



[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: **IBExU04ATEX1182**

[4] Equipment: Pressure-measuring transducer ADZ-SMX-10.0-...

[5] Manufacturer: ADZ NAGANO GmbH

[6] Address: Grenzstraße 28 /H46
D-01109 Dresden

[7] This equipment 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 23th March 1994, certifies that this 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 the test report IB-04-3-280 of 25th August 2004.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 50014:1997+A1 +A2 and EN 50020:2002.

[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 the following:

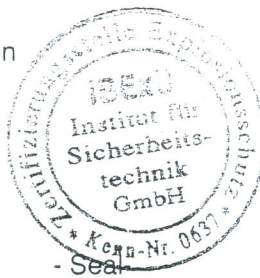
Ex II 2G EEx ia IIC T4
- 40 °C ≤ T_a ≤ 85 °C

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Authorised for certifications Explosion protection

Freiberg, 25th August 2004

(Prof. Dr. Redeker)



(ID no. 0637)

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.

Schedule

[13] **Schedule**

[14] **to the EC-TYPE EXAMINATION CERTIFICATE IBExU04ATEX1182**

[15] **Description of equipment**

The Pressure-measuring transducer ADZ-SMX-10.0 serves for the transformation of a pressure signal in intrinsic safe plants in a proportional electrical signal.

Electrical data

Ambient temperature range: up -40 °C to +85 °C

Type name: ADZ-SMX-10.0-nnnnn-ds-e-g

nnnnn = pressure range to 2000 bar (in 0.1 bar of steps)
ds = pressure port, 01 to 10 (10 variants)
e = elect. connection, 1 to 7 (plug connector or cable)
g = precision, 0 to 2 and 9 for special calibration

intrinsically safe circuit:

circuit diagram (PF1 to PF5)	U_i	= 30 V DC
	I_i	= 50 mA
effective inner capacity	C_i	= 5 nF
effective inner inductivity	L_i	= negligible

For the explanations with cable connection is C_i in addition = 300 pF/m and $L_i = 1 \mu\text{H}/\text{m}$ taking into account according to the available cable length.

[16] **Test report**

The test results are recorded in the test report IB-04-3-280 of 25th August 2004. The test documents are component the test report and listed there.

Summary of the Test Result:

The pressure-measuring transducer type ADZ-SMX 10.0-... fulfils the requirements of the Type of protection Intrinsic Safety for an explosion-proof electrical apparatus for Equipment Group II , Category 2 G, Explosion Group of IIC and Temperature Class T4.

[17] **Special conditions**

none

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

Confirmed by norms (see [9]).

Freiberg, 25th August 2004



(Prof. Dr. Redeker)