# 640C 640MC

# Volumetric Meter - Composite Body with Electronic Register



#### Main characteristics

DN 15 to 20 and Coax, MAP 16, T50 (temperature range 0,1 to 50 °C)

Light and robust

Easy to handle

Meets current and anticipated regulations for potable water

Environmentally friendly

Unrivalled accuracy and measuring range

High resistance to impurities and aggressive water

Quiet operation

Ready for wireless communication with integrated radio functionality (available in different frequencies)

Long lasting battery life expectation inclusive of metrology and radio function

The register includes a lithium battery

## **Applications**

The 640C/640MC is a high precision meter.

Due to its unique piston and measuring chamber design, the smallest drops of water are measured.

With the 640C/640MC you are assured of proven metrology of an established meter with advantage of built in communications capability.

The 640C meter range includes an electronic register with integrated radio functionality which enables easy and fast communication.

Due to our broad range of system solutions you can adapt the 640C/640MC to all your AMR, AMI requirements.

The protection class of the electronic register of the 640C family is IP 68 rated.

With a tamper proof design and its long life span you can be confident when selecting the 640C/640MC.

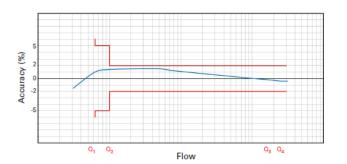


## **Typical Marking**

## **Typical Accuracy Curve**



Markings may vary depending on particular markets or metrological specifications.



## **Accuracy and Reliability**

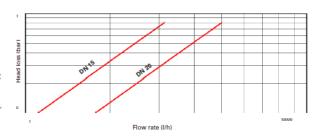
Thanks to the advanced design of its measuring chamber the meter has a low starting flow.

It can be supplied with metrological seal according 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. All electronic components of the register are hermetically sealed and assembled in a glass copper casing which allow the protection class IP68.

The 640C/640MC water meter retains its metrological accuracy for many years of operation, even in difficult working conditions.

## **Typical Head Loss Curve**



## **Cross Section**



640MC



640C DN1



## **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

Certificate of compliance for potable drinking water

KTW/DVGW (D) ACS (F)
WRAS (UK) Hydrocheck (B)

KIWA ATA (NL)

## **Performance Data**

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

			Coaxial Manifold	Inline	
Nominal Size	DN	mm	#	15	20
Permanent flowrate	Q <sub>3</sub>	m³/h	2.5	2.5	4
Ratio "R"	Q <sub>3</sub> /Q <sub>1</sub>	R	40 / 80 / 160 / 315 / 400		
Maximum flowrate (1)	Q <sub>4</sub>	m³/h	3.125	3.125	5.0
Minimum flowrate (1) (tolerance ±5%)	Q <sub>1</sub>	I/h	6.25	6.25	10.0
Transitional flowrate (1) (tolerance ±2%)	Q <sub>2</sub>	I/h	10.0	10.0	16.0

(1) Values for R=400

## Legibility

The display with 9 digits (6 for m³, 3 for litres) ensures exceptional readability. The highest resolution in testing mode is 0.05 litres.

Icons are also displayed on the LCD to indicate important information have been registered:



Low battery level is reached





System is set up in hydraulic testing mode

 $\,m^3\,\,$  indicates the unit programmed in use

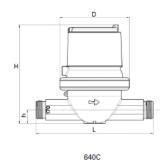
## **Dimensions and Weights**

			Coaxial Manifold	Inline	
Nominal Size	DN	mm	#	15	20
Length	L	mm		134	165
Width	D	mm	101.7	101.7	113.5
Total height	Н	mm	140.3	142.6	149
Height to pipe ax	is h	mm		18.95	21.5
Tail [	Diameter	inch	G 11/2" B	G ¾" B (2)	G 1" B
Piece		mm	47.8	26.44	33.25
Thread	Pitch		2.31	1.81	2.31
Weight		kg	0.5	0.6	0.68

<sup>&</sup>lt;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 1670 INT.