V300 Volumetric Cold Potable Water Meter

Product specification



The V300 is a highly accurate volumetric rotary piston type meter used for the measurement of drinking water. Its specially developed thermoplastic measuring chamber assembly is extremely resistant to aggressive water and provides a long working life. The meter starts to register at very low flows and is accurate throughout a wide flow range.

The V300 has a maximum admissible working temperature of 30°C, a limiting temperature of 50°C and a maximum working pressure of 1400 kPa. Standard counter registration is in kilolitres (kL) and litres. Every V300 water meter is individually tested for accuracy before despatch. The V300 meter meets the metrological requirements of NMI R49-1 class 2 and non-metrological requirements of Australian Standard AS 3565.1-2010.

Register

The V300 has a hermetically sealed register with kilolitres shown in a bold straight reading drum and pointers indicating litres. The "copper can" outer barrier and mineral glass lens ensure moisture is kept out to give clear, condensation free readings over the life of the meter, even in the most severe environments. The counter is protected by a robust housing and lid.

Innovative communication

Pulse output capability (at up to three different pulse rates) is standard on the V300 meter.

The pulse units can easily be retrofitted on site without breaking the calibration seal or interrupting the supply. Two types of pulse units are available; opto-electronic and reed switch units.

Materials

All V300 meters are manufactured from the highest quality materials ensuring maximum resistance to wear and corrosion. Copper alloys in contact with potable water are de-zincification resistant and comply with the Australian Standard AS 2345. All materials in contact with potable water comply with the Australian Standard AS 4020.

Key features

- Positive displacement principle of measurement ensures registration even at the very lowest rates of flow with maintained accuracy over the flow range.
- Volumetric rotary piston design permits optimum performance in horizontal, vertical or inclined pipelines without affecting accuracy.
- Requires no calibration throughout its lifespan.
- "O" ring sealing ensures that internal leaks which could by-pass the measuring chamber are eliminated.
- Use of advanced engineered plastics for the measuring chamber minimises wear and maintains reliability under all operating conditions.
- A large specially designed surface area fine filter is fitted on the measuring chamber inlet.
- A leak indicator is fitted as standard.





Optional features

- Opto-electronic pulse unit for use with data loggers, rate of flow equipment and process control equipment.
- Reed switch pulse units for use with data loggers, remote counters and process control equipment.
- Remote battery operated totalising counter with LCD display (T210 Electronic Outreader).
- Meters can be supplied with brass flange adaptor / connection kits.

Flow performance to NMI R49-1 / Class 2

Nominal diameter (mm) - (Q3/Q1 Ratio)	Units	DN50 - (160)
Minimum flowrate - Q1 ± 5%	L/h	156
Transitional flowrate - Q2 \pm 2%	L/h	250
Permanent flowrate - $Q_3 \pm 2\%$	kL/h	25
Overload flowrate - Q4 \pm 2%	kL/h	31
Approx. minimum registration flowrate	L/h	30
Pressure loss @ flowrate	kPa @ kL/h	24.5 @ 15.0
Maximum working pressure	kPa	1400
Working temperature range	°C	0.3 to 30
Operating temperature range	°C	0.3 to 50
Minimum counter registration	L	0.1
Maximum counter registration	kL	99999.9999
Reed switch pulse outputs	Litres/pulse	10 and 100
Opto-electronic pulse output	Litres/pulse	0.1
Overall meter length (± 1 mm) (L)	mm	300
Height from bottom to top, lid closed (H1)	mm	238
Height from bottom to centre line (H2)	mm	67
Height from bottom to top, lid open (H3)	mm	348
Meter width (B)	mm	223
Approximate bare weight - (Standard packed)	kg	14.5

Meter dimensions

MANAAAA H3 HI 50 mm H₂

Register details



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