Bulk Meters

WMAP MID WATER METER

MID
MI001
CERTIFIED

Axial helix Woltmann meter with interchangeable mechanism

WMAP MID is the latest range of Woltmann meters by **RBM.**
WMAP MID meters feature a dry dial, an axial helix and a removable mechanism. This new range of water meters has been developed in order to meet the strict requirements of the Directive 2004/22/EC on measuring instruments and European Standard EN 14154. WMAP MID meters are manufactured with materials formulated for long-term metrological performance. The rugged design ensures reliable operation. WMAP MID meters are designed for remote communication: they can be retrofitted with a pulse emitter or a radio module maintaining the mechanical and metrological features and without affecting readability.

R.B.M. spa

SISTEMI PER LA CONTABILIZZAZIONE DEI CONSUMI IDROTERMICI
Via San Giuseppe, 1 Nave Brescia (Italy)
Tel 030.253.7211 – Fax 030.253.1799
E-Mail: info@rbm.eu - www.rbm.eu

RBM

WMAP MID WATER METER

WMAP MID is an axial helix (the axis of the helix is coaxial to the axis of the pipe) **Woltmann meter with removable mechanism.** The magnetically driven register operates in a dry compartment and only the helix is submerged in water. Readability is ensured by the **tempered mineral glass lens**: its flat and smooth surface, unlike plastic lenses, is scratch-resistant and does not turn opaque.
WMAP MID meters are pre-equipped for two pulse outputs as a standard. The pulse emitter can be retrofitted maintaining both the meter functionality and design.
WMAP MID meters can be installed both in horizontal and vertical position. Performance is unaffected by the installation conditions and the water characteristics.
WMAP MID water meters comply with Directive 2004/22/EC (Annex MI-001) and have undergone conformity assessment procedure B+D. The maximum measuring range Q3/Q1 (R) certified is 100. Lower measuring ranges are also available (R80, R50, etc.).
WMAP MID water meters are certified for use with potable water in accordance with Italian (D.M. 6 April 2004 no. 174) and international regulations.

Specifications

- **Tempered mineral glass lens of adequate thickness**
- **The counter is housed in a dry compartment which has no contact with the water ensuring continued readability**
- Straight reading on 7 numbered drums for cubic meters and 2 fractional dials for submultiples
- **The MID inscriptions are on a metallic label applied on a meter's flange**
- Metallic lockable lid
- Pulsed meters maintain the metrological seal and are protected by a cover
- No upstream (use of flow straighteners) and downstream straight pipe requirements
- Hydraulic tests are carried out at three flow rates (Q1, Q2, Q3) on 100% of the production. Our testing benches comply with the Standards ISO 4064/3 and ISO 4185 (EN 14154/3) and are approved by a European notified body
- Cast iron flanged body; internal and external epoxy powder coating
- Steel pivot, synthetic sapphire bearing
- Internal mechanism made of anhygroscopic, anti-scaling and hard-wearing plastic materials
- Maximum water temperature: 50°C
- Nominal pressure (PN): 10 or 16 bar

HYDRAULIC PERFORMANCE

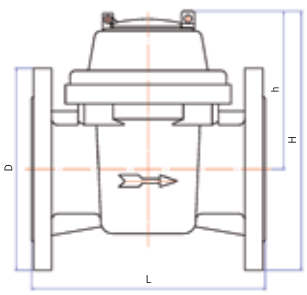
Size	mm	50	65	80	100	125	150	200
	inches	2"	2.½"	3"	4"	5"	6"	8"
Module B no.					TCM 142/10-4717			
Module D no.					0119-SJ-A010-08			
Metrological class MID					**R (Q_3 / Q_1) ≤ 100**			
Performance in accordance with Directive 2004/22/EC								
Q_3	m^3/h	25	40	63	100	160	250	400
Q_4	m^3/h	31,25	50	78,75	125	200	312	500
Q_1	l/h	250	400	630	1000	1600	2500	4000
Q_2	l/h	400	640	1008	1600	2560	4000	6400
R 80								
Q_1	l/h	312,5	500	787,5	1250	2000	3125	5000
Q_2	l/h	500	800	1260	2000	3200	5000	8000

TECHNICAL SPECIFICATIONS

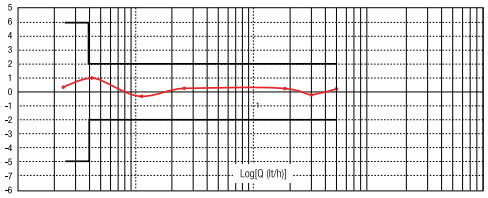
Maximum permissible error between Q_1 and Q_2 (excluded)					+/- 5%			
Maximum permissible error between Q_2 (included) and Q_4					+/- 2% with water temperature ≤ 30° C +/- 3% with water temperature > 30° C			
Temperature class					T50			
Flow profile sensitivity classes					U0S - D0			
Starting flow rate	l/h	125	190	320	450	700	1200	1800
Pressure loss class (ΔP @ Q_3)					ΔP10			
Nominal pressure	bar	10/16	10/16	10/16	10/16	10/16	10/16	10/16
Maximum registration	m^3	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	100,000,000	100,000,000
Minimum registration	l	0.002	0.002	0.002	0.002	0.002	0.02	0.02
Turbine revolutions/litre		1.08	1.02	0.39	0.32	0.40	0.25	0.15
Weight	kg	10.0	11.2	15.2	17.2	22.4	29.0	42.6
Pulse options	l/imp.	10-1000	10-1000	10-1000	10-1000	10-1000	100-10000	100-10000

DIMENSIONS

L	mm	200	200	225	250	250	300	350
H	mm	213	220	275	290	305	320	368
h	mm	136	136	186	186	186	186	206
D	mm	165	185	200	220	250	280	340



Typical error curve



Headloss diagram