



Braukmann MHF49

Magnetic heating filter

APPLICATION

The magnetic heating filter is used to filter out contaminants (e.g. sludge, sand, rust, iron particles etc.) that arise from the regular operation of a heating system. Thus, premature wear and failure of the heating system arising from contaminants can be prevented.

SPECIAL FEATURES

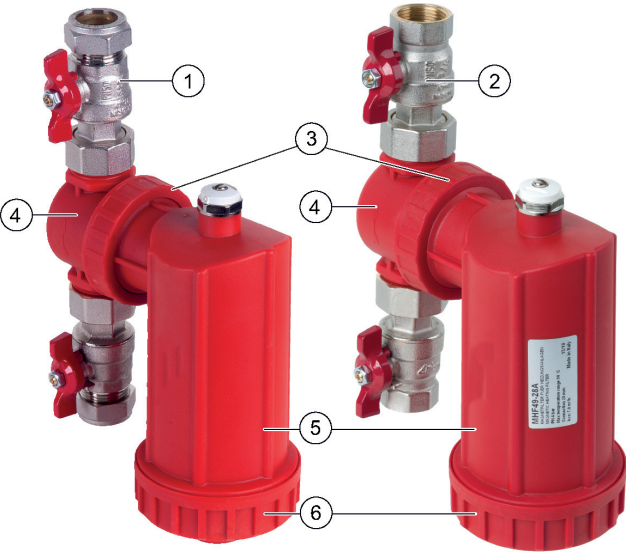
- Simple installation and maintenance
- Rotatable connection for any installation position
- Suitable for dosages of 0.5 liters of chemicals
- Integrated isolation valve, inlet and outlet side
- Pipe cutter guide



TECHNICAL DATA

| Media | |
|--------------------------|--|
| Medium: | Water or water-glycol mixture, quality according to VDI 2035 (up to 50 % glycol) |
| Connections/Sizes | |
| Internal threads: | 3/4", 1" |
| Compression fittings: | 22 mm, 28 mm |
| Pressure values | |
| Max. operating pressure: | 6 bar |
| Operating temperatures | |
| Operating temperature: | 5 - 90 °C |

CONSTRUCTION

| Overview | Components | Materials |
|---|---|---|
|  | 1 Isolation valves - with compression fittings: 22 mm, 28 mm | Nickel-plated brass |
| | 2 Isolation valves - with internal thread: 3/4", 1" | Nickel-plated brass |
| | 3 Large fastening ring | Glass-fibre reinforced Polyamide |
| | 4 Diverter | Glass-fibre reinforced Polyamide |
| | 5 Housing | Glass-fibre reinforced Polyamide |
| | 6 Housing end cap | Glass-fibre reinforced Polyamide |
| Not depicted components: | | |
| | Fine filter mesh | Stainless steel |
| | Magnet | Neodymium (tested according to IEC 60404-5 & ASTM A977) |
| | Removable sheath | High-quality synthetic material |
| | Seals | EPDM |

METHOD OF OPERATION

Through a specifically designed path the medium is forced to pass within the filter cartridge mesh and in the filter chamber. There a combined action of the filter mesh, magnet and inner geometry of the Filter chamber, allow heavy particles to sink to the bottom, while the magnet inside the filter captures any rust and iron particles.

In that way impurities (eg. sludge, sand, rust, iron particles) normally found in a central heating system can be easily removed and kept inside the filter chamber.

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

| Parameter | Value |
|---------------------------------|--------------------------|
| Environment: | clean, dry and dust free |
| Min. ambient temperature: | -15 °C |
| Max. ambient temperature: | +60 °C |
| Min. ambient relative humidity: | 25 % * |
| Max. ambient relative humidity: | 95 % * |

*none condensing

INSTALLATION GUIDELINES

Setup requirements

- The installation site has to be frost-proof and the protection of the device from chemicals, paints, detergents, solvents and their vapours and environmental influences must be guaranteed
- The magnetic heating filter is not suited for:
 - The separation of oils greases, solvents, soaps and other lubricating media
 - The separation of water-solvent materials
- The magnetic heating filter is installed in the heating circuit. For best performance we recommend to install MHF49 in the return line of the heating circuit downstream of the last radiator
- If the circulating pump is installed in the return of the heating circuit, please ensure that the filter is installed upstream of the circulating pump
- The heating system needs to be drained down before installation
- Installation, commissioning and maintenance may only be performed by qualified personnel
- Use the pipe cutter guide
- The connection piece can be installed into both horizontal and vertical pipework
- The magnetic heating filter has to be installed with the air vent pointing upwards
- Make sure all seals are tight before filling the heating system
- Ensure good access for simple maintenance and inspection

Installation Example

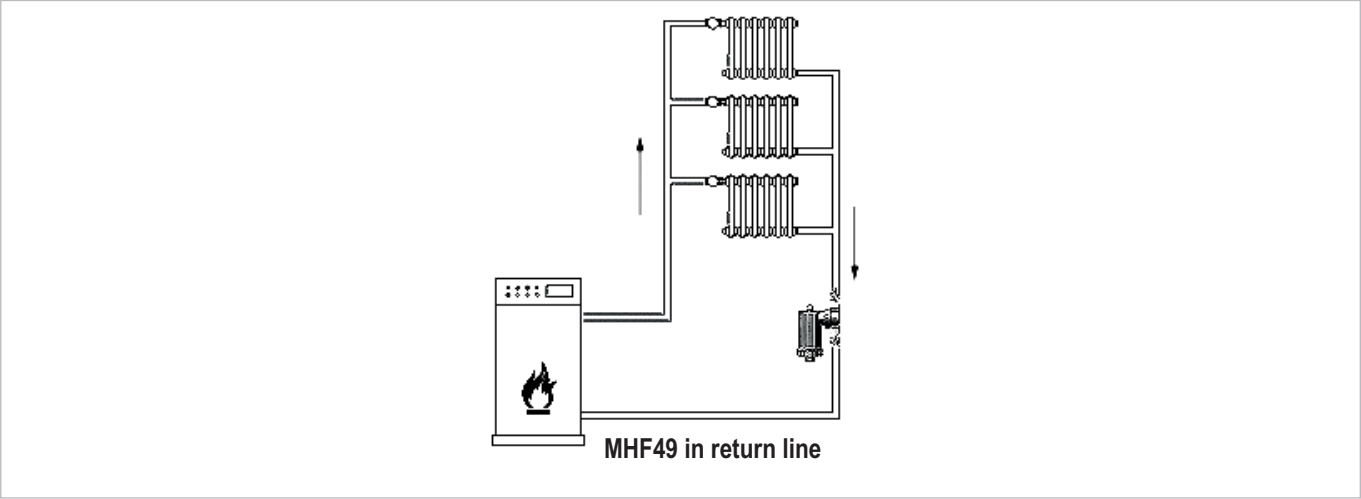


Fig. 1 Standard installation example for the magnetic heating filter

TECHNICAL CHARACTERISTICS

kvs-Values

| Connection sizes: | 22 mm | 28 mm | 3/4" | 1" |
|---|-------|-------|------|-----|
| k _{VS} -value (m ³ /h): | 6.5 | 7.0 | 6.8 | 7.5 |

Pressure drop characteristics

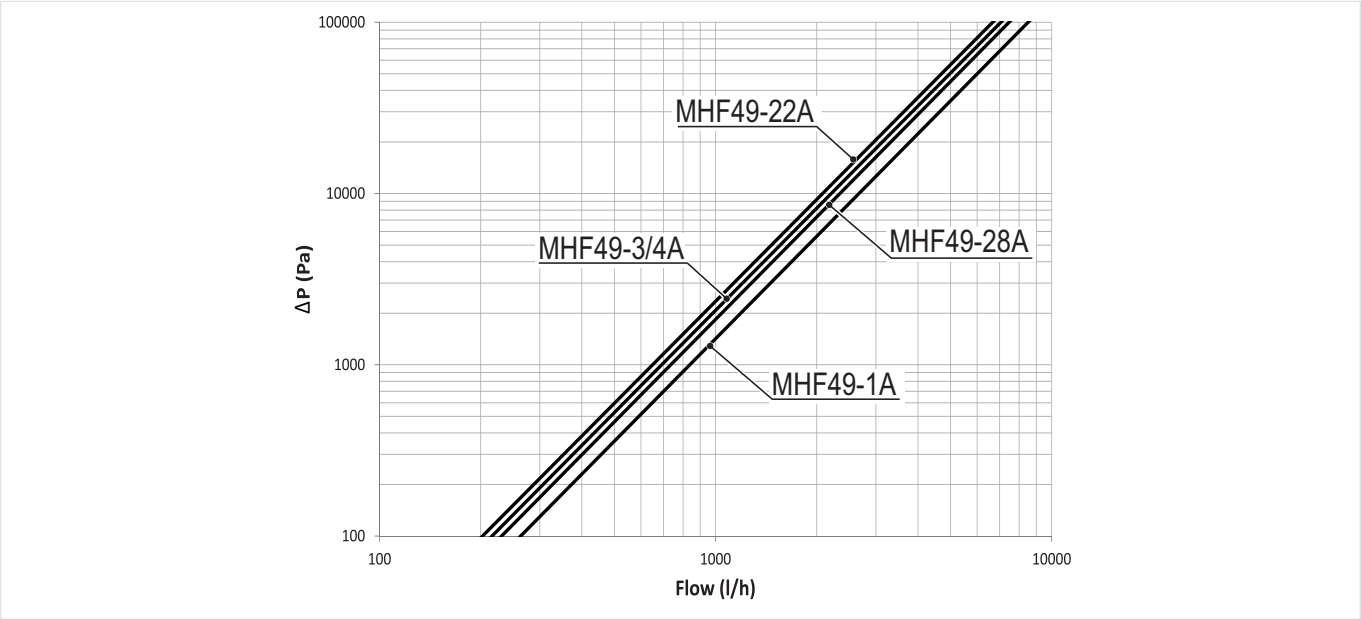
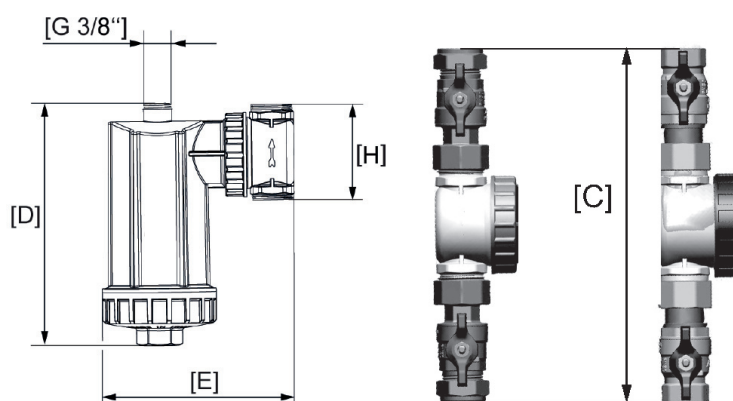


Fig. 2 Pressure drop within the valve in dependency of the flow rate and the used connection size

DIMENSIONS

Overview



| Parameter | | Values | | | |
|-------------------|----|--------|------|-------|------|
| Connection sizes: | | 22 | 28 | 3/4" | 1" |
| Weight: | kg | 1.19 | 1.51 | 1.114 | 1.40 |
| Dimensions: | C | 239 | 271 | 220 | 252 |
| | D | 189 | 189 | 189 | 189 |
| | E | 153 | 153 | 153 | 153 |
| | H | 98 | 98 | 98 | 98 |

Note: All dimensions in mm unless stated otherwise.

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

The magnetic heating filters are available in the following sizes: 3/4" and 1" internal thread, 22 mm and 28 mm compression fittings

- standard
- not available

| | | MHF49-22A | MHF49-28A | MHF49-3/4A | MHF49-1A |
|------------------|----------------------------|-----------|-----------|------------|----------|
| Connection size: | 22 mm compression fittings | • | – | – | – |
| | 28 mm compression fittings | – | • | – | – |
| | 3/4" internal thread | – | – | • | – |
| | 1" internal thread | – | – | – | • |



Manufactured for
and on behalf of
Pittway Sàrl, Z.A., La Pièce 4,
1180 Rolle, Switzerland
by its authorised representative
Ademco 1 GmbH

For more information
homecomfort.resideo.com/europe

Ademco 1 GmbH, Hardhofweg 40,
74821 MOSBACH, GERMANY

Phone: +49 6261 810
Fax: +49 6261 81309