

AquiTron | AT-WM-F

Pulsed Water Meter



DATA SHEET



aquilar
leak detection solutions

AT-WM-F

Pulsed Water Meter



The Aquitrone Water Meter is an IP 68 propeller dry water meter Woltmann's type for cold water, used with our Aquitrone AT-WFM flow monitoring system designed to meet the requirements of BREEAM 2018 (BRE Environmental Assessment Method).

APPLICATION

The AT-WM-F Woltmann Cold Water Meters are commercial sized meters for larger applications. Their design allows for bulk flows of water to be monitored in either a horizontal or vertical installation position. The maximum operating temperature is 30°C for the AT-WM-F when used on Cold Water applications. These Meters are all MID approved for Billing requirements and also hold the WRAS approval making them safe to use on Potable Drinking Water installations. All of the AT-WM-F Meters have a PN16 Flanged connection as standard from 50mm right up to 1500mm.

SYSTEM FEATURES

- Resistant to the external magnetic field, according to EN14154-3
- Low starting slow rate
- Wide measuring range
- Ease read-out due to a freely adjustable rotary counter dial placed in the casing
- Possibility of electronic check-up of the metrological parameters of the water meter
- Modular structure
- Removable measuring insert in covered casing
- Magnetic clutch

ADVANTAGES

- Permanent and efficient construction, ensuring the flow of water in low loss of pressure and easiness in assembly in random waterworks installations.
- Lowered weight of water meter.
- Interchangeable and unified metering layer fitting to several sizes of body and assuring optimal water meter management.
- Standard water meter is suitable for remote readings in AMR system. //should we keep this , we do not use it?
- The possibility of mounting the water meter in the intermediate position without the influence on the metrological parameters, larger possibilities in designing and modernizing new used water meters connections.
- Very good anti-corrosive and mechanical qualities of paint coat (powder paint- epoxy).

TECHNICAL INFORMATION

PIPE SIZES COPPER/MDPE (mm)	54/63	67/75	76/90	108/125	159/180
IMPERIAL	2"	2½"	3"	4"	6"
Meter Size (DN)	50	65	80	100	150
Working Temperature	30 °C				
Constant flow rate Q_3 m ³ /h	40	63	100	160	400
Overload flow rate Q_4 m ³ /h	50	78.75	125	200	500
Transitional flow rate Q_2 m ³ /h	0.64	0.806	1	1.28	3.2
Minimal flow rate Q_1 m ³ /h	0.4	0.504	0.625	0.8	2
Starting flow rate m ³ /h	0.15	0.2	0.25	0.25	1.0
R measuring rate Q_3 / Q_1	100	125	160	200	200
Coefficient Q_2 / Q_1	1.6				
Indication range m ³	10 ⁶				10 ⁷
Accuracy of indication m ³	0.0005				0.005
Upper pressure limit P_{max}	MAP16=(16Bar)				
Working Pressure Range in bar	from 0.6 to 16				
Max pressure lost kPa	ΔP16=(0,16bar)				
Working position	Horizontal, Vertical				
Border range error allowed ε %	±5% ($Q_1 \leq Q \leq Q_2$) ±2 ($Q_2 \leq Q \leq Q_4$) for $0,1 \leq T \leq 30^\circ C$ ±3 ($Q_2 \leq Q \leq Q_4$) for $T > 30^\circ C$				
Pulses per litres	1 pulse per 10 litres				
Meter Length (mm)	200	200	200	250	300
Meter Height (mm)(inc. Cyble)	187	197	219	229	367
Installation space. (mm)	287	297	239	349	582
Weight (kg)	9.9	10.6	13.8	15.6	40.1
Flange Type	PN16				

APPROVALS

2004/22/EC directive of the European Parliament and the Council of Europe from the March 31 2004 on measuring instruments

PN-EN-14154:2005- Water meters. Part 1+3

OMIL R49:2004 and 2006- Water meters designed for measuring cold drinking water and hot water

Research certificate WE type- cold water no. SK08-MI001-SMU002, hot water no. SK10-MI001-SMU013

WM-M water meters have applied Hygienic Attests (PZH) allowing the product to contact with drinking water

Mechanical classification of environmental conditions - Class M1 - by RMG dated 18.12.2006

Classification of environmental conditions, climate and mechanical - Class B - PN-EN-14154-3: 2005 + A1

Classification of electromagnetic environmental conditions-Class E1 - by RMG dated 18.12.2006

ORDERING INFORMATION

Catalogue number	5571 WM-M-50 - DN50 Meter (fits 54mm Copper - 63mm MDPE), IP68, Pulse output
	5576 WM-M-65 - DN65 Meter (fits 67mm Copper - 75mm MDPE), IP68, Pulse output
	5571 WM-M-80 - DN80 Meter (fits 76mm Copper - 90mm MDPE), IP68, Pulse output
	5571 WM-M-100 - DN100 Meter (fits 108mm Copper - 125mm MDPE), IP68, Pulse output
	5571 WM-M-150 - DN150 Meter (fits 159mm Copper - 180mm MDPE), IP68, Pulse output

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