

OIML Member State
The Netherlands

Number R49/2013-A-NL1-22.03 revision 0
Project number 2946934
Page 1 of 3

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

Applicant and
Manufacturer Saudi Meters Company Ltd.
4719, 2nd Industrial City
Riyadh 14331, 7141 Unit No. 14
Kingdom of Saudi Arabia

Identification of the
certified type An ultrasonic **water meter**
Type: Smart Water Meter

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.

This certificate and supporting reports comply with the requirements of OIML-CS-PD-07 clause 6.2.

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**
31 May 2022

Certification Board

NMi Certin B.V.
Thijssseweg 11
2629 JA Delft
The Netherlands
T +31 88 636 2332
certin@nmi.nl
www.nmi.nl

This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

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.



OIML Member State
The Netherlands

Number R49/2013-A-NL1-22.03 revision 0
Project number 2946934
Page 2 of 3

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

- No. NMI-2946934-01 dated 31 May 2022 that includes 31 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. 2946934-1.

Table 1 General characteristics

Measuring principle	ultrasonic flow metering
Accuracy class	2
Environmental class	M1 / O (installed outdoors)
Electromagnetic environment	E2
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 not intended to measure reverse flow
Pressure loss class	DN15 Δp 40 (0,4 bar) (DN15 and DN20) DN25 Δp 63 (0,63 bar) (DN25 and DN32)
Power supply	Non-replaceable battery (3,3 – 3,7 V)
Software identification	Version number: F06-006. Checksum: 7194.

Table 2 General characteristics of the family of instruments

Meter size	Ø in- and outlet [mm]	Flow rates [m ³ /h]				Ratio Q3/Q1
		Minimum Q1	Transitional Q2	Permanent Q3	Overload Q4	
DN15	15	0,01	0,016	2,5	3,125	250
DN20	20	0,016	0,0256	4	5	250
DN25	25	0,04	0,064	10	12,5	250

Meter size	Ø in- and outlet [mm]	Flow rates [m ³ /h]				Ratio Q3/Q1
		Minimum Q1	Transitional Q2	Permanent Q3	Overload Q4	
DN32	32	0,04	0,064	10	12,5	250

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 3 General characteristics of the indicating device

Meter size	Indicating range (minimum value) [m ³]	Verification scale interval (minimum resolution)* [m ³]
DN15	9999	0,00001
DN20	9999	0,0001
DN25; DN32	99999	0,0001

*) Verification scale interval is standard 3 decimals and by breaking the sealing possible to be set according to the table above.

Certificate history:

This revision replaces the previous version.

Revision	Date	Description of the modification
Initial	31 May 2022	Initial issue