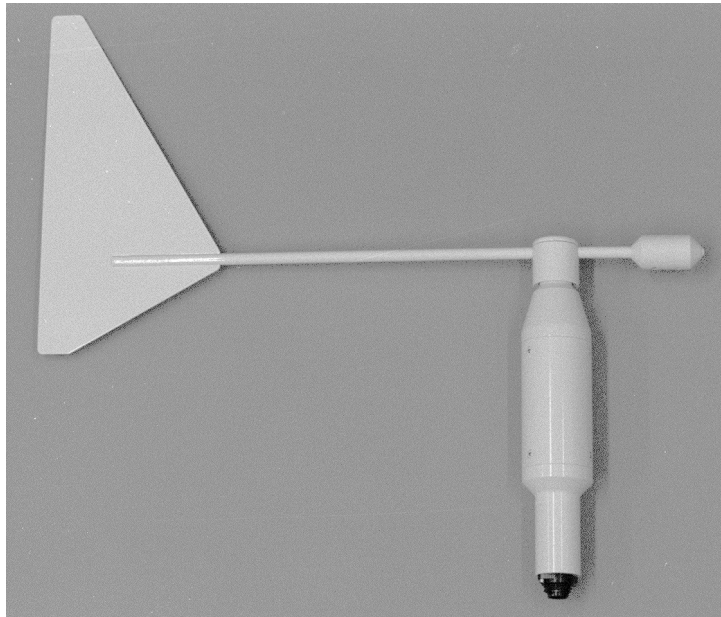


WIND DIRECTION SENSOR

W20-2/CL
and W20-2/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. They are supplied with thermostatic controlled heating devices 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. Its input voltage range is 10... 50 V DC

The wind direction sensor has been designed for measuring of wind direction at very low threshold (0.5 kn) using a wire-wound potentiometer with very low torque and high linearity (0.3 %). When vane axis turns, the coupled potentiometer changes the output current from 4.05 to 19.95 mA corresponding to the vane direction from 1 to 359° . The vane can be removed from the cross arm for maintenance and reinstalled without new orientation, because pin and key allow mounting in the original position only.

Specifications:

Sensor type	: wind vane with potentiometer
Signal output	: 4 - 20 mA two wire current loop
Input voltage range	: 10... 50 V DC
Measuring range	: 1...359°
Accuracy	: +/- 2°
Resistance linearity	: 0.3 %
Damping ratio	: 0.2 m/s
Connection	: 7 pin waterproof plug: pin1 NC, pin2 NC, pin3 signal -, pin4 signal +, pin5 and pin6 AC voltage for heating.
Heating supply	: 200...250 V AC
Ambient temperature	: -20... + 60°C
with heating:	: -50... +60°C
Overswing	: < 10°
Radius of vane circle	: 430 mm
Dimension (body only)	: 300 mm x 60 mm (HxD)
Weight	: 1.5 Kg
Material	: aluminium (anodized), stainless steel and Delrina

DR. ALFRED MÜLLER
METEOROLOGISCHE INSTRUMENTE KG
Chausseestraße 42c
D-15712 Königs Wusterhausen

Tel.: +49 3375 9025-32
FAX: +49 3375 9025-36
e-mail: dr.a.mueller-r.fuess@t-online.de
www.rfuess-mueller.de