

Description

Wind Speed Transmitter

Wind Transmitter "First Class"

The wind transmitter is designed for the acquisition of the horizontal component of the wind speed in the field of meteorology and environmental measuring technology, evaluation of location, and measurement of capacity characteristics of wind power systems. In the plain country the wind transmitter meets all requirements of IEC 61400.121-CD for a 1. class instrument. Special characters are a defined and optimised, dynamic behaviour also at high turbulence intensity, minimal over-speeding, and a low starting value. The measuring value is available at the output as digital signal. It can be transmitted to display instruments, recording instruments, data loggers as well as to process control systems. For winter operation the instrument is equipped with an electronically regulated heating, which guarantees a smooth running of the ball bearings, and prevents the shaft and slot from icing-up

Order-No.

4.3350.00.000
.10.

Technical Data

With heating	
W/o heating	
Measuring range	0.3...75 m/s
Accuracy	< 3% of meas. value or < 0.3 m/s
0,3 ... 50 m/s	< 6% of meas. value
50 ... 75 m/s	r > 0.999 95 (4..20m/s)
Linearity	
Inclined flow	
...mean deviation	1% (in the range ±20°)
from the cosinus line	
Turbulence effect	<1% (in the range up to 30%turbulence intensity)
Electr. output	1000 Hz at 50 m/s
Load	max. 85 m/s
Delay distance	< 3 m
Operating voltage	
Electronics	3.3 ... 42 V DC
Heating	24 V AC/DC; 25 W
Ambient temp.	-50 ..+ 80°C
Electr. connection	8-pole plug connection onto mast tube R 1"
Mounting	
Fixing boring	Ø 35 x 25 mm
Dimensions	290 x 240 mm
Protection	IP 55
Weight	0.5 kg
Material	
Housing	alu, anodised
Cup star	carbon-fibre-reinforced plastic



Wind Direction Transmitter

Wind Direction Transmitter "First Class"

The wind transmitter is designed for the acquisition of the horizontal component of the wind direction in the field of meteorology and environmental measuring technology, evaluation of location, and measurement of capacity characteristics of wind power systems. Special characters are a defined and optimised, dynamic behaviour. Depending on the transmitter model the measuring value is available at the output as digital or analogue signal. The output signal can be transmitted to display instruments, recording instruments, data loggers as well as to process control systems. For winter operation the instrument is equipped with an electronically regulated heating.

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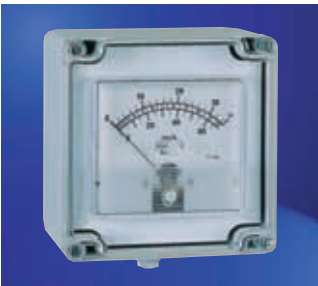
With heating	
W/o heating	
Meas. range	0...360°
Accuracy	1.5°
Electr. output	digital, 9- bit Thies serial synchronous
Resolution	1°
Electr. output	Potentiom.
Resolution	0 ... 10 000 W
	1°
General	
Operating voltage	
Electronics	3,3 ... 42 V DC
Potentiometer	max. 0.5 W
Heating	24 V AC/DC; 25 W
Ambient temp.	-50 ..+ 80°C
Starting value	0.5 m/s at 10° (acc. to ASTM D5366-96)
Damping coefficient	≥0.4
Electr. connection	8-pole plug connection onto a mast tube R 1"
Mounting	
Fixing boring	Ø 35 x 25 mm
Dimensions	390 x 240 mm
Protection	IP 55
Weight	0.5 kg
Material	alu, anodised



Wind Indicators, Recorder, Software



	Description	Order-No.	Technical Data
	<p>Indicators, WS</p> <p>Digital Indicator WG for panel mounting</p> <p>Flat-section indicator for the display of wind speed values. The background of the indicator is black to facilitate reading of the red digits. Preferably switch panel or front panel mounting</p>	<p>4.1044.00.xxx .000 .040 .041 .061</p>	<p>Electr. Input 0 ... 834 Hz 0 ... 20 mA 4 ... 20 mA 0 ... + 10 V</p> <p>Display range 0 ... 40.0 m/s , or depending on sensor type</p> <p>Resolution ± 1 digit</p> <p>Display LED, red, 13 mm high</p> <p>Operating voltage 230 V / 50 Hz</p> <p>Model switch panel mounting</p> <p>Protection IP 20</p> <p>Dimensions 96 x 48 x 104 mm</p> <p>Weight 0.3 kg.</p>
	<p>Digital Indicator WG for panel mounting with 2 adjustable limit contacts</p> <p>Flat-section indicator for the display of wind speed values. Two setting knobs on the front panel serve for setting the two potential-free relay-contacts. LED-digits show the switching functions. The background of the indicator is black to facilitate reading of the red digits. Preferably switch panel or front panel mounting.</p>	<p>4.1045.00.xxx .000 .040 .041 .061</p>	<p>Electr. Input 0 ... 834 Hz 0 ... 20 mA 4 ... 20 mA 0 ... + 10 V</p> <p>Display range 0 ... 40.0 m/s, or depending on sensor type</p> <p>Resolution ± 1 Digit</p> <p>Display LED, red, 13 mm high</p> <p>Contact throw-over-switch</p> <p>Operating voltage 230 V / 50 Hz</p> <p>Model switch panel mounting</p> <p>Protection IP 20</p> <p>Dimensions 96 x 48 x 104 mm</p> <p>Weight 0.3 kg</p>



Indicator
Analogue indicator for the direct connection to the Wind Transmitter (small model),
order-no. 4.3400.30.000

4.3421.00.000

Display range 0 ... 35 m/s
 0 ... 65 kn
 0 ... 12 Beaufort

Division 2 m/s
 5 kn

Electr. input 0 ... 1 mA DC

Model wall mounting case

Protection IP 65

Class 2

Dimensions 122 x 120 x 85 mm

Weight 0.55 kg