

# ORG SERIES

## Automatic Self-Cleaning Water Saving Filters 1½" to 10"



### CONSERVES RINSE WATER!

*Uses UP TO 90% Less Water than Conventional Self-Cleaning Filters*

**Low Cost • Reliable • Flexible • Simplistic Design**

The ORG Series units from Orival Inc. are designed to provide efficient, reliable filtration while reducing the amount of backwash water required. Thanks to its efficient rinse system, the ORG uses approximately 90% less than conventional self-cleaning filters. This low consumption makes it the ideal unit for a wide variety of applications.

The filters are available in line sizes from 1½" to 10" inlet and outlet to handle flow rates up to 1760 GPM for a single unit. The stainless steel fine screen is available in a variety of sizes to suit any application.

*Orival manufactures a wide variety of filtration systems, from 10 GPM to 12,000 GPM, available in stainless steel, carbon steel & special construction.*

### Applications

- Cooling Water
- Drinking Water
- Intake Water
- Reclaim & Effluent Water
- Well Water
- Waste Water
- Agricultural & Turf Irrigation
- H.V.A.C. & Cooling Towers
- Pump Seal Protection
- Fire Sprinkler
- I.E. & RO Protection
- Nozzle Protection
- Heat Exchanger Protection
- Air Compressor Protection
- Rain Harvesting
- Storm Water Reuse

### Features

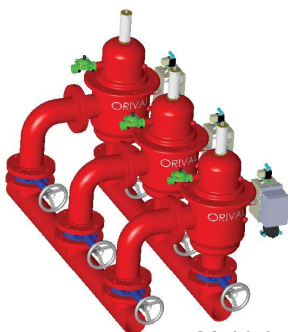
- Organic & Inorganic Suspended Solids Removal
- Hydraulically Operated & Electronically Controlled
- Single or Multiple Filter Manifold Systems
- Stainless Steel & Powder Coated Carbon Steel or Custom Construction
- Efficient Water Saving Design
- Low & High Pressure Operation
- Simplistic Design - No Special Tools for Filter Element Removal
- Few Moving Parts  
Low Mechanical Maintenance

### Screen Selection Guide

	Woven PVC Support	Sintered Multilayer	Wedgewire
Screen Patterns			
Screen Apertures	15-5000 Mic	1-5000 Mic	25-2500 Mic
Open Screen Area	40%	60%	30%
Hydraulic Collapse D.P.	300 psi	300 psi	450 psi
Temp Rating	150°F	300°F	750°F
Material	St/St 316L	St/St 316L	St/St 316L
Optional Material	Super Duplex, SMO 254, Monel & Others		

### Installations

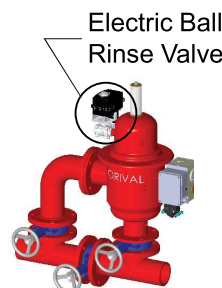
Unlimited  
Flow Rates



Multiple



No Bypass Valve



With Bypass Valve



Automatic Self-Cleaning  
**WATER FILTERS**

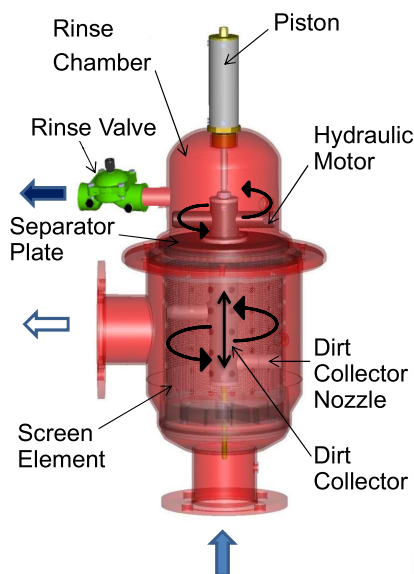
213 S. Van Brunt St.,  
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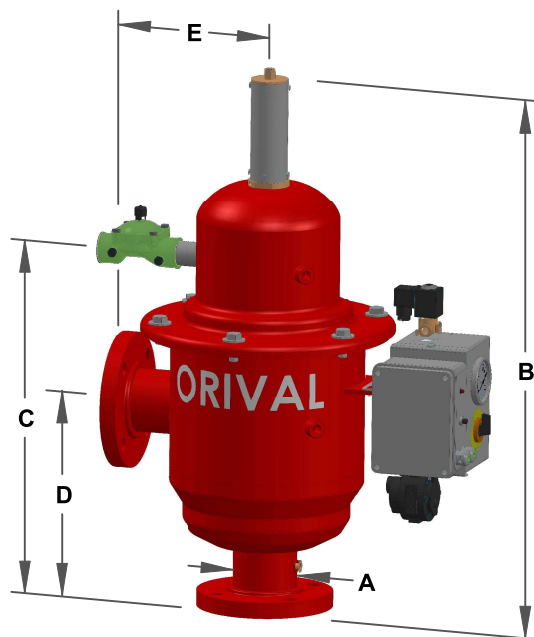
www.orival.com  
filters@orival.com

## How It Works

- Raw water enters the inlet of the filter to the inside of the **Screen Element** collecting suspended solids forming a filter cake.
- As the filter cake grows thicker it causes a pressure drop, when reaching a 7 psi differential the Rinse Controller (not shown) triggers a rinse cycle
- The **Rinse Valve** opens creating a vacuum force at the **Dirt Collector Nozzles** removing the filter cake.
- Water passing through the **Dirt Collector** to the **Hydraulic Motor** causes the entire assembly to rotate.
- As the **Dirt Collector** assembly rotates, the **Piston** strokes in an upward direction at the same time.
- The cleaning cycle lasts for 8 – 16 seconds without interruption of flow through the filter.



## Filter Dimensions (inch)



## Technical Data (Add " -S " for Stainless Steel Construction)

Model	Max Flow (gpm)	Open Screen Area (in <sup>2</sup> )		Rinse Valve (inch)	Dry Weight (lbs)
		Woven	Sintered		
ORG/B-015-LE	65	64	96	1	53
ORG/B-020-LE	110	64	96	1	55
ORG/B-030-LE	175	120	180	1	80
ORG/B-040-LS	350	120	180	1	92
ORG-040-LE	350	466	700	1½	140
ORG-060-LS	660	466	700	1½	145
ORG-060-LE	660	648	972	1½	167
ORG-060-LX	1320	810	1215	2	255
ORG-080-LS	1320	648	972	1½	172
ORG-080-LE	1320	810	1215	2	265
ORG-100-LS	1760	648	972	1½	211
ORG-100-LE	1760	810	1215	2	300

A	B	C	D	E
1½ NPT	20.10	13.60	7.50	7.10
2 NPT	20.10	13.60	7.50	7.10
3	28.40	18.50	10.20	8.20
4	28.40	18.50	10.20	8.20
4	55.40	38.70	21.30	12.50
6	55.40	38.70	21.30	12.50
6	63.20	46.70	27.40	12.50
6	69.70	56.10	27.60	12.50
8	63.20	46.70	27.40	12.50
8	69.70	56.10	27.60	12.50
10	63.20	46.70	27.40	30.70
10	69.70	56.10	27.60	12.50

## Specifications

## Standard

## Optional

Inlet / Outlet Connections	Thread, Flanged, Victaulic	Any Standard
Material of Construction	Carbon Steel or Stainless Steel	Super Duplex, SMO 254, Monel & Others
Operating Pressure	30 psi (min); 150 psi (max)	12 psi (min); 1000 psi (max)
Operating Temperature	No min.; 150° F max.	No min.; 212° F max.
Rinse Valve	Hydraulic	Electric Ball Valve
Control Power	110 / 220 Vac (0.5 A); 6 - 12 Vdc	Hydraulic

## Filtration Degrees

Visible to the naked eye. →

Micron	5	10	15	25	30	40	50	80	100	120	150	200	400	800	1000	1500	3000
Mesh*	3000	1500	1000	600	500	400	250	200	150	120	100	80	40	20	16	10	5
inches*	.0002	.0004	.0006	.0010	.0012	.0016	.002	.003	.004	.005	.006	.008	.016	.032	.04	.06	.12

Physical Size



\* Approximate and for reference only