The Kent Range of Domestic Meters

V100 Volumetric cold water meters

The world's favourite domestic water meter

V100 Volumetric cold water meters

- **The world's biggest-selling domestic water meter**
- **Optimum accuracy and performance at all times, in any position**
- **Revolutionary grooved piston for improved durability and performance**
- **Durable tamperproof construction**
- **Full range of sizes from 15mm to 40mm**
- **Water temperatures up to 50°C**
- **Maximum working pressure of 16 bar**
- **Pulse output available providing access to management information**

The V100 is the world's favourite domestic water meter, with over 50 million already in service in over 100 countries, and offers accuracy, long life, low maintenance and tamperproof operation.
Available in sizes from 15mm to 40mm, with flow rates of between 7.5 l/h to 20 m^3/h, V100 meters offer unrivalled performance to BS5728, ISO4064 Class C or D (for 15mm to 25mm only).
In addition, models can provide valuable management information via a probe pulse unit upgrade.

Unrivalled accuracy in any position, for any flow

Due to the volumetric rotary piston measurement principle, the V100 range can achieve the highest levels of reading accuracy even at the lowest flow rate. The meter can be installed in any position: horizontally, vertically or inclined pipelines, maintaining optimum performance with no loss of accuracy.

Robust, leak-proof construction

The use of advanced engineering plastics for the meter's measuring chamber significantly reduces wear and helps maintain reliable, accurate measurement over all operating conditions. Solid particles are gathered by a large surface area strainer, further preventing damage; and its advanced design ensures that partial obstruction of the strainer will have no ill effect on the accuracy of the meter's registration.
A body 'O' ring seal between the measuring chamber and meter body ensures that internal leaks which could by-pass the measuring chamber are eliminated.

Easy to read

The counter is fully sealed, liquid filled using a vacuum and offers simple, straight-reading presentation. The number rollers are completely immersed in a lubricating non-toxic liquid, and a sac attached to the counter casing

acts as a balancing membrane, ensuring the pressure of the liquid in the counter equals that of the external water. The counter window is inside the meter body in the direction of flow for simplified reading.

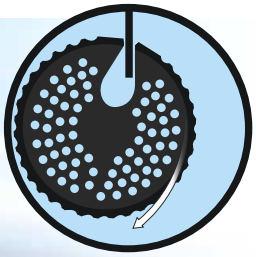
Tamperproof operation

The V100 offers unrivalled resistance to illegal tampering: its unique conical body-half design eliminates the risk of disassembly whilst in service and the mechanically driven cyclometer-type counter is resistant to magnetic interference.

An optional return reverse flow restrictor provides further protection against outside interference, preventing the meter being operated in the reverse direction to reduce the reading. This restrictor cannot be removed without opening the meter and destroying the seal.

Revolutionary grooved piston

Meter stoppages are substantially reduced, durability enhanced and performance improved as a result of a uniquely-designed grooved piston within the meter measuring chamber, increasing applications flexibility (available in 15mm and 20mm sizes).



Relative motion of the grooved piston.
Its action, with the stationary chamber wall, creates small flow eddies which hold solids in suspension until flushed out, reducing meter stoppages.

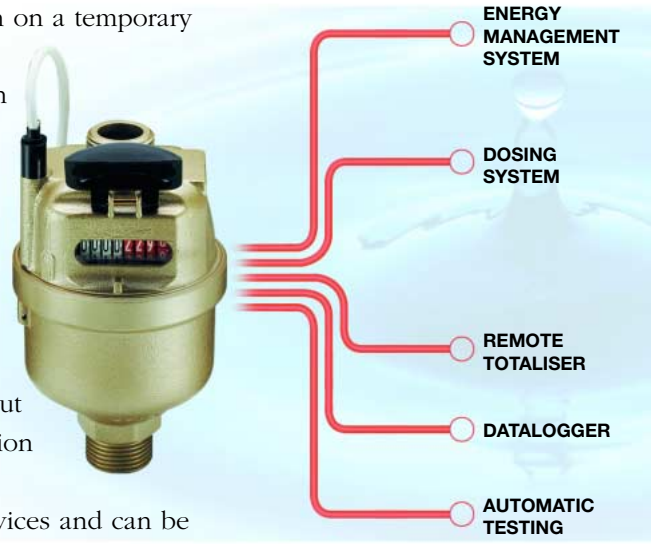
Reliability guaranteed

Every V100 meter is individually tested over its flow range before despatch, and is manufactured from the highest quality materials ensuring maximum resistance to wear and corrosion. All Elster meters are UK WRc approved to prevent health risk.

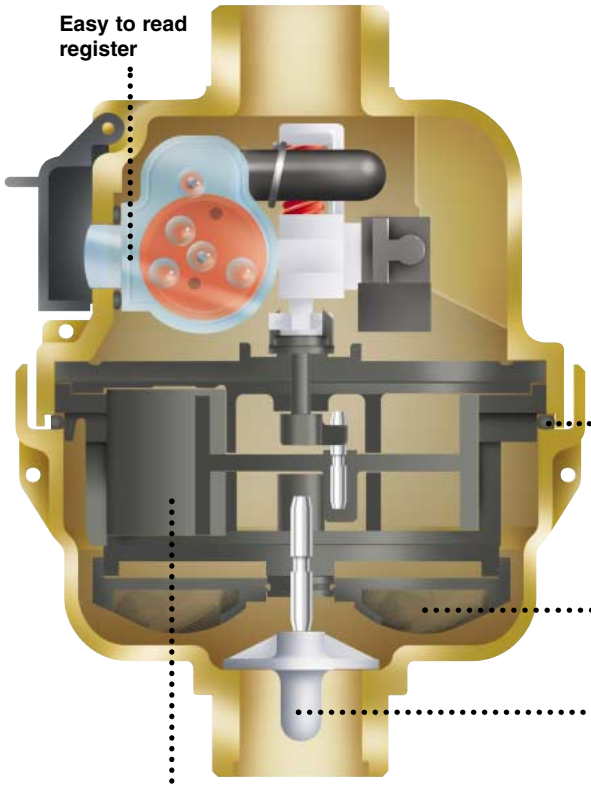
Vital management information tool

Valuable management information can be obtained with the aid of a probe pulse unit, available on V100 meters.

The unit provides important consumption and flow information on a temporary or permanent basis, allowing examination and analysis of consumption patterns and providing a valuable early detection of leaks. Volt-free probe pulsers provide output signals for interrogation by externally-powered reading devices and can be attached to previously installed V100 meters with the facility to install a probe pulse unit, at any time without interrupting the water supply.



V100 meter



Grooved piston design gives long working life and reduces blockages

V100

Specifications Class C to BS5728 and ISO4064

Meter size (mm)			15	20	25	30	40
Overload flow rate	qs±2%	m^3/h	3	5	7	12	20
Permanent flow rate	qp±2%	m^3/h	1.5	2.5	3.5	6	10
Transitional flow rate	qt±2%	l/h	22.5	37.5	52.5	90	150
Minimum flow rate	qmin±5%	l/h	15	25	35	60	100
Starting flow (approximate)		l/h	5.7	9.5	13.2	22.5	37.5
Output pulse		litre/pulse	0.5	0.5	5	5	5
Meter diameter		mm	86	86	104	120	158
Meter length preferred		mm	165	190	–	–	300
Meter length alternative		mm	115 or 134	165	199	199	–
Length over connectors		mm	200 or 228	267	311	327	421
Weight – Meter only (approximate)		kg	0.80 or 0.90	1.30	1.30	2.20	3.70

Specifications Class D to BS5728 and ISO4064

Meter size (mm)			15	15	20
Overload flow rate	qs±2%	m^3/h	2	3	5
Permanent flow rate	qp±2%	m^3/h	1	1.5	2.5
Transitional flow rate	qt±2%	l/h	11.5	17.25	28.75
Minimum flow rate	qmin±5%	l/h	7.5	11.25	18.75
Starting flow (approx)		l/h	3.4	3.4	5.7
Output pulse		litre/pulse	0.5	0.5	0.5
Meter diameter		mm	86	86	86
Meter length preferred		mm	-	165	190
Meter length alternative		mm	134	115 or 134	165
Length over connectors		mm	-	200 or 228	267
Weight – Meter only (approximate)		kg	1.02	1.08	1.27

Specifications Class K

Meter size (mm)			15	20	25	30	40
Overload flow rate	qs±2%	m^3/h	3.5	5	7.5	12	20
Permanent flow rate	qp±2%	m^3/h	2.73	2.95	4.55	6.8	10
Transitional flow rate	qt±2%	l/h	22.5	37.5	52.5	90	150
Minimum flow rate	qmin±5%	l/h	15	25	35	60	100
Starting flow (approximate)		l/h	3.4	3.4	5.7	13.6	20
Meter length		mm	115 or 134	165	199	199	300
Meter radius		mm	43	43	52	60	79
Length over connectors		mm	200 or 228	267	311	327	421
Nominal pipe size		mm	15	20	25	30	40
Weight – Meter only (approximate)		kg	0.80 or 0.90	1.30	1.30	2.2	3.7

Pressure equipment directive 97/23/EC

This product is applicable in networks for the supply, distribution and discharge of water and associated equipment and is therefore exempt.

ELSTER

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