

## Description

### Anemometer Ultrasonic 1D

The Ultrasonic Anemometer 1D serves for the acquisition of the horizontal air flow and direction in tunnels, tubes or similar applications. Due to the high measuring rate the instrument can be used also for the inertia-free measurement of gust- and peak-values.

The measuring values are available as analogue signals and/or data telegram.

The analogue output of the flow speed is effected with or without direction detecting.

The digital output of the flow speed is effected with direction detecting, and virtual-temperature.

If necessary, the sensor branches are automatically heated with critical ambient temperatures. Thus, the function is guaranteed also with negative temperatures.

### Wind Transmitter

for tunnel application

For the measurement of directional air flows especially in tunnels. Instrument sends frequency signals, depending on speed and related to the flow direction.

Instrument is equipped with a mounting bar.

Suitable for connection to the Measuring Transducer TW, order-no. 4.3348.xx.xxx

## Order-No.

4.3860.00.340

4.3308.10.000

## Technical Data

<b>Flow Speed</b>	0 - 20 m/s
Meas. range	0.1 m/s
Resolution	± 0.1 m/s (0 - 5 m/s)
Accuracy	± 2% rms (> 5 m/s)
<b>Direction detecting</b>	
Meas. range	1° / 181°
<b>Virtual Temp.</b>	
Meas. range	- 40 - + 70 °C
Resolution	0,1 K
Accuracy	± 0.5 K
<b>Data output digital</b>	
Interface	RS 485 / 422
Baud rate	9600
Output	10 sec. gliding mean value
Status identification	heating, path disturbance
<b>Data output analogue</b>	
Electr. output	0 - 20 mA (< 250 W)
only WS and WD output	10 sec. gliding mean value
Operating voltage w/o heating	12 - 24 V AC/DC, 3 VA
with heating	24 V AC/DC, 70 VA
Electr. connection	3 m cable
Housing material	stainless steel, V4A
Dimensions	420 x 270 mm
Protection	IP 66
Weight	2.5 kg

Measuring range	0.3 ... 20 m/s
Resolution	approx. 0,05 m wind run
Delay distance	3.3 m
Electr. output	0 ... 410 Hz resp. 418 Hz
Propeller type	4-blade, polypropylene
Dimension	Ø 180 mm
Operating voltage	15 V DC (10 - 16 V DC)
Current supply	approx.. 15 mA
Ambient temp.	-20 ... +70 °C, ice-free
Cable	3 m, LiYCY 4 x 0.25 mm <sup>2</sup>
Dimensions	Ø 200 x 350 mm
Weight	5 kg



Measuring transmitter for directional air flows.

### Applications:

- Air Channels Shafts
- Climatic Ducts
- Street and Railway Tunnels