

2" Spin Klin™ Compact L.C.E.

Automatic Low Cost Energy
disc filtration system

L.C.E systems:

- For low pressure where higher pressure is not available or is too costly
- Flushes at low pressure using less energy
- For low to medium flow rates in a compact footprint



inlet/outlet

**50 mm
(2")**

max. flow rate

**15 m³/h
(66 gpm)**

filtration degrees

**100-400
micron**

min. backwash pressure

**1.5 bar
(22 psi)**

features:

- Micron-precise depth filtration of solids
- Innovative disc technology captures and retains large amounts of solids
- Long-term operation with minimal maintenance
- Easy and simple operation
- Short automatic backwash with regulated water volume for a small water footprint
- Compact design

How the 2" Spin Klin™ Compact Filters Work

General

The Arkal 2" Spin Klin™ Compact L.C.E. filter is a stand alone, polymeric, automatic disc filters with a patented self-cleaning backwash mechanism. The Arkal 2" Spin Klin™ Compact L.C.E. filter is for flow rates of up to 15 m³/h (88 gpm) with filtration degrees ranging from 100 – 400 micron. Inlet/Outlet - 50 mm (2") diameter.

The Filtration Process

The discs are stacked on the Spin Klin™ spine and assembled according to pre-determined water filtration requirements. During filtration, the discs are compressed by means of a pre-loaded spring and differential pressure, forcing the water to pass through the grooved disc surface, thus trapping the solids.

The Backwash Process

Activated by a pre-determined time command or differential pressure, the filter enters backwash mode. The inlet valve port shuts as the drain valve port opens. Water flows through a bypass filter screen into the outlet valve and into the filter. During the backwash process, pressure is released and the spine's piston elevates, releasing the compression on the discs. Tangential jets of filtered water are then forced through the nozzles positioned along the spine. At this stage the discs spin freely, loosening the trapped solids which are then flushed out.

*Please note: During backwash of the 2" Spin Klin™ Compact L.C.E. downstream flow is suspended.



Construction materials	
Filter Housing & Lid	RPP (Reinforce Polypropylene)
Disc elements	PP (Polypropylene)
Backwash valves	RPA (Reinforce Polyamide) or RPP (Reinforce Polypropylene)
Manifolds	PP (Polypropylene)
Seals	NBR or EPDM, (Viton optional)
Control Tubing	PE

Disc material type availability according to filtration degree:

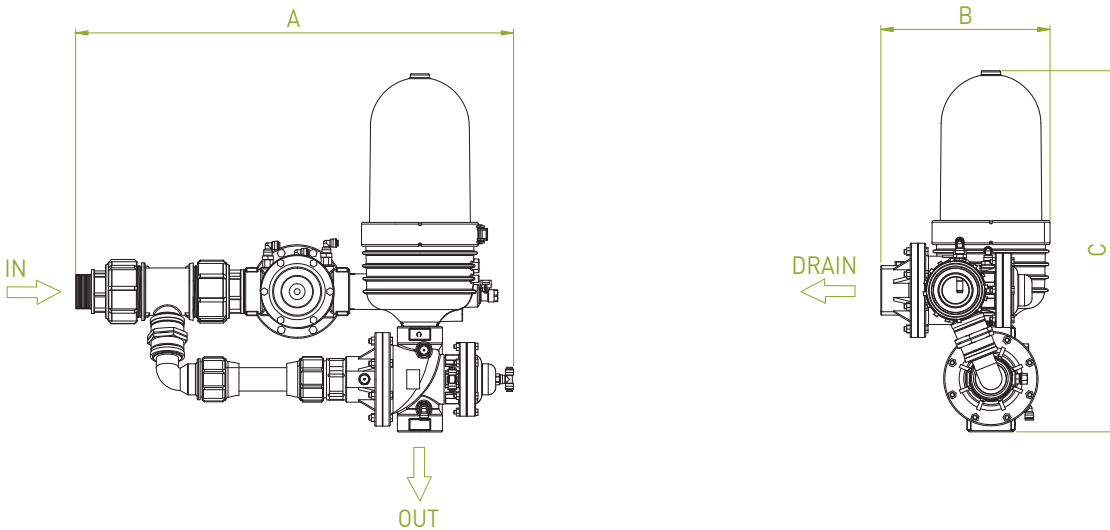
Color Code	Black	Red	Yellow	Blue
Micron	100	130	200	400

Filter Type	2" Spin Klin™ Compact L.C.E.
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General Data	
Max. working pressure	6 bar (87 psi)
Min. backwash pressure	1.5 bar (22 psi)
Max. recommended flow rates	130µ
Filtration volume	1,148 cm ³ (70 in ³)
Filtration area	880 cm ² (124 in ²)
Inlet/Outlet diameter	50 mm (2")
Max. working temperature	60°C (140°F)
Dry weight	20 kg (44 lb)

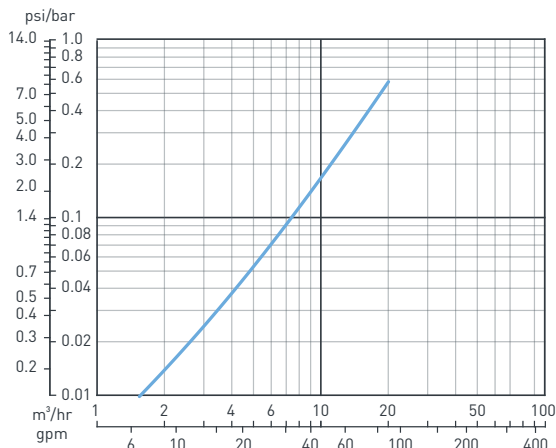
Backwash Data	
Exhaust valve	50 mm (2")
Flushing time	20 sec
Minimum flow for backwash	10 m ³ /h (44 gpm)

Typical Installation Drawing



Dimensions		1 unit battery
A	Length	749 mm [29 1/2"]
B	Width	287 mm [11 5/16"]
C	Height	612 mm [24 3/32"]

Head Loss Graphs (in clean water)



*head loss is based on a 130 micron disc — 1 unit

