

Dipartimento per l'impresa e l'internazionalizzazione Struttura: DG-MCCVNT REGISTRO UFFICIALE Prot. n. 0149983 - 16/09/2013 - USCITA



Ministero dello Sviluppo Economico

DIPARTIMENTO PER L'IMPRESA E L'INTERNAZIONALIZZAZIONE DIREZIONE GENERALE PER IL MERCATO, LA CONCORRENZA, IL CONSUMATORE, LA VIGILANZA E LA NORMATIVA TECNICA Divisione XV - Strumenti di misura e metalli preziosi

Member State of OIML Italy

OIML Certificate No. R49/2006-IT1-13.02

#### OIML BASIC CERTIFICATE OF CONFORMITY

**Issuing Authority** 

Name:

Ministero dello Sviluppo Economico

Dipartimento per l'Impresa e l'Internazionalizzazione Direzione generale mercato, concorrenza, consumatori,

vigilanza e normativa tecnica

Divisione XV - Strumenti di misura e metalli preziosi

Address:

Via Sallustiana, 53 - 00187 Roma (RM) (I)

Person responsible:

Anna Signore, Head of Division

**Applicant** 

Name:

ISOIL INDUSTRIA S.p.A.

Address:

Via F.IIi Gracchi, 27 - 20092 Cinisello Balsamo (MI) (I)

Manufacturer

Name:

ISOIL INDUSTRIA production Center: HEMINA S.p.A.

Address:

Via Piemonte, 2 - 35044 Montagnana (PD) (I)

**Identification of the certified type** (the detailed characteristics will be defined in the additional pages)

Elettromagnetic flow meter for water metering

## Designation of the module

ISOMAG FAMILY Model MS2500 DN 25 up to DN 250 with ML255 Model Converter

This Certificate attests the conformity of the above identified type (represented by the sample or samples identified in the associated Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 49-1 (Edition 2006) Metrological and technical requirements

R 49-2 (Edition 2006) Test methods

R 49-3 (Edition 2006) Test report format

For accuracy class: 2

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# OIML Certificate No. R49/2006-IT1-13.02

This Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This Certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated Test Reports:

No. ATLab-I12-013/0 Rev.0
Towned ATLAD LAT NO 175 Ass

Issued: ATLAB LAT N° 175 Accredited

by Accredia

No. E12177101

Issued: CMC Centro Misure

Compatibilità S.r.l. LAB Nº 0168

Accredited by Accredia

No. R11096701 rev30 Issued: CMC Centro Misure

Compatibilità S.r.l. LAB Nº 0168

Accredited by Accredia

dated 14/12/2012

that includes 43 pages (plus

annexes)

dated 29/11/2012

dated 13/03/2012

that includes 18 pages (plus

annexes)

that includes 38 pages (plus

annexes)

# Certificate history:

Issue no.

Date

**Description of the modification** 

02

16/09/2013

First Issuing

Tools Fromm.

The Issuing Authority **Head of Division** 

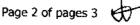
The CIML Member

Anna Signore

Paolo Francisci

Important note:

Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and the associated OIML Basic Type Evaluation Report(s) is not permitted, although either may be reproduced in full









## Description of the type:

The Family of water meters ISOMAG covers the nominal diameters in the range from DN 25 up to DN 250 and consist in 11 nominal diameters.

### Measuring principle:

The conductive medium flows through a magnetic field which induces a voltage signal between the electrodes that is proportional to the mean flow velocity (Faraday law). Flow rate is related to flow velocity and pipe cross sectional area. The converter (electronic unit) control magnetic field parameters, acquire the electrode signal, calculate and display the flow rate measure.

### The flow meter is composed by:

Sensor (pipe in which the liquid flow through): Family MS2500 (DN25 up to DN 250)

Reference: Data sheet DS006-MS2500

Converter (electronic part for signals management): family ML255

Reference: Data sheet DS035-ML255

### **Technical specifications:**

DN	Q3	Q4	Position	Disturbance profile	T	R=Q3/Q1	L	ΔΡ	Resolution < of	PN	Accuracy Class	Climatic Environment Class	Electromagnetic Environment
mm	m3/h	m3/h			°C	(.	mm	kPa	L	MPa	OIML R 49		
25	16	20	H-V	U0-D0	50	100 ÷ 400	200	63	0,1	1,6	2	B-C*	E1
32	25	31,3	H-V	U0-D0	8	100 ÷ 400	200	63	0,1	1,6	2	B-C*	E1
40	40	50	H-V	U0-D0	50	100 ÷ 400	200	63	0,5	1,6	2	B-C*	<b>E</b> 1
50	63	78,8	H-V	U0-D0	50	100 ÷ 400	200	63	1	1,6	2	B-C*	E1
65	100	125,0	H-V	U0-D0	50	100 ÷ 400	200	63	1	1,6	2	B-C*	<b>E</b> 1
80	160	200	H-V	U0-D0	50	100 ÷ 400	200	63	2	1,6	2	B-C*	E1
100	250	312,5	H-V	U0-D0	50	100 ÷ 400	250	63	2	1,6	2	B-C*	<b>E</b> 1
125	400	500	H-V	U0-D0	50	100 ÷ 400	250	63	5	1,6	2	B-C*	E1
150	630	787,5	H-V	U0-D0	50	100 ÷ 400	300	63	5	1,6	2	B-C*	E1
200	1000	1250	H-V	U0-D0	50	100 ÷ 400	350	63	10	1,6	2	B-C*	E1
250	1600	2000	H-V	UO-DO	50	100 ÷ 400	500	63	10	1,6	2	B-C*	E1

<sup>\*</sup> The instrument works properly up to -25 °C but the digits are visible only up to -20 °C

