

# **PY-Series - Polymer Surface Pt Temperature Sensor**

Temperature range -20 °C to +110 °C

#### **Performance Characteristics**

- Ideal surface contact sensor
- Robust polymer housing
- Abrasion resistant jacketed cable
- Ease of mounting by through hole
- Highly resistant against most chemicals
- According to DIN EN IEC 60751

### **Application Examples**

- PV module management
- HVAC
- Data logging
- General purpose surface sensing



Image for illustration purposes only

Page 1 of 2

#### **Dimensions and Materials**

Contact: nexensos.america@yageo.com

| No. | Product<br>Type | Element Resistance $R_{_0}\left[\Omega ight]$ | Dimensions and Tolerances (mm) |           |            |             |             | Conductor     |            |               | Order    |
|-----|-----------------|---|--------------------------------|-----------|------------|-------------|-------------|---------------|------------|---------------|----------|
|     |                 |   | HL                             | HW        | CL         | BD          | L           | Core<br>(AWG) | Insulation | Color         | Number   |
| 1   | PY3060-S-B32    | Pt100 / F 0.3                                 | 30<br>±0.1                     | 6<br>±0.1 | 2514<br>±8 | 3.2<br>±0.1 | 2530<br>±10 | 24/07<br>Cu   | PVC/PVC    | White/<br>Red | 31600393 |
| 2   | PY3060-S-B32    | Pt1000 / F 0.3                                | 30<br>±0.1                     | 6<br>±0.1 | 2514<br>±8 | 3.2<br>±0.1 | 2530<br>±10 | 24/07<br>Cu   | PVC/PVC    | White/<br>Red | 30504002 |
| 3   | PY3060-S-B32    | Pt100 / F 0.3                                 | 30<br>±0.1                     | 6<br>±0.1 | 3014<br>±8 | 3.2<br>±0.1 | 3030<br>±10 | 24/07<br>Cu   | PVC/PVC    | White/<br>Red | 5145162  |

YAGEO Nexensos GmbH, Germany
Web: www.yageo-nexensos.com
Document: 20003959432 Part 001 Version 04 | Status: 11/2024



## **PY-Series - Polymer Surface Pt Temperature Sensor**

Temperature range -20 °C to +110 °C

#### **Performance Data**

| No. | Temperature       |          | se Time<br>= 0.4 m/s) | Conductor        | Application   |  |
|-----|-------------------|----------|-----------------------|------------------|---------------|--|
|     | Range             | T0.5 [s] | T0.9 [s]              | Resistance [Ω/m] |               |  |
| 1   | -20 °C to +110 °C | 11.5     | 32                    | 0.08 ±10 %       | Multi-Purpose |  |
| 2   | -20 °C to +110 °C | 11.5     | 32                    | 0.08 ±10 %       | Multi-Purpose |  |
| 3   | -20 °C to +110 °C | 11.5     | 32                    | 0.08 ±10 %       | Multi-Purpose |  |

#### **Temperature Coefficient**

TCR = 3850 ppm/K

#### **Measuring Current**

Pt100  $\Omega$ : 0.3 to 1.0 mA Pt1000  $\Omega$ : 0.1 to 0.3 mA

(self-heating has to be considered)

## **Self-Heating (Sensor Element)**

0.4 K/mW at 0 °C

#### **Customization Optioins**

- Sensor element (type and resistance)
- Cable material (core and insulation)
- Cable dimensions (length and diameter)
- Connectors
- Certifications (e.g. IMDS, PPAP, IP rating)

Need more information? Check out our Sensor Academy!

Document: 20003959432 Part 001 Version 04 | Status: 11/2024





The information provided in this data sheet describes certain technical characteristics of the product, but shall not be qualified or construed as quality guarantee (Beschafenheitsgarantie) in the meaning of sections 443 and 444 German Civil Code. The information provided in this data sheet regarding measurement values (including, but not limited to, response time, long-term stability, vibration and shock resistance, insulation resistance and self-heating) are average values that have been obtained under laboratory conditions in tests of large numbers of the product. Product results or measurements achieved by customer or any other person in any production, test, or other environment may vary depending on the specific conditions of use. YAGEO Nexensos does not recommend the use of standard catalogue products or automotive grades for YAGEO Nexensos applications or manned space flight. The customer is solely responsible to determine whether the product is suited for the customer's intended use; in this respect YAGEO Nexensos cannot assume any liability. The sale of any products by YAGEO Nexensos is exclusively subject to the General Terms of Sale and Delivery of YAGEO Nexensos in their current version at the time of purchase, which is available under www.yageo-nexensos.com/tc or may be furnished upon request. This data sheet is subject to changes without prior notice.

YAGEO Nexensos GmbH, Reinhard-Heraeus-Ring 23, 63801 Kleinostheim, Germany

YAGEO Nexensos GmbH, Germany Web: www.yageo-nexensos.com Contact: nexensos.america@yageo.com