(1) # EC-Type Examination Certificate

(2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**

(3) Examination certificate number: **SEV 08 ATEX 0142 X**

(4) Equipment: Pressure transmitter type PTM/.../Ex

(5) Manufacturer: STS Sensor Technik Sirnach AG

(6) Address: Rütihofstrasse 8, CH-8370 Sirnach

(7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) Electrosuisse SEV, notified body No. 1258 in accordance with article 9 of the Council Directive of the European Communities of 23 March 1994 (94/9/EC), certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment or protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The results of the examination are recorded in confidential report no 08-IK-0222.01 incl. Extension 1.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN 60079-0:09 **EN 60079-11:12** **EN 60079-26:07**

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

(11) This examination certificate relates only to design and construction of the specified equipment in accordance with the directive 94/9/EC. Further requirements of this directive apply to the manufacturing process and the placing on the market of the equipment.

(12) The marking of the equipment shall include the following:

See Appendix page 3

Electrosuisse
Notified Body ATEX

Martin Plüss
Product Certification

SCESp 035

Fehraltorf, 2012-08-28

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(13) # Appendix

(14) **EC-Type Examination Certificate**

(15) Description of the equipment

The pressure transmitter STS type PTM/.../Ex amplifies the signal of a piezo resistive pressure measuring bridge to a standard 4-20mA signal. Supply and signal transmission takes place by an intrinsically safe two-wire current loop. The superposition of digital signals enables the communication of further parameters.

Ratings

Measuring and supply circuit	with type of protection intrinsic safety Ex ia IIC only for connection to a certified intrinsically safe circuit. Maximum values: $U_i \leq 30$ V $I_i \leq 140$ mA $P_i \leq 0.9$ W
Effective internal capacitance	$C_i = 14$ nF
plus per metre length of connecting cable	$C_K = 0.12$ nF
Effective internal inductance	$L_i = 1.3$ mH
plus per metre length of connecting cable	$L_K = 0.001$ mH

Notes

1. The pressure transmitter STS type PTM/.../Ex can only be used in Zone 0 with the following design features:
   - To be used is a design variant with cable outlet or metal plug.
   - The cable sheath must be protected against electrostatic charge with metal braiding, metal tubing or metal conduit, which is conductively connected to the pressure transmitter and equipotential bonding system of the installation.

2. The pressure transmitter STS type PTM/.../Ex can be used in gas group IIC only in the design variant with cable outlet or metal plug.

3. The permissible ambient temperature range is -25°C to +85°C. The correlation between temperature class, maximum permissible ambient temperature and maximum permissible medium temperature is shown in the following table:

Temperature class		T6	T5	T4	T3
Ambient temperature	[°C]	55	80	85	85
Medium temperature	[°C]	55	80	110	150

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4. The permissible ambient temperature range is -25°C to +85°C. The correlation between the maximum surface temperature and maximum ambient temperature is shown in the following table:

Surface temperature	[°C]	80	---	125
Ambient temperature	[°C]	40	---	85

5. The metal housing of the pressure transmitter STS type PTM/.../Ex must be conductively connected to the equipotential bonding system of the installation when fitted.

   The user must be informed of this information in a suitable form.

(16) Test Report 08-IK-0222.01 incl. Extension 1

(17) Special conditions for safe use
Protect pressure transmitters with titanium housing against impact and friction.

(18) Fundamental essential health and safety requirements
Fulfilled by the standards applied

(19) Marking
In standard version:

Ex II 2G Ex ia IIB T3 ... T6
II 1D Ex ia IIIC IP6X T80 ... T125°C

In version for use in Group IIC und IIIC:

Ex II 2G Ex ia IIC T3 ... T6
II 1D Ex ia IIIC IP6X T80 ... T125°C

In version for use in Zone 0 und 20:

Ex II 1G Ex ia IIC T3 ... T6
II 1D Ex ia IIIC IP6X T80 ... T125°C

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