# MÄTARKONTROLL



# Our strength: Your benefit

- Mechanical roller register with 1-litreresolution:
  - 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

# UNICOcoder® MP

Singlejet consumption meter with M-Bus interface EN 13757-2 for cold water up to 30°C / 50°C DN 15, 20

#### **Features**

- Singlejet dry-dial meter with magnetic coupling
- 8 dial resolution with 3 comma place
- Register can be turned for best readout position
- Maximum operating pressure PN 16 bar
- Maximum operating temperature 30°C / 50°C
- Horizontal or vertical installation
- High grade wear resistant and corrosion proof materials
- Inlet strainer
- Recyclable execution
- **C** € Conformity according to European Measuring Instruments (MID)
- Serial M-Bus-Interface to EN 13757-2 and M-Bus-Protocol EN 13757-3
- Power is provided from the M-Bus central
- Connecting cable, standard length 1,5m

# **Application**

- Residential consumption monitoring of water consumption within an entire building
- Water meter with M-Bus data communication

# **Options**

- M-Bus peripheral devices
- 1" NPSM connection thread on meter



## GWFcoder®-Technology

#### The 2<sup>nd</sup> generation

The well-established GWFcoder®-system reads the absolute mechanical register value precisely and reliably and provides the data through standardized 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.

GWF enhanced the reliable technology in its  $2^{nd}$  generation, so that 8 instead of 5 number wheels are being scanned and therefore a resolution of 1 liter is possible.

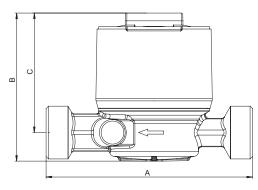
Documentation: HRE-CH - EPe10125

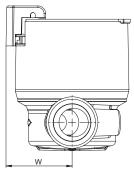
### Installation

Pipeline: horizontal vertical |

**Meter head:** upwards ↑ sideways ← →

# **Dimension Diagram**





## **Technical Data**

DN	mm	15	20	20	20
PN	bar	16	16	16	16
GB	Inch	3/4	1	1	1
R	Inch	1/2	3/4	3/4	3/4
Q <sub>3</sub>	m³/h	2,5	2,5	2,5	4
Q <sub>4</sub>	m³/h	3,125	3,125	3,125	5
Q <sub>2h</sub>	l/h	50	50	50	80
Q <sub>2v</sub>	l/h	100	100	100	160
Q <sub>1h</sub>	l/h	31,3	31,3	31,3	50
Q <sub>1v</sub>	l/h	62,5	62,5	62,5	100
	m³/h	3	3	3	5
	max. °C	30/50	30/50	30/50	30/50
		R80	R80	R80	R80
		R40	R40	R40	R40
	PN GB R Q3 Q4 Q2h Q2v Q1h	PN bar GB Inch R Inch Q3 m³/h Q4 m³/h Q2h l/h Q2v l/h Q1h l/h Q1v l/h m³/h	PN bar 16 GB Inch 3/4 R Inch 1/2 Q3 m³/h 2,5 Q4 m³/h 3,125 Q2h I/h 50 Q2v I/h 100 Q1h I/h 31,3 Q1v I/h 62,5 m³/h 3 max. °C 30/50 R80	PN bar 16 16 GB Inch 34 1 R Inch 1/2 3/4 Q3 m³/h 2,5 2,5 Q4 m³/h 3,125 3,125 Q2h I/h 50 50 Q2v I/h 100 100 Q1h I/h 31,3 31,3 Q1v I/h 62,5 62,5 m³/h 3 3 max. °C 30/50 880	PN bar 16 16 16 GB Inch 3/4 1 1 R Inch 1/2 3/4 3/4 Q3 m3/h 2,5 2,5 2,5 Q4 m3/h 3,125 3,125 3,125 Q2h I/h 50 50 50 Q2v I/h 100 100 100 Q1h I/h 31,3 31,3 31,3 Q1v I/h 62,5 62,5 62,5 m3/h 3 3 3 max. °C 30/50 880 R80

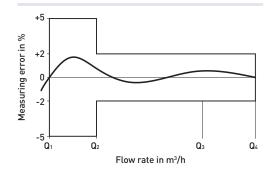
Dimensions and weights						
Length without couplings	Α	mm	110	110	130	130
Length with couplings		mm	184	202	222	222
Height	В	mm	94	94	94	94
Height from pipe centre line	С	mm	76	76	76	76
Installation depth from pipe centre line	W	mm	43	43	43	43
Weight without couplings		app. g	690	720	770	710
Weight with couplings		app. g	830	950	1000	940

Permissible ambient temperature UNICOcoder®MP	+5°C to +55°C
Current consumption	max. 2 M-Bus Loads
M-Bus-Interface / -Protocol	EN 13757-2/-3
Standard transmission speed	2400 baud (optional 300 baud)
Register protection class	IP67

Certifications				
UBA brass	x	х	Х	Х
KTW / W270	x	х	х	Х
NSF-61-G	-	-	X <sup>1]</sup>	-
WRAS	x	-	х	х

<sup>1)</sup> only 1"NPSM execution

# Measuring error curve



# Typical Head Loss Curve

