

# WST Bayonet

Arad



The WST Bayonet water meter (successor to the WST) operates according to the Woltman principle and is extremely reliable with limited susceptibility to wear caused by contaminated water. The propeller is the only moving part that comes into contact with the water. This model comes with a bayonet connection for its registers, which makes register replacement more easy.

## APPLICATION

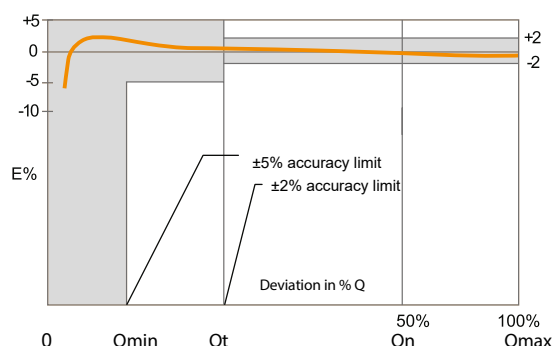
Grid water supply, agricultural and industrial applications

## CHARACTERISTICS

- ✓ Improved hydraulic performance
- ✓ Wide measuring range for various applications
- ✓ Resistant to humidity
- ✓ Easy to open for the replacement of parts
- ✓ Unique measuring system with magnetic transmission
- ✓ Register output by means of (magnetic) Reed contact (EV) or photo-diode pointer (EF-P)

## TECHNICAL DATA

|                     |                                                                                                                              |
|---------------------|------------------------------------------------------------------------------------------------------------------------------|
| Accuracy            | : +/- 2% between Q2 and Q4<br>: +/- 5% between Q1 and Q2                                                                     |
| Connection          | : 2" - 12" (50 mm - 300 mm) -<br>flange connection                                                                           |
| Maximum pressure    | : 16 bar                                                                                                                     |
| Maximum capacity    | : 1250 m <sup>3</sup> /h                                                                                                     |
| Maximum temperature | : 60°C                                                                                                                       |
| Head loss           | : see chart                                                                                                                  |
| Material            | : durably epoxy-coated cast iron<br>/ brass                                                                                  |
| Certification       | : MID 2014/32/EU (OIML<br>R49:2013, EN 14154 en<br>ISO 4064:2014)<br>: CE, ISO 4064:2014<br>: NSF, WRAS, AS/NZS<br>4020:2005 |



Performance and measuring accuracy (according to MID2014/32/EU - ISO 4064:

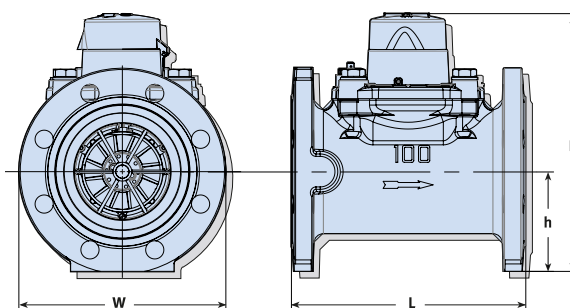
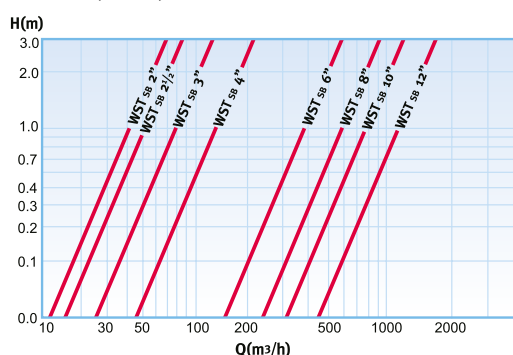
| Nominal passage          | mm<br>inch        | DN50<br>2" | DN65<br>2 1/2" | DN80<br>3" | DN100<br>4" | DN150<br>6" | DN200<br>8" | DN250<br>10" | DN300<br>12" |
|--------------------------|-------------------|------------|----------------|------------|-------------|-------------|-------------|--------------|--------------|
| Minimal capacity Q1      | m <sup>3</sup> /h | 0,63       | 0,63           | 1          | 1,6         | 2,5         | 12,6        | 20           | 20           |
| Transitional capacity Q2 | m <sup>3</sup> /h | 1,01       | 1,01           | 1,6        | 2,56        | 4           | 20,16       | 32           | 32           |
| Nominal capacity Q3      | m <sup>3</sup> /h | 63         | 63             | 100        | 160 / 100*  | 250         | 630         | 1000         | 1000         |
| Maximum capacity Q4      | m <sup>3</sup> /h | 78,75      | 78,75          | 125        | 200         | 312,5       | 787,5       | 1250         | 1250         |

\* 4" EV version 1:10 has a maximum capacity of 100 m<sup>3</sup>/hour to maintain a correct signal.

## Technical drawings and dimensions

| Nominal passage | mm<br>inch | DN50<br>2" | DN65<br>2 ½" | DN80<br>3" | DN100<br>4" | DN150<br>6" | DN200<br>8" | DN250<br>10" | DN300<br>12" |
|-----------------|------------|------------|--------------|------------|-------------|-------------|-------------|--------------|--------------|
| L - Length      | mm         | 200        | 200          | 230        | 250         | 300         | 350         | 450          | 500          |
| B - Width       | mm         | 165        | 185          | 200        | 220         | 283         | 340         | 406          | 489          |
| H - Height      | mm         | 214        | 228          | 234        | 250         | 310         | 338         | 438          | 465          |
| h - Height      | mm         | 70         | 84           | 90         | 106         | 130         | 158         | 258          | 330          |
| Weight          | kg         | 12,5       | 15           | 15,5       | 19          | 35,5        | 41          | 80           | 95           |
| Pitch size      | mm         | 125        | 145          | 160        | 180         | 240         | 295         | 355          | 410          |
| Bolt size       | mm         | M16x70     | M16x80       | M16x80     | M16x80      | M20x100     | M20x120     | M24          | M24          |
| No. of bolts    | no.        | 2x4        | 2x4          | 2x8        | 2x8         | 2x8         | 2x12        | 2x12         | 2x12         |

## Head loss (mwc)



## Register output

| Diameter |        | Type of register output and units of measure |            |      |                  |    |     |
|----------|--------|----------------------------------------------|------------|------|------------------|----|-----|
|          |        | 1 pulse / ... litre                          |            |      | 1 pulse / ... m³ |    |     |
|          |        | 1                                            | 10         | 100  | 1                | 10 | 100 |
| 2        | WST50  | EF-P                                         | EV         | EV   | EV               |    |     |
| 2 ½"     | WST65  | EF-P                                         | EV         | EV   | EV               |    |     |
| 3"       | WST80  | EF-P                                         | EV         | EV   | EV               |    |     |
| 4"       | WST100 |                                              | EF-P / EV* | EV   | EV               | EV |     |
| 6"       | WST150 |                                              | EF-P       | EV   | EV               | EV |     |
| 8"       | WST200 |                                              |            | EF-P | EV               | EV | EV  |
| 10"      | WST250 |                                              |            | EF-P | EV               | EV | EV  |
| 12"      | WST300 |                                              |            | EF-P | EV               | EV | EV  |

\* 4" EV version has a maximum capacity of 100 m³/hour to maintain a correct signal. Unlike other water meters, the register of this water meter cannot be exchanged for other registers with an adjusted pulse ratio.

## INSTALLATION & MAINTENANCE

### Installation

- ✓ Read the enclosed operating instructions and installation instructions before installation.
- ✓ The water meter can be installed in any position. For non-horizontal positions the flow should be from bottom to top.
- ✓ For optimum measuring, a length of straight pipe should be installed upstream and downstream of the meter measuring 5x Ø and 3x Ø, respectively.
- ✓ The meter should be completely filled with water at all times.

- ✓ For installation of the 8" WST Bayonet a special adapted flange 225 mm is available (77300-000350). This flange fits a VDL flange adapter DN200-225 mm (77300-103552).
- ✓ The installation dimensions of the WST Bayonet are equal to the Octave, WST, WTII en WT water meter, with Octave 3" as only exception (length: 225 mm instead of 230 mm).
- ✓ **Note:** the installation length and -width of the WST Bayonet and WST are identical, but height may differ.
- ✓ The previous WST register type can be placed in the WST Bayonet, without EV housing.