

# Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

Member State of OIML  
Germany



OIML Certificate No.  
**R49/2006-DE1-08.02**  
Revision 4

## 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  
Address: 130 Camford Way  
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 Perindustrian Hicom Glenmarie  
40150 Shah Alam, Selangor Darul Ehsan  
Malaysia

and

Elster s.r.o.  
Nám. Dr. Alberta Schweitzera 194  
91601 Stará Turá  
Slovenská republika

### Identification of the certified type

Water meter intended for the metering of cold potable water  
Type: SM100, SM100E, SM100P or SM001, SM001E, SM001P  
SM150, SM150E, SM150P  
SM250, SM250E, SM250P  
SM700, SM700E, SM700P

Further characteristics see page 3

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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

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-1.5-4036396, Revision 2 (94 pages) and Test Report No.  
PTB-1.5-4025664, Revision 4 (95 pages).

## The Issuing Authority

Dr. G. Wendt  
Head of Department

07.06.2012

## The OIML Member

Dr. R. Schwartz  
Head of Division

07.06.2012

*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.

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Identification of the certified pattern – page 1 continued

Metrology characteristics:

Model	SM150 (E,P)			SM250 (E,P)		SM700 (E,P)	
$Q_3$ (m <sup>3</sup> /h)	2.5			4.0		4.0	
$Q_4$ (m <sup>3</sup> /h)	3.125			5.0		5.0	
$Q_2/Q_1$	1.6			1.6		1.6	
$Q_1$ (m <sup>3</sup> /h)	0.0156	0.0125	0.010	0.020	0.025	0.020	0.025
$Q_2$ (m <sup>3</sup> /h)	0.025	0.020	0.016	0.032	0.040	0.032	0.040
$Q_3/Q_1$	160	200	250	200	160	200	160
Lenght (mm)	110			190		190	
thread	G 3/4" B			G 1" B		1" or 1 1/4" NPSM	

Model	SM100 (E,P) or SM001 (E,P)		
$Q_3$ (m <sup>3</sup> /h)	1.6		
$Q_4$ (m <sup>3</sup> /h)	2.0		
$Q_2/Q_1$	1.6		
$Q_1$ (m <sup>3</sup> /h)	0.010	0.008	0.0064
$Q_2$ (m <sup>3</sup> /h)	0.016	0.0128	0.01024
$Q_3/Q_1$	160	200	250
Lenght (mm)	110		
thread	G 3/4" B		

Verification scale interval (m <sup>3</sup> )	Arbitrary
Accuracy class	2
Temperature class	T30
Maximum admissible pressure (bar)	16
Maximum admissible temperature (°C)	30
Environmental class	B and C
Electromagnetic environment	Residential, Commercial and Light industrial use

Installation details:

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