

**MID**
VERSION

Woltex M

Horizontal Woltmann meter with extended accuracy range for water distribution applications.

Woltex M is a horizontal Woltmann meter available as MID approved in sizes from DN 50 to 150. With its extended accuracy range it is dedicated to all applications around water distribution where high reliability and accuracy is requested.

FEATURES AND BENEFITS

- » Hermetically sealed register (copper can/mineral glass envelope)
- » Extended range approval
- » Interchangeable approved mechanisms without re-calibration
- » Pre-equipped through Cyble as a standard
- » Excellent resistance to corrosion with 300 microns epoxy coating

Extended Range of Measurement

Woltex is ensuring accurate and reliable data collection in a large scope of flow-rates typical of water network applications. Leakage detection as far as peak demands are accurately monitored initially and over time.

Endurance & Peak Flow Resistance

This extended range of measurement is the result of more than twenty years experience in Horizontal Woltmann design, from the first hydrodynamically balanced helix patent in 1985 still resulting in unmatched endurance capabilities to the use of high quality materials.

Ease of Installation, Read and Maintenance

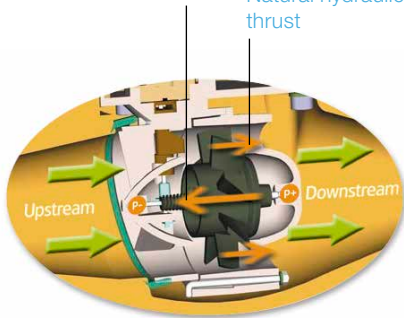
Woltex M range is available in various lengths and connections to minimize installation costs. Interchangeable approved mechanisms allows easy maintenance without re-calibration. Ease of read in the toughest environments (ie: flooded pits) is secured by orientable hermetically sealed register (copper can/mineral glass envelope).

Communication Device

Pre-equipped for future communication through Cyble.

System counteraction

Natural hydraulic thrust



Hydrodynamic balance of helix



Woltex M totalizer



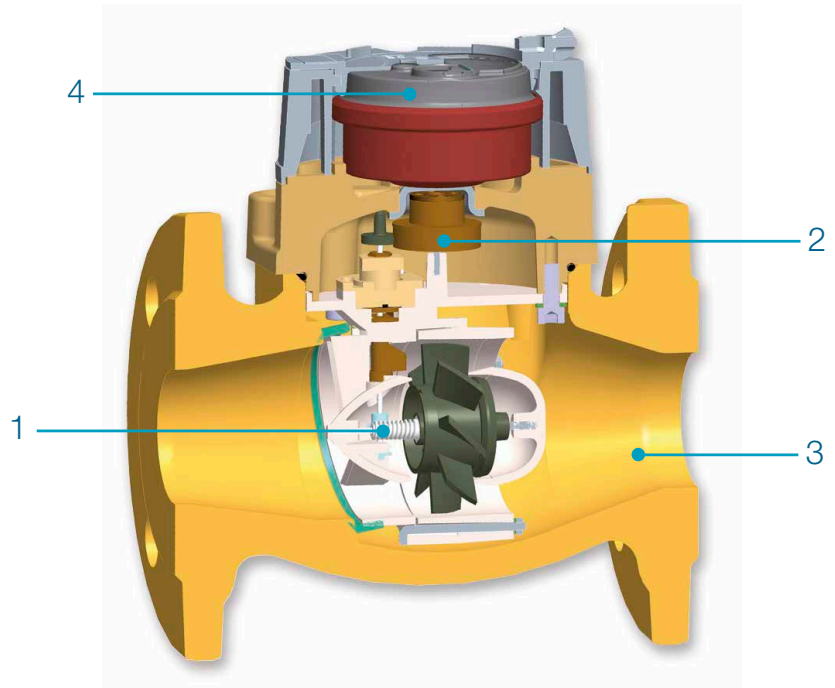
Cyble RF fitted on Woltex M with specific lid

WORKING PRINCIPLE

The water velocity is rotating the horizontal axis propeller. Special shape of its inlet and outlet bearing **1** is counteracting the natural hydraulic thrust applied on the propeller then preventing any downstream pivot wear.

The hydrodynamic balance proved its ability for more than 30 years. This results in a meter able to withstand sustained high flows without impacting low flow accuracy.

The propeller rotation is transmitted by a protected transmission and direct magnetic coupling **2** to the register. The cast iron body **3** is durably protected against the effects of corrosion by epoxy powder coating. The hermetically sealed copper can/mineral glass register **4** is safeguarding the read and integrity of the indicator in the toughest environments (flooded pits, mechanical tampering attempts, ...).



COMMUNICATION

Woltex M is supplied pre-equipped with Cyble Target

Allows communication and remote reading through:

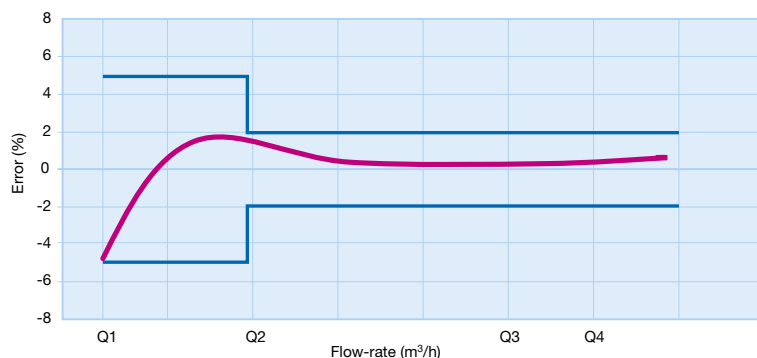
- » Pulse output (Cyble Sensor)
- » M-Bus protocol (Cyble M-Bus)
- » Radio frequency wireless link (Cyble RF)

Compatible with Itron complete offer for Metering Point Management (Automated Remote Reading, Metering Point Analyser, Automated Meter Data Collection):

- » AnyQuest
- » EverBlu
- » WaterMind

These Cyble modules allow the Woltex M meter to be connected with various associated systems if and when desired.

They are particularly adapted to commercial and industrial applications where a need for frequent meter monitoring is expressed especially in hard-to-read locations.



METROLOGICAL CHARACTERISTICS

Typical Performance

Nominal diameter (DN)	mm	50	65	80	100/125	150
	inches	2"	2" 1/2	3"	4"/5"	6"
Starting flowrate*	m³/h	0.19	0.22	0.3	0.38	0.4
Accuracy ± 2% from*	m³/h	0.4	1	1.2	1.4	1.6
Accuracy ± 5% from*	m³/h	0,35	0,5	0,75	0,9	1
Admissible peak flow (10' max)	m³/h	90	200	250	300	700
Max. admissible flowrate (continuous)	m³/h	50	79	79	200	500
Production Ratio		63	63	63	100	100
Head loss at Q3	bar	0.12	0.12	0.15	0.2/0.3	0.14
Max. admissible temperature	°C			30		
Max. admissible pressure	bar			20		
Min. Verification scale interval	L	0,2	0,2	0,2	0,2	2
Indicating range m³	m³	999 999.99	999 999.99	999 999.99	999 999.99	9 999 999.9
Cyble HF pulse weight	L	10	10	10	10	100

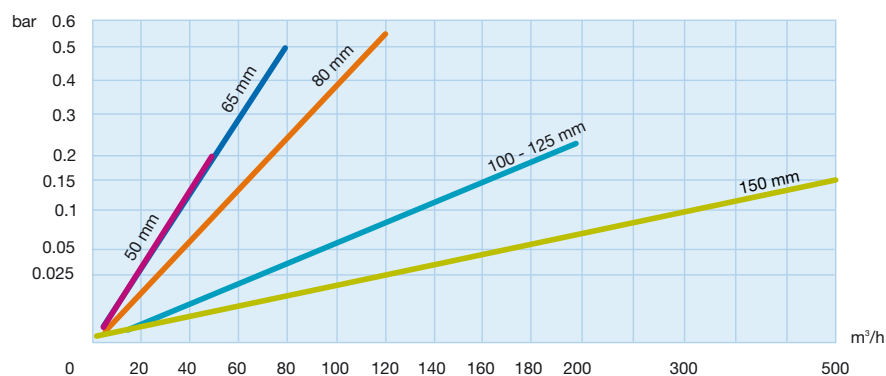
* Average values.

MID Approval Values

Nominal diameter (DN)	mm	50	65	80	100/125	150
	inches	2"	2" 1/2	3"	4"/5"	6"
Q3 Permanent flow rate	m³/h	40	63	63	160	400
Q4 Overload flow rate	m³/h	50	79	79	200	500
Q2 Transitional flowrate	m³/h	1,02	1,60	1,60	2,56	4,00
Q1 Minimum flowrate	m³/h	0,63	1,00	1,00	1,60	2,50
Ratio	m³/h	63	63	63	160	160
Maximum admissible Pressure	bar			20		
Maximum headloss at Q3	bar	0,3	0,6	0,6	0,3	0,3
Sensitivity class to the disturbances		U0D0**	U0D0**	U3D/D0**	U0D0	U0D0
Mid Approval number				LNE-23696-2		

** with flow straighteners S-3D

HEAD LOSS



Woltex M DN150

Dimensions

Dimensions

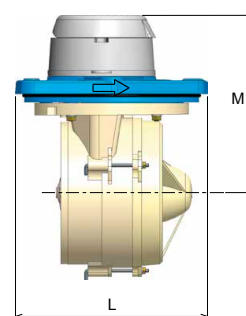
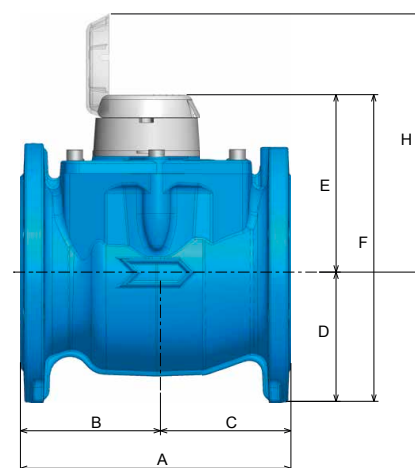
Nominal diameter (DN)		mm	50	65	80	100	125	150
		inches	2"	2" ½	3"	4"	5"	6"
End connection*			Flange PN 10/16					
> Meter								
A (length)	ISO	mm	200	200	200	250	250	300
	DIN	mm	200	200	225	250	-	300
	ISO long	mm	300	300	350	350	-	500
	AS (Australia/UK)	mm	311	-	413	-	-	-
B		mm	100	100	100	111	111	139
C		mm	100	100	100	139	139	161
D		mm	82.5	92.5	100	110	110	142.5
E		mm	160	160	160	169	169	194
F		mm	243	253	261	279	279	339
G		mm	165	185	200	220	220	285
H		mm	262	262	262	309	309	395
Weight		Kg	11.4	12.6	14.1	19.5	19.5	34
> Mechanism								
L		mm	123	123	123	166	166	212
I (max. width)		mm	148	148	148	182	182	273
M		mm	160	160	160	169	241	194
Weight		Kg	3	3	3	5.4	5.4	7.8

* Other drillings are available, under request

* Other drillings are available, under request

INSTALLATION REQUIREMENTS

- » Woltex M could be installed regardless of position.
- » Installation of a strainer upstream of the meter is recommended to protect the hydraulics against raw particles (see Itron strainer leaflet).
- » We recommend the installation of a flow straightener directly upstream of the meter to cancel the effects of hydraulic perturbations on Horizontal Woltmann accuracy (see Itron straightener leaflet).



Join us in creating a more **resourceful world**.
To learn more visit **itron.com**

While Itron strives to make the content of its marketing materials as timely and accurate as possible, Itron makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of, and expressly disclaims liability for errors and omissions in, such materials. No warranty of any kind, implied, expressed, or statutory, including but not limited to the warranties of non-infringement of third party rights, title, merchantability, and fitness for a particular purpose, is given with respect to the content of these marketing materials. © Copyright 2015 Itron. All rights reserved. **WA-0062.4-EN-11.15**

ITRON WATER METERING

9, rue Ampère
71031 Mâcon cedex
France

Phone: +33 3 85 29 39 00
Fax: +33 3 85 29 38 58