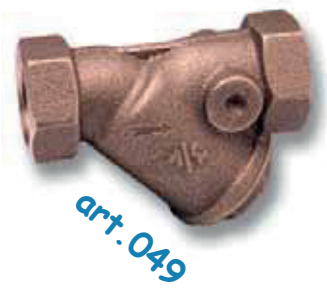
Milder
— Veelzijdig in leidingsystemen —

EN	TECHNICAL DATA SHEET	rev. A
	ST00109	
art. **050**	art. **049**	

Y FILTER F - F



Description

Barberi® impurity collecting filters are components with cylindrical filter, that can be easily taken out and inspected for the normal cleaning and maintenance operation. They are normally used in sanitary water installations, raised waterworks, heating circuits, heating main stations, heat generators (hang wall boilers, wood boilers, heating pumps), thermal solar installations, generic industrial and agricultural water installations.

Articles range

art. **050**	Y Filter - F.F.
art. **049**	Bronze Y Filter in - F.F.

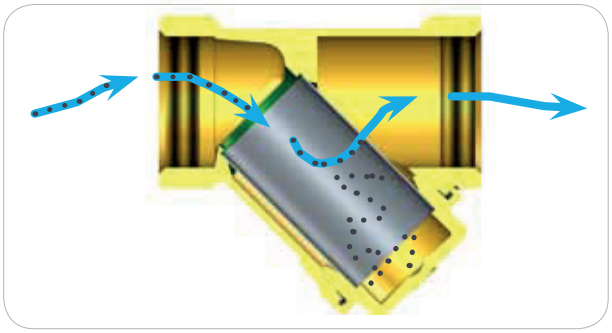
Features

Min - max. acceptable temperature(peaks):
-20 °C *(no frost)* **– 110 °C**
Min - max. working temperature:
0 °C *(no frost)* **– 95 °C**
Max working pressure: **16 bar**
Suitable fluids: **water for heating installations, glycoled water (max 30%), sanitary water**
Installation's connections: **threaded connections ISO 228/1**
Tests: **UNI EN12266-1 §A.3**
On request:
different mesh types (see chapter's end)
viton washers
nickel-plated surface

Materials

1 - Valve's body: **Brass UNI EN 12165 CW617N**
Bronze UNI EN 1982 CB491K(3", 4")
2 - Cartridge: **Steel AISI 304**
3 - Plug: **Brass UNI EN 12165 CW617N**
4 - Washers: **NBR(art.050)**
Fiber(art.049)

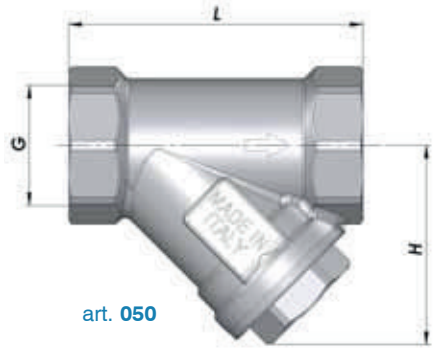
Working way



The strainer with the metal filter is born to avoid impurities to enter into pipes and by depositing themselves reduce the bores increasing the flow drops and oxidation phenomenons. This kind of strainer shall be always installed before all other components in order to protect them from impurities that could damage the installations or make them inefficient. It is normally installed at the water supply inlet before check valves, shut off valves and pressure reducers. It is also used in closed heating circuits at the heat generator inlet to protect heat exchangers from impurity coming from installations. The impurities, depositing onto heat exchangers, will reduce the heat exchange capabilities thus decreasing the performances and reducing the life cycle.
The ***Barberi*** Y strainer is composed of a metal body to connect the body to pipes, of a metal mesh to filter impurities, of a plug for the filter to take off the filtering mesh during maintenance. The filtering mesh hold particles with a bigger dimension than that of its holes; particles will be partially hold and will stay at the bottom of the filter. The filter's body is built so to take advantage from all the filtering surface thus increasing working life before the mesh totally becomes dirty. Occasionally it is possible to take off the filter and clean it with water against the mainstream to clean the passage' surface.

Y FILTER F - F

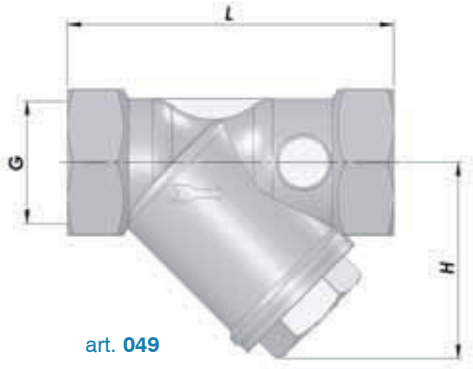
Dimensions



art. **050**

Code	P [bar]	G	H	L	mesh type	Weight	N. P/B	N. P/C
050 008 000	16	1/4"	33	48	A	140	20	80
050 010 000	16	3/8"	33	48	A	100	25	200
050 015 000	16	1/2"	34	52	A	115	20	160
050 020 000	16	3/4"	42	63	A	185	14	84
050 025 000	16	1"	50	75	A	320	10	60
050 032 000	16	1"1/4	63	91	A	515	5	30
050 040 000	16	1"1/2	70	102	A	665	4	24
050 050 000	16	2"	87	118	A	1195	2	12
050 065 000	16	2"1/2	108	150	A	1930	-	8
050 080 000	16	3"	148	167	A	3715	-	5
050 100 000	16	4"	185	226	A	6700	-	2

P: max pressure - Weight (grams) - N. P/B: number of pieces in box - N. P/C: number of pieces in carton



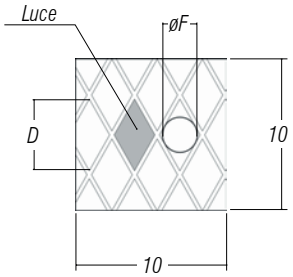
art. **049**

Code	P [bar]	G	H	L	mesh type	Weight	N. P/B	N. P/C
049 010 000	16	3/8"	32	54	B	250	10	80
049 015 000	16	1/2"	42	65	B	250	10	80
049 020 000	16	3/4"	45	85	B	360	15	30
049 025 000	16	1"	47	92	B	450	10	40
049 032 000	16	1"1/4	65	105	B	744	5	20
049 040 000	16	1"1/2	72	115	B	915	4	24
049 050 000	16	2"	98	131	B	1560	2	12
049 065 000	16	2"1/2	124	147	B	2765	-	8
050 080 000	16	3"	148	167	B	3715	-	5
050 100 000	16	4"	185	226	B	6700	-	2

P: max pressure - Weight (grams) - N. P/B: number of pieces in box - N. P/C: number of pieces in carton

Mesh type A: STANDARD CARTRIDGE

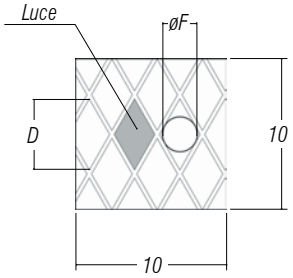
ON REQUEST



n° holes/cm²	70	270	24
Hole area	0.25 mm²	0.025 mm²	1.0 mm²
D	1.0 mm	0.5 mm	2.0 mm
øF	0.50 mm (500 µm)	0.3 mm (300 µm)	1.0 mm (1000 µm)
Size	1/2" - 4"	1"1/2	

As regards the values of the Hole area, D and øF 's tolerance ±15% has to be considered.

Mesh type B: STANDARD CARTRIDGE



n° holes/cm²	65	70	50
Hole area	0.18 mm²	0.25 mm²	0.64 mm²
D	1.0 mm	1.0 mm	1.0 mm
øF	0.40 mm (400 µm)	0.50 mm (500 µm)	0.80 mm (800 µm)
Size	1/2" - 1"	1"1/4 - 2"	2" - 4"

As regards the values of the Hole area, D and øF 's tolerance ±15% has to be considered.

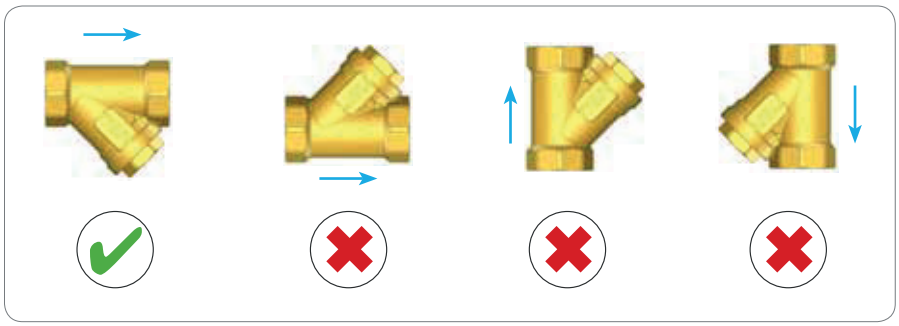
Y FILTER F - F

Installation

Before installing this component please verify system's working conditions, such as pressure and temperature, to be sure that they are within the working conditions of the strainer. It is important that the strainer is free from obstacles for its duly maintenance.

Positioning

For a better efficiency of the filtering operation and of the impurity deposit function it is suggested to install the filter's body on horizontal pipes with the taking off plug towards the bottom position.
For a correct installation please refer to the flow direction indicated from the arrow printed on the valve body. Connection to pipes is made through threads using standard plumbing skills.



Maintenance

Maintenance of the filter shall be done as frequently as much as the impurities are present in the used fluid. Anyway it is suggested to clean the filter at least once per year to avoid, besides a too big flow reduction, irreversible encrustations which will oblige the filtering mesh to be replaced. To clean the metal mesh following steps shall be followed:

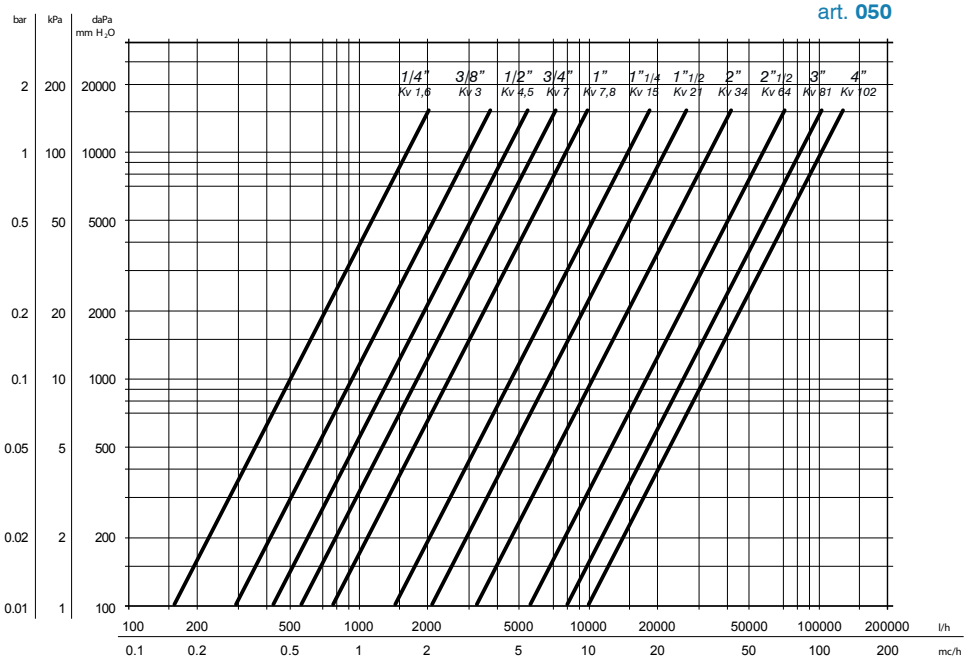
- close the shut off valve of the filter;
- open the plug where the filter is housed and extract the filtering mesh;
- clean the metal mesh against the mainstream by using a plastic bristle brush;
- check that the filter' surface is completely cleaned (if irreversible encrustations are present or the filter is broken, replace it);
- assemble the mesh on the plug and screw the plug on the filter's body;
- open the shut off valves;

Attention! In new installations or normally after filling in a system, it is suggested to clean the filter after the first working week to take off residual debris due to first installation's operations (shavings, sealing material).

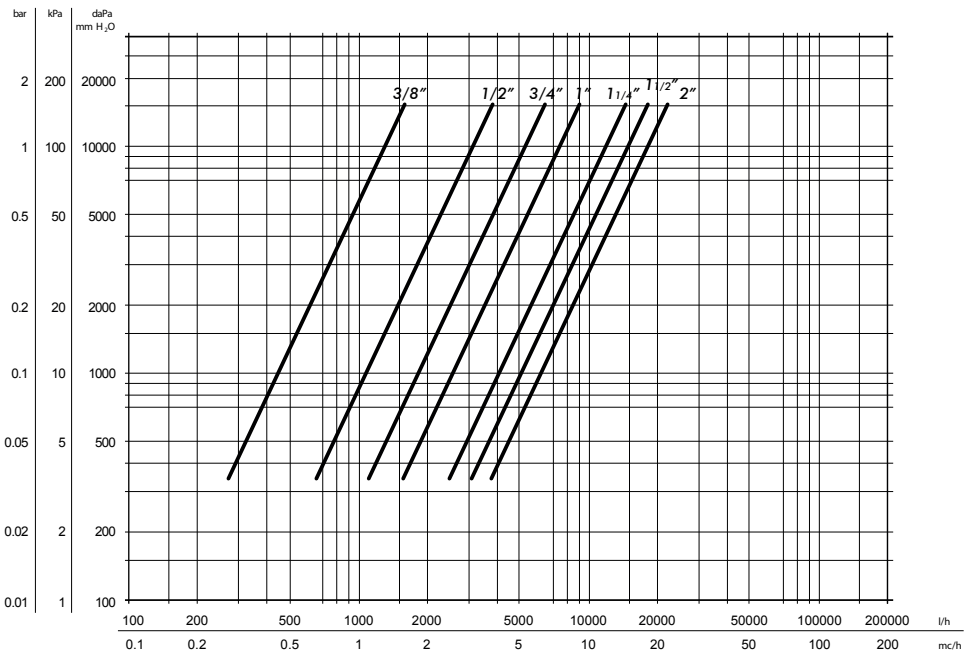
Y FILTER F - F

Diagrams

art. 050



art. 049



Y FILTER F - F

Specifications

The specification's text refers to a specific article reference. Each version of the product obliges the engineer to modify the specification's text

Art.ref. 050 025 000
Y Filter with female threaded connection. *1" Female connections*. Material: brass body, brass plug, stainless steel filter, NBR washers. Max working pressure 16bar, working temperature range 0-95°C. Minimum diameter of the particles filtered *500 µm*.

Art.ref. 049 020 000
Bronze Y Filter with female threaded connection. *3/4" Female connections*. Material: bronze body, brass plug, stainless steel filter, fiber washers. Max working pressure 16bar, working temperature range 0-95°C. Minimum diameter of the particles filtered *400 µm*.

Art.ref. 049 032 000
Bronze Y Filter with female threaded connection. *1"1/4 Female connections*. Material: bronze body, brass plug, stainless steel filter, fiber washers. Max working pressure 16bar, working temperature range 0-95°C. Minimum diameter of the particles filtered *500 µm*.

Art.ref. 049 050 000
Bronze Y Filter with female threaded connection. *2" Female connections*. Material: bronze body, brass plug, stainless steel filter, fiber washers. Max working pressure 16bar, working temperature range 0-95°C. Minimum diameter of the particles filtered *800 µm*.

Related articles

Art. P21
Compact Y filter - M.M.

Art. 051A
Compression Ends Y filter

Art. P22
Compact Y filter - M.M. - with ½" plug suitable for probe holder