



(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 08 ATEX 0142 X**
- (4) Product: **Pressure Transmitter
Type PTM/Ex, PTM/N/Ex**
- (5) Manufacturer: **STS Sensor Technik Sirmach AG**
- (6) Address: **Rüthhofstrasse 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 20CH-00520.X02
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
**EN IEC 60079-0:2018
EN 60079-11:2012
EN 60079-26:2015**
- 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:



See (19) Marking

Eurofins Electric & Electronic Product Testing AG
Notified Body ATEX

Martin Plüss
Product Certification

(13)

Appendix

(14)

EU-Type Examination Certificate no. SEV 08 ATEX 0142 X

(15) **Description of product**

The pressure transmitter 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.

Ambient temperature range:

For Gas application:

PTM/Ex			
Temperature class	T6	T4	T3
Ambient temperature	-25 ... +55 °C	-25 ... +85 °C	-25 ... +85 °C
Medium temperature	-25 ... +55 °C	-25 ... +100 °C	-25 ... +150 °C

PTM/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:

PTM/Ex and PTM/N/Ex	
	Temperature
Ambient temperature	+85 °C
Maximum surface temperature	+125 °C

Ratings:

Parameter for all types:

$U_i = 30 \text{ V}$

$I_i = 140 \text{ mA}$

$P_i = 0.9 \text{ W}$

$C_i = 14 \text{ nF}$

$C_c = 0.12 \text{ nF/m}$

Effective capacitance = internal capacitance + cable length * C_c


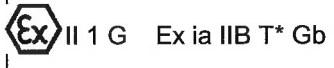

$L_i = 1.3 \text{ mH}$

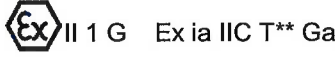
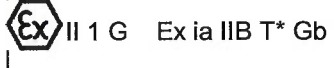

$L_c = 0.001 \text{ mH/m}$

Effective inductance = internal inductance + cable length * L_c



Part number code:

Type	PTM-Ex		
Material enclosure	Stainless steel or titanium		
Connection	Cable	Metallic connector***	Non-metallic connector****
Output signal	4-20 mA without or with OVP (Over Voltage Protection)		
Protection cap	No		
Options	Not Ex-protection relevant		
Ex-marking Gas			
Ex-marking Dust			

Type	PTM/N/Ex		
Material enclosure	Stainless steel or titanium		
Connection	Cable	Metallic connector***	Non-metallic connector****
Output signal	4-20 mA without or with OVP (Over Voltage Protection)		
Protection cap	Yes or no		
Options	Not Ex-protection relevant		
Ex-marking Gas			
Ex-marking Dust			

Explanation:

T* =	temperature class for PTM/Ex could be T3, T4 or T6. Dependencies see separate table.
T** =	temperature class for PTM/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) Specific conditions of use

- Protect pressure transmitters with titanium housing against impact and friction.
- The metallic enclosure of the pressure transmitter must be earthed and connected to the equipotential of the plant.
- Application for zone 0:
Only with direct cable outlet and the cable sheath 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.

(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"

(19) Marking

PTM/Ex and PTM/N/Ex (Standard version)
(variants with ISO 4400 connector):
Ex ia IIB T6...T3 Gb
Ex ia IIIC T200125 °C Da

PTM/Ex and PTM/N/Ex for use in Group IIC and IIIC:
Only with direct cable output or metallic plug:
Ex ia IIC T6...T3 Gb
Ex ia IIIC T200125 °C Da

PTM/Ex and PTM/N/Ex for use in zone 0 and 20:
Only with direct cable outlet and the cable sheath is 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 system or with metallic connectors:
Ex ia IIC T6...T3 Ga
Ex ia IIIC T200125 °C Da