Czech Metrology Institute

Member state
Czech Republic

OIML Certificate No.
R49/2006-CZ-12.03

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-SDC

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

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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-P0089-11 that includes 111 pages.

Measuring system description:

The water meters type SJ-SDC are single jet rotary vane wheel water meters with dry mechanical indicating device (Plastic Can Calculator) or supper dry mechanical indicating device (Copper Can Calculator).

The water meters type SJ-SDC (D3) consist of a brass, bronze or plastic body with connecting threads and inlet strainer, a button plate, a stainless steel shaft, a rotary vane wheel with magnetic holder and stainless steel shaft, a plastic gasket, a rubber O-ring, a pressure plate with agate bearing, a brass, steel or plastic inner head ring, a two antimagnetic protection rings (optional), a dry or super dry mechanical indicating device, closing ring with plastic cover (optional) or plastic clamp on cover.

The water meters type SJ-SDC (D7) consist of a brass, bronze or plastic body with connecting threads and inlet strainer, a adjusting screw, a button plate, a stainless steel shaft, a rotary vane wheel with magnetic holder and stainless steel shaft, a plastic gasket, a rubber O-ring, a pressure plate with agate bearing, a brass, steel or plastic inner head ring, a two antimagnetic protection rings (optional), a dry or super dry mechanical indicating device, closing ring and plastic cover (optional) or plastic clamp on cover.

There are three types of the mechanical indicating device. The first one is formed by numbered rollers with 5 drums and 4 rotary pointers, the second one is with 8 drums and 1 pointer and third one with 7 drums and 2 pointers. These calculators can be designated for inclined reading. There is black star wheel with 6 arms or the silver one with 20 arms, which can be used for rapid testing, on mechanical indicating device.

The water meters type SJ-SDC can be equipped by a reed impulse transmitter which can be used for remote reading.

The water meters type SJ-SDC shall be installed to operate in arbitrary positions with indicating device on the top or on the side.

Kalandra

The Issuing Authority
Jan Kalandra

9 May 2012

Český metrologický institut

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-SDC:

Nominal diameter (DN) [mm]:	15	20	25	32	40
Ratio Q_3 / Q_1:	≤ 80 [1] for H installations				
	≤ 50 [1] for any other installations		-	-	-
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):	± 5 %				
Maximum permissible error for the upper flowrate zone (MPE_u):	± 2 % for water having a temperature ≤ 30 °C ± 3 % for water having a temperature > 30 °C				
Temperature class:	T30, T50, T30/90 and T90				
Water pressure classes:	MAP 16				
Pressure-loss classes:	ΔP 63				
Indicating range [m^3]:	99 999				
Resolution of the indicating device [m^3]:	0.00005 or 0.00002				
Resolution of the device for the rapid testing [pulse/L]:	67,5000	42,7636	22,2353	12,1500	9,4714
Flow profile sensitivity classes:	U0 D0				
Orientation limitation:	No		H		
Length L [mm]:	80 to190	130	160		200
Connection type– Screw thread size:	G¾B G1B	G1B	G1¼B G1½B	G1½B	G2B
Reed switch power supply (U_{max} / I_{max}):	max. 24 V / 0.01 A				
Reed switch K-factor [impulse / L]:	0.001, 0.01, 0.1 and 1				

[1] 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.

Nominal diameter (DN):	Installation position:	Minimum flowrate (Q_1)	Transitional flowrate (Q_2)	Permanent flowrate (Q_3)	Overload flowrate (Q_4)
mm	-	m^3/h	m^3/h	m^3/h	m^3/h
15	H	≥ 0,0313	≥ 0,0500	≤ 2,50 [1]	≤ 3,13
15	V	≥ 0,0500	≥ 0,0800	≤ 2,50 [1]	≤ 3,13
20	H	≥ 0,0500	≥ 0,0800	≤ 4,00 [1]	≤ 5,00
20	V	≥ 0,0800	≥ 0,128	≤ 4,00 [1]	≤ 5,00
25	H	≥ 0,0788	≥ 0,126	≤ 6,30 [1]	≤ 7,88
32	H	≥ 0,125	≥ 0,200	≤ 10,0 [1]	≤ 12,5
40	H	≥ 0,200	≥ 0,320	≤ 16,0 [1]	≤ 20,0

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