

## Product Description

The NCMW100 is an ultrasonic water meter designed to measure consumption of hot and cold water. The meter comes with standard MBus connectivity and is applicable for residential and commercial use alike.

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

The DN100 sized meter has a flanged connections of DN100 and is available for various flow rates and other pipe sizes between DN15-DN100.

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

## Application

The NCMW100 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

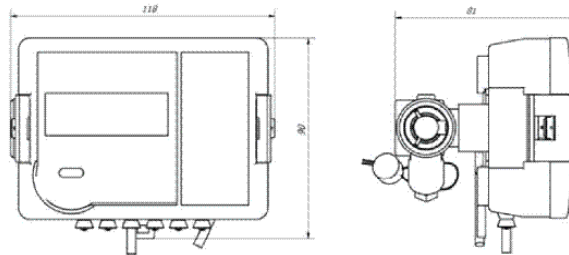
## Technical Information

<b>Approval</b>	MID type approved. Compliance with EN1434
<b>Q3 (nominal flow)</b>	63.0 / 100.0 m <sup>3</sup> /h
<b>Dynamic Range R</b>	250/400
<b>DN</b>	100
<b>Joining the pipeline</b>	DN100 (flanged)
<b>Mounting Length</b>	350.36 mm (see table)
<b>Flow Sensor</b>	Ultrasonic
<b>Medium Temperature</b>	0.1°C to 90°C
<b>Nominal Pressure</b>	PN16/25 Bar
<b>Pressure Loss</b>	0.63 / 0.25 Bar
<b>Protection Class</b>	IP65 (calculator), IP67 (flow sensor)
<b>Environment Protection</b>	Class B / EN 14154
<b>Ambient Temperature</b>	0°C to 65°C
<b>Power Supply</b>	Battery (default) / External (optional)
<b>Battery Lifetime</b>	> 12 years
<b>Calculator Dimensions</b>	117mm x 44mm x 89.5mm
<b>Mounting</b>	In any installation position
<b>Calculator Mounting</b>	On meter body or separately on standard DIN rail

## Nominal Flow Parameters

Meter Type	Flow Rate Q3, m3/h	Overall length (mm)	Joining the pipeline
NCMW100FL-63	63	350	DN100FL
NCMW100FL-100	100	350	DN100FL

## Dimensions



	15	20	25	40	50	65	80	100
<b>L (mm)</b>	110	130 / 190	260	300	270	300	300	360
<b>H (mm)</b>	81	85	123 / 134	141 / 163	167	190	200	235
<b>G (Thread) corr. DN (Flange)</b>	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

# NCMW100

## Ultrasonic Water Meters

### Ordering Codes

#### Water Meters, M-Bus

NCMW 100FL-63.0	Ultrasonic water meter M-Bus, 63.0 m <sup>3</sup> /h, DN100 flanged, 350mm
NCMW 100FL-100.0	Ultrasonic water meter M-Bus, 100.0 m <sup>3</sup> /h, DN100 flanged, 350mm

#### Water Meters, (Ultrasonic) WM-Bus (Wireless)

NCMW 100WFL-63.0	Ultrasonic water meter WM-Bus, 63.0 m <sup>3</sup> /h, DN100flanged, 350mm
NCMW 100WFL-100.0	Ultrasonic water meter WM-Bus, 100.0 m <sup>3</sup> /h, DN100 flanged, 350mm

#### Water Meters, (Ultrasonic), LoRa

NCMW 100LFL-63.0	Ultrasonic water meter LoRa, 63.0 m <sup>3</sup> /h, DN100 flanged, 350mm
NCMW 100LFL-100.0	Ultrasonic water meter LoRa, 100.0 m <sup>3</sup> /h, DN100 flanged, 350mm