

FH / FHC



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 3b O-rings
- 3T PTFE wedge
- 3Ta PTFE gasket
- 4 Spring
- 5 Metal frame

SECTORS:



CHARACTERISTICS:

- Unbalanced.
- Single conical spring.
- Dependent on the rotation direction.
- Exchangeable contact surfaces.

OPERATING LIMITS:

$$d_1 = 10 \div 100 \text{ mm} \quad p = 10 \text{ kg/cm}^2$$

$$v = 20 \text{ m/s} \quad t = -20 \div +200^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

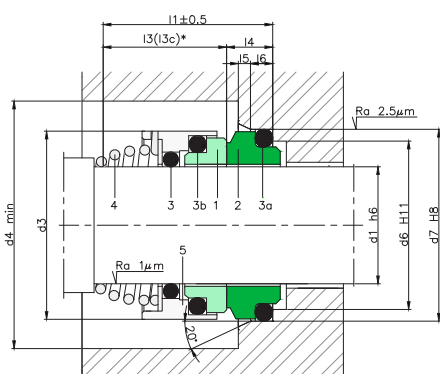
DESCRIPTION:

A general-purpose single, robust seal in which the contact surfaces can be exchanged with each other. It can be used in industrial applications for clean fluids with low viscosities or with a low content of suspended solids that tend to produced sediments or adhere to the seal.

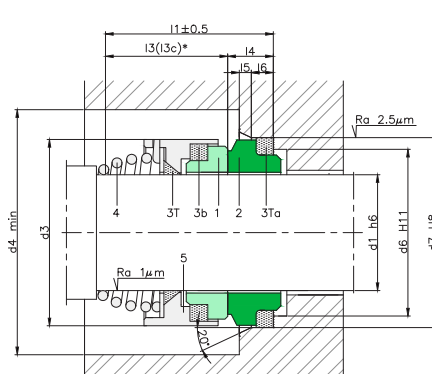
Types:

FH6: secondary seals made of PTFE.

FHC: same structure as FH but the length is I3C.



TYPE FH



TYPE FH PTFE

DIMENSIONS CHART

Dimensions in mm

Shaft	Rotary part				Stationary part					Total length
mm	d ₃	d ₄	I ₃	I _{3C} *	d ₆	d ₇	I ₄	I ₅	I ₆	I ₁
10	20	22	20	15	14.0	18.1	5.5	1.2	3	25.5
12	22	25	22	18	16.5	20.6	5.5	1.2	3	27.5
14	25	28	27	22	19.0	23.1	6.0	1.2	3	33.0
15	29	32	27	22	21.0	26.9	7.0	1.5	4	34.0
16	29	32	28	23	21.0	26.9	7.0	1.5	4	35.0
18	33	36	30	24	25.0	30.9	8.0	1.5	4	38.0
20	33	36	30	25	25.0	30.9	8.0	1.5	4	38.0
22	38	41	30	25	30.0	35.4	8.0	2.0	4	38.0
24	38	41	32	27	30.0	35.4	8.0	2.0	4	40.0
25	40	45	33	27	33.0	38.2	8.5	2.0	4	41.5
26	40	45	33	27	33.0	38.2	8.5	2.0	4	41.5
28	46	50	36	29	38.0	43.3	9.0	2.0	4	45.0
30	46	50	37	30	38.0	43.3	9.0	2.0	4	46.0
32	46	50	37	30	38.0	43.3	9.0	2.0	4	46.0
34	56	62	48	39	45.0	53.5	11.5	2.0	6	59.5
35	56	62	48	39	45.0	53.5	11.5	2.0	6	59.5
36	56	62	48	39	45.0	53.5	11.5	2.0	6	59.5
38	63	70	48	39	52.0	60.5	11.5	2.0	6	59.5
40	63	70	48	39	52.0	60.5	11.5	2.0	6	59.5
42	63	70	48	39	52.0	60.5	11.5	2.0	6	59.5
43	63	70	48	41	52.0	60.5	11.5	2.0	6	59.5
45	69	75	51	41	57.0	65.5	11.5	2.0	6	62.5
48	69	75	51	41	57.0	65.5	11.5	2.0	6	62.5
50	76	83	55	45	64.0	72.5	11.5	2.0	6	66.5
55	76	83	57	47	64.0	72.5	11.5	2.0	6	68.5
60	84	90	61	49	72.0	79.3	11.5	2.0	6	72.5
65	89	96	63	51	77.0	84.5	11.5	2.0	6	74.5
70	94	101	63	51	82.0	89.5	11.5	2.0	6	74.5
75	100	106	68	57	87.0	94.5	11.5	2.0	6	79.5
80	105	111	70	59	92.0	99.5	11.5	2.0	6	81.5
85	115	125	72	59	98.0	105.5	13.5	2.5	6	85.5
90	120	132	75	62	105	111.5	13.5	2.5	6	88.5
95	126	137	75	62	110	116.5	13.5	2.5	6	88.5
100	130	143	85	75	114	119.5	13.5	2.5	6	98.5

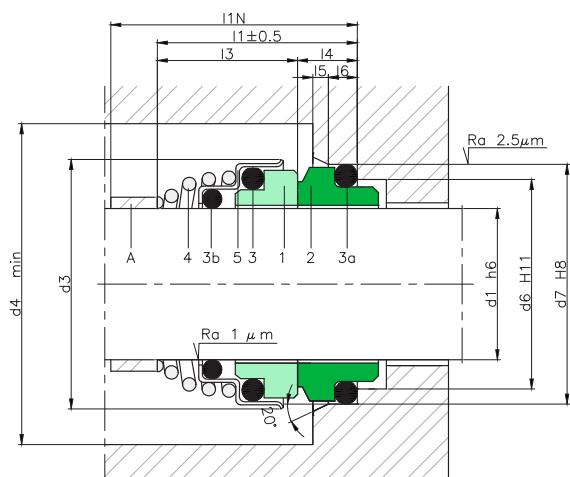
Dimensions subject to changes or modifications.

FN / LS15 and FN.NU / LS15DIN



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 3b O-rings
- 4 Spring
- 5 Metal frame
- A Spacer not provided with the seal



SECTORS:



CHARACTERISTICS:

- Unbalanced.
- Single conical spring.
- Dependent on the rotation direction.

OPERATING LIMITS:

$$d_1 = 10 \div 40 \text{ mm} \quad p = 10 \text{ kg/cm}^2$$

$$v = 20 \text{ m/s} \quad t = -20 \div +180^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

An all-purpose mechanical seal.

A single seal with a versatile design that can be used in applications with low demands: for pumping industrial wastewater and for household use.

Seal compliant with standard EN 12756 (NU).

DIMENSIONS CHART FN / LS15

Dimensions in mm

Shaft	Rotary part			Stationary part					Total length
mm	d ₃	d ₄	l ₃	d ₆	d ₇	l ₄	l ₅	l ₆	l ₁
10	19.5	22	15	14.0	18.1	5.5	1.2	3	20.5
11	22.0	25	18	16.5	20.6	5.5	1.2	3	23.5
12	22.8	25	18	16.5	20.6	5.5	1.2	3	23.5
13	25.0	28	22	19.0	23.1	6.0	1.2	3	28.0
14	25.0	28	22	19.0	23.1	6.0	1.2	3	28.0
15	28.6	32	22	21.0	26.9	7.0	1.5	4	29.0
16	28.6	32	23	21.0	26.9	7.0	1.5	4	30.0
17	28.6	32	23	21.0	26.9	7.0	1.5	4	30.0
18	32.7	36	24	25.0	30.9	8.0	1.5	4	32.0
19	32.7	36	25	25.0	30.9	8.0	1.5	4	33.0
20	32.7	36	25	25.0	30.9	8.0	1.5	4	33.0
21	37.4	42	25	30.0	35.4	8.0	1.5	4	33.0
22	37.4	42	25	30.0	35.4	8.0	2.0	4	33.0
24	37.4	42	27	30.0	35.4	8.0	2.0	4	35.0
25	40.0	45	27	33.0	38.2	8.5	2.0	4	35.5
28	45.5	51	29	38.0	43.3	9.0	2.0	4	38.0
30	45.5	51	30	38.0	43.3	9.0	2.0	4	39.0
32	45.5	51	30	38.0	43.3	9.0	2.0	4	39.0
35	50.0	55	39	45.0	53.5	11.5	2.0	6	50.5
38	56.0	68	39	52.0	60.5	11.5	2.0	6	50.5
40	58.0	68	39	52.0	60.5	11.5	2.0	6	50.5

Dimensions subject to changes or modifications.

DIMENSIONS CHART FN.NU / LS15DIN

Dimensions in mm

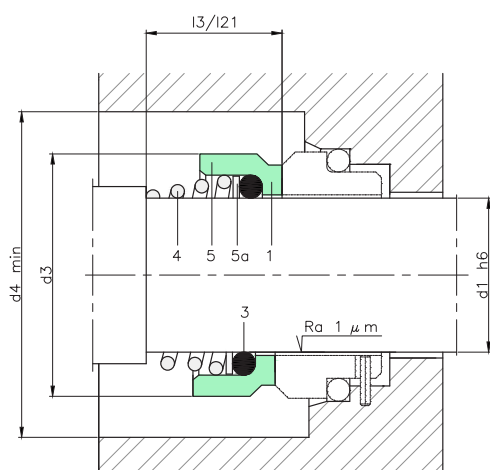
Shaft	Rotary part			Stationary part					Total length	
mm	d ₃	d ₄	l ₃	d ₆	d ₇	l ₄	l ₅	l ₆	l _{1N}	l ₁
10	20.0	22	15	17	21	7	1	4	40	22
12	22.0	25	18	19	23	7	1	4	40	25
14	24.0	28	22	21	25	7	1	4	40	29
16	26.0	32	23	23	27	7	1	4	40	30
18	32.0	36	24	27	33	10	4	9	45	34
20	33.0	36	25	29	35	10	5	9	45	35
22	36.0	42	25	31	37	10	5	9	45	35
24	37.4	42	27	33	39	10	5	9	50	37
25	38.0	45	27	34	40	10	5	9	50	37
28	42.0	51	29	37	43	10	5	9	50	39
30	44.0	51	30	39	45	10	5	9	50	40
32	45.5	51	30	42	48	10	5	9	55	40
33	46.5	51	39	42	48	10	5	9	55	49
35	49.0	55	39	44	50	10	5	9	55	49
38	56.0	68	42	49	56	13	5	9	55	55
40	58.0	68	42	51	58	13	5	9	55	55

LS18 / LS19



COMPONENTS:

- 1 Rotating contact surface
- 3 O-rings
- 4 Spring
- 5 Metal frame
- 5a Ring



Type LS18: Working length of rotating part l_3 .

Type LS19: Working length of rotating part l_{21} .

SECTORS:



CHARACTERISTICS:

- Unbalanced.
- Single conical spring.
- Dependent on the rotation direction.

OPERATING LIMITS:

$$d_1 = 10 \div 80 \text{ mm} \quad p = 10 \text{ kg/cm}^2$$

$$v = 20 \text{ m/s} \quad t = -20 \div +200^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

Single mechanical seal with an extremely versatile and functional design. The rotating part of the seal can be combined with a large variety of stationary parts, which offers a wide range of combinations. Its structure allows secondary seals made of different materials to be used: FKM, Aflas®, FFKM, FEP, NBR, HNBR and materials complying with special standards such as FDA, USP, EC, etc.

This seal may be supplied with any of the stationary parts shown in pages 56 and 58.

DIMENSIONS CHART

Dimensions in mm

Shaft mm	Rotary part			
	d ₃	d ₄	l ₃	l ₂₁
10	19	24	15,5	15,5
12	21	26	16	15,5
14	23	28	16,5	15,5
15	24	29	-	15,5
16	26	31	18	17,5
18	29	34	19,5	18,5
20	31	36	22	20
22	33	38	21,5	21,5
24	35	40	23,5	23
25	36	41	26,5	24,5
26	37	42	-	24,5
28	40	45	26,5	24,5
30	43	48	26,5	24,5
32	46	51	28,5	28
33	47	52	28,5	-
35	49	54	28,5	28
38	53	58	33,5	31
40	56	61	36	34
42	59	64	-	35
43	59	64	38,5	-
45	61	66	39,5	36,5
48	64	69	46	42
50	66	71	45	43
53	69	74	47	-
55	71	76	49	47
58	76	81	55	50
60	78	83	55	51
63	83	88	55	-
65	84	89	55	52
68	88	93	55	53
70	90	95	57	54
75	98	103	62	55
80	100	105	61,8	58

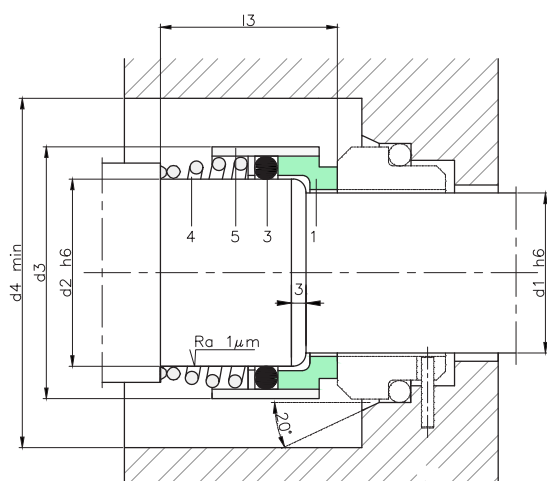
Dimensions subject to changes or modifications.

LS18B



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 4 Spring
- 5 Metal frame



SECTORS:



CHARACTERISTICS:

- **Balanced.**
- **Single conical spring.**
- **Dependent on the rotation direction.**

OPERATING LIMITS:

$$d_1 = 10 \div 80 \text{ mm} \quad p = 25 \text{ kg/cm}^2$$

$$v = 15 \text{ m/s} \quad t = -20 \div +200^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

This mechanical seal has an extremely versatile and functional design and is suitable for working at pressures of up to 25 kg/cm².

The rotating part of the seal can be combined with a large variety of stationary parts, which offers a wide range of combinations.

Its structure allows secondary seals made of different materials to be used: FKM, Aflas®, FFKM, FEP, NBR, HNBR and materials complying with special standards such as FDA, USP, EC 1935/2004, etc.

This seal may be supplied with any of the stationary parts shown in pages 56 and 58.

DIMENSIONS CHART

Dimensions in mm

Shaft mm	Rotary part			
	d ₂	d ₃	d ₄	l ₃
10	14	24	29	25.5
12	16	26	31	26.5
14	18	31	36	29.5
16	20	34	39	31.0
18	22	36	41	32.5
20	24	38	43	32.5
22	26	40	45	32.5
24	28	42	47	32.5
25	30	44	49	33.5
28	33	47	52	35.5
30	35	49	54	35.5
32	38	54	59	39.5
33	38	54	59	39.5
35	40	56	61	43.5
38	43	59	64	46.0
40	45	61	66	48.0
43	48	64	69	51.0
45	50	66	71	55.0
48	53	69	74	55.0
50	55	71	76	58.0
53	58	78	83	60.0
55	60	79	84	60.0
58	63	83	88	60.0
60	65	85	90	60.0
63	68	88	93	60.0
65	70	90	95	61.0
70	75	98	103	63.0
75	80	103	108	68.0
80	85	109	114	68.0

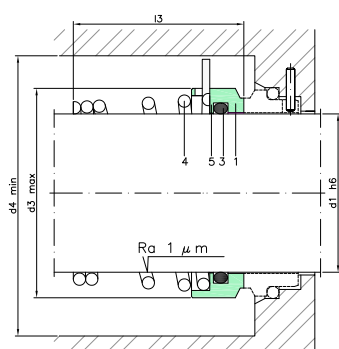
Dimensions subject to changes or modifications.

LS60IL / LS60IN

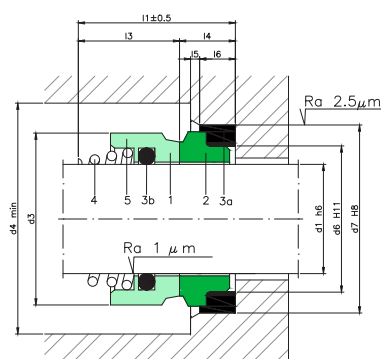


COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 4 Spring
- 5 Metal frame



TYPE LS60 IL



TYPE LS60 IN

SECTORS:



CHARACTERISTICS:

- Unbalanced.
- Single conical spring.
- Dependent on the rotation direction.

OPERATING LIMITS:

$$d_1 = 20 \div 100 \text{ mm} \quad p = 10 \text{ kg/cm}^2$$

$$v = 20 \text{ m/s} \quad t = -40 \div +180^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

A versatile, robust single seal that is widely used in many different industrial and household applications.

DIMENSIONS CHART LS60IL

Dimensions in mm

Shaft mm	Rotary part		
	d ₃	d ₄	l ₃
18	29	32	19,5
25	36	42,6	25
30	43	52	27
35	49	58,4	30
40	56	64,6	34
48	64	72,5	34
70	89,6	92	56

Dimensions subject to changes or modifications.

DIMENSIONS CHART LS60IN

Dimensions in mm

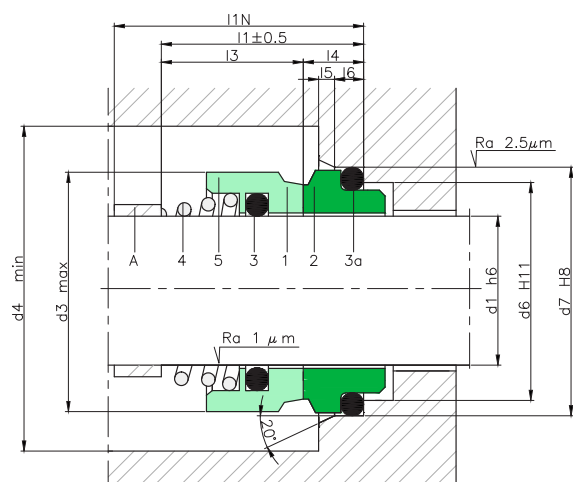
Shaft		Rotary part			Stationary part			Total length
(")	mm	d ₃	d ₄	l ₃	d ₆	d ₇	l ₄	l ₁
0,875	22,22	34,00	46,00	25,50	29,00	37,30	10,00	35,50
1,00	25,24	37,00	50,00	24,90	32,00	40,50	10,60	35,50
1,25	31,75	45,00	62,00	33,50	39,00	50,80	11,50	45,00

RN / LS60 and RN.NU / LS60DIN



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 4 Spring
- 5 Metal frame
- A Spacer not provided with the seal



SECTORS:



CHARACTERISTICS:

- Unbalanced.
- Single conical spring.
- Dependent on the rotation direction.

OPERATING LIMITS:

$$d_1 = 10 \div 140 \text{ mm} \quad p = 10 \text{ kg/cm}^2$$

$$v = 20 \text{ m/s}$$

$$t = -20 \div +200^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

A versatile, robust single seal that is widely used in many different industrial and household applications. The rotating part, with a compact design, only permits the use of secondary seals made of elastic materials. If it should be necessary to use secondary seals made of PTFE for reasons related to temperature, the RN6 model is recommended.

Types:

RN6 and RN6 DIN: Secondary seals made of PTFE and contact surfaces in GB.

RN.NU / LS60DIN: standardised models in accordance with EN 12756 NU.

DIMENSIONS CHART RN / LS60

Dimensions in mm

Shaft	Rotary part			Stationary part						Total length
mm	d ₃	d ₄	l ₃	d ₆	d ₇	l ₄	l ₅	l ₆	l ₁	
10	19.0	23.0	15	14.0	18.1	5.5	1.2	3	20.5	
11	21.0	25.0	18	16.5	20.6	5.5	1.2	3	23.5	
12	21.0	25.0	18	16.5	20.6	5.5	1.2	3	23.5	
13	23.0	27.0	22	19.0	23.1	6.0	1.2	3	28.0	
14	23.0	27.0	22	19.0	23.1	6.0	1.2	3	28.0	
15	24.0	28.0	22	21.0	26.9	7.0	1.5	4	29.0	
16	26.0	30.0	23	21.0	26.9	7.0	1.5	4	30.0	
17	26.0	30.0	23	21.0	26.9	7.0	1.5	4	30.0	
18	29.0	33.0	24	25.0	30.9	8.0	1.5	4	32.0	
19	31.0	35.0	25	25.0	30.9	8.0	1.5	4	33.0	
20	31.0	35.0	25	25.0	30.9	8.0	1.5	4	33.0	
21	33.0	37.0	25	30.0	35.4	8.0	2.0	4	33.0	
22	33.0	37.0	25	30.0	35.4	8.0	2.0	4	33.0	
23	35.0	39.0	27	30.0	35.4	8.0	2.0	4	35.0	
24	35.0	39.0	27	30.0	35.4	8.0	2.0	4	35.0	
25	36.0	40.0	27	33.0	38.2	8.5	2.0	4	35.5	
26	36.0	40.0	27	33.0	38.2	8.5	2.0	4	35.5	
27	36.0	40.0	27	33.0	38.2	8.5	2.0	4	35.5	
28	40.0	44.0	29	38.0	43.3	9.0	2.0	4	38.0	
29	43.0	47.0	30	38.0	43.3	9.0	2.0	4	39.0	
30	43.0	47.0	30	38.0	43.3	9.0	2.0	4	39.0	
31	46.0	50.0	30	38.0	43.3	9.0	2.0	4	39.0	
32	46.0	50.0	30	38.0	43.3	9.0	2.0	4	39.0	
33	46.0	50.0	39	45.0	53.5	11.5	2.0	6	50.5	
34	49.0	53.0	39	45.0	53.5	11.5	2.0	6	50.5	
35	49.0	53.0	39	45.0	53.5	11.5	2.0	6	50.5	
36	49.0	53.0	39	45.0	53.5	11.5	2.0	6	50.5	
37	49.0	53.0	39	45.0	53.5	11.5	2.0	6	50.5	
38	53.0	57.0	39	52.0	60.5	11.5	2.0	6	50.5	
39	56.0	60.0	39	52.0	60.5	11.5	2.0	6	50.5	
40	56.0	60.0	39	52.0	60.5	11.5	2.0	6	50.5	
41	56.0	60.0	39	52.0	60.5	11.5	2.0	6	50.5	
42	59.0	63.0	39	52.0	60.5	11.5	2.0	6	50.5	
43	59.0	63.0	41	57.0	65.5	11.5	2.0	6	52.5	
44	60.0	64.0	41	57.0	65.5	11.5	2.0	6	52.5	
45	61.0	65.0	41	57.0	65.5	11.5	2.0	6	52.5	
46	61.0	65.0	41	57.0	65.5	11.5	2.0	6	52.5	
47	64.0	68.0	41	57.0	65.5	11.5	2.0	6	52.5	
48	64.0	68.0	41	57.0	65.5	11.5	2.0	6	52.5	
49	64.0	68.0	41	57.0	65.5	11.5	2.0	6	52.5	
50	66.0	70.0	45	64.0	72.5	11.5	2.0	6	56.5	
55	71.0	75.0	47	64.0	72.5	11.5	2.0	6	58.5	
60	78.0	82.0	49	72.0	79.3	11.5	2.0	6	60.5	
65	84.0	88.0	51	77.0	84.5	11.5	2.0	6	62.5	
70	89.6	93.6	51	82.0	89.5	11.5	2.0	6	62.5	
75	98.0	102.0	57	87.0	94.5	11.5	2.0	6	68.5	
80	100.0	104.0	59	92.0	99.5	11.5	2.0	6	70.5	
85	107.5	111.5	59	98.0	105.5	13.5	2.5	6	72.5	
90	111.0	115.0	62	105.0	111.5	13.5	2.5	6	75.5	
95	119.0	123.0	62	110.0	116.5	13.5	2.5	6	75.5	
100	123.8	127.8	75	114.0	119.5	13.5	2.5	6	88.5	
110	136.0	140.0	75	124.0	132.2	17.5	4.0	7	92.5	
120	148.0	152.0	85	134.0	142.2	17.5	4.0	7	102.5	
130	160.0	164.0	95	145.0	153.2	17.5	4.0	7	112.5	
135	166.0	170.0	95	152.0	161.2	18.5	4.0	7	113.5	
140	171.0	175.0	100	157.0	164.3	18.5	4.0	7	118.5	

Dimensions subject to changes or modifications.

DIMENSIONS CHART RN.NU / LS60DIN

Dimensions in mm

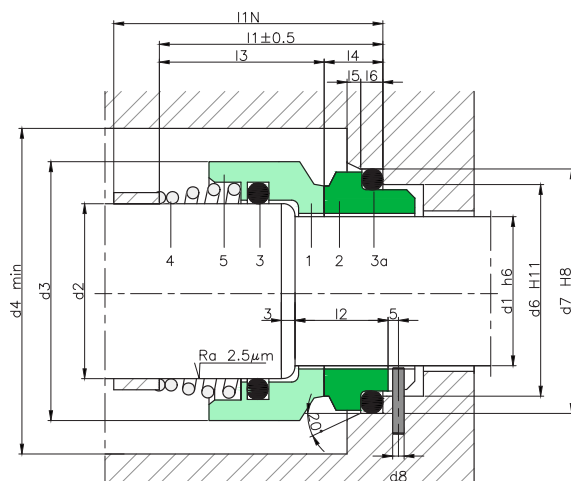
Shaft	Rotary part			Stationary part						Total length
mm	d ₃	d ₄	l ₃	d ₆	d ₇	l ₄	l ₅	l ₆	l _{1N}	l ₁
10	19.0	22	15	17	21	7	1.5	4	40	22
12	21.0	24	18	19	23	7	1.5	4	40	25
14	23.0	26	22	21	25	7	1.5	4	40	29
16	26.0	28	23	23	27	7	1.5	4	40	30
18	29.0	34	24	27	33	10	2.0	4	45	34
20	31.0	36	25	29	35	10	2.0	5	45	35
22	33.0	38	25	31	37	10	2.0	5	45	35
24	35.0	40	27	33	39	10	2.0	5	50	37
25	36.0	41	27	34	40	10	2.0	5	50	37
28	40.0	44	29	37	43	10	2.0	5	50	39
30	43.0	46	30	39	45	10	2.0	5	50	40
32	46.0	48	30	42	48	10	2.0	5	55	40
33	46.0	49	39	42	48	10	2.0	5	55	49
35	49.0	51	39	44	50	10	2.0	5	55	49
38	53.0	58	42	49	56	13	2.0	6	55	55
40	56.0	60	42	51	58	13	2.0	6	55	55
43	59.0	63	47	54	61	13	2.0	6	60	60
45	61.0	65	47	56	63	13	2.0	6	60	60
48	64.0	68	47	59	66	13	2.0	6	60	60
50	66.0	70	46	62	70	14	2.5	6	60	60
53	69.0	73	56	65	73	14	2.5	6	70	70
55	71.0	75	56	67	75	14	2.5	6	70	70
58	76.0	83	56	70	78	14	2.5	6	70	70
60	78.0	85	56	72	80	14	2.5	6	70	70
63	81.0	88	56	75	83	14	2.5	6	70	70
65	84.0	90	66	77	85	14	2.5	6	80	80
68	88.0	93	64	81	90	16	2.5	7	80	80
70	89.6	95	64	83	92	16	2.5	7	80	80
75	98.0	104	64	88	97	16	2.5	7	80	80
80	100.0	109	72	95	105	18	3.0	7	90	90
85	107.5	114	72	100	110	18	3.0	7	90	90
90	111.0	119	72	105	115	18	3.0	7	90	90
95	119.0	124	72	110	120	18	3.0	7	90	90
100	123.8	129	72	115	125	18	3.0	7	90	90

RNB / LS60B and RN.NB / LS60BDIN



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 4 Spring
- 5 Metal frame



SECTORS:



CHARACTERISTICS:

- **Balanced.**
- **Single conical spring.**
- **Dependent on the rotation direction.**

OPERATING LIMITS:

$$d_1 = 10 \div 100 \text{ mm} \quad p = 50 \text{ kg/cm}^2$$

$$v = 20 \text{ m/s}$$

$$t = -20 \div +200^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

A versatile, robust single seal that is widely used in many different industrial and household applications. Suitable for working at high pressures.

The rotating part, with a compact design, only permits the use of secondary seals made of elastic materials.

Types:

RN.NB/LS60BDIN: standardised models in accordance with EN 12756 NB.

DIMENSIONS CHART RNB / LS60B

Dimensions in mm

Shaft	Rotary part				Stationary part							Total length
mm	d ₂	d ₃	d ₄	l ₃	d ₆	d ₇	l ₂	l ₄	l ₅	l ₆	l ₇	l ₁
10	13	22	27	30	14.0	18.1	12.0	5.5	1.2	3	1.5	35.5
12	15	24	30	30	16.5	20.6	12.0	5.5	1.2	3	1.5	35.5
14	17	26	31	31	19.0	23.1	12.5	6.0	1.2	3	1.5	37.0
15	18	32	36	32	21.0	26.9	13.5	7.0	1.5	4	1.5	39.0
16	19	32	36	34	21.0	26.9	14.5	7.0	1.5	4	1.5	41.0
18	21	35	41	34	25.0	30.9	15.5	8.0	1.5	4	1.5	42.0
20	23	36	41	36	25.0	30.9	15.5	8.0	1.5	4	1.5	44.0
22	26	39	45	37	30.0	35.4	16.0	8.0	2.0	4	2.0	45.0
24	28	42	50	39	30.0	35.4	16.0	8.0	2.0	4	2.0	47.0
25	29	43	50	40	33.0	38.2	16.5	8.5	2.0	4	2.0	48.5
28	32	46	50	40	38.0	43.3	17.0	9.0	2.0	4	2.0	49.0
30	34	48	60	49	38.0	43.3	17.0	9.0	2.0	4	2.0	58.0
32	36	50	60	49	38.0	43.3	17.0	9.0	2.0	4	2.0	58.0
35	39	55	68	51	45.0	53.5	21.5	11.5	2.0	6	2.0	62.5
38	42	57	68	51	52.0	60.5	21.5	11.5	2.0	6	2.0	62.5
40	44	60	72	53	52.0	60.5	21.5	11.5	2.0	6	2.0	64.5
42	46	62	72	53	52.0	60.5	21.5	11.5	2.0	6	2.0	64.5
43	47	63	72	53	52.0	60.5	21.5	11.5	2.0	6	2.0	64.5
45	49	65	72	54	57.0	65.5	22.4	11.5	2.0	6	2.0	65.5
50	54	70	80	59	64.0	72.5	23.5	11.5	2.0	6	2.0	70.5
52	57	75	87	62	64.0	72.5	24.0	11.5	2.0	6	2.5	73.5
55	60	80	87	64	64.0	72.5	24.0	11.5	2.0	6	2.5	75.5
60	65	85	92	66	72.0	79.3	24.0	11.5	2.0	6	2.5	77.5
65	70	90	97	66	77.0	84.5	24.0	11.5	2.0	6	2.5	77.5
70	75	99	102	72	82.0	89.5	24.0	11.5	2.0	6	2.5	83.5
75	80	104	107	75	87.0	94.5	25.0	11.5	2.0	6	2.5	86.5
80	85	109	113	75	92.0	99.5	25.0	11.5	2.0	6	2.5	86.5
85	90	114	120	78	98.0	105.5	27.0	13.5	2.5	6	2.5	91.5
90	95	119	130	78	105.0	111.5	27.0	13.5	2.5	6	2.5	91.5
95	100	124	136	91	110.0	116.5	27.0	13.5	2.5	6	2.5	104.5
100	106	130	150	93	114.0	119.5	28.5	13.5	2.5	6	3.0	106.5

Dimensions subject to changes or modifications.

DIMENSIONS CHART RN.NB / LS60BDIN

Dimensions in mm

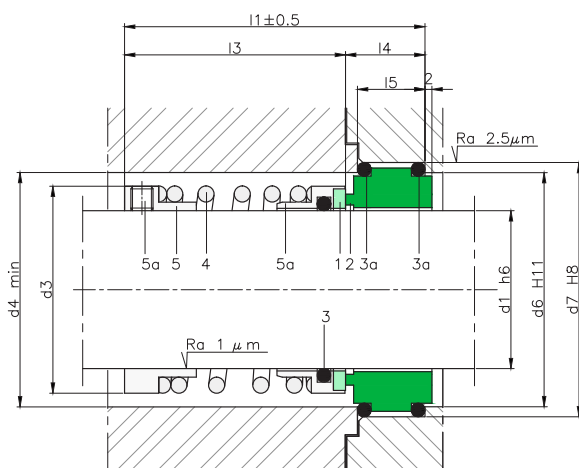
Shaft	Rotary part				Stationary part							Total length	
mm	d ₂	d ₃	d ₄	l ₃	d ₆	d ₇	d ₈	l ₂	l ₄	l ₅	l ₆	l _{1N}	l ₁
10	14	24	26	43	17	21	3	18	7	1.5	4	50	50
12	16	26	28	43	19	23	3	18	7	1.5	4	50	50
14	18	32	34	39	21	25	3	18	7	1.5	4	55	46
16	20	34	36	40	23	27	3	18	7	1.5	4	55	47
18	22	36	38	41	27	33	3	20	10	2.0	5	55	51
20	24	38	40	43	29	35	3	20	10	2.0	5	60	53
22	26	40	42	43	31	37	3	20	10	2.0	5	60	53
24	28	42	44	50	33	39	3	20	10	2.0	5	60	60
25	30	44	46	50	34	40	3	20	10	2.0	5	60	60
28	33	47	49	55	37	43	3	20	10	2.0	5	65	65
30	35	49	51	55	39	45	3	20	10	2.0	5	65	65
32	38	54	58	55	42	48	3	20	10	2.0	5	65	65
33	38	54	58	55	42	48	3	20	10	2.0	5	65	65
35	40	56	60	55	44	50	3	20	10	2.0	5	65	65
38	43	59	63	62	49	56	4	23	13	2.0	6	75	75
40	45	61	65	62	51	58	4	23	13	2.0	6	75	75
43	48	64	68	62	54	61	4	23	13	2.0	6	75	75
45	50	66	70	62	56	63	4	23	13	2.0	6	75	75
48	53	69	73	72	59	66	4	23	13	2.0	6	85	85
50	55	71	75	71	62	70	4	25	14	2.5	6	85	85
53	58	78	83	71	65	73	4	25	14	2.5	6	85	85
55	60	80	85	71	67	75	4	25	14	2.5	6	85	85
58	63	83	88	71	70	78	4	25	14	2.5	6	85	85
60	65	85	90	81	72	80	4	25	14	2.5	6	95	95
63	68	88	93	81	75	83	4	25	14	2.5	6	95	95
65	70	90	95	81	77	85	4	25	14	2.5	6	95	95
70	75	99	104	79	83	92	4	28	16	2.5	7	95	95
75	80	104	109	89	88	97	4	28	16	2.5	7	105	105
80	85	109	114	87	95	105	4	28	18	3.0	7	105	105
85	90	114	119	87	100	110	4	28	18	3.0	7	105	105
90	95	119	124	87	105	115	4	28	18	3.0	7	105	105
95	100	124	129	87	110	120	4	28	18	3.0	7	105	105
100	105	129	134	87	115	125	4	28	18	3.0	7	105	105

LS40A



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 4 Spring
- 5 Metal frame
- 5a Set screws



SECTORS:



CHARACTERISTICS:

- Unbalanced.
- Single cylindrical spring.
- Dependent on the rotation direction.
- System attached to the shaft by allen screws.

OPERATING LIMITS:

$$d_1 = 20 \div 100 \text{ mm} \quad p = 12 \text{ kg/cm}^2$$

$$v = 15 \text{ m/s} \quad t = -20 \div +200^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

Single mechanical seal with an extremely versatile and functional design.

The fact that it is attached to the shaft with screws allows this seal to be installed in a large variety of applications with differing mounting dimensions.

Its structure allows secondary seals made of different materials to be used: FKM, Atlas®, FFKM, FEP, NBR, HNBR and materials complying with special standards such as FDA, USP, EC, etc.

DIMENSIONS CHART

Dimensions in mm

Shaft	Rotary part			Stationary part				Total length
mm	d ₃	d ₄	l ₃	d ₆	d ₇	l ₄	l ₅	l ₁
20	34	36	46	36	42	23	18	69
22	36	38	46	38	44	23	18	69
24	38	40	46	40	46	23	18	69
25	39	41	47	41	47	23	18	70
28	42	44	49	44	50	23	20	72
30	44	46	49	46	52	23	20	72
32	46	48	52	48	54	23	18	75
33	47	49	52	49	55	23	18	75
35	49	51	55	51	57	23	18	78
38	54	58	57	58	64	25	20	82
40	56	60	57	60	66	25	20	82
43	59	63	57	63	69	25	20	82
45	61	65	57	65	71	25	20	82
48	64	68	64	68	74	25	20	89
50	66	70	68	70	76	25	20	93
53	69	73	69	73	79	25	20	94
55	71	75	71	75	81	25	20	96
58	76	83	71	83	89	28	20	99
60	78	85	74	85	91	28	22	102
63	81	88	74	88	94	28	22	102
65	83	90	78	90	96	28	22	106
68	86	93	78	93	99	30	22	106
70	90	95	79	95	101	30	24	109
75	95	104	84	104	110	30	24	114
80	100	109	84	109	115	31	24	115
85	105	114	84	114	120	31	25	115
90	110	119	90	119	125	31	24	121
95	115	124	90	124	130	31	25	121
100	121	129	90	129	135	31	25	121

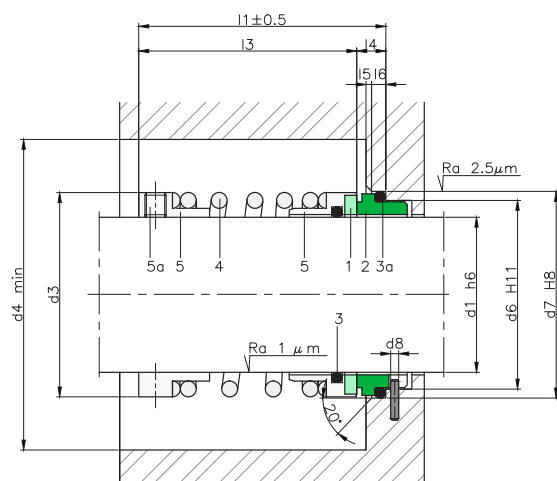
Dimensions subject to changes or modifications.

LS40C



COMPONENTS:

- 1 Rotating contact surface
- 2 Stationary contact surface
- 3 O-rings
- 3a O-rings
- 4 Spring
- 5 Metal frame
- 5a Set screws



SECTORS:



CHARACTERISTICS:

- **Unbalanced.**
- Single cylindrical spring.
- **Dependent on the rotation direction.**
- System attached to the shaft by allen screws.

OPERATING LIMITS:

$$d_1 = 20 \div 100 \text{ mm} \quad p = 12 \text{ kg/cm}^2$$

$$v = 15 \text{ m/s} \quad t = -20 \div +200^\circ\text{C} (*)$$

(*) The temperature resistance depends on the material of the secondary seals used.

The operating limits are defined by the PV factor which is determined for the sealing system characteristics and those of the application.

DESCRIPTION:

Single mechanical seal with an extremely versatile and functional design.

The fact that it is attached to the shaft with screws allows this seal to be installed in a large variety of applications with differing mounting dimensions.

Its structure allows secondary seals made of different materials to be used: FKM, Aflas®, FFKM, FEP, NBR, HNBR and materials complying with special standards such as FDA, USP, EC, etc.

DIMENSIONS CHART

Dimensions in mm

Shaft	Rotary part			Stationary part				Total length
mm	d ₃	d ₄	l ₃	d ₆	d ₇	d ₈	l ₄	l ₁
20	34.50	39.05	35.50	29.06	33.32	3.50	9.0	44.50
22	34.93	39.93	35.50	30.66	34.93	3.50	9.0	44.50
25	38.10	43.10	39.00	33.84	39.85	3.50	10.0	49.00
28	42.86	47.86	41.00	37.01	43.05	3.50	10.0	51.00
30	45.50	50.50	41.00	38.61	44.63	3.50	10.0	51.00
32	47.00	52.00	44.00	40.28	46.32	3.50	10.0	54.00
35	50.00	55.00	47.00	43.46	49.48	3.50	10.0	57.00
38	53.00	58.00	47.00	46.63	52.56	3.50	10.0	57.00
40	55.00	60.00	47.00	48.13	54.25	3.50	10.0	57.00
45	60.00	65.00	47.00	52.98	59.02	3.50	10.0	57.00
48	61.91	66.91	55.00	57.66	63.68	4.50	10.0	65.00
50	66.00	71.00	58.50	59.33	65.37	4.50	10.0	68.50
55	71.00	76.00	60.00	64.01	70.03	4.50	10.0	70.00
60	77.00	82.00	63.00	70.36	76.38	4.50	10.0	73.00
65	82.00	87.00	66.00	75.21	81.23	4.50	10.0	76.00
70	87.00	92.00	66.00	79.88	85.90	4.50	10.0	76.00
75	91.50	96.50	71.00	84.73	90.77	4.50	10.0	81.00
80	99.50	104.50	77.50	94.26	100.29	4.50	10.0	87.50
85	105.50	110.50	77.50	98.93	104.77	4.50	10.0	87.50
90	110.50	115.50	82.00	113.78	109.82	4.50	10.0	92.00
95	115.50	120.50	82.00	108.46	114.33	4.50	10.0	92.00
100	120.00	125.50	82.00	113.31	119.33	4.50	10.0	92.00

Dimensions subject to changes or modifications.