

HELiX
AUTOMATIC

AZUD

SERIE 400

In-line self Cleaning Equipments with disc filtering element with 4" valves.

Easy to transport. Max. Flow: 1.152 m³/h



Available with High Density Polyethylene manifolds.

Modular configuration according to preferences or space availability. Automation in 12 V or 220 V. There are specific solutions to low and high pressure installations, with sea water and/or saline water. Possibility of backflushing with compressed air.

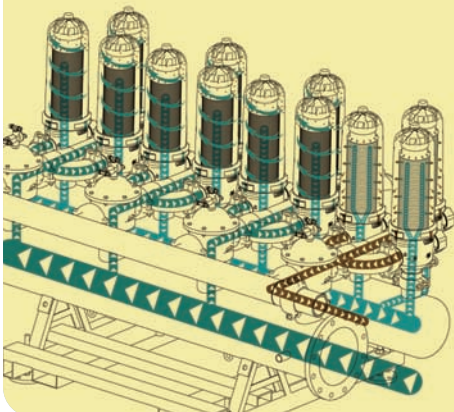
ADVANTAGES

- ✓ **Disc Filtration. Maximum safety.** Its studied design and the materials used in its manufacture guarantee a long life and high resistance.
- ✓ **AZUD HELiX.** Optimization of the performance and minimum frequency and intensity of maintenance labours.
- ✓ **Self-cleaning filtering element.** Maximum saving of water and efficiency in backflushing. Wide filtering area. AZUD filtration grades go from 5 to 500 micron.



TECHNOLOGY

AZUD HELiX AUTOMATIC SERIE 400 backflushes in only one station while the rest of the equipment is in filtration stage, supplying the installation.



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

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

BACKFLUSHING STAGE: The filtered water is introduced in the opposite direction through the filtering element structures, decompressing the stack of discs and making the backflushing.

The solids expelled from the discs are evacuated by the drainage manifold.

The filtration stage starts again with the compression of the discs.

- ✓ **Modularity.** Versatility, compatibility. The system permits a wide range of possibilities with a minimal number of components.
- ✓ **Maximum facility of transport and installation.** Already assembled equipments. Delivered in a metallic pallet easy to transport. Levelling device included. Semi-automated equipment. Includes hydraulic pre-installation for cleaning equipment
- ✓ **Low Maintenance.** Without tooling. Maximum resistance, with movable parts not susceptible to wearing due to a continuous operation.
- ✓ **Water and energy saving.**

HELIX AUTOMATIC AZUD SERIE 400

FILTRATION Maximum flow per filter
 AZUD HELIX AUTOMATIC filter filtering surface 4.476 cm²

QUALITY WATER	micron mesh	200 75	130 120	100 150	50	20
GOOD	m ³ /h gpm	108 471	95 418	69 304	51 231	27 114
AVERAGE	m ³ /h gpm	95 418	89 392	60 264	42 183	21 93
POOR	m ³ /h gpm	77 340	71 314	54 238	30 138	15 69
VERY POOR	m ³ /h gpm	47 209	42 183	36 159	21 93	9 45

BACKFLUSHING

	200 - 130 micron 75 - 120 mesh	100 micron 150 mesh	50-20 micron
Minimum backflushing pressure per filter 4" SERIE 400	2.8 bar	3.5 bar	4 bar
	40 psi	50 psi	58 psi
Minimum backflushing flow per filter 4" SERIE 400	7.5 l/s	9.3 l/s	9.9 l/s
	117 gpm	150 gpm	156 gpm

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.

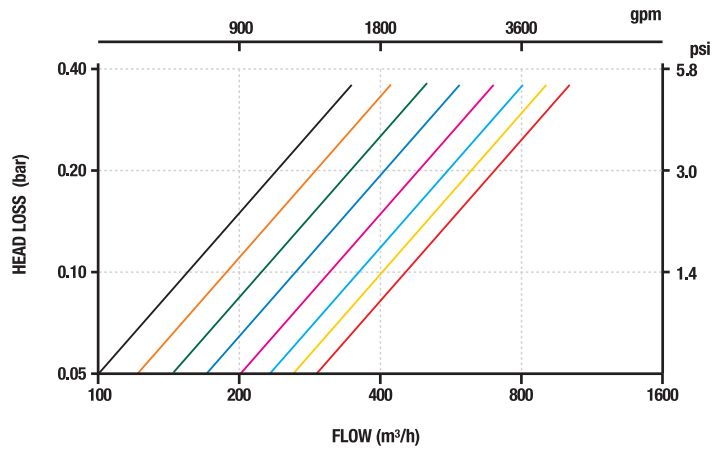
$$\text{Number of filters} = \frac{\text{Flow to filter in the installation}}{\text{Max. Flow per filter}}$$

MATERIAL

Manifolds	Inlet/outlet steel/HPDE structure manifold HPDE drainage manifold
Housing	Polyamide reinforced with fiberglass
Filtering element	PP grooved discs
Sealing element	NBR

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

AZUD HELIX AUTOMATIC 400 HEAD LOSS 130 micron



AZUD HELIX AUTOMATIC SERIE 400

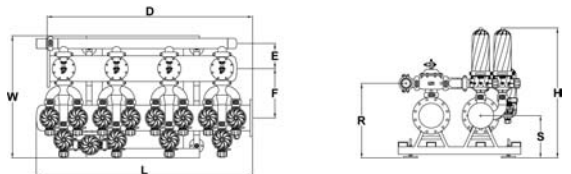
- 404
- 405
- 406
- 407
- 408
- 409
- 410
- 412

Model	Specifications			Dimensions (mm)								
	No. of Filters x Diameter	Manifold (” - mm)	Filtering Surface (cm ²)	F	E	D	L	W	R	S	H	
Configuration L	404L/10FX	4x4” 10”- 250 HPDE	17.904	525	269	2222	2362	1300	782	450	1371	
	405L/10FX	5x4” 10”- 250 HPDE	22.380	525	269	2782	2922	1300	782	450	1371	
	406L/10FE	6x4” 10”- 273 Metal	26.856	525	269	3348	3453	1300	793	450	1382	
	407L/10FE	7x4” 10”- 273 Metal	31.332	525	269	3908	4013	1300	793	450	1382	
	408L/12FE	8x4” 12”- 323,9 Metal	35.808	525	269	4468	4584	1350	819	450	1408	
	409L/12FE	9x4” 12”- 323,9 Metal	40.284	525	269	5028	5144	1350	819	450	1408	
	410L/12FE	10x4” 12”- 323,9 Metal	44.760	525	269	5588	5704	1350	819	450	1408	
	411L/12FE	11x4” 12”- 323,9 Metal	49.236	525	269	6148	6264	1350	819	450	1408	
	412L/12FE	12x4” 12”- 323,9 Metal	53.712	525	269	6708	6824	1350	819	450	1408	
	Configuration D	406D/12FX	6x4” 12”- 315 HPDE	26.856	643	-	-	2608	2000	665	450	1404
407D/12FX		7x4” 12”- 315 HPDE	31.332	643	-	-	3168	2000	665	450	1404	
408D/12FX		8x4” 12”- 315 HPDE	35.808	643	-	-	3168	2000	665	450	1404	
409D/14FX		9x4” 14”- 355 HPDE	40.284	687	-	-	3772	2000	681	450	1420	
410D/14FX		10x4” 14”- 355 HPDE	44.760	687	-	-	3772	2000	681	450	1420	
411D/12FE		11x4” 12”- 323,9 Metal	49.236	525	269	6204	6320	1350	819	450	1408	
412D/12FE		12x4” 12”- 323,9 Metal	53.712	525	269	6764	6880	1350	819	450	1408	

Dimensions of the models with flange connection.
 Drainage Manifold includes PVC connection.
 Other configurations in www.azud.com

AZUD HELIX AUTOMATIC 400

L Configuration



D Configuration

