

(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 7247 X

(4) Equipment: **Level Switch** Type: *** N * * * * * T6 ***

(5) Manufacturer: **ELMESS Thermosystemtechnik GmbH & Co. KG**

(6) Address: **Nordallee 1 D - 29525 Uelzen**

(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 Zertifizierungsstelle 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/Ex 861.01 / 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 61241-1: 2004, EN 61241-11; 2006, EN 60079-1: 2007,
EN 60079-7: 2007, EN 60079-11: 2007, EN 50495: 2010, EN 13463-6 : 2005

(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 d IIC T6 Gb resp. Ex de IIC T6 Gb resp. Ex ib IIC T6 Gb**
 **II 2 D Ex tD A21 IP66 T85°C Db bzw. Ex ibD 21 T85°C Db**

TÜV Rheinland Ex Notified Body

Cologne, 27th June 2012


Dipl.- Ing. Heinz Farke



This EC-Type-Examination Certificate without signature and stamp shall not be valid.
This EC - Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the:
TÜV Rheinland Industrie Service GmbH Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

(13)

Annex to

(14)

EC - Type Examination Certificate TÜV 12 ATEX 7247 X

(15) Description of Equipment

15.1 Article

Niveauwächter

Typ

* N * * * * * T6 *

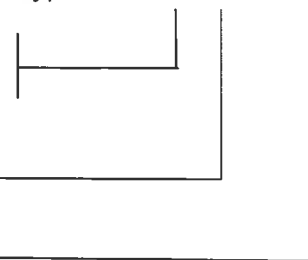
D: Ex-Device, Flameproof

I: Ex-Device with Ex i - Circuitry

H: horizontal

V: vertical

/M: with Micro Switch



For further details regarding type definition refer to the manual.

The level switch is intended to be used with non-flammable fluids within zone 1 or zone 21 environments. The level of the fluid is monitored by contacts, which are switched by one or more magnetic ball floats.

It consists of an enclosure with associated immersion pipe. The electrical connection is being provided by either a flameproof enclosure "d" or by an increased safety enclosure "e". Beyond that there is a version in intrinsic safety available "I".

15.2 Technical Data

Terminal Cross Section	maximum	6 mm ²
Ambient temperature	minimum	- 60 °C
	maximum	+60 °C
Inner temperature of enclosure	maximum	+80 °C
IP code of protection: (EN 60529):	IP66	

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Contacts Type D N * * * * * T6 *:

Current	AC or DC
Rated power	max. 50 W / 60 VA
Rated voltage	max. 250 V
Rated current	max. 0.1 A

Contacts Type I N * * * * * T6 *:

Max. Input Voltage:	Ui	= 45 V
Max. Input Current:	Ii	= 0.1 A
	Li	negligible
	CI	negligible

Contacts Type D N * * * * * /M T6 *:

Current	AC
Rated power	max. 4 kW AC1 (ohmic load)
Rated voltage	max. 400 V
Rated current	max. 10 A

SIL – Classification	PFH	< 1* 10 ⁻⁶
	PFD (TProof ≤ 1 Jahr)	< 1* 10 ⁻³
	HFT	0
	SIL _{CL}	1

The level switch is suitable and intended to be used in SIL1 resp. IPL 1 circuitries.

(16) **Test Report No.** 557 / Ex 861.01 / 12

(17) **Special Conditions for safe use**

The Level Switch has to be mounted in that way, that thermal influences of the media resp. of the vessel, in that the Level Switch is installed in, is negligible.

Repair and overhaul of the flameproof joints are only allowed to be performed by the manufacturer or in the manufacturers responsibility with respect to the aspects of ATEX 137 (99/92/EC) combined with TRBS 1201-3 in Germany. The repair according to table 2 of EN 60079-1 is not allowed.

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The Level Switch are intended to be used in gas or dust atmospheres. In case of hybrid atmospheres a separate risk analysis is required.

Only ATEX approved cable glands has to be used. For the installation the EN 60079-14 has to be followed.

The Level Switch has to be connected to the local potential equalization system.

The instruction manual of the manufacturer has to be looked at.

(18) **Basic Safety and Health Requirements**

Covered by the afore mentioned standards.

TÜV Rheinland Zertifizierungsstelle

Cologne, 27th June 2012


Dipl.-Ing. Heinz Farke



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