the better seal
DEPAC

Mechanical seal
Type 301

The DEPAC mechanical seal type 301 is a stationary single-cartridge seal that has been specially developed for applications in which flushing is permissible and mandatory in accordance with the API plans. The stationary design principle developed by DEPAC for the process industry also offers maximum running reliability even in difficult ranges of applications for mechanical seals.

Advantages

- Stationary design principle
- Extremely short design
- Fits small stuffing box chambers from a cross section of 7.94 mm (5/16")
- Cartridge-mounted
- Balanced
- Independent of the direction of rotation
- Multiple springs made of Hastelloy C
- Springs outside the medium - no blockage of the springs
- Vibration-dampend stationary face support
- Gland with ¼" NPT axial flushing and quenching connection

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Technical specifications

Area of application*

Pressure:	700 mm Hg to 28 bar
Temperature:	dependent on elastomer
Sliding speed:	up to 35 m/s
Shaft movements:	axial +/- 1.0 mm
	radial +/- 0.5 mm

* The maximum specifications for temperature, pressure and sliding speed apply in each case to independent higher operating conditions. However, this does not mean that the seal will function with all extreme conditions at the same time. If in doubt contact DEPAC.

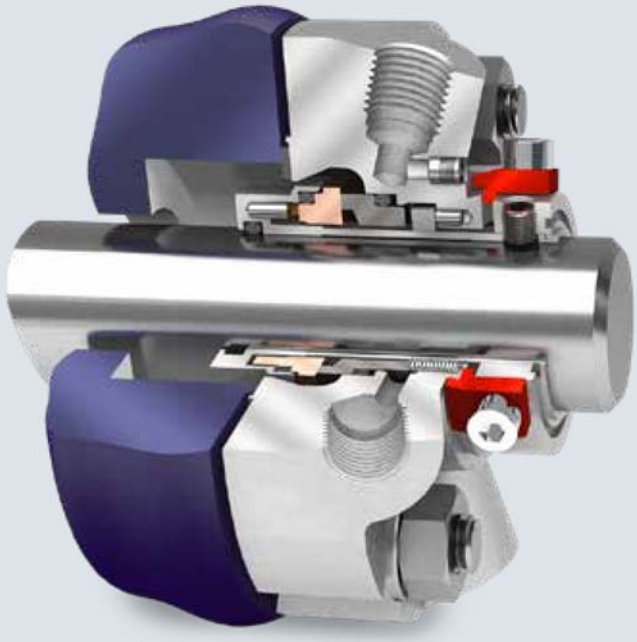
Dimensions

Shaft diameter:	24 – 160 mm
	1“ – 6 ¼“
	Special sizes on enquiry

Bill of materials

Item	Description	Material
1.1	Sleeve	1.4571
1.2	Gland	1.4571
1.4	Adjusting ring	1.4571
1.6	Circlip	1.4310
2.1	Dynamic seal face	SC/SSIC/TC
2.2	Stationary seal face	CA/SC/SSIC/TC
3.1, 3.2, 3.3	O-ring	FKM, EPDM, Kalrez®, PTFE,...
3.10	Flat gasket	Klingersil® C-4300
4.1	Centering piece	Al
4.3	Cheesehead screw	A2
4.6	Threaded pin	A4
5.1	Spring	2.4610

Other materials on enquiry!



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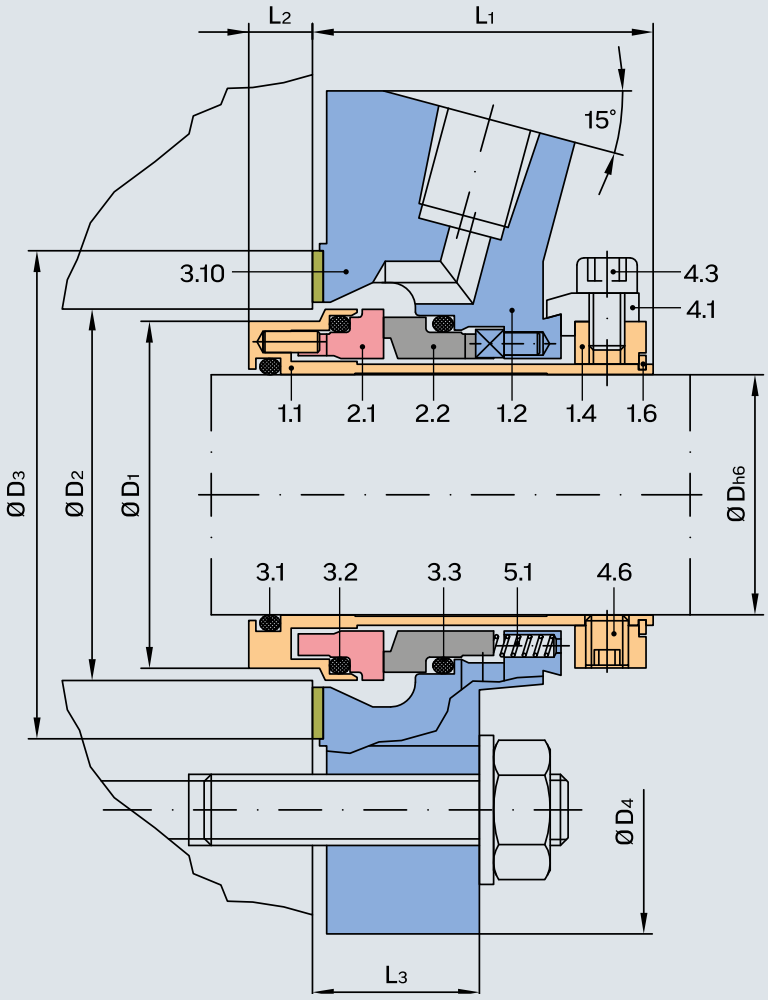
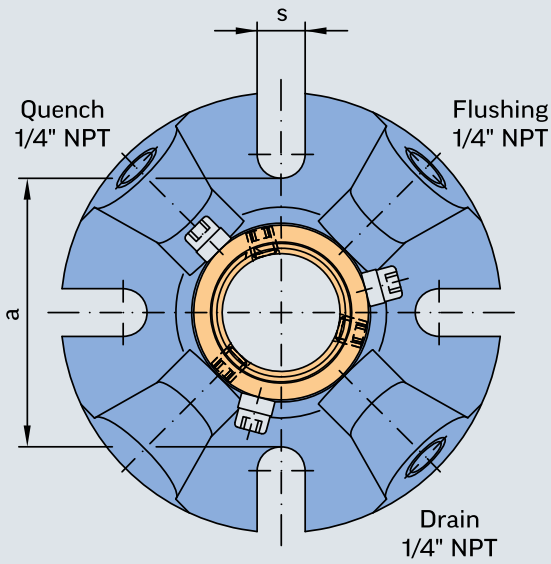
Data sheet





Dimension table Ø 24 – 45 millimetres

D_{h6}	D_1	D_2 min.	D_2 max.	D_3	D_4	L_1	L_2	L_3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
24	40	42	52	60	104	48	9	24	62	12.5	120	127	127
25	40	42	52	60	104	48	9	24	62	12.5	120	127	127
28	43	45	52	60	104	48	9	24	62	12.5	122	129	129
30	45	47	57	65	104	48	9	24	67	12.5	123	130	130
32	47	49	57	65	104	48	9	24	67	12.5	124	131	131
33	47	49	57	65	104	48	9	24	67	12.5	125	131	131
35	50	52	60	68	110	48	9	24	70	12.5	126	133	133
38	53	55	65	73	125	48	9	24	75	14.7	128	136	136
40	55	57	65	73	125	48	9	24	75	14.7	130	137	137
42	57	59	70	78	133	48	9	24	80	14.7	131	138	138
43	58	60	70	78	133	48	9	24	80	14.7	132	138	138
45	60	62	72	80	140	48	9	24	82	14.7	133	140	140

Mechanical seal
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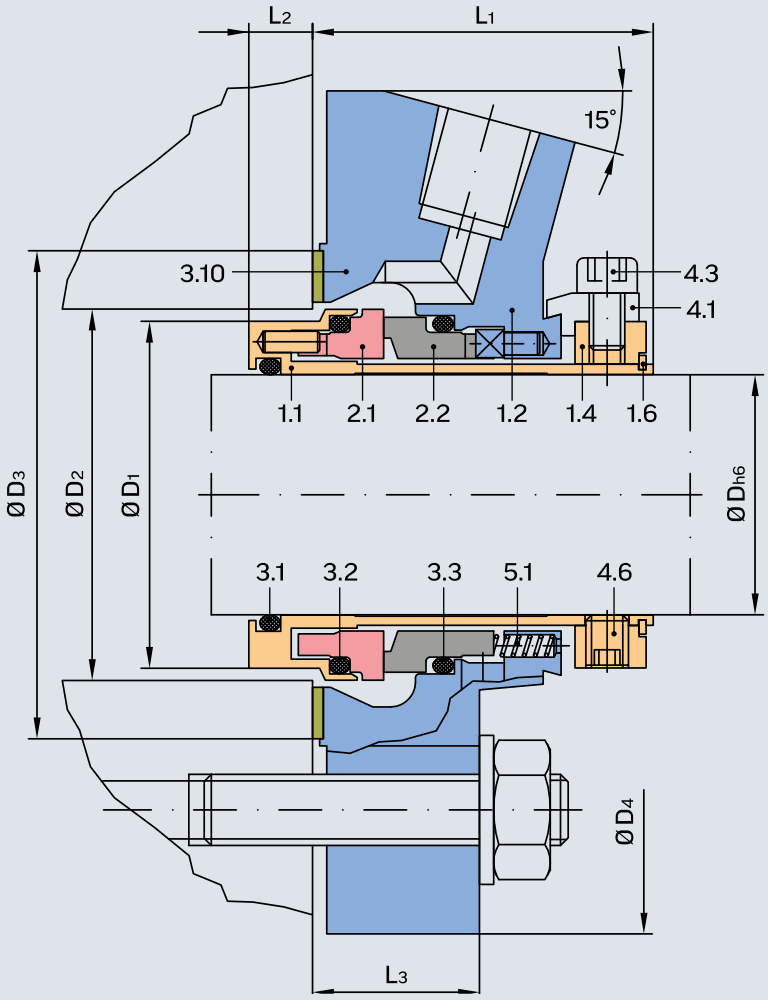

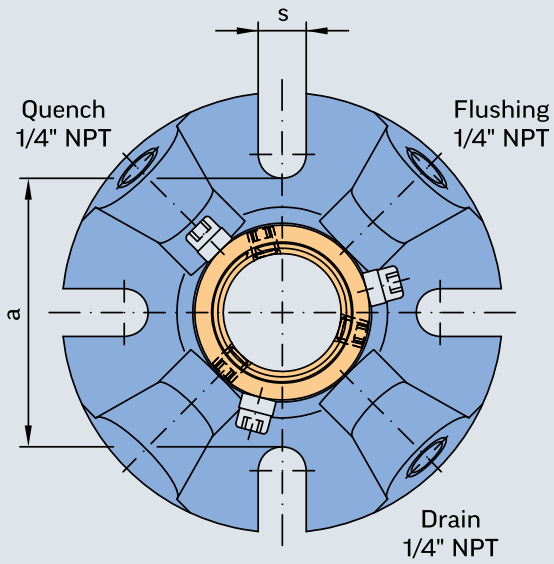

Dimension table Ø 48 – 70 millimetres

Dh6	D1	D2 min.	D2 max.	D3	D4	L1	L2	L3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
48	63	65	72	80	140	48	9	24	82	14.7	135	142	142
50	65	67	77	85	140	48	9	24	87	14.7	136	143	143
53	68	70	82	90	150	48	9	24	92	17.5	138	145	145
55	70	72	82	90	150	48	9	24	92	17.5	139	146	146
58	73	75	90	98	160	48	9	24	100	17.5	141	148	148
60	75	77	90	98	160	48	9	24	100	17.5	142	149	149
63	78	80	95	103	165	48	9	24	105	17.5	144	150	150
65	80	82	95	103	165	48	9	24	105	17.5	145	151	151
68	83	85	110	118	180	48	9	24	120	17.5	147	151	151
70	85	87	110	118	180	48	9	24	120	17.5	149	152	152

Mechanical seal
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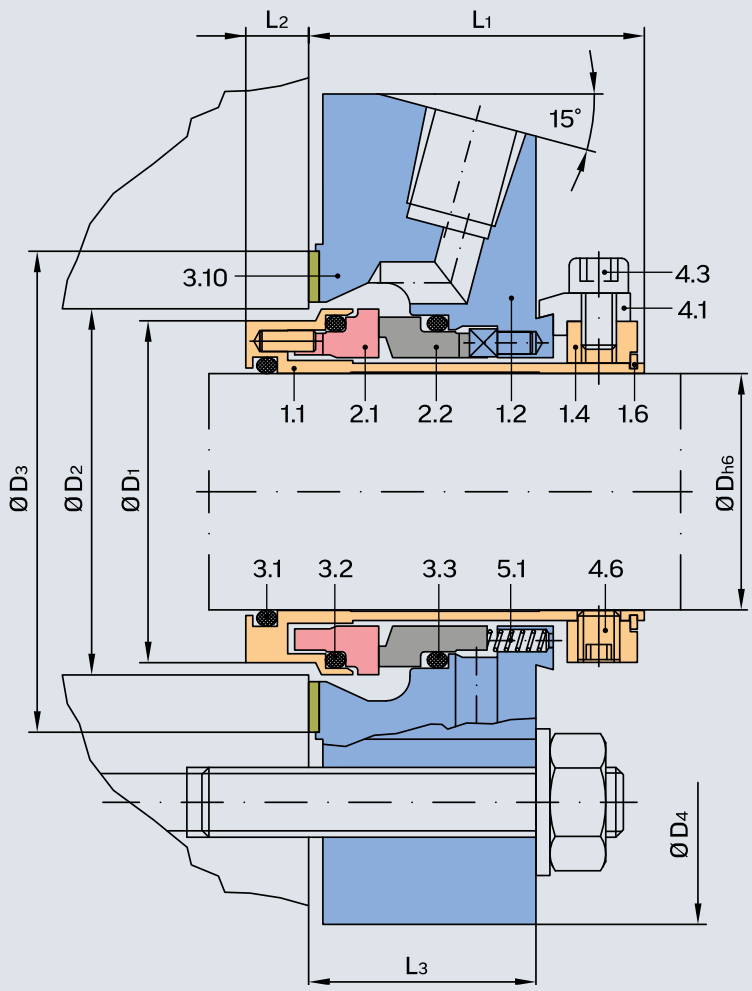
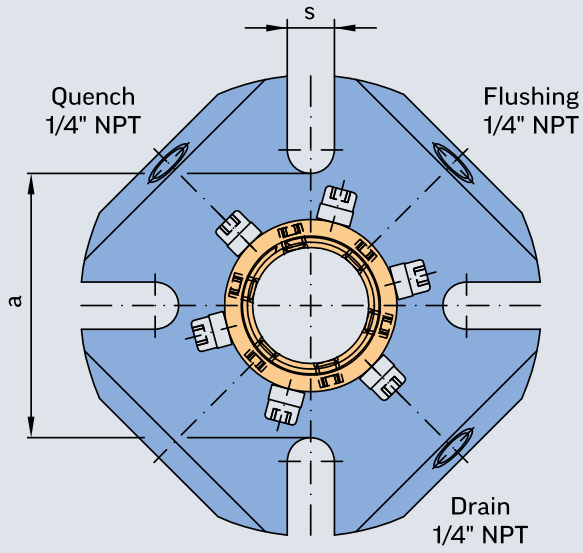
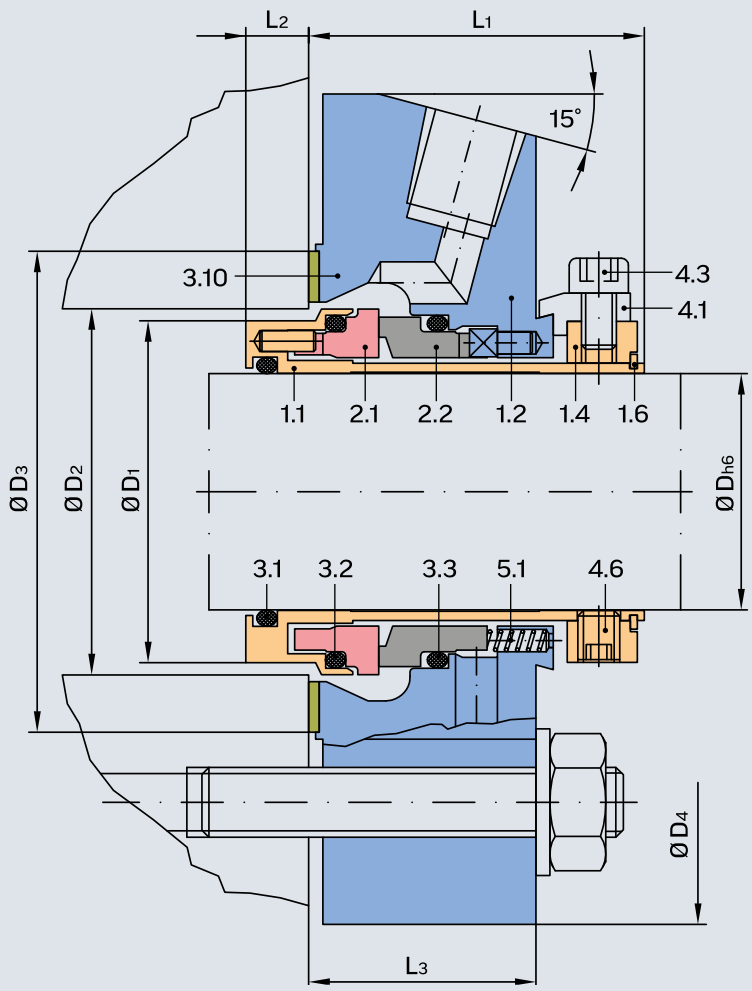


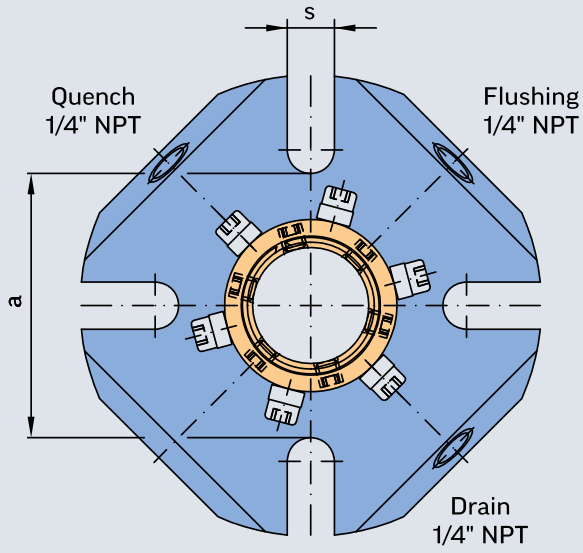


Dimension table Ø 75 – 130 millimetres

D_{h6}	D_1	D_2 min.	D_2 max.	D_3	D_4	L_1	L_2	L_3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
75	95	97	115	123	190	54	8	38.5	125	17.5	234	238	238
80	100	102	120	128	190	54	8	38.5	130	17.5	236	240	240
85	105	107	125	133	220	54	8	38.5	135	21.5	237	242	242
90	110	112	130	138	220	54	8	38.5	140	21.5	239	243	243
95	115	117	135	143	220	54	8	38.5	145	21.5	240	245	245
100	120	122	140	148	220	54	8	38.5	150	21.5	242	246	246
105	125	128	145	153	240	54	8	38.5	155	21.5	244	248	248
110	130	133	150	158	240	54	8	38.5	160	21.5	245	250	250
115	135	138	155	163	240	54	8	38.5	165	21.5	247	251	251
120	140	143	160	168	240	54	8	38.5	170	21.5	248	253	253
125	145	148	165	173	260	54	8	38.5	175	21.5	250	254	254
130	150	153	170	178	260	54	8	38.5	180	21.5	251	256	256

Mechanical seal
Type 301
Data sheet





Dimension table Ø 135 – 160 millimetres

Dh6	D1	D2 min.	D2 max.	D3	D4	L1	L2	L3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
135	155	158	175	183	260	54	8	38.5	185	21.5	253	258	258
140	160	163	180	188	260	54	8	38.5	190	21.5	255	258	258
145	165	168	185	193	280	54	8	38.5	195	21.5	256	259	259
150	170	173	190	198	280	54	8	38.5	200	21.5	258	260	260
155	175	178	195	203	280	54	8	38.5	205	21.5	259	261	261
160	180	183	200	208	280	54	8	38.5	210	21.5	260	261	261

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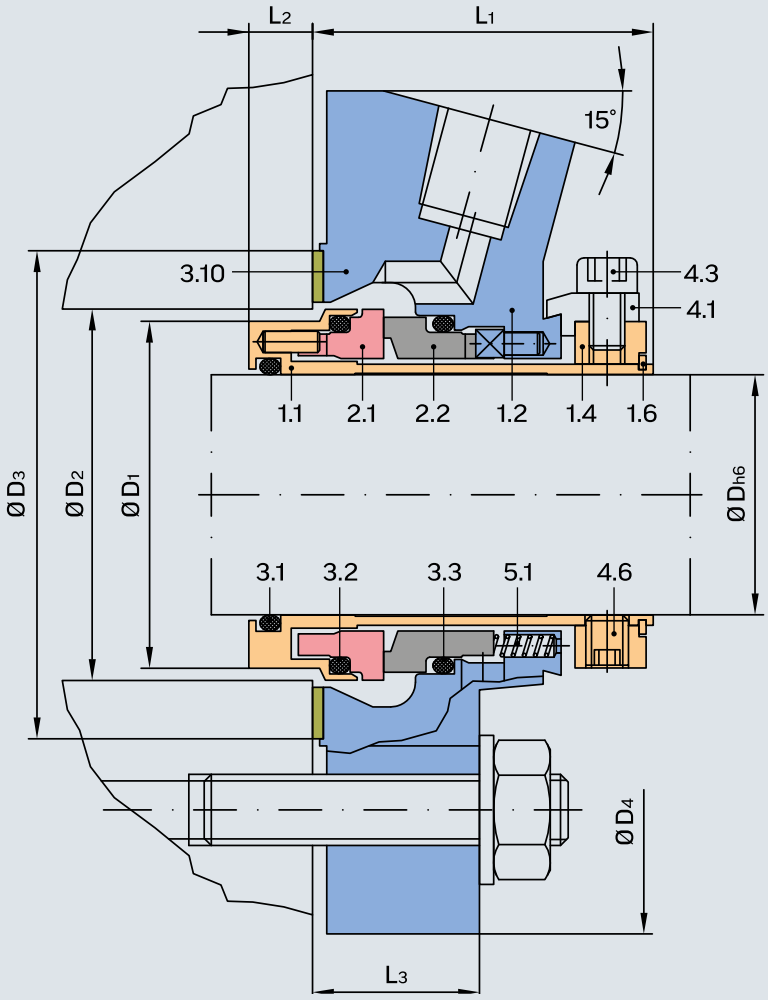
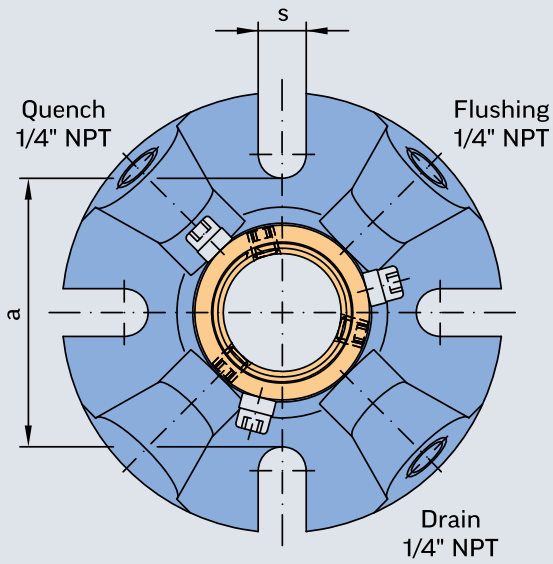
Data sheet





Dimension table Ø 1 – 2 ¼ inches

Dh6	D1	D2 min.	D2 max.	D3	D4	L1	L2	L3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
1	1.575	1.625	2.047	2.362	4.094	1.890	0.354	0.945	2.441	0.492	120	127	127
1 1/8	1.693	1.750	2.047	2.362	4.094	1.890	0.354	0.945	2.441	0.492	122	129	129
1 1/4	1.850	1.875	2.244	2.559	4.094	1.890	0.354	0.945	2.638	0.492	124	131	131
1 3/8	1.969	2.000	2.362	2.677	4.331	1.890	0.354	0.945	2.756	0.492	126	133	133
1 7/16	2.087	2.250	2.559	2.874	4.921	1.890	0.354	0.945	2.953	0.579	127	136	136
1 1/2	2.087	2.250	2.559	2.874	4.921	1.890	0.354	0.945	2.953	0.579	128	136	136
1 5/8	2.244	2.375	2.756	3.071	5.236	1.890	0.354	0.945	3.150	0.579	131	138	138
1 3/4	2.362	2.500	2.835	3.150	5.512	1.890	0.354	0.945	3.228	0.579	133	140	140
1 7/8	2.480	2.625	2.835	3.150	5.512	1.890	0.354	0.945	3.228	0.579	135	142	142
2	2.559	2.750	3.031	3.346	5.512	1.890	0.354	0.945	3.425	0.579	136	143	143
2 1/8	2.677	2.875	3.150	3.465	5.906	1.890	0.354	0.945	3.622	0.689	138	145	145
2 1/4	2.874	3.000	3.543	3.858	6.102	1.890	0.354	0.945	3.937	0.689	140	147	147

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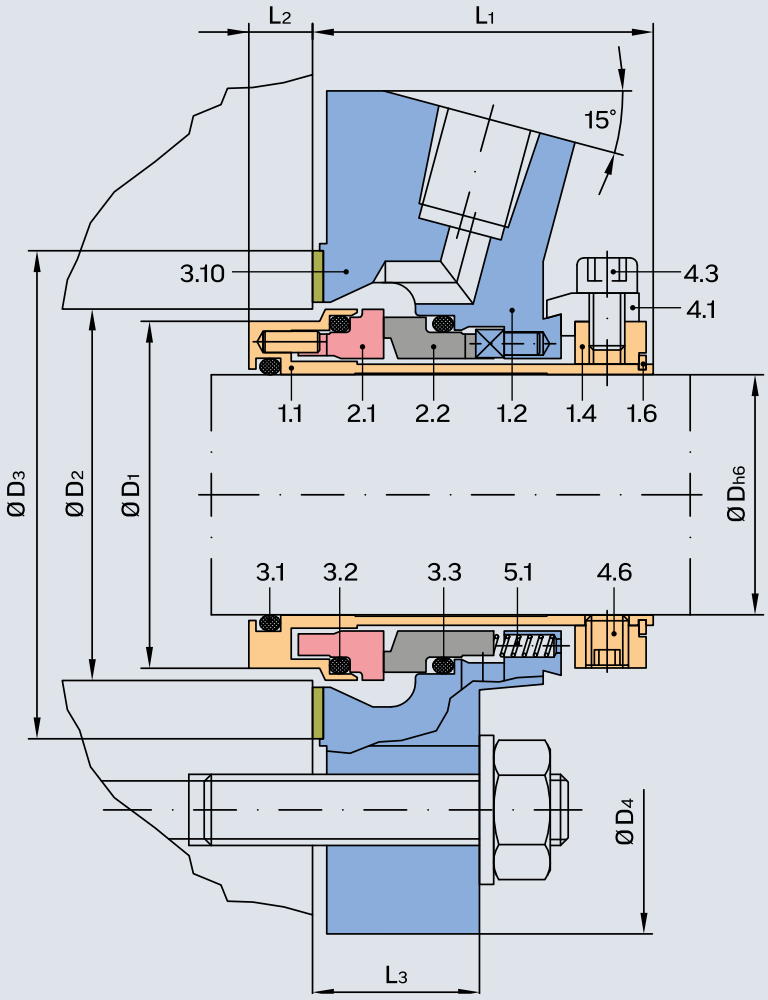

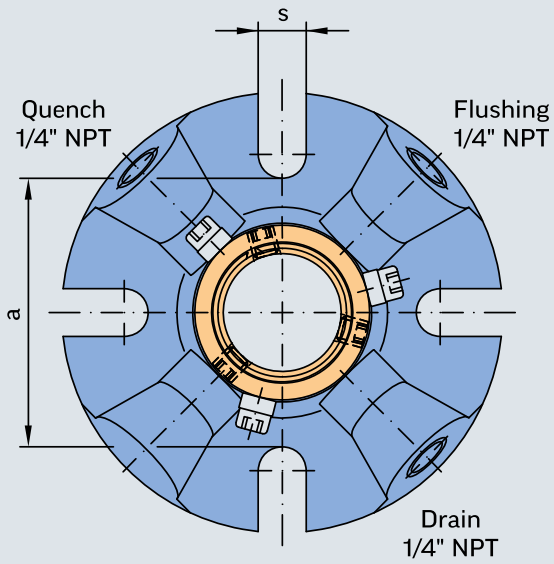

Dimension table Ø 2⅜ – 2¾ inches

Dh6	D1	D2 min.	D2 max.	D3	D4	L1	L2	L3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
2 ⅜	2.953	3.125	3.543	3.858	6.299	1.890	0.354	0.945	3.937	0.689	142	149	149
2 ½	3.071	3.250	3.661	3.976	6.469	1.890	0.354	0.945	4.055	0.689	144	150	150
2 ⅝	3.268	3.625	4.331	4.646	6.693	1.890	0.354	0.945	4.724	0.689	146	151	151
2 ¾	3.346	3.750	4.331	4.646	7.087	1.890	0.354	0.945	4.724	0.689	149	152	152

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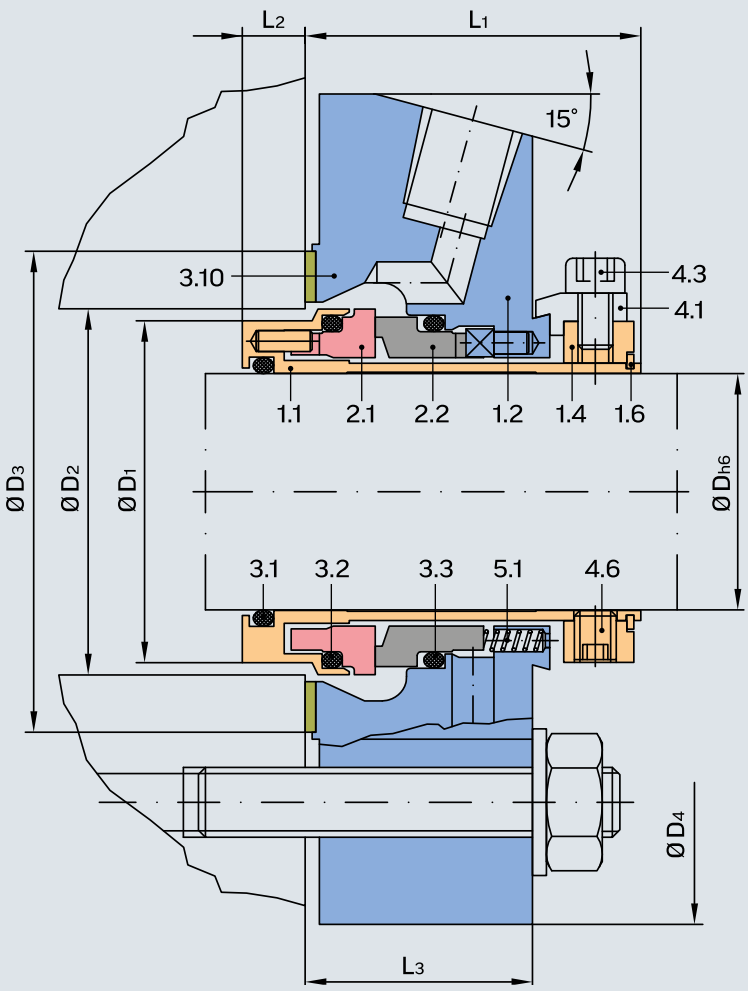

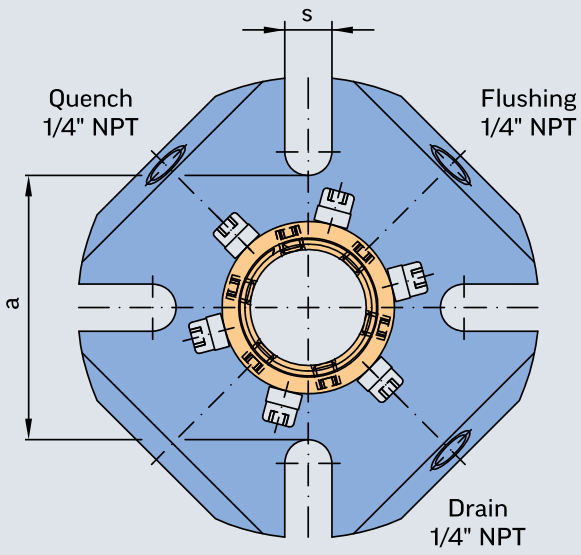

Dimension table Ø 2⅞ – 4¼ inches

Dh6	D1	D2 min.	D2 max.	D3	D4	L1	L2	L3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
2 ⅞	3.661	3.875	4.449	4.764	7.480	2.126	0.315	1.516	4.843	0.689	233	238	238
3	3.740	4.000	4.528	4.843	7.480	2.126	0.315	1.516	4.921	0.689	234	238	238
3 ⅛	3.937	4.125	4.724	5.039	7.480	2.126	0.315	1.516	5.118	0.689	236	240	240
3 ¼	4.055	4.250	4.842	5.157	8.661	2.126	0.315	1.516	5.236	0.846	236	241	241
3 ⅜	4.134	4.375	4.921	5.236	8.661	2.126	0.315	1.516	5.315	0.846	237	242	242
3 ½	4.331	4.500	5.118	5.433	8.661	2.126	0.315	1.516	5.512	0.846	239	243	243
3 ⅝	4.409	4.625	5.197	5.512	8.661	2.126	0.315	1.516	5.591	0.846	239	244	244
3 ¾	4.528	4.750	5.315	5.630	8.661	2.126	0.315	1.516	5.709	0.846	240	245	245
3 ⅞	4.724	4.875	5.512	5.827	8.661	2.126	0.315	1.516	5.906	0.846	241	246	246
4	4.724	5.000	5.512	5.827	8.661	2.126	0.315	1.516	5.906	0.846	242	246	246
4 ⅛	4.921	5.039	5.709	6.024	9.449	2.126	0.315	1.516	6.102	0.846	243	248	248
4 ¼	5.118	5.236	5.905	6.220	9.449	2.126	0.315	1.516	6.299	0.846	244	250	250

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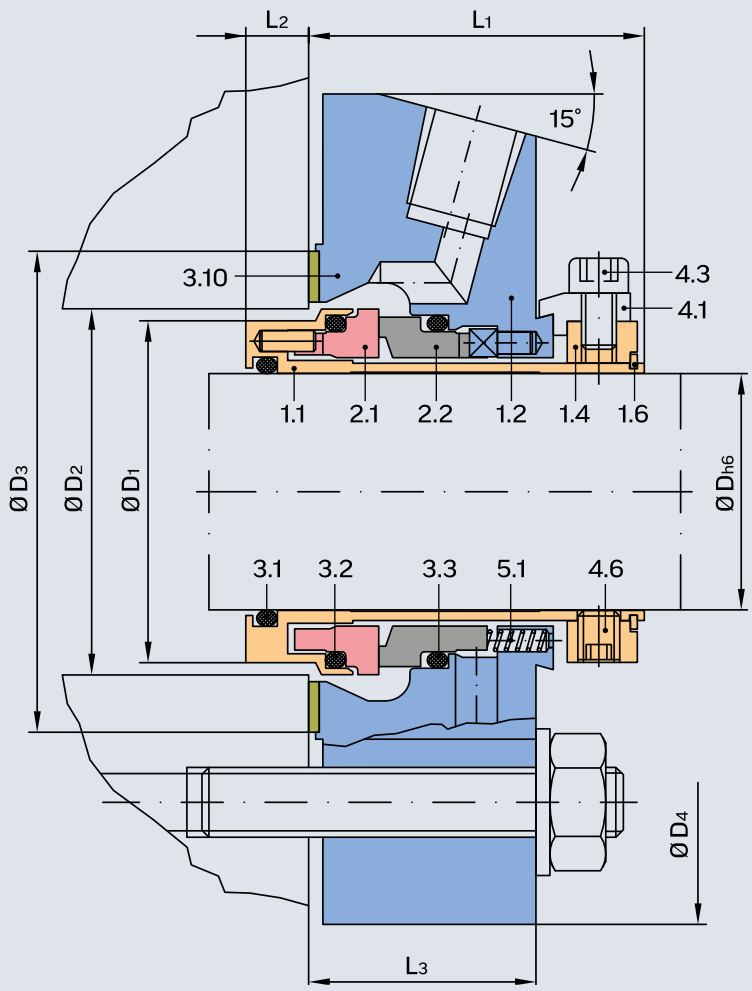

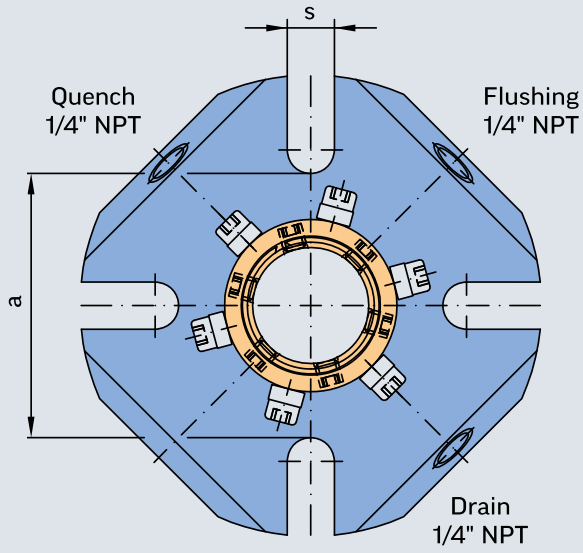

Dimension table Ø 4⅜ – 5¾ inches

Dh6	D1	D2 min.	D2 max.	D3	D4	L1	L2	L3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
4 ⅜	5.118	5.236	5.905	6.220	9.449	2.126	0.315	1.516	6.299	0.846	245	250	250
4 ½	5.315	5.433	6.102	6.417	9.449	2.126	0.315	1.516	6.496	0.846	246	251	251
4 ⅝	5.512	5.630	6.299	6.614	9.449	2.126	0.315	1.516	6.693	0.846	247	253	253
4 ¾	5.512	5.630	6.299	6.614	9.449	2.126	0.315	1.516	6.693	0.846	248	253	253
4 ⅞	5.709	5.827	6.496	6.811	10.236	2.126	0.315	1.516	6.890	0.846	249	254	254
5	5.906	6.024	6.693	7.008	10.236	2.126	0.315	1.516	7.087	0.846	250	256	256
5 ⅛	5.906	6.024	6.693	7.008	10.236	2.126	0.315	1.516	7.087	0.846	251	256	256
5 ¼	6.102	6.220	6.890	7.205	10.236	2.126	0.315	1.516	7.283	0.846	252	258	258
5 ⅜	6.102	6.220	6.890	7.205	10.236	2.126	0.315	1.516	7.283	0.846	253	258	258
5 ½	6.299	6.417	7.087	7.402	10.236	2.126	0.315	1.516	7.480	0.846	254	258	258
5 ⅝	6.496	6.614	7.283	7.598	11.024	2.126	0.315	1.516	7.677	0.846	255	259	259
5 ¾	6.496	6.614	7.283	7.598	11.024	2.126	0.315	1.516	7.677	0.846	256	259	259

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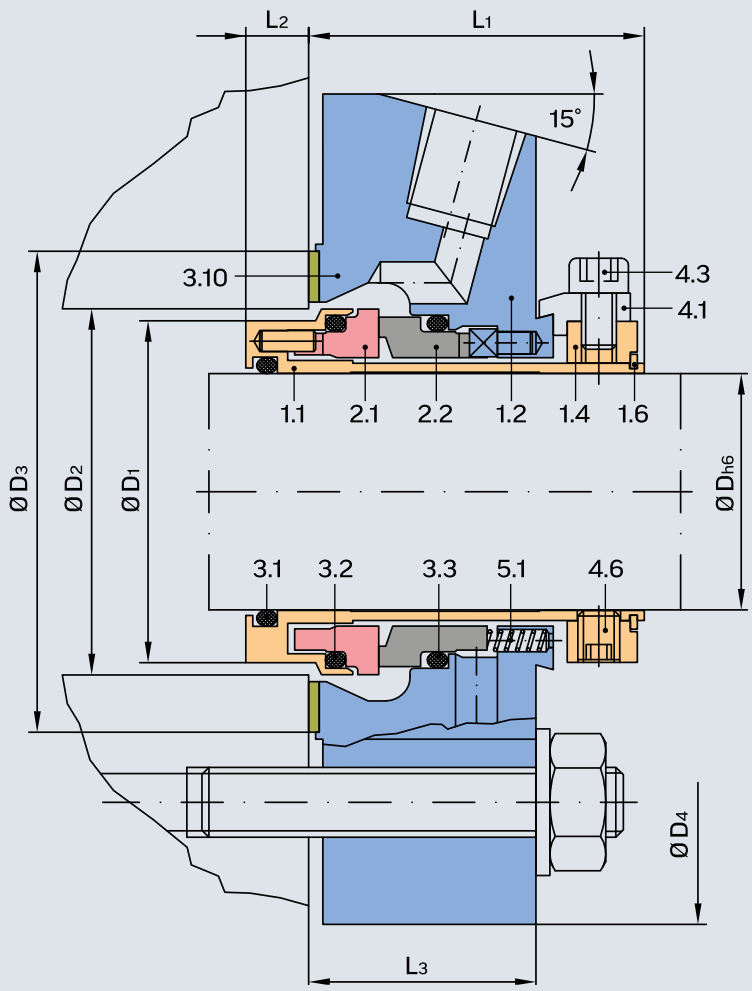

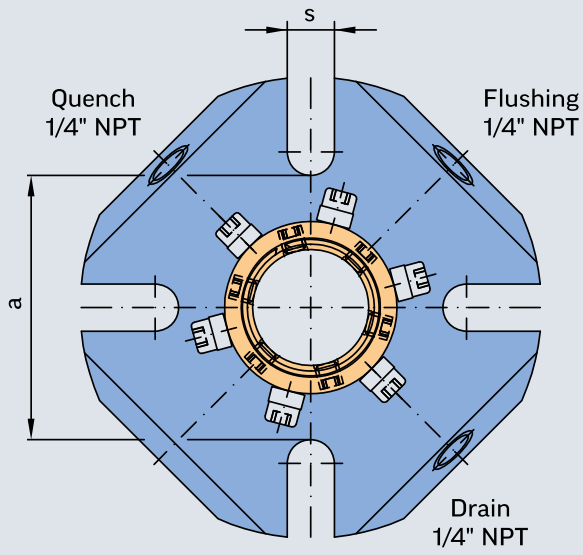

Dimension table Ø 5⅞ – 6¼ inches

Dh6	D1	D2 min.	D2 max.	D3	D4	L1	L2	L3	a	s	O-rings DASH no.		
											3.1	3.2	3.3
5 ⅞	6.693	6.811	7.480	7.795	11.024	2.126	0.315	1.516	7.874	0.846	257	260	260
6	6.890	7.008	7.677	7.992	11.024	2.126	0.315	1.516	8.071	0.846	258	261	261
6 ⅛	6.890	7.008	7.677	7.992	11.024	2.126	0.315	1.516	8.071	0.846	259	261	261
6 ¼	7.087	7.205	7.874	8.189	11.024	2.126	0.315	1.516	8.268	0.846	259	261	261

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