

(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 09 ATEX 7632 X

- (4) Equipment: Level Regulator AL-ADF.../...
Level Transmitter AF-ADF.../... and AVK-ADF.../...
- (5) Manufacturer: **KUBLER France SA**
- (6) Address: 10, avenue d'Alsace, BP 70164 68702 CERNAY Cedex FRANCE



- (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 CERT-Zertifizierungsstelle for ex-protected products of TÜV Rheinland Industrie Service GmbH, TÜV Rheinland Group, 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 194/Ex632.00/09

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: 2006; EN 60079-1: 2007;
EN 61241-0: 2006; EN 61241-1: 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 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 and  II 2 D Ex tD A21 IP 65 T 80°C

TÜV CERT-Zertifizierungsstelle für Explosionsschutz

Cologne, 2009-05-28


Dipl.-Ing. K. Wettingfeld

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 Cert-Zertifizierungsstelle für Ex-Schutz-Produkte
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group 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 09 ATEX 7632 X

(15) **Description of equipment**

15.1 Equipment and type:

Level Regulator, AL-ADF type, and Level Transmitters, AF-ADF and AVK-ADF types

15.2 Description:

The Level Regulator, AL-ADF type, and Level Transmitters, AF-ADF and AVK-ADF types, are used to monitor the filling levels in containers.

These devices are equipped with a flameproof ("Ex d") junction box extended to a cylindrical tube which is an enclosure type Ex-tD as well. That cylindrical tube is immersed into a liquid or fluid for measuring its level.

The Level Regulator device, AL-ADF type, is based on the float principle with individual contacts per level to monitor.

The Level Transmitters devices, AF-ADF and AVK-ADF, are based on the float principle with magnetic transmission in three-conductor potentiometer circuitry or two-conductor resistor circuitry.

The tube (with various tube lengths and various process connections with the tank) contains one or several reed contacts (for AL-ADF type) or a reed measuring chain (reed contacts + resistors, for AF-ADF and AVK-ADF types).

The contacts are activated as the float moves concentrically to the tube axis, following the liquid level.

The equipment is designed to be used in zone 1 or 2 (inside the tank) and zone 1 or 2 (outside the tank) or to be used in zone 21 or 22 (inside the tank) and zone 21 or 22 (outside the tank).

For information, AF-ADF and AVK-ADF Level Transmitters are nearly identical by design; the only difference is that the AVK-ADF type is a bent at an angle Level Transmitter.

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TÜV CERT-Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH,
TÜV Rheinland Group.



15.3 Technical Data

Ambient temperature: $-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$

Electrical parameters :

AL-ADF

- nominal voltage: 250 V (ac/dc),
- nominal current: 1,5 A (ac/dc),
- nominal breaking power of the ILS: 100 VA (reed contacts max number 4).

AF – ADF and AVK – ADF

- nominal voltage: 28 V
- nominal current: 120 mA
- $P \leq 0,8 \text{ W}$

(16) Test Report No.: 194/Ex 7632/00/09

(17) Special Conditions for safe use

For mounting cable glands on flameproof enclosures, implantation and assemblies shall comply with the conditions indicated in the manufacturer's descriptive documents. When cable glands don't have a device of clamping flange, user shall provide the clamping with a cable grip near to this entry.

The cover of the enclosure has to be securely fastened. In certain cases the cover has to be slightly opened again and the setscrew of the cover has to be aligned with the notch in the enclosure flange. The setscrew has to be tightened with an Allen key (<1Nm) and additionally secured with tamper-proof-seal. Make sure that the setscrew is exactly fitting into the notch in the enclosure flange.

The approved equipment is to be used with conductive substances. If non-conductive substances shall be used means against electrostatic effects need to be taken by the end user.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standards

TÜV CERT-Zertifizierungsstelle

Köln, den 2009-05-28


Dipl.-Ing. Klaus Wettingfeld

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