Type Series	Product-Data Sheet - 01.2022
AE-200 **AE-201**	**Overfilling Protection Type AE 200 with Level Limiter Type AE 201**

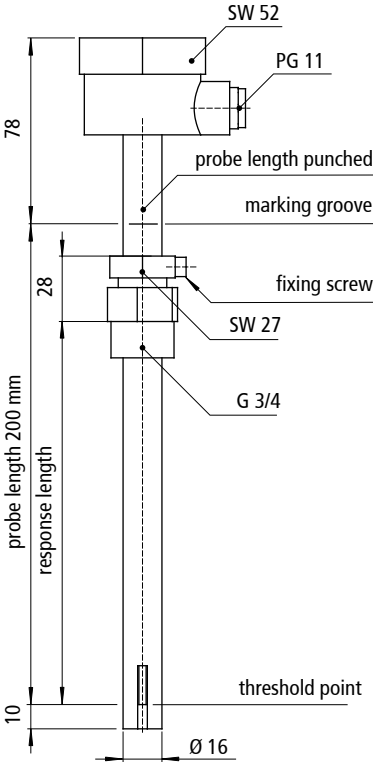
Characteristic	Area of Application / Media			Transportation / Installation	
					
	E5 flash point > 55°C	**E10** fuel oil			

Functional description of the level indicator
The functional principal of this level indicator is based on the different heat conduction in liquid or gasiform environment. An encapsulated PTC thermistor in the peak of the level indicator is heated in dryness by the signal current of the measuring transducer till a sudden enlargement of its electric resistance occurs. As soon as the peak is immersed in liquid, for example it is reached by the liquid level and cooled, the resistance falls back to its original degree. The signal current is limited in such a way that a re-heating is not possible under this condition (immersed). In gasiform environment it takes 15 seconds (at +80 °C of environmental temperature) to 2 minutes (at -25 °C of environmental temperature) to heat up the PTC thermistor.

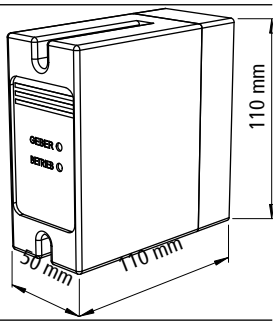
Functional description of measuring transducer
In the measuring transducer, the resistance changes of the PTC thermistor are converted into relay circuits with a binary signal output. Relay de-energization occurs when the level detector tip has cooled down and also in the event of a power failure as well as a short circuit and line break in the connection between the level detector and the measuring transducer. This is indicated on the transmitter by a yellow LED going out. A green LED indicates that the transmitter is ready for electrical operation.

Exceptions
Tanks for the storage of diesel, EL heating oil and gasoline, which are filled from road tankers. In this case, the limit level detection is carried out via an approved limit value transmitter or in connection with the overfill confirmation box and tank truck switch-off electronics (B-AE-110 or B-AE-907-W).

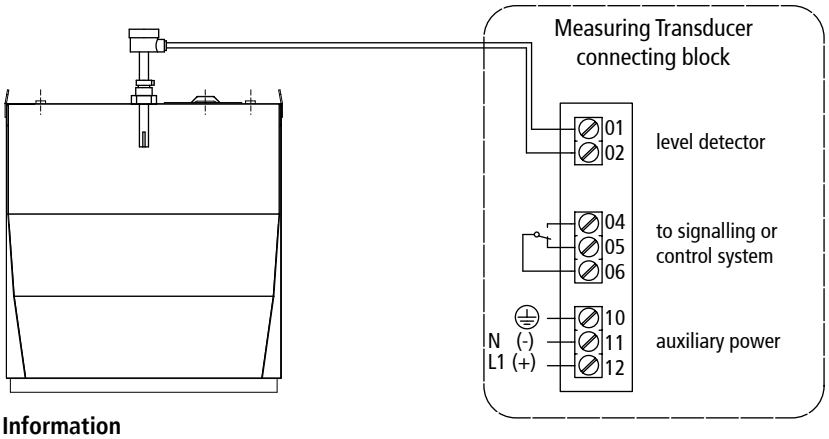
Technical Data of the Level Indicator
media temperature range: -25 °C to +50 °C
environmental temperature: -25 °C to +80 °C
pressure range: 0 - 2 bar
immersion switch delay: < 2 seconds
housing protection: IP 67



Technical Data of the Measuring Transducer
auxiliary power: 230 V, 50 Hz or 24 V, DC
power input: 4 VA / 6 W
environmental temperature: -25 °C to +60 °C
housing protection: IP 40
outputs: floating change-over contact
AC: 250 V; 4 A, cos 0.7; 500 VA max.
DC: 250 V; 0.25 A, 50 W max.
Level detector input: two-core, no polarisation, max. cable length 750 m for 1.5 mm2



Electronic Connection



Information
The overfill protection is a unit which interrupts the filling process of a tank with hazardous liquids or alarms optically or acoustically before the allowed liquid lever (limit) is reached. Stationary and unpressurised tanks for storage of hazardous liquids must be equipped with an approved overfill protection in case of mechanical filling.

Material	Approval	Documentation	Page
	Z-65.11-185, 05/PTB Nr. III B/S 1993 F	Operating Instruction 1x German	1 / 1

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