

# 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.

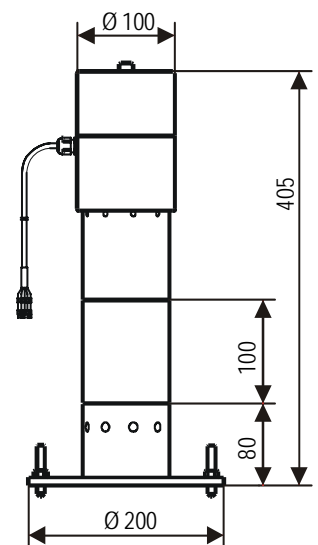
## Model

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

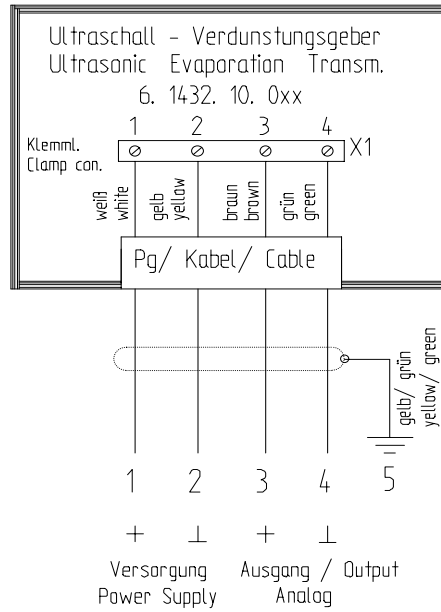
## Technical Data

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	:   <sub>Mess</sub> = 0/4 mA or 0 V
Water low level indication	:   <sub>Mess</sub> = 20 mA or 5 V
Operating temperature	: - 20 ... + 50°C
Cable	: 5 m ; LiYCY 4 x 0,25 mm <sup>2</sup>
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

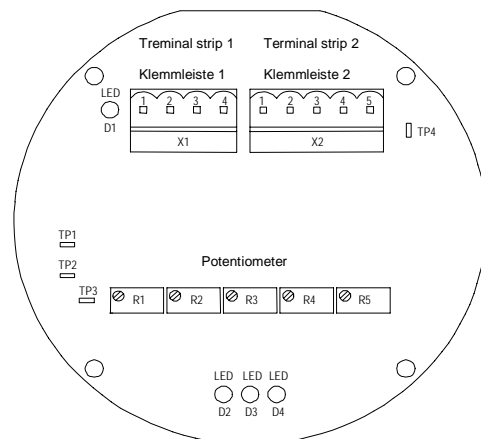
The ultrasonic interface is completely cast with the top. From the sealing compound protrude terminal strips, LEDs, adjusting potentiometers, and test points, which are described as follows:

**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  $\geq 25^{\circ}\text{C}$

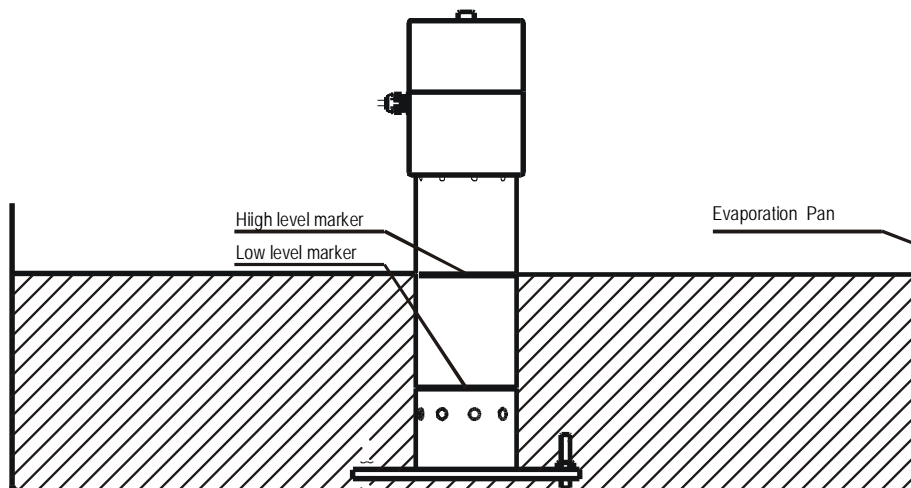


**When LED D3 is not shining, the instrument is defect, and has to be returned to the factory for repair.**

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](http://www.thiesclima.com)      [info@thiesclima.com](mailto:info@thiesclima.com)



- Alterations reserved -