CERTIFICATE

(1) EC-Type Examination

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

(3) EC-Type Examination Certificate Number: **DEKRA 12ATEX0201 X** Issue Number: **2**

(4) Equipment: **Guided Wave Radar Level Transmitter Eclipse Model 706-5...-1.., Model 706-5...-A.. , Model 706-5...-C.. and Eclipse Level Probe Model 7A.-....-... and Model 7C.-....-...**

(5) Manufacturer: **Magnetrol International N.V.**

(6) Address: **Heikensstraat 6, 9240 Zele, Belgium**

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

(8) DEKRA Certification 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 NL/DEK/ExTR12.0063/**.

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

EN 60079-0 : 2012 **EN 60079-11 : 2012** **EN 60079-15 : 2010** **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 Ga** or
II 1/3 G	**Ex nA [ia Ga] IIC T4 Ga/Gc** or
II 1/3 G	**Ex ic [ia Ga] IIC T4 Ga/Gc**

This certificate is issued on 18 April 2014 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.

DEKRA Certification B.V.

R. Schuller
Certification Manager

PRODUCTS RvA C 001

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 88 96 83000 F +31 88 96 83100 www.dekra-certification.com Registered Arnhem 09085396

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate DEKRA 12ATEX0201 X** Issue No. **2**

(15) **Description**

Guided Wave Radar Level Transmitter Eclipse Model 706-5...-... and Eclipse Level Probes Model 7A..-....-... and Model 7C.-....-... are used for level detection, using the TDR (Time Domain Reflectrometry) principle. Model 7..-....-1.. and Model 7..-....-A.. are intrinsically safe versions and Model 7..-....-C.. is a non sparking version with an intrinsically safe Probe connection.
Model 706-51..-.... has an output/supply circuit for connection to a 4 - 20 mA current loop with digital communication (HART) and Model 706-52..-... has an output/supply circuit for connection to a Fieldbus communication.

The transmitter is provided with a display for local read-out and configuration. The maximum probe length is 25 m.

The transmitter enclosure provides a degree of protection IP66 as per EN 60529.

Ambient temperature range -50 °C to +70 °C for type of protection Ex ia, Ex ic.
Ambient temperature range -15 °C to +70 °C for type of protection Ex nA [ia].
Process temperature range -196 °C to +450 °C, depending on the Probe Model.

Electrical data

Eclipse Model 706-51..-1.. and Model 706-51..-A.. with Probe Model 7..-....-... .:
Output/supply circuit (terminals + and -):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 28,4 V; I_i = 120 mA; P_i = 0,84 W; C_i = 4,4 nF; L_i = 2,7 µH.

Eclipse Model 706-51..-C.. with Probe Model 7..-....-... .:
Output/supply circuit (terminals + and -):
U_n = 36 V; U_m = 250 V.

Eclipse Model 706-52..-1.. and Model 706-52..-A.. with Probe Model 7..-....-... .:
Output/supply circuit (terminals + and -):

in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 28,4 V; I_i = 120 mA; P_i = 0,84 W; C_i = 0,5 nF; L_i = 2,7 µH;

in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit in accordance with FISCO, with the following maximum values:
U_i = 17,5 V; I_i = 380 mA; P_i = 5,32 W; C_i = 0,5 nF; L_i = 2,7 µH;

in type of protection intrinsic safety Ex ic IIC, only for connection to a certified intrinsically safe circuit in accordance with FISCO, with the following maximum values:
U_i = 17,5 V; I_i = 570 mA; C_i = 0,5 nF; L_i = 2,7 µH.

Installation instructions

The instructions provided with the equipment shall be followed in detail to assure safe operation.

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate DEKRA 12ATEX0201 X** Issue No. **2**

(16) **Test Report**

No. NL/DEK/ExTR12.0063/**.

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

Because the enclosure of the Guided Wave Radar Level Transmitter Eclipse Model 706-5...-.1. and/or Probe Model 7..-....-... is made of aluminium, if it is mounted in an area where the use of category 1 G apparatus is required, it must be installed such, that, even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. NL/DEK/ExTR12.0063/**.