ORG SERIES Automatic Self Cleaning Water Filters

CONSERVES RINSE WATER! Uses Up To 90% Less Water than Conventional Self Cleaning Filters

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 units. This low consumption makes it the ideal unit for a wide variety of applications.

The unit is available in line sizes from 1^{1/2}" to 8" inlet and outlet, to handle flow rates up to 1320 gpm. The stainless steel fine screen is available in a variety of sizes to suit any application.



½" to 8"



How It Works

Dirty water enters the inlet (1), where it enters the center of the fine screen (2). The water then passes through the fine screen from the inside out and exits the outlet (3).

The unwanted solids accumulate on the inner surface of the fine screen, creating a pressure differential. Once the pressure drop reaches a preset level, a rinse cycle is activated by the control system by opening the rinse valve (4) to an atmospheric drain.

As a result, pressure drops in the hydraulic motor chamber (5) and dirt collector assembly (6). The pressure drop creates a backflush stream, which sucks the dirt off the screen, similar to a vacuum cleaner. The backwash water is carried through the collector and ejected out of the holes in the hydraulic motor (7).

The water being ejected out of the hydraulic motor causes the collector to rotate, similar to a sprinkler. In addition, the

pressure drop in the hydraulic motor chamber causes the collector assembly to move axially. This combination of movements ensures that the entire screen area is cleaned each cycle.

Applications

- Cooling Water Drinking Water Intake Water Reclaimed Water Effluent Water Well Water
- Waste Water Wash Water Irrigation Turf Cooling Towers H.V.A.C.

Pump Seals Protection Fire Sprinkler Protection I.E. & R.O. Protection Nozzle Protection Heat Exchange Protection Air Compressor Protection



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Orival manufactures a wide variety of filtration systems, from 10 gpm to 12,000 gpm, in stainless steel or carbon steel construction.

IECHIFICAL Data (Add "-s" to model number for stall liess steel construction)											
Madal	Inlet/ Outlet (in.) "A"	Max. Flow Rate (gpm)	Open Screen Area (in ²)		Rinse Valve	Empty	Dimensions				
Number			Woven	Sintered	(in.)	(lbs.)	В	С	D	E	
ORG-015-LE	1-1/2 NPT	65	64	96	1	55	20.1	13.6	7.5	7.1	
ORG-020-LE	2 NPT	110	64	96	1	60	20.1	13.6	7.5	7.1	
ORG-030-LE	3	175	120	180	1	90	28.4	18.5	10.2	8.5	
ORG-040-LS	4	350	120	180	1	95	28.4	18.5	10.2	8.5	
ORG-040-LE	4	350	466	700	1-1/2	140	55.4	38.7	21.3	12.5	
ORG-060-LS	6	660	466	700	1-1/2	145	55.4	38.7	21.3	12.5	
ORG-060-LE	6	660	648	972	1-1/2	170	63.2	46.7	27.4	12.5	
ORG-080-LS	8	1320	648	972	1-1/2	175	63.2	46.7	27.4	12.5	

Screens

	Woven on PVC Support	Multilayer Sintered	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	Titanium, Has	stelloy and other e	xotic material			
Fibrous Mat. Filtration	Poor	Poor	Excellent			
Price	Low	Medium	High			

Installations



Specifications

speemeations	Standard	Optional
Power	None, line pressure powered	Electrical (See ORE/P series)
Self Cleaning Operation	Fully Automatic	Semi-automatic, manual
Material of Constuction	Carbon Steel or Stainless Steel	Titanium, Hastelloy and others
Operating Pressure	30 psi min; 150psi max	12 psi min; 1,000 psi max
Operating Temperature	No min; 150°F max	No min; 212°F max
Screen Aperture	50 - 3,000 micron	5-10,000 micron
Controls	Omnitrol 100, 400	Omnitrol 2000
Control Power	110V / 220V AC, 1/2 amp, 9V / 12V DC	Hydraulic

Screen Apertures

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
in*	.0002	.0004	.0006	.0010	.0012	.0016	.002	.003	.004	.005	.006	.008	.016	.032	.04	.06	.12
Physical Size												I	I	I	I		
* Approximate and for reference only																	

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