

Member State of OIML
United Kingdom of Great Britain
and Northern Ireland

OIML Certificate No
R49/2013-GB1-17.03

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**
Person responsible: **Mannie Panesar – Head of Technical Services**
Applicant: **Contadores de agua de Zaragoza S.A. (Contazara S.A.)
Carretera Castellón km.5,5
50720 Zaragoza
Spain**
Manufacturer: **The applicant**
Identification of the certified pattern: A family of cold-water meters, designated **CZ5000**, utilising an Ultrasonic measuring element and having a rated permanent flowrate Q_3 (m³/h) of 1.6, 2.5, 4.0, 6.3 and 10.

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

OIML R49 - Edition 2013(E) for accuracy class: 2

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

Issue Date: 28 November 2017

A handwritten signature in black ink, appearing to read 'Glas', written over a horizontal line.

Grégory Glas
Lead Technical Manager
For and on behalf of the Head of Technical Services



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The conformity was established by testing and examinations described in the associated Evaluation Report P02159 which includes 12 pages.

Characteristics of the instrument:

Table 1 Related flowrates according to meter size (R500)

Meter Size (mm)	15	15	20	20	25	25	25	32
Q_3/Q_1 (R)	500	500	500	500	500	500	500	500
Q_2/Q_1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Q_1 Minimum flowrate (m ³ /hr)	0.003	0.005	0.005	0.008	0.008	0.013	0.02	0.02
Q_2 Transitional flowrate (m ³ /hr)	0.005	0.008	0.008	0.013	0.013	0.020	0.032	0.032
Q_3 Permanent flowrate (m ³ /hr)	1.6	2.5	2.5	4	4	6.3	10	10
Q_4 Overload flowrate (m ³ /hr)	2	3.125	3.125	5	5	7.875	12.5	12.5
Head loss at Q_3 (bar) $r\Delta P$	0.16	0.16	0.16	0.16	0.16	0.16	0.4	0.4

Table 2 Related flowrates according to meter size (R800)

Meter Size (mm)	15	15	20	20	25	25	25	32
Q_3/Q_1 (R)	800	800	800	800	800	800	800	800
Q_2/Q_1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Q_1 Minimum flowrate (m ³ /hr)	0.002	0.003	0.003	0.005	0.005	0.008	0.013	0.013
Q_2 Transitional flowrate (m ³ /hr)	0.003	0.005	0.005	0.008	0.008	0.013	0.02	0.02
Q_3 Permanent flowrate (m ³ /hr)	1.6	2.5	2.5	4	4	6.3	10	10
Q_4 Overload flowrate (m ³ /hr)	2	3.125	3.125	5	5	7.875	12.5	12.5
Head loss at Q_3 (bar) $r\Delta P$	0.16	0.16	0.16	0.16	0.16	0.16	0.4	0.4

Characteristics

Measuring principle: Ultrasonic
 Accuracy Class: 2
 Q_2/Q_1 : 1.6
 Q_3/Q_1 : 500 and 800
 Environmental class: T50 (0.1 °C to 50 °C)
 Environmental class: O (-25 °C to 55 °C)
 Electromagnetic environment: E1
 Maximum admissible temperature: 50 °C
 Maximum admissible pressure: 1.6 Mpa (16 bar)
 Pressure Loss Class: 0.40 bar

Installation details

Connection type: In-line, screw thread
 Minimum straight length of inlet pipe: U0
 Minimum straight length of outlet pipe: D0
 Flow conditioner (details if required): None

Mounting

Orientation: Can be installed in any orientation

Power Supply

Type: Non-replaceable lithium battery, type C (3.6V).

Display

Type: LCD display type 99604109 or 99604209

Functionality

Checking Facilities: Measurement transducer, Calculator & Indicating device
 Checking Facilities Type: P
 Flow Measurement Direction: The meter may or may not measure reverse flow depending on factory set-up - this should be marked on the Data Label

Output options:

No communication
 Encoder / Pulse output
 Pulse output (SSR) 1.5 m cable
 3G radio
 W-Mbus/OMS/Sigfox

Software versions:

5.01

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R49/2013-GB1-17.03	28 November 2017	Certificate first issued.
-	-	No revisions have been issued.