

# Arkai Filtration Systems

## Product Guide





# 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.

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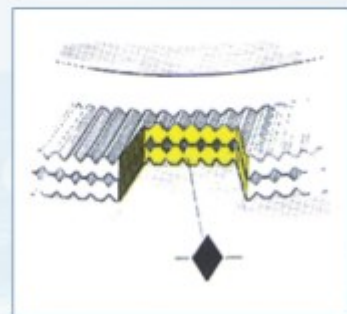
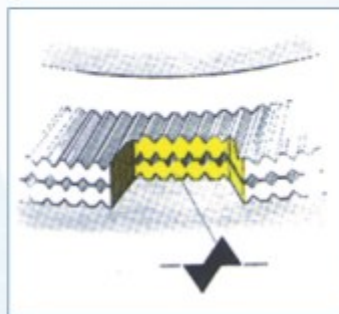
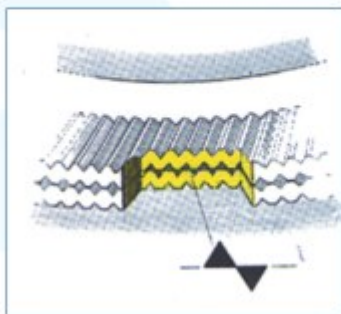
# Disc Filtration Technology

## 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.

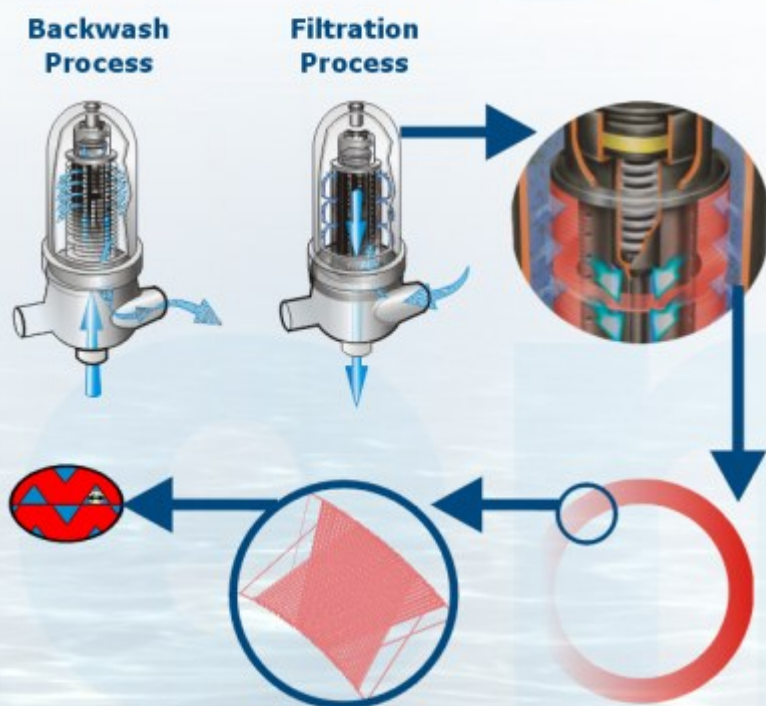
The spine assembly is specially designed to compress the filter element. Inside the spine, a spring and the pressure difference compress the discs tightly during the filtration process, forcing the water to flow between the grooves which trap the solids.



## Spin Klin® Automatic Backwash Operation

Activated by a predefined command (differential pressure or 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 through 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 m³/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 m<sup>3</sup>/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



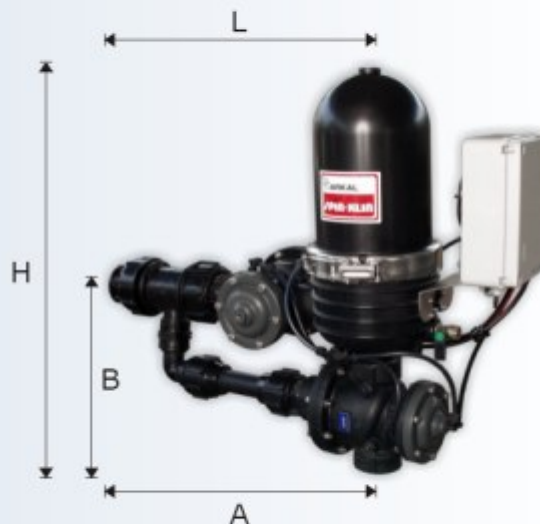
## Special Features:

- 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 m <sup>3</sup> /h   |
| 55 micron                        | 10 m <sup>3</sup> /h   |
| 20 micron                        | 5 m <sup>3</sup> /h    |
| Filtration surface area          | 880 cm <sup>2</sup>    |
| Filtration volume                | 1,320 cm <sup>3</sup>  |
| Filter length - L                | 694 mm                 |
| Filter height - H                | 628 mm                 |
| Distance between end connections | A. 243 mm<br>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 m<sup>3</sup>/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 m <sup>3</sup> /h | 55-60 m <sup>3</sup> /h | 55-80 m <sup>3</sup> /h |
| 55 micron                    | ≤26 m <sup>3</sup> /h | 20-40 m <sup>3</sup> /h | 35-53 m <sup>3</sup> /h |
| 20 micron                    | ≤15 m <sup>3</sup> /h | 10-23 m <sup>3</sup> /h | 20-32 m <sup>3</sup> /h |
| Filtration surface area      | 1,760 cm <sup>2</sup> | 2,640 cm <sup>2</sup>   | 3,520 cm <sup>2</sup>   |
| Filtration volume            | 2,460 cm <sup>3</sup> | 3,690 cm <sup>3</sup>   | 5,280 cm <sup>3</sup>   |
| 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 m<sup>3</sup>/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                | 2.8 bar               | 2.8 bar                   | 2.8 bar                   |
| Max. recommended flow rate:  |                       |                           |                           |
| 40-120 mesh (400-100 micron) | ≤90 m <sup>3</sup> /h | ≤85-120 m <sup>3</sup> /h | 115-150 m <sup>3</sup> /h |
| 55 micron                    | ≤60 m <sup>3</sup> /h | 55-80 m <sup>3</sup> /h   | 75-100 m <sup>3</sup> /h  |
| 20 micron                    | ≤30 m <sup>3</sup> /h | 25-40 m <sup>3</sup> /h   | 35-50 m <sup>3</sup> /h   |
| Filtration surface area      | 5,280 cm <sup>2</sup> | 7,040 cm <sup>2</sup>     | 8,800 cm <sup>2</sup>     |
| Filtration volume            | 7,920 cm <sup>3</sup> | 10,560 cm <sup>3</sup>    | 13,200 cm <sup>3</sup>    |
| 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



Star 18

**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



## 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 m<sup>3</sup>/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 m <sup>3</sup> /h  | 400 m <sup>3</sup> /h  | 500 m <sup>3</sup> /h  | 600 m <sup>3</sup> /h  |
| 55 micron                    | 170 m <sup>3</sup> /h  | 225 m <sup>3</sup> /h  | 280 m <sup>3</sup> /h  | 335 m <sup>3</sup> /h  |
| 20 micron                    |                        |                        | 140 m <sup>3</sup> /h  | 170 m <sup>3</sup> /h  |
| Filtration surface area      | 13,200 cm <sup>2</sup> | 17,600 cm <sup>2</sup> | 22,000 cm <sup>2</sup> | 26,400 cm <sup>2</sup> |
| Filtration volume            | 19,800 cm <sup>3</sup> | 26,400 cm <sup>3</sup> | 33,000 cm <sup>3</sup> | 39,600 cm <sup>3</sup> |
| 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 m<sup>3</sup>/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
- NSF 61 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 m <sup>3</sup> /h | 2,600 m <sup>3</sup> /h | 3,120 m <sup>3</sup> /h | 3,640 m <sup>3</sup> /h | 4,160 m <sup>3</sup> /h |
| 100 micron                             | 1,920 m <sup>3</sup> /h | 2,400 m <sup>3</sup> /h | 2,880 m <sup>3</sup> /h | 3,360 m <sup>3</sup> /h | 3,840 m <sup>3</sup> /h |
| 55 micron                              | 1,280 m <sup>3</sup> /h | 1,600 m <sup>3</sup> /h | 1,920 m <sup>3</sup> /h | 2,240 m <sup>3</sup> /h | 2,560 m <sup>3</sup> /h |
| 20 micron                              | 640 m <sup>3</sup> /h   | 800 m <sup>3</sup> /h   | 960 m <sup>3</sup> /h   | 1,120 m <sup>3</sup> /h | 1,280 m <sup>3</sup> /h |
| Filtration surface area                | 112,640 cm <sup>2</sup> | 140,800 cm <sup>2</sup> | 168,960 cm <sup>2</sup> | 197,120 cm <sup>2</sup> | 225,280 cm <sup>2</sup> |
| Filtration volume                      | 168,960 cm <sup>3</sup> | 211,200 cm <sup>3</sup> | 253,440 cm <sup>3</sup> | 295,680 cm <sup>3</sup> | 337,920 cm <sup>3</sup> |
| 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 m<sup>3</sup>/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:<br>(40-140 mesh) 100-400 micron | 2,580 m <sup>3</sup> /h | 11,350 gpm              | 3,440 m <sup>3</sup> /h | 15,130 gpm             | 4,300 m <sup>3</sup> /h | 18,900 gpm             |
| 55 micron   | 1,400 m <sup>3</sup> /h | 6,240 gpm               | 1,890 m <sup>3</sup> /h | 8,320 gpm              | 2,360 m <sup>3</sup> /h | 10,400 gpm             |
| 20 micron   |                         |                         |                         |                        | 1,180 m <sup>3</sup> /h | 5,190 gpm              |
| Filtration surface area                                     | 134,640 cm <sup>2</sup> | 260,800 in <sup>2</sup> | 179,520 cm <sup>2</sup> | 24,170 in <sup>2</sup> | 224,400 cm <sup>2</sup> | 34,780 in <sup>2</sup> |
| Filtration volume   | 201,960 cm <sup>3</sup> | 12,320 in <sup>3</sup>  | 269,280 cm <sup>3</sup> | 16,420 in <sup>3</sup> | 336,600 cm <sup>3</sup> | 20,500 in <sup>3</sup> |



# Manual Disc Filters $\frac{3}{4}$ "-1"-1 $\frac{1}{2}$ " with Differential Tightening

**Size:**  $\frac{3}{4}$ "-1"-1 $\frac{1}{2}$ "

**Capacity:** Low flow

**Operation:** Manual disc filters

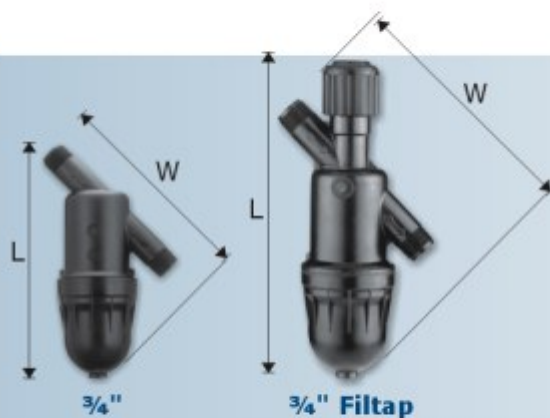
**Applications:** Irrigation systems in greenhouses, small farm fields or as secondary water quality control filters

## 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



**$\frac{3}{4}$ "**

## Technical Data

|   | $\frac{3}{4}$ " w/o valve | $\frac{3}{4}$ " Filtap (with valve) |
|---|---------------------------|-------------------------------------|
| Max. pressure                           | 10 bar                    | 10 bar                              |
| Flow rate: 40-120 mesh (400-130 micron) | 4 m <sup>3</sup> /h       | 4 m <sup>3</sup> /h                 |
| Filtration surface area                 | 160 cm <sup>2</sup>       | 160 cm <sup>2</sup>                 |
| Filtration volume                       | 95 cm <sup>3</sup>        | 95 cm <sup>3</sup>                  |
| 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 m <sup>3</sup> /h | 8 m <sup>3</sup> /h |
| 55 micron                               | 4 m <sup>3</sup> /h | 6 m <sup>3</sup> /h |
| Filtration surface area                 | 308 cm <sup>2</sup> | 500 cm <sup>2</sup> |
| Filtration volume                       | 370 cm <sup>3</sup> | 592 cm <sup>3</sup> |
| 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              |



**1 $\frac{1}{2}$ "**

## Technical Data

|   | 1 $\frac{1}{2}$ "   | 1 $\frac{1}{2}$ " Super |
|---|---------------------|-------------------------|
| Max. pressure                           | 10 bar              | 10 bar                  |
| Flow rate: 40-120 mesh (400-130 micron) | 8 m <sup>3</sup> /h | 12 m <sup>3</sup> /h    |
| 55 micron                               | 5 m <sup>3</sup> /h | 8 m <sup>3</sup> /h     |
| Filtration surface area                 | 308 cm <sup>2</sup> | 2,502 cm <sup>2</sup>   |
| Filtration volume                       | 370 cm <sup>3</sup> | 502 cm <sup>3</sup>     |
| 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

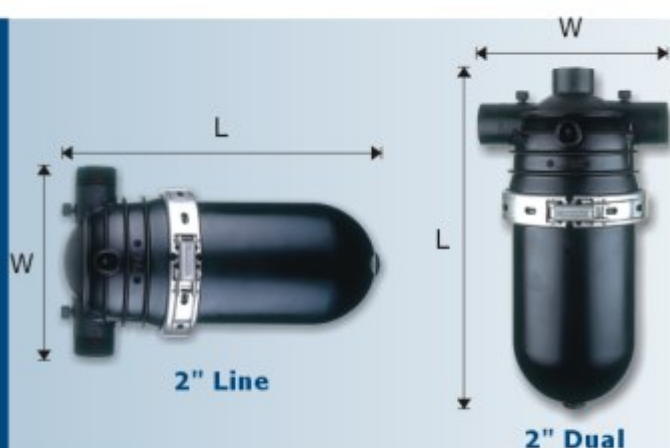
## Standard Features:

- 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



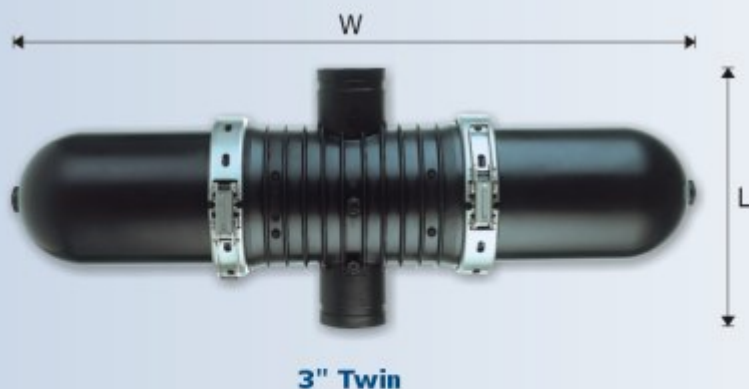
## 2" Line 2" Dual Technical Data

|                                  | 2" Line                | 2" Dual                |
|----------------------------------|------------------------|------------------------|
| Max. pressure                    | 12 bar                 | 12 bar                 |
| Flow rate:                       |                        |                        |
| 40-120 mesh (400-130 micron)     | 25 m <sup>3</sup> /h   | 25 m <sup>3</sup> /h   |
| 55 micron                        | 17 m <sup>3</sup> /h   | 17 m <sup>3</sup> /h   |
| 20 micron                        | 12.5 m <sup>3</sup> /h | 12.5 m <sup>3</sup> /h |
| Filtration surface area          | 950 cm <sup>2</sup>    | 950 cm <sup>2</sup>    |
| Filtration volume                | 1,225 cm <sup>3</sup>  | 1,225 cm <sup>3</sup>  |
| 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 m <sup>3</sup> /h   |
| 55 micron                        | 17 m <sup>3</sup> /h   |
| 20 micron                        | 12.5 m <sup>3</sup> /h |
| Filtration surface area          | 950 cm <sup>2</sup>    |
| Filtration volume                | 1,225 cm <sup>3</sup>  |
| 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 m <sup>3</sup> /h  |
| 55 micron                        | 28 m <sup>3</sup> /h  |
| 20 micron                        | 20 m <sup>3</sup> /h  |
| Filtration surface area          | 1,900 cm <sup>2</sup> |
| Filtration volume                | 2,450 cm <sup>3</sup> |
| 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 Technical Data

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

## 3" Leader Technical Data

|                              |                       |                                  |                       |
|------------------------------|-----------------------|----------------------------------|-----------------------|
| Max. pressure                | 10 bar                | Filtration volume                | 2,450 cm <sup>3</sup> |
| Flow rate:                   |                       | Filter length - L                | 320 mm                |
| 40-120 mesh (400-130 micron) | 50 m <sup>3</sup> /h  | Filter width - W                 | 742 mm                |
| 55 micron                    | 32 m <sup>3</sup> /h  | Distance between end connections | 320 mm                |
| 20 micron                    | 16 m <sup>3</sup> /h  | Weight (flanged)                 | 8 kg                  |
| Filtration surface area      | 1,900 cm <sup>2</sup> | Weight (victualic, threaded)     | 6.3 kg                |



# 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

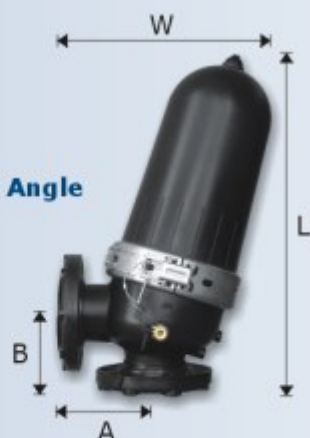
3" Super Angle



## 3" Super Angle Technical Data

|   |                       |
|---|-----------------------|
| Max. pressure                           | 10 bar                |
| Flow rate: 40-120 mesh (400-130 micron) | 60 m <sup>3</sup> /h  |
| 55 micron                               | 35 m <sup>3</sup> /h  |
| 20 micron                               | 18 m <sup>3</sup> /h  |
| Filtration surface area                 | 1,852 cm <sup>2</sup> |
| Filtration volume                       | 1,774 cm <sup>3</sup> |
| 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 m <sup>3</sup> /h  |
| 55 micron                               | 40 m <sup>3</sup> /h  |
| 20 micron                               | 20 m <sup>3</sup> /h  |
| Filtration surface area                 | 1,852 cm <sup>2</sup> |
| Filtration volume                       | 1,774 cm <sup>3</sup> |
| 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

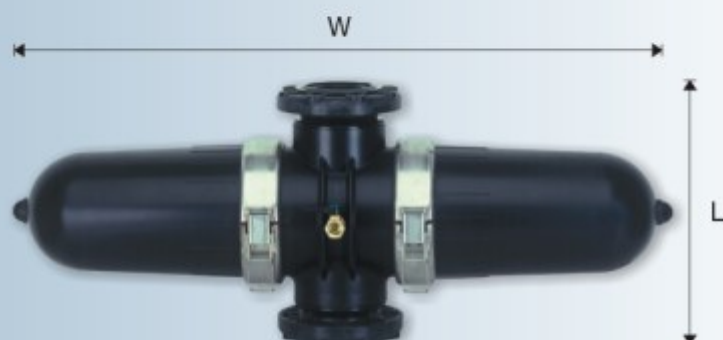
**Standard Features:**

- 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<sup>3</sup>/h
- Operation pressure up to 10 bar
- Excellent chemical and corrosion resistance
- Large filtration area: 3704 cm<sup>2</sup>



4" Super Filter

## 4" Super Technical Data

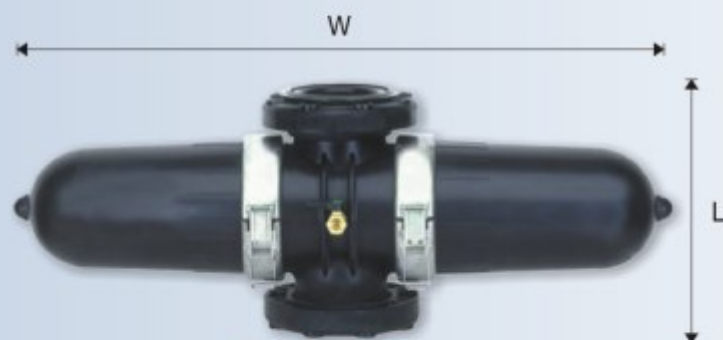
|                               |                       |
|-------------------------------|-----------------------|
| Inlet/Outlet diameter         | 110 mm                |
| Max. pressure                 | 10 bar                |
| Max. flow rate 400-100 micron | 110 m <sup>3</sup> /h |
| Filtration area               | 3,704 cm <sup>2</sup> |
| Filtration volume             | 3,548 cm <sup>3</sup> |
| 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 Technical Data

|                               |                       |
|-------------------------------|-----------------------|
| Inlet/Outlet diameter         | 160 mm                |
| Max. pressure                 | 10 bar                |
| Max. flow rate 400-100 micron | 140 m <sup>3</sup> /h |
| Filtration area               | 3,704 cm <sup>2</sup> |
| Filtration volume             | 3,548 cm <sup>3</sup> |
| 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                  |



6" Super Filter

# Sand Separator Systems

**Size:** 2" sand separator batteries

3" - 10" inlet/outlet diameter

**Capacity:** Modular for different flow rates (about 20m<sup>3</sup>/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 m <sup>3</sup> /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 m <sup>3</sup> /h | ≥45-70 m <sup>3</sup> /h | ≥75-100 m <sup>3</sup> /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 <sup>3</sup> /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 <sup>3</sup> /h | 200 m <sup>3</sup> /h | 270 m <sup>3</sup> /h | 340 m <sup>3</sup> /h | 400 m <sup>3</sup> /h |
| Diameter connection              | 160 mm                | 160 mm                | 225 mm                | 225 mm                | 225 mm                |
| Filtration surface area          | 2.32 mm <sup>2</sup>  | 3.48 mm <sup>2</sup>  | 4.64 mm <sup>2</sup>  | 5.80 mm <sup>2</sup>  | 6.96 mm <sup>2</sup>  |
| 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; m <sup>3</sup> /h 130 mic - Good water quality | Screen Area (cm <sup>2</sup> ) | Length (mm) | Height (mm) | Width (mm) | Weight (Kg) | Volume (m <sup>3</sup> ) |
|--------------|--------------------|-------------------|---|--------------------------------|-------------|-------------|------------|-------------|--------------------------|
|              | 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; m <sup>3</sup> /h 130 mic - Good water quality | Screen Area (cm <sup>2</sup> ) | Height (mm) | Weight (Kg) | Volume (m <sup>3</sup> ) |
|--------------|--------------------|-------------------|---|--------------------------------|-------------|-------------|--------------------------|
|              | 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; m <sup>3</sup> /h 130 mic - Good water quality | Screen Area (cm <sup>2</sup> ) | Length (mm) | Height (mm) | Weight (Kg) | Volume (m <sup>3</sup> ) |
|--------------|--------------------|-------------------|---|--------------------------------|-------------|-------------|-------------|--------------------------|
|              | 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; m <sup>3</sup> /h 130 mic - Good water quality | Screen Area (cm <sup>2</sup> ) | Length (mm) | Height (mm) | Weight (Kg) | Volume (m <sup>3</sup> ) |
|--------------|--------------------|-------------------|---|--------------------------------|-------------|-------------|-------------|--------------------------|
|              | Minimum bar / psi  | Maximum bar / psi |   |                                |             |             |             |                          |
| AK E 3       | 1.5 / 22           | 10 / 145          | 50  | 3,220                          | 1,715       | 580         | 160         | 0.95                     |
| AK E 4       | 1.5 / 22           | 10 / 145          | 100   | 5,780                          | 2,110       | 580         | 190         | 1.15                     |
| AK 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