



Translation

(1) **EC TYPE-EXAMINATION CERTIFICATE**

(2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**



(3) EC-Type Examination Certificate Number

**TÜV 03 ATEX 2011 X**

(4) Equipment: Pressure transmitter type UNIBAR., HYDROBAR., AQUABAR, NIVUBAR. with two-wire system

(5) Manufacturer: NIVUS GmbH

(6) Address: D-75031 Eppingen, Im Täle 2

(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 & Co. KG, TÜV CERT-Certification Body, notified body number N° 0032 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 N° 03 YEX 550365-06.

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

**EN 50014:1997    EN 50020:1994    EN 50284:1999    EN 50 281-1-1:1999**

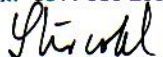
(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(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:

 **II 1 G EEx ia IIC T4 resp. II 1 D T 85°C**

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Head of the  
Certification Body



**TÜV NORD CERT**

Hanover, 2003-03-05



(13) **SCHEDULE**

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 03 ATEX 2011 X**

(15) Description of equipment

The pressure transmitter type UNIBAR., HYDROBAR., AQUABAR, NIVUBAR. with two wire-system is used for the acquisition of static and dynamic pressure values of gaseous and fluidal media. It is possible to measure gauge pressure (negative pressure and overpressure) and absolute pressure, as well.

The pressure value is transformed into a standardized electrical signal.

The sensor of the pressure transmitter must only be operated in hazardous areas that require apparatus of category 1 when atmospheric conditions are present (temperature from -20°C to +60°C, pressure from 0.8 bar to 1.1 bar).

In case that the potentially explosive atmosphere does not require apparatus of category 1 the maximum permissible ambient temperature is 70°C.

Electrical data

Supply and signal  
circuit  
(plug or prefabricated cable)

in type of protection "Intrinsic Safety" EEx ia IIC  
only for the connection to certified intrinsically safe circuits  
with the following maximum values:

$$\begin{aligned}U_i &= 28 \text{ V} \\I_i &= 93 \text{ mA} \\P_i &= 660 \text{ mW}\end{aligned}$$

The effective internal capacitance and inductance of the supply and the signal circuits are negligibly small.  
Capacitance to earth  $\leq 27 \text{ nF}$

(16) Test documents are listed in the test report No.: 03 YEX 550365-06.

(17) Special conditions for safe use

The pressure meter with plug connection has to be erected in such a way that a degree of protection at least IP 20 according to EN 60529 is achieved for the connector plug.

(18) Essential Health and Safety Requirements

no additional ones

**Translation**  
**2. SUPPLEMENT**  
**to**  
**EC-TYPE EXAMINATION CERTIFICATE No. TÜV 03 ATEX 2011 X**

Equipment: **Pressure transmitter type UNIBAR., HYDROBAR., AQUABAR, NIVUBAR. with two wire-system**  
Manufacturer: **NIVUS GmbH**  
Address: **D-75031 Eppingen  
Im Täle 2**

**Amendments:**

In the future, the pressure transmitter type UNIBAR., HYDROBAR., AQUABAR, NIVUBAR. with two-wire system may also be manufactured and operated according to the test documents listed in the test report.

The amendments concern the internal and outer design as well as the special conditions for safe use.

Electrical data

Supply and signal circuit  
(plug or prefabricated cable)

in type of protection "Intrinsic Safety" EEx ia IIC  
only for the connection to certified intrinsically safe circuits  
with the following maximum values:

$U_i = 28 \text{ V}$   
 $I_i = 93 \text{ mA}$   
 $P_i = 660 \text{ mW}$

effective internal capacitance  $C_i \leq 1 \text{ nF}$ ;  
effective internal inductance  $L_i \leq 10 \text{ } \mu\text{H}$ ;  
effective internal capacitance to earth  $\leq 27 \text{ nF}$

All further data apply unchanged for this supplement.

(16) The test documents are listed in the test report N° 06 YEX 551774-1.

(17) Special conditions for safe use

The pressure transmitter with plug connection has to be erected in such a way that a degree of protection at least IP 20 according to EN 60529 is achieved for the connector plug.

At pressure transmitters with cable protection realized by a corrugated pipe, the earthing terminal at the sleeve has to be connected with the potential equalization system.

2. Supplement to EC-Type Examination Certificate No. TÜV 03 ATEX 2011 X

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(18) Essential Health and Safety Requirements

no additional ones

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Hannover, 2006-02-06

A handwritten signature in blue ink, appearing to be "K. Wolf".

Head of the  
Certification Body

Translation  
**3. SUPPLEMENT**  
to  
**EC-TYPE EXAMINATION CERTIFICATE No. TÜV 03 ATEX 2011 X**

Equipment: **Pressure transmitter type UNIBAR., HYDROBAR., AQUABAR, NIVUBAR. with two wire-system**  
Manufacturer: **NIVUS GmbH**  
Address: **D-75031 Eppingen  
Im Täle 2**

Amendments:

In the future, the pressure transmitter type UNIBAR., HYDROBAR., AQUABAR, NIVUBAR. with two-wire system may also be manufactured and operated according to the documents listed in the test report.

The amendments concern the internal design.

The electrical data and all other data apply unchanged for this supplement.

(16) The test documents are listed in the test report N° 06 YEX 551774-6.

(17) Special conditions for safe use

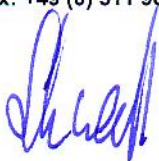
no additional ones

(18) Essential Health and Safety Requirements

no additional ones

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Hannover, 2006-02-21



Head of the  
Certification Body