

# 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
- ▶ Q3=2.5m<sup>3</sup>/h (DN15) / Q3=4m<sup>3</sup>/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
- ▶ Optional dual-zone filter

# 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
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

\*\*\* Pressure loss at 2,500 l/h including dual check valve

Note: the use of a dual-zone filter does not affect the head loss performance

### 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

\* Dual-zone filter on request

### 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)

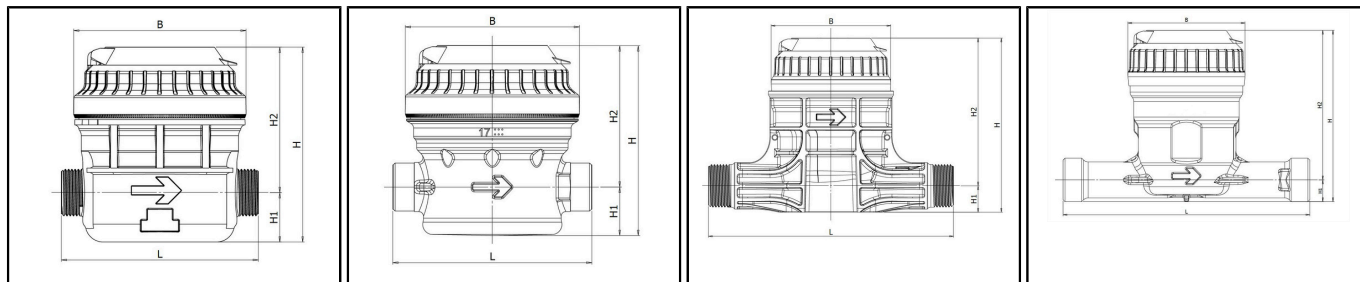
### TEMPERATURES AND PRESSURE

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

## 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"	3/4"	1"
Weight		kg	0.9 / 0.5	1 / 0.5	1 / 0.6	1 / 0.6	1 / 0.6	0.5

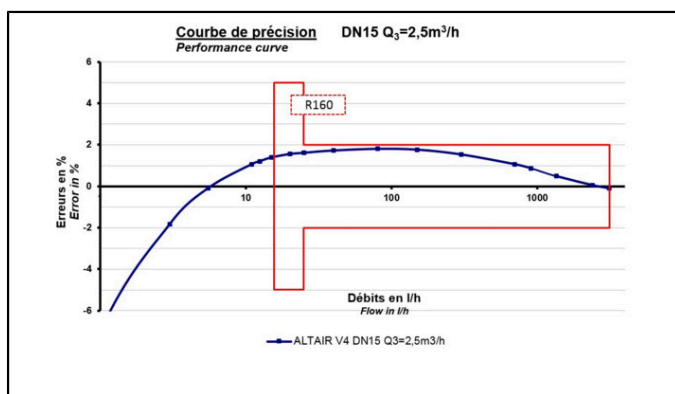
  

Nominal diameter	mm	20	20	20	20	20	
Length*	L	mm	165	190	110	165	190
Nominal flow rate	Q <sub>3</sub>	m <sup>3</sup> /h	2.5	2.5	4	4	4
Housing			brass / composite	brass	brass	brass	brass / composite
Width	B	mm	96.2	90	90	92.7	92.7
Height	H	mm	104.4 / 109	104.1	131	131	131 / 134.8
Height	H1	mm	26.7 / 28	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

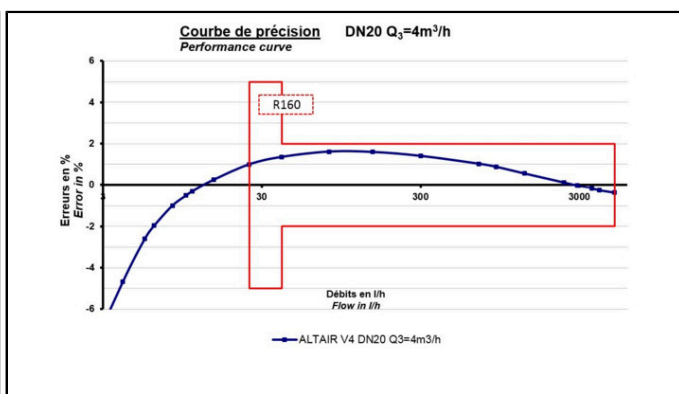
\* Other values on request.

\*\* 1"28 BSW 14 TPI conform to AS 1722.2 Class B

### PRECISION CURVE



DN 15



DN 20

This technology does not require straight length.

### OPTIONS

- Non-return valve | - Pair of connectors | - Glass/metal register
- Patented dual-zone filter. More efficient, it replaces glove finger filters. This new filter considerably slows down the aging of the meter.