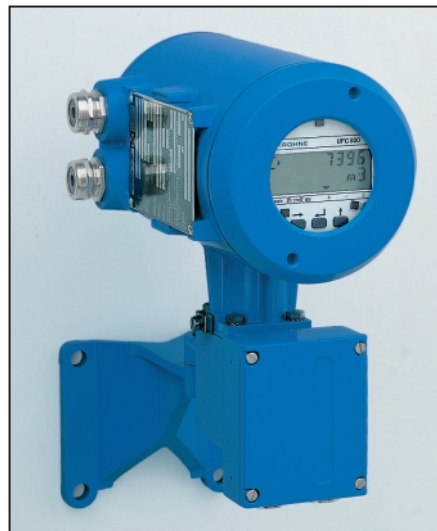
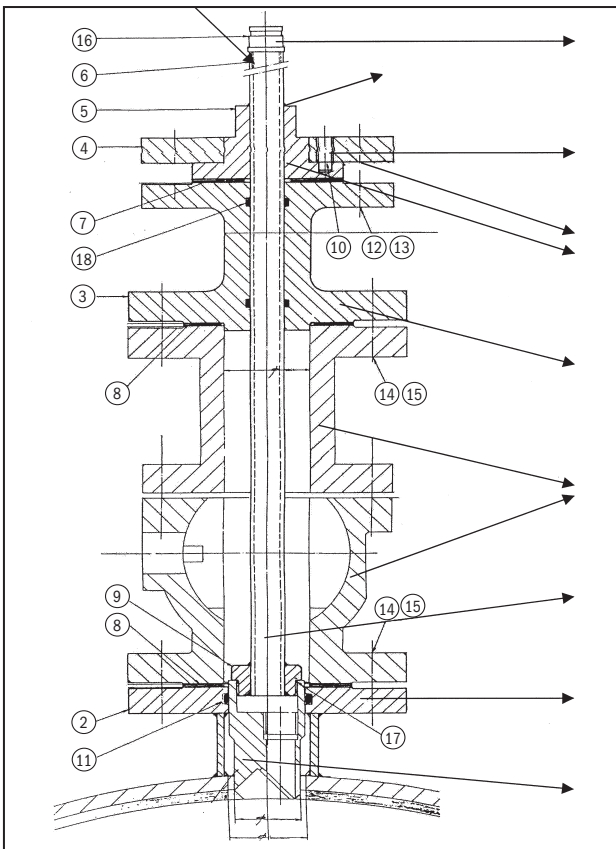


**Addition to the installation
and operating instructions**

ALTOSONIC Ultrasonic Flowmeters UFM 800 hot tap

HOT-TAP configuration and mounting procedure



Variable area flowmeters

Vortex flowmeters

Flow controllers

Electromagnetic flowmeters

Ultrasonic flowmeters

Mass flowmeters

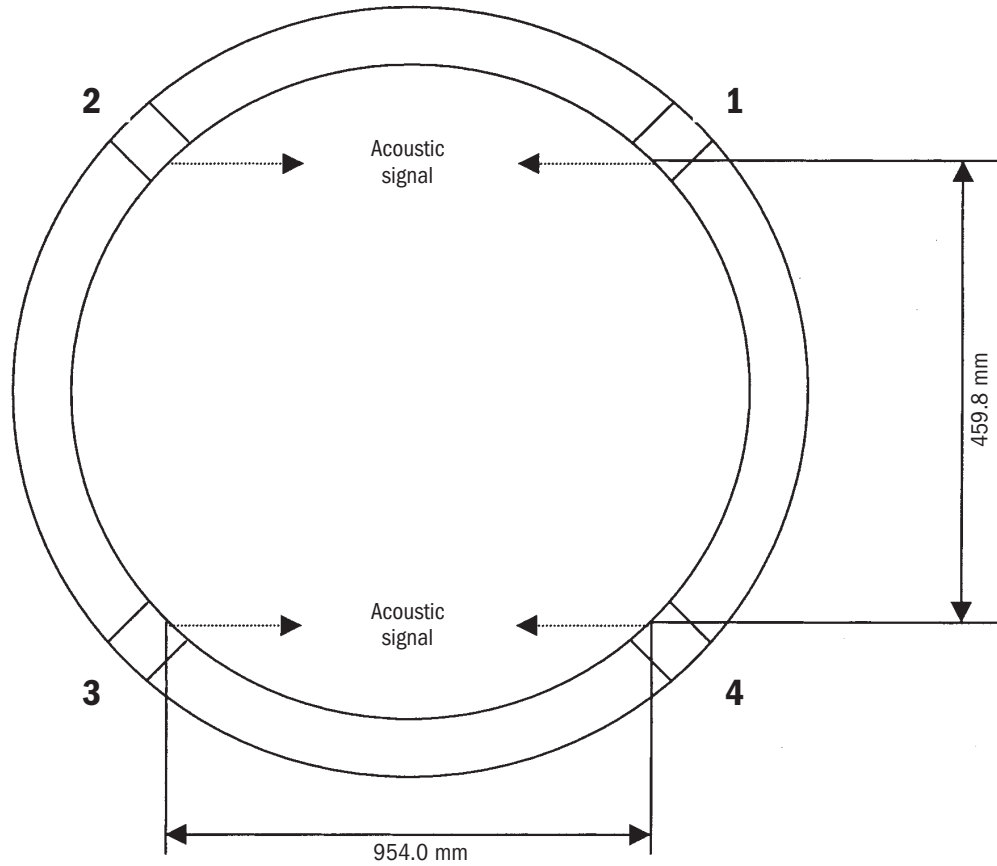
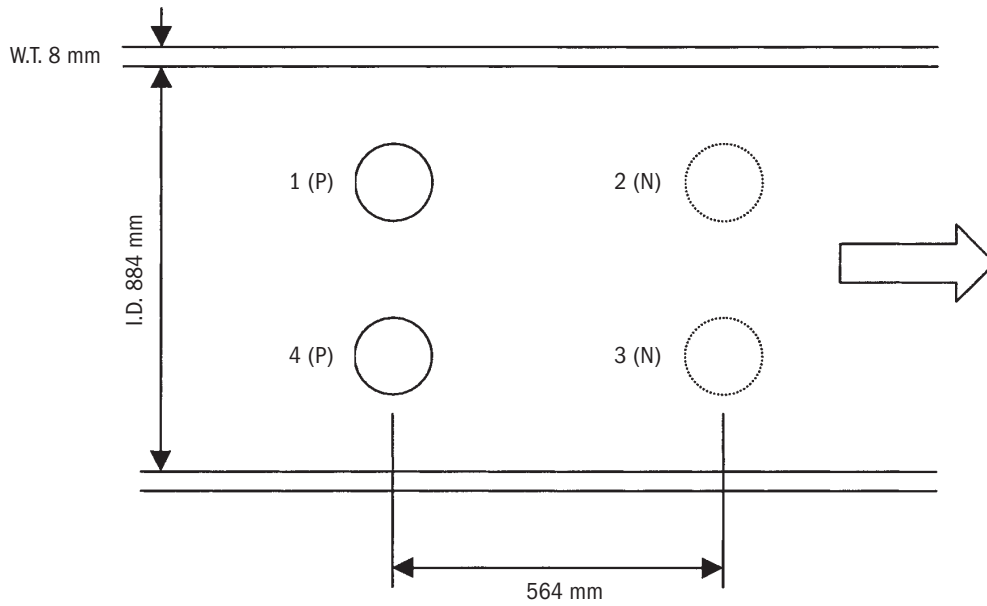
Level measuring instruments

Communications engineering

Engineering systems & solutions

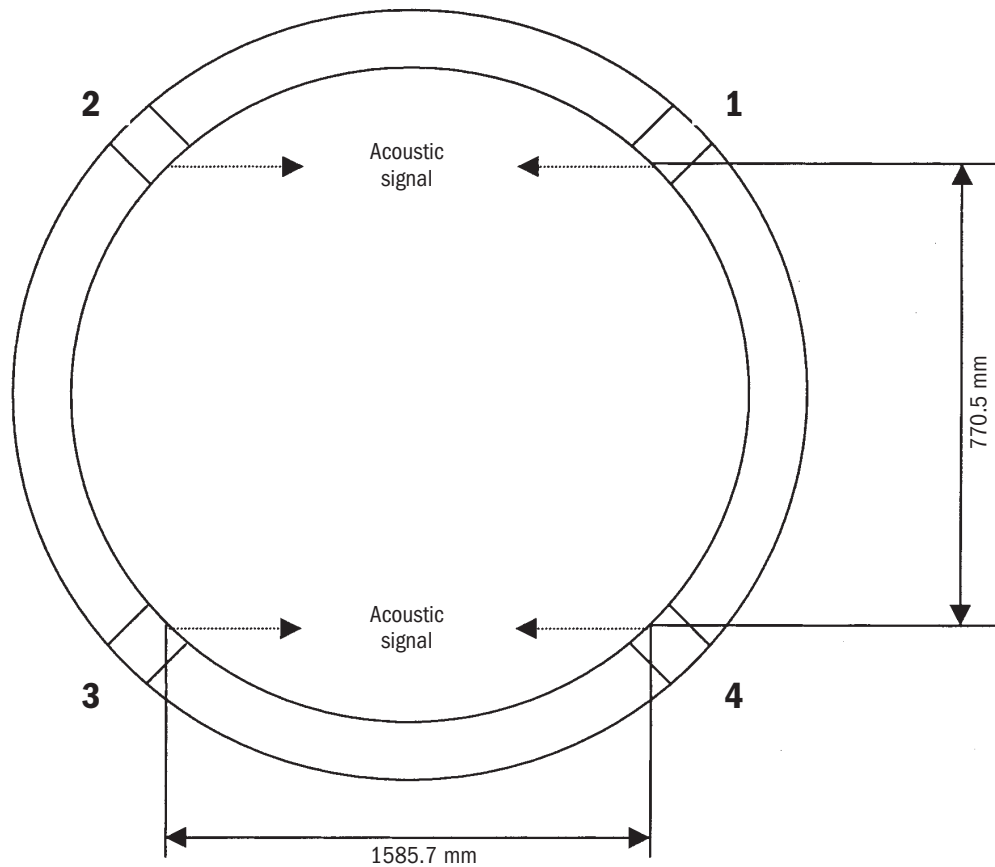
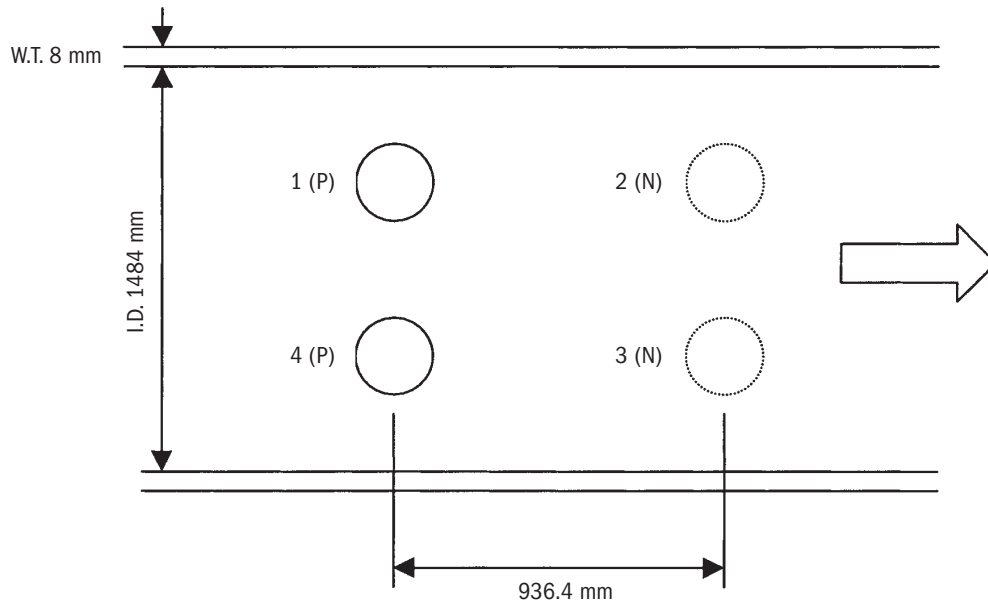
1.0 DN 900 Wall thickness 8 mm

Calculated Primary Constant: 0.8045
Expected Time of flight is 651 μ seconds



2.0 DN 1500 Wall thickness 8 mm

Calculated Primary Constant: 0.7881
Expected Time of flight is 1078 μ seconds



MOUNTING PROCEDURE

1. Install the "Weld-on Sockets" (4 pieces) on the pipe, inner and outer welding is required.
Use the dimensions as stated on the calculation sheet for the Dn900 and Dn1500 pipe. The accuracy and the functionality of the total installation depend on the accuracy by which the welding is done.

ACCURATE WELDING IS EXTREMELY IMPORTANT NO DEVIATION FROM CALCULATED FIGURES ARE ALLOWED

2. Connect the ball valve and the spool piece (Dn50 Pn16 flanges) on the "weld-on socket" (ball valve bottom down).
3. On top of this construction the drilling machine has to be installed. Hot-tapping has to be done by a specialized company. The size of the drilled hole has to be **46 mm**.
4. When the drilling is done retract the drill and close the valve, then remove the drilling configuration.
5. Install the complete Ultrasonic sensor piping on top of the flange (sensor has to be completely retracted). Install the sensors as described in the drawing, the sensor numbers are marked on the coax cable.
6. Open the valve and push the sensor rod into the pipe until the marker (saw cut).
7. The window side is marked with a "w" on the sensor rod, this is needed for positioning the sensors opposite each other for making the final alignment easier.
8. When all four sensors are mounted, align the sensors by using the procedure as described in item 4.0 of the UFM 800 manual (no. 7.30787.32.00).
9. When alignment is completed, weld the sensor rod onto the fixation spool piece.

Hot-Tap device for UFM 800

