FAIR WATER

ECO VALVE METER

Designed for installation on a stop tap or concealed valve

ECO Measurement Capsule + VTZ Manifold + VTZ Connector + Radio AMR Module

- This sub-meter is specially designed for retrofitting on a stop tap or concealed valve
- The isolator is elegantly integrated into the meter manifold
- Intelligent cartridge system - pre-equipped for radio, pulse or M-bus
- For cold or hot water
- 360° rotating counter, horizontal / vertical installation
- Alerts for leaks, backflow, tampering and battery status

Approvals

Pattern Approval NMI 14/3/37 WaterMark LN26661 WMTS530 AS/NZS4020 DR AS3565.1

WaterMark

FAIR WATER

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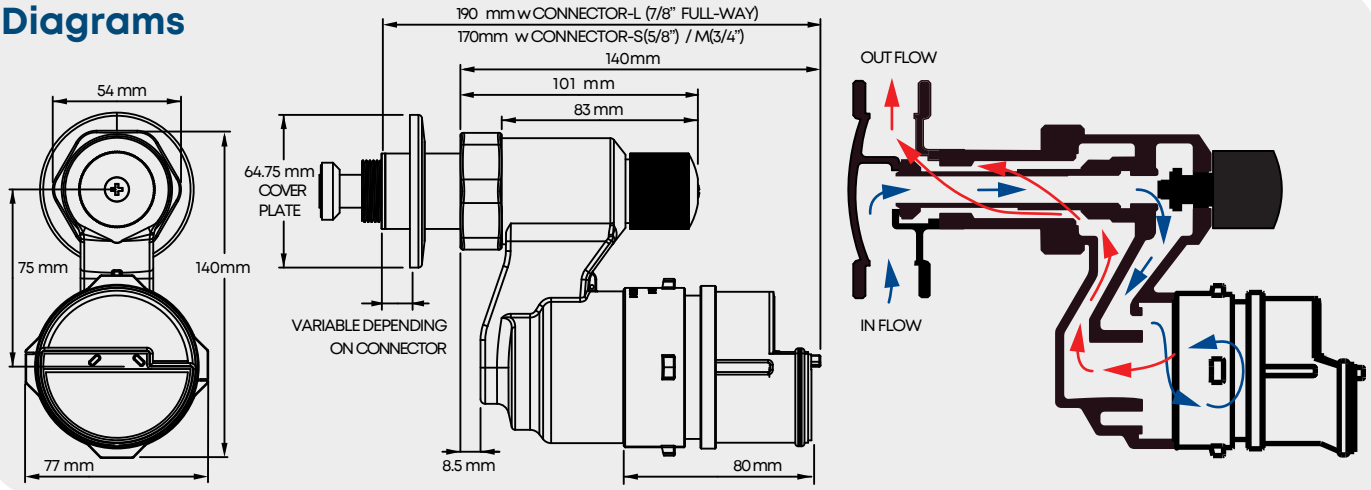
Application

- This sub-meter is specifically designed for quick, inexpensive retrofitting to concealed valves.
- Different sized VTZ connectors are available to fit various jumper isolator valve bodies so that no re-plumbing, building or repair work is necessary.
- The elegant, disability-friendly design integrates a thumb-wheel isolator into the meter manifold.
- Small and unobtrusive with a high quality gloss chrome finish.

Field of Operation

Highest display value:	99,999 m^3
Lowest display value:	0.0005 m^3
Minimum flow rate, Q_1:	0.032 m^3/h
Transition flow rate, Q_2:	0.051 m^3/h
Continuous flow rate, Q_3:	1.6 m^3/h
Overload flow rate, Q_4:	2.0 m^3/h
Flow rate ratio, Q_3/Q_1:	50
Maximum admissible temperature (Cold):	50 °C
Maximum admissible temperature (Hot):	90 °C
Maximum admissible pressure:	1400 kPa
Pressure loss class:	Δp 63
Accuracy class:	2
Flow profile sensitivity class:	U0/D0
Orientation:	Horizontal / Vertical
Flow direction:	Forward

Diagrams



Radio AMR System

Pulse output:	1 L/pulse
Operating temperature:	0 to 65 °C
Power supply:	Lithium battery
Battery life:	12 years
Protection class:	IP 65 (optional IP 68)
Radio Frequency:	918 MHz (Australian ISM)
Maximum transmitter power:	16mW (range 500 M)
Communication type:	Unidirectional

WaterMark

Data transmitted during radio transmission:

Current date, time and data for the last 12 months with monthly logs for:

- reading, backflow, leak (baseline flow), tampering, overspeed-flow, battery status, signal strength.

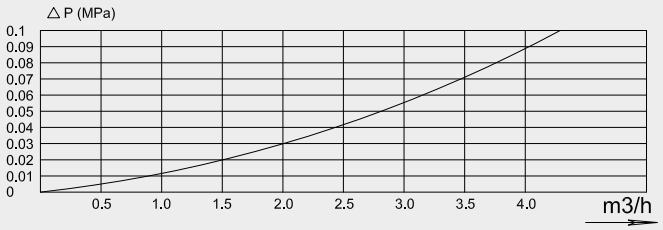
Configurable parameters:

- counter state (current reading) leak, backflow and overspeed-flow thresholds
- transmitting time for Summer/Winter time, time zone and interval between data transfers

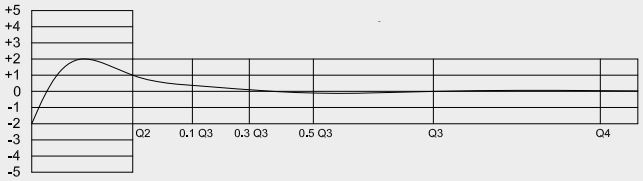
Alternative modules:

Optical Pulse for 1L, 10L, 100L, and M-Bus modules for wired pulse systems. (LoRa™ system under test.)

Pressure loss curve



Error curve



Assembly

Type	Code	DN	Connection	Length	Weight
ECO Measurement Capsule - Cold	50030	15/20	2"		445g
ECO Measurement Capsule - Hot	50040	20	2"		445g
VTZ Manifold	40050		2”		1.11kg
VTZ Connector - S (15mm/20mm isolator)	40925		5/8" Whitworth	40mm	189g
VTZ Connector - M (3/4” isolator)	40902		3/4" Whitworth	40mm	198g
VTZ Connector - L (20mm full-way)	40926		7/8" Whitworth	60mm	222g
Radio AMR Module	95400				33g

Optional Components

Optical Pulse Modules		
Pulse K1 (1L per pulse)	95001	2m cable
Pulse K10 (10L per pulse)	95011	2m cable
Pulse K100 (100L per pulse)	95111	2m cable
M-bus Module		
M-bus device	95002	2m cable

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