

## Installing the transmitter

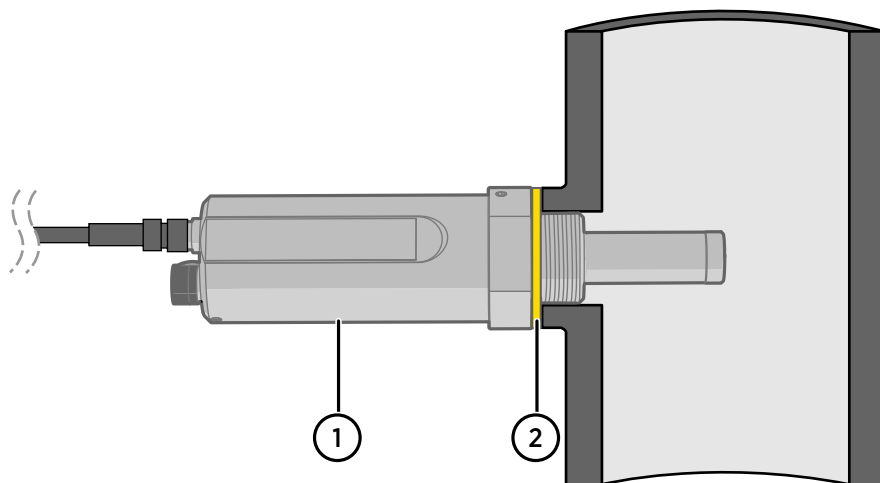
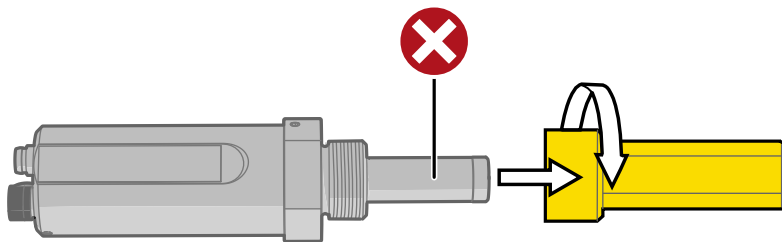


Figure 1 DMT152 installed directly to pipeline (max. 50 bar)

- 1 DMT152 transmitter
- 2 Sealing ring

After selecting a suitable measurement location, install the transmitter as instructed here.

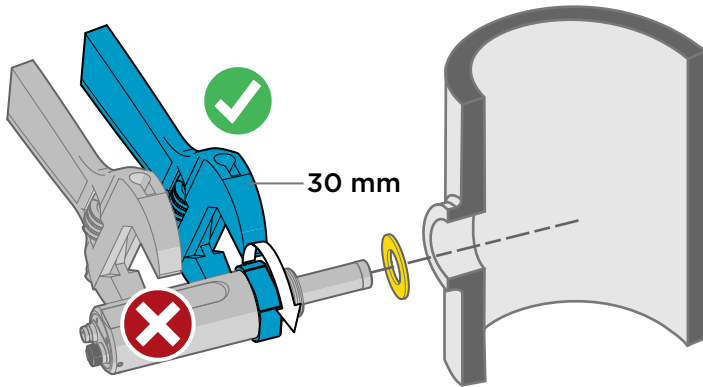
- ▶ 1. Remove the yellow transport protection cap from the transmitter. Do not touch the filter with your hands.



2. Prepare the sealing of the connection:
  - a. If the transmitter has an ISO G1/2", UNF 3/4"-16, or UNF 5/8"-18 thread, place the sealing ring at the base of the thread. Always use a new sealing ring; do not reuse a previously installed ring.
  - b. If the transmitter has an NPT 1/2" thread, do not use the sealing ring. Instead, apply PTFE tape or suitable sealant paste to the thread. Follow the application instructions of the paste.
3. Make sure that the threads on the mounting point are of the correct type, and fasten the transmitter to the measurement point. Use your hands to turn the probe until it feels tight. Do not use force at this point, and check that the sealing ring (if used) remains centered.

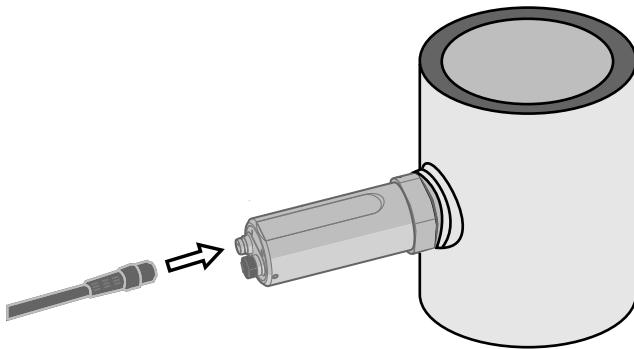


- Use a 30-mm wrench to tighten the connection to 25 Nm. If you do not have a 30-mm wrench, use a 1 3/16" wrench or an adjustable wrench.



**CAUTION!** Only tighten the probe from the 30-mm tightening nut. Do NOT apply force to other points in the probe body.

- Connect the wires of the connection cable. When using cables provided with DMT152, see [Wiring \(page 2\)](#) and [Power supply requirements \(page 3\)](#).
- Plug in the cable to the transmitter. Be sure to use the correct connector; see [Wiring \(page 2\)](#).



- Cover the unused connector on the transmitter with the rubber plug that is attached to the transmitter.
- Turn on the power supply. DMT152 performs self-diagnostics at startup, and the output is frozen for several minutes. The transmitter will output an approximated reading after one minute, but accurate measurement will only be available after the startup procedure is complete.

Normal operation is typically achieved in 10 ... 15 minutes.

**i** When starting up, the transmitter always performs the self-diagnostic procedure, including autocalibration and sensor purge. Keep the transmitter continuously powered to optimize its measurement performance and availability.

## Wiring

Table 1 Standard wiring pinouts and wire colors

Pin	Connector I	Connector II	Wire color
1	V DC supply+	V DC supply+	Brown
2	Signal Ch 1+	RS-485 - / B	White
3	GND	GND	Blue
4	Signal Ch 2+ / LED	RS-485 + / A	Black

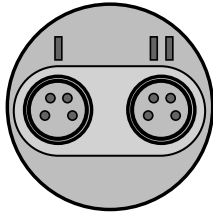


Figure 2 Connectors I and II

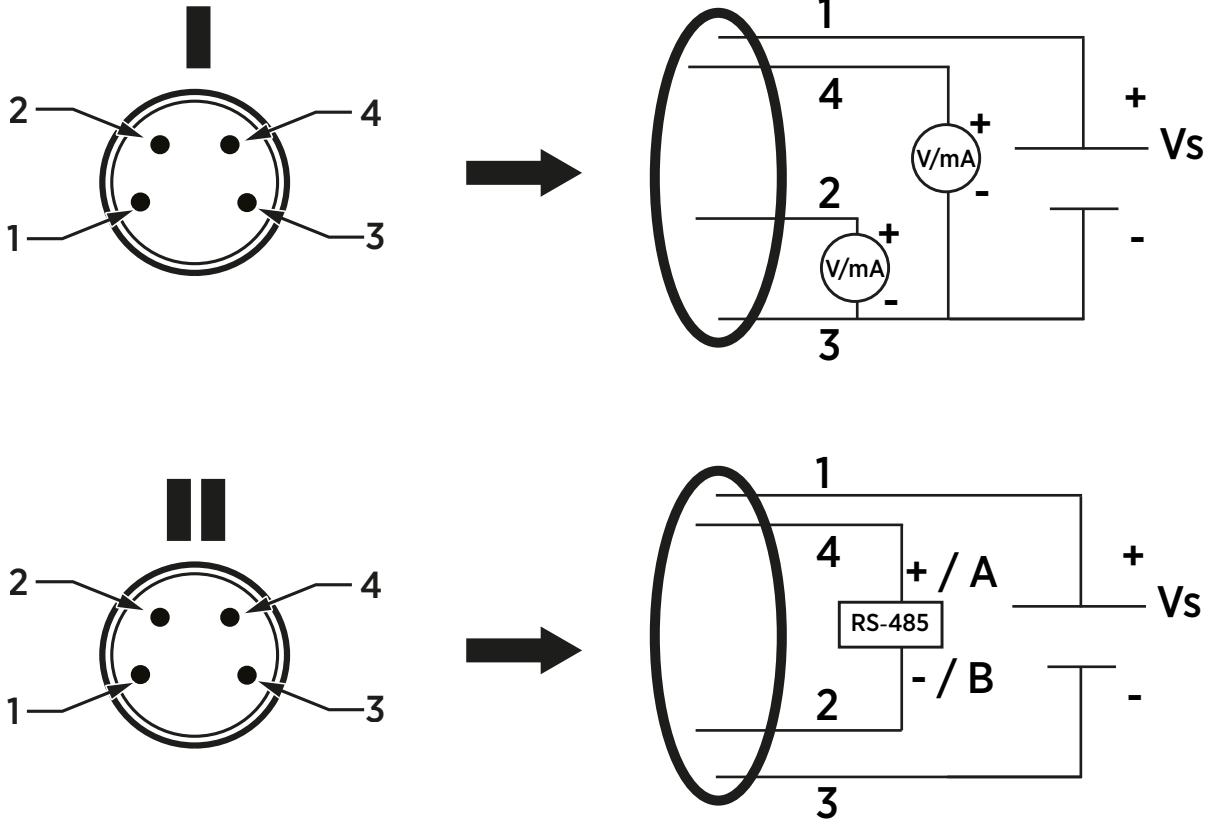


Figure 3 Connector pinout



**CAUTION!** The power supply lines are internally connected. You can use either one of them, but do not connect more than one supply voltage in permanent installations. Temporary simultaneous use with the USB serial interface cable or DM70 handheld dew point meter (which also provide operation power) is OK.

## Power supply requirements

The DMT152 transmitters are designed to operate with a supply voltage of 15 ... 28 V DC (voltage output version) or 21 ... 28 V DC (current output version). When only the RS-485 output is used, 11 ... 28 V DC is enough in typical measurement conditions.

When measuring in pressures 20 ... 50 bar<sub>a</sub> (290 ... 725 psi<sub>a</sub>) or in temperatures -40 ... 0 °C (-40 ... 32 °F), a supply voltage of 21 ... 28 V DC is required.

The power supply should maintain the voltage for all load conditions. Voltage fluctuations must be smaller than 0.3 V, as continuous supply voltage fluctuation may interfere with the autocalibration function.

Current consumption during normal operation is 20 mA. Consumption increases during autocalibration and sensor purge. The maximum current consumption is 220 mA pulsed current.



DMT152 can be powered by the MI70 indicator or the Vaisala USB cable. However, the power supplied by these devices may not be enough for all functions of the transmitter (for example, the current output). If you are using a separate power supply in connector I, connect the power supply first before connecting the USB cable or the MI70 indicator. The order is important, since the transmitter will use the power supply that is connected first.

## Dimensions

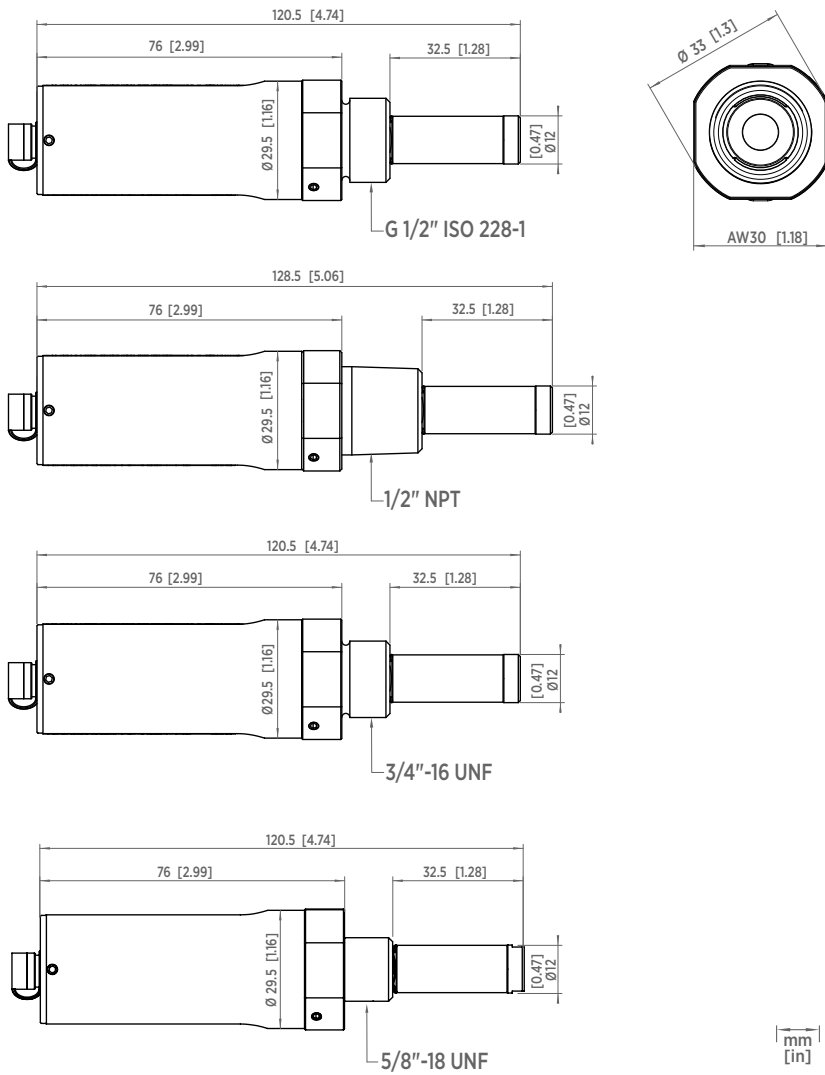


Figure 4 DMT152 dimensions



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