# RT381-SP Rotary Temperature Transmitter

### TempTrak<sup>®</sup> All-Digital Technology For Precise Godet Temperature Control

The RT381-SP is a one-channel temperature measurement system designed as an upgrade for Teijin-Seiki STA transmitters to monitor temperature and speed on heated godet roll shells on filament spinning machines. The system features generous 8 mm clearance between the rotating and stationary parts which eliminates damage due to impact and rubbing. TempTrak® data communications technology is unaffected by dust or debris. Digital circuitry in the rotating transmitter and the stationary receiver are immune to electrical noise and drift. Fault detection modes protect heater from damage and expedite troubleshooting in the event of a sensor failure.

Generous 8 mm rotor-stator clearance

- Replacement for Teijin-Seiki STA
- Digital circuitry from sensor input to signal output

### **FEATURES**

**Accurate** Within ±1.0°C across entire sensing range.

**Robust** Fully encapsulated electronics with generous clearance between rotor and stator.

**Fully Compatible** Easy replacement, works with existing wiring and process control systems for temperature and speed (RPM) signals.

**Digital Circuitry** Maintains calibration and is immune to electrical noise and drift.

**Intelligent** Protects heater if sensor or transmitter malfunctions.

**Product Support** Backed by BEI's reputation for the strongest customer support in the industry including a two-year warranty.

**BINSFELD ENGINEERING INC.** 

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**TYPICAL SPECIFICATIONS** 

Rotor	
Number of Sensors:	1
Input Sensor Type:	JPt200 RTD (200 $\Omega$ at 0°C), Alpha =0.003916(JIS-1604)
Speed:	standard 10,000 RPM (max)
Stator I/O Connector:	8 conductor screw terminal
I/O Signal - Temperature:	551 to 6959 Hz for -10 to 300°C RTD temperature
I/O Signal - Speed:	Frequency Output at 12 Pulses per Revolution
Status Indicator Lights:	Power, Temperature, Signal
Supply Voltage:	18 - 28 VAC or 25 - 40 VDC
Supply Current:	200 mA (max), 100 mA (nom)
System Accuracy:	$\pm 0.3\%$ of span (±0.1° over -10° to 300°C span)(max over operating temperature range)
Operating Temperature:	0 - 85°C, non-condensing

Specifications subject to change without notice.

#### Warranty

Binsfeld Engineering Inc. warrants that its RT381 Series Transmitters will be free from defective materials and workmanship for a period of two years from the date of delivery to the original purchaser and that its products will conform to specifications and standards published by Binsfeld Engineering Inc. Upon evaluation by Binsfeld Engineering Inc., any product found to be defective will be replaced or repaired at the sole discretion of Binsfeld Engineering Inc. Our warranty is limited to the foregoing. Binsfeld Engineering Inc. disclaims any warranty of merchantability or fitness for intended purpose.

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