



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

OIML Certificate No  
R49/2006-GB1-07.01  
Revision 3

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement Office**

Person responsible: **Paul Dixon – Director, Product Certification**

Applicant: **Elster Water Metering Limited  
130 Camford Way  
Sundon Park  
Luton, Bedfordshire  
LU3 3AN  
United Kingdom**

Manufacturer: **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  $Q_3$  of 2.5m<sup>3</sup>/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 Organisation of Legal Metrology (OIML):

<b>OIML:</b>	<b>R49</b>
<b>Edition:</b>	<b>2006 (E)</b>
<b>Accuracy class:</b>	<b>2</b>

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.

This revision replaces previous versions of the certificate.

**Issue Date:** 09 July 2014  
**Reference No:** T1151/0001

**Signatory:** G E Stones



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.

Characteristics:

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

Q <sub>3</sub> /Q <sub>1</sub> (R)	400	315	250	200	160
Q <sub>2</sub> /Q <sub>1</sub>	1.6	1.6	1.6	1.6	1.6
Q <sub>1</sub> Minimum flowrate (m <sup>3</sup> /h)	0.00625	0.00794	0.01000	0.01250	0.01563
Q <sub>2</sub> Transitional flowrate (m <sup>3</sup> /h)	0.01000	0.01270	0.01600	0.02000	0.02500
Q <sub>3</sub> Permanent flowrate (m <sup>3</sup> /h)	2.5	2.5	2.5	2.5	2.5
Q <sub>4</sub> Overload flowrate (m <sup>3</sup> /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 or resonant 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 <sup>th</sup> November 2007	Certificate first issued.
R49/2006-GB1-07.01 Revision 1	5 <sup>th</sup> 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.
R49/2006-GB1-07.01 Revision 3	09 July 2014	Revision 3 issued. Front page: Elster Water Metering name change. Other relevant information: V210 and V200: resonant pointer added

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 or of the associated test report is not permitted, though they may be reproduced in full.