

WATER METERS

NSF/ANSI 61 Certified

Pulsafeeder's multi-jet water meters provide value by offering efficient, accurate operation for potable and non-potable water applications. The meters are offered in three body types: Plastic (potable water) Low-lead brass (potable water) and Leaded brass (non-potable water). The water meters are available in both totalizing & contacting head type providing a dry contact output proportional to flow and can interface directly with both Pulsafeeder pumps and controllers. A totalizing register dial records flow over a wide range with low head loss.



Certified to
NSF/ANSI 61

FEATURES

- Sensor fastens to lens without removing top
- Calibration plug seal wire for tamper evidence
- Union end couplings for each service
- Factory set pulse rates
- Changing pulse rate requires no special tools
- Adjustable GPC (Tools required, see instruction manual for more details)

APPLICATIONS

- Plastic Body NSF 61 certified – Residential Water Conditioning and Potable Water
- Brass Lead-Free NSF 61 certified – Municipal, Industrial, Heat Transfer Cooling Tower and Boiler

MODEL SELECTION - BRASS

NSF 61 Certified Lead Free Brass Contacting Water Meters - Cold Water			
Part Number	Rating	Connection Size	Gallons Per Contact (GPC)
MTR000-G	.25- 20 GPM	1/2" NPT	Totalizer / Less Reed Switch
MTR004-G	.25- 20 GPM	1/2" NPT	1 GPC
MTR100-G	.25- 20 GPM	3/4" NPT	Totalizer / Less Reed Switch
MTR101-G	.25- 20 GPM	3/4" NPT	0.1 GPC
MTR102-G	.25- 20 GPM	3/4" NPT	0.25 GPC
MTR103-G	.25- 20 GPM	3/4" NPT	0.5 GPC
MTR104-G	.25- 20 GPM	3/4" NPT	1 GPC
MTR107-G	.25- 20 GPM	3/4" NPT	10 GPC
MTR300-G	.75- 50 GPM	1" NPT	Totalizer / Less Reed Switch
MTR301-G	.75- 50 GPM	1" NPT	0.1 GPC
MTR302-G	.75- 50 GPM	1" NPT	0.25 GPC
MTR304-G	.75- 50 GPM	1" NPT	1 GPC
MTR307-G	.75- 50 GPM	1" NPT	10 GPC
MTR310-G	.75- 50 GPM	1" NPT	100 GPC
MTR400-G	1.5 - 100 GPM	1.5" NPT	Totalizer / Less Reed Switch
MTR402-G	1.5 - 100 GPM	1.5" NPT	0.25 GPC
MTR404-G	1.5 - 100 GPM	1.5" NPT	1 GPC
MTR407-G	1.5 - 100 GPM	1.5" NPT	10 GPC
MTR410-G	1.5 - 100 GPM	1.5" NPT	100 GPC
MTR504-G	2 - 160 GPM	2" NPT	1 GPC
MTR507-G	2 - 160 GPM	2" NPT	10 GPC
MTR510-G	2 - 160 GPM	2" NPT	100 GPC

MODEL SELECTION - LEADED BRASS

Brass Contacting Water Meters - Cold Water			
Part Number	Rating	Connection Size	Gallons Per Contact (GPC)
MTR100	.5 - 30 GPM	.50" NPT	Totalizer / Less Reed Switch
MTR200	.5 - 30 GPM	.75" NPT	Totalizer / Less Reed Switch
MTR201	.5 - 30 GPM	.75" NPT	0.1 GPC
MTR202	.5 - 30 GPM	.75" NPT	0.25 GPC
MTR203	.5 - 30 GPM	.75" NPT	0.50 GPC
MTR204	.5 - 30 GPM	.75" NPT	1 GPC
MTR207	.5 - 30 GPM	.75" NPT	10 GPC
MTR210	.5 - 30 GPM	.75" NPT	100 GPC
MTR300	.75 - 50 GPM	1" NPT	Totalizer / Less Reed Switch
MTR302	.75 - 50 GPM	1" NPT	0.25 GPC
MTR304	.75 - 50 GPM	1" NPT	1 GPC
MTR307	.75 - 50 GPM	1" NPT	10 GPC
MTR310	.75 - 50 GPM	1" NPT	100 GPC
MTR400	1.5 - 100 GPM	1.5" NPT	Totalizer / Less Reed Switch
MTR404	1.5 - 100 GPM	1.5" NPT	1 GPC
MTR407	1.5 - 100 GPM	1.5" NPT	10 GPC
MTR410	1.5 - 100 GPM	1.5" NPT	100 GPC
MTR507	2 - 160 GPM	2" NPT	10 GPC
MTR510	2 - 160 GPM	2" NPT	100 GPC

MODEL SELECTION - PLASTIC

NSF 61 Certified Plastic Contacting Water Meters - Cold Water			
Part Number	Rating	Connection Size	Gallons Per Contact (GPC)
MTR000-P	.25- 20 GPM	1/2" NPT	Totalizer / Less Reed Switch
MTR004-P	.25- 20 GPM	1/2" NPT	1 GPC
MTR100-P	.25- 20 GPM	3/4" NPT	Totalizer / Less Reed Switch
MTR101-P	.25- 20 GPM	3/4" NPT	0.1 GPC
MTR102-P	.25- 20 GPM	3/4" NPT	0.25 GPC
MTR104-P	.25- 20 GPM	3/4" NPT	1 GPC
MTR104-P-H	.25- 20 GPM	3/4" NPT	1 GPC / Hall Effect Sensor
MTR104-P-L	.25- 20 GPM	3/4" NPT	1 LPC
MTR107-P	.25- 20 GPM	3/4" NPT	10 GPC
MTR107-P-L	.25- 20 GPM	3/4" NPT	10 LPC
MTR300-P	.75- 50 GPM	1" NPT	Totalizer / Less Reed Switch
MTR301-P	.75- 50 GPM	1" NPT	0.1 GPC
MTR302-P	.75- 50 GPM	1" NPT	0.25 GPC
MTR304-P	.75- 50 GPM	1" NPT	1 GPC
MTR304-P-H	.75- 50 GPM	1" NPT	1 GPC / Hall Effect Sensor
MTR304-P-L	.75- 50 GPM	1" NPT	1 LPC
MTR400-P	1.5 - 100 GPM	1.5" NPT	Totalizer / Less Reed Switch
MTR401-P	1.5 - 100 GPM	1.5" NPT	0.1 GPC
MTR402-P	1.5 - 100 GPM	1.5" NPT	0.25 GPC
MTR404-P	1.5 - 100 GPM	1.5" NPT	1 GPC
MTR404-P-H	1.5 - 100 GPM	1.5" NPT	1 GPC / Hall Effect Sensor

COOLING TOWER METER SELECTION

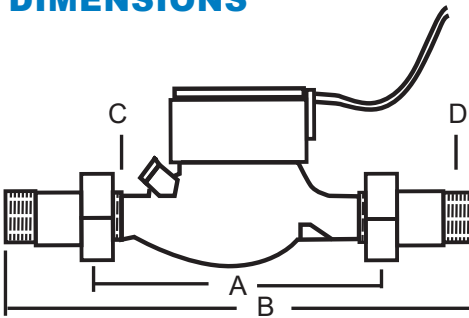
Cooling Tower Size in Tons	Make-Up Water Required (GPM)	Condenser Water Circulation (GPM)	Suggested Meter Size
100 - 400	4 - 16	300 - 1,200	3/4"
400 - 800	20 - 32	1,500 - 2,400	1"
800 - 1,600	26 - 64	2,700 - 4,800	1.5"
1,600 - 3,000	64 - 120	4,800 - 9,000	2"

ENGINEERING DATA

Multi-Jet					
Power	6mA at 12 Vdc (Hall Effect Sensor Only)				
Temperature	105° F (40° C) max				
Pressure	150 PSI operating (10.3 Bar)				
Accuracy	± 1.5% of reading				
Materials					
	Body	Plastic or Eco-brass alloy			
	Internals	Engineered thermoplastic			
	Magnet	Alnico			
	Fittings	Lead-free tail piece			
Connection Gasket					
	NSF-61 Certified	EPDM			
	Non-Certified	Natural Rubber			
Pulse Output					
	Sensor	Totalizer Only	Reed Switch	Hall-effect Device	
	Max Current	N/A	20 mA	20 mA	
	Max Voltage	N/A	24 Vdc or Vac	24 Vdc	
Cable Length					
	4' (1.21 m) standard (2000' maximum run)				
Flow Rates - Multi-Jet (GPM)*					
	Minimum	0.25	0.75	1.5	2
	Maximum	20	50	100	160
Regulatory					
	Lead-Free Brass and Plastic Body - NSF/ANSI 61				

*Caution: Excessive Flow can cause breakage. Do not exceed recommended maximums.

DIMENSIONS



Brass Body	3/4"	1"	1.5"	2"
A (Body)	7 1/2"	10 1/4"	11 3/4"	11 3/4"
B (Body w/ Couplings)	11 5/8"	15"	17"	17 5/8"
C (IPS Thread)	1"	1 1/4"	2"	2 1/2"
D (NPT Thread)	3/4"	1"	1 1/2"	2"
Lead-Free Brass Body	3/4"	1"	1.5"	2"
A (Body)	7 1/2"	10 3/4"	12 5/8"	15 1/4"
B (Body w/ Couplings)	11 5/8"	15.5"	17.75"	21"
C (IPS Thread)	1"	1 1/4"	2"	2 1/2"
D (NPT Thread)	3/4"	1"	1 1/2"	2"
Plastic Body	3/4"	1"	1.5"	
A (Body)	7 1/2"	10 1/4"	11 3/4"	
B (Body w/ Couplings)	11 5/8"	15"	17"	
C (IPS Thread)	1"	1 1/4"	2"	
D (NPT Thread)	3/4"	1"	1 1/2"	

SHIPPING WEIGHT

	3/4"	1"	1.5"	2"
Plastic - LBS	3 lb	4.5 lb	7.5 lb	N/A
Brass - LBS	6 lb	8 lb	13 lb	16 lb

PULSE RATE

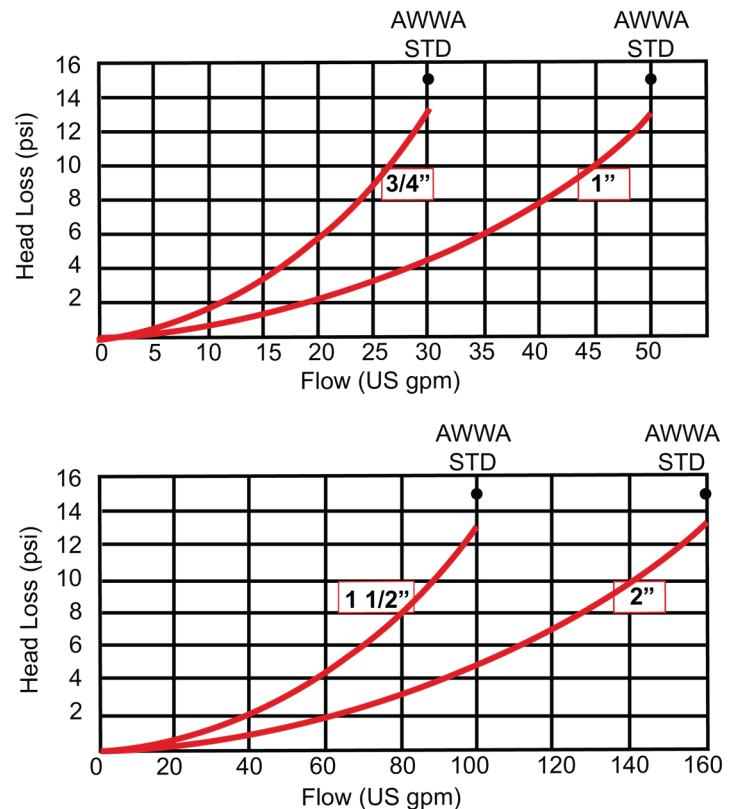
Pulse Rate	Magnetic Pointer Dial Position
10 Pulse Per Gallon (3/4" only)	x 0.01
*4 Pulse Per Gallon	x 0.1
1 Pulse Per Gallon	x 0.1
10 Gallons Per Pulse	x 1
100 Gallons Per Pulse	x 10

* A special magnet is required to achieve a rate of 4 pulses per gallon. It should be placed on the x.01 dial, with non-magnetic pointers on the remaining dials.

DIAL PLATE



PRESSURE LOSS CURVE



PARTS

Lead Free Brass Meter Replacement Parts		
Connection	Part Number	Description
3/4"	MTRG1-1	Lid w/ Hinge Pin
3/4"	MTRG1-2	Gasket Lens Assembly
3/4"	MTRG1-3	Internal Assembly w/ Register only available for MTR107-G
3/4"	MTRG1-4	Coupling Assembly w/ Gaskets
3/4"	MTRG1-5	Connection Gasket (1 pc)
1"	MTRG3-1	Lid w/ Hinge Pin
1"	MTRG3-2	Gasket Lens Assembly
1"	MTRG3-3	Internal Assembly w/ Register only available for MTR307-G
1"	MTRG3-4	Coupling Assembly w/ Gaskets
1"	MTRG3-5	Connection Gasket (1 pc)
1.5"	MTRG4-1	Lid w/ Hinge Pin
1.5"	MTRG4-2	Gasket Lens Assembly
1.5"	MTRG4-3	Internal Assembly w/ Register only available for MTR407-G
1.5"	MTRG4-4	Coupling Assembly w/ Gaskets
1.5"	MTRG4-5	Connection Gasket (1 pc)
2"	MTRG5-1	Lid w/ Hinge Pin
2"	MTRG5-2	Gasket Lens Assembly
2"	MTRG5-3	Internal Assembly w/ Register only available for MTR507-G
2"	MTRG5-4	Coupling Assembly w/ Gaskets
2"	MTRG5-5	Connection Gasket (1 pc)

EXPLODED VIEW

