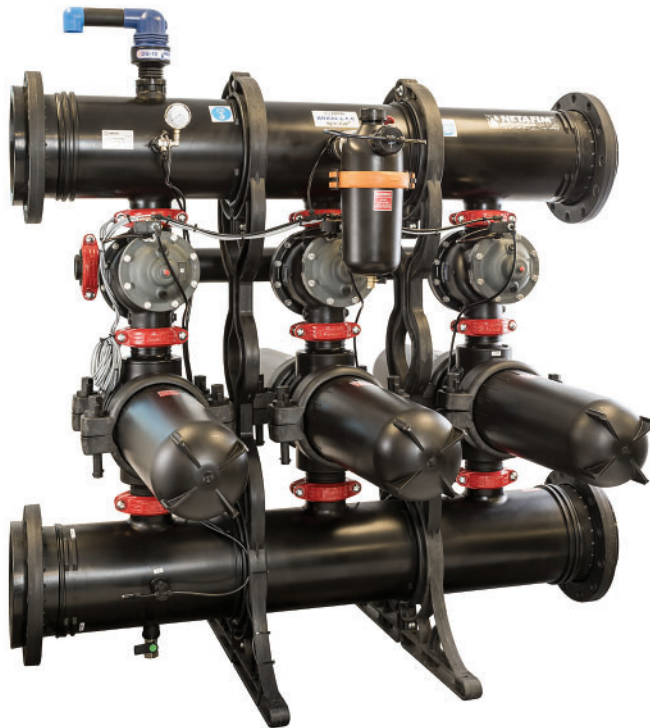


APOLLO™ DISC-KLEEN AUTOMATIC FILTER

**NEW
MODULAR
DESIGN**

**HIGH PERFORMANCE, RELIABLE,
COST-EFFECTIVE FILTRATION SOLUTION**



SAVE MONEY BY REDUCING FILTER SIZE

The Apollo features a longer filter element (spine) with larger discs (rings) producing a larger filtration area which accommodates a higher flow rate so the total number of filter units is reduced - lowering the filter cost.

SAVE MONEY BY REDUCING PUMP SIZE

Only 30 psi is required for backflushing reducing the need to oversize the pump for adequate flushing and it also reduces the need for a Pressure Sustaining Valve.

SAVE TIME & MONEY WHEN MOVING

The Apollo is light-weight with a small footprint making it portable and easy to move which is ideal for crop rotations and rental units in row crop applications.

SAVE MONEY ON MAINTENANCE

Made from high density synthetic materials, it's corrosion-proof not just corrosion resistant. Chemical injection upstream will not damage any filter components.

HOW AUTOMATIC DISC FILTER TECHNOLOGY WORKS

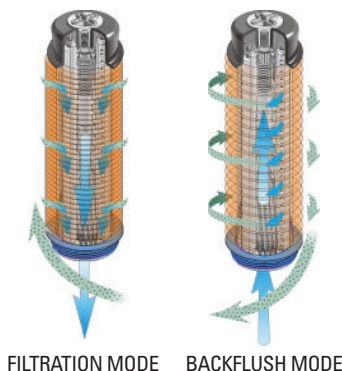
Disc Filters fall into the category of 'depth filtration' filters because they add an additional dimension to the cleaning process. A filter element (spine) contains a stack of compressed discs with an overlapping series of grooves that force the debris to move through numerous trap points. This process increases the likelihood of capturing debris. Because of the increase in filtration surface area, the frequency of cleaning drops and cleaning is easier.

FILTRATION PROCESS

During the filtration process, unfiltered water passes through the stack of tightly compressed discs, debris is trapped by the interlocking grooves of the disc rings, and only filtered water is released to the irrigation system.

BACKFLUSH PROCESS

As debris in the filter increases, the backflush process is initiated. The discs separate and jets of clean water spray and spin the discs removing the trapped debris which is then flushed out.



NEW FEATURES

- ▶ 10" manifold for all filter sizes means easier installation with less inventoried parts
- ▶ Modular design provides portability for easier field installations and has a smaller footprint
- ▶ Water inlet and outlet versatility because grower chooses what works best for the application
- ▶ Light-weight, easy to use polymeric (plastic) clamps secure the filter cover to the filter body

GREATER BENEFITS THAN SAND MEDIA FILTERS

Netafim's Apollo Disc-Kleen Filter and Sand Media Filters both provide quality depth filtration which ensures maximum protection of your irrigation system with surface or well water. The Apollo Filter matches the Sand Media Filter with **PERFORMANCE, RELIABILITY** and **LONGEVITY**. However, the Apollo offers numerous benefits not available with Sand Media Filters.



BENEFIT COMPARISON

	APOLLO	SAND MEDIA
FOOTPRINT	Small	Large
PORTABILITY	Easy	Cumbersome
INSTALLATION LABOR	Minimal	Extensive
SAND	Not Required	Required
REQUIRES ASSEMBLY	No	Yes
BACKFLUSH PRESSURE	30 psi	30 psi



SHORTER LENGTH OF FLUSH CYCLE

- Apollo flushes 5 times faster than Sand Media filters.
- Less interruption of water flow to the field while irrigating maintaining higher uniformity.

LENGTH OF FLUSH CYCLE

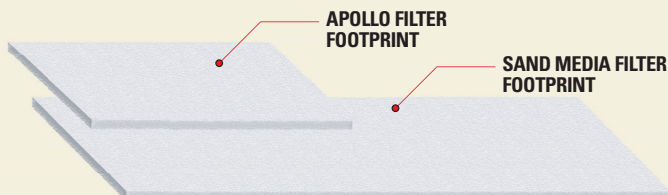
	APOLLO	SAND MEDIA
FLUSH TIME	20 sec	90 sec
DWELL TIME	5 sec	30 sec
TOTAL TIME	25 sec	120 sec

PORTABLE & EASY TO MOVE

- Apollo filter can be mounted on a small, inexpensive utility trailer and easily moved from field to field.
- Sand Media filters are bulky and heavy and require a larger, more expensive heavy-duty trailer to move.
- The new modular design of the Apollo filter means even more portability as smaller units are transported and assembled in the field to create larger filter units.

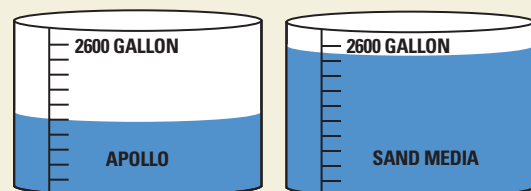
SMALLER FOOTPRINT

- Apollo filter is easier and faster to install and has a 60% smaller footprint.
- Sand Media filters require extensive assembly of the tanks and manifold.
- The Apollo's one size manifold and water inlet and outlet versatility.



LESS OVERALL WATER USED FOR FLUSHING

- Apollo filter may flush more frequently than Sand Media filters, but will use 45% less water overall.
- Shorter overall flush cycles ensure better uniformity of irrigation.
- There is less flush water to dispose of or filter for reuse.



LOWER INSTALLATION COSTS

- The Apollo filter is pre-assembled in 3 and 4 unit filters which are ready to install. Flange and bolt kits make assembling multiple filter units easy with minimal additional installation labor costs.



TECHNICAL INFORMATION

APOLLO 3 MINUS 1 FILTER (3-1)

It's a component filter used to make multiple filter configurations larger than a 4 unit system and for upgrading an existing system at a later date when higher flow rates are required. The 3-1 twin unit cannot be used as a stand-alone system.

Usage examples:

- To create a 5 unit filter system, use one 3 unit twin filter and one 3-1 unit twin.
- To create a 6 unit filter system with future expansion capabilities, use one 4 unit twin filter and one 3-1 unit twin.

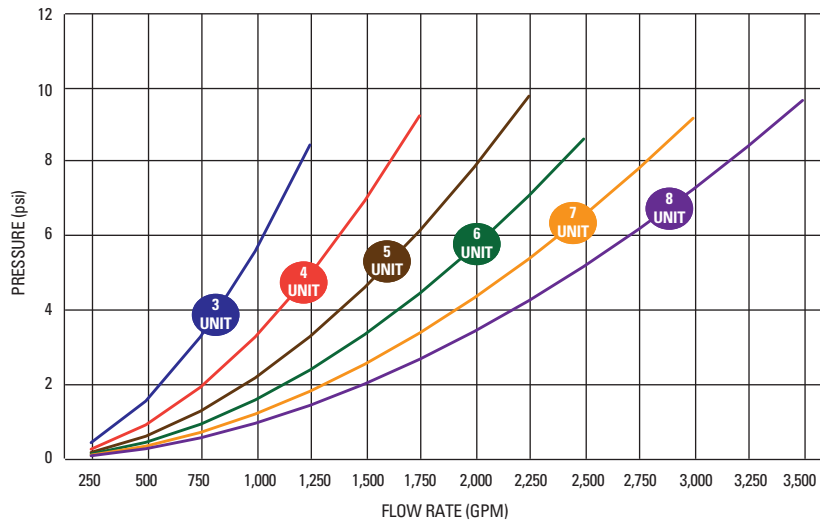


EASY ACCESS TO DISCS

The Apollo filter has a polymeric clamp that is light-weight and easy to use. A small wrench is needed to loosen the clamp bolt on each side. Then the clamp slides down the filter cover and the cover can be removed. Maintenance and trouble-shooting are quick and simple.



HEADLOSS VS. FLOW RATE



MESH AND MICRON

MESH	MICRON	COLOR
40	400	BLUE
80	200	YELLOW
120	130	RED
140	115	BLACK

SPECIFICATIONS

	4 UNIT ANGLE	3 UNIT TWIN	3-1 UNIT TWIN	4 UNIT TWIN	5 UNIT TWIN	6 UNIT TWIN	7 UNIT TWIN	8 UNIT TWIN
STANDARD MODEL MAX. OPERATING PRESSURE (psi)	90	90	90	90	90	90	90	90
HIGH PRESSURE MODEL MAX. OPERATING PRESSURE (psi)	140	140	140	140	140	140	140	140
MINIMUM BACKFLUSH PRESSURE (psi)	30	30	30	30	30	30	30	30
FILTRATION SURFACE AREA (sq. in.)	1,625	2,435	1,625	3,245	4,055	4,865	5,675	6,485
BACKFLUSH FLOW PER UNIT (GPM at 35 psi)	95	190	190	190	190	190	190	190
BACKFLUSH VOLUME PER FLUSH CYCLE (GPM)	130	210	210	265	340	420	500	550
INLET/OUTLET MANIFOLD CONNECTION (in.)	6 FL	10 FL	10 FL	10 FL	10 FL	10 FL	10 FL	10 FL
DRAIN MANIFOLD CONNECTION (in.)	4 GR	4 GR	4 GR	4 GR	4 GR	4 GR	4 GR	4 GR
MINIMUM ALLOWABLE PH	5	5	5	5	5	5	5	5

HIGH PRESSURE MODEL
Dual command filter and orifice plate on drain manifold

MANIFOLD CONNECTIONS
FL = Flanged and GR = Grooved

TECHNICAL & ORDERING INFORMATION

WATER QUALITY GUIDELINES

GOOD WATER QUALITY: Municipal water supply or well water from a clean aquifer with no sand, iron or manganese.

AVERAGE WATER QUALITY: Wells with small amounts of sand (<2 ppm) or clean surface water which includes lakes, ponds, reservoirs and canals.

POOR WATER QUALITY: Well water with sand up to 10 ppm or surface water in hot climates with increased biological growth and no chemical treatment which includes lakes, ponds, reservoirs and canals.

VERY POOR WATER QUALITY: Well water with greater than 10 ppm of sand including rivers, muddy canals, lakes and ponds with severe run off deposits and raw municipal wastewater.

GREATER THAN 3 PPM SAND OR SILT: May require a pre-filter such as a hydrocyclone.

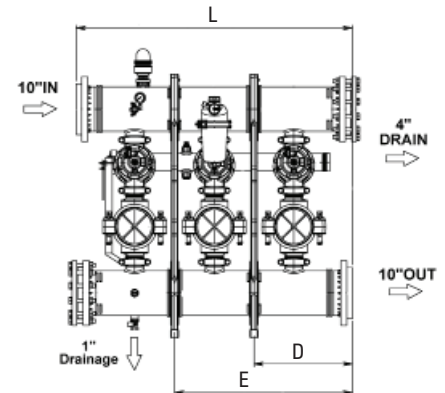
SPINES PER FILTER

FILTER SIZE	# OF SPINES
4 UNIT ANGLE	4
3 UNIT TWIN	6
3-1 UNIT TWIN	4
4 UNIT TWIN	8
5 UNIT TWIN	10
6 UNIT TWIN	12
7 UNIT TWIN	14
8 UNIT TWIN	16

MAX. FLOW RATE (GPM)

WATER QUALITY	FLOW PER SPINE		
	80 MESH	120 MESH	140 MESH
GOOD	198	183	171
AVERAGE	183	171	156
POOR	156	144	132
VERY POOR	132	117	105

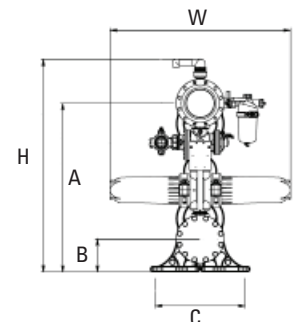
CALCULATING MAXIMUM FLOW RATE (GPM) PER FILTER UNIT:
Take the total # of Spines based on the filter size and multiple that number by the Flow Per Spine based on the Water Quality and Mesh.



DIMENSIONS AND WEIGHT

FILTER SIZE	L	W	H	A	B	C	D	E	WEIGHT
4 UNIT ANGLE	64 1/2"	36 1/8"	47 15/16"	-	8 1/4"	-	-	-	510 LBS.
3 UNIT TWIN	68 9/32"	60 9/32"	71 9/32"	56 15/32"	11 1/32"	29 29/32"	24 9/32"	43 31/32"	351 LBS.
3-1 UNIT TWIN	68 9/32"	60 9/32"	71 9/32"	56 15/32"	11 1/32"	29 29/32"	24 9/32"	43 31/32"	235 LBS.
4 UNIT TWIN	87 15/16"	60 9/32"	71 9/32"	45 7/16"	11 1/32"	29 29/32"	24 9/32"	63 31/32"	455 LBS.
5 UNIT TWIN	107 5/8"	60 9/32"	71 9/32"	45 7/16"	11 1/32"	29 29/32"	24 9/32"	63 31/32"	1,254 LBS.
6 UNIT TWIN	127 5/16"	60 9/32"	74 25/32"	47 6/16"	12 1/32"	29 29/32"	24 9/32"	63 31/32"	1,495 LBS.
7 UNIT TWIN	147"	60 9/32"	74 25/32"	47 6/16"	12 1/32"	29 29/32"	24 9/32"	63 31/32"	1,750 LBS.
8 UNIT TWIN	166 11/16"	60 9/32"	74 25/32"	47 6/16"	12 1/32"	29 29/32"	24 9/32"	63 31/32"	2,010 LBS.

All measurements are approximate. For specific dimensions refer to the CAD Design Details located on the Netafim USA website.



ORDERING INFORMATION - FILTERS

FILTER SIZE	VOLTAGE	MODEL NUMBER
4 UNIT ANGLE	24VAC	26ASK3APP4***AC
3 UNIT TWIN	24VAC	26ASK4PB3***AC
4 UNIT TWIN	24VAC	26ASK4PB4***AC
5 UNIT TWIN	24VAC	26ASK4PB5***AC
6 UNIT TWIN	24VAC	26ASK4PB6***AC
7 UNIT TWIN	24VAC	26ASK4PB7***AC
8 UNIT TWIN	24VAC	26ASK4PB8***AC

Substitute *** with mesh option - 040, 080, 120 and 140.

Backflush Controller ordered separately.

Also available with 12VDC and 12VDC Latching solenoids - refer to the Agriculture Price List for Model Numbers and pricing.

ORDERING INFORMATION - KITS

MODEL NUMBER	DESCRIPTION	USE
25APMODKITFLNG	FLANGE-BOLT KIT: INCLUDES (24) BOLTS, (48) WASHERS, (24) NUTS, (2) FLANGES	FOR SEALING WATER INLET AND OUTLET MANIFOLD CONNECTIONS
25APMODKIT5-8	ADAPTER KIT: INCLUDES (24) BOLTS, (48) WASHERS, (24) NUTS, (1) CONNECTOR, (1) DRAIN MANIFOLD	FOR CONNECTION OF MULTIPLE FILTER UNITS TO CREATE LARGER UNITS



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