For Commercial Applications

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

Series PWM

Commercial Micro Z™ Filter Systems

PURE WATER

Connection Sizes: 1" to 3" (25 - 80 mm)
Flow Rates: Up to 106 gpm (401 lpm)

Watts Pure Water Series PWM Micro Z™ filters are highly effective backwashing media filtration systems for the removal of sediment and suspended solids from water.

They are suitable for commercial applications with flow rates up to 106 gpm (401 lpm) with media bed sizes ranging from 1 to 20 cubic feet in size. If higher flow rates are required, multiple units can be installed in parallel. The media bed is cleaned of captured sediment by periodic backwashing and flushing. This cleaning cycle is time clock demand initiated and can be programmed to occur at any time that is convenient for the user. All steps of the cleaning cycle as well as returning to service are fully automatic and do not require manual actuation.

Watts Pure Water Series PWM sediment filters are designed for point of use or point of entry applications where filtered water is required. Micro Z™ is a naturally occurring form of zeolite that offers superior filtration characteristics over and above sand, anthracite and garnet products currently in use today. The key to Micro Z™'s performance is its hydrophilic properties combined with a jagged external surface texture. This gives Micro Z™ a sediment holding capacity of 2.8 times that of sand, which reduces backwash waste water volumes and provides higher service flow rates which reduces over all system size and cost. Micro Z™ has a 3-5 micron nominal particle size removal rating versus 15-30 micron with other conventional back-washable medias.

Reverse osmosis pretreatment, micro and ultra filtration system pretreatment, cartridge filtration pretreatment, sediment reduction in city and rural water, municipal water filtration, as well as general turbidity reduction are all common applications for the Watts Pure Water Series PWM Micro Z™ filter systems.

Filtered water is a cleaner supply water for boilers, solenoid valves, pumps, faucets, aerator screens, reverse osmosis systems, micro and ultra filtration systems, pools, aquariums, washing, and rinsing processes that reduces down time and costly repairs.



Series PWM10 **Series PWM15** **Series PWM20** **Series PWM30**

Features

- WQA Certified fully automatic time clock initiated control valve
- Sophisticated digital electronic controls that store operating history that can be accessed by the user
- Fully adjustable backwash and flush cycles
- Durable brass bodied control valve for years of service
- Dry contact lock out switch for remote interface is standard
- NSF Certified high capacity Micro Z™ filter media
- Highly corrosion resistant NSF Certified fiberglass tanks
- Durable polypropylene lower distribution system

Standards

Control Valve- WQA Certified to NSF/ANSI Std. 61
Micro Z™ Filter Media- NSF Certified to ANSI Std. 61
Mineral Tank- NSF Certified to ANSI Std. 44 or 61

Note: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

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Specifications

Watts Pure Water Series PWM Micro Z™ filter system shall be installed on the building's main water line just after it enters the building. The installation point shall be after any backflow prevention or pressure regulating valves. Other installation options are to install a system just before the plumbing equipment needing the protection of filtered water. In installations where the dedicated cold water make up to a water heater is the installation point, a backflow preventer and a thermal expansion tank must be installed as well. The system shall be installed with a bypass valve to allow for the shut down and removal of the unit without interrupting the water supply to the building. The filter system shall be a backwashing granular media bed type with digital programmable time clock initiated backwash, high-capacity alumino-silicate filter media rated for 3-5 nominal particle size removal, and all components necessary for proper operation. Electrical requirements are 120 volt 60 hertz. A local drain is required to accept drain water from the system. The feed water pressure must not fall below 30psi (207 kPa) or exceed 125psi (8.7 bar). Water temperature must not fall below 34°F or exceed 110°F (1 - 43°C).
The system shall provide water that has been filtered to a nominal micron rating of 3-5 micron.

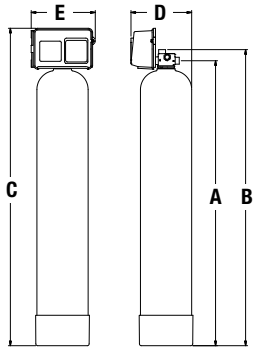
Feed Water Guidelines

pH	6 to 8.5
Water Pressure	30psi to 125psi (207 kPa to 8.7 bar)
Temperature	34 - 110°F (1 - 43°C)
Oil and H2S	None Allowed

* For all other guideline information please contact your Watts representative.

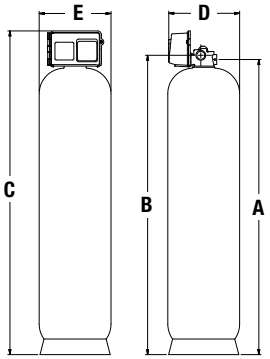
Dimensions - Weights

Series PWM10



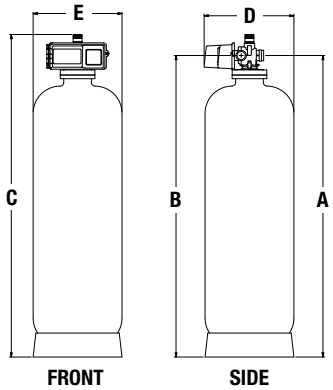
MODEL NO.	DIMENSIONS										WEIGHTS	
	A		B		C		D		E			
	in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs*
PWM10111A10	50 1/8	1273	52 3/8	1330	56 1/2	1435	11 1/2	292	12 3/4	324	118	54
PWM10111B10	56 1/4	1429	58 7/16	1484	62 5/8	1591	12	305	12 3/4	324	147	67
PWM10111C10	54 5/8	1387	56 13/16	1443	61	1549	13	330	12 3/4	324	173	79

Series PWM15



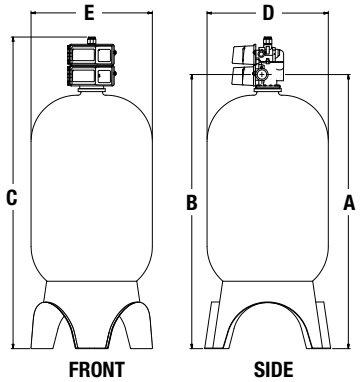
MODEL NO.	DIMENSIONS										WEIGHTS	
	A		B		C		D		E			
	in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs*
PWM15121D10	66 15/16	1699	67 7/8	1724	73 3/8	1864	14 15/16	378	14 1/8	358	278	366
PWM15121E10	66 3/8	1686	67 1/4	1708	72 3/4	1848	15 15/16	405	16 1/8	409	667	303
PWM15121G10	70	1778	71	1803	76 7/16	1941	21 1/8	536	21 1/8	536	1015	461

Series PWM20



MODEL NO.	DIMENSIONS										WEIGHTS	
	A		B		C		D		E			
	in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs*
PWM20141H10	81 7/8	2079	81 7/8	2079	87 1/2	2222	24 7/16	620	24 1/8	612	1015	461
PWM20141I10	83 3/8	2118	83 3/8	2118	89	2260	30 1/8	765	30 1/8	765	1852	842

Series PWM30



MODEL NO.	DIMENSIONS										WEIGHTS	
	A		B		C		D		E			
	in.	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*in.*	*mm*	*lbs.*	*kgs*
PWM30151J10	87 1/4	2216	87 1/4	2216	100	2540	36 1/8	917	36 1/8	917	2525	1148

Specifications

MODEL NO.	TANK SIZE	MINERAL TANK TANK SIZE Ft²	MICRO Z™ Ft³	FLOW RATES FOR SERVICE AND BACKWASH SERVICE GPM 10 GPM Ft²	15 GPM Ft²	20 GPM Ft²	BACKWASH GPM
PWM10111A10	9" x 48"	.44	1.0	4.4	6.6	8.8	7.0 GPM
PWM10111B10	10" x 54"	.54	1.5	5.4	8.1	10.8	7.0 GPM
PWM10111C10	12" x 52"	.78	2.0	7.8	11.7	15.6	10 GPM
PWM15121D10	14" x 65"	1.07	3.0	10.7	16.0	21.4	20 GPM
PWM15121E10	16" x 65"	1.39	4.0	13.9	20.8	27.8	20 GPM
PWM15121G10	21" x 62"	2.41	7.0	24.1	36.1	48.2	40 GPM
PWM20141H10	24" x 72"	3.14	10	31.4	47.1	62.8	50 GPM
PWM20141I10	30" x 72"	4.91	15	49.1	73.6	98.2	85 GPM
PWM30151J10	36" x 72"	7.07	20	70.7	106.1	141.4	100 GPM

Ordering Information

MODEL NO.	DESCRIPTION	PIPE SIZE	SPACE REQUIRED W x D x H	WEIGHT LBS	KGS
PWM10111A10	1 Cubic Foot Micro Z™ filter with Auto Backwash	1"	10" x 11" x 60"	118	54
PWM10111B10	1.5 Cubic Foot Micro Z™ filter with Auto Backwash	1"	11" x 12" x 65"	147	67
PWM10111C10	2 Cubic Foot Micro Z™ filter with Auto Backwash	1"	13" x 14" x 65"	173	79
PWM15121D10	3 Cubic Foot Micro Z™ filter with Auto Backwash	1½"	15" x 16" x 75"	278	126
PWM15121E10	4 Cubic Foot Micro Z™ filter with Auto Backwash	1½"	17" x 18" x 75"	366	166
PWM15121G10	7 Cubic Foot Micro Z™ filter with Auto Backwash	1½"	23" x 24" x 84"	667	303
PWM20141H10	10 Cubic Foot Micro Z™ filter with Auto Backwash	2"	27" x 27" x 95"	1015	461
PWM20141I10	15 Cubic Foot Micro Z™ filter with Auto Backwash	2"	33" x 33" x 95"	1852	842
PWM30151J10	20 Cubic Foot Micro Z™ filter with Auto Backwash	3"	40" x 48" x 114"	2525	1148

Notes: Flow rates, dimensions, and capacities are per tank. Pipe size, tank size, and space requirements are in inches. 20 gpm per square foot flow rates are for intermittent peak flows only and should not be used as continuous flows.

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