Arkal Filtration Systems

Product Guide

ARKAL FILTRATION SYSTEMS

A Steady Stream

Overview

Arkal's challenge

Arkal Filtration Systems implements clean-water technologies to provide cost-effective filtration solutions for industrial, municipal, commercial and agricultural applications.

Arkal has been providing filtration solutions for over 30 years. Our vast experience comprises innovative product development and design. We utilize our international marketing and distribution network to provide service and support to our customers worldwide. As a result, process efficiency is optimized, product quality is ensured, waste is reduced and crop yields are enhanced.

Our main product lines include unique patented automatic Spin Klin® filtration technology, manual disc filters and systems, automatic and semi-automatic screen filters, media filters and integrated water-treatment solutions.

Leading applications include filtration and water treatment, micro-irrigation and membrane protection, wastewater and potable water treatment, cooling systems for industrial manufacturing process water and seawater filtration.

Dynamic clean-water technology solutions

Arkal water filtration solutions have been successfully applied in over 90% of the world's agricultural/landscape micro-irrigation markets. We specialize in the effective treatment of surface and seawater containing high quantities of biological materials.

Our dynamic solutions, including our patented automatic Spin Klin® filtration technology incorporate polymeric systems that feature modularity, flexibility and resist corrosion, most chemicals, sea and saline water and harsh environments. Testing is performed in-house to meet British, French, American and other local certification standards, in addition to ISO 9001.

By introducing disc filtration technology to the filtration world, Arkal became and remains a recognized world leader in filtration technologies. Our broad experience, service orientation and wide product range enable us to tailor solutions according to customer requirements.

of Clear Water

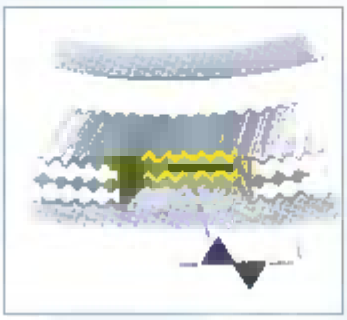
Disc Filtration Technology

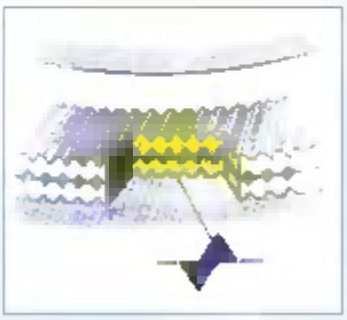
Standard Features:

- Micron-precise filtration of solids
- Innovative depth filter design captures and retains large amounts of solids
- Long-term operation with little maintenance or cleaning
- Disc filtration elements are factory assembled and ready for use

The filter operates using specially designed disc filtration technology. Thin, color-coded polypropylene discs are diagonally grooved on both sides to a specific micron size. A series of these discs are then stacked and compressed on a specially designed spine. When stacked, the groove on top runs opposite to the groove below, creating a filtration element with a statistically significant series of valleys and traps for solids. The stack is enclosed in a corrosion and pressure resistant housing.

During the filtration process, the filtration discs are tightly compressed together by the spring's power and the differential pressure, thus providing high filtration efficiency. Filtration occurs while water is percolating from the outer diameter to the inner diameter of the element. Depending on the micron rating, there are from 18 (in 400 micron discs) to 32 (in 20 micron discs) stopping points in each track, thus creating the unique in-depth filtration.





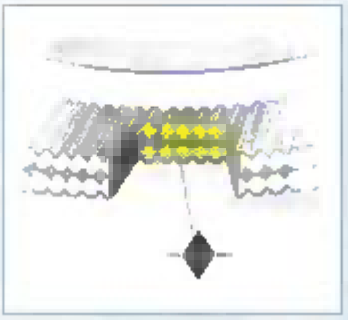


Table of Filtration Grades of the Discs and Color Code

Color Code	Blue	Yellow	Red	Black	Brown	Green	Purple	Gray
Micron	400	200	130	100	70	55	40	20
Mesh	40	80	120	140				

Spin Klin® Technology - Fully Automatic Disc Filter

Spin Klin® Spine - The Core of the Spin Klin® Filtration System

Standard Features:

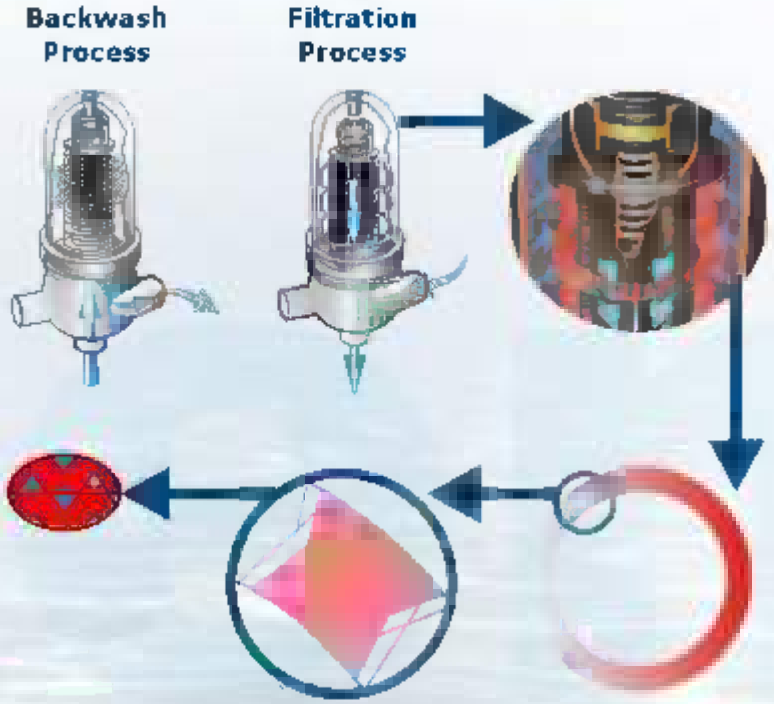
- Holds disc stack for micron-precise filtration of solids
- Corrosion-resistant spine and housing
- Innovative depth filter design captures and retains large amounts of solids – for longer filtration cycles
- Short, efficient backwash process – saves water and energy
- Easy and simple operation
- Long-term operation with little maintenance

Spin Klin® Technology - Spin Klin® Spine Model II

Special Features:

The Spin Klin® discs are stacked on the Spin Klin® spine. The discs are color-coded by micron size, and are assembled according to your water filtration requirements. The spine assembly has a spring compression unit and an internal piston which operate during alternate filtering or backflushing modes.

The spine assembly is specially designed to compress the filter element. Inside the spine, a spring and the pressure difference compress the discs tightly during the filtration process, forcing the water to flow between the grooves which trap the solids.



Spin Klin® Automatic Backwash Operation

Activated by a predefined command (differential pressure of time) alternate units of the Spin Klin® system go into backwash operation. The inlet valve is shut as the drain is automatically opened.

During the backwash process, the compression spring is released. The spine piston rises up, releasing the pressure on the discs. Tangential jets of clean water are pumped at high pressure in the opposite direction through nozzles at the center of the spine. The discs spin free and clear, loosening the trapped solids. Solids are quickly and efficiently flushed out though the drain.

Technical Data

Max. pressure	10 bar	145 psi
Min. pressure for backwash	2.8 bar	40 psi
Flow rate of backwash for each filter	10 m^3/h	44 gpm
Max. working temperature	70°C	158°F
pH	4-11	

2" Spin Klin® Compact (stand alone) Filter

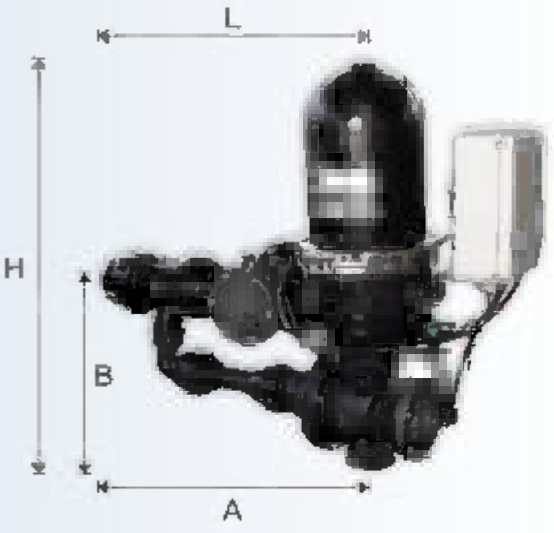
Size: 2"
Capacity: Small flow (10-20 m³/h)
Operation: Fully automatic disc filtration unit
Applications: Irrigation systems for small fields, municipal gardens or greenhouses

Standard Features:
- Micron-precise filtration of solids
- Innovative filter design captures and stores large amounts of solids
- Long-term operation with little maintenance
- Easy and simple operation

Special Features:
- Automatic backwash for self-cleaning
- The backwash cycle has a regulated volume, is short and environmentally friendly as it minimizes the use of flush water and automatically cleans the filter element. This saves labor and costs - minimizes maintenance, and permanently eliminates the need to replace filter media.
- Compact design

Technical Data

Max. pressure	10 bar
Min. pressure (backwash)	2.8 bar
Max. recommended flow rate: 40-140 mesh (400-100 micron)	20 m³/h
55 micron	10 m³/h
20 micron	5 m³/h
Filtration surface area	880 cm²
Filtration volume	1,320 cm³
Filter length - L	694 mm
Filter height - H	628 mm
Distance between end connections	A. 243 mm B. 194 kg
Weight	28.6 kg



2" Spin Klin® Automatic Disc Filter Systems

Size: 3"-6" inlet/outlet diameter
Capacity: Low flow (10-120 m³/h)
Operation: Modular, fully automatic disc filtration systems
Applications: Widely used in small areas of field crops, orchards and groves

Standard Features:
- Micron-precise filtration of solids
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance
- Operation is easy and requires no special tools
- Continuous flow during backwash

Special Features:
- The backwash cycle has a regulated volume, is short and environmentally friendly as it minimizes the use of flush water and automatically cleans the filter element. This saves labor and costs - minimizes maintenance, and permanently eliminates the need to replace filter media.
- Modular batteries allow for easy system expansion.

Technical Data	2 Units	3 Units	4 Units
Max. pressure	10 bar	10 bar	10 bar
Min. pressure (backwash)	2.8 bar	2.8 bar	2.8 bar
Max. recommended flow rate:			
40-120 mesh (400-130 micron)	≤40 m³/h	55-60 m³/h	55-80 m³/h
55 micron	≤26 m³/h	20-40 m³/h	35-53 m³/h
20 micron	≤15 m³/h	10-23 m³/h	20-32 m³/h
Filtration surface area	1,760 cm²	2,640 cm²	3,520 cm²
Filtration volume	2,460 cm³	3,690 cm³	5,280 cm³
Battery length	545 mm	800 mm	1,145 mm
Battery height	788 mm	788 mm	817 mm
Battery width	643 mm	643 mm	674 mm
Weight (polyester coated)	80 kg	100 kg	120 kg
Weight (stainless steel)	70 kg	100 kg	120 kg
Weight (polypropylene)	30 kg	50 kg	70 kg

Manifolds construction material options – Polypropylene, Polyester Coated, Stainless Steel

3" Spin Klin® Automatic Disc Filter Systems

Size: 4" – 8" inlet/outlet diameter
Capacity: Medium flow (90-200 m³/h)
Operation: Modular, fully automatic disc filtration systems
Applications: Widely used in field crops, orchards and groves

Standard Features:
- Micron-precise filtration of solids
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance
- Operation is easy and requires no special tools
- Continuous flow during backwash

Special Features:
- The backwash cycle has a regulated volume, is short and environmentally friendly as it minimizes the use of push water and automatically cleans the filter element. This saves labor and costs – minimizes maintenance, and permanently eliminates the need to replace filter media.
- Modular batteries allow for easy system expansion.

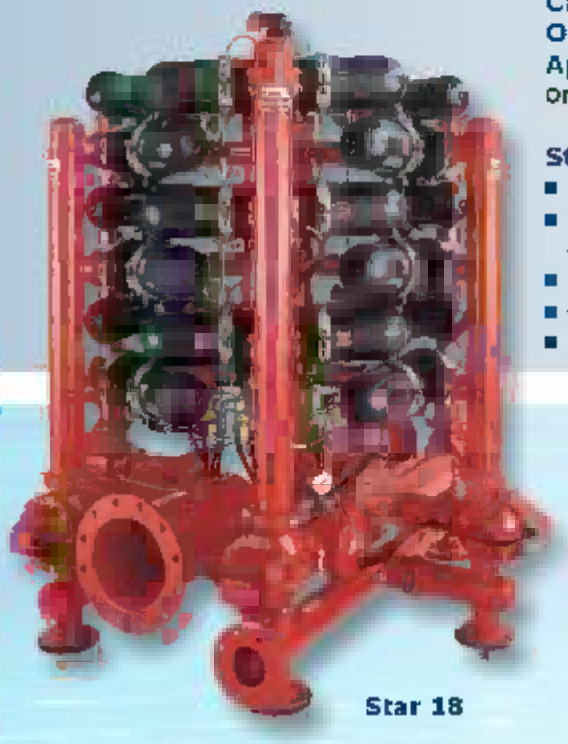
Technical Data	3 Units	4 Units	5 Units
Max. pressure	10 bar	10 bar	10 bar
Min. pressure	2.6 bar	2.8 bar	2.8 bar
Max. recommended flow rate:			
40-120 mesh (400-100 micron)	≤90 m³/h	≤85-120 m³/h	115-150 m³/h
55 micron	≤60 m³/h	55-80 m³/h	75-100 m³/h
20 micron	≤30 m³/h	25-40 m³/h	35-50 m³/h
Filtration surface area	5,280 cm²	7,040 cm²	8,800 cm²
Filtration volume	7,920 cm³	10,560 cm³	13,200 cm³
Battery length	900 mm	1,200 mm	1,500 mm
Battery height	1,220 mm	1,220 mm	1,220 mm
Battery width	900 mm	900 mm	900 mm
Weight (polyester coated)	160 kg	185 kg	223 kg
Weight (stainless steel)	150 kg	170 kg	190 kg
Weight (polypropylene)	120 kg	150 kg	180 kg

Manifolds construction material options – Polypropylene, Polyester Coated, Stainless Steel

Spin Klin® Star Systems

Size: 3" Spin Klin® filter batteries, 8"-12" inlet/outlet diameter
Capacity: High flow (200-650 m³/h)
Operation: Modular, fully automatic disc filtration systems
Applications: Widely used in large areas of field crops, orchards, groves and water supply systems

Standard Features:
- Micron-precise filtration of solids
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance
- Operation is easy and requires no special tools
- Continuous flow during backwash



Star 18

Special Features:
- The backwash cycle has a regulated volume, is short and environmentally friendly as it minimizes the use of push water and automatically cleans the filter element. This saves labor and costs – minimizes maintenance, and permanently eliminates the need to replace filter media.
- Highflow compact design for easy, space saving installation.

Technical Data	8 Units	12 Units	15 Units	18 Units
Max. pressure	10 bar	10 bar	10 bar	10 bar
Min. pressure (backwash)	2.8 bar	2.8 bar	2.8 bar	2.8 bar
Max. recommended flow rate:				
40-140 mesh (400-100 micron)	≤240 m³/h	230-360 m³/h	350-450 m³/h	440-540 m³/h
55 micron	≤160 m³/h	150-240 m³/h	230-300 m³/h	290-360 m³/h
20 micron	≤80 m³/h	70-120 m³/h	110-150 m³/h	140-180 m³/h
Volume of water per backwash	525 liter	790 liter	985 liter	1,180 liter
Filtration surface area	14,080 cm²	21,200 cm²	26,400 cm²	31,680 cm²
Filtration volume	21,120 cm³	31,680 cm³	39,600 cm³	47,520 cm³
Battery length	1,290 mm	1,290 mm	1,760 mm	1,760 mm
Battery height	1,640 mm	2,105 mm	2,105 mm	2,170 mm
Battery width	1,125 mm	1,125 mm	1,970 mm	1,970 mm
Distance inlet/outlet flange	1,235 mm	1,235 mm	1,730 mm	1,730 mm
Inlet/outlet flange diameter	8"	10"	10"	12"
Weight	500 kg	610 kg	750 kg	900 kg

Manifolds - Polyester Coated or Stainless Steel.

Spin Klin® 4" Galaxy Systems

Size: 4" Spin Klin® filter batteries
8" - 14" inlet/outlet diameter
Capacity: High flow (200-3,000 m³/h and higher)
Operation: Modular, fully automatic disc filtration systems
Applications: Widely used in field crops, orchards, groves and water supply systems

Standard Features:
- Micron-precise filtration of solids
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance
- Operation is easy and requires no special tools
- Continuous flow during backwash

Special Features:
- Particularly cost effective high flow module
- The backwash cycle has a regulated volume, is short and environmentally friendly as it minimizes the use of flush water and automatically cleans the filter element. This saves labor and costs – minimizes maintenance, and permanently eliminates the need to replace filter media
- Modular batteries allow for easy system expansion

Technical Data	3 Units	4 Units	5 Units	6 Units
Max. pressure	10 bar	10 bar	10 bar	10 bar
Min. pressure (backwash)	2.8 bar	2.8 bar	2.8 bar	2.8 bar
Max. recommended flow rate:				
40-120 mesh (400-130 micron)	300 m³/h	400 m³/h	500 m³/h	600 m³/h
55 micron	170 m³/h	225 m³/h	280 m³/h	335 m³/h
20 micron			140 m³/h	170 m³/h
Filtration surface area	13,200 cm²	17,600 cm²	22,000 cm²	26,400 cm²
Filtration volume	19,800 cm³	26,400 cm³	33,000 cm³	39,600 cm³
Battery length	1.45 m	1.95 m	2.45 m	1.45 m
Battery height	1.41 m	1.41 m	1.41 m	1.41 m
Battery width	0.83 m	0.90 m	0.90 m	1.45 m
Weight (w/plastic valve)	190 kg	255 kg	310 kg	385 kg
Weight (metal valve)	240 kg	311 kg	380 kg	469 kg
Weight (polypropylene valve)	290 kg	370 kg	485 kg	610 kg
Standard Manifold	8"	10"	10"	12"

Manifolds construction material options – Polypropylene, Epoxy Coated, Stainless Steel

Spin Klin® 6" Galaxy High Flow Systems

Size: 6" Spin Klin Modules. Modules are groups of filters that backwash together.
The number of filters in the modules of a specific system, is designed according to the system designed flow rate and may range between 2 to 12, with 8"- 20" inlet / outlet diameters
Capacity: High flow rates: 800 - 15,000 m³/h (3,500 - 66,000 gpm)
Operation: Modular, fully automatic disc filtration system
Applications: Large field crops and orchards, water supply systems and pre filtration for water treatment technologies

Standard Features:
- Micron-precise filtration of solids
- Long-term operation with little maintenance
- Operation is easy and requires no special tools
- Continuous flow during backwash
- NSF61 standard approved
- Cost effective high flow system

Special Features:
- Low headloss/energy consumption
- Innovative filter design captures and retains large amounts of solids
- Corrosion resistant construction materials, most suitable for sea and brackish water

Technical Data
Table is based on an example of 4 filter modules

	4 Modules System	5 Modules System	6 Modules System	7 Modules System	8 Modules System
Max. pressure	8 bar	8 bar	8 bar	8 bar	8 bar
Min. backwash pressure	2.8 bar	2.8 bar	2.8 bar	2.8 bar	2.8 bar
Max. recommended flow rate: 130 micron	2,080 m³/h	2,600 m³/h	3,120 m³/h	3,640 m³/h	4,160 m³/h
100 micron	1,920 m³/h	2,400 m³/h	2,880 m³/h	3,360 m³/h	3,840 m³/h
55 micron	1,280 m³/h	1,600 m³/h	1,920 m³/h	2,240 m³/h	2,560 m³/h
20 micron	640 m³/h	800 m³/h	960 m³/h	1,120 m³/h	1,280 m³/h
Filtration surface area	112,640 cm²	140,800 cm²	168,960 cm²	197,120 cm²	225,280 cm²
Filtration volume	168,960 cm³	211,200 cm³	253,440 cm³	295,680 cm³	337,920 cm³
System length	9.5 m	11.5 m	13.5 m	15.5 m	17.5 m
System width	3m	3 m	3 m	3 m	3 m
System height	1.5 m	1.5 m	1.5 m	1.5 m	1.5 m
Standard Manifold: 100-130 micron	12"	12"	12"	12"	12"
55 micron	10"	10"	10"	10"	10"
20 micron	8"	8"	8"	8"	8"

Manifolds construction material options – Polypropylene, Epoxy Coated, Stainless Steel

Spin Klin® 12" Galaxy Super Flow Systems

Size: 12" Spin Klin® compact batteries 14" - 20" inlet/outlet manifold diameter
Capacity: High flow (1500 m³/hr and higher)
Operation: Modular, fully automatic disc filtration systems

Standard Features:

- Uniquely efficient
- Precise particle separation
- Innovative filter design captures and stores large amounts of solids
- Low energy and water consumption
- Long-term operation with barely any maintenance
- Operation is easy and requires no filter media replacement
- Continuous flow during backwash
- Corrosion free filtration elements

Special Features:

- Automatic backwashing for self-cleaning
- Particularly cost effective high flow module
- The flushing cycle has a regulated volume, is short and environmentally friendly as it minimizes the use of flush water. This saves labor and costs - minimum maintenance
- Modular batteries allow for easy expansion of system

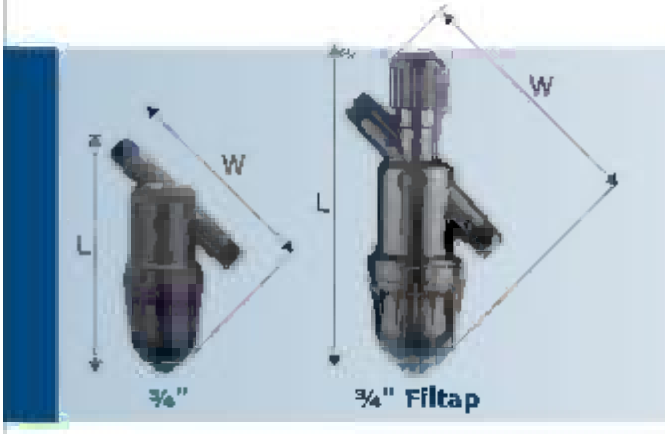
Technical Data	3 Units		4 Units		5 Units	
Max. pressure	10 bar	145 psi	10 bar	145 psi	10 bar	145 psi
Min. pressure for backwash	2.8 bar	38 psi	2.8 bar	38 psi	2.8 bar	38 psi
Max. recommended flow rate: (40-140 mesh) 100-400 micron	2,580 m³/h	11,350 gpm	3,440 m³/h	15,130 gpm	4,300 m³/h	18,900 gpm
55 micron	1,400 m³/h	6,240 gpm	1,890 m³/h	8,320 gpm	2,360 m³/h	10,400 gpm
20 micron					1,180 m³/h	5,190 gpm
Filtration surface area	134,640 cm²	260,800 in²	179,520 cm²	24,170 in²	224,400 cm²	34,780 in²
Filtration volume	201,960 cm³	12,320 in³	269,280 cm³	16,420 in³	336,600 cm³	20,500 in³

Manual Disc Filters ¾"-1"-1½"
with Differential Tightening

Size: ¾"-1"-1½"
Capacity: Low flow
Operation: Manual disc filters
Applications: Irrigation systems in greenhouses, small farm fields or as secondary water quality control filters

Standard Features:
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance or cleaning
- Operation is easy and requires no special tools
- Completely corrosion resistant

Special Features:
- Built-in tap for easy cleaning procedure - filtap



¾" Technical Data

	¾" w/o valve	¾" Filtap (with valve)
Max. pressure	10 bar	10 bar
Flow rate, 40-120 mesh (400-130 micron)	4 m³/h	4 m³/h
Filtration surface area	160 cm²	160 cm²
Filtration volume	95 cm³	95 cm³
Filter length - L	145 mm	195 mm
Filter width - W	190 mm	195 mm
Distance between end connections	152 mm	155 mm
Weight	370 gr	420 gr

1" Technical Data

	1"	1" Super
Max. pressure	10 bar	10 bar
Flow rate, 40-120 mesh (400-130 micron)	6 m³/h	8 m³/h
55 micron	4 m³/h	6 m³/h
Filtration surface area	308 cm²	500 cm²
Filtration volume	370 cm³	592 cm³
Filter length - L	233 mm	340 mm
Filter width - W	158 mm	158 mm
Distance between end connections	158 mm	158 mm
Weight	1.1 kg	1.4 kg

1½" Technical Data

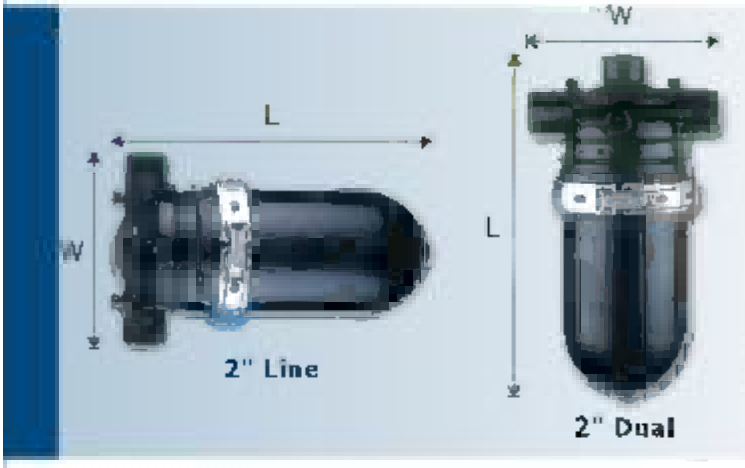
	1½"	1½" Super
Max. pressure	10 bar	10 bar
Flow rate, 40-120 mesh (400-130 micron)	8 m³/h	12 m³/h
55 micron	5 m³/h	8 m³/h
Filtration surface area	308 cm²	2,502 cm²
Filtration volume	370 cm³	502 cm³
Filter length - L	250 mm	350 mm
Filter width - W	200 mm	200 mm
Distance between end connections	200 mm	200 mm
Weight	1.3 kg	1.5 kg

Manual Disc Filters 2"-3"
with Differential Tightening

Size: 2"- 3"
Capacity: Low to medium flow
Operation: Manual disc filters
Applications: Irrigation systems in greenhouses, small farm fields or as secondary water quality control filters

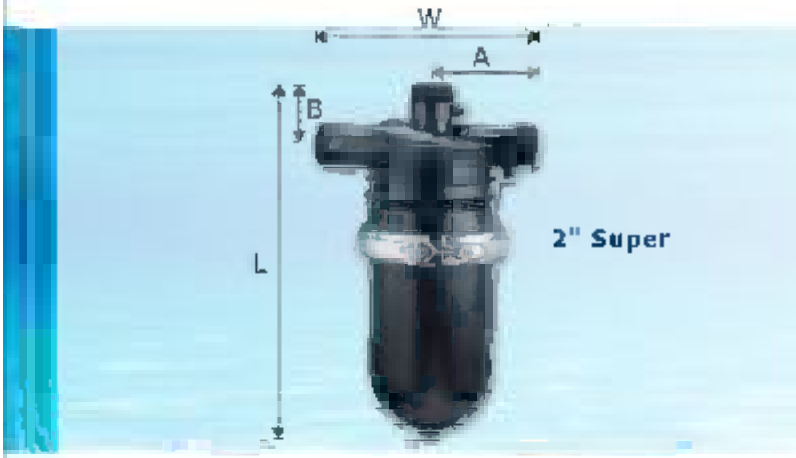
Standard Features:
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance or cleaning
- Operation is easy and requires no special tools
- Completely corrosion resistant

Special Features:
- Tangential inlet for higher retention capacity – 2" Super filter
- Angle or in-line outlet options for maximum flexibility – 2" Dual filter
- Approved for use up to 10 bar – 2" Dual filter
- Largest filtration area of comparable products – 3" Twin filter



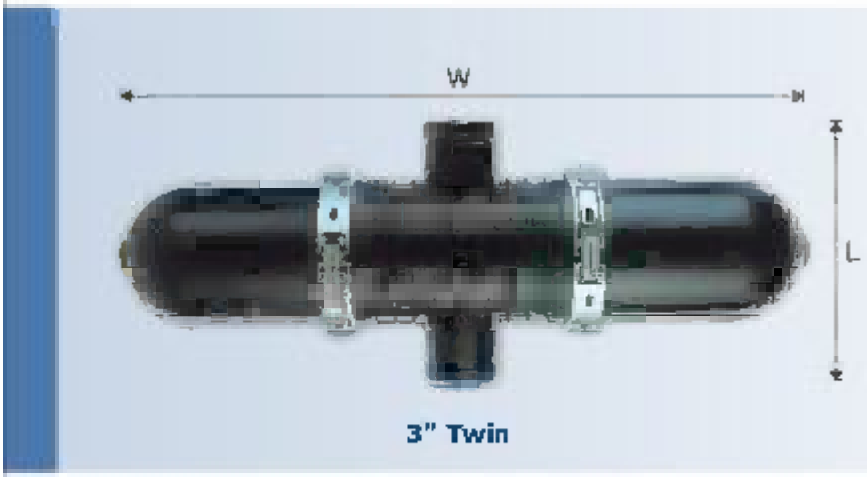
2" Line 2" Dual Technical Data

	2" Line	2" Dual
Max. pressure	12 bar	12 bar
Flow rate:		
40-120 mesh (400-130 micron)	25 m³/h	25 m³/h
55 micron	17 m³/h	17 m³/h
20 micron	12.5 m³/h	12.5 m³/h
Filtration surface area	950 cm²	950 cm²
Filtration volume	1,225 cm³	1,225 cm³
Filter length - L	420 mm	465 mm
Filter width - W	260 mm	260 mm
Distance between end connections	260 mm	260 mm
Weight	5 kg	5 kg



2" Super Technical Data

Max. pressure	10 bar
Flow rate:	
40-120 mesh (400-130 micron)	25 m³/h
55 micron	17 m³/h
20 micron	12.5 m³/h
Filtration surface area	950 cm²
Filtration volume	1,225 cm³
Filter length - L	495 mm
Filter width - W	290 mm
Distance between end connections	A 145 mm, B 85 mm
Weight	6 kg



3" Twin Technical Data

Max. pressure	10 bar
Flow rate:	
40-120 mesh (400-130 micron)	40 m³/h
55 micron	28 m³/h
20 micron	20 m³/h
Filtration surface area	1,900 cm²
Filtration volume	2,450 cm³
Filter length - L	320 mm
Filter width - W	865 mm
Distance between end connections	320 mm
Weight (flanged)	13.95 kg
Weight (victualic, threaded)	9.85 kg

Manual Disc Filters: Leader 2"-3"

Size: 2"- 3"
Capacity: Low to medium flow
Operation: Manual disc filters
Applications: Irrigation systems in greenhouses, small farm fields or secondary water quality control filters

Standard Features:
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance or cleaning
- Operation is easy and requires no special tools
- Completely corrosion resistant

Special Features:
- Made of polypropylene, easy to open, clean and close
- Suitable for all commonly used fertilizers and acids
- Suitable for sea and brackish water, high and low pH

2" Leader

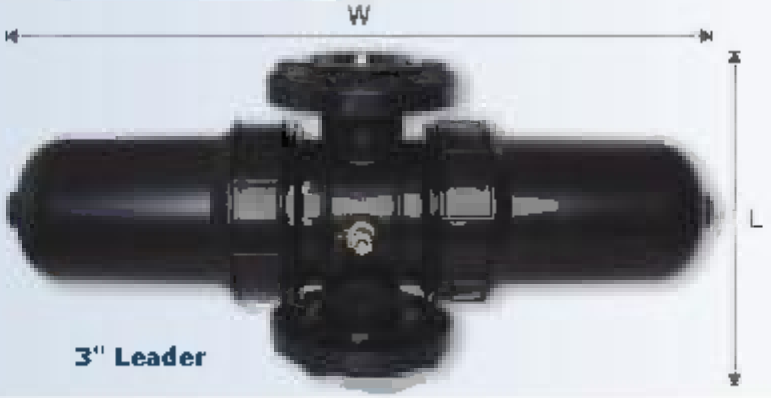
2" Leader Technical Data

Max. pressure	10 bar
Flow rate:	
40-120 mesh (400-130 micron)	30 m^3/h
55 micron	16 m^3/h
20 micron	8 m^3/h
Filtration surface area	950 cm^2
Filtration volume	1,225 cm^3
Filter length - L	425 mm
Filter width - W	230 mm
Distance between end connections	A: 115 mm B: 75 mm
Weight	3.2 kg

3" Leader Technical Data

Max. pressure	10 bar
Flow rate:	
40-120 mesh (400-130 micron)	50 m^3/h
55 micron	32 m^3/h
20 micron	16 m^3/h
Filtration surface area	1,900 cm^2

Filtration volume	2,450 cm^3
Filter length - L	320 mm
Filter width - W	742 mm
Distance between end connections	320 mm
Weight (flanged)	8 kg
Weight (victualic, threaded)	6.3 kg

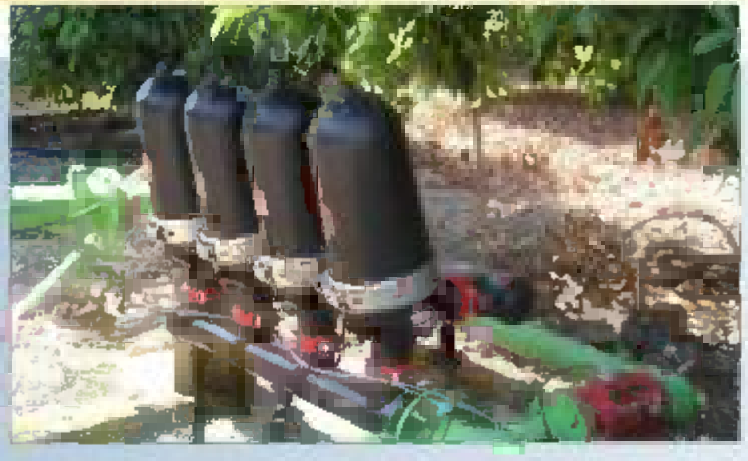


3" Leader

Manual Disc Filters: 3"-4" Super Angle
with Differential Tightening

Size: 3"- 4"
Capacity: Medium to high flow
Operation: Manual disc filters
Applications: Irrigation systems in farm fields or as secondary water quality control filters

Standard Features:
- Innovative filter design captures and retains large amounts of solids
- Long-term operation with little maintenance or cleaning
- Operation is easy and requires no special tools
- Completely corrosion resistant

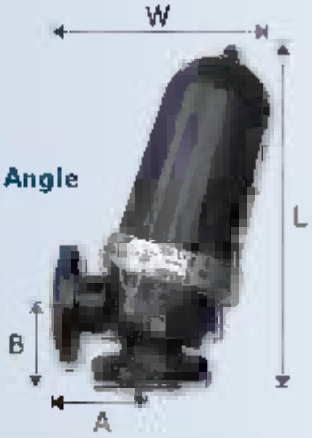


Special Features:
- Largest and highest quality plastic filters on the market

3" Super Angle

3" Super Angle Technical Data

Max. pressure	10 bar
Flow rate: 40-120 mesh (400-130 micron)	60 m³/h
55 micron	35 m³/h
20 micron	18 m³/h
Filtration surface area	1,852 cm²
Filtration volume	1,774 cm³
Filter length - L	631 mm
Filter width - W	308 mm
Distance between end connections	A: 187 mm, B: 145 mm
Weight - Flanged	14.1 kg
Weight - Victaulic, threaded	9.9 kg



4" Super Angle

4" Super Angle Technical Data

Max. pressure	10 bar
Flow rate: 40-120 mesh (400-130 micron)	90 m³/h
55 micron	40 m³/h
20 micron	20 m³/h
Filtration surface area	1,852 cm²
Filtration volume	1,774 cm³
Filter length - L	629 mm
Filter width - W	308 mm
Distance between end connections	A: 187 mm, B: 145 mm
Weight - Flanged	12.2 kg
Weight - Victaulic, threaded	10.1 kg

Manual Disc Filters: Super 4"-6"

Size: 4"- 6"
Capacity: Medium to high flow
Operation: Manual disc filters
Applications:
- Primary filter
- Security filter in the field
- Backup filter to media filter battery
- Well water filtration

Standard Features:
- Innovative filter design captures and retains large amount of solids
- Long-term operation with little maintenance or cleaning
- Operation is easy, requires no special tools
- Completely corrosion free

Special Features:
- The largest polypropylene disc filters in the world, flow rate up to 140 m^3/h
- Operation pressure up to 10 bar
- Excellent chemical and corrosion resistance
- Large filtration area: 3704 cm^2

4" Super Filter

4" Super Technical Data

Inlet/Outlet diameter	110 mm
Max. pressure	10 bar
Max. flow rate 400-100 micron	110 m^3/h
Filtration area	3,704 cm^2
Filtration volume	3,548 cm^3
Filter length - L	1,188 mm
Filter width - W	319 mm
Distance between connections*	445 mm
Weight Flanged	29 kg
Weight Victaulic	27 kg
pH	2-13 (at 20°C)
Maximum temperature	60°C

*Optional, 415 mm/16.3" for old version victaulic ends

6" Super Filter

6" Super Technical Data

Inlet/Outlet diameter	160 mm
Max. pressure	10 bar
Max. flow rate 400-100 micron	140 m^3/h
Filtration area	3,704 cm^2
Filtration volume	3,548 cm^3
Filter length - L	1,188 mm
Filter width - W	319 mm
Distance between connections*	415 mm
Weight	30 kg
pH	2-13 (at 20°C)
Maximum temperature	60°C

Sand Separator Systems

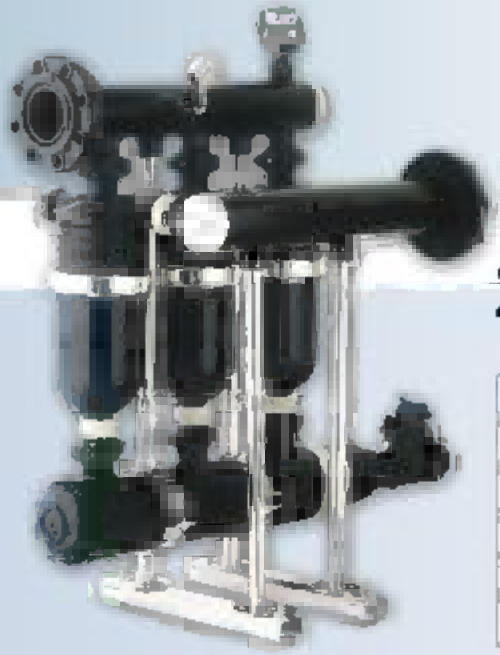
Size: 2" sand separator batteries
3" – 10" inlet/outlet diameter
Capacity: Modular for different flow rates (about 20m³/h per unit)
Operation: Sand separation with the option of built-in secondary disc filtration
Applications:
Used in wells, rivers – wherever sand content is high

Standard Features:
- High efficiency sand separation
- Long-term self-operated - minimal maintenance
- Corrosion resistant

Special Features:
Isolation valves allow:
- Maximum flexibility of flow rates with maximum separation efficiency
- Continuous flow during individual unit maintenance
- Special design prevents erosion damage caused by the high velocity of sandy water flow

2" Sand Separator Technical Data

Max. pressure	10 bar
Flow rate	20 m³/h
Filter length - L	540 mm
Filter width - W	290 mm
Distance between end connections	A: 145 mm, B: 85 mm
Weight	5.3 kg



2" Sand Separator Batteries Technical Data

	2 Units	3 Units	4 Units
Max. pressure	10 bar	10 bar	10 bar
Recommended flow rate	20-45 m³/h	≥45-70 m³/h	≥75-100 m³/h
Battery length	605 mm	855 mm	1,105 mm
Battery height	1,220 mm	1,220 mm	1,220 mm
Battery width	556 mm	556 mm	556 mm
Weight	65 kg	115 kg	145 kg

A.G.F. Media Filters and Batteries

Size: 48" tank diameter
4" inlet/outlet diameter
Capacity: Medium to high flow
Operation: Modular, gravel media filtration systems
Applications: Used in medium and large areas of field crops, orchards and groves

Standard Features:
- High quality filtration of solid impurities
- Easy automated operation, requires no special tools

Special Features:
- All plastic media filter – completely corrosion resistant
- Two large service ports allow for easy access and media maintenance
- Lightweight – easy and quick installation
- Unique internal nozzle design for maximum cleansing of filter media

48" AGF Technical Data

Max. pressure	6 bar
Max. recommended flow rate (single filter)	70 m^3/h
Diameter inlet/outlet	4" (Victualic)
Filter diameter	48" (1,220 mm)
Distance between end connections	1,106 mm
Weight	118 kg

48" AGF Batteries Technical Data

	2 Units	3 Units	4 Units	5 Units	6 Units
Max. pressure	6 bar	6 bar	6 bar	6 bar	6 bar
Recommended flow rate	130 m^3/h	200 m^3/h	270 m^3/h	340 m^3/h	400 m^3/h
Diameter connection	160 mm	160 mm	225 mm	225 mm	225 mm
Filtration surface area	2.32 mm^2	3.48 mm^2	4.64 mm^2	5.80 mm^2	6.96 mm^2
Battery height	1,991 mm	1,991 mm	2,017 mm	2,017 mm	2,017 mm
Distance between end connections	2,630 mm	3,950 mm	5,270 mm	6,590 mm	7,910 mm
Weight	240 kg	360 kg	480 kg	600 kg	720 kg

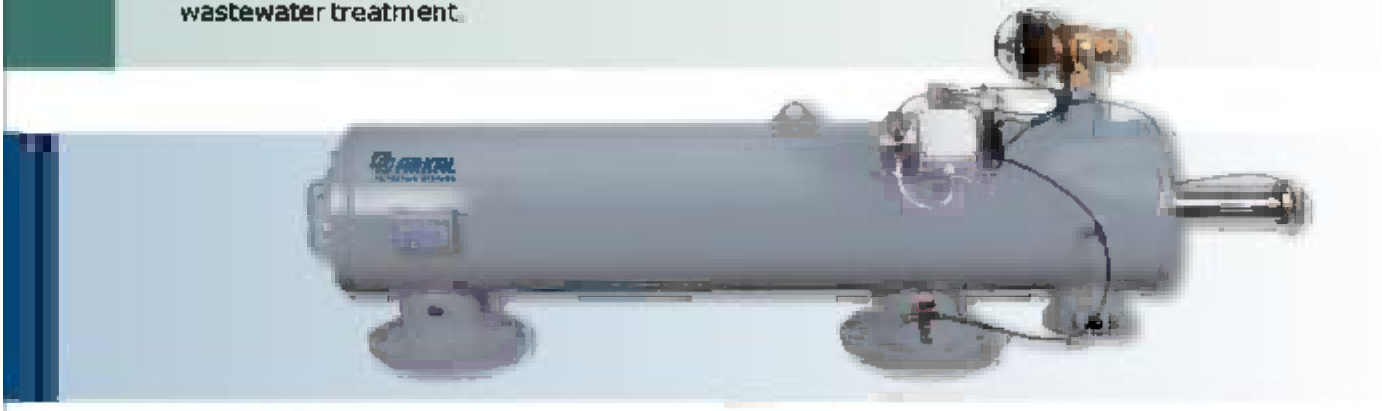
H-Series - Hydraulically Operated Automatic Self Cleaning Screen Filters

Market Sectors:

- In the agricultural/landscape sector, Arkal provides filtration solutions for micro-irrigation and sprinkler systems.
- The industrial, municipal and commercial sectors include the plastic industry-injection molding and extrusion, food processing, chemical and petrochemical, commercial and industrial cooling, metallurgy, water and wastewater treatment.

Typical Applications :

- Primary and secondary filtration on to sprinkler and drip irrigation, mini and micro-sprinkler systems, center pivots and water distribution applications.
- Typical applications in the industrial sectors are cooling towers, heat and ion exchange protection, water supply, wastewater recycling and effluent polishing.



H-Series

Filter Specifications: Parallel Design

Model Number	Operating Pressure		Maximum Flow Rate; m³/h 130 mic - Good water quality	Screen Area (cm²)	Length (mm)	Height (mm)	Width (mm)	Weight (Kg)	Volume (m³)
	Minimum bar / psi	Maximum bar / psi							
AK HLP*3	2 / 29	10 / 145	50	3,220	1,640	580	330	140	0.95
AK HLP*4	2 / 29	10 / 145	100	5,780	2,030	580	330	170	1.15
AK HLP*6	2 / 29	10 / 145	150	5,780	2,100	640	356	183	1.15
AK HXP*6	2 / 29	10 / 145	160	8,410	2,490	590	330	205	1.68
AK HP*8	2 / 29	10 / 145	225	5,780	2,290	640	362	195	1.15
AK HLP*8	2 / 29	10 / 145	300	8,410	2,690	640	362	236	1.68
AK HLP*10	2 / 29	10 / 145	400	8,410	2,690	670	413	270	1.68
AK HXP*10	2 / 29	10 / 145	450	11,710	3,220	720	611	430	2.93
AK HLP*12	2 / 29	10 / 145	600	11,710	3,220	720	611	435	2.93
AK HLP*14	2 / 29	10 / 145	900	12,990	3,220	770	639	455	2.93
AK HLP*16	2 / 29	10 / 145	1,100	12,990	3,220	770	639	480	2.93
AK HXP*16	2 / 29	10 / 145	1,500	17,020	3,220	920	674	680	3.80

Model Number Key

H = Hydraulic
L = Long filter with large filtration area
X = Extra long filter with extra large filtration area
I = Inline
P = Parallel

B-Series - Hydraulically Operated Automatic Self Cleaning Screen Filters

Market Sectors:

- In the agricultural/landscape sector, Arkal provides filtration solutions for micro-irrigation and sprinkler systems.
- The industrial, municipal and commercial sectors include the plastic industry-injection molding and extrusion, food processing, chemical and petrochemical, commercial and industrial cooling, metallurgy, water and wastewater treatment.

Typical Applications :

- Primary and secondary filtration on to sprinkler and drip irrigation, mini and micro-sprinkler systems, center pivots and water distribution applications.
- Typical applications in the industrial sectors are cooling towers, heat and ion exchange protection, water supply, wastewater recycling and effluent polishing.

B-Series

Filter Specifications: Angular Design

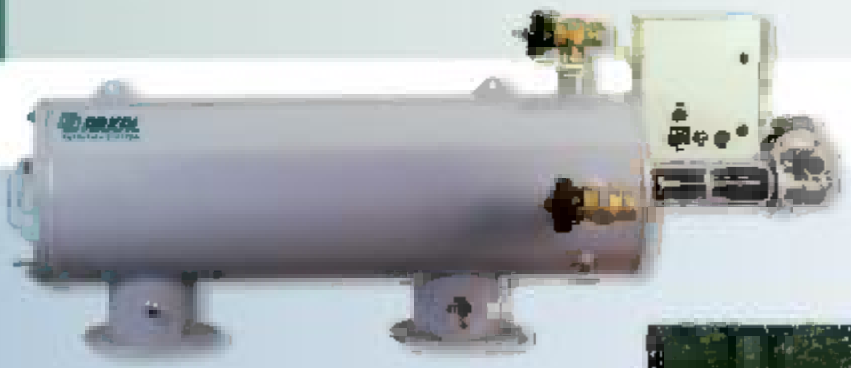
Model Number	Operating Pressure		Maximum Flow Rate; m³/h 130 mic - Good water quality	Screen Area (cm²)	Height (mm)	Weight (Kg)	Volume (m³)
	Minimum bar / psi	Maximum bar / psi					
AK B2	2 / 29	10 / 145	25	1,100	480	34	0.29
AK B2S	2 / 29	10 / 145	30	1,630	625	36	0.29
AK B3	2 / 29	10 / 145	40	1,100	495	34	0.29
AK B3S	2 / 29	10 / 145	50	1,630	640	36	0.29
AK B4	2 / 29	10 / 145	80	1,630	650	50	0.37
AK B4S	2 / 29	10 / 145	90	3,100	920	72	0.50
AK B6	2 / 29	10 / 145	130	4,500	1,150	86	0.57
AK B8	2 / 29	10 / 145	200	5,780	1,230	161	0.89

Model Number Key
S = Filter with super large filtration area

SE-Series - Automatic Self Cleaning Electric Screen Filters with Gear Operated Scanner

Market Sectors:
The Arkal SE Series Electrically Operated Self-Cleaning Screen Filter w/Scanner is used in a wide range of applications in the Agricultural, Industrial, Municipal, Commercial and Domestic sectors. The main industries include: steel mills, petroleum, plastics, chemicals, electronics, textile, paper mills, food, beverage and power stations.

Typical Applications :
- Cooling Towers
- Heat exchange protection
- Ion exchange protection
- Water supply
- Industrial wastewater recycling
- Effluent polishing
- Filtration for micro irrigation



SE-Series

Filter Specifications: Parallel Design

Model Number	Operating Pressure		Maximum Flow Rate; m³/h 130 mic - Good water quality	Screen Area (cm²)	Length (mm)	Height (mm)	Weight (Kg)	Volume (m³)
	Minimum bar / psi	Maximum bar / psi						
AK SE3	1 / 14.5	10 / 145	40	3,220	1,960	630	190	1.1
AK SE4	1 / 14.5	10 / 145	100	4,500	2,150	680	210	1.3
AK SE6	1 / 14.5	10 / 145	180	6,330	2,360	760	350	2.6
AK SE8	1 / 14.5	10 / 145	350	7,030	2,360	810	390	2.6
AK SE10	1 / 14.5	10 / 145	450	8,970	2,620	810	490	4
AK SE12	1 / 14.5	10 / 145	600	10,920	2,990	810	540	4
AK SE14	1 / 14.5	10 / 145	850	11,760	2,620	960	570	4
AK SE16	1 / 14.5	10 / 145	1,100	14,310	2,990	960	680	4
AK SEX16	1 / 14.5	10 / 145	1,500	17,020	2,620	960	680	4

Model Number Key
X = Extra long filter with extra large filtration area
L = Long filter with large filtration area
P = Parallel
I = Inline

E-Series - Automatic Self Cleaning Electric Screen Filters with Piston Operated Scanner

Market Sectors:
The Arkal E-Series Electrically Operated Self-Cleaning Screen Filter is used in a wide range of applications in the Agricultural, Industrial, Municipal, Commercial and Domestic sectors. The main industries include: steel mills, petroleum, plastics, chemicals, electronics, textile, paper mills, food, beverage and power stations.

Typical Applications :
- Cooling Towers
- Effluent polishing
- Heat exchange protection
- Water supply
- Ion exchange protection
- Filtration for micro irrigation
- Industrial wastewater recycling

E-Series

Filter Specifications: Parallel Design

Model Number	Operating Pressure		Maximum Flow Rate; m³/h 130 mic - Good water quality	Screen Area (cm²)	Length (mm)	Height (mm)	Weight (Kg)	Volume (m³)
	Minimum bar / psi	Maximum bar / psi						
AX E 3	1.5 / 22	10 / 145	50	3,220	1,715	580	160	0.95
AX E 4	1.5 / 22	10 / 145	100	5,780	2,110	580	190	1.15
AX E 6	1.5 / 22	10 / 145	150	5,780	2,180	640	210	1.15
AK EX6	1.5 / 22	10 / 145	160	8,410	2,570	580	215	1.7
AK E 8	1.5 / 22	10 / 145	160	5,780	2,370	640	210	1.2
AK EL8	1.5 / 22	10 / 145	300	8,100	2,770	640	250	1.7
AK E10	1.5 / 22	10 / 145	400	8,410	2,770	670	290	2.3
AK E12	1.5 / 22	10 / 145	600	11,710	3,300	720	440	2.3
AK E14	1.5 / 22	10 / 145	900	11,710	3,300	770	450	2.3
AK E16	1.5 / 22	10 / 145	1,100	12,990	3,300	770	510	2.3
AK EX 16	1.5 / 22	10 / 145	1,500	17,020	3,300	920	700	4.6

Model Number Key
S = Filter with super large filtration area
X = Extra long filter with extra large filtration area
P = Parallel
I = Inline

0406FPG-eng2 Adom design # AIB_21_ver7_en

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