

[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: **IBExU12ATEX1107 X**

[4] Equipment: **Precision digital manometer**
type AX6-DM01

[5] Manufacturer: **BD SENSORS s.r.o.**

[6] Address: **Hradistska 817**
687 08 Buchlovice
CZECH REPUBLIC

[7] This 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 examination and test results are recorded in confidential test report IB-11-3-259 of 28 August 2012.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2009 and EN 60079-11:2012.

[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] must include one of the following details:

 **II 2G Ex ia IIC T4 Gb**

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Authorised for certifications Explosion protection

By order

(Dr. Wagner)

Schedule



- Seal-
(ID no. 0637)

Freiberg, 28 August 2012

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 IBExU12ATEX1107 X**

[15] **Description of equipment**

The precision digital manometer type AX6-DM01 is used to display and record the pressures. The power supply comes from three primary cells connected in series. The equipment is intended for use in potentially hazardous areas, where category 2G devices are required. It provides internal intrinsically safe "ia" circuits ready and is operated without external connections. The interface is covered in a safe area used for configuration and data transfer.

Technical Data

Ambient temperature range: from -10 °C to +55 °C

Electrical Data

Supply circuit

Internal parameters (no external connections)

Battery voltage	3 x 1.5 V
Open circuit voltage according to EN 60079-0:	4.95 V
Power consumption:	max. 20 mA

[16] **Test report**

The test results are recorded in detail in the test report IB-11-3-259. The test documents are part of the test report and listed there.

Summary of the Test Result:

The precision digital manometer type AX6-DM01 fulfills the requirements of type of protection Intrinsic safety 'ia' for an electrical component for equipment group II category 2G, explosion group IIC and temperature class T4.

[17] **Special conditions**

- The ambient temperature range is fixed from -10 °C to +55 °C.
- The operation the precision digital manometer type AX6-DM01 is only in combination with the related pressure transmitters with the type examination certificate IBExU10ATEX1026 U allowed.
- Opening the battery compartment cover and the removal of the protective cover of the interface connector must not be done in a hazardous atmosphere.
- The operation of the communication interface in explosive areas is not permitted.
- Only use the batteries specified: 3x 1.5 V / AA Duracell Power Plus.
- For applications in explosion group IIC, the metal case is to ground safely.

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

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

By order

Freiberg, 28 August 2012



(Dr. Wagner)



- [1] **1st Addition to
EC-TYPE EXAMINATION CERTIFICATE IBExU12ATEX1107 X**
according to Directive 94/9/EC, Annex III
- Translation -

[2] Equipment: **Pressure transmitter**

a) Types corresponding IBExU12ATEX1107 X: AX6-DM01

b) Added/appended types: AX6-DM01-500, DM01-500 HD
and DM03

[3] Manufacturer: BD SENSORS s.r.o.

[4] Address: Hradistska 817
687 08 Buchlovice
Czech Republic

[5] **Addition / Alteration**

The additions / alterations of the equipment stated under [2] b) compared to the equipment already certified comprise in particular:

a) Adding another type with compact housing design. Transmitter and display unit are fixedly connected together here.

b) The new device types include a new signal processing electronics.

c) Using a sensor for high pressure applications.

All other parameters remain unchanged for the basic certificate.

[6] **Test Report**


The proof of explosion protection of the equipment stated under [2] b) is documented in the Test Report IB-13-3-117 of 8 July 2013. The test documents are part of the Test Report.

[7] **Test result**

IBExU certifies that the equipment stated under [2] b) fulfils the Essential Health and Safety Requirements given in Annex II to the Directive 94/9/EC by compliance with EN 60079-0:2009 and EN 60079-11:2012.

The equipment stated under [2] b) fulfils the requirements of type of protection Intrinsic Safety ,ia' for an electrical equipment of the Equipment Group II, Category 2G, Explosion Group IIC and Temperature Class T4.

The marking of the equipment stated under [2] b) shall include the following:

 II 2G Ex ia IIC T4 Gb

**This addition is only valid in combination with the EC-Type Examination Certificate
IBExU12ATEX1107 X of 28 August 2012.**

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Freiberg, 8 July 2013

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IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg

- [1] **2nd Addition to
EC-TYPE EXAMINATION CERTIFICATE IBExU12ATEX1107 X**
according to Directive 94/9/EC, Annex III
- Translation -



- [2] **Equipment: Pressure transmitter**
a) previously certified types: AX6-DM01, -DM01-500, -DM01-500 HD and -DM03
b) added types: AX6-DL01, -DL102 with DCL552M
- [3] **Manufacturer: BD SENSORS s.r.o.**
- [4] **Address: Hradistska 817
687 08 Buchlovice
Czech Republic**

- [5] **Addition / Alteration**
The additions / alterations of the equipment stated under [2] compared to the equipment already certified comprise in particular:
a) Adding a type for the measurement of leakage.
b) Adding a type with remote level probe and a new electronic unit. These devices are marked with the Explosion Group IIB.
c) The devices fulfill the requirements of the current standards of EN 60079.

All other parameters remain unchanged for the basic certificate.

- [6] **Test Report**
The proof of explosion protection of the equipment stated under [2] is documented in the Test Report IB-14-3-110 of 18 February 2015. The test documents are part of the Test Report.

- [7] **Test result**
IBExU certifies that the equipment stated under [2] fulfils the Essential Health and Safety Requirements given in Annex II to the Directive 94/9/EC by compliance with EN 60079-0:2012+A11:2013 and EN 60079-11:2012.

The equipment stated under [2] fulfils the requirements of type of protection Intrinsic Safety 'ia' for an electrical equipment of the Equipment Group II, Category 2G, Explosion Group IIC or IIB and Temperature Class T4.

The marking of the equipment stated under [2] shall include the following:

⊕ II 2G Ex ia IIC/IIB T4 Gb

This addition is only valid in combination with the EC-Type Examination Certificate IBExU12ATEX1107 X of 28 August 2012 and its addition.

The Special Conditions still apply, in addition to the USB port to be used only in non-hazardous areas.

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Freiberg, 18 February 2015

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