GEORGE KENT
METERING

# GKM C4200

## Combination Cold Potable Water Meters

Combining two outstanding GKM metering technologies into one unit, the C4200 delivers highly accurate bulk flow metering for applications with large variations in flow rate, helping to ensure optimum revenue collection.

## FEATURES

- High turndown ratio
- Highly accurate bulk flow metering for applications with large variations in flow rate
- Designed to maximise revenue collection
- Interchange ability of key meter components including the complete PSM by-pass meter and H4000 mechanism for on-site replacement if required
- Available in size DN150

## Operation

By utilising the low flow capability of a positive displacement PSM meter and the higher flow efficiency of a H4000 Woltmann meter, the C4200 is able to measure wide flow ranges from 0.0625 $m^3$/h up to 312.5 $m^3$/h.

At lower flows, the water is directed through the smaller PSM meter. As soon as the flow reaches a pre-determined higher level, differential pressure causes the changeover valve located in the H4000 Woltmann meter to open and the flow is directed through both meters

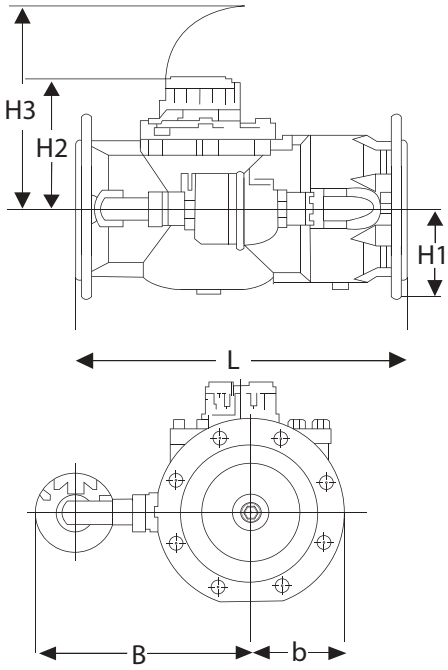
## Product Specification

**C4200 Metrological Characteristics**

| | | | |
|---|---|---|---|
| Size of Meter | | | DN150 |
| Minimum Flowrate | Q1 ± 5% | m3/h | 0.0625 |
| Transitional Flowrate | Q2 ± 2% | m3/h | 0.1 |
| Permanent Flowrate | $Q_3$ ± 2% | m3/h | 250 |
| Overload Flowrate | $Q_4$ ± 2% | m3/h | 312.5 |
| Measuring Range (R) | $Q_3/Q_1$ | | 4000 |
| Changeover Flowrate | Qx1 | m3/h | 4 – 6 |
| Changeover Flowrate | Qx2 | m3/h | 6.5 - 8.5 |
| Max Admissible Pressure | | bar | 16 |
| Pressure Loss Class ΔP | | bar | 0.40 |
| Indicating Range (Larger Meter) | | m3 | 9 999 999 |
| Verification Scale Interval (Larger Meter) | | m3 | 0.005 |
| Indicating Range (Smaller by-pass Meter) | | m3 | 99 999 |
| Verification Scale Interval (Smaller by-pass Meter) | | m3 | 0.0001 |
| Working pressure range | | bar | From 0.3 to 16 |
| Orientation requirements | | | all positions but not head down |

## Dimensions

| Size of Meter | | DN150 |
|---|---|---|
| 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 | 207 |
| Height above C/L - lid closed ( H2 ) | mm | 308 |
| Weight - approximate | kg | 50 |




## Pulse Connectivity

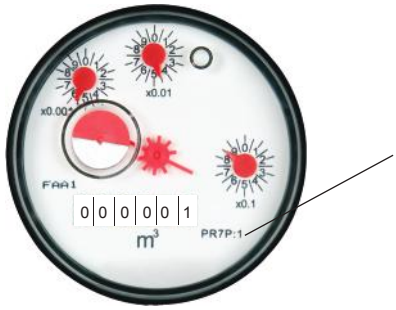
For larger meter (H4000), Pulse Weight can be calculated when fitted with PR7 inductive pulser. Pulse Weight is calculated by multiplying the Register 'Pulse Factor' (P) by the PR7 'K-Factor' (K) Pulse Weight (Litres per Pulse) = P x K

| Size | Pulse Factor | K1 | K10 | K100 | K1000 |
|---|---|---|---|---|---|
| DN150 | P:1 | 10 ltrs | 100 ltrs | 1000 ltrs | 10,000 ltrs |

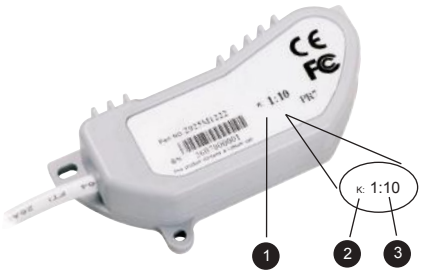
PR7 is an open collector pulse transmitter suitable for data logging, AMR and telemetry equipment. Check with your equipment supplier for full details of compatibility.

The PR7 with a K factor of 1 should be used with advanced data loggers, those capable of accepting a 5ms width pulse. Other outputs (k < > 1) have a variable pulse width. These can be used with any data logger.

For smaller by-pass meter (PSM), a reed switch pulse output facility is also available. The output pulse is 5 ltr/pulse.




On this example 50mm GKM H4000 register, the user can identify from the dial plate both the:
- Type of pulser to use ie PR7
- Pulse Factor ie P:1




1. On the PR7 unit the user can identify from the label the K-Factor for each output channel
2. Primary Output K-Factor
3. Secondary Output K-Factor

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