

# Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

Member State of OIML  
Germany



OIML Certificate N°  
**R49/2003-DE1-06.01**  
**Revision 1**

## OIML CERTIFICATE OF CONFORMITY

### Issuing Authority

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

### Applicant

Name: Severn Trent Metering Services Ltd. Smeckley Wood Close  
Address: Chesterfield Trading Estate, S41 9PZ Chesterfield  
United Kingdom

Manufacturer of the certified type is the applicant.

### Identification of the certified type

Water meter intended for the metering of cold potable water  
Type: SM 150, SM 250 Series

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 (2003): Metrological and technical requirements  
R49-2 (2004): Test methods  
R49-3 (2004): 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.

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The conformity was established by the results of tests and examinations provided in the associated Report No. PTB-1.5-4025664 (94 pages).

## The Issuing Authority

Dr. Gudrun Wendt  
Head of Department  
Liquid flow

24.07.2007

## The OIML Member

Dr. Roman Schwartz  
Head of Division  
Mechanics and Acoustics

24.07.2007

*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:

<b>Model</b>	<b>SM150</b>			<b>SM250</b>	
Nominal diameter DN (mm)	20			25	
$Q_3$ (m <sup>3</sup> /h)	2.5			4.0	
$Q_4$ (m <sup>3</sup> /h)	3.125			5.0	
$Q_2/Q_1$	1.6			1.6	
$Q_1$ (m <sup>3</sup> /h)	0.0156	0.0125	0.010	0.020	0.025
$Q_2$ (m <sup>3</sup> /h)	0.025	0.020	0.016	0.032	0.040
$Q_3/Q_1$	160	200	250	200	160
Length (mm)	110			190	
thread	G 3/4" B			G 1" B	

Verification scale interval (m <sup>3</sup> )	0.00001
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