SPECIFICATION SHEET
Cold Water

# The Kent Range of Bulk Meters

## C4200 Combination cold water meter

| | | | |
|---|---|---|---|
| **Permanent flow rate** | **$m^3/h$** | **qp** | 450 |
| **Size** | **mm** | | 150/30 |

The C4200 is a combination meter which couples an H4000 high capacity meter with a smaller V100 volumetric rotary piston meter to give consistent accuracy over an extended range of flow rates. They are particularly suited to bulk flow metering in areas such as hospitals, factories and sports centres where large variations in flow rate can be expected. Designed to maximise revenue collection with a high turndown ratio.

### Operation

Wide flow ranges are measured by utilising the low flow capability of a positive displacement meter and the higher flow efficiency of a Woltmann meter. At lower flows the water is directed through the smaller of the two meters. As soon as the flow reaches a pre-determined higher level, differential pressure causes the changeover valve located in the Woltmann meter to open and the flow is directed through both meters. Oscillation at the changeover point is eliminated by the valve's positive method of operation. The reverse procedure occurs with decreasing flows.

### Standard features

- Spheroidal graphite iron body
- H4000 meter has high-integrity, copper can sealed register
- Compact body length to ISO4064, BS5728
- Can be installed in horizontal, vertical or inclined pipelines without loss of accuracy
- Interchangeability of key meter components including the complete V100 by-pass meter, and H4000 mechanism for on-site replacement if required
- Iron meter bodies are finished with blue epoxy powder-coating

### Optional features

- To types of pulser are available on the Woltmann meter, opto-electronic and reed switch
- A reed switch pulse output facility is also available on the volumetric meter

### Flange drilling to suit

Flanges drilled to BS 10 Tables C, D, E.
BS4504 PN 10/16, DIN 2532/3
ANSI B16.1/5 Class 125/150,
ISO R 13, KSB 1513

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# C4200

## Performance

| Size of meter | mm | 150/30 |
|---|---|---|
| Main meter size | mm | 150 |
| Overload flow rate qs±2% | $m^3/h$ | 600 |
| Permanent flow rate qp±2% | $m^3/h$ | 450 |
| Flow at 0.6 bar headloss | $m^3/h$ | 310 |
| Flow at 1.0 bar headloss | $m^3/h$ | 400 |
| Maximum dial registration | millions of $m^3$ | 10 |
| Centre pointer registration | litres | 1000 |
| Pulse outputs - opto | litres/pulse | 10 |
| Pulse outputs - reed | litres/pulse | 100,1000,10000 |

### V100 by-pass meter

| | | |
|---|---|---|
| By-pass meter size | mm | 30 |
| Transitional flow qt±2% | l/h | 90 |
| Minimum flow rate qmin±5% | l/h | 60 |
| Starting flow rate (approximate) | l/h | 13.6 |
| Maximum dial registration | thousands of $m^3$ | 100 |
| Minimum indicated digit | litres | 0.2 |
| Pulse unit facility only | litres/pulse | 5.0 |

### Changeover valve

| | | |
|---|---|---|
| Opening flow rate | $m^3/h$ | 7.2 |
| Closing flow rate | $m^3/h$ | 4.6 |
| Maximum working pressure | bar | 16 |
| Maximum working temperature | °C | 50 |

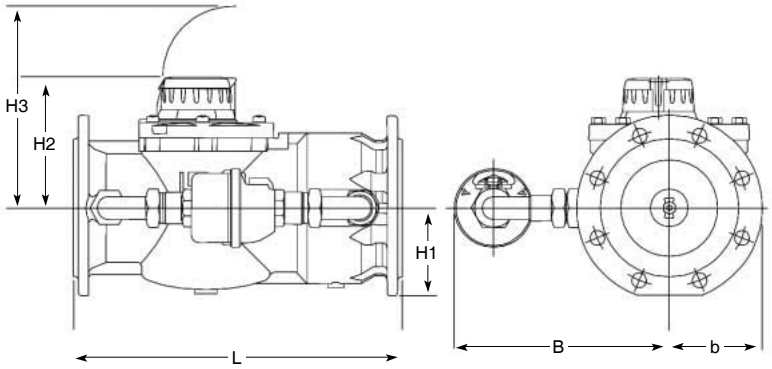
### Dimensions

| | | |
|---|---|---|
| Overall length - L | mm | 500 |
| Width - B | mm | 348 |
| Width - b | mm | 143 |
| Height to C/L of meter - H1 | mm | 138 |
| Height above C/L (lid closed) - H2 | mm | 200 |
| Height above C/L (lid open) - H3 | mm | 308 |
| Weight (approximate) | kg | 50 |

## Installation recommendations

The meter should be installed in a clean pipeline, free from any foreign materials. Install the meter with direction of flow as indicated by the arrow cast in the meter case. May be installed in horizontal or inclined lines. To ensure optimum accuracy, particularly when flows approaching the permanent flow are expected, it is recommended that a straight length of pipe equal to 10 times the nominal meter size be fitted directly to the meter inlet.

Air should be carefully purged - i.e. water should be let into the main slowly so that entrained air does not cause the meter to race causing damage.

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