

RELY ON EXCELLENCE

LMF1

Magnetic Couplings | Bearings



Advantages

- Sliding bearing for the shaft of an impeller in a pump
- Self lubrication through pump liquid
- Suitable for MAK66, MAK685 and NMB HE magnetic couplings and others

Operating range

Viscosity: 0.3 ... 5,000 mPas

Speed: 750 ... 3,600 min⁻¹

Solids: max. 0.1 mm; max. 5% by weight; grain hardness max. 700 HV

Materials

Sliding faces: Silicon carbide SiC (Q1), Carbon silicon impregnated SiC-C-Si (Q3), Carbon graphite resin impregnated (B)
Metal parts: CrNiMo steel 1.4462 (G1)

Recommended applications

- Chemical industry
- Oil and gas industry
- Refining technology
- Pharmaceutical industry
- Food processing industry
- Centrifugal pumps
- Gear pumps

Features

Sliding bearings are used for the shaft in magnetic coupled centrifugal or displacement pumps. The sliding parts are made of SiC. The pump liquid is circulating between the rotating and static parts to ensure lubrication and cooling. EagleBurgmann LMF bearings are successfully used for many years in applications worldwide. They are almost wearless and therefore extremely durable.

Functional description

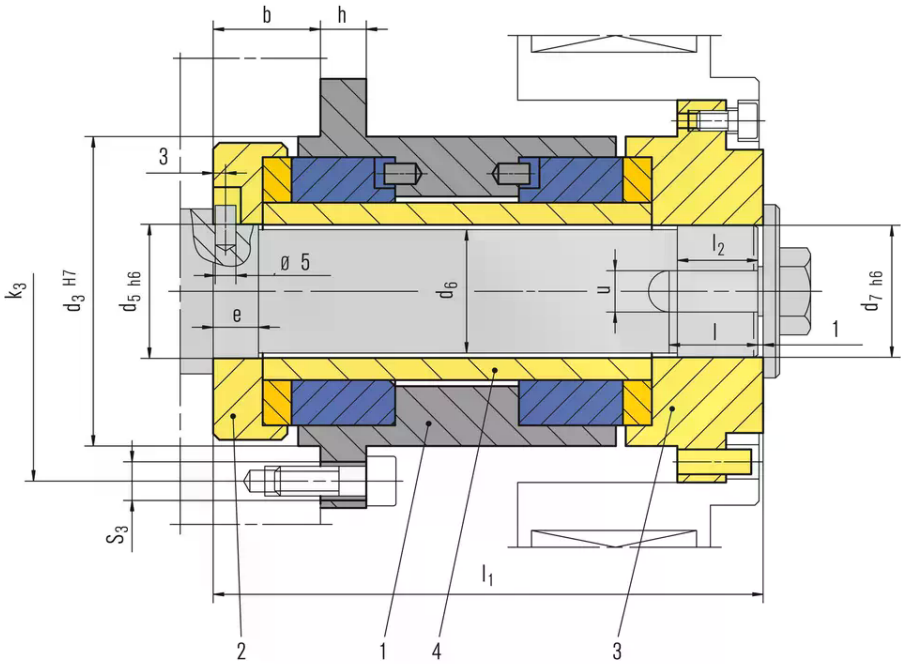
The shaft end is connected to the shaft sleeve and two bearing rings for the axial bearing forces. It is running against the stationary bearing bushings.

Notes

- Variants for low (-110 °C (230 °F)) and high temperature (... +400 °C (752 °F)) and variants with heatable or coolable chamber available.

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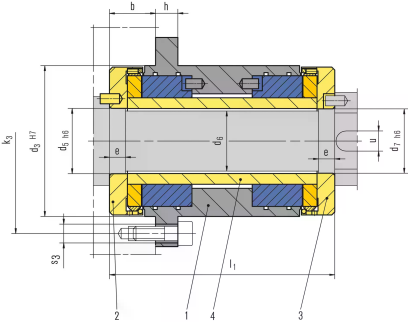
Item	Description
1	Radial journal bearing
2, 3	Axial journal bearing
4	Shaft sleeve



Product variants

LMF10

Bearing for demanding application conditions. Axial journal bearing not shrunk but inserted. Materials as for LMF1, optionally shaft sleeve made of 1.4462 with chromium dioxide coating. Dimensions see table.



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Dimensions

LMF1	d3	d5	d6	b	e	l1	l2	h	k3	n3	s3	d7	l	u
LMF1-22/54-00	44	16.5	15.8	21	8	87	29	7	55	5	5.5	16	16	5
LMF1-43/80-00	75	32.5	31.5	26	11	129.3	20	8	87	5	6.6	32	22	10
LMF1-43/90-00	75	32.5	31.5	26	11	139.3	20	8	87	5	6.6	32	22	10
LMF1-55/110-00	92	40.5	39.5	27	12	170.3	30	10	103	5	6.6	40	32	12
LMF1-65/188-00	115	50.5	49.5	34.5	15	188.5	14	13.5	130	5	9	50	-	-

Dimensions in millimeter

LMF10	d3	d5	d6	b	e	l1	l2	h	k3	n3	s3	d7
LMF10-43/90-00	75	32.5	31.5	26.0	12	139.3	20	8.0	87	5	6.6	32
LMF10-55/110-00	92	40.5	39.5	27.0	12	170.3	30	10.0	103	5	6.6	40
LMF10-55/144-00	92	40.5	39.5	30.0	12	184.3	12	20.0	107	5	6.6	40
LMF10-65/188-00	115	50.5	49.5	34.5	15	188.5	14	13.5	130	5	9.0	50
LMF10-65/264-00	115	50.5	49.5	43.5	15	264.5	14	28.5	150	6	11.0	50

Dimensions in millimeter