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

OIML Certificate No
R49/2006-GB1-09.01

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^3/h (R250) or 4.0m^3/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):

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 evaluation report P00211 having 30 pages (which references WRc-NSF test report M064305-R49s having 64 pages).

Issuing authority

Mr P R Dixon
for NWML

CIML member

Mr P Mason

Date 30th June 2009
Ref: T1151/0003

Characteristics:

Meters with Q3 = 4.0 m^3/h

Table 1 Permitted flow designations by model

Model Name	**Q_3/Q_1 (R)**						
	400	**315**	**250**	**200**	**160**	**100**	**80**
V100, V110, V200 and V210	✓	✓	✓	✓	✓	✓	✓

Table 2 Related flowrates according to each Q3/Q1 designation

Q_3/Q_1 (R)	**400**	**315**	**250**	**200**	**160**	**100**	**80**
Q_2/Q_1	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Q1 Minimum flowrate (m^3/h)	0.01	0.0127	0.016	0.02	0.025	0.04	0.05
Q2 Transitional flowrate (m^3/h)	0.016	0.0203	0.0256	0.032	0.04	0.064	0.08
Q3 Permanent flowrate (m^3/h)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Q4 Overload flowrate (m^3/h)	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Meters with Q3 = 2.5 m^3/h

Table 3 Permitted flow designations by model

Model Name	Q_3/Q_1 (R)				
	250	**200**	**160**	**100**	**80**
V100, V110, V200 and V210	✓	✓	✓	✓	✓

Table 4 Related flowrates according to each Q3/Q1 designation

Q_3/Q_1 (R)	**250**	**200**	**160**	**100**	**80**
Q_2/Q_1	1.6	1.6	1.6	1.6	1.6
Q1 Minimum flowrate (m^3/h)	0.01	0.0125	0.01562	0.025	0.03125
Q2 Transitional flowrate (m^3/h)	0.016	0.02	0.025	0.04	0.05
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 (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
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:

V200 and V210 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.

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