

1. **EU-TYPE EXAMINATION CERTIFICATE**
2. **Equipment or Protective System Intended for use in Potentially explosive atmospheres
Directive 2014/34/EU**
3. EU-Type Examination Certificate Number: **EESF 18 ATEX 050X Issue 2**
4. Product: **Temperature sensor**

Certified types: **W-M-302-3/XXXX-YYY/FEP-4-A-EX
W-M-302-3/XXXX-YYY/FEP-4-A-T-EX
W-M-302-6/XXXX-YYY/FEP-4-A-EX
W-M-302-6/XXXX-YYY/FEP-4-A-T-EX**
5. Manufacturer: **Lapp Automaatio Oy**
6. Address: **Martinkyläntie 52, FI-01720 Vantaa, Finland**

Additional manufacturing locations:

Lapp Connecto Oy, Varastokatu 10, FI-05800 Hyvinkää, Finland
7. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
8. Eurofins Expert Services Oy, Notified Body number 0537, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report No. EUFI29-19005105-T1.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN IEC 60079-7:2015/A1:2018 EN 60079-31:2014
10. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
11. This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
12. The marking of the product shall include the following:



II 2G Ex eb IIC T6...T4 Gb
II 2D Ex tb IIIC T60°C... T130°C Db

Espoo, 20.12.2019
Eurofins Expert Services Oy



Kari Koskela
Expert



Jenni Hirvelä
Expert

This document is digitally signed.

13. **Schedule**

14. **EU-Type Examination Certificate EESF 18 ATEX 050X Issue 2**

15. **Description of Product**

The temperature sensors consists of one Pt100-measuring element in a mineral insulated stainless steel protection tube. For the connection to external circuits the sensor is equipped with four connection wires and a PE conductor.

In the type designation XXXX is the length of the mineral insulated stainless steel tube is and YYY is the length of the connection wires.

Recommended current 1 mA.

 $U_{\max} = 60 \text{ V}$
 $I_{\max} = 10 \text{ mA}$ (types ...4-A-EX)

 $I_{\max} = 5 \text{ mA}$ (types ...4-A-T-EX)

16. **Report Number**

EUFI29-19005105-T1

17. **Specific Conditions of Use**

Allowed maximum ambient temperature ranges for T6...T4 are:

T6: $-40 \text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq +80 \text{ }^{\circ}\text{C}$

T5: $-40 \text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq +95 \text{ }^{\circ}\text{C}$

T4: $-40 \text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq +130 \text{ }^{\circ}\text{C}$

Allowed maximum ambient temperature ranges for T60 °C...T130 °C are:

T60°C: $-40 \text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq +60 \text{ }^{\circ}\text{C}$

T130°C: $-40 \text{ }^{\circ}\text{C} \leq T_{\text{amb}} \leq +130 \text{ }^{\circ}\text{C}$

For intermediate values, the maximum surface temperature $T^{**} \text{ }^{\circ}\text{C}$ shall be equal to maximum T_{amb} value.

The sensor head may be exposed to process temperatures outside the above mentioned ranges but in no case shall the pot seal or the connection wires be exposed to temperatures beyond $-40 \text{ }^{\circ}\text{C}$... $+130 \text{ }^{\circ}\text{C}$. The permitted process temperature ranges are $-200 \text{ }^{\circ}\text{C}$... $+400 \text{ }^{\circ}\text{C}$ or $-200 \text{ }^{\circ}\text{C}$... $+550 \text{ }^{\circ}\text{C}$ depending on the Pt100 element and as marked on the equipment.

The connection of the sensor to external circuits shall be made within appropriate Ex eb or Ex tb enclosure as applicable. Also the pot seal shall be within the enclosure.

18. **Essential Health and Safety Requirements**

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

19. **Drawings and Documents**

Construction drawing, component list and manufacturing instructions:

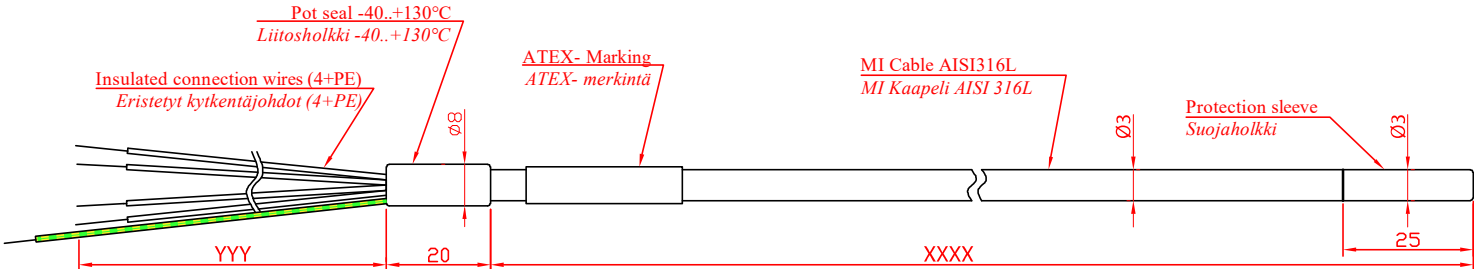
Equipment type:	Document number:
W-M-302-3/XXXX-YYY/FEP-4-A-EX	5111619 (rev 0), 5 pages
W-M-302-3/XXXX-YYY/FEP-4-A-T-EX	5111621 (rev 0), 5 pages
W-M-302-6/XXXX-YYY/FEP-4-A-EX	5112026 (rev 0), 5 pages
W-M-302-6/XXXX-YYY/FEP-4-A-T-EX	5112025 (rev 0), 5 pages

20. Certificate History

Certificate	Date	Report No.	Change
VTT 07 ATEX 014X	23.1.2007	VTT-S-00736-07	Prime certificate.
VTT 07 ATEX 014X Supplement 1	20.3.2008	-	Added a temperature sensor type: WT-MI-302-3/1000-200/FEP-4J-KLA-EX. Construction drawing, component list and manufacturing instructions.
EESF 18 ATEX 050X	05.12.2018	-	Name and address of the manufacturer has changed. The Certificate Number has changed due to the name change of the Notified Body.
EESF 18 ATEX 050X Issue 1	20.2.2019	-	Document revisions corrected.
EESF 18 ATEX 050X Issue 2	20.12.2019	EUF129- 19005105-T1	Product names simplified (WT-MI... to W-M...), other lengths besides 1000mm permitted, and new models with a different Pt100 element added.

Changes in the drawing are allowed only by the permission of the authorities who have granted the certificate
 Muutokset sallittu vain sertifikaatin myöntäjän luvalla

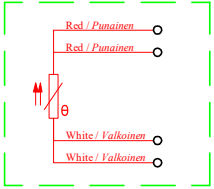
The drawing is a valid document only with signatures (Chkd. and Appd.)
 Piirustus on pätevä dokumentti vain allekirjoitettuna (Tark. ja Hyv.)



- Operating temperature range -200...+550°C temporarily + 600°C
- Recommended applied current 1 mA
- Electrical connections to approved unit according to application or to terminal box according to requirements at connecting site
- When 2 or 3 wire connection is used all wires must be connected or terminated accordance with the regulations
- Tinned copper connection wires 0,22 mm²

- Käyttölämpötila-alue -200...+550°C hetkellisesti + 600°C
- Suositeltava sovellettu mittausvirta 1 mA
- Sähköinen kytkentä sovelluksen mukaisesti hyväksyttyyn laitteeseen tai kytkentäkoteloon kytkentä paikan vaatimusten mukaisesti
- Käytettäessä 2- tai 3 johdinkytkentää, kaikki johtimet pitää olla kytkettynä tai päätettynä määräysten mukaisesti
- Tinatut kupari kytkentäjohtimet 0,22 mm²

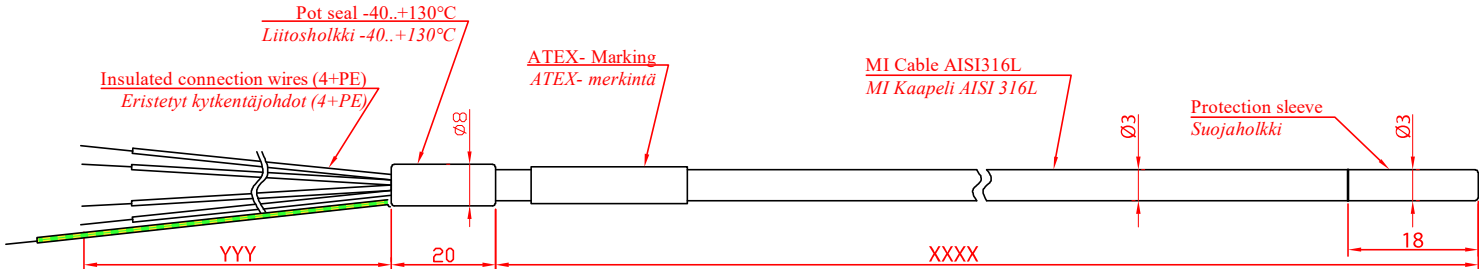
1x Pt100, Class A, 4-wire, acc. to standard IEC 60751.
 1xPt100, Luokka A, 4-johdin, standardin IEC 60751 mukaan



	Name Nimi	Signature Allekirjoitus	Date Päiväys	Info				
Drawn Piirtäjä	T.Mahrberg		12.11.2019	EESF 18 ATEX 050X II 2G Ex eb IIC T6-T4 Gb II 2D Ex tb IIIC T60°C...T130°C Db				
Checked Tarkastaja	S.Ojanen		12.11.2019					
Approved Hyväksyjä	V.Tepponen		12.11.2019					
LAPP AUTOMAATIO Lapp Automaatio Oy Martinkyläntie 52 FI-01720 Vantaa, Finland p. +358 (0) 20 764 64 e. info.automaatio@lappgroup.com				Process material Prosessi materiaali AISI 316		Product Tuotenimi W-M-302-3/XXXX-YYY/FEP-4-A-EX	Size Koko A4	
				Coating material Pinnoite materiaali		Drawing number Piirustusnumero 5111619	Rev. 0	Scale Suhde

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 Muutokset sallittu vain sertifikaatin myöntäjän luvalla

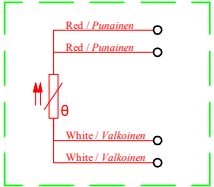
The drawing is a valid document only with signatures (Chkd. and Appd.)
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- Operating temperature range -200...+400°C
- Recommended applied current 1 mA
- Electrical connections to approved unit according to application or to terminal box according to requirements at connecting site
- When 2 or 3 wire connection is used all wires must be connected or terminated accordance with the regulations
- Tinned copper connection wires 0,22 mm²

- Käyttölämpötila-alue -200...+400°C
- Suositeltava sovellettu mittausvirta 1 mA
- Sähköinen kytkentä sovelluksen mukaisesti hyväksyttyyn laitteeseen tai kytkentäkoteloon kytkentä paikan vaatimusten mukaisesti
- Käytettäessä 2- tai 3 johdinkytkentää, kaikki johtimet pitää olla kytkettynä tai päätettynä määräysten mukaisesti
- Tinatut kupari kytkentäjohtimet 0,22 mm²

1x Pt100, Class A, 4-wire, acc. to standard IEC 60751.
 1xPt100, Luokka A, 4-johdin, standardin IEC 60751 mukaan

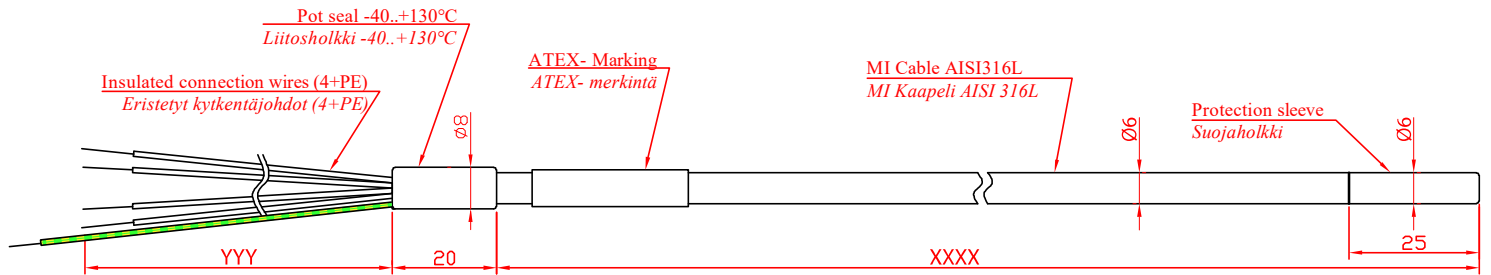


Name Nimi	Signature Allekirjoitus	Date Päiväys	Info		
Drawn Piirtäjä	T.Mahrberg	12.11.2019	EESF 18 ATEX 050X II 2G Ex eb IIC T6-T4 Gb II 2D Ex tb IIIC T60°C...T130°C Db		
Checked Tarkastaja	S.Ojanen	12.11.2019			
Approved Hyväksyjä	V.Tepponen	12.11.2019			
LAPP AUTOMAATIO Lapp Automaatio Oy Martinkyläntie 52 FI-01720 Vantaa, Finland p. +358 (0) 20 764 64 e. info.automaatio@lappgroup.com			Process material Prosessi materiaali	Product Tuotenimi	Size Koko
			AISI 316	W-M-302-3/XXXX-YYY/FEP-4-A-T-EX	A4
			Coating material Pinnoite materiaali	Drawing number Piirustusnumero	Scale Suhde
				5111621	
				Rev. 0	

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Muutokset sallittu vain sertifikaatin myöntäjän luvalla

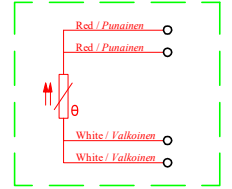
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- Operating temperature range -200...+550°C temporarily + 600°C
- Recommended applied current 1 mA
- Electrical connections to approved unit according to application or to terminal box according to requirements at connecting site
- When 2 or 3 wire connection is used all wires must be connected or terminated accordance with the regulations
- Tinned copper connection wires 0,22 mm²

- Käyttölämpötila-alue -200...+550°C hetkellisesti + 600°C
- Suositeltava sovellettu mittausvirta 1 mA
- Sähköinen kytkentä sovelluksen mukaisesti hyväksyttyyn laitteeseen tai kytkentäkoteloon kytkentä paikan vaatimusten mukaisesti
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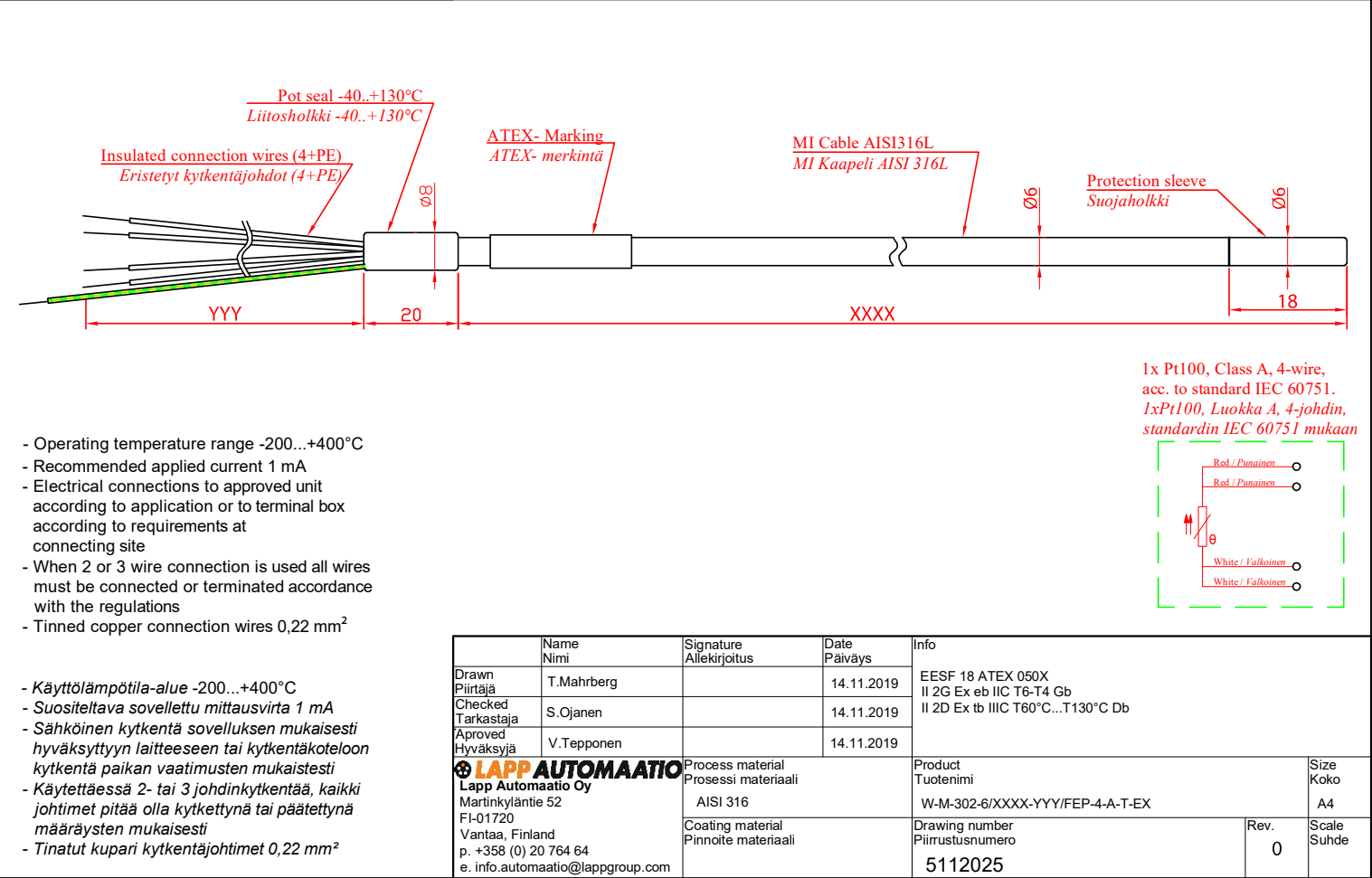
1x Pt100, Class A, 4-wire, acc. to standard IEC 60751.
1xPt100, Luokka A, 4-johdin, standardin IEC 60751 mukaan



Name Nimi	Signature Allekirjoitus	Date Päiväys	Info		
Drawn Piirtäjä	T.Mahrberg	14.11.2019	EESF 18 ATEX 050X II 2G Ex eb IIC T6-T4 Gb II 2D Ex tb IIIC T60°C...T130°C Db		
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LAPP AUTOMAATIO Lapp Automaatio Oy Martinkyläntie 52 FI-01720 Vantaa, Finland p. +358 (0) 20 764 64 e. info.automaatio@lappgroup.com			Process material Prosessi materiaali AISI 316	Product Tuotenimi W-M-302-6/XXXX-YYY/FEP-4-A-EX	Size Koko A4
			Coating material Pinnoite materiaali	Drawing number Piirustusnumero 5112026	Rev. 0 Scale Suhde

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EU Declaration of Conformity

We, the manufacturer Lapp Automaatio Oy
Martinkyläntie 52
FI-01720 Vantaa, Finland

declare that the following product

Temperature sensor

Type: W-M-302-3/XXX-YYY/FEP-4-A-EX
W-M-302-3/XXX-YYY/FEP-4-A-T-EX
W-M-302-6/XXX-YYY/FEP-4-A-EX
W-M-302-6/XXX-YYY/FEP-4-A-T-EX

is in conformity with the Directive 2014/34/EU.

The declaration is based on the EU-type Examination Certificate
EESF 18 ATEX 050X Issue 2

and the Production Quality Assessment Notification EESF 18 ATEX Q 006

issued by Eurofins Expert Services Oy (Notified Body number 0537),
address: Kivimiehentie 4, P.O. Box 47, FI-02151 Espoo, Finland.

The marking of the equipment or protective system include the following:

 II 2 GD Ex eb IIC T6... T4 Gb
Ex tb IIIC T60°C... T130°C Db

The compliance with the Essential Health and Safety Requirements of the Directive is met by
the compliance with the following standards:

EN IEC 60079-0:2018
EN IEC 60079-7:2015/A1:2018
EN 60079-31:2014

"The revised (now harmonized) standards have been compared to the standards used for certification
purposes and that no changes in the "state of the art" apply to the equipment."

Vantaa 3.2.2020



Johan Olofsson
Managing Director of Lapp Automaatio Oy

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