



IceFree Hybrid Turbine Control Vane with Cable, 10m cable

Heated vane for use in wind turbine control and wind resource assessment in icing environments...

SPECIFICATIONS

| | |
|------------------------------------|---|
| Sensor type | Description |
| Applications | <p>heated vane</p> <ul style="list-style-type: none"> • wind turbine control • wind resource assessment in icing environments • environmental monitoring |
| Sensor range | 0° to 360°, free rotation |
| Instrument compatibility | digital inputs of turbine controllers, PLCs, or Symphonie logger |
| Signal type | Output signal |
| Transfer function | <ul style="list-style-type: none"> • high level square wave frequency (see manual for details) • amplitude equals supply voltage • other formats from optional personality module • 0° = 100 Hz to 359° = 459 Hz • (280 Hz is center for turbine control applications) • 1° per Hz |
| Accuracy | within +/- 2 ° of transfer function |
| Dead band | none |
| Recommended load resistance | 1200 Ω minimum |
| Output signal range | <ul style="list-style-type: none"> • 100 Hz to 459 Hz • 0 Hz output indicates fault |
| Resolution | 1° |
| Threshold | Response characteristics |
| Supply voltage | < 2 m/s (< 4.5 mph) |
| Supply current | Power requirements |
| Heater supply voltage | 8 to 24 V DC |
| Heater supply current | <ul style="list-style-type: none"> • 40 mA typical • 51 mA max. (not including heater) |
| Mounting | 24 V, AC or DC |
| Tools required | <ul style="list-style-type: none"> • self regulating • 1 to 4 A, thermal load dependant • cold start inrush current: 9 A peak • inrush drops below 4 A within 30 secs. |
| Accessories | Installation |
| Wiring | <p>sensor housing compatible with:</p> <ul style="list-style-type: none"> • 25 mm pipe per BS1387, or • 32 mm tube, or • 1 inch IPS pipe • 1-1/4" Tube <p>quick disconnect allows for easy mounting or dismounting</p> <p>captive M6 clamp bolt, nut, and connector</p> <p>10 mm wrench</p> <ul style="list-style-type: none"> • pre-wired cable assembly (not included) • personality module (interface converter) (not included) <p>sensor plugs onto captive connector - see manual for wiring details</p> |
| Operating temperature range | Environmental |
| Operating humidity range | -40 ° C to 60 ° C (-40 ° F to 140 ° F) |
| Connections | 0 to 100% RH (sealed against condensation) |
| | Physical |
| | <ul style="list-style-type: none"> • shield • two heater wires (20 AWG) |

- three sensor wires: power, common, signal (22 AWG)

1.58 kg (3.5 lbs)

Weight

Dimensions

- overall height 252 mm (9.92 inches)
- swept diameter: 213 mm (8.4 inches)
- body diameter: 58 mm (2.3 inches)

Materials

Wing

black anodized aluminum

Body

nickel plated zinc

Shaft

stainless steel

Bearing

double-shielded stainless steel ball bearings

110 Riggs Road - Hinesburg - VT 05461 USA - TEL (802) 482-2255 - FAX (802) 482-2272 - EMAIL sales@nrgsystems.com