



Member state
Czech Republic

OIML Certificate No.
R49/2006-CZ-12.02

OIML CERTIFICATE OF CONFORMITY

Issuing Authority

Name: Czech Metrology Institute
Address: Okružní 31,
638 00 Brno, CZ
Person responsible: Jan Kalandra

Applicant

Name: Ningbo Water Meter Co., Ltd.
Address: No. 99, Lane 268, Beihai Road
315033 Ningbo
China

Manufacturer of the certified type

Name: Ningbo Water Meter Co., Ltd.
Address: No. 99, Lane 268, Beihai Road
315033 Ningbo
China

Identification of the certified type

Single Jet Water Meter
Type: SJ-LFC and SJ-WDC

Further characteristics see page 3

This certificate attests the conformity of above identified type (represented by the sample or samples identified in the associated test report) with the requirements of the following Recommendation(s) of the International Organization of Legal Metrology (OIML):

R 49, edition 2006, for accuracy class 2

This certificate relates only to the metrological and technical characteristics of the type of instrument covered by the relevant OIML Recommendation(s) 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 Test report: No. 6015-PT-P0090-11 that includes 75 pages.

Measuring system description:

The water meters type SJ-WDC are single jet rotary vane wheel water meters with wet mechanical indicating device.

The water meters type SJ-LFC are single jet rotary vane wheel water meters with semi dry (Liquid Filled Calculator) indicating device mechanical indicating device with protected registered drums.

The water meters type SJ-WDC consist of a brass, bronze or plastic body with connecting threads, an inlet strainer, an adjusting screw (optional), an adjusting button plate, a stainless steel shaft with plastic pivot, a rotary vane wheel and gears, a mechanical indicating device formed by numbered rollers with 5 drums and 4 rotary pointers, a black star wheel with 6 arms, which can be used for rapid testing, a register holder ring, a rubber O-ring, a glass disc, a rubber gasket and brass, bronze, steel or plastic head ring with a plastic cover.

The water meters type SJ-LFC consist of a brass, bronze or plastic body with connecting threads, an inlet strainer, an adjusting screw (optional), an adjusting button plate, a stainless steel shaft with plastic pivot, a rotary vane wheel and gears, a mechanical indicating device formed by numbered rollers with 5 drums, installed in capsule filled by special liquid, and 4 rotary pointers, a black star wheel with 6 arms, which can be used for rapid testing, a rubber O-ring, a glass or plastic disc, a rubber gasket and brass, bronze, steel or plastic head ring with a plastic cover.

The water meters type SJ-LFC and SJ-WDC can be equipped by a reed impulse transmitter which can be used for remote reading, or pre-equipped for further installation.

The water meters type SJ-LFC and SJ-WDC shall be installed to operate in horizontal position only with indicating device on the top.


The Issuing Authority
Jan Kalandra

9 May 2012




The CIML Member
Pavel Klenovský

9 May 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 the associated test report is not permitted although either may be reproduced in full.

Characteristics:

Basic technical data of water meters type SJ-LFC and SJ-WDC:

Nominal diameter (DN) [mm]:	15	20	25	32
Overload flowrate (Q_4) [m^3/h]:	≤ 3.13	≤ 5.00	≤ 7.88	≤ 12.5
Permanent flowrate (Q_3) [m^3/h]:	$\leq 2.50^1$	$\leq 4.00^1$	$\leq 6.30^1$	$\leq 10.0^1$
Transitional flowrate (Q_2) [m^3/h]:	≥ 0.0250	≥ 0.0400	≥ 0.0630	≥ 0.1000
Minimum flowrate (Q_1) [m^3/h]:	≥ 0.0156	≥ 0.0250	≥ 0.0394	≥ 0.0625
Ratio Q_3 / Q_1 :	$\leq 160^2$			
Ratio Q_2 / Q_1 :	1.6			
Ratio Q_4 / Q_3 :	1.25			
Accuracy class:	2			
Maximum permissible error for the lower flowrate zone (MPE _l):	$\pm 5\%$			
Maximum permissible error for the upper flowrate zone (MPE _u):	$\pm 2\%$ for water having a temperature $\leq 30\text{ }^\circ\text{C}$ $\pm 3\%$ for water having a temperature $> 30\text{ }^\circ\text{C}$			
Temperature class:	T30 or T50			
Water pressure classes:	MAP 10 and MAP 16			
Pressure-loss classes:	ΔP 63			
Indicating range [m^3]:	99 999			
Resolution of the indicating device [m^3]:	0.00005			
Resolution of the device for the rapid testing [pulse/L]:	66.1333	50.7273	27.0000	13.0952
Flow profile sensitivity classes:	U0 D0			
Orientation limitation:	H			
Length L [mm]:	110 to 190	130	160	160
Connection type– Screw thread size:	G $\frac{3}{4}$ B G1B	G1B	G1 $\frac{1}{4}$ B G1 $\frac{1}{2}$ B	G1 $\frac{1}{2}$ B
Reed switch power supply (U_{max} / I_{max}):	max. 24 V / 0.01 A			
Reed switch K-faktor [impulse / L]:	0.001, 0.01, 0.1 and 1			

¹ The value of Q_3 shall be chosen from the R5 line of ISO 3:1973.

² The ratio Q_3 / Q_1 shall be chosen from the R10 line from ISO 3:1973 and this value shall be higher than 10.