

In service control of Cold (tap) and Hot Water Meters - Periodic verification

lug-26

Country	Author (original)	Reviewer (green means reviewed)	Regulation reference	Type of control	Metrological requirement	Q _{low}	Q _{high}	Acceptance criteria	Validity of 1 st period	Validity extension	Comment
FRANCE	D. Doucet	Lydia Onimus	Arrêté du 06 mars 2006	Statistical or unitary	Test at 2 flowrates: - between 0,8 x Q _{high} and Q _{high} - between Q _{low} and 2 x Q _{low}	For Q3 < 16 m3/h Q _{low} = 0,06 x Q3 (or Q2) For Q3 ≥ 16 m3/h Q _{low} = 0,2 x Q3	Q _{high} = Q3	+/- 4%	R ≤ 50 : 9 years 50 < R ≤ 125 : 12 years R > 125 : 15 years	7 years (all meters)	No special legislation for billing
GERMANY	J. Westphal		GM-VA SPV 5.22 (20.03.2018)	Statistical	Tests on 3 flowrates Q ₁ Q ₂ Q ₃	Q ₁	Q ₃	VFG x 1/γ	6 years (coldwater) ; 6 years (warm water)	2, 3, 6 (5) years	No special legislation for billing
UK	I. Holmes-Higgin		The Measuring Instruments Regulations 2016, Regulation 61 SCHEDULE 6 IN SERVICE REQUIREMENTS FOR CERTAIN REGULATED MEASURING INSTRUMENTS IN GREAT BRITAIN	No systematic requirement. Control of an individual instrument.	Must remain within in-service performance limits to continue to be used for trade purposes.	Any flowrate Q1 to < Q2	Any flowrate Q2 to and including Q4	±6% for Q1 to <Q2 ±2.5% for Q2 to and including Q4	Unlimited period	n/a	
ITALY	N. Di Maria		DM 93/2017, under revision Circolare periodicità contatori Aqua 2018	Unitary (100%)	Same as for initial verification	According to meter's characteristics		Double MPE	Mechanical meters Static meters	10 years 13 years	
POLAND	K. Rzepczynski	K. Rzepczynski	DZIENNIK USTAW RZECZYPOSPOLITEJ POLSKIEJ Warszawa, dnia 26 kwietnia 2019 r. Poz. 759	Statistical or unitary	Tests at Q3, Q2 and Q1 Q3 cannot be higher than 500m3/h and up DN 300 For statistic all parameter should be the same for whole population			Q2-> Q3 +/- 2% CW Q2-> Q3 +/- 3% HW Q1->Q2 +/- 5% CW/HW	5 years	Unitary 5 years Statistical 3 years	
DENMARK	K. Kaagaard	Allan Svendsen	BEK no. 582 (28-05-2018) VEJ no. 9464 (20-06-2018) CLM Water 01 (18-12-2019)	Statistical or unitary		For meters with Q3 ≤ 4 m3/h approved in accordance with MID: As the lower measuring point, a flow of 0.05 x Q3 must be measured For with Qn ≤ 3.5 m3/h approved in accordance with MIDIR As the lower measuring point, a flow of 0.1 x Qn must be measured	For with Q3 ≤ 4 m3/h approved in accordance with MID: As the upper measuring point, a flow of 0.4 x Q3 is always selected For with Qn ≤ 3.5 m3/h approved in accordance with MIDIR: As the upper measuring point, a flow of 0.5 x Qn is always selected	+/- 2% for CW +/-3% for HW	9 years	The verification error limit (≤ ±2 %): Up to 9 years of extension. Centre point (≤ ±3 %): Up to 6 years of extension. The usage tolerance (≤ ±4 %): Up to 3 years of extension.	
Portugal	R. Cordeiro	Luis Bras	Portaria n.º 321/2019	Unitary 100%	Q1, Q2, Q3	Meter Characteristics		Double MPE	Q3≤4/12years; Q3=6,3-16/8years; Q3=25-63/6years;Q3=100-160/4years	Same as 1st Period	No special legislation for billing
SWITZERLAND	M. Helfenstein	Markus Hefelstein Luis Bras Juergen Westphal To be done Juergen Westphal	941.231 Regulation of the "EJPD" on measuring instruments for thermal energy (TMmV)	Since the regulation was amended on January 1, 2024, hot water meters are not subject to metrological law.	-						
SPAIN	R. Cordeiro		Orden ICT/155/2020	Statistical or unitary	Q1, Q2, Q3	Meter Characteristics		Double MPE	12 years	5 years	No special legislation for billing
BELGIUM											
NETHERLANDS											
AUSTRIA		I. Holmes-Higgin									
IRELAND (Northern)			The Measuring Instruments Regulations 2016, Regulation 61 SCHEDULE 6 IN SERVICE REQUIREMENTS FOR CERTAIN REGULATED MEASURING INSTRUMENTS IN GREAT BRITAIN	No systematic requirement. Control of an individual instrument.	Must remain within in-service performance limits to continue to be used for trade purposes.	Any flowrate Q1 to < Q2	Any flowrate Q2 to and including Q4	±6% for Q1 to <Q2 ±2.5% for Q2 to and including Q4	Unlimited period	n/a	
SWEDEN	K. Kaagaard		SWEDAC	Statistical or unitary	Q1, Q2, Q3	Q1	Q3	+/- 5% for Q1 to Q2, +/- 2% for Q2 to Q4 CW, +/- 2% for Q2 to Q4 HW +/- 5%	5 - 10 years (case-by-case)	5 - 10 years (case-by-case)	
FINLAND			Measuring Instruments Act (707/2011), TUKES	Statistical or unitary	Q1, Q2, Q3	Q1	Q3		10 years	10 years	
CZECHIA	K. Rzepczynski	K. Rzepczynski	National metrological law (notice 345/2002 Sb) + 127/2024 ammended	Statistical or unitary, in practice 99% unitary	Q1, Q2, Q3			+/- 5% for Q1 to Q2, +/- 3% for Q2 to Q4	5 years or 8 years for static meters (since 2025)	5 years or 8 years for static meters (since 2025)	
SLOVAKIA		K. Rzepczynski	UNM SR c 161/2019	Unitary	Q1, Q2, Q3			+/- 5% for Q1 to Q2, +/- 3% for Q2 to Q4	5 years	5 years	
SLOVENIA		K. Rzepczynski									
HUNGARY		K. Rzepczynski									
ROMANIA	A. Bunduri	K. Rzepczynski	Internal procedure approved by the national authority with no. 6549 of 06 Nov 2020	Periodic metrological verification (unitary 100%) and metrological verification after repair; Statitstical (2-5% sampling)	Tests on 3 flowrates Q ₁ Q ₂ Q ₃	Q ₁	Q ₃	Q2-> Q3 +/- 2% CW Q2-> Q3 +/- 3% HW Q1->Q2 +/- 5% CW/HW	4 years	4 years	
BULGARIA		To be done									
CROATIA		N. Di Maria	Metrology law NN 74/14, 111/18, 114/22, Ordinance of testing procedure for water meters intended for use in households, commerce and light industry NN 24/2018 and Ordinance of tehcnical and metrological requirements relating to measuring instruments NN 21/16 prescribed by the State Institute of Metrology	Statistical	3-flow testing; Q1, Q2 and Q3/Q4	Q1 to Q2	Q2 to Q4	Q1 to Q2 (excepted) =5%, Q2(included) to Q4(excepted)=3%	Current year + 5 years	Current year + 5 years	
GREECE		N. Di Maria	No regulation								
LITHUANIA		K. Rzepczynski	Not obligatory / no regulation								
LATVIA		K. Rzepczynski	Notice 289/2024 + 2025 amendment (Not obligatory for since 2025)	unitary	Q1, Q2, Q3			Q2-> Q3 +/- 2% CW Q2-> Q3 +/- 3% HW Q1->Q2 +/- 5% CW/HW	4 years for mechanical 6 for static type	4 years for mechanical 6 for static type	not obligatory since 2025, probably for billing only (to be re-checked)
ESTONIA		K. Rzepczynski	Probably will be also changed to not obligatory	Unitary or statistical (1-3% sampling)	Q1, Q2, Q3			Q2-> Q3 +/- 2% CW Q2-> Q3 +/- 3% HW Q1->Q2 +/- 5% CW/HW	5 years	5 years	
CYPRUS		To be done									
LUXEMBURG		To be done									
MALTA		To be done									
IRELAND		Kevin Murray	Ireland is a special case because there is no domestic water charges. - no periodic verification rules								