The Kent Range of Domestic Meters

SPECIFICATION SHEET
Cold Water

V110 Class C Volumetric cold water meters

Permanent flow rate	**qp**	**m^3/h**	1.5	2.5	3.5
Size		**mm**	15	20	25



- Volumetric rotary-piston principle of measurement ensures registration even at the very lowest rates of flow with maintained accuracy over the flow range
- Unique grooved piston design (15mm and 20mm)
- Can be installed in horizontal, vertical or inclined pipelines without affecting accuracy
- The co-polymer resin manufactured body allows its use with absolute confidence where waters with aggressive or dezincification properties exist
- Requires no calibration throughout its lifespan
- 'O' ring seal placed between the measuring chamber and meter body 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
- Large surface area fine filter prevents damage by gathering solid particles. Due to its design, a partially obstructed filter will not affect the meter's accurate registration

Compliance with standards

Performance figures for the V110 range meet the requirements of the following:

- ISO4064
- EEC Directive 75/33/EEC
- BS5728 Class C

Register

The register is fully-sealed, vacuum filled, with a simple straight-reading presentation. The number rollers are totally immersed in a non-toxic liquid which acts as a lubricant. The sac attached to the register casing acts as a balancing membrane and ensures the pressure of the liquid in the register is the same as that of the water inside the meter. The register is placed in a window inside the meter body in the direction of flow for easy reading.

Tamperproof

The V110 offers outstanding resistance to illegal tampering. Its unique conical body-half design means it cannot be disassembled while in service and the mechanically-driven register cannot be interfered with magnetically. An individual serial number is heat printed on each body.

Optional features

- Internal disc-type reverse flow restrictor can be included as an optional feature. This reduces the possibility of water being run back illegally

Remote-reading

The V110 operates as a standard meter until the need arises, and then by simply removing a plastic plug and inserting a magnetically-operated signal sensor, it can be converted for remote read.
It can be converted on location whilst still in use without any disconnection, risk of component damage or need to re-calibrate.
The pulse provided by the probe can be used to step a remote register or in the longer term, the output can also be interfaced with a module which could be interrogated by a computer or other device.
The V110 model is particularly suitable for incorporation in energy management systems.

ELSTER

V110

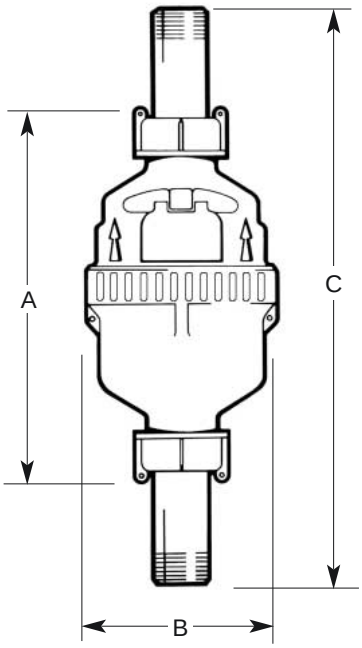
Performance BS5728, ISO4064 Class C

Size of meter		**mm**	**15**	**20**	**25**
Meter thread size		inches	G¾B	G1B	G1¼B
Permanent flow rate	qp±2%	m^3/h	1.5	2.5	3.5
Overload flow rate	qs±2%	m^3/h	3.0	5.0	7.0
Transitional flow rate	qt±2%	l/h	22.5	37.5	52.5
Minimum flow rate	qmin±5%	l/h	15.0	25.0	35.0
Starting flow approximately		l/h	5.7	9.5	13.2
Headloss at qs		bar	1.0	1.0	1.0
Headloss at qp		bar	0.25	0.25	0.25
Meter resets to zero at		m^3	10000	10000	100000
Minimum indicated digit value		litre	0.1	0.1	1
Output pulse		litre/pulse	0.5	0.5	5

Notes:
Maximum working pressure 10 bar (16 bar on 15mm size).
Maximum working temperature 50ºC.

Dimensions

Meter length – A	mm	115	165	165	199
Meter diameter – B	mm	99	99	99	114
Length over connectors – C	mm	200	248	267	312
Nominal pipe size	mm	15	15	20	25
Weight of meter and connections	kg	0.43	0.45	0.47	0.75



Installation

Care should be taken during installation to ensure that the meter and its connectors are not subjected to elongation, compression or bending forces.
Allowance should be made for expected expansion and contraction of adjacent pipework.
High installation stresses may eventually give rise to joint leakage or even permanent damage to the meter or its connections.

Materials

All Elster meters are manufactured from highest quality materials ensuring maximum resistance to wear and corrosion and are UK WRc approved.

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.

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The Company's policy is one of continuous improvement and the right is reserved to modify the specifications without notice.