



WM-NLCH Series Multi-jet Lead Free Brass Hot Water Meters



The WM-NLCH Series meter is a multijet dry-type totalizing hot water meter available in sizes from 1/2" to 2". It is produced in an ISO9001 certified production facility and is constructed in conformance with AWWA C708 standards. The product complies with NSF/ANSI 61 Annex G and conforms with lead-free plumbing as defined by California, Vermont, Maryland and Louisiana state laws and the U.S. Safe Drinking Water Act that took effect January, 2014. It is an ideal choice for a range of municipal and industrial water metering applications.

Water flows through the meter's strainer (inlet and internal) and into the measuring chamber where it drives the impeller. A driving magnet transmits the movement of the impeller to a driven magnet located within the sealed register. The magnet is connected to a gear train which translates the impeller rotations into volume totalizers displayed on the meter's register dial face.

The WM-NLCH Series water meter is top loaded and consists of three basic components: main case, measuring chamber, and head ring. The main cases of all sizes are constructed using C87850 low-lead brass alloy.

END CONNECTIONS



All WM-NLCH meters have straight meter threads on the inlet and outlet of the body and come with NPT male stubs that attach using a union connection and a flat seal gasket.

NPT Threaded: 1/2", 3/4", 1", 1 1/2", 2"

FEATURES

- All parts in contact with water are constructed of corrosion-resistant materials
- Body and coupling are made with low-lead brass alloy C87850 and meets potable water standards
- Impeller is the only moving part in contact with water, giving the meter long life and consistently reliable operation
- Extra filter at the inlet of the meter body permits cleaning without having to open the meter
- Leak Indicator to show extremely low flow
- Dial plate design in US Gallons
- Optional check valve to avoid reverse flow (lead-free)
- Optional pulse output switch with 2-wire (red and black) 5 ft. cable

MATERIALS

Body & Couplings: Lead Free EcoBrass

Internals: Engineered Thermoplastic

Magnet: Alnico

SPECIFICATIONS

Max. Pressure: 150 psi

Max. Temperature: 194 ° F

Max. Reading:

1/2" to 1": 9,999,999.99

1 1/2" & 2": 99,999,999.9

Accuracy:

Normal Flow: +/- 1.5%

Low Flow: +/- 3%

(see accuracy curve)

OPTIONAL PULSE OUTPUT

Sensor Type: Dry contact reed switch

Pulse Rates:

1/2" to 1":

1, 2, 10, 20 pulses per gallon

1 pulse per 5, 10, 50, or 100 gallons

1 1/2" & 2":

1 or 2 pulses per gallon

1 pulse per 5, 10, 50 or 100 gallons

Max. Voltage: 24 VAC/DC

Max. Current: 10 mA

Cable: Two stranded 22 AWG wires with bare leads; 5 ft. cable with PVC insulation

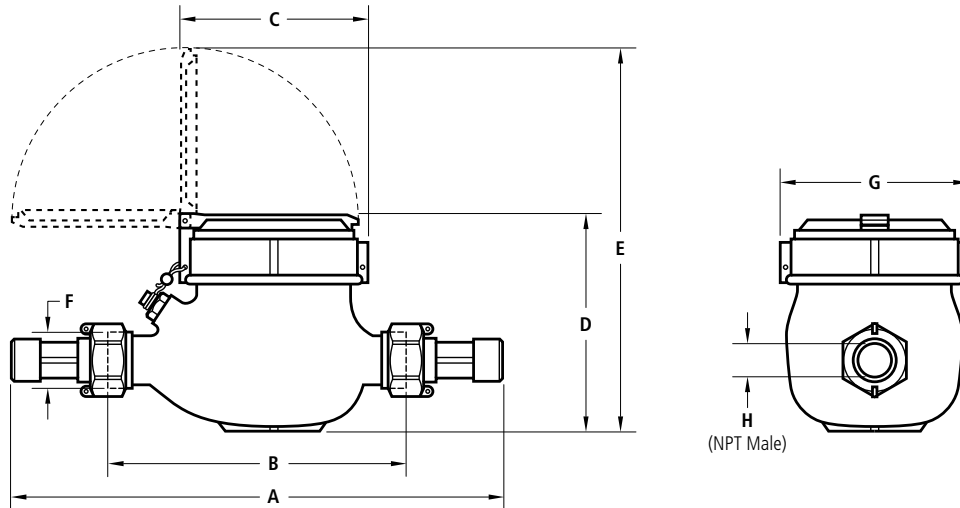


WM-NLCH Series



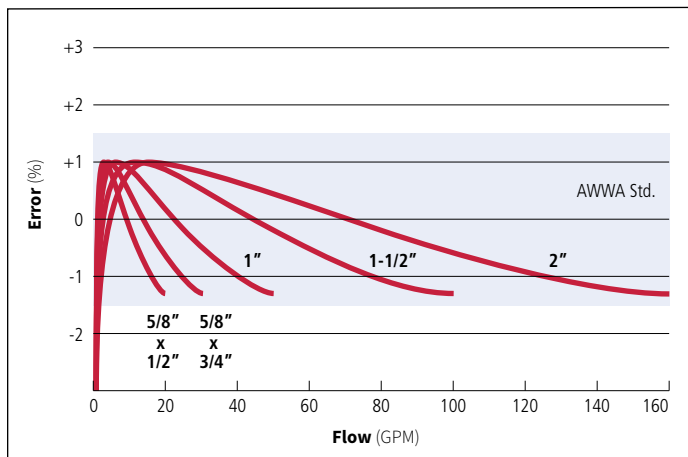
Lead Free Brass Hot Water Meters

DIMENSIONS AND FLOW RATES (inches, gallons, pounds)

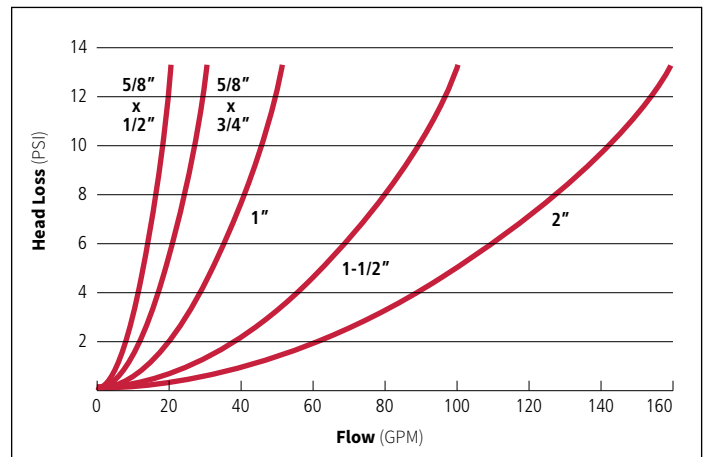


Size	A	B	C	D	E	F	G	H (NPT)	Flow Rate (gpm)			Normal Flow Range	Weight (lbs.)	Model
									High	Continuous	Low			
5/8" x 1/2"	10.20	7.5	3.7	4.3	7.6	0.75	3.7	1/2"	20	10	0.25	1-20	3.75	WM-NLCH-050
5/8" x 3/4"	11.57	7.5	3.7	4.3	7.6	1.00	3.7	3/4"	20	10	0.25	1-20	4.25	WM-NLCH-075
1"	15.20	10.3	3.9	4.7	8.2	1.25	3.9	1"	50	25	0.75	3-50	6.50	WM-NLCH-100
1 1/2"	17.00	11.9	4.9	5.6	10.1	2.00	4.9	1 1/2"	100	50	1.50	5-100	8.25	WM-NLCH-150
2"	17.00	11.9	4.9	5.6	10.1	2.5	4.9	2"	160	80	2.00	8-160	13.75	WM-NLCH-200

ACCURACY CURVES



HEAD LOSS CURVES





WM-NLCH Series



Lead Free Brass Hot Water Meters

ORDERING INFORMATION

WM-NLCH-050-R/1P

Series	Size	Pulse Output
--------	------	--------------

Series: _____

WM-NLCH = Lead Free brass multi-jet hot water meter

Size: _____

- 050** = 5/8" x 1/2" NPT
- 075** = 5/8" x 3/4" NPT
- 100** = 1" NPT
- 150** = 1 1/2" NPT
- 200** = 2" NPT

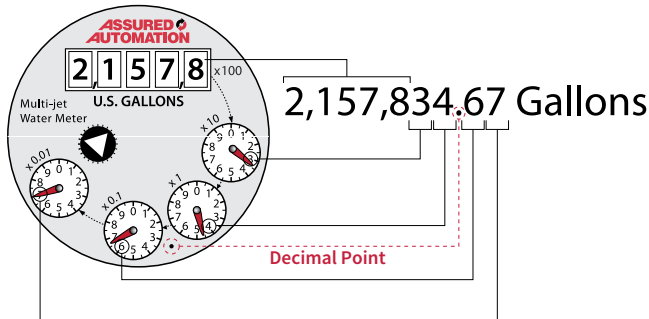
Pulse Output: _____

(Omit) no pulse output

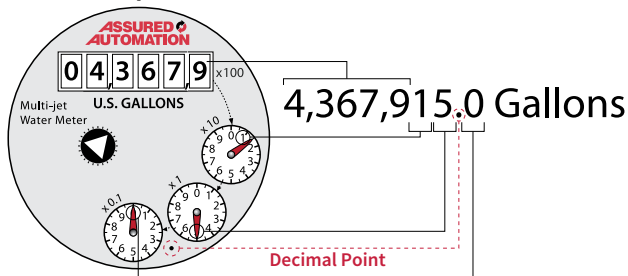
- R/10P** = 10 pulses per gallon
- R/20P** = 20 pulses per gallon
- R/1P** = 1 pulse per gallon
- R/2P** = 2 pulses per gallon
- R/5G** = 5 gallons per pulse
- R/10G** = 10 gallons per pulse
- R/50G** = 5 gallons per pulse
- R/100G** = 10 gallons per pulse

READING THE METER

Sizes 1/2", 3/4", & 1":



Sizes 1-1/2" & 2":



OPTIONS AND ACCESSORIES

Pulse Output Switches



These switches are used in conjunction with a digital remote display, a wireless transceiver, or a batch controller.



All WM-NLCH meters have a magnet on one of the smaller dials. The switch is easily fixed above the proper dial by inserting the two locating pins into the two holes in the lens of the meter. A single screw hold the switch in place.

Digital Remote Displays

Make reading easy with a resettable display.



- Reset button that can be disabled
- Can be backlit with external 5VDC power source
- 8 digit display goes up to 99,999,999
- UL listed

Various weatherproof models available



Check Valves



Check valves are recommended for all meter installations. They prevent water from flowing backwards through the meter.

For complete wireless water meter reading systems, please visit our water meter division at Flows.com

