

# AZUD HELIX AUTOMATIC FT DLP

## SELF-CLEANING DISC FILTERS

### Working conditions

Salinity	< 6000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. backwash pressure	1.5 bar (22 psi)
Min. backwash flow	2.5 l/s (39 gpm) per filter 2"S y 3" 5 l/s (79 gpm) per filter 4"
Backwash duration	15 - 25 s
pH	4 - 11
Water temperature	≤ 60 °C (140 °F)

### Filtration degrees (micron)



**DLP** Technology  
Low Pressure Backflush



## DESCRIPTION

Self-cleaning disc AZUD HELIX AUTOMATIC FT DLP filter available in Ø2", Ø3" and Ø4".

AZUD patents, developments and manufacturing quality control guarantee an excellent filtration quality by optimizing operational costs of the installation where it is integrated. Thermoplastic materials used in the manufacture offer an extraordinary resistance and lifespan of all the components of the equipment, minimizing the tasks of inspection and maintenance, which are carried out easily and with no tools.

**Applications:** Filtration for cooling towers, heat exchangers, tanks/lakes/fonts, water reuse system; make-up water filtration; particles recovery; disinfection systems protection, spray nozzles protection, UF membranes protection; media filter prefiltration.

## MAIN FEATURES

- > **RELIABLE FILTRATION**, thanks to a double effect of centrifugal separation and in-depth 3D filtration with multiple particle retention points.
- > **EFFICIENT SELF-CLEANING**, with no interruption of clean water supply. The exclusive DLP TECHNOLOGY minimizes the backwash water volume and the energy consumption.
- > **MINIMUM BACKWASH FREQUENCY**, thanks to the patented anti-clogging deflector AZUD HELIX and an increased filtration area per filter element.
- > **PLUG&PLAY AND MODULAR SOLUTION.**

### HOW DO THEY WORK

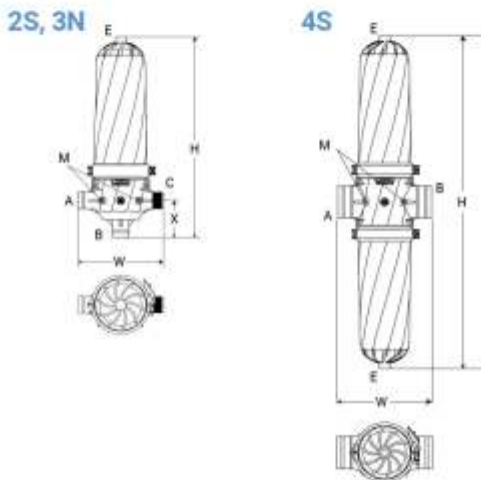
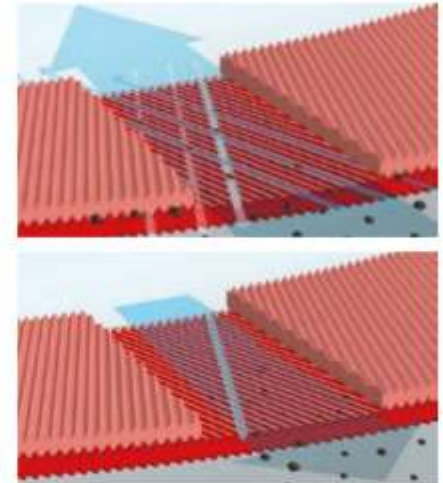
#### FILTRATION PHASE:

- Water flows from the inlet manifold to the inside of the filter, passing through the anti-clogging deflector AZUD HELIX, which throws the heavy particles away from the disc stack, avoiding the quick clogging of the filter and minimizing the backwash frequency.
- Water flows OUT-IN through the disc stack to the outlet manifold while particles bigger than the filtration degree are trapped in the discs.

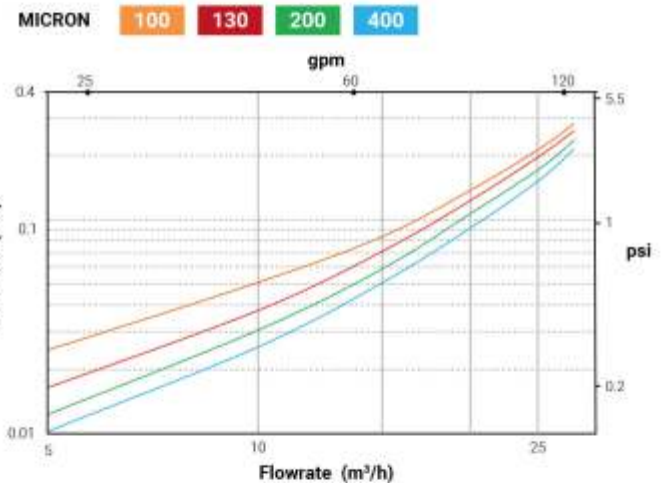
#### SELF-CLEANING PHASE:

- When automatic backwash is activated, the pressurized water flows IN-OUT, decompressing the disc stack.
- High-speed flushing water flowing through the spray nozzles, creates a tangential cleaning effect the flush out the trapped particles.

▶ Check our YouTube channel for more details



### 2" SUPER HEAD LOSS\*



\*The backwash frequency depends on the design flowrate. For hydraulic calculation, consider the set-point value for the self-cleaning cycle (usually 0.5 bar/7.25 psi).

### MATERIALS OF CONSTRUCTION

<b>MG Discs</b>	Polypropylene
<b>WS Discs</b>	High density polyethylene
<b>Disc support</b>	Reinforced polypropylene
<b>Base - lid</b>	Reinforced polyamide
<b>Spring</b>	Stainless steel 302
<b>Clamp</b>	Stainless steel 304
<b>Sealing o-rings</b>	Nitrile rubber/high density polyethylene

### MODELS

FILTER CONFIGURATION	DIAMETER	MODEL	Q MAX. 130 µm*	FILTRATION AREA	CONNECTION			DIMENSIONS			FILTER WEIGHT	
					A	B	C	H	W	X	EMPTY	FULL
	2" SUPER	2SR			BSP	BSP	BSP					
		2SA	26 m³/h	1620 cm²	NPT	NPT	NPT	720 mm	310 mm	133 mm	8.6 kg	18.5 kg
		2SV	114 gpm		GROOVED	GROOVED	BSP	28.3 in	12.2 in	5.2 in	18.9 lb	40.7 lb
		2SW			GROOVED	BSP	GROOVED					
	3"	3NR			BSP	BSP	BSP					
		3NA	30 m³/h	1620 cm²	NPT	NPT	NPT	735 mm	336 mm	147 mm	8.9 kg	19.4 kg
		3NV	132 gpm		GROOVED	GROOVED	BSP	28.9 in	13.2 in	5.8 in	19.8 lb	42.6 lb
		3NW			GROOVED	BSP	GROOVED					
	4" SUPER	4SL	52 m³/h 229 gpm	3240 cm²	GROOVED	GROOVED	-	1200 mm 47.2 in	340 mm 13.4 in	-	16.2 kg 35.7 lb	35.1 kg 77.3 lb

¾" BSP E connection • ¼" BSP M connection

\*Maximum flowrate is limited by the size and type of the auxiliary elements (manifold, flanges and valves).