

CT5-S20

20mm totaliser positive displacement flowmeter with high rate 72 pulses/Litre pulse output

FEATURES

- Volumetric rotary piston principle, measures accurately in any position.
- Mechanical totaliser.
- 72 counts/Litre Reed Switch contact closure output for precision data collection and flowrate readings.
- Designed to meet AS3565.1-1998.
- Accuracy (Qt to Qs): $\pm 2\%$, Repeatability: $\pm 0.15\%$



The CT5-S20 20mm water meter is suitable for measurement of cold water up to 50 °C with a working pressure up to 1500 kPa. The meter offers great accuracy and a long operating life for domestic drinking water applications.

The mechanical counter register is positioned for easy reading and displays from 0.02 to 9,999,999 Litres. The precision engineered rotary piston measuring chamber ensures accurate measurement even at very low starting flow rates. Meters can be installed in any position without affecting accuracy and require no onsite calibration. An inline filter element prevents blockages and an internal check valve stops backflows (can optionally have dual check-valves).

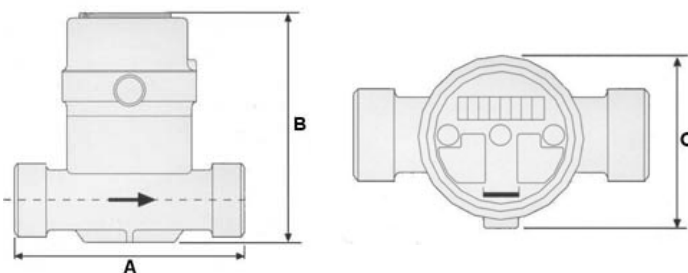
CT5-S20 flowmeters are fitted with a high resolution reed switch contact closure output. At the request of various water authorities, with ManuFlo technology, 72 pulses per Litre (ppL) output signal is achieved, which is the highest amount of pulses per Litre for a domestic water meter of this size (whilst retaining the mechanical register). This allows capture of precision water measurement information to data-loggers and to other data collection devices. Very accurate data can then be obtained for water usage totals and flowrate habits of consumers. Electrical connection is via a 1.5 metre 2-core shielded cable.

All meters are supplied with a gasket seat coupling connection kit (optional ball seat available). CT5-S20 flowmeters are manufactured from high quality materials to meet Australian specification requirements.

The CT5-S20 20mm provides the best pulse output rate for domestic water meters, with 72 pulses/Litre.

SPECIFICATIONS

Size (mm)		20
Pulse output rate	Pulses/Litre	72
Mechanical register	Minimum Litres	0.02
	Maximum KL	9999.9999
Starting flow rate		0.033
Min. registration	Qr $\pm 5\%$ Litres/min	0.05
Min. transitional flow	Qt $\pm 2\%$ Litres/min	0.41
Nom. continuous flow	Qn $\pm 2\%$ Litres/min	41.6
Max. intermittent flow	Qs $\pm 2\%$ Litres/min	83.3
Weight with couplings	kg	1.9



Other Specifications

Headloss @ Qn <25 kPa; Maximum pressure rating 1500 kPa; Maximum water temperature 50°C.

Accuracy Qt to Qs: $\pm 2\%$; Repeatability: $\pm 0.15\%$.

Reed switch pulse Vmax: 24V; I max: 50mA, with anti-bounce and current-limiting resistor fitted.

Cable: 2-core, 1.5 metre length (with some input devices, to avoid bounce install a 450pF capacitor across input).

Other pulse data: Typically 50% duty cycle pulse (equal on/off state), largest difference 46% on / 54% off state.

At Qs flowrate (83.3 Litres/min), pulserate maximum frequency is 100Hz (1.388 Litres/sec x 72 pulses/Litre).

Pipeline must be full at all times for correct measurement. Suitable for clean water only. Purge the pipeline prior to install.

Once installed, to avoid damage to measuring chamber, bleed the liquid into the pipeline and flowmeter.

DIMENSION (see diagram)	
Length A	152 mm
Height B	145 mm
Width C	92 mm

Order Code	Description
CT5-S20	20mm flowmeter, with Gasket Seat $\frac{1}{4}$ " BSP (male) coupling set

Options	(add suffix to flowmeter Order Code)
-BS20	Ball seat $\frac{1}{4}$ " BSP (female) coupling set for NSW, instead of Gasket Seat
-DCV	Dual Check Valve

Thread connections available to suit different states.

Also available as manifold flowmeter for Brisbane Water.

Also available : 15mm CT5-S15 and 25mm CT5-S25 (see separate data sheets).

ManuFlo [®]™

Flow Measurement Products

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