



- [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: **IBExU14ATEX1273 X**
- [4] Equipment: **Differential pressure transmitters**  
Type AX18-D\*\*200
- [5] Manufacturer: **BD SENSORS GmbH**
- [6] Address: **BD-Sensors-Str. 1**  
**95199 Thierstein**  
**Germany**
- [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 test results are recorded in the test report IB-14-3-111 of 19 December 2014.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012, EN 60079-11:2012 and EN 60079-26:2007.
- [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 the following details:

 II 1/2G Ex ia IIC T4 Ga/Gb  
 II 2D Ex ia IIIC T85 °C Db

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Authorised for certifications  
-Explosion protection-

By order



(Dr. Wagner)



- Seal -  
(ID no. 0637)

Freiberg, 19 December 2014

Certificates without signature  
and seal are not valid.  
Certificates may only be dupli-  
cated completely and un-  
changed. In case of dispute, the  
German text shall prevail.

**Annex**

[13]

**Annex**

[14]

**to the EC-TYPE EXAMINATION CERTIFICATE IBExU14ATEX1273 X**

[15]

**Description of the equipment**

The differential pressure transmitters AX18-D\*\*200 are pressure gauges with different process connections; they consist of a flameproof enclosure of aluminium, which is separated in electronic and terminal compartment. The measured medium which is present in zone 0, contacts the transmitter via a tube installation and is only with stainless steel in contact. The devices are designed for use in hazardous areas requiring Category 1/2G or 2D equipment. They are supplied by an intrinsically safe power supply for the category "ia".

**Device variants:**

- AX18-DPT200 Basic version as described above
- AX18-DGP200 Single pressure port
- AX18-DAP200 Differential pressure sensor made as absolute pressure cell
- AX18-DLP200 Remote seal (one side)
- AX18-DRP200 Two remote seals with capillaries

**Technical data**

Ambient temperature range: -10 °C to +60 °C

**Electrical data**

Supply and signal circuit in type of protection intrinsic safety Ex ia IIC

	Ui	28 V DC
	Ii	93 mA
	Pi	660 mW
effective internal capacitance	Ci	29.7 nF
effective internal inductance	Li	negligible

[16]

**Test report**

The proof of the explosion protection is recorded in detail in the test report IB-14-3-111. The test documents are part of the test report and are listed there.

**Summary of the test results:**

The differential pressure transmitters AX18-D\*\*200 fulfil the requirements for type of protection intrinsic safety 'ia' on a device of the Equipment Group II and Category 1/2G or 2D, Explosion Group IIC or IIIC and Temperature Class T4 or a surface temperature of +85 °C.

[17]

**Special conditions**

The safety and assembly instructions contained in the operating instruction and the ambient temperature range  $-10\text{ °C} \leq T_a \leq +60\text{ °C}$  have to be taken into account.

[18]

**Essential health and safety requirements**

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

By order



(Dr. Wagner)

Freiberg, 19 December 2014