



[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: **IBExU11ATEX1073**

[4] Equipment: **Ex Immersible Magnetic Probe (in plastics)**
Type T-20_ (.F) .. EX .. resp. T-200.L .. EX .. resp.
Type TK-30 .. EX .. (M)

[5] Manufacturer: E.L.B. Füllstandsgeräte Bundschuh GmbH & Co. KG

[6] Address: An der Hartbrücke 6
64625 Bensheim
GERMANY

[7] The design of the equipment mentioned in [4] and any acceptable variations 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 directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that the equipment mentioned in [4] 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-11-3-109 of 15 September 2011.

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

[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 in [17] in the schedule to this 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:

II 2G Ex ib IIB T4 Gb

-20 °C ≤ T_a ≤ +60 °C resp. +80 °C

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. Wagner)



- Seal -
(ID no. 0637)

Freiberg, 19 September 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.

Schedule

[13] **Schedule**

[14] **to the EC-Type Examination Certificate IBExU11ATEX1073**

[15] **Description of equipment**

The Ex immersible magnetic probes are used for the acquisition of level limit values respectively for the leakage monitoring or continuous level measurement in vessels with liquid flammable media. They are connected to certified, intrinsically safe circuits.

Ambient temperature range

Type T-200.L .. EX ..	-20 °C to +60 °C
Type T-20_... and T-30_...	-20 °C to +80 °C

Supply circuit

in type of protection Ex ib IIB

Type T-20_ (.F) .. EX ..	$U_i \leq 50 \text{ V}$	$I_i \leq 100 \text{ mA}$	
Type T-200.L .. EX ..	$U_i \leq 50 \text{ V}$	$I_i \leq 100 \text{ mA}$	
Type TK-30_..EX..	$U_i \leq 28 \text{ V}$	$I_i \leq 92 \text{ mA}$	
Type TK-30_..EX.. M (with measuring transmitter TK101)	$U_i \leq 28 \text{ V}$	$I_i \leq 92 \text{ mA}$	$P_i \leq 660 \text{ mW}$

L_i, C_i negligible resp. must be considered for designs with unconnected cable end with
 $L = 1 \mu\text{H/m}$ and $C = 100 \text{ pF/m}$

[16] **Test report**

The test results are recorded in the test report IB-11-3-109. The test documents are part of the test report and are listed there.

Summary of the test results:

The Ex immersible magnetic probes fulfil the requirements of explosion protection for equipment of Group II and Category 2G with equipment protection by intrinsic safety.

[17] **Special conditions for safe use**

none

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

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

By order

Freiberg, 19 September 2011



(Dr. Wagner)