

## Wind Direction Transmitter "First Class"

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 °<br>acc. to ASTM D 5096-96<br>0.2 m/s at 90 °<br>acc. to VDI3786 page 2 |
| Distance constant | 1.8 m<br>acc. to ASTM D 5096-96                                                        |
| Damping ration    | > 0.3<br>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 |
|----------------|-------------|

#### 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 |
|----------------|-------------|

#### 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 |
|----------------|------------|

#### 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

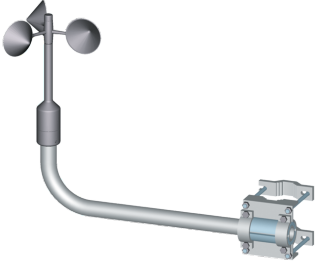
|                |           |
|----------------|-----------|
| Wind direction | 0 ... 5 V |
|----------------|-----------|

#### Operating voltage

|            |                |
|------------|----------------|
| Electronic | 12 ... 24 V DC |
|------------|----------------|

|                     |                                   |
|---------------------|-----------------------------------|
| Current consumption | approx. 2.9 mA + I <sub>out</sub> |
|---------------------|-----------------------------------|

Accessories

| Product                                                                             | Product name                                                           | Brief description                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Traverse for<br>Wind<br>Transmitters<br>"First Class"<br>4.3174.00.000 | For mounting the wind speed transmitter and wind direction transmitter jointly onto a mast.<br><br><b>General</b><br>Height0.76 m<br>Mountingon mast tube Ø 1,5``<br>Materialaluminium, anodised (AlMgSi0.5)<br>Sensor distance horizontal0.6 m<br>Sensor distance vertikal0.2 m<br>Weight3 kg<br>MountingØ 34 mm for First Class wind sensors |
|  | Hanger 1m First<br>Class<br>4.3184.01.000                              | The hanger is used for the lateral mounting of a wind transmitter, First Class type, onto a mast<br><br><b>General</b><br>Length1 m<br>Mountingat mast tube Ø 40 ... 80 mm<br>Materialaluminium (AlMgSi0.5)<br>Weight1.5 kg<br>MountingØ 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<br>0.11° Analog voltage outputs<br>0.06... 0.16° Frequency output |
| Accuracy        | 1°                                                                             |

**Miscellaneous**

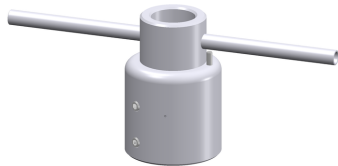
|                  |            |
|------------------|------------|
| Electrical input | 0 ... 30 V |
|------------------|------------|

**Operating voltage**

|            |               |
|------------|---------------|
| Electronic | 6 ... 12 V DC |
|------------|---------------|

**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<br>for sensor Ø 35 mm |

