



(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 12 ATEX 0164 X**
- (4) Equipment: Pressure transmitter  
Type: 8854.xx, 8859.xx
- (5) Manufacturer: Trafag AG
- (6) Address: Sensors and Controls, Industriestrasse 11, CH-8608 Bubikon
- (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 09-IK-0051.41
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:  
**EN 50303:00                      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 page 4 (19) Markings**



**Electrosuisse  
Notified Body ATEX**

Martin Plüss  
Product Certification



SCFSp 035

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SEV 12 ATEX 0164 X / page 1 of 4

(13)

## Appendix

(14)

### EC-Type Examination Certificate

(15) Description of the equipment

The pressure transmitter trafag type 8854.XX and 8859.XX measures the signal of a piezoresistive 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.

8854.XX are types featuring a screw-in flange, 8859.XX represent immersed probes.

#### Type designation

Placeholders "xx" stands for the pressure range of the sensor. They do not have any impact on the explosion protection and general safety.

#### Maximum values:

$$U_i \leq 28 \text{ V}$$

$$I_i \leq 93 \text{ mA}$$

$$P \leq 0.65 \text{ W}$$

Effective internal capacitance  
plus per meter length of connecting cable

$$C_i = 12 \text{ nF}$$

$$C_K = 0.12 \text{ nF}$$

Effective internal inductance  
plus per meter length of connecting cable

$$L_i = 1.25 \text{ mH}$$

$$L_K = 0.001 \text{ mH}$$

**Note(s)**

1. The pressure transmitter trafag type 8854.XX and 8859.XX can only be used as a device in EPL Ga (zone 0) with the following type characteristics:

- 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 correlation between temperature class, maximum permissible ambient temperature and maximum permissible medium temperature for EPL Ga, Gb is shown in the following table:

For type 8854.XX				
Temperature class	T6	T5	T4	T3
Ambient temperature [°C]	-40 ... +50	-40 ... +60	-40 ... +85	-40 ... +125
Medium temperature [°C]	-40 ... +50	-40 ... +60	-40 ... +110	-40 ... +150

For type 8859.XX				
Temperature class	T6	T5	T4	T3
Ambient temperature [°C]	-5 ... +55	-5 ... +60	-5 ... +80	-5 ... +80
Medium temperature [°C]	-5 ... +55	-5 ... +60	-5 ... +80	-5 ... +80

3. The correlation between the maximum surface temperature and maximum ambient temperature for EPL Da, Db is shown in the following table:

For type 8854.XX				
Ambient temperature [°C]	+50	+60	+85	+125
Surface temperature [°C]	+70	+80	+105	+145

For type 8859.XX			
Ambient temperature [°C]	+50	+60	+125
Surface temperature [°C]	+70	+80	+145

4. The pressure transmitter trafag type 8854.XX or 8859.XX is also an equipment of equipment group I, category M1.
5. The metal body of the pressure transmitter must be conductively connected with the equipotential bonding system of the installation.

- (16) Test Report 09-IK-0051.41
- (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) **Markings**

Ex code according to standard

Only versions with cable outlet (cable jacket with metal mesh) or metallic plug.



II 1G Ex ia IIC T3 ... T6



II 1D Ex ia IIIC IP6X T145 ... T70°C



I M1 Ex ia I

or

For other versions and versions for IIC only with cable outlet or metallic plug.



II 2G Ex ia IIB/IIC T3 ... T6



II 1D Ex ia IIIC IP6X T145 ... T70°C



I M2 Ex ia I



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SEV 12 ATEX 0164 X / page 4 of 4