

Operation Manual Sludge separator with magnet and insulation

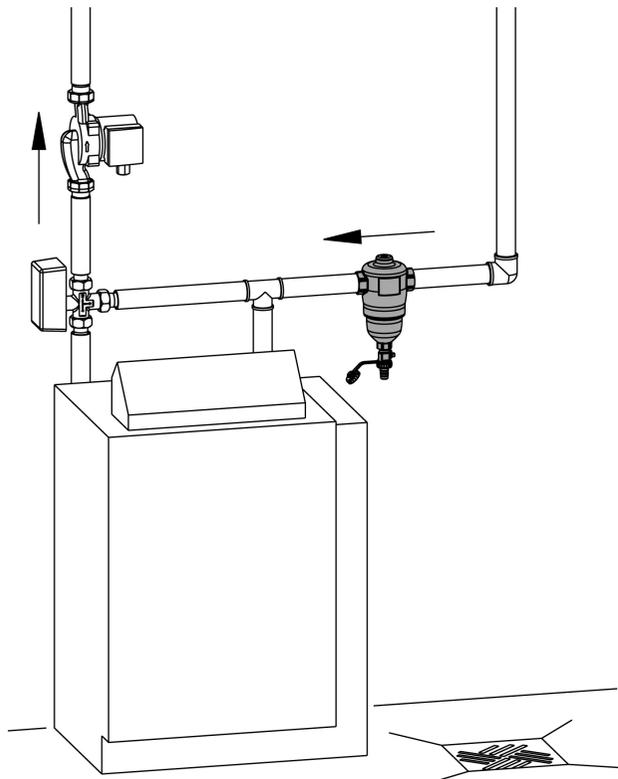


Fig. 4: Installation drawing of sludge separator

6 | Start-up

Deaeration. Check for tightness.

7 | Inspection / Maintenance

If necessary, rinse the sludge from the sludge separator by opening the ball valve.

After discharging the sludge, it might be necessary to refill the heating system. When doing so, observe VDI 2035.



Attention! Risk of scalding

The surface of the system and/or the backwash water may cause scalding due to the high operating temperature.

8 | Accessories

Designation	Order no.
Automatic deaerator	please inquire

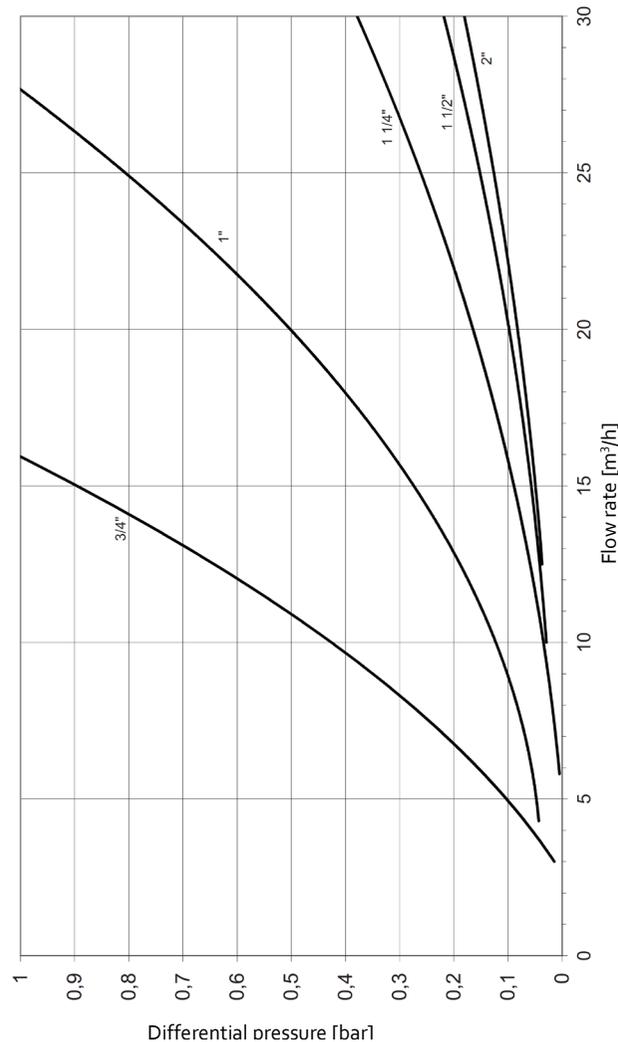
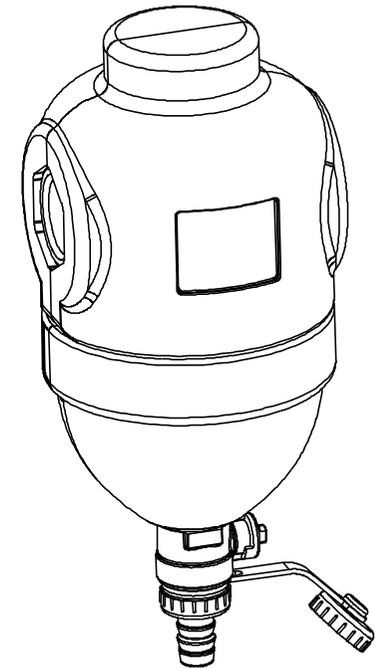


Fig. 3: Pressure loss curve



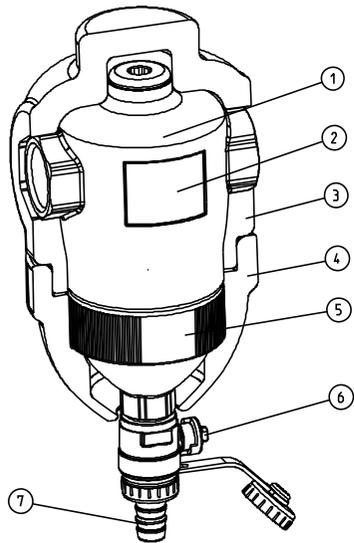
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Components of the sludge separator



- | | |
|--------------------|-----------------|
| ① Sludge separator | ⑤ Magnetic ring |
| ② Type designation | ⑥ Ball valve |
| ③ Upper Insulation | ⑦ Hose socket |
| ④ Lower Insulation | |

Fig. 1: Components of the sludge separator

General information

Our systems must be installed by an approved sanitary and heating company.

Check the components for transport damage.

In case of excessive sludge, the heating system must be checked for corrosion damage.

The magnetic ring does not change the hydraulic properties.

1 | Designated application

In heating systems, in particular in old systems, the circulation of polluted water causes premature wear and tear and damage to components such as pumps and regulating valves. Furthermore, it clogs heat exchangers, radiators and pipes and thus causes a reduced thermal efficiency of the

system. The sludge separator effectively removes even very small particles (mainly sand and rust particles) at a very low pressure loss. The interior element (see Fig. 2, item 1) consists of several, radially arranged nets.

The impurities contained in the water hit these nets, are separated and then sink to into the lower part of the housing (see Fig. 2, item 2).

The magnetic ring (see fig. 2, pos. 3) improves the separation of ferrous impurities. The magnetic ring can also be removed from the housing to discharge the deposited impurities by opening the ballcock (see fig. 2, pos. 4), even whilst the system is running.

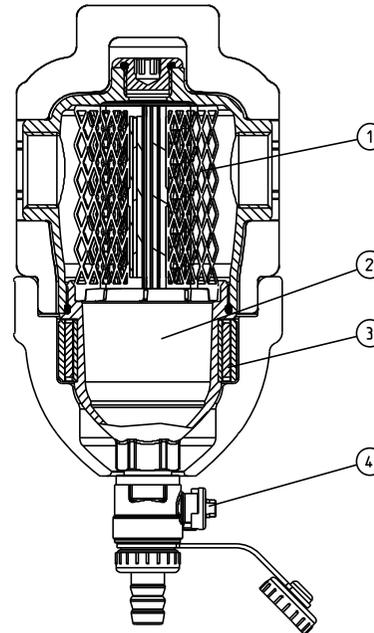


Fig. 2: Item drawing

2 | Technical specifications

Sludge separator	3/4"	1"	1 1/4"	1 1/2"	2"	
Connection diameter [f thr]	R 3/4"	R 1"	R 1 1/4"	R 1 1/2"	R 2"	
Nominal connection diameter [DN]	20	25	32	40	50	
Settling capacity (depending on composition of sludge), max. [µm]	5					
Max. flow at 1.2 m/s [m³/h]	1.36	2.11	3.47	5.42	8.20	
Nominal pressure	PN 10					
Max. water temperature [°C]	110					
Max. glycol concentration [%]	50					
Installation length [mm]	110		124		127	
Total height [mm]	248		268			
Weight empty [kg]	1.9		2.2		2.4	
Order no.	707 ...	705	710	715	720	725

3 | Installation requirements

Observe the local installation regulations as well as the technical specifications.

Install the device free of strain. The dirt trap has to be installed in pipes of similar dimensions as its nominal diameter.

4 | Scope of supply

- Sludge separator made of brass with magnetic ring
- Hose socket for hose connection
- Insulation
- Operation manual

5 | Installation

The sludge separator must be installed in a horizontal pipe, preferably in the return of the circulation, upstream of the boiler (refer to fig. 4). This way, the impurities contained in the circulation, in particular during the activation phase, may be intercepted before they may reach the boiler.

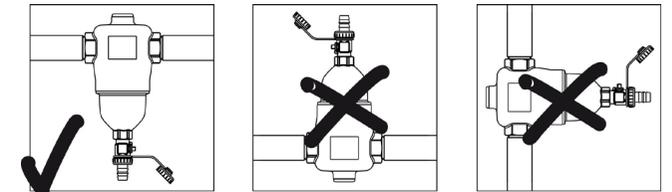


Fig. 3: Installation of a sludge separator