



(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 13ATEX2001 X**

(4) Equipment or protection system
Flow meters
Types M21 and AD**

(5) Manufacturer
Tecfluid S.A.

(6) Address
Narcís Monturiol, 33
08090 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 12.475 VP**


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

- Standards **EN 60079-0:2009** **EN 60079-11:2012** **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 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 1GD Ex ia IIC T4..T6 Ga
Ex ia IIIC T85 °C Da



Getafe, 2013-01-22

Carlos Fernández Ramón
DIRECTOR OF THE LABORATORY

Angel Vega Remesal
Head of the ATEX area

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)

Page 1 / 3





LABORATORIO OFICIAL J. M. MADARIAGA



(A1) SCHEDULE

(A2) EC-Type Examination Certificate nr: **LOM 13ATEX2001 X**

(A3) Description of equipment or protective system

M21 and AD * flow meters are based on a section of pipe through which a fluid, in some cases by displacing a float and other displacing a disk. Attached to the pipe is placed an enclosure containing the reading flow system. This enclosure can be made of aluminium, stainless steel or polypropylene.

Types and variants

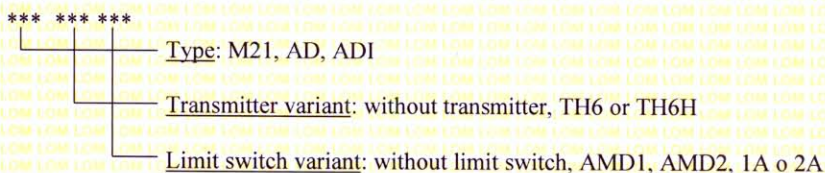
M21	Flow meter with conical float with reading system enclosure
AD	Impact disk flow meter without reading system enclosure
ADI	Impact disk flow meter without reading system enclosure

The equipment with two wire transmission includes a circuit called HALLTEC VI having two variants, TH6 with 4-20 mA output and TH6H with HART support. This circuit can be encapsulated. The temperature class is T6 when the circuit is encapsulated and T4 without encapsulation.

Equipment with limit switch detectors include one or two detectors:

M1-AMD1	One NAMUR inductive detector
M1-AMD2	Two NAMUR inductive detector
1A	One reed micro-switch
2A	Two reed micro-switch

Type codification:



Specific parameters of the type of protection

Variants with transmitter TH6 / TH6H	Variants that only include inductive detectors	Variants that only include reed micro switches
U_i : 30 V C_i : 56 nF P_i : 1,3 W	U_i : 16 V P_i : 64 mW L_i : 100 uH	I_i : 25 mA C_i : 30 nF Without parameters

When combined variants with transmitter and inductive sensors, the connection of the respective circuits should be kept separate by independent cables.

(A4) Test report nr: **LOM 12.475 VP**

(A5) Special conditions for safe use

- These apparatuses may only be used in locations with low risk of mechanical impact due to aluminium enclosures
- There is electrostatic hazard due to the plastic part of the enclosure. It shall follow the manufacturer instructions.
- The wiring of the variants containing transmitter and inductive sensor must be kept separated



LABORATORIO OFICIAL J. M. MADARIAGA

(A1) SCHEDULE

(A2) EC-Type Examination Certificate nr: **LOM 13ATEX2001 X**

(A6) Individual tests

None

(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
- Technical dossier nr.:	R-ET-AV2ATEX	1	2012-09-26
- Drawings nr.:	239520071	0	2011-09-10
	268910106	0	2012-10-21
	P239520071/02	0	2012-04-04
	P693120046/03	0	2012-08-29
	P116810010/02	0	2012-02-17
	P116810012/02	0	2012-02-17
	P116810014/02	0	2012-02-17
	P116810016/02	0	2012-02-17
- Component list nr.:	239520071/01	0	2012-04-04

