Water Meters Flow measuring instrument for water use

NWM Water Meter

The **NWM Water Meter** is a device for measuring flow in water applications.

The **NWM** water meter has a pulse output for connection to LORENTZ pump controllers.

The water meter is used in applications where measured flow and water volume values are required.

The **NWM Water Meter** is suitable for applications with a pipe size of DN25 and DN32.

The NWM Water Meter contains a special sealed liquid which is separate from the flow water to maximize readability, avoid fogging and avoid scaling.

Characteristics

- All materials in contact with water are corrosion resistant.
- Five (5) digit mechanical display showing total liquid in 1m3 increments.
- Reed switch output which can be connected to PS2 and PSk controllers.
- Easy to install.

Technical Data

- Water temperature max. 50°C
- Water pressure: max. 16 bar
- Reed switch positioned on the x0,001 dial pointer: 10 l/imp.
- Reed Switch cable length: 1,45m
- IP64
- CE Conformity





Flow rate characteristics

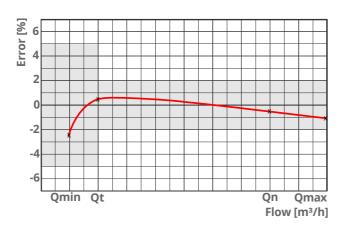
| Flow | DN25 | DN32 | |
|---|-------|-------|--|
| Max. flow rate: Q _{max} [m³/h] | 7,87 | 12,5 | |
| Nominal flow rate: Q _n [m³/h] | 6,3 | 10 | |
| Transition flow rate: Q _t [m³/h] | 0,063 | 0,1 | |
| Minimum flow rate: Q _{min} [m³/h] | 0,036 | 0,062 | |

Reed switch impulse data output

| Reed switch impulse | | | | | |
|-------------------------------------|----|--|--|--|--|
| Water meter size Liters per impulse | | | | | |
| DN25 | 10 | | | | |
| DN32 | 10 | | | | |

Accuracy Curve

The Accuracy curve shows the deviation in percent error for different flow rates. In regular operation the deviation is between -2% and +2%.



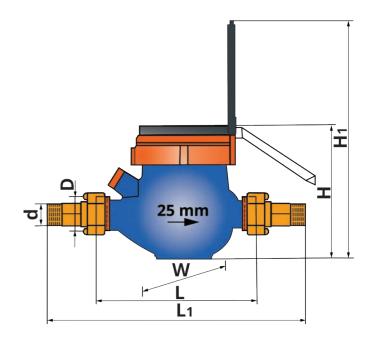
Water Meters

Flow measuring instrument for water use

NWM Water Meter

Dimensions and weights

| Description | DN25 | DN32 |
|-----------------|---------|---------|
| L [mm] | 260 | 260 |
| L1 [mm] | 380 | 384 |
| D [mm] | G1-1/4B | G1-1/2B |
| d [mm] | R1 | R1-1/4 |
| H [mm] | 117,5 | 117,5 |
| H1 [mm] | 206,5 | 206,5 |
| W [mm] | 98 | 98 |
| Net Weight [kg] | 2,6 | 3,1 |
| | | |



Order information

| Item number | Description |
|-------------|-----------------------------------|
| 19-002220 | Water meter, NWM-DN25, 0.01 cbm/p |
| 19-002225 | Water meter, NWM-DN32, 0.01 cbm/p |

Packaging information

| Description | 19-002220 | 19-002225 |
|------------------------|-------------|-------------|
| Dimension [LxWxH] [mm] | 310x280x250 | 310x280x250 |
| Gross Weight [Kg] | 3,5 | 3,9 |
| Volume [m³] | 0,022 | 0,022 |
| | | |

Water Meters Flow measuring instrument for water use

WP Water Meter

The WP Water Meter is a turbine type magnetic transmission instrument intended to measure high flow rates in water applications.

Water meters should be used in cases where accurate measurement of water volume is required.

WP Water Meters cover a wide flow range and are designed to handle high flow rates. They are suitable for applications with a pipe size from DN50 to DN200.

The helical blades of the turbine rotate around the axis of the flow. The magnetic transmission keeps the register separate from water, meaning only the impeller and transmission shaft contact water.

Characteristics

- Removable and interchangeable measuring element.
- Hermetically sealed dry type register.
- Reed switch output which can be connected to PS2 and PSk controllers using LORENTZ CONNECTED applications.
- Easy to install.

Technical Data

- Water temperature max. 40°C
- Water pressure: max. 16 bar
- Reed Switch cable length: 1,45m
- IP64
- CE Conformity





Flow rate characteristics

| Flow | DN50 | DN65 | DN80 | DN100 | DN125 | DN150 | DN200 |
|---|------|--------|--------|-------|-------|-------|-------|
| Max. flow rate: Q _{max} [m³/h] | 50 | 78,75 | 78,75 | 125 | 200 | 312,5 | 500 |
| Nominal flow rate: Q _n [m³/h] | 40 | 63 | 63 | 100 | 160 | 250 | 400 |
| Transition flow rate: Q _t [m³/h] | 0,8 | 1,26 | 1,26 | 2 | 3,2 | 5 | 8 |
| Minimum flow rate: Q _{min} [m³/h] | 0,5 | 0,7875 | 0,7875 | 1,25 | 2 | 3,12 | 5 |

Reed switch impulse data output

| Reed switch impulse | | | | | | |
|---------------------|--------------------|--|--|--|--|--|
| Water meter size | Litres per impulse | | | | | |
| DN50 | 100 | | | | | |
| DN65 | 100 | | | | | |
| DN80 | 100 | | | | | |
| DN100 | 100 | | | | | |
| DN125 | 100 | | | | | |
| DN150 | 1000 | | | | | |
| DN200 | 1000 | | | | | |

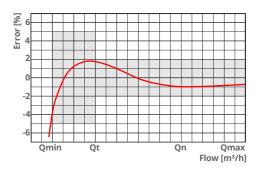
Water Meters

Flow measuring instrument for water use

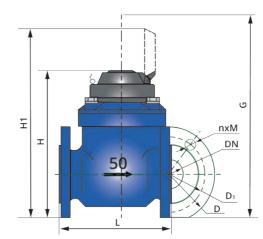
WP Water Meter

Accuracy Curve

The Accuracy curve shows the deviation in percent error for different flow rates. In regular operation the deviation is between -2% and +2%.



Dimensions and weights



| Description | DN50 | DN65 | DN80 | DN100 | DN125 | DN150 | DN200 |
|-----------------------------|-------|-------|-------|-------|-------|-------|--------|
| L[mm] | 200 | 200 | 225 | 250 | 250 | 300 | 350 |
| H [mm] | 252 | 262 | 272 | 282 | 297 | 341 | 371 |
| H1 [mm] | 339 | 349 | 359 | 369 | 384 | 428 | 458 |
| G [mm] [Maintaining height] | 400 | 400 | 400 | 400 | 400 | 500 | 500 |
| D [mm] | 165 | 185 | 200 | 220 | 250 | 285 | 340 |
| D1 [mm] | 125 | 145 | 160 | 180 | 210 | 240 | 295 |
| nxM [Connecting bolt qty] | 4xM16 | 4xM16 | 8xM16 | 8xM16 | 8xM16 | 8xM20 | 12xM20 |
| Weight [kg] | 12 | 13 | 15 | 16 | 21 | 33 | 42 |
| | | | | | | | |

Order and Packaging information

| 0.000 | | | | |
|----------------|----------------------------------|----------------------|---------------------------|----------------|
| Item number | Description | Gross Weight [Kg] | Dimension [LxWxH] [mm] | Volume [m³] |
| 19-002165 | Water meter, WP-DN50, 0.1 cbm/p | 15 | 280x230x320 | 0,021 |
| 19-002170 | Water meter, WP-DN65, 0.1 cbm/p | 16 | 290x230x330 | 0,022 |
| 19-002180 | Water meter, WP-DN80, 0.1 cbm/p | 17 | 280x240x350 | 0,023 |
| 19-002190 | Water meter, WP-DN100, 0.1 cbm/p | 20 | 320x260x350 | 0,029 |
| 19-002200 | Water meter, WP-DN125, 0.1 cbm/p | 25 | 340x310x390 | 0,041 |
| 19-002210 | Water meter, WP-DN150, 1 cbm/p | 38 | 370x340x420 | 0,053 |
| 19-002202 | Water meter, WP-DN200, 1 cbm/p | 49 | 415x390x435 | 0,070 |
| | | | | |