



Member State of OIML
United Kingdom of Great Britain
and Northern Ireland

OIML Certificate No
R49/2006-GB1-07.01
Revision 2

OIML CERTIFICATE OF CONFORMITY

Issuing authority

Name: **National Weights and Measures Laboratory
(Part of the National Measurement Office)**
Address: **Stanton Avenue
Teddington
Middlesex
TW11 0JZ, United Kingdom**

Person responsible: **Paul Dixon - Product Certification Manager**

Applicant

Name: **Elster Metering Limited**
Address: **Pondwicks Road
Luton
Bedfordshire, LU1 3LJ
United Kingdom**

Manufacturer of the certified pattern is the Applicant.

Identification of the certified pattern:

Family of cold-water meters utilising a common, volumetric measuring element, with a nominal capacity of 36 revs/litre and having a rated permanent flowrate Q3 of 2.5m³/h. Further characteristics see page 2

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML:	R49
Edition:	2006 (E)
Accuracy class:	2

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

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

The conformity was established by tests described in the associated test report M034805 having 24 pages, test report 001787B having 4 pages, test report SN:1104 having 13 pages and associated pattern evaluation checklist F20210 having 28 pages.

This revision replaces previous versions of the certificate.

Issuing authority



Mr P R Dixon
for NWML

CIML member



Mr P Mason

Date 08 December 2010

Ref: T1151/0001

Characteristics:

Model Name	Q ₃ /Q ₁ (R)				
	400	315	250	200	160
V100	✓	✓	✓	✓	✓
V110	✓	✓	✓	✓	✓
V200	✓	✓	✓	✓	✓
V210	✓	✓	✓	✓	✓
V230			✓	✓	✓

Q ₃ /Q ₁ (R)	400	315	250	200	160
Q ₂ /Q ₁	1.6	1.6	1.6	1.6	1.6
Q1 Minimum flowrate (m ³ /h)	0.00625	0.00794	0.01000	0.01250	0.01563
Q2 Transitional flowrate (m ³ /h)	0.01000	0.01270	0.01600	0.02000	0.02500
Q3 Permanent flowrate (m ³ /h)	2.5	2.5	2.5	2.5	2.5
Q4 Overload flowrate (m ³ /h)	3.125	3.125	3.125	3.125	3.125

Measuring principle:	Semi-positive displacement meter (36 revs/litre)
Accuracy Class:	2
Environmental class:	T30 (MAT)
Electromagnetic environment:	N/A
Maximum admissible temperature:	30 °C
Maximum admissible pressure:	1.6 Mpa (16 bar)
Orientation requirements:	None

Installation details

Connection type

(flange, screw thread, concentric manifold): V100, V110, V200, V200H, V230, (screw thread)
V210, V210H (concentric)

Minimum straight length of inlet pipe: non specified

Minimum straight length of outlet pipe: non specified

Flow conditioner (details if required): This type of meter is not susceptible to flow disturbances

Mounting

Orientation: Can be installed in any position

Other relevant information:

V210 and V200

Inductive pointer and sensor unit (optional)

The meter register is equipped with a metallic pointer on the first element of the verification scale. Two bosses and two holes on the shroud enable the option of an inductive sensor to be fitted to the meter shroud.

Reed switch sensor (optional)

The meter register is equipped with a magnetic pointer on the first element of the verification scale. The reed switch sensor is fitted to the meter shroud.

V200H and V210H

V200 and V210 meters with an electronic register

V200 and V210 meters fitted with an electronic non-resettable totalising register powered by a lithium cell, which features a 6+5 digit liquid crystal display.

V100 and V110

Reed switch sensor (optional)

The meter register is equipped with a magnet on the first element of the verification scale. The reed switch sensor is fitted in a pocket within the meter housing, in close proximity to the magnet.

V230

Reed switch sensor (optional)

The meter register is equipped with a magnetic pointer on the largest fractional element of the verification scale. The reed switch sensor is fitted to the meter shroud.

Certificate History:

ISSUE NO.	DATE	DESCRIPTION
R49/2006-GB1-07.01	8 th November 2007	Certificate first issued.
R49/2006-GB1-07.01 Revision 1	5 th October 2009	Revision 1 issued. Meter model V200H and V210H added. Certificate history added.
R49/2006-GB1-07.01 Revision 2	08 December 2010	Revision 2 issued. Meter model V230 reed switch sensor added.

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