AlphaDisc™

Disc filters

The ultimate irrigation system protection thanks to a combination of precise depth filtration, high dirt-holding capacity and a unique easy-to-scale modular design that covers a wide range of flow rates or water quality needs. AlphaDisc™ prevents clogging and partial clogging, ensuring system longevity, and uniformly irrigated crops leading to better ROI, cost saving and peace of mind.

Very high efficiency

Easy maintenance

Long lasting

Benefits & Features

→ Very high efficiency

Experience superior clogging protection with our uniquely designed discs that provide precise filtration across all depths, with precise filtration grade through all depths of the disc ensuring better clogging protection.

→ Easy maintenance

Reduce maintenance and disruptions with industry-leading filtration volume, high particle capture, and fewer back-flush cycles.

→ Long lasting

Enjoy long-term reliability with durable, anti-corrosive materials designed to withstand harsh environments.

→ Cost-effective

Achieve a more efficient irrigation system with low back-flush flow rates and minimal head loss.
Maximize your irrigation room with a vertical installation and a smaller overall footprint.

Applications

- Primary or secondary automatic filter for maximum protection in systems irrigating with surface water that contains algae and other organic matter such as reservoirs, canals, rivers and wastewater applications.

Specifications

- Connected with real-time filtration data through our IP65-rated smart controller. Innovative AlphaDisc™ smart controller with “always on” access to filtration data; IP65.
- Adapt effortlessly to any system setup with in line, on line, and angle configuration options.
- Easily scale your system as your needs evolve with AlphaDisc™’s innovative modular design.
  Vertical installation for a well-designed, more cost-effective irrigation room.

orbia Precision Agriculture

NETAFIM™

→ Configurations

Single 3"

Dual 4"

Trio 6"

Single XL 3"/4"

Dual XL 6"

Trio XL 8"

→ Additional configurations

Dual on Dual XL

Dual on Trio XL

Trio on Trio XL

Alpha In line 3 units

Alpha In line 4 units

→ Recommended flow rate

for Single 3", Dual 4", Trio 6" (flow rate per filter unit)

		Excellent	Good	Average	Poor	Very poor
100 mic / 140 mesh	(m^3/h)	50	43	35	27.5	20
	(gpm)	220	187	154	121	88
130 mic / 120 mesh	(m^3/h)	50	44	38	31	25
	(gpm)	220	193	165	138	110
200 mic / 80 mesh	(m^3/h)	50	45	40	35	30
	(gpm)	220	198	176	154	132

for Single XL 3" (flow rate per filter unit)

		Excellent	Good	Average	Poor	Very poor
100 mic / 140 mesh	(m^3/h)	80	68	56	44	32
	(gpm)	352	299	246	194	141
130 mic / 120 mesh	(m^3/h)	80	70	60	50	40
	(gpm)	352	308	264	220	176
200 mic / 80 mesh	(m^3/h)	80	72	64	56	48
	(gpm)	352	317	282	246	211

for Single XL 4", Dual XL 6", Trio XL 8" (flow rate per filter unit)

		Excellent	Good	Average	Poor	Very poor
100 mic / 140 mesh	(m^3/h)	110	94	77	60.5	44
	(gpm)	480	408	336	264	192
130 mic / 120 mesh	(m^3/h)	110	96	83	69	55
	(gpm)	480	420	360	300	240
200 mic / 80 mesh	(m^3/h)	110	99	88	77	66
	(gpm)	480	432	384	336	288

For additional configurations, please contact Netafim™ representative

→ Technical specifications

	Filtration area		Filtration volume		Inlet/outlet diameter		Connection type	Maximum operating pressure		Weight (empty)	
	(cm^2)	(in^2)	(cm^3)	(in^3)	(inch)	(mm)		(bar)	(psi)	(kg)	(lb)
Single 3"	1760	272	2296	140	3	80	Grooved / Universal flange	10	145	54	118
Single XL 3"	5240	812	6284	383	3	80				57	126
Single XL 4"	5240	812	6284	383	4	100				58	129
Dual 4"	3520	545	4592	280	4	100				115	253
Dual XL 6"	10480	1624	12568	766	6	150	Universal flange			127	279
Trio 6"	5280	818	6888	420	6	150				156	344
Trio XL 8"	15720	2437	18852	1150	8	200				182	401

For other configurations, please contact a Netafim™ representative.

→ Construction materials and temperature

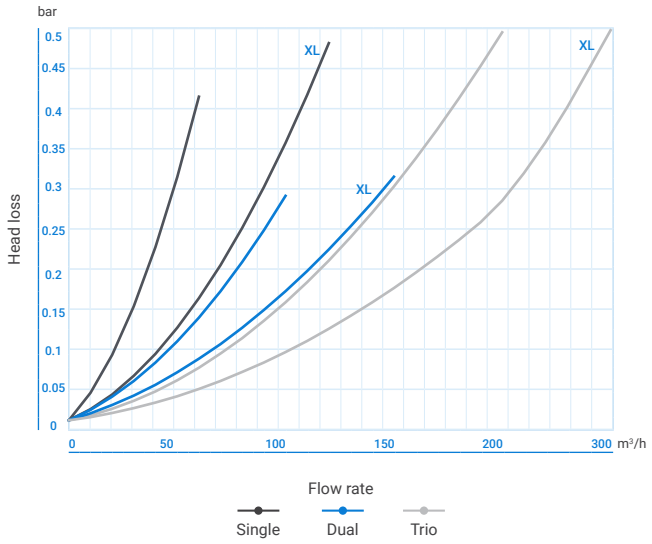
Filter housing & lid	rPA (reinforced polyamide)
Discs	PP (polypropylene) or PA (polyamide)
Cleaning mechanism	all polymeric
Exhaust valve	all polymeric
Seals	EPDM
Operating temperature	5 - 60 °C (30 - 140 °F)

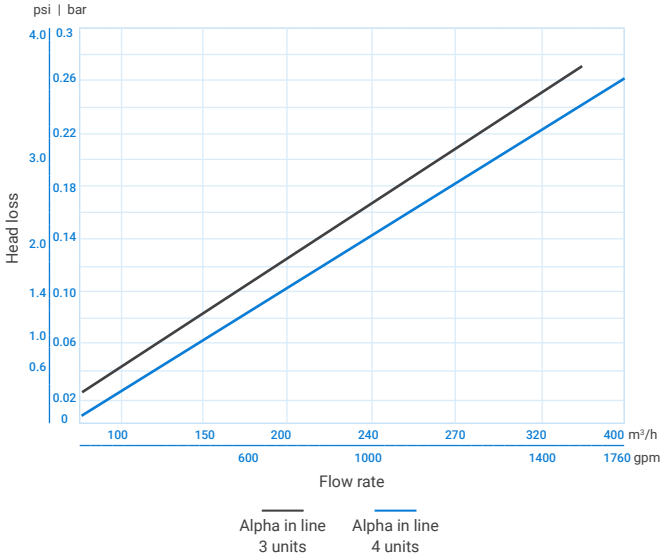
→ Flushing data

	Minimum pressure for back-flush		Back-flush flow rate*		Recommended flushing time	Reject water volume per flush cycle*		Back-flush manifold diameter		Back-flush manifold connection type
	(bar)	(psi)	(m^3/h)	(gpm)		(liter)	(galon)	(inch)	(mm)	
Single 3"	1.5	22	7.2	31.7	18 sec	36	9.5	3	80	Grooved / Flanged
Single XL 3"			13	57.2		65	17.2			
Single XL 4"			13	57.2		65	17.2			
Dual 4"			7.2	31.7		36	9.5			
Dual XL 6"			13	57.2		65	17.2			
Trio 6"			7.2	31.7		36	9.5			
Trio XL 8"			13	57.2		65	17.2			

* At 1.5 bar (22 psi).
* High back flush pressure can cause excessive wear on AlphaDisc™ discs and spine. It is not recommended that back flush pressure will exceed 7 bar.
If back flush pressure is higher, installation of an orifice valve in the drain manifold is recommended. Please contact Netafim™ for additional information.

→ Head loss





→ Catalog numbers

The filters configuration and his catalog number will be determined according to the specific conditions in each application. For a correct definition of a required filter/ filtration system please contact your Netafim™ local representative.