

MT cold NTEP

Multijet domestic water 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
- Long service life, robust domestic water meter:
Excellent measuring stability and reliability
- Measurement of low flow rates:
Increased cost effectiveness

Properties

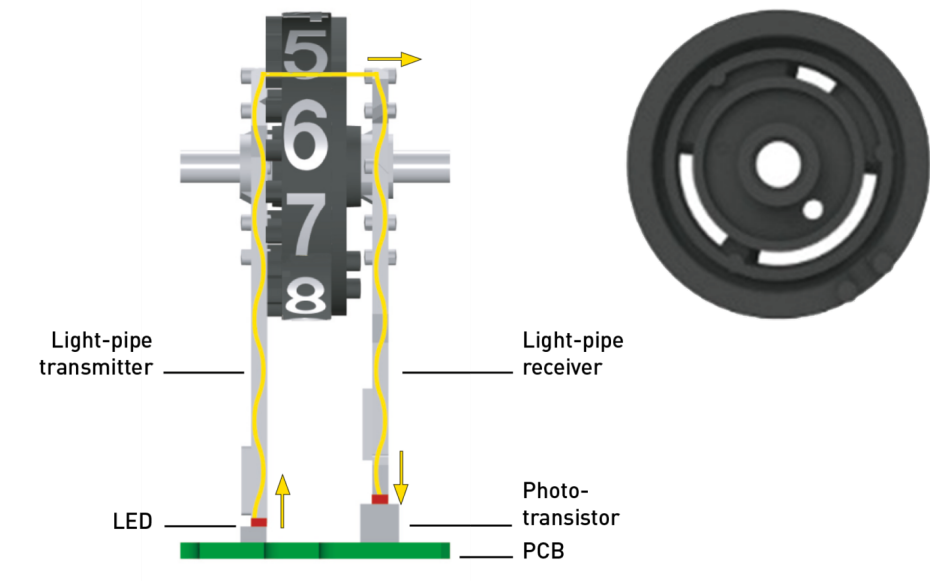
- NSF/ANSI 61-G & 372 certified and marked
- NTEP Approval CC 21-096A1
- UL2043 plenum rating for products installed in air-handling spaces
- Meets AWWA C708 accuracy standards in horizontal position
- Sealed register for tamper resistance
- Meter with high accuracy and durability
- Protection class IP68 with 16.4 ft cable
- Encoder Output – serial data interface to wired or wireless transmitting device

Specifications

	1"	1½"
Max. flow rate	55 gpm	88 gpm
Max. continuous flow rate	44 gpm	70 gpm
Min. flow rate (+/- 3 %)	0.75 gpm	1.5 gpm
Max. working pressure	230 psi	230 psi
Max. working temp.	122 °F	122 °F
Nominal pipe size	1"	1½"
Connection on meter	1¼" NPSM thread	2" NPSM thread
Main case material	Brass	Brass
Encoder resolution	1/10 gal	1/10 gal

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

Technical Data

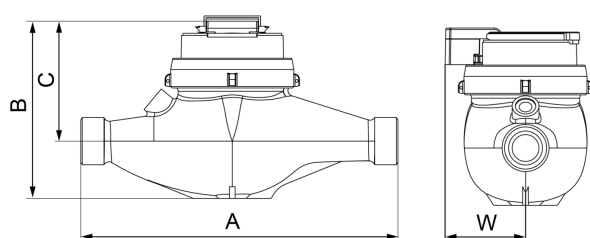
Dimensions and weights			1"	1"	1½"
Length without couplings	A	Inch	10.24	10.75	11.81
Meter height with lid	B	Inch	5.31	5.31	6.30
Meter height with lid from pipe centre line	C	Inch	3.58	3.58	4.49
Installation depth with lid from pipe centre line	W	Inch	2.24	2.24	2.68
Meter height with open lid	G	Inch	7.20	7.20	8.19
Weight without couplings		lbs	5.73	5.90	11.91
Permissible ambient temperature			+ 41 °F to + 131 °F		
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		
Register protection class			IP68		
Cable length			16.4 ft		

Approval	MTK3coder MP
NTEP cold No. CC 21-096A1	■
New York Certificate No. 10767	■

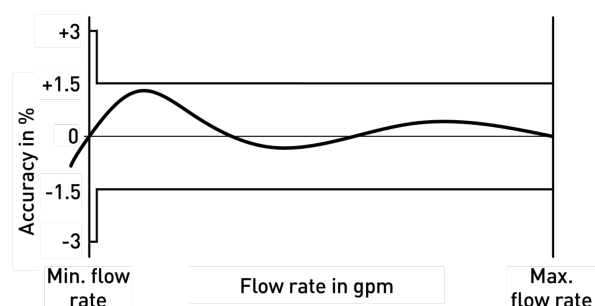
Certifications	MTK3coder MP
NSF/ANSI 61-G & 372 D.Hot / incl. cold	■



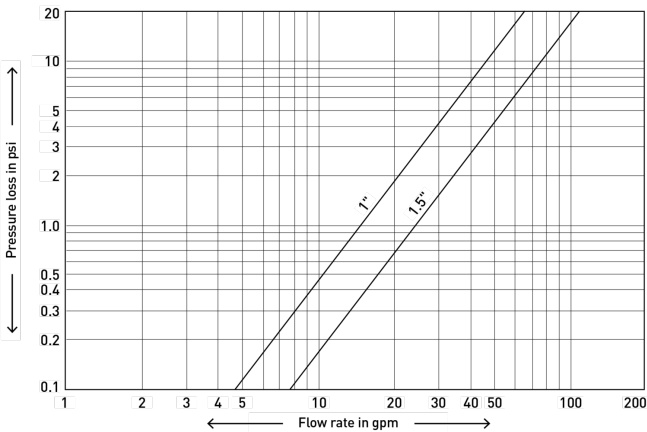
Dimension Diagram



Accuracy chart



Pressure loss chart



Installation

Pipeline	horizontal	—
Meter head	facing up	↑

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.

	Register	Interface	Billing/MDM	Revenue
Encoder register		 Index transferral Serial data	 7519619.6	
Pulse register		 Pulse counting	 7508260.2	