

# 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=25m<sup>3</sup>/h (DN50) / Q3=40m<sup>3</sup>/h (DN65) / Q3=63m<sup>3</sup>/h (DN80) / Q3=100m<sup>3</sup>/h (DN100)
- ▶ MID approval up to R=800
- ▶ Starting flow rate: 18 l/h (DN50)
- ▶ Cast-iron body

# AQUILA V5

## SINGLE-JET METER

### METROLOGICAL DATA

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

\* other values on request

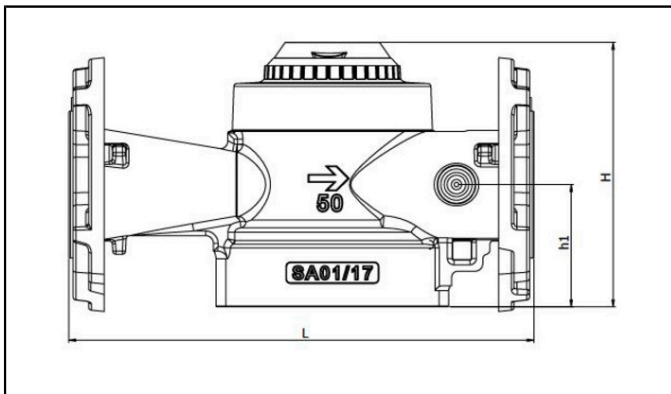
### APPROVAL

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

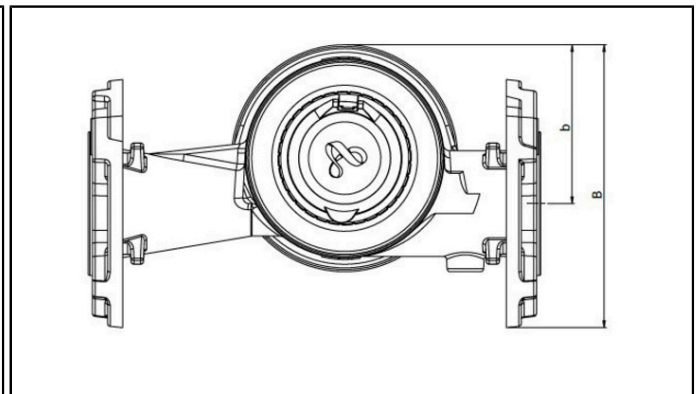
### TEMPERATURE AND PRESSURE

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

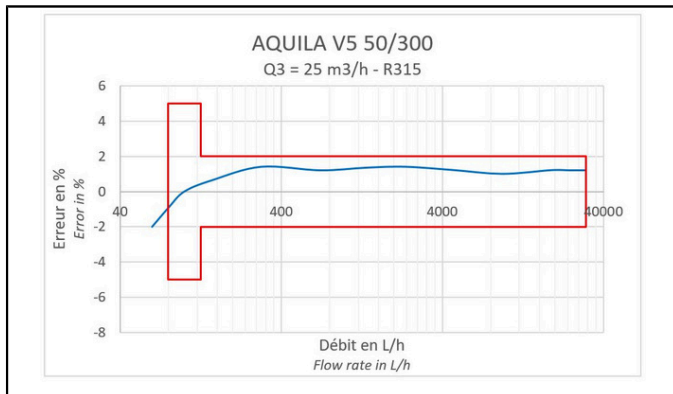
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## SINGLE-JET METER

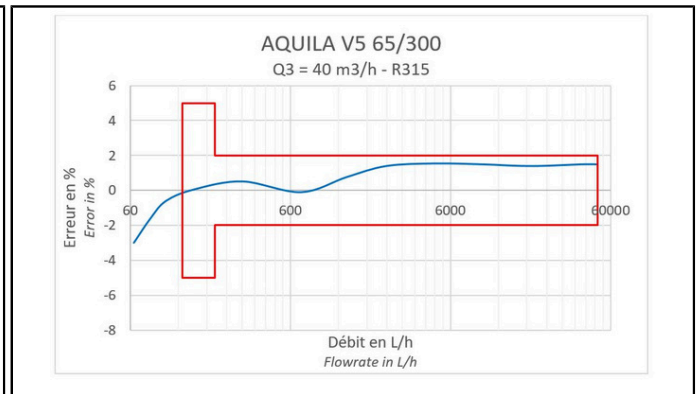
### AVAILABLE FLANGES

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



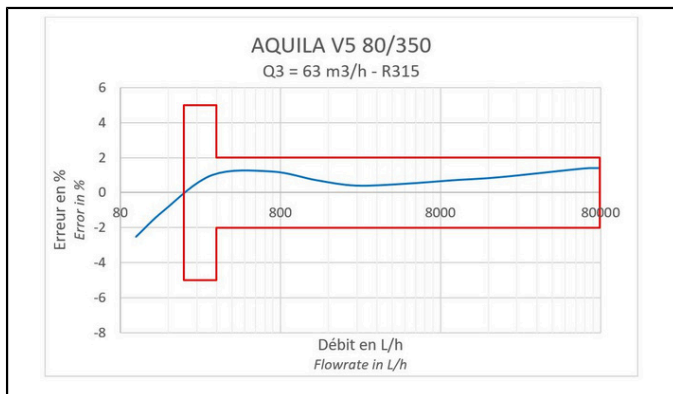
DN50



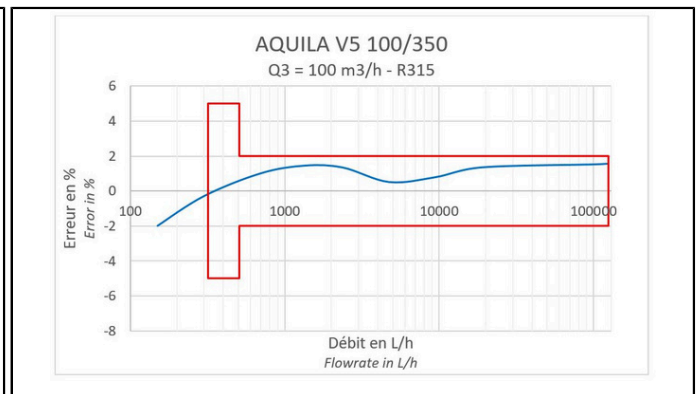
DN65

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