

'MFG' Series Media Filter Systems



Overview

The Marlo 'MFG' Series automatic backwashing media filter system is designed to provide the highest quality in water filtration equipment while covering a wide variety of commercial applications including turbidity reduction, iron removal, and chlorine removal. A broad range of filter media and component options are offered to fit your exact specifications.

'MID' Multi-Media Filters

High efficiency, in-depth filter system using a layered media bed of anthracite, silica sand, and two grades of garnet for excellent filtration down to the order of 5 - 10 micron.

'MZA' Natural Zeolite Filters

An alternative, single media approach to traditional multi-media filters that achieves a finer filtration to 3-5 micron with longer service run times.

'MGA' Iron Removal Filters

Filter system capable of reducing iron, manganese, and hydrogen sulfide using manganese greensand filter media.

'ACA' Carbon Filters

Granular Activated Carbon (GAC) is designed for the reduction of chlorine, taste, odor, and dissolved organic material from municipal and industrial water supplies.

Standard Equipment & Features

- Control Valve:
 - Top Mount, Multi-port Type, Low Lead Brass
 - Fleck 2750 - 1" Valve
 - Fleck 2850 - 1-1/2" Valve
 - Fleck 3150 - 2" Valve
 - Fleck 3900 - 3" Valve
- Resin Tanks: Fiberglass reinforced polyethylene - (FRP) NSF 44 certified
- Internal Distributors: Sch 80 PVC/ABS
- 12-Day Timeclock Initiated Backwash Cycle (Electro-mechanical)
- Automatic Backwash Flow Controller

Operating Parameters

- Inlet Pressure: 30-100 psig
- Electrical: 120VAC, 1-Phase, 60 Hz
- 120/24 VAC, 50/60 Hz wall mount transformer (Digital Control Valves Only)
- Temperature: 35-100 °F

Options Available

- Skid mounted, pre-piped, pre-wired systems
- Multi-tank system configurations (twin, triple, quad)
- Fleck NXT2 Digital Control Timers
- ASME Stamped Pressure vessels (18" dia. & higher)
- Inlet/Outlet pressure gauges and sample valves
- Differential pressure switch backwash cycle
- Separate Source Backwash Cycle
- Recirculation Pumps (Cooling Towers)
- Backwash Water Supply Pumps
- Alternate filter media (Birm, Filter-AG, Calcite)
- RO Lockout Switch
- Greensand Intermittent Regenerant Tank Systems
- Greensand Continuous Regeneration Systems

Specifications

MZA - Natural Zeolite Filter Specifications (Turbidity Reduction)

CATALOG NUMBER	FLOW RATES			PIPE SIZE		MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES)			SHIPPING WEIGHT (LBS)
	SERVICE		BACK WASH	SERVICE	DRAIN			SINGLE (L1xWxH)	TWIN (L2xWxH)	SINGLE	
	CONT. GPM ①	PEAK GPM									
MZA-10G-1	5	10	8	1	1	1	10x54	10x10x62	32x10x62	190	
MZA-12G-1	8	16	12	1	1	2	12x52	12x12x60	36x12x60	240	
MZA-14G-1	10	20	15	1	1	3	14x65	14x14x73	40x14x73	315	
MZA-16G-1	14	28	20	1	1	4	16x65	16x16x73	44x16x73	380	
MZA-16G-1-1/2	14	28	20	1-1/2	1	4	16x65	16x16x73	44x16x73	385	
MZA-18G-1	18	28	25	1	1-1/2	5	18x65	18x18x75	48x18x75	465	
MZA-18G-1-1/2	18	36	25	1-1/2	1-1/2	5	18x65	18x18x75	48x18x75	470	
MZA-21G-1-1/2	24	48	35	1-1/2	1-1/2	7	21x62	21x21x75	54x21x75	625	
MZA-24G-1-1/2	31	62	50	1-1/2	2	10	24x72	24x24x83	60x24x83	850	
MZA-24G-2	31	62	50	2	2	10	24x72	24x24x86	60x24x86	870	
MZA-30G-2	49	98	70	2	2	15	30x72	30x30x86	72x30x86	1,295	
MZA-36G-2	70	100	105	2	3	20	36x72	36x36x86	84x36x86	1,980	
MZA-36G-3	70	140	105	3	3	20	36x72	36x36x91	84x36x91	2,060	

MID - Multimedia Filter Specifications (Turbidity Reduction)

CATALOG NUMBER	FLOW RATES			PIPE SIZE		MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES)			SHIPPING WEIGHT (LBS)
	SERVICE		BACK WASH	SERVICE	DRAIN			SINGLE (L1xWxH)	TWIN (L2xWxH)	SINGLE	
	CONT. GPM ①	PEAK GPM									
MID-10G-1	5	10	8	1	1	1	10x54	10x10x62	32x10x62	225	
MID-12G-1	8	16	12	1	1	2	12x52	12x12x60	36x12x60	310	
MID-14G-1	10	20	15	1	1	3	14x65	14x14x73	40x14x73	420	
MID-16G-1	14	28	20	1	1	4	16x65	16x16x73	44x16x73	520	
MID-16G-1-1/2	14	28	20	1-1/2	1	4	16x65	16x16x73	44x16x73	525	
MID-18G-1	18	28	25	1	1-1/2	5	18x65	18x18x75	48x18x75	640	
MID-18G-1-1/2	18	36	25	1-1/2	1-1/2	5	18x65	18x18x75	48x18x75	645	
MID-21G-1-1/2	24	48	35	1-1/2	1-1/2	7	21x62	21x21x75	54x21x75	870	
MID-24G-1-1/2	31	62	50	1-1/2	2	10	24x72	24x24x83	60x24x83	1,200	
MID-24G-2	31	62	50	2	2	10	24x72	24x24x86	60x24x86	1,220	
MID-30G-2	49	98	70	2	2	15	30x72	30x30x86	72x30x86	1,820	
MID-36G-2	70	100	105	2	3	20	36x72	36x36x86	84x36x86	2,680	
MID-36G-3	70	140	105	3	3	20	36x72	36x36x91	84x36x91	2,760	

ACA - Activated Carbon Filter Specifications (Dechlorination)

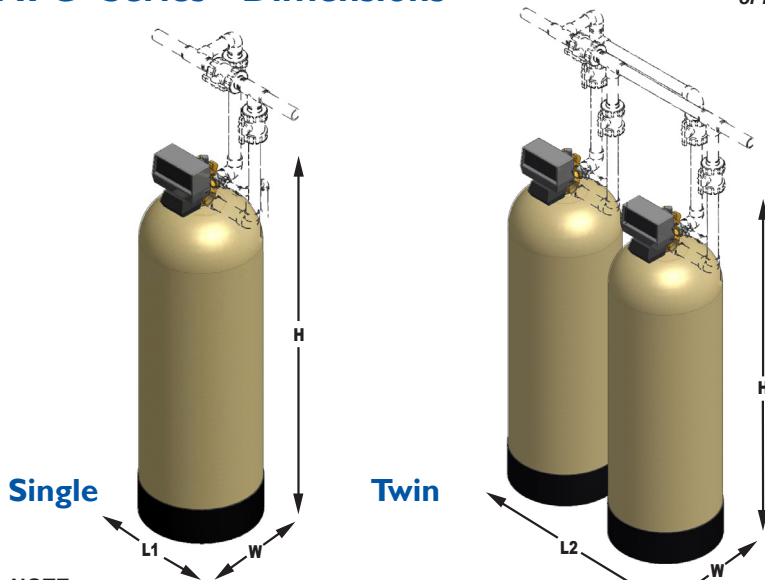
CATALOG NUMBER	FLOW RATES			PIPE SIZE		MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES)			SHIPPING WEIGHT (LBS)
	SERVICE		BACK WASH	SERVICE	DRAIN			SINGLE (L1xWxH)	TWIN (L2xWxH)	SINGLE	
	CONT. GPM ①	PEAK GPM									
ACA-10G-1	2	4	5	1	3/4	1	10x54	10x10x62	32x10x62	165	
ACA-12G-1	4	8	8	1	1	2	12x52	12x12x60	36x12x60	195	
ACA-14G-1	6	12	10	1	1	3	14x65	14x14x73	40x14x73	250	
ACA-16-1	8	16	15	1	1	4	16x65	16x16x73	44x16x73	305	
ACA-16G-1-1/2	8	16	15	1-1/2	1	4	16x65	16x16x73	44x16x73	310	
ACA-18G-1	10	20	20	1	1	5	18x65	18x18x75	48x18x75	360	
ACA-18G-1-1/2	10	20	20	1-1/2	1	5	18x65	18x18x75	48x18x75	365	
ACA-21G-1-1/2	14	28	25	1-1/2	1-1/2	7	21x62	21x21x75	54x21x75	520	
ACA-24G-1-1/2	20	40	30	1-1/2	1-1/2	10	24x72	24x24x83	60x24x83	715	
ACA-24G-2	20	40	30	2	1-1/2	10	24x72	24x24x86	60x24x86	735	
ACA-30G-2	30	60	50	2	2	15	30x72	30x30x86	72x30x86	1,050	
ACA-36G-2	40	80	70	2	2	20	36x72	36x36x86	84x36x86	1,390	
ACA-36G-3	40	80	70	3	2	20	36x72	36x36x91	84x36x91	1,450	
ACA-42G-2	60	100	100	2	3	30	42x72	42x42x105	96x42x105	1,720	
ACA-42G-3	60	120	100	3	3	30	42x72	42x42x110	96x42x110	1,780	

MGA - Manganese Greensand Filter Specifications (Iron Removal)

CATALOG NUMBER	FLOW RATES			PIPE SIZE		MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES)			SHIPPING WEIGHT (LBS)
	SERVICE		BACK WASH	SERVICE	DRAIN			SINGLE (L1xWxH)	TWIN (L2xWxH)	SINGLE	
	CONT. GPM ①	PEAK GPM									
MGA-10G-1	2	4	5	1	3/4	1	10x54	10x10x62	32x10x62	225	
MGA-12G-1	3	6	8	1	1	2	12x52	12x12x60	36x12x60	310	
MGA-14G-1	4	8	10	1	1	3	14x65	14x14x73	40x14x73	420	
MGA-16-1	6	12	15	1	1	4	16x65	16x16x73	44x16x73	520	
MGA-16G-1-1/2	6	12	15	1-1/2	1	4	16x65	16x16x73	44x16x73	525	
MGA-18G-1	7	14	20	1	1	5	18x65	18x18x75	48x18x75	640	
MGA-18G-1-1/2	7	14	20	1-1/2	1	5	18x65	18x18x75	48x18x75	645	
MGA-21G-1-1/2	10	20	25	1-1/2	1-1/2	7	21x62	21x21x75	54x21x75	870	
MGA-24G-1-1/2	13	26	30	1-1/2	1-1/2	10	24x72	24x24x83	60x24x83	1,200	
MGA-24G-2	13	26	30	2	1-1/2	10	24x72	24x24x86	60x24x86	1,220	
MGA-30G-2	20	40	50	2	2	15	30x72	30x30x86	72x30x86	1,820	
MGA-36G-2	30	60	70	2	2	20	36x72	36x36x86	84x36x86	2,680	
MGA-36G-3	30	60	70	3	2	20	36x72	36x36x91	84x36x91	2,760	
MGA-42G-2	40	80	100	2	3	30	42x72	42x42x105	96x42x105	3,520	
MGA-42G-3	40	80	100	3	3	30	42x72	42x42x110	96x42x110	3,580	

* Sizing assumes inlet water supply of less than 2 ppm iron with continuous or intermittent regeneration with potassium permanganate (KMnO4).

'MFG' Series - Dimensions



NOTE: Installation piping (shown in broken lines) are provided by others.

Notes

- At expected pressure loss not exceeding 5 psig, based on a clean filter bed
- Dimensions are estimate only. Actual dimensions may vary based on job-site space limits and piping layout. Allow a minimum of 24" above height dimension for media loading. Consult factory for dimensions on skid mounted systems.
- Shipping weights are estimate only. Weights include media and support gravel, which are added to the tanks after installation. Double weight for twin tank systems.