

Member State of OIML  
Germany



OIML Certificate No.  
**R49/2013-DE1-16.02**

## OIML CERTIFICATE OF CONFORMITY

### Issuing Authority

Name: Physikalisch-Technische Bundesanstalt  
Address: Bundesallee 100, 38116 Braunschweig  
Person responsible: Dr. M. Rinker

### Applicant

Name: ZENNER International GmbH & Co. KG  
Address: Römerstadt 6  
66121 Saarbrücken  
GERMANY

### Manufacturers:

ZENNER International GmbH & Co. KG Talstraße 2 09619 Mulda GERMANY	ZENNER FUZHOU Water Meters Co. Ltd. Building 14 Juyuanzhou Jinshan Industrial Zone 350008 Fuzhou PR CHINA
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ZENNER do Brasil Instrumentos de Medicao Ltda. Rua Bartololeu de Gusmão 2.444 Canudos – Novo Hamburgo RS CEP: 93546-000 BRAZIL	Zenner Han Sein Thant Co. LTD No. 88,89,90, Ma Haw Gani Street, Quarter (1), Shwe Pyi Thar Township, Yangon Region, Republic of the Union of Myanmar
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ZENNER Coma JVC. Construction Machinery Company 125D Minh Khai, Q Hai Ba Trung Hanoi VIETNAM	ZENNER Meters Ltd. 15 Dongxing Road Songjiang Industrial Zone 201613 Shanghai PR CHINA
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ZENNER Aquamet India Pvt Ltd.  
39-B, HSIDC Industrial Estate, Sec. 31  
Faridabad – 121003  
INDIA

### Identification of the certified type

Water meter intended for the metering of cold potable water and hot water  
Woltman meter with mechanical indicating device.  
Type: WPHD

Further characteristics see page 3

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This Certificate attests the conformity of the above identified type (represented by the sample or samples identified in the associated Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R49-1 (2013) Metrological and technical requirements  
R49-2 (2013) Test methods  
R49-3 (2013) Test report format

This Certificate relates only to the metrological and technical characteristics of the type of instrument covered by the relevant OIML Recommendation 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 Reports

WPHD DN200-Y20155078	dated	2016-01-20	that includes	107 pages
WPHD DN250-Y20155076	dated	2016-01-20	that includes	87 pages
WPHD DN300-Y20155071	dated	2016-01-20	that includes	71 pages

**The Issuing Authority**

Dr. M. Rinker  
Member of Certification Body

22.01.2016

**The OIML Member**

Dr. R. Schwartz  
Vice President

22.01.2016

*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 Test Report(s) is not permitted, although either may be reproduced in full.

Identification of the certified type – page 1 continued

## Type details: WPHD

Q <sub>3</sub>	m <sup>3</sup> /h	400	630	1000
Q <sub>4</sub>	m <sup>3</sup> /h	500	787,5	1250
Q <sub>2</sub> /Q <sub>1</sub>		1,6		
Body length	mm	≥ 350	≥450	≥ 500
Nominal diameter	DN	200	250	300
Q <sub>1</sub> Orientation H	m <sup>3</sup> /h	10,0 / 8,0 / 6,349 / 5,0 / 4,0 / 3,2 / 2,5	15,75 / 12,6 / 10,0 / 7,875 / 6,3 / 5,04 / 3,938	25,0 / 20,0 / 15,873 / 12,5 / 10,0 / 8,0 / 6,25
Q <sub>2</sub> Orientation H	m <sup>3</sup> /h	16,0 / 12,8 / 10,159 / 8,0 / 6,4 / 5,12 / 4,0	25,2 / 20,16 / 16,0 12,6 / 10,08 / 8,064 / 6,3	40,0 / 32,0 / 25,397 / 20,0 / 16,0 / 12,8 / 10,0
Q <sub>3</sub> /Q <sub>1</sub> Orientation H		40 / 50 / 63 / 80 / 100 / 125 / 160	40 / 50 / 63 / 80 / 100 / 125 / 160	40 / 50 / 63 / 80 / 100 / 125 / 160
Q <sub>1</sub> Orientation V	m <sup>3</sup> /h	10,0 / 8,0 / 6,349 / 5,0 / 4,0 / 3,2	15,75 / 12,6 / 10,0 / 7,875 / 6,3 / 5,04	25,0 / 20,0 / 5,873 / 12,5 / 10,0 / 8,0
Q <sub>2</sub> Orientation V	m <sup>3</sup> /h	16,0 / 12,8 / 10,159 / 8,0 / 6,4 / 5,12	25,2 / 20,16 / 16,0 / 12,6 / 10,08 / 8,064	40,0 / 32,0 / 25,397 / 20,0 / 16,0 / 12,8
Q <sub>3</sub> /Q <sub>1</sub> Orientation V		40 / 50 / 63 / 80 / 100 / 125	40 / 50 / 63 / 80 / 100 / 125	40 / 50 / 63 / 80 / 100 / 125
Pressure loss class	bar	Δ10	Δ10	Δ10
Pressure class	bar	MAP 16		

Temperature class	T30 / T50
Accuracy class	± 2 % (Q <sub>2</sub> ≤ Q ≤ Q <sub>4</sub> ) für Water temperature ≤ 30°C
	± 3 % (Q <sub>2</sub> ≤ Q ≤ Q <sub>4</sub> ) für Water temperature > 30°C
	± 5 % (Q <sub>1</sub> ≤ Q ≤ Q <sub>2</sub> )
Pressure range	0.3 bar bis 16 bar
Environmental class	B, C
Minimum straight length of inlet / outlet pipe	0mm / 0mm
Climatic environment	5°C bis 55°C
Electromagnetic environment	Not applicable

Typ WPHD

