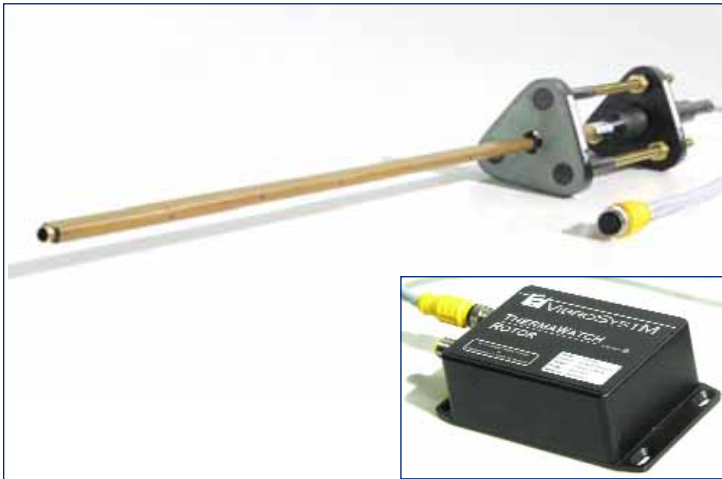




## THERMAWATCH ROTOR TWR-100

FAST-RESPONSE NON-CONTACT ROTOR  
POLE TEMPERATURE MONITORING



### DESCRIPTION

The ThermoWatch Rotor™ sensor, TWR-100 and signal conditioner provide a fast-response on-line temperature reading from salient and non-salient field poles of large rotating machines. Its 4-20 mA linearized output can be connected to the ZOOM® system or to any other instrumentation.

Because of its small size, the TWR-100 is easy to install through a stator core ventilation hole or any other location where the sensor tip is positioned in front of rotor pole faces, circuits or amortisseur bars. TWR-100 can also monitor rotor pole joints. This sensor, in combination with other condition monitoring parameters and ZOOM system, provides users with a comprehensive analysis of rotor condition.

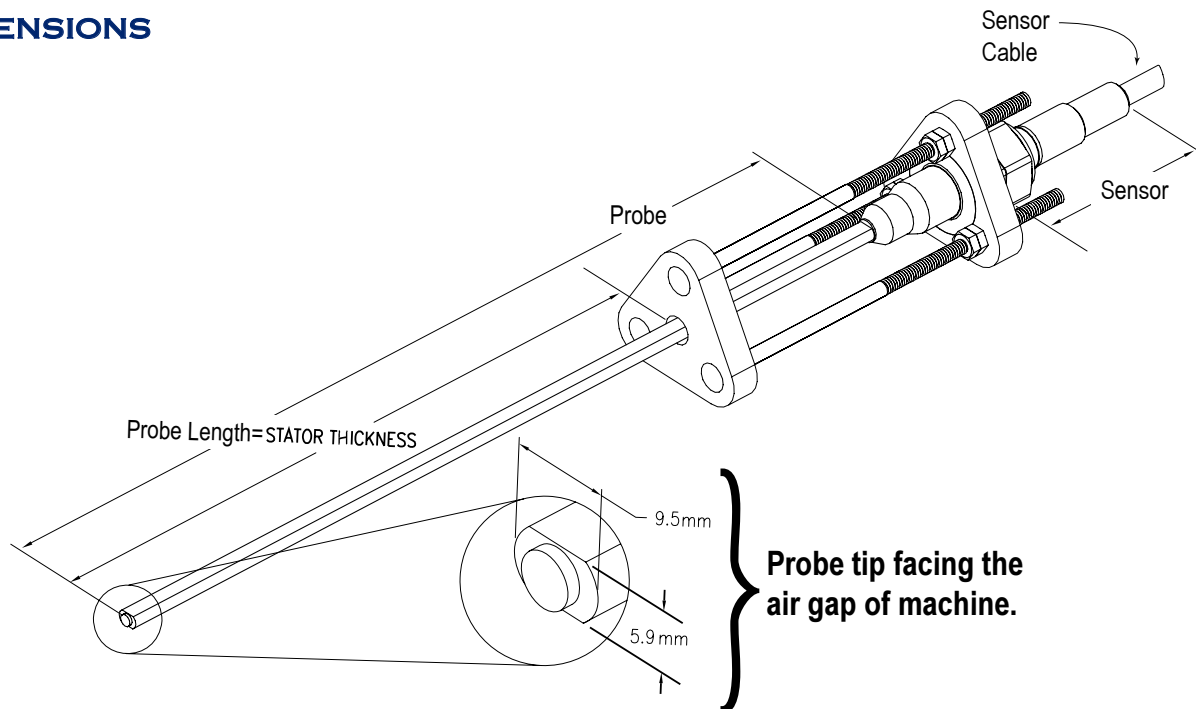
### APPLICATIONS

- Provides a fast-response temperature reading of each rotor pole (on-line monitoring).
- Monitor temperature of rotor pole face, rotor pole circuit, and/or rotor pole amortisseur bars.
- Monitor temperature of rotor pole joints of salient pole machines

### FEATURES

- High-speed temperature sensing device
- Non-contact, temperature measurement from stator to rotor
- Small-size (5.9 mm/ 0.2 in.)
- Easy installation through one ventilation hole or near rotor pole.
- On-line temperature monitoring of each rotor pole
- Patented pending technology.

### DIMENSIONS





## TWR-100 GENERAL SPECIFICATION

### Operating

- Continuous Temperature Measuring Range 0 to 200°C (32 to 392°F)
- Accuracy <5°C/<9°F (40° to 200°C/104° to 392°F)
- Repeatability <1°C/<1.8°F
- Frequency Response DC to 350 Hz<sup>(1)</sup> (0° to 200°C/32° to 392°F)

(1) Note: For DC to 900 Hz, contact VibroSystM Sales Department

### Electronics

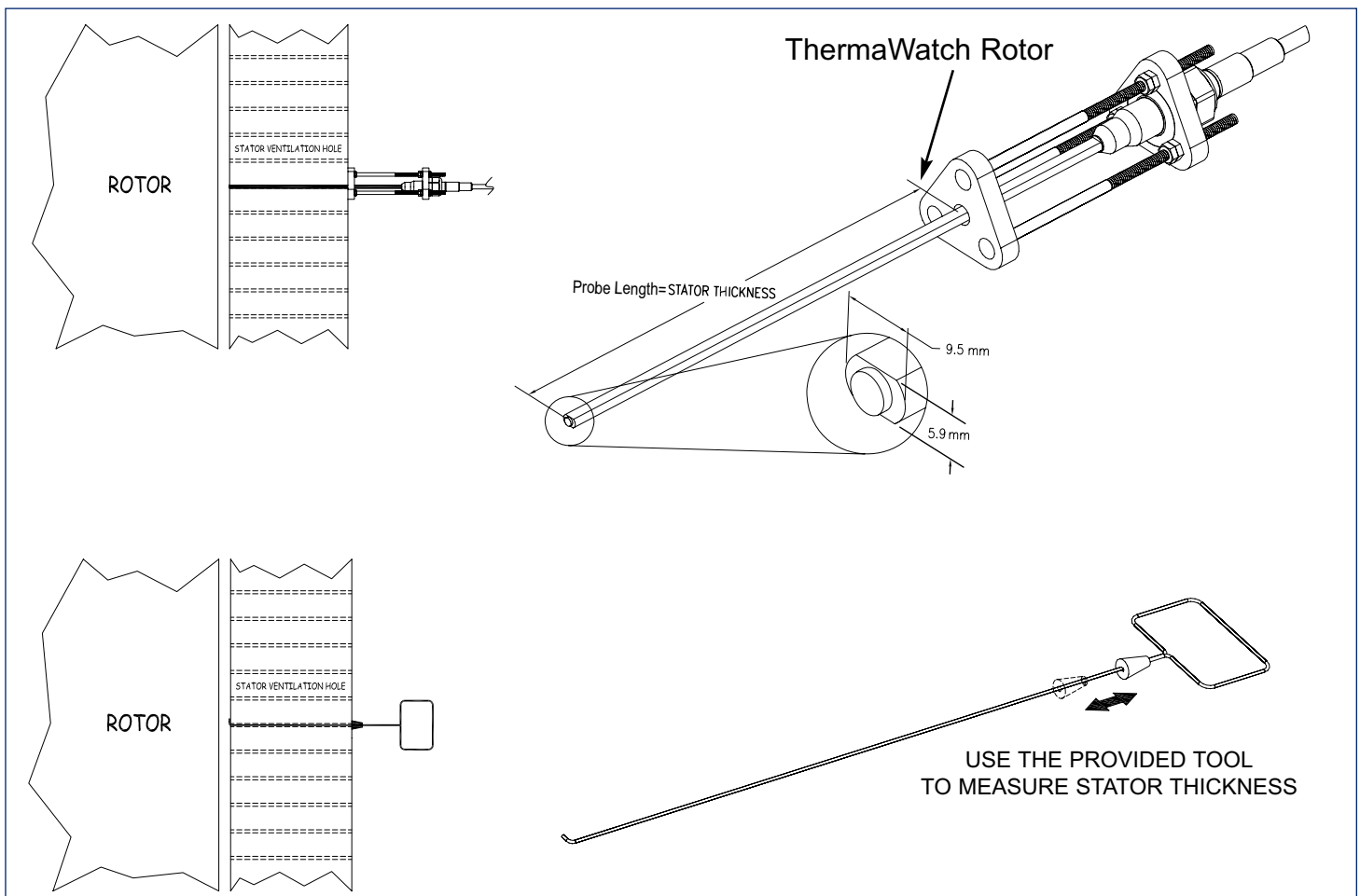
- Output signal 4 to 20 mA
- Power Supply + 24 Vdc

### Environmental

- Temperature Range
  - Probe 0° to 150°C (32° to 302°F)
  - Sensor 0° to 100°C (32° to 212°F)
  - Signal Conditioner 0° to 65°C (32° to 149°F)

### Physical Characteristics

- Probe Tip 5.9 mm/0.2 in.
  - Extension Cable up to 6.0 m/19.7 ft
  - Probe Length Maximum 457 mm/18 in.
- Other lengths can be customized by VibroSystM.



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VibroSystM reserves the right to change specifications to improve products without notification.  
<sup>1</sup> Protected by patents around the world: US patents 7,064,559; 6,307,385; 6,552,667; 6,075,464; 5,990,807; 5,182,612; and other patents pending.

**Published:** 07.08.06 **Revised:** 09.03.13