

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

[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: **IBExU06ATEX1072 X**

[4] Equipment: SONOCONTROL Type 14 BF5?

[5] Manufacturer: SONOTEC Ultraschallsensorik Halle GmbH

[6] Address: Nauendorfer Straße 2
06112 Halle
GERMANY

[7] The equipment mentioned under [4] and any acceptable variation there to 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 23rd 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 the equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in test report IB-06-3-106 of 22nd May 2006.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2004, E IEC 60079-18:2004 and prEN 1127-1:2004.

[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.

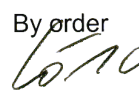
[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned under [4] shall include the following:

⊕ II 2G Ex mb II T4

IBExU Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7 - 09599 Freiberg, Germany
☎ +49 (0) 3731 3805-0 - 📠 +49 (0) 3731 23650

Authorised for certifications
- Explosion protection -

By order

(Dr. Lössch)



Freiberg, 23rd May 2006

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 EC-TYPE EXAMINATION CERTIFICATE IBExU06ATEX1072 X**

[15] **Description of the equipment**

The equipment SONOCONTROL Type 14 BF5? is an ultrasonic sensor for liquid detection and is screwed from outside directly on the tank wall. It is an electronic board and a piezoelectric ceramic are collective encapsulated in a metal casing with a fixed cable connection.

Technical data

Connection threads	M30x1.5
Power supply	18 - 24 VDC
Nominal current:	80 mA

Max. r.m.s. a.c. or d.c. voltage U_m 253 V

The electric circuit is internal connected to earth.

Ambient temperature range: -20 °C to +60 °C

[16] **Test Report**

The detailed verification of the explosion protection is recorded in the Test Report IB-06-3-106. The test documents are component of the Test Report.

Summary of test results:

The equipment SONOCONTROL Type 14 BF5? fulfills the requirements of the explosion protection about electrical equipment designed to type of protection Encapsulation "mb" for Equipment Group II, Category 2G and Temperature Class T4.

[17] **Special conditions**

- The Ambient temperature range is regulated of $-20\text{ °C} \leq T_a \leq +60\text{ °C}$.

- The equipment is only operated in inserted condition and guarded for mechanical impact in seam and special on the sensor face.

[18] **Essential health and safety requirements**

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

By order



(Dr. Lösch)

Freiberg, 23rd May 2006