1 Implementation – Connection

The LT-Radar Data Logger is fitted with an **extension card** that makes it possible to manage both a US sensor and a **Radar sensor;** in this case, two cables must be used.

1.1 Connecting the US sensor

✓ Use the **cable supplied with the US probe**

See the "**LT-US documentation**" for:

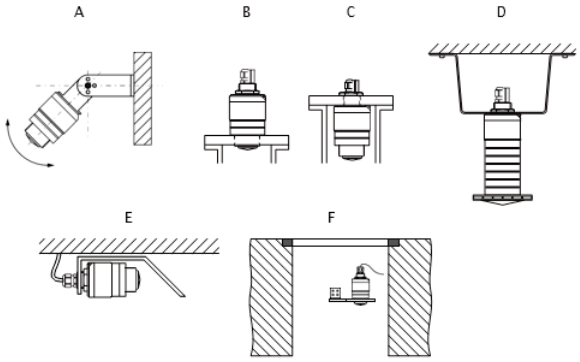
- US probe installation recommendations,
- ultrasound sensor calibration,
- diagnostics functions.

1.2 Connecting the Radar sensor

See the installation documentation for the Radar sensor in your installation.

1.3 Fitting diagrams

For the quality of the measurement, the sensor must be placed in the flow axis above an area where the eddies are not too strong. After mounting the bracket in a vertical or horizontal position, the incline of the bracket must be adjusted so that it is **parallel to the surface of the water.**

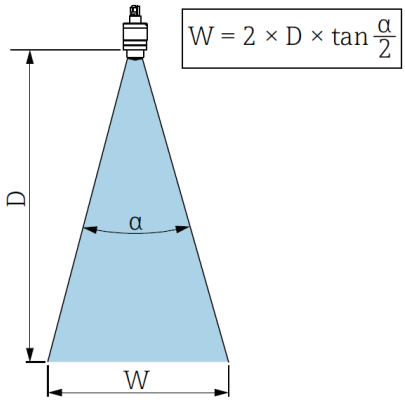


A *Adjustable wall or ceiling mount*
B *Front screw mount*
C *Rear screw mount*
D *Ceiling mount with locknut (included)*
E *Horizontal mount with reflective plate*
F *Wall mount for the shaft*

The Radar sensor must always be installed in an open space (without obstacles). Sensor cables are not carrier cables; do not use them to suspend the sensor.

1.4 Calculating the angle of the measurement beam

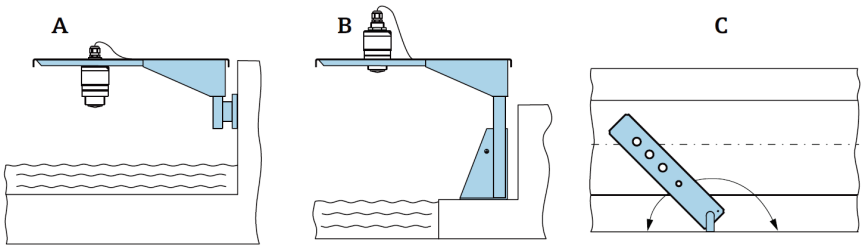
Example of mounting over a basin or channel: the figure below shows the relationship between the angle of the beam α, the distance D and the diameter of the beam W.



Example: the diameter of the beam **W** measured by the Radar is equal to the distance **(D) * 0.21**
If the sensor is attached 5 metres above the water level, the beam will be 1.05 m.

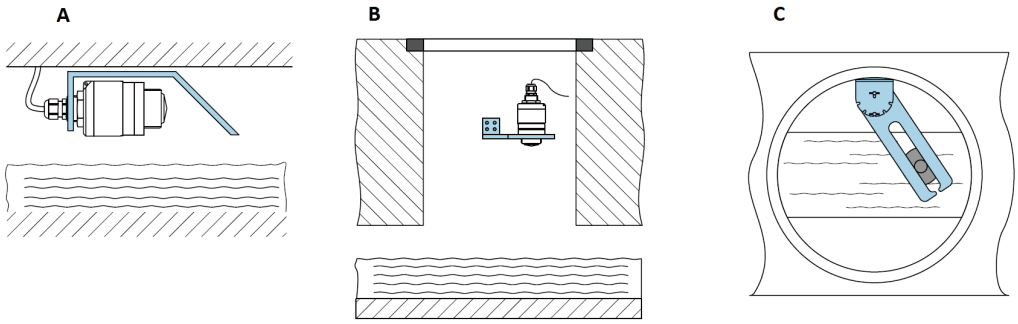
1.5 Installing the sensor

☑ Vertical position:



A *With wall mount*
B *With mounting frame*
C *With pivot (for example, to position the sensor above the centre of the channel)*

☑ Horizontal position:



A *With reflective plate (deflector)*
B *On an arm with wall mount*
C *On an adjustable swivel arm (for example, to align the device along the centre of a channel)*

The various installation accessories are offered by the sensor supplier.