SHARK SLURRY-S

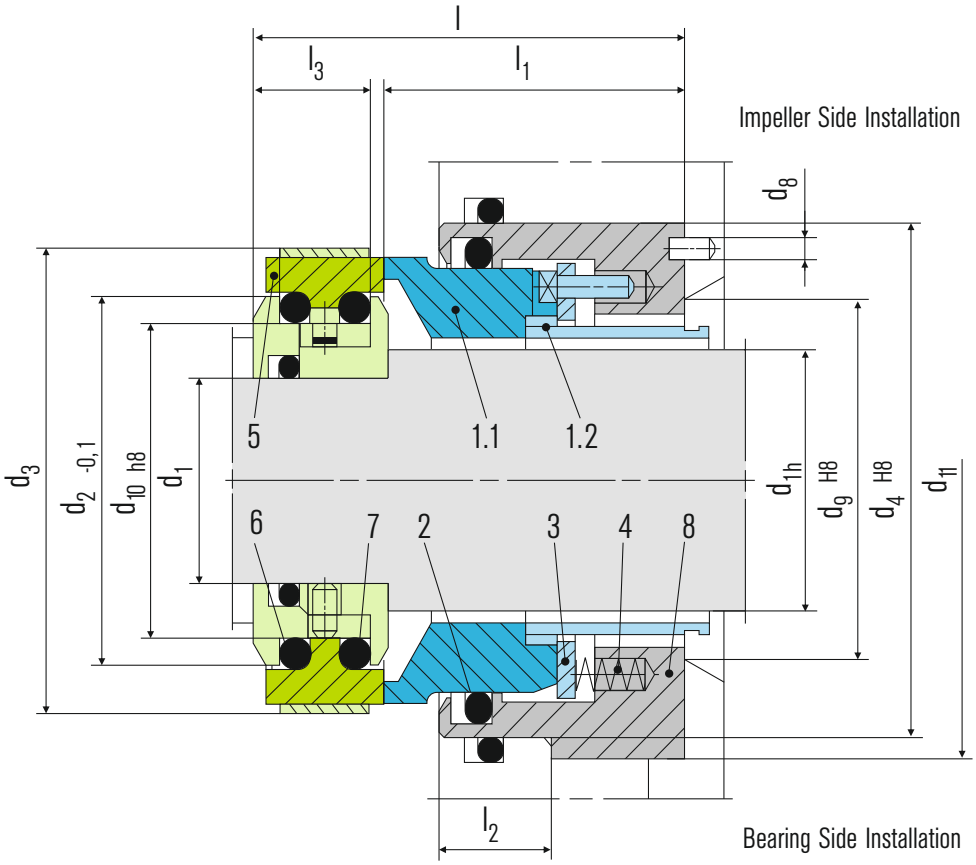
Cartridge Slurry Seals

Product Description

1. Balanced
2. Dual seal as cartridge unit also available
3. Independent of direction of rotation
4. Multiple springs stationary
5. Seat arranged directly behind the impeller
6. Seat rotating
7. Single seal
8. Spring protection sleeve
9. Variant as cartridge with/without guide sleeve for application with/without quench

Technical Features

1. Accommodates shaft deflections due to stationary design
2. Especially for application for medias containing solids
3. No damage of the shaft by dynamically loaded O-Ring
4. Operation under vacuum without seat locking possible
5. Pumping screw for increased circulation available
6. Springs are protected from product and leakage



Typical Industrial Applications

Water and waste water technology
Dirty, abrasive and solids containing media
Dredger pumps
Mining industry
Oil and gas industry
Oil sand extraction plants (FGD)
Power plant technology
Pulp and paper industry
Sewage water pumps
Suspension pumps of flue-gas desulphurization

Performance Capabilities

Sizes: dN = Up to 270 mm (Up to 10.625")
Pressure: p1* = 0 to 230 PSIG
Temperature: t = -4 °F to +320 °F
Speed = 33 ft/s

Standards

EN 12756

Materials

Stationary Seal Face: Silicon carbide (S1, S2)
Rotating Seal Face: Silicon carbide (S1, S2)

Notes

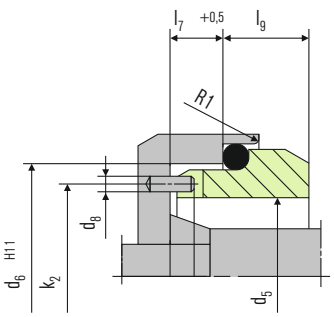
Direction of installation:

From the impeller side: Installs from the product side of the pump

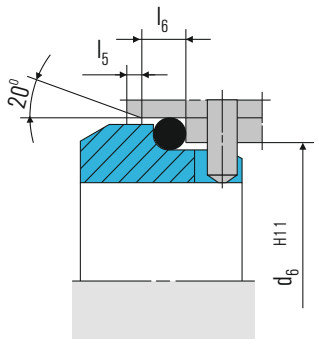
From the bearing side: Installs from the atmospheric side of the pump

Item	Part no.	Description
1.1	472	Seal face
1.2	520	Sleeve
2	412.1	O-Ring
3	474	Thrust ring
4	477	Spring
5	475	Seat (G11)
6	412.2	O-Ring
7	412.3	O-Ring
8	441	Housing
DIN 24250		

Stationary Seats



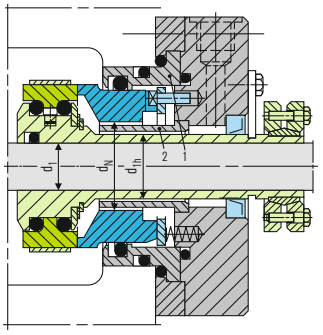
G2
(dN 36 ... 90 mm)



G9
(dN 95 ... 180 mm)

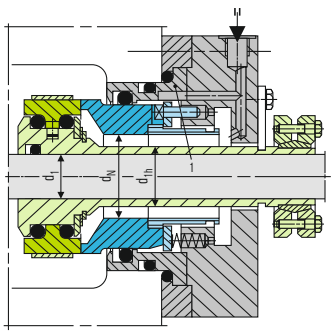
SHARK SEALS

Design Variations



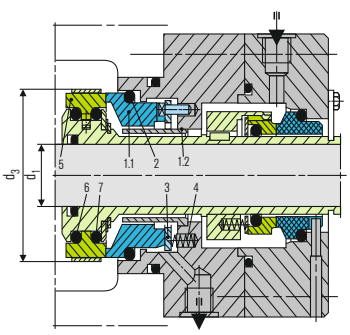
SLURRY-S-L

Cartridge-type single seal with guide sleeve (Item no. 2) for use with quench. Insert (Item no.1) either metal or silicon carbide.



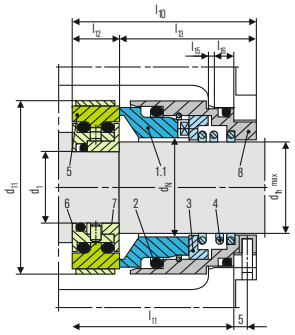
SLURRY-S-

Cartridge-type single seal. Insert (Item no. 1) either metal or silicon carbide. Optional without maintenance rinsing.



SLURRY-D

Double seal in cartridge design for operation in barrier or buffer pressure (does not open if barrier pressure fails), available alternatively with a pumping screw for a higher rate of circulation. Torque transmission e.g. by shrink disk.



SLURRY-S-EN

Single seal with cylindrical spring and type G76 seat. For installation in covers with installation dimensions according to EN 12756 B or U. Installation length l_{11} corresponds to max. l_{1k}. Intermediate sizes on request.

Dimensional Data

Dimensions in mm

d_1	d_{1h}	d_N	d_2	d_3	d_4	d_5	d_6	d_7	d_8	d_9	d_{10}	d_{11} +0.2min	l	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_9	k_2	t	t_1
20	28	36	47.1	65	70	46	56	63	4	40	38	75	75	53	20	19.5	17	10.5	6	9	8	51	4.5	3
25	33	41	52.1	70	75	51	62	70	4	45	43	80	75	53	20	19.5	17	10.5	6	9	9.5	56.5	4.5	3
28	38	46	57.1	75	80	56	67	75	4	50	48	85	75	53	20	19.5	17	10.5	6	9	9.5	61.5	4.5	3
33	43	51	62.1	80	85	61	72	80	4	55	53	90	75	53	20	19.5	17	10.5	6	9	10.5	66.5	4.5	3
38	48	56	67.1	85	90	66	77	85	4	60	58	95	75	53	20	19.5	17	10.5	6	9	10.5	71.5	4.5	3
43	53	61	72.1	90	95	69	81	90	4	65	63	100	75	53	20	19.5	17	10.5	7	9	11	75	4.5	3
48	58	66	77.1	95	100	76	88	97	4	70	68	105	75	53	20	19.5	17	10.5	7	9	11.5	82	4.5	3
53	63	71	82.1	101	105	81	95	105	4	75	73	110	75	53	20	19.5	17	10.5	7	9	11.5	88	4.5	3
55	65	75	87.1	106	110	86	100	110	4	79	78	115	75	53	20	19.5	17	10.5	7	9	11.5	93	4.5	3
60	70	80	92.1	111	115	91	105	115	4	84	83	120	75	53	20	19.5	17	10.5	7	9	13	98	4.5	3
65	75	85	97.1	116	120	96	110	120	4	89	88	125	75	53	20	19.5	17	10.5	7	9	13	103	4.5	3
70	80	90	102.1	121	125	101	115	125	4	94	93	130	75	53	20	19.5	17	10.5	7	9	13	108	4.5	3
75	85	95	107.1	126	130	107	122.2	134.3	5	99	98	135	75	53	20	19.5	17	10.5	10	12	20	114.5	7	3
80	90	100	112.1	131	135	107	122.2	134.3	5	104	103	140	75	53	20	19.5	17	10.5	10	12	20	114.5	7	3
90	100	110	126.1	147	155	117	136.2	148.3	5	116	117	163	98	73	30	22	19	16.0	10	12	20	126.5	7	4
100	110	120	136.1	157	165	132	146.2	158.3	5	126	127	173	98	73	30	22	19	16.0	10	12	20	139	7	4
110	120	130	145.1	167	175	142	156.2	168.3	5	136	136	183	98	73	30	22	19	16.0	10	12	20	149	7	4
120	130	140	154.1	177	185	152	168.2	180.3	5	146	145	193	98	73	30	22	19	16.0	10	12	22	160	7	4
130	140	150	163.9	188	195	162	178.2	190.3	5	156	155	203	98	73	30	22	19	16.0	12	12	24	170	7	4
140	150	160	174.9	189	205	172	188.2	200.3	5	166	166	213	98	73	30	22	19	16.0	12	12	24	180	7	4
160	170	180	193.9	220	230	187	212.5	224.3	5	186	185	238	98	73	30	22	19	16.0	12	12	28	199.5	7	4
180	190	200	213.9	240	255	-	-	-	-	206	205	265	98	73	30	22	19	16.0	-	-	-	-	-	4
190	200	210	231.9	255	270	-	-	-	-	218	220	280	115	83	40	28.35	24.7	19.0	-	-	-	-	-	5
200	210	220	241.9	265	280	-	-	-	-	228	230	290	115	83	40	28.35	24.7	19.0	-	-	-	-	-	5
210	220	230	251.9	275	290	-	-	-	-	238	240	300	115	83	40	28.35	24.7	19.0	-	-	-	-	-	5
220	230	240	261.9	285	300	-	-	-	-	248	250	310	115	83	40	28.35	24.7	19.0	-	-	-	-	-	5
230	240	250	271.9	295	310	-	-	-	-	258	260	320	115	83	40	28.35	24.7	19.0	-	-	-	-	-	5
250	260	270	291.9	315	330	-	-	-	-	278	280	340	115	83	40	28.35	24.7	19.0	-	-	-	-	-	5

SLURRY-S-EN Dimensional Data

Dimensions in mm

d_N	d_1h	d_1	d_{11}	d_{12}	d_{13}	d_{14}	l_{10}	l_{11}	l_{12}	l_{13}	l_{15}	l_{16}
35	33	20	56	42	48	3	57.7	49.2	15	42.7	2	5
43	39	27	67	54	61	4	57.7	49.2	15	42.7	2	6
54	50	35	78	65	73	4	59.8	52.1	15.5	44.3	2.5	6
66	60	47	91	77	85	4	66	58	16.5	49.5	2.5	6
77	72	55	103	88	97	4	74.5	66	17.5	57	2.5	7
100	90	70	125	110	120	4	82	73	21	61	3	7

Dimensions for shaft diameters from 250 mm on request.
inch size available from size 0.750 to 10.625
Note: Additional technical & dimensional information will be provided on request.