

## Wind Direction Transmitter "First Class"

Part number: 4.3151.00.xxx

Special characters are a defined and optimised, dynamic behaviour as well as:

- High measurement accuracy and resolution
- High damping with small distance constant
- Low starting value
- Low power consumption
- Simple mounting

The measuring value is available at the output as 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 (4.3150.00.xxx) is equipped with an electronically regulated heating.



## Specification

Part number: 4.3151.00.xxx

### Wind direction

Measuring range	0 ... 360 °
Resolution	0.35 °
Accuracy	1 °
Starting value	0.5 m/s at 10 ° acc. to ASTM D 5096-96 0.2 m/s at 90 ° acc. to VDI3786 page 2
Distance constant	1.8 m acc. to ASTM D 5096-96
Damping ration	> 0.3 acc. to ASTM D 5096-96

### Operating voltage

Electronic	3.3 ... 42 V DC
Heating	24 V AC/DC, 25 W

### General

Ambient temp.	-50 ... +80 °C
Electr. connection	8 pol. plug connection
Mounting	onto mast tube Ø 1"

Material	aluminium, anodised
Protection	IP 55
Dimension	Ø 450 x 410 mm
Weight	0.7 kg
Mounting	Ø 35 x 25 mm

## Versions

As per 4.3151.00.xxx, but:

### Product number 4.3151.00.140

#### Data output analog

Wind direction	0 ... 20 mA
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#### Operating voltage

Electronic	15 ... 24 V DC
Current consumption	approx. 2.9 mA + I <sub>out</sub>

### Product number 4.3151.00.141

#### Data output analog

Wind direction	4 ... 20 mA
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#### Operating voltage

Electronic	15 ... 24 V DC
Current consumption	approx. 2.9 mA + I <sub>out</sub>

### Product number 4.3151.00.161

#### Data output analog

Wind direction	0 ... 10 V
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#### Operating voltage

Electronic	15 ... 24 V DC
Current consumption	approx. 2.9 mA + I <sub>out</sub>

### Product number 4.3151.00.173

#### Data output analog

Wind direction	0 ... 5 V
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#### Operating voltage

Electronic	12 ... 24 V DC
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Current consumption

approx. 2.9 mA + Iout

## Accessories

Product	Product name	Brief description														
	Traverse for Wind Transmitters "First Class" 4.3174.00.000	For mounting the wind speed transmitter and wind direction transmitter jointly onto a mast.  <b>General</b> <table border="1"> <tr> <td>Height</td> <td>0.76 m</td> </tr> <tr> <td>Mounting</td> <td>on mast tube Ø 1,5''</td> </tr> <tr> <td>Material</td> <td>aluminium, anodised (AlMgSi0.5)</td> </tr> <tr> <td>Sensor distance horizontal</td> <td>0.6 m</td> </tr> <tr> <td>Sensor distance vertikal</td> <td>0.2 m</td> </tr> <tr> <td>Weight</td> <td>3 kg</td> </tr> <tr> <td>Mounting</td> <td>Ø 34 mm for First Class wind sensors</td> </tr> </table>	Height	0.76 m	Mounting	on mast tube Ø 1,5''	Material	aluminium, anodised (AlMgSi0.5)	Sensor distance horizontal	0.6 m	Sensor distance vertikal	0.2 m	Weight	3 kg	Mounting	Ø 34 mm for First Class wind sensors
Height	0.76 m															
Mounting	on mast tube Ø 1,5''															
Material	aluminium, anodised (AlMgSi0.5)															
Sensor distance horizontal	0.6 m															
Sensor distance vertikal	0.2 m															
Weight	3 kg															
Mounting	Ø 34 mm for First Class wind sensors															
	Hanger 1m First Class 4.3184.01.000	The hanger is used for the lateral mounting of a wind transmitter, First Class type, onto a mast  <b>General</b> <table border="1"> <tr> <td>Length</td> <td>1 m</td> </tr> <tr> <td>Mounting</td> <td>at mast tube Ø 40 ... 80 mm</td> </tr> <tr> <td>Material</td> <td>aluminium (AlMgSi0.5)</td> </tr> <tr> <td>Weight</td> <td>1.5 kg</td> </tr> <tr> <td>Mounting</td> <td>Ø 34 mm</td> </tr> </table>	Length	1 m	Mounting	at mast tube Ø 40 ... 80 mm	Material	aluminium (AlMgSi0.5)	Weight	1.5 kg	Mounting	Ø 34 mm				
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Weight	1.5 kg															
Mounting	Ø 34 mm															



Geovane  
4.3190.00.900

The product set combines the precise wind vanes from Thies CLIMA with the advanced Geovane from Kintech Engineering. The Geovane uses GPS and the sun position to automatically determine the exact north direction 1° accurate. This combination ensures the highest accuracy of wind direction against the geographic north point as a reference.

- Geovane for automatic north correction
- 1° precise wind vanes from Thies CLIMA
- Wind vane and geovane are preconfigured
- Ideal e.g. for site surveys, power curve monitoring and meteorology

#### Wind direction

Measuring range	0 ... 380 °
Resolution	0.06° RS-485 0.11° Analog voltage outputs 0.06... 0.16° Frequency output
Accuracy	1°

#### Miscellaneous

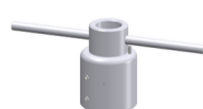
Electrical input	0 ... 30 V
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#### Operating voltage

Electronic	6 ... 12 V DC
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#### General

Ambient temp.	-25 ... +85 °C
Mounting	Onto mast tube Ø34mm
Protection	IP 67
Measuring time	1, 5, 10, 30, 60 seconds
Weight	0,815 kg



Northring for First  
Class Windfahne  
509619

The adapter is used for the north alignment of a First Class Wind Direction Sensor.

#### General

Length	75 mm
Material	Alluminum anodized ( AlMgSi1 )
Weight	0.25 kg
Mounting	for mast Ø 35 mm for sensor Ø 35 mm