AZUD HELIX AUTOMATIC

FT200 SW AA DLP

SELF-CLEANING DISC FILTRATION EQUIPMENT



Working conditions

Salinity	6000 - 55000 mg/l
Max. working pressure	10 bar (145 psi)
Min. working pressure	0.8 bar (11.6 psi)
Min. air pressure*	4.5 bar (65 psi)
Max. air pressure*	6 bar (87 psi)
Air flow per duration	18 l/s (285 gpm) x 10 s
Backwash volume	10 l water per filter (2.6 gal)
pH	4 - 11
Water temperature	≤ 60 ºC (140 ºF)

*Compressed air pressure > Water pressure

Filtration degrees (micron)

400 | 200 | 130 | 100 | 50 | 20 | 10 | 5

DLP Technology
Low Pressure Backflush

DESCRIPTION

Self-cleaning disc filtration equipment composed by 1 to 10 filters AZUD HELIX AUTOMATIC Ø2" with discs AZUD MG/WS, which perform an in-depth 3D filtration, installed in-line on Ø2"-Ø8" inlet/outlet manifolds. Includes Ø2" backwash valves 3-way membrane type and the innovative DLP TECHNOLOGY, that enable the sequential low-pressure backwashing of each filter using a mix of filtered water and compressed air stored in an auxiliary tank, while continues the filtered water supply downstream. The patented AZUD HELIX anti-clogging deflector provides a reliable filtration thanks to an effect of centrifugal separation, with less backwash frequency and less water and energy consumption.
The material of construction of these equipment are specifically designed to enhance filtration in installations with high salinity water.

Smart, compact and modular plug&play solution, made of technical thermoplastics, increases the shelf life of the installation providing a long-term operation with minimum operational costs and less maintenance downtime.

APPLICATIONS

- > **Make-up water filtration**
- > **Filtration in tanks, lakes and fonts**
- > **Disinfection system protection**
- > **Particles recovery**
- > **Water reuse**

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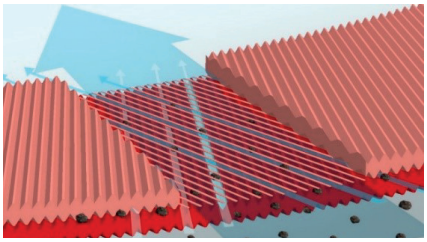
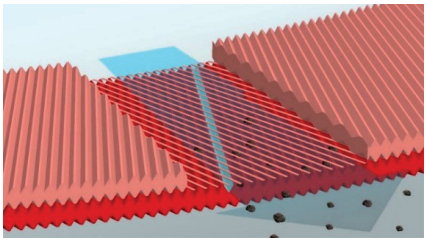
HELIX AUTOMATIC
FT200 SW AA DLP

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 disc.

SELF-CLEANING PHASE:

- During the automatic backwash, a water-air mix is made, providing a more energetic and effective cleaning with a 80% water saving.
- The water-air mix flows IN-OUT, decompressing the disc stack. High-speed flushing water flowing through the spray nozzles, creates a tangential cleaning effect that flush out the trapped particles.

Check our YouTube channel for more details

MODELS

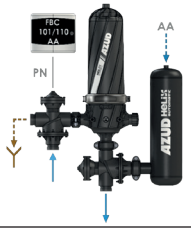
Filtration area	Model	Q max. 50 µm* m³/h (gpm)	Q max. 130 µm* m³/h (gpm)	Connection	INLET AND OUTLET MANIFOLD			AZUD FBC control unit**
					DIN 2576	ANSI B16.5 CLASS 150	Grooved	
1620 cm²	**FT201 SW AA** 1 filter Ø2"	14 (62)	21 (92)	**Ø2"**			•	101/1 SW AA
3240 cm²	**FT202 SW AA** 2 filter Ø2"	28 (123)	42 (185)	**Ø3"**	•	•	•	110/2 SW AA
4860 cm²	**FT203 SW AA** 3 filter Ø2"	42 (185)	50 (220) 63 (277)	**Ø3"** **Ø4"**	•	•	•	110/3 SW AA
6480 cm²	**FT204 SW AA** 4 filter Ø2"	56 (246)	80 (352) 84 (370)	**Ø4"** **Ø6"**	•	•	•	110/4 SW AA
8100 cm²	**FT205 SW AA** 5 filter Ø2"	70 (308)	80 (352) 105 (462)	**Ø4"** **Ø6"**	•	•	•	110/5 SW AA
9720 cm²	**FT206 SW AA** 6 filter Ø2"	84 (370)	126 (555)	**Ø6"**	•	•	•	110/6 SW AA
11340 cm²	**FT207 SW AA** 7 filter Ø2"	98 (431)	147 (647)	**Ø6"**	•	•	•	110/7 SW AA
12960 cm²	**FT208 SW AA** 8 filter Ø2"	112 (493)	160 (705) 168 (740)	**Ø6"** **Ø8"**	•	•	•	110/8 SW AA
14580 cm²	**FT209 SW AA** 9 filter Ø2"	126 (555)	160 (705) 189 (832)	**Ø6"** **Ø8"**	•	•	•	110/9 SW AA
16200 cm²	**FT210 SW AA** 10 filter Ø2"	140 (616)	160 (705) 210 (925)	**Ø6"** **Ø8"**	•	•	•	110/10 SW AA

DRAINAGE MANIFOLD: Ø3" Grooved/PVC

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

**AZUD FBC control unit not included with the equipment.

MATERIALS OF CONSTRUCTION

Filters	Backwash valves Inlet/outlet/drainage manifolds	Scheme
Filters Ø2" (1-10 units) • MG/WS disc: PP/HDPE • Support structure: rPP • Base-lid: rPA • Spring: HASTELLOY • Clamp: SS 316L • Sealing o-rings: NBR/HDPE	**Valves Ø2"** 3 way-membrane (2 units / filter) • Body: rPA • Axis, seat and spring: SS DUPLEX • Sealing o-rings: NBR • Command: Pneumatic (PN) **Manifolds:** HDPE PE-100 **Flanges:** PP coated steel **AA tank:** HDPE	

PP: Polypropylene **rPP:** Reinforced polypropylene **SS:** Stainless steel **rPA:** Reinforced polyamide **HDPE:** High density polyethylene **NBR:** Nitrile rubber

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