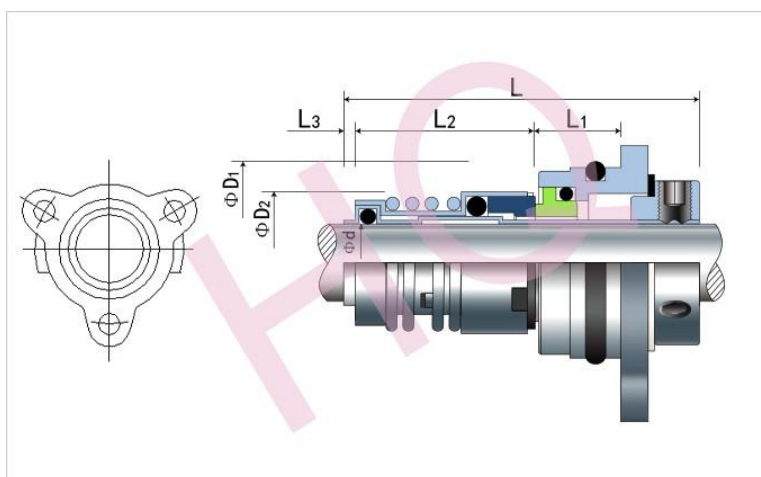


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GR-Z-1



Type: Grundfos Pump Seal
 Temperature: -30 to $+150^{\circ}\text{C}$
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B, Q2, U2, P, E, N, V, F, G, Alfa



It suits for Grundfos Pumps.

Belongs to GR-Z series.

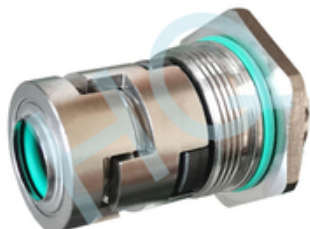
$d=12\text{mm}, 16\text{mm}, 22\text{mm}.$



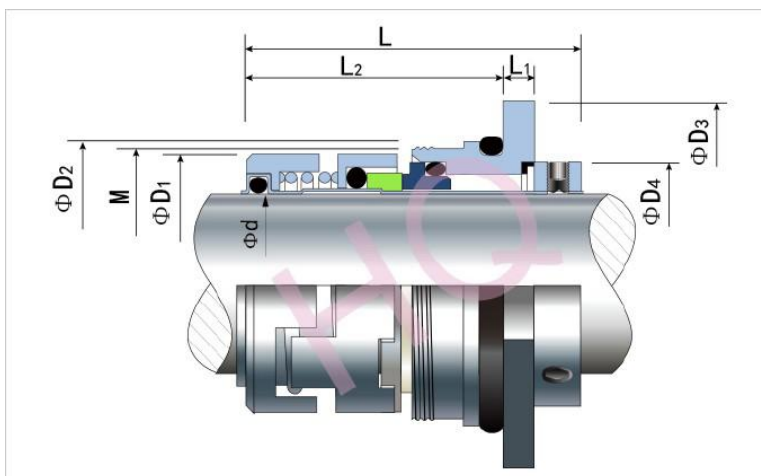
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Type: Grundfos Pump Seals
 Replacement: Equivalent with Grundfos type H seals
 Temperature: -30°C to $+200^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 25\text{m/s}$
 Material: B,Q2,U2,P,E,V,F,G



d	D1	D2	D3	D4	L	L1	L2	M
12	25	29	33.5	25	55.5	4	44.5	28X1.5
14								
16	30.5	34	40.5	29	58	5	46	33x1.5
18								

Suit for CR1, CR3, CR5, CRN1, CRN3, CRN5, CRI1, CRI3, CRI5, CR32, CR45, CR64, CR90, CRN32, CRN45, CRN64, CRN90

Series Pumps.

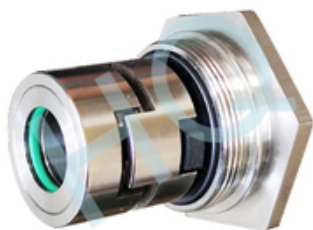


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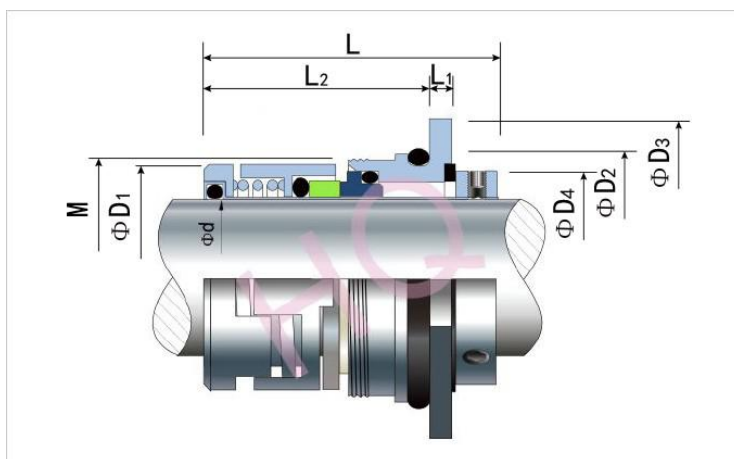


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GR-Z1-1



Type: Grundfos Pump Seals
 Replacement: Replace Grundfos H type
 Temperature: -30°C to $+200^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 25\text{m/s}$
 Material: B, Q2, U2, P, E, V, F, G



d (mm)	D1	D2	D3	D4	L	L1	L2	M
12	25.0	29	33.5	25	55.5	4	44.5	28X1.5
16	30.5	34	40.5	29	58.0	5	46.0	33X1.5

Suit for CR1, CR3, CR5, CRN1, CRN3, CRN5, CRI1, CRI3, CRI5, CR32, CR45, CR64, CR90, CRN32, CRN45, CRN64, CRN90 Series Pumps.



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GR-Z1-2



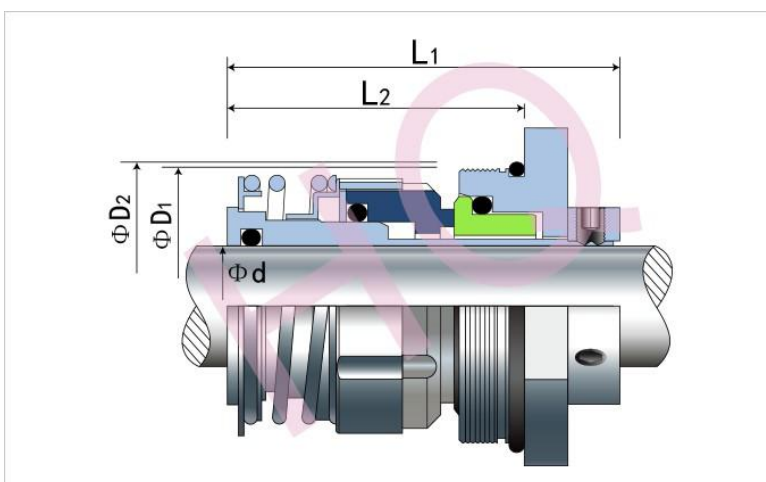
Type: Suit for Grundfos CR,CRI, CRN1, 3, 5,CR, CRI, CRN10, 15, 20,CR, CRN32, 45, 64, 90,CR, CRN120, 150 Pumps

Temperature: - 20 to +120°C

Pressure: ≤ 2.5 Mpa

Speed: ≤ 25 m/s

Material: Q1,Q2,V,K,E,P,G,M5,M6,T4



d (mm)	D1	D2	L1	L2
12	M28X1.5	29.8	57	44.5
16	M33X1.5	34.8	58	46.0



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GR-Z1-3

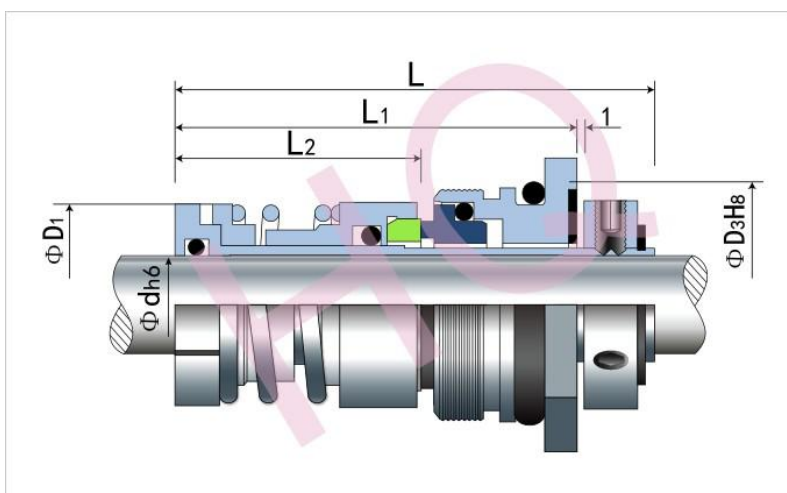


Type: Suit for Grundfos Pumps
Temperature: -20 to +120°C

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

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

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



d (mm)	D1	D3	M	L	L1	L2
12	25.0	29.0	M28X1.5	58.5	49.0	30.0
16	30.5	34.0	M33X1.5	60.0	51.0	30.5



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Type: Suit for Grundfos CR1, CR3, CR5, CRN1, CRN3, CRN5, CRI1, CRI3, CRI5 Pumps, CR32, CR45, CR64, CR90 Pumps, CRN32, CRN45, CRN64, CRN90 Pumps Replacement:

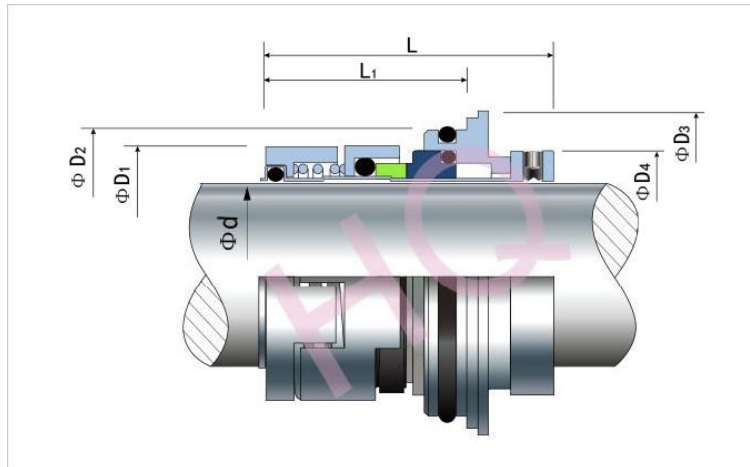
Replacement: Equivalent with Grundfos Type H seals/HQQV/HQQE

Temperature: -30°C to $+200^{\circ}\text{C}$

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

Speed: $\leq 25\text{m/s}$

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



d (mm)	D1	D2	D3	D4	BORE (H8)	L	L1
22	39.5	51.2	60	39	50	70.5	50.5
32							

Suit for CR1, CR3, CR5, CRN1, CRN3, CRN5, CRI1, CRI3, CRI5, CR32, CR45, CR64, CR90, CRN32, CRN45, CRN64, CRN90

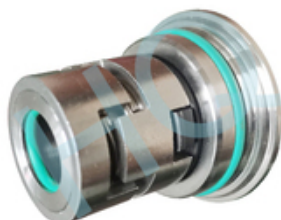
Series Pumps.



<http://www.hqseal.com>

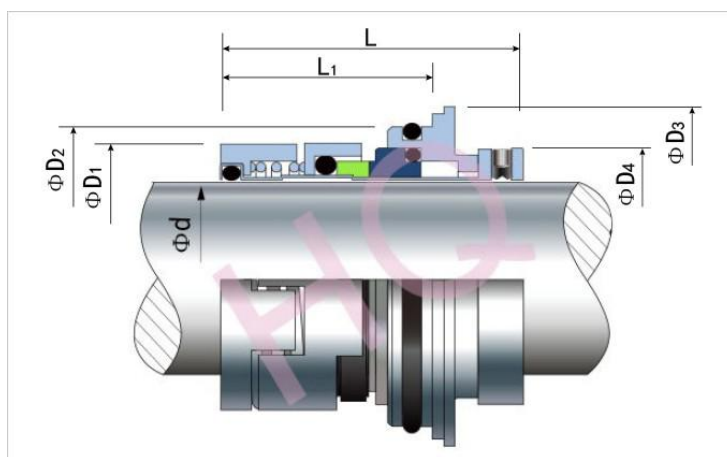


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Type: Grundfos Pump Seals
 Replacement: Replace Grundfos H type
 Temperature: -30°C to +200°C

Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 25\text{m/s}$
 Material: B,Q2,U2,P,E,V,F,G



d (mm)	D1	D2	D3	D4	BORE (H8)	L	L1
22	39.5	51.2	60	39	50	70.5	50.5

Suit for CR1, CR3, CR5, CRN1, CRN3, CRN5, CRI1, CRI3, CRI5, CR32, CR45, CR64, CR90, CRN32, CRN45, CRN64, CRN90 Series Pumps.



<http://www.hqseal.com>



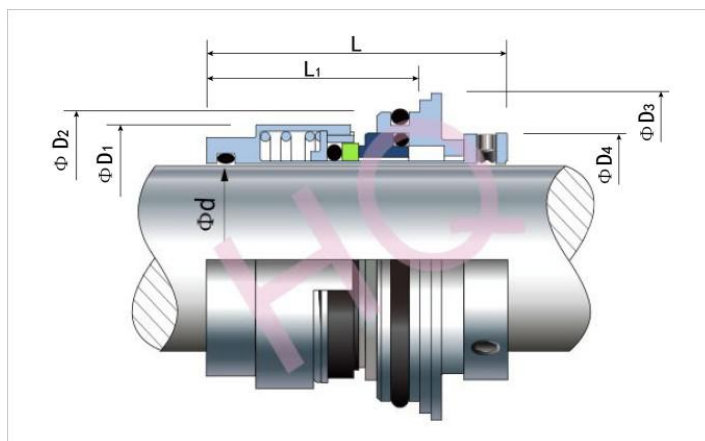
hq@hqseal.com

GR-Z2-2



Type: Grundfos Pump Seals
Replacement: Replace Grundfos H type
Temperature: -30°C to +200°C

Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 25\text{m/s}$
Material: B,Q2,U2,P,E,V,F,G



d (mm)	D1	D2	D3	D4	BORE (H8)	L	L1
22	39.5	51.2	60	39	50	70.5	50.5

Suit for CR1, CR3, CR5, CRN1, CRN3, CRN5, CRI1, CRI3, CRI5, CR32, CR45, CR64, CR90, CRN32, CRN45, CRN64, CRN90

Series Pumps.



<http://www.hqseal.com>

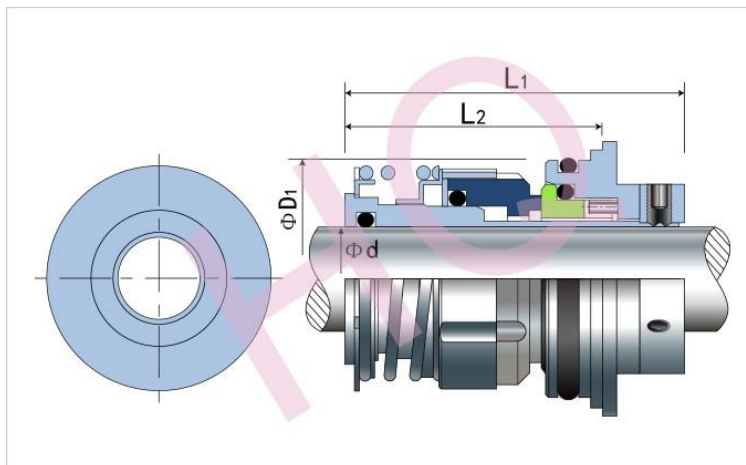


hq@hqseal.com

GR-Z2-3



Type: Grundfos Pump Seal
 Temperature: -30 to $+180^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 25\text{m/s}$
 Material: B, A1, Q1, Q2, U2, P, E, N, V, F, G, Alfa



$d=22\text{mm}$



<http://www.hqseal.com>

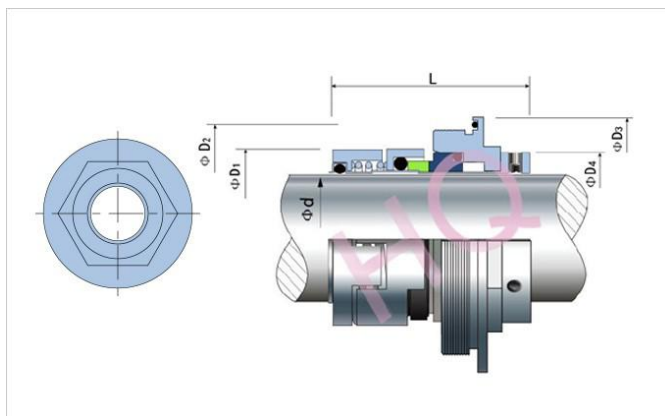


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GR-Z2-4



Type: Grundfos Pump Seal
 Temperature: -30 to +180°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 25\text{m/s}$
 Material: B, Q2, U2, P, E, N, V, F, G, Alfa



d=22mm



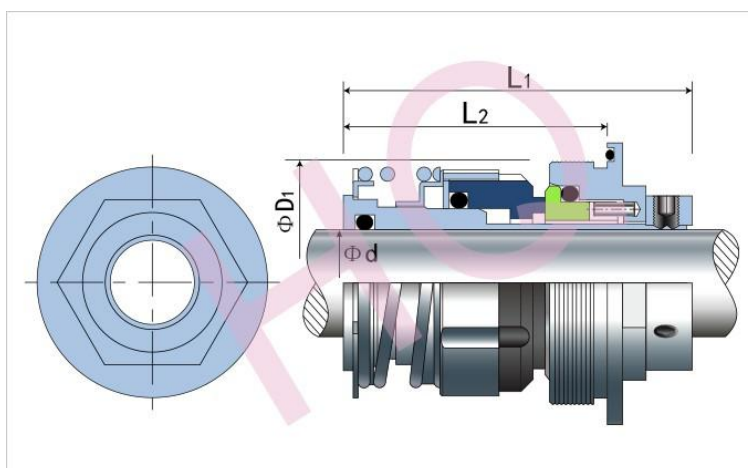
<http://www.hqseal.com>



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Type: Grundfos Pump Seal
 Temperature: -30 to +180°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 25\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d=22mm



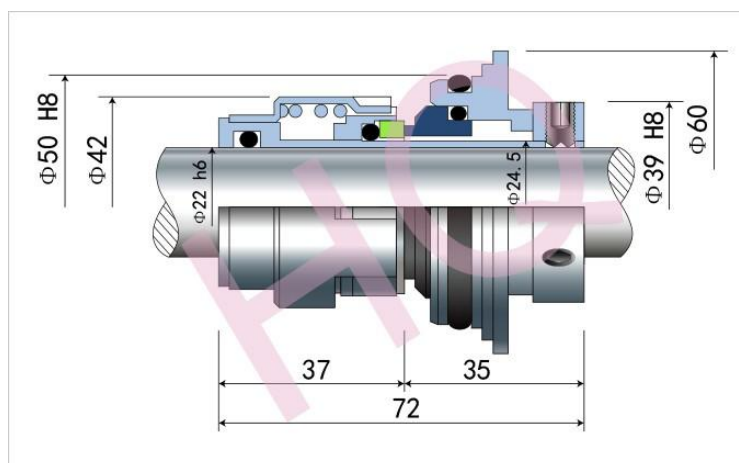
<http://www.hqseal.com>



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Type: Grundfos Pump Seal
 Temperature: -30 to +180°C
 Pressure: $\leq 2.5\text{Mpa}$ Speed: $\leq 25\text{m/s}$
 Material: B, Q2, U2, P, E, N, V, F, G, Alfa



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GR-Z2-7



Type: Suit for GRUNDFOS "H" code

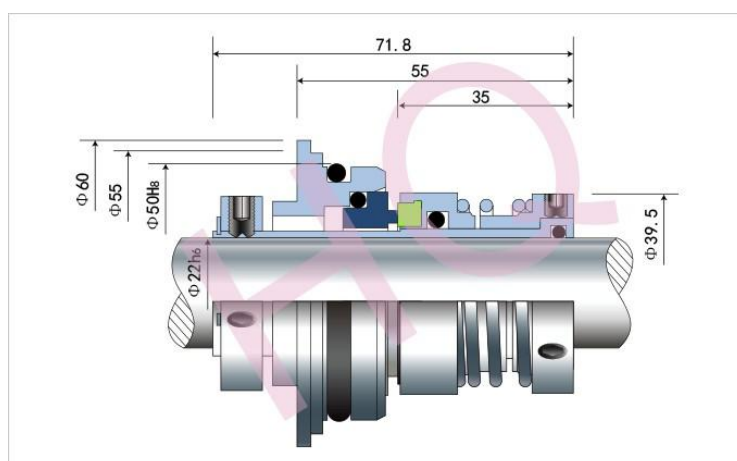
seals, Installed in CR, CRI and CRIE Pumps

Temperature: -30 to +180°C

Pressure: 2.1Mpa

Speed: $\leq 22\text{m/s}$

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



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GR-Z2-8



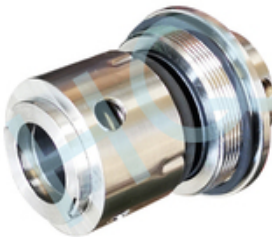
Type: Mechanical Seal
Temperature: -30 to +200°C

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

Speed: $\leq 23\text{m/s}$

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

GR-Z2-9



Type: Mechanical Seal
Temperature: -30 to +200°C

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

Speed: $\leq 23\text{m/s}$

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

This is 22mm Type E Cartridge Seal.

It is machined type, replace the original Grundfos pump seals.

GR-Z2-10



Type: Grundfos Pump Seal
Replacement: Suit for Grundfos SL Frame A pumps
Temperature: -20 to +180°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B, Q2, U2, P, E, N, V, F, G, Alfa

Suit for Grundfos pumps.

A new type based on GR-Z2-1.



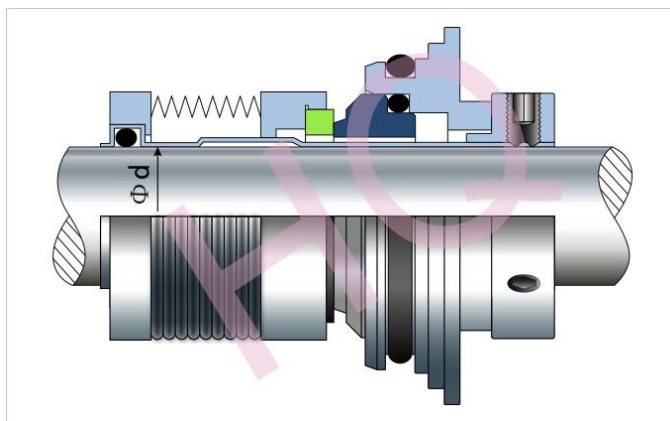
<http://www.hqseal.com>



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Type: Grundfos Pump Seal
Replacement: Equivalent with Grundfos K
type seal
Temperature: -20 to +120°C
Pressure: $\leq 2.8\text{Mpa}$
Speed: $\leq 25\text{m/s}$
Material: A,B,U1,U2,Q1,Q2,F,V,G,K,T,M5



d=22mm

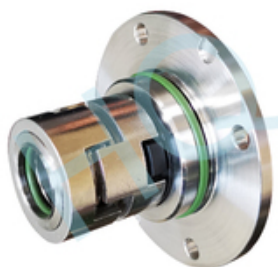


<http://www.hqseal.com>



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GR-Z4



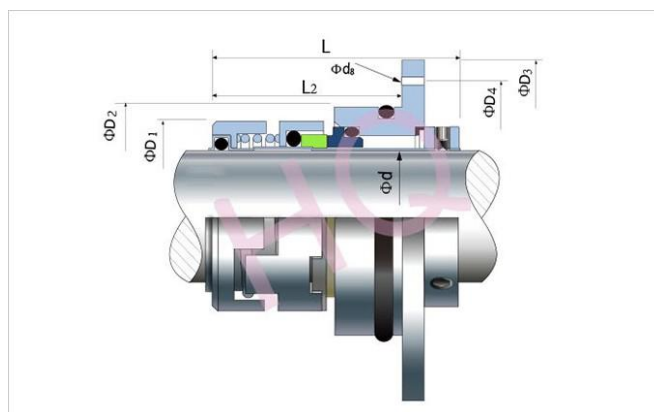
Type: Suit for GRUNDFOS CR,CRN
and CRI series pumps

Temperature: -30°C to $+200^{\circ}\text{C}$

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

Speed: $\leq 25\text{m/s}$

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



d (mm)	d8	D1	D2	D3	D4	L	L2
12	6.0	25.0	31	58	44	55.5	44.5
16	6.5	30.0	34	65	49	58.0	46.0
22	7.0	39.5	50	90	72	70.5	50.5

GR-Z4-0



Type: Grundfos Pump Seal

Temperature: -25 to $+150^{\circ}\text{C}$

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

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

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

d=12mm,16mm,22mm.



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GR-Z4-1



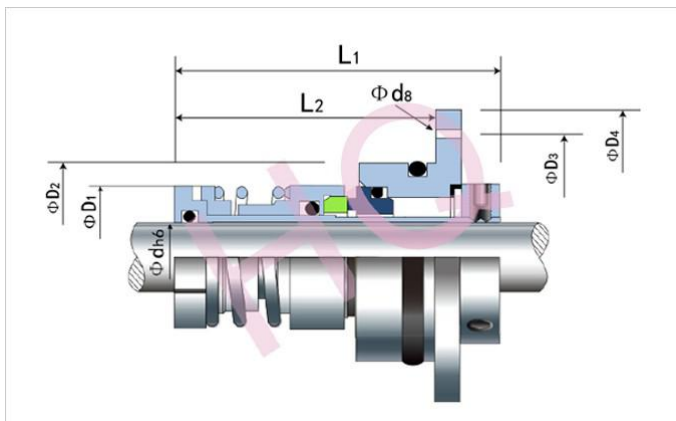
Type: Suit for Grundfos Pumps
 Temperature: -30 to +180°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 23\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa

d=12mm,16mm,22mm.

GR-Z4-2



Type: Grundfos Pump Seal
 Temperature: -30 to +180°C
 Pressure: $\leq 2.1\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



d=12mm,16mm,22mm.

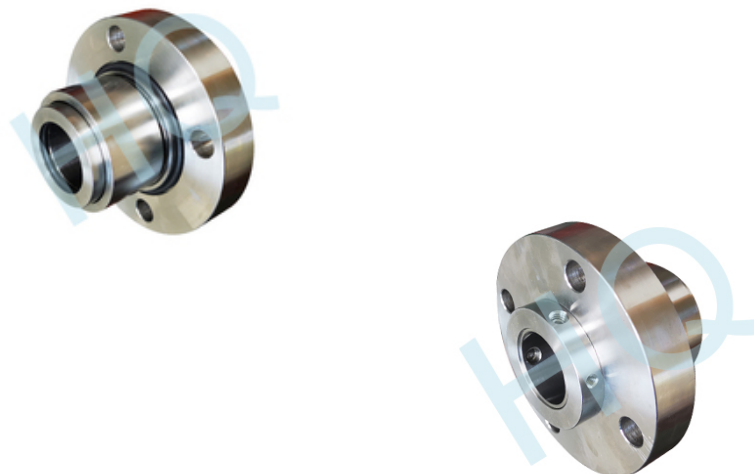


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GR-Z4-3



Type: Grundfos Pump Seal
Replacement: Suit for CR,CRN, CRI 120 Series pumps
Temperature: -30 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

Suit for CR,CRN, CRI 120 Series pumps

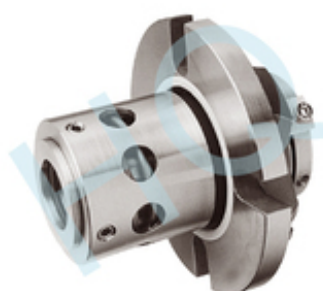
d=32mm



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Type: Grundfos Pump Seal
Temperature: -30 to +180°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 20\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Suit for Grundfos Pumps

d=12mm,16mm,22mm,35mm.



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Type: Suit for Grundfos,FRISTAM
FP,FPE,FPX,FR,FT,FZ Pumps

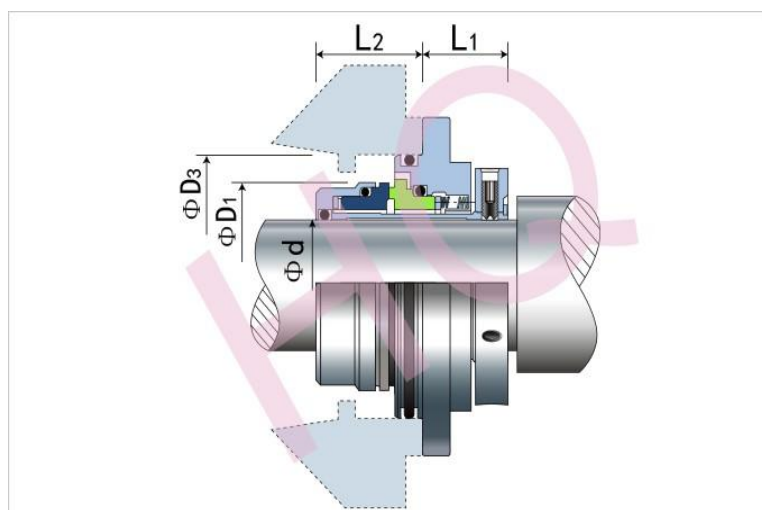
Replacement: AES MOGCE

Temperature: -20 to +180°C

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

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

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



d (mm)	D1	D3	L1	L2
30	46.8	60	24.9	30.9
d (inch)	D1	D3	L1	L2
1.181	1.843	2.362	0.978	1.216



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GR-Z7



Type: Grundfos Pump Seal
Replacement: Suit for Grundfos SL Frame A pumps
Temperature: -20 to +180°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Suit for Grundfos SL Frame A pumps

GR-Z8(TD5)



Type: Mechanical Seal
Replacement: Suit for Southern Pump
Temperature: -20 to +100°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Suit for Sountern Pumps.

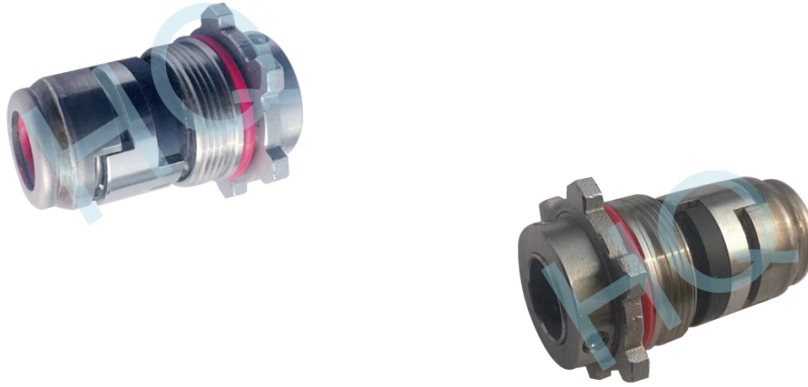
d=40mm,43mm,48mm,55mm,60mm.



<http://www.hqseal.com>



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Type: Mechanical Seal

Replacement: Suit for Southern Pump

Temperature: -20 to +100°C

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

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

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

Suit for Sountern Pumps.

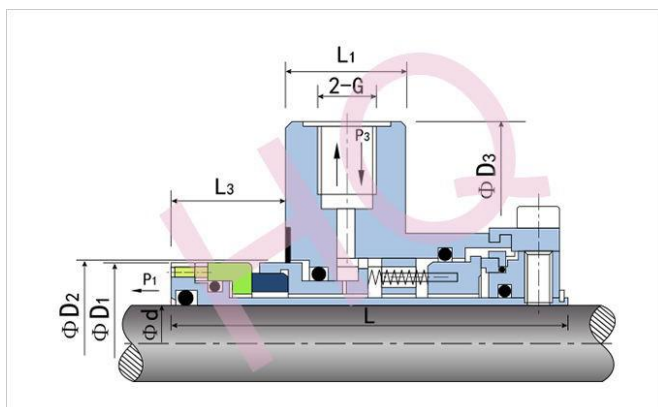


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GR-G02(CARTEX)



Type: Cartridge Seal
Replacement: Burgmann CARTEX
Temperature: -40 to +204°C

Pressure: $\leq 4.0\text{Mpa}$

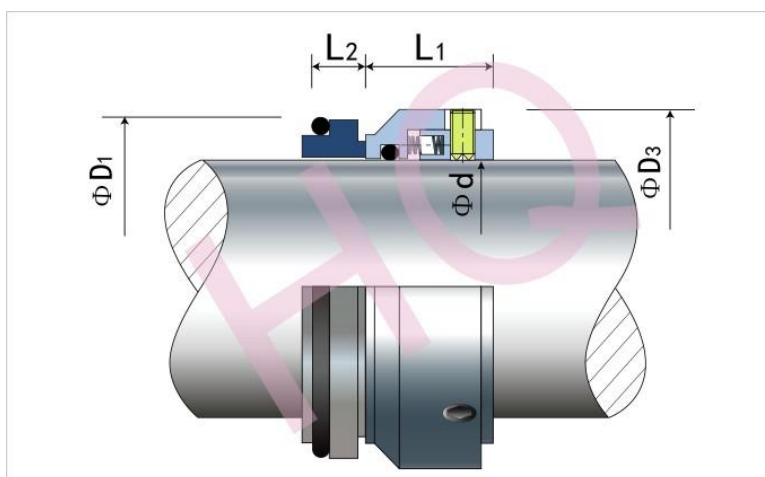
Speed: $\leq 23\text{m/s}$

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

d (mm)	D1	D2		D3	D5	L	L1	L3	S	G (Inch)
		min	max							
25	43.0	51.0	44.0	105	62	86.5	25.4	24	14	1/4"
28	46.0	52.0	47.0	105	62	86.5	25.4	24	14	1/4"
30	48.0	56.0	49.0	105	65	86.5	25.4	24	14	1/4"
33	50.0	57.0	51.0	110	67	86.5	25.4	24	14	1/4"
35	53.0	61.0	54.0	113	70	86.5	25.4	24	14	1/4"
38	56.0	66.0	57.0	123	75	86.5	25.4	24	14	3/8"
40	58.0	68.0	59.0	123	78	86.5	25.4	24	16	3/8"
43	60.0	70.5	61.5	133	80	86.5	25.4	24	16	3/8"
45	62.5	73.0	64.0	138	81	86.5	25.4	24	16	3/8"
48	65.5	75.0	67.0	138	84	86.5	25.4	24	16	3/8"
50	68.0	78.0	69.0	148	87	86.5	25.4	24	16	3/8"
55	73.0	83.0	74.0	148	90	86.5	25.4	24	18	3/8"
60	78.0	91.0	79.0	157	102	86.5	25.4	24	18	3/8"
65	83.0	98.5	84.5	163	109	86.5	25.4	24	18	3/8"
70	93.0	108.0	95.0	178	118	86.5	25.4	24	18	3/8"
75	100.0	118.0	101.6	190	129	108.0	28.0	30	18	3/8"
80	106.4	124.0	108.0	195	135	108.0	28.0	30	18	3/8"
85	109.5	128.0	111.1	198	139	108.0	28.0	30	22	3/8"
90	115.9	135.0	117.5	205	145	108.0	28.0	30	22	3/8"
95	119.1	138.0	120.7	208	148	108.0	28.0	30	22	3/8"
100	125.4	144.0	127.0	218	154	108.0	28.0	30	22	3/8"



Type: Grundfos Pump Seals
 Replacement: LIDERING GR-SA-65
 Temperature: -30°C to $+200^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



*Siut for Grundfos Pumps

*Shaft size:30mm,38mm,50mm,65mm.

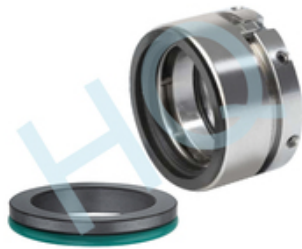


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GR-G12(SSAIS06)



Type: Multi Spring Seal, Suit for Grundfos Sarlin

Pump

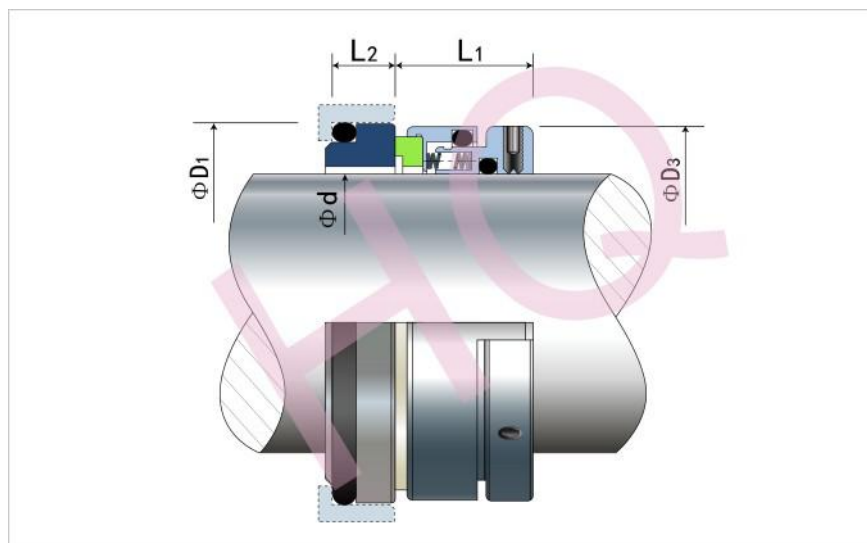
Replacement: AES SSAIS06, Upper Seal for Grundfos S range submersible pump seals

Temperature: -30°C to +200°C

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

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

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



d (mm)	D1	D3	L1	L2
30	45	46	24	10
38	56	58	27	11
50	70	70	27	13
65	85	90	32	13

d(inch)	D1	D3	L1	L2
1.181	1.772	1.811	0.945	0.394
1.496	2.205	2.283	1.063	0.433
1.969	2.756	2.756	1.063	0.512
2.559	3.348	3.543	1.260	0.512



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GR-G13(M010SA)



Type: Multi Spring Seal, Suit for Grundfos Sarlin Pumps

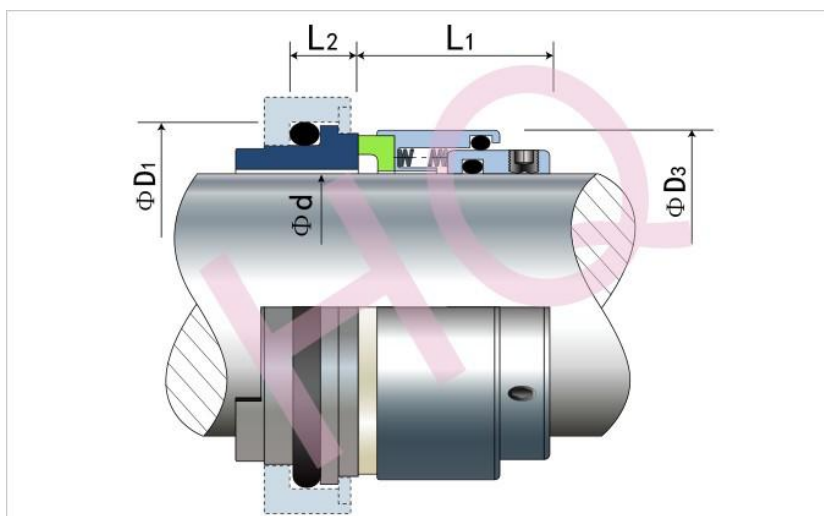
Replacement: AES M010SA, ROPLAN 210, Lower Seal for Grundfos S range submersible pump seals

Temperature: -30°C to $+200^{\circ}\text{C}$

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

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

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



d (mm)	D1	D3	L1	L2
25	38.0	39	29.9	9.6
32	48.0	46	32.4	11.0
38	55.0	54	33.9	11.2
50	69.3	66	34.4	14.0
65	85.4	85	38.9	15.3

d(inch)	D1	D3	L1	L2
0.984	1.498	1.535	1.177	0.378
1.260	1.890	1.811	1.276	0.433
1.496	2.165	2.126	1.335	0.441
1.969	2.728	2.598	1.354	0.551
2.559	3.362	3.346	0.531	0.602



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GR-G14(43)



Type: Double "Plug in" Cartridge seals. Suit for

GR-SL1 Pumps

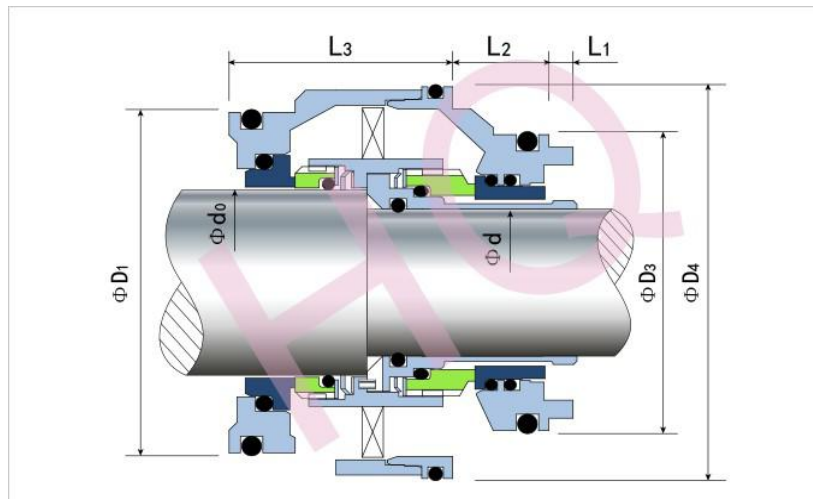
Replacement: Suit for Grundfos SL1 Frame A pumps

Temperature: -20 to +160°C

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

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

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



Suit for Grundfos Sewage Pumps.

d=55mm+43mm



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GR-G15(40S8)



Type: Upper seal to suit for Grundfos S- series

Pumps

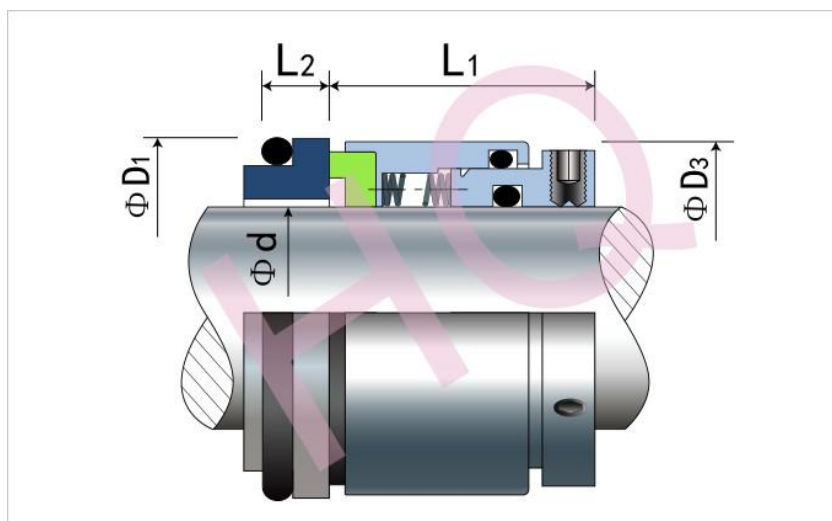
Replacement: Vulcan 40S8

Temperature: -30°C to $+175^{\circ}\text{C}$

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

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

Material: A,B,Q1,Q2,V,E,P,F,G,M,T6



d (mm)	D1	D3	L1	L3	Type code
38	56	53.0	34.0	11.0	40S
50	70	65.6	34.5	9.5	40S8
65	85	84.2	36.5	11.0	40S8



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GR-G16(42)



Type: Lower seal to suit for Grundfos S- Series

Pumps

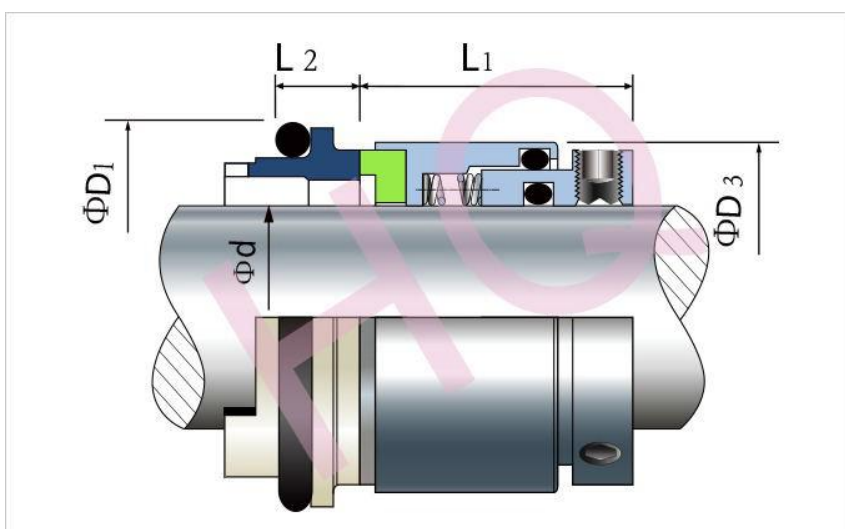
Replacement: Vulcan 42

Temperature: -30°C to +180°C

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

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

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



d (mm)	D1	D3	L1	L3
32	48	46.0	34.0	11.0
38	55	53.0	34.0	11.5
50	70	65.6	34.5	14.0
65	85	84.2	66.0	15.0



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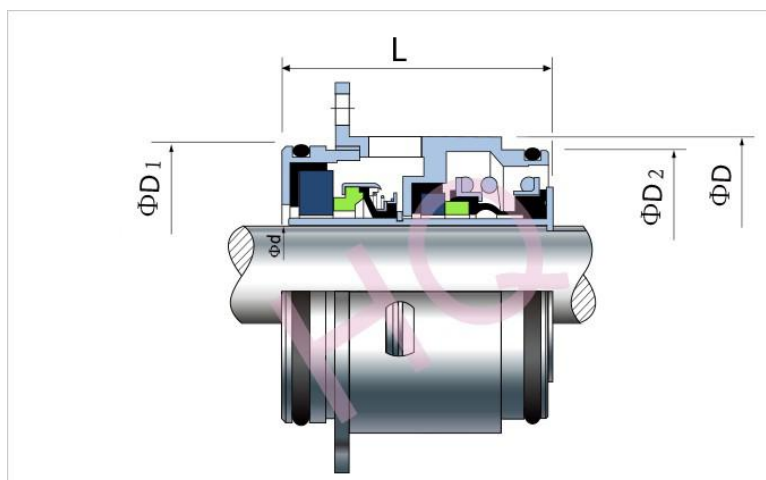


Type: Suit Grundfos pump SE series pumps
 Replacement: Lidering GR-SE
 Temperature: -20°C to +180°C

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

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

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



d (mm)	D1	D2	D	L
22	58	56	62	63.5
32	71	68	73	70.0



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GR-G20(1615)



Type: Suit for GRUNDFOS CR,CRN and CRI series pumps

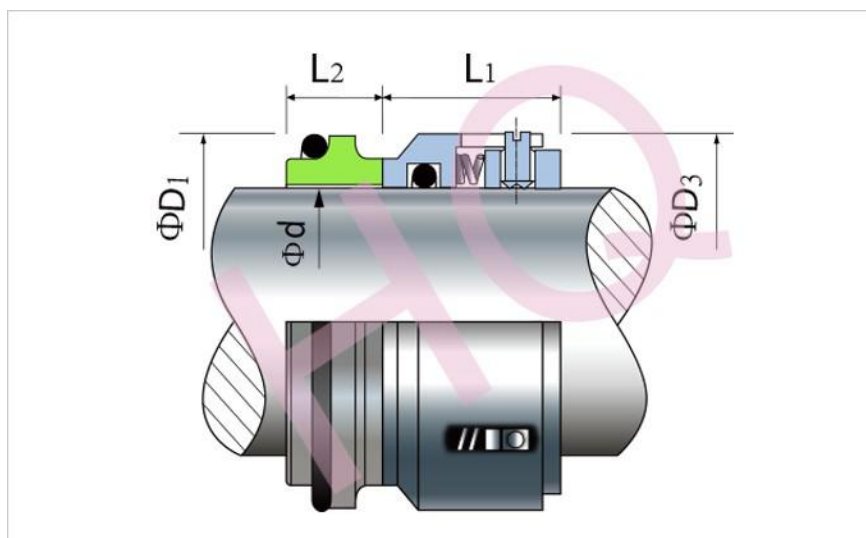
Replacement: Vulcan 1615, Billi BB30L

Temperature: -30°C to $+200^{\circ}\text{C}$

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

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

Material: Stainless steel rotary face and antimony carbon seats and viton O-ring.



d (mm)	D1	D3	L1	L2
30	45	45.5	28.0	10.5
38	56	55.0	31.0	14.0
50	70	70.5	32.5	15.0



<http://www.hqseal.com>



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GR-G35(HJ92N)

Type: Wave Spring Mechanical Seal, Suit for
Grundfos CRT, NK Pumps, CLM-G, CLP-G
Pumps

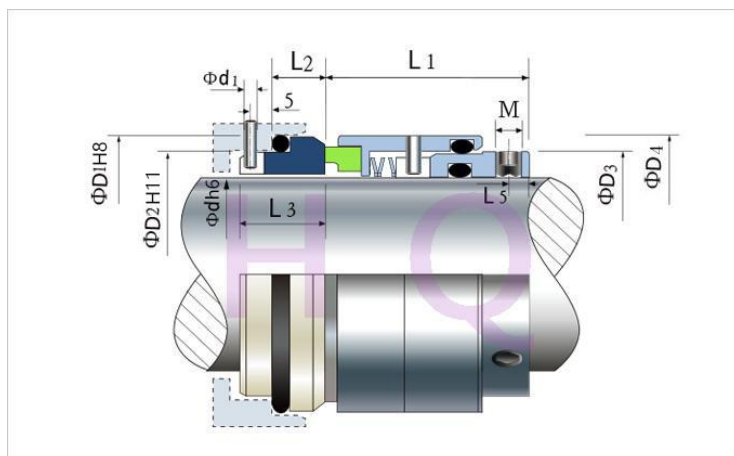
Replacement: Burgmann HJ92N, Grundfos Type D

Temperature: -30°C 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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d (mm)	D1	D2	D3	D4	d1	L1	L2	L3	L5	M
18	33	27	26.0	32	3	30.5	7.0	15.0	3.0	M4
20	35	29	28.0	34	3	30.5	7.0	15.0	3.0	M4
22	37	31	30.0	36	3	30.5	7.0	15.0	3.0	M4
24	39	33	32.5	38	3	33.0	7.0	15.0	3.5	M5
25	40	34	33.5	39	3	33.0	7.0	15.0	3.5	M5
28	43	37	36.5	42	3	35.5	7.0	15.0	3.5	M5
30	45	39	38.5	44	3	35.5	7.0	15.0	3.5	M5
32	48	42	41.5	47	3	35.5	7.0	15.0	3.5	M5
33	48	42	41.5	47	3	35.5	7.0	15.0	3.5	M5
35	50	44	43.5	49	3	35.5	7.0	15.0	3.5	M5
38	56	49	47.5	54	4	37.0	8.0	16.0	4.0	M5
40	58	51	49.5	56	4	37.0	8.0	16.0	4.0	M5
43	61	54	52.5	59	4	37.0	8.0	16.0	4.0	M5
45	63	56	54.5	61	4	37.0	8.0	16.0	4.0	M5
48	66	59	57.5	64	4	37.0	8.0	16.0	4.0	M5
50	70	62	59.5	66	4	38.0	9.5	17.0	4.5	M6

GR-G36(HJ977GN)

Type: Wave Spring Mechanical Seal, Suit for
Grundfos CRT, NK Pumps, CLM-G, CLP-G
Pumps

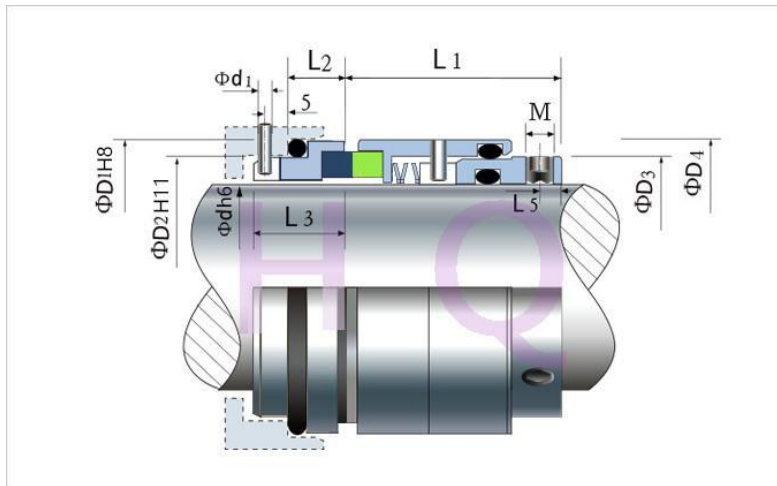
Replacement: Burgmann HJ977GN, Grundfos Type D

Temperature: -20°C to $+200^{\circ}\text{C}$

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

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

Material: A, B, Q1, Q2, V, E, P, F, G, M, T6



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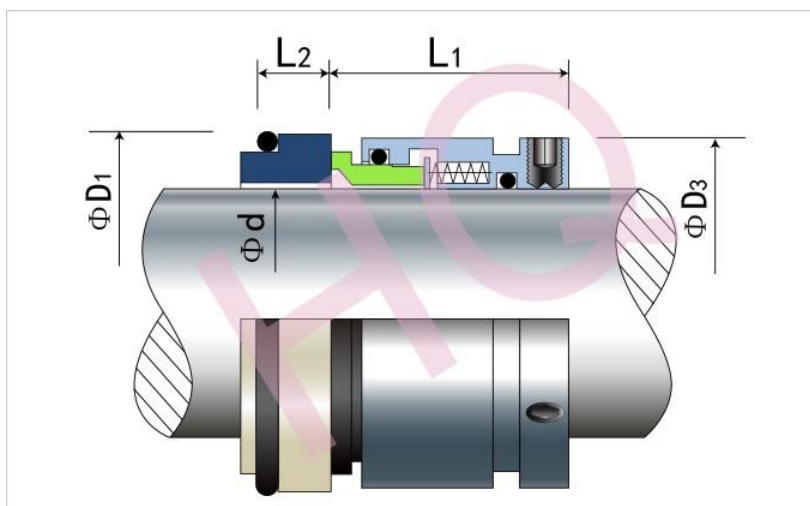
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d (mm)	D1	D2	D3	D4	d1	L1	L2	L3	L5	M
18	33	27	26.0	32	3	28.5	9.0	17.0	3.0	M4
20	35	29	28.0	34	3	28.5	9.0	17.0	3.0	M4
22	37	31	30.0	36	3	28.5	9.0	17.0	3.0	M4
24	39	33	32.5	38	3	31.0	9.0	17.0	3.5	M5
25	40	34	33.5	39	3	31.0	9.0	17.0	3.5	M5
28	43	37	36.5	42	3	33.0	9.5	17.5	3.5	M5
30	45	39	38.5	44	3	33.0	9.5	17.5	3.5	M5
32	48	42	41.5	47	3	33.0	9.5	17.5	3.5	M5
33	48	42	41.5	47	3	33.0	9.5	17.5	3.5	M5
35	50	44	43.5	49	3	33.0	9.5	17.5	3.5	M5
38	56	49	47.5	54	4	34.5	10.5	18.5	4.0	M5
40	58	51	49.5	56	4	34.5	10.5	18.5	4.0	M5
43	61	54	52.5	59	4	34.5	10.5	18.5	4.0	M5
45	63	56	54.5	61	4	34.5	10.5	18.5	4.0	M5
48	66	59	57.5	64	4	34.5	10.5	18.5	4.0	M5
50	70	62	59.5	66	4	35.5	12.0	19.5	4.5	M6

GR-G37



Type: Upper seal to suit for Grundfos CRT、NK、
CLM-G、CLP-G Series Pumps
Replacement: Original Grundfos Seal
Temperature: -30°C to +200°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,Q2,U2,P,E,V,F,G



d (mm)	D1	D3	L1	L2
38	56	58	27	11
50	70	70	27	13
65	85	90	32	13



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GR-G38



Type: Lower seal to suit for Grundfos CRT、NK、

CLM-G、CLP-G Series Pumps

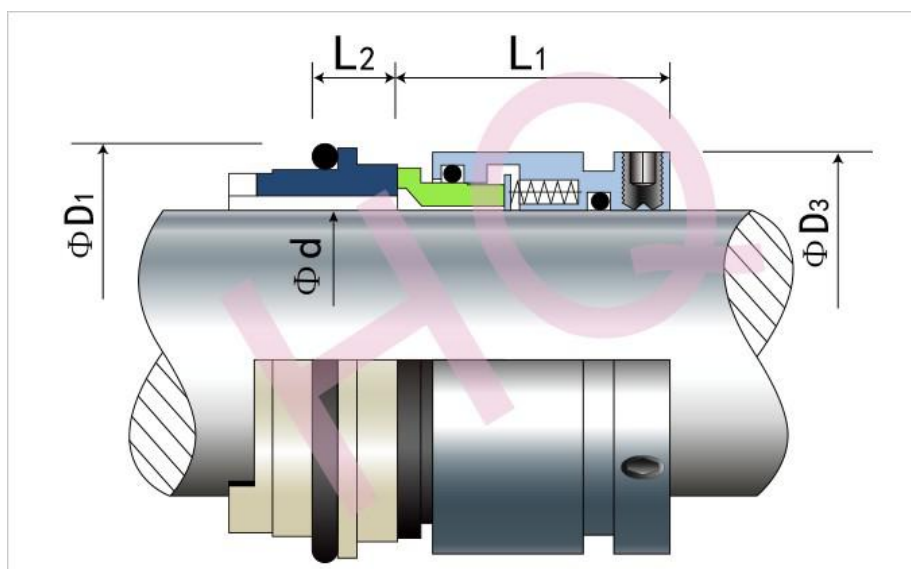
Replacement: Original Grundfos Seal

Temperature: -30°C to +200°C

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

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

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



d (mm)	D1	D3	L1	L2
32	48.0	46	32.4	11.0
38	55.0	54	33.9	11.2
50	69.3	66	34.4	14.0
65	85.4	85	38.9	15.3



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GR-G40



Type: Grundfos double entry Pump Seals
Temperature: -40 to +180°C

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

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

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

Suit for Grundfos double entry Pumps

Manufacture it according to client's requirement



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Type: Grundfos Pump Seal
Replacement: ITT 1335
Temperature: -20 to +200°C
Pressure: $\leq 1.0\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Suit for Grundfos double entry Pumps

Manufacture it according to client's requirement



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HQM7N/M74/M74F

Type: Wave Spring Mechanical Seal

Replacement: Burgmann M7N/M74/M74F

Temperature: -20°C to +120°C

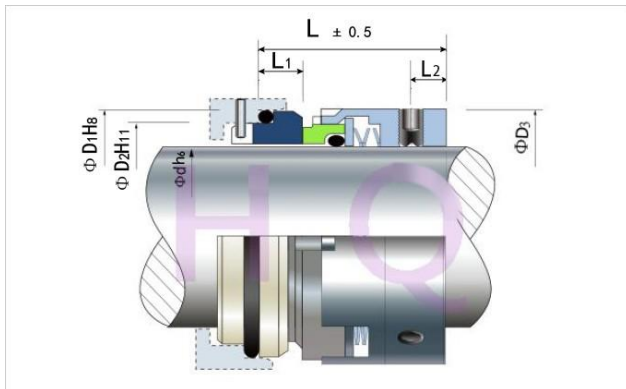
Pressure: $\leq 1.2\text{Mpa}$

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

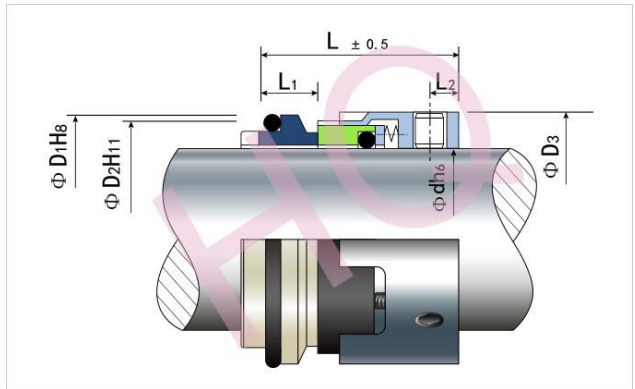
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa



HQM7N



HQM74



d (mm)	D1	D2	D3	L	L1	L2
14	25	21	25	35.0	10.0	6
16	27	23	27	35.0	10.0	6
18	33	27	33	37.5	11.5	7
20	35	29	35	37.5	11.5	7
22	37	31	37	37.5	11.5	7
24	39	33	39	40.0	11.5	8
25	40	34	40	40.0	11.5	8
28	43	37	43	42.5	11.5	8
30	45	39	45	42.5	11.5	8
32	48	42	47	42.5	11.5	8
33	48	42	48	42.5	11.5	8
35	50	44	50	42.5	11.5	8
38	56	49	55	45.0	14.0	8
40	58	51	57	45.0	14.0	8
43	61	54	60	45.0	14.0	8
45	63	56	62	45.0	14.0	8
48	66	59	65	45.0	14.0	8



Type: Suit for JP, CH8, CH12, CRK (I)2,
CRK(I)4,SPK1, SPK2,SPK4,SPK8,CR2,
CR4 Series Pumps

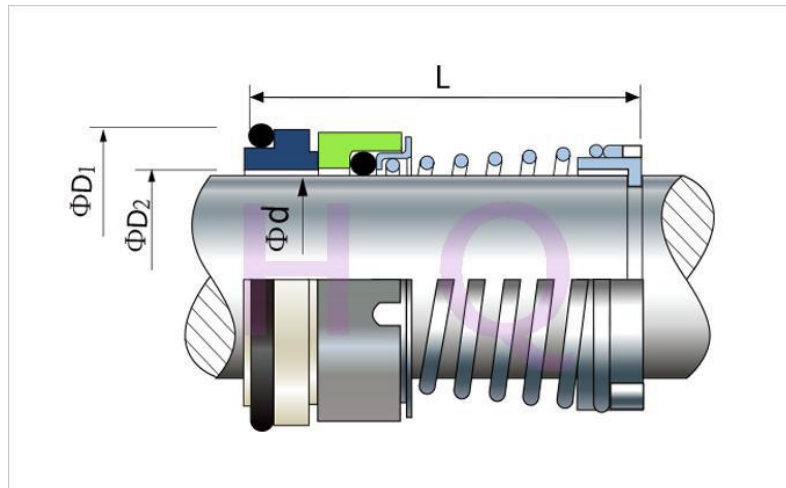
Replacement: Equivalent with Grundfos type C seals

Temperature: -20°C to +180°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 (mm)	D1	D2	L
12	22.7		44.5



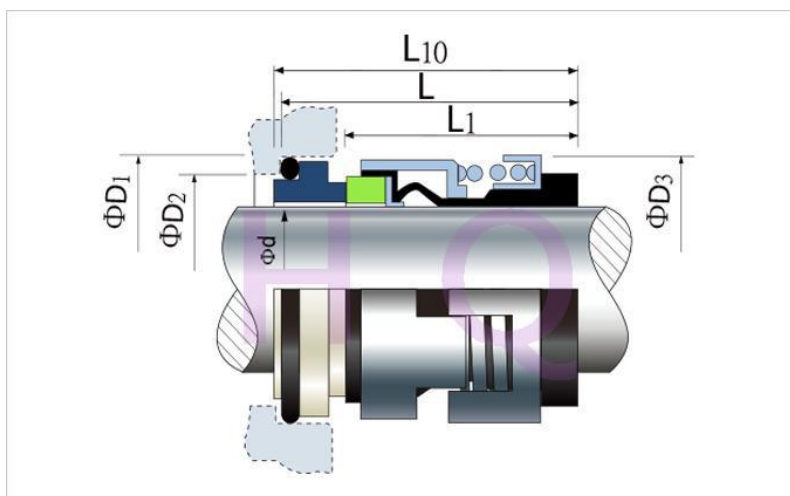
<http://www.hqseal.com>



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Type: Suit for CH, CHI, CHE, CRK, SPK,
TP,AP,CR,CRN,NK, TP, LM(D)/LP(D)
NM/ NP, DNM/DNP Series Pumps
Replacement: Grundfos Type B,Lidering GR-B
Temperature: -20°C to +180°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 (mm)	D1	D2	D3	L	L1	L10
GR-G3-12	23	19	22	39	31	40.5
GR-G3-S-12	23	19	22	34	26	35.5
GR-G3-16	27	23	26	40.5	32.5	41.5
GR-G3-S-16	27	23	26	35.5	27.5	36.5



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GR-G3-S



Type: Suit for GRUNDFOS

CH,CHI,CHE,CRK,SPK,TP,AP
Pumps,CR,CRN,NK,TP
Pumps,LM(D)/LP(D),NM/NP,
DNM/DNP Pumps.

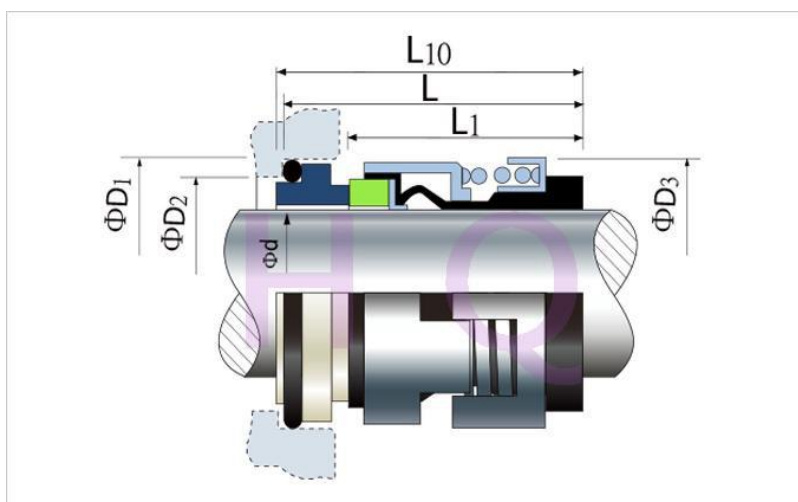
Replacement: Grundfos Type B,Lidering GR-B-SH

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	L	L1	L10
GR-G3-12	23	19	22	39	31	40.5
GR-G3-S-12	23	19	22	34	26	35.5
GR-G3-16	27	23	26	40.5	32.5	41.5
GR-G3-S-16	27	23	26	35.5	27.5	36.5

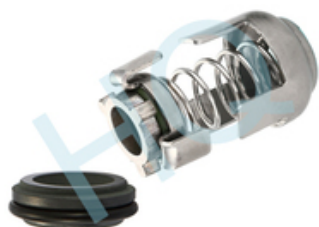


<http://www.hqseal.com>

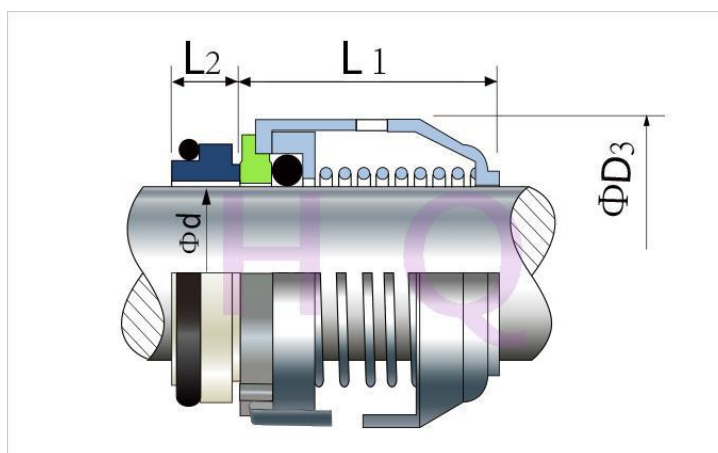


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GR-G4(12mm)



Type: Suit for GRUNDFOS ,SARLIN,HIG
HIGLE,INOXPA and JABSO pumps series
Replacement: Equivalent with Grundfos type A seals
Lidering GR-A12
Temperature: -20°C to +180°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 (mm)	D3	L2+L2
12	29	40.0
16	36	38.6



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GR-G4(16mm)



Type: Suit for GRUNDFOS,SARLIN,HIGLE,
INOXPA and JABSO Pumps

Replacement: Equivalent with Grundfos type A
seals,Lidering GR-A16

Temperature: -20 to +180°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

Refer to GR-G4(12mm)



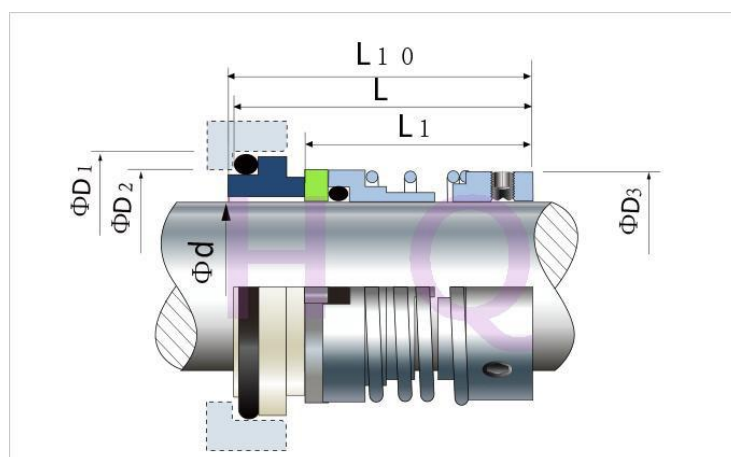
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Type: Suit for CNP-CDL Pumps
 Temperature: -20°C to $+180^{\circ}\text{C}$
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: A,B,Q1,Q2,U1,U2,P,E,V,F,G



d (mm)	D1	D2	D3	L	L1	L10
12	23	19	22	39.0	31.0	40.5
16	27	23	26	40.5	32.5	41.5



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GR-G6



Type: Suit for CM CME1,3,5,10,15,25
and CMV Series Pumps

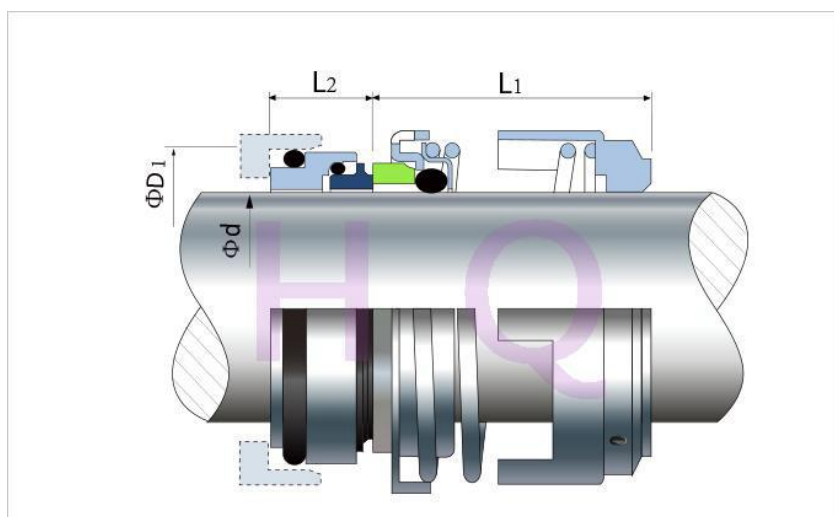
Replacement: Lidering GR-A-LG-22

Temperature: -20°C to +180°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 (mm)	D1	L1	L2
22	38.3	50.5	15.5



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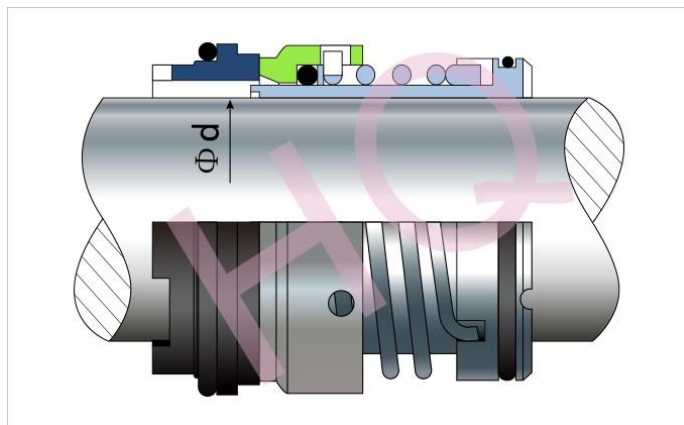


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GR-G9



Type: Grundfos Pump Seal
Replacement: LIDERING GR-SA-LG65
Temperature: -20°C to +180°C
Pressure: $\leq 1.4\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: A,B,Q1,Q2,V,E,P,F,G,M,T6



*Suit for Grundfos Pump.

Shaft Size: 65mm.



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GR-G11



Type: Suit for Grundfos CM series pumps

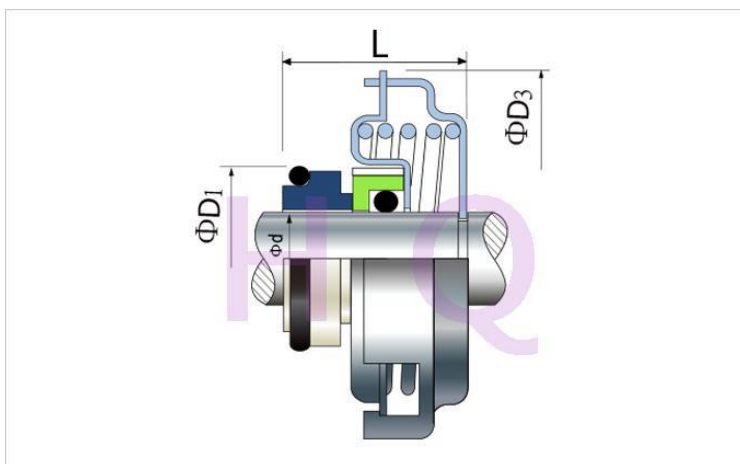
Replacement: AES SOS

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

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	L
12	22.5	48	23.6
16	27.0	48	23.6



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GR-G11-E



Type: Suit for Grundfos CM series pumps

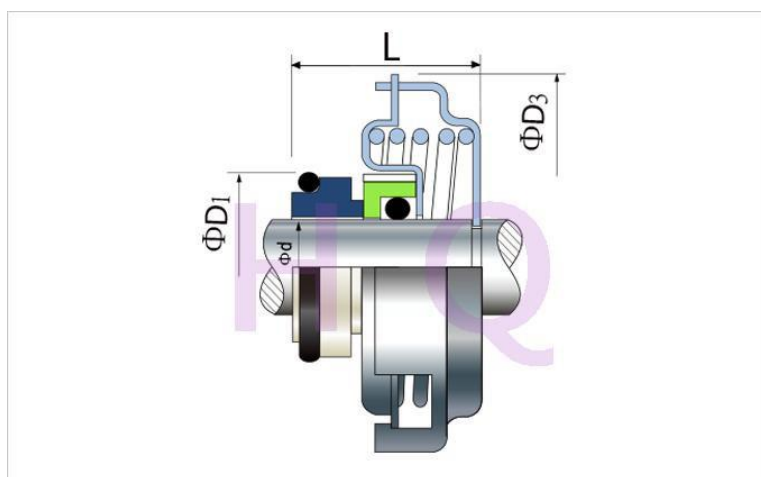
Replacement: AES SOS

Temperature: -20 to +180°C

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

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

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



d (mm)	D1	D3	L
12	22.5	48	23.6
16	27.0	48	23.6



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GR-G8



Type: Grundfos Pump Seal

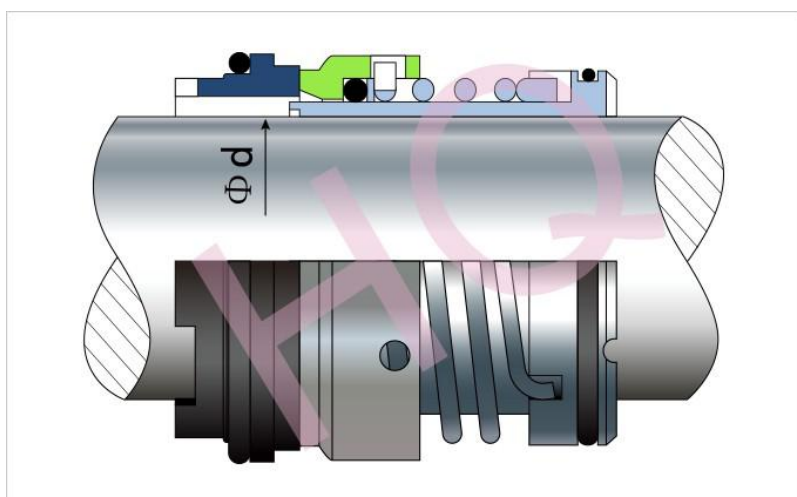
Replacement: Grundfos-A-65

Temperature: -20 to +120°C

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

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

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



* Suit for Grondfos Pumps.

* d=65mm.



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GR-G18(MG12S/B012G)



Type: Suit for Grundfos PT,NP5,LPD,NP,LP

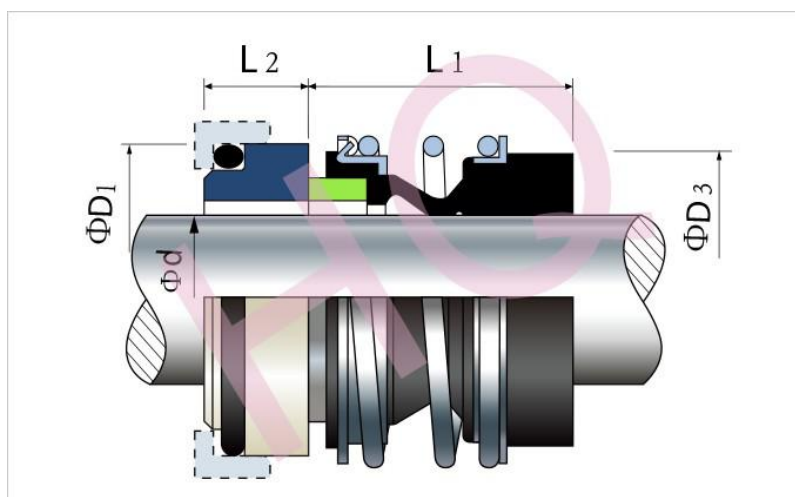
Replacement: Grundfos type G,Vulcan 192G,
Burgmann MG12S, AES B012G

Temperature: -20°C to +180°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 (mm)	D1	D3	L1	L2
12	23	24	25.9	15.0
16	27	28	28.4	12.3
22	37	36	30.0	11.1
33	48	51	35.0	7.5



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GR-G19(T01SA)

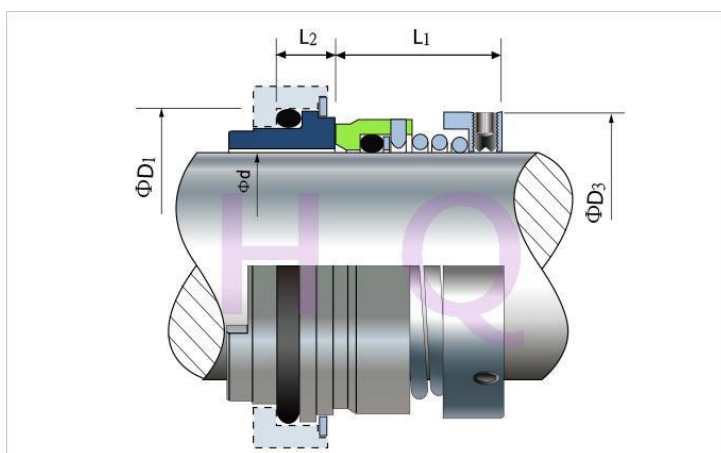


Type: Lower Seal to Suit for Sarlin Pumps series
 Replacement: AES T01SA, Buegmann M337S11
 Temperature: -20°C to $+180^{\circ}\text{C}$

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 (mm)	D1	D3	L1	L2
32	48	50	37.6	11



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GR-G44



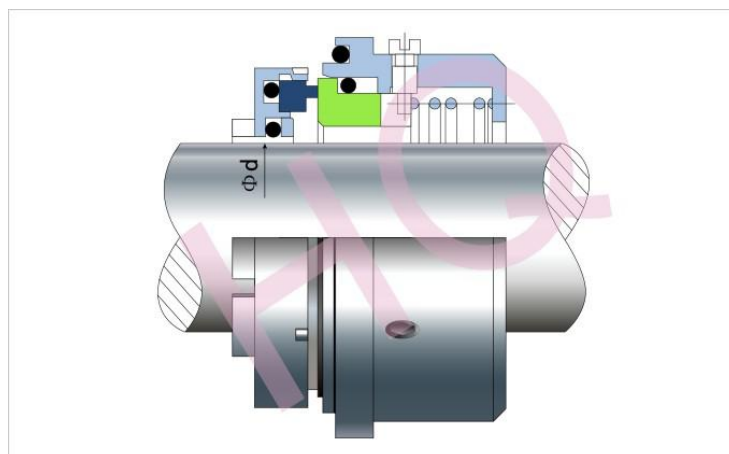
Type: Grundfos Pump Seals

Temperature: -30 to +180°C

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

Speed: $\leq 12\text{m/s}$

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



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GR-G22(19616mm)



Type: Elastomer bellows seals with spacer and damp ring. Suit for CP-Series pumps

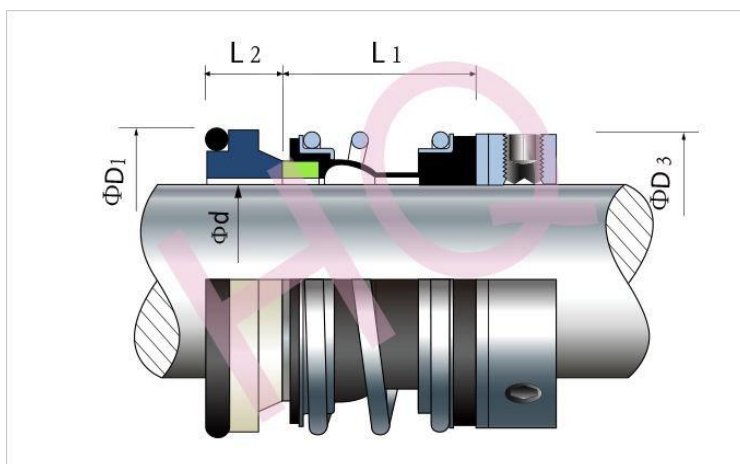
Replacement: Vulcan 196+Spacer. Suit Grundfos "CP" series pumps

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

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 (mm)	D1	D3	L1	L2
16	31.5	28.5	21.5	10.5



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GR-G23(81)



Type: O-Ring mounted conical spring seals with positive drive.

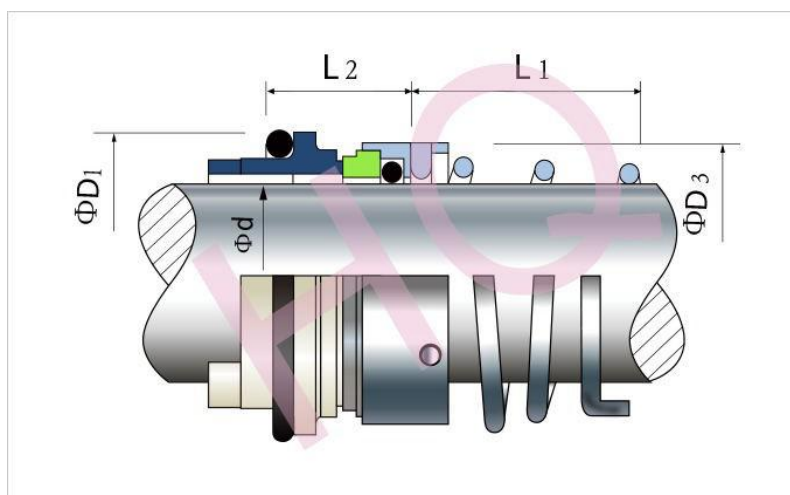
Replacement: Vulcan 81, Billi BB30U, Suit for Grundfos S-Sereis Pumps

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

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
25	38	36	26.5	10.0
32	48	46	28.5	11.0
38	55	53	33.5	11.5



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Type: Elastomeric bellows mechanical seal, Suit for

Grundfos, Hilge Pumps

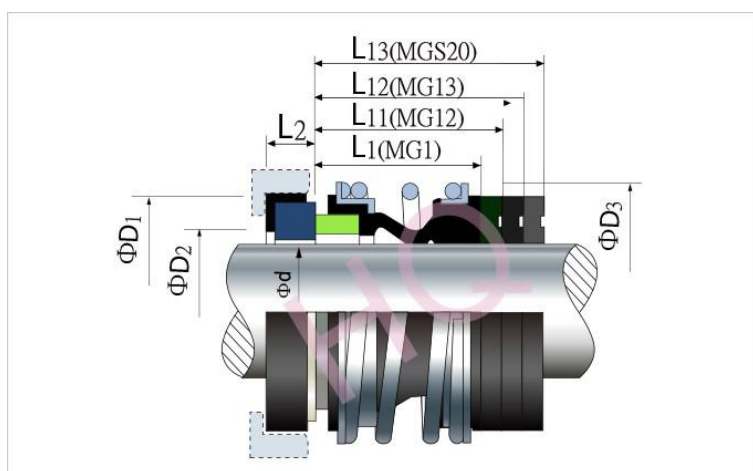
Replacement: Burgmann MG1/12/13/S20, AES
B02/B012/B01, Vulcan 191/192/193, Roten
L3/L3K/L3N, Flowserve 190/192/193

Temperature: -20°C to +120°C

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

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

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



<http://www.hqseal.com>



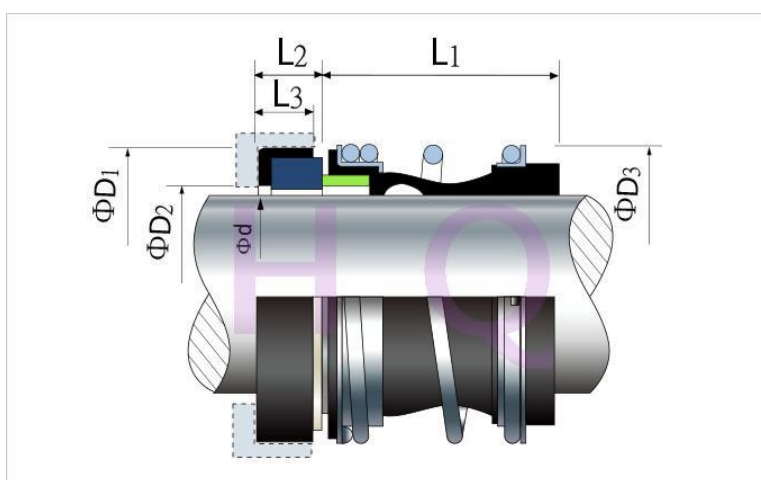
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Siz (mm)	d	D3	D2	D1	L1	L11	L12	L13	L2
10	10	22.5	17	21	14.5	25.9	33.4	25	6.6
12	12	25.0	19	23	15.0	25.9	33.4	25	6.6
14	14	28.5	21	25	17.0	28.4	33.4	25	6.6
15	15	28.5	-	-	17.0	28.4	33.4	25	-
16	16	28.5	23	27	17.0	28.4	33.4	25	6.6
18	18	32.0	27	33	19.5	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
32	32	53.5	42	48	27.5	35.0	47.5	33	7.5
33	33	53.5	42	48	27.5	35.0	47.5	33	7.5
35	35	57.0	44	50	28.5	35.0	47.5	33	7.5

GR-G25



Type: Elastomeric bellow mechanical seal
 Replacement: Vu1can1520(Metric), AES BP02,
 BURGMANN MG1S20, Crane 2(N
 Seat), Flowserve150
 Temperature: -40°C to +150°C
 Pressure: $\leq 1.2\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: V,Q1,Q2,U2,U1,B,A,P,E,V,F,G



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Size (mm)	D1	D2	D3	L1	L2	L3
10	24.60	16.00	20	25.40	8.74	7.47
12	27.79	19.05	22	25.40	8.74	7.47
13	27.79	19.05	22	25.40	8.74	7.47
14	30.95	22.23	24	25.40	10.32	8.97
15	30.95	22.23	25	25.40	10.32	8.97
16	30.95	22.23	26	25.40	10.32	8.97
18	34.15	25.40	32	25.40	10.32	8.97
19	34.15	25.40	32	25.40	10.32	8.97
20	35.70	26.99	34	25.40	10.32	8.97
22	37.30	28.58	36	25.40	10.32	8.97
24	40.50	31.75	38	25.40	10.32	8.97
25	40.50	31.75	39	25.40	10.32	8.97
28	47.63	35.72	42	33.34	11.99	10.46
30	50.80	38.89	44	33.34	11.99	10.46
32	50.80	38.89	46	33.34	11.99	10.46
33	53.98	42.07	47	33.34	11.99	10.46
34	53.98	42.07	49	33.34	11.99	10.46
35	53.98	42.07	49	33.34	11.99	10.46

GR-G26(196-22mm)



Type: Elastomer bellow seals with special profile

boot mounted seats

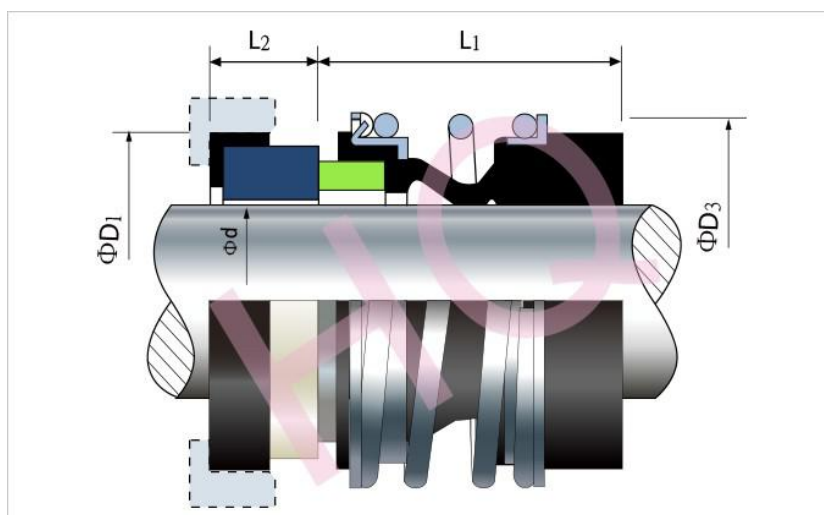
Replacement: Vulcan 196 22mm, Suit for Grundfos LM, LP, LPD, LPE Pumps

Temperature: -20°C to +180°C Pressure:

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 (mm)	D1	D3	L1	L2
22	37	36	33	12



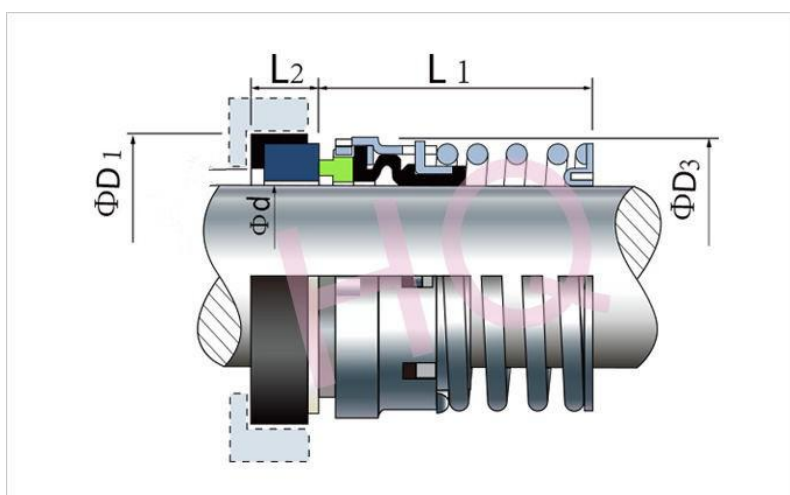
<http://www.hqseal.com>



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Type: Elastomer Bellow Mechanical Seal
 Replacement: Vulcan A5, Crane 1+Vulcan 11
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.4\text{Mpa}$
 Speed: $\leq 10\text{m/s}$
 Material: B, Q2, U2, P, E, N, V, F, G, Alfa



<http://www.hqseal.com>



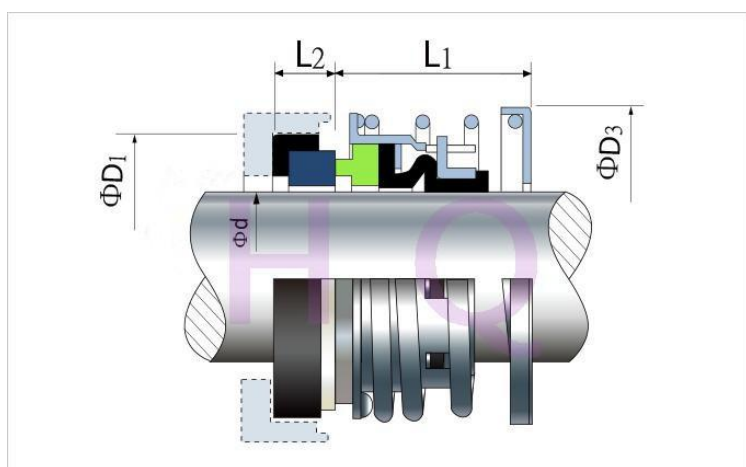
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d (inch)	D1		D3		L1		L2	
	mm	inch	mm	inch	mm	inch	mm	inch
0.500	25.40	1.000	23.80	0.937	30.16	1.187	7.93	0.312
0.625	31.75	1.250	27.76	1.093	33.32	1.312	10.28	0.405
0.750	34.93	1.375	30.94	1.218	33.32	1.312	10.28	0.405
0.875	38.10	1.500	34.11	1.343	34.93	1.375	10.28	0.405
1.000	41.28	1.625	38.10	1.500	39.67	1.562	11.10	0.437
1.125	44.44	1.750	41.28	1.625	41.28	1.625	11.10	0.437
1.250	47.63	1.875	46.02	1.812	41.28	1.625	11.10	0.437
1.375	50.80	2.000	48.68	1.917	42.85	1.687	11.10	0.437
1.500	53.98	2.125	51.85	2.041	42.85	1.687	11.10	0.437
1.625	60.38	2.375	58.10	2.287	50.80	2.000	12.70	0.500
1.750	63.50	2.500	61.27	2.412	50.80	2.000	12.70	0.500
1.875	66.68	2.625	64.44	2.537	53.98	2.125	12.70	0.500
2.000	69.85	2.750	67.21	2.646	53.98	2.125	12.70	0.500
2.125	76.20	3.000	72.02	2.835	60.33	2.375	14.28	0.562
2.250	79.38	3.125	75.30	2.965	60.33	2.375	14.28	0.562
2.375	82.55	3.250	78.30	3.083	63.50	2.500	14.28	0.562
2.500	85.73	3.375	81.54	3.210	63.50	2.500	14.28	0.562

GR-G28



Type: Elastomer Bellow Mechanical Seal
 Replacement: Vulcan A4, Crane2+Vulcan11
 Temperature: -20°C to +120°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



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d(inch)	D1		D3		L1		L2	
	mm	inch	mm	inch	mm	inch	mm	inch
0.500	25.40	1.000	30.14	1.187	20.64	0.813	7.93	0.312
0.625	31.75	1.250	33.32	1.312	22.23	0.875	10.28	0.405
0.750	34.93	1.375	36.52	1.438	22.23	0.875	10.28	0.405
0.875	38.10	1.500	39.72	1.564	23.8	0.937	10.28	0.405
1.000	41.28	1.625	45.30	1.783	25.40	1.000	11.10	0.437
1.125	44.44	1.750	48.47	1.908	26.97	1.062	11.10	0.437
1.250	47.63	1.875	52.80	2.079	26.97	1.062	11.10	0.437
1.375	50.80	2.000	55.98	2.204	28.58	1.125	11.10	0.437
1.500	53.98	2.125	59.15	2.329	28.58	1.125	11.10	0.437
1.625	60.38	2.375	66.96	2.636	34.93	1.375	12.70	0.500
1.750	63.50	2.500	70.12	2.761	34.93	1.375	12.70	0.500
1.875	66.68	2.625	73.16	2.88	38.10	1.500	12.70	0.500
2.000	69.85	2.750	76.48	3.011	38.10	1.500	12.70	0.500
2.125	76.20	3.000	82.71	3.256	42.85	1.987	14.28	0.562
2.250	79.38	3.125	85.89	3.381	42.85	1.987	14.28	0.562
2.375	82.55	3.250	89.06	3.506	46.02	1.812	14.28	0.562
2.500	85.73	3.375	92.24	3.631	46.02	1.812	14.28	0.562

GR-G29



Type: Elastomeric bellows mechanical seal

Suit for Grundfos, Hilge Pumps

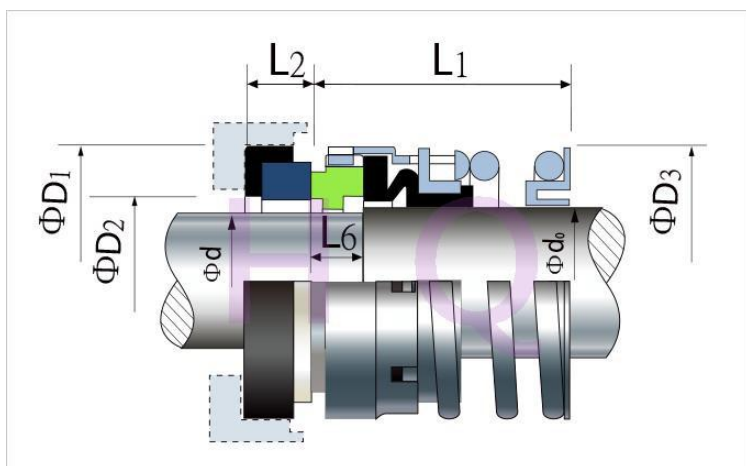
Replacement: Crane 1B+ Vulcan 11

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

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



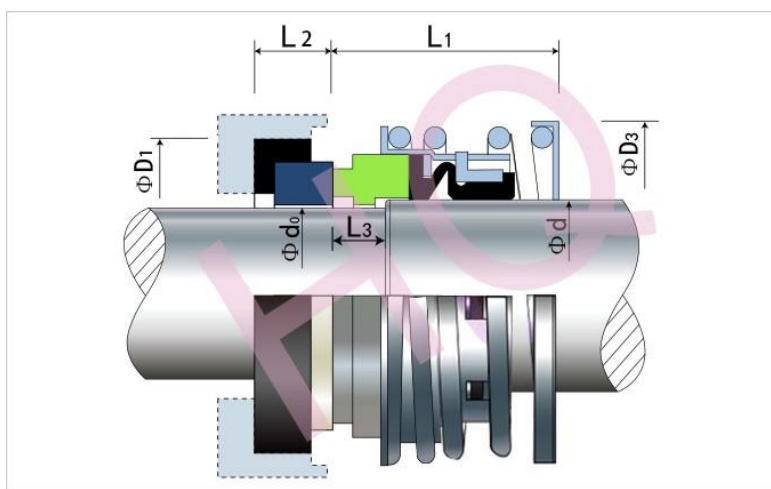
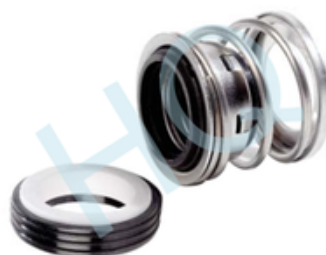
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Size (Inch)	d0	D1	D2	D3	L1	L2	L6
1.000	25.4	41.28	33.32	38.10	47.63	11.10	8.70
1.125	28.5	44.44	36.50	41.28	49.20	11.10	8.70
1.250	31.7	47.63	39.70	46.02	49.20	11.10	8.70
1.375	34.9	50.80	42.84	47.63	50.80	11.10	8.70
1.500	38.1	53.98	46.05	50.80	50.80	11.10	8.70
1.625	41.2	60.33	50.80	57.15	60.33	12.70	11.10
1.750	44.4	63.50	53.97	60.33	60.33	12.70	11.10
1.875	47.6	66.68	57.15	63.50	63.50	12.70	11.10
2.000	50.8	69.85	60.32	66.68	63.50	12.70	11.10
2.125	53.9	76.20	60.32	71.42	69.85	14.27	12.70
2.250	57.1	79.38	61.90	74.60	69.85	14.27	12.70
2.375	60.3	82.55	67.39	77.77	73.03	14.27	12.70
2.500	63.5	85.73	68.25	80.95	73.03	14.27	12.70

Type: Elastomer Bellow Mechanical Seal, Suit for
Grundfos, Hilge Pumps
Replacement: Crane 2B+Vulcan 11
Temperature: -20°C to +120°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



d (Inch)	d0	D1	D3	L1	L2	L3
1.000	0.875	1.500	1.812	1.312	0.405	0.343
1.125	1.000	1.125	1.937	1.375	0.437	0.343
1.250	1.125	1.750	2.062	1.375	0.437	0.343
1.375	1.250	1.875	2.250	1.437	0.437	0.343
1.500	1.375	2.000	3.375	1.437	0.437	0.343
1.625	1.500	2.125	2.718	1.750	0.500	0.437
1.750	1.625	2.375	2.750	1.750	0.500	0.437
1.875	1.750	2.500	2.875	1.875	0.500	0.437
2.000	1.875	2.625	3.000	1.875	0.500	0.437
2.125	2.000	2.750	3.250	2.062	0.562	0.500
2.250	2.125	3.000	3.375	2.062	0.562	0.500
2.375	2.250	3.125	3.500	2.187	0.562	0.500
2.500	2.375	3.250	3.625	2.187	0.562	0.500
2.625	2.500	3.375	3.875	2.312	0.562	0.562
2.750	2.625	3.375	4.000	2.312	0.562	0.562
2.875	2.750	3.500	4.125	2.437	0.562	0.562
3.000	2.875	3.750	4.250	2.437	0.562	0.562

GR-G31



Type: Elastomer Bellows Mechanical Seal

Suit for Grundfos, Hilde Pumps

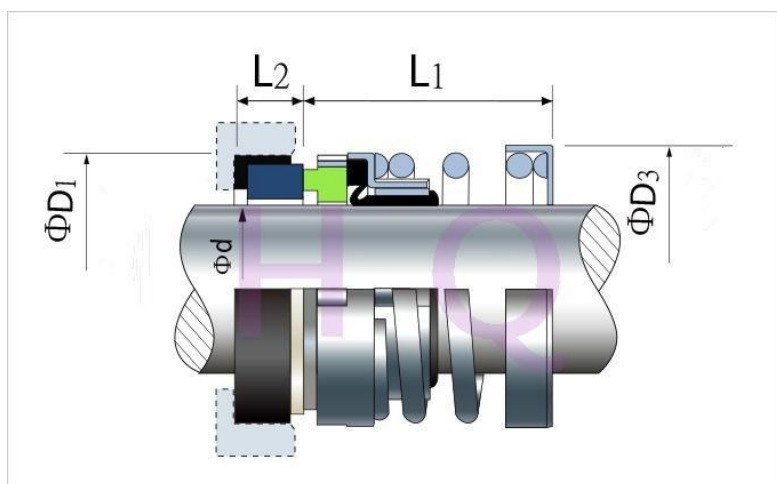
Replacement: Vulcan 10

Temperature: -20°C to +120°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



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d (mm)	D1	D3	L1	L2
10	24.60	21.8	43.66	8.74
12	27.79	23.5	43.66	8.74
13	27.79	23.5	43.66	8.74
14	30.95	27.0	43.66	10.32
15	30.95	27.0	43.66	10.32
16	30.95	27.0	43.66	10.32
18	34.15	30.7	43.66	10.32
19	34.15	30.7	43.66	10.32
20	35.70	33.4	43.66	10.32
22	37.30	33.4	43.66	10.32
24	40.50	39.2	43.66	10.32
25	40.50	39.2	43.66	10.32
28	47.63	45.6	60.33	11.99
29	47.63	45.6	60.33	11.99
30	50.80	47.4	60.33	11.99
32	50.80	47.4	60.33	11.99
33	53.98	52.0	60.33	11.99
34	53.98	52.0	60.33	11.99
35	53.98	52.0	60.33	11.99
38	57.15	55.6	60.33	11.99
40	60.33	59.2	60.33	11.99

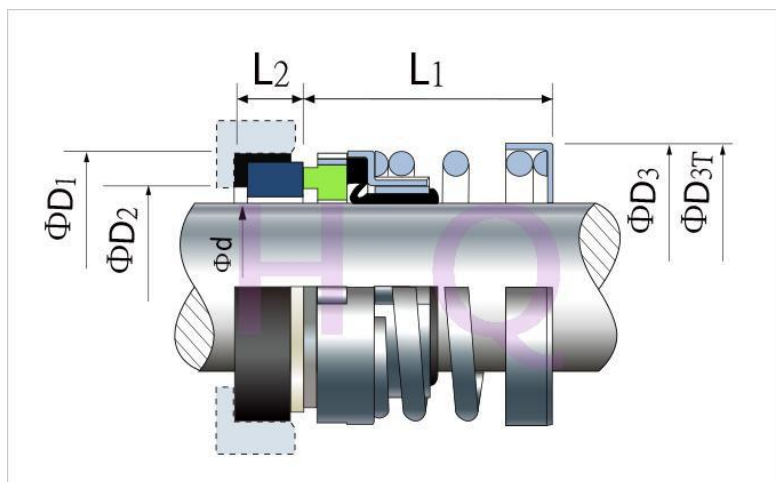
FR-G39

Type: Elastomeric bellows mechanical seal
 Replacement: AES P04/P04T, Crane 21, Vulcan 11,
 Roten 21A, Flowserve 110
 Temperature: -20°C to +120°C

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

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

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

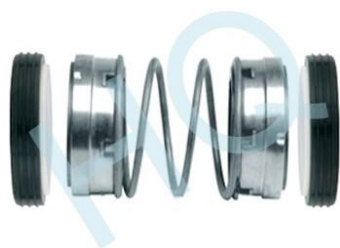


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Size (inch)	d	D3 (HQ21)	D3T (HQ21T)	D1	L1	L2
0.500	12.7	24.0	22.8	25.40	20.62	7.95
0.625	15.8	26.7	26.7	31.75	22.23	10.31
0.750	19.1	31.2	30.4	34.93	22.23	10.31
0.875	22.2	33.5	33.4	38.10	23.80	10.31
1.000	25.4	43.2	39.3	41.28	25.40	11.10
1.125	28.6	46.5	42.0	44.45	26.97	11.10
1.250	31.7	49.5	45.8	47.63	26.97	11.10
1.375	34.9	52.7	49.3	50.8	28.58	11.10
1.500	38.1	56.0	52.8	53.98	28.58	11.10
1.625	41.2	62.2	55.5	60.33	34.93	12.70
1.750	44.4	66.0	61.0	63.50	34.93	12.70
1.875	47.6	66.0	64.0	66.68	38.10	12.70
2.000	50.8	73.0	66.0	69.85	38.10	12.70
2.125	53.9	73.5	71.5	76.20	42.85	14.27
2.250	57.1	79.6	79.6	79.38	42.85	14.27
2.375	60.3	82.0	79.6	82.55	46.05	14.27
2.500	63.5	85.0	81.5	85.73	46.05	14.27
2.625	66.6	88.5	84.6	85.73	49.20	15.88
2.75	69.8	92.7	90.0	88.90	49.20	15.88
3.00	76.2	102.0	96.8	98.40	52.37	15.88



Type: Elastomer Bellow Mechanical Seal,
Suit for Grundfos,Hilge Pumps

Replacement: Crane 1 Double

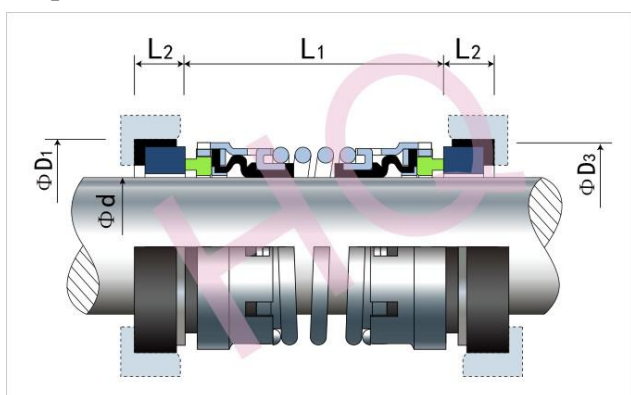
Temperature: -20°C to +120°C

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

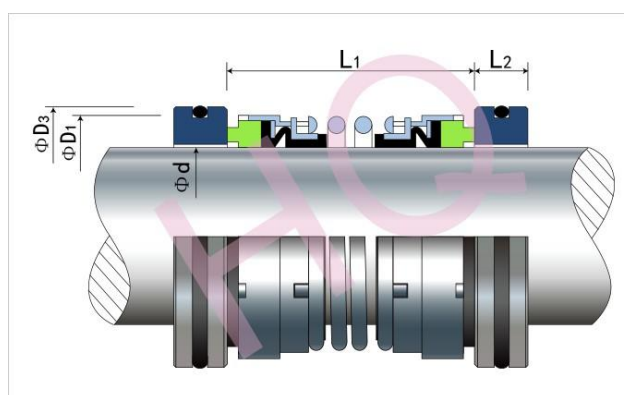
Speed: $\leq 10\text{m/s}$

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

Cup Seat



O-Ring Seat



d (inch)	D1	D3	L1	L2
0.875	1.406	1.500	2.000	0.406
1.000	1.500	1.625	2.312	0.437
1.125	1.625	1.750	2.375	0.437
1.250	1.812	1.875	2.375	0.437
1.375	1.875	2.000	2.437	0.437
1.500	2.000	2.125	2.437	0.437
1.625	2.250	2.375	2.875	0.500
1.750	2.375	2.500	2.875	0.500
1.875	2.500	2.625	3.000	0.500
2.000	2.625	2.750	3.000	0.500
2.125	2.812	3.000	3.375	0.562
2.250	2.937	3.125	3.375	0.562
2.375	3.062	3.250	3.500	0.562
2.500	3.187	3.375	3.500	0.562



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Type: Elastomer Bellows Mechanical Seal,

Suit for Grundfos, Hilge Pump

Replacement: Crane 2 Double+Vulcan 31

Temperature: -20°C to +120°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

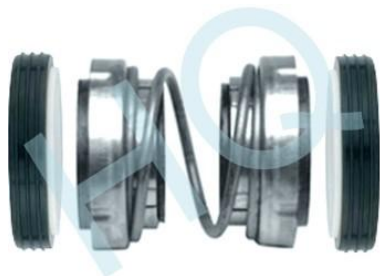
Elastomer Bellows Mechanical seal。 Equalent
to Crane2 double+Vulcan 11。 Refer to HQ2



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Type: Elastomer Bellow Mechanical Seal,Suit
for Grundfos,Hilge Pump
Replacement: Crane 21DBI+Vulcan 11
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,Alfa

Elastomer Bellow Mechanical seal,
Equalent to Crane21 DBI+Vulcan 11
Refer to HQ21



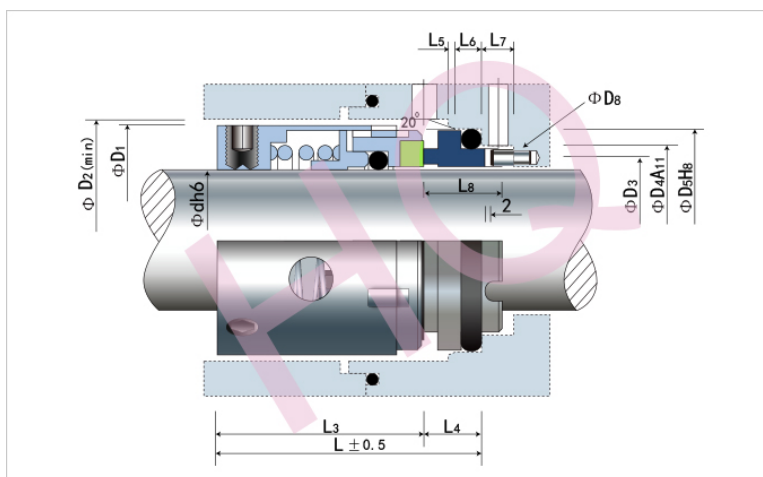
<http://www.hqseal.com>



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HQ104

Type: O-Ring Mechanical Seal
 Temperature: -20 to +200°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



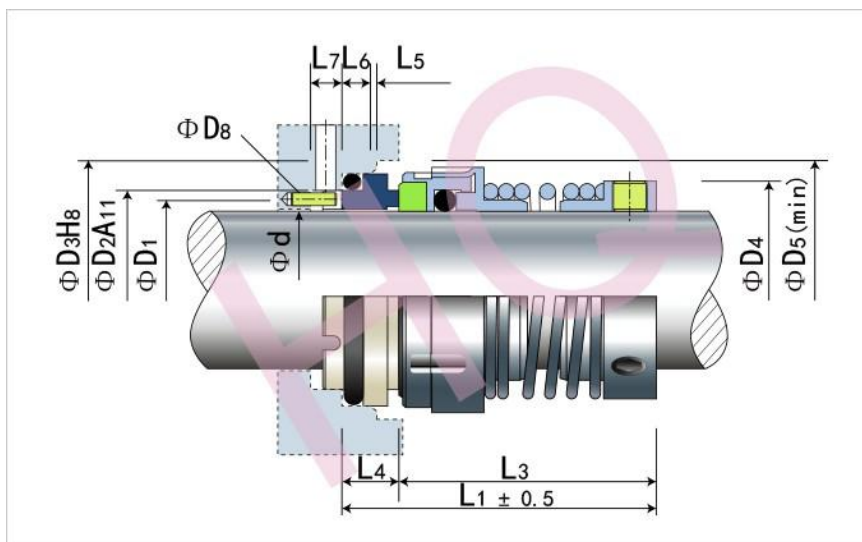
d (mm)	D1	D2	D3	D4	D5	D8	L	L3	L4	L5	L6	L7	L8
16	33	36	21	25	33	2	49	37	12	1.5	5.5	7	16
18	35	38	23	28	36	2	52	40	12	1.5	5.5	7	16
20	37	40	25	30	40	3	54	40	14	2.0	6.5	8	19
22	39	42	27	32	42	3	57	43	14	2.0	6.5	8	19
25	42	45	30	35	45	3	57	43	14	2.0	6.5	8	19
28	45	48	33	38	48	3	58	44	14	2.0	6.5	8	19
30	52	55	35	40	50	3	63	49	14	2.0	6.5	8	19
35	57	60	40	45	55	3	65	51	14	2.0	6.5	8	19
40	62	65	45	50	60	3	68	54	14	2.0	6.5	8	19
45	67	70	50	55	65	3	74	60	14	2.0	6.5	8	19
50	72	75	55	60	70	3	77	63	14	2.5	6.5	8	19
55	77	80	60	65	75	3	79	65	14	2.5	6.5	8	19
60	82	85	65	70	80	3	79	65	14	2.5	6.5	8	19
65	92	95	73	80	90	3	91	74	17	2.5	6.5	8	22
70	97	100	78	85	97	3	95	76	19	2.5	7.5	9	25
75	102	105	83	90	102	3	95	76	19	2.5	7.5	9	25
80	107	110	88	95	107	3	100	81	19	3.0	7.5	9	25
85	112	115	93	100	112	3	101	82	19	3.0	7.5	9	25
90	117	120	98	105	117	3	102	83	19	3.0	7.5	9	25
95	122	125	103	110	122	3	102	83	19	3.0	7.5	9	25
100	127	130	108	115	127	3	102	83	19	3.0	7.5	9	25
110	141	145	120	130	142	3	126	105	21	3.0	8.0	9	27
120	151	155	130	140	152	3	126	105	21	3.0	8.0	9	27

Type: O-Ring Seal, Suit for Grundfos Pumps
 Temperature: -20°C to $+180^{\circ}\text{C}$

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

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

Material: Q1, Q2, V, K, E, P, G, M5, M6, T4



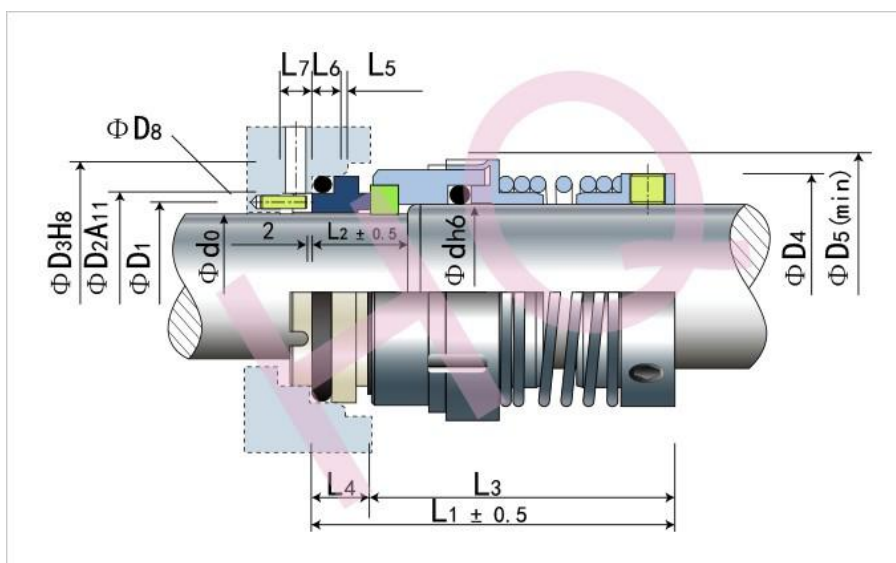
d (mm)	D3	D4	D1	D2	D3	D8	L1	L3	L4	L5	L6	L7
16	33	36	21	25	33	2	52	40	12	1.5	5.5	7
18	35	38	23	28	36	2	56	44	12	1.5	5.5	7
20	37	40	25	30	40	3	58	44	14	2.0	6.5	8
22	39	42	27	32	42	3	62	48	14	2.0	6.5	8
25	42	45	30	35	45	3	62	48	14	2.0	6.5	8
28	45	48	33	38	48	3	64	50	14	2.0	6.5	8
30	52	55	35	40	50	3	70	56	14	2.0	6.5	8
35	57	60	40	45	55	3	74	60	14	2.0	6.5	8
40	62	65	45	50	60	3	78	64	14	2.0	6.5	8
45	67	70	50	55	65	3	85	71	14	2.0	6.5	8
50	72	75	55	60	70	3	89	75	14	2.5	6.5	8
55	77	80	60	65	75	3	91	77	14	2.5	6.5	8
60	82	85	65	70	80	3	91	77	14	2.5	6.5	8
65	92	95	73	80	90	3	106	89	17	2.5	6.5	8
70	97	100	78	85	97	3	110	91	19	2.5	7.5	9
75	102	105	83	90	102	3	110	91	19	2.5	7.5	9
80	107	110	88	95	107	3	117	98	19	3.0	7.5	9

Type: O-Ring Seal, Suit for Grundfos Pumps
 Temperature: -20°C to $+160^{\circ}\text{C}$

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

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

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



d (mm)	d0	D4	D5	D1	D2	D3	D8	L1	L2	L3	L4	L5	L6	L7
16	11	33	36	19	25	33	2	60	20	48	12	1.5	5.5	7
18	13	35	38	22	28	36	2	64	20	52	12	1.5	5.5	7
20	15	37	40	23	30	40	3	66	22	52	14	2.0	6.5	8
22	17	39	42	26	32	42	3	70	22	56	14	2.0	6.5	8
25	20	42	45	28	35	45	3	70	22	56	14	2.0	6.5	8
28	22	45	48	31	38	48	3	72	22	58	14	2.0	6.5	8
30	25	52	55	33	40	50	3	79	23	65	14	2.0	6.5	8
35	28	57	60	37	45	55	3	84	24	70	14	2.0	6.5	8
40	34	62	65	42	50	60	3	88	24	74	14	2.0	6.5	8
45	38	67	70	47	55	65	3	95	24	81	14	2.0	6.5	8
50	44	72	75	52	60	70	3	99	24	85	14	2.5	6.5	8
55	48	77	80	57	65	75	3	101	24	87	14	2.5	6.5	8
60	52	82	85	62	70	80	3	101	24	87	14	2.5	6.5	8
65	58	92	95	70	80	90	3	113	27	96	17	2.5	6.5	8
70	62	97	100	74	85	97	3	120	32	101	19	2.5	7.5	9
75	66	102	105	79	90	102	3	120	32	101	19	2.5	7.5	9
80	72	107	110	84	95	107	3	127	32	108	19	3.0	7.5	9
85	76	112	115	89	100	112	3	129	32	110	19	3.0	7.5	9
90	82	117	120	94	105	117	3	130	32	111	19	3.0	7.5	9
95	85	122	125	99	110	122	3	130	32	111	19	3.0	7.5	9
100	90	127	130	104	115	127	3	130	32	111	19	3.0	7.5	9

GR-G41(Sleeve)



Type: Grundfof Sleeve
Temperature: -20 to +180°C
Pressure: $\leq 1.4\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Manufacture it according to client's requirement



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GR-G10-1(SOS)/GR-G10-2(SSOS)



Type: Suit for Grundfos SE- and SV series submersible pumps.

Replacement: AES SOS

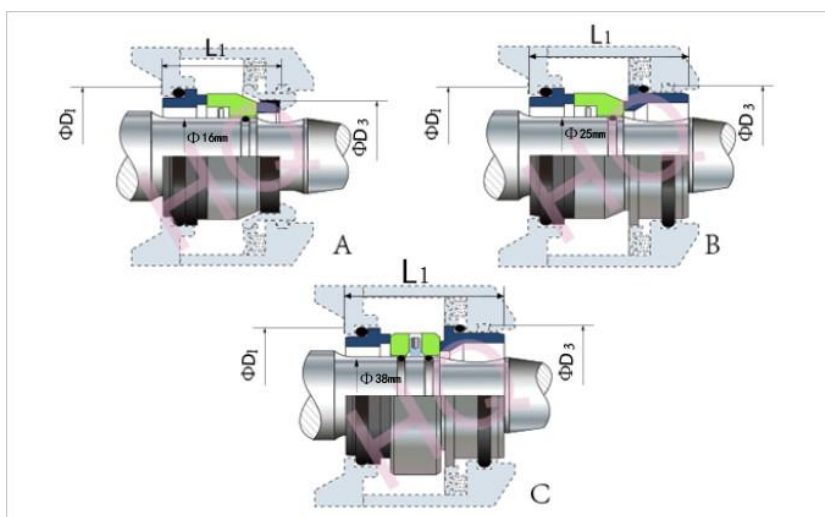
Temperature: -20°C to $+180^{\circ}\text{C}$

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

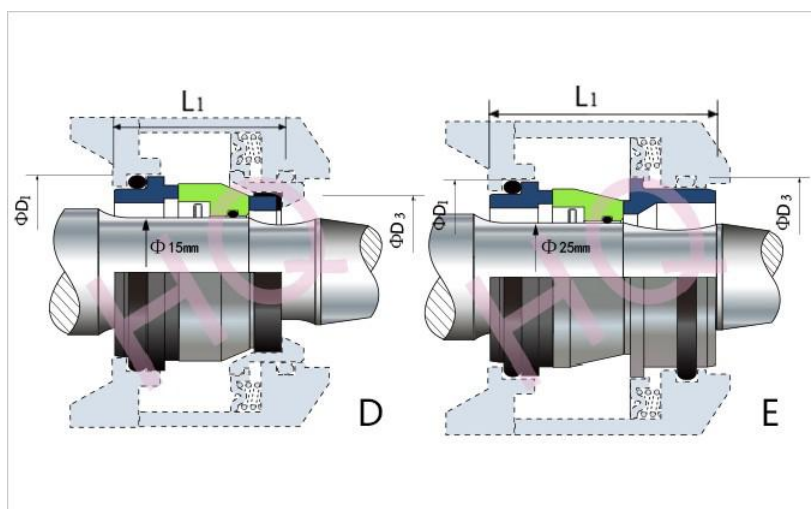
Speed: $\leq 10\text{m/s}$

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

GR-G10-1(SOS)



GR-G10-2(SSOS)



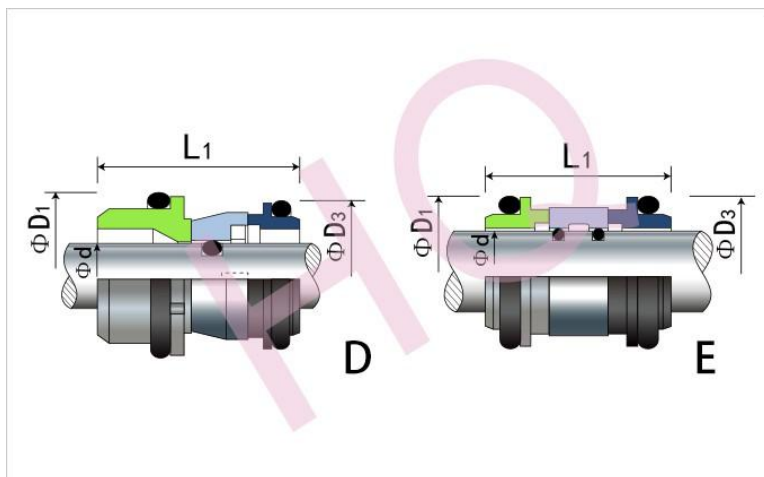
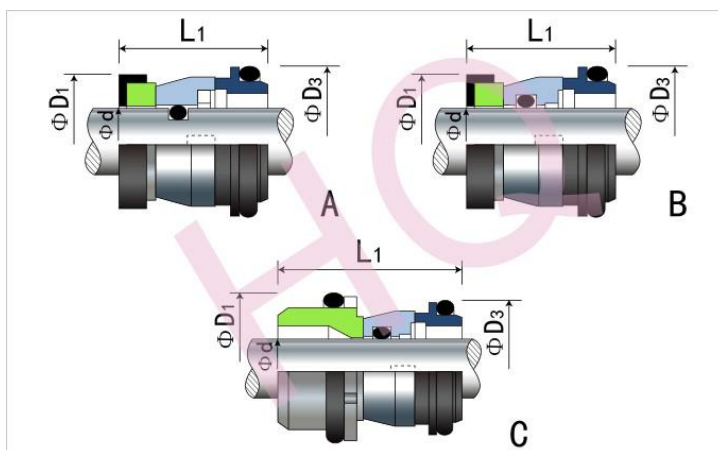
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GR-G10-3(86)

Type: Double Seal, Suit for Grundfos
SE- and SV- Series Pump
Replacement: Vulcan 86
Temperature: -20°C to +140°C
Pressure: $\leq 1.4\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: Q1,Q2,A,B,P,E,V



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Diagram	d (mm)	D1	D3	L1	Type
A	16	28	35	30.0	86B
B	16	28	35	30.0	86
C	24	48	45	50.0	86
D	24	48	45	50.0	86
E	38	53	56	65.5	86

GR-G42(HB80)



Type: Mechanical Seal
Replacement: Suit for Grundfos Pumps
Temperature: -20 to +120°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 12\text{m/s}$
Material: Q1,Q2,U2,T,V,M1,F,G,M

Product Details

* The product description:

Vertical sectional plus stainless steel shell structure, the import and export of the pump at the same level and same caliber, can like valve installed in the pipeline, it focus on the multistage pump of high pressure, the vertical pump cover an small area and pipeline has the advantages of convenient installation, excellent hydraulic model is adopted at the same time, so also has the advantages of high efficiency and energy saving, smooth operation, mechanical seal and shaft seal adopts wear-resisting, leakproof, long service life.



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HQ502L)

Type: Suit for Grundfos,Hilge Pumps

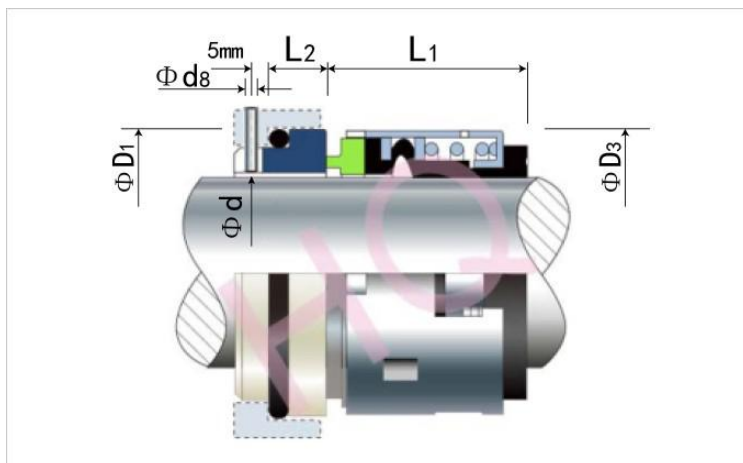
Replacement: AES B07SL,Vulcan 502/BP

Temperature: -20°C to +120°C

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

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

Material: A,Q1,Q2,U1,U2,Graphite,F,G,M,M5



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d (mm)	D1	D3	d8	L1	L2
12	23	22.0	3	23.9	8.6
14	25	24.0	3	26.4	8.6
16	27	26.2	3	26.4	8.6
18	33	32.2	3	27.5	10.0
20	35	33.9	3	27.5	10.0
22	37	36.1	3	27.5	10.0
24	39	38.1	3	30.0	10.0
25	40	38.8	3	30.0	10.0
28	43	42.1	3	32.5	10.0
30	45	44.2	3	32.5	10.0
32	48	45.8	3	32.5	10.0
33	48	46.9	3	32.5	10.0
35	50	48.8	3	32.5	10.0
38	56	54.2	4	34.0	11.0
40	58	56.1	4	34.0	11.0
43	61	58.8	4	34.0	11.0
45	63	60.9	4	34.0	11.0
48	66	64.1	4	34.0	11.0
50	70	66.2	4	34.5	13.0
53	73	69.1	4	34.5	13.0
55	75	71.1	4	34.5	13.0
58	78	78.2	4	39.5	13.0
60	80	79.9	4	39.5	13.0
63	83	82.8	4	39.5	13.0
65	85	85.1	4	39.5	13.0
70	92	90.0	4	44.7	15.3
75	97	97.0	4	44.7	15.3
80	105	104.0	4	44.3	15.7
85	110	108.0	4	44.3	15.7
90	115	114.0	4	49.3	15.7
95	120	118.0	4	49.3	15.7
100	125	124.0	4	49.3	15.7

HQ60/65

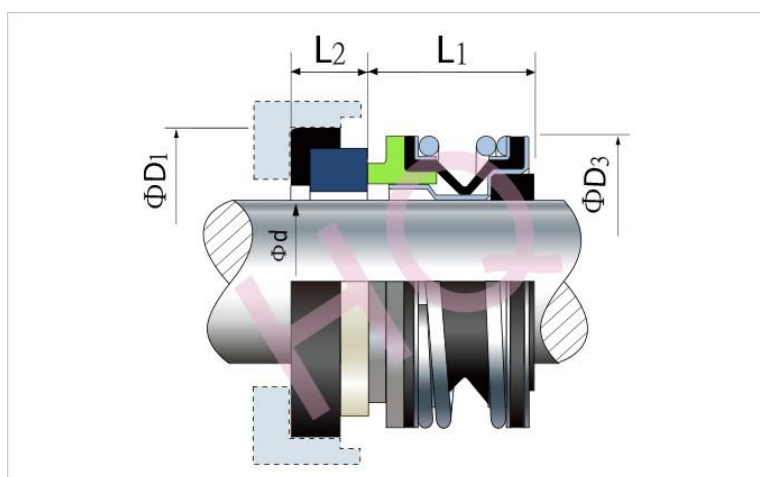


Type: Suit for Grundfos, Hilge Pumps
 Replacement: Vulcan 60/65, AES B04/B04U,
 Crane 106, Roten 16, Flowserve 160
 Temperature: -20 to +120°C

Pressure: ≤ 0.5 Mpa

Speed: ≤ 10 m/s

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



Size (mm)	d	D1	D3	L1	L2
60/0.375	9.5	22.2	24.00	16.00	6.20
60/0.500	12.7	25.4	27.00	16.60	6.20
60/0.625	15.8	31.8	31.00	18.70	10.31
60/0.750	19.0	34.9	34.20	18.70	10.31
60/1.000	25.4	41.3	43.00	20.60	11.10
65/0.375	9.5	25.4	27.00	16.60	7.90
65/0.500	12.7	25.4	27.00	16.60	7.90
65/0.625	15.8	31.7	31.00	18.20	10.30
65/0.750	19.1	34.9	34.20	18.20	10.30
65/1.750	63.5	61.0	51.59	33.34	10.32



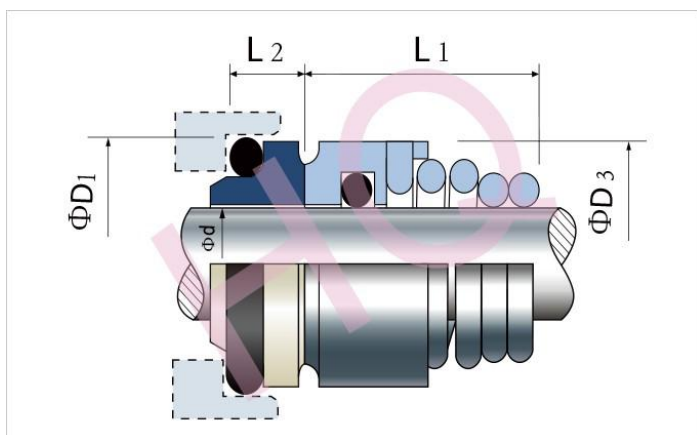
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HIL-06(8B...127)

Type: Suit for Grundfos, Hilge centrifugal pumps
 Replacement: Vulcan 8B, 8BU, 12, 12S, 12H, 126, 126L, 127. Billi BB1
 Temperature: -20°C 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



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d (mm)	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
19	30.9	31	25.0	8.0	12	001-19 O3
19	30.9	31	25.0	8.0	12S	001-19 O5
19	35.0	31	20.0	9.5	8BU	002-19 O3
22	37.0	33	27.5	10.0	126	L1K-22 F3
28	43.3	40	29.0	9.0	12	001-28 O3
28	43.3	40	29.0	9.0	12H	001-28 A3
28	43.3	40	29.0	9.0	12S	001-28-O5
28	42.0	40	24.6	11.0	8B	002-28 O3
30	45.0	43	32.5	10.0	126	L1K-30 F3
30	45.0	43	32.5	10.0	126L	L1K-30 G3
30	45.0	43	40.0	10.0	127	L1K-30 D3
38	60.5	53	39.0	11.5	12	001-38 O3
38	55.0	53	31.0	11.5	8B	002-38 O3
40	58.0	56	34.0	13.0	126	L1K-40 F3
40	58.0	56	34.0	13.0	126L	L1K-40 G3
50	70.0	66	38.0	14.0	126	L1K-50 F3
50	70.0	66	38.0	14.0	126L	L1K-50 G3
50	70.0	66	43.0	14.0	8BU	1238-50 O3

HIL-07(128)



Type: Suit for Grundfos, Hilge centrifugal Pumps

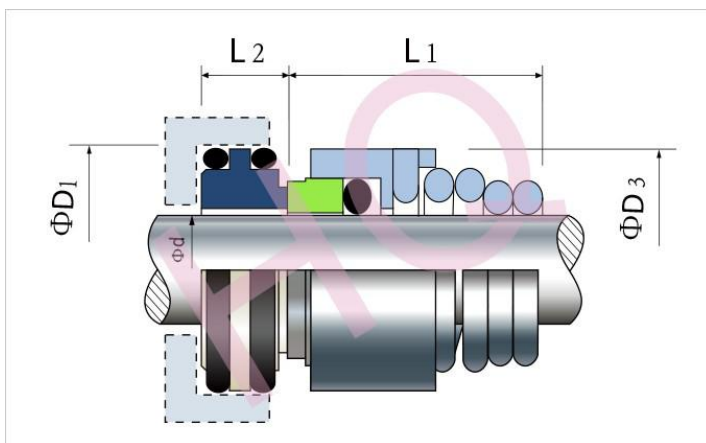
Replacement: Vulcan 128, Billi BB1S

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

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. Seal Code
19	39.3	31	20.0	10.8	OB3-19 B3
28	47.3	40	26.5	11.3	OB3-28 B3
38	59.3	53	33.5	11.3	OB3-38 B3

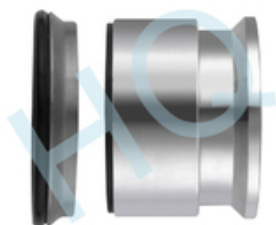


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HIL-01(M010S1)



Type: Suit for Grundfos, Higel Hygiana

centrifugal Pumps

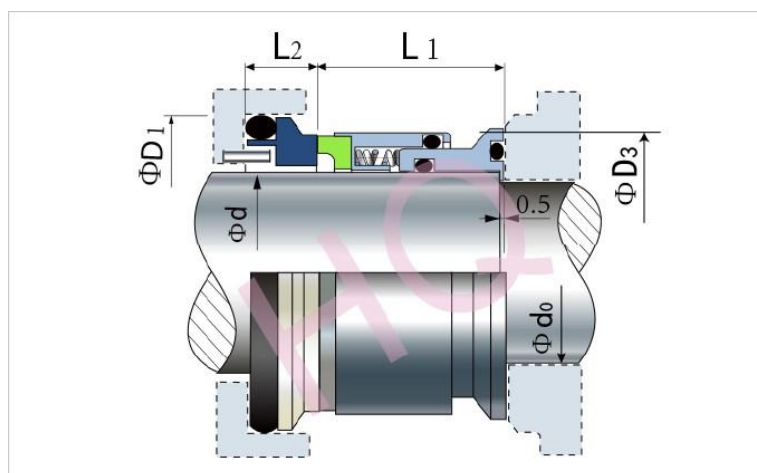
Replacement: AES M010S1, Burgamnn SHJ97, Vulcan 1663, Billi BB8H3, ROTEN EHS3

Temperature: -40°C to $+250^{\circ}\text{C}$

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

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

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



d (mm)	d0	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
28	24	48.0	43.0	34.5	10.5	1663	BS2-28 O1
38	35	57.1	52.8	35.0	10.5	1663	BS2-38 O1

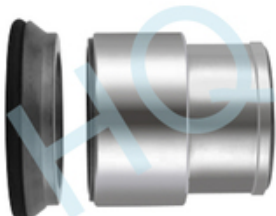


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HIL-02(M010S1)



Type: Suit for Grundfos, Hilge Euro-Hygia

centrifugal Pumps

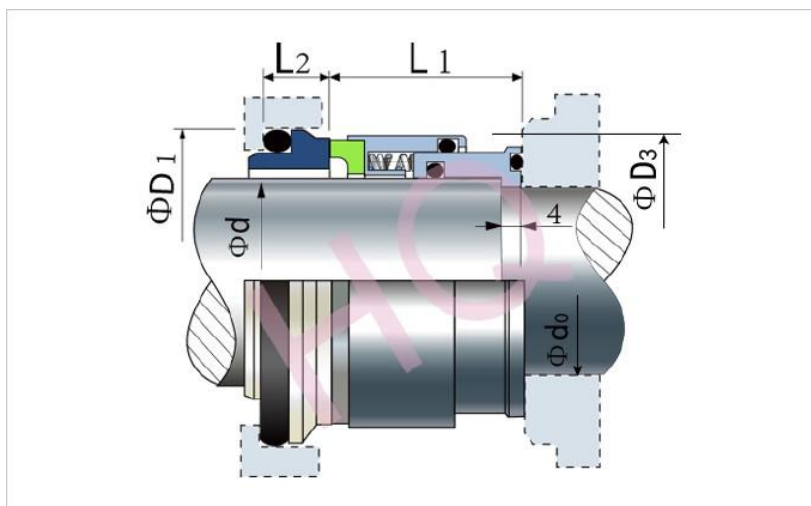
Replacement: AES M010S2, Burgamnn SHJ97,

Vulcan 1663A, Billi BB8H3A,
ROTEN EHS3

Temperature: -40°C to +250°C

Pressure: ≤ 2.5 Mpa Speed: ≤ 15 m/s

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



d (mm)	d0	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
28.0	24.0	48.0	43.0	38.0	10.5	1663A	BS3-28 O1

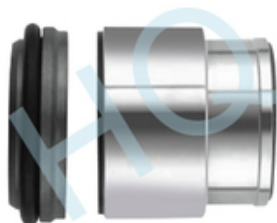


<http://www.hqseal.com>

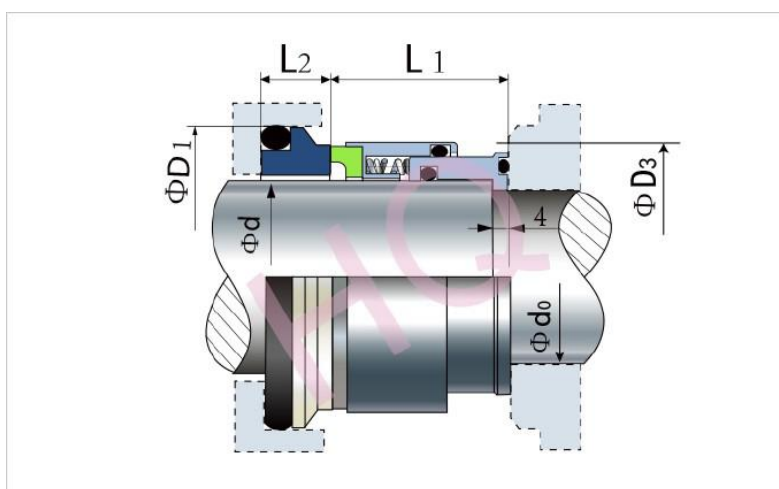


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HIL-03(M010S1)



Type: Suit for Grundfos,Hilge Euro-
HYGIA,HYGIA,Panda,Sipia
centrifugal Pumps
Replacement: AES M010S3, Burgamnn SHJ97,
Vulcan1662, Billi BB8HA2,
ROTEN EHS3
Temperature: -40°C to +250°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



d (mm)	d0	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
19	16	30.9	33.5	29	8.0	1662	001-19 O1
28	24	43.3	43.0	33	9.0	1662	001-28 O1
28L	24	43.3	43.0	33	9.0	1662L	001-28 A1
38	35	60.5	52.8	43	11.5	1662	001-38 O1



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Type: Suit Hisaka Pumps
Replacement: Ridering HSK
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

Equal to Lidering HSK Seals

Suit Hisaka Pumps

d=20mm, 35mm, 45mm.



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Type: Suit Inbeat Pumps
Replacement: Ridering IB Seals
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

Equal to Lidering IB Seals

Suit Inbeat Pumps

d=15mm, 20mm, 25mm,, 35mm

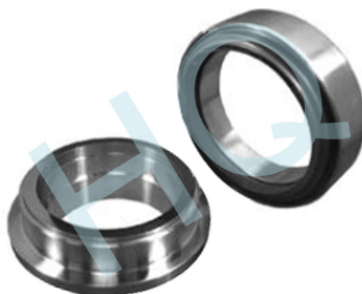


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ROTO-01



Type: Suit Roto Jet Pumps
Replacement: U.S. VGXAB
Temperature: -25 to +150°C
Pressure: $\leq 0.8\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G,Alfa

Suit Roto Jet Pumps

Equal U.S. VGXAB.

d=2 1/2



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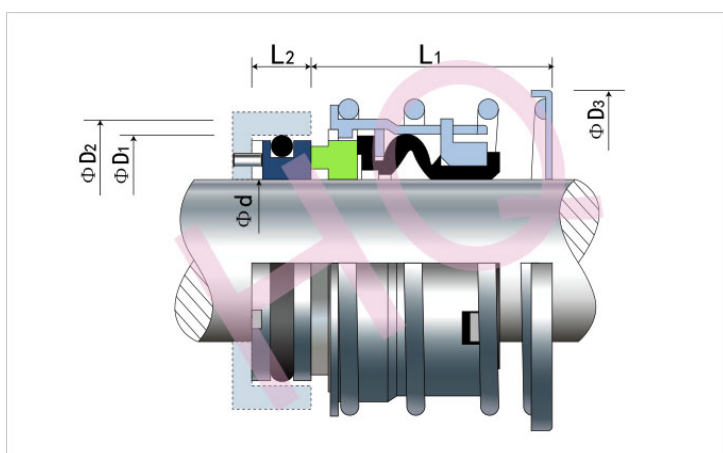


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OP-02



Type: Viking Pump Seals
 Replacement: Vulcan V4, Lidering VI 101
 Temperature: -20 to +150°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



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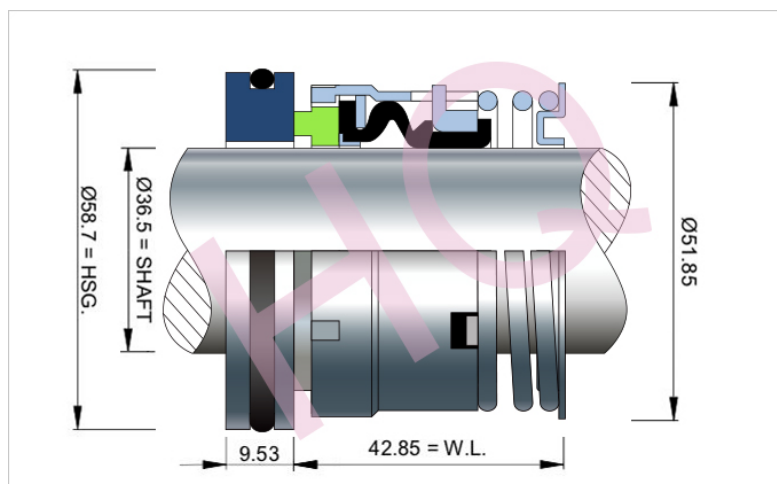


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d (inch)	Size Code	D1	D2	D3	L1	L2
1.000	0254	40.82	37.0	43.0	25.4	7.87
1.250	0317	47.60	45.5	51.5	25.4	9.65

0254.O.AN. Stationary has no ANTI-ROTATION slot

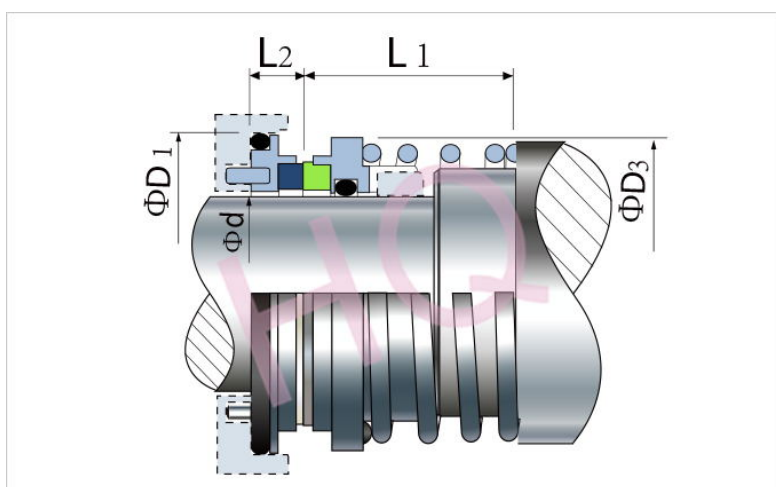
0317.O.AN Stationary has 2 off slots at 180"



OP-04



Type: Viking Pump Seals
 Replacement: AES P011, Vulcan 89
 Temperature: -20°C to $+120^{\circ}\text{C}$
 Pressure: $\leq 1.4\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B, A1, Q1, Q2, U2, P, E, N, V, F, G



d		D1		D3		L1		L2	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
28.58	1.125	50.30	1.980	47.20	1.858	34.87	1.373	9.40	0.370
36.50	1.437	58.00	2.283	56.50	2.224	43.73	1.722	9.40	0.370



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GD-01(1653)



Type: Suit Godwin "DRI-PRIME"
series pumps

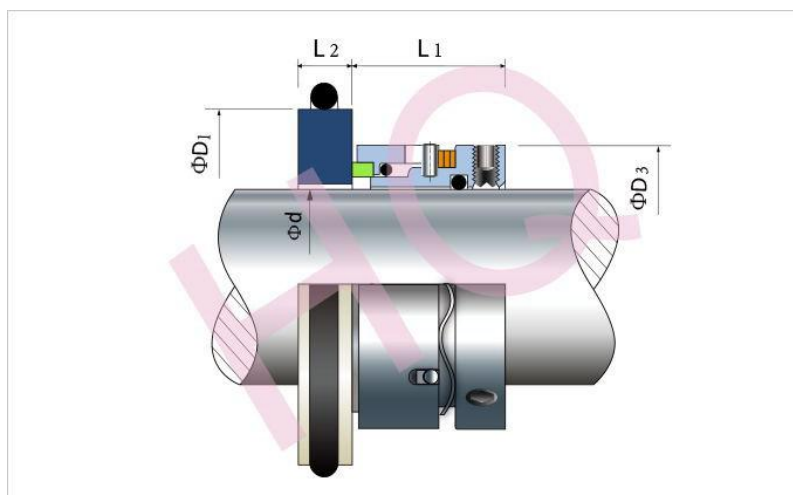
Replacement: Vulcan 1653

Temperature: -40°C to $+205^{\circ}\text{C}$

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

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

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



d (mm)	D1	D3	L1	L2
40	69.9	56	32	7.5
50	89.9	71	34	13.0

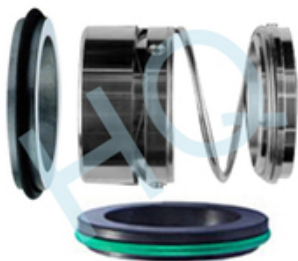


<http://www.hqseal.com>

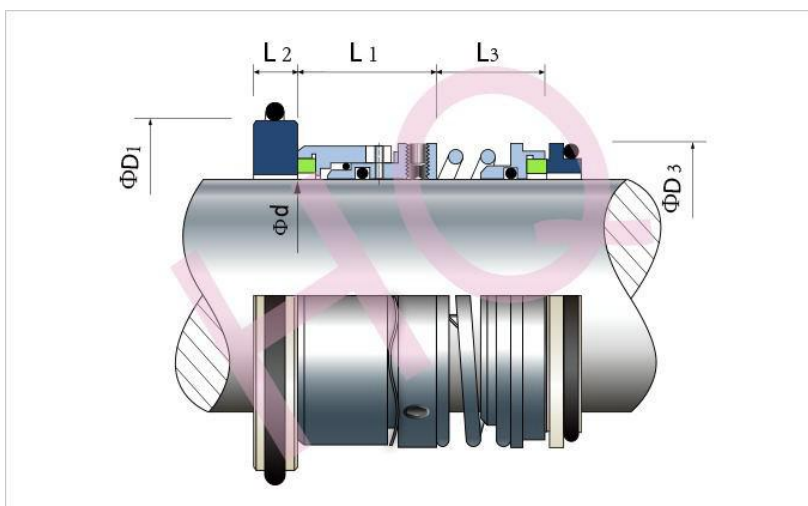


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GD-02(1653D)



Type: Suit Godwin DRI-PRIME
 Series pumps
 Replacement: Vulcan 1653D
 Temperature: -20°C to +120°C
 Pressure: $\leq 1.0\text{Mp}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D2	L1	L2	L3
75	109.9	98	45.5	14.9	37

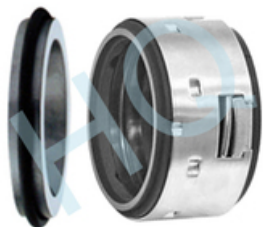


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GD-03(1724P/1725P)

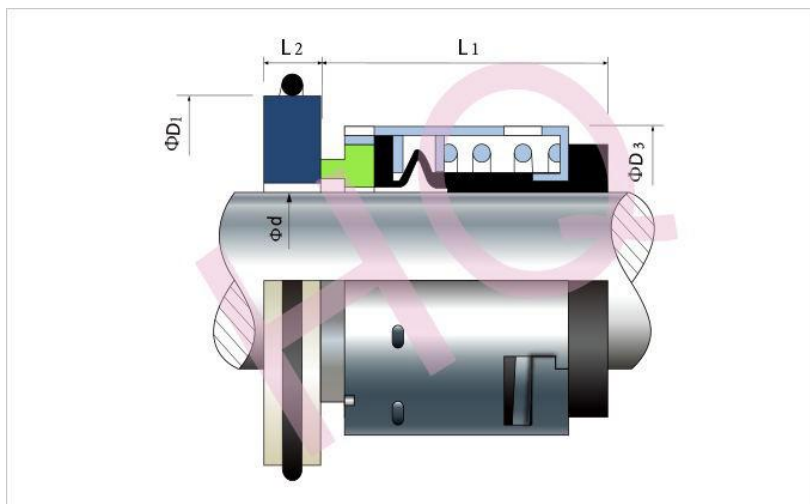


Type: Suit Godwin "DRI-PRIME" series pumps
 Replacement: Vulcan 1724P and 1725P, AES B07X
 Temperature: -40°C to +200°C

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

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

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



d (mm)	D1	D3	L1	L2	Vulcan Type
40	69.9	56	32.0	7.35	1725P
50	64.5	66	34.5	10.3	1724P



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GD-04(B092XU)

Type: Suit for Godwin CD/HL Pumps

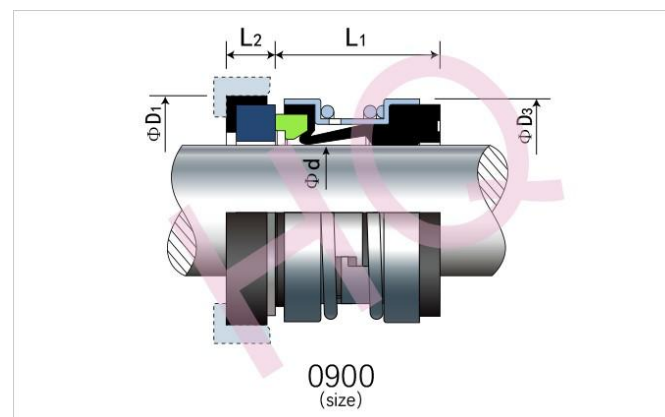
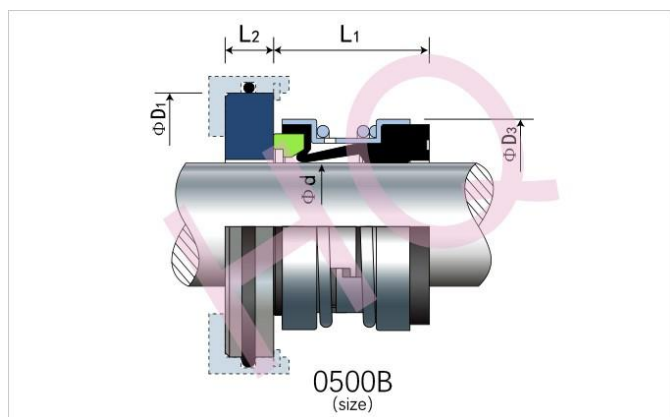
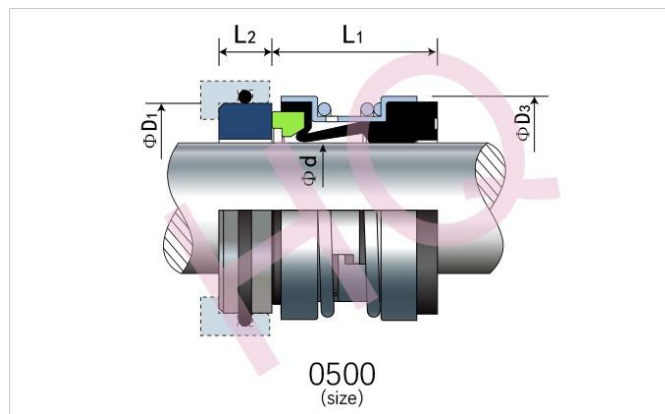
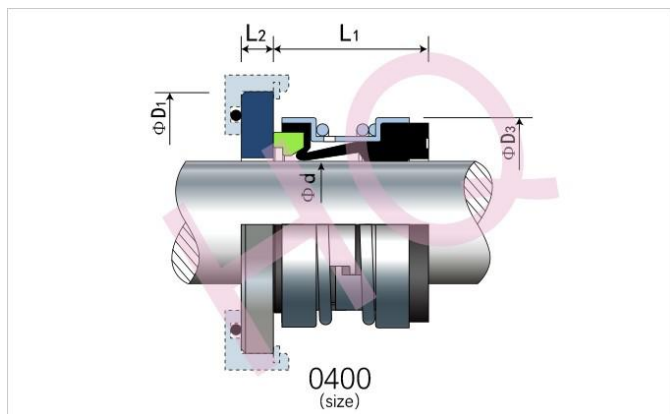
Replacement: AES B092XU

Temperature: -20°C to +120°C

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

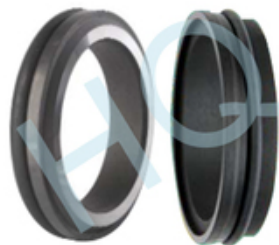
Speed: $\leq 10\text{m/s}$

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

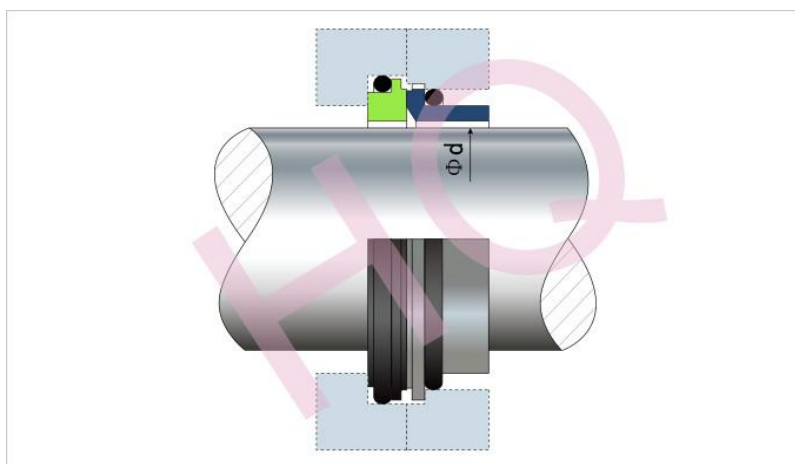


Size	d (mm)	D1	D3	L1	L2
40	40	70.0	55	32.0	7.3
50	50	64.5	65	34.0	10.3
50B	50	90.0	65	34.0	13.0
90	90	115	113	47.6	14.0
Size	d (inch)	D1	D3	L1	L2
40	1.575	2.756	2.165	1.260	0.287
50	1.969	2.539	2.559	1.339	0.406
50B	1.969	3.543	2.559	1.339	0.512
90	3.543	4.528	4.449	1.874	0.551

GD-05(MOGFPU)



Type: Suit for Godwin Fir Pumps
 Replacement: AES MOGFPU
 Temperature: -20 to +180°C
 Pressure: $\leq 2.7\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



Suit for Godwin Fire Pumps.

d=44.00mm, 1.732 inch

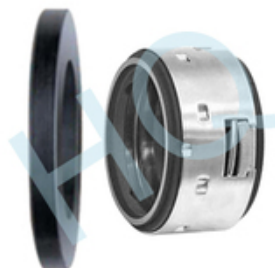


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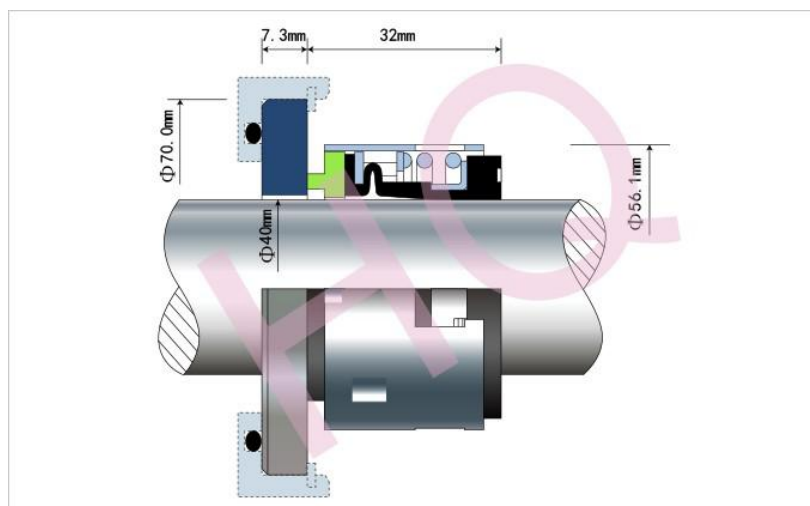


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GD-06(B07X)



Type: Godwin CD80,CD100
and CD150 Sals
Replacement: AES B07X
Temperature: -20 to +180°C
Pressure: $\leq 1.4\text{Mpa}$
Speed: $\leq 10\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa



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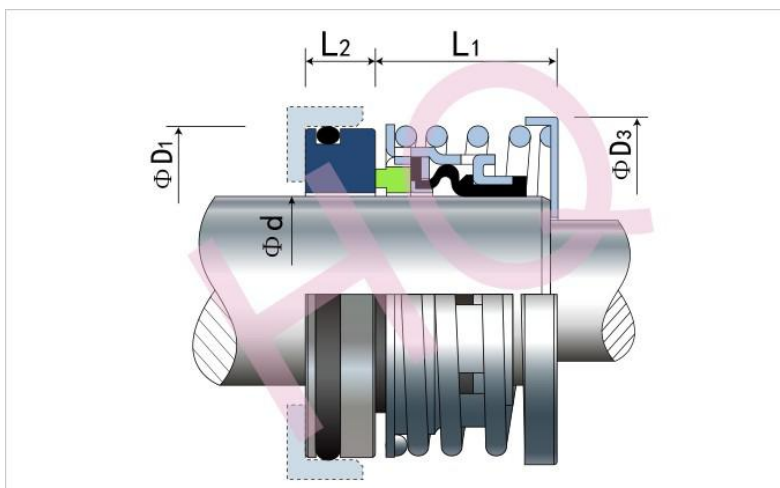


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GMN-01(P02GU)



Type: GORMAN-RUPP T3/T4/T6
Pumps Seal
Replacement: AES P02GU
Temperature: -20°C to $+120^{\circ}\text{C}$
Pressure: $\leq 1.4\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,A1,Q1,Q2,U2,P,E,N,V,F,G



d (mm)	D1	D3	L1	L2
38.1	60.3	59.2	33.3	13.2
d (inch)	D1	D3	L1	L2
1.500	2.374	2.329	1.313	0.520

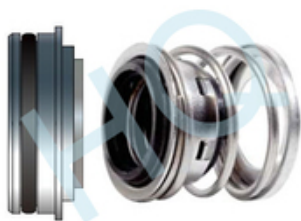


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GMN-02(P02GU-GR)



Type: MORMAN-RUPP Pump Seal

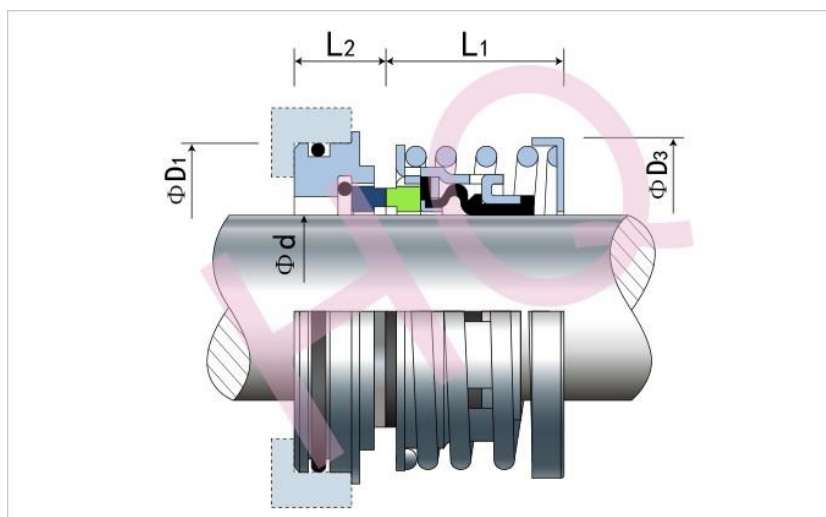
Replacement: AES P02GU-GR

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



d (mm)	D1	D3	L1	L2
47.6	73	73.2	38.1	20.6
d (inch)	D1	D3	L1	L2
1.875	2.875	2.880	1.500	0.809



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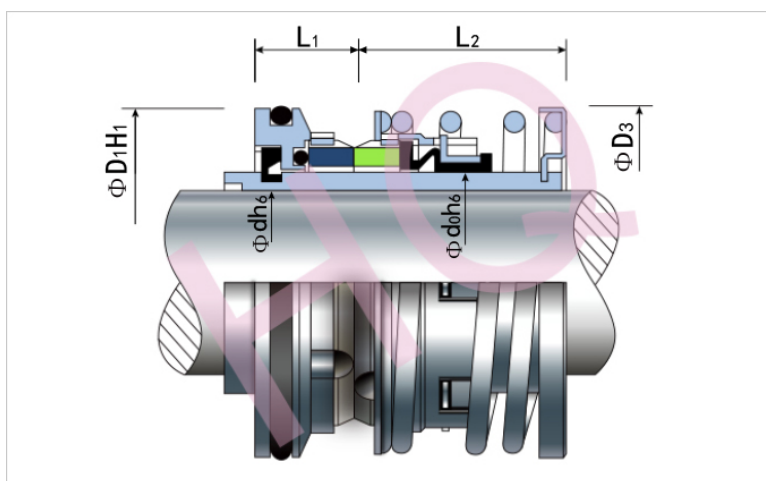


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GMN-03



Type: MORMAN-RUPP Pump Seal
 Replacement: Lidering GRN, US VGD
 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



d (inch)	d0	D1	D3	L1	L2
1.250	38.100	60.35	62.0	17.0	36.5
1.500	47.625	73.00	75.5	20.5	37.5
1.875	57.150	93.00	86.0	19.0	38.0
2.250	69.850	102.00	104.5	22.5	46.0
2.750					



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Type: GORMANN-RUPP Pump Seal
Replacement: US VGDU
Temperature: -20 to +120°C
Pressure: $\leq 1.4\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: B,Q2,U2,P,E,N,V,F,G,Alfa

Gorman-Rupp Pumps, for T range of self-priming Gorman-Rupp Pumps.

Pumps Model: T3/T4/T6, Model: T8, Model: T10



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GMN-05

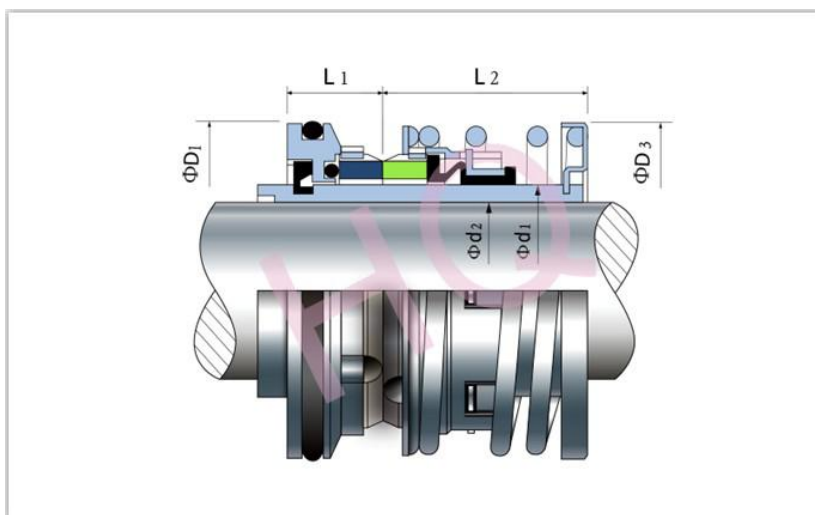


Type: GORMAN-RUPP Pumps Seal
Temperature: -20°C to +120°C

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

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

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



d1	d2	D1	D3	L1	L2
38.1	31.75	60.3	60.1	17	36.5



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Type: GORMANN-RUPP Pump Seal

Temperature: -20 to +120°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=30mm



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CO-P02G



Type: Suit for Gorman Rupp T3,T4 and T6 Pumps.

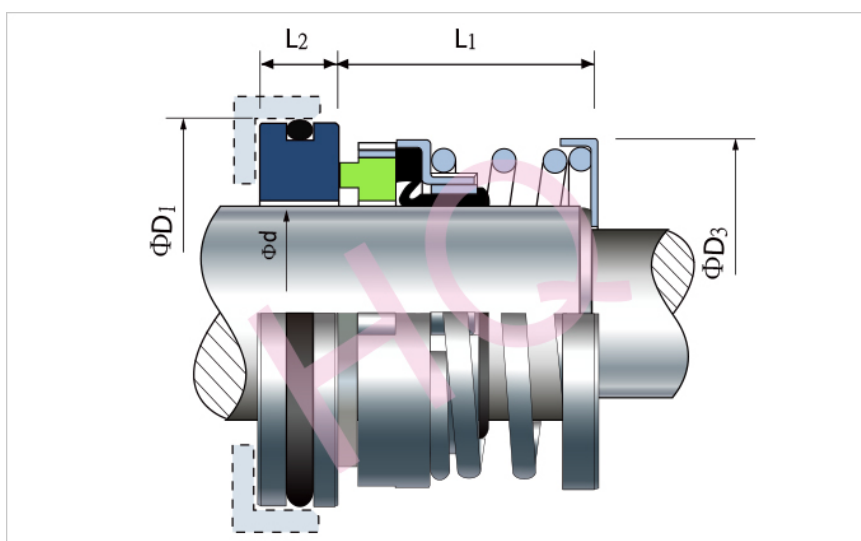
Replacement: AES P02G

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



d	D1	D3	L1	L2
38.1	60.3	56	32	13.2



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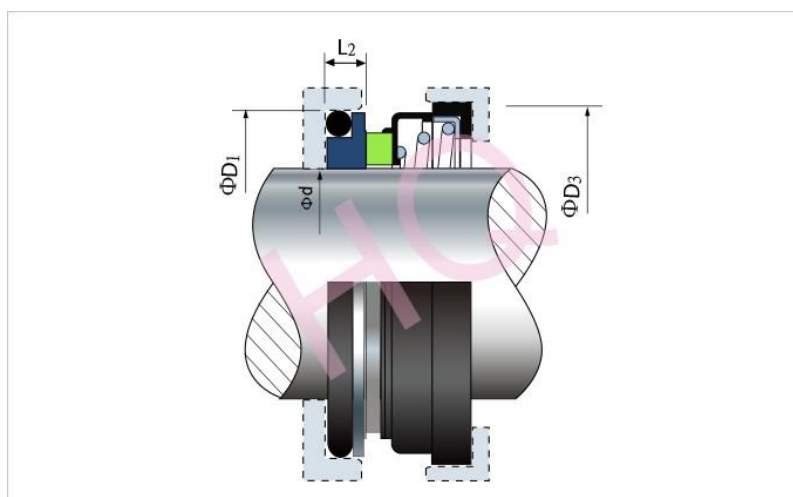


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HAI-02(B06)



Type: Suit for Haigh Macerators
 Replacement: AES B06, Vulcan 28,
 Flowerve MAC
 Temperature: -30°C to $+200^{\circ}\text{C}$
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: F,B,Q2,V,P,E,G



d (mm)	D1	D3	L2
31.7		57.5	
44.4	67	70.0	7.5

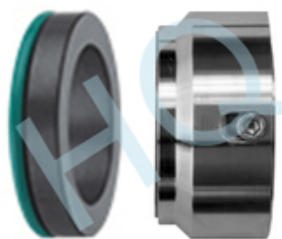


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HAI-03(1620)



Type: Suit Haigh Macerators

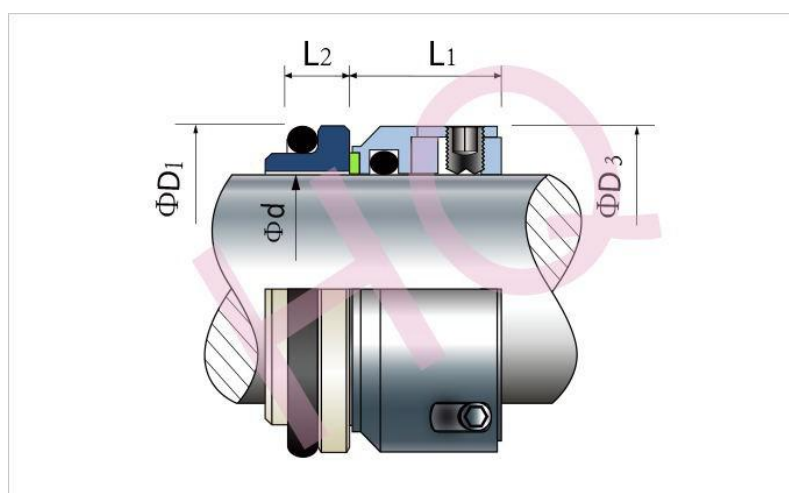
Replacement: Vulcan 1620

Temperature: -40°C to +250°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
42	62	65	30.15	14.1



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HAI-06(144)



Type: KOLMEKS A-,L-,N-
and T- pumps Seals

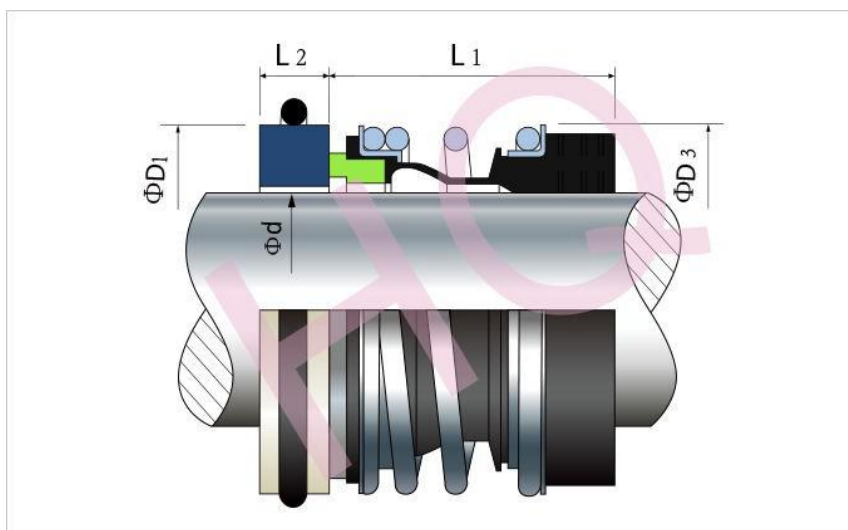
Replacement: Vulcan 144

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
12	22.22	22	25.40	5.5
28	30.15	32	24.50	8.0
25	36.73	39	25.40	8.0
32	46.00	46	30.15	8.5
40	58.00	56	36.00	9.0

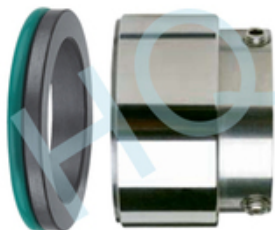


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HAI-10(M010X)

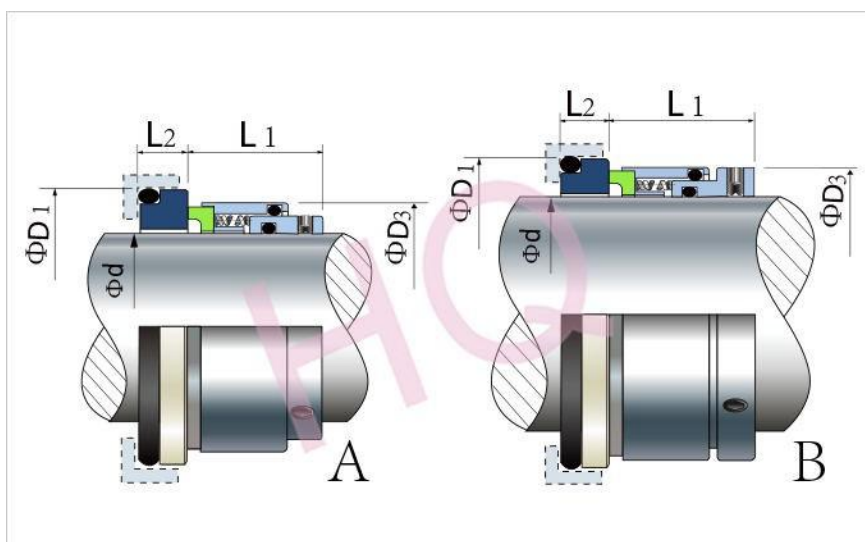


Type: Suit for Haigh MACI Pumps
Replacement: AES M010X, Burgmann 477
Temperature: -40°C to +250°C

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

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

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



Type	d (mm)	D1	D3	L1	L2
A	42	62	59.0	33.9	10.1
B	70	92	87.3	36.5	11.3



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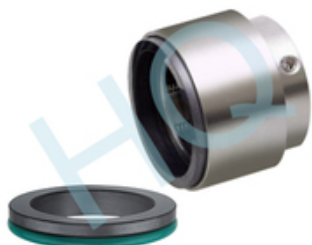


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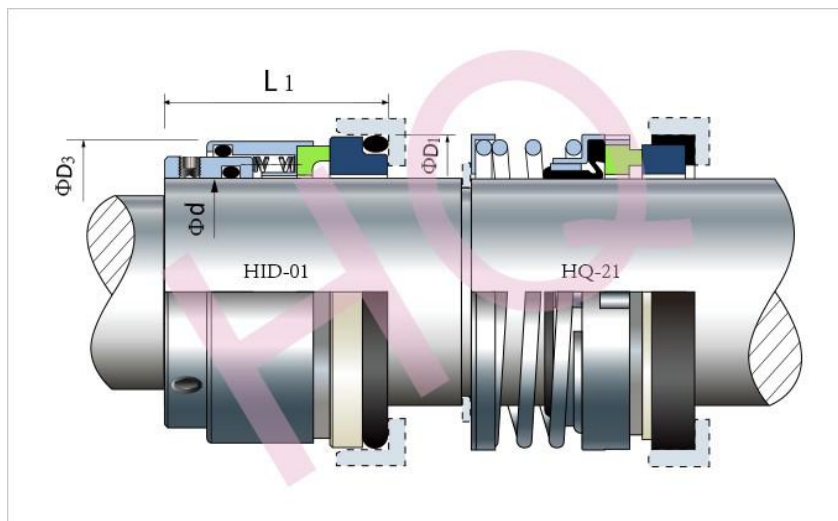


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HID-10(SAIH)



Type: Suit for Hidrostat
G,M,X Pumps
Replacement: AES SAIH
Temperature: -40°C to +250°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



d (inch)	D1	D3	L1
28.6	44.4	43.1	38.1
38.1	53.9	52.7	39.6
50.8	69.8	65.9	46.6
76.2	98.4	93.6	52.4



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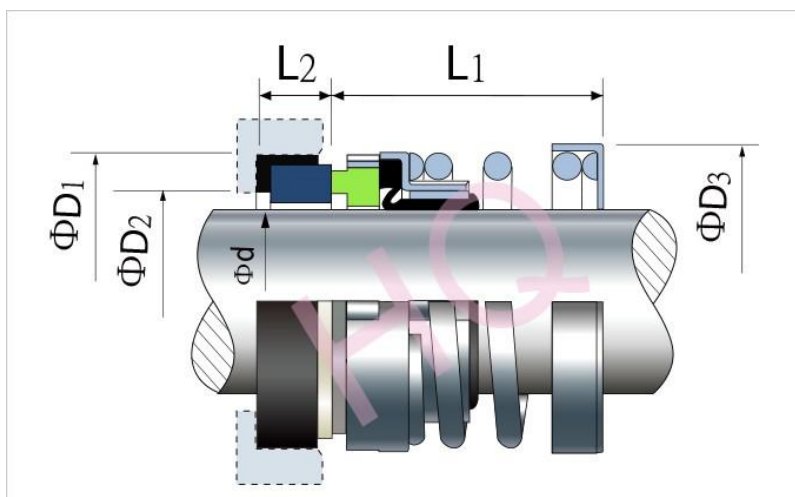


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HID-02(P03)



Type: Suit for HIDROSTAL Pumps
 Replacement: AES P03, Vulcan RD11, Burgamnn 912/D1/G60
 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		D3		L1		L2		O.E.M.
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Seal Code
22.23	0.875	38.10	1.500	33.4	1.315	23.80	0.937	10.28	0.405	C0.6,V0.6
25.00	0.984	40.50	1.594	39.2	1.543	25.40	1.000	10.32	0.406	CO25
28.58	1.125	44.44	1.750	46.3	1.823	26.97	1.062	11.10	0.437	C1.1,V1.1
34.93	1.375	50.80	2.000	52.6	2.071	28.58	1.125	11.10	0.437	C1.3
38.10	1.500	53.98	2.125	55.8	2.197	28.58	1.125	11.10	0.437	C1.5
50.80	2.000	69.85	2.750	73.0	2.874	38.10	1.500	12.70	0.500	C2.0
63.50	2.500	85.73	3.375	84.9	3.343	46.02	1.812	14.28	0.562	C2.5
76.20	3.000	98.43	3.875	102.7	4.043	52.37	2.062	15.88	0.625	C3.0



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HID-03(194)



Type: Suit Hidrostral pumps

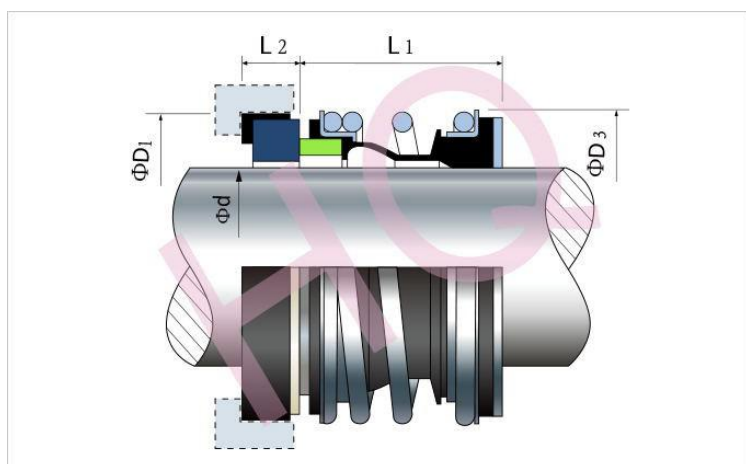
Replacement: Vulcan 194

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



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d		D1		D3		L1		L2		O.E.M.
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	Seal Code
15.88	0.625	30.14	1.187	28.0	1.102	22.23	0.875	10.28	0.405	G016
20.00	0.787	38.10	1.500	36.0	1.417	30.00	1.181	10.00	0.394	G020
20.00	0.787	35.00	1.378	40.5	1.584	21.50	0.846	7.50	0.295	G020K
28.58	1.125	44.44	1.750	47.0	1.850	26.97	1.062	11.10	0.437	G1.1
38.10	1.500	53.98	2.215	58.0	2.283	28.58	1.125	11.10	0.437	G1.5
50.80	2.000	69.85	2.750	71.0	2.795	38.10	1.500	12.70	0.500	G2.0
63.50	2.500	85.73	3.375	90.0	3.543	46.02	1.812	14.28	0.562	G2.5
76.20	3.000	98.43	3.875	102.0	4.016	52.37	2.062	15.88	0.625	G3.0
95.00	3.740	123.85	4.876	131.0	5.157	60.33	2.375	19.10	0.752	G095
100.00	3.937	123.85	4.876	131.0	5.157	60.33	2.375	19.10	0.752	G100



Type: Suit for HIDROSTAL Pumps

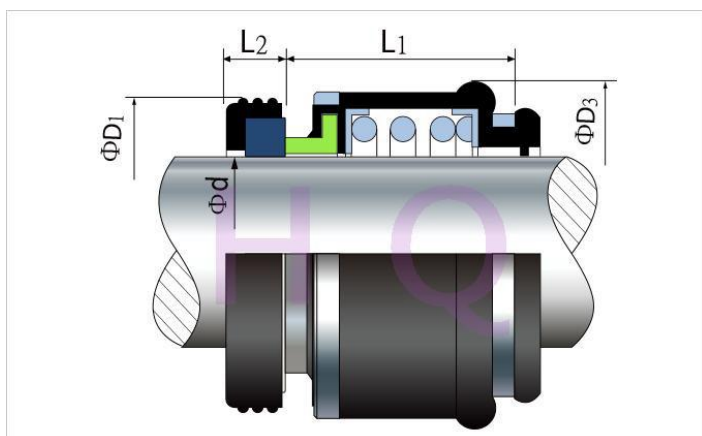
Replacement: Lidering HI, US VG-7087

Temperature: -40°C to +250°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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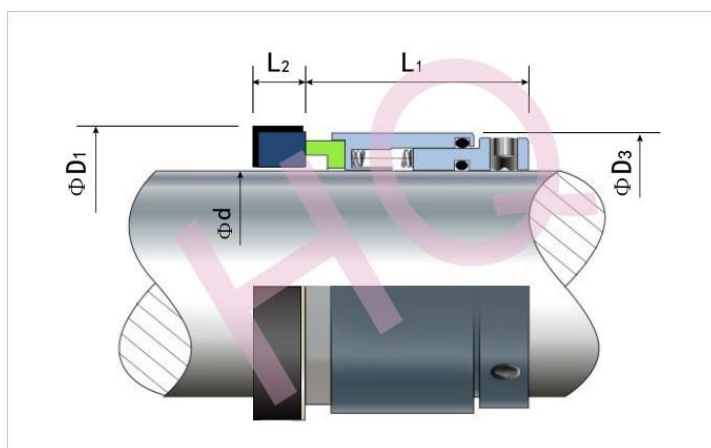


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d (mm)	d	D1	D3	L1	L2	L1K
28	28	44	50.0	30.0	10.0	40.0
35	35	54	64.0	35.5	10.0	45.5
50	50	70	74.5	45.2	12.2	57.4
d (inch)	d	D1	D3	L1	L2	L1K
1.125	28.575	44.450	50.0	30.0	11.1	41.0
1.500	38.100	53.975	66.0	35.5	10.0	45.5
2.000	50.800	69.850	75.5	45.2	13.0	58.2

HID-05(41)

Type: Suit for HIDROSTAL Pumps
 Replacement: Vulcan 41
 Temperature: -40 to +204°C
 Pressure: $\leq 2.5\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,A,Q2,U2,P,E,V,F,G



d (mm)	D1	D3	L1	L2	O.E.M
					Seal Code
25.58	44.44	44.0	30.0	8.10	M1.1
38.10	53.98	54.8	31.6	8.10	M1.5
50.80	69.85	67.6	38.1	12.70	M2.0,X2
63.50	85.73	78.3	46.2	14.28	M2.5,X2.5
76.20	98.43	93.7	52.4	15.88	M3.0,X3.0
95.00	123.85	128.0	62.9	16.50	X0.95
d (Inch)	D1	D3	L1	L2	O.E.M
					Seal Code
1.125	1.750	1.732	1.181	0.319	M1.1
1.500	2.125	2.157	1.244	0.319	M1.5
2.000	2.750	2.661	1.500	0.500	M2.0,X2
2.500	3.375	3.082	1.812	0.562	M2.5,X2.5
3.000	3.875	3.689	2.063	0.625	M3.0,X3.0
3.740	4.876	5.039	2.477	0.649	X0.95



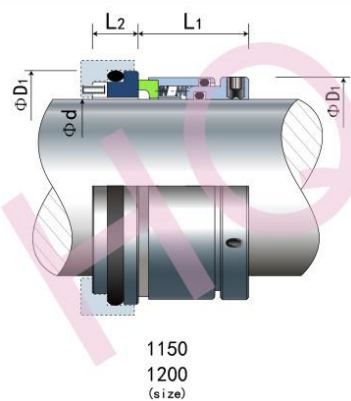
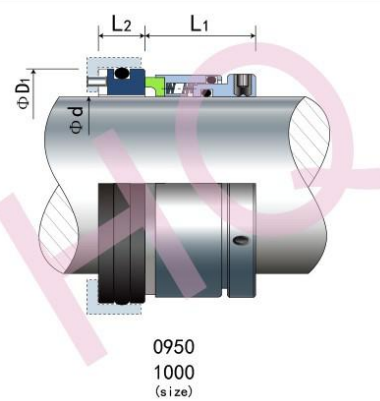
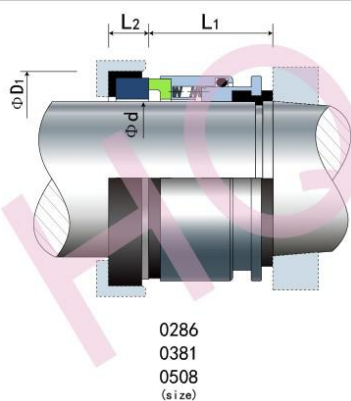
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HID-06(M010H)

Type: Multi Spring Mechanical Seal, Suit for
Hidrostal G,M,N,X pump
Replacement: AES M010H
Temperature: -40 to +220°C
Pressure: $\leq 2.5\text{Mpa}$
Speed: $\leq 15\text{m/s}$
Material: Q1,S,A,Q2,V,E,P,M5,M6,G1,T4,M



d (mm)	D1	D3	L1	L2
28.6	44.4	-	32.6	10.6
38.1	53.9	-	34.7	11.1
50.8	69.8	-	45.3	12.7
95.0	112.8	-	123.8	17.4
100.0	119.1		123.8	17.4
115.0	142.9	134.9	36.5	12.5
120.0	142.9	141.3	36.5	12.5

d (inch)	D1	D3	L1	L2
1.125	1.750	-	1.283	0.417
1.500	2.125	-	1.366	0.437
2.000	2.750	-	1.783	0.500
3.740	4.439	-	4.875	0.685
3.937	4.689	-	4.875	0.685
4.527	5.625	5.312	1.437	0.492
4.724	5.625	5.563	1.437	0.492



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Type: Mechanical Seal
 Temperature: -20 to +190°C
 Pressure: $\leq 1.6\text{Mpa}$
 Speed: $\leq 20\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa

*Product description

Hidrostal Replacement Pump Seals. Equivalent with
 Hidrostal pumps seals

*Pump Models

F04K-MH/F06K-S/F10K-MD F06K-H/F06K-S H05K-MH/F06K-H F04K-MH/F04K-S F04K-MH/F06K-M F10K-HD
 F10K-MD F10K-HD F10K-SS

*OEM	DESCRIPTION	SIZE	SAF S
157261	LOW	1-	
157257	U	1-	
157262	LOWER SEAL	1-	
157258	U	1-	
157263	L	2.000	
157259	U	2.000	



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Type: Suit for Grundfos, Hilge Pumps

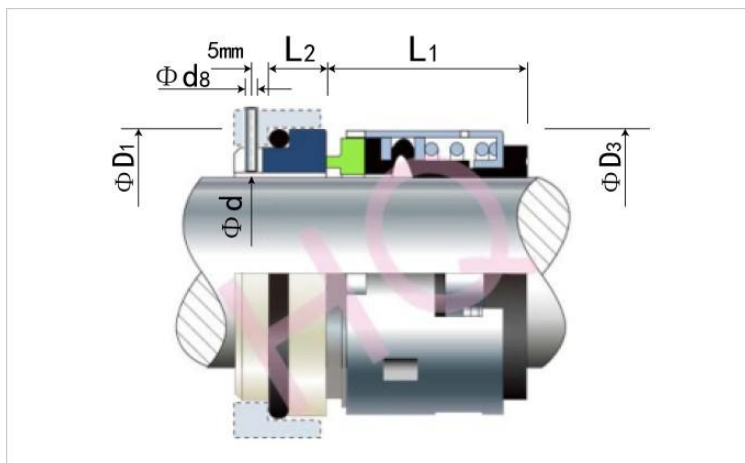
Replacement: AES B07SL, Vulcan 502/BP

Temperature: -20°C to +120°C

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

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

Material: A, Q1, Q2, U1, U2, Graphite, F, G, M, M5



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Size (mm)	D1	D3	d8	L1	L2
12	23	22.0	3	23.9	8.6
14	25	24.0	3	26.4	8.6
16	27	26.2	3	26.4	8.6
18	33	32.2	3	27.5	10.0
20	35	33.9	3	27.5	10.0
22	37	36.1	3	27.5	10.0
24	39	38.1	3	30.0	10.0
25	40	38.8	3	30.0	10.0
28	43	42.1	3	32.5	10.0
30	45	44.2	3	32.5	10.0
32	48	45.8	3	32.5	10.0
33	48	46.9	3	32.5	10.0
35	50	48.8	3	32.5	10.0
38	56	54.2	4	34.0	11.0
40	58	56.1	4	34.0	11.0
43	61	58.8	4	34.0	11.0
45	63	60.9	4	34.0	11.0
48	66	64.1	4	34.0	11.0
50	70	66.2	4	34.5	13.0

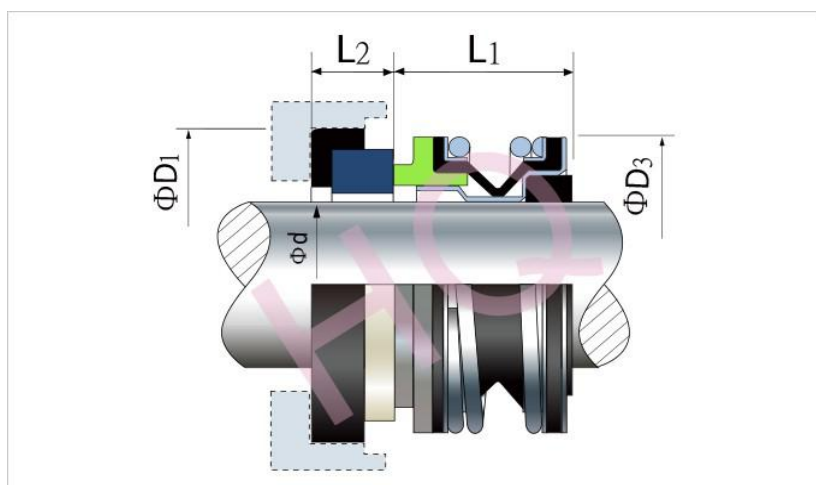


Type: Suit for Grundfos, Hilge Pumps
 Replacement: Vulcan 60/65, AES B04/B04U,
 Crane106, Roten 16, Flowserve 160
 Temperature: -20 to +120°C

Pressure: $\leq 0.5\text{Mpa}$

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

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



Size (mm)	d	D1	D3	L1	L2
60/0.375	9.5	22.2	24.00	16.00	6.20
60/0.500	12.7	25.4	27.00	16.60	6.20
60/0.625	15.8	31.8	31.00	18.70	10.31
60/0.750	19.0	34.9	34.20	18.70	10.31
60/1.000	25.4	41.3	43.00	20.60	11.10
65/0.375	9.5	25.4	27.00	16.60	7.90
65/0.500	12.7	25.4	27.00	16.60	7.90
65/0.625	15.8	31.7	31.00	18.20	10.30
65/0.750	19.1	34.9	34.20	18.20	10.30
65/1.750	63.5	61.0	51.59	33.34	10.32



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HIL-06(8B...127)

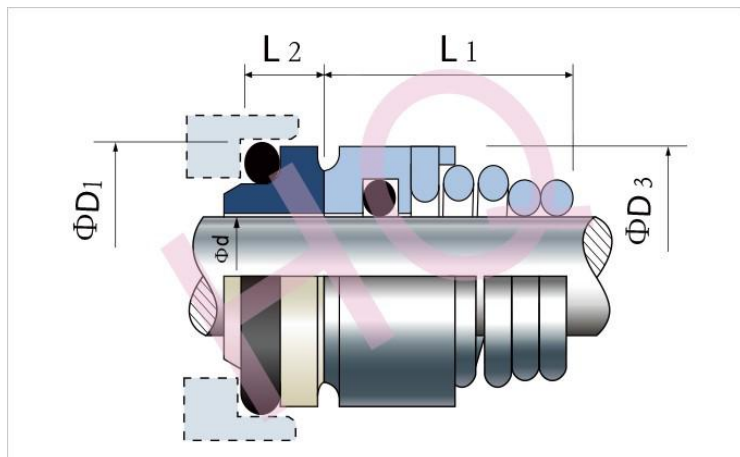
Type: Suit for Grundfos, Hilge centrifugal pumps
Replacement: Vulcan 8B, 8BU, 12, 12S, 12H, 126, 126L, 127. Billi BB1

Temperature: -20°C 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



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d (mm)	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
19	30.9	31	25.0	8.0	12	001-19 O3
19	30.9	31	25.0	8.0	12S	001-19 O5
19	35.0	31	20.0	9.5	8BU	002-19 O3
22	37.0	33	27.5	10.0	126	L1K-22 F3
28	43.3	40	29.0	9.0	12	001-28 O3
28	43.3	40	29.0	9.0	12H	001-28 A3
28	43.3	40	29.0	9.0	12S	001-28-O5
28	42.0	40	24.6	11.0	8B	002-28 O3
30	45.0	43	32.5	10.0	126	L1K-30 F3
30	45.0	43	32.5	10.0	126L	L1K-30 G3
30	45.0	43	40.0	10.0	127	L1K-30 D3
38	60.5	53	39.0	11.5	12	001-38 O3
38	55.0	53	31.0	11.5	8B	002-38 O3
40	58.0	56	34.0	13.0	126	L1K-40 F3
40	58.0	56	34.0	13.0	126L	L1K-40 G3
50	70.0	66	38.0	14.0	126	L1K-50 F3
50	70.0	66	38.0	14.0	126L	L1K-50 G3
50	70.0	66	43.0	14.0	8BU	1238-50 O3

HIL-07(128)

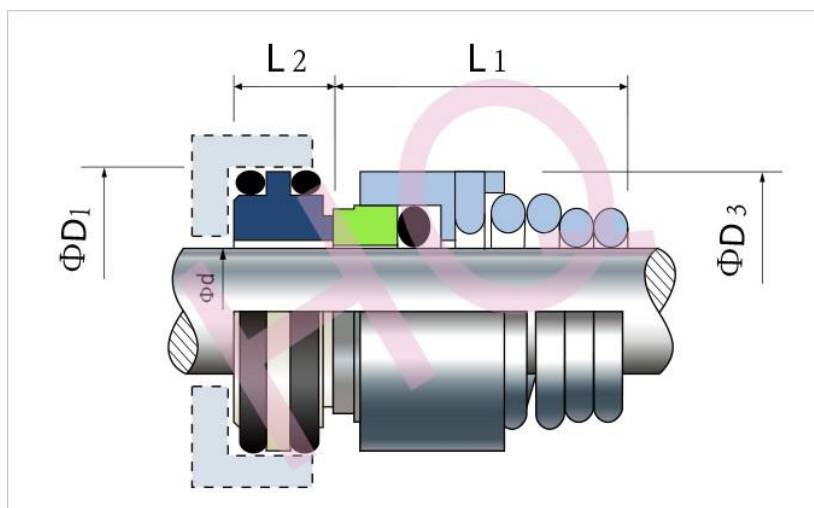


Type: Suit for Grundfos, Hilge c
entrifugal Pumps
Replacement: Vulcan 128, Billi BB1S
Temperature: -20°C to +180°C

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

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

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



d (mm)	D1	D3	L1	L2	O.E.M. Seal Code
19	39.3	31	20.0	10.8	OB3-19 B3
28	47.3	40	26.5	11.3	OB3-28 B3
38	59.3	53	33.5	11.3	OB3-38 B3

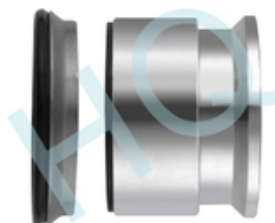


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HIL-01(M101S1)



Type: Suit for Grundfos, Hight Hygiana

centrifugal Pumps

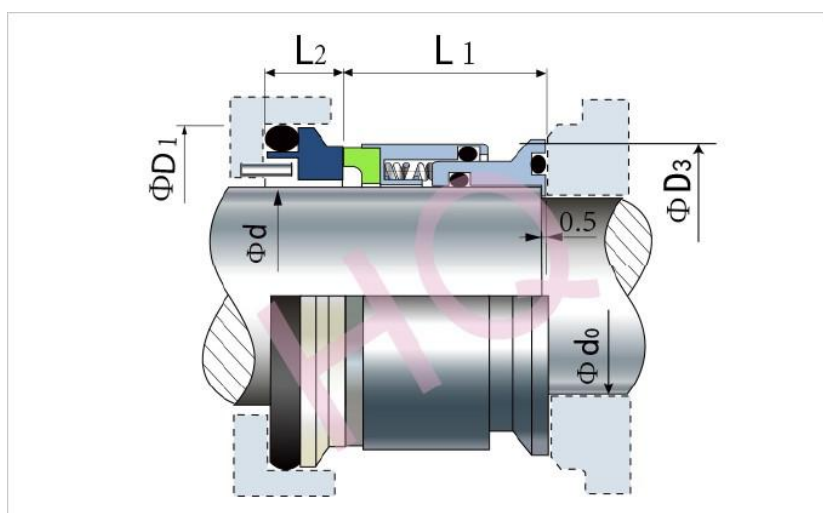
Replacement: AES M010S1, Burgamnn SHJ97, Vulcan 1663, Billi BB8H3, ROTEN EHS3

Temperature: -40°C to $+250^{\circ}\text{C}$

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

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

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



d (mm)	d0	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
28	24	48.0	43.0	34.5	10.5	1663	BS2-28 O1
38	35	57.1	52.8	35.0	10.5	1663	BS2-38 O1

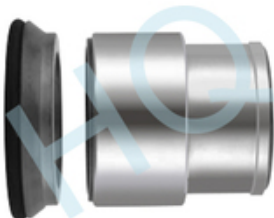


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HIL-02(M010S1)



Type: Suit for Grundfos, Hilge Euro-Hygia

centrifugal Pumps

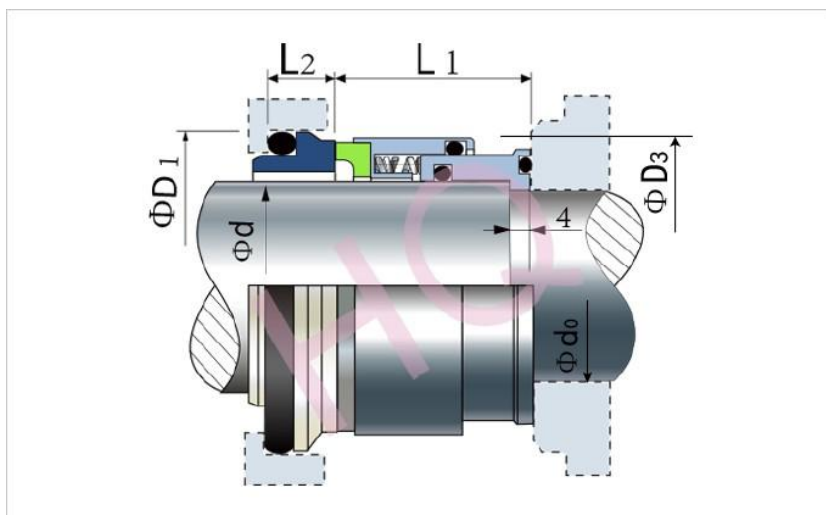
Replacement: AES M010S2, Burgamnn SHJ97,

Vulcan 1663A, Billi BB8H3A,
ROTEN EHS3

Temperature: -40°C to +250°C

Pressure: ≤ 2.5 Mpa Speed: ≤ 15 m/s

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



d (mm)	d0	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
28.0	24.0	48.0	43.0	38.0	10.5	1663A	BS3-28 O1

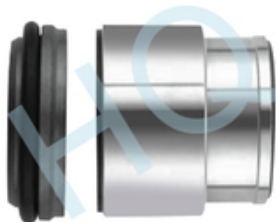


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HIL-03(M010S1)



Type: Suit for Grundfos, Hilge Euro-

HYGIA, HYGIA, Panda, Sipia

centrifugal Pumps

Replacement: AES M010S3, Burgamnn SHJ97,

Vulcan1662, Billi BB8HA2,

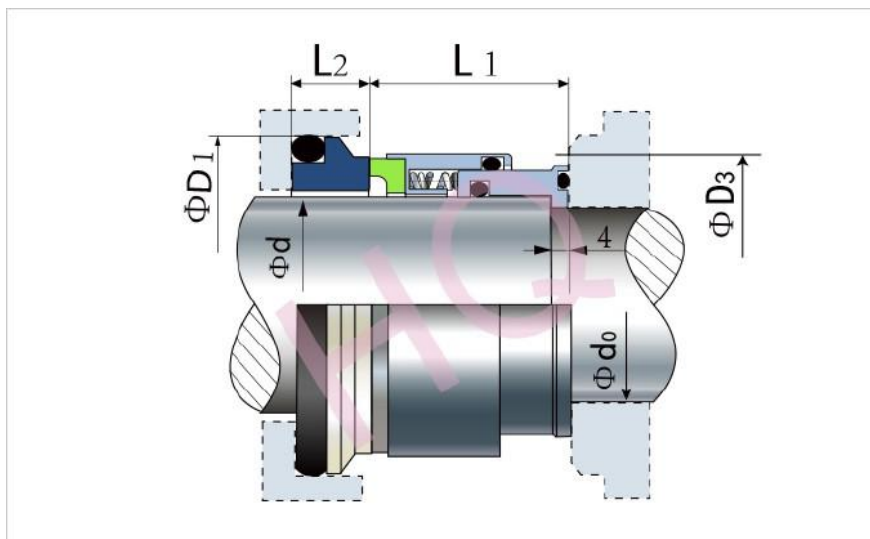
ROTEN EHS3

Temperature: -40°C to $+250^{\circ}\text{C}$

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

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

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



d (mm)	d0	D1	D3	L1	L2	Vulcan Code	O.E.M. Seal Code
19	16	30.9	33.5	29	8.0	1662	001-19 O1
28	24	43.3	43.0	33	9.0	1662	001-28 O1
28L	24	43.3	43.0	33	9.0	1662L	001-28 A1
38	35	60.5	52.8	43	11.5	1662	001-38 O1

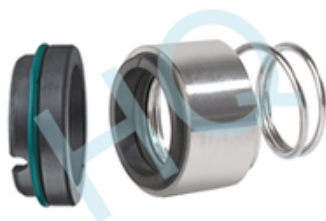


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HIL-04(T01KU)



Type: Suit for Hilge Maxa,Maxana Pumps

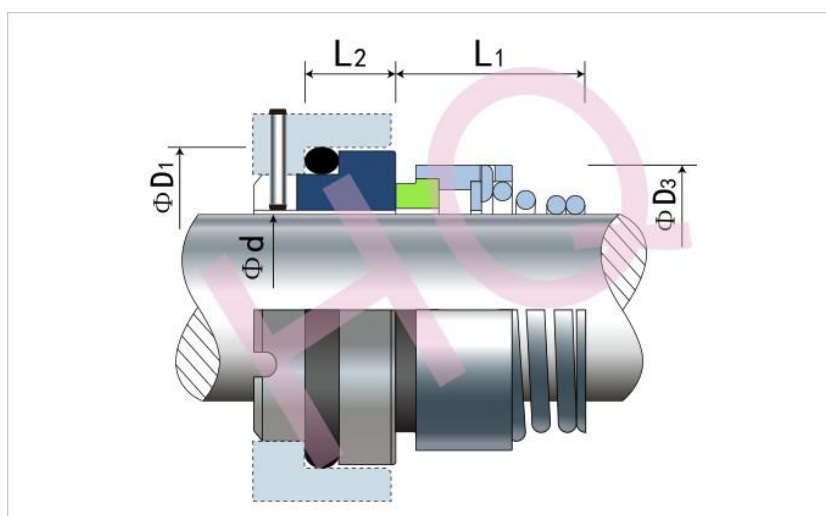
Replacement: AES T01LKU

Temperature: -20°C to +180°C

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

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

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



d (mm)	D1	D3	L1	L2
30	45	44	31.5	11.0
40	58	56	33.5	11.5
50	70	66	33.5	14.0
d (inch)	D1	D3	L1	L2
1.181	1.732	1.732	1.240	0.433
1.575	2.205	2.205	1.319	0.453
1.969	2.598	2.598	1.319	0.551



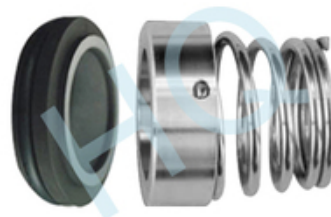
<http://www.hqseal.com>



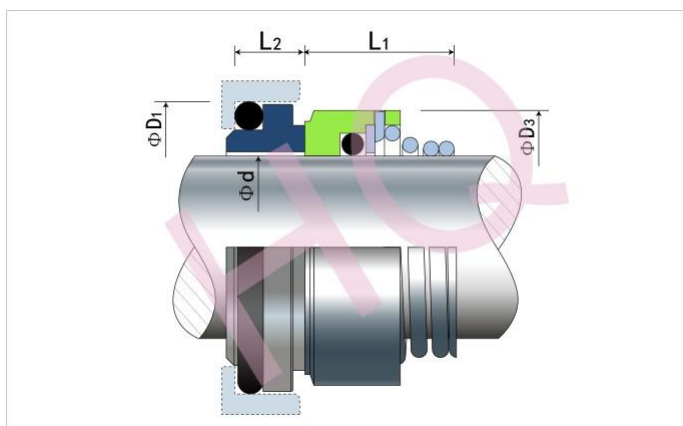
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HIL-05(T03HU)

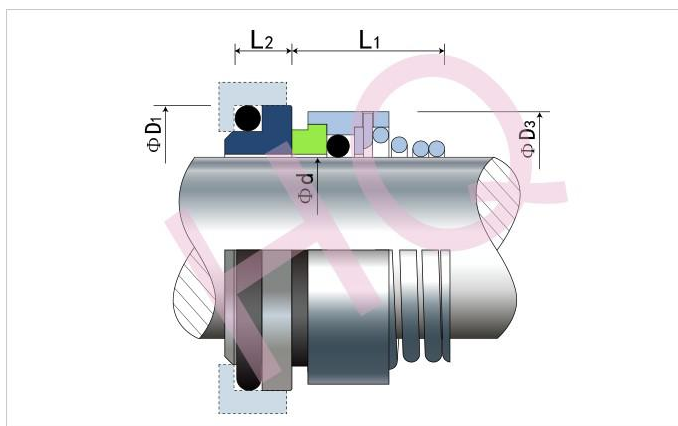
Type: Suit for Grundfos,Higle Pumps
 Replacement: AES T03HU
 Temperature: -40 to +200°C
 Pressure: $\leq 1.0\text{Mpa}$
 Speed: $\leq 15\text{m/s}$
 Material: B,Q2,U2,P,E,N,V,F,G,Alfa



Type A



Type B



d (mm)	D1	D3	L1	L2
19	30.9	32	25	8.0
28	43.3	42	29	9.0
38	60.5	54	39	11.5
d (inch)	D1	D3	L1	L2
0.748	1.217	1.260	0.984	0.315
1.102	1.705	1.654	1.142	0.354
1.496	2.382	2.126	1.535	0.453



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HIL-09(T01LOU)

Type: O-ring Mechanical Seal

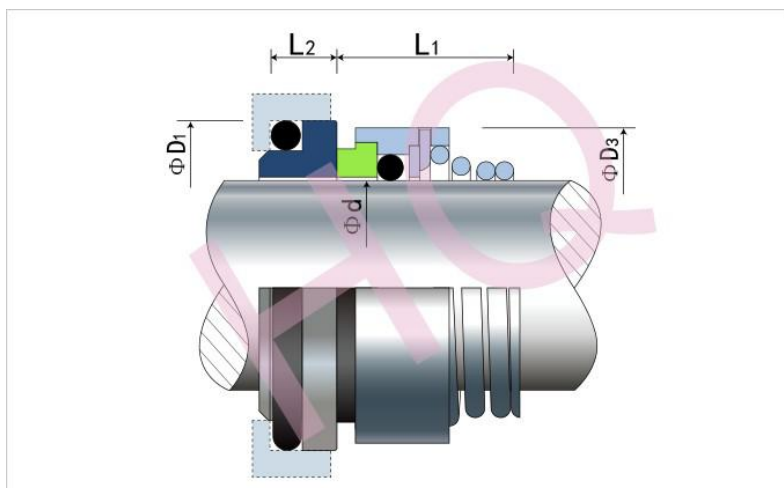
Replacement: AES T01LOU

Temperature: -20 to +140°C

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

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
19	35	31	22.0	7.5
28	42	42	26.5	9.0
30	45	44	25.0	10.5
38	55	54	32.2	10.3
40	58	56	34.7	10.8
50	70	66	45.9	11.6
d (mm)	D1	D3	L1	L2
0.748	1.378	1.260	0.866	0.295
1.102	1.654	1.653	1.043	0.354
1.181	1.772	1.732	0.984	0.413
1.496	2.165	2.126	1.268	0.406
1.575	2.283	2.205	1.366	0.425
1.969	2.756	2.598	1.799	0.457

HIL-10(T01LOU)

Type: O-ring Mechanical Seal

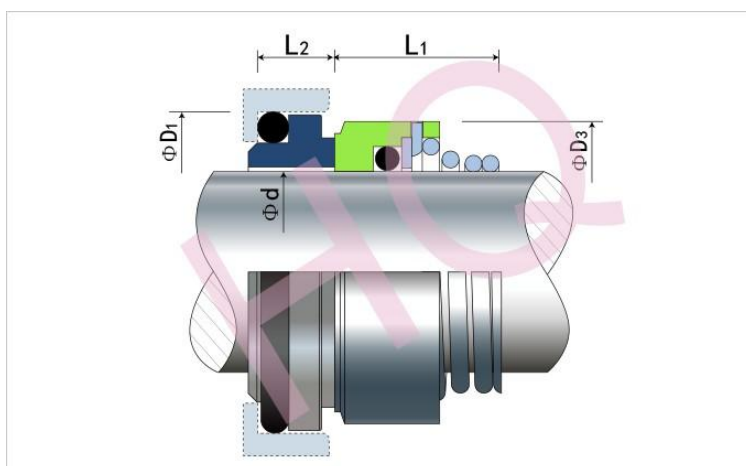
Replacement: AES T02LOU

Temperature: -20 to +140°C

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

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
19	35	31	22.0	7.5
28	42	42	26.5	9.0
30	45	44	25.0	10.5
38	55	54	32.2	10.3
40	58	56	34.7	10.8
50	70	66	45.9	11.6
d (mm)	D1	D3	L1	L2
0.748	1.378	1.26	0.866	0.295
1.102	1.654	1.653	1.043	0.354
1.181	1.772	1.732	0.984	0.413
1.496	2.165	2.126	1.268	0.406
1.575	2.283	2.205	1.366	0.425
1.969	2.756	2.598	1.799	0.457

HIL-11(T01LFU)

Type: O-ring Mechanical Seal

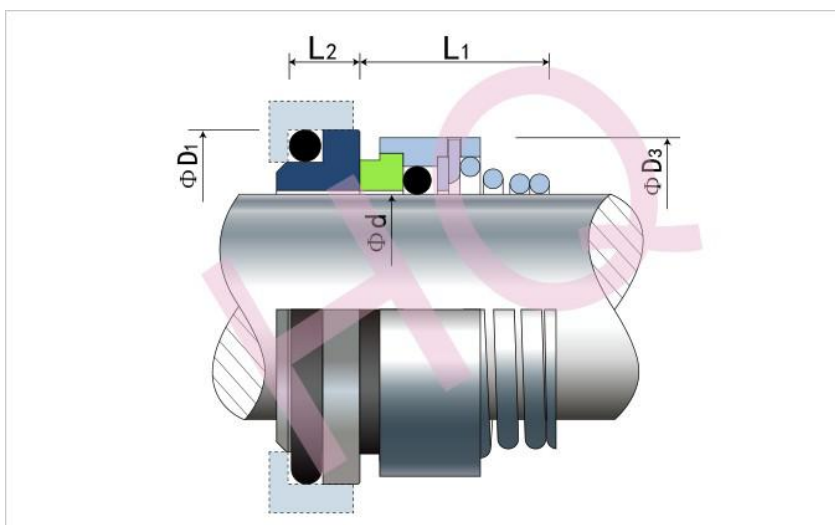
Replacement: AES T01LFU

Temperature: -20 to +140°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	L1	L2
22	37	36	23.5	10.0
30	45	44	31.5	11.0
40	58	56	33.5	11.5
50	70	66	33.5	13.0
d (mm)	D1	D3	L1	L2
0.866	1.457	1.417	0.925	0.394
1.181	1.772	1.732	1.240	0.433
1.575	2.283	2.205	1.319	0.453
1.969	2.756	2.598	1.358	0.512



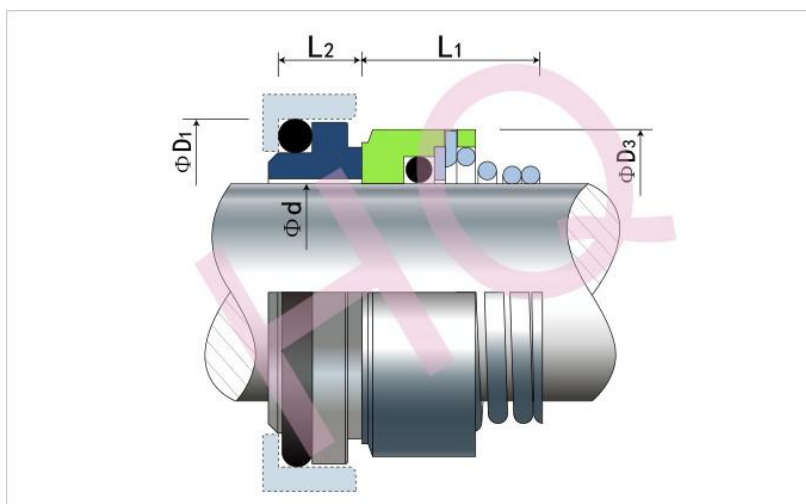
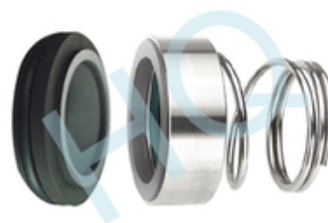
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HIL-12(T01LFU)

Type: O-ring Mechanical Seal
 Replacement: AES T02LFU
 Temperature: -20 to +140°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	L1	L2
22	37	36	23.5	10.0
30	45	44	31.5	11.0
40	58	56	33.5	11.5
50	70	66	33.5	13.0
d (mm)	D1	D3	L1	L2
0.866	1.457	1.417	0.925	0.394
1.181	1.772	1.732	1.240	0.433
1.575	2.283	2.205	1.319	0.453
1.969	2.756	2.598	1.358	0.512



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HIL-13(T01LXU)



Type: O-ring Mechanical Seal

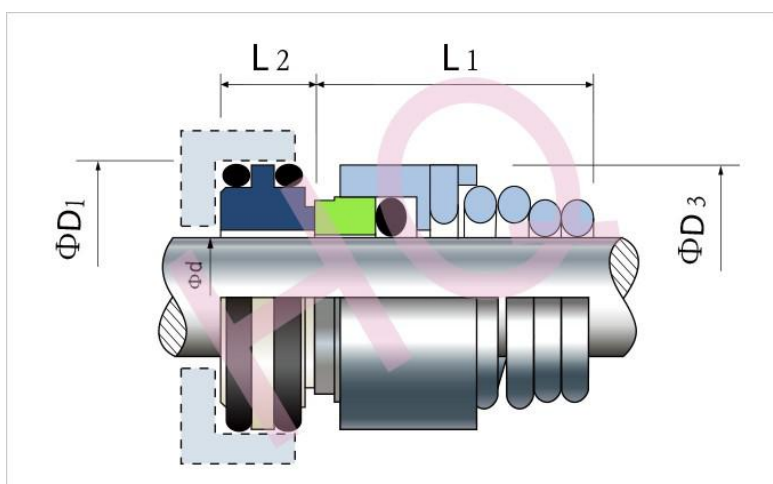
Replacement: AES T01LXU

Temperature: -20 to +140°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	L1	L2
19	39.3	31	20.0	15.0
28	47.3	40	24.5	15.5
d (inch)	D1	D3	L1	L2
0.748	1.220	1.260	0.787	0.591
1.102	1.575	1.654	0.965	0.610

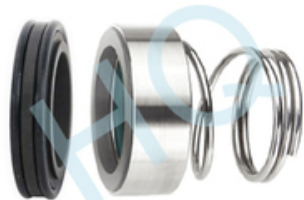


<http://www.hqseal.com>

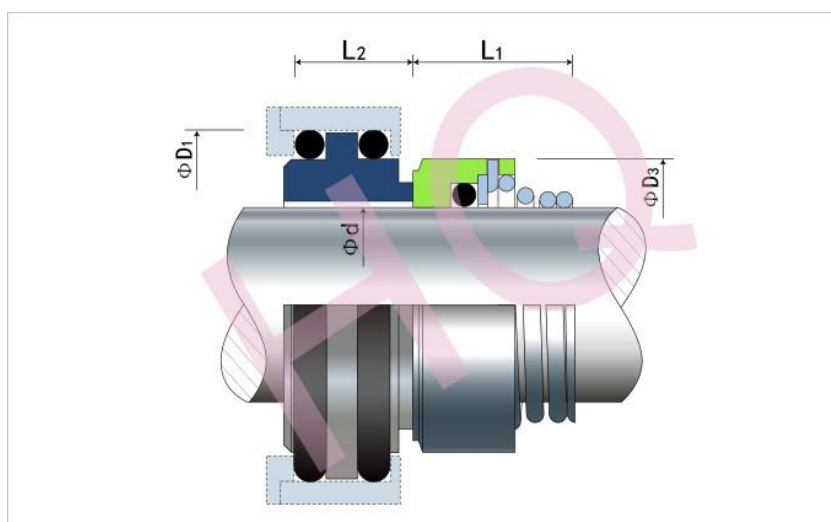


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HIL-14(T01LXU)



Type: O-ring Mechanical Seal
 Replacement: AES T02LXU
 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



d (mm)	D1	D3	L1	L2
19	39.3	31	20.0	15.0
28	47.3	40	24.5	15.5
d (inch)	D1	D3	L1	L2
0.748	1.220	1.260	0.787	0.591
1.102	1.575	1.654	0.965	0.610



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HIL-15(T01LXSU)



Type: O-ring Mechanical Seal

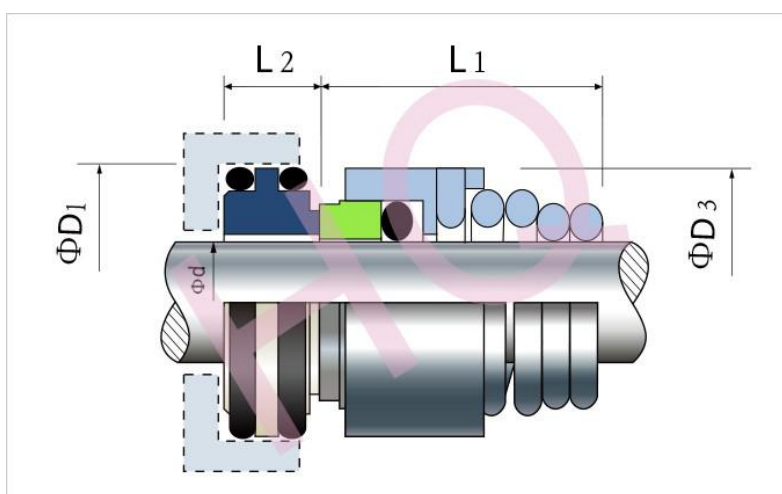
Replacement: AES T01LXSU

Temperature: -20 to +140°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	L1	L2
19	35.0	32	20.0	15.0
28	41.3	42	24.5	15.5
d (inch)	D1	D3	L1	L2
0.748	1.378	1.260	0.787	0.591
1.102	1.626	1.654	0.965	0.610



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HIL-16(T01LXSU)



Type: O-ring Mechanical Seal

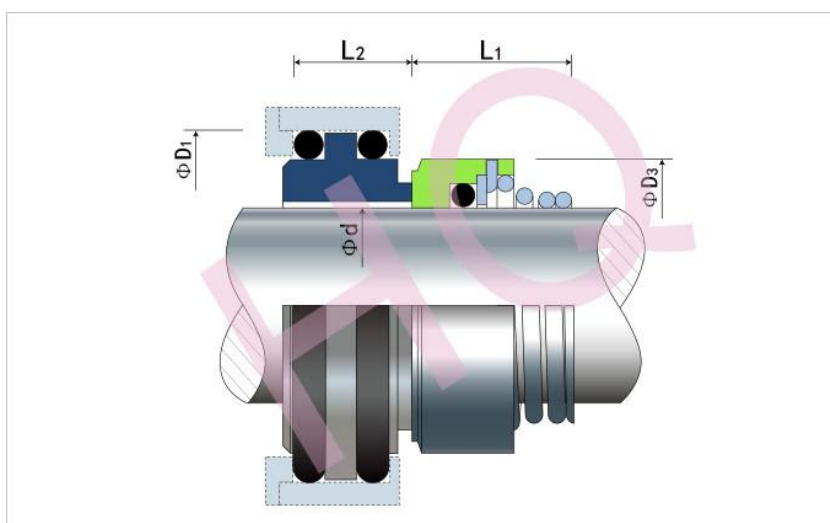
Replacement: AES T02LXSU

Temperature: -20 to +140°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	L1	L2
19	35.0	32	20.0	15.0
28	41.3	42	24.5	15.5
d (inch)	D1	D3	L1	L2
0.748	1.378	1.260	0.787	0.591
1.102	1.626	1.654	0.965	0.610

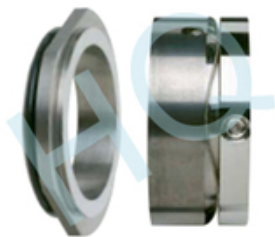


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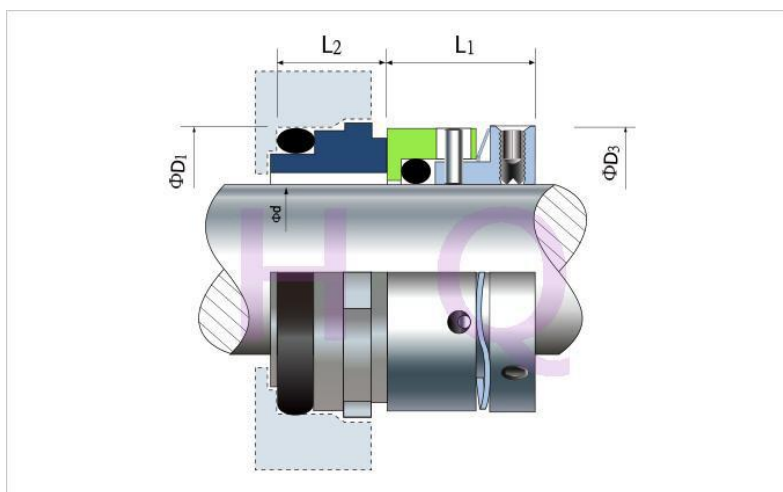


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HIL-08(W04U)



Type: Suit for Gundfos, Hilge Domina I Pumps
 Replacement: AES W04U
 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



d (mm)	D1	D3	L1	L2
30	40.0	41.0	19.1	9.3
35	44.5	45.5	19.1	9.2
50	62.0	61.9	21.1	10.4
70	85.0	88.9	25.8	14.1
80	95.0	101.0	25.8	16.2
d (inch)	D1	D3	L1	L2
1.181	1.575	1.614	0.752	0.366
1.378	1.752	1.791	0.752	0.362
1.969	2.441	2.437	0.831	0.409
2.756	3.346	3.500	1.016	0.555
3.150	3.740	3.976	1.016	0.638



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JS-01(W06)



Type: Suit for Hilge Domina S and Johnson

OnLine(OL) Series Lobe Rotor pumps

Replacement: AES W06, Vulcan 1650, BURGMANN

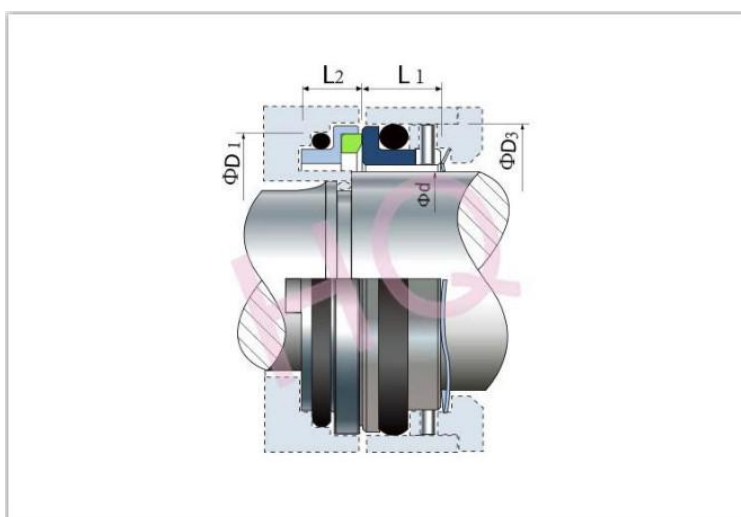
HRZ60

Temperature: -20 to +150°C

Pressure: ≤ 2.1 Mpa

Speed: ≤ 10 m/s

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



d (mm)	D1	D3	L1	L2	O.E.M Pump Model
24	37.5	38	14.0	11.0	OL1
40	56.0	58	15.5	12.5	OL2
53	69.0	71	17.5	11.5	OL3



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Cross Reference Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWERVE	Lidering	U.S
O E M Seals								
Fristam Pump Seals								
FR-01	M2S11	T01F	-		-	FRI-		
FR-02	M2S11	T01F	-		-	FRI-		
FR-03	M2S11	T01F	-		-	FRI-		
FR-04	M2S11	T01F	-		-	FRI-		
FR-05	M2S11	T01F	-		-	FRI-		
FR-06	M2S11	T01F	-		-	FRI-		
FR-07	M2S11	T01F	-		-	FRI-		
FR-9	M2S11	T01F	-	2201	-	FRI-		
FR-10	M2S11	T01F		112862		FRI		
FR-11	M2S11	T01F	-	112893	-	FRI-		
FR-12	M2S11	T01F	-	112921	-	FRI		
FR-13		T01F	-	-	-	-		
FR-14	-	WOFA	-	-	-	-		
FR-15	-	WOFC	-	-	-	-		
FR-16	-	WOFB	-	-	-	-		
FR-17		WOFBC						
FR-18		MOFC						
FR-19		P09						
FR-20	-	BOH						
FR-21				Y+V9018				
FR-22				V9200				
FR-23				W-XX02				
FR-24				W-4280				
FR-25				Y+V9010				
FR-26		W07DMBFU						
FR-28		W01FU						
FR-29		W025						
FR-30		1676						

Cross Reference Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M								
FR-31		1696						
GR-Z6		MOGCE						

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M								
Seals · Grundfos Pump Seals								
GR-Z								
GR-Z-1								
GR-Z1								
GR-Z1-1								
GR-Z1-2								
GR-Z1-3								
GR-Z2								
GR-Z2-1								
GR-Z2-2								
GR-Z2-3								
GR-Z2-4								
GR-Z2-5								
GR-Z2-6								
GR-Z2-7								
GR-Z3								
GR-Z4								
GR-Z4-2								
GR-Z5								
GR-Z6								
GR-G1							GR-C-12	
GR-G02	CARTEX							
GR-G3							GR-B	
GR-G3-S							GR-B-SH	
GR-G4							GR-A	
GR-G5								

Cross Reference Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
Grundfos Pump Seals								
GR-G6							GR-A-LG-22	
GR-G7							GR-SA-65	
GR-G8								
GR-G9							GR-SA-LG65	
GR-G10-1		SOS						
GR-G10-2		SOSS						
GR-G11								
GR-G12		SSAIS06						
GR-G13		M010SA						
GR-G14								
GR-G15		40S8						
GR-G16		42						
GR-G17							GR-SE	
GR-G18	MG12S	B012G						
GR-G19	M377S11	T01SA						
GR-G20				1615				
GR-G21								
GR-G22				196-16mm				
GR-G23				81				
GR-G24	MG1/G6							



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Cross Reference Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
Grundfos Pump Seals								
GR-G25	MG1S20/G50							
GR-G26				196-22mm				
GR-G27			1(US)					
GR-G28			2(US)					
GR-G29			1B/11					
GR-G30			2B/11					
GR-G31				10/G50				
GR-G32			1 double/11					
GR-G33			2 double/31					
GR-G34			21 DBI/11					
GR-G35	HJ92N/G16							
GR-G36	HJ92N/46							
GR-G37								
GR-G38								
GR-G39			21					
Godwin Pump Seals								
GD-01				1653				
GD-02				1653D				
GD-03				1724P/1725P				
GD-04		B092XU						
GD-05		MOGFPU						
GD-06		B07X						
Gorman-RUPP Pump Seals								
GMN-01		P02GU						
GMN-02		P02GU0GR						
GMN-03								VGD
GMN-04								VGDU
Haigh Pump Seals								
HAI-02		B06		28				
HAI-03	477			1620				
HAI-06				144				
HAI-10				M010X				

Cross Reference Charts

HQ	BURGMANN	AES	CRANE	VULCAN	ROTEN	FLOWSERVE	Lidering	U.S
O E M Seals								
Hidrostal								
HID-01		SAIH						
HID-02	912/D1/G60	P03		RD11				
HID-03				194				
HID-04							HI	
HID-05				41				
HID-06		M010H						
Hilge Pump Seals								
HIL-01	SHJ97	M010S1			EHS3			
HIL-02	SHJ97	M010S2			EHS3			
HIL-03	SHJ97	M010S3			EHS3			
HIL-04		T01LKU						
HIL-05		T03HU						
HIL-06			8B,8BU,12,12S....					
HIL-07			128					
HIL-08		W04U						
HIL-09		T01LOU						
HIL-10		T02LOU						
HIL-11		T01LFU						
HIL-12		T02LFU						
HIL-13		T01LXU						
HIL-14		T02LXU						
HIL-15		T01LXSU						
HIL-16		T02LXSU						



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
	Babbitt Alloy Impreg,Carbon Graphite		A1
	Copper Alloy Impreg,Carbon Graphite		A2
	Resin Impreg Impreg,Carbon Graphite(Furan)		B
	Resin Impreg Impreg,Carbon Graphite(Epoxy)		B1
	Resin Impreg Impreg,Carbon(Phedol-formaldehyde)		B2
	Hot-pressing Carbon		B5



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Metarial Codes

Seal Ring Materials			
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



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