



The YARDNEY Maxi-Flush® automatic backwashing screen filter provides the ultimate in high rate screen filter performance. The patented backwashing valve system of the Maxi-Flush® screen filter provides for reverse flow during the backwash cycle to “flush” the system of entrapped pollutants.

The stainless steel filter cartridge, which is permanent, requires no maintenance and is backwashed with clean filtered water produced by the system.

The high strength stainless steel cartridge is permanent and is constructed with a burst strength of 400 PSI. The filter and cartridge have no internal moving parts to wear out, break down or replace.

The highly effective, reverse flow, backwash is controlled by the patented Yardney filter backwash valve. During the brief backwash cycle, a portion of the clean water produced by the system is diverted to the filter unit that is undergoing backwash. This flow of clean water frees pollutants from the cartridge and restores it to a clean condition. Each filter vessel is sequentially backwashed until the entire system is cleaned.

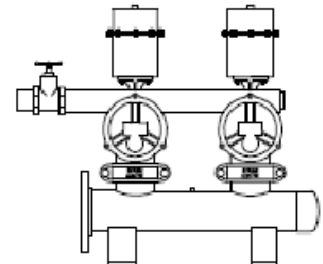
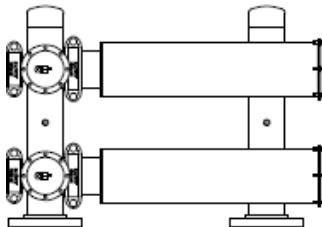
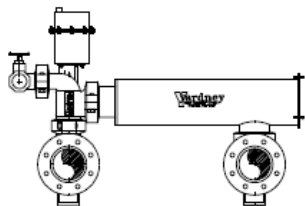
The Maxi-Flush® backwashing screen filter is built for durable, trouble free service. The filter housing are constructed of carbon steel, which is Scotchkote 134 fusion epoxy interior lined as a standard feature on Golf/Turf models. Carbon steel manifolds and the Yardney cast iron backwash valve are also fusion epoxy lined. For Agricultural models, the fusion epoxy coating is an option recommended for aggressive water applications on the carbon steel systems.

### **Features:**

- **Heavy-Duty, durable low-cost screen filtration system – flows from 250 GPM to 5000 GPM**
- **Rugged permanent stainless steel wedgewire screen filter cartridge – various meshes available**
- **Large screen cartridge area produces long run times between backwash cycles.**
- **Filtered, clean water backwashing automatically initiated by time or pressure differential**
- **No moving parts to wear out.**
- **Golf/Turf models have flanged connections. Agricultural models include standard grooved connections with optional flanged connections available.**
- **Backwash manifolds & throttling valves are included in the Golf/Turf models (optional for Agricultural AMF units).**
- **Golf/Turf models available with 40, 60, 80, 100 or 150 mesh SS Wedgewire cartridges. Agricultural models are also available with a 200-mesh cartridge (with about a 33% reduction in rated flow).**
- **Pressure rating 100 PSI for Agricultural applications and 150 PSI for Industrial / Golf / Turf applications.**
- **Industrial / Golf / Turf connections are standard Flanged – Agricultural is standard grooved.**

## MAXI-FLUSH® PRODUCT FEATURES AND SPECIFICATIONS

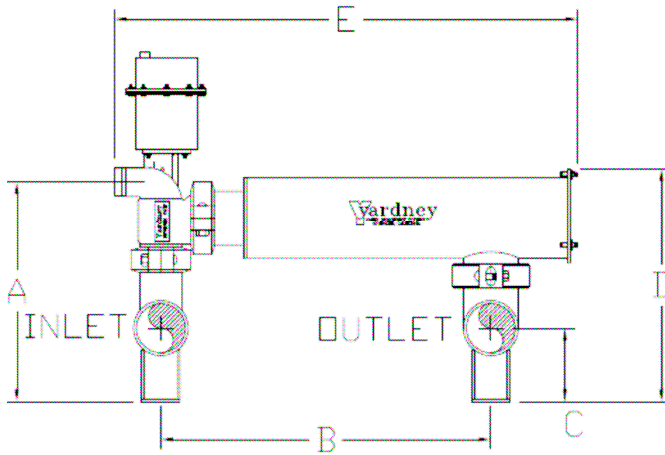
- General:** The filtration system is designed to remove suspended solids down to 105 microns in size depending upon screen mesh selection. Screen options offered are 60, 80, 100 and 150 mesh. Pressure drop through the filter at maximum rated flow is not exceed 5 PSI. The flow rate required will be specified by designer and sized accordingly.
- The Yardney Maxi-Flush Screen Filter is an automatic backwashing screen filter system. Backwashing can be accomplished by using clean filtered water. The Yardney Maxi-Flush Screen Filter is designed to be configured with at least two filter vessels per system to permit backwashing with clean filtered water.
- Filter Vessels:** Filter vessels are constructed of carbon steel and be lined with fusion-bonded epoxy. Each filter vessel features a safety seal fusion epoxy lined lid that is removable for cartridge inspection and servicing. Filter vessels are rated for a maximum working pressure of 150 PSI. A minimum operating pressure of 40 PSI is required.
- Piping:** The filter system is provided with fusion epoxy lined carbon steel inlet and outlet piping. The piping is connected with grooved type couplings. Flanged connection for the Inlet and outlet are standard.
- Valving:** Each filter vessel comes equipped with an automatic Yardney backwash valve. Yardney patents the automatic valve (U.S. Patent No. 4,262,698). The backwash valve is constructed of cast iron with a fusion epoxy lining on all wetted surfaces. The valve incorporates the use of a replaceable polyurethane valve seal and a replaceable brass valve guide assembly. The valve shaft uses double "O" rings to protect from dirt and contamination. The valve shaft and valve seal retainers are constructed of "304" stainless steel. . The Yardney diaphragm operated actuator assembly powers the valve by water. The valve features a self-lubricating grease cavity with external grease fitting for lubrication.
- Filter Cartridge:** The filter cartridge is constructed of a rigid Type 304 stainless steel design. The cartridge stainless is a continuously wound stainless steel wire welded to rigid reinforcement members. Burst strength rating on this product is 400 PSI. The cartridge is intended to be a permanent part of the system and should not require regular replacement. Reversing the flow of the filter and using pressure to eject the accumulated contaminants accomplish cleaning of the cartridge. The cartridge ends have a protective rubber coating on its ends for protection of sharp metal edges. A molded rubber gasket is fitted to each cartridge end for a secure liquid seal of the cartridge assembly. Automatic backwashing of the cartridge is accomplished through the use of the Yardney automatic backwash control system.
- Automatic Backwash Control System:** The filter system includes an automatic control system to monitor filter performance and to automatically initiate backwashing when required. The solid state controller will monitor filter operation on the basis of elapsed time and pressure differential. When preset pressure differential or elapsed time values are reached, the controller will initiate a backwashing sequence. The controller will allow for frequency of flush settings from 15 minutes up to a maximum of 24 hours. The user may set flush duration and delay between filter vessels. A pressure differential switch with a range up to 15 PSI is also provided. The controller will initiate a backwash based upon elapsed time or pressure differential; whichever event occurs first. These controllers require 110 VAC power supply.
- Backwashing:** The filter system is designed to provide for filtered water backwash. The filter system will continue to process water during backwash and requires no outside water source for the backwash function.
- Fusion Bonded Epoxy Lining:** The filter vessels; piping and valves are lined with Yardney Type 134 fusion bonded epoxy. All metal surfaces are sandblasted to a white metal condition prior to epoxy application. Metal surfaces are then preheated to 450°F prior to electrostatic application of the powder coating. After the electrostatic coating application is complete, the coated parts are cured at 400°F for a minimum of 20 minutes to insure complete coverage. The coating material is nontoxic and is approved for potable water applications.



## Automatic Backwash Valve



The patented Yardney backwash valve features Stainless steel valve trim and a field replaceable, Polyurethane, valve-sealing elements. Yardney valves also feature external lubrication fittings for ease of field service. The Yardney valve is totally field repairable and is powered by source line water pressure.

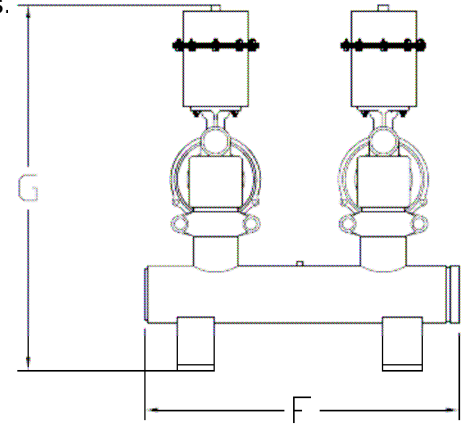


## Stainless Steel Filter Cartridge



### Automatic backwash cleaning operation for removal of suspended solids.

The Yardney Maxi-Flush® filtration system is automatically monitored either on elapsed time since the last back flushing, or pressure differential. This dual monitoring offers the user the flexibility to assure that filter operation is maintained with high efficiency, low-pressure drop and consistent high quality produced water. Yardney automatic controls are available for A/C power or D/C powered applications.



MODEL #	MAXIMUM FLOW		MAXIMUM PRESSURE	INLET / OUTLET	FLUSH LINE	A	B	C	D	E	F	G
	GPM	M <sup>3</sup> /HR										
MFS6-2	250	5.75	150 PSI	4"	2"	18 1/2"	26 7/8"	6"	20"	42 1/2"	27 1/4"	28"
MFS8-2	450	103.5	150 PSI	6"	2"	22 5/8"	24 1/8"	8"	25 1/8"	40 1/8"	28 1/4"	32 1/8"
MFS8-3	750	172.5	150 PSI	6"	2"	22 5/8"	24 1/8"	8"	25 1/8"	40 1/8"	41 3/8"	32 1/8"
MFS10-2	1000	230.0	150 PSI	8"	4"	28 1/8"	48 7/8"	9"	30 3/4"	67 1/4"	30 7/8"	38 1/4"
MFS10-3	1500	345.0	150 PSI	8"	4"	28 1/8"	48 7/8"	9"	30 3/4"	67 1/4"	46 1/8"	38 1/4"
MFS10-4	2000	460.0	150 PSI	10"	4"	30 1/4"	48 7/8"	10"	32 3/4"	67 1/4"	62 3/8"	40 1/4"
MFS10-5	2500	575.0	150 PSI	10"	4"	30 1/4"	48 7/8"	10"	32 3/4"	67 1/4"	77 5/8"	40 1/4"
MFS10-6	3000	690.0	150 PSI	12"	4"	30 1/8"	48 7/8"	11"	32 3/4"	67 1/4"	111"	40 1/4"
MFS10-7	3500	805.0	150 PSI	12"	4"	31 1/4"	48 7/8"	11"	33 3/4"	67 1/4"	126 1/2"	41 1/4"
MFS10-8	4000	920.0	150 PSI	14"	4"	33 1/4"	48 7/8"	13"	35 3/4"	67 1/4"	144"	43 1/4"
MFS10-9	4500	1035.0	150 PSI	14"	4"	33 1/4"	48 7/8"	13"	35 3/4"	67 1/4"	159 1/4"	43 1/4"
MFS10-10	5000	1150.0	150 PSI	14"	4"	33 1/4"	48 7/8"	13"	35 3/4"	67 1/4"	174 1/2"	43 1/4"

± 1/16" variance for measurements (A – G)

Optional Flanged inlet and outlet configuration available