

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

Member State of OIML
Germany



OIML Certificate No.
R49/2006-DE1-12.03

OIML CERTIFICATE OF CONFORMITY

Issuing Authority

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

Applicant

Name: SEVLAND GmbH
Address: Hauptstraße 27
90547 Stein

Manufacturer

Name: Vzljot JSC
Address: Masterskaya Str. 9
190121 St. Petersburg
RUSSIA

Identification of the certified type

Ultrasonic water meter intended for the metering of cold potable water and hot water
Type: AFLOWT UF

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

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 Test Reports No. PTB-1.5-4050906 that includes 597 pages

The Issuing Authority

Dr. G. Wendt
Head of Department

16.01.2012

The OIML Member

Dr. R. Schwartz
Head of Division

16.01.2012

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:

Nominal diameter mm	Q ₁ m ³ /h	Q ₂ m ³ /h	Q ₃ m ³ /h	Q ₄ m ³ /h	Q ₂ /Q ₁	Q ₃ /Q ₁
10	0,25 / 0,2 / 0,15625 / 0,125 / 0,1 / 0,079365 / 0,0625 / 0,05 / 0,039683 / 0,03125 / 0,025	0,4 / 0,32 / 0,25 / 0,2 / 0,16 / 0,126984 / 0,1 / 0,08 / 0,063492 / 0,05 / 0,04	2,5	3,125	1,6	10 / 12,5 / 16 / 20 / 25 / 31,5 / 40 / 50 / 63 / 80 / 100
15	0,63 / 0,504 / 0,39375 / 0,315 / 0,252 / 0,2 / 0,1575 / 0,126 / 0,1 / 0,07875 / 0,063	1,008 / 0,8064 / 0,63 / 0,504 / 0,4032 / 0,32 / 0,252 / 0,2016 / 0,16 / 0,126 / 0,1008	6,3	7,875	1,6	10 / 12,5 / 16 / 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
20	1,0 / 0,8 / 0,625 / 0,5 / 0,4 / 0,3175 / 0,25 / 0,2 / 0,1587 / 0,125 / 0,1	1,6 / 1,28 / 1,0 / 0,8 / 0,64 / 0,508 / 0,4 / 0,32 / 0,254 / 0,2 / 0,16	10	12,5	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
25	1,6 / 1,28 / 1,0 / 0,8 / 0,64 / 0,508 / 0,4 / 0,32 / 0,254 / 0,2 / 0,16	2,56 / 2,05 / 1,6 1,28 / 1,02 / 0,81 / 0,64 / 0,51 / 0,41 / 0,32 / 0,256 /	16	20	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
32	2,5 / 2,0 / 1,56 / 1,0 / 0,79 / 0,625 / 0,5 / 0,4 / 0,313 / 0,25	4,0 / 3,2 / 2,5 / 2,0 / 1,6 / 1,27 / 1,0 / 0,8 / 0,63 / 0,5 / 0,4	25	31,25	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
40	4,0 / 3,2 / 2,5 / 2,0 / 1,6 / 1,27 / 1,0 / 0,8 / 0,63 / 0,5 / 0,4	6,4 / 5,12 / 4,0 / 3,2 / 2,56 / 2,03 / 1,6 / 1,28 / 1,0 / 0,8 / 0,64	40	50	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
50	6,3 / 5,0 / 4,0 3,15 / 2,52 / 2,0 1,57 / 1,26 / 1,0 0,79 / 0,63	10 / 8 / 6,3 / 5 / 4 / 3,2 / 2,5 / 2,0 / 1,6 / 1,26 / 1,0	63	78,75	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100

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Nominal diameter mm	Q ₁ m ³ /h	Q ₂ m ³ /h	Q ₃ m ³ /h	Q ₄ m ³ /h	Q ₂ /Q ₁	Q ₃ /Q ₁
65	10 / 8 / 6,25 / 5 4 / 3,17 / 2,5 / 2 1,59 / 1,25 / 1,0	16 / 12,8 / 10 / 8 6,4 / 5,1 / 4 / 3,2 2,54 / 2,0 / 1,6	100	125	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
80	16 / 12,8 / 10 / 8 / 6,4 / 5,1 / 4 / 3,2 / 2,54 / 2 / 1,6	25,6 / 20,5 / 16 / 12,8 / 10,2 / 8,13 / 6,4 / 5,12 / 4,06 / 3,2 / 2,56	160	200	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
100	25 / 20 / 15,6 / 12,5 / 10 / 8 / 6,25 / 5 / 4 / 3,125 / 2,5	40 / 31 / 25 / 20 / 16 / 12,7 / 10 / 8 / 6,35 / 5 / 4 /	250	312,5	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
125	40 / 32 / 25 / 20 / 16 / 12,6984 / 10 / 8 / 6,3492 / 5 / 4	64 / 51,2 / 40 / 32 / 25,6 / 20,3175 / 16 / 12,8 / 10,1587 / 8 / 6,4	400	500	1,6	10 / 12,5 / 16 / 20 / 25 / 31,5 / 40 / 50 / 63 / 80 / 100
150	63 / 50,4 / 39,38 / 31,5 / 25,2 / 20 / 15,75 / 12,6 / 10 / 7,88 / 6,3	101 / 80,6 / 63 / 50,4 / 40,3 / 32/ 25,2 / 20,2 / 16 / 12,6 / 10,1	630	787,5	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
200	100 / 80 / 62,5 / 50 / 40 / 32/ 25 / 20 / 15,87 / 12,5 / 10	160 / 128 / 100 / 80 / 64 / 50,8 / 40 / 32 / 25,4 / 20 / 16	1000	1250	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
300	250 / 200 / 156 125 / 100 / 80 / 63 / 50 / 40 / 31,25 / 25	400 / 320 / 250 / 200 / 160 / 127 / 100 / 80 / 63,5 / 50 / 40	2500	3125	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100
400	400 / 320 / 250 / 200 / 160 / 126,9841 / 100 / 80 / 63,4920 / 50 / 40	640 / 512 / 400 / 320 / 256 / 203,1746 / 160 / 128 / 101,5873 / 80 / 64	4000	5000	1,6	10 / 12,5 / 16 20 / 25 / 31,5 40 / 50 / 63 / 80 / 100

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Verification scale intervall (m ³)	0,00001
Accuracy class	2
Temperature class	T90
Maximum admissible pressure (bar)	25
Maximum admissible temperature (°C)	90
Environmental class	B, C and I
Electromagnetic environment	E2 (industrial use)

Installation details:

Connection type	Flange, screw thread, concentric manifold
Minimum straight length of outlet pipe	10 x DN
Minimum straight length of inlet pipe	10 x DN
Flow conditioner	none
Orientation limitations	None overhead mounting