TEKLEEN® NEWSLINE
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Automatic Water Filter Streamlines Drip Irrigation

Drip irrigation systems take the worry out of watering – unless emitters become clogged with dirt and other contaminants that spew forth from the water source. Then watering becomes a labor-intensive process requiring constant monitoring and frequent cleaning, often canceling out the time and money saved by the drip system itself.

Water quality is a key factor in the success of drip irrigation systems. The purity of the water can be affected by many factors including seasonal changes, pipeline conditions and flow velocity, rate of turnover of ponds, and changing sources of water, among others.

How can you assure adequate water quality to keep your drip system functioning at an optimal level? Start by choosing the right filtration for your particular conditions. To a degree, filtration is as much art as science. But there are several quantifiable parameters that can help you determine the right size filter for your needs. These include:

1. Minimum and Maximum Operating Flow. This is the most critical factor when sizing a filter. Do not confuse flow rate with line size; they often are not compatible. For example, a two-inch filter that accommodates a 100 GPM (gallon per minute) flow rate will not work for a system with a 150 GPM flow rate; in that case you would need to go up to the next larger size, or a three-inch filter.
2. Water Source. This determines what kind of debris you are you trying to trap. Generally speaking, well water contains inorganic debris such as sand, while pond or surface water contains largely organic matter such as algae and leaves. Inorganic matter requires a smaller screen to trap the sand and sediment that would pass through a larger screen.
3. Minimum and Maximum Operating Pressure. Accurate pressure readings are important for two reasons: 1) each filter type has a maximum rated pressure of operation; and 2) if your system calls for an automatic, self-cleaning filter, minimum operating pressure must be maintained when the filter's flushing mechanism is engaged.
4. Size of Downstream Orifice to be Protected. Generally speaking, a filter is necessary to keep debris from clogging downstream sprinklers or other emission devices. The size of those orifices will determine the pore (i.e. micron) size of your filter element. As a rule of thumb, the proper filter porosity should maintain a ratio of 1:5 for drip irrigation and 1:3 for sprinklers. More specifically: drip 80-100 micron (200-150 mesh); micro sprinklers (jets) 150-200 micron (100-80 mesh); impact sprinklers and rotors 200-400 micron (40-80 mesh).
5. Budget: This parameter is complex. One should take into account not only the initial cost of a filter but also the cost of maintaining a system without filtration. Automatic, self-cleaning filters are more expensive than manual filters, but when labor costs are factored in may be less expensive in the long run.

The Tekleen Automatic Filter is self cleaning and operates on line pressure alone, eliminating the need for an external power source. The filter offers the following benefits:

- *Fully automatic and self-cleaning*
- *Environmentally friendly*
- *Cost-effective*
- *Maintenance free*
- *Compact design*

Mesh (holes per linear inch)	Micron*	Inches**
20	850	.033
40	400	.016
60	250	.010
80	177	.007
100	150	.006
140	100	.004
200	75	.003
325	50	.002
550	25	.001

* 1,000 micron (μ) = 1 millimeter (mm)
** 1 inch (in) = 25.4 millimeter (mm)

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ABW

Model	Connection inches	Screen Area sq. ft.	Max Flow gpm	Empty Wt. lbs.	Specifications
ABW2 - LP	2	0.5	100	120	Stainless steel body at the carbon steel price (stainless steel 316L body or carbon steel body with baked on powder epoxy coating at the same price.) Internal parts: stainless steel dirt collector, stainless steel screen on a PVC sleeve. Maximum 150 psi, 150° F. Standard screen mesh 50µ to 1000µ. Optional 3 layer stainless steel screen to 10µ, high temperature, and high pressure.
ABW3	3	0.5	150	150	
ABW3 - LP	3	1.7	250	200	
ABW4	4	0.8	350	170	
ABW4 - L	4	3.3	500	250	
ABW4 - LP	4	3.3	500	250	
ABW6 - L	6	3.3	800	350	
ABW6 - LP	6	3.3	800	350	
ABW6 - XLP	6	4.9	800	400	
ABW8	8	3.3	1,300	400	
ABW8 - P	8	3.3	1,300	400	
ABW8 - LP	8	5.0	1,600	500	
ABW10	10	4.4	1,800	500	
ABW10 - P	10	4.4	1,800	500	
ABW12	12	6.6	2,500	700	
ABW12 - P	12	6.6	2,500	700	
ABW14	14	7.4	4,000	800	
ABW14 - P	14	7.4	4,000	800	
ABW16 - LP	16	10.0	6,000	1,000	
ABW20 - TP	20	20.0	8,000	1,800	
ABW24 - TP	24	20.0	12,000	2,000	

BELL

Model	Connection inches	Screen Area sq. ft.	Max Flow gpm	Empty Wt. lbs.	Specifications
Bell - 1.5	1.5" NPT	0.5	50	60	Carbon steel body with baked on powdered epoxy coating. Maximum 150 psi, 150° F, Stainless steel screen mesh 35µ to 400µ. 2 gallons per rinse with a 1" valve & 8 gallons per rinse with a 2" valve.
Bell - 2	2" NPT	0.5	100	60	
Bell - 3	3" NPT	0.5	150	60	
Bell - 3L	3" ANSI	0.8	200	80	
Bell - 4	4" ANSI	0.8	300	90	
Bell - 4L	4" ANSI	1.7	400	150	
Bell - 6	6" ANSI	1.7	500	200	

MTF

Model	Connection inches	Screen Area sq. ft.	Max Flow gpm	Empty Wt. lbs.	Specifications
MTF1	1" NPT	0.6	30	30	Stainless steel body, 316L. Maximum 150 psi, 200° F, 3 layers sintered stainless steel screen Mesh sizes from 5µ to 400µ. 5 second rinse duration, using 2 gallons per rinse without interrupting main flow. 1" flushing valve.
MTF1.5	1.5" NPT	0.6	50	30	
MTF2	2" NPT	0.6	80	30	
MTF2 - L	2" NPT	1.5	150	60	
MTF3	3" ASA	1.5	200	80	
MTF4	4" ASA	1.5	300	90	

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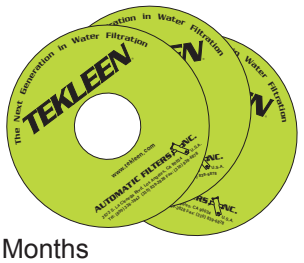

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AFFIX BUSINESS CARD

Please Circle:

My need is Current 6 Months

Crop Golf Greenhouse Nursery Trees Turf Other

Irrigation Type: Drip Jet Sprinkler

Water Source: Ditch Lake Well

Flow (gpm) _____

Pressure (psi) _____

Line Size (inch) _____