

Ultrasonic - Evaporation Transmitter



Instruction for use 6.1432.10.040 / ...041 / ...073



Field of application

The Ultrasonic Evaporation Transmitter is designed for measuring the evaporation level in an evaporation pan type „Class A Pan“. The instrument is well-suited for plant-garden, plant- and semen cultivation companies, and for agriculture-research-institutes to find out the individual water requirement of plants, and for the artificial water supply of fields, in order to achieve an optimal yield. The instrument is equipped with a temperature compensation optimal yield.

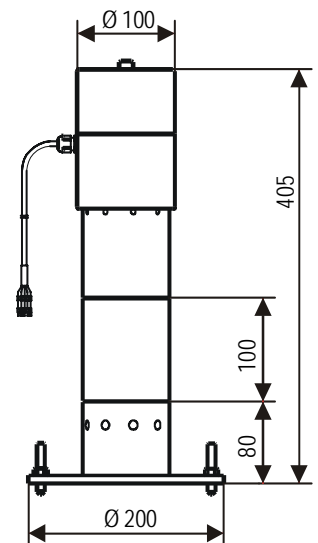
Model

Order- Nr.	Supply voltage	Electr. output	Load
6.1432.10.040	15...24 V	0...20 mA	max. 500 Ω
6.1432.10.041	15...24 V	4...20 mA	max. 500 Ω
6.1432.10.073	12...24V	0... 5 V	

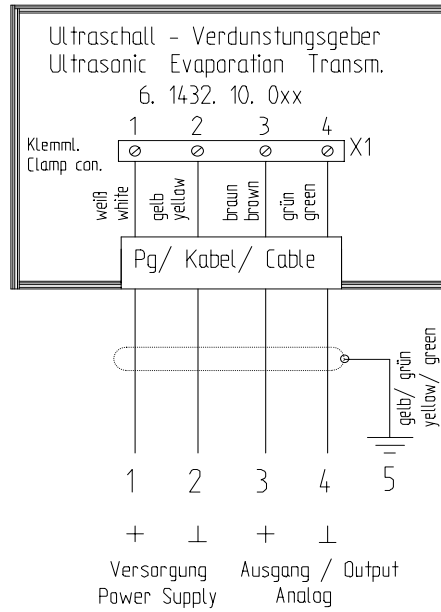
Technical Data

Measuring range	: 0 - 100 mm
Resolution	: << 0.1 mm , analogue output
Accuracy of measurement	: $\pm 1,5\%$ of m.r. (at 0 ... 50°C)
Supply voltage	: see Model
Current consumption	: approx. 70 ... 90 mA
Electr. output	: see Model
Load	: max. 500 ohm
Water high level indication	: _{Mess} = 0/4 mA or 0 V
Water low level indication	: _{Mess} = 20 mA or 5 V
Operating temperature	: - 20 ... + 50°C
Cable	: 5 m ; LiYCY 4 x 0,25 mm ²
Weight	: 3,5 kg

Dimensions



Connecting Diagram



Bestell - Nr. Order - No.	Vorsorgung Power Supply	Ausgang / Output Analog = 0...100 mm	Bürde Load
6. 1432. 10. 040	15...24V DC	0 ... 20 mA	max 500 Ohm
6. 1432. 10. 041	15...24V DC	4 ... 20 mA	max 500 Ohm
6. 1432. 10. 073	12...24V DC	0 ... 5 V	

Ultraschall - Interface

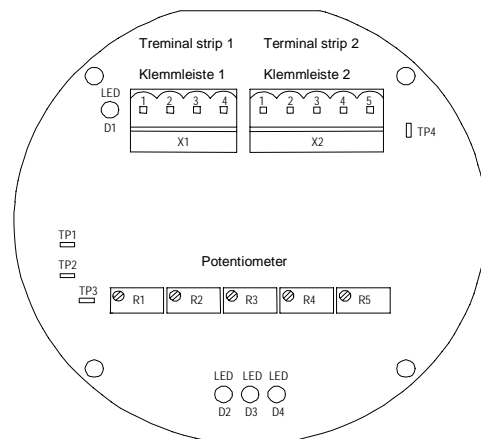
The ultrasonic interface is completely cast with the top. From the sealing compound protrude terminal strips, LEDs, adjusting potentiometers, and test points, which are described as follows:

Terminal strip1
 Pin 1 = supply (+)
 Pin 2 = supply (GND)
 Pin 3 = output (+)
 Pin 4 = output (GND)

Terminal strip 2
 Pin 1 = + VCC sensor
 Pin 2 = signal sensor
 Pin 3 = GND sensor
 Pin 4 = NTC
 Pin 5 = NTC

LED's

D 1 = is shining (red) when current flows via analogue output (only with model „current output“ ...040/041)
 D 3 = ready for operation (red)
 D 2 = is shining when air temperature in the measuring tube is $\leq 25^{\circ}\text{C}$
 D 4 = is shining when air temperature in the measuring tube is $\geq 25^{\circ}\text{C}$

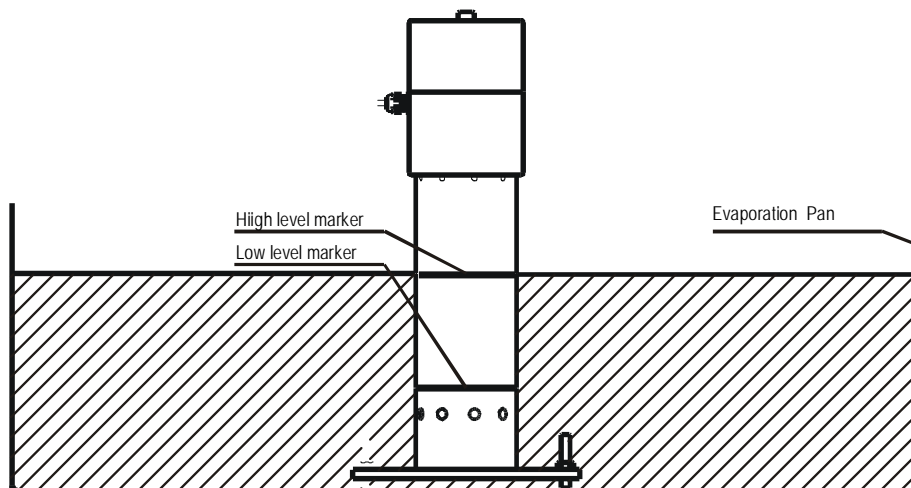


When LED D3 is not shining, the instrument is defect, and has to be returned to the factory for repair.

The ultrasonic interface was adjusted by the manufacturer with the adjustment potentiometers 1...5. The test points (TP) protruding from the sealing compound, serve for the manufacturer's adjustment.

Preparation for Operation

Put the ultrasonic evaporation sensor into the evaporation pan, and fill the instrument with water up to the upper level-mark. The fill level has to be always between the two marks, as the instrument was adjusted by the manufacturer within this measuring range.





ADOLF THIES GmbH & Co. KG

Hauptstraße 76 37083 Göttingen Germany
P.O. Box 3536 + 3541 37025 Göttingen
Phone ++551 79001-0 Fax ++551 79001-65
www.thiesclima.com info@thiesclima.com



- Alterations reserved -