



### **Translation**

# (1) EC-Type Examination Certificate

- **Directive 94/9/EC** -

Equipment and protective systems intended for use in potentially explosive atmospheres

(3) **BVS 07 ATEX E 091 X** 

(4) Equipment: Oil level thickness gauge type NivOil oil sensor

(5) Manufacturer: IER Mess- und Regeltechnik GmbH

(6) Address: 68199 Mannheim, Germany

- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 test and assessment report BVS PP 07.2078 EG.

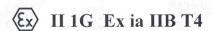
(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2006 General requirements EN 60079-11:2007 Intrinsic safety 'i'

EN 60079-26:2004 Equipment group II category 1G

- (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 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:



### **DEKRA EXAM GmbH**

Bochum, dated 06. August 2007

	Signed: Dr. Eickhoff	Signed: Dr. Wittler
- 10°	Certification body	Special services unit



(13) Appendix to

## (14) EC-Type Examination Certificate

## **BVS 07 ATEX E 091 X**

## (15) 15.1 Subject and type

Oil level thickness gauge type NivOil oil sensor

#### 15.2 Description

The oil level thickness gauge consists of a cylindrical plastic enclosure (surface resistance  $\leq 10^9 \Omega$ ) which contains a printed circuit board embedded in casting compound fitted with electronic components.

One end of the enclosure is equipped with a measuring gauge of stainless steel; the other end is connected to a cable entry for the fixed cable of up to 300m length.

The surface resistance of the exterior shell of the connecting cable is larger than  $10^9 \Omega$ .

#### 15.3 Parameters

#### 15.3.1 Supply and signal circuit

Maximum input voltage	Ui	DC	17.9	V
Maximum input current	Ii		157	mA
Maximum input power	$P_{i}$		695	mW
Maximum internal capacity	$C_i$		60	nF
Maximum internal inductance	Li		0.3	mH

- 15.3.2 Ambient temperature range  $-20 \, ^{\circ}\text{C} \le \text{T}_{\text{a}} \le 60 \, ^{\circ}\text{C}$
- (16) <u>Test and assessment report</u> BVS PP 07.2078 EG as of 06.08.2007

### (17) Special conditions for safe use

- 17.1 The connecting cable of the oil level thickness gauge has to be led through the wall separating areas meeting the requirements of category 1G from less hazardous areas in such a way that the degree of protection IP 67 according to EN 60529 will be achieved.
- 17.2 The connecting cable of the sensor may only be installed in areas where no electrostatic charges will occur.
- 17.3 The technical information provided by the manufacturer regarding the use of the oil level thickness gauge in contact with aggressive and corrosive media have to be observed.



We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 05.08.2008 BVS-Scha/Ar E 1091/08

**DEKRA EXAM GmbH**