

flowIQ® 2200 & 3200

Installation quick guide
KWMx220



Kamstrup

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Quick installation guide steps



Important information before installation

1



Installation

2



Check the installation

3



RF antenna mounting

4



Lid Mounting

5



FCC cautions

6



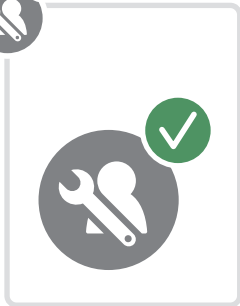
ICES/ISED cautions

7

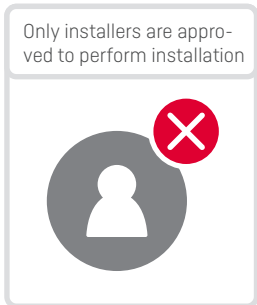


Important information before installation

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 ✓

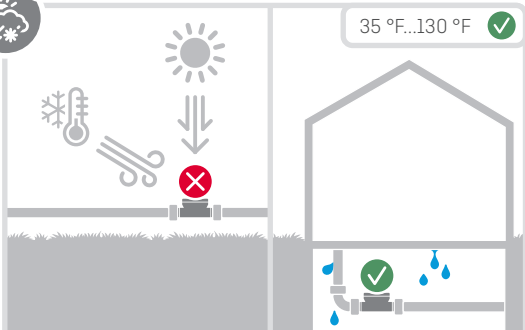


Fixed installation with min. vibration. Electromagnetic environmental class: Residential and commercial



Important information before installation

1.3



35 °F...130 °F

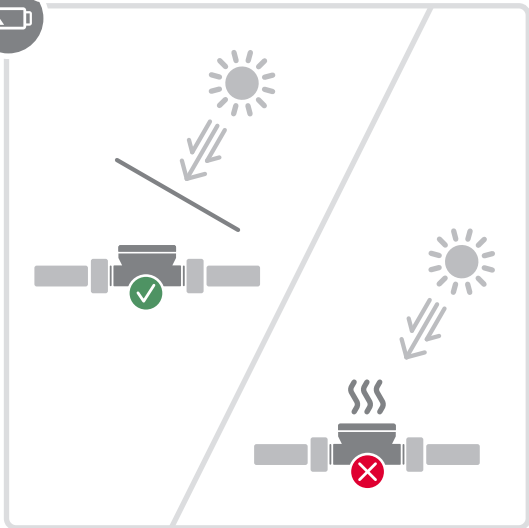


Condensing humidity permitted. (Indoors installed in utility rooms and outdoors in meter pits). Installation in direct sun and freezing conditions must be avoided



IP68-rated (waterproof-submersible)



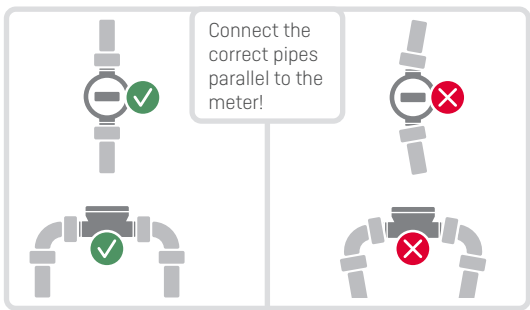
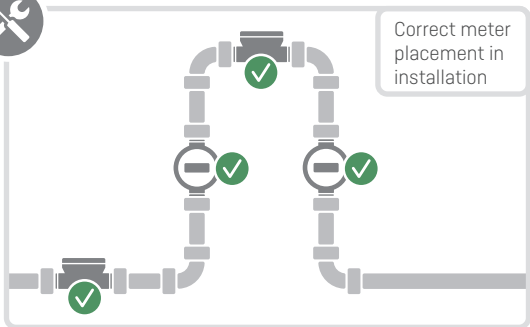


The meter can be installed indoors, in a pit or under water, but direct sun should be avoided. Increased ambient temperature can adversely affect battery life ($t_{BAT} < 95\text{ }^{\circ}\text{F}$)



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

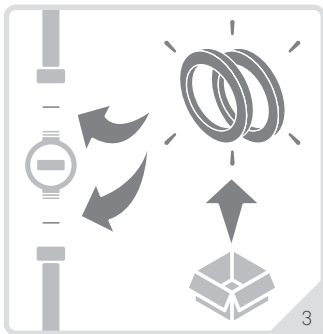
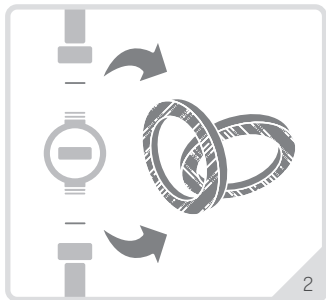
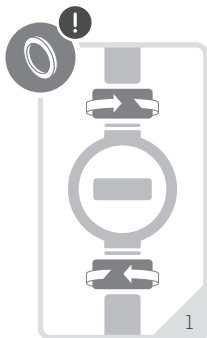


Air ✗



Replace gaskets when installing new meter

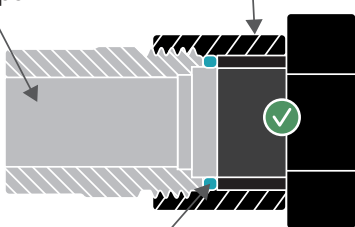
2.3





Flowpart

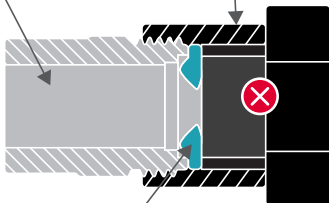
Extension



Gasket (right size)

Flowpart

Extension



Gasket (wrong size)

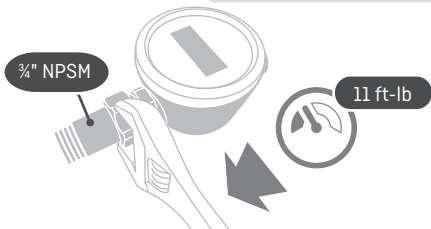


Important! Be aware of maximum torque

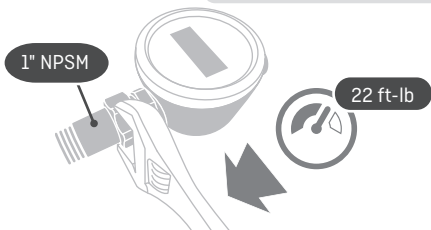
2.5



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



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



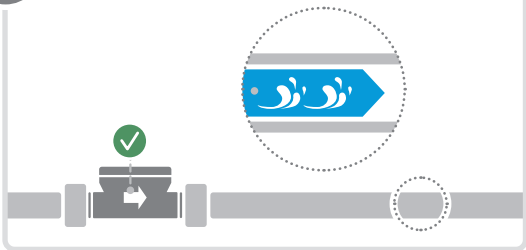


Install meter in the correct direction of flow

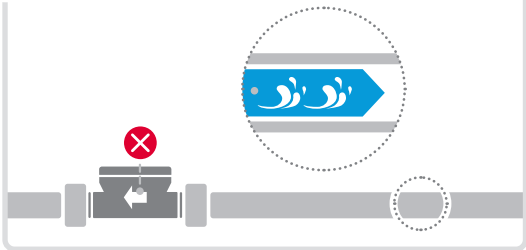
2.6



Same water and meter direction

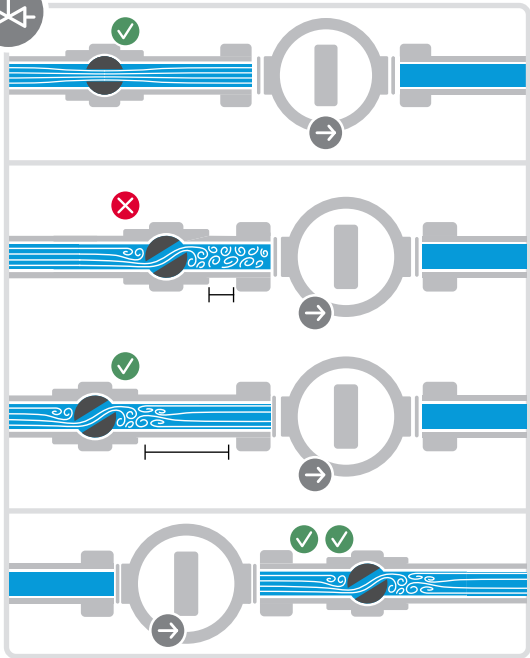


Opposite water and meter direction





Correct valve installation



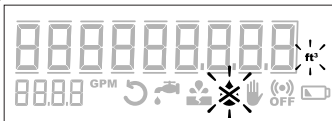


Check the installation

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 counter is in movement



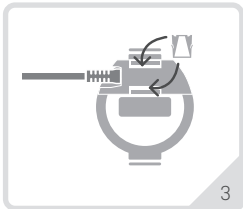
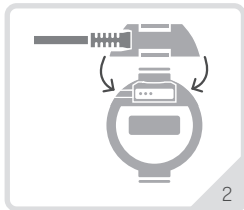
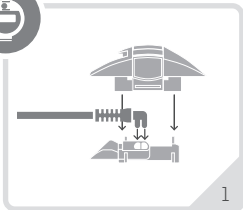
Current display status...



...shortly after

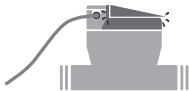
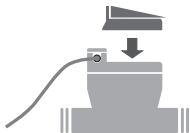


The flow indicator in the display will update frequently, permitting the installer to confirm that the meter is properly operating.



Note: For pit antennas use clamps 30-26-1211 and for top mounted antennas use clamps 30-26-1214.





For meters subjected to any kind of mechanical impact, Kamstrup recommends installing a convenient lid on the meter. This protects the meter display from direct sunlight and/or the glass from moderate mechanical impact.

For both flowIQ® 2200 and flowIQ® 3200 meters, it is possible to install a lid.

Note: Installing a lid is mandatory for Reclaimed Water meters.



Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the users authority to operate the equipment.

RF Exposure compliance statement: This device must be installed to provide a separation distance of at least 20 cm from all persons.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1** This device may not cause harmful interference, and
- 2** This device must accept any interference recieved, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.



However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**English:**

This device complies with Industry Canada license-exempt RSS standard[s]. Operation is subject to the following two conditions:

- (1) This device may not cause interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Complies with the Canadian ICES-003 Class B specifications.

This device complies with RSS 247 of Industry Canada. This Class B device meets all the requirements of the Canadian interference-causing equipment regulations.

This radio transmitter IC ID 22376-KWMx220 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.



| Antenna type | Maximum gain | |
|--------------|--------------|--------------|
| | 450-470 MHz: | 902-928 MHz: |
| Helix | -2 dBi | -2 dBi |
| Pit, small | -5 dBi | 1 dBi |
| Wall | 1 dBi | -1 dBi |

This equipment has been approved for fixed operation, and unless otherwise advised in separate supplemental instructions for individual wireless transmitter(s), requires minimum 20 cm spacing be provided between antenna(s) and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.



Warning

Must be installed to provide a separation distance of at least 20 cm from all persons.

Hardware version identification number (HVIN):

02K02D18A8UB, 02K02D18B8UB, 02K02D18R8UB,
02K02D18C8UB, 02L02D18B8UB, 02L02D18N8UB,
02L02D18L8UB, 02L02D18D8UB, 02L02D18F8UB,
02L02D18H8UB, 02L02D18M8UB, 02L02D18K8UB,
02L02D18P8UB

**Français:**

Cet appareil est conforme aux normes CNR exemptes de licence d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes:

(1) Cet appareil ne doit pas provoquer d'interférences et

(2) Cet appareil doit accepter toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité de l'appareil.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Cet appareil est conforme à la norme canadienne RSS 247. Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Cet émetteur radio IC ID 22376-KWMx220 a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés cidessous, avec le gain maximal autorisé indiqué. Les types d'antenne non inclus dans cette liste et ayant un gain supérieur au gain maximum indiqué pour tout type répertorié sont strictement interdits pour l'utilisation avec cet appareil.



| Antenna type | Maximum gain | |
|--------------|--------------|--------------|
| | 450-470 MHz: | 902-928 MHz: |
| Helix | -2 dBi | -2 dBi |
| Pit, small | -5 dBi | 1 dBi |
| Wall | 1 dBi | -1 dBi |

Cet équipement a été approuvé pour une utilisation fixe et, sauf indication contraire dans les instructions supplémentaires pour émetteurs sans fil individuels, cet équipement nécessite un espace minimum de 20 cm entre l'antenne [s] et le corps de la personne utilisant l'appareil [à l'exclusion des extrémités des mains, des poignets et des pieds] pendant les modes de fonctionnement sans fil.

**Warning**

Doit être installé de façon à respecter une distance de minimum 20 cm à toute personne.

Numéro d'identification de la version de material (NIVM):
02K02D18A8UB, 02K02D18B8UB, 02K02D18R8UB,
02K02D18C8UB, 02L02D18B8UB, 02L02D18N8UB,
02L02D18L8UB, 02L02D18D8UB, 02L02D18F8UB,
02L02D18H8UB, 02L02D18M8UB, 02L02D18K8UB,
02L02D18P8UB

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