

In-line Self Cleaning Equipment with disc filtering elements and 4" valves.
Max. Flow: 1152 m³/h (5070 gpm).

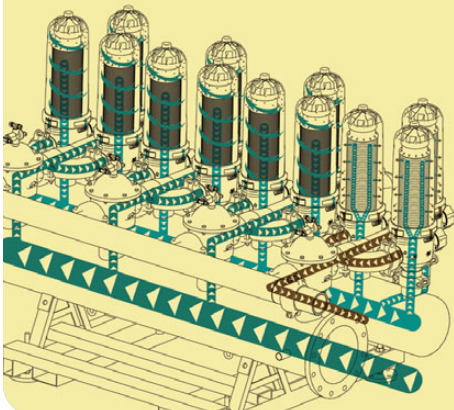


Available with High Density Polyethylene manifolds.

Modular configurations can be designed to customer preference of space availability. Automation available in 110 V, 220 V or 12 V. Design solutions also available for high or low pressure and sea water/saline water. Compressed air can be used for backwashing.

TECHNOLOGY

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



FILTRATION STAGE: 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.

BACKWASHING STAGE: The clean water from is introduced from the reverse direction through the filtering element. This decompresses the stack of 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 a Control Unit.

ADVANTAGES

- ✓ **Disc Filtration. Maximum safety.** Its patented design and high quality materials used in manufacturing guarantee an extended life with high resistance.
- ✓ **AZUD HELIX.** Helix created Centrifugal Action optimizes the filtration performance and reduces backwash frequency and maintenance.
- ✓ **Self-cleaning filtering element.** Backwashing uses minimal water maintaining an efficient cleaning action. Large filtering surface. AZUD filtration units available from 5 to 500 micron.



- ✓ **Modularity, Versatility, Compatibility.** The system permits a wide range of flows and configurations using a minimal number of components.
- ✓ **Facilitates easy installation and transport.** Pre-assembled equipment, assembled on metal pallet with leveling. Semi-automatic equipment includes pre-installed hydraulic piping for cleaning elements.
- ✓ **Low Maintenance.** No tools required. Maximum wear resistance of high quality moving parts.
- ✓ **Water and energy saving.**

HELIX AUTOMATIC AZUD SERIES 400

FILTRATION Maximum flow per filter
 AZUD HELIX AUTOMATIC filter filtering surface 4476 cm² / 694 in²

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 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 SERIE.

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

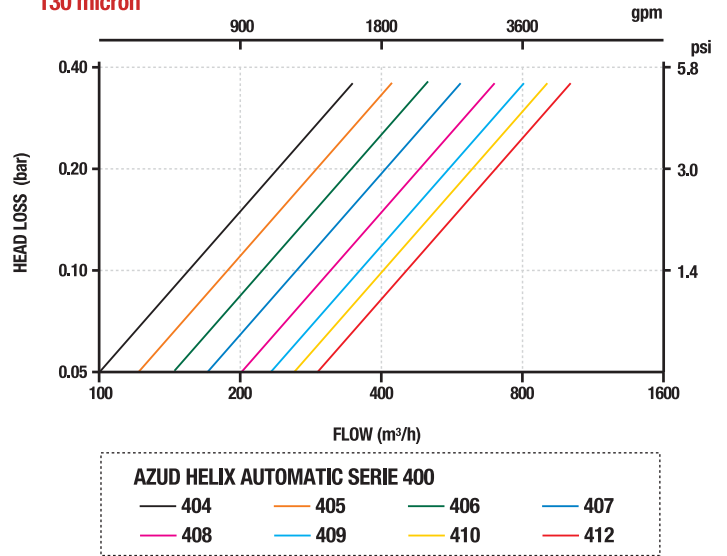
NOTE : The flow rate given by the filter conditions determines the frequency of the backwashing.

MATERIAL

Manifolds	Inlet/outlet steel/HPDE structure manifold HDPE 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	

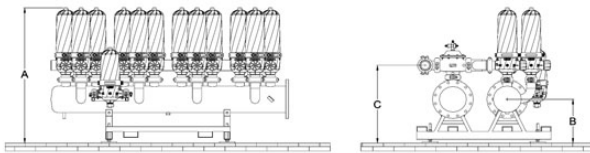
AZUD HELIX AUTOMATIC 400 HEAD LOSS

130 micron

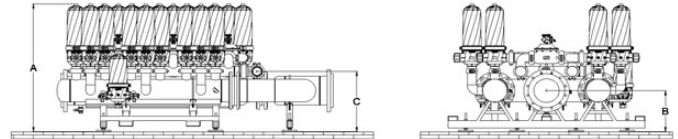


AZUD HELIX AUTOMATIC 400

L Configuration



D Configuration



Model	Specifications				Dimensions (mm)													
	N. Filters	Manifold	Filtering Surface (cm ²)	Filtering Surface (in ²)	A		C		D		E		F		G		H	
					mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
404L/10FX	4 x 4"	10"- 250 HDPE	17904	2775	1371	54	782	31	1300	51	2362	93	2222	87	269	11	525	21
405L/10FX	5 x 4"	10"- 250 HDPE	22380	3469	1371	54	782	31	1300	51	2922	115	2782	110	269	11	525	21
406L/10FE	6 x 4"	10"- 273 Metal	26856	4162	1382	54	793	31	1300	51	3453	136	3348	132	269	11	525	21
407L/10FE	7 x 4"	10"- 273 Metal	31332	4856	1382	54	793	31	1300	51	4013	158	3908	154	269	11	525	21
408L/12FE	8 x 4"	12"- 323,9 Metal	35808	5550	1408	55	819	32	1350	53	4584	180	4468	176	269	11	525	21
409L/12FE	9 x 4"	12"- 323,9 Metal	40284	6244	1408	55	819	32	1350	53	5144	203	5028	198	269	11	525	21
410L/12FE	10 x 4"	12"- 323,9 Metal	44760	6938	1408	55	819	32	1350	53	5704	225	5588	220	269	11	525	21
411L/12FE	11 x 4"	12"- 323,9 Metal	49236	7631	1408	55	819	32	1350	53	6320	249	6204	244	269	11	525	21
412L/12FE	12 x 4"	12"- 323,9 Metal	53712	8325	1408	55	819	32	1350	53	6880	271	6764	266	269	11	525	21
406D/12FX	6 x 4"	12"- 323,9 HDPE	26856	4162	1400	55	661	26	2000	79	2804	110	2762	109	577	23	772	30
407D/12FX	7 x 4"	12"- 323,9 HDPE	31332	4856	1400	55	661	26	2000	79	3364	132	3322	131	577	23	772	30
408D/12FX	8 x 4"	12"- 323,9 HDPE	35808	5550	1400	55	661	26	2000	79	3938	155	3910	154	577	23	772	30
409D/14FX	9 x 4"	12"- 323,9 HDPE	40284	6244	1420	56	681	27	2000	79	4512	178	4482	176	577	23	786	31
410D/14FX	10 x 4"	12"- 323,9 HDPE	44760	6938	1420	56	681	27	2000	79	5086	201	5058	198	577	23	786	31

B=450 mm (18 in)

Drainage Manifold included - Grooved connection.
 Dimensions of the models with flange connection.
 Other configurations in www.azud.com