

Q1000 series - Electromagnetic flowmeters

Sizes: 50 to 200 mm

Internal battery powered

FEATURES

- For water measurement.
- Large, bright and easy-to-read LCD, shows Total and Flowrate.
- Internal Lithium battery powered (10 year battery life).
- Obstructionless bore:
 - impurities can pass without blockage;
 - minimum pressure loss.
- No moving parts.
- No need for calibration.
- Built-in earthing - no need for additional earthing.
- Durable, with anti-corrosive electrodes. IP68.
- Wafer-style installation, supplied with Table D connection kit.



The Q1000 range of electromagnetic flowmeters are designed for measuring bulk flows of water. Applications include:

- revenue billing in commercial or industrial applications;
- network management;
- irrigation management of agricultural land;
- leakage monitoring.

The large, bright and easy-to-read LCD shows non-resetable Total (M³) and instantaneous flow rate (M³/hour).



There is no need for calibration, and with built-In earthing, there is no need for additional earthing rings. Being an electromagnetic type of flowmeter, there are no moving parts. Also, the unrestricted flow tube means that any impurities can pass through the flowmeter without blockage, and there is minimal pressure loss (less than 0.1 bar), even at the highest flow rates, thus reducing network system pressures and helping to prevent leakage from burst pipes.

The flowmeters have an IP68 rating and are “sealed-for-life”, and are highly durable. Their Stainless Steel construction means no risk of water ingress and subsequent damage to electronics, and anti-corrosive electrodes ensure consistently accurate performance throughout the flowmeter’s entire life.

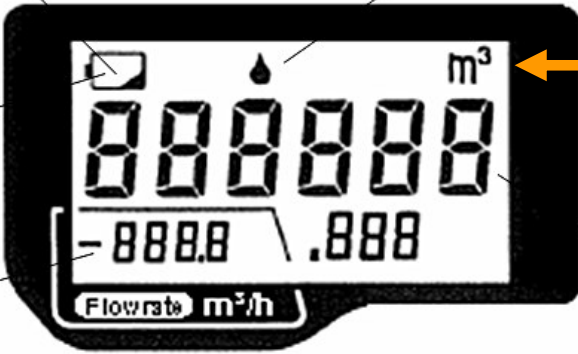
The flangeless design means wafer-style installation - the flowmeters can be fitted to most pipe flanges without adaptation. Each flowmeter is supplied with a Table D connection kit (studding, nuts, and washers. Gaskets are not required, as the unit is self-sealing).

The flowmeters are powered by an internal Lithium battery - ideal for remote locations, or where an external power supply is not available. The fitted batteries provide 10 years continuous life at 30 °C ambient temperature. Note: Batteries are not replaceable, and the measured water must have a conductivity of at least 50 µS/cm.

CONFIGURATION OPTIONS

	<p>1. Integral Display Only (<u>standard version</u>)</p> <ul style="list-style-type: none"> • Flowmeter with on-board LCD display for simple visual read. No pulse output. • Can simply be upgraded “in-the-field” to other versions.
	<p>2. Integral Display, and on-board Pulsar</p> <ul style="list-style-type: none"> • The optional pulse transmitter provides a reliable pulse output signal. • Pulse output capability enables connection to a variety of ancillary devices including AMR and Data-loggers.

DISPLAY



Low-Battery The indicator will blink when the meter has approximately 3 months working life remaining

No-Water The indicator will blink when there is an empty pipe or no water in the meter

Measurement Stopped The indicator will appear permanently when the meter life has expired. Data is stored for up to 9 months

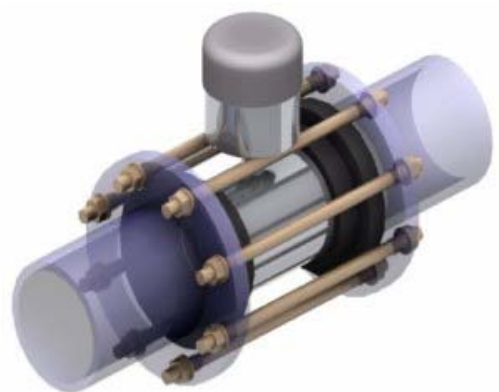
Flow Rate If water is flowing in reverse direction a minus sign is displayed to the left of the values.

Net Volume Any reverse flow will be subtracted from the volume display. The decimal places are shown below the main billable units

Note: 1 M³ = 1,000 Litres

INSTALLATION

- The innovative, flange-less design of the Q1000 meter ensures the meter can be fitted to most standard pipe flanges without the need for expensive adaptation.
- Every meter comes equipped with a Table D installation kit, including studding, nuts, and washers. Just provide your own flanges and tools!
- Installation is possible in horizontal, vertical or inclined pipes
- The Q1000 requires no programming or calibration thus reducing the risk of costly installation errors.
- Simply *FIT-and-GO!*



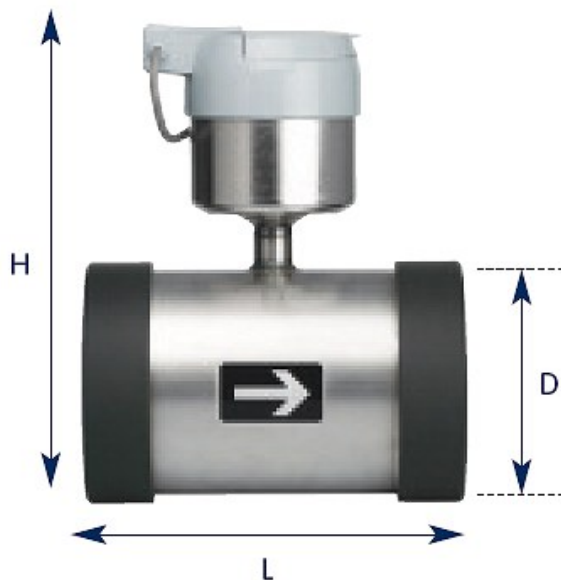
SPECIFICATIONS

Maximum working pressure	1600 kPa (16 bar)
Maximum water temperature	70 °C
Minimum water conductivity	50 µS/cm.
Rating	IP68
Construction	Stainless Steel
Earthing	Built-in earthing – no need for additional earthing rings.
Connection	Wafer style. Supplied with Table D connection kit.
Integral display	LCD shows: <ul style="list-style-type: none"> • non-resetable Total (M³ to 3 decimal places i.e. Litres); • instantaneous flow rate (M³/hour); • Low-Battery; No-Water.
Power	<ul style="list-style-type: none"> • Internal Lithium battery powered. • 10 years continuous life at 30 °C ambient temperature. • Batteries are non-replaceable.
Maximum registration	50 - 100 mm: 999 999.999 M ³ 125 - 200 mm: 9 999 999.99 M ³
Pulse output	Bi-directional, transistor pulse output
Response rate	0.5 second response rate
Pressure Loss at Permanent Flow Q3	< 0.1 Bar

optional on-board Pulsar

Pulserate	Channel 1: 1 pulse / 10 Litres # Channel 2: 1 pulse / 100 Litres #
Pulse width	is variable with flow rate. 50% duty cycle.
Maximum pulse frequency	<ul style="list-style-type: none"> • 100Hz • For pulse frequencies above 100Hz: <ul style="list-style-type: none"> ○ Pulses are stored and 'carried forward' until pulse frequency falls below 100Hz. ○ A maximum of 9999 pulses can be 'carried forward'.
Alarm	Indicates "Low Battery".
Supplied cable length	10-metres

DIMENSIONS



Size (mm)	L	D	H
50	200	102	258
65	200	121	278
80	200	133	289
100	250	159	314
125	250	190	345
150	300	216	400
200	350	272	455

APPROVALS

Water Meter Standards Approvals
Water Meter Standards

Specifications as per ISO 4064, EN14154 and OIML R49 standards
BS6920 Drinking Water Approval for materials in contact with water
CE Approval (EMC)

- EN 61000-6-1:2001 Immunity
- EN 61000-6-3:2001 Emissions

Order Codes

Order Code	Size	Meter Weight (kg)	Flowrange (Litres/min)				
			Minimum Q1 ±3%	Transitional Q2 ±1.5%	Transitional Q2A ±0.75%	Permanent Q3 ±0.75%	Maximum Q4 ±0.75%
Q1050	50 mm	4.5	2.7	4.3	15	1050	1310
Q1065	65 mm	5.0	4.2	6.7	23	1660	2080
Q1080	80 mm	6.0	6.7	10.7	30	2660	3330
Q1100	100 mm	7.5	10.5	16.7	45	4160	5210
Q1125	125 mm	9.5	16.7	26.7	60	6660	8330
Q1150	150 mm	15	26.7	43.3	100	10500	13130
Q1200	200 mm	20	41.7	66.7	150	16600	20830

Options (additional to integral display)

- PQ** On-board Pulser, and 10 metres of cable.
Channel 1: 1 pulse / 10 Litres (uses reverse compensation to account for any backflow)
Channel 2: 1 pulse / 100 Litres (uses reverse compensation to account for any backflow)
- RQ** Remote display, on 10 metres of cable.
 - for ≤100 mm: Total format xxxxxx.xxx M³, Pulse output: 1 pulse / 10 Litres
 - for >100 mm: Total format xxxxxxxx.xx M³, Pulse output: 1 pulse / 100 Litres



Integral display.



Optional remote display.