WATER & AIR

Switching Anemometer

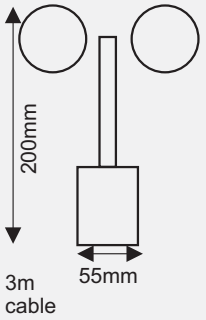
- **Tested against an N.P.L. calibration rotor**
- **Robust and durable for permanent exposure to the weather**
- **Marine version available**

An anemometer is for run of wind measurements, or operation with an electronic counter to determine average wind speed. A magnet turns with the rotor spindle and the resulting varying field causes a mercury wetted reed switch to make and break contact once per revolution of the rotor. The contacts are bounce free, simplifying connection to electronic circuits, and no power is required apart from that necessary to detect contact closure, thus facilitating use at remote sites. The rotor is tested by comparison with an N.P.L. calibrated rotor, and a calibration figure is provided.

Construction is from anodised aluminium alloy, stainless steels, and weather resisting plastics for all exposed parts, and the bearings (stainless steel shaft running in two precision corrosion resistant ball-races) are protected from the entry of moisture droplets and dust, resulting in an instrument suitable for permanent exposure to the weather.

In the marine version (A100R/M) a touching shaft-seal is fitted for extra protection in place of the standard non-contact seal, with a small increase in threshold speed. An anti-icing heater can be fitted if required.

SPECIFICATIONS

Performance: Threshold	Performance: Accuracy	Calibration	Temperature range	Size	Rotor size
0.25m/s (0.6 m/s A100R3), Max speed over 75m/s	1% +0.1m/s, distance constant 5m	0.80 revolutions per meter (1 pulse per 1¼ meters)	-30 to +55ºC		Standard 150mm dia. 3-cup rotor
Weight	**Fixing: Rotor**	**Fixing: Anemometer**	**Electrical: Switching voltage**	**Electrical: Switching current**	**Electrical: Switch rating**
Total 350g including standard 3m cable	Patented gravity sensitive fastener for rapid attachment and release	Standard tripod screw (¼in. BSW/UNC), taper adaptor also available. Note that mounting must be within 15° of vertical	100 volts DC maximum	0.5 Amps maximum	28 Watts maximum (DC resistive)
Electrical: Duty cycle	**Electrical: Contact resistance**	**Electrical: Actuating time**	**Electrical: Switch bounce**	**Electrical: Min. current**	**Electrical: Switch life**
50% ± 5% up to 50m/s +-10% Up to 75m/s	0.05 Ohms	1.5mS	Nil	Nil (life not reduced by use in dry circuits)	Rated 25×10^9 operations minimum

ORDERING INFORMATION

Meters and dataloggers (see separate datasheet)

SDL 5000 series	DataHog datalogger
SDL 2900 series	MiniMet datalogger

Sensor

A100R	Vector Anemometer with 3m cable
A100R/I	Vector Anemometer with 3m cable & DataHog / MiniMet connector

Accessories

ACC/12	Dual Arm Pole mount
ACC/13	Single Pole top mount for 1 wind sensor
ACC/13A	Pole side mount for 1 wind sensor

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