



(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 06 ATEX 1072**



(4) Equipment: Sensor, types 6... .. 1 and 7... .. 1

(5) Manufacturer: HAUBER Elektronik GMBH

(6) Address: Fabrikstr. 6, 72622 Nürtingen Zisishausen, 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 07-16213.



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

**EN 60079-0: 2004    EN 60079-1:2004    EN 61241-0:2004    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, 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:

 **II 2 G Ex d IIC T4**  
 **II 2 D Ex tD A21 IP 6x T 120 °C**

Zertifizierungsstelle Explosionsschutz

Braunschweig, March 14, 2007

By order:

Dr.-Ing. U. Klausmeyer  
Direktor und Professor



## SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 06 ATEX 1072**

(15) Description of equipment

The sensor of types 6... .. 1 and 7... .. 1 consists of the flameproof enclosure with direct cable entry. Connection is by means of an integrated connecting cable (unconnected cable end).

The sensor is used for measuring and monitoring mechanical quantities, e.g. vibrations or temperatures.

### Electrical data

Rated insulation voltage .....	up to	48 V
Rated current		
Enclosure 120 ... ..	max.	25 mA
Enclosure 160 ... ..	max.	100 mA
Power loss		
Enclosure 120 ... ..	max.	0.75 W
Enclosure 160 ... ..	max.	2.85 W
Rated conductor size .....	max.	4 x 0.34 mm <sup>2</sup> or 8 x 0.25 mm <sup>2</sup>

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc. Any additional technical details are specified in the operating instructions.

Ambient temperature .....	-20 °C to 60 °C
Temperature at measuring point .....	max. 100 °C

The sensor head is designed for -20 °C to 120 °C temperature resistance; cable entry and connecting cable for -20 °C to 100 °C temperature resistance.

(16) Test report PTB Ex 06-16213

(17) Special conditions for safe use

The quality of the connecting wire shall be such that it meets the thermal and mechanical requirements under field service conditions.

The thermal limiting values of the cable entry and the connecting cable must be considered for operation of the sensor.

# Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 06 ATEX 1072

(18) Essential health and safety requirements

Met by compliance with the afore-mentioned Standards.

Zertifizierungsstelle Explosionsschutz

By order

Dr.-Ing. U. Klausmeyer  
Direktor und Professor



Braunschweig, March 14, 2007

## 1<sup>st</sup> SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 06 ATEX 1072

(Translation)

Equipment: Sensor, type 6... .. 1 and 7... .. 1

Marking:  II 2 G Ex d IIC T4

 II 2 D Ex tD A21 IP 6x T 120 °C

Manufacturer: HAUBER Elektronik GMBH

Address: Fabrikstr.6, 72622 Nürtingen Zisishausen, Germany

### Description of supplements and modifications

In the future the technical data are defined as follows:

### Electrical data

Rated insulation voltage up to 48 V

Power dissipation

Enclosure 120 ... max. 0.75 W

Enclosure 160 ... max. 2.85 W

Rated conductor size max. 4 x 0.34 mm<sup>2</sup> or 8 x 0.25 mm<sup>2</sup>

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc. Any additional technical details are specified in the operating instructions.

Ambient temperature -20 °C to 60 °C

Temperature at measuring point max. 100 °C

The sensor head is designed for -20 °C to 120 °C temperature resistance; cable entry and connecting cable for -20 °C to 100 °C temperature resistance.

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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

Applied standards

EN 60079-0: 2012

EN 60079-1:2007

EN 60079-31:2009

Due to the use of the above-mentioned standards, the marking changes as follows:



II 2 G Ex d IIC T4 Gb

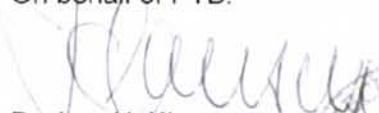


II 2 D Ex tb IIIC T120 °C Db

Test report: PTB Ex 13-13066

Zertifizierungssektor Explosionsschutz  
On behalf of PTB:

Braunschweig, April 17, 2013

  
Dr.-Ing. U. Klausmeyer  
Direktor und Professor

