

# WESAN WPV G

## WOLTMAN METER

**DIEHL**  
Metering



### APPLICATION

Meter for measuring heavily fluctuating flow rates.

### FEATURES

- ▶ Calibratable and exchangeable measuring insert in one unit, suitable for calibration comprising: measuring insert as main meter, switch-over valve, measuring capsule as bypass meter
- ▶ Ideal design of housing and housing cover prevents sedimentation, stagnant water and air pockets
- ▶ Bypass line integrated in housing cover. No risk of sedimentation or corrosion.
- ▶ No measuring errors in the switch-over range
- ▶ Measuring capsule as bypass meter and non-return valve easily replaced on site
- ▶ Encapsulated counter of glass/copper IP 68
- ▶ Good long-term measuring accuracy
- ▶ Complete head unit with counter and sensors can be rotated by 350° for easier reading
- ▶ System compatibility, WESAN WPV G can be extended with IZAR RADIO (clip on radio module) or IZAR PULSE (clip on pulse module)
- ▶ In order to secure a safe switch-over the WESAN WPV G needs a minimum ingoing pressure of 0.6 bar

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### GENERAL

| WESAN WPV G                   |                                  |          |                 |
|-------------------------------|----------------------------------|----------|-----------------|
| Medium temperature range      | °C                               | 1 ... 30 |                 |
| Temperature safety            | °C                               | 1 ... 50 |                 |
| Ambient operating temperature | °C                               | 1 ... 55 |                 |
| Ambient storage temperature   | °C                               | 1 ... 55 |                 |
| Nominal pressure              | PN                               | bar      | 16 <sup>1</sup> |
| Display range                 | 0.5 l ... 999,999 m <sup>3</sup> |          |                 |
| Protection class              | IP 68                            |          |                 |
| Available bypass meters       | ALTAIR MCI                       |          |                 |

<sup>1</sup> versions with different nominal pressure on request (see also special versions)

### TECHNICAL DATA

| Nominal diameter                 | DN             | mm                | 50              | 80              | 100             |
|----------------------------------|----------------|-------------------|-----------------|-----------------|-----------------|
| Permanent flow rate              | Q <sub>3</sub> | m <sup>3</sup> /h | 25              | 63              | 100             |
| Minimum flow rate                | Q <sub>1</sub> | l/h               | 25 <sup>2</sup> | 25 <sup>2</sup> | 25 <sup>2</sup> |
| Transitional flow rate           | Q <sub>2</sub> | l/h               | 40 <sup>2</sup> | 40 <sup>2</sup> | 40 <sup>2</sup> |
| Overload flow rate               | Q <sub>4</sub> | m <sup>3</sup> /h | 31.25           | 78.75           | 125             |
| Starting flow rate               |                | l/h               | 2 <sup>2</sup>  | 2 <sup>2</sup>  | 2 <sup>2</sup>  |
| Permanent flow rate bypass meter | Q <sub>3</sub> | m <sup>3</sup> /h | 4               | 4               | 4               |
| Switch-over flow rate rising     |                | m <sup>3</sup> /h | 2.2             | 2.7             | 2.4             |
| Switch-over flow rate falling    |                | m <sup>3</sup> /h | 0.9             | 1.1             | 1.2             |

<sup>2</sup> with bypass meter ALTAIR MCI

### APPROVAL

| Nominal diameter                             | DN | mm | 50      | 80      | 100     |
|--|----|----|---------|---------|---------|
| MID (DE-16-MI001-PTB002)                     |    |    | .       | .       | .       |
| Dynamic range bypass meter                   |    |    |         |         |         |
| ALTAIR MCI (Q <sub>3</sub> /Q <sub>1</sub> ) | R  |    | 1000    | 2500    | 4000    |
| Potable water                                |    |    | AoC DEU | AoC DEU | AoC DEU |

### REACH

Information pursuant to Article 33 (1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006:

This product series contains components with the following substances in a concentration of more than 0.1% weight by weight (w/w):

- Lead (CAS no.: 7439-92-1)

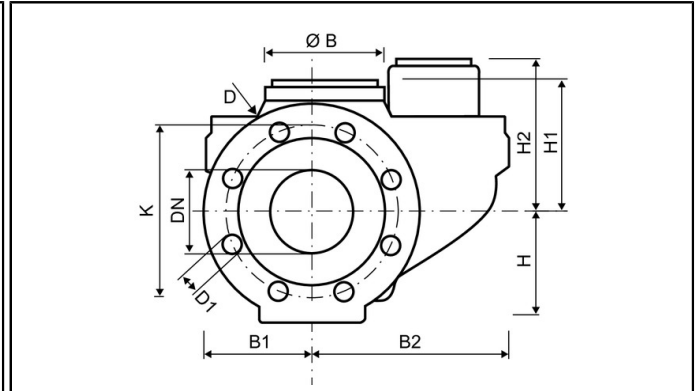
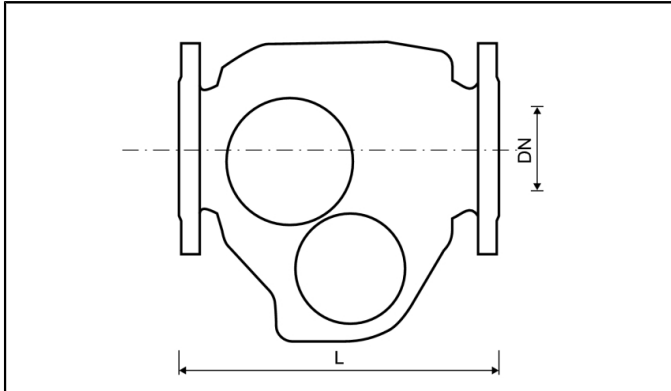
### SPECIAL VERSIONS

- Versions with different nominal pressure on request
- Special flange holes on request

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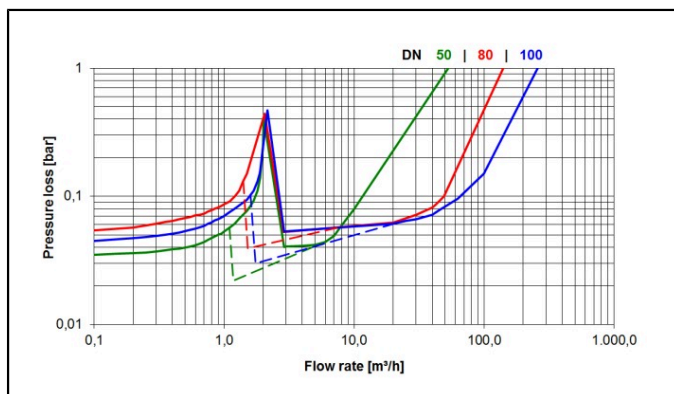
## DIMENSIONS



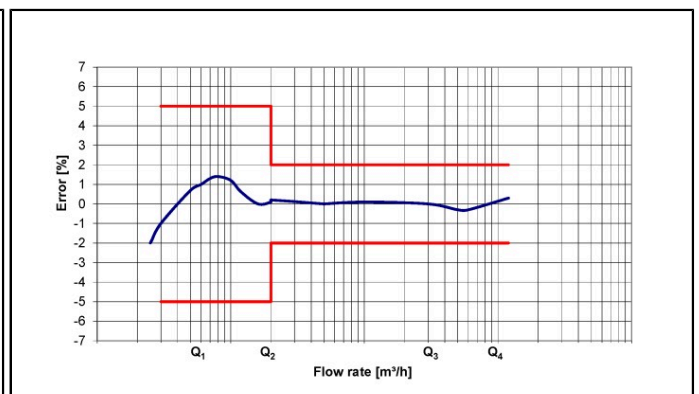
| Nominal diameter                  | DN  | mm  | 50               | 80               | 100              |
|-----------------------------------|-----|-----|------------------|------------------|------------------|
| Overall length (DIN 19625)        | L   | mm  | 270              | 300              | 360              |
| Overall length (DIN ISO 4064)     | L   | mm  | -                | 300              | 350              |
| Flange diameter                   | D   | mm  | 165              | 200              | 220              |
| Hole circle diameter              | K   | mm  | 125              | 160              | 180              |
| Number of screwholes              |     | pcs | 4                | 8 / 4            | 8                |
| Screwhole diameter                | D1  | mm  | 18               | 18               | 18               |
| Height                            | H   | mm  | 76               | 105              | 101              |
| Height                            | H1  | mm  | 115              | 135              | 140              |
| Height                            | H2  | mm  | 174 <sup>2</sup> | 175 <sup>2</sup> | 146 <sup>2</sup> |
| Height to remove measuring insert |     | mm  | 250 <sup>2</sup> | 280 <sup>2</sup> | 280 <sup>2</sup> |
| Width                             | B1  | mm  | 85               | 100              | 110              |
| Width                             | B2  | mm  | 160              | 180              | 180              |
| Diameter                          | Ø B | mm  | 110              | 110              | 110              |
| Weight of complete meter          |     | kg  | 17.4             | 25.5             | 29               |
| Weight of measuring insert        |     | kg  | 6.3              | 9.3              | 9.3              |

<sup>2</sup> with bypass meter ALTAIR MCI

## PRESSURE LOSS GRAPH / TYPICAL ERROR GRAPH



Pressure loss graph



Typical error graph