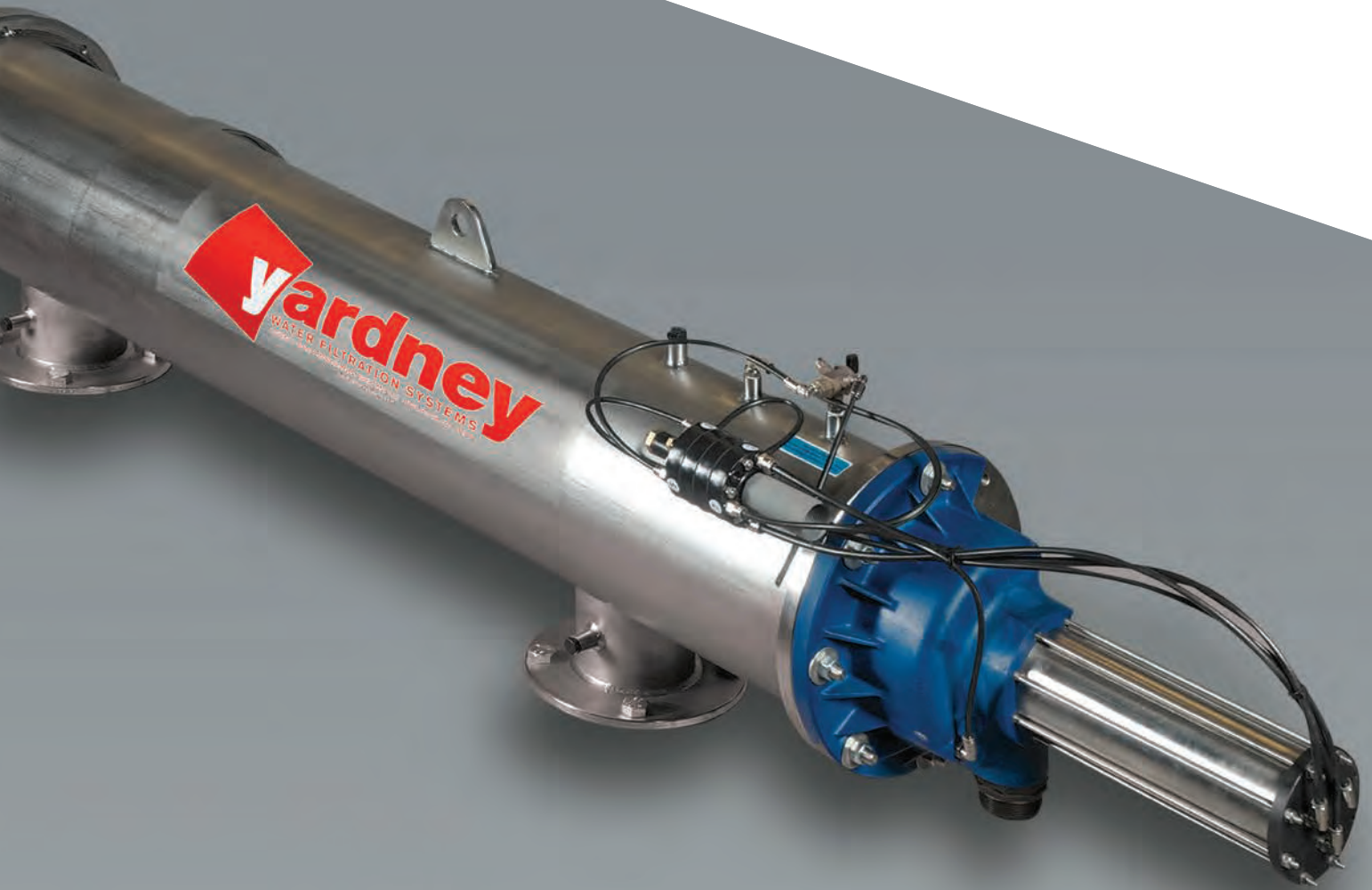




Filtaworx®

Automatic  
Self-Cleaning  
Screen Filter



Irrigation Systems

# Filtaworx® Automatic Self-Cleaning Screen Filter

Time.  
Quality.  
Experience.  
Knowledge.

**Yardney Filtaworx automatic self-cleaning screen filters** provide excellent protection for all types of irrigation systems including drip, micro-spray, sprinklers and golf course systems. Filtaworx filters are one of the most technically innovative self-cleaning filters available combining proven high performance, reliability and economy in a compact robust design.



Heavy duty stainless steel filter body provides corrosion resistance in most environments.

## Applications

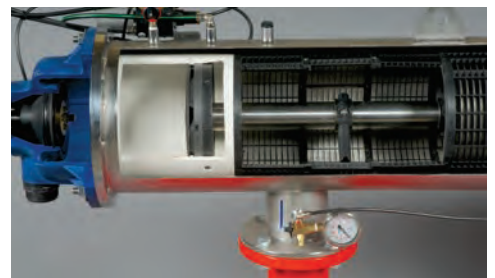
- Removal of algae, slime or other organic contaminant as well as sand, grit and other inorganic contaminants with fine filtration down to 250 mesh or 50 microns
- 150 psi standard operating pressure (high pressure systems available)
- Flow ranges from 110 gpm
- Irrigation and turf applications including drip, micro-spray and sprinklers

## Advantages

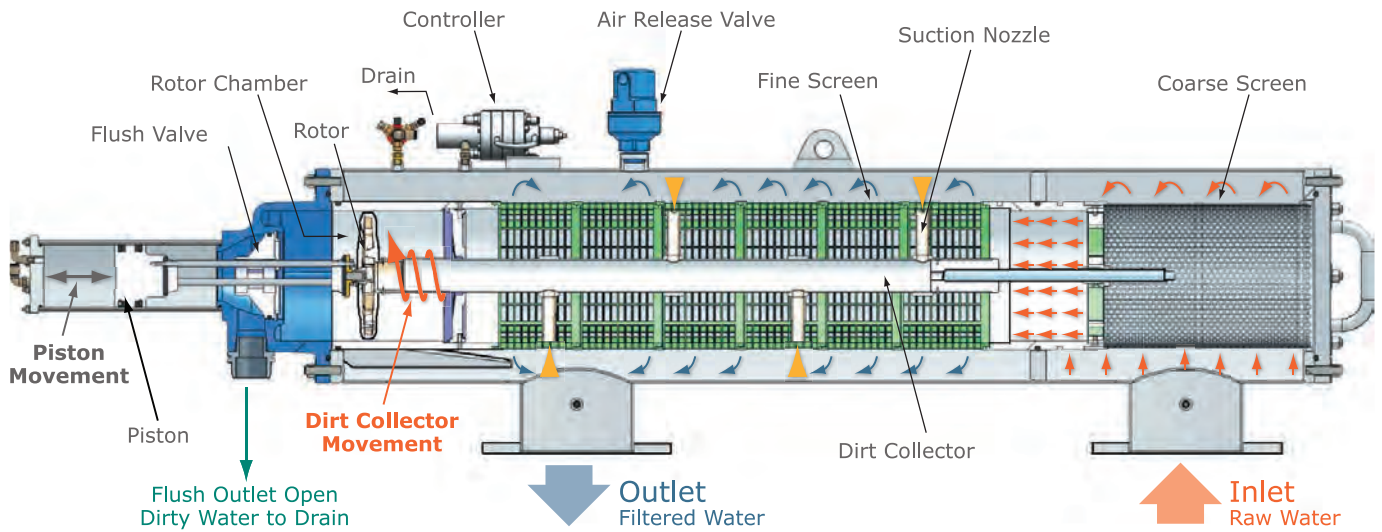
- Heavy duty stainless steel filter body
- Durable low maintenance self-cleaning mechanism
- Wide range of screen mesh sizes available in 20, 40, 80, 100, 120, 150, 200 and 250 mesh
- Hydraulically or electrically driven internal cleaning mechanism
- Automatic self-cleaning piston action moves in both directions
- Sacrificial anode
- Automatic operation of the self-cleaning backflush cycle is achieved when a pre-set pressure drop (5-7 psi) across the filter is reached
- Sectional screens allow easy replacement of a section of screen versus entire cartridge if damage occurs to the screen
- Compact and simple installation can be mounted in any position or orientation, with minimal space requirements



Twist-lock sectional screens provide easy cartridge replacement.



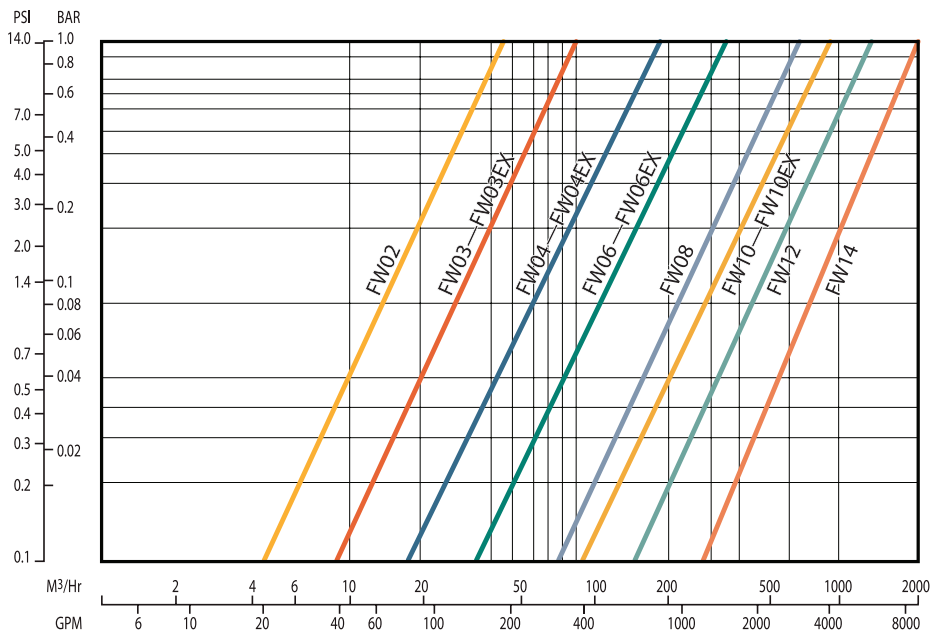
Minimal moving parts means high reliability in the field.



## Filtration System Operation

- During normal filtering mode the raw water enters the inlet of the filter and passes through the coarse screen (the 1/4" perforations remove large debris that may obstruct the lower mechanism).
- Water then travels to the inner section of the filter and through the fine screen to the outlet. The solids in the water are trapped on the fine screen, eventually causing a pressure drop (dp) across the filter.
- At a pressure drop of 5–7 psi the controller activates the cleaning cycle by opening the flush valve to drain (atmosphere).
- The interconnection of the suction nozzles, via the dirt collector to the drain, causes a back flushing or “vacuum clean” effect on the fine screen with a high velocity suction jet of water from the clean side of the screen, removing the dirt on the screen as it passes through.
- The water escaping via the rotor causes the dirt collector and suction nozzle assembly to rotate. The piston moves this assembly down and back along the entire length of the fine screen in a spiraling motion, cleaning the screen in approximately 15 seconds.
- At completion of flushing, the valve closes and the filter is ready for the next cycle.

## Pressure Losses For Various Flow Capacities



|   |           |
|---|-----------|
| Maximum working pressure                          | 150 psi   |
| Minimum line pressure required during flush cycle | 30 psi    |
| Approximate flush time                            | 15-17 sec |
| Flush volume                                      | 40 gal    |
| Maximum working temperature                       | 150 °F    |

SPECIFICATIONS | HORIZONTAL

| Model   | Nominal Flow Rate (gpm) | Filtration Surface Area (inches) | Maximum Pressure | Inlet/Outlet | Flush Port | A       | B        | C       | E       | F       | H       | L        | X       | Y       | Z        |
|---------|-------------------------|----------------------------------|------------------|--------------|------------|---------|----------|---------|---------|---------|---------|----------|---------|---------|----------|
| FW04EX  | 440                     | 870                              | 150 psi          | 4"           | 2"         | 9 1/4"  | 35 7/16" | 18 3/8" | 10 3/4" | 9"      | 20 5/8" | 76 7/8"  | 28 3/4" | 14 1/4" | 143 3/4" |
| FW06    | 790                     | 870                              | 150 psi          | 6"           | 2"         | 10 5/8" | 35 7/16" | 19"     | 12 3/4" | 11"     | 23"     | 79 3/8"  | 30 3/4" | 14 1/4" | 146 1/2" |
| FW06EX  | 790                     | 1258                             | 150 psi          | 6"           | 2"         | 10 5/8" | 35 7/16" | 33 1/4" | 12 3/4" | 11"     | 23"     | 93 3/4"  | 30 3/4" | 14 1/4" | 174 1/2" |
| FW08    | 1400                    | 1258                             | 150 psi          | 8"           | 2"         | 10 5/8" | 35 7/16" | 38"     | 12 3/4" | 15 1/4" | 23"     | 102 7/8" | 30 3/4" | 15"     | 183 1/2" |
| FW10    | 1760                    | 1258                             | 150 psi          | 10"          | 2"         | 12 1/4" | 35 7/16" | 38"     | 14"     | 15 1/4" | 23 1/2" | 102 7/8" | 31 1/2" | 15 3/4" | 183 1/2" |
| FW10EX* | 1760                    | 1614                             | 150 psi          | 10"          | 2"         | 12 1/4" | 43 5/16" | 38"     | 16"     | 26 7/8" | 26 1/4" | 122 1/4" | 34 1/4" | 16 1/2" | 209"     |
| FW12*   | 2640                    | 1614                             | 150 psi          | 12"          | 2"         | 12 1/4" | 43 5/16" | 38"     | 16"     | 26 7/8" | 26 1/4" | 122 1/4" | 34 1/4" | 16 1/2" | 209"     |
| FW14*   | 3960                    | 1886                             | 150 psi          | 14"          | 2"         | 12 1/4" | 50"      | 38"     | 16"     | 20 1/8" | 26 1/4" | 122 1/4" | 34 1/4" | 17 3/4" | 209"     |

\*Products with an asterisk do not include sacrificial anodes

Standard assembly includes:

- 304 stainless steel body with flanged inlet and outlet
- Glass reinforced nylon support structure with 316 stainless steel mesh fine screen
- Hydraulic controller
- Sacrificial Anode (FW04EX -FW10 only)
- Models FW10EX, FW12 and FW14 include four-layer sintered 316 stainless steel screens

Available options:

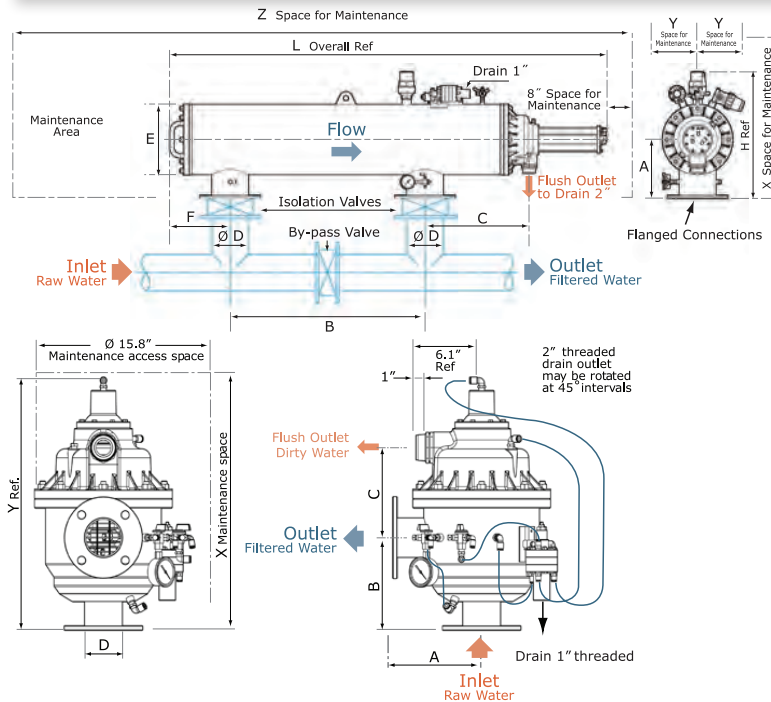
- Four-layer sintered 316 stainless steel screens
- 316 stainless steel housing available on request
- Alternative materials of housing, seals, screen cartridge, etc. dependent on application
- High pressure
- Electric controller
- Sustaining valve (highly recommended)

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 info@yardneyfilters.com

SPECIFICATIONS | VERTICAL

| Model   | Nominal Flow Rate (gpm) | Filtration Surface Area (inches) | Maximum Pressure | Inlet/Outlet | Flush Port | A      | B       | C      | X       | Y       |
|---------|-------------------------|----------------------------------|------------------|--------------|------------|--------|---------|--------|---------|---------|
| FW02*   | 110                     | 189                              | 150 psi          | 2"           | 2"         | 7 1/4" | 7 3/4"  | 8"     | 28 3/8" | 22"     |
| FW02-F* | 110                     | 189                              | 150 psi          | 2" Flg       | 2"         | 8 1/4" | 8 1/4"  | 8"     | 28 3/8" | 22 5/8" |
| FW03*   | 220                     | 189                              | 150 psi          | 3"           | 2"         | 7 5/8" | 8 3/8"  | 8"     | 28 3/8" | 22 5/8" |
| FW03-F* | 220                     | 189                              | 150 psi          | 3" Flg       | 2"         | 8 1/4" | 8 1/4"  | 8"     | 28 3/8" | 22 5/8" |
| FW03EX* | 220                     | 307                              | 150 psi          | 3"           | 2"         | 8 1/4" | 12 3/8" | 8 1/2" | 35 1/2" | 27 1/8" |
| FW04*   | 350                     | 307                              | 150 psi          | 4"           | 2"         | 9 1/4" | 12 3/8" | 8 1/2" | 35 1/2" | 27 1/8" |

\*Products with an asterisk do not include sacrificial anodes



Filtaworx ordering code part number breakdown:

| Electric or Hydraulic | PRODUCT | Screen Size   | Filter (inches) | Mesh |
|-----------------------|---------|---------------|-----------------|------|
| E                     | FW147   | 1 Standard    | 06              | 150  |
| H                     | FW147   | 2 Long        | 06              | 150  |
|                       |         | 3 Extra Long* |                 |      |

\*Extra long screen (3) only available on FW04

EFW147 1 06 150  
 Model FW06: Electric with standard screen, 6" filter, 150 mesh  
 HFW147 2 06 150  
 Model FW06: Hydraulic with long screen, 6" filter, 150 mesh



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