

flowIQ® 2200 & 3200 – Encoded Output Installation quick guide



Kamstrup

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Quick installation guide steps



Important information before installation

1



Installation

2



Check the installation

3



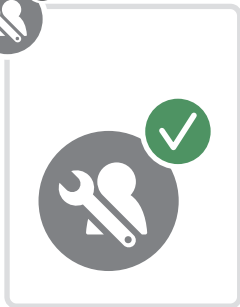
Encoded output

4

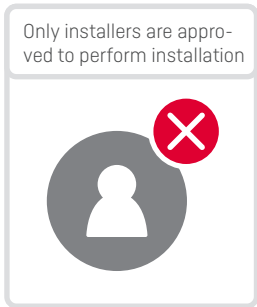


Important information before installation

1.1



Only installers are approved to perform installation



Further information on
kamstrup.com



Important information before installation

1.2



Permitted water temperature



33 °F...120 °F



Maximum operating pressure



250 PSI

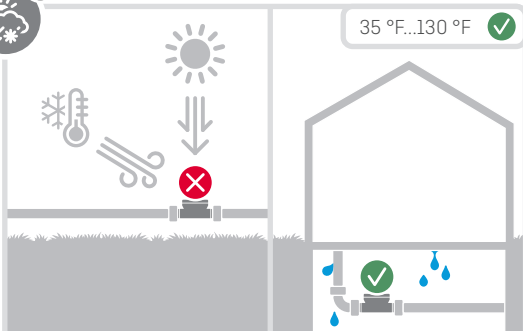


Fixed installation with min. vibration. Electromagnetic environmental class: Residential and commercial



Important information before installation

1.3

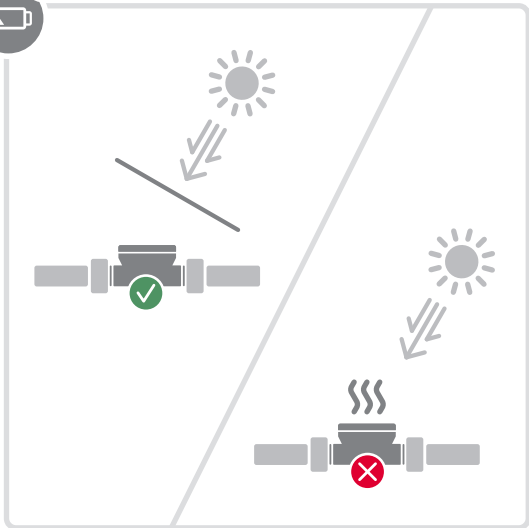


Condensing humidity permitted. (Indoors installed in utility rooms and outdoors in meter pits). Installation in direct sun and freezing conditions must be avoided



IP68-rated (waterproof-submersible)



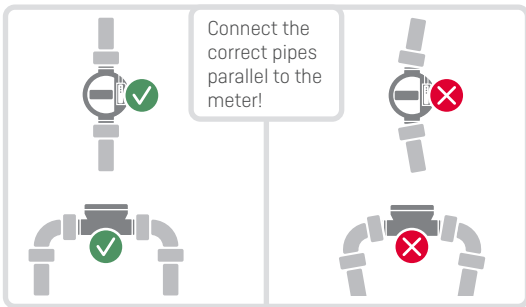
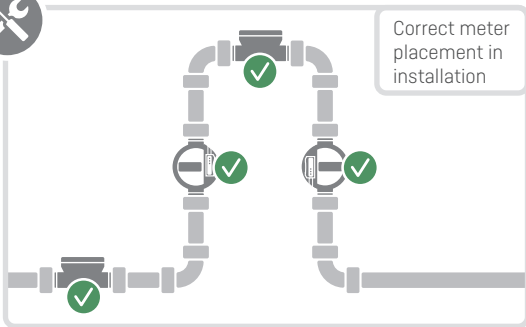


The meter can be installed indoors, in a pit or under water, but direct sun should be avoided. Increased ambient temperature can adversely affect battery life ($t_{BAT} < 95\text{ }^{\circ}\text{F}$)



Ensure correct piping during installation

2.1





Ensure correct pressure during operation

2.2



The meter is filled with water during operation



≥ 5 PSI ✓



Water pressure too low



< 5 PSI ✗



Avoid entrained air in the water flow

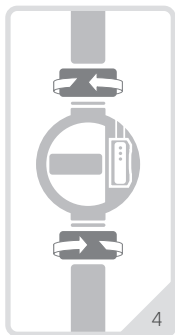
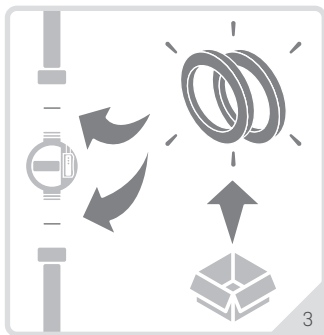
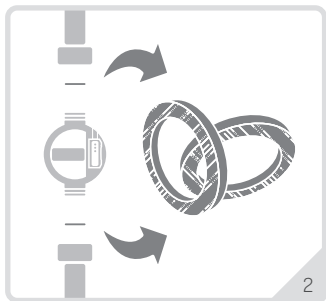
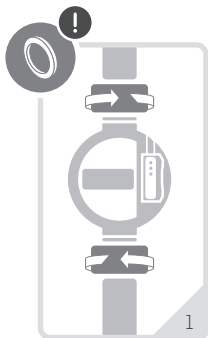


Air ✗



Replace gaskets when installing new meter

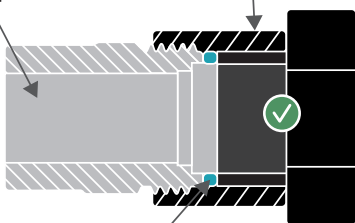
2.3





Flowpart

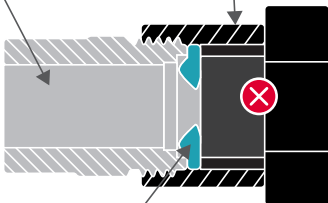
Extension



Gasket (right size)

Flowpart

Extension




Gasket (wrong size)



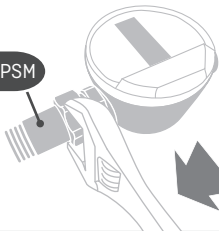
Important! Be aware of maximum torque

2.5




Maximum torque for 3/4" NPSM PPS meters: 11 ft-lb 

3/4" NPSM

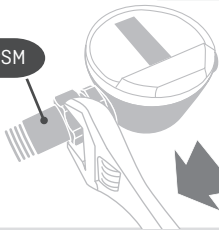


11 ft-lb 



Maximum torque for 1" NPSM PPS meters: 22 ft-lb 

1" NPSM



22 ft-lb 

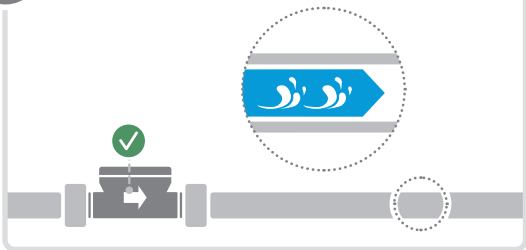


Install meter in the correct direction of flow

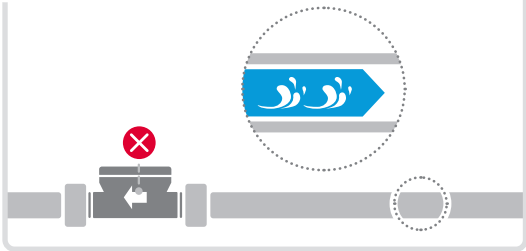
2.6



Same water and meter direction



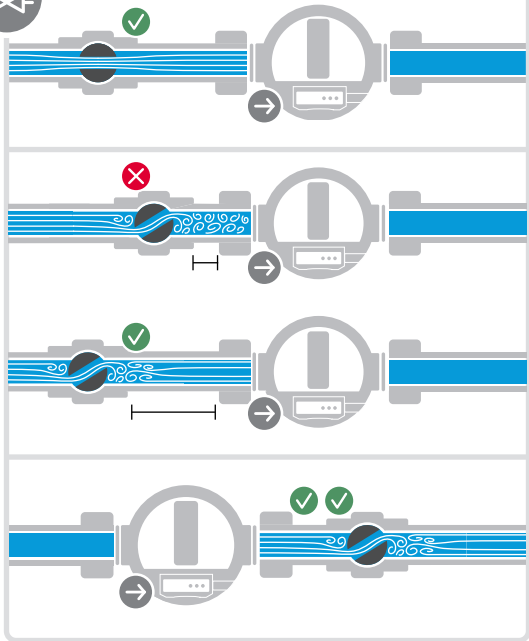
Opposite water and meter direction





Correct valve installation

2.7



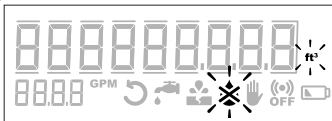


Check the installation

3.1



Installation is complete



Make sure the meter displays **DRY** and the desired unit of measurement



1

Open the water supply



2



Check the installation

3.2



Check that the display switches to **FLOW** and that the volume counter is incrementing



Current display status...



...shortly after

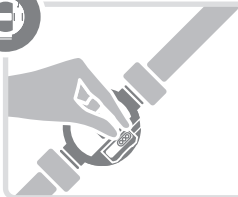


The display will update frequently when consuming water, permitting the installer to confirm that the meter is properly operating.



Mount the cable for encoded output on meter

4.1



Remove the protective cap



Mount plug



Click



Click

Mount clamps



4

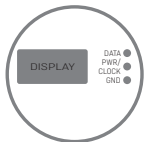


Three wire

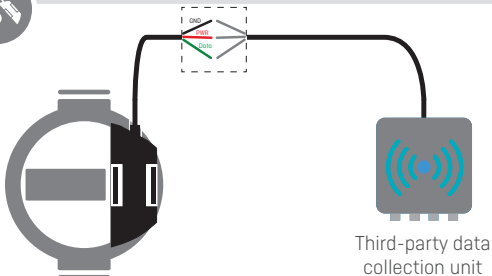


Data **GND** **PWR/clock**

External connection



The reading unit must comply with the electrical requirements of the specification for the Sensus protocol UI 1203R21, September 2014.



Kamstrup flowIQ® with module 41 and three wire open ended cable

Open ended cable compatibility table

| | Sensus | Neptune | Itron #1 | Itron #2 |
|------------------|---------------|----------------|-----------------|-----------------|
| Data | Green | Red | Red | Brown |
| GND | Black | Green | White | Grey |
| PWR/clock | Red | Black | Black | Yellow |

Third-party color coding refers to those of the data collection unit terminations.

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