



Mechanical water meter for households

Q water domestic

Mechanical domestic water meter for determining water consumption in water supply systems.

Qwater domestic mechanical water meters are designed as multi-jet dry dial meter, which are of high quality and function reliably and for a long service life even in the case of deposits caused by rust, lime or other fine suspended particles.

They are available with a nominal flow rate of Q_3 2,5 m³/h to Q_3 25 m³/h.



Use

The mechanical water meter is used to measure water quantities. The main areas of application are water supply systems in which the total water consumption of a real estate object is measured.

This is meaningful in:

- Apartment buildings
- Offices and administration buildings

Typical users are:

- Private building owners
- Housing associations
- Building service companies
- Property management companies

Functions

- Measurement of water consumption
- Cumulation of the consumption values
- Display of consumption values

Technical design

Measuring principle

The counters work according to the multi-jet measuring principle. The water flow hits an impeller wheel tangentially; the speed of this wheel is scanned inductively via coils.

Mechanical design

Basic design and totalizer

The water meter is comprised of a flow measuring section, which houses the impeller and the totalizer. It is designed as a compact unit; the flow measuring section and the totalizer form one unit.

The body of the flow measuring section is made of brass. It houses the measuring chamber with the single-jet impeller. The inlet has a sieve to retain larger dirt particles.

The flow measuring section carries the totalizer, which is a dry running meter. It is protected by a transparent plastic cover. The water meter indicates the actual consumption with an 8-digit totalizer. It has an indicator for the current water consumption and a rotating wheel for the indication of flow.

Direct connection

The water meter for direct connection has a flow measuring section with two externally threaded connections. Fittings are used to mount it directly into the piping.

- Prepared for integration into various remote reading systems.
- Temperature range up to 50 °C (cold) and up to 90 °C (warm)
- Nominal flow Q_3 2,5 up to Q_3 25
- Nominal size DN15 up to DN50

- Length 105 mm up to 300 mm
-) Approval MID measurement class (Q_3 / Q_1) to R160 horizontal
- ≥ 360° rotable 8-digit totalizer
- Brass body (DN50: grey cast iron)
- Maximum pressure load 1,6 MPa

The water meter is equipped with a QUNDIS-specific Data Matrix code. It is located on the meter label plate, on the packaging and on the outer packaging and contains the serial number, the full article number, the year of conformity assessment and the number of products.

Technical data

ADVANCED MEASURING SOLUTIONS.

Meter type		WMDH ×××× A	WMDH ×××× B	WMDH ××× C	WMDH ×××× D	WMDH ×××× F	WMDH ××× G	WMDH ××××	WMDH ××× K	WMDH ×××× L	WMDH ×××× W	WMDH ××× N	WMDH ××××
Installation position					horizontal (H)						ascending (V)		
Meter size / permanent flowrate Q ₃	m ³ /h	2,5	4	6,3	10	16a)	25 a)	25	2,5	4	6,3	10	16a)
corresponds to previous nominal size $\ensuremath{Q_{n}}$	m ³ /h	1,5	2,5	3,5	0,9	10	15	15	1,5	2,5	3,5	9	10
Nominal size DN	mm	15	20	25	25	40	90	50	20	20	25	25	40
Connection thread	Zoll	G%B	G1B	G11/4B	G11/4B	G2B	G21/2B	F50	G1B	G1B	G11/4B	G11/4B	G2B
Length L	mm	165	190	260	260	300	(q00E	270	105	105	150	150	150
Height H (ca.)	mm	104	108	120	120	143	155	184	150	150	170	170	215
Weight	δ	1,4	1,6	2,4	2,4	4,8	6,9	12,5	9,1	9,1	2,9	2,9	5,4

Performance data

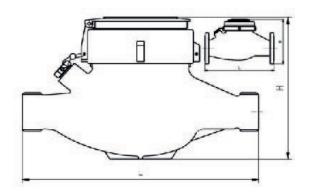
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Measuring ran (MID) Q_3/Q_1 (H/V)	R8C	E E	R80H R80H/R40V R80H	R80H	R80H	R80H	R80H	R80H	R80H	R80H	R80H	R80H	R80H
Starting flow	8 W		80	14	17	19	20	20	80	8	14	17	19
Temperature class MAT	ပ္		Cold w	ater T50	Cold water T50 Hot water T50/T90	061/0		T30		Cold water T	Cold water T50 Hot water T50/T90	ter T50/T90	
Perm. operating pressure MAP	bar						Ţ	16					
Flow rate Q'at 1 bar pressure loss (ca.)	l/h 4500	00	2600	11000	12500	24000	31250	31250	2500	2500	12500	12500	26000
Mechanical class							M1	1					
Protection class							П	IP 64					
Inflow/outflow zone U0 / D0							/0N	00/00					
Ambient conditions						Environment	al class B; Te	Environmental class B; Temperature range 5 - 55°C	ge 5 - 55°C				
Drinking water approvals						Germa	ıny: KTW, W2	Germany: KTW, W270 France: ACS	: ACS				

16.3.2020 - V.2.0

a) warm water meters only available as quality approved versions b) for $Q_3\,25\,m^3/h$ WMDH xx1x G (warm water) only possible with a length of 270 mm

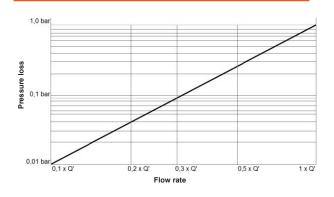


Dimensional drawing

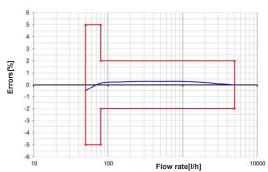


Dimensioning: see table Technical data

Typical error curve



Typical pressure loss graph



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