

# (1) EC-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 94/9/EC**
- (3) EC-Type-Examination Certificate Number

## TÜV 12 ATEX 7226 X

- (4) Equipment: **Displacer Level Transducer Type: DLT9000**
- (5) Manufacturer: **Dandong Top Electronics Instrument Group Co., Ltd.**
- (6) Address: **No.10 Huanghai Street, Zhenxing District, Dandong City, Liaoning , Province, 118000, China**

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Notified Body for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex226.00/12



- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

**EN 60079-0: 2009**

**EN 60079-1: 2007**

**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 the schedule to this certificate.
- (11) This EC-Type-Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:

 **II 2 G**      **Ex ia IIC T5 Gb**  
 **II 2 G**      **Ex d IIC T5/T6 Gb**

TÜV Rheinland Certification Body for explosion protected equipment

Cologne, 12<sup>th</sup> February 2013

  
Dipl.-Ing. Klauspeter Graffi

(Translation)

This EC-Type-Examination Certificate without signature and stamp shall not be valid.

It may be circulated only without alteration.

Extracts or alterations are subject to approval by the:

TÜV Zertifizierungsstelle für Ex-Schutz-Produkte

TÜV Rheinland Industrie Service GmbH, Am Grauen Stein, 51105 Köln

Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13) Annex

(14) **EC - Type Examination Certificate**  
**TÜV 12 ATEX 7226 X**

(15) Description of equipment:

15.1 Equipment and type:

Displacer Level Transducer Type: DLT9000

15.2 Description

DLT9000 Displacer Level Transducer is a measuring instrument used for measuring level, interface and density, based on microprocessor. Not only can DLT 9000 output 4~20mA current signal, it also makes advantage of HART communication to easily access important processing information. It is compatible with 375 or 475 HART communicator or HARTMPT software to get information about processing variable, level transducer or level sensor on the worksite or from terminal box. The HART description document (DD) of DLT 9000 has been registered and can be integrated with any HART function (7.0 version or above) control system.

The DLT9000 Displacer Level Transducer is protected by a flameproof enclosure type “d”, whereas the electronic module can additionally be assessed as “intrinsic safe” if it is supplied by an “intrinsic safe” source. The device can be used in zone 1. The assessment of the device was done within the IECEx test report CN/CQM/ExTR12.0014/01

The DLT9000 Displacer Level Transducer is intended to be used in zone 1 only, whereas the mechanical part of the application, the displacer itself and the subassembly for the connection to the DLT9000, can be located in zone 0.

The mechanical movement of the displacer is transformed into rotational motion, which then is detected by a hall sensor. The hall sensor itself is located inside the DLT9000 and the sensor subassembly forms the junction between the flameproof and the non-flameproof compartment. The hall sensor itself is located into a flameproof protecting tube.

The mechanical part is not in the scope of this certificate.

This Type-Examination Certificate without signature and official stamp shall not be valid.  
This certificate may be circulated only without alteration. Extracts or alterations are subject to approval by.  
TÜV Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH,

15.3 Technical Data

Rated voltage: 12V~30VDC

**Ui = 30V, li = 93mA, Ci = 0nF, Li = 22µH, Pi = 0.7W**

Output: 4~20mA

Rated ambient temperature range (°C):

T5:  $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq 80^{\circ}\text{C}$  or T6:  $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq 60^{\circ}\text{C}$

(16) Test Report No.

557/Ex 226.00/12

(17) Special Conditions for safe use / Remarks for safe usage:

T5:  $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq 80^{\circ}\text{C}$  or T6:  $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq 60^{\circ}\text{C}$ .

The operating temperature of the liquid may influences the operating temperature and temperature class of the DLT 9000.

Only flameproof certified cable glands with ingress protection of IP66 shall be used.


Repairs of the threaded joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in table 3 and table 4 of IEC 60079-1:2007

(18) Basic Safety and Health Requirements

Fulfilled by the afore mentioned standards.

TÜV Rheinland Certification Body  
for explosion protected equipment

Cologne, 12<sup>th</sup> February 2013

  
Dipl.-Ing. Klauspeter Graffi

This Type-Examination Certificate without signature and official stamp shall not be valid.  
This certificate may be circulated only without alteration. Extracts or alterations are subject to approval by.  
TÜV Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH,

TÜV Rheinland Industrie Service GmbH • Friedrich-Engels-Allee 346 • D-42283 Wuppertal

Dandong Top Electronics  
Instrument (Group) Co, Ltd.  
**Ms Guo Yuqin**  
No. 10, Huanghai Street  
Zhengxing District  
Dandong City, Liaoning Province  
**P.R. China**

Andre Maschke  
Tel. +49 (0)202/5275-270  
Fax +49 (0)202/5275-170  
Mobil +49 (0)1 70 / 56 29 76 3  
Mail Andre.Maschke@de.tuv.com  
2013-05-06 / ml

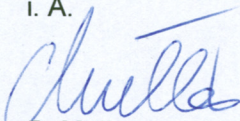
**Certificate**  
**ZN: 01 220 1344523**

Dear Ms Guo Yuqin,  
with this letter you are receiving the certificate.

Best regards

TÜV Rheinland Industrie Service GmbH

i. A.

  
P. Müller

**Attachment**  
**Certificates**

TÜV Rheinland  
Industrie Service GmbH  
Friedrich-Engels-Allee 346  
42283 Wuppertal

Tel. ++49 202 5275-0  
Fax ++49 202 5275-110  
IS-Wuppertal@de.tuv.com

Geschäftsführung:  
Stephan Frense (Sprecher)  
Eckhard Lippold  
Marcus Staude

Köln HRB 26876

Aufsichtsratsvorsitzender  
Dr.-Ing. Manfred Bayerlein

<http://www.tuv.com>