

Manufacturer Declaration

Manufacturer: **Yokogawa Process Analyzers Europe B.V.**
Address: **Euroweg 2**
3825 HD Amersfoort
The Netherlands

Product description: **SM60-T1, Pt1000 temperature sensor**

Statement:

The sensor meets the requirements given by the standard IEC 60079-11:2011, "Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i". Within the standard it falls into the category "**simple apparatus**" (clause 5.7(a), passive component).

The sensor has no internal voltage and/or current-limiting and/or suppression devices and does not contain any means of increasing the available voltage or current.

The sensor has negligible internal inductance and capacitance. The connection cable, type WU20-PC or WU20-LT or WF10 in combination with BA10 connection box, has a maximum inductance of 1µH/meter and a maximum capacitance of 1.5nF/meter.

Special conditions of use must be taken into consideration:

- The sensor may only be connected to an intrinsically safe certified Yokogawa analyzer model PH202S, FLXA21 and FLXA202, with a maximum connection cablelength of 60 meters in between the electrode and analyzer.
- Electrostatic charges of the sensor enclosure parts shall be avoided, especially in the case that the process medium is non-conductive. Use a damp cloth for cleaning the sensor.
- When the sensor is located in the explosive atmosphere, the maximum process temperature depends on the temperature class. Values are defined in table 1 considering the self heating of the temperature sensor.

Table 1: Upper limit of process temperature SM60-T1

Temperature Class	Max. Process temperature [°C]
T6	55
T5	70
T4	110
T3	150 *
T2	150 *
T1	150 *

*: Max. Process temperature is limited by the operating temperature of the sensor.

If applicable, the product is checked against the latest official released revision of the standards mentioned above. Differences do not affect the product identified on this declaration.

Amersfoort – September 15, 2020

Yokogawa Process Analyzers Europe B.V.

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T. Both
Safety Engineer

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S. Kiyono
General Manager