

[1] **EC-TYPE EXAMINATION CERTIFICATE**  
according to Directive 94/9/EC, Annex III



(Translation)

[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **IBExU11ATEX1047 X**

[4] Equipment: **Pressure measuring device**  
type NivuBar H III

[5] Manufacturer: NIVUS GmbH

[6] Address: Im Täle 2  
75031 Eppingen  
GERMANY

[7] The design of the equipment mentioned under [4] and any acceptable variation thereto are specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that the under [4] mentioned equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
The test results are recorded in the test report IB-11-3-012/2 of 25 March 2011.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2009, EN 60079-11:2007, EN 60079-26:2007 and EN 61241-11:2006.

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified under [17] in the schedule to this EC-Type Examination Certificate.

[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned in [4] shall include at least one of the following:

II 1G Ex ia IIB T4 Ga

II 1D Ex iaD 20 T85 °C

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Authorised for certifications Explosion protection

By order

(Dr. Wagner)

Schedule



- Seal-  
(ID no. 0637)

Freiberg, 25 March 2011

Certificates without signature and seal are not valid.  
Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

[13] **Schedule**

[14] **to the EC-TYPE EXAMINATION CERTIFICATE IBExU11ATEX1047 X**

[15] **Description of equipment**

The pressure measuring device NivuBar H III is a pressure transmitter in the high-grade steel enclosure or from CuNi10Fe1Mn. The equipment is intended for use in potentially hazardous areas, where category 1G or 1D devices are required. They are supplied by an intrinsically safe power supply of the Category „ia“.

Category 1 equipment

The sensor of the pressure measuring device may be operated in explosive atmospheres which requires equipment of category 1 only if there are atmospheric conditions (temperature from -20 °C to +60 °C, pressure from 0.8 bar to 1.1 bar).

Ambient temperature range: from -25 °C to +70 °C  
Degree of protection of the enclosure: ≥ IP 67

Supply and signal electric circuit in type of protection Intrinsic Safety Ex ia IIB  
(supply + and -)

	$U_i$	28 V
	$I_i$	93 mA
	$P_i$	660 mW
effective inner capacity	$C_i$	105 nF
effective inner inductivity	$L_i$	5 µH

plus line inductivities 1 µH/m and line capacities 160 pF/m

The supply connections have an inner capacity of max. 140 nF opposite the enclosure.

[16] **Test report**

The test results are explained in detail in the test report IB-11-3-012/2. The test documents are part of the test report and listed there.

Summary of the test results:

The pressure measuring device NivuBar H III fulfills the requirements of type of protection Intrinsic safety ‚ia‘ for an electrical component for equipment group II category 1G, explosion group IIB and temperature class T4 and category 1D with a maximum surface temperature of 85 °C.

[17] **Special conditions**

- The ambient temperature range is fixed from -25 °C to +70 °C.
- The safety and assembly notes contained in the operating instructions have to be observed.

[18] **Essential Health and Safety Requirements**

Confirmed by compliance with standards (see [9]).

By order

Freiberg, 25 March 2011



(Dr. Wagner)