

# AZUD HELIX AUTOMATIC

## AZUD HELIX AUTOMATIC SERIE 200/300 DLP

In-line Self Cleaning Equipment with disc filtering elements and 2" (Series 200) or 3" (Series 300) valves for exclusive use for irrigation water filtration application.

High density polyethylene manifolds. Easy to install. Maximum resistance and durability.

Max. Flow: 220 m<sup>3</sup>/h (968 gpm)



Modular configurations according to preferences and space availability. Ready to connect and operate thanks to AZUD FBC Control Unit, that allows complete automation of the equipment for different power supplies: 110-120; 220-240 V AC 50/60 Hz; 12 V DC.

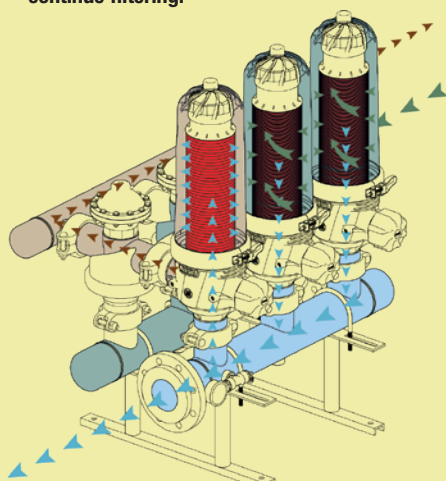
## ADVANTAGES

- ✓ **Disc filtration. Maximum safety.**  
Its careful design and manufacture guarantee an extended lifespan, resistance and high filtration quality.
- ✓ **AZUD HELIX device.**  
Patented clogging retardant device. Performance optimization, minimum frequency and intensity of the maintenance labours.
- ✓ **Self-cleaning filtering element.**  
Maximum water saving and efficiency in backwashing phase. Large filtration area. Filtration degrees 100, 130, 200 and 400 micron.



## TECHNOLOGY

**AZUD HELIX AUTOMATIC backwashes one station at a time. Remaining elements continue filtering.**



**FILTRATION PHASE:** The Helix generates a centrifugal helical effect upon entry into the filter, this moves the particles away from the discs. The water then passes efficiently through the depth of the uniquely designed discs.

**BACKFLUSHING PHASE:** The clean water from the auxiliary filter is introduced from the reverse direction through the filtering element. This decompresses the stack discs, allowing the discs to separate and backwash efficiently.

The solids are expelled from the discs and evacuated through the backwash manifold.

The filtration process then restarts with the compression of the discs. The backwash is controlled by two valves and a controller, which integrate the filtration equipment.

- ✓ **Modularity, versatility and compatibility.**  
The modular system allows for a wide range of configurations with the minimal number of components.
- ✓ **Maximum ease of transportation and installation.**  
Factory assembled equipment.
- ✓ **Manufactured in plastic materials.**
- ✓ **Low maintenance.**  
No tools required. Maximum wear resistance of high quality moving parts.
- ✓ **Water and energy savings.**

# AZUD HELIX automatic

FILTRATION Maximum flow per filter  
AZUD HELIX AUTOMATIC filter filtering surface 1.620 cm<sup>2</sup>

		SERIES 300			SERIES 200			
	micron mesh	400 40	200 75	130 120	400 40	200 75	130 120	100 150
GOOD	m <sup>3</sup> /h	32	30	28	27	26	24	24
	gpm	141	132	123	119	115	105	105
AVERAGE	m <sup>3</sup> /h	30	28	26	25	24	22	22
	gpm	132	123	115	110	105	96	96
POOR	m <sup>3</sup> /h	28	26	24	23	22	20	20
	gpm	123	114	105	101	97	88	88
VERY POOR	m <sup>3</sup> /h	26	24	22	21	20	18	18
	gpm	114	105	97	92	88	79	79

## AZUD HELIX AUTOMATIC SERIES 200/300 DLP

BACKFLUSHING PHASE	Disc Technology	
	MG	WS
Minimum backflushing pressure per filter	1.5 bar	1.3 bar
	22 psi	19 psi
Minimum backflushing flow per filter	2.5 l/s	2 l/s
	39 gpm	32 gpm

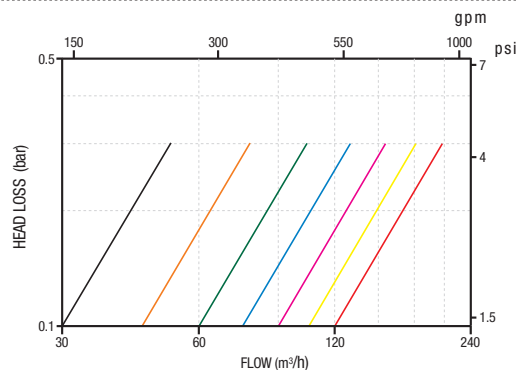
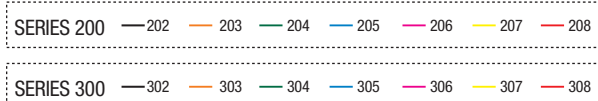
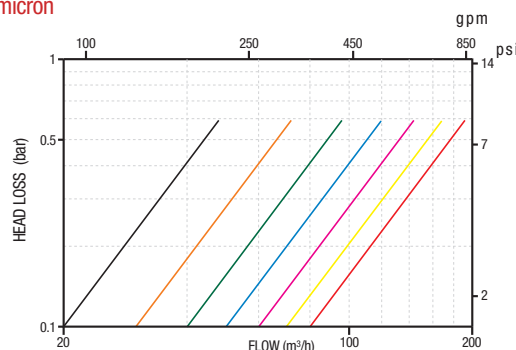
### HOW TO CHOOSE AZUD HELIX AUTOMATIC EQUIPMENT

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

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

NOTE : The flow rate given by the filter conditions determines the frequency of the backwashing.

### AZUD HELIX AUTOMATIC HEAD LOSS 130 micron

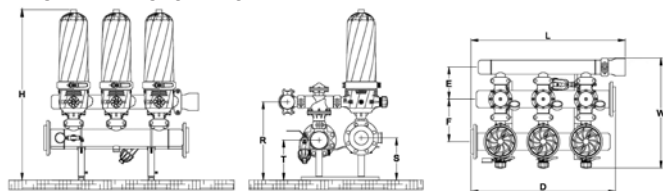


### MATERIALS OF CONSTRUCTION

Housing	Polyamide reinforced with fiberglass
Filtering element	MG discs - Polypropylene WS discs - High density polyethylene
Sealing element	NBR
Backflushing valve	Reinforced technical plastic
Manifolds	High density polyethylene

4<pH<11 • Maximum temperature 60 °C / 140 °F  
Maximum pressure: Standar 10 bar / 145 psi.

### AZUD HELIX AUTOMATIC



Model	Specifications					Dimensions																	
	N. Filters	Manifold	Filtering Surface cm <sup>2</sup>	in <sup>2</sup>		F mm	in	E mm	in	D mm	in	L mm	in	W mm	in	R mm	in	T mm	in	S mm	in	H mm	in
SERIES 200	202/3FX	2" x 2	3" - 90 mm	3240	502	272	10.7	204	8	715	28.1	745	29.3	700	27.6	496	19.5	255	10	277	10.9	1085	42.7
	203/3FX	2" x 3	3" - 90 mm	4860	753	272	10.7	204	8	930	36.6	990	39	700	27.6	496	19.5	255	10	277	10.9	1085	42.7
	203/4FX	2" x 3	4" - 110 mm	4860	753	272	10.7	204	8	930	36.6	990	39	700	27.6	516	20.3	265	10.4	287	11.3	1105	43.5
	204/4FX	2" x 4	4" - 110 mm	6480	1044	272	10.7	204	8	1065	41.9	1220	48	700	27.6	516	20.3	265	10.4	287	11.3	1105	43.5
	204/6FX	2" x 4	6" - 150 mm	6480	1044	272	10.7	204	8	1085	42.7	1220	48	700	27.6	566	22.3	290	11.4	312	12.3	1155	45.5
	205/4FX	2" x 5	4" - 110 mm	8100	1255	272	10.7	204	8	1480	58.3	1540	60.6	700	27.6	516	20.3	265	10.4	287	11.3	1105	43.5
	205/6FX	2" x 5	6" - 150 mm	8100	1255	272	10.7	204	8	1520	59.9	1560	61.4	700	27.6	566	22.3	290	11.4	312	12.3	1155	45.5
	206/6FX	2" x 6	6" - 150 mm	9720	1506	272	10.7	204	8	1795	70.7	1835	72.2	700	27.6	566	22.3	290	11.4	312	12.3	1155	45.5
	207/6FX	2" x 7	6" - 150 mm	11340	1757	272	10.7	204	8	2070	81.5	2110	83.1	700	27.6	566	22.3	290	11.4	312	12.3	1155	45.5
	208/6FX	2" x 8	6" - 150 mm	12960	2008	272	10.7	204	8	2345	92.3	2385	93.9	700	27.6	566	22.3	290	11.4	312	12.3	1155	45.5
208/8FX	2" x 8	8" - 200 mm	12960	2008	350	13.8	204	8	2345	92.3	2410	94.9	780	30.7	608	23.9	312	12.3	334	13.1	1200	47.2	
SERIES 300	302/4FX	3" x 2	4" - 110 mm	3240	502	311	12.2	230	9.1	715	28.1	745	29.3	785	30.9	571	22.5	265	10.4	307	12.1	1160	45.7
	303/4FX	3" x 3	4" - 110 mm	4860	753	311	12.2	230	9.1	930	36.6	990	39	785	30.9	571	22.5	265	10.4	307	12.1	1160	45.7
	304/6FX	3" x 4	6" - 150 mm	6480	1044	311	12.2	230	9.1	1085	42.7	1220	48	785	30.9	621	24.4	290	11.4	332	13.1	1210	47.6
	305/6FX	3" x 5	6" - 150 mm	8100	1255	311	12.2	230	9.1	1520	59.8	1560	61.4	785	30.9	621	24.4	290	11.4	332	13.1	1210	47.6
	306/6FX	3" x 6	6" - 200 mm	9720	1506	311	12.2	230	9.1	1795	70.7	1835	72.2	785	30.9	621	24.4	290	11.4	332	13.1	1210	47.6
	306/8FX	3" x 6	8" - 200 mm	9720	1506	311	12.2	230	9.1	1795	70.7	1860	73.2	785	30.9	661	26	310	12.2	352	13.9	1250	49.2
	307/8FX	3" x 7	8" - 200 mm	11340	1757	311	12.2	230	9.1	2070	81.5	2135	84.1	785	30.9	661	26	310	12.2	352	13.9	1250	49.2
	308/8FX	3" x 8	8" - 200 mm	12960	2008	311	12.2	230	9.1	2345	92.3	2410	94.9	785	30.9	661	26	310	12.2	352	13.9	1250	49.2

Dimensions of the models with DIN 2576 flange connection. Possibility of grooved connection.  
3" Drainage manifold. Grooved connection.  
Other configurations in www.azud.com