

EN		DATA SHEET		rev. B				
	ST 00097							
	014	015	024					
	025	010						





015





025



010

Description

Barberi® foot valves are monodirectional devices, allowing the backflow prevention of fluid under pressure. They allow the filtering of the fluid in which they are immersed, for this reason they are normally used in hot and cold water suction systems from wells or storages and in general hydraulic systems.

024

Range of products

Series 010	Foot valve with integrated stainless steel filter
Series 025	Foot valve for high pressure with interchangeable stainless steel filter - brass filter connection
Series 024	Foot valve for high pressure with interchangeable stainless steel filter - nylon filter connection
Series 015	Foot valve with interchangeable stainless steel filter - brass filter connection
Series 014	Foot valve with interchangeable stainless steel filter - nylon filter connection

Features

Working temperature range (peaks): -20 (no frost)-110 °C Working temperature range: 0 (no frost)-95 °C Opening pressure: 0,02 bar

Max working pressure:

- 010, 014, 015: from G 3/8 to G 1 **16 bar** from G 1 1/4 to G 2 **10 bar**

from G 1 1/4 to G 2 10 bar from G 2 1/2 to G 4 8 bar

- 024, 025: from G 3/8 to G 1 **25 bar**

from G 1 1/4 to G 2 18 bar

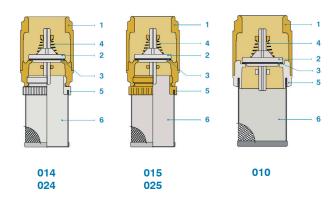
Suitable fluids: water for thermal systems, glycol solutions (max 30%), domestic water Connections: threaded connections ISO 228-1

Tests: EN 12266-1 §A.3

On request: versions with galvanic treatment

Materials

- 1 Body: brass EN 12165 CW617N
- 2 Obturator: POM
- 3 Gaskets: NBR
- 4 Spring: stainless steel AISI 302
- 5 Filter connection:
- 010, 014, 024: nylon
- 015, 025: brass EN 12164 CW614N
- 6 Filter: stainless steel AISI 304 L

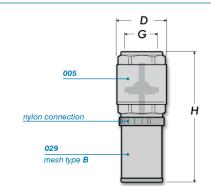




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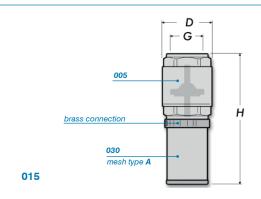
Dimensions

014



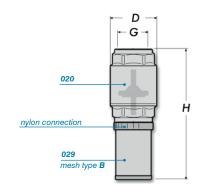
Code	P [bar]	G	D	Н	Mesh type	Weight [g]	N. P/B	N. P/C
014 010000	16	G 3/8	29	88	В	80	25	300
014 015000	16	G 1/2	30	90	В	110	20	240
014 020000	16	G 3/4	37	100	В	170	15	135
014 025000	16	G 1	44	111	В	250	14	84
014 032000	10	G 1 1/4	56	123	В	360	7	42
014 040000	10	G 1 1/2	63	139	В	490	5	30
014 050000	10	G 2	78	163	В	790	3	18
014 065000	8	G 2 1/2	103	176	В	1375	-	9
014 080 000	8	G 3	120	203	В	2020	-	6
014 100000	8	G 4	155	233	В	3310	-	4

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



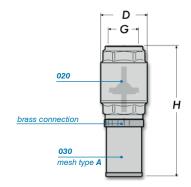
Code	P [bar]	G	D	Н	Mesh type	Weight [g]	N. P/B	N. P/C
015 010000	16	G 3/8	29	88	А	95	25	200
015 015000	16	G 1/2	30	90	Α	125	20	160
015 020 000	16	G 3/4	37	100	Α	190	15	135
015 025 000	16	G 1	44	111	Α	285	14	84
015 032000	10	G 1 1/4	56	123	Α	415	6	36
015 040 000	10	G 1 1/2	63	139	Α	550	5	30
015 050 000	10	G 2	78	163	Α	860	3	18
015 065000	8	G 2 1/2	103	176	Α	1510	-	9
015 080 000	8	G 3	120	203	Α	2180	-	6
015 100 000	8	G 4	155	233	А	3550	-	4

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



Code	P [bar]	G	D	Н	Mesh type	Weight [g]	N. P/B	N. P/C
024 010000	25	G 3/8	29	95	В	122	15	120
024 015000	25	G 1/2	32	100	В	160	15	120
024 020000	25	G 3/4	39	112	В	245	14	84
024 025000	25	G 1	47	127	В	345	6	54
024 032000	18	G 1 1/4	60	137	В	570	5	30
024 040 000	18	G 1 1/2	67	154	В	725	4	24
024 050 000	18	G 2	83	177	В	1100	3	18

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



Code	P [bar]	G	D	Н	Mesh type	Weight [g]	N. P/B	N. P/C
025 010 000	25	G 3/8	29	95	А	135	24	192
025 015 000	25	G 1/2	32	101	Α	175	12	144
025 020 000	25	G 3/4	39	114	Α	265	14	84
025 025 000	25	G 1	47	129	A	380	8	48
025 032 000	18	G 1 1/4	60	139	А	635	5	30
025 040 000	18	G 1 1/2	67	155	Α	780	4	24
025 050 000	18	G 2	83	178	А	1150	3	12

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

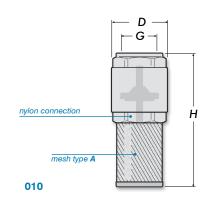


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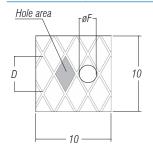
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Code	P [bar]	G	D	Н	Mesh type	Weight [g]	N. P/B	N. P/C
010 015 000	16	G 1/2	29	80	А	75	15	180
010 020 000	16	G 3/4	37	90	А	115	28	168
010 025 000	16	G 1	44	100	А	165	16	96
010 032 000	10	G 1 1/4	56	110	А	265	7	42
010 040 000	10	G 1 1/2	63	126	А	330	6	36
010 050 000	10	G 2	78	146	Α	535	3	18
010 065 000	8	G 2 1/2	103	162	Α	1000	-	10
010 080 000	8	G 3	120	188	А	1535	-	6
010 100000	8	G 4	155	214	А	2615	-	4

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

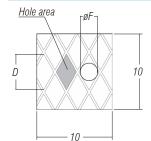
Filter mesh - Type A



nr. holes/cm²	24
Hole area	1,1 mm²
D	2,6 mm
øF	0,85 mm (850 μm)
Size	G 3/8–G 4

Regarding the values of Hole area, D and #F consider a tolerance of about $\pm 15\%$

Filter mesh - Type B



nr. holes/cm²	22
Hole area	1,3 mm ²
D	2,6 mm
øF	0,95 (950 μm)
Size	G 3/8-G 4

Regarding the values of Hole area, D and #F, consider a tolerance of about $\pm 15\%$

Installation

Before installing a foot valve please verify the system working conditions, such as pressure and temperature, to be sure that they are within the working conditions of the valve.

Positioning

The valves can be installed in any position respecting the flow direction as indicated by the arrow on the valve body. It is suggested to place the valve so that the filter is far enough from walls, at least 4–5 cm, to avoid the cartridge from getting dirty quickly and excessive suction efforts.







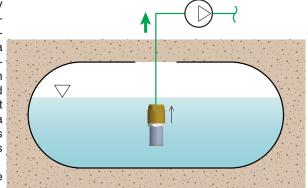


Maintenance

Inspect the valve regularly according to the operating conditions and frequency of use. If leakages are found where the gasket

is housed, these could be caused by debris. It is therefore necessary to disassemble the valve and clean accurately the gasket using compressed air or mechanical action to remove all impurities. The filter, assembled on the valve body, must be cleaned regularly to guarantee a correct flow to the user and avoid excessive suction efforts to the booster pumps. To clean the filter, it is suggested to disassemble and clean it with a countercurrent flow (series 014, 015, 024, 025) and, if damaged or too many incrustations are revealed, replace it. In easy situation, it is possible to clean the filter only on the external surface by passing a sponge and providing with a good flushing. The filter of the 010 series can only be cleaned according to this last procedure and if the filter is too much damaged it is necessary to replace the whole valve.

CAUTION: if the filter or the valve body needs to be disassembled, be sure that the booster pumps are always switched off.





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Accessories

029

Stainless steel filter with nylon connection

Max working temperature: 95 °C



3000		

Code	Size	Mesh type		
029 010 000	G 3/8 M	В	50	400
029 015 000	G 1/2 M	В	35	280
029 020 000	G 3/4 M	В	20	160
029 025 000	G 1 M	В	25	100
029 032 000	G 1 1/4 M	В	20	80
029 040 000	G 1 1/2 M	В	10	40
029 050 000	G 2 M	В	6	24
029 065 000	G 2 1/2 M	В	-	20
029 080 000	G 3 M	В	-	10
029 100 000	G 4 M	В	-	6

030

Stainless steel filter with brass connection

Max working temperature: 140 °C



Code	Size	Mesh type		€
030 010 000	G 3/8 M	А	50	400
030 015 000	G 1/2 M	Α	35	280
030 020 000	G 3/4 M	А	20	160
030 025 000	G 1 M	А	25	100
030 032 000	G 1 1/4 M	Α	20	80
030 040 000	G 1 1/2 M	Α	10	40
030 050 000	G 2 M	Α	6	24
030 065 000	G 2 1/2 M	А	-	20
030 080 000	G 3 M	А	-	10
030 100 000	G 4 M	А	-	6

028

Stainless steel filter with stainless steel connection

Max working temperature: 140 °C



Code	Size	Mesh type	5	*
028 010 000	G 3/8 M	С	50	400
028 015 000	G 1/2 M	С	35	280
028 020 000	G 3/4 M	С	20	160
028 025 000	G 1 M	С	12	96
028 032 000	G 1 1/4 M	С	9	72
028 040 000	G 1 1/2 M	С	10	40
028 050 000	G 2 M	С	6	24
028 065 000	G 2 1/2 M	С	4	16
028 080 000	G 3 M	С	-	11
028 100 000	G 4 M	С	-	6



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Specifications

Series 014

Foot valve with interchangeable stainless steel filter and nylon filter connection. Threaded connection from G 3/8 to G 4 F. Brass body. POM obturator. Stainless steel spring. NBR gasket. Stainless steel filter, nylon filter connection. Working temperature range 0–95 °C (no frost). Opening pressure 0,02 bar. Maximum working pressure 16 bar (from G 3/8 to G 1), 10 bar (from G 1 1/4 to G 2), 8 bar (from G 2 1/2 to G 4). Suitable fluids water for thermal systems, glycol solutions max 30%, domestic water. Minimum diameter of the filtered particles 950 μ m.

Series 015

Foot valve with interchangeable stainless steel filter and brass filter connection. Threaded connection from G 3/8 to G 4 F. Brass body. POM obturator. Stainless steel spring. NBR gasket. Stainless steel filter, brass filter connection. Working temperature range 0–95 °C (no frost). Opening pressure 0,02 bar. Maximum working pressure 16 bar (from G 3/8 to G 1), 10 bar (from G 1 1/4 to G 2), 8 bar (from G 2 1/2 to G 4). Suitable fluids water for thermal systems, glycol solutions max 30%, domestic water. Minimum diameter of the filtered particles 850 μ m.

Series 024

Foot valve for high pressure with interchangeable stainless steel filter and nylon filter connection. Threaded connection from G 3/8 to G 2 F. Brass body. POM obturator. Stainless steel spring. NBR gasket. Stainless steel filter, nylon filter connection. Working temperature range 0–95 °C (no frost). Opening pressure 0,02 bar. Maximum working pressure 25 bar (from G 3/8 to G 1), 18 bar (from G 1 1/4 to G 2). Suitable fluids water for thermal systems, glycol solutions max 30%, domestic water. Minimum diameter of the filtered particles $950~\mu m$.

Series 025

Foot valve for high pressure with interchangeable stainless steel filter and brass filter connection. Threaded connection from G 3/8 to G 2 F. Brass body. POM obturator. Stainless steel spring. NBR gasket. Stainless steel filter, brass filter connection. Working temperature range 0–95 °C (no frost). Opening pressure 0,02 bar. Maximum working pressure 25 bar (from G 3/8 to G 1), 18 bar (from G 1 1/4 to G 2). Suitable fluids water for thermal systems, glycol solutions max 30%, domestic water. Minimum diameter of the filtered particles $850 \ \mu m$.

Serie 010

Foot valve with integrated stainless steel filter. Threaded connection from G 1/2 to G 4 F. Brass body. POM obturator. Stainless steel spring. NBR gasket. Stainless steel filter. Working temperature range 0–95 °C (no frost). Opening pressure 0,02 bar. Maximum working pressure 16 bar (from G 1/2 to G 1), 10 bar (from G 1 1/4 to G 2), 8 bar (from G 2 1/2 to G 4). Suitable fluids water for thermal systems, glycol solutions max 30%, domestic water. Minimum diameter of the filtered particles 850 μ m.

