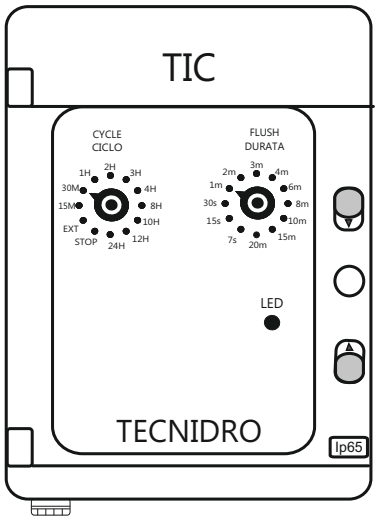
Backwash controller

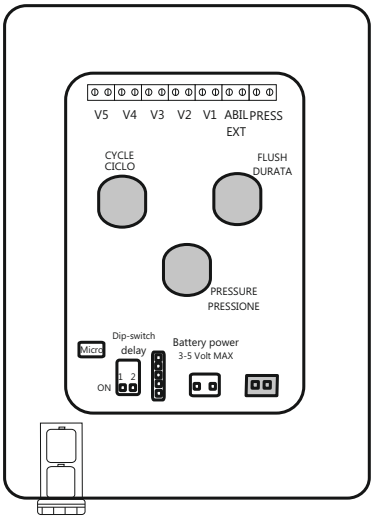
TECNIDRO

Controller -TIC

Backwash Controller TIC

TIC Controller is a backwash system for filters from 2 up to 4 s tations, powered by two half torch alkaline batteries 1,5 volts (model C) or on request it can be 220 Volts AC with external power.
The two 1,5 Volts batteries will manage the contrller for about 4000 backwashing operations, but it is recommended to replace them annually.
The controller operates by latching solenoid 9/12 V DC.
The controller is regulated by two commutators, CYCLE and FLUSH.





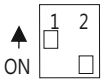
Test of start controller

TIC Controller allows to develop all the functions using only two commutators (CYCLE and FLUSH).
The commutator CYCLE defines the interval between a washing and the next.
The commutator FLUSH defines the flushing time.

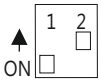
Connect the electric solenoids wires into the special connectors V1, V2, V3, V4, V5 MASTER (if needed) in the master card inside the controller, respecting the polarity (black / color).
Insert the batteries, if required in the special holder respecting the polarities.
The red led flashes 4 times.
After few seconds the controller will start an opening and closing test of all the solenoids in order to position them in the closing position.
The delay between the valves openings and closings is setted by means dip-switches located on the master card inside the controller.

Setting flushing delays

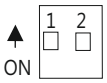
Delay 0 sec.



Delay 15 sec.



Delay 30 sec.



Delay 45 sec.

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Test with Cycle and Flush

Position the CYCLE commutator on Stop position.

1) Holding the CYCLE commutator on Stop position, program the FLUSH setting the washing time from 7 seconds up to 20 minutes.
2) Program the CYCLE, available in time intervals from 15 minutes to 24 hours.

After having also selected the CYCLE the controller will start with the first backwash.
Once fixed the FLUSH and the CYCLE, to change the settings just move the commutators in the timing.
Each time you change the setting, the controller will start immediately a new flushing following the new CYCLE and FLUSH settings.
The delay between the valve opening and closing as already mentioned previously it is setted by a dip switch inside the master card.

Flashing led informations

During the waiting between filter washing there is a flash every 4 seconds.
During the washing caused by a temporal expiration there is a fast flash every second.

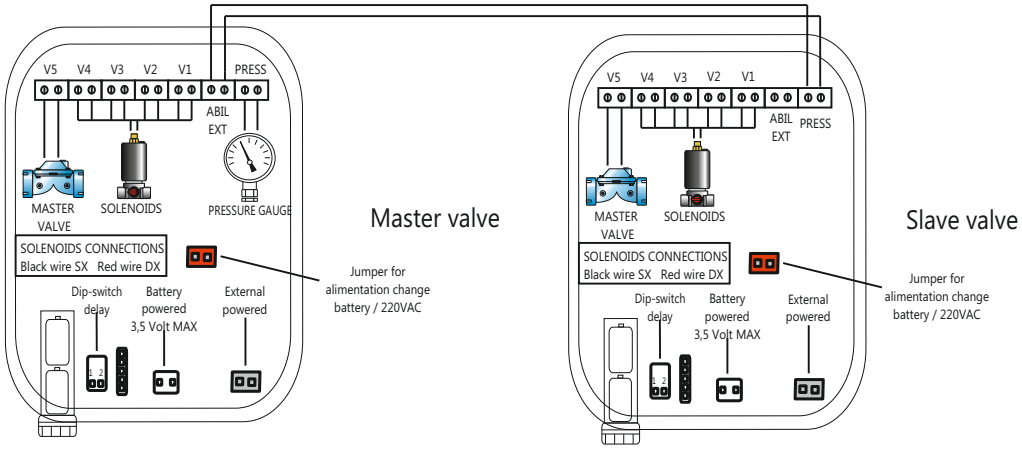
The system can be used with external differential pressure switch.

After setting back the pressure on te external pressure switch to the desired value, reset the normal flushing condition by fixing CYCLE and FLUSH commutators following the previous instructions.

Controller in sequence

If you want more Backwash Controllers in sequence, you can connect the first unit (MASTER) to a second unit (SLAVE) through two electric wires.
Connect the wires into the connector ABIL. EXT for the first controller and in connector PRESS. for the second controller as showed in the picture in the next page (Is mandatory that the polarity is mantained).
In this way is possible to connect as many SLAVE controllers as you need.
The washing will be managed by the first controller (MASTER).
Once the washing of the first unit (MASTER) is finished it will send a signal to the second unit (SLAVE) through the electrical connection (polarity must be observed).
After few seconds, the second unit will make its own backwash.
The CYCLE is setted by the first unit (MASTER), while the time FLUSH is setted each unit individually (SLAVE).

Controller in sequence connection:



General Features

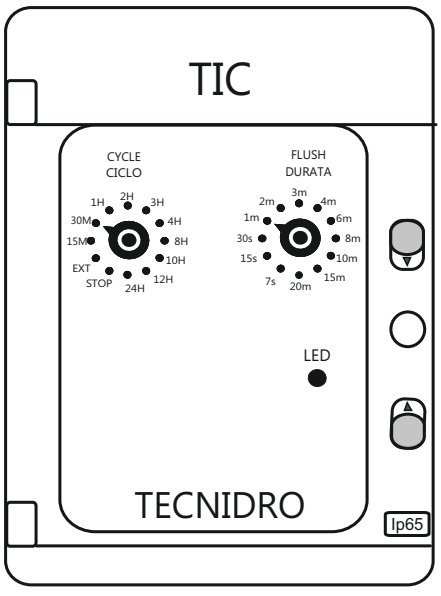
Container **:**	Box Ip65
Power :	2 half torch battery 1.5 V DC (no jumper) Or 220 V AC (with jumper)
Exit :	n° 4 station (filters+ master) + n° 1 Controllers in sequence
Wash time (FLUSH):	7-15-30 sec. – 1-2-3-4-6-8-10-15-20 min.
Waiting Time (CYCLE) :	15-30 min. – 1-2-3-4-8-10-12-24 h.

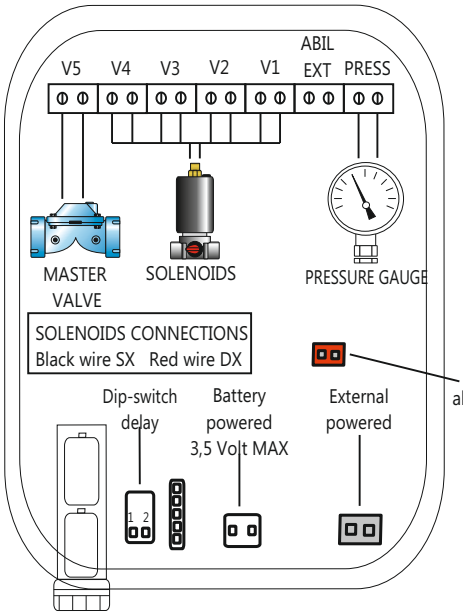
Internal Features:

V1-V2-V3-V4-:	Filters Station with latch solenoid 9/12 VDC latch
Press:	External differencial pressure switch
Alim ext:	External power
Press:	Slave controller in sequence (If request)
Abil ext:	Master controller (If request)
V5:	Master valve station (If request)

Waiting time between Closing and opening Valves: With dip switch (0, 15, 30, 45 sec.).

Departures : Manually-program on signal pressure (if request)





Solenoid to be connected:

9/12 V DC

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