Transmitter 3-wire, intrinsically safe

II 2 G Ex ia IIC T4 Gb II 2 D Ex ia IIIC T115°C

Type 29710-NI-xx

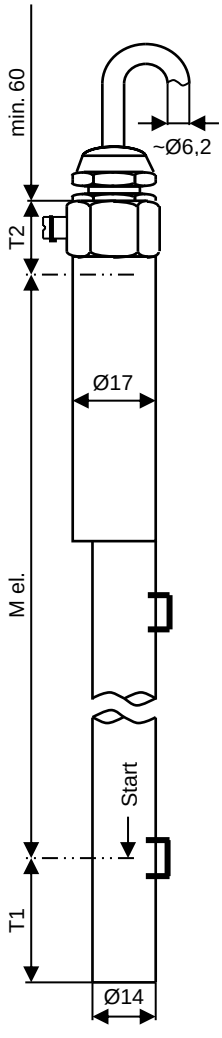
Function: **Intrinsically safe transmitter with ATEX/IECEx certificate for use with WEKA VLI for media temperature ≤ 150°C**

The transmitter is mounted outside of the float chamber opposite to the indication rail (see datasheet 20010501).
The magnet inside the float activates the reed switches in the transmitter, depending on the level of liquid in the float chamber, thereby changing the effective value of a resistance network. This converts a current input into a variable voltage output signal that can be fed directly to a remote display or recording instrument.
If the liquid level rises above the measuring range of the transmitter the output signal jumps to 115% and remains on that limit.
This transmitter is compatible with Zones 1, 2, 21 and 22 for gas groups IIA, IIB, IIC, IIIA, IIIB and IIIC.
The transmitter must be connected with a certified energy limiting device (e.g. Zener barrier) installed in a safe area. This device guarantees the electrical limit values specified below, including the cable. The metal housing of the transmitter must be connected to protection ground.

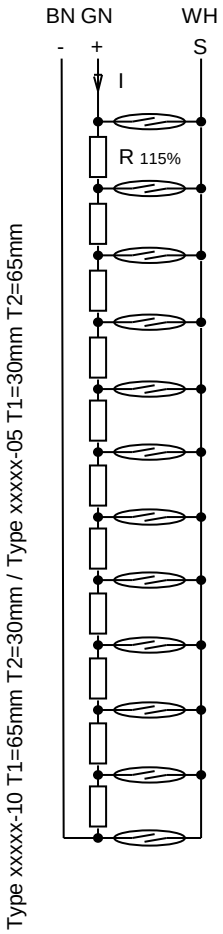
Certificate CE 0820 Ex

II 2 G Ex ia IIC T4 Gb **ZELM 15 ATEX 0536**
II 2 D Ex ia IIIC T115°C Db **IECEx ZLM 15.0002**

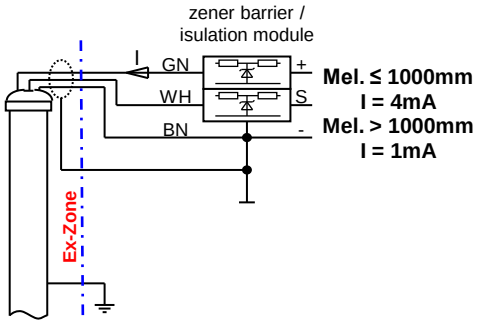
Dimensions



Internal circuit



External electrical connections



Product code: **29710-NI-10** **10mm resolution**
For details see page 2 **29710-NI-05** **5mm resolution**
M el. = Measuring length in mm

	29710-NI-10	**29710-NI-05**
Resolution	10mm	5mm
Transmitter tube dia.	Ø 14 / 10	Ø 17 / 14
Measuring length "M el."	200mm (min.) ... 4000mm (max.)	

Supply current
M el. ≤ 1000mm I = 4mA
M el. > 1000mm I = 1mA

Operating temperatures

Media temperature	Ambient temperature	Temperature class
-50°C…+150°C	-50°C…+50°C	T4 (115°C)

For dust explosion hazardous areas (D) the media temperature has to be considered instead of the surface temperature.

Enclosure IP68 - 10bar (EN60529)

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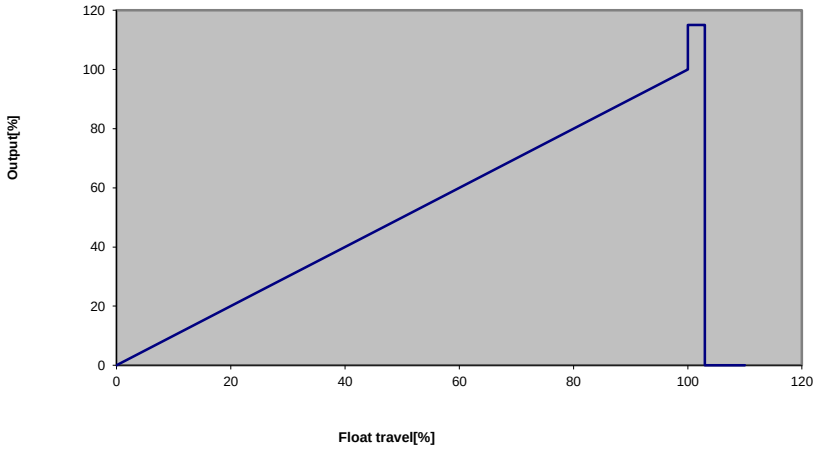
Type 29710-NI-xx

Signal output

- with R = 10Ω and I = 1mA
  10mV per step (1cm) For 29710-NI-10 one step = 1cm and for 29710-NI-05 one step = 5mm
- with R = 10Ω and I = 4mA
  40mV per step (1cm) For 29710-NI-10 one step = 1cm and for 29710-NI-05 one step = 5mm



Materials

Housing tube	Stainless steel 316 / 316L
Cable gland	Brass, nickel-plated
- Seal	PA / NBR
Cable (Standard 5m)	Silicone, red, 3 x 0,5mm2, Ø ~6,2mm, largely resistant to oils/petroleum products, halogen-free
Type label	Stainless steel, lasered

Electrical limit values

Umax = 15VDC
Imax = 4mA

Safety related limit values

Ui =	max. 22,6V
Ii =	max. 160mA
Pi =	max. 900mW
Ci ≈	0
Li ≈	0

Fixation

When ordering level indicators with transmitters, hose clamps are included.
When ordering transmitters as spare parts, hose clamps are never included and must be ordered seperately.
In case of ordering hose clamps pipe size must be indicated.

For pipe diameter	30…40mm	P/O	80648
For pipe diameter	40…57mm and 57…80mm	P/O	84043

Note

Please read the instructions in our datasheet 20010501 before performing installation.
This device is maintenancefree and repair work is prohibited.
The cable must be durably installed.
The relevant certificates are available at www.weka-ag.ch These information has to be considered additionally.

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