

Installation and User Guide

Kamstrup pit antenna with click-on installation for flowIQ® 2100/3101

- 6697-904 2 m cable [915 MHz]
- 6697-905 7.5 m cable [915 MHz]



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Kamstrup's pit antenna is used for increasing the radio range to ensure optimal data transfer.

Read this guide and follow a few guidelines as illustrated, and you will get the best benefit from your installation.

General information

This pit antenna fits the Kamstrup flowIQ® 2100 and flowIQ® 3101 water meters.

The antenna is only for pit installations, but for pit-lids of both cast iron, concrete or composite.

Only four holes need to be drilled in the lid, and a 1:1 drilling template can be found on the last page of this guide.

The antenna is submersible, and the antenna cable must never be shortened or damaged.

The antenna consists of a circular antenna head with a fixed cable down to a capacitive click-on connection for the water meter.



Installation overview

The antenna is connected to the meter by means of a "click-on" ring with a capacitive connection. See figure 1.

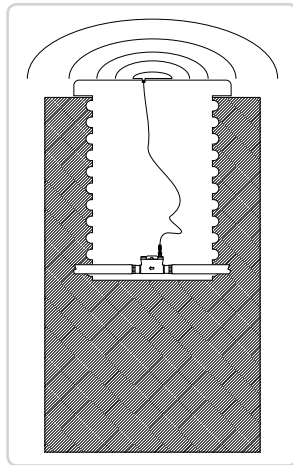


Figure 1

The antenna is available in two variants and the installation is described in the following paragraphs. The following variants are available:

Antenna: 6697-904 2 m cable (915 MHz)
 6697-905 7.5 m cable (915 MHz)

Both variants come with screws, bolts and rawlplugs for mounting in either concrete, cast iron or composite pit-lids.

Connection to meter

The antenna is connected to the meter by means of a "click-on" ring with a capacitive connection.

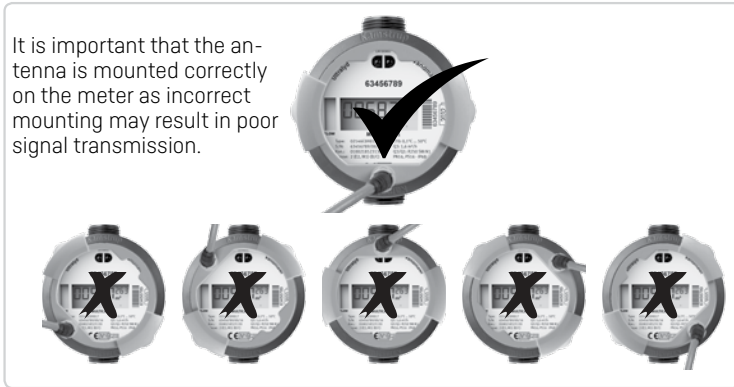


Figure 2

Separation of antenna ring

The click-on ring can be separated so that the cable can be fit through the pit-lid. Never cut or damage the antenna cable, the antenna cable must not be shortened.

First, detach the wire loop (figure 3), then release the clip from the ring using a pen or screwdriver to wedge it free (figure 4).



Reattach the wire to the click-on ring (figure 5). The wire MUST be completely clean. Attach the ring to the meter register (figure 6 and 2). Make sure that the antenna cable is at the bottom of the register.

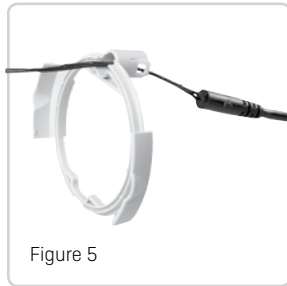


Figure 5



Figure 6

Pit installation for antenna 6697-904/905

The antenna must be placed on a pit-lid that is strong enough to minimize dereflection under heavy load. It is important to mount the antenna on a flat surface to obtain the greatest mechanical strength, see figure 7.

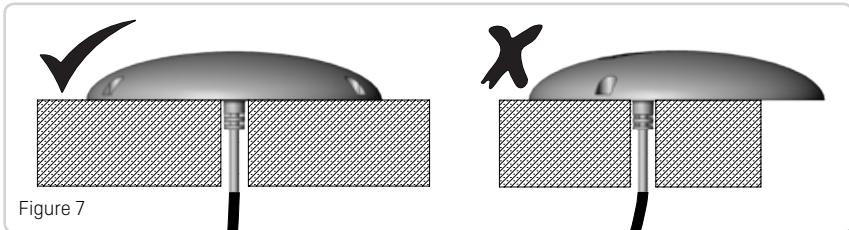


Figure 7

The antenna is to be mounted with 3 included screws to the pit-lid, see figure 5. 3 Hex screws + anchors and 3 Hex bolt UNC 10-24 X $\frac{3}{4}$ " are included. Maximum torque of 4 Nm \pm 10 %.

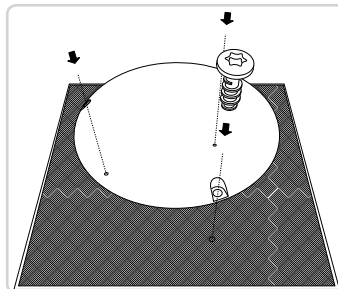
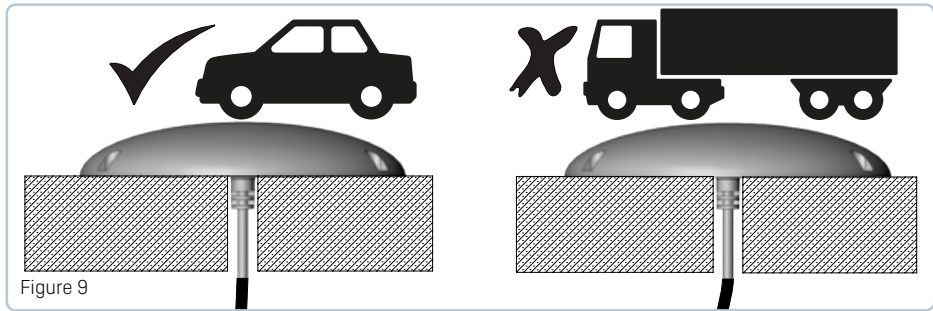
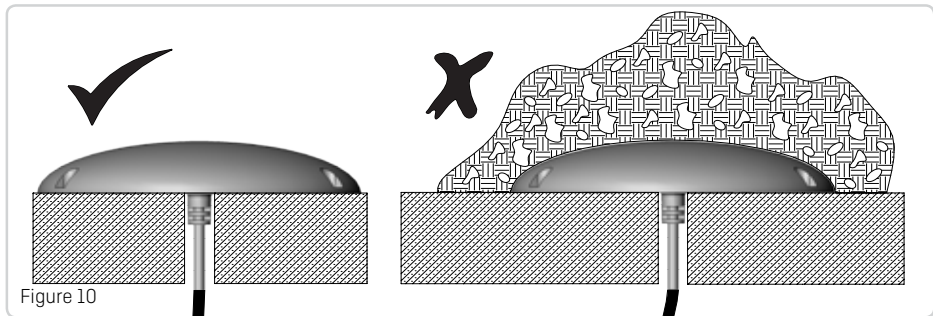


Figure 8

The antenna can be installed in driveways for automobile traffic only, see figure 9.

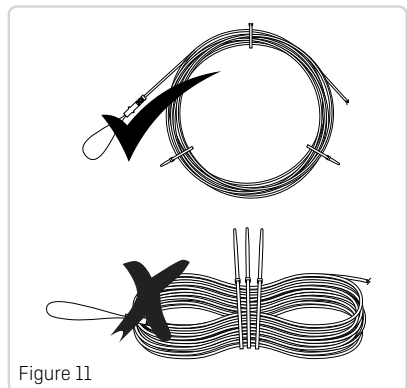


To ensure the signal strength it must be free of obstacles. This means that the antenna must not be covered by soil, water, leaves, vehicles, snow or other, see figure 10. An outdoor sealants can be used, to prevent water penetrating through the antenna/lid.



During installation, it must be ensured that there is enough cable in order to lift the pit-lid away securely, without pulling the cable. Make sure that you have the correct length of cable.

- Avoid mounting near electric cable
- Avoid tight bend or squeeze of the antenna cable
- Never install the antenna in a corner or near metal or metal pipes



Drilling template 1:1

