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Issuing authority Person responsible: NMi Certin B.V. M.Ph.D. Schmidt

Applicant and Manufacturer

Euromag International S.r.l. Via della Tecnica 20

35035 Mestrino (PD) Italy

Identification of the certified type

An electromagnetic water meter

Type: MUT7000

Characteristics

See page 2 and further

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

> R 49-1 (2013) "Water meters intended for the metering of cold potable water and hot water"

Accuracy class 2

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above. This Certificate does not bestow any form of legal international approval.

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

Issuing Authority

NMi Certin B.V., OIML Issuing Authority NL1 24 May 2022

#### Certification Board

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The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org

This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon at the top of the electronic version of this certificate.





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# **OIML** Certificate

**OIML Member State**The Netherlands



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The conformity was established by the results of tests and examinations provided in the associated report(s):

No. NMi-2652375-01 dated 24 May 2022 that includes 29 pages.

## **Characteristics of the measuring instrument**

In Table 1 the general characteristics of the measuring instrument are presented.

Table 2 gives an overview of the general characteristics of the family of instruments.

The construction of the measuring instrument is recorded in the Documentation folder no. T12283-1.

#### **Table 1 General characteristics**

Measuring principle	Electromagnetic	
Accuracy class	2	
Environmental class	M1 / O (installed outdoors)	
Electromagnetic environment	E1	
Temperature range ambient	-25 °C / +55 °C	
Water temperature class	T50 (+0,1 °C / +50 °C)	
Maximum admissible pressure (MAP)	1,6 MPa (16 bar)	
Orientation	All positions (Horizontal, vertical or diagonal)	
Flow profile sensitivity class	U0 and D0 (0 x DN upstream and 0 x DN downstream)	
Reverse flow	The sensor is also designed to measure reverse flow. The reverse flow is recorded on a separate volume totalization. Also for reverse flow another pulse output is used.	
Pressure loss class	Δp 16 (0,16 bar)	
Power supply	The water meter is powered by means of: - A replaceable battery of 3,6 V (operating range: 2,9 3,7 V); - DC mains 10,8 – 13,2 V.	

#### **Table 2 Software identification**

Indentification	Software versions	CRC Checksum(*)	Remarks
Bootloader	1.06	b4F9C9Ab	-
Legally relevant firmware	1.08	AC406F7C	-

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Note: (\*) The checksum is stated as a hexadecimal value.

The software version and checksum are shown after powering up the device or can be check by bringing the magnet close to the reed for 5 seconds. Bootloader and firmware version are shown as the third and fourth screen after entering the menu system of the meter.

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# **OIML** Certificate

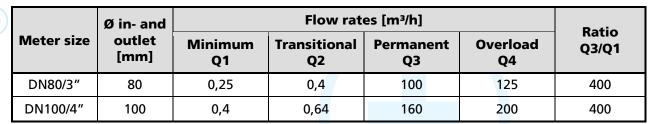
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### **Table 3 General characteristics of the family of instruments**





Please note that the flow rates Q1, Q2, Q3 and Q4 can be freely chosen as long as:

- Values Q3 and ratio Q3/Q1 are selected from paragraph 4.1 of OIML R49-1: 2013(E);
- Values mentioned for Q1 and Q2 are minimum values and the ratio Q2/Q1 = 1,6;
- Values mentioned for Q3 and Q4 are maximum values and the ratio Q4/Q3 = 1,25;
- The ratio Q3/Q1 is at least 40.

#### **Table 4 General characteristics of the indicating device**

Meter size	Indicating range (minimum value) [m³]	Verification scale interval (minimum resolution) [m³]
DN80; DN100 (+)	999999,999	0,00001

#### **Certificate history:**

Revision	Date	Description	
Initial	24 May 2022	Initial release	





