

SELF-CLEANING FILTER



Description

Barberi self-cleaning filters are equipped with a vertical cylindrical filtering cartridge, which can be easily cleaned by opening the drain valve (self-cleaning through flushing). They are used in domestic water distribution systems and thermal systems to protect generators (wall-mounted boilers, solid fuel generators, heat pumps) and devices such as thermostatic mixing valves, pressure reducing valves and backflow preventers. Impurities precipitate to the bottom of the body or are caught by the filtering cartridge. Thanks to the double thread on the body connections and the union connection, they can be applied to pipes in four different ways.

Range of articles

Series V71.B Self-cleaning filter for thermal and domestic hot water systems. Complete with G 1/4 F front and rear pressure test port. 4 in 1 threaded connections.

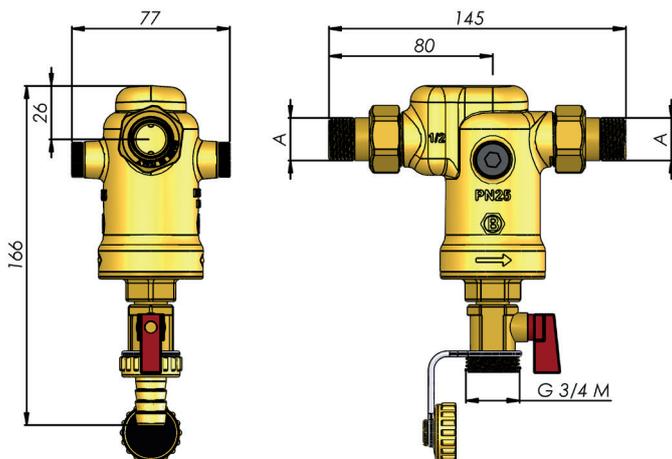
Features

Max. working temperature: **110 °C**
 Max. inlet pressure: **25 bar**
 Suitable fluids: **water, glycol solutions (max 30%), potable water**
 4 in 1 threaded connections (ISO 228-1): **double thread on the body G 3/4 M + G 1/2 F and union G 3/4 RN-G 1/2 M**
 Test ports: **G 1/4 F**
 Tightening torque of the filter plug: **10 N·m**

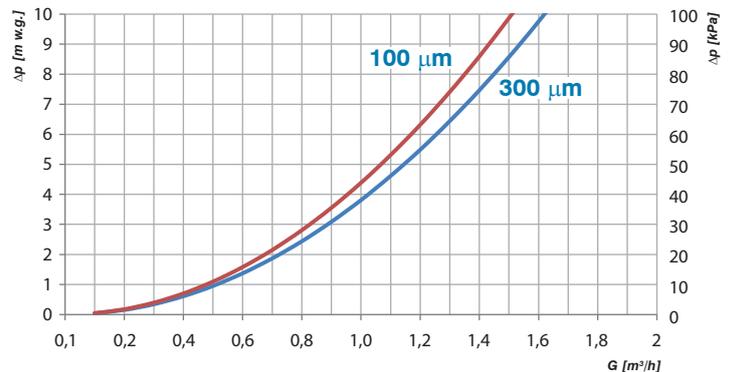
Materials

Body: **brass EN 1982 CB753S**
 Filtering cartridge: **stainless steel AISI 304L**
 Gaskets: **NBR**
 Plugs: **PA66**
 Drain valve:
 body: **brass EN 12165 CW617N**
 ball: **brass EN 12165 CW614N, chrome plated**

Dimensions



Diagrams



Code	Connections	Kv [m³/h]	Mesh size [mm]	Weight [kg]	N. P/B	N. P/C
V71B1500003	(G 3/4 M + G 1/2 F) + (G 3/4 RN + G 1/2 M)	1,62	0,3	1,050	1	6
V71B1500001	(G 3/4 M + G 1/2 F) + (G 3/4 RN + G 1/2 M)	1,51	0,1	1,050	1	6

N. P/B: number of pieces in box - N. P/C: number of pieces in carton

Working way

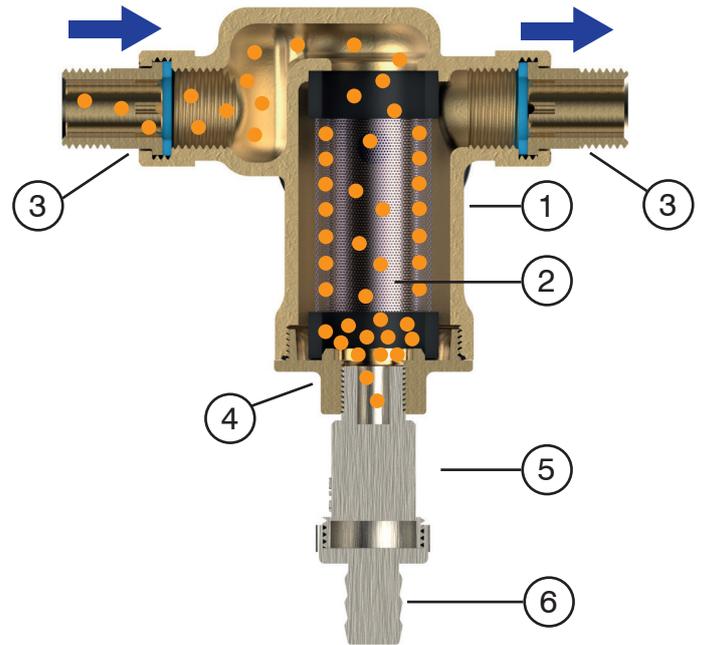
The self-cleaning filter is composed of a body (1), filtering cartridge (2), 4 in 1 connections (3), filter plug (4), drain valve (5), hose connection (6).

Thanks to the body shape, the self-cleaning filter cleans the water of thermal and sanitary systems through two combined actions:

- **impurity decantation towards the body bottom:** the medium flow enters the upper part of the filter (2), slows down and the particles begin to fall towards the device bottom under the effect of gravity;
- **mechanical filtration:** the particles not yet fallen are hold by the filter mesh (2).

A large amount of particles begins to fall down to the device bottom, leaving to the filter a less difficult cleaning deal: in this way the filter gets clogged more slowly.

The device eliminates impurities, helping to prevent clogging or malfunction of delicate devices such as heat exchangers, generators, pressure reducing valves, thermostatic mixing valves, backflow preventers. The device can be easily cleaned through flushing (self-cleaning) or can be opened for a periodic in-depth cleaning procedure.



Features

Advantages

Decantation and filtration

Thanks to the body shape, fluid cleaning is performed both by gravity and by the action of the filtering cartridge.

Self-cleaning

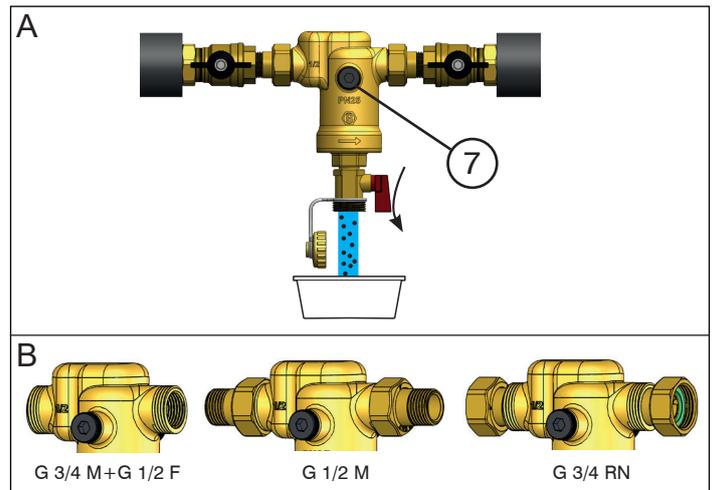
After opening the drain valve, the filter can be cleaned by flushing (fig. A). For a complete cleaning it's possible to remove the cartridge.

4 in 1 connections

Thanks to the presence of the union fitting and the double MF threaded connection on the body, it's possible to connect the filter to the pipe in 4 different ways (fig. B).

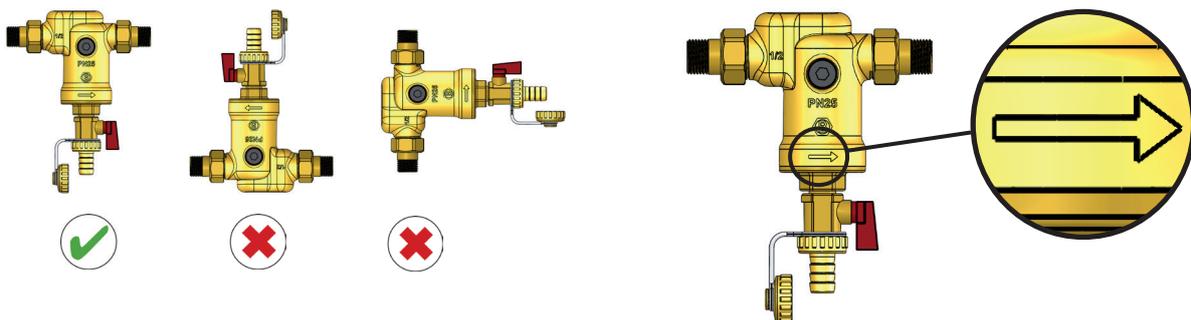
Fitted for pressure gauge

The filter is equipped with frontal and rear G 1/4 F connection (7). These test ports are placed downstream of the cartridge. Connecting a pressure gauge, it's possible to check the filter clogging together with an additional pressure gauge upstream.



Installation

The filter must be installed on horizontal pipes with the drain valve pointing downward. Other installation positions reduce the filtering efficiency and the possibility to clean the filter through flushing. Respect the flow direction indicated by the arrow on the valve body.



Maintenance

The amount of impurities that are deposited in the device depend on the system conditions and materials.

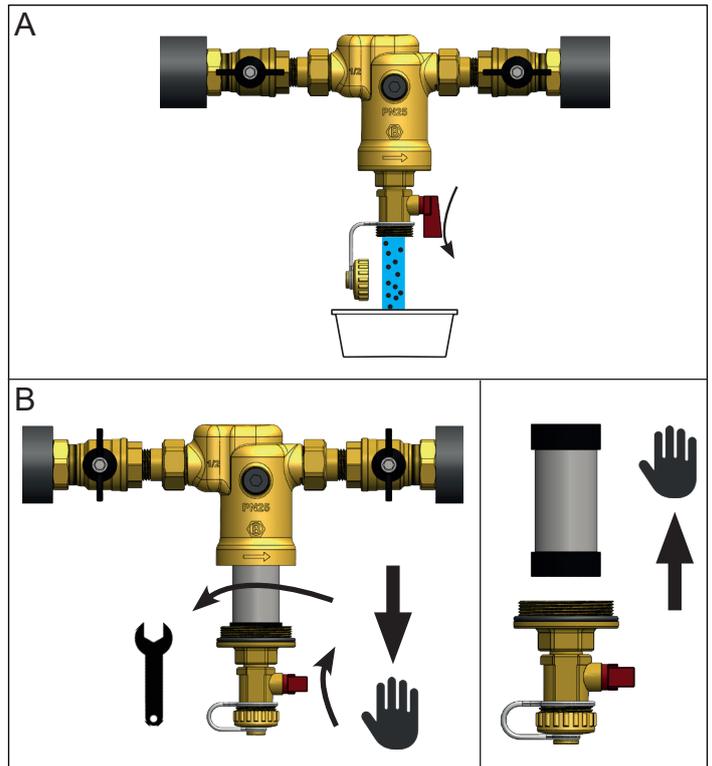
Cleaning must be performed with boiler off and system cold.

Cleaning can be performed according to two procedures:

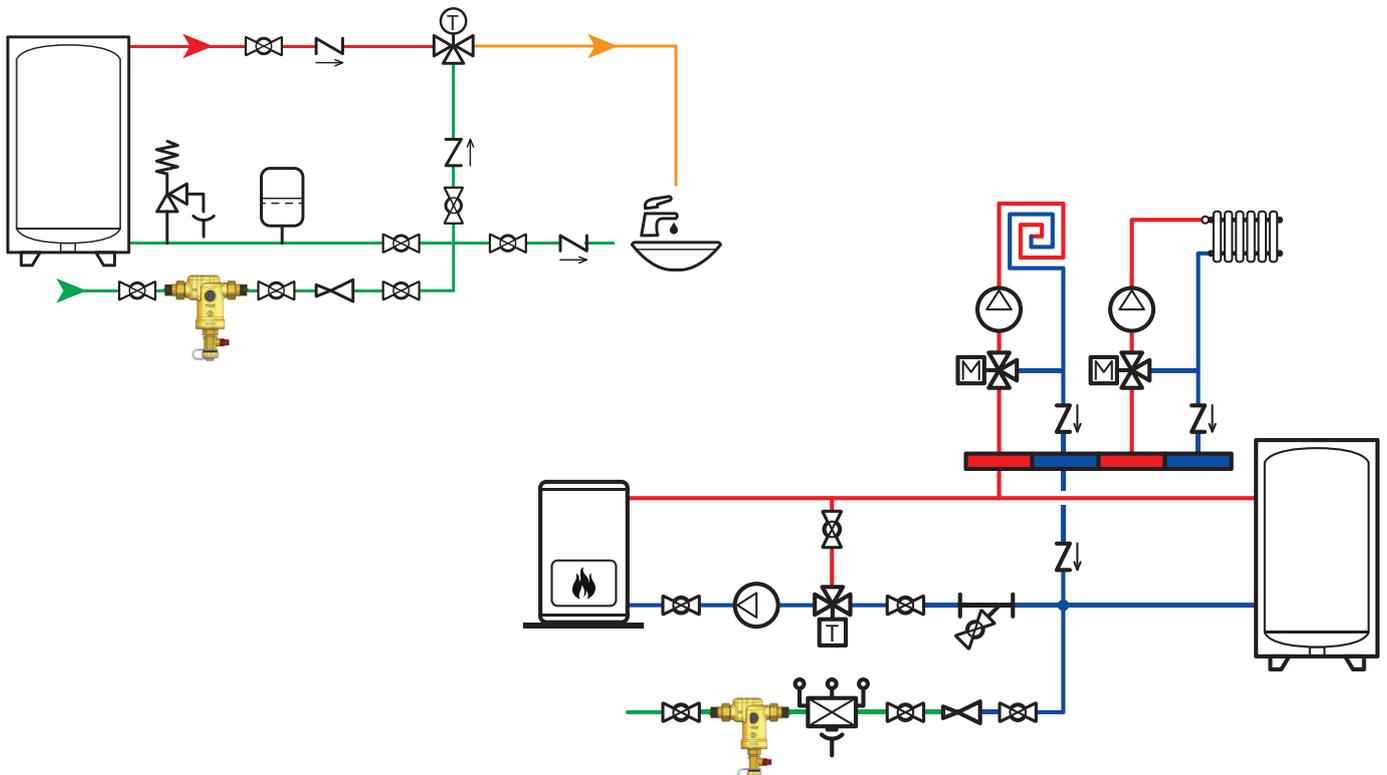
- basic cleaning: fast procedure through flushing (self-cleaning) (fig. A);

- in-depth cleaning: accurate cleaning after disassembling the filtering cartridge (fig. B).

Cleaning is described in detail in the instructions for use and maintenance



System diagrams



Specifications

Series V71.B

Self-cleaning filter for thermal and domestic hot water systems. 4 in 1 connections: double thread on the body G 3/4 M + G 1/2 F and union G 3/4 RN-G 1/2 M. Complete with frontal and rear pressure test ports G 1/4 F. Brass body. Stainless steel filtering cartridge. NBR gaskets. PA66 plugs. Brass drain valve. Maximum working temperature 110 °C. Maximum inlet pressure 25 bar. Suitable fluids potable water, water, glycol solutions (max 30%).