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 ÷ 100 mm p= 10 kg/cm²

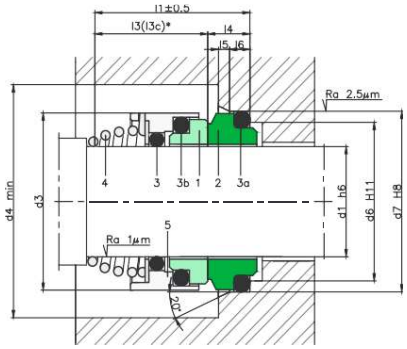
v= 20 m/s t= -20÷ +200oC(*)

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

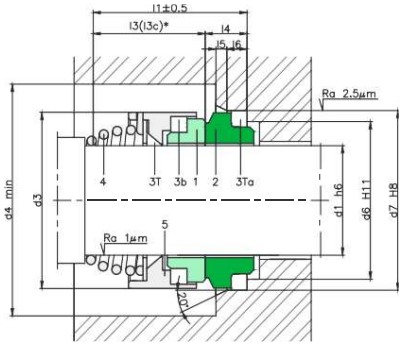
The operating limits are deined by the PV factor which is determined for the sealing system characteristics and those of the application.

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 luids 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.



TYPEFH



TYPEFH PTFE

DIMENSIONS CHART

Dimensions in mm

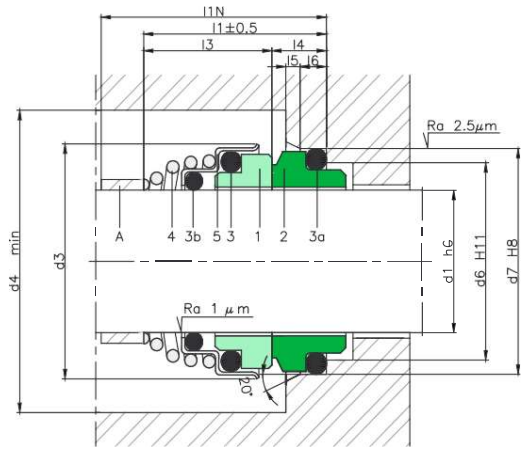
Shaft	Rotary part				Stationary part					Total length
mm	d_3	d_4	l_3	l_{3C}	d_6	d_7	l_4	l_5	l_6	l_1
10	20	22	20	15	14.0	18.1	5.5	1.2	3	25.5
12	22	25	22	18	16.5	20.6	5.5	1.2	3	27.5
15	29	32	27	22	21.0	26.9	7.0	1.5	4	34.0
18	33	36	30	24	25.0	30.9	8.0	1.5	4	38.0
22	38	41	30	25	30.0	35.4	8.0	2.0	4	38.0
25	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
32	46	50	37	30	38.0	43.3	9.0	2.0	4	46.0
35	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
42	63	70	48	39	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
50	76	83	55	45	64.0	72.5	11.5	2.0	6	66.5
60	84	90	61	49	72.0	79.3	11.5	2.0	6	72.5
70	94	101	63	51	82.0	89.5	11.5	2.0	6	74.5
80	105	111	70	59	92.0	99.5	11.5	2.0	6	81.5
90	120	132	75	62	105	111.5	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 modiications.

FN / MSE15 and FN.NU / MSE15DIN

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 ÷ 40 mm p= 10 kg/cm²

v= 20 m/s t= -20÷ +180oC(*)

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

The operating limits are deined 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-indus trial 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
13	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
17	28.6	32	23	21.0	26.9	7.0	1.5	4	30.0
19	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
24	37.4	42	27	30.0	35.4	8.0	2.0	4	35.0
28	45.5	51	29	38.0	43.3	9.0	2.0	4	38.0
32	45.5	51	30	38.0	43.3	9.0	2.0	4	39.0
38	56.0	68	39	52.0	60.5	11.5	2.0	6	50.5

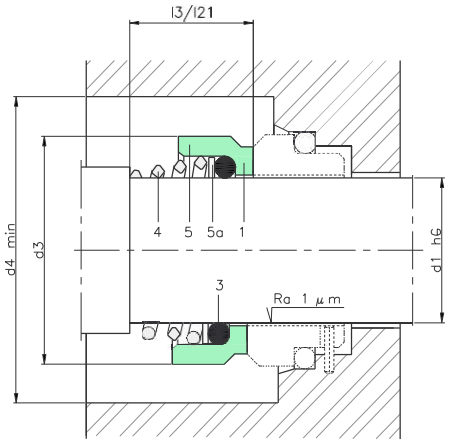
DIMENSIONS CHART FN.NU / LS15DIN

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

Dimensions subject to changes or modiications.

MSE18 / MSE19



Type LS18: Working length of rotating part l_3
Type LS19: Working length of rotating part l_{21}

COMPONENTS:

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

SECTORS:

CHARACTERISTICS:

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

OPERATING LIMITS:

d_1= 10 ÷ 80 mm p= 10 kg/cm²

v= 20 m/s t= -20÷ +200oC(*)

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

The operating limits are deined 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- differ ent materials to be used: FKM, Al®as , 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 stat-ion ary parts shown in pages 56 and 58.

DIMENSIONS CHART

Dimensions in mm

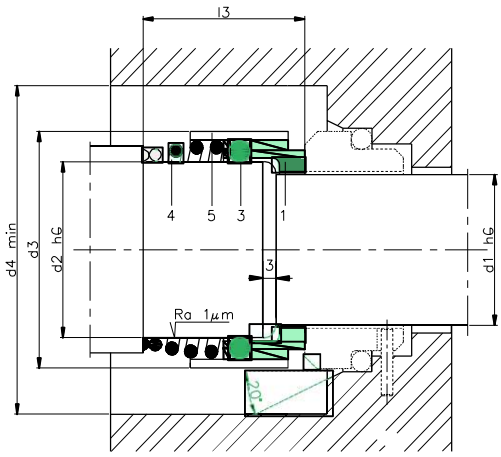
Shaft	Rotary part			
mm	d_3	d_4	l_3	l_{21}
10	19	24	15,5	15,5
12	21	26	16	15,5
14	23	28	16,5	15,5
15	24	29	-	15,5
16	26	31	18	17,5
18	29	34	19,5	18,5
20	31	36	22	20
22	33	38	21,5	21,5
24	35	40	23,5	23
25	36	41	26,5	24,5
26	37	42	-	24,5
28	40	45	26,5	24,5
30	43	48	26,5	24,5
32	46	51	28,5	28
33	47	52	28,5	-
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 modiications.

MSE18B

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 ÷ 80 mm p= 25 kg/cm²

v= 15 m/s t= -20÷ +200oC(*)

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

The operating limits are deined 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 pres sures of up to 25 kg/c².m
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 diffe rent materials to be used: FKM, Alas®, 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 sta-tio nary parts shown in pages 56 and 58.

DIMENSIONS CHART

Dimensions in mm

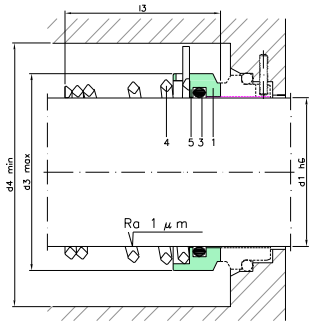
Shaft	Rotary part			
mm	d_2	d_3	d_4	l_3
10	14	24	29	25.5
12	16	26	31	26.5
14	18	31	36	29.5
16	20	34	39	31.0
18	22	36	41	32.5
20	24	38	43	32.5
22	26	40	45	32.5
24	28	42	47	32.5
25	30	44	49	33.5
28	33	47	52	35.5
30	35	49	54	35.5
32	38	54	59	39.5
33	38	54	59	39.5
35	40	56	61	43.5
38	43	59	64	46.0
40	45	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 modiications.

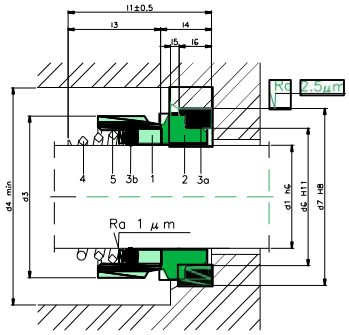
MSE60IL / MSE60IN

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 ÷ 100 mm p= 10 kg/cm²

v= 20 m/s t= -40÷ +180oC(*)

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

The operating limits are deined 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 applica tions.

DIMENSIONS

Dimensions in mm

Shaft	Rotary part		
mm	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

Dimensions in mm

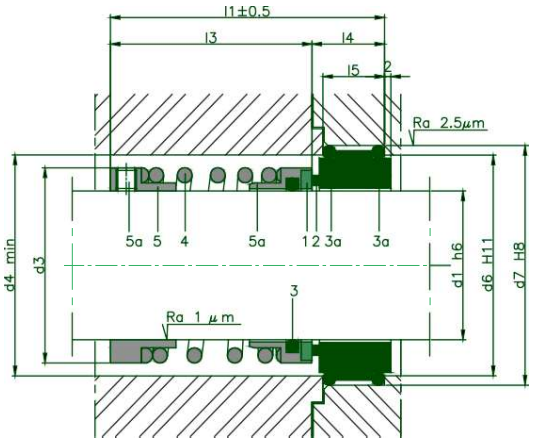
Shaft		Rotary part			Stationary part			Total length
(")	mm	d_3	d_4	l_3	d_6	d_7	l_4	l_1
0,875	22,22	34,00	46,00	25,50	29,00	37,30	10,00	35,50
1,00	25,24	37,00	50,00	24,90	32,00	40,50	10,60	35,50

Dimensions subject to changes or modiications.

MSE40A

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 ÷ 100 mm p= 12 kg/cm²

v= 15 m/s t= -20÷ +200oC(*)

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

The operating limits are deined 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 diffe rent 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

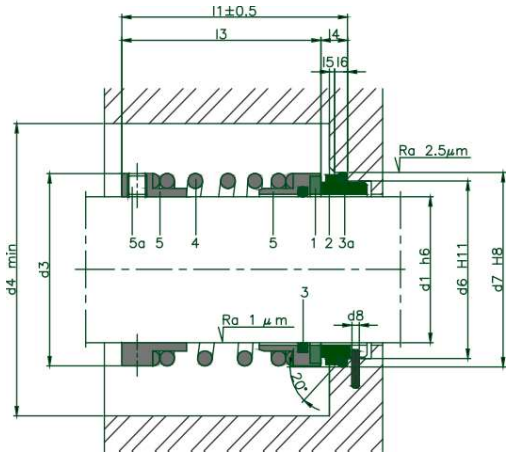
Shaft	Rotary part			Stationary part				Total length
mm	d_3	d_4	l_3	d_6	d_7	l_4	l_5	l_1
20	34	36	46	36	42	23	18	69
22	36	38	46	38	44	23	18	69
24	38	40	46	40	46	23	18	69
25	39	41	47	41	47	23	18	70
28	42	44	49	44	50	23	20	72
30	44	46	49	46	52	23	20	72
32	46	48	52	48	54	23	18	75
33	47	49	52	49	55	23	18	75
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 modiications.

MSE40C

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 ÷ 100 mm p= 12 kg/cm²

v= 15 m/s t= -20÷ +200oC(*)

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

The operating limits are deined 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 diffe rent materials to be used: FKM, Alas®, 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 modiications.