

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.

Model	Catalogue Number
50mm Flanged	WM500OCT
50mm Polymer Threaded *	WM500OCT-POLY
50mm Threaded *	WM500OCT-TH
65mm Flanged	WM650OCT
80mm Flanged	WM800OCT
100mm Flanged	WM1000OCT
150mm Flanged	WM1500OCT
200mm Flanged	WM2000OCT
250mm Flanged	WM2500OCT
300mm Flanged	WM3000OCT

* Threaded versions are provided with couplings.

NB. Option for Octaves with spool pieces to meet Australian length requirements are also available.



Description

The Octaves measurement method is based on an ultrasonic, transit time, dual beam sense which determines the length of time it takes an ultrasonic sound wave to travel the distance between the two sensors located on the meter's body. The Octave is available in sizes from DN50-DN300 (2"-12") in a cast iron body and is suitable for utility, waterworks, industrial and agricultural applications. It complies with NMI R49, OMIL R49 EN14154 and ISO 4064:2005 standards and has an operating range of 0.1 to +50°C.

Application

For proper flow measurements, the Octave's measuring tube should be completely full 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.

Features and Benefits

- Excellent long-term stability and reliability
- Rugged mechanical design - Submersible (IP68)
- Bi-directional (including bi-directional outputs)
- Flexible data formats including flow directions, flow rates and volumes
- AMR and cellular networks ready
- Dual line LCD
- Programmable Display (units and outputs resolution)
- EMI / RFI Protection



Uniquely Australian

Performance Specifications

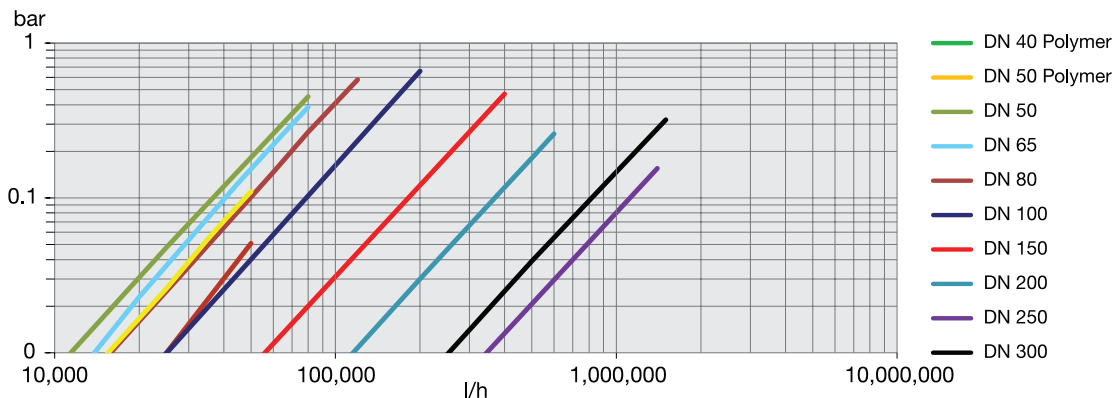
Maximum Working Pressure	16 bar
Liquid Temperature	0.1 up to 50°C
Precision Class	ISO 4063 rev.2005, Accuracy class 2
Configuration	Compact - The display is built in to the unit
Power Source	2 x D size Li-battery: 15 year life time
Environmental Protection	IP 68, Ambient operation temp. -25°C up to +55°C
Display Units	Multi line 9 digit LC display (Flow rate and volume units are programmable)
Volume Display Options	1. Net (Forward less reverse) 2. Forward only 3. Forward & reverse alternating 4. Reverse only
Outputs (optional)	Digital Pulse Output
Coupling Threads (only 1½" and 2")	BSP, NPSM
Connections	Flanges according to ISO, BS 10 and ANSI 150
Severity Levels	Mechanical class M1 & Electromagnetic Environment class E1
Pressure Loss	ΔP 0.16 bar

Flow Rate

Flowrate m³/h	Meter Size							
	DN 50-2"	DN 65-2.5"	DN 80-3"	DN 100-4"	DN 150-6"	DN 200-8"	DN 250-10"	DN 300-12"
Q1 Minimum flow rate	0.080	0.080	0.125	0.200	0.500	0.800	2	2
Q2 Transitional flow rate	0.125	0.125	0.200	0.320	0.800	1.280	3.2	3.2
Q3 Permanent flow rate	40	40	63	100	250	400	1000	1000
Q4 Overload flow rate	50	50	80	125	313	500	1250	1250
Q3/Q1 (R)	500	500	500	500	500	500	500	500
Starting Flow	0.025	0.025	0.025	0.025	0.2	0.2	0.5	0.5

Flow Characteristics

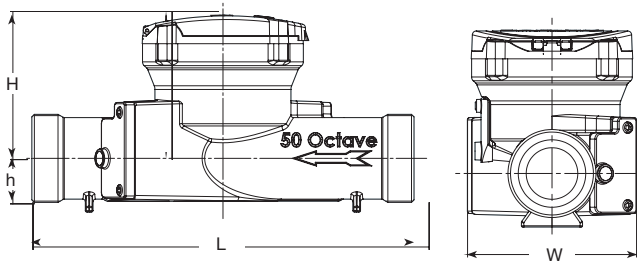
Head Loss Curve 1 ½" - 12"



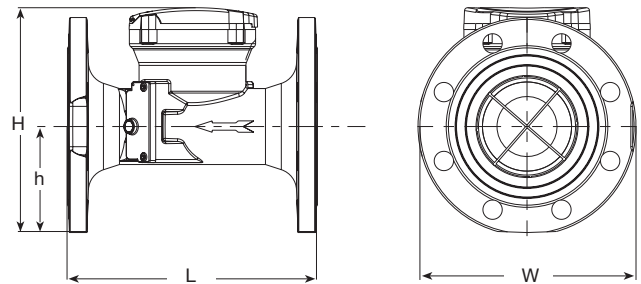
Dimensions

Model	Nominal Size	Octave										
		mm	40 Threaded	50 Threaded	50	65	80	100	150	200	250	300
		inch	1½ Threaded	2 Threaded	2	2.5	3	4	6	8	10	12
L - Length without couplings (mm)			300	300	200	200	225	250	300	350	449	499
B - Width (mm)			113	113	165	185	200	220	285	340	406	489
H - Height (mm)			155	155	194	210	210	223	282	332	383	456
h - Height (mm)			35	35	40	90	90	103	140	165	203	245
Weight (kg) - cast iron body				8	9	11.5	13	15	32	45	68	96
Weight (kg) - polymer body			1.4	1.45								

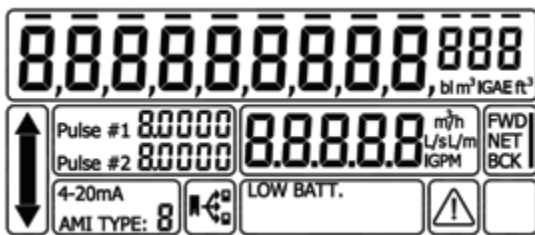
Threaded



Flanged



Digital Display



- Flow direction
- System error
- Flow rate units
- Output mode
- Accumulator mode
- Volume units
- Communication mode
- Pulse resolution
- Low battery alert