Irrigation

WT MID WATER METER

MID
MI001
CERTIFIED

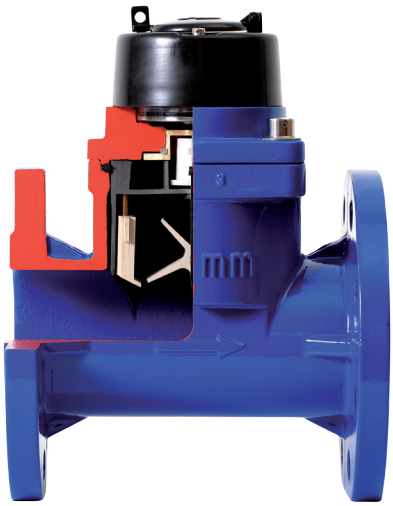
Woltmann tangential water meter with interchangeable mechanism

WT MID is the latest range of Woltmann meters by Maddalena. WT MID meters feature a dry dial 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.
WT meters are especially designed for use with irrigation water. Compliance to the European directive and the materials used ensure good metrological performance.
WT MID meters are designed for remote communication: a pulser or a radio module may be retrofitted retaining the mechanical and metrological features and without affecting readability.
WT MID meters are guaranteed by Maddalena: manufacturer of high quality measuring instruments for the past century.

maddalena®
www.maddalena.it

WT MID WATER METER

WT MID is a Woltmann tangential meter with removable mechanism.
The magnetically driven register is mounted in a dry compartment and only the impeller is submerged in water.
The tempered mineral glass lens ensures readability. Unlike plastic lenses, it is scratch-resistant and does not turn opaque.
WT MID meters come as a standard pre-equipped for one pulse output. As a result, the pulse emitter may be retrofitted retaining both the meter functionality and design.
WT MID meters may be installed both in horizontal and vertical position.
WT MID water meters comply with Directive 2004/22/EC (Annex MI-001) and have undergone conformity assessment procedure B + D. The measuring range Q3/Q1 (R) certified is 40.
WT MID meters are also MID certified as “water supply unit” (see relevant data sheet), a measuring system that comprises an on-off hydraulic valve and a flow limiter.



Structural and functional specifications

- **Tempered mineral glass lens** of adequate thickness
- **The counter is housed in a dry compartment that has no contact with the water for continued readability**
- Straight reading on 7 numbered drums for cubic meters and 2 pointers for submultiples
- **The MID inscriptions are on a metal label applied on a meter’s flange**
- Metal lockable lid
- The pulser may be retrofitted to the meter after installation retaining the metrological seal and the metal protective cover
- Suitable for installation both in horizontal and vertical position
- All meters are individually hydraulically tested at three flow rates (Q1, Q2, Q3). Our testing benches comply with the Standards ISO 4064/3 and ISO 4185 (EN 14154/3) and are certified by a European notified body
- Steel pivot and synthetic sapphire bearing
- Internal mechanism made of anhygroscopic, anti-scaling and hard-wearing plastic materials
- Maximum operating temperature: 30 °C. Operation guaranteed up to 50 °C
- Nominal pressure (PN): 10 or 16 bar

HYDRAULIC PERFORMANCE

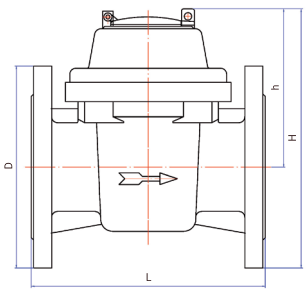
Size	mm	50	65	80	100	125	150	200
	in.	2"	2.½"	3"	4"	5"	6"	8"
Module B no.					TCM 142/13-5129			
Module B no.					0119-SJ-A010-08			
Metrological class (MID)					**R (Q_3 / Q_1) ≤ 40 H-V**			
Performance in accordance with Directive 2004/22/EC								
Q_3	m^3/h	40	63	63	100	160	250	400
Q_4	m^3/h	50	78.8	78.8	125	200	313	500
Q_1	m^3/h	1	1.58	1.58	3.13	4.0	6.25	10.0
Q_2	m^3/h	1.6	2.52	2.52	5.0	6.4	10.0	16.0

TECHNICAL SPECIFICATIONS

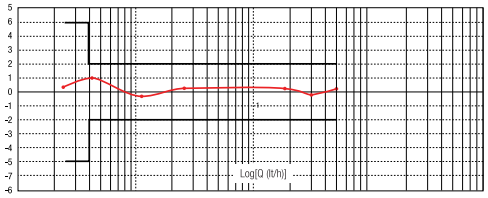
Maximum permissible error between Q_1 and Q_2 (excluded)					+/- 5%			
Maximum permissible error between Q_2 (excluded) and Q_4					+/- 2%			
Temperature class					T30			
Flow profile sensitivity classes					U10 - D5			
Starting flow rate	l/h	125	190	320	450	700	1200	1800
Pressure loss class (ΔP at Q_3)					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	m^3	0.002	0.002	0.002	0.002	0.002	0.02	0.02
Turbine revolutions/litre		0.63	0.38	0.23	0.18	0.13	0.08	0.05
Weight	kg	10.9	12.7	14.0	16.2	21.5	29.1	42.6
Pulse options	l/p	100	100	100	100	100	1000	1000

DIMENSIONS

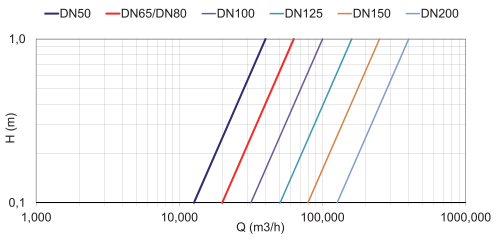
L	mm	200	200	225	250	250	300	350
H	mm	250	264	280	292	312	338	378
h	mm	136	136	186	186	186	186	206
D	mm	165	185	200	220	250	280	340



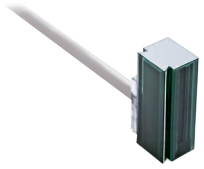
Typical error curve



Head loss



ACCESSORIES



REED SWITCH SINGLE PULSER

Suitable for the transmission of consumption data and industrial batching.

ARROW RADIO MODULE

Combined with a pulser for reading remotely the water meter.

COUNTERFLANGE KIT

It comprises two flanges, two rubber gaskets, nuts and screws.

FLOW STRAIGHTENER

Fitted upstream of the meter. It allows installation with no straight pipe sections.

For more information on the accessories please refer to the relevant data sheet.

maddalena®
www.maddalena.it

MADDALENA spa
Via G.B. Maddalena 2/4
33040 Povoletto (Udine)
Tel. +39 0432 634811
Fax +39 0432 679820
info@maddalena.it

For more information, please contact your sales representative: