

LABORATORIO OFICIAL J. M. MADARIAGA



O(I) DM	EC										

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

LOM 08ATEX2039 EC-Type Examination Certificate nr (3)

Equipment or protection system Vibrating switch levels (4)

Types SOLIVIB...E.../NSV...E...

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

Grifé, 655 Address (6)

08918- Badalona (BARCELONA)

SPAIN

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

Laboratorio Oficial J.M. Madariaga (LOM), notified body number 0163 in accordance with Article 9 of the Directive 94/9/EC (8) 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 08.082 WP

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

> EN 61241-0:2006 EN61241-1:2004 Standards

If the sign X is placed after the certificate number, it indicates that the equipment or protective system is subject to special (10)conditions for safe use specified in the schedule to this certificate.

This EC-Type Examination Certificate relates only to the design and construction of this specified equipment or protective (11) 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.

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



II 1/2 D Ex tD A20/A21 IP65 T80 °C -20 °C ≤ Ta ≤ +60 °C

Madrid, 22nd June 2008



Carlos Fernández Ramón DIRECTOR OF THE LABORATORY Angel Vega Remesal Head of the ATEX

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)

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)



Page 1/3



LABORATORIO OFICIAL J. M. MADARIAGA

(A1) SCHEDULE

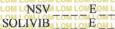
- (A2) EC-Type Examination Certificate: LOM 08ATEX2039
- (A3) Description of equipment or protective system

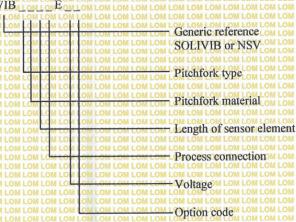
Level sensor intended for solids which operates by a vibrating diapason powered by a piezoelectric device. It has a category 2D metallic enclosure which contains the electronic devices and a category 1D diapason. The whole device have different threaded adapters as process connection, typically tanks and silos. The output signal is by means of a relays.

The power supply can be done at 230 Vac, 110 Vac, 24 Vac and 18-36 Vdc

The device is foreseen to be commercialised with two type references: SOLIVIB and NSV

Type codification





- (A4) LOM Test report nr LOM 08.082 WP
- (A5) Special conditions for safe use

None

(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.



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



LABORATORIO OFICIAL J. M. MADARIAGA

OM LOM LOM	LOW FOW FOW FOW FOW FOW FOW FO	M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO	LOM LOM	LOW	MILOM LOM LOM LOM LOM LOM LOM LOM LOM LOM
OM LOW LOW	LOW	M LOW LOW LOW LOW LOW	LOM LOM	FOW	M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOW LOW	FOW	M LOW	LOW FOW	I LOM	NM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
A2)LOM	EC-Type Examination Cert	ificate: LOM 08AT	EX20	129 / LOM	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OM LOW LOW	LOW FOW FOW FOW FOW FOW FOW FOW FOW FOW F	M LOM LOM LOM LOM LOM M LOM LOM LOM LOM LOM M LOM LOM LOM LOM LOM	LOM LOM	I LOM	JM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OW FOW FOW	FOW FOW FOW FOW FOW FOW FOW FO	M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO	LOM LOM	LOM	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OM LOM LOM	LOM	M LOW LOW LOW LOW LOW	Rev.om	LOW Date LOW LOW LOW LOW LOW LOW	IM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOW LOW	Lei Description nr.: Low Low Lo	DT0315 OM LOW LOW DT0331 OM LOW LOW	LOM LOM	2008-02-11 LON	NM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOW LOW	- Marking sheet nr.:	M DT03330M LOM LOM	LOM LOW	LON 2008-02-05 LOM LOM LO	WILOW FOW FOW FOW FOW FOW FOW FOW FOW FOW F
OM LOW LOW	Component list nr.:	DT:0117 (4 sheets	FOUR FOUR	2007-07-10	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OM LOW LOW	LOM	PE0199 (5 sheets) DT0202	OM LOW	2007-07-10	IN LOM
OM LOW LOW	LOM LOM LOM LOM LOM LOM LOM LO	DT:0115R1	LOW FOW	2007-07-10	MC LOM
OM LOW LOW OW LOW LOW	FOW	DT:0116R1 ON LOW	LOW LOW	2007-07-10	THE COME CONTROL CONTR
OM LOM LOM	LOW	PM0561R0 ON LOW PM0381R0	TOW FOW	2008-01-30 2004-10-20	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OW FOW FOW	LOW FOW FOW FOW FOW FOW FOW FO	PM0366R0	FOW FOW	1012004-10-20 LON	IM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOM LOM	LOM LOW	PM0367R0 PM0557R0	OM LON	2004-09-02 LOM LOM LO	79M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOM LOM	LOM	PM0558R0 om Lom	TOW FON	LON 2004-09-20 LON LON LO	MOL NOT NOT NOT MOL ON TON TON TON TON TON TON TON TON TON
OM LOM LOM	LOW FOW FOW FOW FOW FOW FOW FOW FOW FOW F	OM LOW	LOW LOW	I LOM)M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOM LOM	LOM LOW	M EOM LOM LOM LOM LOM	LOM LON	LOW FOW FOW FOW FOW FOW FO	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OM LOM LOM	LOW LOW LOW LOW LOW LOW LOW LOW	OM LOW LOW LOW LOW LOW	LOM LOW	LOW FOW FOW FOW FOW FOW FO	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OM LOW LOW OM LOW LOW	LOW	OM LOW	LOM LOW	I LOM	MILON LOM
OM LOM LOM	LOM	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L	LOM LOW	FLOM LOM LOM LOM LOM LOM LOM LOM LOM LOM	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OW FOW FOW	LOW FOW FOW FOW FOW FOW FOW FOW FOW	OW FOW FOW FOW FOW FOW	LOW LOW	I LOM	IM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOW LOW OM LOW LOW	LOW FOW FOW FOW FOW FOW FOW FOW FOW FOW F	OM LOW	LOM LON	I LOM	NM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOW LOW	LOW FOW FOW FOW FOW FOW FOW FOW FOW FOW F	OM LOW LOW LOW LOW LOW	LOM LON	LOW FOW FOW FOW FOW FOW FO	MOJ
OM LOM LOM	I LOM	DM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO	LOM LON	I LOM LOM LOM LOM LOM LOM LOM I LOM)M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOM LOM	FOW	M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO	LOM LOM	LOM	IN LOW
OM LOM LOM	LOW	M LOM LOM LOM LOM LOM	LOW LOW	I LOM	JM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
M LOM LOM	LOM LOM LOM LOM LOM LOM LOM LO	M LOM LOM LOM LOM	LOM LOM	LOW FOW FOW FOW FOW FOW FO	SM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
DM LOM LOM	LOW LOW LOW LOW LOW LOW LO	M LOM LOM LOM LOM			OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
M LOM LOM	LOM LOM LOM LOM LOM LOM LO	M LOM LOM LOM LOM	LOM LOM	LOW FOW FOW FOW FOW FOW FO	NN TON TOW TOW TOW ENDER CHAIR OW TOW TOW TOW TOW TOW TOW TOW TOW TOW
OM LOM LOM	LOW FOW FOW FOW FOW FOW FOW FOW FOW FOW F	M LOM LOM LOM LOM LOM LOM	LOM LON	I LOM LOM LOM LOM LOM LOM LO I LOM LOM LOM LOM LOM LOM	OM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
DM LOM LOM	LOW LOW LOW LOW LOW LOW LOW LOW	M FOW FOW FOW FOW FOW	LOW LOW	I LOM	M LOM LONG LONG LONG THE LONG LONG LONG LONG LONG LONG LONG LONG
M LOW LOW	LOM	M LOW LOW LOW LOW LOW	LOW LOW	I LOM	DW FOW FOW FOW FOW FOW FOW FOW FOW FOW FO
OM LOM LOM	LOM	M LOM LOM LOM LOM LOM LOM	LOM LON	I LOM LOM LOM LOM LOM LOM LOM LOM	M LOM LON COM LON COM LON
MOLOMIOM	LOM	M LOW LOW LOW LOW LOW	LOM LON	LOW FOW FOW FOW FOW FOW FO	OM LOM LON ON THE CONTROL ON LOM
OM LOM LOM	LOM LOM LOM LOM LOM LOM LOM LO	M LOW LOW LOW LOW LOW	LOM LON	I LOM LOM LOM LOM LOM LOM LO I LOM LOM LOM LOM LOM LO	DM LOM LOM LOM LOM LOM LOM LOM LOM LOM LO
OM LOM LOM OM LOM LOM	LOM LOM LOM LOM LOM LOM LOM LO	M LOW LOW LOW LOW LOW	LOM LON	I LOM LOM LOM LOM LOM LOM LO I LOM LOM LOM LOM LOM LO	DM LOM LOM LOS COM LOM LOM LOM LOM LOM LOM LOM LOM LOM L
OM LOM LOM	LOM	M LOM LOM LOM LOM LOM LOM	LOM LON	FLOM LOM LOM LOM LOM LOM LOM	DM.LOM LOM LOM LOM LOM LOM LOM LOM LOM LOM
OM LOM LOM	LOM	M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO	LOM LON	I LOM LOM LOM LOM LOM LOM LO I LOM LOM LOM LOM LOM LO	DIVIDIAL TOW FOW FOW FOW FOW FOW FOW FOW FOW FOW F
DM LOM LOM	LOM LOM LOM LOM LOM LOM LO	M LOM LOM LOM LOM LOM	LOM LON	I LOM LOM LOM LOM LOM LO	M LOM LOM LOM LOM LOM LOM LOM LOM LOM LO

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