PRODUCT INFORMATION

Magnetic filter, type series HLM C-1-…-HZ
Magnetic filter, type series HLM TR-1-…-HZ

Area of application
The magnetic filter type HLM C-1-… HZ / TR-1-…HZ is used for separating ferromagnetic and paramagnetic iron impurities from liquid, pasty and pumpable product streams. It is designed for and used in the food, chemical and pharmaceutical industries in accordance with the requirements of the operating company.
In order to prevent cooling of the product, the magnetic filter is surrounded by a heating jacket in which a liquid heating medium can circulate.

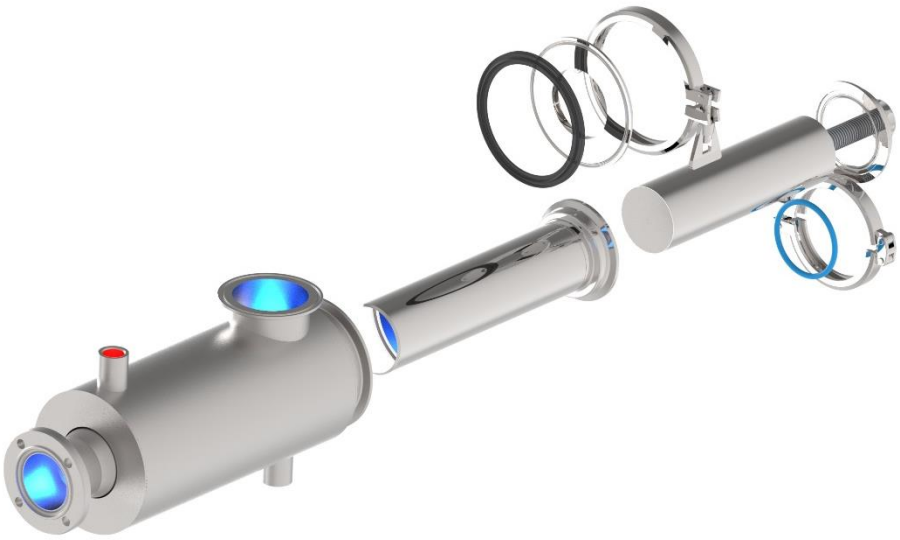
Operating principle
The product to be cleaned flows through the magnetic filter with the magnetisable ferromagnetic and paramagnetic iron impurities being attracted by the magnetic rod and adhering to the cladding tube.

Cleaning
To remove any captured impurities, open magnetic filter and remove magnet insert. After rinsing off product residues the actual magnetic rod can be pulled out of the cladding tube. Impurities can easily be removed from the non-magnetic cladding tube.
Reassemble magnetic filter in reverse order.

PROCEMA GmbH
Von-Wrangell-Str. 10 - DE-53359 Rheinbach - Phone: +49 (0) 22 26 - 90 06 95
info@procema.de - www.procema.de

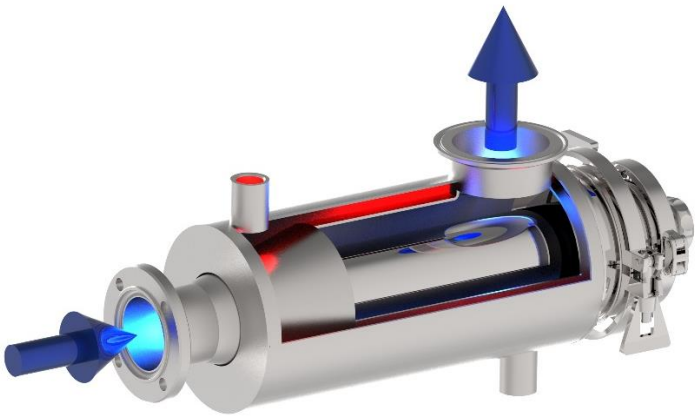
PROCEMA

Technical data for magnetic filter C-1-…HZ									
Pipe connection		**connection diameter**	**Magnetic rod diameter**	**Flux density in contact with the product in relation to the temperature range**			**Material qualities of the components in contact with product**		**Heating jacket connection**
Norminal width (DN)	Throughput volume m³/h	Nennweite (DN)	mm	Flux density < 80°C	Flux density < 150°C	Flux density < 300°C	Magnetic rod	Housing	Bushing (Inch)
25-50	1	50	25	10500	9000	9000	1.4571	1.4301 / 1.4404	1/2
32	1-8	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404	1/2
40	1-8	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404	1/2
50	1-8	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404	1/2
65	1-8	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404	1/2
65	1-8	125	60	12000	11500	11500	1.4571	1.4301 / 1.4404	1/2
80	20	125	60	12000	11500	11500	1.4571	1.4301 / 1.4404	1/2
100	25	150	60	13000	12000	11500	1.4571	1.4301 / 1.4404	1/2
125	40	150	60	13000	12000	11500	1.4571	1.4301 / 1.4404	1/2
The magnetic filters are manufactured with all required connections (milk pipe, flange, TriClamp, imperial, pipe ends, etc.). **Horizontal or vertical installation is possible.** **Dimensions of unit are adapted to flow volume and product properties (viscosity, lumpiness, etc.).** **Magnetic filter can be supplied in an aseptic version.**									also according to wishes



Inline filter C-1-60-100-50-HZ cleaning procedure

PROCEMA GmbH
Von-Wrangell-Str. 10 - DE-53359 Rheinbach - Phone: +49 (0) 22 26 - 90 06 95
info@procema.de - www.procema.de



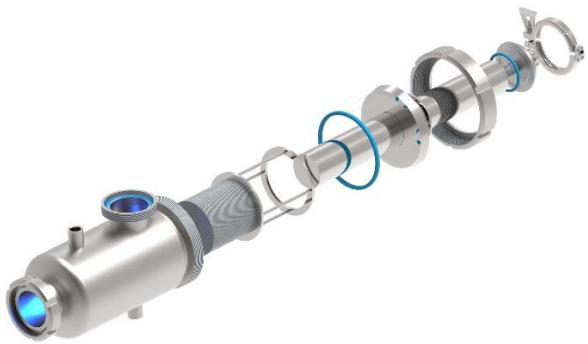
Inline filter C1-60-100-80-HZ (sectional illustration)

Technical data for magnet

Magnet material	Rare earth material (NdFeB)
Magnetic field strength	max. 16,000 Gauss on magnetic rod surface max. 13,000 Gauss measured on cladding tube surface in contact with product, depending on temperature range and housing size
Magnetic rod diameter	25 mm / 60 mm, depending on housing size

Housing data

Material quality	Implementation in stainless steel 1.4301/1.4404 (brushed, frosted or polished) Seals according to regulation EC no. 10/2011, EC no. 1935/2004, EC no. 2023/2006 (GMP)
Option	housing combined with filter insert



PROCEMA GmbH
Von-Wrangell-Str. 10 - DE-53359 Rheinbach - Phone: +49 (0) 22 26 - 90 06 95
info@procema.de - www.procema.de

Technische Daten Magnetfilter TR-1-…-HZ									
Pipe connection		**Housing diameter**	**Diameter of magnet(s)**	**Flux density in contact with the product relation tot he temperature range in °C**			**Material qualities of the components in contact with product**		**Heating jacket connection**
Nominal width (DN)	Nominal width (Inch)	Nominal width (DN)	mm	up to 80	up to 150	up to 300	Magnetic rods	Housing	Bushing (Inch)
50	2	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404	1/2
65	2 1/2	125	60	12000	11500	11500	1.4571	1.4301 / 1.4404	1/2
80	3	125	60	12000	11500	11500	1.4571	1.4301 / 1.4404	1/2
80-100	4	150	25	10500	9000	9000	1.4571	1.4301 / 1.4404	1/2
100-150	5	200	60	11000	10000	10000	1.4571	1.4301 / 1.4404	1/2
>125	>5	250	60	11000	10000	10000	1.4571	1.4301 / 1.4404	1/2
The magnetic filters are manufactured with all required connections (milk pipe, flange, Tri-Clamp, pipe ends, etc.) as per customer request. Horizontal or vertical installation is possible. Dimensions of unit are adapted to flow volume and product properties (viscosity, lumpiness, etc.). Magnetic filter can be supplied in an aseptic version.									also according to the customer's wishes

Inline filter TR-1-60-100-50-HZ cleaning procedure

PROCEMA GmbH
Von-Wrangell-Str. 10 - DE-53359 Rheinbach - Phone: +49 (0) 22 26 - 90 06 95
info@procema.de - www.procema.de

Inline filter TR-1-60-125-80 (sectional illustration)

Technical data for magnet

Magnetic rod	1 magnetic rod
Magnet material	Rare earth material (NdFeB)
Magnetic field strength	max. 15,000 Gauss on magnetic rod surface max. 12,000 Gauss measured on cladding tube surface in contact with product, depending on magnetic rod length and temperature range

Housing data

Material quality	Implementation in stainless steel 1.4301/1.4404 (brushed, frosted or polished) Seals according to EC no. 10/2011, EC no. 1935/2004, EC no. 2023/2006 (GMP)

PROCEMA GmbH
Von-Wrangell-Str. 10 - DE-53359 Rheinbach - Phone: +49 (0) 22 26 - 90 06 95
info@procema.de - www.procema.de