

# 620C/ 620MC

Volumetric Meter-Composite Body  
Dry Dial



## Main characteristics

**DN 15 to 25 and Coax, PN16**

Light and robust

Easy to handle

Compatibility with all new and planned regulations for potable water

Environmentally friendly

Unrivalled accuracy and measuring range

High resistance to impurities and aggressive water

Quiet operation

## Applications

The 620C/620MC is a high precision meter.

Due to its unique piston measuring chamber even drops of water are counted.

With the 620C/620MC you are assured of continuously good metrology.

A clear view is either provided by a register with an integrated wiper<sup>(1)</sup> or a sealed metal/glass register that does not fog. For a faster and more comfortable readout the 620C/620MC is prepared for AMR.

Due to our broad range of system solutions you can adapt the 620C/620MC to all your AMR needs.

Because of its tamper proof design and its long life span you can be confident in selecting the 620C/620MC.

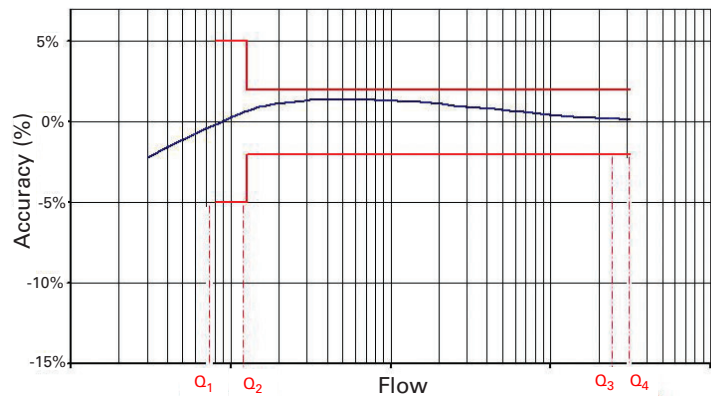
<sup>(1)</sup> not available for 620C DN 25

## Typical Marking



Markings can vary depending on different markets or metrological specifications.

## Typical Accuracy Curve



## Accuracy and Reliability

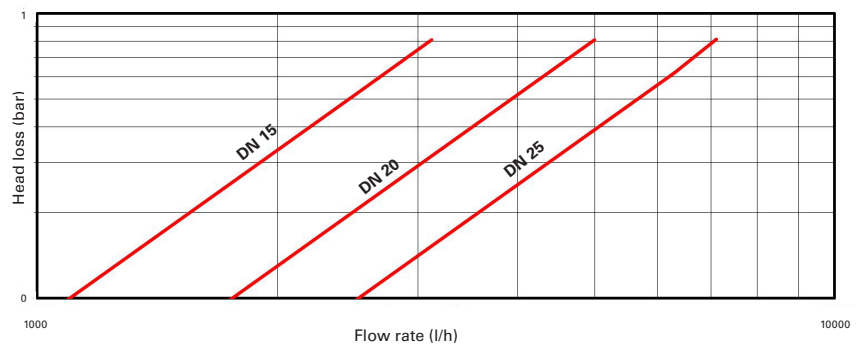
Thanks to the advanced design of its measuring chamber the meter has an extreme low starting flow.

It can be supplied with metrological seal according to the MID regulation 2004/22/EC with a ratio up to R400.

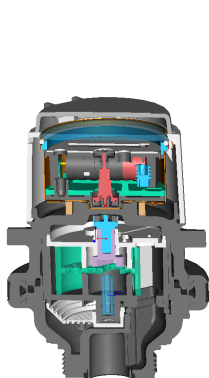
Foreign matter present in the water is filtered out by either the tubular strainer on the inlet or the seat strainer. Particles can go through the meter without damage; the patented elastic pivot enables the particles to pass between the piston and the measuring chamber. All the gears are situated in the dry register, which eliminates any risk of blockage due to suspended particles in the water.

The 620C/620MC water meter keeps its metrological accuracy for many years of operation, even in difficult working conditions.

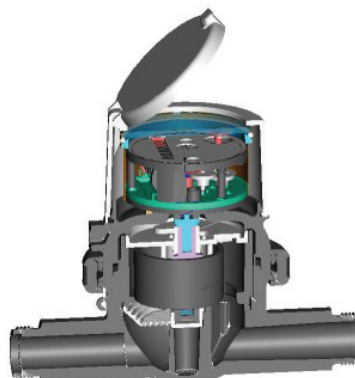
## Typical Head Loss Curve



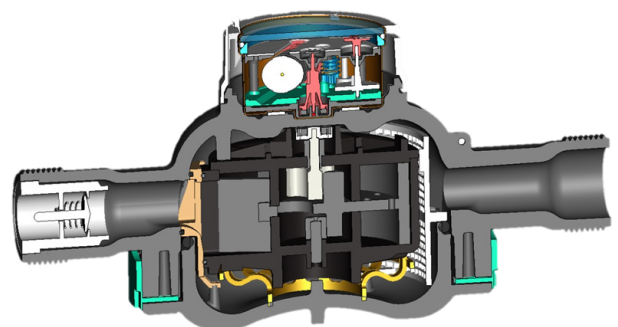
## Cross Section



620MC



620C DN15



620C DN25

## Approvals

### EC type-examination certificate

in conformity with

- 2004/22/EC (MID)
- EN 14154:2007
- OIML R49:2006
- ISO 4064:2005

Q<sub>3</sub> 2,5 DE-07-MI001-PTB002

Q<sub>3</sub> 4 DE-09-MI001-PTB004

Q<sub>3</sub> 6,3 DE-12-MI001-PTB004

### Certificate of compliance for potable drinking water

KTW/DVGW (D) <sup>(1)</sup> ACS (F) <sup>(1)</sup>

WRAS (UK) <sup>(1)</sup> Hydrocheck (B) <sup>(1)</sup>

KIWA ATA (NL)

<sup>(1)</sup> on-going for 620C DN 25

## Legibility

The display on 8 drums (5 for m<sup>3</sup>, 3 for litres) and 1 pointer ensures perfect readability. The lowest resolution is 0.05 litres. The dial has a central disc whose rotation indicates the passage of water. This indicator can be used to reveal a downstream leak.

The plastic dial <sup>(1)</sup> is equipped with a wiper for optimum legibility under all conditions. The 620C/620MC water meter can operate in any position and its dry dial register can be rotated up to 350°. The dial can therefore be easily read under all conditions of use. As an option, the meter can be supplied with a metal/glass register, making it perfectly water-tight (IP 68).

<sup>(1)</sup> not available for 620C DN 25

## Performance Data

### Metrological characteristics - Directive 2004/22/EC (MID) & EN 14154:2007

Nominal Size	DN	mm	Coaxial Manifold	inline		
			#	15	20	25
Permanent flowrate	Q <sub>3</sub>	m <sup>3</sup> /h	2.5	2.5	4	6.3
Ratio "R"	Q <sub>3</sub> /Q <sub>1</sub>	R	40 / 80 / 160 / 315 / 400			40 / 80 / 160
Maximum flowrate <sup>(1)</sup>	Q <sub>4</sub>	m <sup>3</sup> /h	3.125	3.125	5.0	7.875
Minimum flowrate <sup>(1)</sup> (tolerance ±5%)	Q <sub>1</sub>	l/h	6.25	6.25	10.0	39.375 <sup>(2)</sup>

<sup>(1)</sup> Values for R=400

<sup>(2)</sup> at R160

## Dimensions and Weights

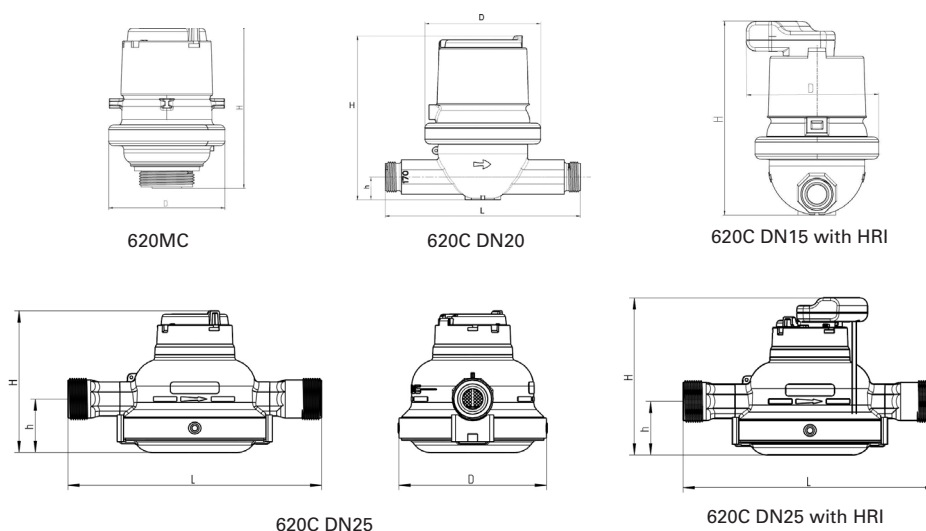
Nominal Size	DN	mm	Coaxial Manifold	inline		
			#	15	20	25
Length	L	mm		170 <sup>(1)</sup>	190 <sup>(3)</sup>	260
Width	D	mm	101.7	101.7	113.5	151
Total height	H	mm	140.3	142.6	149	145
Height to pipe axis	h	mm		18.95	21.5	54.6
Tail Diameter		inch	G 1½" B	G ¾" B <sup>(2)</sup>	G 1" B	G 1¼" B
Piece		mm	47.8	26.44	33.25	41.91
Thread	Pitch		2.31	1.81	2.31	2.31
Weight		kg	0.5	0.6	0.68	1.3

<sup>(1)</sup> Also available in length 110/114/115/130/134 and 165 mm

<sup>(2)</sup> Also available in length 165 and 190 mm with 1" threads

<sup>(3)</sup> Also available in length 165 and 220 mm

## Dimensional Diagram



For the installation guidelines please refer to our website and the manual MD 1001 and MD 1650 INT.

## HRI options

The dial of the 620C/620MC meter is equipped as standard with a pointer able to activate the HRI sensor. The HRI reproduces the mechanical register index exactly, by detecting the direction of rotation of the pointer. It provides a reliable pulse and data interface for remote and mobile readout. The HRI can be fitted on site to already installed water meters or ordered factory fitted to the meter.

For more information refer to the leaflets LS 8100 and LS 3300

The HRI is available in three versions:

### 1. HRI Pulse Unit (A-version)

The litre pointer activates the HRI allowing a basic resolution of one litre per pulse. The output pulse value can be factory set using the divisor D

(e.g. D = 100 means 1 pulse per 100 litres).

The possible pulse output D values are:

1 / 10 / 100 / 1000 / 2.5 / 25 / 250

### 2. HRI Data Unit (B-version)

The HRI Data Unit is a data interface which supplies the meter reading as well as the serial or customer number. This version additionally provides a pulse output as described above. The HRI Data Unit can be connected to an M-Bus network for remote read or a MiniPad for mobile inductive read (MiniBus), both in accordance with the IEC 870 protocol.

### 3. Sensus((S))cout-S Radio Unit

Integrated Sensus((S))cout radio with the usage of long term proven and reliable HRI sensing technology. Radio read is made via the handheld Psion WA pro and SensusREAD software.

### 4. Opto-Encoder 630C

A version with opto-encoder for M-Bus or MiniBus interface is also available.

Main benefits are battery free design and absolute reading for perfect matching of remote reading with index.

Refer to datasheet code LS 8500.

For further information please contact your Sensus sales office.



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