

# AQUILA<sup>®</sup>

## Class C bulk water meter

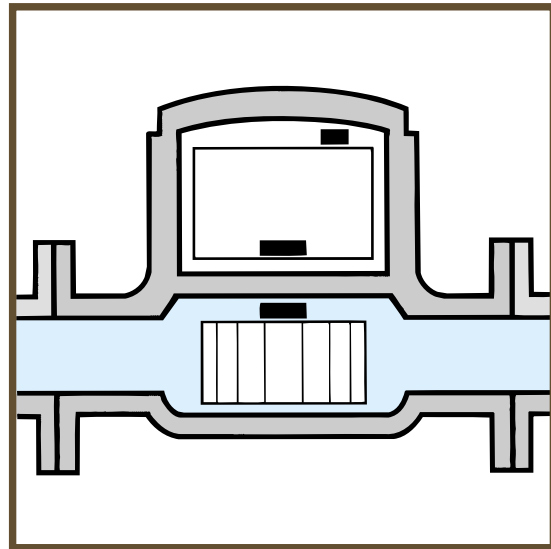
Aquila meters are bulk meters designed to invoice substantial quantities of cold water.

They are characterised by their very high measuring dynamics, insensitivity to disturbance and easy maintenance.

Aquila meters are modular and directly connectable via the Pulsar pulse emitter to Cursa pressure and flowrate analyser. They can also be connected to the Izar radioreading system.

Their single-jet technology makes them particularly insensitive to disturbance before or after the meter.

Aquila meters have class C EEC approval in the horizontal position. However, their performance is large-

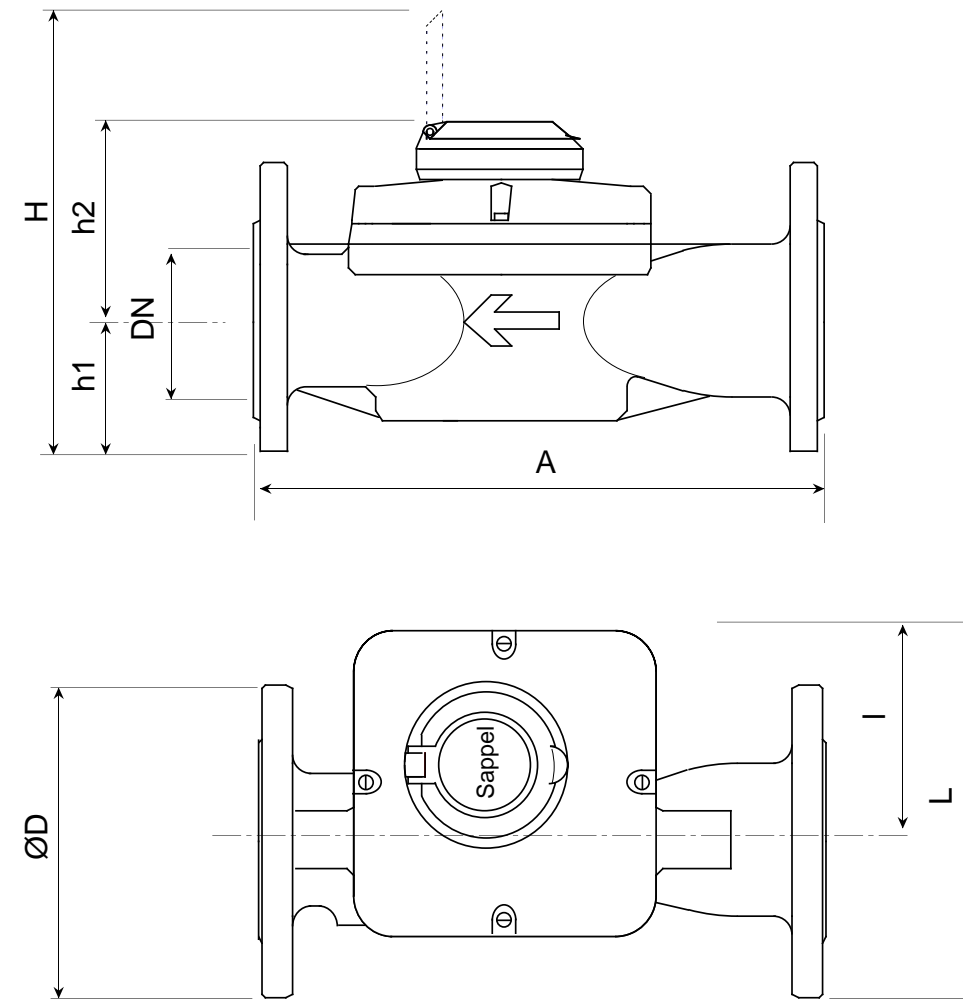


ly better than the requirements of regulations, for high and low flow rates alike.

Aquila meters may be fitted with pressure connectors on request.



## Dimensions



## Dimensions, weight and connections

Caliber Qn	m <sup>3</sup> /h	<b>15</b>	<b>20</b>	<b>30</b>	<b>50</b>
Caliber DN	mm	50	65	80	100
Length A	mm	300	300	350	350
Width l	mm	110	110	163	155
Width L	mm	193	203	263	265
Height h1	mm	70	80	95	105
Height with closed lid h2	mm	107	113	123	125
Height with open lid H	mm	251	262	303	307
Weight	kg	13.1	14.8	23.2	27.4
Flange diameter D	mm	165	185	200	220
Standard flange		With flat face PN 16			

Non contractual document. Please have the features specified before ordering.

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If you have any question, please do not hesitate to contact us :



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# Main technical characteristics

## Designation

		AQUILA			
Qn	m <sup>3</sup> /h	15	20	30	50
Caliber DN	mm	50	65	80	100
Connection diameter	mm	50	60	65	80

## Measuring range (m<sup>3</sup>/h)

Installation	Horizontal			
Start flowrate	0.015	0.02	0.04	0.045
Min. constructor's flowrate	0.07	0.1	0.1	0.14
Min. approved flowrate	Qmin.	0.09	0.12	0.18
Transition flowrate	Qt	0.225	0.3	0.45
Nominal flowrate	Qn	15	20	30
Max. approved flowrate	Q max.	30	40	60
Overload flowrate	(ΔP = 1 bar)	36	52	95
Max. constructor's flowrate		40	60	100
Constructor measurement dynamics		514	520	950

## EEC approval

Class	C horizontal installation
Approval number	F 96 382.003

## Head loss

Kvs (ΔP = Q <sup>2</sup> /Kvs <sup>2</sup> )	36	52	95	130
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## Temperatures and pressures

Ambient temperature limits	from 0°C to 70°C
Water operating temperature limits	from 0°C to 50°C
Storage temperature limits	from -20°C to 70°C
Max. operating pressure	16 bar
Test pressure	36 bar
Rupture pressure	62 bar
Register protection	Anti-condensation system

## Pulse emitter \*

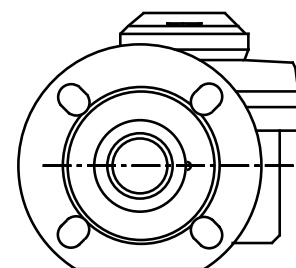
Type	Pulse weight
Pulsar	10 litres

(\* ) Sales documentation GB 858

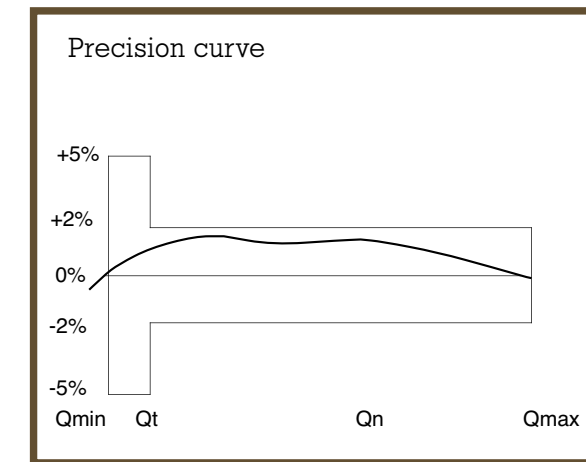
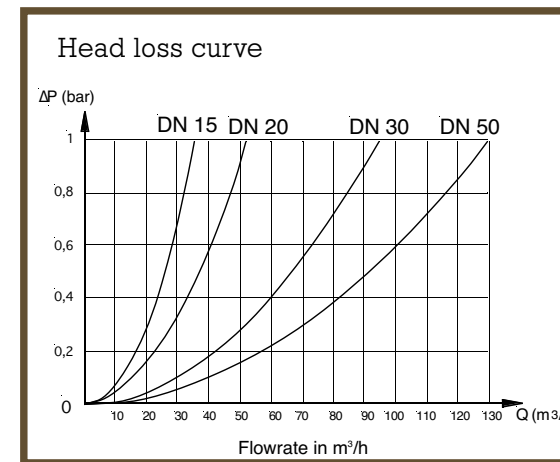
## Adaptation for DN 60 mm pipes :

DN 50 and 65 mm meters have special machining in the connection flanges : screw fixing holes are drilled in an oval way, giving the possibility of installing as desired DN 50 or 65 mm meters in a DN 60 mm pipe.

DN 50 and DN 65 mm



Oval holes for adaptation on 60 mm pipes

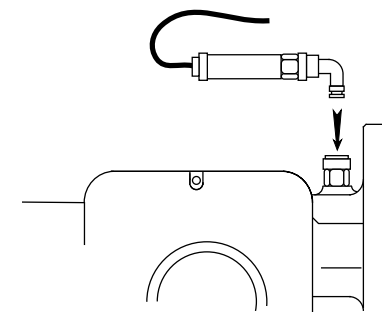


## Options...

A pressure connector is fitted on request on the side of the outlet duct of the Aquila meter. Its principle allows positioning of a pressure sensor at any time, without disturbing water distribution.

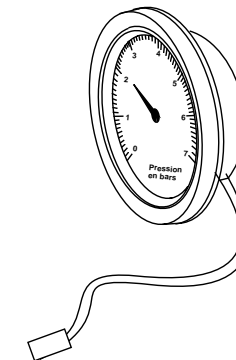
### Electronic pressure sensor :

The electronic pressure sensor is clipped on to the pressure connector of the Aquila meter and directly connected to the flowrate and pressure analyzer Cursa, or to any other type of 4/20 mA pressure recorder.



### Mechanical pressure sensor :

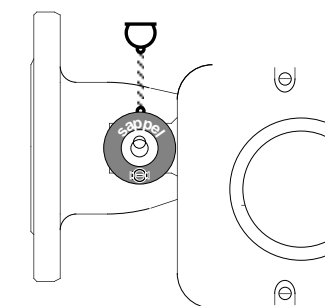
The mechanical pressure sensor is clipped on to the pressure connector of the Aquila meter and allows direct pressure metering.



## ... and accessory

### Spirit-level :

A flat part is fitted on the top of the meter inlet duct. A spirit-level placed on it enables one to ensure that the meter has been horizontally mounted. It is recommended that Aquila is installed in horizontal position in order to optimize its metrological efficiency.



### Straight length :

Upstream perturbing elements influence the flow profile of the water. Single-jet technology is a good solution for reducing these perturbing effects, or even cancelling them. If there are no straight lengths upstream, the maximum permissible errors are still respected, whatever the upstream perturbations.