(1) # EC-TYPE EXAMINATION CERTIFICATE

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **KEMA 07ATEX0110 X** Issue Number: **1**

(4) Equipment: **Proximity Probe Model TM0180, TM0105, TM0110 with Extension Cable Model TM0181**

(5) Manufacturer: **ProvibTech, Inc.**

(6) Address: **11011 Brooklet Drive, Suite 360, Houston, Texas 77099, USA**

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 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 confidential test report number 2107335.

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

EN 60079-0 : 2006 **EN 60079-11 : 2007** **EN 60079-26 : 2007**

(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 according 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 1 G Ex ia IIC T4
or
II 2 G Ex ia IIC T2

This certificate is issued on 10 October 2007 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

KEMA Quality B.V.

P.T. van Nijen
Certification Manager

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(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 07ATEX0110 X** Issue No. **1**

(15) **Description**

Proximity Probe Model TM0180 (8 mm probe), TM0105 (5 mm probe), TM0110 (11 mm probe) with Extension Cable Model TM0181 are used for measuring the static and dynamic distance between the target and the probe. TM0110 is used when longer measuring linear range is required.

An integrated probe-cable assembly or a probe-cable assembly combined with additional extension cable are such that their maximum combined length is 9 m or less.

The temperature class and the ambient temperature range, depending on the equipment category required in the area where the probe is installed, are listed in the following table:

Equipment category	Temperature class	Ambient temperature range
1G	T4	-55 °C ... +115 °C
2G	T2	-55 °C ... +232 °C

Electrical data

Probe Model TM0180 or Model TM0105
Supply circuit (cable connector):
In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with following maximum values:
U_i = -30 V; I_i = 140 mA; P_i = 0,9 W; C_i = 50,5 pF/m; L_i = 35,4 µH.

Probe Model TM0110
Supply circuit (cable connector):
In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with following maximum values:
U_i = -30 V; I_i = 140 mA; P_i = 0,9 W; C_i = 50,5 pF/m; L_i = 97 µH.

Routine tests

The completed integrated probe-cable assembly shall be tested per clause 11.2 of EN 60079-11 with a voltage of 500 Vac during one minute between probe enclosure and input terminal.

(16) **Test Report**

KEMA No. 2107335.

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

For ambient temperature range see (15).

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

Assured by compliance with the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 2107335.