

ALTAIR V4 DN15/20

ROTARY PISTON 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

- ▶ DN 15/20
- ▶ $Q_3 = 2.5 \text{ m}^3/\text{h}$ (DN 15) / $Q_3 = 4 \text{ m}^3/\text{h}$ (DN 20)
- ▶ MID approval up to R = 800
- ▶ Starting flow rate at 0.4 l/h
- ▶ Composite & brass version
- ▶ High dynamic range
- ▶ Installation in any position

ALTAIR V4 DN15/20

ROTARY PISTON METER

TECHNICAL DATA

| Nominal diameter | DN | mm | 15 | 15 | 15 | 15 | 15 | 20 |
|--|--------------------------------|-------------------|-------|-------|-------|-------|-------|-------|
| Length* | L | mm | 110 | 115 | 134 | 165 | 170 | 115 |
| Nominal flow rate | Q ₃ | m ³ /h | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| R standard* | Q ₃ /Q ₁ | | 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 ₁ | l/h | 15.62 | 15.62 | 15.62 | 15.62 | 15.62 | 15.62 |
| Transitional flow rate* | Q ₂ | l/h | 25 | 25 | 25 | 25 | 25 | 25 |
| Overload flow rate | Q ₄ | m ³ /h | 3.125 | 3.125 | 3.125 | 3.125 | 3.125 | 3.125 |
| Pressure loss at Q ₃ | | bar | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 |
| Pressure loss at Q ₄ | | bar | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Kvs (deltaP=Q ² /Kvs ²) | | | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 |

| Nominal diameter | DN | mm | 20 | 20 | 20 | 20 | 20 |
|--|--------------------------------|-------------------|-------|-------|------|------|---------------|
| Length* | L | mm | 165 | 190 | 110 | 165 | 190 |
| Nominal flow rate | Q ₃ | m ³ /h | 2.5 | 2.5 | 4 | 4 | 4 |
| R standard* | Q ₃ /Q ₁ | | 160 | 160 | 160 | 160 | 160 |
| Starting flow rate | | l/h | 0.4 | 0.4 | 0.7 | 0.7 | 0.7 |
| Minimum flow rate* | Q ₁ | l/h | 15.62 | 15.62 | 25 | 25 | 25 |
| Transitional flow rate* | Q ₂ | l/h | 25 | 25 | 40 | 40 | 40 |
| Overload flow rate | Q ₄ | m ³ /h | 3.125 | 3.125 | 5 | 5 | 5 |
| Pressure loss at Q ₃ | | bar | 0.59 | 0.59 | 0.55 | 0.55 | 0.55 / 0.57** |
| Pressure loss at Q ₄ | | bar | 0.92 | 0.92 | 0.85 | 0.85 | 0.85 / 0.89** |
| Kvs (deltaP=Q ² /Kvs ²) | | | 3.25 | 3.25 | 5.41 | 5.41 | 5.41 / 5.30** |

* Other values on request

** Composite version

APPROVAL

| DN 15 - 20 | |
|---------------------|---|
| Approvals | MID: LNE - 6250 / Type A2 WATERMARK: WM040207 - NMI: P14/3/64 |
| Standards | ISO 4064 EN 14154 OIML R49 |
| Sanitary conformity | ACS WRAS AoC DEU BELGAQUA KIWA DM 174 ASNZ-4020 |

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)

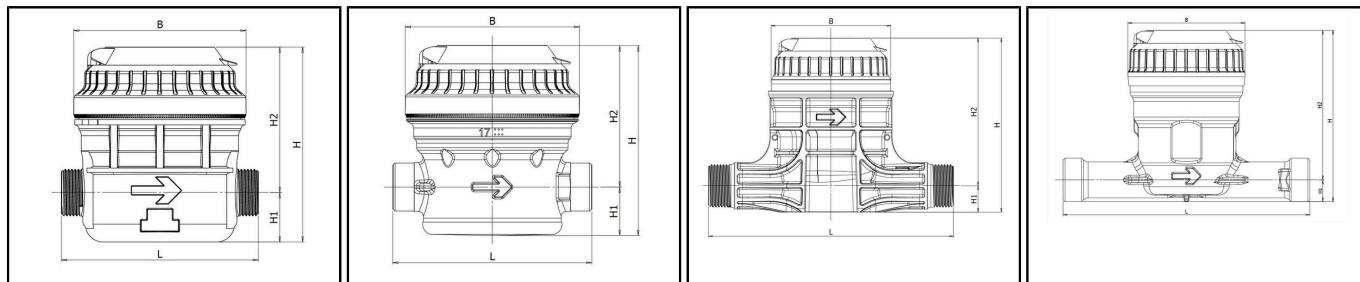
TEMPERATURES AND PRESSURE

| 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

ROTARY PISTON METER

DIMENSIONS



DN 15 - composite

DN 15 - brass

DN 20 - composite

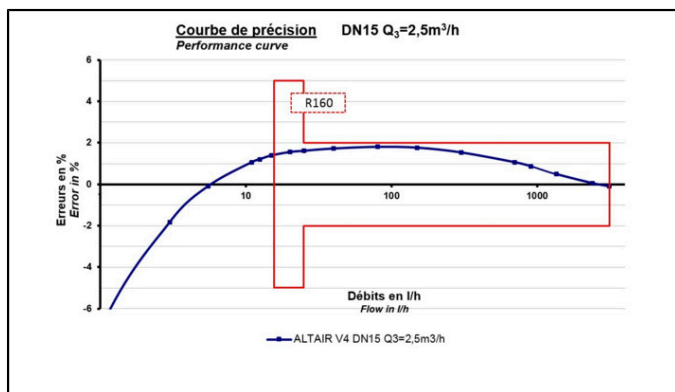
DN 20 - brass

| Nominal diameter | DN | mm | 15 | 15 | 15 | 15 | 15 | 20 |
|--------------------|----------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-----------|
| Length* | L | mm | 110 | 115 | 134 | 165 | 170 | 115 |
| Nominal flow rate | Q ₃ | m ³ /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" | 3/4" | 1" |
| Weight | | kg | 0.9 / 0.5 | 1 / 0.5 | 1 / 0.6 | 1 / 0.6 | 1 / 0.6 | 0.5 |

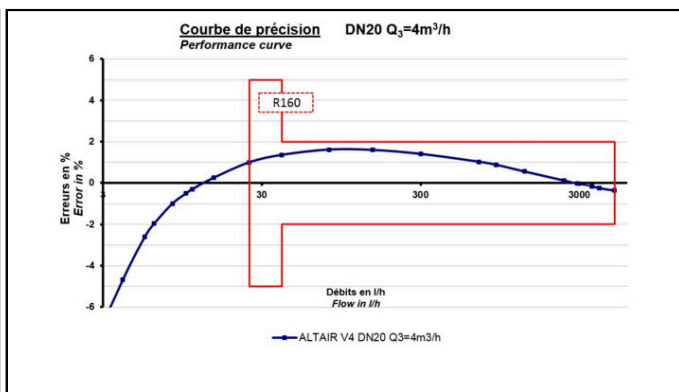
| Nominal diameter | DN | mm | 20 | 20 | 20 | 20 | 20 |
|--------------------|----------------|-------------------|-------------------|-------|-------|-------|-------------------|
| Length* | L | mm | 165 | 190 | 110 | 165 | 190 |
| Nominal flow rate | Q ₃ | m ³ /h | 2.5 | 2.5 | 4 | 4 | 4 |
| Housing | | | brass / composite | brass | brass | brass | brass / composite |
| Width | B | mm | 96.2 | 90 | 90 | 90 | 90 / 96 |
| 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" | G1B |
| 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

Diehl Metering GmbH · Industriestrasse 13 · 91522 Ansbach · Germany
 Phone: +49 981 1806-0 · Fax: +49 981 1806-615 · metering-germany-info@diehl.com · www.diehl.com/metering
 Subject to technical adjustments

Empower a sustainable future