

- p_{max.} PN 40
- t_{max.} +200 °C
- Screw thread:
G 3/8 to G 2
- Screw thread:
Rp 1/2 to Rp 3
- Flanges:
DN 50 to DN 200
- Solder connections:
22 mm to 35 mm
- Material:
Brass, stainless steel,
bronze, cast iron
- Mesh sizes:
280 µm to 1200 µm



KOBOLD companies worldwide:

ARGENTINA, AUSTRIA, BELGIUM, CANADA, CHILE, CHINA, CZECHIA,
 FRANCE, GERMANY, GREAT BRITAIN, INDIA, INDONESIA, ITALY,
 MALAYSIA, MEXICO, NETHERLANDS, POLAND, SINGAPORE, SLOVAKIA,
 SPAIN, SWITZERLAND, THAILAND, USA, VENEZUELA, VIETNAM

KOBOLD Messring GmbH
 Nordring 22-24
 D-65719 Hofheim/Ts.
 ☎ +49(0)6192 299-0
 ☎ +49(0)6192 23398
 E-Mail: info.de@kobold.com
 Internet: www.kobold.com

Models:
 MFR-
 MFT-I, MFT-A,
 MFT-L,
 MFF-

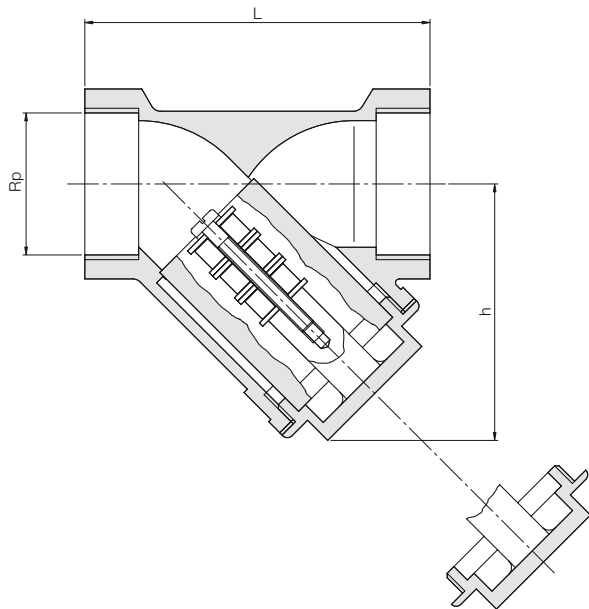
Description

KOBOLD magnetic filters are used in many applications, including central system filters, where it is necessary to protect devices from dirt and contamination. They are used to catch and remove contaminants from industrial cooling and lubrication circuits, especially where residue and sediment from assembly (such as chips from thread-cutting) and normal operation (such as scale and residue from frictional wear) can be carried along in the medium being filtered. Contaminants of these types can form deposits that can cause pitting and corrosion in highly sensitive measuring and control devices. Regular maintenance and cleaning of the magnetic filter inserts will effectively prevent system and device failure and the resulting downtime.

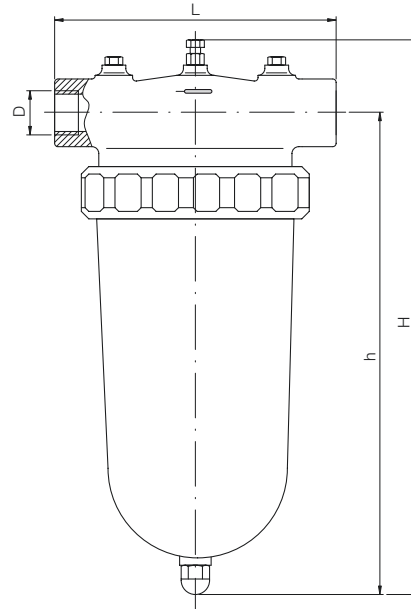
Function

The medium being filtered with these devices first flows around the centrally positioned bar magnet and then passes through – from the inside out – the stainless steel filter cartridge. The bar magnetic attracts and retains larger ferrous particles, thus making the magnetic filter easier to service. Larger, coarse pieces of material are trapped by the filter cartridge. The selected mesh sizes, from 280 to 1200 μm , ensure that the filter does not get clogged with fine sludge and causes only a minor pressure loss.

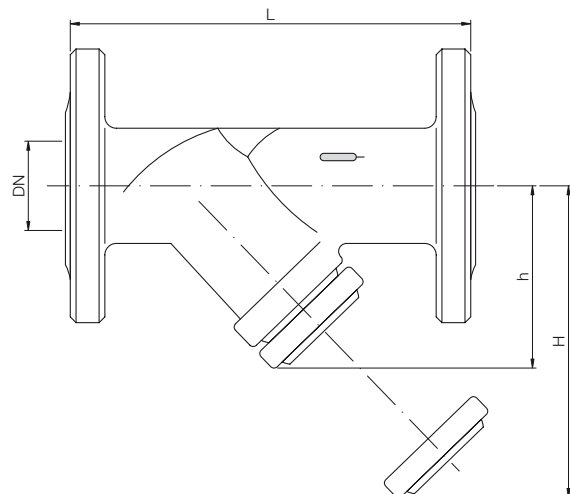
Magnetic filter, female thread, MFR-



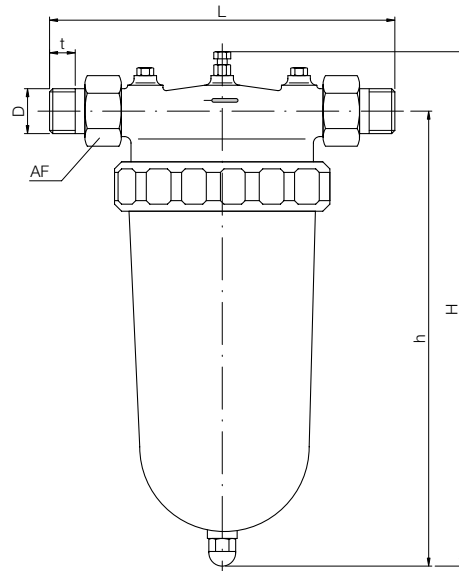
Adapter magnetic filter, female thread, MFT-I



Flange magnetic filter, MFF-



Adapter magnetic filter, threaded connection, MFT-A, MFT-L





Materials

Screw-on magnetic filter: body bronze
 Adapter magnetic filter: body brass
 Flange magnetic filter: body cast iron, coated
 Filter cartridge: stainless steel

Mounting

Screw-on magnetic filter: horizontal or vertical
 Adapter magnetic filter: horizontal
 Flange magnetic filter: horizontal or vertical

Maintenance

First check after being put into operation. Thereafter, frequency of checks are dependent on actual rate of contamination, with at least one check per year.

Cleaning

Clean with water stream/compressed air and brush.

Technical Details

Thread connection: female thread Rp 1/2 to Rp 3
 male thread R 3/4 to R 1 1/4
 (according to DIN 2999)
 Solder connections: 22 mm to 35 mm
 Flanges: as per DIN 2533
 DN 50 to DN 200

Nominal pressures

Screw-on magnetic filter: PN 16
 Adapter magnetic filter: PN 10
 Flange magnetic filter: PN 16

Max. temperature

Screw-on magnetic filter: 200 °C
 Adapter magnetic filter: 90 °C
 Flange magnetic filter: 200 °C
 Filter size: see table

Dimensions and Order Details (example: MFR-0015)

Version	Connection	k _v -value [m ³ /h]	Filter size [µm]	Size of filter cartridge [mm]	L [mm]	h [mm]	H [mm]	t [mm]	AF [mm]	Weight [kg]	ID no.
Female thread	Rp 1/2	6.2	280	19/32	58	44	-	-	-	0.23	MFR-0015
	Rp 3/4	7.7	280	25/38	69	47	-	-	-	0.32	MFR-0020
	Rp 1	12.4	280	29/46	82	56	-	-	-	0.45	MFR-0025
	Rp 1 1/4	13.9	280	37/55	98	68	-	-	-	0.74	MFR-0032
	Rp 1 1/2	18.5	280	43/61	109	78	-	-	-	0.72	MFR-0040
	Rp 2	31	280	58/75	131	98	-	-	-	1.6	MFR-0050
	Rp 2 1/2	56	530	66/90	151	114	-	-	-	2.4	MFR-0065
	Rp 3	80	530	80/130	172	129	-	-	-	4.6	MFR-0080
Female thread adapter	Rp 1	17.5	600	70/197	130	283	324	-	-	5.1	MFT-I025
	Rp 1 1/4	20	600	70/197	135	283	324	-	-	5.1	MFT-I032
	Rp 1 1/2	25	600	70/197	150	293	338	-	-	5.5	MFT-I040
	Rp 2	33	600	70/197	160	299	351	-	-	6.0	MFT-I050
Male thread adapter	R 3/4	12	600	70/197	192	283	324	11	37	5.3	MFT-A020
	R 1	17.5	600	70/197	223	283	324	19	46	5.5	MFT-A025
	R 1 1/4	21	600	70/197	253	283	324	21.5	52	5.9	MFT-A032
Solder connection adapter	22 mm	12	600	70/197	176	283	324	17	37	5.3	MFT-L020
	28 mm	17.5	600	70/197	184	283	324	18.5	46	5.5	MFT-L025
	35 mm	21	600	70/197	200	283	324	23.5	52	5.9	MFT-L032
Flange	DN 50	47	750	58/105	230	120	190	-	-	9.0	MFF-0050
	DN 65	75	750	73/123	290	140	220	-	-	13.0	MFF-0065
	DN 80	113	1200	88/144	310	165	265	-	-	17.0	MFF-0080
	DN 100	189	1200	108/184	350	220	340	-	-	27.0	MFF-0100
	DN 125	303	1200	135/221	400	260	410	-	-	41.0	MFF-0125
	DN 150	379	1200	160/260	480	300	475	-	-	62.0	MFF-0150
	DN 200	758	1200	208/360	600	360	580	-	-	115.0	MFF-0200



Technical Details MFR-female thread (brass version)

Design: two-part screwed body
 Connections: female thread G 3/8 to G 2
 DIN ISO 228 T1
 Nominal pressure: PN 20
 Temperature range: max. 90°C (water)
 -15°C to +110°C (air)
 Mesh size: 400 µm for G 3/8 to G 1
 470 µm for G 1 1/4 to G 2
 Mounting position: cover toward bottom,
 note specified direction of flow

Materials

Body: brass Ms 58
 Cover: brass Ms 58
 Mesh: stainless steel
 Gasket: Saital K

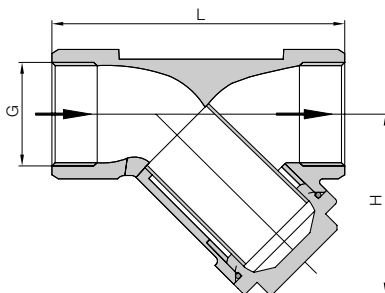
Technical Details MFR-EA (version stainless steel)

Design: two-part screwed body
 Connections: female thread Rp 1/2 to Rp 2
 DIN 2999
 Nominal pressure: PN 40
 Temperature range: -20°C ... +180°C (air)
 Mesh size: filter (standard) 500 µm
 filter (fine) 250 µm
 Mounting position: cover toward bottom,
 note specified direction of flow

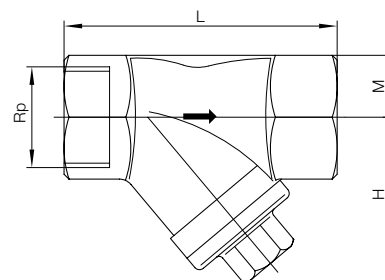
Materials

Body: stainless steel 1.4408
 Cover: stainless steel 1.4408
 Mesh: stainless steel 1.4301
 Gasket: PTFE

MFR-IG



MFR-EA



**Dimensions and Order Details,
 MFR-IG, brass version**

(example: MFR-IGR10)

Screw thread [G]	Order no.	L [mm]	H [mm]	Weight [kg]
3/8	MFR-IGR 10	55	40	0.2
1/2	MFR-IGR 15	58	40	0.3
3/4	MFR-IGR 20	70	50	0.3
1	MFR-IGR 25	90	60	0.5
1 1/4	MFR-IGR 32	96	68	0.8
1 1/2	MFR-IGR 40	106	75	1.2
2	MFR-IGR 50	126	90	2.2

MFR-EA, stainless steel version

(example: MFR-EAR15E)

Screw thread [Rp]	Order no. filter (standard)	Order no. filter (fine)	M [mm]	H [mm]	L [mm]
-	-	-	-	-	-
1/2	MFR-EAR15E	MFR-EAR15D	12.5	42.5	65.0
3/4	MFR-EAR20E	MFR-EAR20D	15.5	49.0	75.0
1	MFR-EAR25E	MFR-EAR25D	18.5	57.5	90.0
1 1/4	MFR-EAR32E	MFR-EAR32D	23.0	65.0	110.0
1 1/2	MFR-EAR40E	MFR-EAR40D	26.5	74.0	120.0
2	MFR-EAR50E	MFR-EAR50D	33.5	85.0	150.0