

# EC-TYPE EXAMINATION CERTIFICATE



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[2]

**Equipment or Protective System intended for use  
in Potentially Explosive Atmospheres  
Directive 94/9/EC**

[3]

EC-Type Examination Certificate Number: **DEMKO 06 ATEX 0508841X Rev. 3**

[4]

Equipment or Protective System: **Magnetostrictive Probes, Sump Sensor, and Accessories**

[5]

Manufacturer: **Veeder Root Company**

[6]

Address: **2709 Route 674, Duncansville PA, 16635 USA**

[7]

This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to 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 report no. **12NK12141**

[9]

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

**EN 60079-0:2009**

**EN 60079-11:2007**

**EN 60079-26:2007**

[10]

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system.

These are not covered by the certificate.

[12]

The marking of the equipment or protective system shall include the following:

 **II 1 G Ex ia IIA T4**

## Certification Manager

Jan-Erik Storgaard

**Date of issue:** 2006-03-06

**Re-issued:** 2013-01-11

## Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark  
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[13]

[14]

**Schedule**  
**EC-TYPE EXAMINATION CERTIFICATE No.**  
**DEMKO 06 ATEX 0508841X Rev. 3**  
**Report: 12NK12141**

[15]

Description of Equipment or protective system

The intrinsically safe Magnetostrictive Plus Probes, Global Magnetostrictive Probes, Magnetostrictive Sump Sensors, and Associated Accessories are designed to detect the level of liquid in petroleum storage tanks, containment sumps and dispenser pans. The devices are powered by an associated apparatus with suitable entity parameters.

Nomenclature for type:

Magnetostrictive Plus Probe	84636x – yzz, 84736x - yzz and 85636x - yzz
Global Magnetostrictive Plus Probe	84626x – yzz
Magnetostrictive Sump Sensor	85706x - yzz

x (Sixth Digit)

Specifies OEM and material

y (First Suffix)

EEPROM programming variables

zz (Second and Third Suffixes)

Specifies Length

Temperature range:

The ambient temperature range is -40 °C to +60 °C.

Electrical data:

Intrinsically safe specifications:

U <sub>i</sub> :	12.6 V
I <sub>i</sub> :	196 mA
P <sub>i</sub> :	0.62 W
C <sub>i</sub> :	1.221 uF
L <sub>i</sub> :	4.00 mH

Installation instructions:

See special conditions of safe use.

Mounting instructions

None.

Routine tests:

None.

[16]

Report No.

Project Report No.: 12NK12141 (Hazardous Location Testing)

Documents:

**Description:**

**Drawing No.:**

**Rev. Level:**

**Date:**

Safety Certification Mag Plus Probe	331671-001	M	2012-04-26
Safety Certification Mag Sump Sensor	331671-020	E	2012-06-27
Safety Certification Mag Probe Accessories	331671-038	B	2012-10-18
Mag Probe Installation Manual	577014-031	B	N/A

[17]

Special conditions for safe use:

- o The devices have been evaluated in conjunction with the intrinsic safety system defined in DEMKO 06 ATEX 137480X. The descriptive system documents and manuals 577014-031 and 577013-578 included with the aforementioned certificate must be followed during installation and the appropriate Veeder Root accessories must be used. Manual 577014-031 details applicable process connections in accordance with EN 60079-26.
- o The following condition of safe use applies to the Mag Sump Sensor: Before installing or taking into a hazardous area, earth the unit in a Safe Area to remove any static charge. Then immediately transport the unit to the installation site; do not rub or clean the unit prior to installation. Cleaning is not required under normal service conditions; do not rub or clean the device after installation. If the unit is not fixed to a known earth point when installed, ensure that a separate earth connection is made to prevent the potential of static discharge. When fitting or removing the unit, use of anti-static footwear & clothing is required.
- o The enclosure contains aluminum. Care must be taken to avoid ignition hazards due to impact of friction.



[13]

[14]

**Schedule**  
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[18]

Essential Health and Safety Requirements

Concerning ESR this Schedule verifies compliance with the Annex III of ATEX directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

Additional information

The Hummel cable gland, part number HSK-M-Ex, Size 16X1,5 and the Veeder Root Mag Probe Gland, Part number 501-000-1206 were both subject to a hydrostatic pressure of 10 bar for a period of one minute. During the one minute observation period both glands did not show evidence of leakage or rupture.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

