

Octave Ultrasonic Water Meter

Scope of Use / Specification Sheet

The Octave Ultrasonic Meters are a revolutionary, precise and ultra-reliable ultrasonic bulk water meter with no moving parts. With superior hydraulics and batteries that last more than 15 years, the Octave is today's best choice for bulk meters.

The Octave Range is NMI approved.



Product List	
Order Code	Description
WM500OCTSS*	DN50 - Threaded - ISO Length Stainless Steel
WM500OCTSS+	DN50 - Flanged - ISO Length Stainless Steel
WM800OCTSS+	DN80 - Flanged - ISO Length Stainless Steel
WM1000OCTSS+	DN100 - Flanged - ISO Length Stainless Steel
WM1500OCTSS+	DN150 - Flanged - ISO Length Stainless Steel
WM2000OCTSSHF+	DN200 - Flanged - ISO Length Stainless Steel

* Threaded versions are provided with couplings. WaterMark Approved

+ Approved utility use only. No WaterMark

All meters are NMI approved. Maximum temperature 50 °C. POR = Price On Request.

Digital Dual pulse output included with meter.

Features and Benefits

- Dual beam ultrasonic technology for precise and ultra reliable metering
- No moving parts
- Excellent long-term stability and reliability
- Battery powered – up to 15 years life expectancy
- Rugged mechanical design – submersible (IP68)
- Extremely sensitive and accurate in low flows
- Bi-directional outputs (digital and analog)
- Flexible data formats including flow directions, flow rates and volumes
- AMR and cellular networks ready with alerts and statistics features
- Multiline LCD
- Programmable Display (units and outputs resolution)
- EMI / RFI Protection
- NMI approved to zero upstream and zero downstream straight length of pipe

Materials

Body	Polymer / Stainless Steel
External Nuts and Bolts	Stainless Steel

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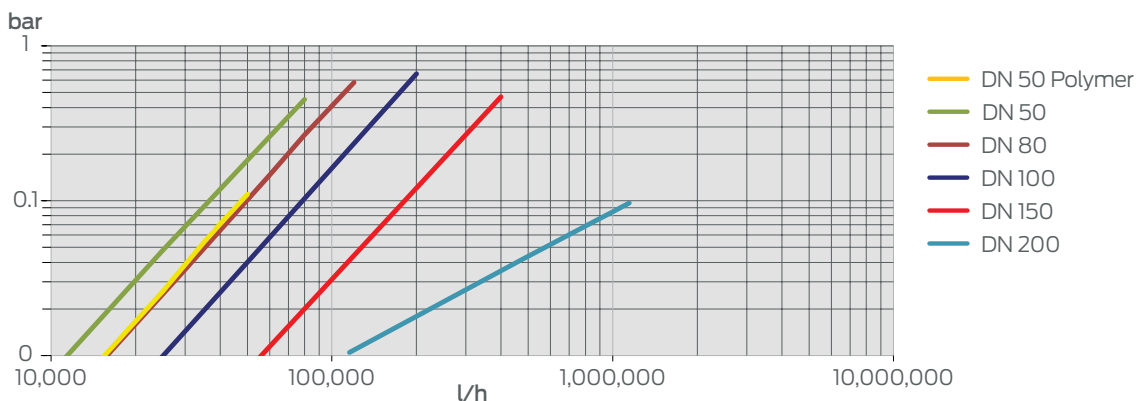
Performance Specifications

Maximum Working Pressure	16 bar
Liquid Temperature	0.1°C up to 50°C
Precision Class	NMI R49, Accuracy class 2
Configuration	Compact – the display is built into the unit
Power Source	2 × D size Li-battery: 15 year life time
Environmental Protection	IP 68, Ambient operation temp. -25°C up to +55°C
Volume Display Options	1. Net (Forward less reverse) 3. Reverse only 2. Forward only 4. Forward and reverse alternating
Outputs	Digital Dual Pulse Output (included), 4-20mA, SSR, M-Bus, MODBUS Fully configurable to suit site requirements
Connections	Flanges according to BS 10 Table D
Severity Levels	Mechanical class M1 and Electromagnetic Environment class E1
Pressure Loss Class	ΔP 0.16 bar

Flow Rate

m ³ /h	Meter Size				
	DN 50	DN 80	DN 100	DN 150	DN 200
Q1 Minimum flow rate	0.080	0.125	0.200	0.500	4
Q2 Transitional flow rate	0.125	0.200	0.320	0.800	6.4
Q3 Permanent flow rate	40	63	100	250	1000
Q4 Overload flow rate	50	80	125	313	1250
Q3/Q1 (R)	500	500	500	500	250
Starting Flow	0.025	0.025	0.025	0.2	1.0

Head Loss Curve



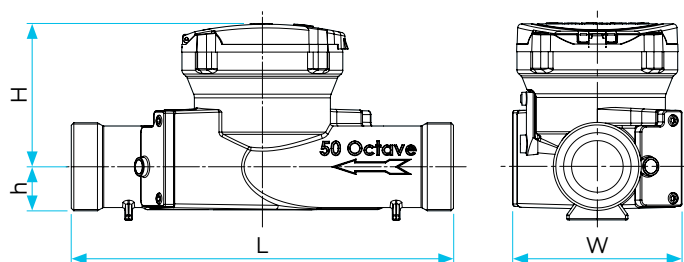
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Dimensions

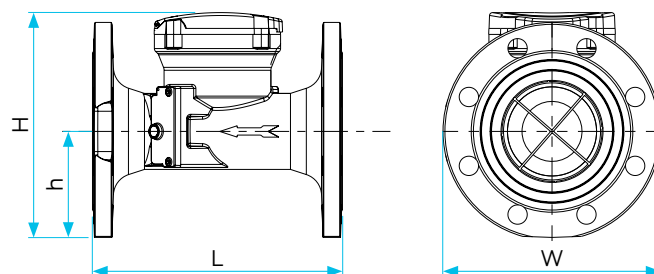
Model	mm	50 Threaded	50	80	100	150	200
	inch	2" Threaded	2"	3"	4"	6"	8"
(L) Length without couplings		300	200	225	250	300	350
(W) Width		113	165	200	220	285	340
(H) Height		155	194	210	223	282	332
(h) Height		35	40	90	103	140	165
Weight (kg) – Polymer body		1.45	-	-	-	-	-
Weight (kg) – SS body		4	6	7	9.5	16	32

Note: All measurements in mm unless otherwise stated.

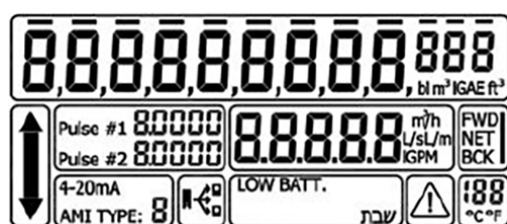
Threaded



Flanged



Digital Display



Flow Direction

Flow Rate Units

Accumulator Mode

Communication Mode

Low Battery Alert



System Error

4-20mA
AMI TYPE: 8

Output Mode

m³ IGAE ft³

Volume Units

Pulse #1 88888
Pulse #2 88888

Pulse Resolution

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Installation

For proper flow measurements, the Octave's measuring tube must be completely full of water at all times. Non-wetted sensors show loss of signal. Although this will not cause damage to the meter, it will not measure flow, and will display zero.

For further information view the instruction manual.

Installation is subject to the requirements of the applicable regulatory authority, the National Construction Code Volume Three – Plumbing Code of Australia, associated reference standards as applicable at the time and AS/NZS 3500.1.

Warranty

Reliance Worldwide Corporation (Aust.) Pty. Ltd. (RWC) will either replace or repair any defective goods where the defect arose as a result of manufacture within the warranty period. You may contact RWC at the phone number, or e-mail shown below for further information or to make a claim.

Visit www.rmc.com.au/warranty to view the warranty statement in full and for further important information.

Standards and Approvals

Threaded Stainless Steel and Polymer only:



WMK26311
AS 3565.1

Flanged Stainless Steel and Cast Iron only:

- Approved utility use only. No Watermark

All Types

- NMI R49