

Technical Information Bulletin

Date: 13.11.2017

Concerning: Modifications ProFlow range

Dear Customer,

In our continuous efforts to further improve the quality of our products, we are implementing the following modifications on our commercial/industrial systems of the ProFlow range:

1. Electronic controller:

We have developed a brand new PCB platform that combines state-of-the-art design and components (like ARM processors). The new PCB platform offers us a lot of possibilities for future upgrades with regards to hardware (different displays, addition of WiFi, larger memory, more outputs, etc), as well as software. This changes has already been implemented for our residential products with a diaphragm control valve.

With the implementation of this upgraded PCB on the ProFlow range, we have added the following features to the electronic controller:

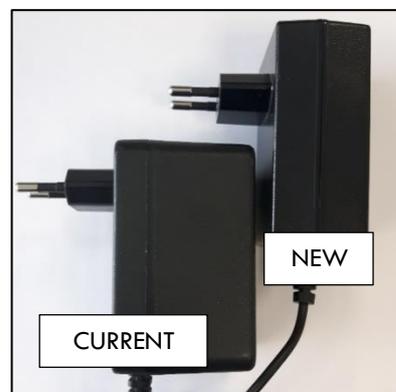
1. **Buzzer:** the new PCB has an integrated buzzer, that is used as:
 - an audible alarm for the salt level reminder and maintenance reminder functions;
 - a sound-signal whenever a button is pressed.The buzzer function can be enabled or disabled by the end-user in the Basic Settings programming mode.
2. **2nd line on display:** on the 2nd line of the display, the total volume of water used since start-up is displayed.
3. **SuperCap for power backup:** the larger SuperCap keeps the clock running in the background for 15-20 hours in case of a power failure.
4. **2nd auxiliary relay/contact;** as for the 1st auxiliary relay, the function can be programmed; the output voltage is
 - for 1" control valves (Rotary): 24 **VDC**, max. 500mA
 - for 1,5" control valves (EV1,5): 24 **VAC**, max. 500mA

Transformer for 1" control valves (Rotary) only:

Because of pending Energy Efficiency regulations we are switching from the current AC/AC transformer to a new AC/DC transformer. Advantages are:

- higher efficiency / lower energy loss (< 0.5 watt)
- light weight;
- more compact.

Note: The connection plug on the outlet cord of the new AC/DC transformer is **SMALLER** than on the current AC/AC transformer, although it is similar model. This is done intentionally to avoid use of an incorrect transformer.



Printed Circuit Board for 1" control valves(Rotary) only:

The PCB is modified to operate on DC current.

Note: This also implicates that the auxiliary contacts now output 24V DC instead of 24V AC; please keep this in mind when connecting any external devices to the auxiliary contact(s).

Note: The PCB will not get damaged when an incorrect transformer (AC instead of DC, and vice versa) is connected; it will simply not function.

Important remarks:

1. for 1" control valves (Rotary): the new PCB (24 VDC) is **NOT** interchangeable with the current PCB (24 VAC); therefore new Part Number have been created...
2. for 1,5" control valves (EV1,5): the new PCB is interchangeable with the current PCB; therefore the Part Number does not change.
3. the user interface of the software itself doesn't change at all.

Below you can find an overview of the new 24 VDC PCB's for the 1" control valves (Rotary):

System configuration:	Part Number PCB	
	24 VAC (current version)	24 VDC (new version)
Softener Simplex (PF-SOF-SIM)	74106	74354
Softener Duplex Parallel (PF-SOF-PRL)		
Softener Duplex Alternating (PF-SOF-ALT)	74167	74357
Filters (PF-AF, PF-GAC)	72703	74356
Oxydizer	74282	74358

2. 1" ProFlow systems only: drain connection

- **Control valve (1" Rotary)**

The current 13 mm drain elbow connection will be replaced by a larger 19 mm drain elbow connection; this allows the use of a larger 19 mm drain hose; the result of these changes is a significant increase in backwash flow rate (+15% at same pressure drop). Especially for large filter systems that may occasionally run at lower inlet pressure (a typical problem on private wells with booster pumps) this will provide an improvement of the backwash.

- **Drain hose**

The current 13 mm drain hose will be replaced by a larger 19 mm drain hose.

- **Air Gap**

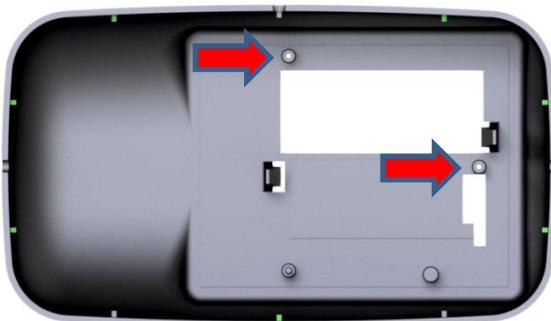
The air gap that is currently supplied with all 1" ProFlow systems features 13 mm hose barbs for the connection of the 13 mm drain hose; unfortunately it is not compatible with the larger 19 mm drain hose. Also, feedback from our customers over the last years learns us that for commercial applications this air gap is rarely used. Therefore the air gap will be taken out, so all 1" ProFlow systems will no longer be supplied with an air gap.

3. Brine tank assembly

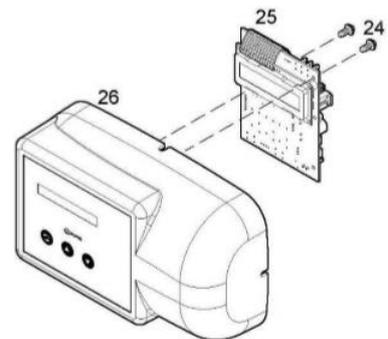
Currently all ProFlow brine tank assemblies are supplied with a 13 mm overflow elbow and the same air gap and 13 mm drain hose, as used for the 1" systems. To keep things consistent between the control valve and the brine tank, this overflow elbow and drain hose will be replaced by a larger 19 mm version, while the air gap is taken out.

4. 1" ProFlow systems only: timer cover:

The timer cover has been modified by adding 2 extra alignment pins for the PCB; as a consequence, the PCB can now simply be 'snap-fitted' in place, without the need of any fixation screws:



New version with 'snap fit' fixation



Current version with fixation screws

5. Expansion of ProFlow product range:

The Multimix and the pHneutralizer systems will be incorporated into the ProFlow product range; all of the above mentioned modifications are also implemented on these products.

For Multimix, this also means that the brine tank assembly is no longer included in the Multimix system itself; as with our ProFlow softener systems, the brine tank can (and needs to) be ordered separately. The ProFlow brine tank assemblies for softeners and multimix are identical, so they can be used for both applications! This should further simplify the inventory management for our customers!

This upgrade is introduced in our production as of 15 November 2017. So all ProFlow systems with a production date as of 15/11/2017 are equipped with the new electronic controller and all above mentioned modifications.

Please do not hesitate to contact us if you need any additional information on this topic.



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