



Reverse Osmosis Components




***Industrial manual
self-cleaning filters
made in stainless
steel AISI 316***

Introduction

The FILBLUE manual industrial selfcleaning filters are designed to remove all suspended solids from surface water (rivers, lakes and seawater), well water and waste water. Recommended applications include:

- Prefiltration for water treatment plants
- Process water
- Evaporative cooling towers
- Heat exchangers
- Irrigation
- Aquaculture
- Protection of spray nozzles

Selection guide for manual self cleaning filter

	FILBLUE 0	FILBLUE 1	FILBLUE 10
<ul style="list-style-type: none"> - Built in AISI 316 - Wide range of applications - Modular construction - Easy modification in automatic version 			
Filtration Rating	3000 -1000 micron	800 - 80 micron	800 - 80 micron
Continuous flow	NO	NO	NO
Efficiency ¹	90%	90%	90%
Efficiency on non compressible particle	High	High	High
Efficiency on compressible particles	Low	Low	Low
Efficiency on light particles	Low	Low	Low
Max particles size at inlet ²	2 cm	3 mm	3 mm
Max total suspended solids ³	-	100 mg/l	30 mg/l
Turbidity of non compressible particles	-	10 NTU	10 NTU
Turbidity of compressible particles	10 NTU	40 NTU	10 NTU

1 - Efficiency on all the inorganic and non compressible particles.

2 - The suggested maximum particles size at inlet must be no higher than 10 times the grade of sieve.

3 - For models FILBLUE 1 and FILBLUE 10 the maximum level of the suspended solid must be reduced in case of high quantity of abrasive material (sand or other). For further information please contact our technical office.

MANUAL SELF CLEANING FILTERS WITH STRAINER

FILBLUE 0



MANUAL SELF CLEANING FILTERS WITH STRAINER

FILBLUE 1



MANUAL SELF CLEANING FILTERS WITH BRUSHES

FILBLUE 10



MANUAL SELF CLEANING FILTERS WITH STRAINER

FILBLUE 0

Introduction

The FILBLUE 0 manual selfcleaning filter is designed to remove all suspended solids from surface water (rivers, lakes and seawater), well water and wate water. Recommended applications include:

- Prefiltration for water treatment plants
- Process water
- Evaporative cooling towers
- Heat exchangers
- Irrigation
- Aquaculture
- Protection of spray nozzle



Materials

Component	Description
Body	AISI 316 with MIG weldings and acid dipped. On request Duplex (SAF2205)
End cap	AISI 316. On request Duplex (SAF2205)
Flange connections	AISI 316. PN10 UNI2277
Thread connections	GAS thread UNI338-66
Inlet cylinder	PVC
Filtration strainer	PVC - filtration gradients available: 3000 (standard), 2000, 1000 micron
Internal seals	NBR
Drain valve	PVC ball valve
Pressure gauges	INOX - Diameter 2"1/2 - 0-10 Bar
Accessories (Plugs and reducers)	PP - PVC

MANUAL SELF CLEANING FILTERS WITH STRAINER

Model	FILBLUE 0 2-10	FILBLUE 0 3-15	FILBLUE 0 80-15	FILBLUE 0 100-30	FILBLUE 0 150-45	FILBLUE 0 200-60	
Code	F0000316002	F0000316003	F0000316080	F0000316100	F0000316150	F0000316200	
Surface area cm ²	1000	1500	1500	3000	4500	6000	
Connections IN/OUT	2"	3"	DN80	DN100	DN150	DN200	
Drain	1"1/4F	1"1/4F	1"1/2F	1"1/2F	1"1/2F	1"1/2F	
Pressure min-max Bar	1-10	1-10	1-10	1-10	1-10	1-10	16 Bar On request
Temperature max - °C	60	60	60	60	60	60	
pH min-max	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	
Max diam. inlet particles cm	2	2	2	2	2	2	

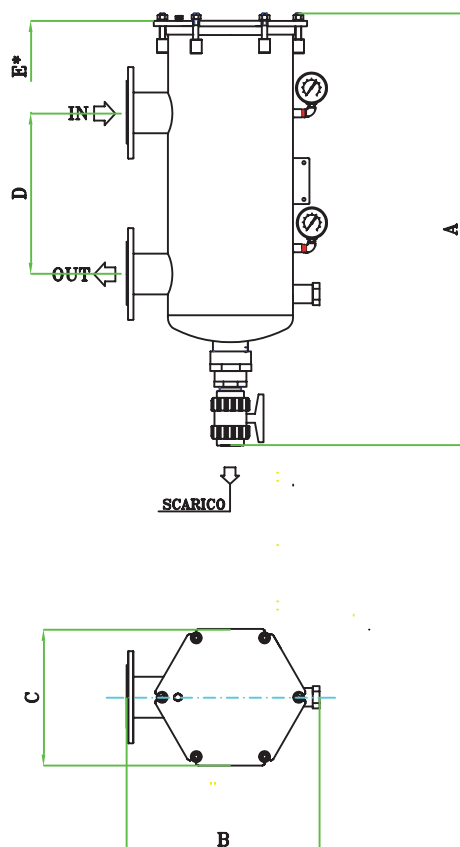
Flow rate	3000 µm (standard)	80	80	80	130	200	300	Max clean water flow rate in m ³ /h at 20°C and differential pressure 0,15 bar.
	2000 µm	80	80	80	130	200	300	
	1000 µm	80	80	80	130	200	300	

Sizes	A (mm)	740	890	940	1185	1430	1675	Measurements may be changed by the manufacturer without notice.
	B (mm)	300	300	420	420	420	435	
	C (mm)	200	200	300	300	300	340	
	D (mm)	250	300	345	460	585	700	
	E (mm)	500	650	700	900	1150	1400	
	Weight kg	8	10	21	27	35	46	

Packaging	G (mm)	1310	1310	1310	1555	1800	2050	The packaging may be changed by the manufacturer without notice.
	H (mm)	470	470	470	470	470	470	
	I (mm)	600	600	600	600	600	600	
	Weight (kg)	10	12	23	30	38	49	

Price € each	€ 2.354,00	€ 2.539,00	€ 4.226,00	€ 4.632,00	€ 5.309,00	€ 5.726,00	Duplex on request
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FILBLUE 0



European Community members only
 These filters satisfy all requirements of the European Directive for Pressure Equipment (P.E.D.) 97/23/EC, following module A (internal production control) as conformity assesment procedure.

Construction certificates: CE

MANUAL SELF CLEANING FILTERS WITH STRAINER

FUNDAMENTALS OF OPERATION

SERVICE

The water enters into the filter through (IN), passes through inlet cylinder (1) and then enters into the filter cylinder of the desired micron rating (2) from inside to out, and the filtered water passes to service through the exit (OUT).

Service	
Valve (3)	Closed

SELF CLEANING CYCLE

The deposition of suspended particles on the filter cylinder impedes water flow across it and hence causes a pressure differential (ΔP) across the filter cylinder. The cleaning cycle can be done when the pressure differential reaches a desired limit.

This is the procedure for the cleaning cycle:

- open the drain valve (3)

In some several cases this is cleaning cycle procedure:

- open the drain valve (3)

- stop the feed flow using the dedicate valve

- stop the filtered flow using the dedicate valve

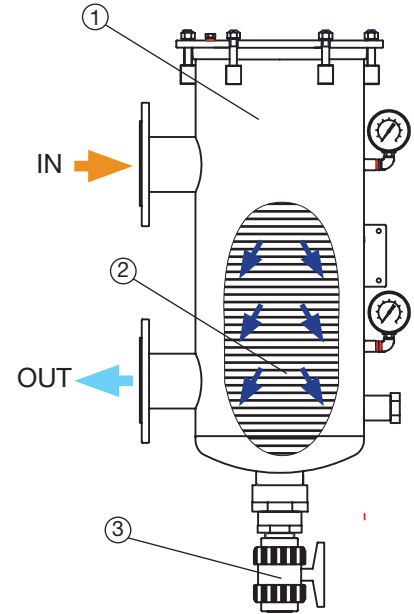
- open the filter

- take out the filter cylinder

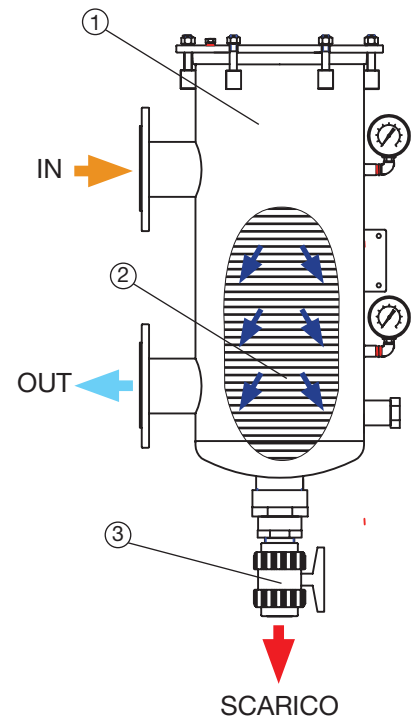
- clean manually the filter cylinder

After this cleaning procedure put the filter cylinder into the housing following the instructions indicated in the technical manual.

Cleaning	
Valve (3)	Open



FILBLUE 0



FILBLUE 0

MANUAL SELF CLEANING FILTERS WITH STRAINER

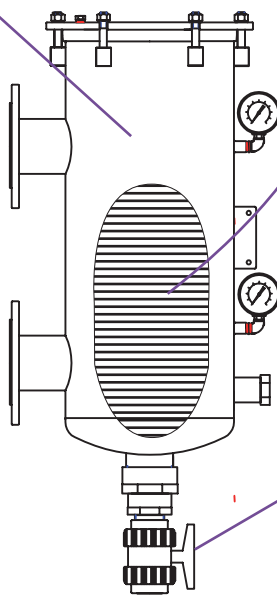
Filter cylinder



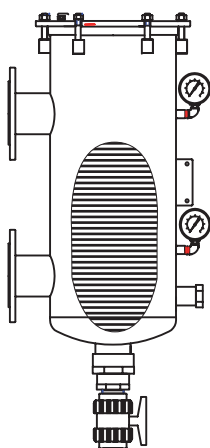
Prefilter cylinder



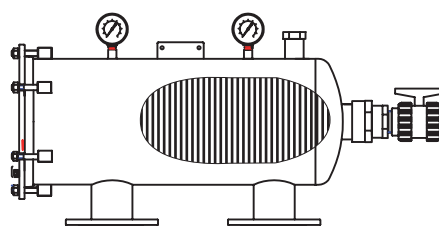
Pressure gauge



Drain valve



Vertical installation



Horizontal installation

MANUAL SELF CLEANING FILTERS WITH STRAINER

FILBLUE 1

Introduction

The FILBLUE 1 manual selfcleaning filter is designed to remove all suspended solids from surface water (rivers, lakes and seawater), well water and waste water. Recommended applications include:

- Prefiltration for water treatment plants
- Process water
- Evaporative cooling towers
- Heat exchangers
- Irrigation
- Aquaculture
- Protection of spray nozzle



Materials

Component	Description
Body	AISI 316 with MIG weldings and acid dipped. On request Duplex (SAF2205)
End cap	AISI 316. On request Duplex (SAF2205)
Flange connections	AISI 316. PN10 UNI2277
Thread connections	GAS thread UNI338-66
Inlet cylinder	PVC
Sleeve internal support	PVC
Rete filtrante Filtration sleeve	Polyester - filtration gradients available: 800, 500, 300, 200, 125 (standard), 80 micron
Internal seals	NBR
Drain valve	PVC ball valve
Pressure gauges	INOX - Diameter 2"1/2 - 0-10 Bar
Accessories (Plugs and reducers)	PP - PVC

MANUAL SELF CLEANING FILTERS WITH STRAINER

Model	FILBLUE 1 2-10	FILBLUE 1 3-15	FILBLUE 1 80-15	FILBLUE 1 100-30	FILBLUE 1 150-45	FILBLUE 1 200-60	
Code	F0001316002	F0001316003	F0001316080	F0001316100	F0001316150	F0001316200	
Surface area cm ²	1000	1500	1500	3000	4500	6000	
Connections IN/OUT	2"	3"	DN80	DN100	DN150	DN200	
Drain	1"1/4F	1"1/4F	1"1/2F	1"1/2F	1"1/2F	1"1/2F	
Pressure min-max Bar	1-10	1-10	1-10	1-10	1-10	1-10	On request
Temperature max - °C	60	60	60	60	60	60	
pH min-max	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	
Max diam. inlet particles mm	3	3	3	3	3	3	

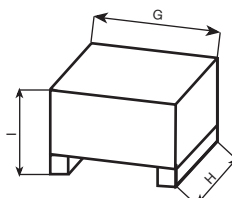
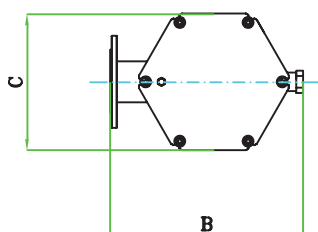
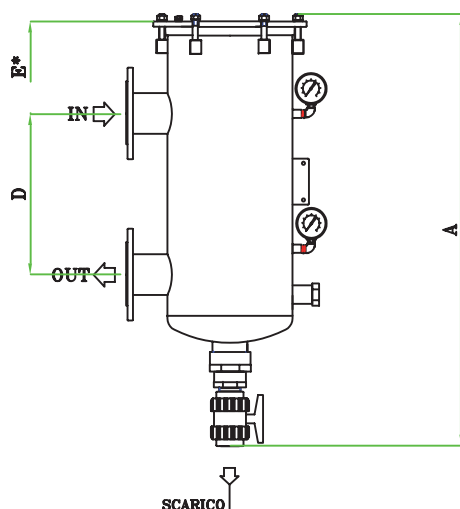
Flow rate	800 µm	80	80	80	130	200	300	Max clean water flow rate in m ³ /h at 20°C and differential pressure 0,15 bar.
	500 µm	80	80	80	130	200	300	
	300 µm	80	80	80	130	200	300	
	200 µm	80	80	80	130	200	300	
	125 µm (standard)	40	60	80	130	200	300	
	80 µm	36	54	72	117	180	270	

Sizes	A (mm)	740	890	940	1185	1430	1675	Measurements may be changed by the manufacturer without notice.
	B (mm)	300	300	420	420	420	435	
	C (mm)	200	200	300	300	300	340	
	D (mm)	250	300	345	460	585	700	
	E (mm)	500	650	700	900	1150	1400	
	Weight kg	8	10	21	27	35	46	

Packaging	G (mm)	1310	1310	1310	1555	1800	2050	The packaging may be changed by the manufacturer without notice.
	H (mm)	470	470	470	470	470	470	
	I (mm)	600	600	600	600	600	600	
	Weight (kg)	10	12	23	30	38	49	

Price € each	€ 2.354,00	€ 2.539,00	€ 4.226,00	€ 4.632,00	€ 5.309,00	€ 5.726,00	Duplex on request
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FILBLUE 1



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These filters satisfy all requirements of the European Directive for Pressure Equipment (P.E.D.) 97/23/EC, following module A (internal production control) as conformity assesment procedure.

Construction certificates: CE

MANUAL SELF CLEANING FILTERS WITH STRAINER

FUNDAMENTALS OF OPERATION

SERVICE

The water enters into the filter through (IN), passes through inlet cylinder (1) and then enters into the filter cylinder complete with a filter sleeve in polyester of the desired micron rating (2). The filtration is from inside to out. The filtered water passes to service through the exit (OUT).

Service	
Valve (3)	Closed

SELF CLEANING CYCLE

The deposition of suspended particles on the filter cylinder impedes water flow across it and hence causes a pressure differential (ΔP) across the filter cylinder. The cleaning cycle can be done when the pressure differential reaches a desired limit.

This is the procedure for the cleaning cycle:

- open the drain valve (3)

In some several cases this is cleaning cycle procedure:

- open the drain valve (3)

- stop the feed flow using the dedicate valve

- stop the filtered flow using the dedicate valve

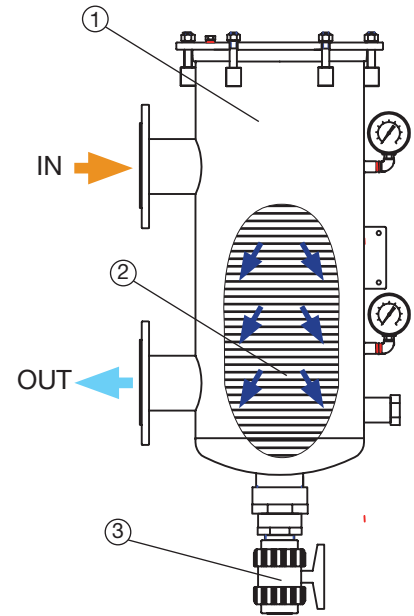
- open the filter

- take out the filter cylinder

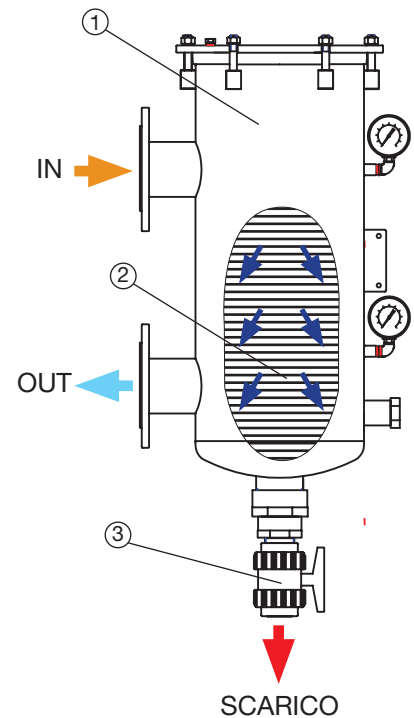
- clean manually the filter cylinder

After this cleaning procedure put the filter cylinder into the housing following the instructions indicated in the technical manual.

Cleaning	
Valve (3)	Open



FILBLUE 1



FILBLUE 1

MANUAL SELF CLEANING FILTERS WITH STRAINER

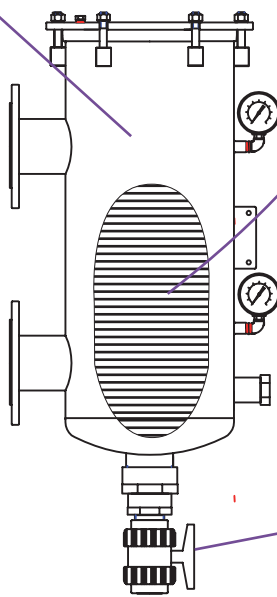
Prefilter cylinder



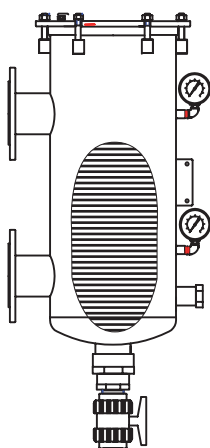
Filter cylinder



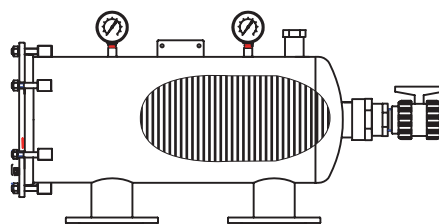
Pressure gauge



Drain valve



Vertical installation



Horizontal installation

MANUAL SELF CLEANING FILTERS WITH BRUSHES

FILBLUE 10

Introduction

The FILBLUE 10 manual selfcleaning filter is designed to remove all suspended solids from surface water (rivers, lakes and seawater), well water and waste water. Recommended applications include:

- Prefiltration for water treatment plants
- Process water
- Evaporative cooling towers
- Heat exchangers
- Irrigation
- Aquaculture
- Protection of spray nozzle



Materials

Component	Description
Corpo Body	AISI 316 with MIG weldings and acid dipped. On request Duplex (SAF2205)
End cap	AISI 316. On request Duplex (SAF2205)
Flange connections	AISI 316. PN10 UNI2277
Thread connections	GAS thread UNI338-66
Inlet cylinder	PVC
Sleeve internal support	PVC
Filtration sleeve	Polyester - filtration gradients available: 800, 500, 300, 200, 125, 80 micron
Brushes	PP
Brushes support	PVC
Brushes support pipe	PVC
Internal seals	NBR
Rotating handle	AISI 316 - PVC
Drain valve	PP with membrane - Flow rate regulation possible
Master valve	Cast iron butterfly valve with AISI 316 lens
Pressure gauges	INOX - Diameter 2"1/2 - 0-10 Bar
Accessories (Plugs and reducers)	PP - PVC

MANUAL SELF CLEANING FILTERS WITH BRUSHES

Model	FILBLUE 10 2-10	FILBLUE 10 3-15	FILBLUE 10 80-15	FILBLUE 10 100-30	FILBLUE 10 150-45	FILBLUE 10 200-60	
Code	F0010316002	F0010316003	F0010316080	F0010316100	F0010316150	F0010316200	
Surface area cm ²	1000	1500	1500	3000	4500	6000	
Connections IN/OUT	2"	3"	DN80	DN100	DN150	DN200	
Drain	1"1/2F	1"1/2F	2"F	2"F	2"F	2"F	
Pressure min-max Bar	1-10	1-10	1-10	1-10	1-10	1-10	On request
Temperature max - °C	60	60	60	60	60	60	
pH min-max	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	
Max diam. inlet particles cm	2	2	2	2	2	2	

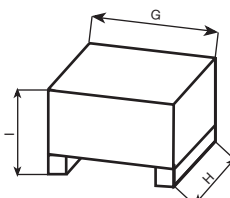
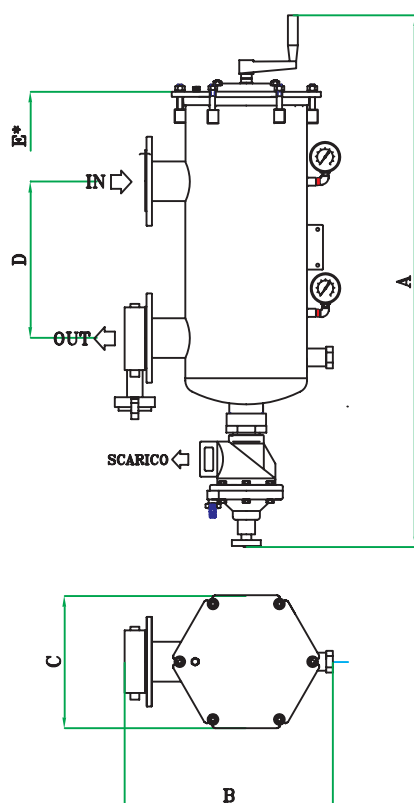
Flow rate	800 µm	80	80	80	130	200	300	Max clean water flow rate in m ³ /h at 20°C and differential pressure 0,15 bar.
	500 µm	80	80	80	130	200	300	
	300 µm	80	80	80	130	200	300	
	200 µm	80	80	80	130	200	300	
	125 µm (standard)	40	60	80	130	200	300	
	80 µm	36	54	72	117	180	270	

Sizes	A (mm)	980	1130	1185	1435	1685	1935	Measurements may be changed by the manufacturer without notice.
	B (mm)	345	350	475	480	485	500	
	C (mm)	200	200	300	300	300	340	
	D (mm)	250	300	345	460	585	700	
	E (mm)	500	650	700	900	1150	1400	
	Weight kg	9	11	23	29	37	48	

Packaging	G (mm)	1310	1310	1310	1555	1800	2050	The packaging may be changed by the manufacturer without notice.
	H (mm)	470	470	470	470	470	470	
	I (mm)	600	600	600	600	600	600	
	Weight (kg)	11	13	25	32	40	51	

Price € each	€ 2.953,00	€ 3.236,00	€ 5.908,00	€ 6.863,00	€ 7.739,00	€ 8.689,00	Duplex on request
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FILBLUE 10



European Community members only
 These filters satisfy all requirements of the European Directive for Pressure Equipment (P.E.D.) 97/23/EC, following module A (internal production control) as conformity assesment procedure.

Construction certificates: CE

MANUAL SELF CLEANING FILTERS WITH BRUSHES

FUNDAMENTALS OF OPERATION

SERVICE

The water enters the filter (IN), then crosses a prefiltration chamber (1) from out to in and then through the fine secondary filter (2), from in to out. The water is filtered to the required degree in the second stage before passing to service (OUT). Filtration in the second stage is effected by a polyester sleeve of the desired micron rating, fitted over an internal support mesh.

Service	
Valve (6)	Open
Valve (3)	Closed
Handle (5)	Stop

SELF CLEANING CYCLE

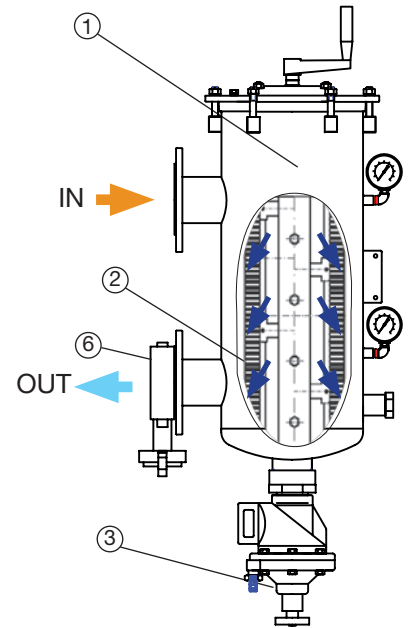
The deposition of suspended particles on the filter sleeve impedes water flow across it and hence causes a pressure differential (ΔP) across the filter sleeve. The cleaning cycle can be initiated when the pressure differential reaches a desired value.

Cleaning cycle:

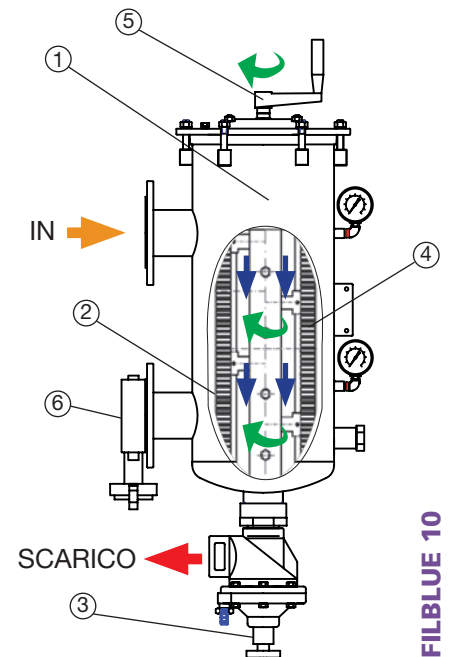
- closes the valve master (6) which equalises the (ΔP) and prevents the particles rigidly adhering to the inside of the sleeve
- opens the drain valve (3)
- starts the rotating handle (5) which rotates a set of brushes inside the sleeve.

The particles are removed through the drain valve (3).
The cleaning cycle lasts for approximately 20 seconds.

Cleaning	
Valve (6)	Closed
Valve (3)	Open
Handle (5)	Rotating



FILBLUE 10



FILBLUE 10



MANUAL SELF CLEANING FILTERS WITH BRUSHES

