

22-12-2014



BELL
Flow Systems

Flow
Level
Pumps
Analytic
Samplers

Power supply	230V AC $\pm 5\%$ / 1 A / 50 Hz
Power	± 100 W
Enclosure	Thermoplastic green Wall mounted model
Height	412 mm $\pm 2\%$
Width	340 mm $\pm 2\%$
Depth	302 mm $\pm 2\%$
Weight	± 9 kg
Material	PE
Back plate	Aluminum with suspension bracket
Protection class	IP 54
Ambient temp.	0°C / +40°C
Zone	Not in explosion hazardous environments



Efcon Sampling Tube DN 12 or DN 9 mm

- According EN 16479
- Ambient -5°C to 60°C
- PA Yarn Reinforced 3 layer Section
- Tube size DN 12 or DN 9 mm (standard)



EFCON Wall Mounted Peristaltic Water Sampler

According EN 16479 and EN ISO 5667

Simple Peristaltic Wastewater Sampler according the peristaltic vacuum principle with DN 12 or DN 9 mm tubing. Sampling can take place by Time or Flow (Pulse or Current) Proportional or with a trigger contact to start/stop Time Based Sampling.

Bi-Directional Peristaltic Pump prevents the use of complex 'Air-Managers'.

Basic 24-lines data registration, Alarm Output.
Standard with 5 meter Sampling Tube DN 12 or DN 9 mm

WARNING!

Peristaltic Samplers (produced by Efcon® & all other competitors) do not meet ISO 5667-2 Annex A / Sampler Design Instructions, claiming 12 mm open diameter of a water sampler and are therefore not allowed to be used for billing purposes in The Netherlands.

NOTE: For use in Heavy Duty Applications we recommend to use Efcon® Vacuum Samplers.

Please contact Efcon® for customized solutions like MODBUS, WI-FI, UMTS, Open Channel Flowmeters etc.

Specifications

Display	2 lines 16 characters, 16 keys Totalizer 300000,00m3 max (autom. resets)
I/O hardware	8 digital inputs, 4 analog inputs, 11 relay outputs
Basic operation	Manual sample button, Next container button, Reset button
Inputs	Pulse input, Current flow input (4-20mA), Optional: 2x digital inputs (free config.)
Output	Optional: 1x 24VDC active output (free config.)
Sample principle	Peristaltic
Sample program	Volume / time / batch
Sample interval	0,01 – 250,00 m3 / sample 2 – 250 minutes / sample
Max error samples	0 – 999
Sample Volume	20 – unlimited
Peristaltic	Max suction time 1- 99 sec Dose time 1 – 99 sec
Turn time	00:00 – 23:59 Select day (MTWTFSS)
Turn Interval	00:00:00 – 99:59:59 (HH:MM:SS)
Container config.	1 – 24 containers, volume 0,01 – 99,99 l
Program settings	Start program according date/time (0=Off) Stop program according date/time (0=Off)
Stop after container	0 – 99 (0= Off)
Password	Yes, (1-9999)
Date & time	Changeable
Flow signal	Pulse / current / pulse + current
Pulse input	0,01 – 100,00 m3
Current	20mA = 1,0 – 360,0 m3/h
Input Options	Program on/off, Start program, Stop program, take sample, next container, start cool unit.
Output Options	General alarm, sample alarm, sampling active, sample ok, high temperature, sample error, 1m3 Pulse, 0,1 m3 pulse, 0,01 m3 pulse, Containers full

Suction height / lenght

- Maximum suction height: 7 meters
- Maximum suction length: 30 meter

Operation principal

1. Purge

When taking a sample the sampler starts purging the suction hose during a set time (parameter PurgeT, default 10 seconds). This is to remove the old medium from the suction hose trough the inlet.

2. Suction

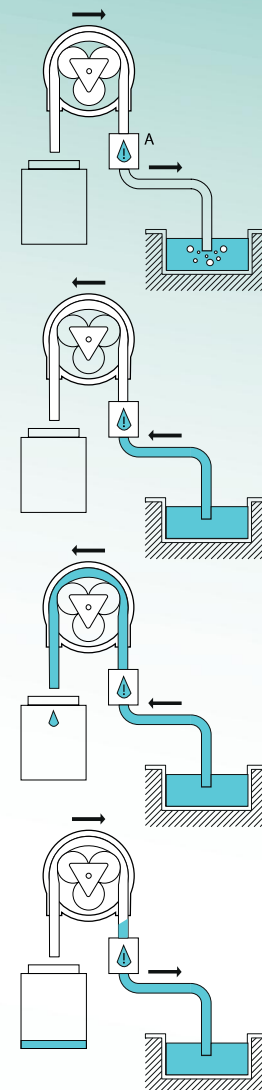
The sampler starts creating a vacuum on the inlet until medium reaches the medium detector. When the sampler doesn't detect medium within a set time (parameter Suction, default 30 seconds) an error sample is counted.

3. Dose

After the medium is detected the sampler doses the medium during a set time (Dose time: 6 seconds default).

4. Rinse

When a sample is dosed the peristaltic pump creates pressure again on the inlet to rinse all the excess water from the tubing inside the pump and suction hose all during a set time (Parameter RinseT, default 10 seconds).



Installation Instructions

Mount the inlet of the suction hose on a fixed representative turbulent point to sample homogeneous waste water. Ensure the suction hose is always emerged in the waste water / medium.

Sample Medium

- Free of solid parts
- Free of air inclusion
- Temperature +0,1°C / +50°C
- Minimal conductivity: 50µS

