

AQUILA V5

SINGLE-JET METER

DIEHL
Metering



APPLICATION

AQUILA V5 is a bulk water meter designed for water network management and invoicing of substantial quantities of cold water.

It is characterised by its very high measuring dynamic, insensitivity to disturbance and easy maintenance. Its modular rotating flanges make it easy to install on any type of pipe, even when resizing is necessary.

Developed within the framework of the MID, AQUILA V5 complies with the European regulations and holds sanitary conformity certificates.

AQUILA V5 can be fitted at any time with an IZAR clip-on module converting it into a communicating meter ready for mobile reading (walk-by, drive-by, passive drive-by) or fixed network reading (radio/wired).

FEATURES

- ▶ DN50/65/80/100
- ▶ Q3=25m³/h (DN50) / Q3=40m³/h (DN65) / Q3=63m³/h (DN80) / Q3=100m³/h (DN100)
- ▶ MID approval up to R=800
- ▶ Starting flow rate: 18 l/h (DN50)
- ▶ Cast-iron body

AQUILA V5

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METROLOGICAL DATA

| Nominal diameter | DN | mm | 50 | 65 | 80 | 100 |
|--|--------------------------------|-------------------|-------|-------|-------|--------|
| Length | L | mm | 300 | 300 | 350 | 350 |
| Nominal flow rate | Q ₃ | m ³ /h | 25 | 40 | 63 | 100 |
| R standard* | Q ₃ /Q ₁ | | 315 | 315 | 315 | 315 |
| Starting flow rate | | l/h | 18 | 28 | 31 | 38 |
| Minimum flow rate | Q ₁ | l/h | 80 | 127 | 200 | 317 |
| Transition flow rate | Q ₂ | l/h | 127 | 203 | 320 | 508 |
| Maximum flow rate | Q ₄ | m ³ /h | 31.25 | 50 | 78.75 | 125 |
| Head loss at Q ₃ | | bar | 0.47 | 0.61 | 0.43 | 0.60 |
| Head loss at Q ₄ | | bar | 0.74 | 0.99 | 0.77 | 0.92 |
| Kvs (deltaP=Q ² /Kvs ²) | | | 36.38 | 50.23 | 89.63 | 130.18 |

* other values on request

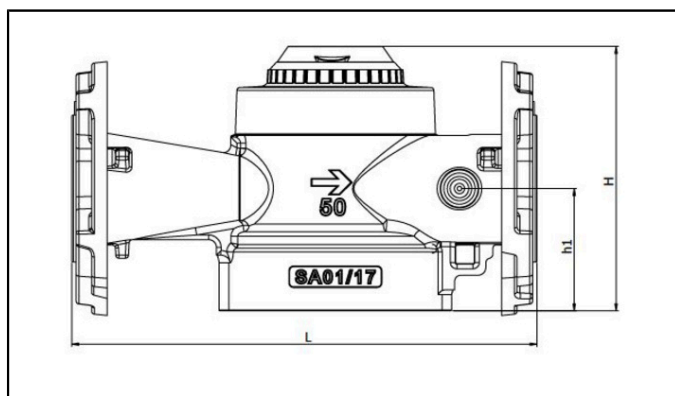
APPROVAL

| AQUILA V5 | |
|---------------------|--------------------------------|
| MID approval | LNE - 10913 C1 type |
| Standards | EN 14154 ISO 4064 OIML R49 |
| Sanitary conformity | ACS WRAS PZH |

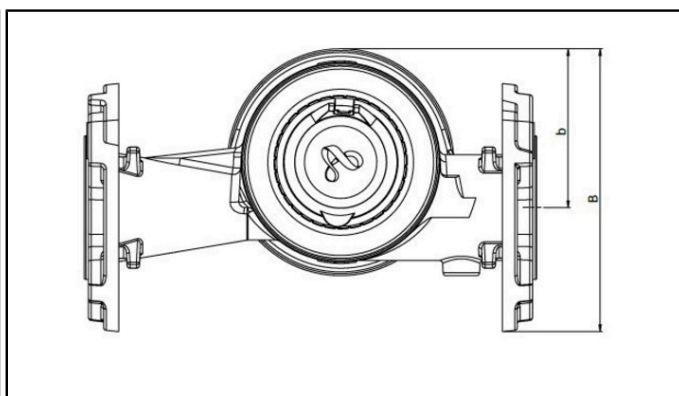
TEMPERATURE AND PRESSURE

| AQUILA V5 | | |
|-------------------------------|----|-----------------------------------|
| Water temperature | °C | 0.1 ... +50 |
| Ambient operating temperature | °C | 1 ... +55 |
| Storage temperature | °C | -10 ... +55 |
| Nominal pressure | PN | bar 16 (additional PN20 for DN50) |

DIMENSIONS



Side view



Top view

| Nominal diameter | DN | mm | 50 | 65 | 80 | 100 |
|-------------------------------|----|----|-----------|-----------|-----------|-----------|
| Length | L | mm | 300 | 300 | 350 | 350 |
| Width at the axis | b | mm | 105 | 105 | 150 | 150 |
| Width | B | mm | 187 | 198 | 250 | 260 |
| Height | H | mm | 171 | 171 | 204 | 204 |
| Height | h1 | mm | 80 | 80 | 98 | 98 |
| Flange diameter | | mm | 164 | 186 | 200 | 220 |
| Housing | | | Cast-iron | Cast-iron | Cast-iron | Cast-iron |
| Weight (meter + flanges PN16) | | kg | 8.4 | 9.6 | 14.8 | 16.1 |

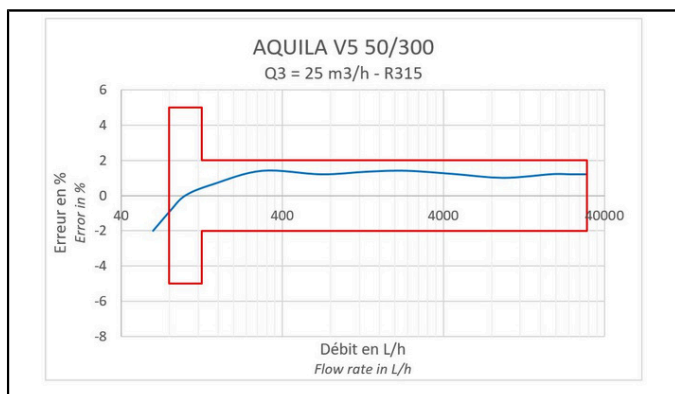
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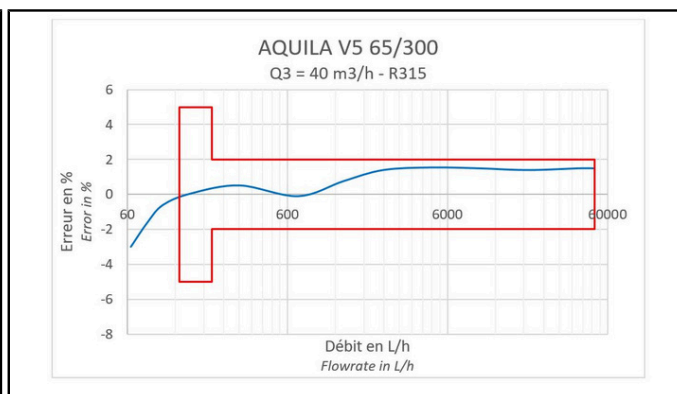
AVAILABLE FLANGES

| Nominal diameter | DN | mm | 50 | 65 | 80 | 100 |
|-----------------------|----|-----|-----|-----|-----|-----|
| Length | L | mm | 300 | 300 | 350 | 350 |
| Flanges DN50 PN16 | | | • | - | - | - |
| Flanges DN50 PN20 | | | • | - | - | - |
| Flanges DN60-65 PN16 | | | • | • | - | - |
| Flanges DN80 PN16 | | | - | • | • | - |
| Flanges DN100 PN16 | | | - | - | • | • |
| Number of screw holes | | pcs | 4 | 8 | 8 | 8 |

PRECISION CURVE - DN50/65



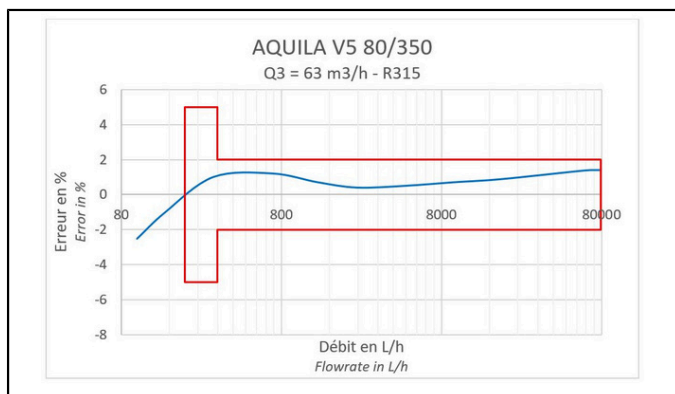
DN50



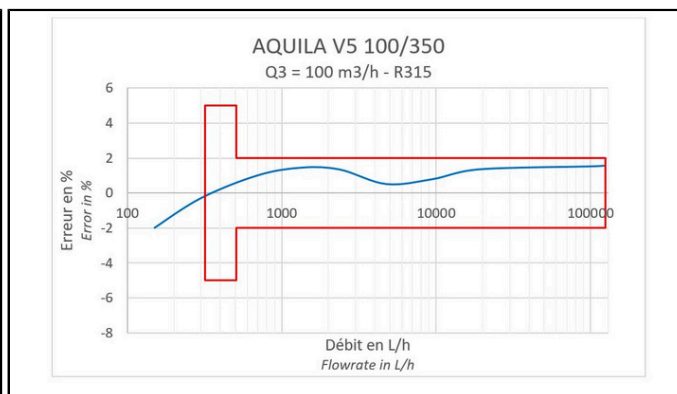
DN65

This technology doesn't require straight length.

PRECISION CURVE - DN80/100



DN80



DN100

This technology does not require straight length.

OPTIONS

- Pressure connector
- Different types of flanges