

# HELiX<sup>®</sup>

S Y S T E M

# AZUD

## LM

In line equipments with grooved discs filtering elements, High Density Polyethylene manifolds and "Manual backflushing activation Kit" to each filter, including the grooved ending and two 2" valves.



## TECHNOLOGY

AZUD HELIX LCM equipment backflushes without any interruption of water supply to the crop. The backflush is made manually in a sequential way: the 2 auxiliary valves that incorporate each filter allow the removal of the filtering elements one by one. The rest of filters continue in the filtration stage.

**FILTRATION STAGE:** The helix generates a centrifuge helical effect, which moves away from the discs the particles in the water.

This is translated in a lesser frequency and intensity of the maintenance labours, with the subsequent saving of water.

Through the discs is made the in-depth filtration process.

**CLEANING STAGE:** When the operator closes the two valves in one of the filters, this stops the filtration process and allow the removal of the filtering element placed inside to clean it. The rest of filters continue in the filtration process. This process of the equipment ends when all the filters in the equipments have been cleaned.

It is recommended to clean when the differential of pressure reach max. 0.5 bar.

## ADVANTAGES

- ✓ **Disc Filtration. Maximum safety.** Its studied design and the materials used in its manufacture guarantee a long life and high resistance.
- ✓ **AZUD HELIX System.** Optimization of the performance and minimum frequency and intensity of maintenance labours.
- ✓ **Self-cleaning filtering element.** The LM equipments allow to house both manual filtering elements.



LM

- ✓ **Modularity.** Versatility, compatibility. The system permits a wide range of possibilities with a minimal number of components.
- ✓ **Maximum facility of transport and installation.**
- ✓ **Manufactured in plastic materials.**
- ✓ **Low Maintenance.** Without tooling. Maximum resistance, with movable parts not susceptible to wearing due to a continuous operation..
- ✓ **Water and energy saving.**

**Filtration** Maximum recommended flow rate per filter (m<sup>3</sup>/h)  
AZUD HELIX SYSTEM filter Filtering surface 1,699 cm<sup>2</sup>

Quality of water	Backflushing frequency		
	Low	Average	High
GOOD	16	23	30
AVERAGE	14	20	26
POOR	13	18	23
VERY POOR	8	12	18

### HOW TO CHOOSE AZUD HELIX AUTOMATIC EQUIPMENTS

1. Determine the required filtration grade.
2. Establish the quality of the water.
3. Calculate according to the following equation, the numbers of filters required with the selected SERIE.

$$\text{Number of filters} = \frac{\text{Flow to filter in the installation}}{\text{Max. Flow per filter}}$$

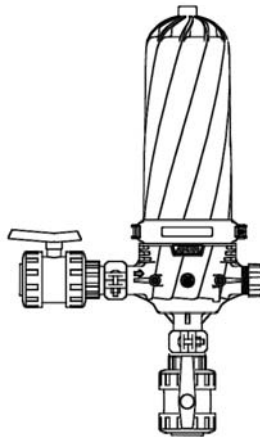
### MATERIAL

Manifolds	Hight Density Polyethylene
Housing	Polyamide reinforced with glass fibre
Filtering element	PP grooved discs
Sealing element	NBR

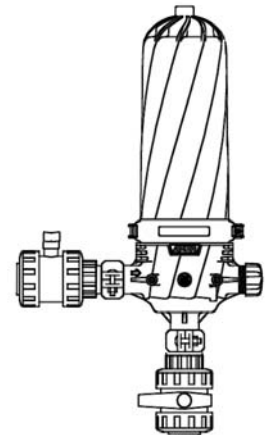
pH>4 • Maximum pressure 10 bar / 145 psi • Maximum temperature 60°C / 140 F

### BACKFLUSHING OPERATION

The arrangement of the two valves on each one of the filters allows that once they are isolated from the system, the filtering element can be removed to clean it. During this time, the rest of filters are in the filtration mode; once the first filter is again incorporated to the system, the operator can continue with the cleaning until finishing all the filters in the equipment.



Filtration position



Backflushing position

Model	Specifications			Dimensions (mm)							
	N. Filters	Manifold	Filtering Surface (cm <sup>2</sup> )	F	D	L	W	T	S	H	
202/4VH	2"x 2	4"-110	3,398	477	645	615	746	722	267	1310	
202/4FH	2"x 2	4"-110	3,398	477	715	715	746	722	267	1310	
203/4VH	2"x 3	4"-110	5,097	477	860	830	746	722	267	1310	
203/4FH	2"x 3	4"-110	5,097	477	930	930	746	722	267	1310	
LM	204/6VH	2"x 4	6"-160	6,796	502	1229	1145	771	772	292	1360
	204/6FH	2"x 4	6"-160	6,796	502	1245	1245	804	772	292	1360
	205/6VH	2"x 5	6"-160	8,495	502	1504	1420	771	772	292	1360
	205/6FH	2"x 5	6"-160	8,495	502	1520	1520	804	772	292	1360
	206/6VH	2"x 6	6"-160	10,194	502	1695	1778	771	772	292	1360
	206/6FH	2"x 6	6"-160	10,194	502	1795	1795	804	772	292	1360

Other configurations in [www.azud.com](http://www.azud.com)

### AZUD HELIX SYSTEM

