



(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 11 ATEX 0145 X**
- (4) Product: Pressure transmitter 8852.xx, 8853.xx, 8858.xx
- (5) Manufacturer: Trafag AG
- (6) Address: Industriestrasse 11, 8606 Bubikon, 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-00100.X74
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
- 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 Appendix
siehe Anhang

Eurofins Electric & Electronic Product Testing AG
Notified Body ATEX

Urban Strebel
Product Certification



(13)

Appendix

(14)

EU-Type Examination Certificate no. SEV 11 ATEX 0145 X

(15) **General product information**

The sensor series 8852.xx, 8853.xx and 8858.xx with metallic enclosure and cable connection or metallic enclosure with metallic connector are pressure sensors for gasses or liquids designed according to requirements EPL "Ga" or EPL "Da".

The aforementioned types with non-metallic connector are pressure sensors for gasses or liquids designed according to requirements EPL "Gb" or EPL "Da".

The temperature class depends on ambient-temperature and medium-temperature on the sensor. These relations are shown in the following tables:

For sensor with connectors:

Type	Temperature class	T6	T4	T3
8852	Ambient temperature [°C]	-25 ... 55	-25 ... 85	-25 ... 85
8853	Medium temperature [°C]	-25 ... 55	-25 ... 100	-25 ... 150

For sensor with direct cable entries:

Type	Temperature class	T6	T4
8858	Ambient temperature [°C]	-5 ... 50	-5 ... 80
	Medium temperature [°C]	-5 ... 50	-5 ... 80

The relationship between the max. ambient temperature and surface temperature for dust environment and mines application is shown in the following table:

For sensor with connectors:

Type	Surface temperature [°C]	140
8852, 8853	Ambient temperature [°C]	85

For sensor with direct cable entries:

Type	Surface temperature [°C]	135
8858	Ambient temperature [°C]	80

See also operating- and safety- instructions 10.88.0439.B from Trafag AG with plug connection are delivered without the cable and the connector's counterpart. The end user must install correct connector type and cable for the appliance and must check that no additional ignition risks occur with these parts.

Code (e.g. Ex II T) :

Types with metallic enclosure and cable connection or metallic enclosure with metallic connector for zone 0, 20, M1



II 1 G Ex ia IIC T6 ... T3 Ga
 II 1 G Ex ia IIC T6 ... T4 Ga (with cable connection)
 II 1 D Ex ia IIIC T₂₀₀ 140 °C Da
 I M1 Ex ia I Ma

Types with metallic enclosure and non-metallic connector for zone 1, 2, 20, 21, 22, M2



II 2 G Ex ia IIB T6 ... T3 Gb
 II 1 D Ex ia IIIC T₂₀₀ 140 °C Da
 I M2 Ex ia I Mb

See Operating and safety instructions for different configurations and applications.

The pressure transmitter type 8852.xx or type 8853.xx or type 8858.xx measures the signal of a piezo-resistive pressure measurement bridge and converts it into a standard signal. Input and signal transmission take place via an intrinsically safe three-wire 4-20 mA current loop circuit.

Measurement and power supply circuit of the ignition protection type intrinsic security Ex ia IIC, Ex ia IIIC and Ex ia I is only for connection to a certified and intrinsically safe electric circuit.

Maximum ratings:

U_i ≤ 30 V
 I_i ≤ 100 mA
 P_i ≤ 1.0 W

Effective internal capacitance C_i = 10 nF
 plus per meter length of connecting cable C_{cab} = 0.12 nF

Effective internal inductance L_i = 0.1 mH
 plus per meter length of connecting cable L_{cab} = 0.001 mH

Description of type variations

Type	Metallic enclosure		Non metallic enclosure	Metallic connector housing	Non-metallic connector housing	Cable connection
	stainless steel (SST)	titanium (Ti)				
8852	x	x	---	x	x	x
8853	x	x	---	x	x	x
8858	x	x	---	x	x	x

x = variation of deliver

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(17) **“Special conditions for safe use” / “Schedule of limitations”**

- Protect pressure transmitters with titanium housing against impact and friction according to EN IEC 60079-0:2018 (7 joules of impact). In particular, this also applies to use in mines. Here, however, the protection must be correspondingly higher (impacts of 20 joules).
- The metallic enclosure must be earthed.
- The devices must be protected against UV-light (for example daylight or light from luminaires). This applies to all types with a non-metallic connector enclosure and for all non-metallic housings.

Types with metal housing and cable connection or metal housing with metal plug do not need this protection against UV light.

(18) **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	

(19) **Drawings and Documents**

See test report “Manufacturer’s Documents”

