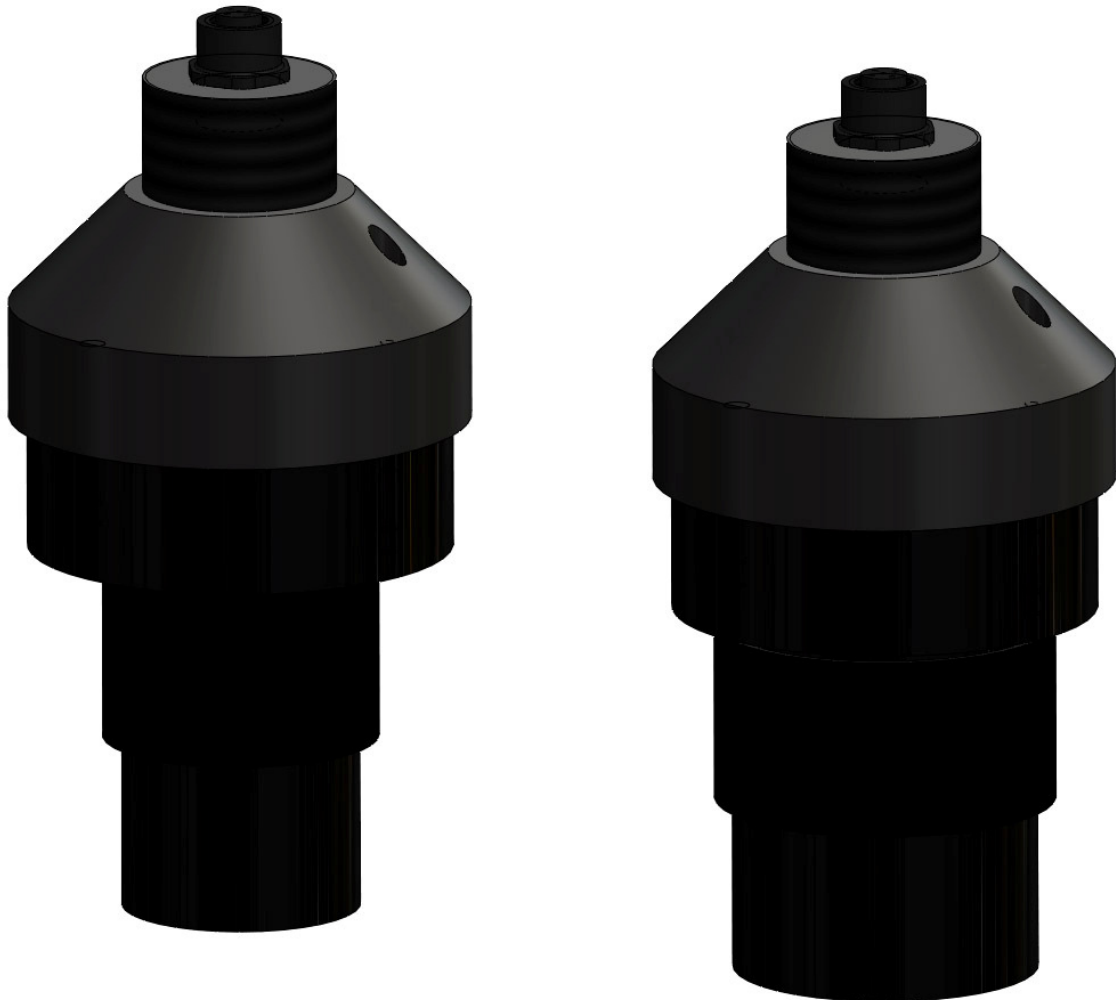


S425/C Ultrasound Level Sensor



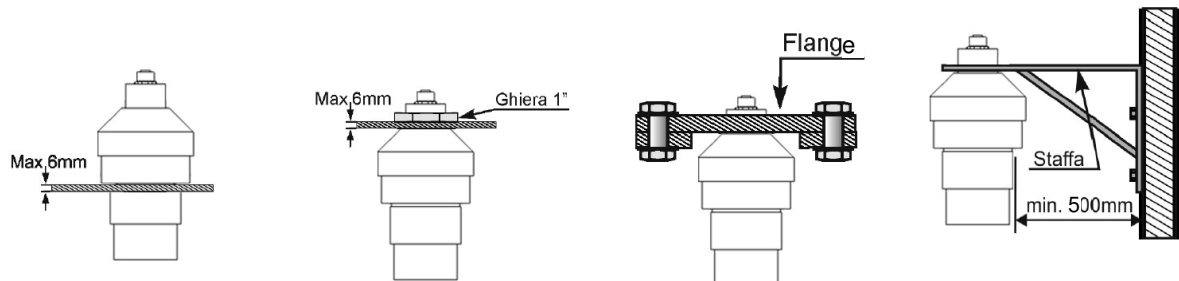
Applications

- Non-contact level measurement, ultrasonic, suitable for measuring liquids, with integrated temperature sensor for temperature compensation. Modbus RTU protocol.

Features and Benefits

- PVDF body, resistant to aggressive environments
- High resolution measurement, 1mm
- Dual threaded
- Instant installation with disconnectable connector (IP67)

Mounting examples



Precautions for installation and assembly

When the ultrasound probe is installed on a tank with convex roof, don't mount it in the center of the tank, but leave a minimum distance of 500 mm for the 5m probe and 800mm for the 8m probe between the sensor and the smooth wall of the tank (Fig. 1).

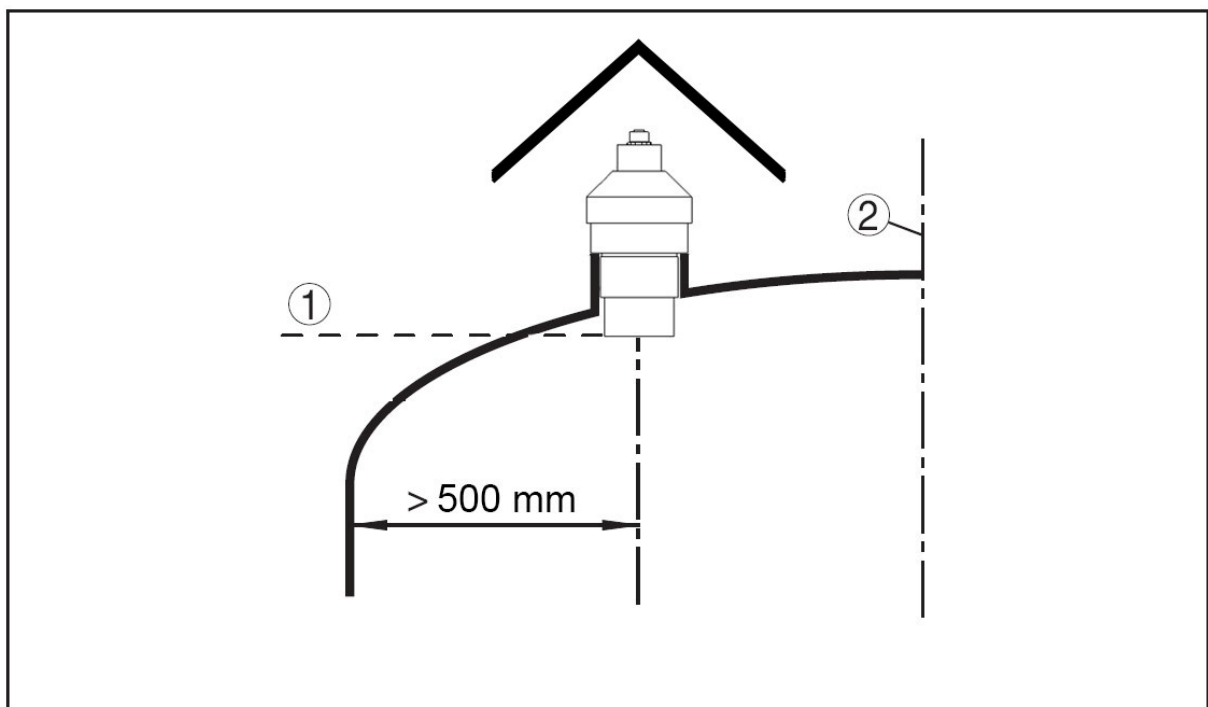


Fig. 1

1. Reference level
2. Axis of symmetry of the tank

Also use protection, to protect the sensor from direct sunlight and rain (Fig. 1).

Make sure that there are no obstacles in the range of the emission beam of the probe, and that the sensor is not installed in the proximity of the load flow (Fig. 2, Fig. 3).

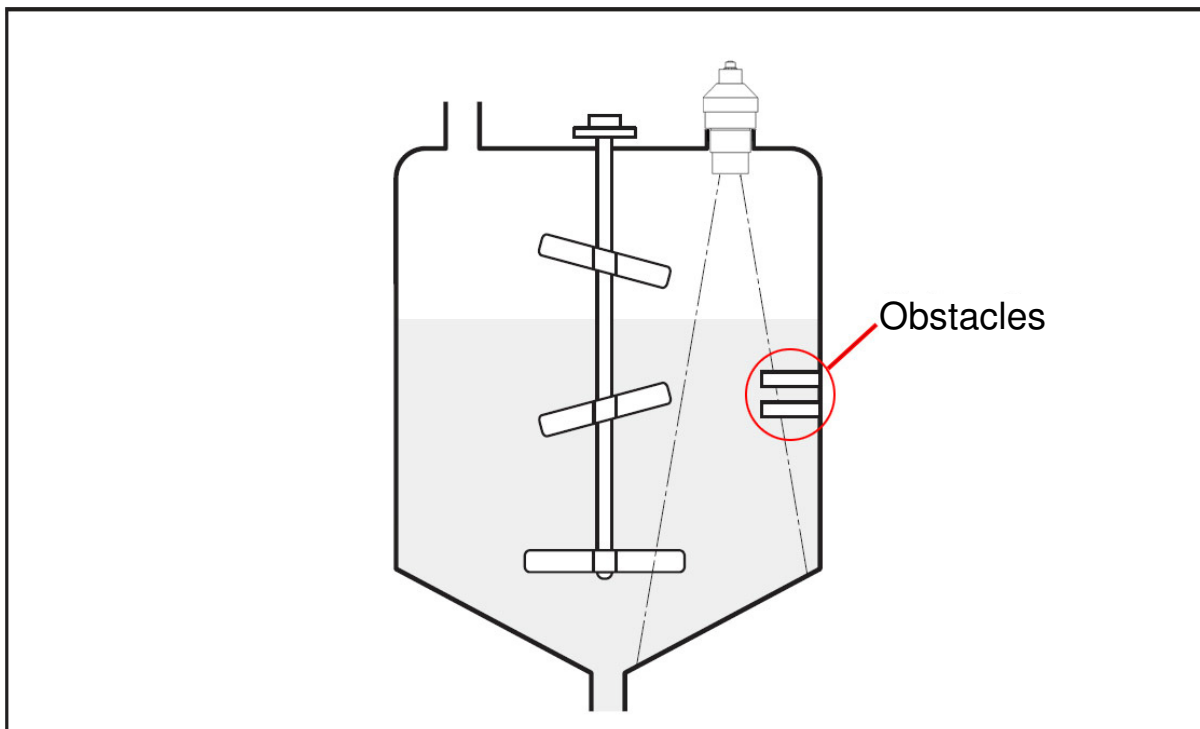


Fig. 2

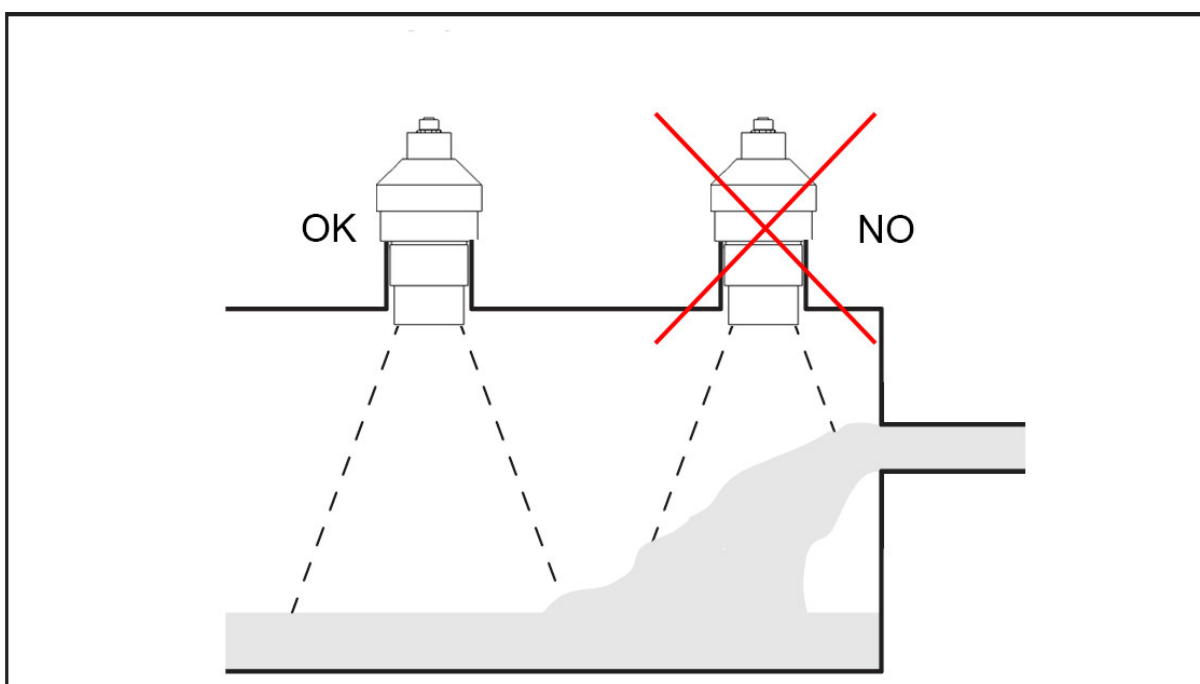


Fig. 3

Accertarsi che non siano presenti schiume sulla superficie del prodotto. Durante l'installazione si tenga presente che in prossimità della sonda c'è una ZONA CIECA (o ZONA MORTA) di 30cm per la sonda 5m e di 40cm per la sonda 8m, entro la quale il sensore non può misurare (Fig. 4, Fig. 5).

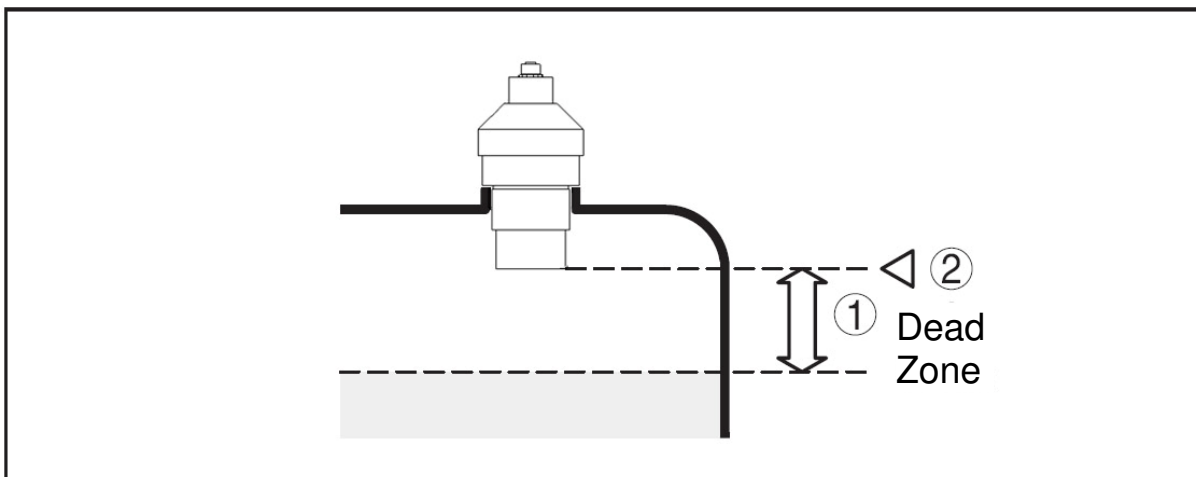


Fig. 4

- 3. Dead zone
- 4. Reference level

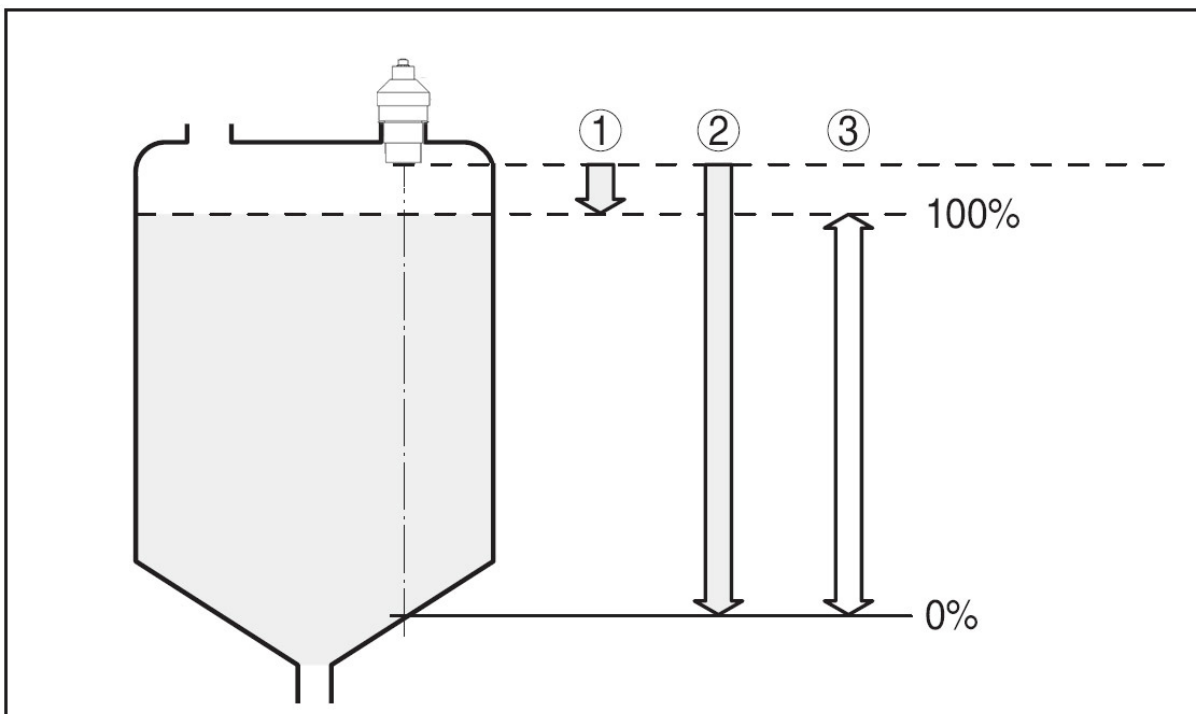


Fig. 5

- 1. Full tank
- 2. Empty (max. measuring distance)
- 3. Measuring range

Therefore, install the probe considering this dead zone.

By installing the probe into a socket, make sure that the transmitting part of the probe protrudes at least 10mm from the socket itself (Fig. 6, Fig. 7).

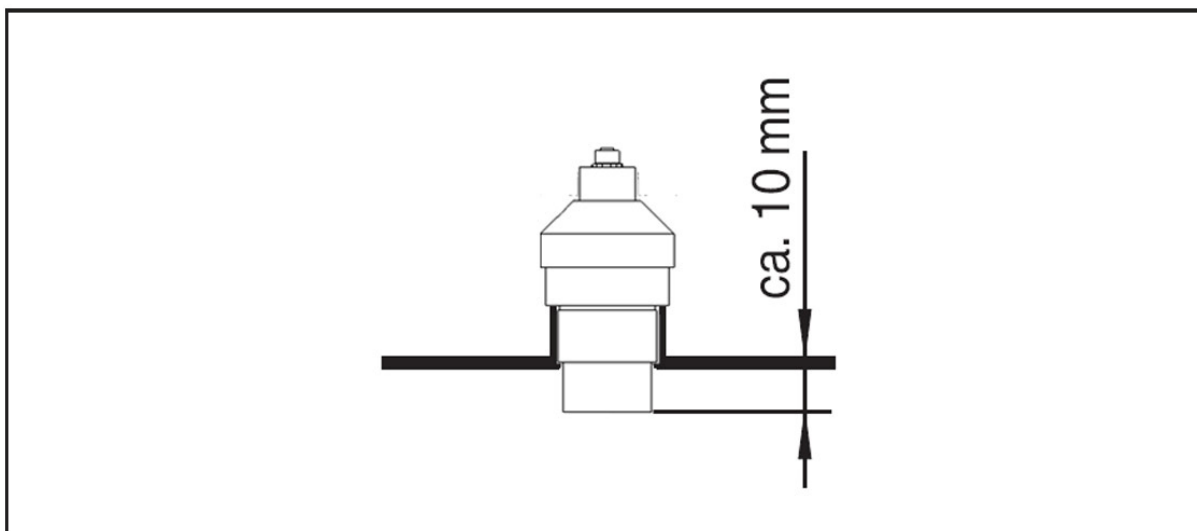


Fig. 6

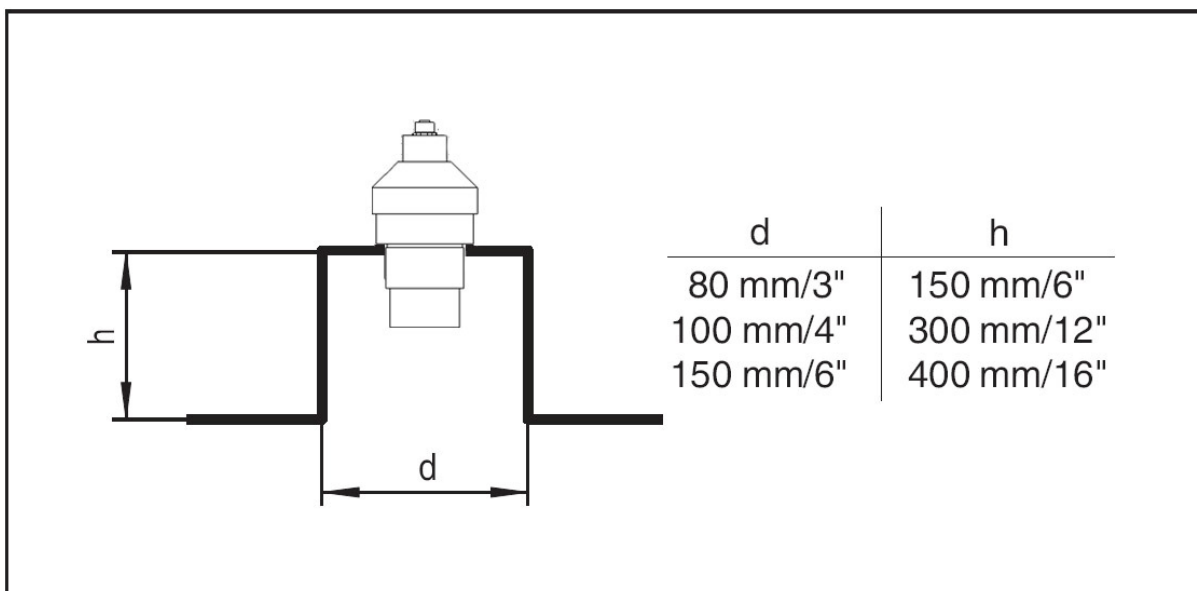


Fig. 7

Pay attention to the presence of disruptive influences that can affect the liquid level measurement, such as: presence of foam, the presence of obstacles in the tank, the presence of floating solids; these problems can be avoided by performing the level measurements in internal stillwells with minimum diameters of 130mm.

The tube must have a length greater than or equal to the distance to the empty, also must have one or more vent holes to allow the smooth filling and emptying of the tube (Fig. 8).

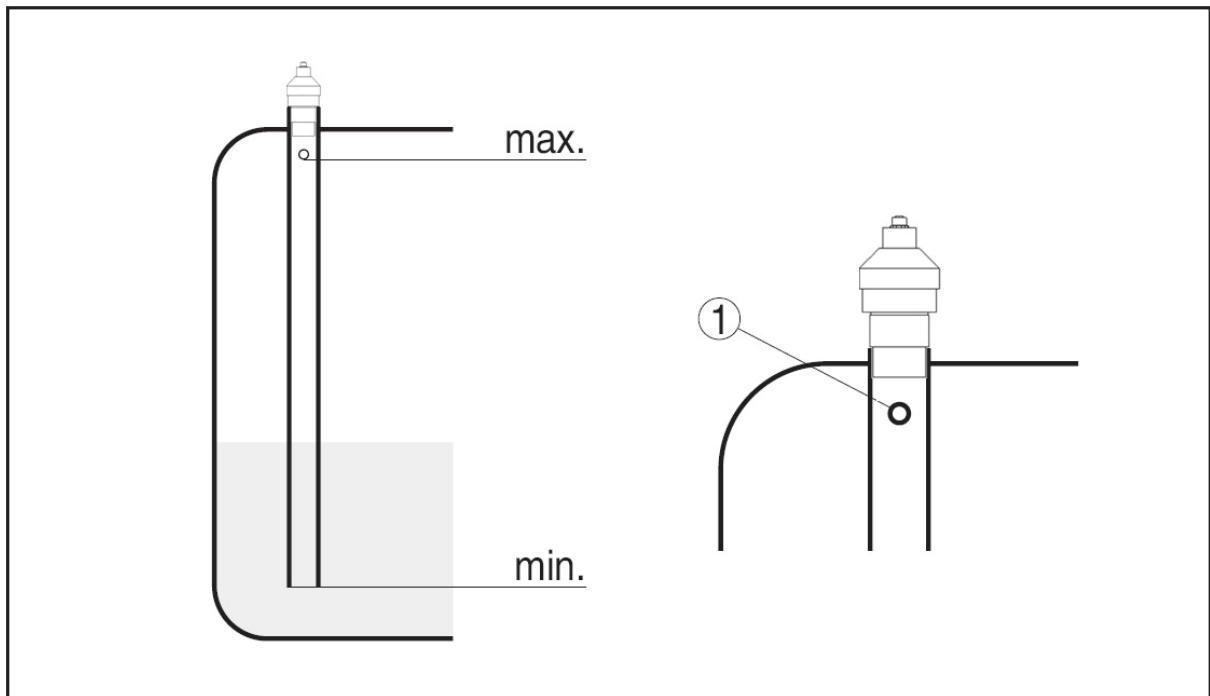


Fig. 8

1. Vent hole D5 ... 10mm (0.197 ... 0.395 in)

For the measurement of liquids align the sensor so that it is as perpendicular as possible to the surface of the product (Fig. 9).

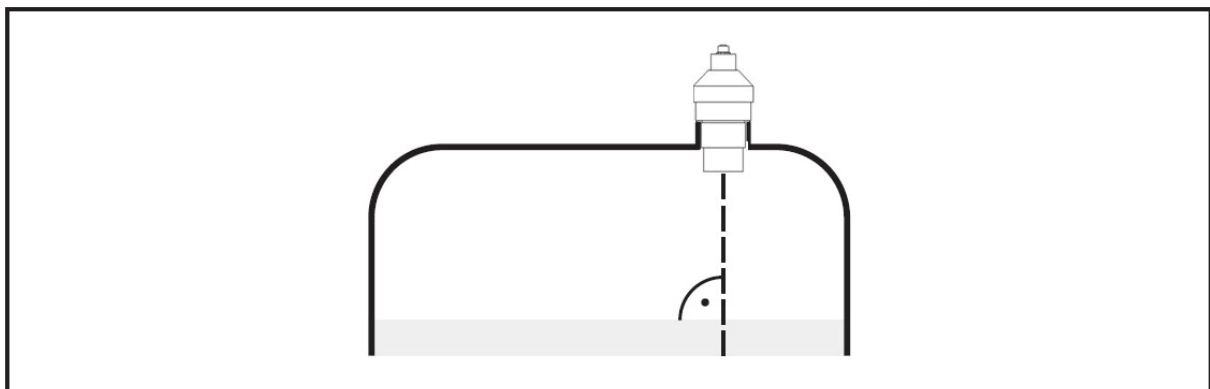
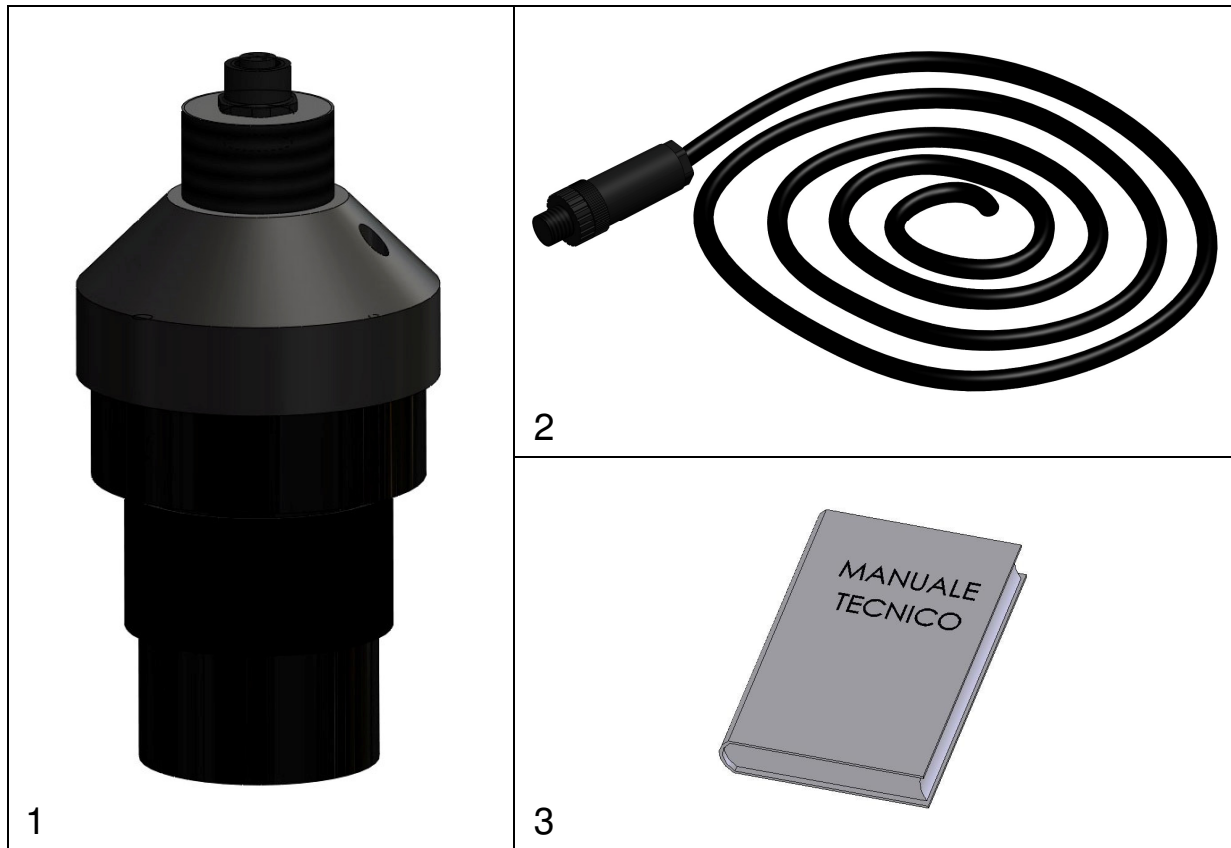


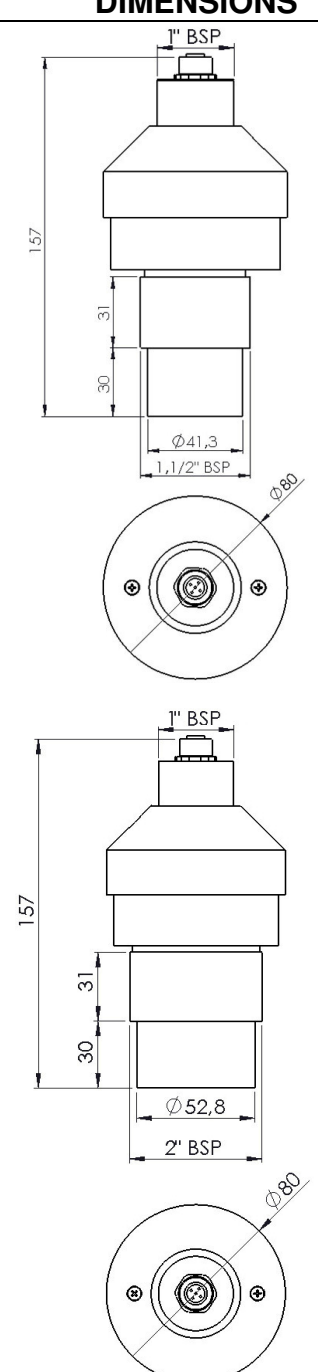
Fig. 9

Composition of the supply

The supply consists of a single package containing the following parts:



1. 1 S425/C Ultrasound Level Probe with connector
2. 5 m 6-pin cable with connector
3. 1 Technical Manual

TECHNICAL DATA	DIMENSIONS
Materials: — PVDF/PCV body	
Thread: S425/C 5meters: 1" BSP M and 1,5" BSP M S425/C 8meters: 1" BSP M and 2" BSP M	
Measuring ranges: S425/C 5meters: 30cm - 500cm S425/C 8meters : 40cm - 800cm	
Measuring method: Ultrasonico con compensazione di temperatura automatico	
Mechanical protection: IP67 (IP68 optional)	
Electrical connection: IP67 connector with 5m cable.	
Power supply / Absorption: 24Vdc / 2W	
Working Temperature: -10 °C +75 °C	
Working Pressure: from 0,5bar to 1,5bar	
Current output: optional (500 ohm max load)	
Accuracy: +-0,2% of the measured distance, not better than 2mm	
Resolution: 1mm .	
Digital communication: Modbus RTU standard	
Emission angle: : S425/C 5meters: 14°+-1° S425/C 8meters: 10°+-1°	

Order codes

9700920097	S425/C 5 meters Ultrasound Level Sensor
9700921097	S425/C 8 meters Ultrasound Level Sensor

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