
PRODUCT INFORMATION

Magnetic filter type series HLM C-1-...

Magnetic filter type series HLM TR-1-...



Inline filter unit C-1-60-125-65-aseptic

TR-1-60-100-65

Area of application

The magnetic filter type HLM C-1-... and HLM TR-1... is used for separating ferro- and para-magnetic iron impurities from liquid, paste and pumpable product flows. The filter is used in the food, chemical and pharmaceutical industry depending on the requirements of the operator.

Operating principle

The product to be cleaned flows through the magnetic filter with the magnetisable ferro- and para-magnetic iron impurities being attracted by the magnetic rod and sticking to the magnetic rod/cladding tube.

Cleaning

To remove any captured impurities, open magnetic filter and remove magnet insert. After rinsing off product residue the magnetic rod encapsulated in a metal stainless steel sleeve 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.

Optionally, the units are available with a filter insert.

Technical specification of magnetic filter C-1-...

Pipe connection		Diameter Housing	Diameter Magnetic rod	product-contacting flow density in Gauss with a dependence on the temperature range			Material qualities of components in contact with product	
Nominal width (DN)	Throughput volume m ³ /h	Nominal width (DN)	mm	Flow density < 80°C	Flow density < 150°C	Flow density < 300°C	Magnetic rod	Housing
25-50	< 3	50	25	10500	9000	9000	1.4571	1.4301 / 1.4404
32-40	< 8	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404
40-50	< 10	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404
50-65	< 10	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404
65	< 25	125	60	12000	11500	11500	1.4571	1.4301 / 1.4404
80	< 25	125	60	12000	11500	11500	1.4571	1.4301 / 1.4404
100	< 50	150	60	13000	12000	11500	1.4571	1.4301 / 1.4404
125	< 50	150	60	13000	12000	11500	1.4571	1.4301 / 1.4404

Magnetic filters are produced with all required connections (milk pipe, flange, Tri-Clamp, imperial, 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, fragmentation, etc.).

Magnetic filter available in aseptic design.

Cip and sterilisable.

Technical specification of magnetic filter TR-1-...

Pipe connection		Diameter Housing	Diameter Magnetic rod	product-contacting flow density in Gauss with a dependence on the temperature range			Material qualities of components in contact with product	
Nominal width (DN)	Throughput volume m ³ /h	Nominal width (DN)	mm	Flow density < 80°C	Flow density < 150°C	Flow density < 300°C	Magnetic rod	Housing
32-65	< 10	100	60	11000	10000	10000	1.4571	1.4301 / 1.4404
65-80	< 20	125	60	12000	11500	11500	1.4571	1.4301 / 1.4404
80	< 30	150	25	10500	9000	9000	1.4571	1.4301 / 1.4404
100	< 50	200	60	11000	10000	10000	1.4571	1.4301 / 1.4404
125/150	< 80	250	60	11000	10000	10000	1.4571	1.4301 / 1.4404

Magnetic filters are produced with all required connections (milk pipe, flange, Tri-Clamp, imperial, 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, fragmentation, etc.).

Magnetic filter available in aseptic design.

Cip and sterilisable.

Technical specification magnet

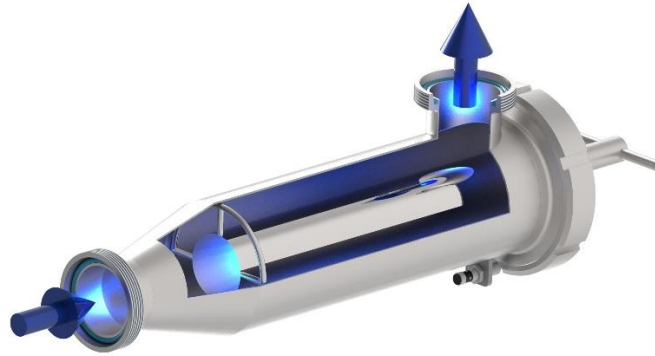
Magnet material	rare earth material (NdFeB)
Strength of magnetic field	max. 16,000 Gauss on magnetic rod surface max. 13,000 Gauss on cladding tube surface in contact with product measured, depending on magnetic rod diameter and on temperature range
Diameter magnetic rod	25 mm / 60 mm / depending on housing size
Options	Housing with heating jacket Housing with filter basket (type C-1 only) Housing with combination heating jacket + filter basket (type C-1 only) Safety position limit switch for monitoring the container opening

Housing data

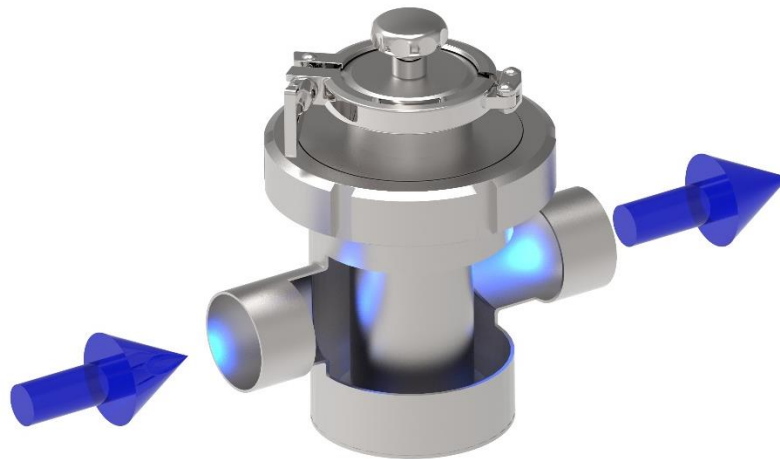
Material quality	design in stainless steel 1.4301 or 1.4404 (brushed, frosted or polished) Seals according to EC No. 10/2011, EC No. 1935/2004, EC No. 2023/2006 (GMP)
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Inline filter unit C-1-60-125-65-aseptic with insertion aid and TR-1-60-100-50 in cleaning condition



Sectional view inline filter C-1-60-150-80 with safety position switch



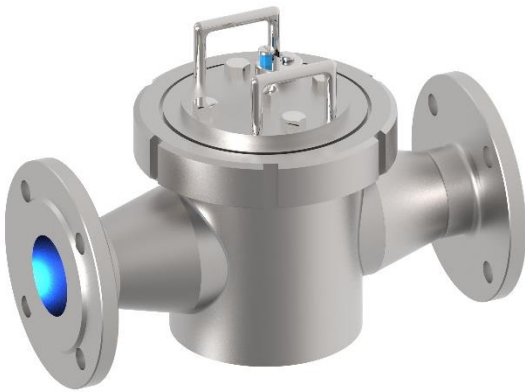
Sectional representation of inline filter TR-1-60-100-50



Inline filter unit C-1-60-125-65 with filter basket



Inline filter unit TR-3-60-200-125-aseptic for large throughput volumes, also available with heating jacket



Inline filter unit TR-5-25-150-65 manufactured according to customer requirements