

# ALTAIR V4 DN15/20

VOLUMETRIC METER

**DIEHL**  
Metering



## APPLICATION

ALTAIR V4 represents the latest generation of volumetric meters developed within the framework of the MID and European standards to meet field requirements. ALTAIR V4 is a particularly compact and robust meter, adapting to the most restrictive environments and compatible with varying water qualities. Modular, ALTAIR V4 can be fitted at any time with an IZAR clip-on module converting it into a communicating meter, ready for mobile or fixed network (radio/wired) reading.

## FEATURES

- ▶ DN15/20
- ▶  $Q_3=2.5\text{m}^3/\text{h}$  (DN15) /  $Q_3=4\text{m}^3/\text{h}$  (DN20)
- ▶ MID approval up to R=800
- ▶ Starting flowrate at 0.4 l/h
- ▶ Composite & brass version
- ▶ High dynamic range
- ▶ Installation in any position

# ALTAIR V4 DN15/20

## VOLUMETRIC METER

### METROLOGICAL DATA

| Nominal diameter                               |                                | mm                | 15    | 15    | 15    | 15    | 15            | 20    |
|--|--------------------------------|-------------------|-------|-------|-------|-------|---------------|-------|
| Length*  | L                              | mm                | 110   | 115   | 134   | 165   | 170           | 115   |
| Nominal flow rate                              | Q <sub>3</sub>                 | m <sup>3</sup> /h | 2.5   | 2.5   | 2.5   | 2.5   | 2.5           | 2.5   |
| R standard*                                    | Q <sub>3</sub> /Q <sub>1</sub> |                   | 160   | 160   | 160   | 160   | 160           | 160   |
| Starting flow rate                             |                                | l/h               | 0.4   | 0.4   | 0.4   | 0.4   | 0.4           | 0.4   |
| Minimum flow rate*                             | Q <sub>1</sub>                 | l/h               | 15.62 | 15.62 | 15.62 | 15.62 | 15.62         | 15.62 |
| Transition flow rate*                          | Q <sub>2</sub>                 | l/h               | 25    | 25    | 25    | 25    | 25            | 25    |
| Maximum flow rate                              | Q <sub>4</sub>                 | m <sup>3</sup> /h | 3.125 | 3.125 | 3.125 | 3.125 | 3.125         | 3.125 |
| Head loss at Q <sub>3</sub>                    |                                | bar               | 0.59  | 0.59  | 0.59  | 0.59  | 0.59          | 0.59  |
| Head loss at Q <sub>4</sub>                    |                                | bar               | 0.92  | 0.92  | 0.92  | 0.92  | 0.92          | 0.92  |
| Kvs (deltaP=Q <sup>2</sup> /Kvs <sup>2</sup> ) |                                |                   | 3.25  | 3.25  | 3.25  | 3.25  | 3.25          | 3.25  |
| Nominal diameter                               |                                | mm                | 20    | 20    | 20    | 20    | 20            | 20    |
| Length*  | L                              | mm                | 165   | 190   | 110   | 165   | 190           |       |
| Nominal flow rate                              | Q <sub>3</sub>                 | m <sup>3</sup> /h | 2.5   | 2.5   | 4     | 4     | 4             |       |
| R standard*                                    | Q <sub>3</sub> /Q <sub>1</sub> |                   | 160   | 160   | 160   | 160   | 160           |       |
| Starting flow rate                             |                                | l/h               | 0.4   | 0.4   | 0.7   | 0.7   | 0.7           |       |
| Minimum flow rate*                             | Q <sub>1</sub>                 | l/h               | 15.62 | 15.62 | 25    | 25    | 25            |       |
| Transition flow rate*                          | Q <sub>2</sub>                 | l/h               | 25    | 25    | 40    | 40    | 40            |       |
| Maximum flow rate                              | Q <sub>4</sub>                 | m <sup>3</sup> /h | 3.125 | 3.125 | 5     | 5     | 5             |       |
| Head loss at Q <sub>3</sub>                    |                                | bar               | 0.59  | 0.59  | 0.55  | 0.55  | 0.55 / 0.57** |       |
| Head loss at Q <sub>4</sub>                    |                                | bar               | 0.92  | 0.92  | 0.85  | 0.85  | 0.85 / 0.89** |       |
| Kvs (deltaP=Q <sup>2</sup> /Kvs <sup>2</sup> ) |                                |                   | 3.25  | 3.25  | 5.41  | 5.41  | 5.41 / 5.30** |       |

\* Other values on request

\*\* Composite version

### APPROVAL

| DN 15 - 20          |   |
|---------------------|---|
| MID approval        | LNE - 6250   Type A2                        |
| Standards           | ISO 4064   EN 14154   OIML R49              |
| Sanitary conformity | ACS   WRAS   KTW   BELGAQUA   KIWA   DM 174 |

### 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 articles with the following substances in a concentration of more than 0.1% weight by weight (w/w):

- Lead

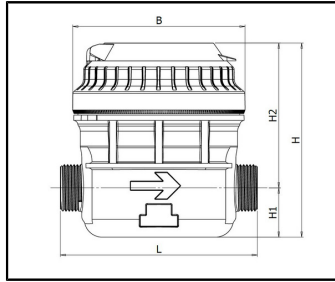
### TEMPERATURES AND PRESSURE

| DN 15 - 20                    |                |
|-------------------------------|----------------|
| Water temperature             | °C 0.1 ... +50 |
| Ambient operating temperature | °C +1 ... +55  |
| Storage temperature           | °C -10 ... +55 |
| Nominal pressure              | PN bar 16      |

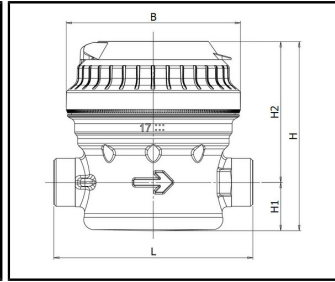
# ALTAIR V4 DN15/20

## VOLUMETRIC METER

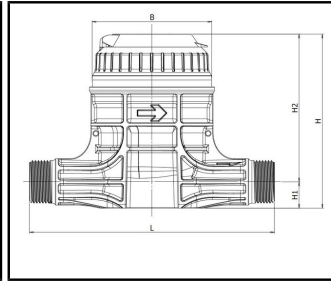
### DIMENSIONS



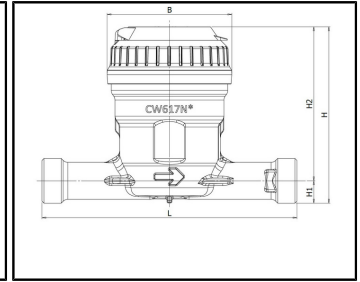
DN 15 - composite



DN 15 - brass



DN 20 - composite



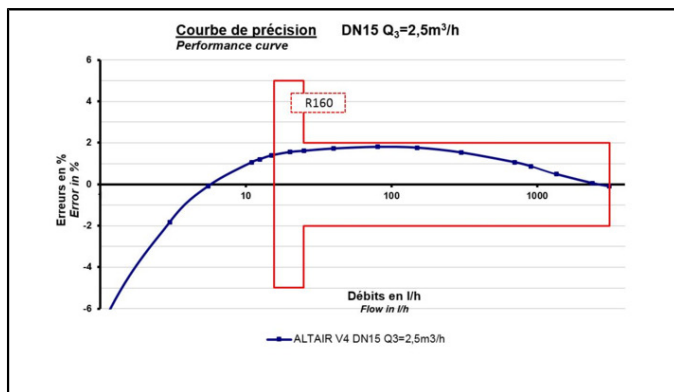
DN 20 - brass

| Nominal diameter   | mm             | 15                | 15                | 15                | 15                | 15                | 20                |           |
|--------------------|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------|
| Length*            | L              | mm                | 110               | 115               | 134               | 165               | 170               | 115       |
| Nominal flow rate  | Q <sub>3</sub> | m <sup>3</sup> /h | 2.5               | 2.5               | 2.5               | 2.5               | 2.5               | 2.5       |
| Housing            |                |                   | brass / composite | brass / composite | brass / composite | brass / composite | brass / composite | composite |
| Width              | B              | mm                | 96.2              | 96.2              | 96.2              | 96.2              | 96.2              | 96.2      |
| Height             | H              | mm                | 104.4 / 109       | 104.4 / 109       | 104.4 / 109       | 104.4 / 109       | 104.4 / 109       | 109       |
| Height             | H1             | mm                | 26.7 / 28         | 26.7 / 28         | 26.7 / 28         | 26.7 / 28         | 26.7 / 28         | 28        |
| Height             | H2             | mm                | 77.7 / 81         | 77.7 / 81         | 77.7 / 81         | 77.7 / 81         | 77.7 / 81         | 81        |
| Thread connections | inch           |                   | 3/4"              | 3/4" - 7/8"       | 3/4"              | 3/4"              | 3/4"              | 1"        |
| Weight             | kg             |                   | 0.9 / 0.5         | 1 / 0.5           | 1 / 0.6           | 1 / 0.6           | 1 / 0.6           | 0.5       |

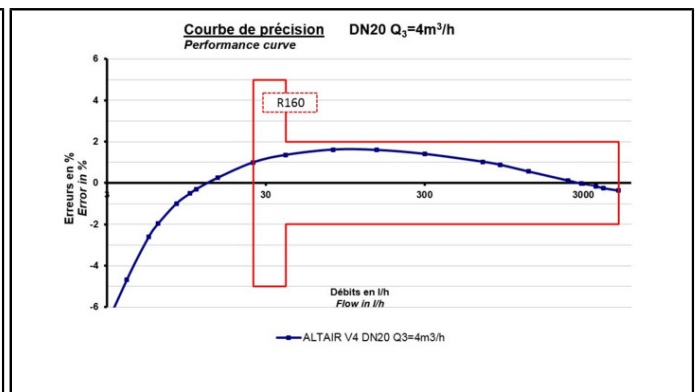
| Nominal diameter   | mm             | 20                | 20                | 20    | 20    | 20    |                   |
|--------------------|----------------|-------------------|-------------------|-------|-------|-------|-------------------|
| Length*            | L              | mm                | 165               | 190   | 110   | 165   | 190               |
| Nominal flow rate  | Q <sub>3</sub> | m <sup>3</sup> /h | 2.5               | 2.5   | 4     | 4     | 4                 |
| Housing            |                |                   | brass / composite | brass | brass | brass | brass / composite |
| Width              | B              | mm                | 96.2              | 95.9  | 92.7  | 92.7  | 92.7              |
| Height             | H              | mm                | 104.4 / 109       | 104.1 | 131   | 131   | 131 / 134.8       |
| Height             | H1             | mm                | 26.7 / 28         | 26.1  | 16.6  | 16.6  | 16.6 / 20.4       |
| Height             | H2             | mm                | 77.7 / 81         | 78    | 114.4 | 114.4 | 114.4             |
| Thread connections | inch           |                   | 1"                | 1"    | 1"    | 1"    | 1"                |
| Weight             | kg             |                   | 1 / 0.6           | 1     | 1.2   | 1.4   | 1.4 / 0.7         |

\*Other values on request.

### PRECISION CURVE



DN 15



DN 20

This technology does not require straight length.

### OPTIONS

- Non-return valve
- Pair of connectors
- Glass/metal register