

Member State Switzerland

OIML Certificate No R49/2006-CH1-08.02

OIML CERTIFICATE OF CONFORMITY

Issuing authority

Name

Federal Office of Metrology METAS

Certification Body METAS-Cert

Address

METAS, Lindenweg 50, CH-3003 Bern-Wabern

Person responsible

Jürg Ramseyer, Head of METAS-Cert

Applicant

Name

E.WEHRLE GmbH

Address

Obertalstrasse 8, D – 78120 Furtwangen

Manufacturer

The manufacturer of the certified pattern is the Applicant

Identification of the certified pattern

Multi-jet dry-rotor meter intended for the metering of cold

and hot water (T30 / T50 / T70 / T90)

Type

MTK-HWV, MTK-SWV, MTK-FWV, MTK-HWX, MTK-SWX, MTK-FWX, MTK-HWK, MTK-SWK, MTK-FWK, MTW-HWV, MTW-SWX, MTW-FWX, MTW-SWX, MTW-FWX, MTW-SWX, MTW-FWX, MTW-SWX, MTW-FWX, MTW-SWX, MTW-FWX, MTW

MTW-HWK, MTW-SWK, MTW-FWK

For further characteristics see page 3 and ff.

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):

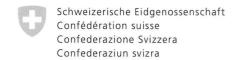
R 49-1, edition 2006

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 identified above.

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

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The conformity was established by the results of tests and examinations provided in the associated Test Reports:

No 135-10842 that includes 5 pages

The Issuing Authority

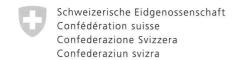
The CIML Member

Dr. Philippe Richard, Vice Director

Jürg Ramseyer, Head of METAS-Cert

CH-3003 Bern-Wabern, 27th June 2008

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.



1 Description of the type

The meter is a multi-jet dry-rotor meter with various threading. The measuring sensor and the register are tightly interconnected to prevent any unauthorized opening and manipulation of the meter.

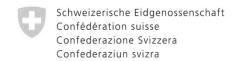
2 Technical specifications

Rated Operation Conditions DN 15/20 (O-ring)

Q_3	(m ³ /h)	2.5		4.0		
Q_4	(m^3/h)	3.125		5.0		
Q ₂ /Q ₁	(,)	1.6		1.6		
Overall length	(mm)	≥ 105		≥ 105		
Nominal Diameter	DN	15		20		
Threaded connector According to EN 14154-1, chap. 4.2		≥ G ½ B		≥ G ¾ B		
Measuring range (Q ₃ /Q ₁),		160 / 125 / 100 / 80 /		160 / 125 / 100 / 80 /		
mounting horizontal		63 / 50 / 40 / 31.5 / 25		63 / 50 / 40 / 31.5 / 25		
			/ 20 / 16 / 12.5 / 10		16 / 12.5 / 10	
Measuring range (Q_3/Q_1) ,		50 / 40 / 31.5 / 25 / 20		50 / 40 / 31.5 / 25 / 20		
mounting vertical		/ 16 / 12.5 / 10		/ 16 / 12.5 / 10		
Pressure loss class ΔP		40 63				
Water pressure MAP	MPa	1.0 for PPO register chamber				
		1.6 for brass body				
		Cold water Hot water			Hot water	
Temperature class		T30	T50		T70, T90	
Accuracy class		± 2 %	± 3 %		± 3 %	
		$(Q_2 \le Q \le Q_4)$	$(Q_2 \le Q \le Q_4)$ ± 5 % $(Q_1 \le Q \le Q_2)$		$(Q_2 \le Q \le Q_4)$	
		± 5 %			± 5 %	
		$(Q_1 \le Q \le Q_2)$			$(Q_1 \le Q \le Q_2)$	
Environmental		Class B				
classification According to EN 14154-1, table C.1		Temperature range (5 – 55) °C				
Electromagnetic		n/a				
environment		_				
Durability		12 years (standard installation conditions)				
Flow disturbance class		U0/D0				

Rated Operation Conditions DN 15/20 (flat gasket)

Q_3	(m ³ /h)	2.5	4.0
Q_4	(m ³ /h)	3.125	5.0
Q_2/Q_1		1.6	1.6
Overall length	(mm)	≥ 105	≥ 105
Nominal Diameter	DN	15	20
Threaded connector		≥ G ½ B	≥ G ¾ B
According to EN 14154-1, chap. 4.2			

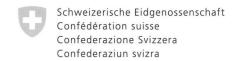


Measuring range (Q ₃ /Q ₁), mounting horizontal		80 / 63 / 50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10	80 / 63 / 50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10	
Measuring range (Q ₃ /Q ₁), mounting vertical		50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10	50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10	
Pressure loss class ΔP		40	63	
Water pressure MAP	MPa	1.0 for PPO register chamber 1.6 for brass body		
Temperature class		T30	T50	
Accuracy class		$\pm 2 \% (Q_2 \le Q \le Q_4)$	$\pm 3 \% (Q_2 \le Q \le Q_4)$	
		$\pm 5 \% (Q_1 \le Q \le Q_2)$	$\pm 5 \% (Q_1 \le Q \le Q_2)$	
Environmental		Class B		
classification		Temperature range (5 – 55) °C		
According to EN 14154-1, table C.1				
Electromagnetic		n/a		
environment				
Durability		12 years (standard installation conditions)		
Flow disturbance class		U0/D0		

Rated Operation Conditions DN 25/32

Q_3	(m ³ /h)	6.3		10.0		
Q_4	(m ³ /h)	7.88		12.5		
Q_2/Q_1		1.6		1.6		
Overall length	(mm)	≥ 150		≥ 150	≥ 150	
Nominal Diameter	DN	25 32		32		
Threaded connector According to EN 14154-1, chap. 4.2		≥ G 1 ¼ B ≥ G 1 ¼ I		1⁄4 B		
Measuring range (Q ₃ /Q ₁),		160 / 125 / 100 / 80 / 160 / 125 / 100		25 / 100 / 80 /		
mounting horizontal		63 / 50 / 40 / 3	1.5 / 25	63 / 50	63 / 50 / 40 / 31.5 / 25	
		/ 20 / 16 / 12.5	/ 10	/ 20 / 1	6 / 12.5 / 10	
Measuring range (Q ₃ /Q ₁),		50 / 40 / 31.5 /	50 / 40 / 31.5 / 25 / 20 50 /		10 / 31.5 / 25 / 20	
mounting vertical		/ 16 / 12.5 / 10 / 16		/ 16 / 1	12.5 / 10	
Pressure loss class ΔP		40 63		63		
Water pressure MAP	MPa	1.6				
		Cold water Hot water		Hot water		
Temperature class		T30	T50		T70, T90	
Accuracy class		± 2 %	± 3 %		± 3 %	
		$(Q_2 \le Q \le Q_4)$	$(Q_2 \le Q \le Q_4) \qquad (Q_2$		$(Q_2 \le Q \le Q_4)$	
		± 5 %	± 5 %		± 5 %	
		$(Q_1 \le Q \le Q_2)$	$ Q_1 \le Q $	$\leq Q_2$	$(Q_1 \le Q \le Q_2)$	
Environmental		Class B				
classification		Temperature range (5 – 55) °C				
According to EN 14154-1, table C.1		n/o				
Electromagnetic		n/a				

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environment	
Durability	12 years (standard installation conditions)
Flow disturbance class	U0/D0

Rated Operation Conditions DN 40/50

Q_3	(m ³ /h)	16.0 25.0				
Q_4	(m^3/h)	20.0		31.25		
Q_2/Q_1		1.6		1.6		
Overall length	(mm)	≥ 150		≥ 150		
Nominal diameter	DN	40		50		
Threaded connector According to EN 14154-1, chap. 4.2		≥ G 2 B		≥ G 2 ½ B or flange		
Measuring range (Q ₃ /Q ₁), mounting horizontal		160 / 125 / 100 / 80 / 63 / 50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10		250 / 200 /160 / 125 / 100 / 80 / 63 / 50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10		
Measuring range (Q ₃ /Q ₁), mounting vertical		50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10		50 / 40 / 31.5 / 25 / 20 / 16 / 12.5 / 10		
Pressure loss class ΔP		63		63		
Water pressure MAP	MPa	1.6				
		Cold water			Hot water	
Temperature class		T30	T50		T70, T90	
Accuracy class		± 2 %	$(Q_2 \le Q \le Q_4)$ $(Q_2 \pm 5 \%$ $\pm 5 \%$		± 3 %	
		$(Q_2 \le Q \le Q_4)$			$(Q_2 \le Q \le Q_4)$	
		± 5 %			± 5 %	
		$(Q_1 \le Q \le Q_2)$	$(Q_1 \le Q \le Q_2) \qquad (Q_1 \le Q \le Q_2)$		$(Q_1 \le Q \le Q_2)$	
Environmental		Class B				
classification According to EN 14154-1, table C.1		Temperature range (5 – 55) °C				
Electromagnetic environment		n/a				
Durability		12 years (standard installation conditions)				
Flow disturbance class		U0/D0				