

AMR WATER METERS

with integrated RF transmitters

EM-M - Multi-Jet Type Water Meters RF
Dn 15 ... 50 mm, Class C, IP68

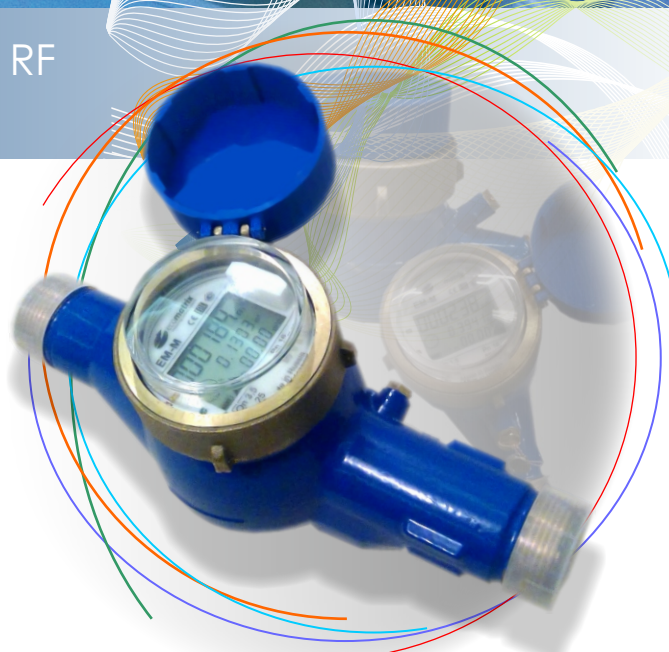
EM-M water meters are designed for measuring, archiving, and remotely transmitting the volume of drinking water via an RF radio channel. They are suitable for both cold water systems (with temperatures from 0.1°C to 50°C and pressure up to 16 bar) and hot water systems (from 0.1°C to 90°C and pressure up to 16 bar).

Nominal diameters (DN): 15, 20, 25, 32, 40, 50 mm.

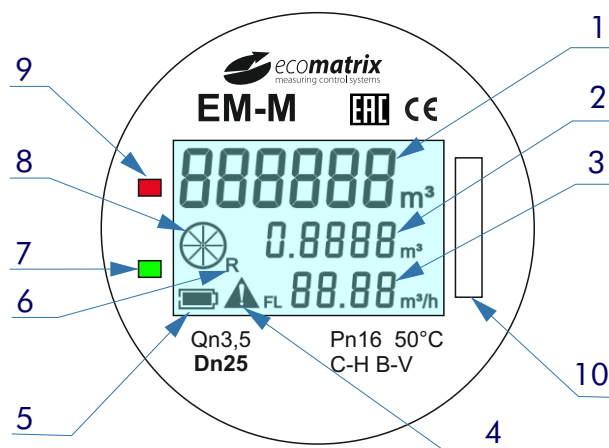
EM-M meters feature anti-magnetic protection, an IP68 protection class, and comply with metrological class C.

The EM-M meter's data logger is an electronic unit equipped with a built-in radio module, a multifunction display, and a long-life battery (lasting at least 10 years).

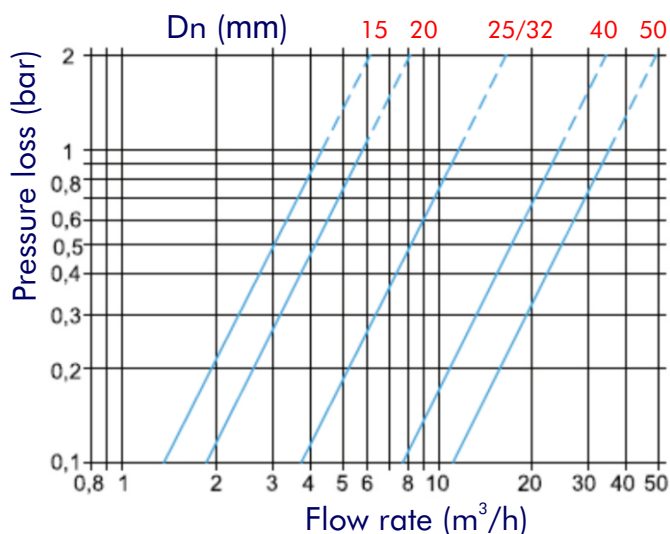
The built-in archive stores current, hourly, and daily parameter values for a period of 12 months.



EM-M meters electronic register:



Typical pressure loss curve:



- 1, 2 - Volume (m³)
- 3 - Flow rate (m³/h)
- 4 - Alarm (tamper, back flow etc.)
- 5 - Battery level
- 6 - Back flow
- 7 - RF active - RX
- 8 - Flow direction
- 9 - RF active - TX
- 10 - Antenna location

EM-M - Multi-Jet Type Water Meters RF

The operating modes of EM-M meters are configured wirelessly using the RF Terminal (EM3011) and a dedicated software application. At a preset interval (ranging from 5 seconds to 18 hours, typically 30 seconds), the meter transmits parameter data via radio — including the current meter reading, instantaneous flow rate at the time of transmission, water consumption over the past hour and the previous day, internal temperature, alerts, and more.

The data is automatically transmitted to the mobile reading system WalkBy or to the receiving modules of a fixed data collection system.

EM-M RF transmitted parameters:

- **Current Value** (999999.999 m³) – accumulated, at the time of transmission
- **Flow** (999999.999 m³/h) – hourly value, for the last hour
- **Flow** (999999.999 m³/h) – daily value, for the last 24 hours
- **Instantaneous Flow** (99.99 m³/h) – instantaneous, at the time of transmission
- **Internal Temperature** (-99 ... +999 °C) – temperature inside the meter register
- **Alarms** – magnetic tampering / reverse water flow / leak detection, etc.

Technical data:

		Dn15		Dn20		Dn25		Dn32		Dn40		Dn50	
Class		B	C	B	C	B	C	B	C	B	C	B	C
Q _{max}	m ³ /h	3.0		5		7.0		12.0		20.0		30	
Q _n	m ³ /h	1.5		2.5		3.5		6.0		10.0		15.0	
Q _t	m ³ /h	0,12	0,0225	0,2	0,375	0,25	0,0525	0,48	0,09	0,8	0,15	1,2	0,225
Q _{min}	m ³ /h	0,03	0,015	0,05	0,025	0,07	0,035	0,12	0,06	0,2	0,1	0,3	0,15
Sensitivity, min	m ³ /h	0,015	0,0075	0,025	0,0125	0,035	0,0175	0,06	0,03	0,1	0,05	0,15	0,075
Permissible relative error limits	%	± 5 - from Q _{min} to Q _t ; ± 2 - from Q _t to Q _{max}											
Display range	m ³	min - 0,0001, max - 999999.9999											
Temperature range	°C	0,1-50											
Operating pressure, max	bar	16											
Position on the pipeline		Horizontal installation - class C, vertical installation - class B											
AMR		RF - FSK 866/868/900 MHz, <25mW											
Mid time between failures, min	hour	150000											
Class protection performance		IP68											
Mid operation time	years	12											
Weight approx.	kg	1,6				2,3				4,4		4,6	

Main Dimensions:

	Dn15	Dn20	Dn25	Dn32	Dn40	Dn50
Thread meter GxB, D1	3/4	1	1 1/4	1 1/2	2	2 1/2
Thread meter GxB, D2	1/2	3/4	1	1 1/4	1 1/2	2
Overall length, L1 (mm)	245	288	378		438	
Overall length, L2 (mm)	165	190	260		300	
Height, H1 (mm)	120		130		145	
Height, H2 (mm)	35		40		50	
Height, H3 (mm)	25		25		25	
Width, B (mm)	100				110	

