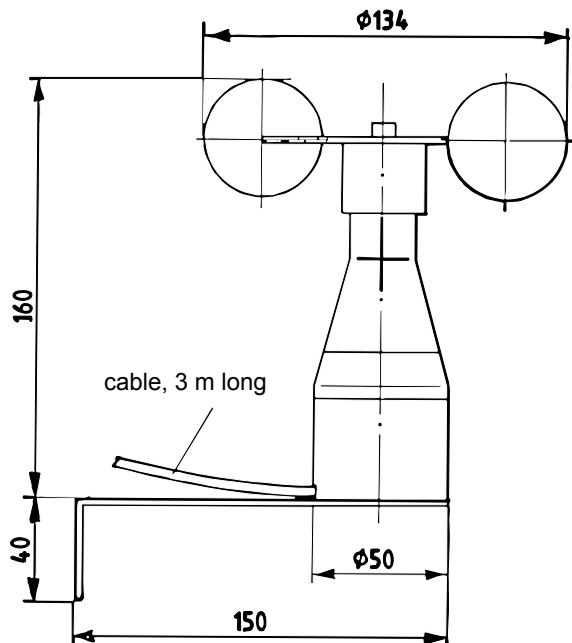


# Small Wind Transmitter

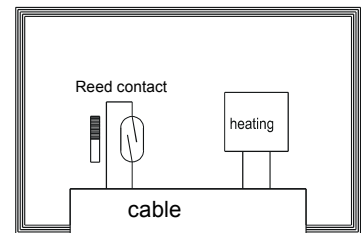
Instruction for Use

4. 3515. 50. 000 / .100 with heating

4. 3515. 51. 000 / .100 without heating



Dimensional Drawing



Order- no. :

4.3515.50.000  
4.3515.50.100  
with heating

1 revolution  
= 2 pulses  
40 m / s = 100 Hz  
heating  
24 V AC/DC  
max. 1 A

4.3515.51.000  
4.3515.51.100  
without heating

1 revolution  
= 2 pulses  
40 m / s = 100 Hz

Connecting Diagram

## Mode of Operation

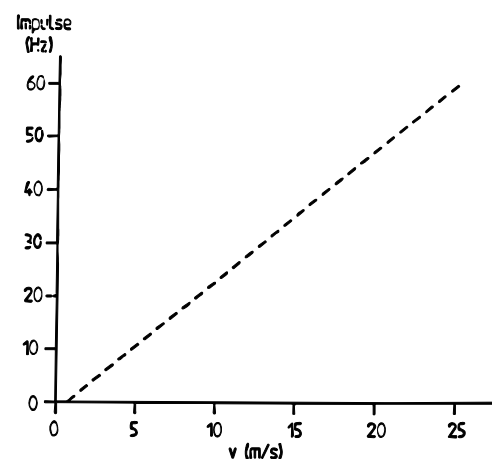
The wind transmitter converts the wind speed into electrical signals. These signals are induced by a Reed-contact, which closes through the effect of 2 magnets. The axis, fixed to the cup-star, runs in friction bearings. The magnets, situated on this axis, pass the Reed-contact thus forming a frequency dependent on the number of cup-star revolutions, which corresponds to the wind speed.

A PTC-heating element ensures a disturbance-free winter operation ( Order - No.: 4.3515.50.x00)

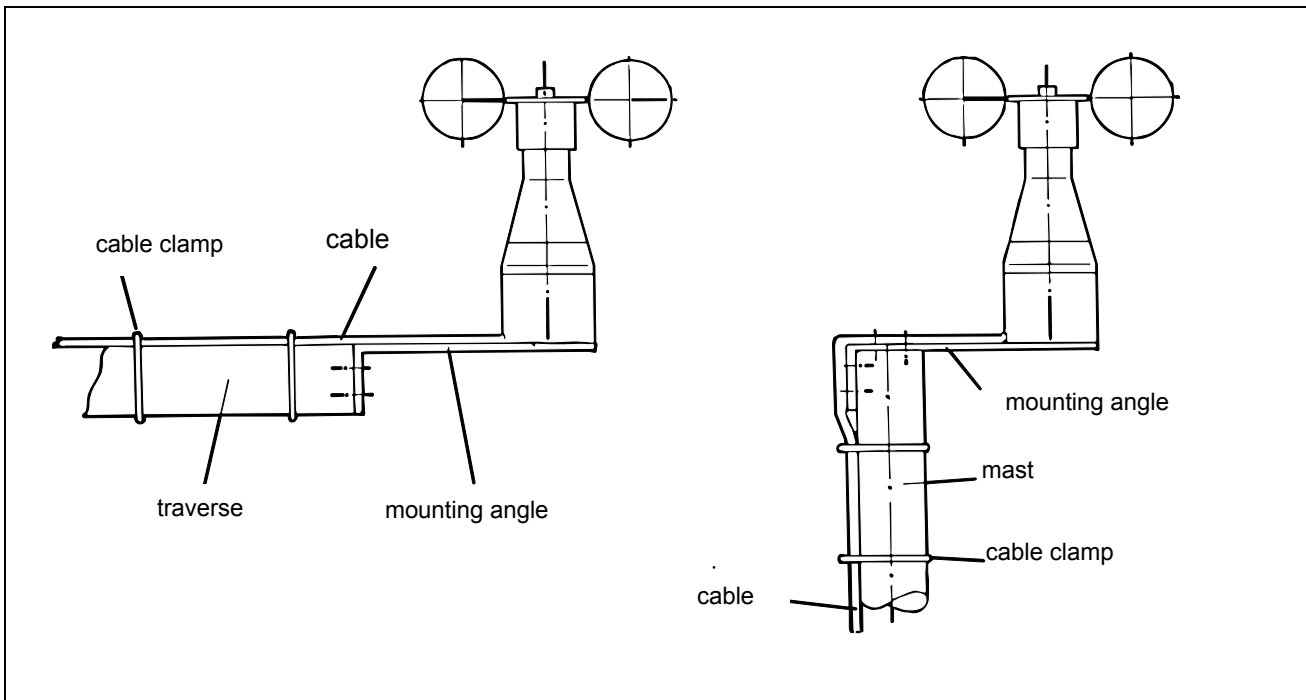
## Technical Data

Measuring range	: 0,5 ... 40 m/s
Accuracy	: $\pm 0,5$ m/s or $\pm 5\%$ v. Mw.
Electr. Output	: 0 ... 100 Hz at 40 m/s
Resolution	: 0,4 m – wind run
Type of contact	: 1 Reed-contact
Load	: max. 60 m/s –for a short time
Contact load	: 10 VA, max. 42 V DC, max. 0,4 A
Heating	: 24 V AC/DC (80 °C)
Switch on current	: max. 1 A
Ambient temp.	: - 25 °C ... + 60 °C
Material	: synthetic material ABS,
Instrument colour	: 4.3515.5x.000 white 4.3515.5x.100 black
Cable 3 m long	: LiYY 4 x 0,25 mm <sup>2</sup> LiYY 2 x 0,5 mm <sup>2</sup>
Weight	: 0,3 kg

## Characteristic



## Possibilities of Mounting



The wind transmitter is screwed on a traverse, a mast etc. by means of a mounting angle. A horizontal adjustment should be carried out.

Through cable clamps or similar fastening adapters the measuring cable is fixed tightly to e.g. a traverse in order to prevent the cable from flapping or chafing with high wind speeds which might result in cable damages.

### Selecting a site

In general wind measurement instruments should be able to detect the wind conditions of a large area. In order to obtain comparable values when determining the surface wind, measurements should be taken at a height of 10 meters over an even area with no obstacles. An area with no obstacles means that the distance between the wind transmitter and an obstacle should be at least 10 times the height of the obstacle ( s. VDI 3786 ). If it is not possible to fulfil this condition, then the wind transmitter should be set up a height where local obstacles do not influence the measured values to any significant extent (approx. 6-10 m above the obstacle).

The wind transmitter should be set up in the centre of flat roofs and not on the roof side in order to avoid bias in the direction (privileged directions).

### Maintenance

After proper mounting the instruments works maintenance-free.

Heavy pollution can clog up the slit between the rotating and the stationary parts of the wind transmitter. This slit must be kept clean

## ADOLF THIES GmbH & Co.KG

Hauptstraße 76 37083 Göttingen Germany  
Postfach 3536 + 3541 37025 Göttingen  
Tel. (0551) 79001-0, Fax (0551) 79001-65  
Internet <http://www.thiesclima.com> eMail [info@thiesclima.com](mailto:info@thiesclima.com)



Technical Alteration reserved