



(1) **EU-Type Examination Certificate**

- (2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 2014/34/EU**
- (3) Certificate number: **SEV 04 ATEX 0149 X**
- (4) Product: Pressure transmitter Type: TM../Ex
- (5) Manufacturer: STS Sensor Technik Sirmach AG
- (6) Address: Rütihofstrasse 8, 8370 Sirmach, Switzerland
- (7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Eurofins, notified body No. 1258, 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 19CH-01246.X01
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
- EN IEC 60079-0:2018**  
**EN 60079-11:2012**
- Except in respect of those requirements listed at item 18 of the schedule.
- (10) If the sign «X» is placed after the certificate number, it indicates that the product is subjected to special conditions for safe use specified in the schedule to this certificate. The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- (11) This EU type examination certificate relates only to design and construction of the specified product. Further requirements of this 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:



**TM/Ex and TM/N/Ex with cable outlet or metallic connector:**

**II 1 G Ex ia IIC T6 ... T3 Ga**  
**II 1 D Ex ia IIIC T200 110 °C Da**

**TM/Ex and TM/N/Ex in different versions:**

**II 2 G Ex ia IIB T6 ... T3 Gb**  
**II 1 D Ex ia IIIC T200 110 °C Da**

**Eurofins Electric & Electronic Product Testing AG**  
**Notified Body ATEX**

Martin Plüss  
Product Certification

(13)

## Appendix

(14)

**EU-Type Examination Certificate no. SEV 04 ATEX 0149 X**

(15) **Description of product**

For Gas application:

TM/Ex			
Temperature class	T6	T4	T3
Ambient temperature	-25 ... +55 °C	-25 ... +85 °C	-25 ... +85 °C
Medium temperature	-25 ... +55 °C	-25 ... +110 °C	-25 ... +150 °C

TM/N/Ex		
Temperature class	T6	T4
Ambient temperature	-5 ... +50 °C	-5 ... +80 °C
Medium temperature	-5 ... +50 °C	-5 ... +80 °C

For dust application:

TM/Ex and TM/N/Ex	
	Temperature
Ambient temperature	+85 °C
Maximum surface temperature	+110 °C

**Ratings:**

Parameter for all types and for +Vin/GND and for +Out/-Out:

$U_i = 20 \text{ V}$

$I_i = 300 \text{ mA}$

$P_i = 1.2 \text{ W}$

$C_i = 0 \text{ nF}$ ,  $L_i = 0 \text{ mH}$

$C_{\text{cable}} = 0.12 \text{ nF/m}$

Effective capacitance = cable length \*  $C_c$




$L_{\text{cable}} = 0.001 \text{ mH/m}$




Effective inductance = cable length \*  $L_c$

Classification of installation and use:      stationary

Ingress protection:                              IP20

**Part number code:**

Type	TM/Ex		
Material enclosure	Stainless steel or titanium		
Connection	Cable	Metallic connector***	Non-metallic connector****
Protection cap	No		
Ex-marking Gas	 II 1 G Ex ia IIC T* Ga		 II 2 G Ex ia IIB T* Gb
Ex-marking Dust	 1 D Ex ia IIIC T <sub>200</sub> 110°C Da		

Type	TM/N/Ex		
Material enclosure	Stainless steel or titanium		
Connection	Cable	Metallic connector***	Non-metallic connector****
Protection cap	Yes, electrostatically conductive material		
Ex-marking Gas	 II 1 G Ex ia IIC T** Ga		 II 2 G Ex ia IIB T* Gb
Ex-marking Dust	 II 1D Ex ia IIIC T <sub>200</sub> 110°C Da		

**Explanation:**

T* =	temperature class for TM/Ex could be T3, T4 or T6. Dependencies see separate table.
T** =	temperature class for TM/N/Ex could be T4 or T6. Dependencies see separate table.
Metallic connector*** =	e.g. M12 connector, M16 connector or Mil C26482 connector
Non-metallic connector**** =	ISO 4400 connector also named DIN 43650 connector or rectangle connector
Note:	Not relevant for Ex-marking are following options: pressure range, sort of pressure, pressure connection, accuracy.

(16) **Special conditions for safe use:**

- The probe with titanium enclosure must be installed protected against impact and friction.
- The metallic enclosure of the pressure transmitter must be earthed and connected to the equipotential of the plant.
- Application for EPL Ga:  
Only types with direct cable outlet and the cable sheath: It has to be protected against electrostatic charge by means of a metal braid, metal hose or metal pipe which is conductively connected to the pressure transmitter and the equipotential bonding system of the plant or metallic connectors.
- It must be used only cables with isolation at least > 500 VAC. The cable of the pressure transmitter must be separated to any other power cables. The distance between the cables must be preferably far. The common length between cables must be preferably short.

(17) **Essential health and safety requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
None	

(18) **Drawings and Documents**

See test report "Manufacturer's Documents"