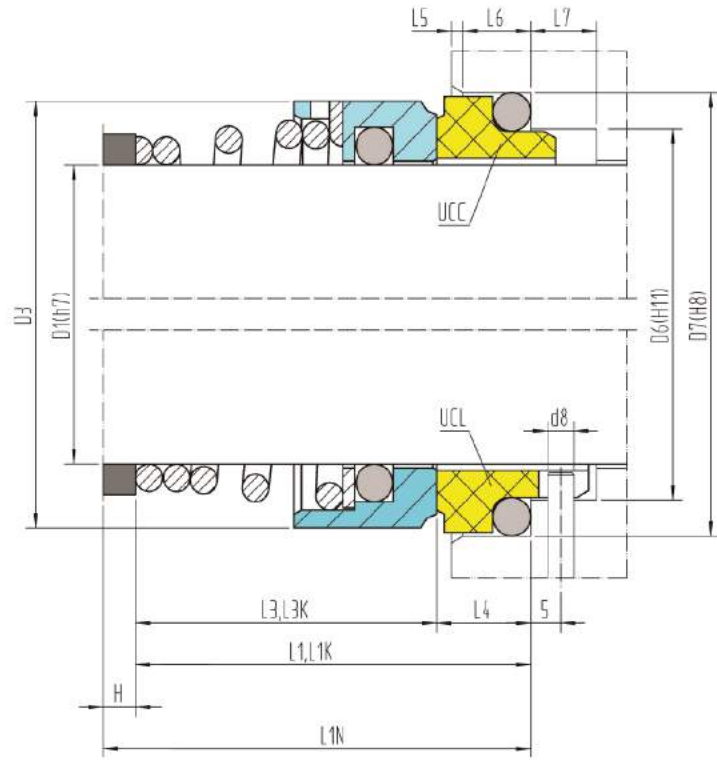


**Universal allround seal
Conical spring rotating
Massive or brazed seal rings**



$L1=L3+L4$
 $L1K=L3K+L4$
 $L1N=L3+H+L4$

Operating limits:

(look at working conditions page 112)

$p \leq$	12bar (16bar)
$t =$	$-35 \div 140^\circ\text{C}$ (180°C)
$v \leq$	15 m/s

Materials:

Rotary: E, F, G, U

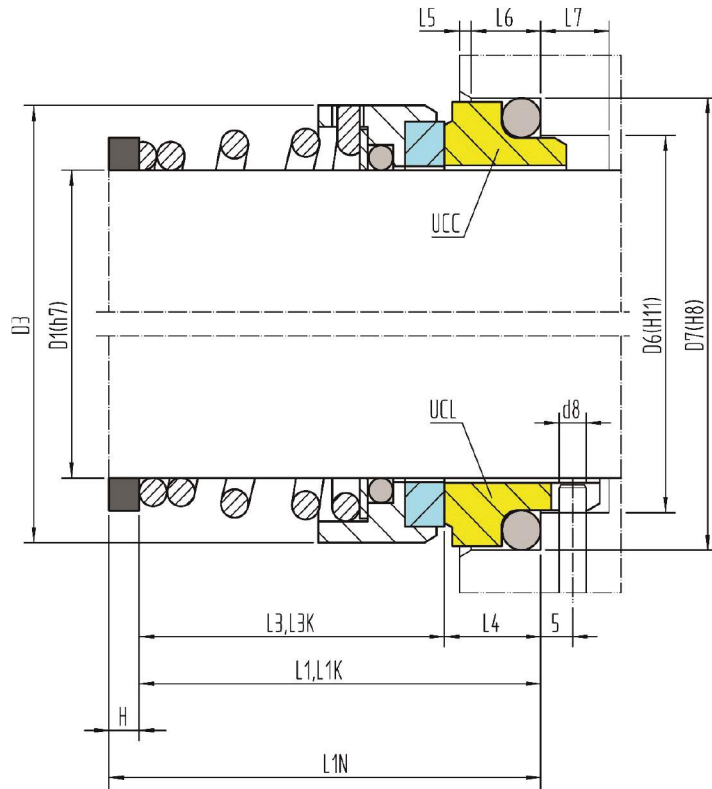
Stationary: A, B, Q, U, V

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

EN 12756 (DIN 24960)													UCC		UCL		U9CL		
D1	D6	D7	D3	L1K	L3K	L1N	L1	L3	L4	L6	L5	H	D8	L7	L1	L3	L4		
10	17	21	21	32.5	25.5	40	22	15	7	4	1.5	18	3	8.5	25.5	15.5	10		
12	19	23	22	32.5	25.5	40	25	18	7	4	1.5	15	3	8.5	26	16	10		
14	21	25	24	35	28	40	29	22	7	4	1.5	11	3	8.5	26.5	16.5	10		
16	23	27	26	35	28	40	30	23	7	4	1.5	10	3	8.5	28	18	10		
18	27	33	29	37.5	27.5	45	34	24	10	5	2	11	3	9	31	19.5	11.5		
20	29	35	30	37.5	27.5	45	35	25	10	5	2	10	3	9	33.5	22	11.5		
22	31	37	34	37.5	27.5	45	35	25	10	5	2	10	3	9	33	21.5	11.5		
24	33	39	35	40	30	50	37	27	10	5	2	13	3	9	35	23.5	11.5		
25	34	40	37	40	30	50	37	27	10	5	2	13	3	9	38	26.5	11.5		
28	37	43	42	42.5	32.5	50	39	29	10	5	2	11	3	9	38	26.5	11.5		
30	39	45	45	42.5	32.5	50	40	30	10	5	2	10	3	9	38	26.5	11.5		
32	42	48	45	42.5	32.5	55	40	30	10	5	2	15	3	9	40	28.5	11.5		
33	42	48	48	42.5	32.5	55	49	39	10	5	2	6	3	9	40	28.5	11.5		
35	44	50	50	42.5	32.5	55	49	39	10	5	2	6	3	9	40	28.5	11.5		
38	49	56	54	45	32	55	55	42	13	6	2	—	4	9	47.5	33.5	14		
40	51	58	56	45	32	55	55	42	13	6	2	—	4	9	50	36	14		
43	54	61	60	45	32	60	60	47	13	6	2	—	4	9	52.5	38.5	14		
45	56	63	64	45	32	60	60	47	13	6	2	—	4	9	53.5	39.5	14		
48	59	66	67	45	32	60	60	47	13	6	2	—	4	9	60	46	14		
50	62	70	69	47.5	33.5	60	60	46	14	6	2.5	—	4	9	60	45	15		
53	65	73	74	47.5	33.5	70	70	56	14	6	2.5	—	4	9	62	47	15		
55	67	75	74	47.5	33.5	70	70	56	14	6	2.5	—	4	9	64	49	15		
58	70	78	80	52.5	38.5	70	70	56	14	6	2.5	—	4	9	70	55	15		
60	72	80	80	52.5	38.5	70	70	56	14	6	2.5	—	4	9	70	55	15		
63	75	83	87	52.5	38.5	70	70	56	14	6	2.5	—	4	9	70	55	15		
65	77	85	87	52.5	38.5	80	80	66	14	6	2.5	—	4	9	70	55	15		
68	81	90	92	52.5	36.5	80	80	64	16	7	2.5	—	4	9	73	55	18		
70	83	92	92	60	44	80	80	64	16	7	2.5	—	4	9	75	57	18		
75	88	97	97	60	44	80	80	64	16	7	2.5	—	4	9	80	62	18		
80	95	105	102	60	42	90	90	72	18	7	3	—	4	9	80	61.8	18.2		
85	100	110	110	60	42	90	90	72	18	7	3	—	4	9	80	61.8	18.2		
90	105	115	117	65	42	90	90	72	18	7	3	—	4	9	80	61.8	18.2		
95	110	120	122	65	42	90	90	72	18	7	3	—	4	9	78	60.8	17.2		
100	115	125	127	65	42	90	90	72	18	7	3	—	4	9	78	60.8	17.2		

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

Universal allround seal
Conical spring rotating
Shrunked seal rings



$L1=L3+L4$
 $L1K=L3K+L4$
 $L1N=L3+H+L4$

Operating limits:

(look at working conditions page 112)

p ≤	12bar (16bar)
t =	-35 ÷ 140°C (180°C)
v ≤	15 m/s

Materials:

Rotary: A, B, Q, U

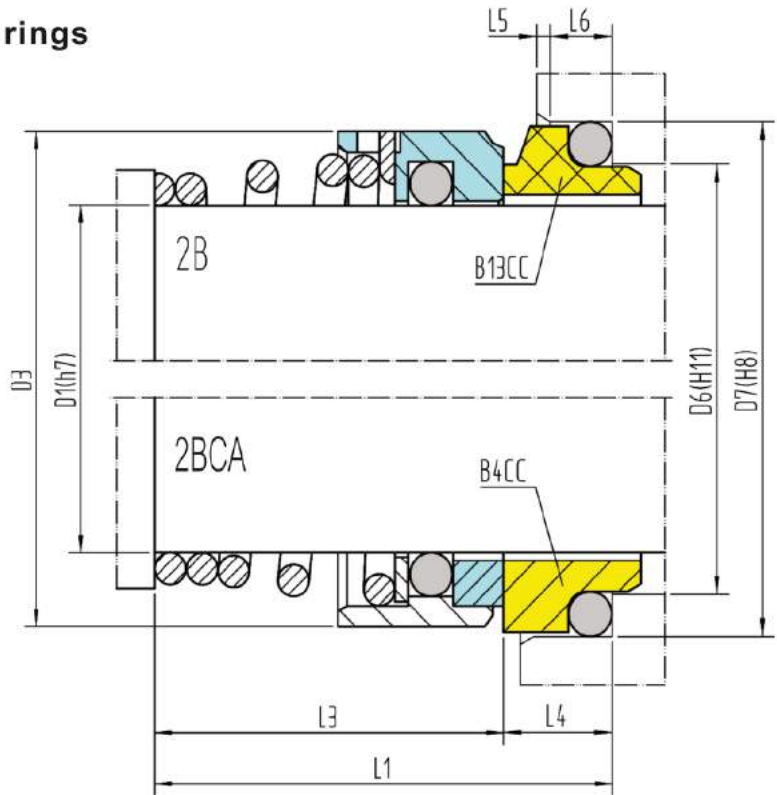
Stationary: A, B, Q, U, V

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

EN 12756 (DIN 24960)											UCC		UCL		U6CC			U9CL		
D1	D6	D7	D3	L1K	L3K	L1N	L1	L3	L4	L6	L5	H	D8	L7	L1	L3	L4	L1	L3	L4
10	17	21	21	32.5	25.5	40	22	15	7	4	1.5	18	3	8.5	22.1	15.5	6.6	25.5	15.5	10
12	19	23	22	32.5	25.5	40	25	18	7	4	1.5	15	3	8.5	22.6	16	6.6	26	16	10
14	21	25	24	35	28	40	29	22	7	4	1.5	11	3	8.5	23.1	16.5	6.6	26.5	16.5	10
16	23	27	26	35	28	40	30	23	7	4	1.5	10	3	8.5	24.6	18	6.6	28	18	10
18	27	33	29	37.5	27.5	45	34	24	10	5	2	11	3	9	27	19.5	7.5	31	19.5	11.5
20	29	35	30	37.5	27.5	45	35	25	10	5	2	10	3	9	29.5	22	7.5	33.5	22	11.5
22	31	37	34	37.5	27.5	45	35	25	10	5	2	10	3	9	29	21.5	7.5	33	21.5	11.5
24	33	39	35	40	30	50	37	27	10	5	2	13	3	9	31	23.5	7.5	35	23.5	11.5
25	34	40	37	40	30	50	37	27	10	5	2	13	3	9	34	26.5	7.5	38	26.5	11.5
28	37	43	42	42.5	32.5	50	39	29	10	5	2	11	3	9	34	26.5	7.5	38	26.5	11.5
30	39	45	45	42.5	32.5	50	40	30	10	5	2	10	3	9	34	26.5	7.5	38	26.5	11.5
32	42	48	45	42.5	32.5	55	40	30	10	5	2	15	3	9	36	28.5	7.5	38	28.5	11.5
33	42	48	48	42.5	32.5	55	49	39	10	5	2	6	3	9	36	28.5	7.5	38	28.5	11.5
35	44	50	50	42.5	32.5	55	49	39	10	5	2	6	3	9	36	28.5	7.5	38	28.5	11.5
38	49	56	54	45	32	55	55	42	13	6	2	—	4	9	42.5	33.5	9	47.5	33.5	14
40	51	58	56	45	32	55	55	42	13	6	2	—	4	9	45	36	9	50	36	14
43	54	61	60	45	32	60	60	47	13	6	2	—	4	9	47.5	38.5	9	52.5	38.5	14
45	56	63	64	45	32	60	60	47	13	6	2	—	4	9	48.5	39.5	9	53.5	39.5	14
48	59	66	67	45	32	60	60	47	13	6	2	—	4	9	55	46	9	60	46	14
50	62	70	69	47.5	33.5	60	60	46	14	6	2	—	4	9	54.5	45	9.5	60	45	15
53	65	73	74	47.5	33.5	70	70	56	14	6	2	—	4	9	58	47	11	62	47	15
55	67	75	74	47.5	33.5	70	70	56	14	6	2	—	4	9	60	49	11	64	49	15
58	70	78	80	52.5	38.5	70	70	56	14	6	2	—	4	9	66	55	11	70	55	15
60	72	80	80	52.5	38.5	70	70	56	14	6	2	—	4	9	66	55	11	70	55	15
63	75	83	87	52.5	38.5	70	70	56	14	6	2	—	4	9	66	55	11	70	55	15
65	77	85	87	52.5	38.5	80	80	66	14	6	2	—	4	9	66	55	11	70	55	15
68	81	90	92	52.5	36.5	80	80	64	16	7	2	—	4	9	66.3	55	11.3	73	55	18
70	83	92	92	60	44	80	80	64	16	7	2	—	4	9	66.3	57	11.3	75	57	18
75	88	97	97	60	44	80	80	64	16	7	2	—	4	9	73.3	62	11.3	80	62	18
80	95	105	102	60	42	90	90	72	18	7	2	—	4	9	73.8	61.8	12	80	61.8	18.2
85	100	110	110	60	42	90	90	72	18	7	2	—	4	9	75.8	61.8	14	80	61.8	18.2
90	105	115	117	65	42	90	90	72	18	7	2	—	4	9	75.8	61.8	14	80	61.8	18.2
95	110	120	122	65	42	90	90	72	18	7	2	—	4	9	75.8	60.8	14	78	60.8	17.2
100	115	125	127	65	42	90	90	72	18	7	2	—	4	9	75.8	60.8	14	78	60.8	17.2

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

Universal allround seal
 Conical spring rotating
 Massive, brazed or shrinked seal rings



Materials:

Rotary: A, B, E, F, G, Q, U
 Stationary: A, B, Q, U
 Rubber parts: P, E, V, K, M

Operating limits:

(look at working conditions page 112)

2B	2BCA
p ≤ 12 bar	p ≤ 16 bar
t = -35 + 180°C	t = -35 + 140°C
v ≤ 15 m/s	v ≤ 15 m/s

Special fitting dimensions									B4CC			B13CC		
D1	D6	D7	D3	L1	L3	L4	L6	L5	L1	L3	L4			
10	15.5	19.2	21	22.1	15.5	6.6	3.8	1.5	22.6	15.5	7.1			
12	17.5	21.6	22	21.1	15.5	5.6	3.8	1.5	23.1	15.5	7.6			
14	20.5	24.6	24	21.1	15.5	5.6	3.8	1.5	23.1	15.5	7.6			
15	20.5	24.6	26	22.1	15.5	6.6	3.8	1.5	24.1	15.5	8.6			
16	22	28	29	25	17.5	7.5	5	1.5	26.5	17.5	9			
18	24	30	30	26.5	18.5	8	5	2	28.5	18.5	10			
19	29.5	35	34	27.5	20	7.5	5	2	29.5	20	9.5			
20	29.5	35	34	27.5	20	7.5	5	2	29.5	20	9.5			
22	29.5	35	35	29	21.5	7.5	5	2	31	21.5	9.5			
24	32	38	37	30.5	23	7.5	5	2	32.5	23	9.5			
25	32	38	42	31.5	24.5	7.5	5	2	34	24.5	9.5			
26	34	40	45	32.5	24.5	8	5	2	34.5	24.5	10			
28	36	42	45	33.5	24.5	9	5	2	35.5	24.5	11			
30	39.2	45	48	35	24.5	10.5	5	2	35.5	24.5	11			
32	42.5	48	50	38.5	28	10.5	5	2	39	28	11			
35	46.2	52	56	39	28	11	5	2	39.5	28	11.5			
38	49.2	55	60	41.3	31	10.3	5	2	42.5	31	11.5			
40	52.2	58	64	44.8	34	10.8	5	2	45.5	34	11.5			
42	53.3	62	67	47	35	12	6	2	49.3	35	14.3			
45	55.3	64	69	48.1	36.5	11.6	6	2	50.8	36.5	14.3			
48	59.7	68.4	74	53.6	42	11.6	6	2	56.3	42	14.3			
50	60.8	69.3	74	54.6	43	11.6	6	2.5	57.3	43	14.3			
55	66.5	75.4	80	60.3	47	13.3	6	2.5	62.3	47	15.3			
58	69.5	78.4	80	63.3	50	13.3	6	2.5	65.3	50	15.3			
60	71.5	80.4	87	64.3	51	13.3	6	2.5	66.3	51	15.3			
65	76.5	85.4	87	65	52	13	6	2.5	67.3	52	15.3			
68	82.7	91.5	92	66.7	53	13.7	6	2.5	69	53	16			
70	83	92	92	67	54	13	6	2.5	69.3	54	15.3			
75	90.2	99	97	69	55	14	6	2.5	70.3	55	15.3			
80	95.2	104	102	73	58	15	6	3	74.3	58	16.3			

Unbalanced
 Dependent on rotation

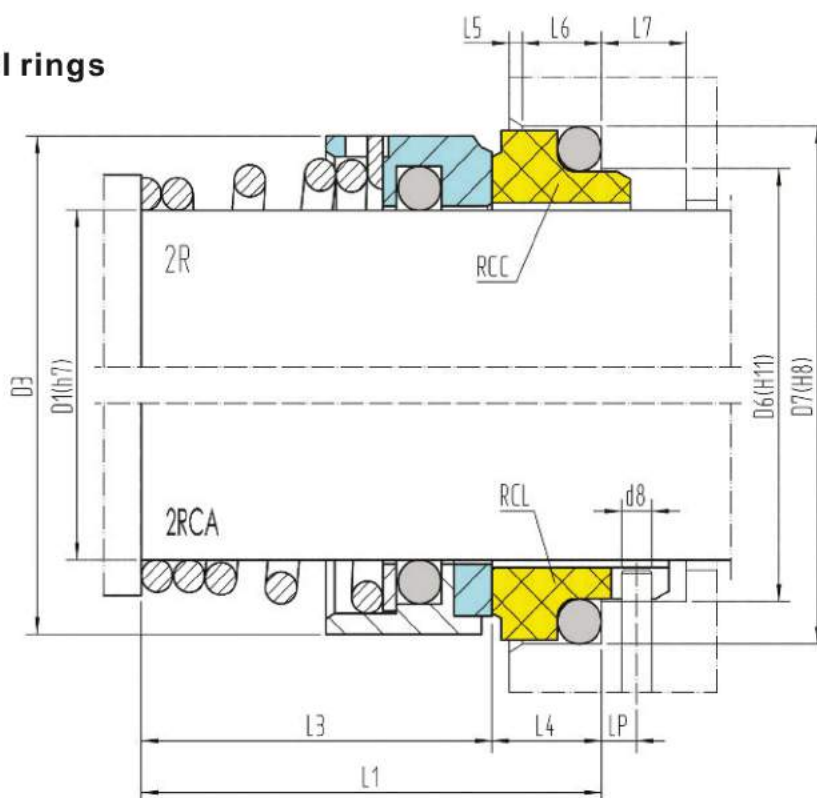
O-Ring
 Mechanical seals

2R-2RCA-2RMC-2RMCCA

Universal allround seal
 Conical spring rotating
 Massive, brazed or shrunk seal rings

Unbalanced
 Dependent on rotation

O-Ring
 Mechanical seals



Operating limits:
 (look at working conditions page 112)

2R	-2RMC	2RCA	-2RMCCA
p ≤	12 bar	p ≤	16 bar
t =	-35 + 180°C	t =	-35 + 140°C
v ≤	15 m/s	v ≤	15 m/s

Materials:

Rotary: A, B, E, F, G, Q, U

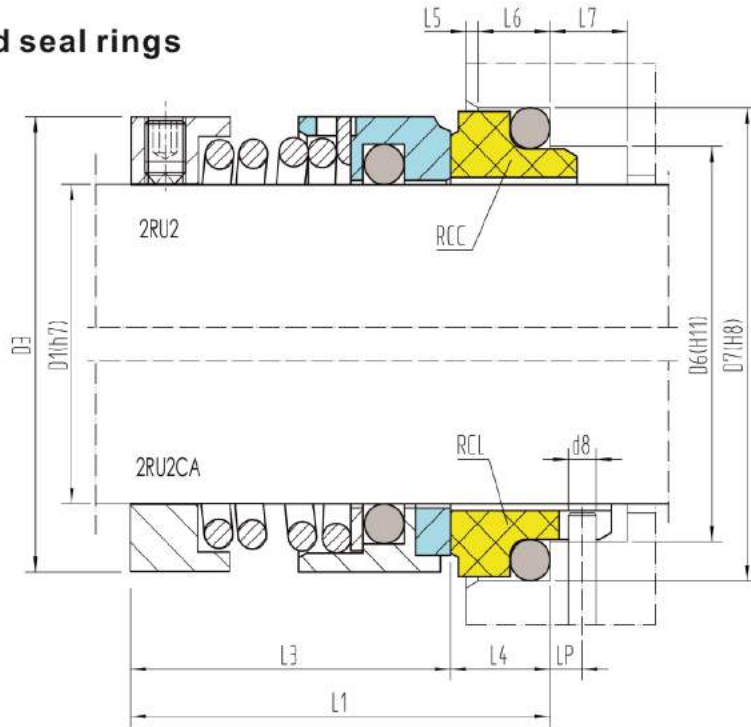
Stationary: A, B, Q, U

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

Special fitting dimensions

Special fitting dimensions									RCC	RCL	2RMC-2RMCCA		
D1	D6	D7	D3	L1	L3	L4	L6	L5	D8	L7	Lp	L1	L3
6	10.6	13.1	13.5	19.5	15	4.5	2	1.2	2	6	3.5	—	—
7	13	17.1	14.5	20.5	15	5.5	2.8	1.2	2	6.2	3.5	15.5	10
8	13	17.1	15.8	20.5	15	5.5	2.8	1.2	2	6.2	3.5	15.5	10
9	13	17.1	16.5	20.5	15	5.5	2.8	1.2	2	6.2	3.5	15.5	10
10	14	18.1	21	20.5	15	5.5	2.8	1.2	2	6.2	3.5	17.5	12
11+12	16.5	20.6	22	23.5	18	5.5	2.8	1.2	2	6.2	3.5	19.5	14
13+14	19	23.1	24	28	22	6	2.8	1.2	2	6.7	4	23	17
15	21	26.9	24	29	22	7	3.7	1.3	2.5	7.6	4	24	17
16+17	21	26.9	26	30	23	7	3.7	1.3	2.5	7.6	4	25	18
18	25	30.9	29	32	24	8	3.7	1.3	3	8.5	4.5	26	18
19+20	25	30.9	30	33	25	8	3.7	1.3	3	8.5	4.5	28	20
21+22	30	35.4	34	33	25	8	3.7	1.8	3.5	8.5	5	28	20
23+24	30	35.4	35	35	27	8	3.7	1.8	3.5	8.5	5	30	22
25+27	33	38.2	37	35.5	27	8.5	3.7	1.8	4	9.1	5	29.5	21
28	38	43.3	42	38	29	9	3.7	1.8	4	9.6	6	31	22
29+32	38	43.3	45	39	30	9	3.7	1.8	4	9.6	6	31	23
33+34	45	53.5	45	50.5	39	11.5	5.4	2.1	5	12	7.5	41.5	30
35+37	45	53.5	50	50.5	39	11.5	5.4	2.1	5	12	7.5	41.5	30
38+43	52	60.5	54	50.5	39	11.5	5.4	2.1	5	12	7.5	41.5	30
44+49	57	65.5	56	52.5	41	11.5	5.4	2.1	5	13	8.5	42.5	31
50	64	72.5	69	56.5	45	11.5	5.4	2.1	5	13	8.5	46.5	35
55	64	72.5	74	58.5	47	11.5	5.4	2.1	5	13	8.5	48.5	37
60	72	79.3	80	60.5	49	11.5	5.4	2.1	5	13.5	8.5	48.5	37
65	77	84.5	87	62.5	51	11.5	5.4	2.1	5	13.5	8.5	50.5	39
70	82	89.5	92	62.5	51	11.5	5.4	2.1	5	13.5	8.5	50.5	39
75	87	94.5	97	68.5	57	11.5	5.4	2.1	5	13.5	8.5	57.5	46
80	92	99.5	102	70.5	59	11.5	5.4	2.1	5	13.5	8.5	59.5	48
85	98	105.5	110	72.5	59	13.5	5.4	2.6	5	13.5	8.5	59.5	46
90	105	111.5	117	75.5	62	13.5	5.4	2.6	5	13.5	8.5	62.5	49
95	110	116.5	122	75.5	62	13.5	5.4	2.6	5	13.5	8.5	64.5	51
100	114	119.5	127	88.5	75	13.5	5.4	2.6	5	13.5	8.5	78.5	65
110	124	132.2	143	92.5	75	17.5	7.1	3.9	5	13.5	8.5	78.5	61
120	134	142.2	155	102.5	85	17.5	7.1	3.9	5	13.5	8.5	90.5	73
130	145	153.2	166	112.5	95	17.5	7.1	3.9	5	13.5	8.5	99.5	82
135	152	161.2	171	113.5	95	18.5	7.1	3.9	5	13.5	8.5	101.5	83
140	157	164.3	178	118.5	100	18.5	7.1	3.9	5	13.5	8.5	108.5	90
150	167	174.2	188	128.5	110	18.5	7.1	3.9	5	13.5	8.5	118.5	100
160	188	195	199	141	120	21	9.1	3.9	5	13.5	8.5	121	100

Universal allround seal
 Conical spring rotating
 Massive, brazed or shrunk seal rings



Materials:
 Rotary: A, B, E, F, G, Q, U
 Stationary: A, B, Q, U
 Rubber parts: P, E, V, K, M

Operating limits:
 (look at working conditions page 112)

p ≤	12bar (16bar)
t =	-35 +140°C (180°C)
v ≤	15 m/s

Special fitting dimensions

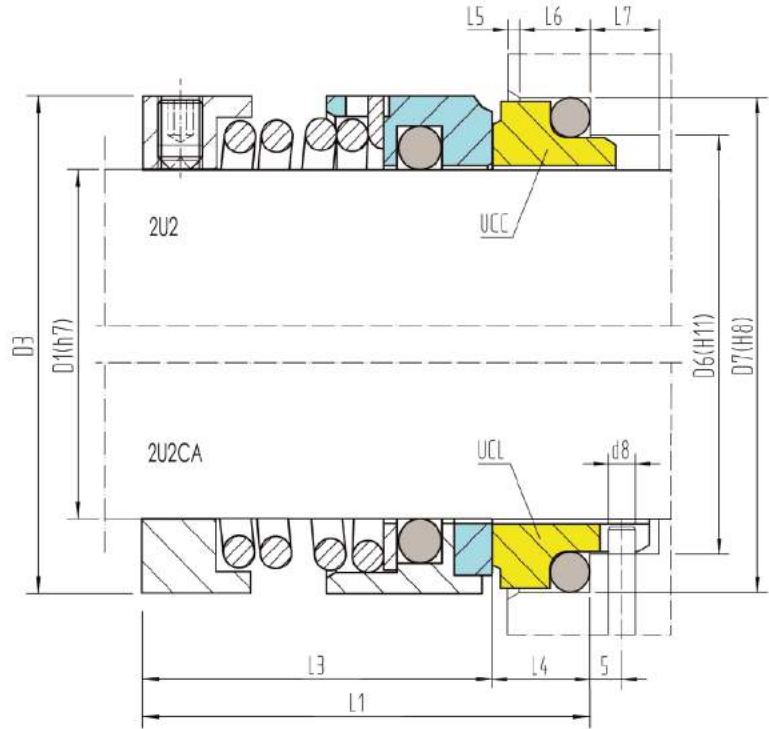
										RCC	RCL
D1	D6	D7	D3	L1	L3	L4	L6	L5	D8	L7	LP
6	10.6	13.1	13.5	19.5	15	4.5	2	1.2	2	6	3.5
7	13	17.1	14.5	20.5	15	5.5	2.8	1.2	2	6.2	3.5
8	13	17.1	15.8	20.5	15	5.5	2.8	1.2	2	6.2	3.5
9	13	17.1	16.5	20.5	15	5.5	2.8	1.2	2	6.2	3.5
10	14	18.1	21	20.5	15	5.5	2.8	1.2	2	6.2	3.5
11+12	16.5	20.6	22	23.5	18	5.5	2.8	1.2	2	6.2	3.5
13+14	19	23.1	24	28	22	6	2.8	1.2	2	6.7	4
15	21	26.9	24	29	22	7	3.7	1.3	2.5	7.6	4
16+17	21	26.9	26	30	23	7	3.7	1.3	2.5	7.6	4
18	25	30.9	29	32	24	8	3.7	1.3	3	8.5	4.5
19+20	25	30.9	30	33	25	8	3.7	1.3	3	8.5	4.5
21+22	30	35.4	34	33	25	8	3.7	1.8	3.5	8.5	5
23+24	30	35.4	35	35	27	8	3.7	1.8	3.5	8.5	5
25+27	33	38.2	37	35.5	27	8.5	3.7	1.8	4	9.1	5
28	38	43.3	42	38	29	9	3.7	1.8	4	9.6	6
29+32	38	43.3	45	39	30	9	3.7	1.8	4	9.6	6
33+34	45	53.5	45	50.5	39	11.5	5.4	2.1	5	12	7.5
35+37	45	53.5	50	50.5	39	11.5	5.4	2.1	5	12	7.5
38+43	52	60.5	54	50.5	39	11.5	5.4	2.1	5	12	7.5
44+49	57	65.5	56	52.5	41	11.5	5.4	2.1	5	13	8.5
50	64	72.5	69	56.5	45	11.5	5.4	2.1	5	13	8.5
55	64	72.5	74	58.5	47	11.5	5.4	2.1	5	13	8.5
60	72	79.3	80	60.5	49	11.5	5.4	2.1	5	13.5	8.5
65	77	84.5	87	62.5	51	11.5	5.4	2.1	5	13.5	8.5
70	82	89.5	92	62.5	51	11.5	5.4	2.1	5	13.5	8.5
75	87	94.5	97	68.5	57	11.5	5.4	2.1	5	13.5	8.5
80	92	99.5	102	70.5	59	11.5	5.4	2.1	5	13.5	8.5
85	98	105.5	110	72.5	59	13.5	5.4	2.6	5	13.5	8.5
90	105	111.5	117	75.5	62	13.5	5.4	2.6	5	13.5	8.5
95	110	116.5	122	75.5	62	13.5	5.4	2.6	5	13.5	8.5
100	114	119.5	127	88.5	75	13.5	5.4	2.6	5	13.5	8.5
110	124	132.2	143	92.5	75	17.5	7.1	3.9	5	13.5	8.5
120	134	142.2	155	102.5	85	17.5	7.1	3.9	5	13.5	8.5
130	145	153.2	166	112.5	95	17.5	7.1	3.9	5	13.5	8.5
135	152	161.2	171	113.5	95	18.5	7.1	3.9	5	13.5	8.5
140	157	164.3	178	118.5	100	18.5	7.1	3.9	5	13.5	8.5
150	167	174.2	188	128.5	110	18.5	7.1	3.9	5	13.5	8.5
160	188	195	199	141	120	21	9.1	3.9	5	13.5	8.5

2U2-2U2CA

Unbalanced
Dependent on rotation

O-Ring
Mechanical seals

Universal allround seal Conical spring rotating Shrunked seal rings



Operating limits:

(look at working conditions page 112)

$p \leq$	12bar (16bar)
$t =$	-35 ÷ 140°C (180°C)
$v \leq$	15 m/s

Materials:

Rotary: A, B, Q, U

Stationary: A, B, Q, U, V

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

EN 12756 (DIN 24960)											
										UCC	UCL
D1	D6	D7	D3	L1	L3	L4	L6	L5	D8	L7	
10	17	21	21	22	15	7	4	1.5	3	8.5	
12	19	23	22	25	18	7	4	1.5	3	8.5	
14	21	25	24	29	22	7	4	1.5	3	8.5	
16	23	27	26	30	23	7	4	1.5	3	8.5	
18	27	33	29	34	24	10	5	2	3	9	
20	29	35	30	35	25	10	5	2	3	9	
22	31	37	34	35	25	10	5	2	3	9	
24	33	39	35	37	27	10	5	2	3	9	
25	34	40	37	37	27	10	5	2	3	9	
28	37	43	42	39	29	10	5	2	3	9	
30	39	45	45	40	30	10	5	2	3	9	
32	42	48	45	40	30	10	5	2	3	9	
33	42	48	48	49	39	10	5	2	3	9	
35	44	50	50	49	39	10	5	2	3	9	
38	49	56	54	55	42	13	6	2	4	9	
40	51	58	56	55	42	13	6	2	4	9	
43	54	61	60	60	47	13	6	2	4	9	
45	56	63	64	60	47	13	6	2	4	9	
48	59	66	67	60	47	13	6	2	4	9	
50	62	70	69	60	46	14	6	2	4	9	
53	65	73	74	70	56	14	6	2	4	9	
55	67	75	74	70	56	14	6	2	4	9	
58	70	78	80	70	56	14	6	2	4	9	
60	72	80	80	70	56	14	6	2	4	9	
63	75	83	87	70	56	14	6	2	4	9	
65	77	85	87	80	66	14	6	2	4	9	
68	81	90	92	80	64	16	7	2	4	9	
70	83	92	92	80	64	16	7	2	4	9	
75	88	97	97	80	64	16	7	2	4	9	
80	95	105	102	90	72	18	7	2	4	9	
85	100	110	110	90	72	18	7	2	4	9	
90	105	115	117	90	72	18	7	2	4	9	
95	110	120	122	90	72	18	7	2	4	9	
100	115	125	127	90	72	18	7	2	4	9	