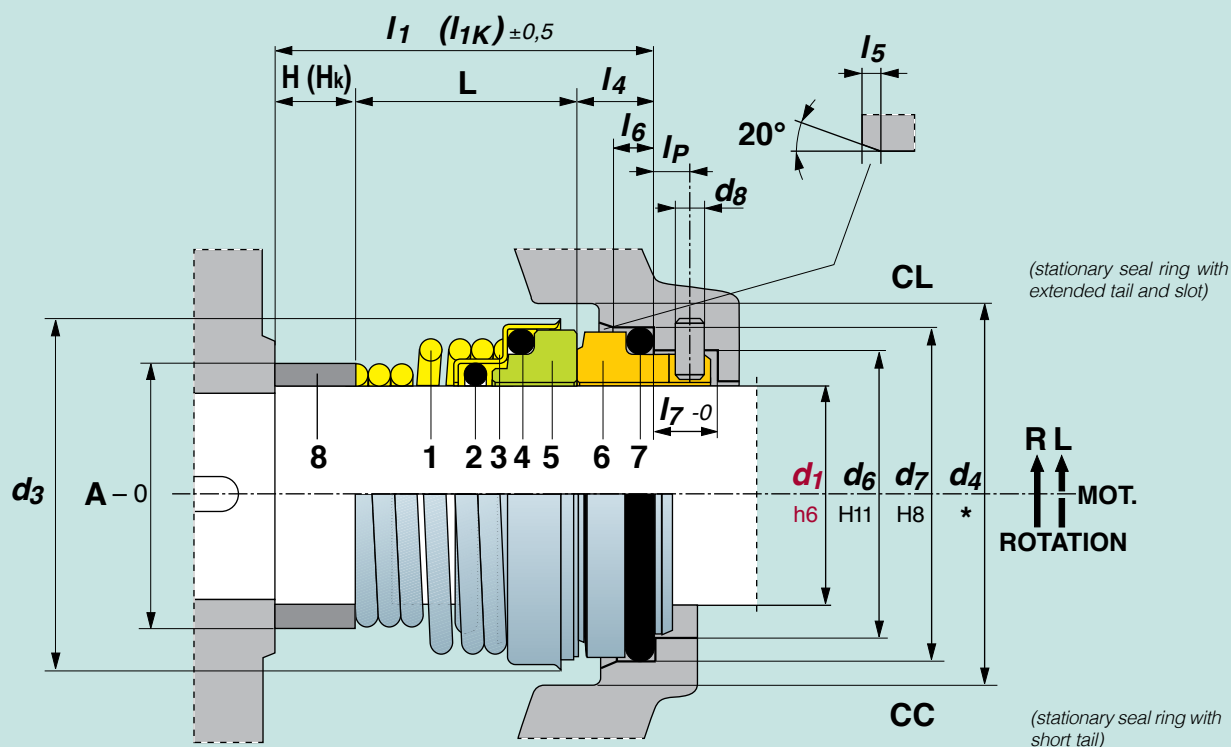


TYPE 3



ROTEN

TYPE 3

d_1	d_6	d_7	d_3	d_4	L_1	L	L_4	L_6	L_5	d_8	L_7	L_p
10	14	18,1	20	21	20,5	15	5,5	2,8	1,2	2	6,2	3,5
11	16,5	20,6	22	24	23,5	18	5,5	2,8	1,2	2	6,2	3,5
12	16,5	20,6	22	24	23,5	18	5,5	2,8	1,2	2	6,2	3,5
13	19	23,1	25	27	28	22	6	2,8	1,2	2	6,7	4
14	19	23,1	25	27	28	22	6	2,8	1,2	2	6,7	4
15	21	26,9	26	31	29	22	7	3,7	1,3	2,5	7,6	4
16	21	26,9	26	31	30	23	7	3,7	1,3	2,5	7,6	4
17	21	26,9	26	31	30	23	7	3,7	1,3	2,5	7,6	4
18	25	30,9	33	36	32	24	8	3,7	1,3	3	8,5	4,5
19	25	30,9	33	36	33	25	8	3,7	1,3	3	8,5	4,5
20	25	30,9	33	36	33	25	8	3,7	1,3	3	8,5	4,5
21	30	35,4	36	41	33	25	8	3,7	1,8	3,5	8,5	5
22	30	35,4	36	41	33	25	8	3,7	1,8	3,5	8,5	5
23	30	35,4	38	41	35	27	8	3,7	1,8	3,5	8,5	5
24	30	35,4	38	41	35	27	8	3,7	1,8	3,5	8,5	5
25	33	38,2	40	45	35,5	27	8,5	3,7	1,8	4	9,1	5
28	38	43,3	42	50	38	29	9	3,7	1,8	4	9,6	6
29	38	43,3	46	50	39	30	9	3,7	1,8	4	9,6	6
30	38	43,3	46	50	39	30	9	3,7	1,8	4	9,6	6
32	38	43,3	46	50	39	30	9	3,7	1,8	4	9,6	6
33	45	53,5	48	54	50,5	39	11,5	5,4	2,1	5	12	7,5
35	45	53,5	50	56	50,5	39	11,5	5,4	2,1	5	12	7,5
38	52	60,5	56	62	50,5	39	11,5	5,4	2,1	5	12	7,5
40	52	60,5	58	64	50,5	39	11,5	5,4	2,1	5	12	7,5
43	52	60,5	59	65	50,5	39	11,5	5,4	2,1	5	12	7,5
45	57	65,5	61	70	52,5	41	11,5	5,4	2,1	5	13	8,5
48	57	65,5	66	72	52,5	41	11,5	5,4	2,1	5	13	8,5
50	64	72,5	67	75	56,5	45	11,5	5,4	2,1	5	13	8,5

Dimensions in mm.

NB: The spacer is never to be considered for ROTEN 3.

UNITEN

EN 12756

TYPE 3

3K

d_1	d_6	d_7	d_3	d_4	L_1	L	L_4	L_6	L_5	H	A	d_8	L_7	L_p	L_{1k}	L	H_k
10	17	21	20	22	40	15	7	4	1,5	18	13	3	8,5	5	32,5	15	10,5
12	19	23	22	24	40	18	7	4	1,5	15	15	3	8,5	5	32,5	18	7,5
14	21	25	25	26	40	22	7	4	1,5	11	18	3	8,5	5	35	22	6
16	23	27	26	28	40	23	7	4	1,5	10	20	3	8,5	5	35	23	5
18	27	33	33	34	45	24	10	5	2	11	22	3	9	5	37,5	27,5	—
20	29	35	33	36	45	25	10	5	2	10	25	3	9	5	37,5	27,5	—
22	31	37	36	38	45	25	10	5	2	10	27	3	9	5	37,5	27,5	—
24	33	39	38	40	50	27	10	5	2	13	29	3	9	5	40	30	—
25	34	40	40	41	50	27	10	5	2	13	30	3	9	5	40	30	—
28	37	43	42	44	50	29	10	5	2	11	34	3	9	5	42,5	32,5	—
30	39	45	46	48+	50	30	10	5	2	10	36	3	9	5	42,5	32,5	—
32	42	48	46	48	55	30	10	5	2	15	38	3	9	5	42,5	32,5	—
33	42	48	48	49	55	39	10	5	2	6	42	3	9	5	42,5	32,5	—
35	44	50	50	51	55	39	10	5	2	6	42	3	9	5	42,5	32,5	—
38	49	56	56	58	55	42	13	6	2	—	46	4	9	5	45	32	—
40	51	58	58	60	55	42	13	6	2	—	48	4	9	5	45	32	—
43	54	61	59	63	60	47	13	6	2	—	51	4	9	5	45	32	—
45	56	63	61	65	60	47	13	6	2	—	53	4	9	5	45	32	—
48	59	66	66	68	60	47	13	6	2	—	56	4	9	5	45	32	—
50	62	70	67	70	60	46	14	6	2,5	—	59	4	9	5	47,5	33,5	—

Dimensions in mm.

+ This size is larger than the minimum prescribed by the EN norm

* The size d_4 is considered the minimum dimension for the stuffing box diameter.
Where possible, it is better to have a larger dimension or a conical stuffing box.

This is a particularly economic mechanical seal, highly valuable and with interchangeable components.

The basic pairing Ceramic-Carbon provides **TYPE 3** with a vast field of applications also with dirty liquids. Its metallic parts are in stainless steel and the gaskets may be in various kinds of elastomer, which again widens the range of possible applications. It is produced in large amounts for the most usual shaft diameters, from 10 to 50 mm.

Pump manufacturers as well as installers and users appreciate its technical and construction features and its vast field of applications.

MAX. WORKING CONDITIONS

These depend on: $\varnothing$ shaft, pressure, speed, temperature and fluid to be sealed.

p ≤ 16 bar

t = -35 ÷ 180°C

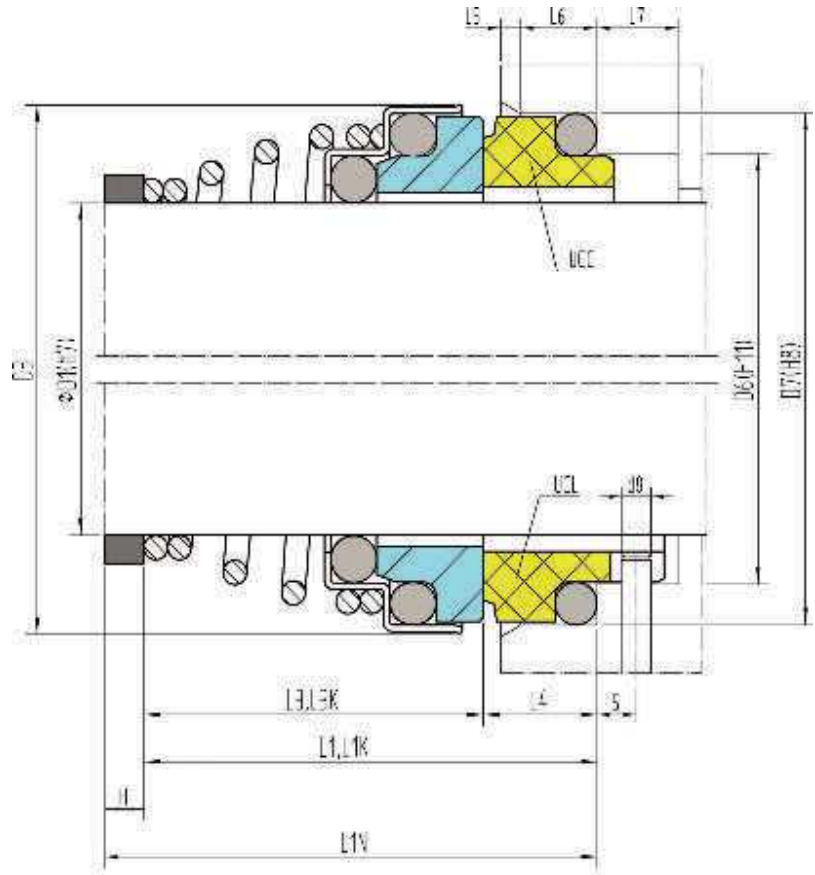
v ≤ 15 m/s



TYPE 3 - 3K		STANDARD MATERIALS							
POS.	COMPONENTS								
1	Self-driving spring	X1							
2	Shaft gasket	B1	E1	N1	P1	W1	Y1		
3	Frame	H1 *	X1						
4	Rotary gasket	B1	E1	N1	P1	W1	Y1		
5	Rotary seal ring	K1	K4	R1	V1	V2	V3	Z1	
6	Stationary seal ring	C4	K1	V1	V2	V3	R1	X3	
7	Stationary gasket	B1	E1	N1	P1	W1	Y1		
8	Spacer (if required)	G1	H1	X1					

* Available up to Ø25 included

Simple mass-produced seal
Conical spring rotating
Massive replaceable seal rings



$$L1 = L3 + L4$$

$$L1K = L3K + L4$$

$$L1N = L3 + H + L4$$

Operating limits:

(look at working conditions page 112)

$p \leq$	12 bar
$t =$	$-35 \div 180^\circ\text{C}$
$v \leq$	15 m/s

Materials:

Rotary: Q, U, V

Stationary: A, B, Q, U

Rubber parts: P, E, V, K, M

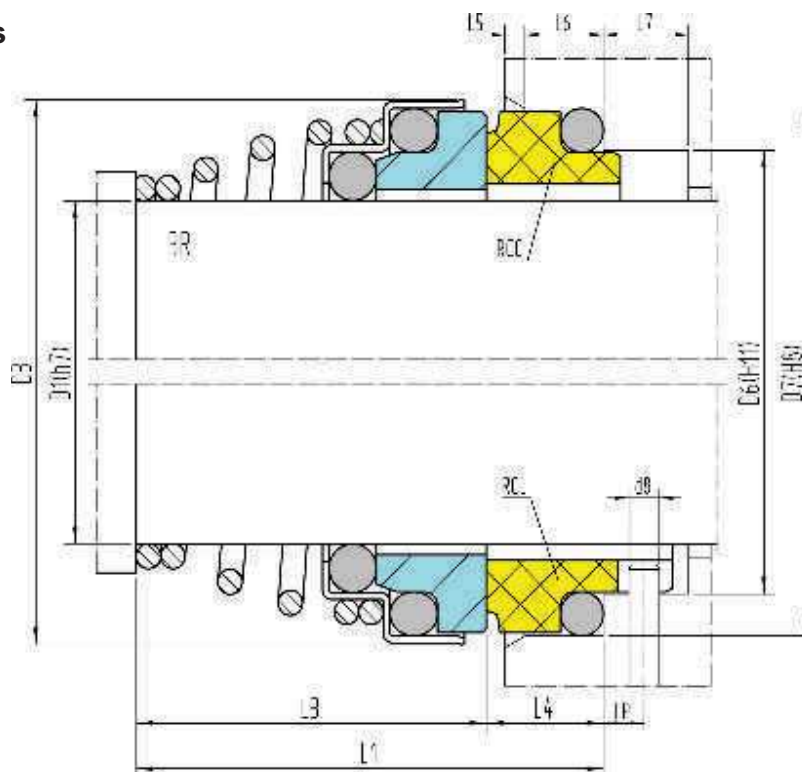
EN 12756 (DIN 24960)

UCC UCL

D1	D6	D7	D3	L1K	L3K	L1N	L1	L3	L4	L6	L5	H	D8	L7
10	17	21	20	32.5	25.5	40	22	15	7	4	1.5	18	3	8.5
12	19	23	22	32.5	25.5	40	25	18	7	4	1.5	15	3	8.5
14	21	25	25	35	28	40	29	22	7	4	1.5	11	3	8.5
16	23	27	29	35	28	40	30	23	7	4	1.5	10	3	8.5
18	27	33	33	37.5	27.5	45	34	24	10	5	2	11	3	9
20	29	35	33	37.5	27.5	45	35	25	10	5	2	10	3	9
22	31	37	38	37.5	27.5	45	35	25	10	5	2	10	3	9
24	33	39	38	40	30	50	37	27	10	5	2	13	3	9
25	34	40	40	40	30	50	37	27	10	5	2	13	3	9
28	37	43	46	42.5	32.5	50	39	29	10	5	2	11	3	9
30	39	45	46	42.5	32.5	50	40	30	10	5	2	10	3	9
32	42	48	46	42.5	32.5	55	40	30	10	5	2	15	3	9
33	42	48	48	42.5	32.5	55	49	39	10	5	2	6	3	9
35	44	50	50	42.5	32.5	55	49	39	10	5	2	6	3	9
38	49	56	56	45	32	55	55	42	13	6	2	—	4	9
40	51	58	58	45	32	55	55	42	13	6	2	—	4	9

Spacer ring is not included in the delivery of the mechanical seal.

Simple mass-produced seal
Conical spring rotating
Massive replaceable seal rings



Materials:

Rotary: Q, U, V

Stationary: A, B, Q, U

Rubber parts: P, E, V, K, M

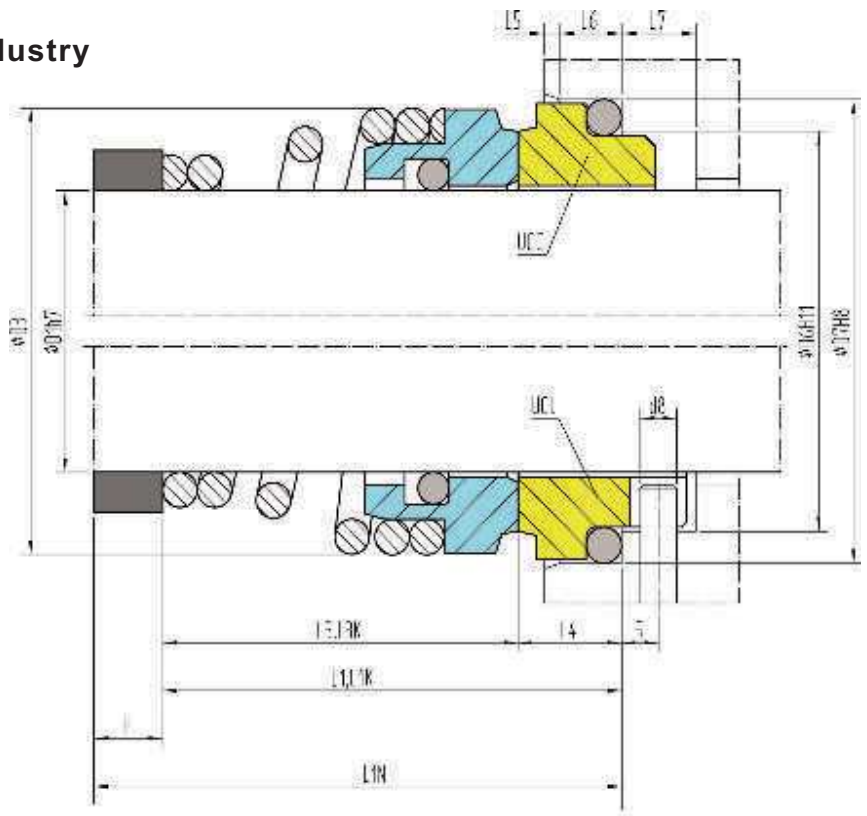
Operating limits:

(look at working conditions page 112)

$p \leq$	12 bar
$t =$	$-35 \div 180^{\circ}\text{C}$
$v \leq$	15 m/s

Special fitting dimensions												RCC			RCL			3RS								
D1	D6	D7	D3	L1	L3	L4	L6	L5	D8	L7	Lp	D1	D6	D7	L1	L3	L4	L6	H							
9	—	—	—	—	—	—	—	—	—	—	—	9	15.8	20	23.4	17.7	5.7	3.5								
10	14	18.1	20	20.5	15	5.5	2.8	1.2	2	6.2	3.5	10	15.5	19.2	22.6	16.6	6	3.5	—							
11+12	16.5	20.6	22	23.5	18	5.5	2.8	1.2	2	6.2	3.5	12	16.5	21.5	24.3	18	6.3	3.8	—							
13+14	19	23.1	25	28	22	6	2.8	1.2	2	6.7	4	—	—	—	—	—	—	—	—							
15	21	26.9	25	29	22	7	3.7	1.3	2.5	7.6	4	—	—	—	—	—	—	—	—							
16+17	21	26.9	29	30	23	7	3.7	1.3	2.5	7.6	4	16	21	26	29.5	23	6.3	3.7	—							
18	25	30.9	33	32	24	8	3.7	1.3	3	8.5	4.5	18	27	33	40	30	8	5	—							
19+20	25	30.9	33	33	25	8	3.7	1.3	3	8.5	4.5	20	28	33.6	45	25	8	5	12							
21+22	30	35.4	38	33	25	8	3.7	1.8	3.5	8.5	5	—	—	—	—	—	—	—	—							
23+24	30	35.4	38	35	27	8	3.7	1.8	3.5	8.5	5	—	—	—	—	—	—	—	—							
25+27	33	38.2	40	35.5	27	8.5	3.7	1.8	4	9.1	5	25	30.4	36	33.5	26	7.5	5	—							
28	38	43.3	46	38	29	9	3.7	1.8	4	9.6	6	—	—	—	—	—	—	—	—							
29+32	38	43.3	46	39	30	9	3.7	1.8	4	9.6	6	30	39.2	45	35.5	25.5	10	5	—							
33	45	53.5	48	50.5	39	11.5	5.4	2.1	5	12	7.5	—	—	—	—	—	—	—	—							
35	45	53.5	50	50.5	39	11.5	5.4	2.1	5	12	7.5	—	—	—	—	—	—	—	—							
38	52	60.5	56	50.5	39	11.5	5.4	2.1	5	12	7.5	—	—	—	—	—	—	—	—							
40	52	60.5	58	50.5	39	11.5	5.4	2.1	5	12	7.5	40	52.2	58	45.5	32.5	13	5	—							

Self cleaning allround seal
Conical spring rotating
Massive seal rings
Food and pharmaceutical industry



Operating limits:
(look at working conditions page 112)

p≤	16 bar
t=	-35 ÷ 180°C
v≤	15 m/s

Materials:

Rotary: Q, U, V

Stationary: A, B, Q

Rubber parts: P, E, V, K

L1=L3+L4

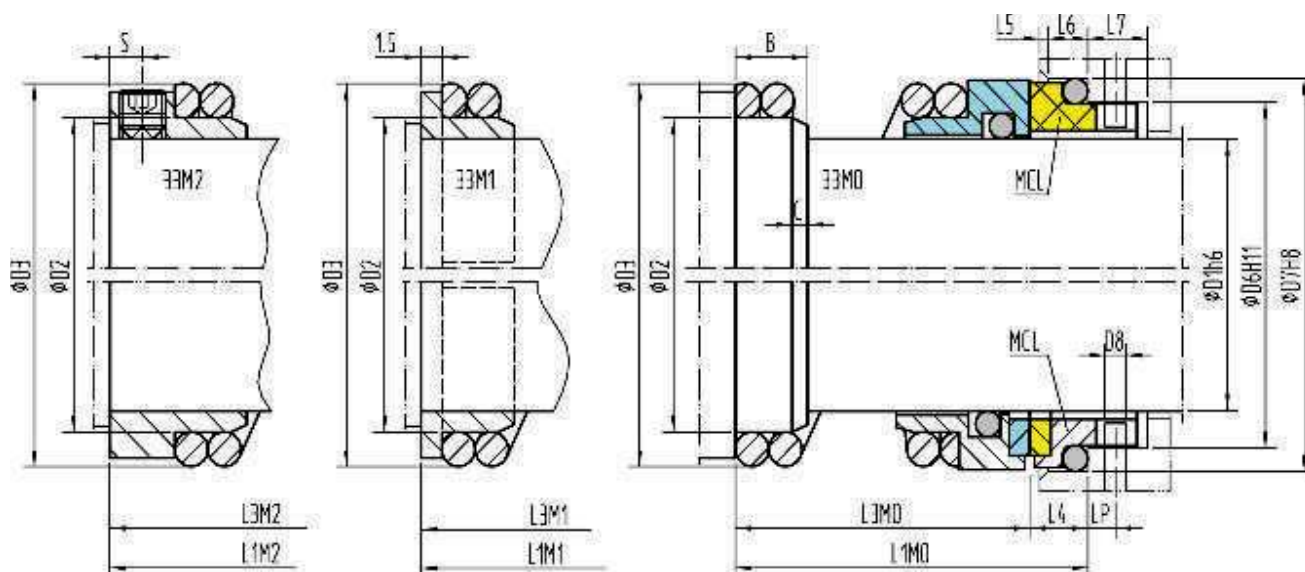
L1K=L3K+L4

L1N=L3+H+L4

EN 12756 (DIN 24960)													UCC	UCL
D1	D6	D7	D3	L1K	L3K	L1N	L1	L3	L4	L6	L5	H	D8	L7
10	17	21	22	32.5	25.5	40	22	15	7	4	1.5	18	3	8.5
12	19	23	24	32.5	25.5	40	25	18	7	4	1.5	15	3	8.5
14	21	25	26	35	28	40	29	22	7	4	1.5	11	3	8.5
16	23	27	28	35	28	40	30	23	7	4	1.5	10	3	8.5
18	27	33	33	37.5	27.5	45	34	24	10	5	2	11	3	9
20	29	35	35	37.5	27.5	45	35	25	10	5	2	10	3	9
22	31	37	37	37.5	27.5	45	35	25	10	5	2	10	3	9
24	33	39	39	40	30	50	37	27	10	5	2	13	3	9
25	34	40	41	40	30	50	37	27	10	5	2	13	3	9
28	37	43	44	42.5	32.5	50	39	29	10	5	2	11	3	9
30	39	45	46	42.5	32.5	50	40	30	10	5	2	10	3	9
32	42	48	48	42.5	32.5	55	40	30	10	5	2	15	3	9
33	42	48	50	42.5	32.5	55	49	39	10	5	2	6	3	9
35	44	50	52	42.5	32.5	55	49	39	10	5	2	6	3	9
38	49	56	56	45	32	55	55	42	13	6	2	—	4	9
40	51	58	58	45	32	55	55	42	13	6	2	—	4	9
43	54	61	62	45	32	60	60	47	13	6	2	—	4	9
45	56	63	64	45	32	60	60	47	13	6	2	—	4	9
48	59	66	67	45	32	60	60	47	13	6	2	—	4	9
50	62	70	69	47.5	33.5	60	60	46	14	6	2.5	—	4	9
53	65	73	72	47.5	33.5	70	70	56	14	6	2.5	—	4	9
55	67	75	75	47.5	33.5	70	70	56	14	6	2.5	—	4	9
58	70	78	80	52.5	38.5	70	70	56	14	6	2.5	—	4	9
60	72	80	82	52.5	38.5	70	70	56	14	6	2.5	—	4	9
63	75	83	85	52.5	38.5	70	70	56	14	6	2.5	—	4	9
65	77	85	87	52.5	38.5	80	80	66	14	6	2.5	—	4	9
68	81	90	91	52.5	36.5	80	80	64	16	7	2.5	—	4	9
70	83	92	93	60	44	80	80	64	16	7	2.5	—	4	9
75	88	97	101	60	44	80	80	64	16	7	2.5	—	4	9
80	95	105	106	60	42	90	90	72	18	7	3	—	4	9
85	100	110	115	60	42	90	90	72	18	7	3	—	4	9
90	105	115	120	65	42	90	90	72	18	7	3	—	4	9
95	110	120	—	65	42	90	90	72	18	7	3	—	4	9
100	115	125	—	65	42	90	90	72	18	7	3	—	4	9

Spacer ring is not included in the delivery of the mechanical seal.

Shipping and industrial seal Cylindrical spring rotating Massive or shrunk seal rings



Materials:

Rotary: A, B, Q

Stationary: Q, U, V

Rubber parts: P, E, V, K, M

Operating limits:

(look at working conditions page 112)

33M0-33M1-33M2
$p \leq 16$ bar
$t = -35 \div 140^\circ\text{C}$ (180°C)
$v \leq 15$ m/s

33M0-33M1-33M2

Metric dimensions										MCL									
D1	D6	D7	D2	D3	L1M0	L3M0	B	L1M1	L3M1	L1M2	L3M2	S	L4	L6	L5	C	LP		
10	14.78	19.05	12.70	-	30.00	21.00	5.00	32.00	23.00	38.00	29.00	4.0	9.00	2.90	1.50	1.60	4		
15	22.71	26.97	17.47	29.00	31.50	22.50	5.50	33.50	24.50	40.00	31.00	4.0	9.00	2.90	1.50	1.60	4		
18	25.90	30.17	20.62	32.50	33.50	24.50	6.50	35.00	26.00	41.50	32.50	4.0	9.00	2.90	1.50	1.60	4		
20	29.06	33.32	23.80	34.50	35.00	26.00	7.00	36.50	27.50	44.50	35.50	4.7	9.00	2.90	1.50	1.60	4		
21	29.06	33.32	23.80	34.90	35.00	26.00	7.00	36.50	27.50	44.50	35.50	4.7	9.00	2.90	1.50	1.60	4		
22	30.66	34.93	25.40	34.90	35.00	26.00	7.00	36.50	27.50	44.50	35.50	4.7	9.00	2.90	1.50	1.60	4		
24	32.23	36.5	26.97	41.00	35.00	26.00	7.00	36.50	27.50	44.50	35.50	4.7	9.00	2.90	1.50	1.60	4		
25	33.84	39.85	28.57	41.00	40.00	30.00	7.50	41.50	31.50	49.00	39.00	4.7	10.00	4.00	1.50	1.60	4		
26	33.84	39.85	28.57	42.00	40.00	30.00	7.50	41.50	31.50	49.00	39.00	4.7	10.00	4.00	1.50	1.60	4		
28	37.01	43.05	31.75	42.90	41.50	31.50	8.50	43.00	33.00	51.00	41.00	4.7	10.00	4.00	1.50	1.60	4		
30	38.61	44.63	33.32	45.50	41.50	31.50	8.50	43.00	33.00	51.00	41.00	4.7	10.00	4.00	1.50	1.60	4		
32	40.28	46.32	34.92	47.00	44.50	34.50	9.00	46.00	36.00	54.00	44.00	4.7	10.00	4.00	1.50	1.60	4		
35	43.46	49.48	38.10	50.00	47.50	37.50	10.00	49.00	39.00	57.00	47.00	4.7	10.00	4.00	1.50	1.60	4		
38	46.63	52.56	42.88	53.00	47.50	37.50	10.00	49.00	39.00	57.00	47.00	4.7	10.00	4.00	1.50	1.60	4		
40	48.13	54.25	44.45	55.00	47.50	37.50	10.00	49.00	39.00	57.00	47.00	4.7	10.00	4.00	1.50	1.60	4		
45	52.98	59.02	49.20	60.00	47.50	37.50	10.50	49.00	39.00	57.00	47.00	4.7	10.00	4.00	1.50	1.60	4		
48	57.66	63.68	52.37	62.00	52.50	42.50	11.50	54.00	44.00	65.00	55.00	6.5	10.00	4.00	1.50	1.60	5		
50	59.33	65.37	53.97	66.00	55.50	42.50	12.00	57.00	47.00	68.50	58.50	6.5	10.00	4.00	1.50	1.60	5		
55	64.01	70.03	58.72	71.00	57.00	47.00	13.00	58.50	48.50	70.00	60.00	6.5	10.00	4.00	1.50	1.60	5		
60	70.36	76.38	65.07	77.00	60.50	50.50	14.00	62.00	52.00	73.00	63.00	6.5	10.00	4.00	1.50	1.60	5		
65	75.21	81.23	69.85	82.00	63.50	53.50	14.00	65.00	55.00	76.00	66.00	6.5	10.00	4.00	1.50	1.60	5		
70	79.88	85.90	74.60	87.00	63.50	53.50	14.00	65.00	55.00	76.00	66.00	6.5	10.00	4.00	1.50	1.60	5		
75	84.73	90.77	79.37	91.50	66.50	56.50	14.00	70.00	60.00	81.00	71.00	7.0	10.00	4.00	1.50	1.60	5		
80	94.26	100.29	85.73	-	73.00	-	14.00	76.00	-	87.50	-	7.0	-	4.00	1.50	1.60	5		
85	98.93	104.95	90.47	-	73.00	-	14.00	76.00	-	87.50	-	7.0	-	4.00	1.50	1.60	5		
90	103.78	109.82	95.25	-	78.00	-	17.00	81.00	-	92.00	-	7.0	-	4.00	1.50	1.60	5		
95	108.46	114.48	100.00	-	78.00	-	17.50	81.00	-	92.00	-	7.0	-	4.00	1.50	3.20	5		
100	113.31	119.33	104.77	-	78.00	-	17.50	81.00	-	92.00	-	7.0	-	4.00	1.50	3.20	5		

O-Ring
Mechanical seals

Unbalanced
Dependent on rotation

Inch dimensions

MCL

D1Zoll	D6	D7	D2	D3	L1RMO	L3RMO	B	L1RM1	L3RM1	L1RM2	L3RM2	S	L4	L5	L6	C	LP
0,375	0.582	0.750	0.500	-	1.190	0.84	0.19	1.250	0.896	1.500	1.146	0.16	0.354	0.059	0.111	0.06	0.16
0,500	0.769	0.937	0.625	-	1.250	0.896	0.25	1.310	0.956	1.560	1.206	0.16	0.354	0.059	0.111	0.06	0.16
0,625	0.957	1.125	0.750	1,142	1.310	0.956	0.25	1.380	1.026	1.630	1.276	0.16	0.354	0.059	0.111	0.06	0.16
0,750	1.082	1.250	0.875	1,280	1.310	0.956	0.31	1.380	1.026	1.630	1.276	0.16	0.354	0.059	0.111	0.06	0.16
0,875	1.207	1.375	1.000	1,375	1.380	1.026	0.31	1.440	1.086	1.750	1.396	0.19	0.354	0.059	0.111	0.06	0.16
1,000	1.332	1.569	1.125	1,500	1.560	1.166	0.31	1.630	1.236	1.940	1.546	0.19	0.394	0.059	0.161	0.06	0.16
1,125	1.457	1.695	1.250	1,687	1.630	1.236	0.37	1.690	1.296	2.000	1.606	0.19	0.394	0.059	0.161	0.06	0.16
1,250	1.586	1.824	1.375	1,811	1.750	1.356	0.37	1.810	1.416	2.130	1.736	0.19	0.394	0.059	0.161	0.06	0.16
1,375	1.711	1.948	1.500	1,937	1.880	1.486	0.44	1.940	1.546	2.250	1.856	0.19	0.394	0.059	0.161	0.06	0.16
1,500	1.836	2.069	1.688	2,063	1.880	1.486	0.44	1.940	1.546	2.250	1.856	0.19	0.394	0.059	0.161	0.06	0.16
1,625	1.961	2.198	1.812	2,165	1.880	1.486	0.44	1.940	1.546	2.250	1.856	0.19	0.394	0.059	0.161	0.06	0.16
1,750	2.086	2.324	1.937	2,313	1.880	1.486	0.44	1.940	1.546	2.250	1.856	0.19	0.394	0.059	0.161	0.06	0.16
1,875	2.270	2.507	2.062	2,437	2.060	1.666	0.50	2.130	1.736	2.250	1.856	0.25	0.394	0.059	0.161	0.06	0.19
2,000	2.395	2.632	2.188	2,625	2.190	1.796	0.50	2.250	1.856	2.690	2.296	0.25	0.394	0.059	0.161	0.06	0.19
2,125	2.520	2.757	2.312	2,750	2.250	1.856	0.56	2.310	1.916	2.750	2.356	0.25	0.394	0.059	0.161	0.06	0.19
2,250	2.645	2.882	2.437	2,875	2.250	1.856	0.56	2.310	1.916	2.750	2.356	0.25	0.394	0.059	0.161	0.06	0.19
2,375	2.770	3.007	2.562	3,000	2.380	1.986	0.56	2.440	2.046	2.880	2.486	0.25	0.394	0.059	0.161	0.06	0.19
2,500	2.895	3.132	2.688	3,125	2.380	1.986	0.56	2.440	2.046	2.880	2.486	0.25	0.394	0.059	0.161	0.06	0.19
2,625	3.020	3.257	2.812	3,250	2.500	2.106	0.56	2.560	2.166	3.000	2.606	0.25	0.394	0.059	0.161	0.06	0.19
2,750	3.145	3.382	2.937	3,375	2.500	2.106	0.56	2.560	2.166	3.000	2.606	0.25	0.394	0.059	0.161	0.06	0.19
3,000	3.520	3.757	3.188	3,750	2.880	2.486	0.63	3.000	2.606	3.440	3.046	0.28	0.394	0.059	0.161	0.06	0.19
3,125	3.645	3.882	3.312	-	2.880	2.486	0.63	3.000	2.606	3.440	3.046	0.28	0.394	0.059	0.161	0.06	0.19
3,250	3.770	4.007	3.437	-	2.880	2.486	0.63	3.000	2.606	3.440	3.046	0.28	0.394	0.059	0.161	0.06	0.19
3,500	4.020	4.257	3.688	-	2.880	2.486	0.69	3.000	2.606	3.440	3.046	0.28	0.394	0.059	0.161	0.06	0.19
3,750	4.270	4.507	3.937	-	3.060	2.666	0.75	3.190	2.796	3.630	3.236	0.28	0.394	0.059	0.161	0.12	0.19
4,000	4.645	4.882	4.250	-	3.250	2.856	0.75	3.380	2.986	3.880	3.486	0.31	0.394	0.059	0.161	0.12	0.19
4,250	4.895	5.132	4.500	-	3.250	2.856	0.75	3.380	2.986	3.880	3.486	0.31	0.394	0.059	0.161	0.12	0.19
4,500	5.145	5.382	4.750	-	3.250	2.856	0.75	3.380	2.986	3.880	3.486	0.31	0.394	0.059	0.161	0.12	0.19

