

Product Description

The NCMW40 is the ultrasonic water meter designed to measure consumption of hot and cold water. The meter comes with standard M-Bus connectivity and is applicable residential and commercial use alike.

Selectable communication options include M-Bus (default), WM-Bus, and LoRa IoT.

The DN40 sized meter has threaded end connections of G2" or flanged connection of DN40. The meter is also available for various flow rates and other pipe sizes between DN15-DN100.

The meter comprises of an ultrasonic flow sensor & M-Bus connectivity unit, and is MID type approved and complies to EN 14154.

Application

The NCMW40 range of water meters finds application within district cooling systems, homes, offices as well as industry application.

Approvals

MID type approval. Compliance to the standard EN1434.

Interfaces

- ▶ M-Bus / WM-Bus / Pulse Output / IoT (LoRa) / Optical.
- ▶ The optical interface is integrated into the front panel of the calculator & is designed for data reading via M-Bus protocol & parameterization of the meter.

Features and Benefits

- ▶ Ultrasonic Water Meter
- ▶ Highly Accurate Water Flow Measurement
- ▶ M-Bus connectivity
- ▶ MID approved
- ▶ Mounting in any installation position
- ▶ Available in various flow rates and pipe sizes

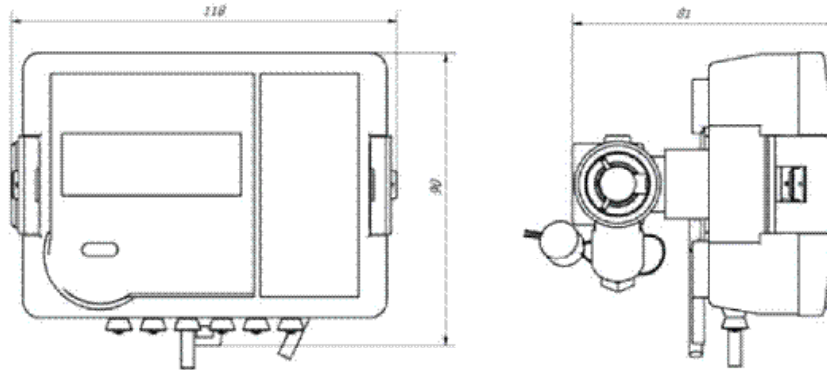
Technical Information

Approval	MID compliance with EN14154
Q3 (nominal flow)	10.0 / 16.0 m ³ /h
Dynamic Range R	250/400
DN	40
Joining the pipeline	G2" (thread), DN40 (flanged)
Mounting Length	300 mm (see table)
Flow Sensor	Ultrasonic
Medium Temperature	0.1 ... 90°C
Nominal Pressure	PN16/25 Bar
Pressure Loss	0.63 / 0.25 Bar
Protection Class	IP65 (calculator), IP67 (flow sensor)
Environment Protection	Class B / EN 14154
Ambient Temperature	0 ... 65°C
Power Supply	Battery (default) / External (optional)
Battery Lifetime	> 12 years
Calculator Dimensions	117mm x 44mm x 89.5mm
Mounting	In any installation position
Calculator Mounting	On meter body or separately on standard DIN rail

Nominal Flow Parameters

Meter Type	Flow Rate Q3, m ³ /h	Overall length (mm)	Joining the pipeline
NCMW40-10.0	10.0	300	G2"
NCMW40FL-10.0	10.0	300	DN40FL
NCMW40-16.0	16.0	300	G2"
NCMW40FL-16.0	16.0	300	DN40FL

Dimensions



	15	20	25	40	50	65	80	100
L (mm)	110	130 / 190	260	300	270	300	300	360
H (mm)	81	85	123 / 134	141 / 163	167	190	200	235
G (Thread) corr. DN (Flange)	G $\frac{3}{4}$	G1" DN20	G1 $\frac{1}{4}$ " DN25	G2" DN40	DN50	DN65	DN80	DN100

Power Supply

Power Supply (one of the following - depending on meter configuration)

- ▶ AA battery 3.6V 2.5Ah (Li-SOC12) battery, operation time at least 11 years
- ▶ 12 to 42 V DC or 12 to 36V 50/60 Hz AC external power supply, used current 10mA and back up battery AA 3.6V (Li SOC12), operation time at least 11 years (without reading data through digital interfaces)
- ▶ 230V (+10% - 30%) 50/60 Hz C power supply, current consumption is not more than 10mA, the meter should be equipped with external power supply unit and an external transformer

LCD Indicator

- ▶ The device is equipped with 8 digit Liquid Crystal Display (LCD) with special symbols to display parameters, measurement units and operation modes
- ▶ The following information can be displayed
 - ▶ integral and instantaneous measured parameters
 - ▶ archive data and set day data
 - ▶ device configuration information
- ▶ Programmable LCD displaying parameters



Data Logger - History Values

- ▶ Every hour, day and month values of the measured parameters are stored in internal memory
- ▶ All data from archive can be read by means of the remote reading
- ▶ In addition, the data logger records of monthly parameters can be seen on the display

Wired M-Bus Interface

- ▶ The internal M-Bus module provides data reading possibility via M-Bus protocol

Ordering Codes

Water Meters M-Bus

NCMW40 - 10.0	Ultrasonic water meter M-Bus, 10.0 m ³ /h, DN40, G2, 300mm
NCMW40FL - 10.0	Ultrasonic water meter M-Bus, 10.0 m ³ /h, DN40 flanged, 300mm
NCMW40 - 16.0	Ultrasonic water meter M-Bus, 16.0 m ³ /h, DN40, G2, 300mm
NCMW40FL - 16.0	Ultrasonic water meter M-Bus, 16.0 m ³ /h, DN40 flanged, 300mm

Water Meters (Ultrasonic) WM-Bus (Wireless)

NCMW 40W-10.0	Ultrasonic water meter WM-Bus, 10.0 m ³ /h, DN40, G2, 300mm
NCMW 40W-16.0	Ultrasonic water meter WM-Bus, 16.0 m ³ /h, DN40, G2, 300mm
NCMW 40WFL-10.0	Ultrasonic water meter WM-Bus, 10.0 m ³ /h, DN40 flanged, 300mm
NCMW 40WFL-16.0	Ultrasonic water meter WM-Bus, 16.0 m ³ /h, DN40 flanged, 300mm

Water Meters (Ultrasonic) LoRa

NCMW 40L-10.0	Ultrasonic water meter LoRa, 10.0 m ³ /h, DN40, G2,300mm
NCMW 40L-16.0	Ultrasonic water meter LoRa, 16.0 m ³ /h, DN40, G2,300mm
NCMW 40LFL-10.0	Ultrasonic water meter LoRa, 10.0 m ³ /h, DN40 flanged, 300mm
NCMW 40LFL-16.0	Ultrasonic water meter LoRa, 16.0 m ³ /h, DN40 flanged, 300mm