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: **KEMA 01ATEX1052 X** Issue Number: **3**

(4) Equipment: **Level sensor series NMG125..... or series NMG125.....MU and built-on component series MG..... or series MG.....MU**

(5) Manufacturer: **KSR KUEBLER Niveau-Messtechnik AG**

(6) Address: **Heinrich-Kübler-Platz 1, D-69439 Zwingenberg, Germany**

(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 no. 215930700.

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

EN 60079-0 : 2012 **EN 60079-11 : 2012** **EN 60079-26 : 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:

Series NMG 125	**II 1/2 G**	**Ex ia IIC T4 ... T6 Ga/Gb** or
	II 2 D	**Ex ib IIIC T80°C Db**
Series MG	**II 2 G**	**Ex ia IIC T4 ... T6 Gb** or
	II 2 G	**Ex ib IIC T4 ... T6 Gb** or
	II 2 D	**Ex ib IIIC T80°C Db**

This certificate is issued on 4 December 2013 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.

T. Pijpker
Certification Manager

PRODUCTS RvAC 001

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(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 01ATEX1052 X** Issue No. **3**

(15) **Description**

The level sensor series NMG125..... and series NMG125.....MU serves to measure the level height in tanks of flammable liquids.
The level sensor consists of a float, a guide tube and a terminal box. A potentiometer (measuring chain), consisting of resistors and reed contacts, is located inside the guide tube of the level sensor. A magnet inside the float activates the reed contacts.

Optionally, the level sensor may be provided with a PT100, PT1000, thermal switch, reed contact or Namur switch. These sensors can also be combined.

Dependent on the type, the level sensor may be provided with one or two separately certified transmitters.

The built-on component series MG..... and series MG.....MU may be applied as an individual instrument on bypass pipes or as a position sensor.

The permissible operating pressures and process temperatures are to be taken from the manufacturer's operating manual.

Ambient temperature range: -50 °C to + 60 °C.

The relation between the temperature class, the maximum surface temperature, the maximum permissible ambient temperature and the maximum permissible process temperature shall be taken from the following table:

Temperature class	Ambient temperature	Process temperature	Surface temperature (Dust)
T4	≤ 60 °C	≤ 100 °C	≤ 80 °C
T5	≤ 60 °C	≤ 65 °C	
T6	≤ 60 °C	≤ 50 °C	

Electrical data

Level sensor series NMG125.....

Supply circuit of the potentiometer:
in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 28 V; I_i = 120 mA; P_i = 0,84 W; C_i = 0 nF; L_i = 0 µH.
When a optional transmitter is applied, the electrical data as mentioned in its EC-Type Examination Certificate shall be taken into account.

Optional circuit for (a combination of) a PT100, PT1000, thermal switch, reed contact or Namur switch:
in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 30 V; I_i = 120 mA; P_i = 0,9 W (P_i = 0,6 W in case of a Namur switch); C_i = 0 nF; L_i = 0 µH.

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 01ATEX1052 X** Issue No. **3**

When a optional transmitter is applied, the electrical data as mentioned in its EC-Type Examination Certificate shall be taken into account.

Level sensor series NMG125.....MU

Power supply circuit (Terminals -UB, ΔU, +UB):
in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, with following maximum values:
U_i = 20 V; I_i = 50 mA; P_i = 0,25 W; C_i = 0 nF; L_i = 0 µH.
When a optional transmitter is applied, the electrical data as mentioned in its EC-Type Examination Certificate shall be taken into account.

Optional circuit for (a combination of) a PT100, PT1000, thermal switch, reed contact or Namur switch:
in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
U_i = 30 V; I_i = 120 mA; P_i = 0,9 W (P_i = 0,6 W in case of a Namur switch); C_i = 0 nF; L_i = 0 µH.
When a optional transmitter is applied, the electrical data as mentioned in its EC-Type Examination Certificate shall be taken into account.

Level sensor series MG..... and MG.....MU

The electrical data of the level sensor series MG..... resp. MG.....MU is the same as for the level sensor series NMG125..... resp. NMG125.....MU, with the difference that the circuits may also be applied in type of protection intrinsic safety Ex ib IIC or Ex ib IIIC.

Installation instructions

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

(16) **Test Report**

No. 215930700.

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

For the relation between the temperature class, the maximum surface temperature, the maximum permissible ambient temperature and the maximum permissible process temperature see (15).

When floats of titanium are applied, ignition sources due to impact and friction sparks shall, even in the event of rare incidents, be avoided.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 215930700.