

MUUTOKSET SALLITTU VAIN SERTIFIKAATIN MYÖNTÄJÄN LUVALLA
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PIIRROS ON PÄTEVÄ DOKUMENTTI VAIN ALLEKIRJOITETTUNA (Tark. ja Hyv.)
 The drawing is a valid document only with signatures
 (Chkd. and Appd.)

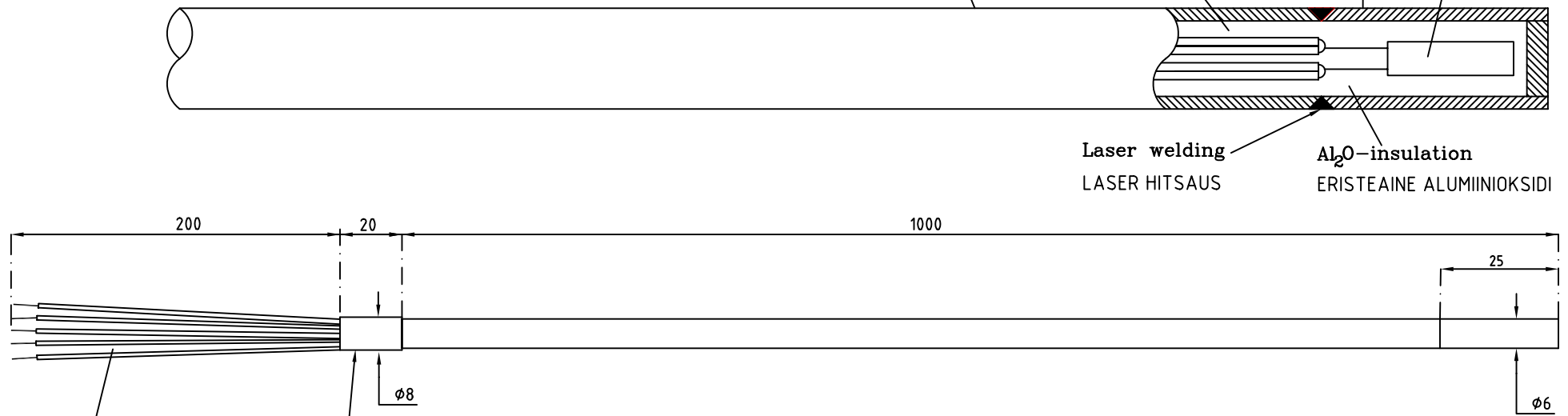
Transducer cable, 4XCu Conductors, sheat AISI 316L
 Mi-KAAPELI, 4XCU-JOHTIMET, VAIPPA AISI 316L

Protection tube
 SUOJAPUTKI AISI 316L
 PT100 IEC-751/A

MgO-insulation
 ERISTEAINE MAGNESIUMOKSIDI

Laser welding
 LASER HITSAUS

Al₂O₃-insulation
 ERISTEAINE ALUMIINIOKSIDI



Insulated connection wires (4+PE)
 ERISTETYT KYTKENTÄJOHDOT (4+PE)

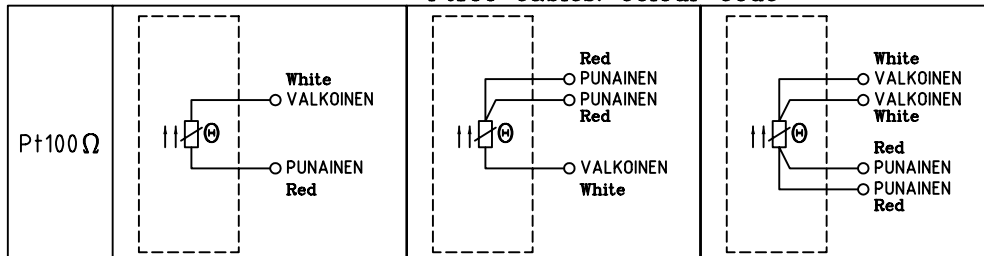
Max temperature -40/+125 °C

- MAX. KÄYTTÖLÄMPÖTILA +550°C
- MAX. MITTAUSVIRTA 10 mA
- SÄHKÖINEN KYTKENTÄ SOVELLUKSEN MUKAISESTI HYVÄKSYTTYYN LAITTEeseen TAI KYTKENTÄKOTELOON KYTKENTÄPAIKAN VAATIMUSTEN MUKAISESTI.

- Max operating temperature +550 °C
- Max measuring current 10 mA
- Electrical connections to approved unit according to application or to terminal box according to requirements at connecting site

Pt100-JOHTIMIEN VÄRIMERKINNÄT

Pt100 Cables: Colour Code



Nimitys Title
 ATEX-HYVÄKSYNTÄ NRO
 ATEX-APPROVAL NR. VTT 07 ATEX 014X
 TYYPPI
 TYPE
 WT-MI-302-6/1000-200/FEP-4 J-KLA-EX

SKS Group Oy
 PL 122
 01720 VANTAA
 FINLAND

Päiväys Date 31.01.2007	Suunn. Design T.Ojanen	Tark. Chkd.	Hyv. Appd.	Muutos Revision REV.2	Piirustusnumero Drawing Number 1073428	Lehti Sheet
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1. **EC-TYPE EXAMINATION CERTIFICATE**2. **Equipment or Protective System Intended for use in
Potentially explosive atmospheres - Directive 94/9/EC**

3. Reference: **VTT 07 ATEX 014X**
4. Equipment: **Temperature sensor**
- Certified type: **WT-MI-302-6/1000-200/FEP-4J-KLA-EX**
5. Manufactured by: **SKS Group Oy**
6. Address: **Martinkyläntie 50, FI-01720 Vantaa, Finland**

7. This equipment or protective system and any acceptable variations thereto are specified in the schedule and possible supplement(s) to this Certificate and the documents therein referred to.

8. VTT, notified body number 0537, in accordance with Article 9 of the Council Directive 94/9/EC of March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system 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. VTT-S-00736-07.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 (2004) **EN 60079-7 (2003)**
EN 61241-0 (2006) **EN 61241-1 (2004)**

10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11. This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12. The marking of the equipment or protective system shall include the following:



II 2 GD

Ex e II T1-T6

Ex tD A21 IP66 T 60 °C

T_{amb}: -40 ... + 125/ 550 °C

VTT Technical Research Centre of Finland

Espoo, 23.1.2007



Martti Siirola
Research Scientist



Risto Sulonen
Senior Research Scientist



13. **Schedule**14. **EC-TYPE EXAMINATION CERTIFICATE VTT 07 ATEX 014X**

15. Description of Equipment

Temperature sensor, type WT-MI-302-6/1000-200/FEP-4J-KLA-EX, consists of one Pt100-measuring element in a stainless steel protection tube. For the connection to external circuits the sensor is equipped with a fixed MgO-insulated cable with 4+PE conductors. The length (in mm) of a MgO-cable is 1000 mm.

Documents:

Construction drawing, component list and manufacturing instructions; drawing nr. 1073428 (rev 3), 3 pages

16. Report No. VTT-S-00736-07.

17. Special conditions for safe use

The temperature classification of the sensor (550 °C, T1 - T6) is determined by the ambient temperature of the installation place.

Maximum ambient temperature is 550 °C for the sensor head and 125 °C for the connection terminals of the sensor cable.

The connection of the sensor to external circuits shall be made according to the requirements of the connection place. Maximum voltage in the circuits to which the sensor is connected shall not exceed 60 V.

18. Essential Health and Safety Requirements

Met by the compliance with the standards EN 60079-0, EN 60079-7, EN 61241-0 and EN 61241-1

VTT Technical Research Centre of Finland

Espoo, 23.1.2007



Martti Siirola
Research Scientist



Risto Sulonen
Senior Research Scientist