First Class Wind Sensors

Wind Speed Transmitter / Wind Direction Transmitter First Class Advanced

The First Class wind sensors are designed for the acquisition of the horizontal component of the wind velocity in the field of meteorology and environmental measuring technology, evaluation of location, and measurement of capacity characteristics of wind power systems.

Wind Speed Transmitter First Class

Wind Direction Transmitter First Class

Meet IEC 61400-12-1 (2005 - 12) requirements

Universally compatible with other systems

Highly durable construction

Extended measuring range

Highly accurate

Wind Speed Transmitter [First Class Advanced]   Product number 4.3351.00.000

Wind speed

Measuring range	0 to 75 m/s
Accuracy	< 1 % of meas. value (0.3 to 50 m/s) or < ±0.2 m/s
Starting velocity	< 0.3 m/s
Linearity	r > 0.99999 (4 to 20 m/s)
Delay distance	< 3 m (aac. to ASTM D 5096-96)

Data output digital

Frequency	1082 Hz at 50 m/s

Operating voltage

Electronic	3.3 to 48 V DC 130 µA from 3.3 to 15 V 180 µA > 15 V
Heating	24 V AC / DC, max 25 W

General

Ambient temperature	-50 to +80 °C
Electr. connection	8 pol. plug connection
Mounting	onto mast tube Ø 1"
Protection	IP 55
Survival speed	80 m/s (min. 30 minutes)
Weight	0.5 kg
Fixing boring	diameter 35 mm x 25 mm
Material housing	aluminium, anodised
Material cup star	carbon-fiber glass reinforced

Wind Direction Transmitter (First Class Advanced) Product number Part number: 4.3151.00.00x

Wind direction

Measuring range	0 – 360°
Resolution	0.35° to 2.5°
Accuracy	±0.75° to ±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 ASTMD 5096-96
Damping ration	> 0.3 acc. to ASTMD 5096-96

Operating voltage

Electronic	3.3 to 42 V DC
Current consumption	1.4 mA standby
Heating	24 V AC / DC, 25 W

General

Ambient temperature	-50 to +80 °C
Electr. connection	8 pol. plug connection
Mounting	onto mast tube Ø 1"
Material	aluminium, anodised
Protection	IP 55
Dimension	diameter 450 mm x 410 mm
Weight	0.7 kg
Fixing boring	diameter 35 mm x 25 mm