

WIND SPEED SENSOR

W20-1/CL
and **W20-1/CL/H**



The sensors **W20-1/CL** and **W20-2/CL** have been designed to provide accuracy, sensitivity and reliability using modern technology for construction and materials for operation under all climatic conditions.

The wind sensors are supplied with thermostatic controlled heating device for trouble-free operation up to -50°C , if ordering the option /H (**W20-1/CL/H** and **W20-2/CL/H**). The sensor contains a standard 4 to 20 mA two wire current loop amplifier for long distance data transfer to a display unit or computer station. The input voltage range is 10 ...50 V DC.

This sensor **W20-1/CL** is designed for measuring of wind speed with low threshold (0.5 Kn.) up to strongest wind. The rugged 3-cup anemometer is completely made of anodised aluminium, durable and lightweight. A labyrinth prevents dust and water from bearings. A water-proof 7-pin plug provides a safety cable connection. Eight small magnets attached to the axis produce in a fixed dry-reed contact pulses frequency proportional to wind speed, which are transformed to a DC current by a current loop amplifier with a Butterworth filter, 4...20 mA corresponding to 0...60 m/s. The heating requires a supply voltage of 200...250 V AC.

Specifications

Sensor type	: 3-cup anemometer with dry-reed contact
Signal output	: 4 - 20 mA two wire current loop
Input	: 10 - 50 V DC
Measuring range	: 0 - 80 m/s (20 mA correspond to 60 m/s)
Accuracy	: 1.5 % of measured value
Start velocity	: 0.3 m/s
Distance constant	: 1.5 m
Connection	: 7pin water-proof plug pin 1 NC, pin 2 NC, pin 3 signal -, pin 4 signal +, pin 5 and pin 6 AC voltage for heating.
Heating supply	: 200...250 V AC
Ambient temperature	: -20... + 60°C
with heating	: -50... + 60°C
Cup diameter	: 100 mm
Cup wheel diameter	: 410 mm
Dimension (body only)	: 300 mm x 60 mm (HxD)
Weight	: 1.5 Kg
Material	: aluminium (anodised), stainless steel and polyamide

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