

Anemometer Windspeed (Vector) A100LM/PC3

Opto-electronic wind speed transmitter



Description

- Opto-electronic wind speed transmitter
- Classified according to IEC standard
- "Low Power", high frequency output signal
- Range 0.2 ... 75 m/s
- Resolution < 0.5 m/s
- Low power, pulse output only
- Consumes 1 mA while operating from the logger's battery supply.

Measurement principle

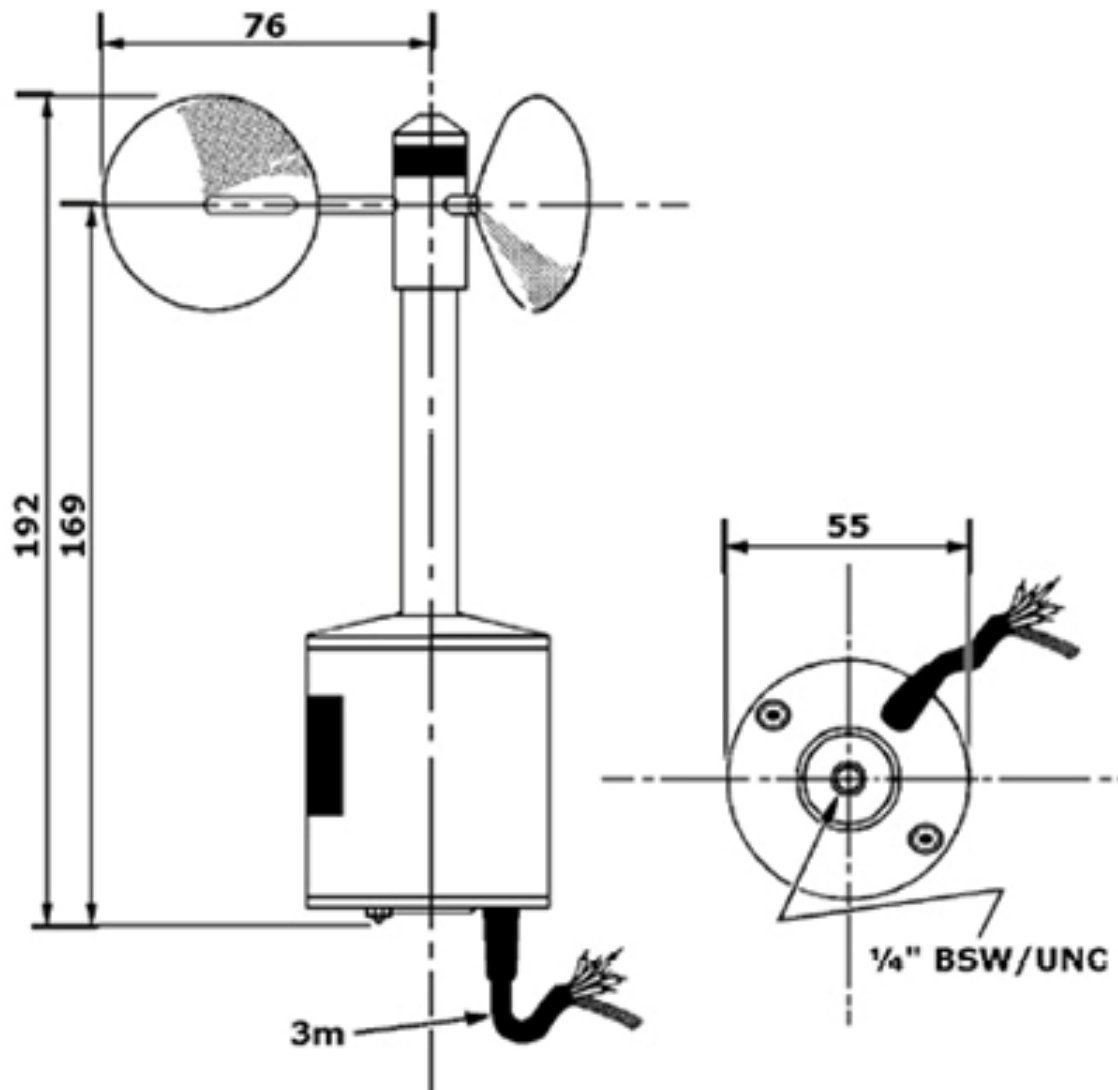
The low-inertia 3-cup rotor is set into rotation by the wind. The wheel is scanned optoelectronically and the measuring value is available at the output as a digital signal.

Specifications

Characteristics	
Measurement range	0 ... 75 m/s
Accuracy	± 0.2 m/s (<10 m/s); $\pm 2\%$ of reading (> 10m/s)
Resolution	0.05 m/s
Non-Linearity	0.4 % full-range output frequency (correction curve supplied)
Starting wind speed	0.2 m/s
Survival wind speed	max. 75 m/s
Distance constant	2.3 m $\pm$ 10 %
Ambient temperature	-30 ... +70 °C
Transducer	Interruption of optical beam
Operating supply	4.75 ... 28 VDC (max 1.3 mA, average is typically less than 1 mA)

Characteristics	
Electrical output	0 ... 750 Hz
Termination	cable length 3 m
Materials	Anodized aluminium, weather-resisting plastics
Weight Anemometer	0.5 kg (Gross weight for shipping: 1 kg)
Recalibration	recommended interval every 24 months
Manufacturer	Vector Instruments / UK (A100LM)

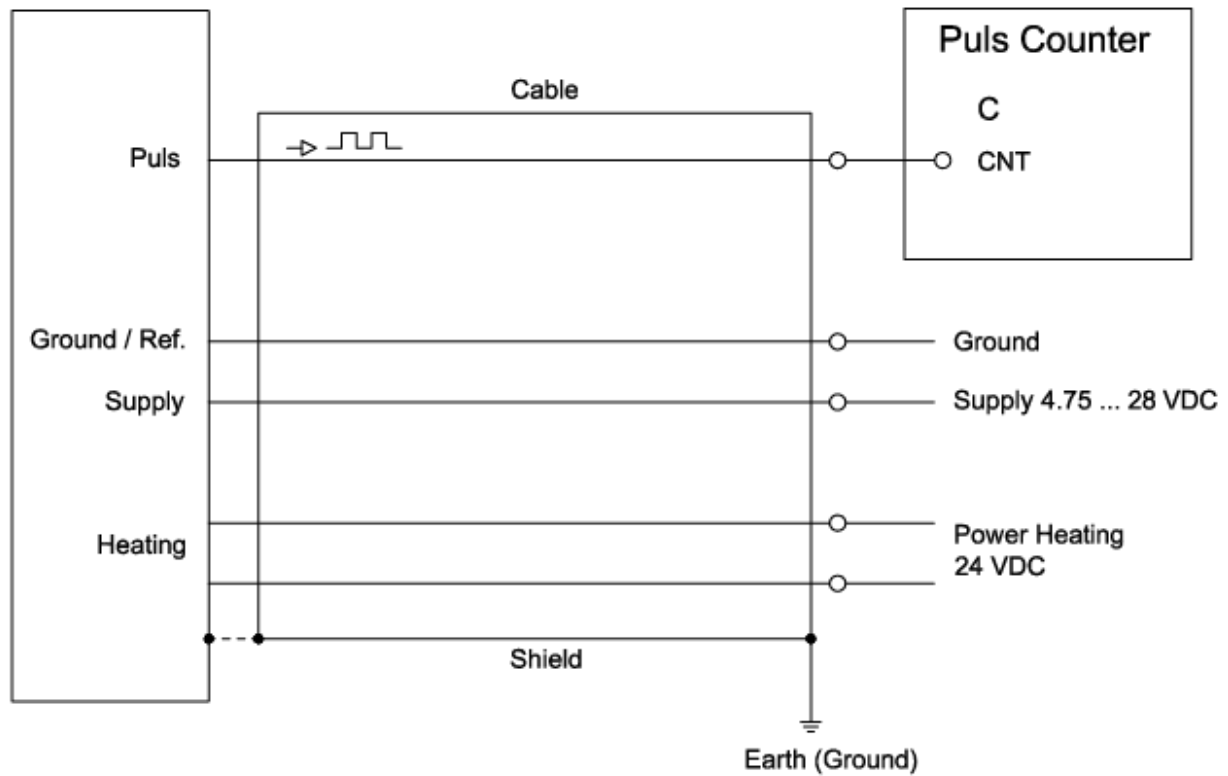
Dimensional drawing



Sensor connection diagram

Anemometer Vector Wind Speed

Meteo-40 Data Logger



Sensor	Manufacturer Wire Color	Ammonit Cable Wire Color*	Meteo-40 Counter	Supply Sensor
Wind speed Pulse output	white	white	CNT	
Supply	red	red		4.75 ... 28 VDC, 1 mA typ.
Ground	blue, yellow	black		GND
Heating	brown	orange, orange		24 V / 6 W, 250 mA
Heating	violet	violet, violet		

* with Junction box

Cable type

without heating wires: LiY(C)Y 3 x 0.25 mm²

with heating wires: LiY(C)Y 7 x 0.25 mm²