Installation Manual

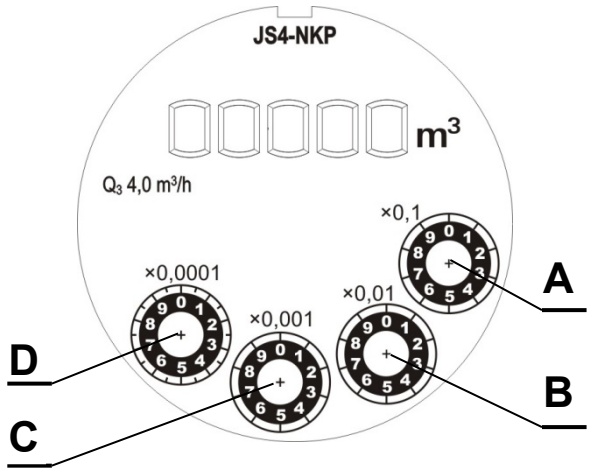
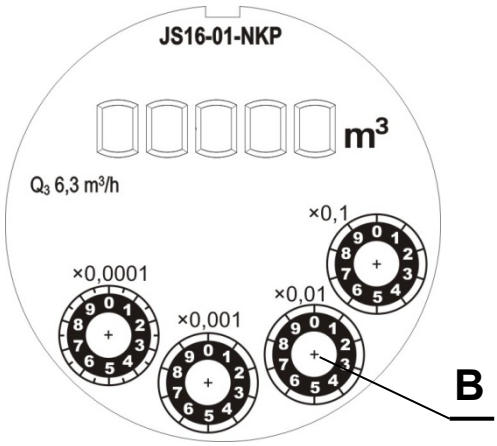
NK transmitters for apartment and household water meters (T50; IP65 and IP68) in -NKP versions, applied as side water meters in coupled water meter assemblies.

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

NK – reed relay pulse transmitter

APATOR POWOGAZ

Table 1. Positioning of single or four-magnet fixtures at specific indicators of the counter front plate and the corresponding NK transmitter pulse rates

<table>
<tr><th colspan="2">Water meter type and size</th></tr>
<tr><th>JS4-NKP (DN20)</th><th>JS16-NKP Master+ (DN40)</th></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td colspan="2">A. x 0.1 indicator location: - 1-magnet fixture, pulse rate ->1000 l/pulse
- 4-magnet fixture, pulse rate ->250 l/pulse
B. x 0.01 indicator location: - 1-magnet fixture, pulse rate ->100 l/pulse*
- 4-magnet fixture, pulse rate ->25 l/pulse
C. x 0.001 indicator location: - 1-magnet fixture, pulse rate ->10 l/pulse
- 4-magnet fixture, pulse rate ->2.5 l/pulse
D. x 0.0001 indicator location: - 1-magnet fixture, pulse rate ->1 l/pulse
- 4-magnet fixture, pulse rate ->0.25 l/pulse

*) The only pulse weight available with JS Master+ water meters</td></tr>
</table>

This step-by-step procedure for the installation of the NK transmitter in apartment and household water meters is shown below with the **JS-4-NKP (10 L = 1 pulse)** and **JS-16-01-NKP (100 L = 1 pulse)** water meters:

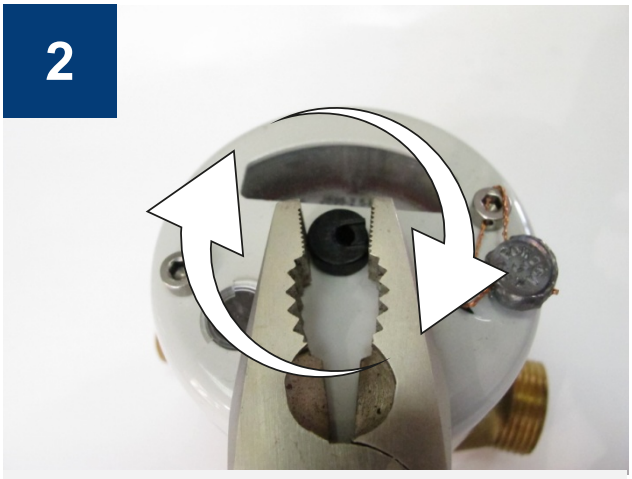
1a

JS-4-NKP water meter (NK transmitter installation ready). The IP65-rated counter features a single-magnet fixture installed at the x 0.001 position -> pulse rate at 10 L = 1 pulse.

1b

JS-16-01-NKP water meter (NK transmitter installation ready). The IP65-rated counter features a single-magnet fixture
installed at the x 0.01 position
-> pulse rate at 100 L = 1 pulse.

2



Use a pair of pincers 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

View of the counter guard with the counter mechanism’s magnetic shielding removed

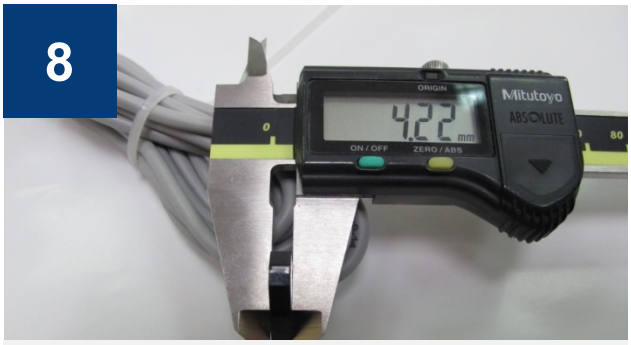
6

JS-4-NKP

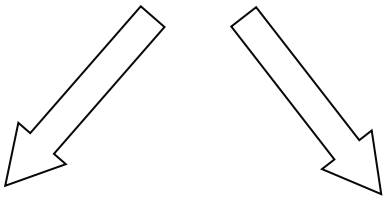
7

JS-16-01-NKP

8



Install the NK reed relay pulse transmitter, P/N **31-9051-020000**, width b = 4 mm, intended for water meters and flow transducers (T90 and IP65). Specification: U < 24V; Is < (max 100 mA); cable: YTLY 2x0.14 mm^2, L = 2 m.



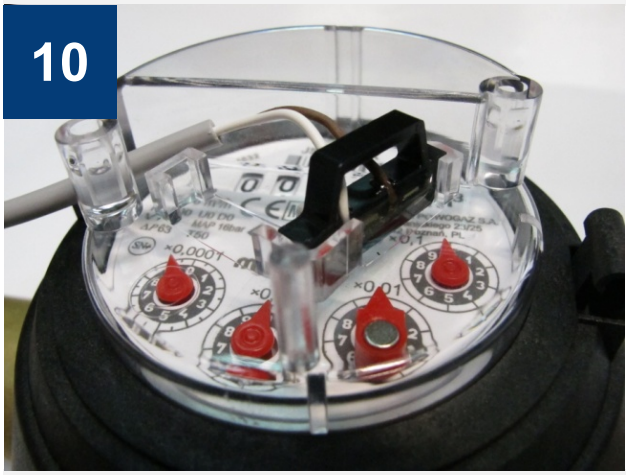
JS-4-NKP

9

Installing the NK transmitter
Place the NK transmitter in the installation slot next to the magnet fixture in the counter guard. The resin-encapsulated electronic circuitry of the NK transmitter shall be aligned toward the magnet fixture. Shown in the image is the single-magnet fixture installed at the x 0.001 indicator to enable a pulse rate of 10 L = 1 pulse.

JS-16-01-NKP

10

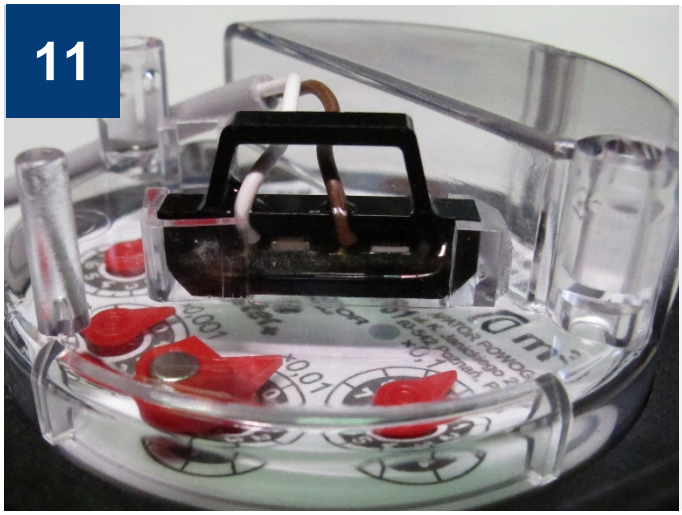


Installing the NK transmitter
Place the NK transmitter in the installation slot next to the magnet fixture in the counter guard. The resin-encapsulated electronic circuitry of the NK transmitter shall be aligned toward the magnet fixture. Shown in the image is the single-magnet fixture installed at the x 0.01 (DN40) indicator to enable a pulse rate of 100 L = 1 pulse.

Note:

The **JS-4-NKP** water meter has two slots for the NK transmitter to choose from, and a single or four-magnet fixture can be installed, as required.
See Table 1 for pulse weight options.

11

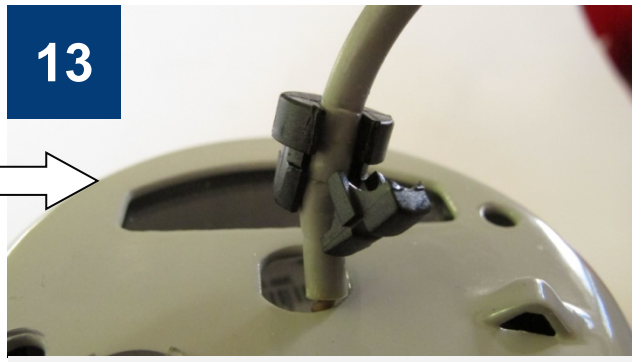


Complete the NK transmitter installation by engaging the NK transmitter into the guide piece to stop. The top of the NK transmitter should now be level with the top of the guide piece.

12

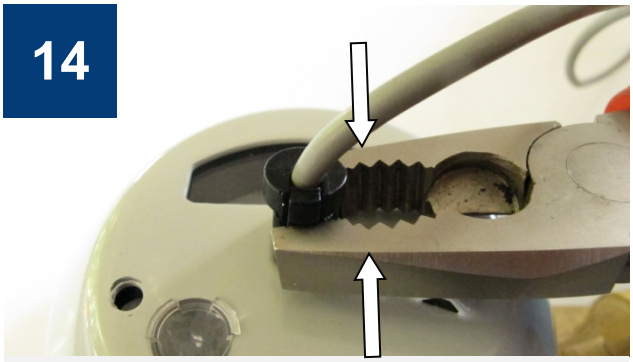
Put the counter mechanism's magnetic shielding on the counter guard. Pass the NK transmitter cable through the cable entry slot in the counter mechanism's magnetic shielding.

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

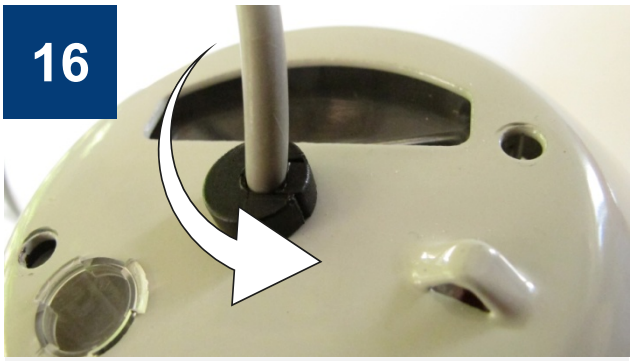


Rotate the counter mechanism’s magnetic shielding installed on the water meter to the operating position (in which the drums are seen through the manual reading sight hole). Use a pair of pliers to clamp and latch the cable gland on the NK transmitter cable.

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 Allen bolts. Install the Allen cap 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 against the removal of the counter mechanism’s magnetic shielding.

This concludes the installation of the NK transmitter.

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