

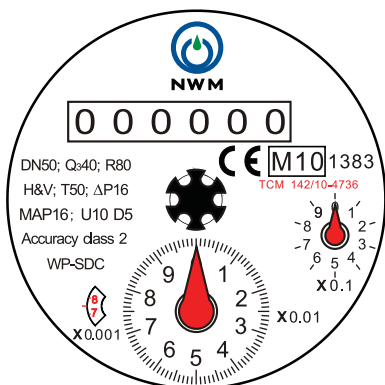
## EC Type Approval No.

CE **M10** 1383  
TCM 142/10-4736

## DN40~DN500 Flange Connecting



### Dial Plate (Dn50)



## WP-SDC Dn40 to Dn500 Copper Can Register

### Removable Element Woltman Cold Water Meter

It is a Removable Element Woltman water meter for industrial and irrigation application in sizes from Dn 40 mm to Dn500mm for cold meter.

#### Features

- Magnetic drive, lower transmission resistance.
- Super dry type with Copper can Register(IP68).
- Register may be rotated through 360°.
- The measuring mechanism can be removable from the body for checking, maintaining and replacing, no need to dismantle the body from the pipe.
- Low pressure loss, long working life.
- No effected by external magnetic fields.

#### Standards Compliance

- ISO 4064: 2005 / OIML R49

#### Optional Features (Pulse Emitter Pre-Equipment)

| Reed switch pulse              | A group signals for each |                 |                  |                   |
|--------------------------------|--------------------------|-----------------|------------------|-------------------|
|                                | X0.01                    | X0.1            | X1               | X10               |
| Positions of special pointer   |                          |                 |                  |                   |
| Water quantity for each circle | 0.1m <sup>3</sup>        | 1m <sup>3</sup> | 10m <sup>3</sup> | 100m <sup>3</sup> |
| DN40/50/65/80/100/125          | ◇                        | ◇               |                  |                   |
| DN150/200                      |                          | ◇               | ◇                |                   |
| DN250/300/350/400/500          |                          |                 | ◇                | ◇                 |

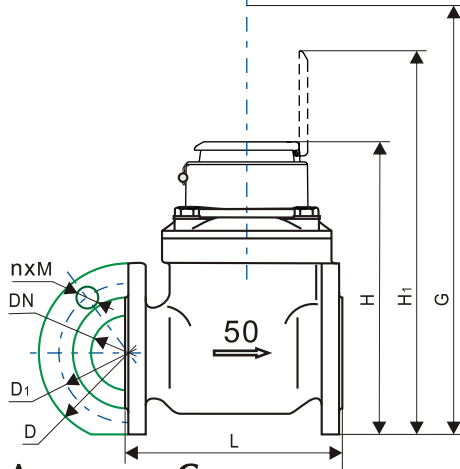
#### Working Conditions

- Water temperature : T50 or T30
- Water pressure: ≤ 1.6 MPa

#### Installation Requirements

- The meter can be installed in any position with the direction of the flow as indicated by the arrow cast in the meter body with the register face upwards.
- The meter must have 10 diameters straight pipe ahead of the meter and 5 diameters straight pipe after to insure proper flow through the meter.
- Pipeline must be flushed before installation.
- The meter should be constantly full of water during operation.

## Dimension Picture



## Technical Characteristics

### Dimensions and Weights for pressure rating PN10

| Nominal diameter         | DN                | 40    | 50   | 65   | 80    | 100  | 125  | 150   | 200  | 250    | 300 | 350    | 400 | 500    |
|--------------------------|-------------------|-------|------|------|-------|------|------|-------|------|--------|-----|--------|-----|--------|
| Length                   | mm L              | 260   | 200  | 200  | 225   | 250  | 250  | 300   | 350  | 450    | 500 | 500    | 600 | 800    |
| Height                   | mm H              | 249   | 252  | 262  | 272   | 282  | 297  | 341   | 368  | 488    | 511 | 560    | 630 | 737    |
| Working height           | mm H <sub>1</sub> | 321   | 339  | 349  | 359   | 369  | 384  | 428   | 455  | 575    | 598 | 598    | 713 | 813    |
| Height                   | mm G              | 360   | 400  | 400  | 400   | 400  | 400  | 500   | 500  | 710    | 730 | 730    | 830 | 930    |
| Outside diameter         | mm D              | 150   | 165  | 185  | 200   | 220  | 250  | 285   | 340  | 395    | 445 | 505    | 565 | 670    |
| Circle diameter          | mm D <sub>1</sub> | 110   | 125  | 145  | 160   | 180  | 210  | 240   | 295  | 350    | 400 | 460    | 515 | 620    |
| Connecting bolt quantity | nxM               | 4xM16 |      |      | 8xM16 |      |      | 8xM20 |      | 12xM20 |     | 16xM24 |     | 20xM24 |
| Meter weight             | Kg                | 12    |      | 13   | 16    | 18   | 20   | 42    | 64   | 94     | 114 | 199    |     | 340    |
| Body weight              | Kg                | 8.9   | 10.1 | 11.5 | 13.9  | 18.8 | 29.6 | 43    | 74.4 | 93     | 159 |        | 290 |        |

Note: The weight for reference.

### Dimensions and Weights for pressure rating PN16

| Nominal diameter         | DN                | 40    | 50  | 65  | 80    | 100 | 125 | 150   | 200    | 250    | 300 | 350    | 400    | 500    |
|--------------------------|-------------------|-------|-----|-----|-------|-----|-----|-------|--------|--------|-----|--------|--------|--------|
| Length                   | mm L              | 260   | 200 | 200 | 225   | 250 | 250 | 300   | 350    | 450    | 500 | 500    | 600    | 800    |
| Height                   | mm H              | 225   | 252 | 262 | 272   | 282 | 297 | 341   | 371    | 489    | 516 | 560    | 647    | 785    |
| Working height           | mm H <sub>1</sub> | 303   | 339 | 349 | 359   | 369 | 384 | 428   | 458    | 576    | 603 | 603    | 723    | 838    |
| Height                   | mm G              | 360   | 400 | 400 | 400   | 400 | 400 | 500   | 500    | 710    | 730 | 730    | 830    | 930    |
| Outside diameter         | mm D              | 150   | 165 | 185 | 200   | 220 | 250 | 285   | 340    | 405    | 460 | 520    | 580    | 715    |
| Circle diameter          | mm D <sub>1</sub> | 110   | 125 | 145 | 160   | 180 | 210 | 240   | 295    | 355    | 410 | 470    | 525    | 650    |
| Connecting bolt quantity | nxM               | 4xM16 |     |     | 8xM16 |     |     | 8xM20 | 12xM20 | 12xM24 |     | 16xM24 | 16xM27 | 20xM30 |

### Available length for selecting

| Nominal diameter | For Selecting Length (L) | mm  |
|------------------|--------------------------|-----|
| DN40             | mm                       | 300 |
| DN50             | mm                       | 250 |
| DN65             | mm                       | 250 |
| DN80             | mm                       | 300 |
| DN100            | mm                       | 360 |
| DN150            | mm                       | 430 |
| DN400            | mm                       | 500 |
| DN500            | mm                       | 500 |

### Performance data according to EC-Type Approval (ISO 4064: 2005)

| Nominal diameter     | DN                               | 40    | 50  | 65     | 80     | 100  | 125 | 150   | 200 | 250   | 300  | 350  | 400  | 500   |  |
|----------------------|----------------------------------|-------|-----|--------|--------|------|-----|-------|-----|-------|------|------|------|-------|--|
| Maximum flow rate    | m <sup>3</sup> /h Q <sub>4</sub> | 31.25 | 50  | 78.75  | 78.75  | 125  | 200 | 312.5 | 500 | 787.5 | 1250 | 1250 | 2000 | 3125  |  |
| Nominal flow rate    | m <sup>3</sup> /h Q <sub>3</sub> | 25    | 40  | 63     | 63     | 100  | 160 | 250   | 400 | 630   | 1000 | 1000 | 1600 | 2500  |  |
| Transition flow rate | m <sup>3</sup> /h Q <sub>2</sub> | 0.8   | 0.8 | 1.26   | 1.26   | 2    | 3.2 | 5     | 8   | 12.6  | 20   | 20   | 32   | 50    |  |
| Minimum flow rate    | m <sup>3</sup> /h Q <sub>1</sub> | 0.5   | 0.5 | 0.7875 | 0.7875 | 1.25 | 2   | 3.125 | 5   | 7.785 | 12.5 | 12.5 | 20   | 31.25 |  |
| Measuring range      | R                                | 50    |     |        |        |      |     |       |     |       |      |      |      |       |  |

### Description of the Register

| Nominal diameter                | DN40/50/65/80/100/125 | DN150/200  | DN250/300/350/400/500 |
|---------------------------------|-----------------------|------------|-----------------------|
| Number of black numbered roller | 6                     | 6          | 6                     |
| Number of red numbered roller   | 0                     | 0          | 0                     |
| Number of black pointer         | 0                     | 1          | 2                     |
| Number of red pointer           | 3                     | 2          | 1                     |
| Maximum reading                 | m <sup>3</sup>        | 999999.999 | 9999999.99            |
| Minimum reading                 | m <sup>3</sup>        | 0.0005     | 0.005                 |

### Maximum Permissible Error

When water temperature Class is T30:

In the lower zone from Q<sub>1</sub> inclusive up to but excluding Q<sub>2</sub> is ± 5% .

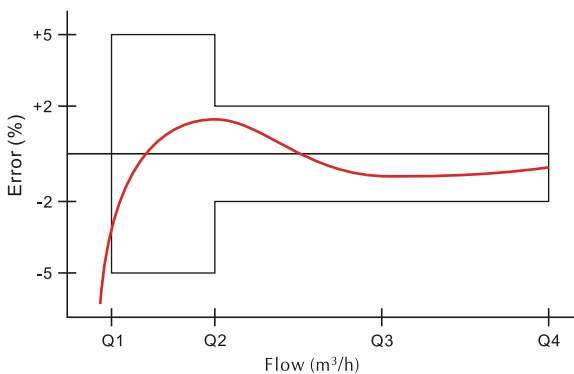
In the upper zone from Q<sub>2</sub> inclusive up to and including Q<sub>4</sub> is ± 2% .

When water temperature Class is T50:

In the lower zone from Q<sub>1</sub> inclusive up to but excluding Q<sub>2</sub> is ± 5% .

In the upper zone from Q<sub>2</sub> inclusive up to and including Q<sub>4</sub> is ± 3% .

## Accuracy Curve



## Head Loss Curve

