

Continuous level transmitter: DLT2 and DLT3

Without overflow protection DLT2, with overflow protection: DLT3

Application and function

The continuous level transmitters DLT2 and DLT3 in combination with the EC 8 probe are a level control system. The output is a 4..20 mA current proportional to the filling level.

A limit value for a maximum filling level can be programmed, where the auxiliary relay opens and therefore enables an overflow protection (version DLT3).

It is intended for use in steam boilers or other fluid tanks.

The product meets the requirements of EU Directive 2014/68/EU (PED).

Regulations applied: corresponding DIN EN standards.

Function DLT2 / DLT3

The DLT2/DLT3 level transmitters operate in conjunction with the Igema EC 8 level probe, based on the capacitive level measurement method, exploiting the dielectric properties of the medium. For the safe operation of this measuring method a minimum size of the dielectric constant of the substance to be measured is required.

The capacitive method of measurement enables the continuous determination of the fill level. The pre-saved limit values for 0% and 100% provide the value range for the calculation of the current fill level. After scaling, the current value is converted into an analogue signal for output to the standard 4..20 mA current interface.

The evaluation unit supplies the measuring probe, which is mounted in the container, electrically, and evaluates its signal.

The 4..20 mA signal is available at the terminal block of the DLT2/DLT3 for further processing.

The auxiliary relay has 2 functions:

1. Error signalling:

If an internal error occurs, the relay opens and the 4..20mA output goes back to 0mA. This enables a warning message to be displayed.

2. Displaying an overflow (version DLT3):

If a programmed filling level is exceeded, the relay opens and therefore enables the implementation of an overflow protection.

The 4..20mA current output remains active and still allows further control via a PLC.



Standard technical equipment

- DLT2/DLT3 in plastic plug-in housing for installation in switch cabinets
- Quick fastening with spring detent on standard 35 mm rail according to DIN EN 50022; or screw fastening on mounting plate

Technical data

Main's connection	110 – 240 V / 50/60Hz
Power consumption	5 VA
Device fuse	63 mA/T
Protection class according to	IP40 ¹⁾
DIN EN 60529	0°C – 55°C
Allowed ambient temperature	4..20 mA
Power interface	500 Ω

Power interface (not galv. separately)	Output current	4 mA .. 20 mA	
	Load	max. 500 Ω	
Limit or additional relay	Switching voltage (max.)	250 VAC	24 VDC
	Switching current (max.)	4 A resistive	4 A inductive/larger loads: use contactor

Length of connecting cable	max. 250m
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- 1) According to DIN EN 12952-11, 4.3.4, protection class IP54 must be ensured in the boiler area (switch cabinet)

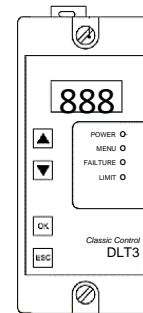
DLT2/DLT3 perform a periodic self-check.

It is to be expected that, due to non-linear container geometry the filling quantity (liquid quantity/volume) will not be linear to the filling height/level!

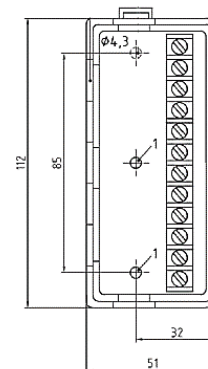
Digital Documentation



Front view



Lower part with connecting terminals



Side view

