



Member State of OIML
Germany



OIML Certificate No.
R49/2006-DE1-12.06
Revision 1

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

Manufacturers

ZENNER International GmbH & Co KG.
Talstraße 2
09619 Mulda
GERMANY

ZENNER Aquamet India Pvt Ltd.
39-B, HSIDC Industrial Estate, Sec. 31
Faridabad - 121003
INDIA

ZENNER Coma JVC Construction Machinery Company
125 D Minh Khai Street
Hanoi
VIETNAM

ZENNER do Brasil Instrumentos de Medição Ltda.
Rua Bartolomeu de Gusmão, 2.444
Canudos – Novo Hamburgo RS
CEP: 93546-000
BRAZIL

ZENNER Meters LTD
15 Dongxing Road
Songjiang Industrial Zone
Shanghai, 201613
P. R. China

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

Identification of the certified type

Water meter intended for the metering of cold potable water and hot water
Multi jet meter with mechanical indicating device
Type: MTK-S1

Further characteristics see page 4 and 5



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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):

- R 49-1 (Edition 2006) Metrological and technical requirements
- R 49-2 (Edition 2006) Test methods
- R 49-3 (Edition 2006) 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 OIML Basic Type Evaluation Reports

MTK-S1 Q3-1,6 165,	dated	2012-10-17,	that includes	64 pages
MTK-S1 Q3-2,5 165,	dated	2012-10-17,	that includes	148 pages
MTK-S1 Q3-1,6 165 CC,	dated	2012-10-17,	that includes	53 pages
MTK-S1 Q3-2,5 165 CC,	dated	2012-10-17,	that includes	53 pages
MTK-S1 Q3-1,6 165 MOD,	dated	2012-10-17,	that includes	53 pages
MTK-S1 Q3-2,5 165 MOD,	dated	2012-10-17,	that includes	53 pages

Certificate history

Issue no.	Date	Description of modification
Initial	2012-10-17	----
1	2015-05-12	Additional manufacturers specified



Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin
Nationales Metrologieinstitut

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The Issuing Authority

Dr. M. Rinker
Head of Working Group

12.05.2015

The OIML Member

Dr. R. Schwartz
Vice-President

12.05.2015

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.

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Identification of the certified type - page 1 continued

Type details MTK-S1

Q ₃	m ³ /h	1,6	2,5
Q ₄	m ³ /h	2,0	3,125
Q ₂ /Q ₁		1.6	
Body length (mm)	mm	≥ 165	
Nominal diameter (DN)	DN	15	
Connection type		≥G 3/4 B	
Indicating device		7R MD or 8R MD	
Q ₁ Orientation H	ℓ /h	64 / 50,8 / 40 / 32 / 25,4 / 20 / 16	100 / 79,4 / 62,5 / 50 / 39,7 / 31,2 / 25 / 20 / 15,6
Q ₂ Orientation H	ℓ /h	102,4 / 81,3 / 64 / 51,2 / 40,6 / 32 / 25,6	160 / 127 / 100 / 80 / 63,5 / 50 / 40 / 32 / 25
Q ₃ /Q ₁ Orientation H		25 / 31,5 / 40 50 / 63 / 80 100	25 / 31,5 / 40 50 / 63 / 80 100 / 125 / 160
Q ₁ Orientation V	ℓ /h	80 / 64	100 / 79,4 / 62,5
Q ₂ Orientation V	ℓ /h	128 / 102,4	160 / 127 / 100
Q ₃ /Q ₁ Orientation V		20 / 25	25 / 31,5 / 40
Minimum scale interval	ℓ	0,02	
Pressure loss class		0,40 bar (0,040 MPa)	0,63 bar (0,063 MPa)
Pressure class		MAP 16	
Pressure range		0,3 bar (0,03 MPa) to 16 bar (1,6 MPa)	
Temperature range		0.1°C < T < 50°C	

	≤ 30°	> 30°C
Accuracy class	± 2 % (Q ₂ ≤ Q ≤ Q ₄)	± 3 % (Q ₂ ≤ Q ≤ Q ₄)
	± 5 % (Q ₁ ≤ Q < Q ₂)	± 5 % (Q ₁ ≤ Q < Q ₂)

Temperature class	T30 / T50
Minimum straight length of inlet / outlet pipe	0 mm / 0 mm
Environmental class	B, C

Indicating device 8R MD



8R MD basic version



8R MD with modulator plate



8R MD with magnetic pointer



8R MD variation CC



8R MD with pulse output



8R MD with module

Indicating device 7R MD



7R MD basic version



7R MD with modulator plate



7R MD with magnetic pointer



7R MD variation CC