

## 'MFS' Series Media Filter Systems



### Overview

The Marlo 'MFS' Series automatic backwashing media filter system is designed to provide the highest quality in water filtration equipment while covering a wide variety of commercial and industrial 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.

### Materials of Construction

- Media Tanks: Carbon steel with Safety Blue exterior paint
- Tank Lining: NSF 61 rated epoxy coating
- Exterior Piping: Galvanized steel pipe & cast iron fittings
- Internal Distributors: Sch 80 PVC/ABS
- Control Valves: Painted cast iron body

### Standard Equipment / Features

- Marlo MX-II electronic system controller
- Timer initiated backwash cycle
- Water activated diaphragm style control valves
- NEMA-4X electrical enclosures (FRP)
- Inlet/Outlet pressure gauges and sampling valves
- Factory Hydro-tested at 100 psig

### Operating Parameters

- Inlet Pressure: 30-100 psig
- Electrical: 120 VAC, 1-Ph, 60Hz
- Temperature: 35-110 °F

### Options Available

- Skid mounted, pre-piped, pre-wired systems
- Differential pressure switch backwash cycle
- Multiple tank parallel configurations
- ASME code stamped resin tanks
- Allen-Bradley PLC systems
- PVC or CPVC exterior face-piping (PVC standard for filters with 6" service)
- Copper or Stainless steel exterior face-piping
- Stainless steel internal distributor piping
- Seismic zone rated systems
- Butterfly control valves (air operated; standard for filters with 6" service)
- Air-scour backwash system
- Steam / hot water sanitizable carbon filters
- Alternate filter media (Birm, Filter-AG, Calcite)

# Specifications

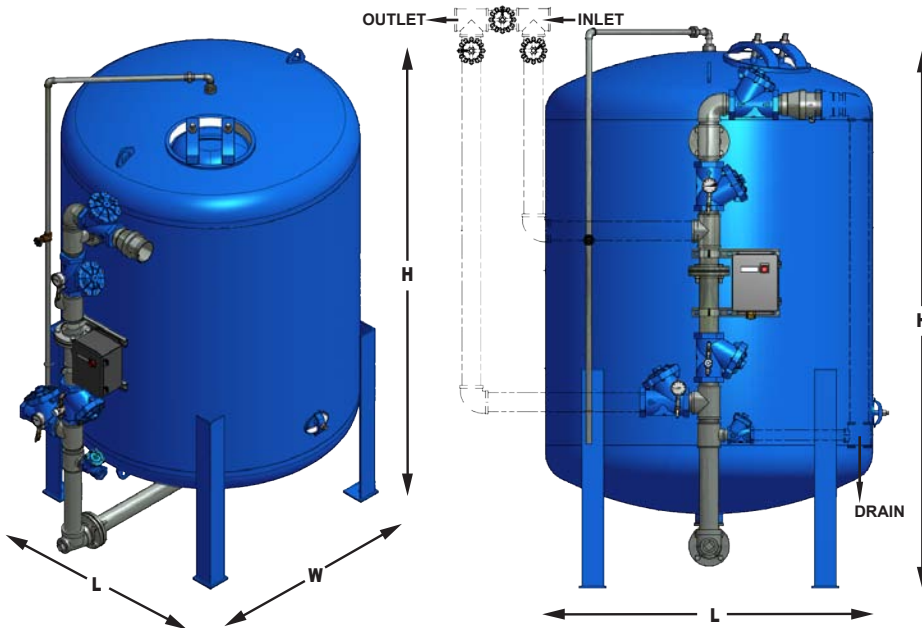
MZA - Natural Zeolite Filter Specifications									
CATALOG NUMBER	FLOW RATES		PIPE SIZE			MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES) ②	SHIPPING WEIGHT (LBS) ③
	SERVICE		BACK WASH	SERVICE	DRAIN				
	CONT. GPM ①	PEAK GPM							
MZA-20	20	45	35	1.5	1.5	5	20x54	21x30x72	650
MZA-24	30	60	45	1.5	2	8	24x54	25x34x73	900
MZA-30	50	100	75	2	2.5	12	30x54	31x40x76	1,400
MZA-36	70	140	105	2.5	3	18	36x60	37x48x84	2,100
MZA-42	100	200	145	2.5	4	24	42x60	43x54x88	2,700
MZA-48	125	250	190	3	4	32	48x60	49x62x95	4,000
MZA-54	160	320	240	3	4	40	54x60	55x70x97	4,900
MZA-60	200	400	300	3	6	50	60x60	61x76x103	6,200
MZA-66	240	480	360	4	6	60	66x60	67x82x105	8,600
MZA-72	285	570	425	4	6	70	72x60	73x88x107	11,700
MZA-84	385	770	580	6	6	95	84x60	85x104x102	15,600
MZA-96	500	1000	750	6	6	125	96x60	96x122x110	20,100
MZA-108	640	1280	950	8	8	160	108x60	109x134x112	25,000
MZA-120	800	1600	1175	8	8	200	120x60	121x146x115	29,500

MID - Multimedia Filter Specifications									
CATALOG NUMBER	FLOW RATES		PIPE SIZE			MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES) ②	SHIPPING WEIGHT (LBS) ③
	SERVICE		BACK WASH	SERVICE	DRAIN				
	CONT. GPM ①	PEAK GPM							
MID-20	20	45	35	1.5	1.5	5	20x54	21x30x72	1,200
MID-24	30	60	45	1.5	2	8	24x54	25x34x73	1,500
MID-30	50	100	75	2	2.5	12	30x54	31x40x76	2,200
MID-36	70	140	105	2.5	3	18	36x60	37x48x84	2,900
MID-42	100	200	145	2.5	4	24	42x60	43x54x88	3,700
MID-48	125	250	190	3	4	32	48x60	49x62x95	5,100
MID-54	160	320	240	3	4	40	54x60	55x70x97	6,300
MID-60	200	400	300	3	6	50	60x60	61x76x103	8,100
MID-66	240	480	360	4	6	60	66x60	67x82x105	11,000
MID-72	285	570	425	4	6	70	72x60	73x88x107	14,300
MID-84	385	770	580	6	6	95	84x60	85x104x102	19,600
MID-96	500	1000	750	6	6	125	96x60	96x122x110	25,200
MID-108	640	1280	950	8	8	160	108x60	109x134x112	31,500
MID-120	800	1600	1175	8	8	200	120x60	121x146x115	37,500

ACA - Activated Carbon Filter Specifications									
CATALOG NUMBER	FLOW RATES		PIPE SIZE			MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES) ②	SHIPPING WEIGHT (LBS) ③
	SERVICE		BACK WASH	SERVICE	DRAIN				
	CONT. GPM ①	PEAK GPM							
ACA-20	10	20	20	1	1.25	5	20x54	21x30x72	500
ACA-24	15	30	30	1.5	1.5	8	24x54	25x34x73	700
ACA-30	25	50	50	1.5	1.5	12	30x54	31x40x76	1,100
ACA-36	35	70	70	2	2	18	36x60	37x48x84	1,600
ACA-42	50	100	100	2	2.5	24	42x60	43x54x88	2,100
ACA-48	65	125	125	3	3	32	48x60	49x62x95	3,100
ACA-54	80	160	160	3	4	40	54x60	55x70x97	3,900
ACA-60	100	200	200	3	4	50	60x60	61x76x103	4,900
ACA-66	120	240	240	3	4	60	66x60	67x82x105	7,000
ACA-72	140	285	285	3	4	70	72x60	73x88x107	9,900
ACA-84	195	385	385	4	6	95	84x60	85x104x102	13,300
ACA-96	250	500	500	6	6	125	96x60	96x122x110	16,900
ACA-108	320	640	640	6	6	160	108x60	109x134x112	21,000
ACA-120	400	800	800	6	6	200	120x60	121x146x115	24,500

MGA - Manganese Greensand Filter Specifications									
CATALOG NUMBER	FLOW RATES		PIPE SIZE			MEDIA	TANK SIZE	OVERALL DIMENSIONS (INCHES) ②	SHIPPING WEIGHT (LBS) ③
	SERVICE		BACK WASH	SERVICE	DRAIN				
	CONT. GPM ①	PEAK GPM							
MGA-20	10	15	20	1	1.25	5	20x54	21x30x72	900
MGA-24	15	30	30	1.5	1.5	8	24x54	25x34x73	1,300
MGA-30	20	40	50	1.5	1.5	12	30x54	31x40x76	2,000
MGA-36	30	60	70	2	2	18	36x60	37x48x84	3,000
MGA-42	40	80	100	2	2.5	24	42x60	43x54x88	4,000
MGA-48	50	100	125	3	3	32	48x60	49x62x95	5,600
MGA-54	65	130	160	3	4	40	54x60	55x70x97	7,000
MGA-60	80	160	200	3	4	50	60x60	61x76x103	8,800
MGA-66	95	190	240	3	4	60	66x60	67x82x105	11,500
MGA-72	115	230	285	3	4	70	72x60	73x88x107	14,000
MGA-84	150	300	385	4	6	95	84x60	85x104x102	18,300
MGA-96	200	400	500	6	6	125	96x60	96x122x110	23,500
MGA-108	250	500	640	6	6	160	108x60	109x134x112	29,300
MGA-120	315	630	800	6	6	200	120x60	121x146x115	35,000

## 'MFS' Series - Dimensions



## Notes

- ① At expected pressure loss not exceeding 5 psig, based on a clean filter bed
- ② 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 resin loading. Use of ASME rated tanks may add up to 12" of tank height. Consult factory for dimensions on skid mounted systems.
- ③ Shipping weights are estimate only. Weights include resin and support gravel, which are added to the tanks after installation.