

Czech Metrology Institute



Member state

Czech Republic

OIML Certificate No. R49/2006-CZ-14.03

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:

355 Hongxing Road, Jiangbei District

315032 Ningbo

China

Manufacturer of the certified type

Name:

Ningbo Water Meter Co., LTD.

Address:

355 Hongxing Road, Jiangbei District

315032 Ningbo

China

Identification of the certified type

Multijet water meter Type: MJ-SDC PLUS

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-P0005-12 from 12th January 2012 that includes 53 pages including annexes.

Measuring system description:

The water meters type MJ-SDC PLUS are multi jet rotary vane wheel water meters with dry mechanical indicating device.

The water meters type MJ-SDC PLUS consist of a brass body with connecting screw threads, inlet strainer and adjusting screw, a rubber gasket, plastic casing for an impeller with multiple inlets and outlets, stainless steel shaft with plastic tip, rotary vane impeller with agate bearing and magnetic ring, plastic casing for an indicating device with a rubber O-ring, antimagnetic protection ring, plastic shaft with a magnetic ring, a dry mechanical indicating device, plastic ring, rubber O-ring and a glass window and brass screw head ring with a plastic sliding gasket and a plastic lid.

There are two variants for composition of the mechanical indicating device: variant with 5 numbered rollers and 4 rotary pointers and variant with 8 numbered rollers and 1 rotary pointer. There is a star wheel with 6 arms on the indicating device which can be used for rapid testing.

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

The Issuing Authority
Jan Kalandra

12 December 2014

The CIML Member Pavel Klenovský

12 December 2014

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 MJ-SDC PLUS DN 15 and DN 20:

Nominal diameter (DN) [mm]:	15	20	
Ratio Q_3/Q_1 :	≤ 200 ¹		
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 ₁):	± 5 %		
Maximum permissible error for the upper	$\pm 2\%$ for water having a temperature ≤ 30 °C		
flowrate zone (MPE _u):	± 3 % for water having a temperature > 30 °C		
Temperature classes:	T30, T50		
Water pressure class:	MAP 16		
Pressure-loss class:	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]:	90.0938	60.0000	
Flow profile sensitivity classes:	U0 D0		
Orientation limitation:	H		
Length L [mm]:	145 to 190	160 to 190	
Connection type- Screw thread size:	G¾B, G1B	G1B	
Reed switch power supply $(U_{\text{max}}/I_{\text{max}})$:	max. 24 V / 0.01 A		
Reed switch K-factor [impulse / L]:	0.001, 0.01, 0.1 and 1		

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

Nominal diameter (DN):	Installation position:	Minimum flowrate (Q_1)	Transitional flowrate (Q_2)	Permanent flowrate (Q_3)	Overload flowrate (Q_4)
mm	-	m³/h	m³/h	m ³ /h	m ³ /h
15	Н	≥ 0.0125	≥ 0.0200	≤ 2.50 ¹	≤3.13
20	Н	≥ 0.0200	≥ 0.0320	≤ 4.00 ¹	≤ 5.00

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