Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin



(1) EC-TYPE-EXAMINATION CERTIFICATE

(Translation)

- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres **Directive 94/9/EC**
- (3) EC-type-examination Certificate Number:



PTB 04 ATEX 5013 X

(4) Equipment: Pneumatic measuring transducer for level indication

types: AC 628A and AC 628 B

(5) Manufacturer: Foxboro Eckardt Development GmbH

(6) Address: Glockenstraße 52, 70376 Stuttgart, Germany

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that 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 atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 03-53027.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 13463-1:2001

EN 13463-5:2003

- (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, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

 $\langle Ex \rangle$ II 1/2 G c IIB +H₂ +C₂H₂ for type AC 628A

(Ex) II 1/2 G c IIC for type AC 628B

Zertifizierungsstelle Explosionsschutz By order:

Dr.-Ing. M. Beyer Oberregierungsrat

Braunschweig, 2005-08-10

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PB

Physikalisch-Technische Bundesanstalt

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(13)

SCHEDULE

(14) EC-TYPE-EXAMINATION CERTIFICATE PTB 04 ATEX 5013 X

(15) Description of equipment

The equipment is intended to indicate the liquid level in tanks filled with flammable liquids. The pneumatic transducers for level indication with float (also referred to as measuring transducers), types AC 628 A and AC 628 B operate according to the buoyancy principle. The buoyant force which depends on the liquid level, the separating layer between two different liquids or the density of a liquid is detected and converted into a pneumatic standardized signal.

(16) Test report PTB Ex 03-53027

Parts of the equipment which meet the requirements of category 2 (e.g. measuring transducer) have neither been tested nor evaluated by PTB. These components may be applied alternatively, provided they have been subjected to one of the conformity assessment procedures according to Directive 94/9/EC and if they meet the requirements for installation. The torsion tube including sealings and bearing (category 1) as well as the assembly consisting of parts which have already been assessed (category 2), have been tested and evaluated by PTB. Parts of the complete equipment which are not relevant for category 1 and which do not have an effect on category 1 have not been evaluated within the scope of this test report. Category-2-components which are expected to have an effect to category 1 have been tested.

(17) Special conditions for safe use

The measuring transducer, type AC 628 A shall only be used for flammable liquids with the exception of carbon disulphide.

The pre-formed floats for type AC 628 B shall only be manufactured of conductive PTFE (PTFE + 25% carbon). It shall be guaranteed that the specific resistance of the floats is below $10^6 \,\Omega m$ and that the bleed resistance, measured between the lowest hanging float and ground, does not exceed the value of $10^6 \,\Omega$.

The measuring transducers shall only be used for such flammable gases and liquids, against which the torsion tube is sufficiently corrosion-resistant.

The float shall be secured against pendular movements.

(18) Essential health and safety requirements

The requirements are met by compliance with the harmonised standards mentioned above, considering the special conditions for safe use.

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