MTWe - MI-001 - 915 MHz

Multijet meter

Your benefits

- Utility grade and sustainable technology (robust & high grade wear resistant materials with brass body):
  Excellent measuring stability and reliability over meter lifetime and awareness of using a recyclable product
- NFC Tap and go
  Simple commissioning process
- Plug & Play:
  Easy and fast on-site installation with automatic radio activation (no programming required)
- Performance driven design:
  Range up to 10 miles (line of sight)
- Integrated monitoring of connectivity and reconnecting mechanism:
  Robust operation with automatic repair options, e.g. due to gateway failures

Applications

- Multi-Family residential and Retail/Commercial applications for consumption monitoring of water and identification of critical events

Properties

- Multijet dry-dial meter with magnetic coupling
- Measuring range R80
- Horizontal installation
- Maximum operating pressure 16 bar
- Maximum operating temperature 90 °C
- Typical battery lifetime up to 15 years
- 18 monthly volume key date values
- CE Conformity according to European Measuring Instruments (MID)
- NSF/ANSI 61-G & 372 certified and marked
- LoRaWAN transmission in license free 915 MHz frequency band
- Data security via AES-128-bit end-to-end encryption over 2 independent security layers
- ADR (adaptive data rate) support gives higher transmission intervals with consistent battery life

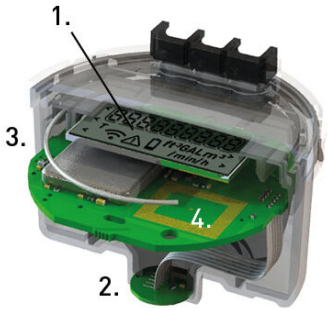
GWF AG
Obergrundstrasse 119
6005 Lucerne, Switzerland

T +41 41 319 50 50
info@gwf.ch, www.gwf.ch

Technical support:
T +41 41 319 52 00, support@gwf.ch

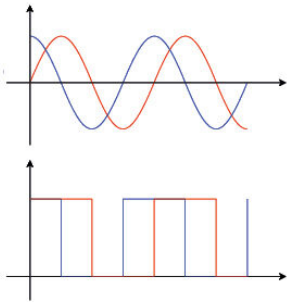
Last updated: 06.06.2025
Generated: 09.06.2026 23:51 | All rights reserved

Electronic Register - Hybrid - Technology



(1) LCD
(2) Sensors
(3) Communication antenna
(4) NFC interface

Signal Processing:



- The ERH register is designed to detect the rotations of either two or four-pole magnets. Its electronic filter protects it from external magnetic disturbances, while two sensors filter and digitally convert the magnetic field.
- A highly efficient microcontroller is responsible for determining the rate and direction of flow while also having the capability to detect a range of events and alarms, such as backflow. Furthermore, the LCD display allows for maximum flexibility when viewing the measurement data.
- Lastly, the ERH register is fitted with an energy-saving, access-protected NFC interface for parameterization and activation, as well as a wireless communication transceiver for LoRaWAN 915 MHz.

Generated: 09.06.2026 23:51 | All rights reserved

Technical Data

Nominal diameter	**DN**	**mm**	**25**	**40**
Operating pressure	**PN**	**bar**	**16**	**16**
Connection thread on meter (NPSM)		Inch	1¼	2
Nominal flow rate	**Q_3**	**m^3/h**	**6,3**	**16**
Overload flow rate	Q_4	m^3/h	7,875	20
Transitional flow rate ± 3 %	Q_2	m^3/h	0,126	0,32
Minimum flow rate ± 5 %	Q_1	m^3/h	0,079	0,2
Smallest readable value		l	1	1
Max. register reading		m^3	1'000'000	1'000'000
Temperature		max. °C	90	90
Measuring range			R80	R80

Dimensions and weights				
Length without couplings	A	mm	260	300
Height	B	mm	135	160
Height from pipe centre line	C	mm	91	114
Installation depth from pipe centre line	W	mm	50	68
Weight without couplings		kg	2,6	5,2

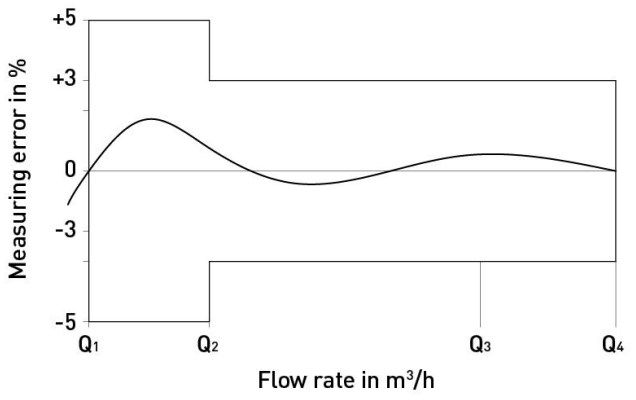
Ambient conditions	
Ambient temperature	+ 5 °C to + 55 °C
Transport & Storage temperature	- 20 °C to + 70 °C
Register protection class	IP67

Power supply	
Lithium/Mangan battery (not replaceable)	3 V DC
Typical battery lifetime (depending on environment and configuration conditions)	Up to 15 years

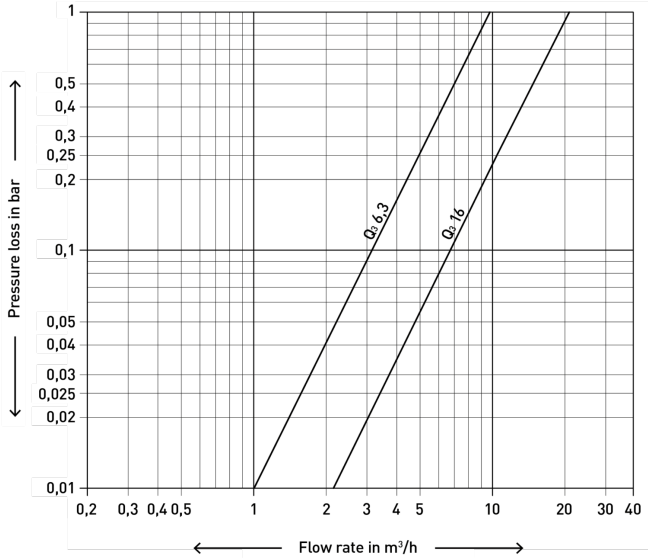
Approval	**MTW3e**
MI-001 No. CH-MI001-07005	■
IC: 28165-ERH	■

Certifications	MTW3e
NSF/ANSI 61-G & 372 D.Hot / incl. cold	■
LoRa Alliance Certification (1.0.4 spec.)	■

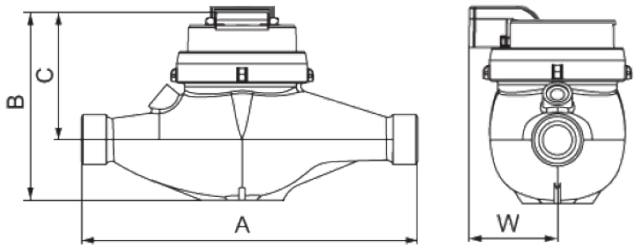
Measuring error curve



Typical Head Loss Curve



Dimension Diagram



Installation

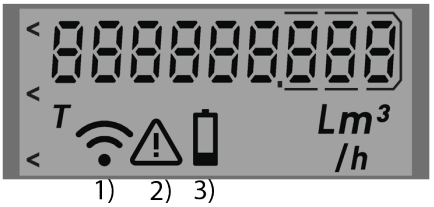
Pipeline: horizontal

Meter head: facing up

Generated: 09.06.2026 23:51 | All rights reserved

Display, LoRaWAN specifications, data package

Display	
LCD	9 digits
Volume unit	m^3
Volume resolution	0.001 m^3
Flow rate unit	m^3/h or L/h
Test mode	T
Low battery Icon	see image 3)
Alarm Icon	see image 2)
Radio indicator (On/Off) and LoRaWAN connectivity status	see image 1)



LoRaWAN specifications	
Regional parameters (Frequency band)	US902-928 MHz ISM Band (902 - 928 MHz)
Transfer protocol (payload)	GWF specific
Radiated power	max. 20 dBm (100 mW)
Class	A
ADR (Adaptive data rate)	Yes
Activation type (LoRaWAN)	OTAA

Information data package	
DevEUI	70B3D538700000AB
Meter manufacturer	GWF
Medium	Warm water
Meter S/N	23132356
Absolute meter reading (down to 15 min values)	359.761 m^3
Remaining battery life	Semester
Alarms	Meter alarms, Low Battery, Burst pipe, Potential leak, Backflow, No Usage, Max. flow rate exceeded, Min./Max. temperature