



(1) **EC-TYPE EXAMINATION CERTIFICATE**

(2) Equipment or protective system intended for use in potentially explosive atmospheres  
Directive 94/9/EC

(3) EC-Type Examination Certificate number: **LOM 07ATEX2032 X**

(4) Equipment or Protection System      Capacitive level measuring device  
Types      Microcap...EX... / NMC... E

(5) Applicant:      Kobold Mesura S.L.U

(6) Address      Grife, 655  
08918 Badalona (BARCELONA)  
SPAIN

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

(8) Laboratorio Oficial J.M. Madariaga (LOM), notified body number 0163 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament 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 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 report nr. **LOM 07.105 HP**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
Standards      EN 60079-0:2006      EN 60079-11:2007      EN 60079-26:2007  
                         EN 61241-0:2006      EN 61241-11:2006

(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 and construction of this specified equipment or protective system in accordance with the Directive 94/9/EC. Further requirements of the Directive applies to the manufacture and supply of this equipment or protective system. These are not covered by this certificate.

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

II 1/2 G D    Ex ia IIC T4      Ta: -20 °C / +60 °C  
Ex iaD 20 T85 °C IP65



Madrid, 4th May 2007

Carlos Fernández Ramón  
DIRECTOR OF THE LABORATORY

Angel Vega Remesal  
Head of ATEX area

*(This document may only be reproduced in its entirety and without any change)*

This Certificate is a translation from the original in Spanish. The LOM liability applies only on the Spanish text





# LABORATORIO OFICIAL J. M. MADARIAGA

## (A1) SCHEDULE

(A2) EC-Type Examination Certificate: : LOM 07ATEX2032 X

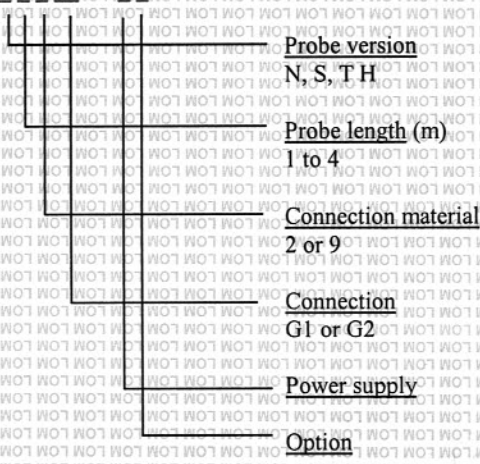
### (A3) Description of equipment or protective system

Capacitive level control device foreseen to be commercialised as two different type references:

Microcap...EX  
NMC... E

Type nomenclature:

Microcap... EX  
NMC-... E



This device is a current loop transmitter at 4-20 mA. The head of the device is made as category 2 and probe as category 1

Specific parameters of the type of protection : U<sub>i</sub>: 30 V Pi: 1,33 W I<sub>i</sub>: 50 mA

(A4) Test report nr: LOM 07.105 HP

### (A5) Special conditions for safe use

It must be take in account the electrostatic risk of the head enclosure.

### (A6) Individual tests

None



*(This document may only be reproduced in its entirety and without any change)*



# LABORATORIO OFICIAL J. M. MADARIAGA

## (A1) SCHEDULE

(A2) EC-Type Examination Certificate: : LOM 07ATEX2032 X

### (A7) Essential Health and Safety Requirements

Explosion safe requirements are covered by application of the standards indicated in page 1/3 of this certificate.

### (A8) Descriptive documents:

	Rev.	Date
- Description nr.:	DT0164	2007-04-29
	DT0167	2007-03-19
- Component part list:	DT0161	2007-03-19
	DT0162 (2 sheets)	2007-03-20
	DT0163	2007-03-19
- Drawings nr.:	Microcap1	4 2007-01-23
	Microcap2 (2 sheets)	4 2007-01-23
	Microcap3	4 2007-01-25
	PE0201R0	2007-03-20
	PE0202R0	2007-03-20
	PE0203R0	2007-03-20
	PE0204R0	2007-03-20
	PE0205R0	2007-03-20
	PE0206R0	2007-03-20
	PE0207R0	2007-03-20
	PE0208R0	2007-03-20
	PE0209R0	2007-03-20
	PM0481R0	2007-03-20
	PM0482R0	2007-03-20



(This document may only be reproduced in its entirety and without any change)

This Certificate is a translation from the original in Spanish. The LOM liability applies only on the Spanish text



## (1) EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT

(2) Equipment or protective system intended for use in potentially explosive atmospheres  
Directive 94/9/EC

(3) Supplement nr. 1 to EC-Type Examination Certificate number **LOM 07ATEX2032 X**

(4) Equipment or Protection System **Capacitive level measuring device**  
**Types Microcap...EX... / NMC... E...**

(5) Applicant **Kobold Mesura S.L.U.**

(6) Address **Grifé, 655**  
**08918 Badalona (BARCELONA)**  
**SPAIN**

(7) Test report nr. **LOM 08.426 CP**

### (8) Variations included in this certificate

To include a variant with changes in the electronic circuit

Variations in the specific parameters of the type of protection:

U <sub>i</sub>	P <sub>i</sub>	I <sub>i</sub>
30V	1,33 W	101 mA
20 V	1,33 W	-
14,5 V	-	-

### (9) Variations in marking

Those that correspond to the specific parameters of the type of protection

### (10) Variations in the special conditions for a safe use

None

### (11) Descriptive documents

	Rev.	Date
- Part list nr.:		
DT0161	1	2008-11-03
DT0162	1	2008-09-24
DT0163	2	2007-03-19
- Drawings nr.:		
PE0201R1	1	2008-09-24
PE0204R1	1	2008-09-24
PE0207R1	1	2008-09-24
PE0210	5	2008-09-18
PE0211 (2 sheets)	5	2008-09-18
PE0212	5	2008-09-18

OFICIAL

Madrid, 12th December, 2008

**Carlos Fernández Ramón**  
DIRECTOR OF THE LABORATORY



LABORATORIO OFICIAL J. M. MADARIAGA

**Angel Vega Remesal**  
Head of ATEX area

This supplement must be an inseparable part together with the base certificate **LOM 07ATEX2032 X**  
This Certificate is a translation from the original in Spanish. The LOM liability applies only on the Spanish

*(This document may only be reproduced in its entirety and without any change)*

RPCPER 07.4/2  
Rev. 0

UNIVERSIDAD POLITÉCNICA DE MADRID  
ENSAYOS E INVESTIGACIONES DE MATERIALES Y EQUIPOS PARA ATMÓSFERAS EXPLOSIVAS Y MINERÍA  
( Real Decreto 334/1992 de 3 de Abril - BOE 1992-04-29)





(1) EC-TYPE EXAMINATION CERTIFICATE SUPPLEMENT

(2) Equipment or protective system intended for use in potentially explosive atmospheres  
Directive 94/9/EC

(3) Supplement nr. 2 to EC-Type Examination Certificate number LOM 07ATEX2032 X

(4) Equipment or Protection System Capacitive level measuring device  
Type Microcap...EX... / NMC-... E..

(5) Manufacturer KOBOLD MESURA, S.L.U.

(6) Address Guifré, 665  
08918 BADALONA(BARCELONA)  
ESPAÑA

(7) Test report nr.: LOM 12.166 YP

(8) Variations included in this certificate

- Update to the standards EN 60079-0:2009, EN 60079-31:2009 and EN 60079-26:2007
- Update of electronic design

Type codification remains unchanged.

Specific parameters of the type of protection are the same as specified in supplement 1 of this certificate

(9) Changes in marking



II 2/1GD Ex ia IIC T4 Gb/Ga  
Ex ia IIIC T85 °C Db/Da  
-20 °C ≤ Ta ≤ +60°C

(10) Changes in the special conditions for a safe use

Without changes

(11) Descriptive documents

	Rev.	Date
- Description nr.: DT0492	-	2012-04-01
- Schematics nr.: PE0231 (sheet 1)	1	2011-11-15
PE0231 (sheet 2)	1	2011-11-15
PE0231 (sheet 3)	1	2012-03-27
- Drawings nr.: PE0233R0 (10 sheets)	0	2012-04-12
DT0488	-	2012-04-12

Getafe, 2012-06-22

Carlos Fernández Ramón  
DIRECTOR OF THE LABORATORY

Angel Vega Remesal  
Head of ATEX area

This supplement must be an inseparable part together with the base certificate LOM 07ATEX2032 X

This Certificate is a translation from the original in Spanish. The LOM liability applies only on the Spanish text

(This document may only be reproduced in its entirety and without any change)

