



Member state  
Czech Republic

OIML Certificate No.  
R49/2013-CZ-17.02

## OIML BASIC CERTIFICATE OF CONFORMITY

### Issuing Authority

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

### Applicant

Name: DH Metering Europe S.A.  
Address: Rue Henry Lemaire, 22, B – 7911 Frasnes-Lez-Anvaing  
Belgium

### Manufacturer of the certified type

Name: DH Metering Europe S.A.  
Address: Rue Henry Lemaire, 22, B – 7911 Frasnes-Lez-Anvaing  
Belgium

### Identification of the certified type

**Water meter - volumetric**  
**Type: DHV3000, DHV3200**

For further characteristics see page 2 to 4

This certificate attests the conformity of above identified Type (represented by the sample(s) identified in the OIML Basic Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**R 49, edition 2013, 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-P3001-17 from 4<sup>th</sup> January 2017 that includes 131 pages including annexes.

**Measuring system description:**

The water meters type DHV3000 and DHV3200 are semi positive displacement rotary piston water meters with wet mechanical indicating device with protected registered drums.

The water meters type DHV3000 and DHV3200 consist of a brass (DHV3000) or composite (DHV3200) body (divided into two parts connected by screw) with connecting screw threads, an inlet strainer, a wet measuring unit with a piston and mechanical transmission, rubber O-ring, a mechanical indicating device protected by a plastic cover. The mechanical indicating device is formed by numbered rollers with eight drums. The numbered drums are installed in capsule filled by special liquid.

The water meters type DHV3000 and DHV3200 are not designed to measure reverse flow.

The meter is intended for mount to the connecting any pipework with the flow axis in the horizontal and vertical (from bottom to top and from top to bottom) plane and with the indicating device positioned at the top and at the side.



**The OIML Issuing Authority**  
Pavel Klenovský

8 February 2017

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 OIML Basic Type Evaluation Report (s) is not permitted, although either may be reproduced in full.

**Characteristics:**

Basic technical data of water meters type **DHV3000, DHV3200 DN15**

Nominal diameter:	15			
$Q_1$ [m <sup>3</sup> /h]:	0.013	0.016	0.025	0.031
$Q_2$ [m <sup>3</sup> /h]:	0.020	0.025	0.040	0.050
$Q_3$ [m <sup>3</sup> /h]:	2.50	2.50	2.50	2.50
$Q_4$ [m <sup>3</sup> /h]:	3.13	3.13	3.13	3.13
$Q_3/Q_1$ :	200	160	100	80
$Q_2/Q_1$ :	1.6			
$Q_3/Q_4$ :	1.25			
Accuracy class:	2			
Maximum permissible error for the lower flowrate zone (MPE <sub>l</sub> ):	±5%			
Maximum permissible error for the upper flowrate zone (MPE <sub>u</sub> ):	± 2 % for water having a temperature ≤ 30 °C			
Temperature class:	T30			
Water pressure class:	MAP 16			
Pressure loss class:	ΔP63			
Orientation limitation:	all positions			
Indicating range [m <sup>3</sup> ]:	9 999			
Resolution of the indicating device [m <sup>3</sup> ]:	0.00002			
Connection type (screw thread):	G 3/4" B			
Length [mm] - brass body:	110 - 115 - 165			
Length [mm] - composite body:	110 - 115 - 165			

Basic technical data of water meters type **DHV3000, DHV3200 DN20**

Nominal diameter:	20					
$Q_1$ [m <sup>3</sup> /h]:	0.013	0.016	0.020	0.025	0.040	0.050
$Q_2$ [m <sup>3</sup> /h]:	0.020	0.026	0.032	0.040	0.064	0.080
$Q_3$ [m <sup>3</sup> /h]:	4.00	4.00	4.00	4.00	4.00	4.00
$Q_4$ [m <sup>3</sup> /h]:	5.00	5.00	5.00	5.00	5.00	5.00
$Q_3/Q_1$ :	315	250	200	160	100	80
$Q_2/Q_1$ :	1.6					
$Q_3/Q_4$ :	1.25					
Accuracy class:	2					
Maximum permissible error for the lower flowrate zone (MPE <sub>l</sub> ):	±5%					
Maximum permissible error for the upper flowrate zone (MPE <sub>u</sub> ):	± 2 % for water having a temperature ≤ 30 °C					
Temperature class:	T30					
Water pressure class:	MAP 16					
Pressure loss class:	ΔP63					
Orientation limitation:	all positions					
Indicating range [m <sup>3</sup> ]:	9 999					
Resolution of the indicating device [m <sup>3</sup> ]:	0.00002					
Connection type (screw thread):	G 1" B					
Length [mm] - brass body:	165 - 190					
Length [mm] - composite body:	165					

### Marking and inscriptions

The water meters type **DHV3000**, **DHV3200** shall be clearly and indelibly marked with the following information:

- Water meter type
- Unit of measurement ( $\text{m}^3$ )
- Numerical value  $Q_3$  in  $\text{m}^3/\text{h}$  ( $Q_3 \times .\times$ ) and the ratio  $Q_3 / Q_1$
- OIML certificate of conformity number
- Name of trademark of the manufacturer
- Year of manufacture, two last digits of the year of manufacture, or the month and year of manufacture
- Serial number (as near as possible to the indicating device)
- Direction of flow, by means of an arrow (shown on both sides of the body or on one side only provided the direction of flow arrow is easily visible under all circumstances)
- Maximum admissible pressure (MAP16)
- The temperature class (T30)
- The pressure loss class ( $\Delta p$  63)

These markings shall comply with the requirements of OIML R 49 and shall be visible without dismantling the water meter after the instrument has been placed on the market or put into use.

### Security measures

To prevent tampering with the water meter, the meters have to be sealed by connecting the brass or composite parts of the body using a wire with a lead seal such that the parts of the body cannot be turned without damaging the seal or the sealing wire.

Figure 1:

