

Fields of application

- Level measurements in vessels, tanks, water technology plants

Description

The economical level probe DP-LM has been designed for measuring standard levels and filling levels in water plants, in oil or other non-aggressive mediums. Measurements can be carried out in a water depth of up to 250 meters.

Optionally, a version of the level probe covered with platinum membrane or other special coating is available for measurements in aggressive liquids.

The level probe can be handled easily, it is very stable and is delivered with an stainless steel casing and connected cable (integrated pressure compensation).

2 variants of cap configuration are available (as weight made of steel and as plastic cap).

The transmitters are characterized by a good long-term stability. Optionally they can be delivered with 0.25 % FS or 0.1 % FS.

Options

- PTFE cable
- overvoltage protection for lightning protection
- temperature measurement

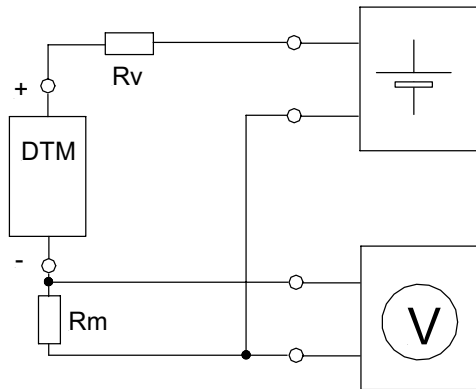
Safety information

During installation, putting into service and operation of these pressure sensors, it is necessary to observe the relevant safety regulations that are in force in the country of the user (as for example, VDE 0100).

Electrical Mounting

- All wiring should conform to local codes and must be carried out by authorised personal only. Keep high and low voltage wiring separated. For applications in critical industrial environment use special cables.
- Observe without fail the connecting information – labeled on the transmitter or laid down in the operating instructions – while connecting the pressure transmitter.
- Ensure that the cables routed without crushing.

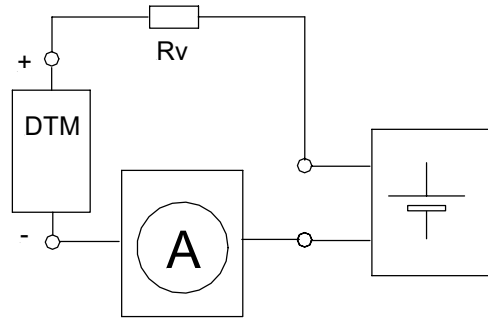
A



2-wire current transmitter
Voltage measurement across a resistor

$$R_V + R_M \leq (U_B - 10 \text{ V}) / 20 \text{ mA}$$

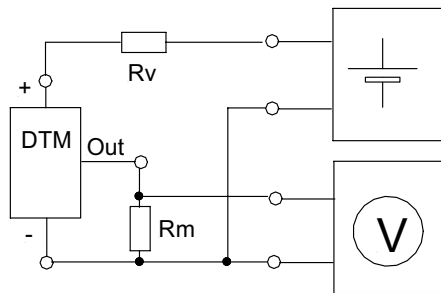
B



2-wire current transmitter
Current measurement

$$R_V \leq (U_B - 10 \text{ V}) / 20 \text{ mA}$$

C

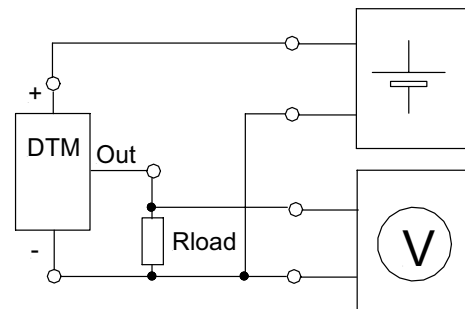


3-wire current transmitter
Voltage measurement across the load resistor

$$R_V + R_M \leq (U_B - 9 \text{ V}) / 28 \text{ mA}$$

DTM pressure transmitter (DP-LM)
 R_V serial resistor (advisable)
 R_M Resistor for measurement
 U_B Batterie voltage
 R_L load resistor

D



Pressure transmitter with voltage output
Voltage measurement across the load resistor

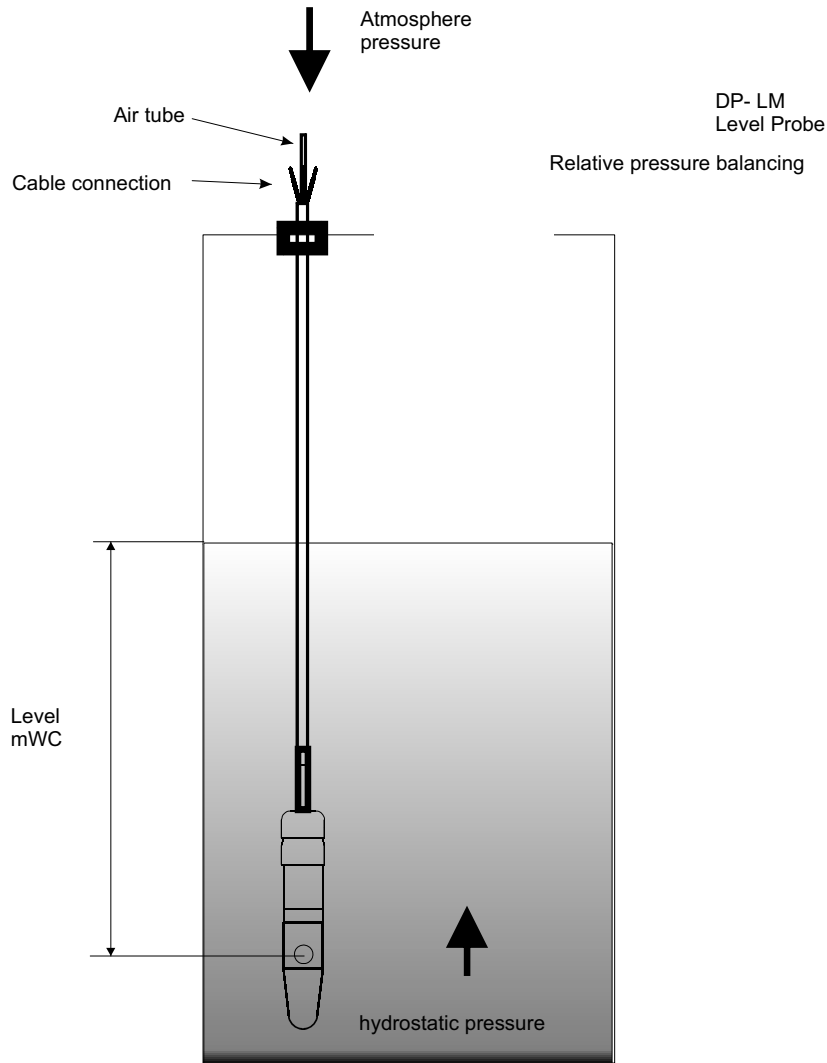
$$R_L \geq 4,7 \text{ k}\Omega \text{ f\u00fcr DST-3x.x}$$

$$R_L \geq U_{OUTmax} / 2 \text{ mA f\u00fcr DST-20.x}$$

Cable colors to type Childlife

Default: (A) + white, - brown, yellow / green housing
 (B, C, D) + white, - brown, out yellow, green housing

Application

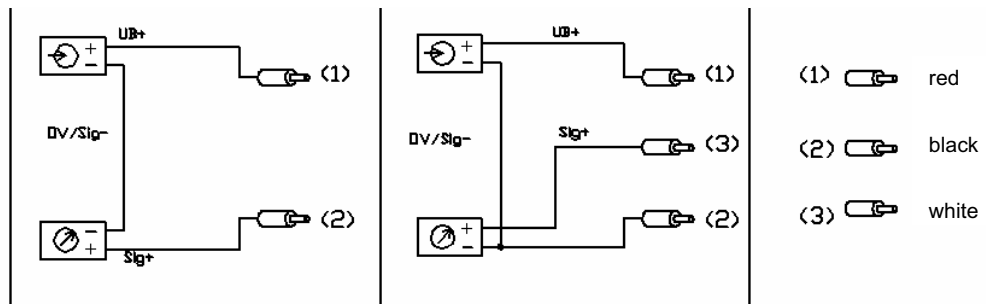


Cable Connection:

(A) DP-LM 10.0 4...20 mA, 2 wires

(B,C,D) DP-LM 20.0 / 30.0, 3 wires

Einzeldracht- durchführung



Errors excepted; subject to alterations in the sense of technical improvement.