Water

# UNICOcoder® NTEP

Singlejet meter

## Your benefits

- Mechanical roller register with 0.1 US gallons resolution:
  **Efficient consumption monitoring in energy data management**
- Transfer of the effective meter reading:
  **No data loss and guaranteed security of the billing data**
- Register without batteries:
  **No service life restriction**
- Robust, high grade wear resistant materials:
  **Excellent measuring stability and reliability**
- Measurement of low flow rates:
  **Increased cost effectiveness**

## Properties

- NSF/ANSI 61-G & 372 certified and marked
- NTEP Approval CC 19-019A2
- UL2043 plenum rating for products installed in air-handling spaces
- Meets AWWA C712 accuracy standards in horizontal and vertical position
- Sealed register for tamper resistance
- Meter with high accuracy and durability
- Encoder Output – serial data interface to wired or wireless transmitting device

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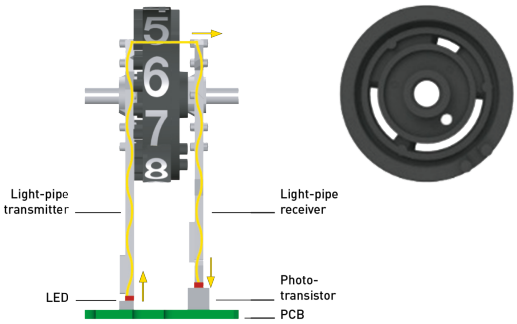
# Encoder-Technology

The well-established GWFcoder®-system reads the absolute mechanical register value precisely and reliably and provides the data through standardized serial interfaces. The number wheels with three various long, asymmetrically arranged slots are being scanned through light pipes which are connected to five light emitting diodes (LED). Thus, the exact position of each number wheel can be detected and the encoded absolute register read can be transmitted as part of the M-Bus protocol. This functioning principle is patented by GWF. The GWFcoder®-interface provides an incomparably higher level of information compared to meters with pulse output.

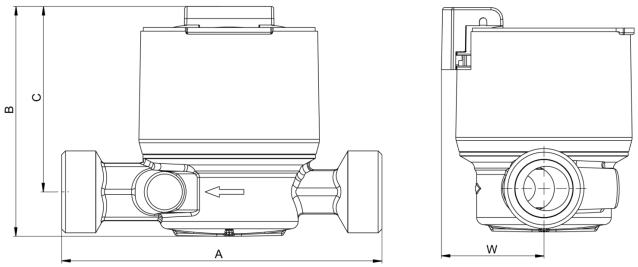



| Meter absolut Encoder readout | |
|---|---|
| Absolute meter reading | 1236542.1 US gallons |
| Serial number | 43215678 |
| Meter state | OK |
| Medium | Water |

## Installation

| | | |
|---|---|---|
| **Pipeline** | horizontal | — |
| | vertical up-flow / vertical down-flow | \| |
| **Meter head:** | facing up | ↑ |
| | sideways | ←→ |

## Dimension Diagram




| Dimensions and weights | | | |
|---|---|---|---|
| **Length without couplings** | **A** | **Inch** | **5.12** |
| Height | B | Inch | 3.7 |
| Height from pipe centre line | C | Inch | 3.0 |
| Installation depth from pipe centre line | W | Inch | 1.7 |
| Weight without couplings | | lbs | 1.57 |

# Technical Data

| Specifications | |
|---|---|
| Max flow rate | 22 gpm |
| Nominal flow rate | 11 gpm |
| Min flow rate (+ 1,5/- 5 %) | 0.50 gpm |
| Max working pressure | 230 psi |
| Max working temp | 194°F |
| Nominal pipe size | ¾" |
| Connection on meter | 1" NPSM thread |
| Main case material | Brass |
| Encoder resolution | 1/10gal |
| Current consumption | max. 2 M-Bus Loads |
| Meter Output Encoder Wired M-Bus | EN 13757-2/-3 |
| Meter Output Encoder ECO (for radio modules) | EN 13757-3 |
| Standard transmission speed | 2400 baud |

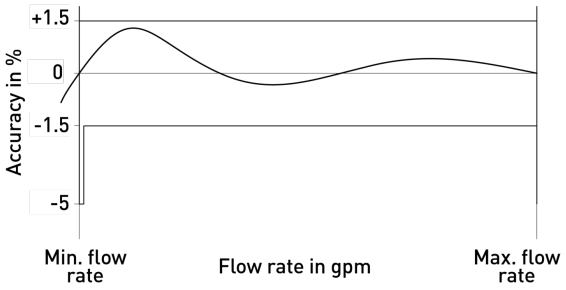
| Ambient conditions | |
|---|---|
| Permissible ambient temperature UNICOcoder® MP | +41°F to +131°F |
| Transport & Storage temperature | -4 °F to + 158 °F |
| Register protection class | IP67 or IP68 |

| Approval | Unico2coder MP |
|---|---|
| NTEP cold/hot 33° - 156.7°F No. CC 19-019A2 | ■ |
| New York Certificate No. 10766 | ■ |
| UL2043 | ■ |

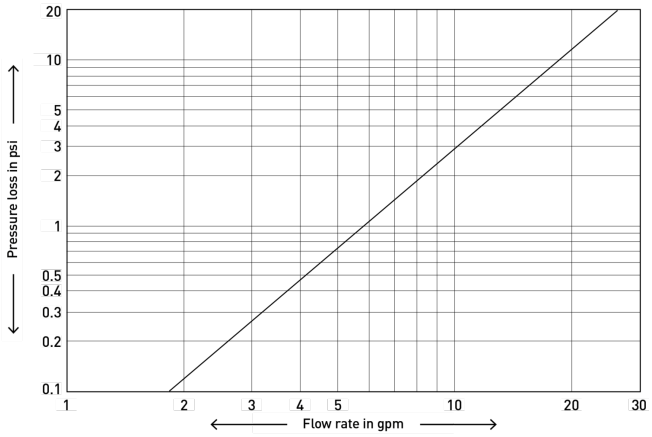
| Certifications | Unico2coder MP |
|---|---|
| NSF/ANSI 61-G & 372 D.Hot / incl. cold | ■ |

Certified to NSF/ANSI 61-G & 372

## Accuracy chart




## Pressure loss chart




## Comparison «absolute meter reading» vs. pulse

**GWFcoder® technology:**

Transfers the effective meter reading. The read-out value in the billing system and the invoice are the same as the meter reading.

**Pulse transfer:**

The potential sources of error for a reproduced meter reading with pulse transmission are:

- Bouncing
- Backflow water
- Temporary signal interruption
- Double pulses
- Incorrect pulse value

The readout value in the billing system and the invoice may differ from the meter reading leading to diminished revenue stream.