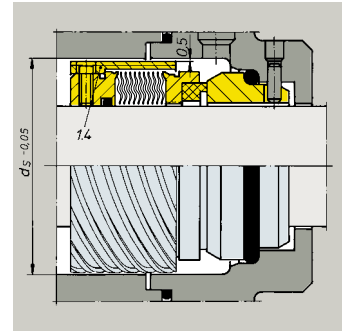
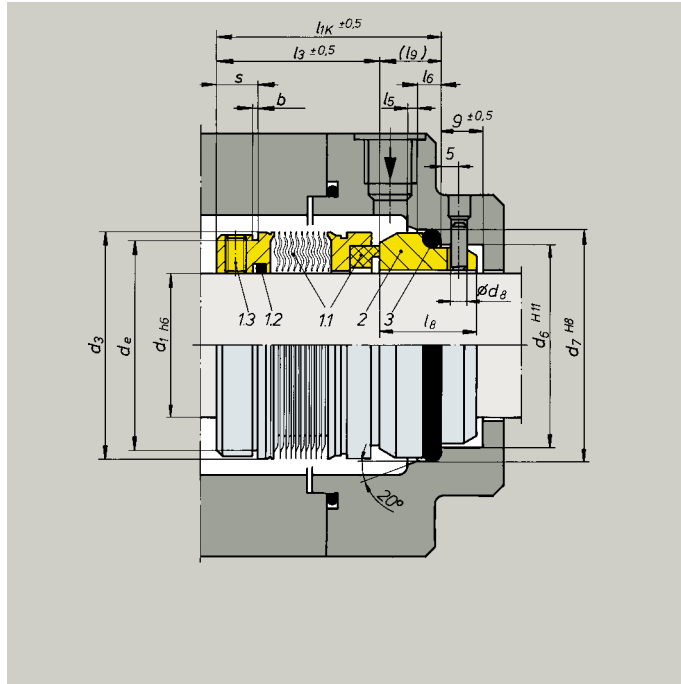


For plain shafts, rotating bellows

MFL 85 N



MFL 85 F

Dimensions, item no's and descriptions as for MFL85N, but with **pumping screw** (item no. 14). Dependent on direction of rotation!
The pumping screw can be retrofitted.

- ▶ **Single seal**
 - ▶ **Balanced**
 - ▶ **Independent**
 - ▶ **of direction of rotation**
 - ▶ **Metal bellows**
- To EN 12756**

Mechanical seals in the MFL series have a universal field of application. They are designed for extreme ranges of temperature and for high-viscosity media. There is no dynamic O-ring and therefore a bellows seal will never hang-up. (See page 63 for details of the MFL65 stationary bellows seal.)

Operating limits

- $d_1 = 16 \dots 100 \text{ mm } 0.64'' \dots 4''$
 $p_1 =$ with external pressurization¹⁾
 25 bar 360 PSI
 with internal pressurization²⁾
 $< 120 \text{ }^\circ\text{C } 10 \text{ bar } 145 \text{ PSI}$
 $< 220 \text{ }^\circ\text{C } 5 \text{ bar } 72 \text{ PSI}$
 $v_g = 20 \text{ m/s } 66 \text{ ft/s}$
- MFL85N:
 $t = -40 \dots +220 \text{ }^\circ\text{C}$
 $(-40 \text{ }^\circ\text{F} \dots +428 \text{ }^\circ\text{F})$
- MFLWT80:
 $t = -20 \dots +400 \text{ }^\circ\text{C}$
 $(-4 \text{ }^\circ\text{F} \dots +752 \text{ }^\circ\text{F})$
- MFLCT80:
 $t = -100 \dots +100 \text{ }^\circ\text{C}$
 $(-148 \text{ }^\circ\text{F} \dots +212 \text{ }^\circ\text{F})$

¹⁾ Higher pressures possible with special designs – please refer to Burgmann.
²⁾ Positively retained stationary seat necessary.

MFL 85 N

With vibration damper for optimum running characteristics (important when there is a risk of dry running).

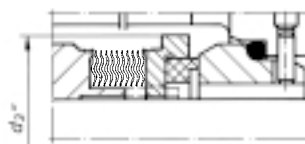
Item	Part no.	Description
		to DIN 24250
1.1	472/481	Seal face with bellows unit
1.2	412.1	O-ring
1.3	904	Set screw
2	475	Type G9 stationary seat
3	412.2	O-ring

MFL 85 GS

Gas-lubricated seal faces. For application options never thought possible before now. Same dimensions as MFL 85 N. See page 72 for more details.

Combination of materials

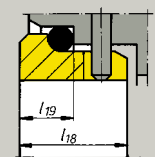
Bellows: M₆ - Inconel® 718 hardened, 2.4819
 M₅ - Hastelloy® C
 Seal face: A, Q₁₂
 Stationary seat: Q₁
 Other metal parts:
 1.4571, 1.4462, 1.3917, 2.4610
 MFLCT 80: only A Q₁ G M₆ M/G



Execution in Hastelloy® C MFL WT/CT80

Stationary seat alternative

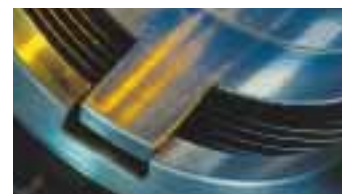
- G16



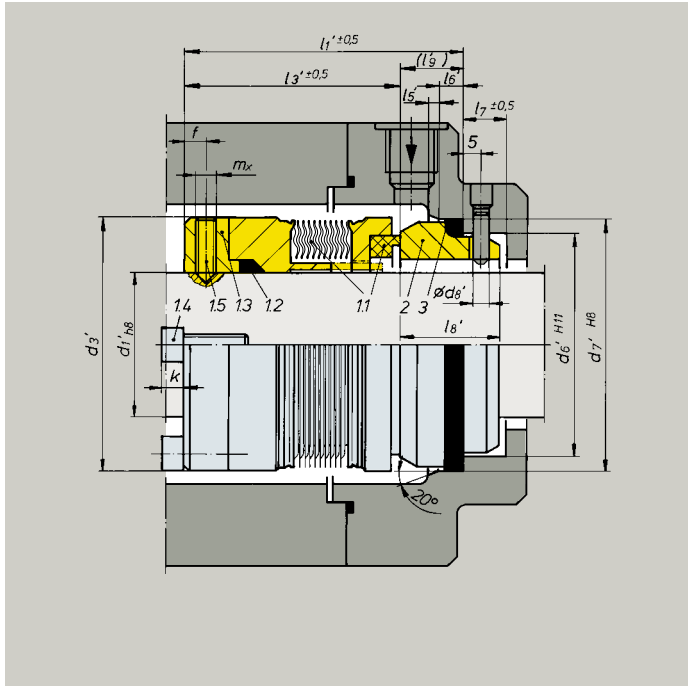
l_{1K} is shorter than specified by EN 12756 (MFL85N).
 Unquoted dim. same as for G9.



Vibration damper for type MFL 85 N



Torque transmission for type MFL WT 80



MFLWT 80 / MFLCT 80

Dimensions are not to EN 12756. Seal face positively driven to protect bellows from torsional stress. Secondary seals made of Burgmann Statotherm®.



MFL85N

Item Part no. Description to DIN 24250

- 1.1 472/481 Seal face with bellows unit
- 1.2 410 Sealing ring
- 1.3 474 Drive collar
- 1.4 Socket head screw
- 1.5 904 Set screw
- 2 475 Stationary seat
- 3 412 Sealing ring

MFL 85N/MFL 85F

d ₁	d ₃	d ₆	d ₇	d ₈	d _e	d _s	l _{1K}	l ₃	l ₅	l ₆	l ₈	l ₉	l ₁₈	l ₁₉	b	s
16	30.0	23	27	3	25.0	38	42.5 ¹⁾	32.5	1.5	4	17.5	10.0	-	-	1.6	9.0
18	32.0	27	33	3	28.0	39	37.5	30.5	2.0	5	14.0	11.5	15.0	7.0	1.6	10.0
20	33.5	29	35	3	29.5	41	37.5	30.5	2.0	5	14.0	11.5	15.0	7.0	1.6	10.0
22	36.5	31	37	3	32.0	44	37.5	30.5	2.0	5	14.0	11.5	15.0	7.0	1.6	10.0
24	39.0	33	39	3	34.5	47	40.0	28.5	2.0	5	19.5	11.5	15.0	7.0	1.6	8.2
25	39.6	34	40	3	35.5	48	40.0	28.5	2.0	5	19.5	11.5	15.0	7.0	1.6	8.5
28	42.8	37	43	3	38.5	51	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.0
30	45.0	39	45	3	40.5	53	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	8.5
32	46.0	42	48	3	42.0	55	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.2
33	48.0	42	48	3	43.0	56	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.2
35	49.2	44	50	3	45.5	58	42.5	31.0	2.0	5	19.5	11.5	15.0	7.0	1.6	9.5
38	52.3	49	56	4	48.0	61	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
40	55.5	51	58	4	50.0	64	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
43	57.5	54	61	4	53.0	67	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
45	58.7	56	63	4	55.0	69	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.5
48	61.9	59	66	4	58.0	72	45.0	31.0	2.0	6	22.0	14.0	16.0	8.0	1.6	9.2
50	65.0	62	70	4	60.5	74	47.5	32.5	2.5	6	23.0	15.0	17.0	9.5	1.6	10.5
53	68.2	65	73	4	64.0	77	47.5	32.5	2.5	6	23.0	15.0	17.0	9.5	1.6	10.5
55	70.0	67	75	4	65.5	80	47.5	32.5	2.5	6	23.0	15.0	17.0	9.5	1.6	10.0
58	71.7	70	78	4	67.0	83	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
60	74.6	72	80	4	69.5	85	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
63	79.0	75	83	4	72.5	88	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
65	84.1	77	85	4	78.0	95	52.5	37.5	2.5	6	23.0	15.0	18.0	10.5	3.0	14.0
68	87.3	81	90	4	82.0	96	52.5	34.5	2.5	7	26.0	18.0	18.5	11.0	1.6	10.0
70	87.3	83	92	4	81.0	96	60.0	42.0	2.5	7	26.0	18.0	19.0	11.5	3.0	17.0
75	95.0	88	97	4	87.0	104	60.0	42.0	2.5	7	26.0	18.0	19.0	11.5	3.0	16.0
80	98.4	95	105	4	91.0	109	60.0	41.8	3.0	7	26.2	18.2	19.0	11.5	3.0	16.0
85	104.7	100	110	4	96.0	114	60.0	41.8	3.0	7	26.2	18.2	19.0	11.5	3.0	16.0
90	111.0	105	115	4	103.0	119	65.0	46.8	3.0	7	26.2	18.2	20.5	13.0	3.0	21.0
95	114.0	110	120	4	106.0	124	65.0	47.8	3.0	7	25.2	17.2	20.5	13.0	3.0	21.0
100	117.4	115	125	4	111.0	129	65.0	47.8	3.0	7	25.2	17.2	20.5	13.0	3.0	20.0

MFLWT 80/MFLCT 80

d ₃	d ₃ ²⁾	d ₆	d ₇	d ₈	l ₁	l ₃	l ₅	l ₆	l ₇	l ₈	l ₉	f	k	m _x
38	-	29.0	35.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
40	-	31.0	37.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
42	-	34.0	40.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
44	-	37.0	43.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
46	49.8	37.0	43.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
47	51.7	39.0	45.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M5
50	54.5	42.0	48.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M6
52	56.6	44.0	50.0	3	58.0	46.5	2.0	5	9	19.5	11.5	5	5	M6
54	59.5	49.0	56.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
55	59.5	49.0	56.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
57	62.5	51.0	58.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
60	65.7	54.0	61.0	4	60.5	46.5	2.0	6	9	22.0	14.0	5	5	M6
66	65.7	56.0	63.0	4	61.5	47.5	2.0	6	9	22.0	14.0	5	6	M6
69	68.6	59.0	66.0	4	61.5	47.5	2.0	6	9	22.0	14.0	5	6	M6
71	71.5	62.0	70.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
74	75.1	65.0	73.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
76	76.1	67.0	75.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
79	80.8	70.0	78.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
81	80.8	72.0	80.0	4	62.5	47.5	2.5	6	9	23.0	15.0	5	6	M6
85	84.0	75.0	83.0	4	68.0	53.0	2.5	6	9	23.0	15.0	5	6	M6
87	92.3	77.0	85.0	4	68.0	53.0	2.5	6	9	23.0	15.0	6	6	M8
90	95.5	81.0	90.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
92	95.5	83.0	92.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
95	101.3	88.0	97.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
97	101.3	88.0	97.0	4	71.0	53.0	2.5	7	9	26.0	18.0	6	6	M8
102	105.0	95.0	105.0	4	71.0	52.8	3.0	7	9	26.2	18.2	6	6	M8
107	110.6	100.0	110.0	4	71.0	52.8	3.0	7	9	26.2	18.2	6	6	M8
112	117.0	105.0	115.0	4	71.0	52.8	3.0	7	9	26.2	18.2	6	6	M8
117	120.2	110.0	120.0	4	71.0	53.8	3.0	7	9	25.2	17.2	6	6	M8
122	125.2	115.0	125.0	4	71.0	53.8	3.0	7	9	25.2	17.2	6	6	M8
127	130.2	122.2	134.3	5	74.0	54.0	3.0	9	11	30.0	20.0	6	6	M8

1) Installation length is longer than l_{1K} specified by EN 12756

2) d₃ Executed in Hastelloy®