



# LABORATORIO OFICIAL J. M. MADARIAGA



## (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 nr. **LOM 14ATEX2006 X**

(4) Equipment or protection system      Volumetric counters  
Type COVOL

(5) Manufacturer      TECFLUID, S.A.

(6) Address      Narcis Monturiol, 33  
08960 Sant Just Desvern (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 13.344 GP**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
- Standards      **EN 60079-0:2009**      **EN 60079-1:2007**      **EN 60079-31:2009**

(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 apply 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 2G      Ex d IIC T6 Gb  
II 2D      Ex tb IIIC T85 °C Db

Getafe, 2014-02-03

Carlos Fernández Ramón  
Responsible of the Certification Committee

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

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RCPCEP 07.3/2  
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)



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# LABORATORIO OFICIAL J. M. MADARIAGA

## (A1) SCHEDULE

(A2) EC-Type Examination Certificate nr: **LOM 14ATEX2006 X**

(A3) Description of equipment or protective system

Volumetric counters with rotary piston for liquids, used in closed pipes. The equipment consists of a main body which includes the mechanical pieces of the counter, an enclosure containing the electronics, a magnetic sensor into a union piece and a thread adapter. The assembly of the enclosure, the magnetic sensor and the thread adapter are part of a flameproof enclosure or with protection by enclosure.

There are three types of enclosure containing electronic circuits depending on the device model:

- Only with terminal strip

This enclosure can be type either C30 or C31 from Cooper Crouse-Hinds. The sensor terminals are directly connected to an internal terminal strip that allows connection to the outside.

- CIP or CIP2 totalizer

This enclosure can be type either C30 or EFS-72 from Cooper Crouse-Hinds. The enclosure includes electronic circuits for flow rate totalization and LCD display. The circuits are powered by an internal 3.3V, 560 mA battery.

- CP420 or CH420 transmitters

This enclosure can be type either C30 or EFS-72 from Cooper Crouse-Hinds. The enclosure includes electronic circuits for determining the flow rate and volume as well as signal transmission and local LCD display. The external power supply between 12 and 36 V comes from the 4-20 mA current loop, optionally with HART protocol.

(A4) Test report nr. **LOM 13.344 GP**

(A5) Special conditions for safe use

- CIP/CIP2 variants, which include internal battery, cannot be opened when there is an explosive atmosphere present.

(A6) Individual tests

- Equipment is excluded from individual tests to be overcome overpressure type tests at 4 times the reference pressure.

(A7) Essential Health and Safety Requirements

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

(A8) Descriptive documents

	<u>Rev.</u>	<u>Date</u>
- Technical dossier nr. R-ET-C1ATEX	2	2014-01-24
- Drawings nr.:		
249400003	0	2013-09-13
261050037	0	2013-09-27
261170066	1	2013-09-13
268910110	0	2013-11-25
ADF/C30	0	2013-11-29
CO/ADF/C30	0	2013-11-19
CO/ADF/C31	0	2013-11-19