Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

Member State of OIML
Germany

OIML Certificate N°
R49-1/2006-DE1-07.03
Revision 3

OIML CERTIFICATE OF CONFORMITY

Issuing Authority

Name:	Physikalisch-Technische Bundesanstalt
Address:	Bundesallee 100, 38116 Braunschweig
Person responsible:	Dr. Gudrun Wendt

Applicant

Name:	Elster Metering Limited 130 Camford Way
Address:	Sundon Park Luton, Bedfordshire LU3 3AN United Kingdom

Manufacturer of the certified type is the applicant and:

Elster Metering LTD (Circle Ring Network)
No. 10 Jalan Jurutera U1/23, Section U1
Kawasan Perindustrial Hicom Glenmarie
40150 Shah Alam, Selangor Darul Ehsan
Malaysia

Identification of the certified type

Water Meter intended for the metering of cold potable water
Type: SM100VR, SM150VR

Further characteristics see page 3

This Certificate attests the conformity of the above identified type (represented by the sample or samples identified in the associated Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R49-1 (2006): Metrological and technical requirements
R49-2 (2006): Test methods
R49-3 (2006): Test report format

R3-000036

Physikalisch-Technische Bundesanstalt

OIML Certificate N°
R49-1/2006-DE1-07.03
Revision 3

This Certificate relates only to the metrological and technical characteristics of the type of instrument covered by the relevant OIML Recommendation identified above.

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

The conformity was established by the results of tests and examinations provided in the associated Report No.

PTB-1.5-4030627, Revision 2 (97 pages) and Test Report No.
PTB-1.5-4036395, Revision 2 (93 pages).

The Issuing Authority	**The CIML Member**
Dr. Gudrun Wendt	Dr. Roman Schwartz
	Direktor und Professor
04.03.2010	04.03.2010

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated Test Report(s) is not permitted, although either may be reproduced in full.

Physikalisch-Technische Bundesanstalt

OIML Certificate N°
R49-1/2006-DE1-07.03
Revision 3

Identification of the certified pattern – page 1 continued

Metrology characteristics SM150VR:

Q_3:	2.5 m^3/h	
Q_4:	3.125 m^3/h	
Q_2/Q_1:	1.6	
Q_1:	0.0156 m^3/h	0.0125 m^3/h
Q_2:	0.025 m^3/h	0.020 m^3/h
Q_3/Q_1:	160	200
Lenght:	110 mm	
Thread:	G ¾" B	
Measuring principle:	Fluidic oscillation	
Accuracy Class:	2	
Temperature Class:	T30	
Maximum admissible pressure:	1,6 MPa (16 bar)	
Environmental Class:	B and C	
Maximum admissible temperature:	30 (℃)	

Metrology characteristics SM100VR:

Q_3:	1.6 m^3/h		
Q_4:	2.000 m^3/h		
Q_2/Q_1:	1.6		
Q_1:	0.01 m^3/h	0.008 m^3/h	0.0064 m^3/h
Q_2:	0.016 m^3/h	0.0128 m^3/h	0.01024 m^3/h
Q_3/Q_1:	160	200	250
Lenght:	110 mm		
Thread:	G ¾" B		
Measuring principle:	Fluidic oscillation		
Accuracy Class:	2		
Temperature Class:	T30		
Maximum admissible pressure:	1,6 MPa (16 bar)		
Environmental Class:	B and C		
Maximum admissible temperature:	30 (℃)		

Installation details SM100VR and SM150VR:

Connection type:	Screw thread
Minimum straight length of inlet pipe:	0 mm
Minimum straight length of outlet pipe:	0 mm
Flow conditioner:	none
Orientation limitations:	none