

# **First Installation Guide**







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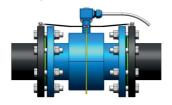
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## First Installation Guide

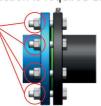
## 1 SENSOR SOAKING

Flowmeters can show unstable readings during the first 2-3 days after installation This change, in effect, affects reading accuracy. Simply by keeping the meter wet, this problem solves itself within 2-3 days and no other action is required at all.

Soaking of the sensor under operational conditions with a wetted full pipe



Nuts and bolts must be tightened correctly

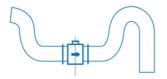


## **2 SENSOR INSTALLATION**

Electromagnetic flowmeters only work correctly under certain determined conditions. For our right to guarantee the product, all those conditions have to be met in all applications. Those conditions are achieved by the correct installation of the sensor.

#### Flowmeter sensor must always remain full of liquid.

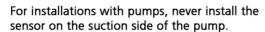
For horizontal mounting locate the sensor in a low section of the pipe.



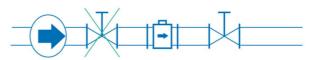


For vertical mounting flow direction must be upwards.

For installations with valves, correct location for the valve is downstream of a sensor.





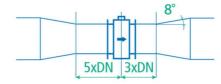


#### Laminar flow is required to guarantee the accuracy of the readings.

Sensor must be installed in a section of straight pipe with minimum 5 times the pipe diameter upstream and 3 times downstream.



When using pipe reducers, they have to be installed before and after the straight pipe section. The angle of the slope of the reducer should not exceed 8°.

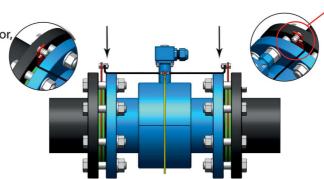


## 3 GROUNDING

#### a) PLASTIC PIPE (Grounding with earthing rings)

of earth between sensor ring, pipe and liquid

**Ensure continuity** 



Washers must be
used for earthing ring
installations
You must use a
conductor
with a minimum
cross-section
of 1,5 mm
of Copper wire for all
grounding.

Nuts and bolts must be tightened using a spanner. Finger tight has no effect

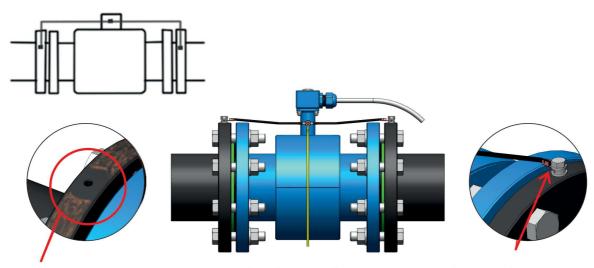
Earthing rings must be used for plastic pipe installation



Remember to earth the cable Grounding of the neck



#### b) CONDUCTIVE PIPE (Grounding without earthing rings)



Contact point must be properly cleaned from rust, paint, etc.

See also the installation/operational manual

## 4 CHANGING THE BATTERY



1. Connect the new battery pack to the second battery connector (Picture 2 - without losing measurement data).



2. Unplug the old battery pack, remove it from the transmitter and replace with the new battery pack.





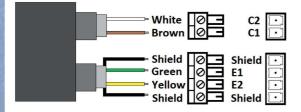
3. Set new battery capacity in mAh into the Service settings - Battery capacity menu.



## CONNECTION OF THE SENSOR TO THE MOTHERBOARD

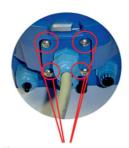
### **Remote and Compact version**

a) REMOTE VERSION

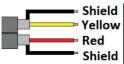


b) COMPACT VERSION

Plug the connections into the transmitter



All connections must be properly tightened

















#### **Connection to PC**

Unscrew the







Connect the miniUSB cable to the transmitter

## **Contact Support**

#### Information required:

Serial number of the flowmeter, FW version, SW version, fault description, photos of installation (if applicable).

**Technical support:** Telephone:

support@arkon.co.uk +420 543 214 822