Installation Manual

NK transmitters for industrial water meters (T130; IP65) in the -NKP version

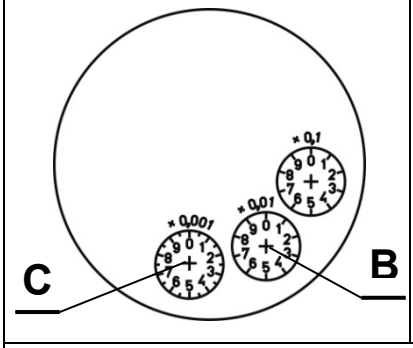
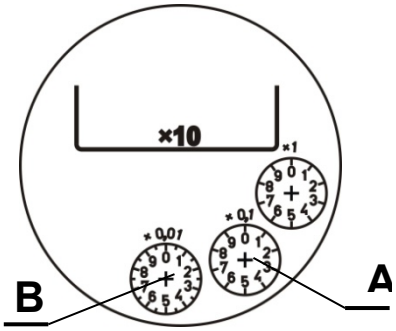
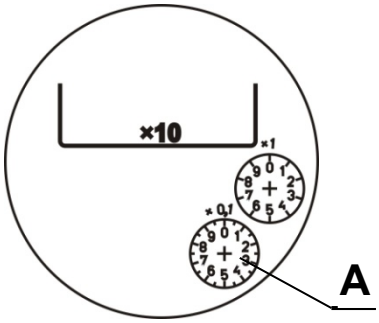
NKP – water meter ready for the installation of reed relay pulse transmitters

NK – reed relay pulse transmitter

ISO 9001 **PN-N-18001** **ISO 14001**

APATOR POWOGAZ

Positioning of the single-magnet fixture at specific indicators of the counter front plate and the corresponding NK transmitter pulse rates

Water meter size		
DN40 to 125	DN ≥ 150-250	DN300
		

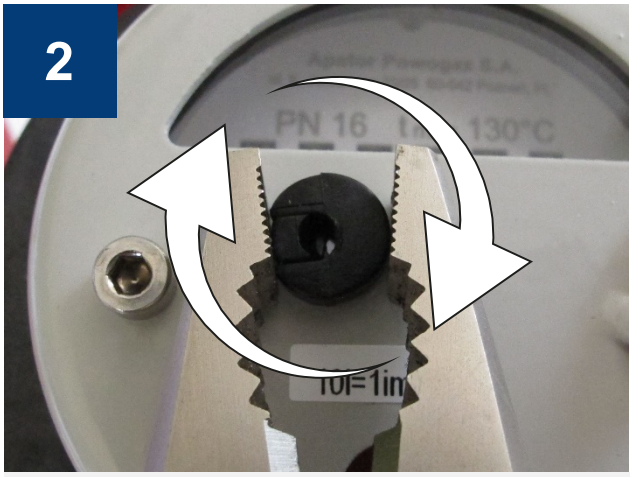
A. x 0.1 indicator location: pulse rate -> 1000 L/pulse
B. x 0.01 indicator location: pulse rate -> 100 L/pulse
C. x 0.001 indicator location: pulse rate -> 10 L/pulse

This step-by-step procedure for the installation of the NK transmitter in industrial water meters (T130; IP65) type MWN130 and MP130 in -NKP versions shown below with the **MWN130 40-NKP (10 L = 1 pulse)** below:

1

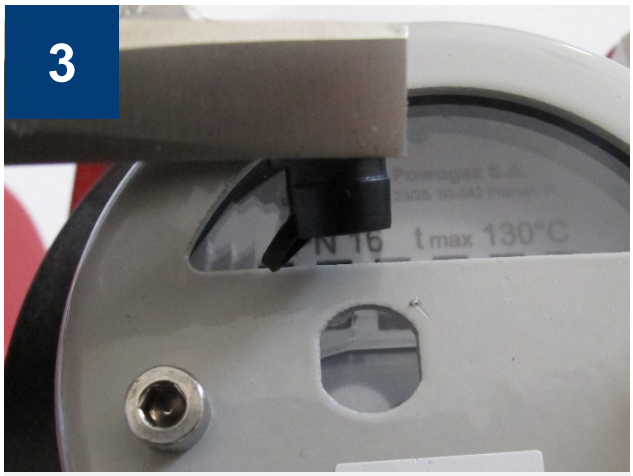
MWN130-50 NKP water meter, suitable for the installation of an NK transmitter. The IP65-rated rotating counter features a single-magnet fixture installed at the x 0.001 position -> pulse rate at 10 L = 1 pulse.

2



Use a pair of pliers to grasp the latched cable gland and rotate it 90° counter-clockwise (or clockwise).

3

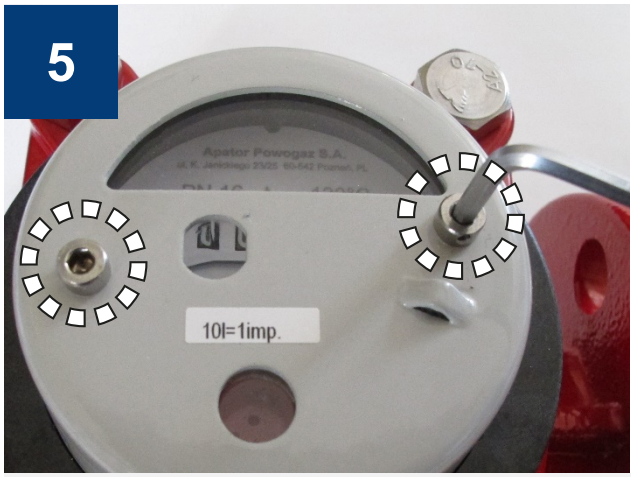


Remove the cable gland fully from the cable entry slot.

4

Cut the wire and remove the lead tamper seal with the Powogaz mark “KJ3”.

5

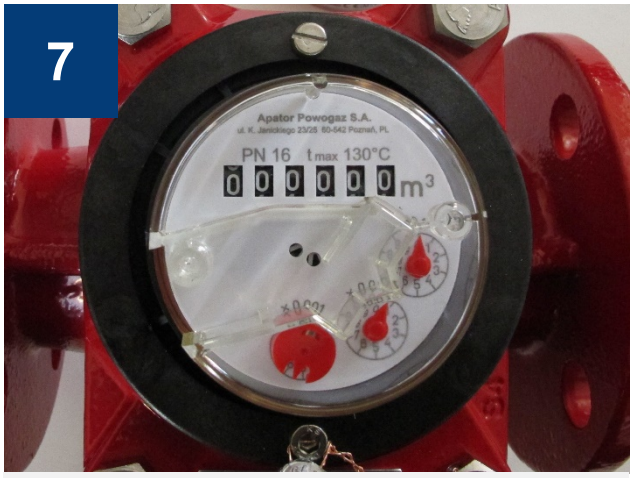


Remove the Allen bolts which secure the counter mechanism's magnetic shielding. Remove the counter mechanism's magnetic shielding; note that the bolt at the boss (shown to the right) has the cap head designed to accommodate a lead tamper seal wire.

6

Install the NK reed relay pulse transmitter, P/N **31-2440-010000**, width b = 7.5 mm, intended for water meters (T130 and IP65). Specification: U < 24V; Is < (max 100 mA); cable: YTLY 2x0.14 mm^2, L = 2 m.

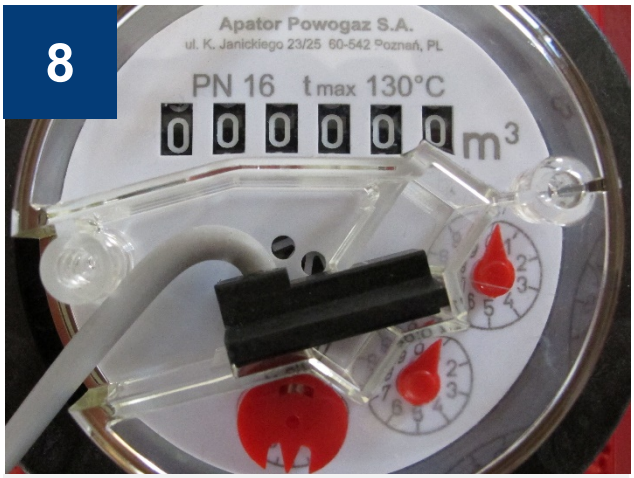
7



View of the counter guard with two installation slots for the NK transmitter with the counter mechanism's magnetic shielding removed.

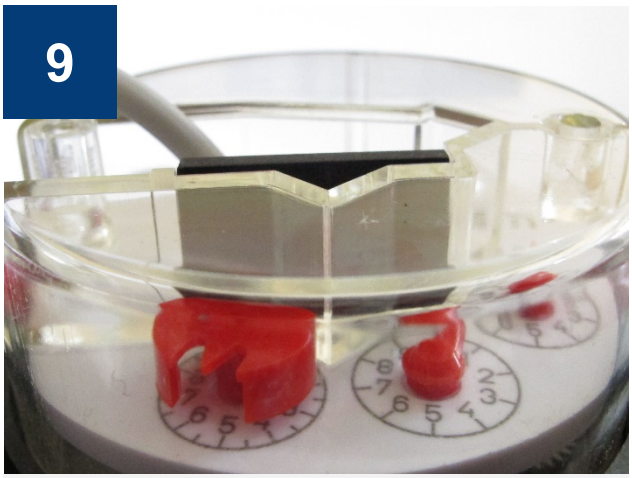
7b

8



Installing the NK transmitter
Place the NK transmitter in the counter guard installation slot (1) next to the magnet fixture. The transmitter base with the side entry of the cable shall be directed toward the counter front plate so that the narrow trapezoid section of the transmitter is up and towards the counter mechanism's magnetic shielding. Shown in the image is the magnet fixture installed at the x 0.001 (DN40) indicator to enable a pulse rate of 10 L = 1 pulse.

9



Complete the NK transmitter installation by engaging the NK transmitter into the guide piece to stop. The top of the NK transmitter should now be level with the top of the counter guard.

Note:
The NK transmitter assembly can be installed in the slot (2). (See the images below.) The pulse weight of the transmitter varies with the water meter size magnet fixture position at the indicators.

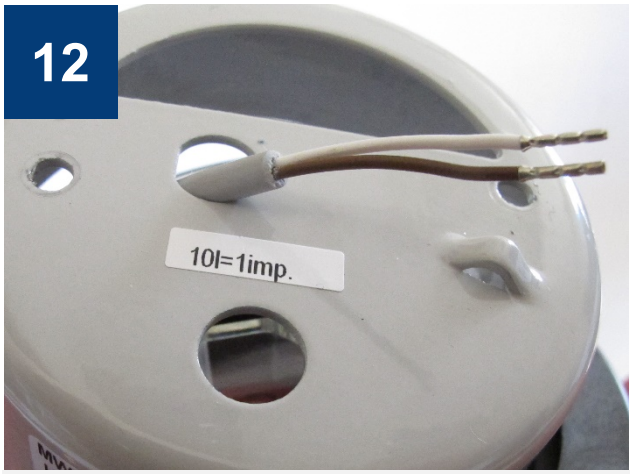
10

The x 0.01 indicator position (DN50-125): pulse rate at 100 L = 1 pulse

11

The x 0.1 indicator position (DN150-250) or x 0.1 indicator position (DN300 twin indicator front plate): pulse rate at 1000 L = 1 pulse

12

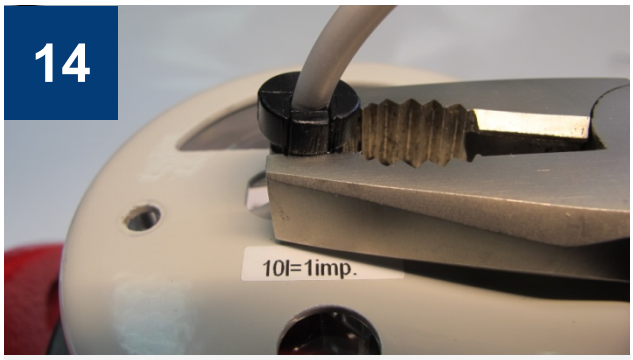


Put the counter mechanism's magnetic shielding on the counter guard. Pass the NK transmitter cable through the cable entry slot in the counter mechanism' magnetic shielding.

13

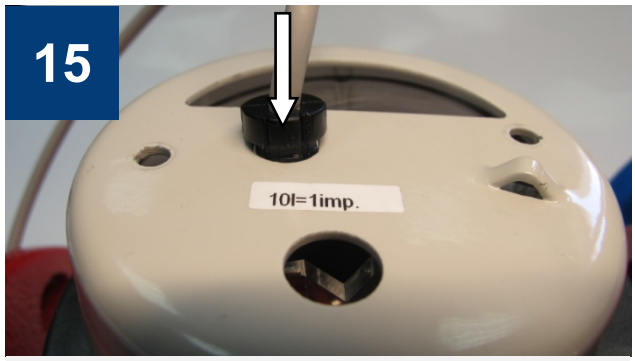
Use your fingers or a pair of pliers to slide the latched cable gland on the cable at 40-50 mm from the NK transmitter.

14



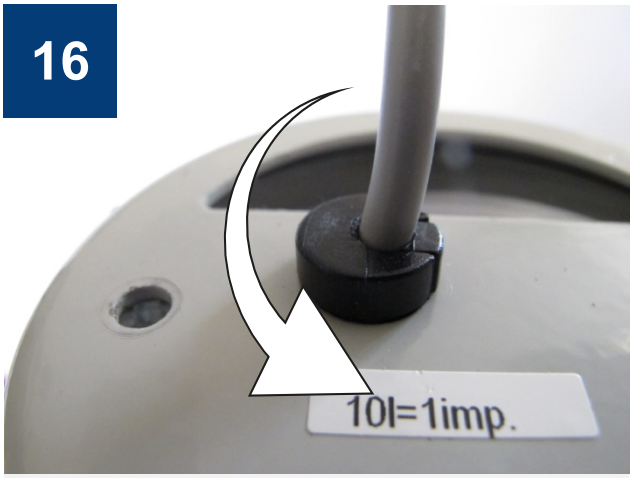
Rotate the counter mechanism's magnetic shielding installed on the water meter to the operating position (in which the drums are seen through the manual reading sight hole). Use a pair of pliers to clamp and latch the cable gland on the NK transmitter cable.

15



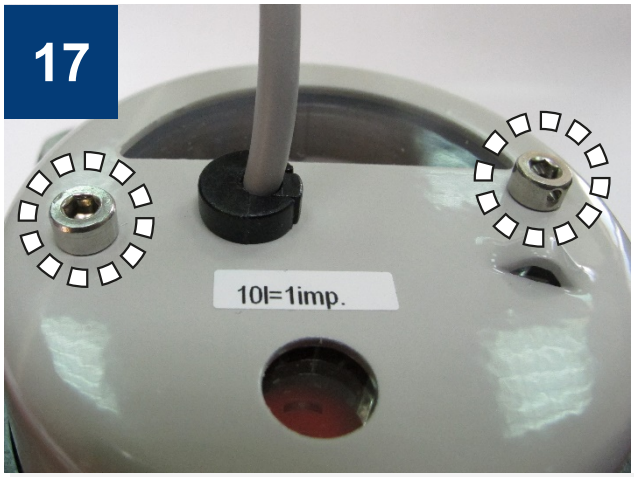
Align the side chamfer on the latched cable gland with the cable entry slot in the counter mechanism's magnetic shielding. Press the latched cable gland into the slot to stop.

16



Rotate the latched cable gland in the slot by 90° (clockwise or anti-clockwise) to the position shown in the image. In this position, the cable will be retained in the counter mechanism's magnetic shielding.

17



Secure the counter mechanism's magnetic shielding with the two Allen bolts. Install the Allen bolt for the lead tamper seal wire in the hole next to the boss in the counter guard to facilitate sealing of the water meter.

This concludes the installation of the NK transmitter.

Note:

When installing the counter guard, verify that the transmitter cable is aligned under the counter guard to prevent damage and failure of the cable!

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