



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

OIML Certificate No  
R49/2006-GB1-09.01  
Revision 1

## 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: **130 Camford Way  
Sundon Park  
Luton, Bedfordshire  
LU3 3AN  
United Kingdom**

Manufacturer: **The applicant and the manufacturers listed in Annex A.**

Identification of the certified pattern:

**Family of cold-water meters utilising a common, volumetric measuring element, with a nominal capacity of 16.5 revs/litre and having a rated permanent flowrate Q3 of 2.5m<sup>3</sup>/h (R250) or 4.0m<sup>3</sup>/h (R400).**

**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):

<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.

The conformity was established by tests described in the associated evaluation report P00211 having 30 pages (which references WRC-NSF test report M064305-R49 having 64 pages).

This revision replaces previous versions of the certificate.

Issuing authority

CIML member




Mr P R Dixon  
for NWML

Mr P Mason

Date 2<sup>nd</sup> December 2009  
Ref: T1151/0003

**Characteristics:**

**Meters with Q3 = 4.0 m<sup>3</sup>/h**

Table 1 Permitted flow designations by model

Model Name	Q <sub>3</sub> /Q <sub>1</sub> (R)						
	400	315	250	200	160	100	80
V100, V110, V200 and V210	✓	✓	✓	✓	✓	✓	✓
V220			✓	✓	✓	✓	✓

Table 2 Related flowrates according to each Q<sub>3</sub>/Q<sub>1</sub> designation

Q <sub>3</sub> /Q <sub>1</sub> (R)	400	315	250	200	160	100	80
Q <sub>2</sub> /Q <sub>1</sub>	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Q1 Minimum flowrate (m <sup>3</sup> /h)	0.01	0.0127	0.016	0.02	0.025	0.04	0.05
Q2 Transitional flowrate (m <sup>3</sup> /h)	0.016	0.0203	0.0256	0.032	0.04	0.064	0.08
Q3 Permanent flowrate (m <sup>3</sup> /h)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q4 Overload flowrate (m <sup>3</sup> /h)	5.0	5.0	5.0	5.0	5.0	5.0	5.0

## Meters with Q3 = 2.5 m<sup>3</sup>/h

Table 3 Permitted flow designations by model

Model Name	Q <sub>3</sub> /Q <sub>1</sub> (R)				
	250	200	160	100	80
V100, V110, V200 and V210	✓	✓	✓	✓	✓
V220			✓	✓	✓

Table 4 Related flowrates according to each Q<sub>3</sub>/Q<sub>1</sub> designation

Q <sub>3</sub> /Q <sub>1</sub> (R)	250	200	160	100	80
Q <sub>2</sub> /Q <sub>1</sub>	1.6	1.6	1.6	1.6	1.6
Q1 Minimum flowrate (m <sup>3</sup> /h)	0.01	0.0125	0.01562	0.025	0.03125
Q2 Transitional flowrate (m <sup>3</sup> /h)	0.016	0.02	0.025	0.04	0.05
Q3 Permanent flowrate (m <sup>3</sup> /h)	2.5	2.5	2.5	2.5	2.5
Q4 Overload flowrate (m <sup>3</sup> /h)	3.125	3.125	3.125	3.125	3.125

Measuring principle:	Semi-positive displacement meter (16.5 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, V210, V220
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
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### Other relevant information:

#### **V200, V210 and V220 meters**

#### **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.

### V100 and V110 meters

#### **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.

#### Certificate History:

<b>ISSUE NO.</b>	<b>DATE</b>	<b>DESCRIPTION</b>
R49/2006-GB1-09.01	30 <sup>th</sup> June 2009	Certificate first issued.
R49/2006-GB1-09.01 Revision 1	2 <sup>nd</sup> December 2009	Revision 1 issued. Meter model V220 added. Certificate history 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.

# Annex A

## Alternative Manufacturers

ELSTER METERING PTY LTD - 55 Northcorp Boulevard - Victoria - Australia

ELSTER METERING SA - Rue de Birmingham - 66 Molenbeek St Jean – Brussels - Belgium

COMPANIA COLOMBIANA DE MEDIDORES TAVIRA SA - Avenida de las Americas No. 66 A-08 - Bogota - Colombia

ELSTER MESSTECHNIK GMBH - Otto-Hahn-Strasse 25 – Lampertheim - Germany

ELSTER COMPTAGE SA - 23 Rue Papin - Villeneuve D'Ascq - France

ELSTER-INTROMET B.V. METERS BV - Minervum 7146 - Breda - Netherlands

ELSTER AMCO WATER, INC - PO Box 225 – Isabela - Puerto Rico

PREMAGAS S.R.O. - Nám. Dr. A. Schweitzera 194 - Stará Turá - Slovakia

ELSTER KENT METERING (PTY) LTD - 64 Commando Road - Johannesburg - South Africa

GEORGE KENT (MALAYSIA) BERHAD - Lot 1115 - Jalan Dengkil - Selangor Darul Ehsan - Malaysia.

THAI METERS CO. LTD - 262-268 Vorachak Road – Bangkok - Thailand