UMPP-2A MOUNTING INSTRUCTION

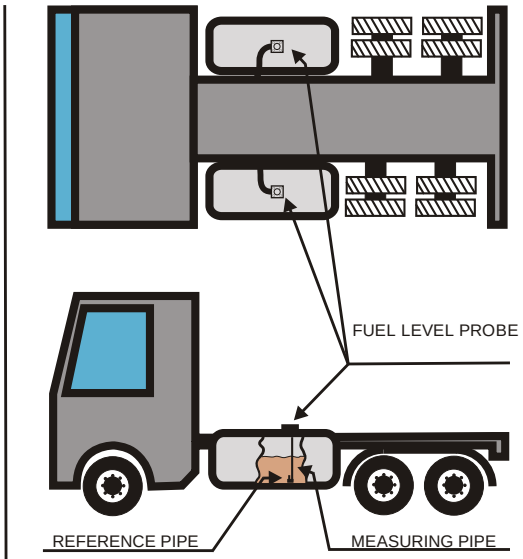


FIG.1

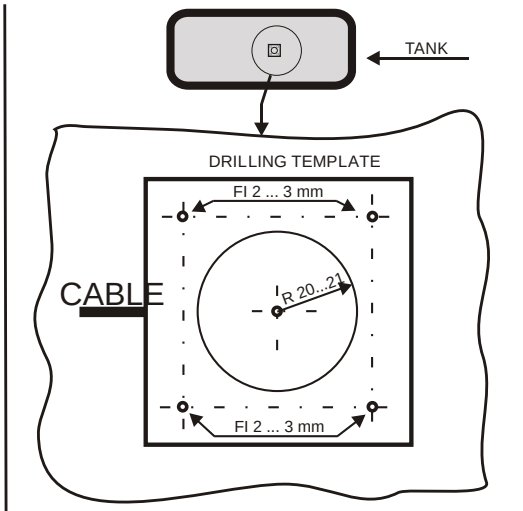


FIG.2

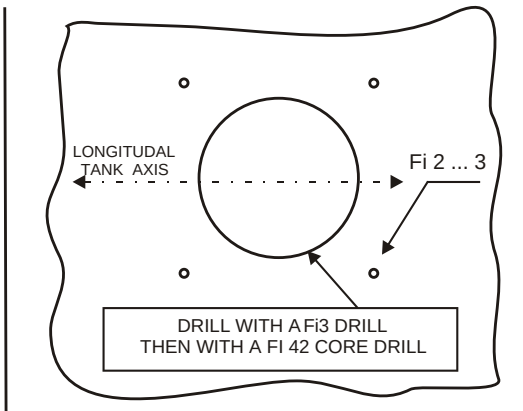
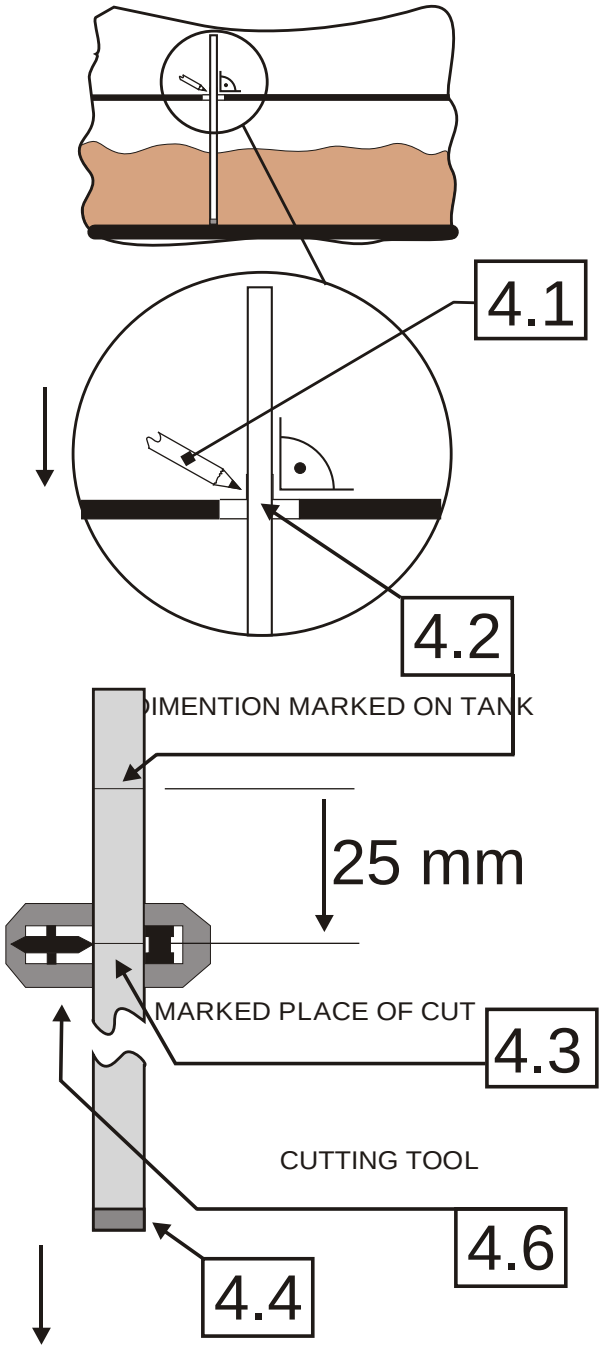


FIG.3

Figure 1 shows an example of installing probes/probes on vehicle tanks/tanks. The number of installed probes depends on the number of tanks in the vehicle or machine on which the probes will be installed. When choosing the installation location, follow the following criteria:

- the probe should be placed in the central one place of the tank, the surface should be relatively even and flat,
- the probe cannot collide with mechanical obstacles inside the tank - bulkheads, float elements, fuel lines
- the measuring tube should be installed as perpendicular to the fuel level as possible,
- the probe transducer should not be located in near the fuel return pipe - if not It is possible to follow the above rule use nylon mesh on the transducer. (the use of the mesh suppresses the sudden flow of fuel and does not allows for aeration in the measurement zone probes)
- mounted probe and connecting cable no should make it difficult to handle and operate the tank - refueling, servicing, washing.

After selecting the installation site, prepare it for attaching the drilling template. To do this, remove dirt from the tank and degrease the place of sticking with a solvent - NITRO, ACETONE. Stick the template, orienting its position using a line defining the longitudinal axis of the tank. The placed line of the tank axis is intended to facilitate even and aesthetic placement of the probe. Due to the equal division of the mounting holes, the probe can be rotated every 90°. The template is shown in Fig. 2. Holes should be drilled in the marked places with a drill of the given diameters. When drilling, remove chips frequently. To facilitate this operation, you can cover the drilling site and the drill with a thin layer of grease or, in the case of steel tanks, place a strong magnet near the holes. Make the main hole with a crown drill. Drill diameters are given in Fig. 3. After making the holes, remove the sticker, it is convenient to use a solvent for this purpose.



RYS.4

Determining the length of the measuring tube

The next step in installing the probe is to adjust the length of the measuring tube to the height of the tank. The routing and cutting of the tube is shown in Fig.4. The figure shows the sequence of steps involved in performing this operation.

Order of operations:

- unscrew the measuring tube from the transducer,
- insert the pipe with the threaded side into the tank through the hole made fi-42, rest the tube on the bottom tank, determine the vertical position of the tube,
- use a stylus or indelible marker to complete 4.1 scratch on the tube 4.2. Remove the tube from the tank,
- designate the cutting site 4.3. The place of cutting is moved by 25 mm towards the thread of the tube 4.4,
- cut the tube according to the marked length 4.3,
- cutting is best done with a roller device for cutting tubes 4.6.
- remove filings and impurities from inside the tube 4.5.

After mounting the tube in this way in the probe body, the tube is placed approximately 5 mm above the bottom of the tank

Notes on cutting the tube

When cutting the pipe with a saw blade or grinder, a large amount of small filings are created, the removal of which requires more attention. The easiest way to get rid of filings is to rinse the tube with diesel oil, solvent or a strong air stream.

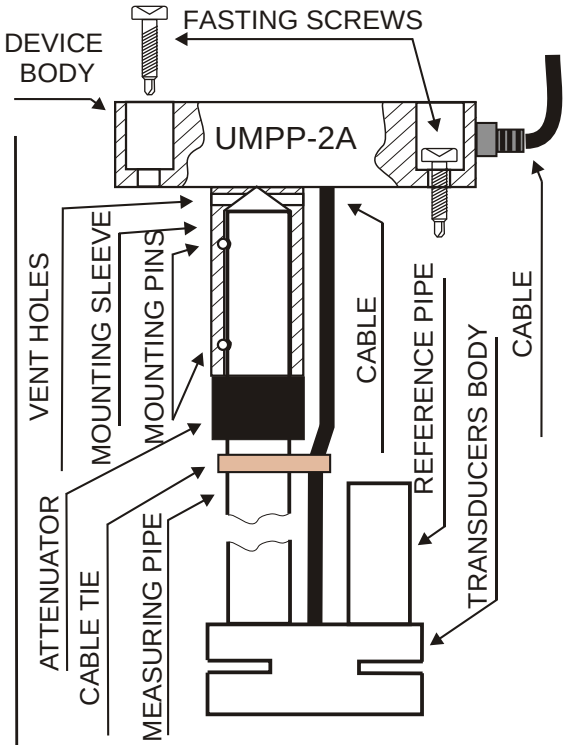


FIG.5

General view of the UMPP-2A probe and installation rules

The view of the probe elements is presented in Fig. 5.
The probe is mounted on the tank using four self-drilling screws.
The measuring tube is mounted in the body with two spring pins, which slightly but sufficiently deform the tube during installation and also immobilize it.
A very important element that affects the quality of measurements is the vibration damper - a rubber sleeve that should be mounted on the measuring tube. Remember to press the vibration damper to the mounting sleeve and secure it together with the transducer cable using a plastic cable tie, Fig. 5.
Due to the fact that the probe gasket is asymmetrical, during installation, pay attention to its orientation in relation to the rounding of the tank plane - on a flat surface it does not matter - the wider part of the gasket should adhere to the falling plane of the tank. The above description is illustrated in Fig. 6.

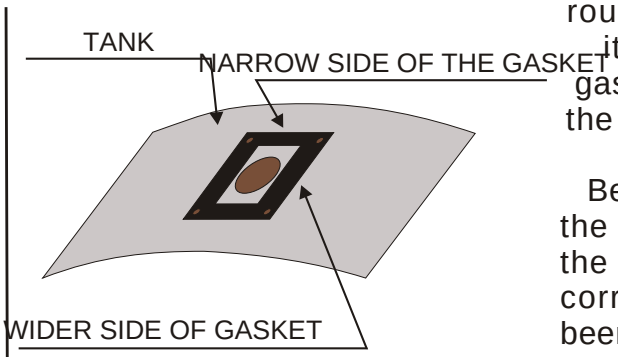


FIG.6

Before immobilizing the measuring tube in the probe body, make sure that the length of the measuring tube has been determined correctly and that the vibration damper has been installed. Screw the tube into the measuring transducer. Insert the mounting spring pins into the sleeve holes. Perform this operation with the measuring tube inserted into the sleeve and make sure to press it towards the vent holes. Place the sleeve on a stable, flat surface and use a hammer to drive the pins into the holes in the sleeve Fig.7. Lay excess cable along the measuring tube and secure

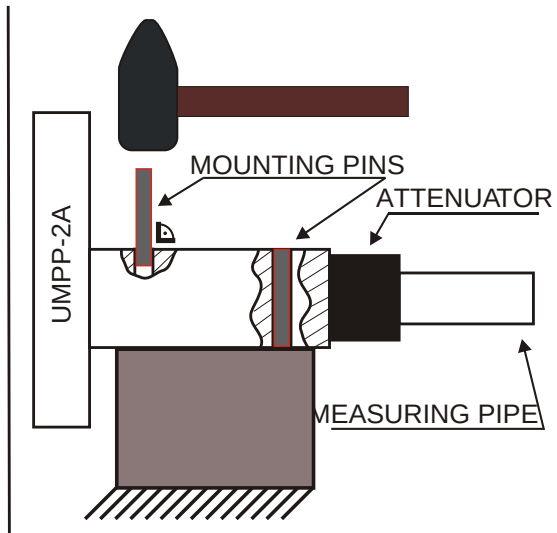


FIG.7