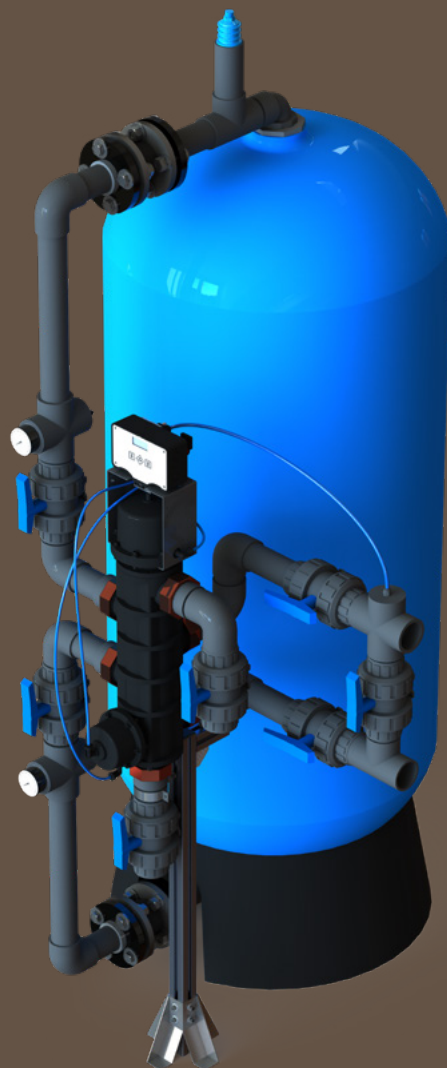




TECHNICAL GUIDE

PACKAGED PRODUCTS

V363 SFE FILTRATION KIT





KIT CHARACTERISTICS

- Type of valve: SIATA V363
- Controller type: SIATA SFE
- Voltage: 230 V 50/60Hz - transformer 12 VAC 50/60Hz
- Electrical power: 4 VA
- IP protection: 30
- Operating pressure: 1.5 - 6 bar
- Water temperature: 5 - 38°C
- Ambient temperature: 5 - 50°C
- **Premium version:** packaging dimensions: 120 x 80 x 50 cm/ weight without pallet: 74 kg
- **Budget version:** packaging dimensions: 100 x 39 x 24 cm/ weight without pallet: 20 kg
- Regeneration start mode:
 - *Timeclock*
 - *Pressure drop start*
 - *Volume regeneration possible adding a water meter*

PERFORMANCES

Vessel Ø in inches	21	24	30	36	42	48
Backwash with sand m ³ /h (@ 40 m/h)	9.1	11	17.6	26.5	35.8	No
Backwash with birm m ³ /h (@ 35 m/h)	8.0	9.6	15.4	23.2	31.3	No
Backwash with GAC m ³ /h (@ 25 m/h)	5.7	6.9	11	16.6	22.3	29.2
Backwash with multimedia m ³ /h (@ 35 m/h)	8.0	9.6	15.4	23.2	31.3	40.9
Filtration speed service 10 m/h	2.3	2.8	4.4	6.6	8.9	11.7
Filtration speed service 15 m/h	3.4	4.1	6.6	10	13.4	17.5
Filtration speed service 20 m/h	4.6	5.5	8.8	13.3	17.9	23.3

KIT VERSIONS

The V363 KITS are available in 1 budget version and 2 premium versions. Premium kits feature more accessories compared to budget, refer to the bill of material section to identify each kit's content.

PREMIUM VERSIONS

1. CI-F-363SFE-0011 > C&I Filtration kit Premium - SIATA V363 SFE

(NBP premium full)

2. CI-F-363SFE-0010 > C&I Filtration kit Premium - SIATA V363 SFE

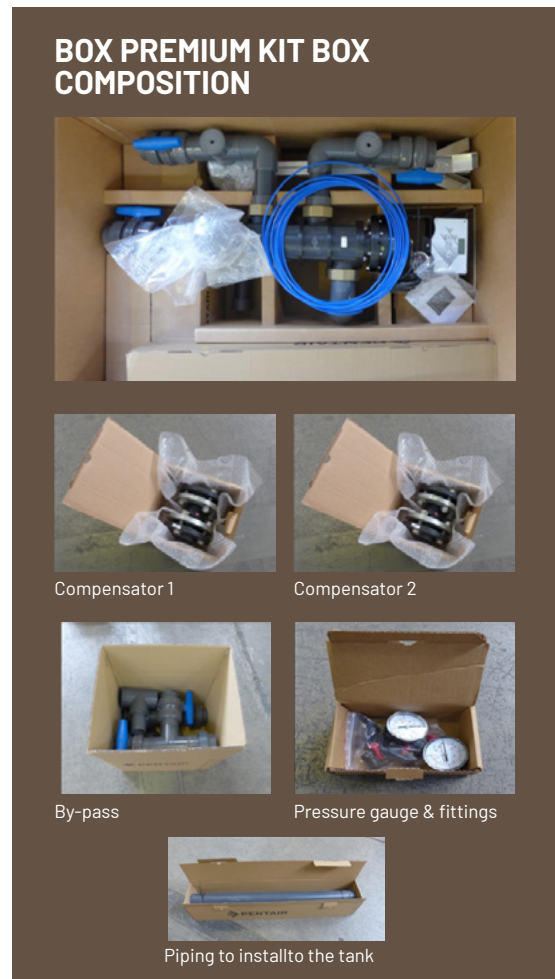
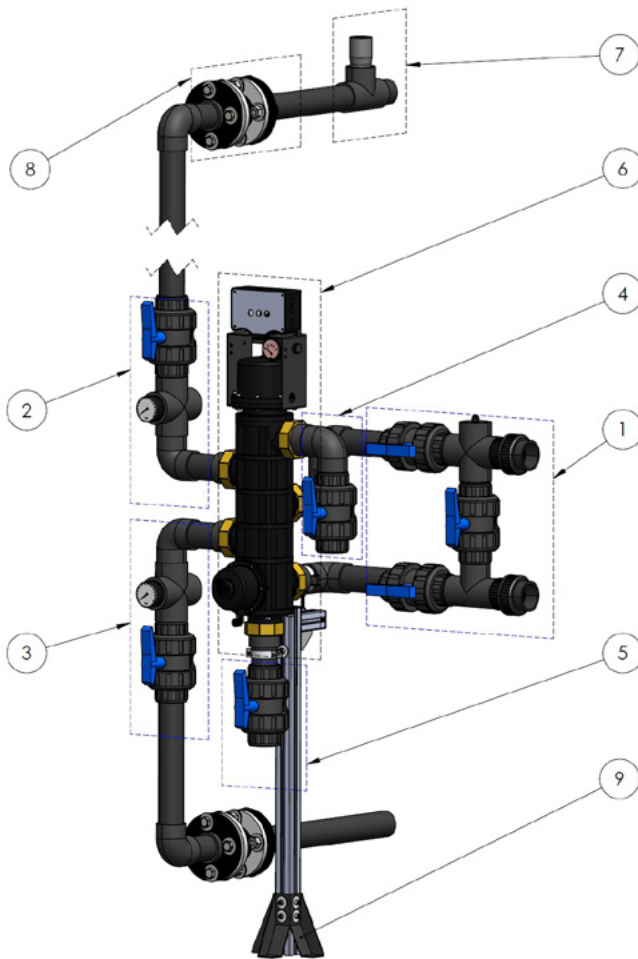
(NBP premium without differential pressure switch)

BUDGET VERSION

1. CI-F-363SFE-0000 > C&I Filtration kit Premium - SIATA V363 SFE

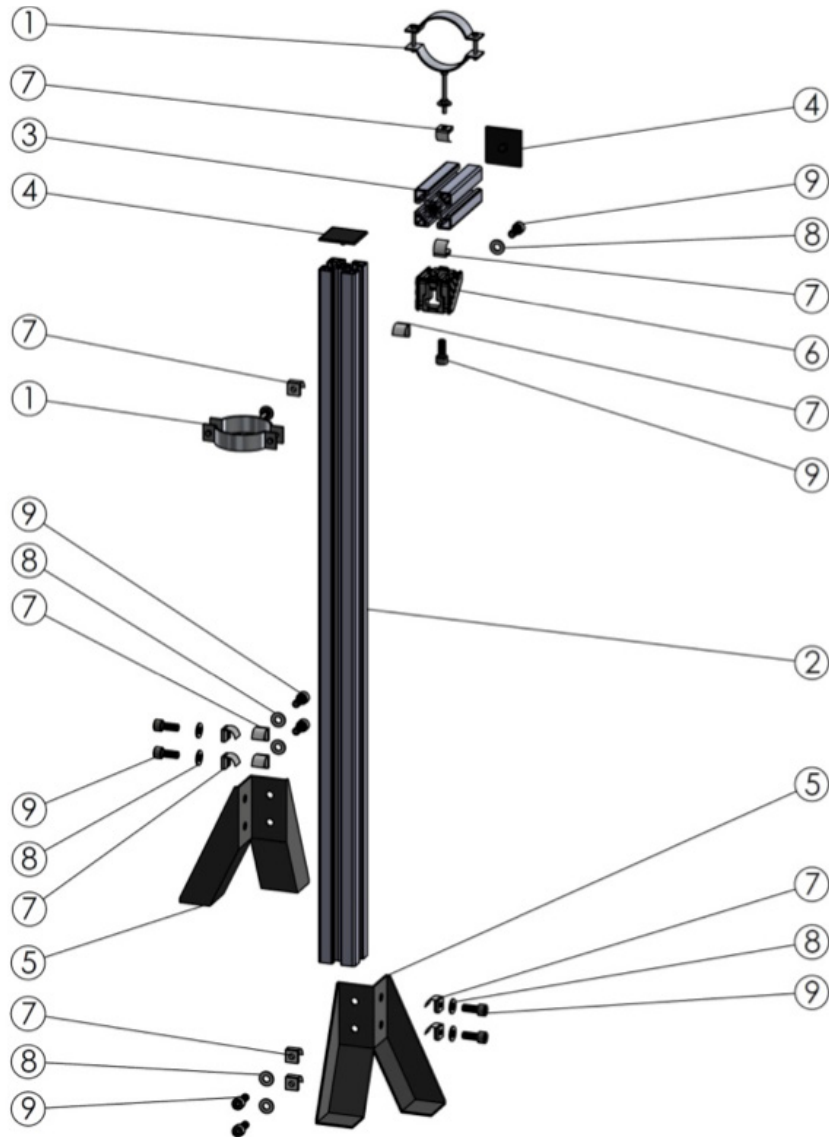
(NBP budget)

BILL OF MATERIAL OF THE PREMIUM KITS



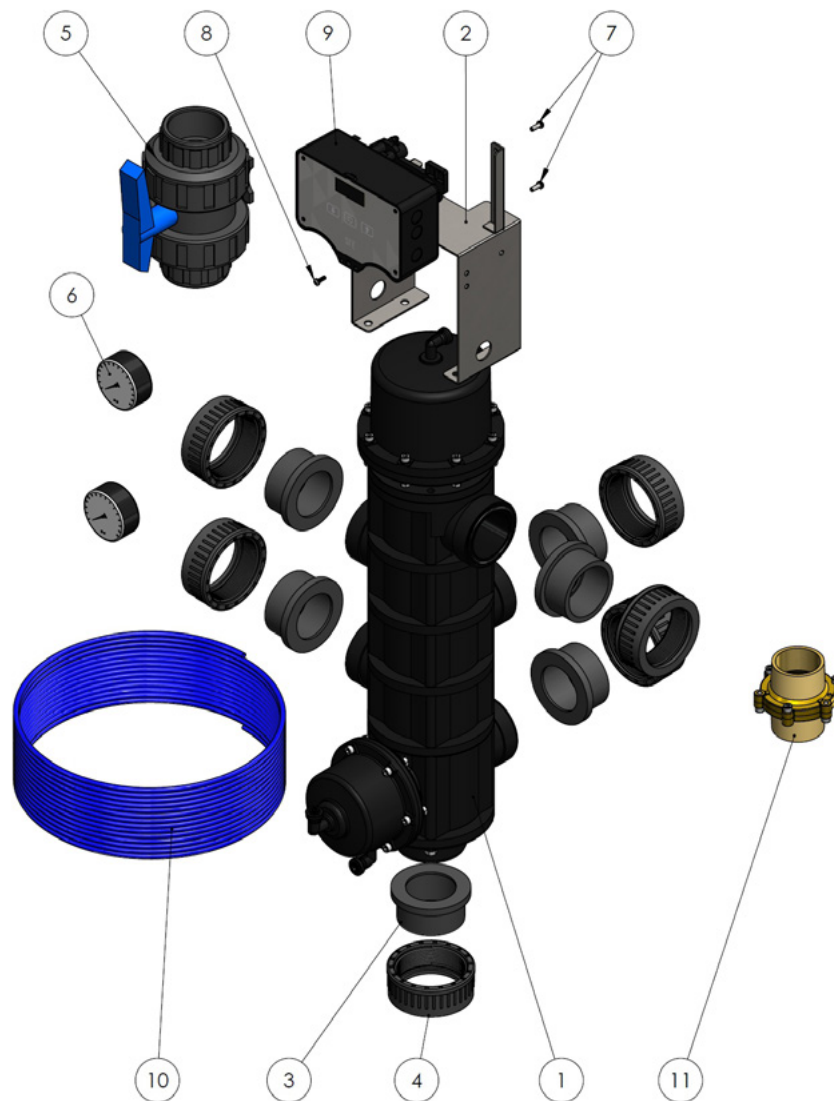
ITEM N°	DESCRIPTION	QTY
1	Inlet outlet & bypass assy	1
2	Top of the tank piping	1
3	Bottom of the piping	1
4	Backwash drain	1
5	Rinse drain	1
6	Valve & controller assy	1
7	Vacuum breaker connection kit (NB to be used with structural VB)	1
8	Vibration compensator flanged joint	2
9	Support frame	2
OTHERS NOT SHOWN		
	DN 50 pipe	3 m
	Differential pressure switch	1
	Ø 6 mm pneumatic tube	10 m
	Pneumatic fitting bag	1
	Manometer 0 - 6 bar	2

BILL OF MATERIAL OF PREMIUM KITS SUPPORT FRAME



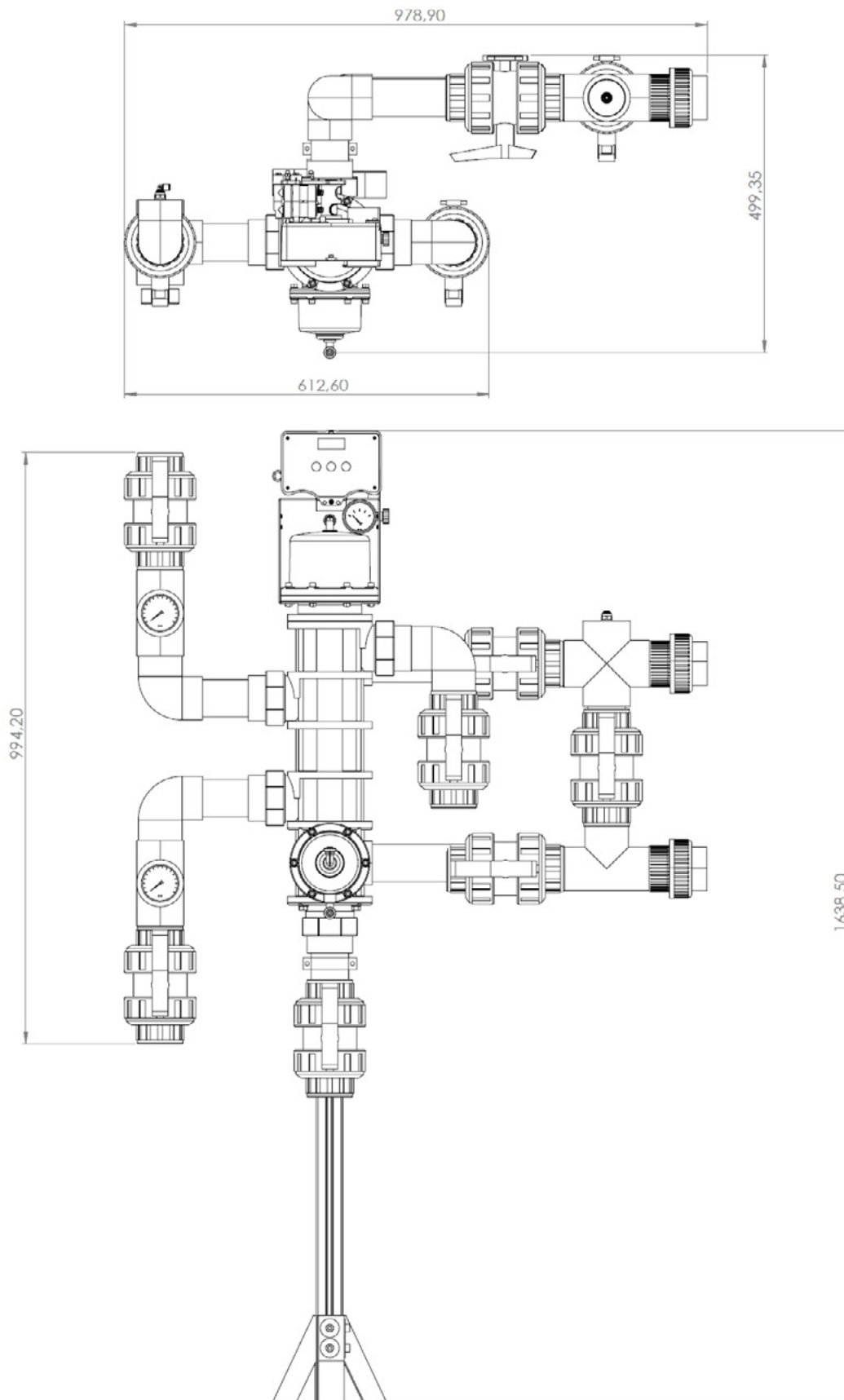
ITEM N°	DESCRIPTION	QTY
1	DN 50 pipe collar kit	2
2	Vertical frame profile	1
3	Horizontal frame profile	1
4	Plug	2
5	Floor support	2
6	L plate	1
7	Spring nut	12
8	Washer	12
9	Screw	10

BILL OF MATERIAL OF THE BUDGET KITS

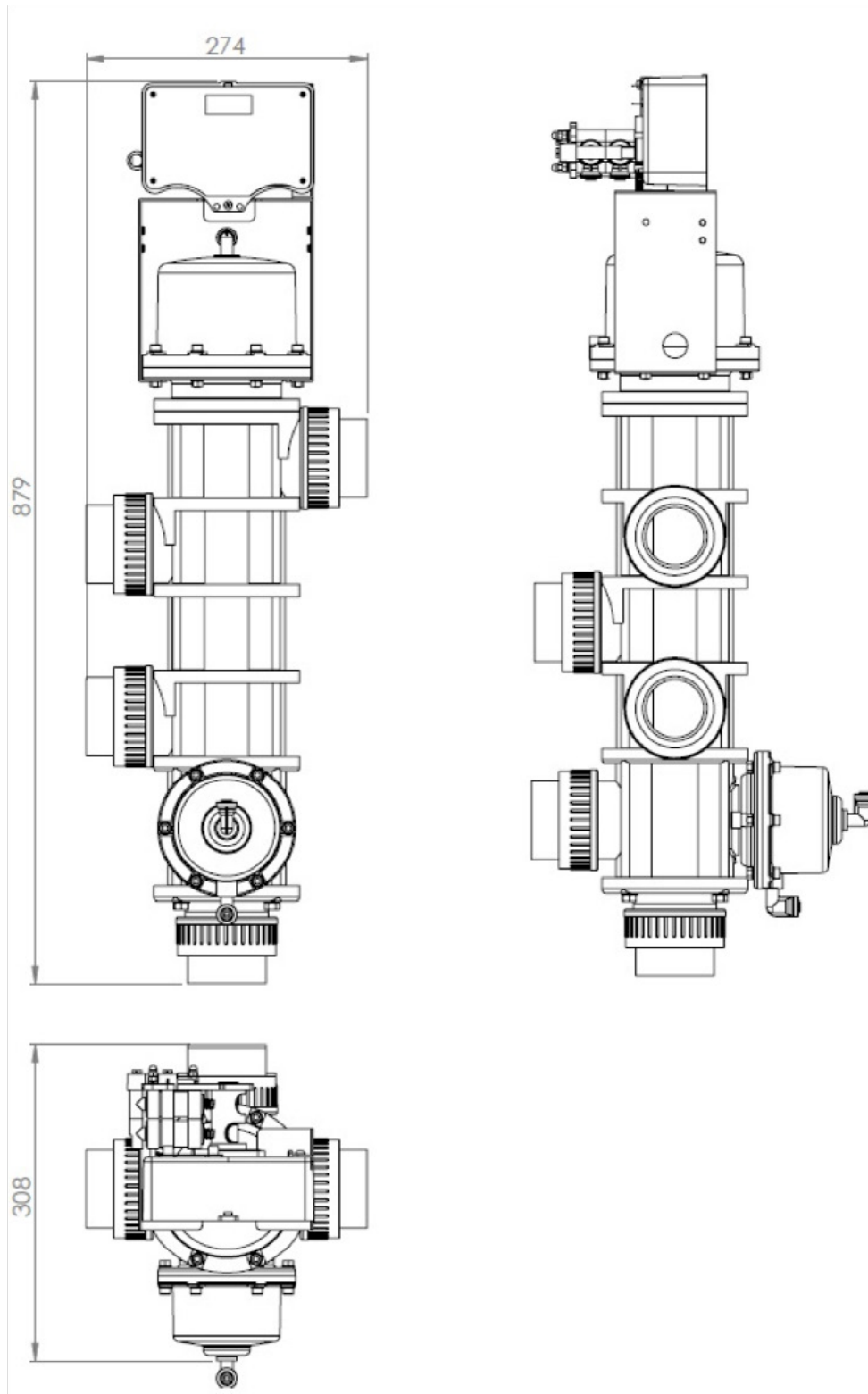


ITEM N°	DESCRIPTION	QTY
1	Valve V363 Sea water	1
2	Controller Bracket	1
3	Fitting DN 50 PVC to glue	6
4	Fitting nut	6
5	Manual valve DN 50	1
6	Pressure gauge front mount 6 - 0 bar	2
7	Screw to fix the timer	2
8	M4 Screw to fix lower part of the timer to the bracket	1
9	SFE timer model SFE-BK210/05	1
10	Ø 6 mm pneumatic tube	10 m
11	DLFC 25 - 100 gpm	1

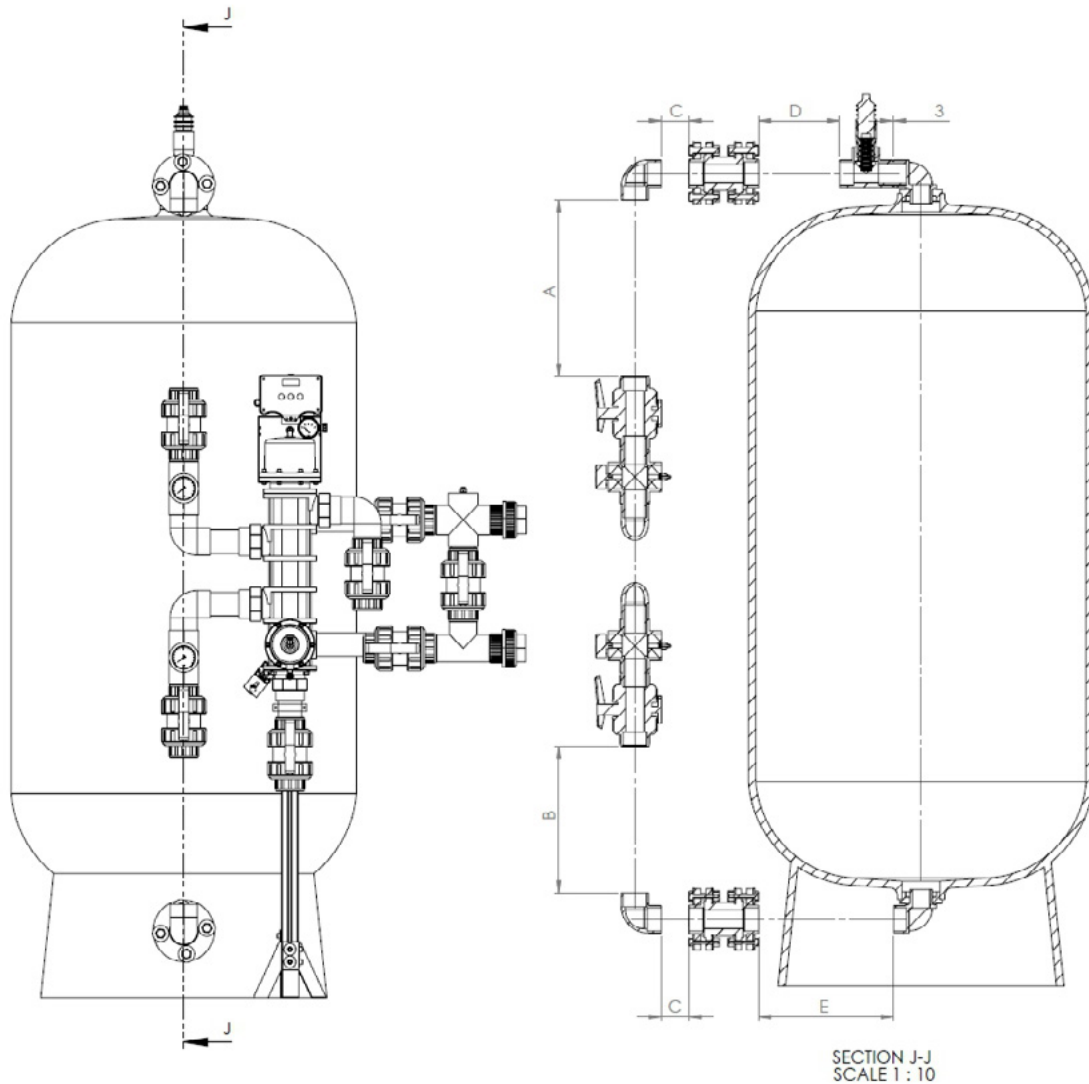
DIMENSIONS OF THE PREMIUM KITS PREASSEMBLED PARTS



DIMENSIONS OF THE BUDGET KITS PREASSEMBLED PARTS



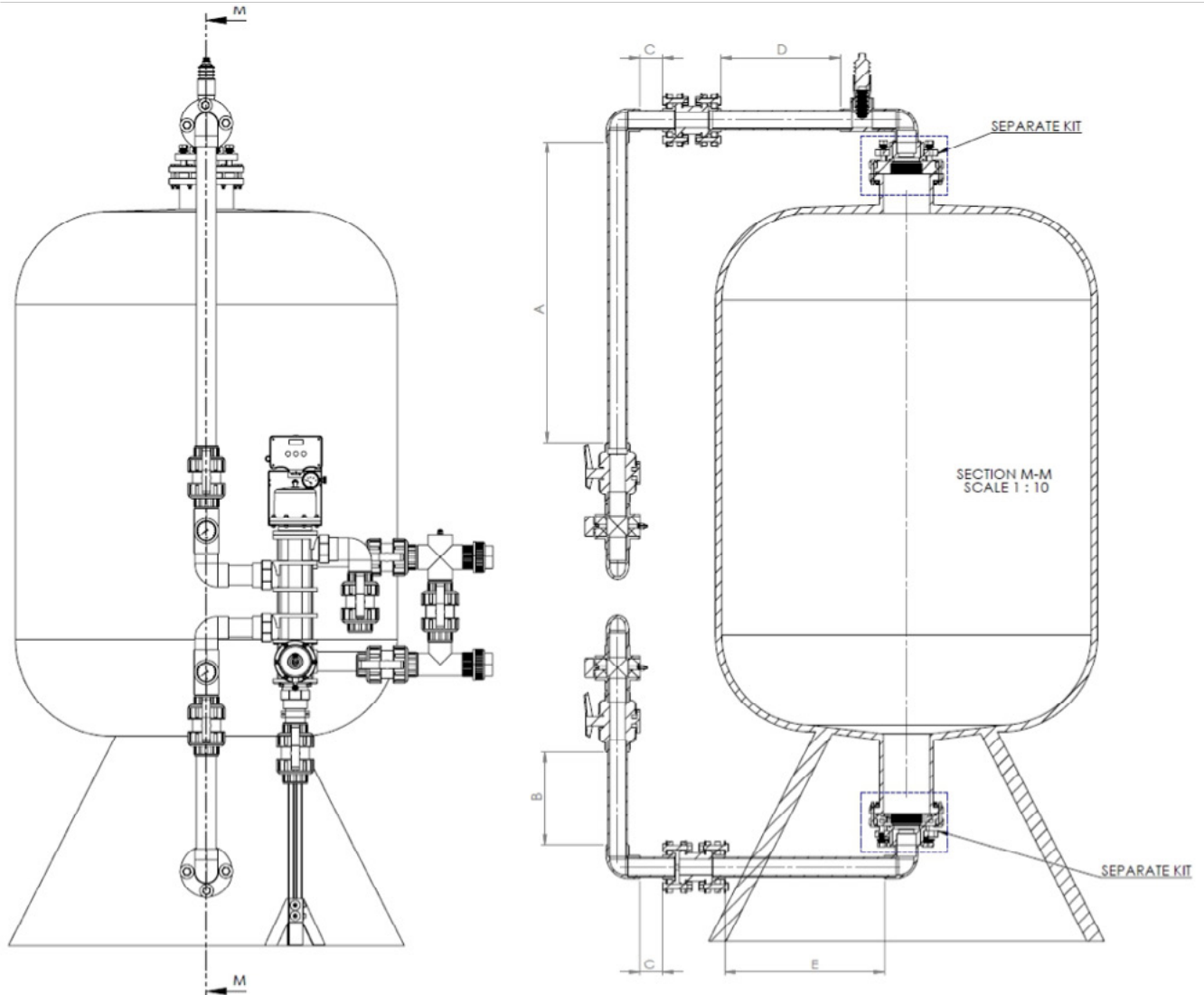
ASSEMBLY ON THREADED STRUCTURAL TANKS



DIMENSIONS	A* mm	B mm	C mm	D mm	E mm
Structural tank 21x60	151	365	74	56	201
Structural tank 24x69	393	360	74	56	201
Structural tank 30x72	411	395	74	136	281
Structural tank 36x72	513	357	74	214	359

*"A" quotes will vary depending on tank tolerances on height, we advise to measure this distance directly on site and glue this pipe as last one.

ASSEMBLY ON FLANGED TANKS



DIMENSIONS	A* mm	B mm	C mm	D mm	E mm
Structural tank 42x78	929	292	74	293	435
Structural tank 48x82	963	299	74	370	512

*"A" quotes will vary depending on tank tolerances on height, we advise to measure this distance directly on site and glue this pipe as last one.

The kit piping is DN 50. The DN 80 flange and the reduction 80 to 50 are not included in this kit.

HYDRAULIC CONNECTIONS OF THE CONTROLLER

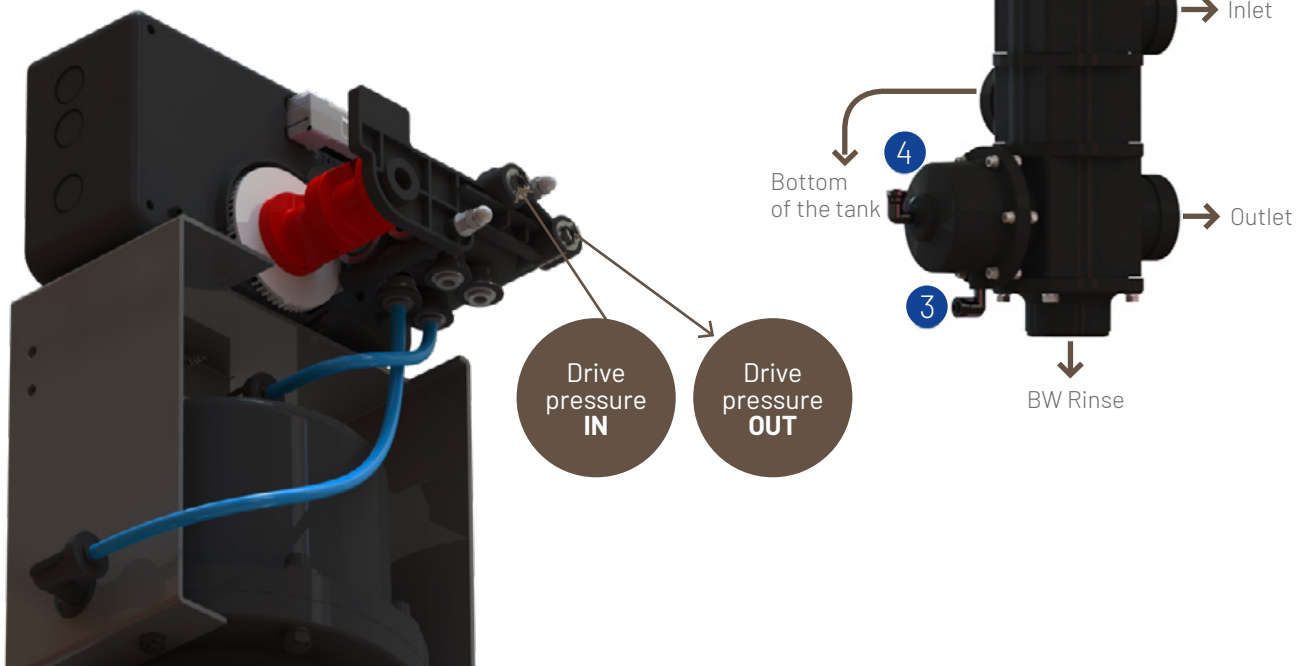
WATER OR COMPRESSED AIR CAN BE USED TO PRESSURIZE THE VALVE



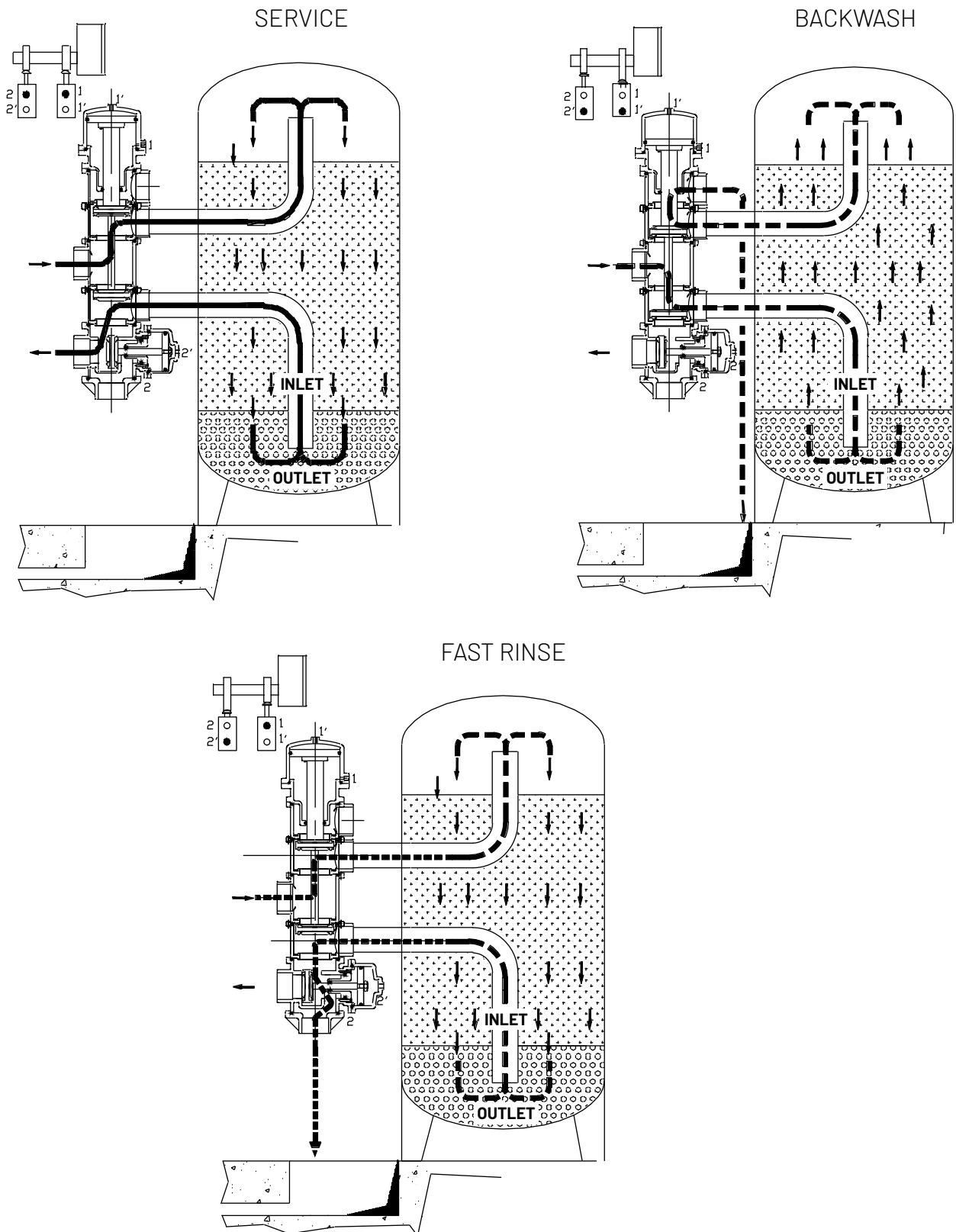
Warning!

Pressurizing fluids to control the valve must comply with the following specifications:

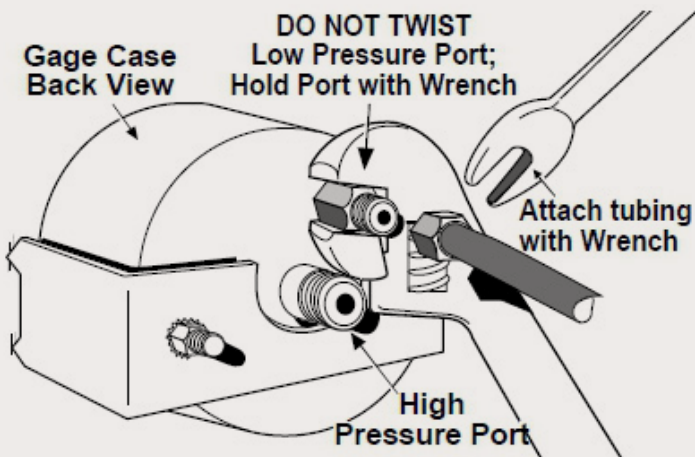
- Compressed air: must be filtered from oils and impurity, whilst being at ambient humidity otherwise seals of the distributor system can be damaged; the recommended feed pressure must always be between 2 bar and 3.5 bar.
- Water from external source: water must be filtered from impurities; recommended feed pressure must always be between 2 bar and 6 bar and not lower than the system's inlet water pressure
- Water from inlet feed pressure quick connection: water must be filtered from impurities; a filter must be added to protect the pilot circuit. The inlet pressure in the system must remain above 2.5 bar also in dynamic conditions in all cycles. If dynamic pressure drops below 2.5 bar consider to operate with external pressure source.



FLOW DIAGRAMS OF THE VALVE



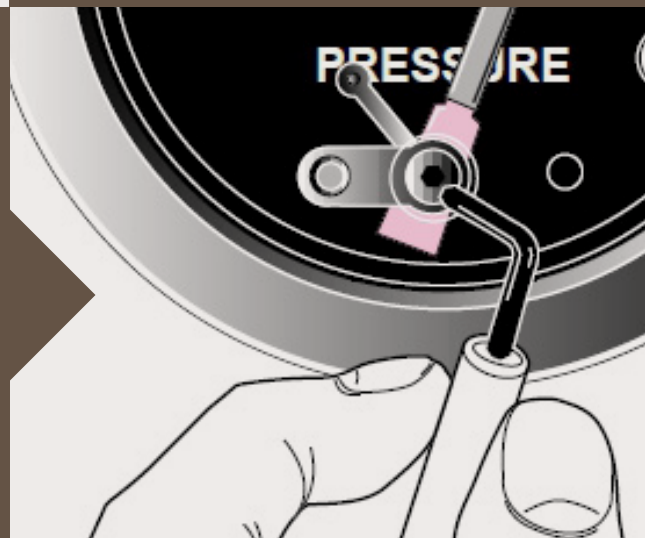
DIFFERENTIAL PRESSURE SWITCH'S HYDRAULIC CONNECTIONS



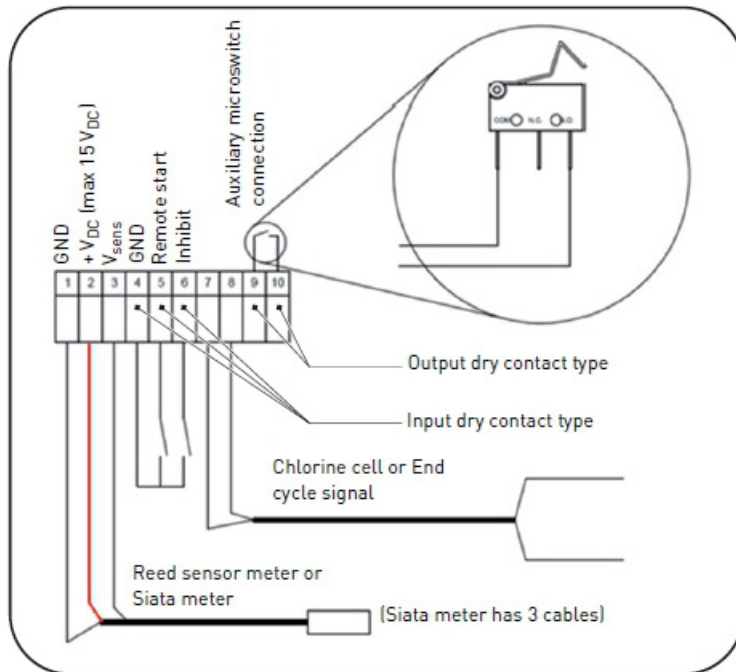
The "High" pressure port (center mounted) is piped to the inlet side of the filter. The "Low" pressure port (top center mounted) is piped to the outlet side of the filter.

You **MUST** use a second wrench on the Low Pressure port when tightening tube fittings. See Figure above. Notice that a wrench is used for holding the low pressure port while a second wrench will tighten the pressure tubing/hose fitting onto the port.

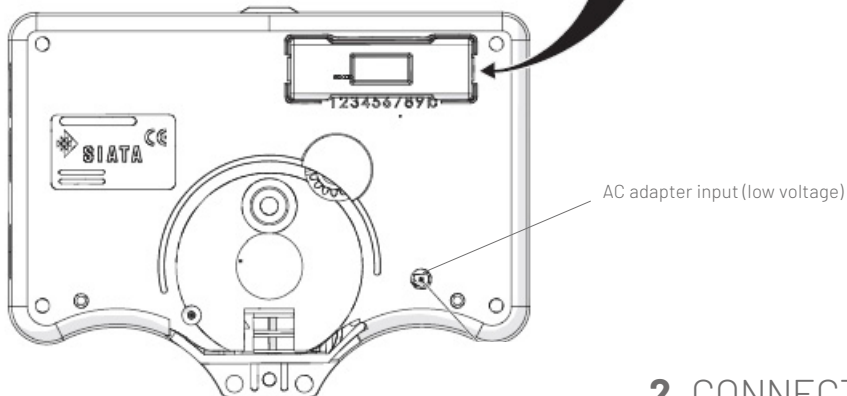
All contacts are set using a $\frac{1}{16}$ in. hex wrench. Rotate the contact until the required setting is reached. Set the contact slightly below the desired maximum differential pressure. Default setting is 2 bar.



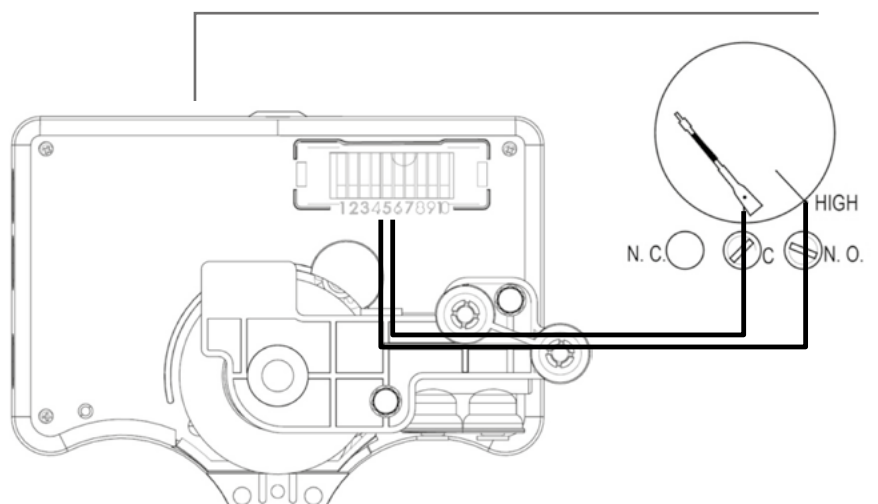
ELECTRICAL CONNECTIONS



1. SFE WIRING DIAGRAM



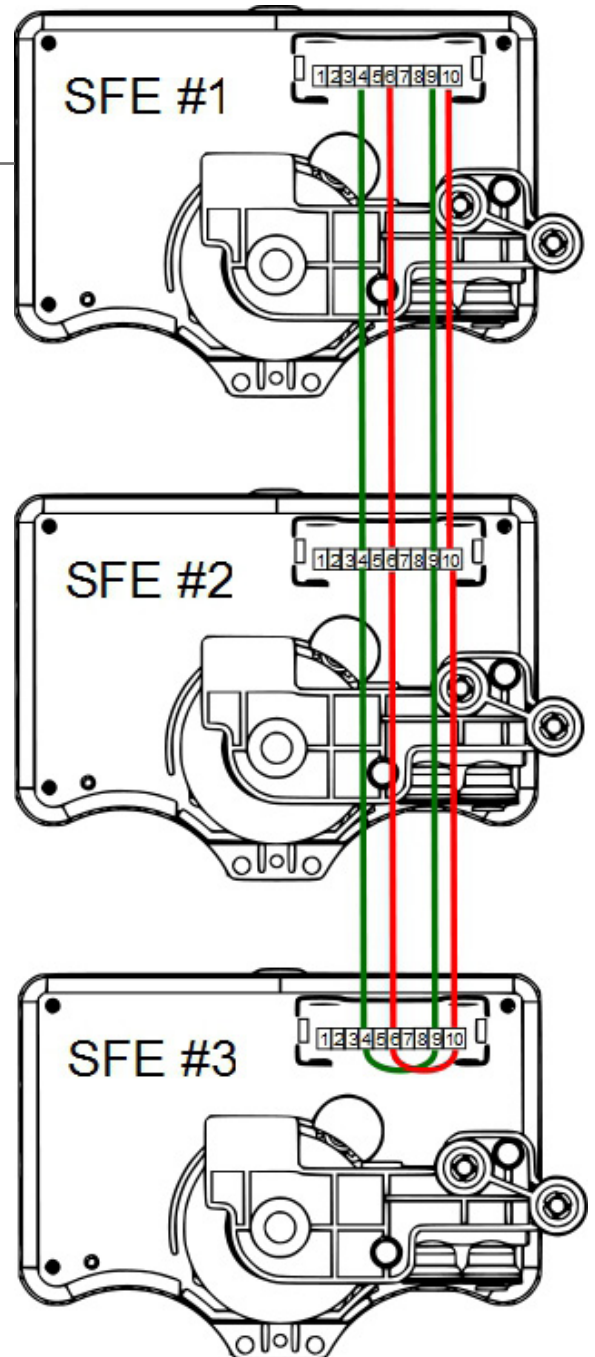
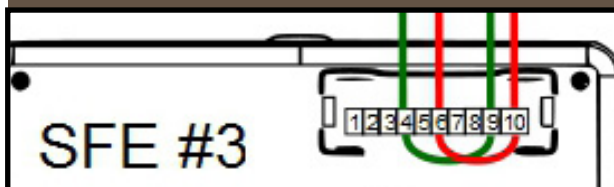
2. CONNECTION OF THE DIFFERENTIAL PRESSURE SWITCH



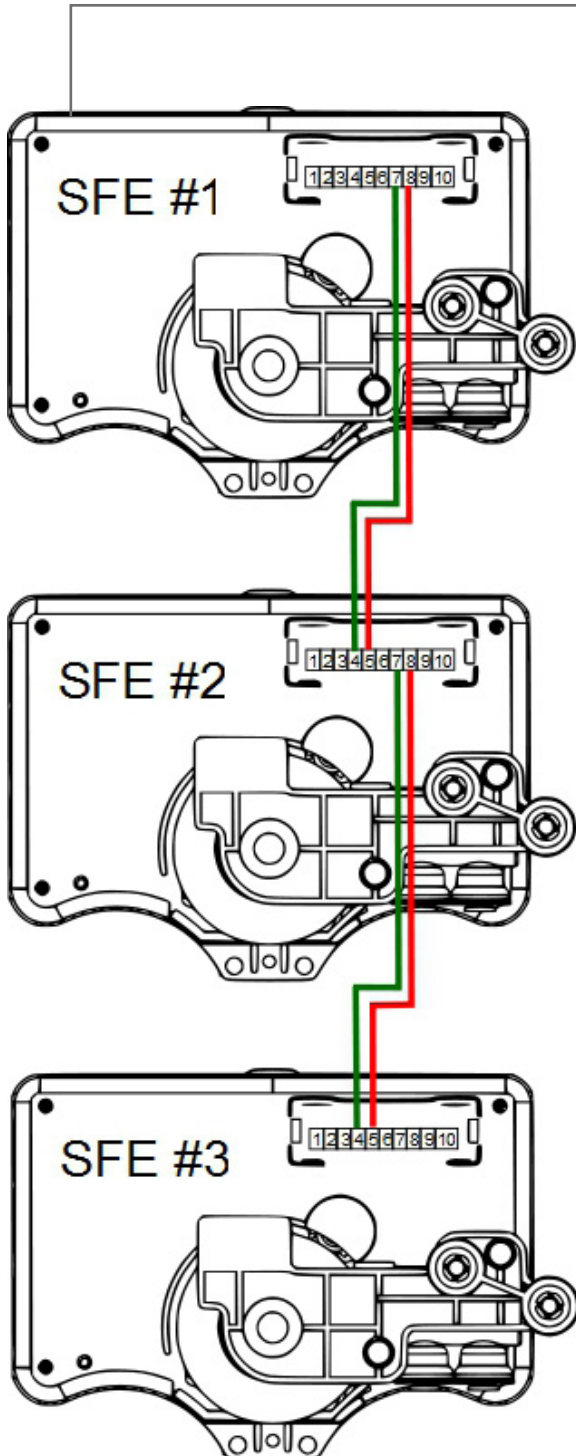
3. INTERLOCK CONNECTION OF 2 OR MORE SFE

The regeneration signal can be used as inhibit input for others SFE to connect more units in parallel. This will prevent to have more than one SFE in regeneration/backwash at the same time.

To interlock more SFE controllers, connect terminal strip positions #10, #9, #6, #4 of the 1st SFE to the equivalent position on the 2nd SFE (#10 with #10, #9 with #9 etc). Repeat the procedure from the 2nd to the 3rd SFE, and then till the last SFE. On the last SFE bridge #10 with #6 and #9 with #4 like shown in the drawing below.



4. CASCADE REGENERATION OF PARALLEL UNITS USING END CYCLE SIGNAL AND REMOTE START INPUT



On filters, it is useful to cascade backwashes from the 1st to the last filter. In order to make it work, connect the SFE as shown in the drawing on the left and as summarized in the below table.

SFE #1	SFE #2	SFE #3	LAST SFE
4	4	4	4
5	5	5	5
7	7	7	7
8	8	8	8

Warning!

Program day override, volume capacity or day of the week regeneration (d1 to d7) only on SFE #1 - Program the three parameters previously mentioned to off on SFE #2,#3,#4. See programming.

If you operate with a differential pressure switch, connect it to SFE #1 on input 4-5 of the terminal strip.




PROGRAMMING

The following is a quick programming guide for time clock filters with backwash on programmed day interval. For other type of programming refer to the SFE controller manual which can be downloaded at:

https://www.pentairaquaeurope.com/sites/default/files/collaterals/manual_sfecontroller_multilingual.pdf

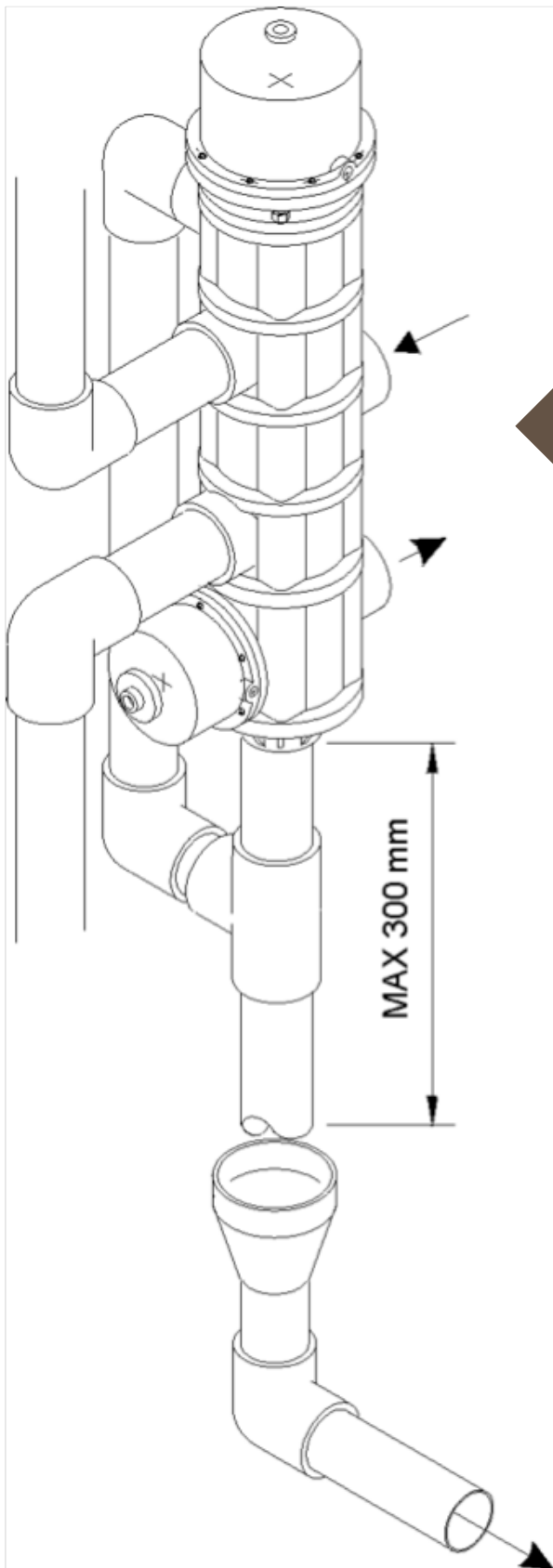
1. PROGRAMMING LEVEL 1

PARAMETER NAME / DESCRIPTION	DISPLAY PARAMETER TO SET	VALUE RANGE / COMMENT
Press  button to enter in programming menu		
Clock visualization mode	24 H	Set the clock visualization mode with \updownarrow arrows and confirm with 
Time of day	15 : 46	Set the time of day with \updownarrow arrows and confirm with 
Day of the week	MO 15 : 46	Set the day of the week with \updownarrow arrows and confirm with 
Disable/enable the day of the week backwash	MO TU WE TH FR SA SU d 1 0	Set the day of the week backwash off on Monday with \updownarrow arrows and confirm with 
Disable/enable the day of the week backwash	MO TU WE TH FR SA SU d 2 0	Set the day of the week backwash off on Tuesday with \updownarrow arrows and confirm with 
Disable/enable the day of the week backwash	MO TU WE TH FR SA SU d 3 0	Set the day of the week backwash off on Wednesday with \updownarrow arrows confirm with 
Disable/enable the day of the week backwash	MO TU WE TH FR SA SU d 4 0	Set the day of the week backwash off on Thursday with \updownarrow arrows confirm with 
Disable/enable the day of the week backwash	MO TU WE TH FR SA SU d 5 0	Set the day of the week backwash off on Friday with \updownarrow arrows confirm with 
Disable/enable the day of the week backwash	MO TU WE TH FR SA SU d 6 0	Set the day of the week backwash off on Saturday with \updownarrow arrows confirm with 
Disable/enable the day of the week backwash	MO TU WE TH FR SA SU d 7 0	Set the day of the week backwash off on Sunday with \updownarrow arrows confirm with 
Backwash time	2 : 00	Set the backwash start time with \updownarrow arrows confirm with 
END		

2. PROGRAMMING LEVEL 2

PARAMETER NAME / DESCRIPTION	DISPLAY PARAMETER TO SET	VALUE RANGE / COMMENT
Press \updownarrow for 5 seconds to enter master programming		
Set Backwash start mode	S H 0	Set the start time clock or remote signal with \updownarrow arrows and confirm with \square
Backwash duration	1 C 1 5	Set backwash time with \updownarrow arrows and confirm with \square
Brine draw duration	2 o F F	Set cycle to off for filter mode with \updownarrow arrows and confirm with \square
Slow rinse duration	3 o F F	Set cycle to off for filter mode with \updownarrow arrows and confirm with \square
Fast rinse duration	4 C 1 0	Fast rinse time with \updownarrow arrows and confirm with \square
Salt allarm countdown	S A o F	Confirm with \square
Day override	A 4	Set day interval between backwash of the filter \updownarrow arrows confirm with \square
Frequency	F r 5 0	Set the power source frequency with \updownarrow arrows confirm with \square
Service start signal	F C 0 1	Set the back to service signal to 1 minute \updownarrow arrows confirm with \square
END		

TIPS AND SUGGESTIONS



To avoid valve vibration during the operation, interrupt the conduction drain as shown in the pictures.

For an optimum valve operation, the drain flow needs to be regulated by using the manual valves installed in the drain, according to the flow rate and the inlet pressure.



www.pentairaquaeurope.com