### **Translation**

# (1) EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, Directive 94/9/EC



(4) for the equipment: Pressure Sensor VPS-....

(5) of the manufacturer: FAFNIR GmbH

6) Address: Bahrenfelder Straße 19

22765 Hamburg

Germany

Order number: 8000414822

Date of issue: 2013-02-05

(7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 12 203 111601.

TUV NORD

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0;2009 EN 60079-11;2012 EN 60079-26;2007

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment or protective system must include the following:

(Ex) II 1 G Ex ia IIC T6 Ga resp. II 1/2 G Ex ia IIC T6 Ga/Gb resp. II 2 G Ex ia IIC T6 Gb

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body

### Schwedt

Hanover office, Am TÜV 1, 30519 Hannover, Fon +49 (0)511 986 1455, Fax +49 (0)511 986 1590

This certificate may only be reproduced without any change, schedule included.



## (13) SCHEDULE

## (14) EC-Type Examination Certificate No. TÜV 12 ATEX 111601

### (15) Description of equipment

The Pressure Sensor VPS-... is used for the detection of inner tank pressures in explosive hazardous areas.

The permissible ambient temperature ranges as well as the medium temperature ranges in dependence of the temperature class have to be taken from the following tables:

### Use as Category 1 (EPL Ga) and Category 1/2 (EPL Ga/Gb) apparatus

Temperature class	Ambient and medium temperature range
Т6	-20 °C to +45 °C
T1 to T5	-20 °C to +60 °C

The process pressure of the media has to be from 0.8 bar to 1.1 bar when potentially explosive mist air mixtures exist. If no potential explosive mixtures exist, the device may also be operated outside of this stated range according to the specification of the manufacturer.

### Use as Category 2 (EPL Gb) apparatus

Temperature class	Ambient and medium temperature range
Т6	-20 °C to +45 °C
T5	-20 °C to +60 °C
T1 to T4	-20 °C to +70 °C

### Electrical data

Signal- and power circuit (terminals +, -, A, B)

in type of protection "Intrinsic Safety" Ex ia IIC

only for the connection to a certified intrinsically safe circuit

Maximum values:  $U_i =$ 

 $U_i = 15 V$  $I_i = 100 \text{ mA}$ 

 $P_i = 100 \text{ mW}$ 

 $L_i = 50 \mu H$ 

 $C_i = 10 \text{ nF}$ 

- (16) Test documents are listed in the test report No. 12 203 111601.
- (17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones