ТΤ

multipoint temperature probe with protective sheath in 304SS



technical documentation EN Rev. of 01/02/2024



CONTENTS

| 1-WARRANTY | page | 3 |
|--|------|----|
| 2-PRODUCT | page | 4 |
| 3-FEATURES | page | 5 |
| 4-DIMENSIONS | page | 6 |
| 5-INSTALLATION | page | 8 |
| 6-ELECTRICAL CONNECTION | page | 11 |
| 7-FACTORY TEST AND QUALITY CERTIFICATE | page | 12 |

Products supplied by SGM LEKTRA are guaranteed for a period of 12 (twelve) months from delivery date according to the conditions specified in our sale conditions document.

SGM LEKTRA can choose to repair or replace the Product.

If the Product is repaired it will maintain the original term of guarantee, whereas if the Product is replaced it will have 12 (twelve) months of guarantee.

The warranty will be null if the Client modifies, repair or uses the Products for other purposes than the normal conditions foreseen by instructions or Contract.

In no circumstances shall SGM LEKTRA be liable for direct, indirect or consequential or other loss or damage whether caused by negligence on the part of the company or its employees or otherwise howsoever arising out of defective goods.

ATTENTION!

<u>Ground connection is essential for protection against electrostatic discharge</u> <u>caused by the rubbing of the measured product.</u>

NOTE: The absence of an adequate grounding connection

automatically voids the warranty of the product.



2.1 IDENTIFICATION

Each instrument has an adhesive identification plate on which are the meter main data. The following picture describes the information and data on the identification plate.



1. Product code

2. Length thermometer rope

3. Serial number

3-FEATURES

Housing material aluminium coated with epoxy paint

Thermometric well material SS304

Minimum mean bend radius of thermometric well 800mm

Process connection

SS304 1/2" G Under rook arch fixing with 1mt. chain and bracket in carbon steel passivated DN40 PN6 Carbon steel passivated flange DN40 PN6 PP flange

IP rating IP 66

Thermometric well IP rating

Measuring points

n° 1 ÷ xx (max n°12)

Measure range

-30 ÷ +125°C

Accuracy

 $\pm 0,5^{\circ}$ C (in the range of -10° C $\div +85^{\circ}$ C)

Certification

ATEX II 1D IP66 T125°C ATEX Zone 22

4-DIMENSIONS

4.1 MECHANIICAL DIMENSION





5-INSTALLATION

5.1 INSTALLATION PRECAUTIONS

- Installation must be only performed by qualified personnel and in accordance with local governing regulations.
- The equipment must be used only after having correctly transposed the instructions of this manual
- The power supply and electrical connections plate data must always be respected
- Improper device use would cause serious damage to people, to the product and connected equipment

5.2 GROUNDING

Ground connection is essential for protection against electrostatic discharge caused by the rubbing of the measured product. NOTE: The absence of an adequate grounding connection automatically voids the warranty of the product.



5.3 EXTERNAL MOUNTING ADVICE

- fully well tighten the cap and the PG9 cable glands.

- For the connections between the TT probes and MUX use the FUTP2PR AWG624/1 CAT. 5E cable or equivalent.
- position the cable so that it forms a downward curve at the PG9 output (as shown below); in this way the conden sation and/or rain water will tend to drip from the curve bottom.





5.5 CONNECTIONS CABLE SPECIFICATION

| FUTP2PR AWG 6 24/1 CAT. 5E cable | | |
|----------------------------------|--|--|
| FUTP2PR AWG 6 24/1 CAT. 5E cable | Copper rigid wire Ø 0,50mm | |
| Conductors | Copper rigid wire Ø 0,50mm | |
| Insulations | Polyethylene Ø 1,00mm +-0,1 | |
| Colors | 2 white-green-brown | |
| Twisted wires in pairs | Green - white G / brown - white B | |
| Twisting | Twisted couples to each other | |
| Shield | Polyester tape + continuity tinned copper wire + Mylar tape | |
| Insulating sheath | PVC RZ BLUE RAL 5015 Ø 5,90mm+-0,50 | |
| Marking | SGM-LEKTRA-525B025A-F UTP 2PR AWG 6 24/1 CAT 5E + metric marking | |
| Operating temperature | -25°C+70°C (fixed installation) | |
| Test voltage | 1,5KV V.c.a. | |
| Working voltage | 300/300V | |
| Curvature radius | 8 times the diameter | |
| Reference Standards | CEI 20-35 - IEC 332.1 – CEI 20-37 ROHS 2011/65/UE(ROHS 2) | |

6-ELECTRICAL CONNECTIONS

6.1 CONNECTIONS

- Remove the closing cover and the caps from the cable glands.
- Insert the connection cables between the TT probes and MUX by passing them through the cable glands.
- Connect the cables to the appropriate terminals as per the following paragraphs.
- Fully tighten the cable glands and the cover to ensure IP66 protection



Electrical connections between TT sensors and MUX02 unit must be made with shielded-cable FTP4 4x2x24 AWG.

The shield must be connected to the "S" TT sensor main connector only!

Connection cable limit-lenght from MUX02 to TT sensor is 50m, be sure to place the connection cable far from power cables. ATTENTION !

Make wrong connection can demage the TT sensors.

7-FACTORY TEST AND QUALITY CERTIFICATE

In conformity to the company and check procedures I certify that the equipment:
TT serial n°:
is conform to the technical requirements on Technical Data and it is made in conformity to the procedure

Quality Control Manager: Production and check date:

