Lama
Sistemas de filtrado / Filtration systems

INDUSTRIAL CATALOGUE

Since 1948 designing and manufacturing filtration systems

2023

www.lama.es

Filtration Technology Water

INDEX

IMPORTANT WARNING: the price list for the current fiscal year 2023, that is published herein, is merely informative, and is an estimation, so it could undergo changes throughout the year due to possible changes in the price of raw materials. The company is neither subject to nor obliged to maintain the prices indicated in the tariff, nor to publish any potential variation thereof. The version of the website https://lama.es/distribuidores-lama is the current and updated version.

LAMA FILTER **APPLICATIONS**

Service water

Drinking water filtration

Wastewater treatment

Process water recirculation systems

Process water cooling systems

Inlet process water

Industrial sewage water

Industrial mussel water treatment

Ballast water

Advantages, Technology and Sustainability

RESPONSIBLE MANAGEMENT

- NEW SURFACE TREATMENT FOR STEEL FILTERS
After a process of change in the surface treatment that our filters are submitted, we have introduced the process called **NANOTECHNOLOGY** in one of the baths. It brings more security, ecology, flexibility and less water and energy are used.

- NEW NANOPLUS TECHNOLOGY TREATMENT
The new **NANOPLUS TECHNOLOGY** treatment, which is applied to our screen filters, improves their performance, durability and resistance.

- NO MORE ELECTRICITY:
Due to our commitment to sustainability, LAMA **will not use electrical consuption** in all the factory.
We have installed of a **solar thermal plant**. The solar station will provide all the necessary energy that Lama needs for the regular activity; which is 132 kv.

nano TECHNOLOGY

nanoPLUS TECHNOLOGY

QR CODES AS A COMMITMENT TO RESOURCE OPTIMISATION

Thanks to the **personalized QR code** and its data synthesis capacity, the user will be able to access the following content in a simple and agile way:

- Main characteristics.
- Download product data.
- Download user guide.
- Assembly and disassembly video.
- Reference images of these products.

Furthermore, we ensure that the customer is always up to date with the information they need for the proper operation of their filter, valve or programmer.

RESTRUCTURE OUR **PACKAGING** OF OUR PRODUCTS

According to of sustainable management agenda, we have started to restructure our packaging of our products. Specifically, we have started this process with our **SAND filters.**

Thanks to this choice, we have reduced our use of **plastic by 93%**, which equates to **1.4kg less plastic per sand filter** shipped.

NEW AUTOMATIC SCREEN FILTERS

AutoMesh & EkoLU

Registered design

The tight-fitted sections result in an **increased useful surface** when compared to other cartridges sold in the market.

NEW AUTOMATIC SCREEN FILTERS

We are launching to the market our new automatic screen filters **Auto**Mesh© and **EKO**LU©.

Many product features have been improved, thanks to the processes of the company's R&D Department; **the morphology of the filters body, the accessories have been reorganised and an increased useful surface.**

The main new feature is the system's ground breaking **filtering cartridge.** The engineering department has carefully studied the resistance of the new cartridge, with mathematical formulas used to simulate possible deformations. t has been designed with a honeycomb structure, **fully injected in polyamide**. In addition, the injection process is carried out in a single cartridge-screen phase. The cartridge is optimised for the cleaning process, using the water used during this phase.

All of this will achieve higher manufacturing speeds and shorter delivery times.

LAMA Programmers

RIO8

NEW PROGRAMMER ***RIO***©

Our automatic filter stations are equipped with efficient cleaning programmers, such as the new **RIO**© device. It has 8 outputs (220v) and is very easy to use, just follow a few steps to be fully configured and ready to work. It has a control unit from which all available operations can be performed. The programmer is available in Spanish, English and French.

mini's

The cleaning programmer **Mini's** is designed for the **automatic hydraulic screen filter** family EKO (EKO, EKOLU and EKOSENIOR).

The end-user does not have to worry about programming the duration of the backwashing so the regulation is automatic. The limit switch regulates itself automatically, depending on the flow and pressure, thanks to an inductive sensor in the hydraulic cylinder of the filters.

Furthermore, **Mini'S** can be settled using batteries as well as an electrical transformer for the stations with electricity.

CE

E-Commerce **Lama**

Our new e-commerce offer our customers a quick and comfortable shopping experience.

Within our strategy for the coming years, one of the key points is the optimization of the buying process. This project has meant for **LAMA** a revision of the processes, with the objective of being the leading company within the sector for professionals both for the online and offline channels.

The new e-commerce LAMA supposes for our clients a great number of improvements, that we would like to summarize in 4 points:

1. Quick purchase in a single click: we have reorganized the product families, as well as the descriptions of the articles to facilitate the search of it in a single step.

2. 100% responsive page: the possibility of making your purchases or management from any device, whether it is a computer, smartphone or tablet.

3. 24/7 online management: we have incorporated all the information so that you can consult and download your orders, invoices or delivery notes.

4. Direct communication with the customer: we want to inform our customers automatically about the status of their requirements or orders, so the purchase process is always updated. All this, accompanied by a close and reliable communication.

www.lamastore.es

Quality Certificates and Warranty

Certificate ES13/14728.01

SGS

FERNANDO LAMA, S.L.

Pol. Ind. Guadalquivir
C/ Artesanía, naves 1, 3 y 5
41120 Gelves (Sevilla)

has been assessed as part of the management system of GRUPO LAMA certified organization as meeting the requirements of

ISO 9001:2015

For the following activities

Design and manufacturing of filtering systems.

in / from the following sites

Pol. Ind. Guadalquivir, C/ Artesanía, naves 1, 3 y 5 - 41120 Gelves (Sevilla)

Valid from
16 September 2019 until 16 September 2022.
Issue 2.

This document is part of Certificate ES13/14728.
The validity of this document is subject to the certificate.

IAF ENAC CERTIFICACIÓN Nº 05/C-SC001

Authorized by

Certification Management

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Page 1 of 1

Lama
Sistemas de filtrado / Filtration systems

PRODUCT WARRANTY

- All Product are guaranteed for 1 year from invoice date.
- The warranty period against holes/punctures due to corrosion is 2 years.
- The warranty is limited to the replacement of the faulty parts after Lama personnel approval.
- Please check the products technical data, their maximum pressure ratings and minimum backwash ratings, by their model, and must be utilized as intended. Please also check the recommended flow for every product as well as the kind of water, each.
- The physical filtration of water shall be in particle diameters no greater than the filtration degree allowed by the filtering element used.
- You must read the user guide before connect and set up the product.

WARRANTY EXCLUSIONS

- The breakage, removal or manipulation of the serial numbers or labelling of the product will be a cause for cancellation of the warranty.
- Lama will not be responsible for damage caused by accidents, improper transport, loss, improper handling or unauthorized modifications to the product.
- Lack of periodic cleanings outlined in the operating manual given with the product.
- Lack of maintenance resulting in wear (fatigue in the material or wear due to abrasion, installation vibrations, or high temperatures)
- Voltages higher or lower than those indicated in the programmer.
- Humidity in the programmer, solenoids, and other electrical material.
- Wear in the hydrocyclones due to sand and stone abrasion.
- Pressures that are higher or lower than those indicated in the product catalog tables for the ordered product.
- Poor quality water or acid environments, decantation, precipitation, and buildup of bacteria or algae.
- Water hammer damage due to operator error or an inadequate setup, transportation or handling damage and expenses.
- Poor or inadequate assembly, operating the filter in an enclosed area or sunken pit (enclosed or open).
- Valves and solenoids are excluded if drainpipes run under pressure.
- Water qualities or concentrations of impurities beyond the values given in the tables.
- Third-party damage, theft, or vandalism.

WARRANTY CLAIMS

- This product has been subject to factory testing and it has met all quality standards. However, if you do find a defect, please notify your dealer. To make any claim, you must present a warranty claim document, outlining the item and batch shown on the product nameplate, and where possible the purchase invoice.

Article: .....
Lot: .....
Date: .....

Signature:

Lama Departamento de Calidad

MANUFACTURING STANDARDS

All of our products are subject to strict quality controls during the manufacturing process, apart from completely fulfilling current regulations as well as for the elaboration of filtering equipment for agriculture use, both at an international and a European level (ISO and CEN are currently being updated and others are being fulfilled. LAMA actively takes part as a member of the working group WG5 of the technical committee TC334 of CEN).

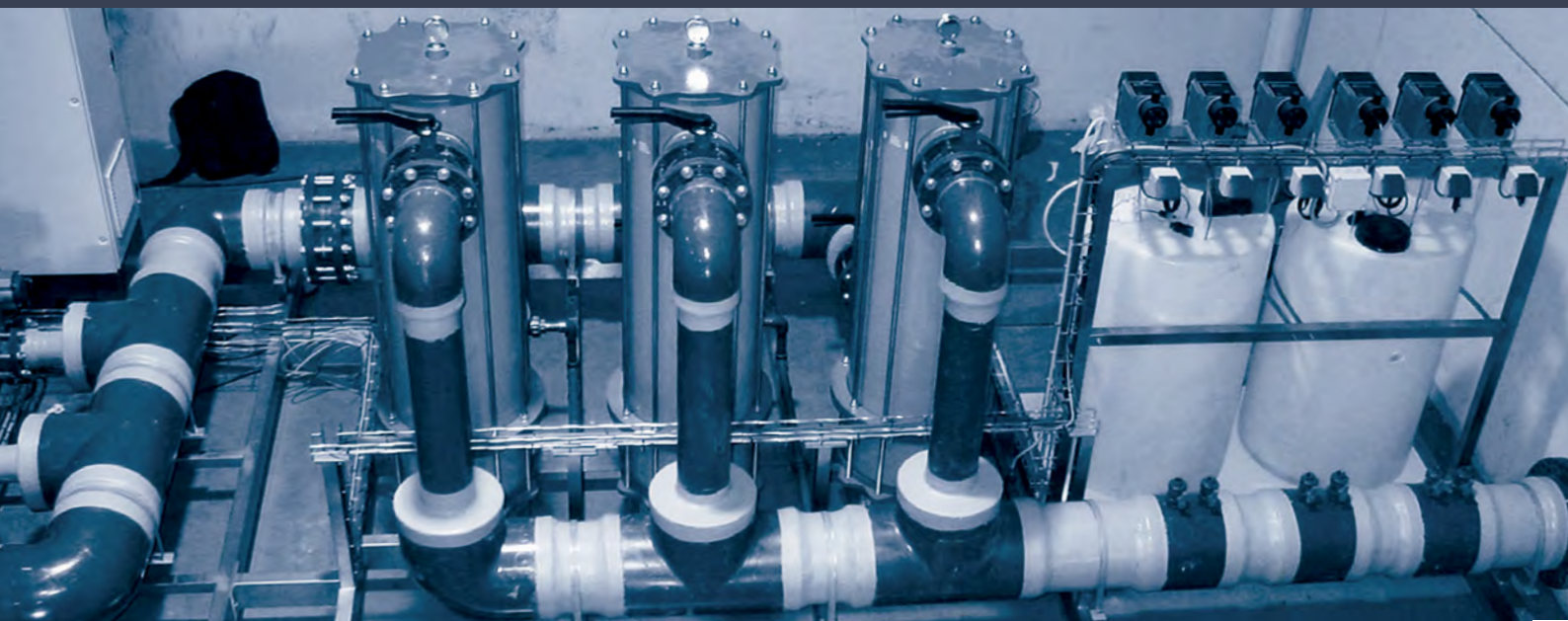
LAMA has a quality insurance system certified according to the norm **ISO-9001:2015 by SGS as designing and manufacturing of filtering systems.**

Our products are in agreement with the whole of it obligations that concern us in accordance with the instruction established for the **CE** positioning.

ISO 9001:2015 SGS CE Made in Spain Certifica OK DICTUC Lama Departamento de Calidad

1. Microfiltration

Microfiltration is a very efficient technology for separating solids and recovering products from all types of liquids. Microfiltration retains a smaller particle size than a conventional filter; cartridges used for microfiltration have a pore size of 1–20 µm. As the pores are so small, an additional advantage of these filters is that they retain bacteria and viruses. Despite the fact that viruses are smaller than the pores of a microfiltration membrane, retention is possible because viruses are coupled to bacteria.



CONSTRUCTION MATERIALS

- **Body:** PVC
- **Joints:** synthetic rubber nitrile 60º Shore.
- **Screws:** stainless steel AISI 316L.
- **Central ring:** PVC

FILTERING CARTRIDGES FROM 20 TO 1 µm

(Not included in the price)

Filtration cartridges are perfectly adapted to their bases, due to the watertight joints in top part, and a compressed resort in bottom part. This fact admits different flows to the requirements

For other microns, please ask.

MAXIMUM WORKING PRESSURE

6 Kg/cm² (please ask for other pressures)

TESTING PRESSURE

9 Kg/cm²

CLOSING SYSTEM

Sainless steel nuts

Inside view of the filter.

PRES MAX 6 Kg/cm² 85 psi

C(mm)	Number of cartridges	A	Limit flow (m³/h)	E (mm)	F (mm)	Code
200	4	DN50*	9,6	362	-	**MP40-4**
250	7	DN65*	16,8	432	¼"	**MP40-7**
315	11	DN80**	26,4	480	¼"	**MP4011P**
400	20	DN80**	50	582	¼"	**MP4020P**
500	35	DN100**	84	712	¼"	**MP4035P**

- *Flat connection
- **Movable flange
- **Outlet** water can be rotated 90º / 180º / 270º

1.2 Microfiltration GFRP

MicrofiltraciónPRFV

CONSTRUCTION MATERIALS

- **Body:** glass fiber reinforced polyamide (GFRP)
- **Joints:** synthetic rubber nitrile 60º Shore
- **Central ring:** PVC

FILTERING CARTRIDGES FROM 20 TO 1 µm

(Not included in the price)

Filtration cartridges are perfectly adapted to their bases, due to the watertight joints in top part, and a compressed resort in bottom part. This fact admits different flows to the requirements

For other microns, please ask.

MAXIMUM WORKING PRESSURE

8 Kg/cm² (please ask for other pressures).

TESTING PRESSURE

12 Kg/cm²

CLOSING SYSTEM

Adjustable lock nut

PRES MAX 8 Kg/cm² 114 psi

Net Weight (Kg)	Gross Weight (Kg)	Package volume (m^3)	Connection (Ø)	Number of cartridges	Code
7,5	8	0,07	2"	4	**FSM2**

MICROFILTRATION CARTRIDGES. Polypropylene Foam.

Description	Code
Polypropylene foam 10" (1-5-10-20-50 microns)	**CPX0110**
	CPX0510
	CPX1010
	CPX2010
	CPX5010

Description	Code
Polypropylene foam 40" (1-5-10-20-50 microns)	**CPX0140**
	CPX0540
	CPX1040
	CPX2040
	CPX5040

Polypropylene foam (Ask)

Polypropylene spool (Ask)

Active-carbon (Ask)

*For any other lenght and cartridge number, **please ask.**

2. **Media** Filters

Filtration through a layer or bed of grains is universally known, and is possibly the most efficient of all industrial treatment systems. It is commonly known as "Sand Filtration", although these types of systems can involve any type of bed that is optimal for particle retention functions.

2. Lama Media Filters

INTRODUCTION

The filtration system through media filters is internationally known, and probably, one of the most efficient filtration systems applicable to water treatment. However these filtration systems are adaptable to any kind of particles retention, it is commonly known as “Filtration by sand filters”.

The filtration through sand is produced by physical retaining the dirt into the gaps formed between the granules laid throughout the whole mantle. This is an in-depth filtration; characteristic that gives sand filtration to be system.

APPLICATIONS

Depending on the filter and applied filtration speed:

- Previous filtration to Reverse Osmosis
- Drinking water
- Turbidity removal
- Fish farm water treatment
- Food and beverage industry
- Agriculture Industry
- Effluents treatment

CLASSIFICATION

- Low Media Filter
- Special Media Filter
- High Media Filter

Acording to the solid retention system:

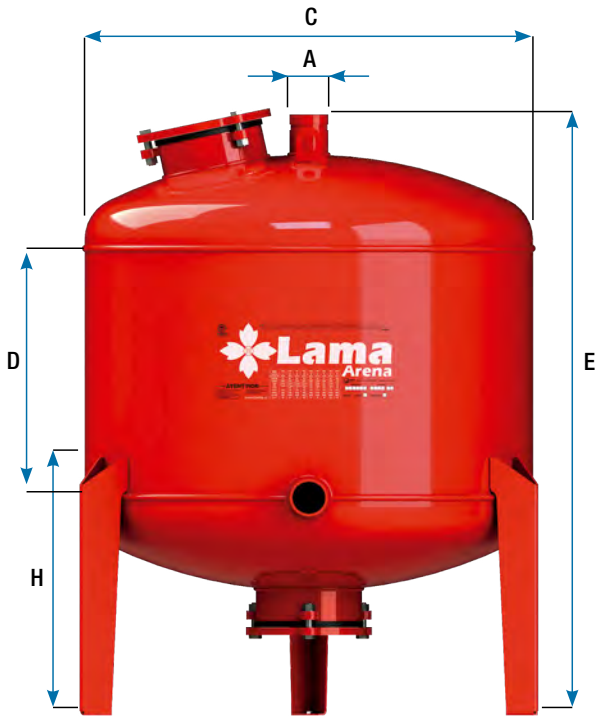
- Collector arm
- Nozzles

FILTERING ELEMENT

- Siliceous sand
- Volcanic sand
- Anthracite
- Active carbon
- Glass

LechoBajo

2.1. Low Media Filters



It can be manufactured under **ASME** code

nano TECHNOLOGY

Available PRES MAX 16 Kg/cm² 228 psi

PRES MAX 8 Kg/cm² 114 psi

COLLECTOR ARM

Filtration Surface (m^2)	C (mm.)	A (ØVic.)	H (mm.)	D (mm.)	E (mm.)	Package volume (m^3)	Sand Kg.	Code
0,096	350	1" Thread H	155	315	645	0,180	30	**FAV1**
0,196	500	1,5" Thread H	350	400	900	0,620	100	**FA1M**
0,385	700	2" Thread H	350	400	965	0,810	200	**FA700**
0,503	800	3" Thread H	450	500	1.128	0,960	300	**FA800**
0,709	950	3" Flange	450	500	1.220	1,620	500	**FA950**
1,131	1200	4" Flange	450	500	1.275	2,456	800	**FA1200**

NOZZLES

Filtration Surface (m^2)	C (mm.)	A (ØVic.)	H (mm.)	D (mm.)	E (mm.)	Package volume (m^3)	Sand Kg.	Code
0,385	700	2" Thread H	350	400	930	0,810	170	**FD700**
0,709	950	3" Flange	450	500	1.220	1,700	420	**FD950**
1,131	1200	4" Flange	450	500	1.280	2,500	700	**FD1200**

- Ask us for **VIC plastic** conection for **FA950 and FA800.**
- The **DIN flange** filters have the same price under request.
- It is recommened to add a **security filter after the sand station.**

2.2 High Media Filters

LechoAlto

CONSTRUCTION MATERIALS
- **Body**: carbon steel A-42-B
- **Manifolds:** carbon steel or polyethyene
- **Joints:** synthetic rubber nitrile 60º Shore
- **Screws:** zinc-plated weather resistant
- **Closing cover inlet and outlet water:** 15 mm melting
- **Collector arms and nozzles:** polypropylene

STEEL SURFACE TREATMENT
The steel elements are treated internally and externally with nanotechnology. After that, the elements are painted by electrostatic spraying powder paint, epoxy polyester (for alimentary use, please ask)

FILTERING ELEMENT (It is not included in the price)
- Siliceous Sand
- Volcanic Sand
- Anthracite
- Active Carbon
- Pyrolusite
- Ask for another filtering element
- Glass

SYSTEM
- Designed for low filtration rates of 5 to10 m/h
- Holes water for easy maintenance

CLEANING
- Backwashing with clean water, it is made by pumping water backwards through the filter media, to regenerate the filtering material.
- It brings external water
- It can be combined with air

MAXIMUM WORKING PRESSURE
- 8 Kg/cm² (standard)
- 16Kg/cm² (optional)

TESTING PRESSURE
- 12 Kg/cm²

***It is recommened to add a security filter after the sand station.**

Desing and manufactured under client specifications

It can be manufactured under ASME code

PRES MAX 8 Kg/cm² 114 psi

Available PRES MAX 16 Kg/cm² 228 psi

nano TECHNOLOGY

COLLECTOR ARM

Filtration Surface (m^2)	A (ØVic.)	B (mm.)	C (mm.)	D (mm.)	E (mm.)	J (mm.)	K (mm.)	Package volume (m^3)	Code
0,20	2"	1.730	500	1.400	2.215	165	165	0,3	**F15B**
0,38	2"	1.860	700	1.400	2.280	165	165	0,62	**F17B**
0,50	3"	1.873	800	1.400	2.290	165	165	0,8	**F18B**
0,71	3"	1.928	950	1.400	2.315	165	165	1,19	**F19B**
1,13	3"	1.934	1.200	1.300	2.272	165	165	1,86	**F12B**
1,54	3"	1.916	1.400	1.200	2.210	165	165	2,47	**F14B**

NOZZLES

Filtration Surface (m^2)	A (ØVic.)	B (mm.)	C (mm.)	D (mm.)	E (mm.)	J (mm.)	K (mm.)	Package volume (m^3)	Code
0,20	2"	1.730	500	1.400	2.215	165	165	0,3	**F15C**
0,38	2"	1.860	700	1.400	2.280	165	165	0,62	**F17C**
0,50	3"	1.873	800	1.400	2.290	165	165	0,8	**F18C**
0,71	3"	1.928	950	1.400	2.315	165	165	1,19	**F19C**
1,13	3"	1.934	1.200	1.300	2.272	165	165	1,86	**F12C**
1,54	3"	1.916	1.400	1.200	2.210	165	165	2,47	**F14C**

2.3 Special Media Filters

Standard noozle filters

CONSTRUCTION MATERIALS

- **Body:** carbon steel.
- **Manifolds:** carbon steel or polyethyene.
- **Closing joints:** synthetic rubber nitrile 60º Shore.
- **Screws:** zinc-plated weather resistant.
- **Closing cover inlet and outlet water:** 15 mm melting.
- **Nozzles:** polypropylene.

SURFACE TREATMENT

Surface treatment by high pressure sandblast, grade S.A. 21/2, according toUNE-EN ISO 8501:1988.
It is very important to create a rough surface for the best adhesion of the paint. This enables oxides and all kinds of particles to be eliminated.

Exterior area:

- **1st layer** of epoxi zinc phosphate primer, with a dry film thickness of 80 microns. Micronage measurement.
- **2nd layer** medium layer epoxi, with a dry film thickness is 120 microns. Micronage measurement.
- **3rd layer** of aliphatic polyurethane enamel, with a dry film thickness is 50 microns, in blue colour. Micronage measurement. For another colour/treatment, please ask us.

Interior area:

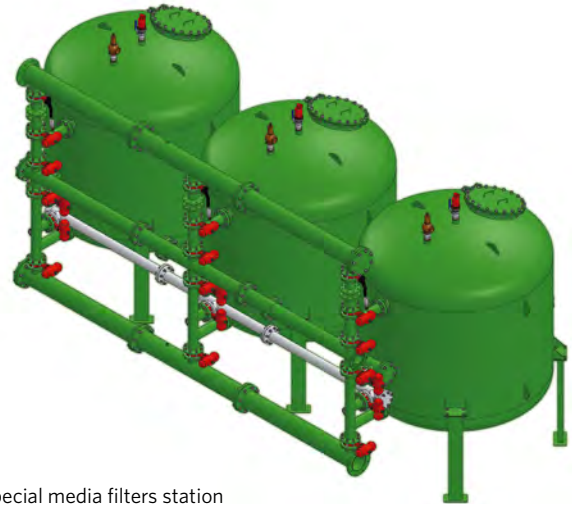
- **1st phase:** epoxi primer layer.
- **2nd phase:** double layer of epoxi paint without solvent **for foodstuff,** with an average dry film thickness of 350 microns. Micronage measurement.

PERFORMANCE

- The backwashing with clean water for investment of flow, or changing the filtering material.
- The backwashing through compressed air.
- Great combination between filtración/backwashing adapted to the number of valves.
- It can be used butterfly valves, they can be pneumatic or electric.
- The control of the parametres can be done on site or remote.

***It is recommened to add a security filter after the sand station.**

***It can be manufactured in ebonite.**



Examples of special media filters station with pneumatic butterfly valves.

Desing and manufactured under client specifications

It can be manufactured under ASME code

Available PRES MAX 16 Kg/cm² 228 psi

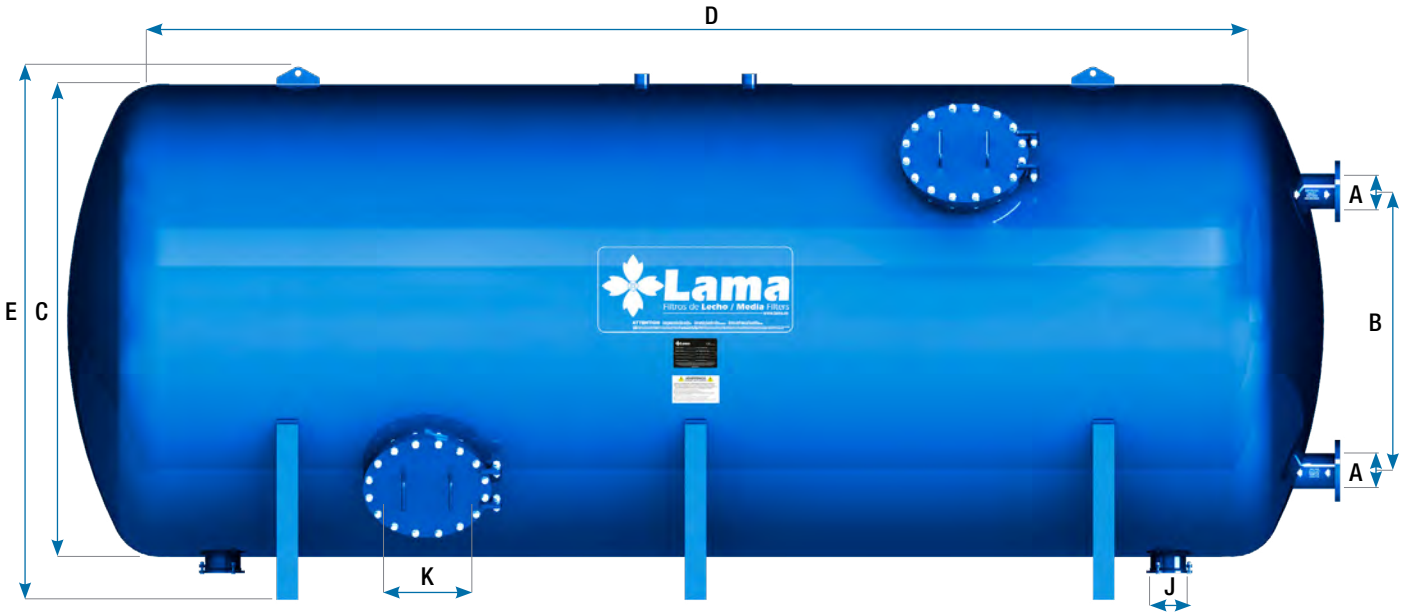
Available PRES MAX 10 Kg/cm² 114 psi

PRES MAX 4 Kg/cm² 72 psi

Filtration Surface (m^2)	A	B (mm.)	C (Ømm.)	D (mm.)	E (mm.)	J (mm.)	K (mm.)	Package volume (m^3)	Code
1,13	3" Flange	2.736	1.200	2.000	3.176	220	460	2,66	**F12CJH**
1,13	3" Flange	2.236	1.200	1.500	2.676	220	460	2,1	**F12CV15**
1,54	3" Flange	2.820	1.400	2.000	3.217	220	460	3,7	**F14CJH**
1,54	3" Flange	2.320	1.400	1.500	2.717	220	460	2,93	**F14CV15**
2,01	3" Flange	2.907	1.600	2.000	3.259	460	460	4,75	**F16CJH**
2,01	3" Flange	2.407	1.600	1.500	2.759	460	460	3,78	**F16CV15**
2,54	3" Flange	3.006	1.800	2.000	3.307	460	460	6,32	**F18CJH**
2,54	3" Flange	2.506	1.800	1.500	2.807	460	460	5,05	**F18CV15**
3,14	4" Flange	3.087	2.000	2.000	3.347	460	460	7,95	**F20CJH**
3,14	4" Flange	2.587	2.000	1.500	2.847	460	460	6,41	**F20CV15**

2.4 Horizontal Media Filters

LechoEspecial



Available PRES MAX 16 Kg/cm² 228 psi

Available PRES MAX 10 Kg/cm² 114 psi

PRES MAX 4 Kg/cm² 72 psi

It can be manufactured under ASME code

Desing and manufactured under client specifications

Design suitable to container sizes

Filtration Surface (m^2)	A (ØVic.)	B (mm.)	C (mm.)	D (mm.)	E (mm.)	J (mm.)	K (mm.)	Volume (m^3)	Code
9,3	6" Flange	900	1.800	4.900	2.065	6"	500	13,7	**H18B49**
10,43	6" Flange	1.100	2.000	4.900	2.265	6"	500	16,9	**H20B49**
11,54	6" Flange	1.300	2.200	4.900	2.465	6"	500	20,6	**H22B49**

3.**Disc** Filters

The disc performs physical filtration by retaining solids that are not dissolved in the water in channels. Filtration takes place due to the effect of the overlapping of a set of discs, installed in a strong and secure structure. The disc channels allow filtration to take place deeply.

3. Disc Filters

CLASSIFICATION

According to the backwashing process:
- Self-cleaning
- Semi-automatic
- Manuals

According to the construction material:
- Plastic. Glass fiber reinforced polyamide
- Carbon steel

Disc standard **190µ**

NEW AUTOSENIOR WITH TANK

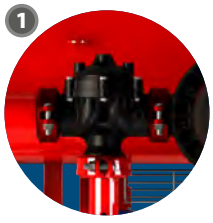
Its mechanisms are perfectly synchronized to deal with the cleaning works with the guarantee that the water won't be contaminated. It allows the perfect automation of the system and a reduced head loss. Besides, it makes possible to use compressed air to guide the manoeuvres.

On the other hand, it stands out because it has just a few components, something that maked easier the assembly and the taking apart works.

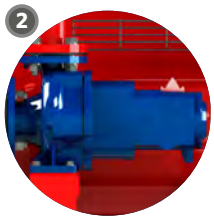
Furthermore, it resists to the hardest chemical and physical agents.

Min. Drainage Flow (m^3/h)	Disc spare part 190µm	Filter
10,5	RAA3R	Autosenior

AutoSenior
Model: **CAS3P**



Backwashing
Globo Plastic valve



Pump
equipment

Control
equipment

Clean water storage
for backwash

Flow Limit 4m H.D.*	Max. recommended flow (m^3/h)			Filtration Surface (cm^2)	Description	Price (€)	Code
	< 50ppm	50/100ppm	100/200ppm				
70	20	12	8	1.613	1 equipped filter: tank + pump + Globo valve + solenoid + Vic coupling	Ask	**CAS3P**

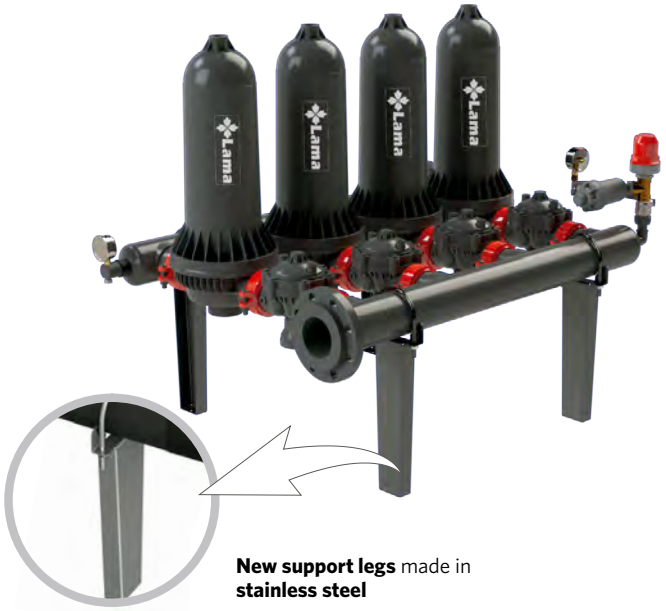
INFORMATION

Equippped: is composed of filters + collectors + Globo Plastic valve + suction pad + manometer.

PRES MAX 8 Kg/cm² 114 psi

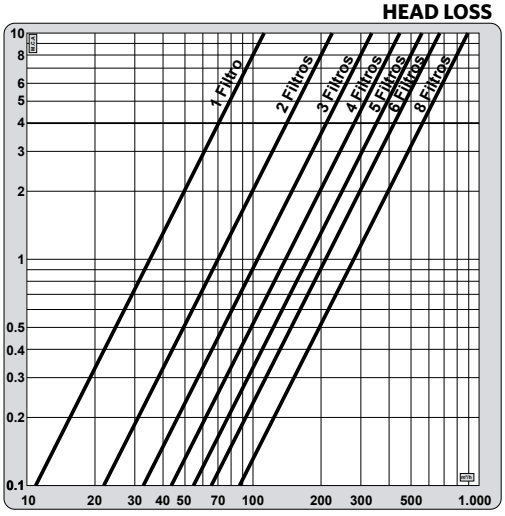
2,5 BACKWASHING PRESSURE Kg/cm²

ALSO FOR SEA WATER



New support legs made in **stainless steel**

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a fluid for assessment with 190 µm disc Lama.

Flow Limit 4m H.D.*	Max. recommended flow (m³/h)			Filtration Surface (cm²)	Description	Code
	< 50ppm	50/100ppm	100/200ppm			
65	20	12	8	1.613	1 unequipped	**FAS3TR**
					1 equipped Globo + Solenoid	**FAE3K**

Flow Limit 4m H.D.*	Max. recommended flow (m³/h)			Filtration Surface (cm²)	Description	Code
	< 50ppm	50/100ppm	100/200ppm			
141	40	25	16	3.226	FAS3 X 2 Ø 4"	**C2ASPEQS**
211	60	37,50	24	4.839	FAS3 X 3 Ø 4"	**C3ASPEQS**
281	80	50	32	6.452	FAS3 X 4 Ø 4"	**C4ASPEQS**
352	100	62,50	40	8.065	FAS3 X 5 Ø 6"	**C5ASPEQS**
422	120	75	48	9.678	FAS3 X 6 Ø 6"	**C6ASPEQS**
562	160	100	64	12.904	FAS3 X 8 Ø 6"	**C8ASPEQS**
703	200	125	80	16.130	10 double line	**10ASPEQS**
844	240	150	96	19.356	12 double line	**12ASPEQS**
984	280	175	112	22.582	14 double line	**14ASPEQS**
1.125	320	200	128	25.808	16 double line	**16ASPEQS**
1.265	360	225	144	29.034	18 double line	**18ASPEQS**
1.687	480	300	192	38.712	24 double line	**24ASPEQS**

Net Weight (Kg)	Net Equipped Weight (Kg)	Gross Equipped Weight (Kg)	Package Volume	Min Vol. Drainage Water (2,5 Kg/cm²)	Min. Drainage Flow (m³/h)	RAA3R - Disc spare part 190µm	KLAAS3 Compressed air cleaning kit
15	24	40	0,14 m³	45 l	10,5	Ask	Ask

- The station is supplied assembled, with the exception of the tower and cover to make shipping easier The station is delivered assembled ask us for **Vic plastic connection.**
- The drainage collector is not included. Please ask for the price.
- It is also available for **metal collectors.**
- Please ask for **Autosenior low pressure.**

*** Consult page 44 for option with programmer and number of stations.***

3.2 Automatic disc. COMPACT AUTOSENIOR

AutoSenior

INFORMATION

Station: is composed of filters + collectors + Globo Plastic valve + suction pad + manometer

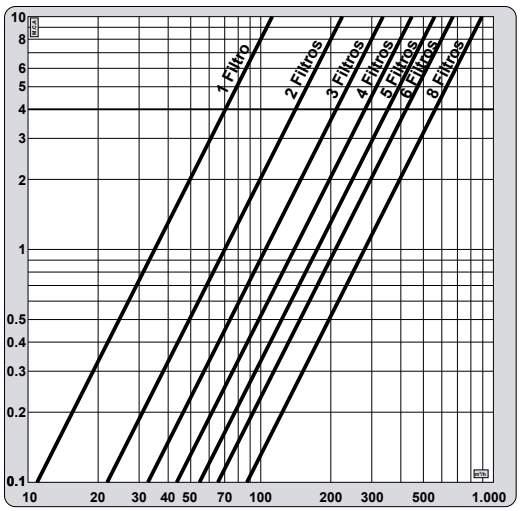
PRES MAX 10 Kg/cm² 142 psi

2,5 BACKWASHING PRESSION Kg/cm²

(For **1,5 Kg/cm²** ask us)

New **ringlock clamp** closure

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a fluid for assessment with 190 µm disc Lama.

Flow Limit 4m H.D.*	Max. recommended flow (m³/h)			Filtration Surface (cm²)	Description	Code
	< 50ppm	50/100ppm	100/200ppm			
141	40	25	16	3.226	**FA3K** X 2 Ø 4"	**C2A3A4S**
211	60	37,50	24	4.839	**FA3K** X 3 Ø 4"	**C3A3A4S**
281	80	50	32	6.452	**FA3K** X 4 Ø 4"	**C4A3A4S**
281	80	50	32	6.452	**FA3K** X 4 Ø 6"	**C4A3A6S**
352	100	62,50	40	8.065	**FA3K** X 5 Ø 6"	**C5A3A6S**
422	120	75	48	9.678	**FA3K** X 6 Ø 6"	**C6A3A6S**
562	160	100	64	12.904	**FA3K** X 8 Ø 6"	**C8A3A6S**
562	160	100	64	12.904	**FA3K** X 8 Ø 8"	**C8A3A8S**

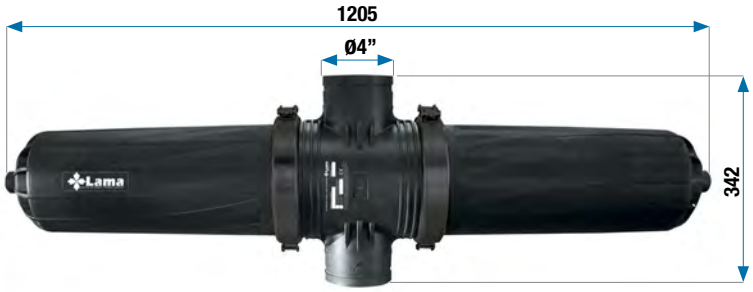
Net Weight (Kg)	Net Equipped Weight (Kg)	Gross Equipped Weight (Kg)	Package Volume	Min Vol. Drainage Water (2,5 Kg/cm²)	Min. Drainage Flow (m³/h)	RAA3R - Disc spare part 190µm	Code
-	24	40	0,14 m³	45 l	10,5	-	**FAAP3ANK**
8	-	-	0,14 m³	45 l	10,5	-	**FAAP3AN**

- The station is supplied assembled, with the exception of the tower and cover to make shipping easier The station is delivered assembled ask us for **Vic plastic connection.**
- **FLOW LIMIT:** is what creates a head loss close to the beginning of backwash.
- The drainage collector is not included. Please ask for the price.

*** Consult page 44 for option with programmer and number of stations.***

INFORMATION

Equippped: is composed of filters + collectors + Globo Plastic valve + suction pad + manometer.

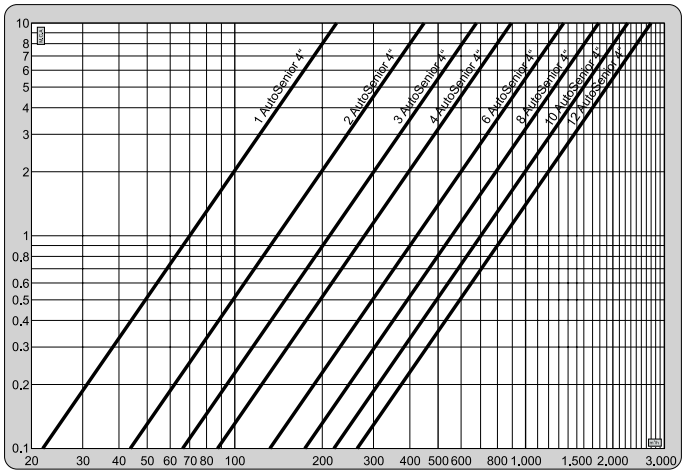


PRES MAX 8 Kg/cm² 114 psi

2,5 BACKWASHING PRESSURE Kg/cm²

NEW PRODUCT

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a fluid for assessment with 190 µm disc Lama.

Number of Filters	Flow Limit 4m H.D.*	Max. recommended flow (m³/h)			Filtration Surface (m²)	Min. drainage Flow (m³/h)	Collector	Code
		< 50ppm	50/100ppm	100/200ppm				
2	282	80	50	32	6.452	21	Ø6"	**C2A4P3S**
3	423	120	75	48	9.678	21	Ø6"	**C3A4P3S**
4	564	160	100	64	12.904	21	Ø8"	**C4A4P3S**
6	846	240	150	96	19.356	21	Ø10"	**C6A4P3S**
8	1.128	320	200	128	25.808	21	Ø10"	**C8A4P3S**
10	1.410	400	250	160	32.260	21	Ø12"	**C10A4P3S**
12	1.692	480	300	192	38.712	21	Ø12"	**C12A4P3S**

Net Weight (Kg)	Net Equipped Weight (Kg)	Gross Equipped Weight	Min Vol. Drainage Watere (2,5 Kg/cm²)	Min. Drainage Flow (m³/h)	RAA3R Disc spare part 190µm	KLAAS3 Compressed air cleaning kit	Code
15	32,5	0,130 m³	90 l	21	-	-	**FAAP4**

- Ask us for **VIC plastic** connection.
- The **drainage collector is included** in the price.

*** Consult page 44 for option with programmer and number of stations.***

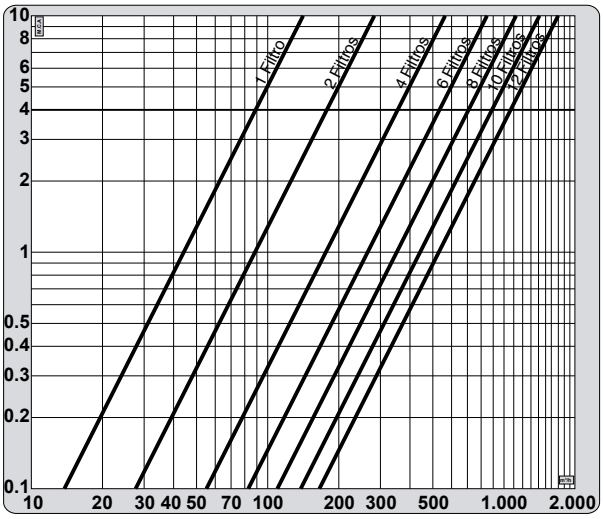
3.4 Automatic discs. COMPACT MODULAR AUTOMATIC DISC STATIONS

Rotativos

INFORMATION

Cover and disc tower manufactured in stainless steel.
Security closing in 4 steps.
The device is designed for **high pressures**.
Stabilising valve is included in C2RL, C3RL and C4RL stations.

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a fluid for assessment with 190 µm disc Lama.

	FRA3
Net Weight (Kg)	40
Net equipped Weight (Kg)	51
Gross equiped Weight (Kg)	71
Package Volume (m^3)	0,250
Min Vol. Drainage Water (2,5 Kg/cm^2)	60 ℓ
RAR3R - Disc spare part 190µm	----

available 3"

2,5 BACKWASHING PRESSURE Kg/cm²

Available PRES MAX 16 Kg/cm² 228 psi

PRES MAX 10 Kg/cm² 142 psi

nano TECHNOLOGY

Flow Limit 4m H.D.*	Max. recommended flow (m^3/h)			Filtration Surface (cm^2)	Min. Drainage Flow m^3/h)	Collector	Description	Code
	< 50ppm	50/100ppm	100/200ppm					
89	26	16	10	2.042	14	Ø3"	1 without programmer	**FRA3**
178	52	31	20	4.084	14	Ø4"	2 in line	**C2RLS**
356	140	84	55	8.168	14	Ø6"	4 in line	**C4RLS**
534	225	135	88	12.252	14	Ø8"	6 in line	**C6RLS**
712	300	180	117	16.336	14	Ø8"	8 in line	**C8RLS**
890	375	225	146	20.420	14	Ø10"	10 double line	**10RLS**
1.068	450	270	176	24.504	14	Ø10"	12 double line	**12RLS**

- Ask us for any **other composition.**

*** Consult page 44 for option with programmer and number of stations.***

AutoMaster 3.5 Automatic discs. COMPACT MODULAR AUTOMATIC DISC STATIONS

available 4" - 6" | 2,5 BACKWASHING PRESSURE Kg/cm² | PRES MAX 10 Kg/cm² 142 psi | nanoPLUS TECHNOLOGY

Flow Limit 4m H.D.*	Max. recommended flow (m³/h)			Filtration Surface (cm²)	Min.Drainage flow (m³/h)	Description	Code
	< 50ppm	50/100ppm	100/200ppm				
211	73	44	28	4.839	31,5	1 de 4" filter unequipped	**FAS4TR**
211	73	44	28	4.839	31,5	1 de 4" filter equipped	**FAE4**
633	231	139	92	14.517	31,50	3 de 4" in line	**C3AS4S**
844	339	204	132	19.356	31,50	4 de 4" in line	**C4AS4S**
1.055	424	255	165	24.195	31,50	5 de 4" in line	**C5AS4S**
1.266	508	306	198	29.034	31,50	6 de 4" in line	**C6AS4S**
1.477	593	357	231	33.873	31,50	7 de 4" in line	**C7AS4S**
1.688	676	406	264	38.712	31,50	8 de 4" double line	**C8AS4S**
2.109	847	510	330	48.390	31,50	10 de 4" double line	**10AS4S**

MasterMegadisc 3.6 Automatic discs. COMPACT MODULAR AUTOMATIC DISC STATIONS

available 4" - 6" | 2,5 BACKWASHING PRESSURE Kg/cm² | Available PRES MAX 16 Kg/cm² 228 psi | PRES MAX 10 Kg/cm² 142 psi | nanoPLUS TECHNOLOGY

	Flow Limit 4m H.D.*	Max. recommended flow (m³/h)			Filtration Surface (cm²)	Min. Drainage Flow (m³/h)	Collector	Description	Code
		< 50ppm	50/100ppm	100/200ppm					
4"	267	97	58	38	6.126	42	Ø4"	1 of 4" filter unequipped	**FRS4**
	1.068	450	270	176	24.504	42	Ø10"	4 of 4" filters in line	**C4R4S**
	1.602	675	405	263	36.756	42	Ø12"	6 of 4" filters in line	**C6R4S**
	2.136	900	540	351	49.008	42	Ø14"	8 of 4" filters double line	**C8R4S**
	3.204	1.350	810	526	73.512	42	Ø18"	12 of 4" filters double line	**12R4S**
6"	534	225	135	88	12.252	84	Ø6"	1 of 6" filter equipped	**FRA6**
	6.408	2.700	1.620	1.053	147.024	84	Ø24"	12 of 6" filters double line	**12R6S**
	9.024	3.600	2.160	1.404	196.032	84	Ø24"	16 of 6" filters double line	**16R6S**
	12.816	5.400	3.240	2.106	294.048	84	Ø30"	24 of 6" filters double line	**24R6S**

*** Consult page 44 for option with programmer and number of stations.***

AutoSenior 4"

AutoMaster 4"

Rotativos

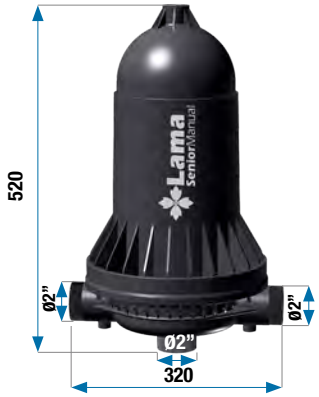
SeniorManual

3.7 Manuals Discs. SENIOR 2", 2"XL, 3"XS AND 3" FILTERS

PRES MAX 8 Kg/cm² 142 psi

2" **Senior thread**

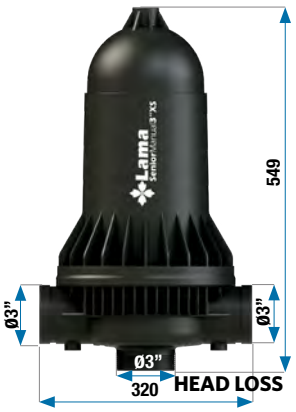
3" **Senior connection**



Senior 2"

Senior 2"XL

Senior 3"



Senior 3"XS

PRES MAX 10 Kg/cm² 142 psi

FDS3AB

Senior 4"

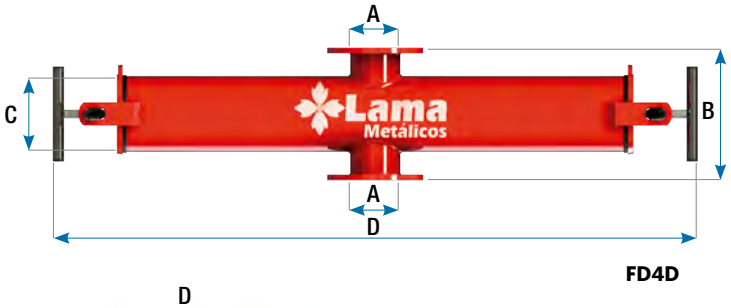
Results obtained in our factory with approved measuring instruments, using clean water as a fluid for assessment with 190 µm disc Lama.

Filtration Surface (cm^2)	**Net Weight** (Kg)	**Gross Weight** (Kg)	**Package volume** (m^3)	**Limit Flow** (m^3/h)	**Description**	**Code**
1.240	5,5	6	0,04	22	Senior 2" filter · Discs · Thread B.S.P.	**FDS2**
1.085	5,5	6	0,04	22	Senior 2" filter · Discs centrifuge · Thread B.S.P.	**FDC2**
1.795	7,5	8	0,07	45	Senior 2"XL filter· Discs · Thread B.S.P. / N.P.T. 2"	**FDS2XL**
1.240	6,5	7	0,04	22	Senior 3"XS filter ·Discs · Vic	**FDS3XS**
1.795	7,5	8	0,07	50	Senior 3" filter · Discs · Vic	**FVD3**
1.795	7,5	8	0,07	50	Senior 3" filter · Discs · Thread B.S.P.	**FDS3**
1.640	7,5	8	0,07	43	Senior 3" filter · Discs centrifuge · Vic	**FVA3**
1.640	7,5	8	0,07	43	Senior 3" filter· Discs centrifuge · Thread B.S.P.	**FDC3**
3.590	13,4	16,6	0,11	100	Filter Senior 4" · Discs	**FVD4**

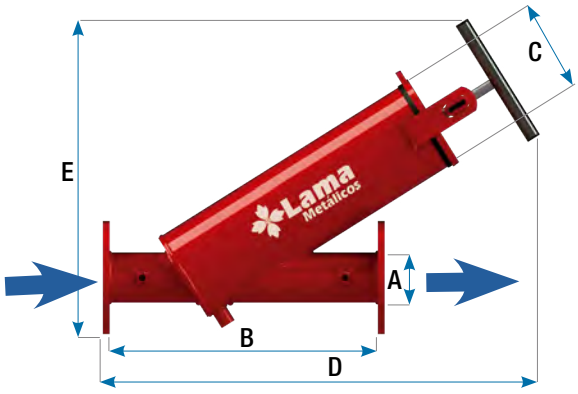
*** Consult page 44 for option with programmer and number of stations.***

MATERIALS

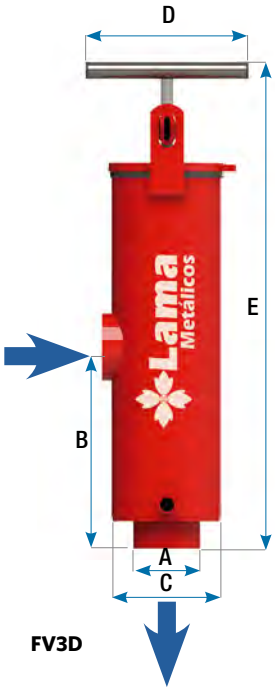
Body: A42B carbon steel
Closing joints: nitrile synthetic rubber 60 ° Shore
Screws: zinc plated weather resistant
Crosshead: stainless steel AISI 316L
Connection flange: DIN 2576 for irrigation



FD4D



FY3D



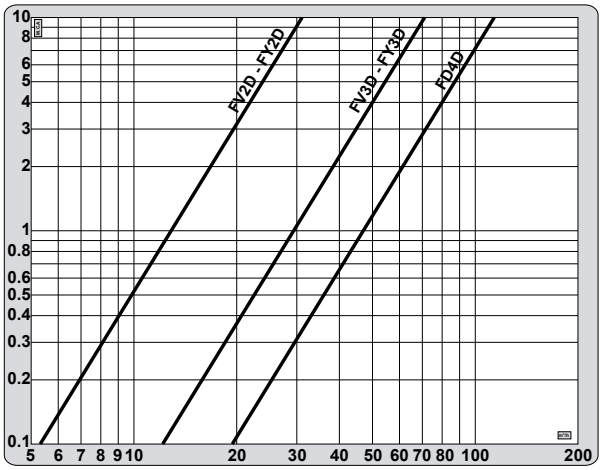
FV3D

Available PRES MAX 16 kg/cm² 228 psi

PRES MAX 10 kg/cm² 142 psi

nano TECHNOLOGY

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a fluid for assessment with 190 µm disc Lama.

A	B (mm)	C (mm)	D (mm)	E (mm)	Net Weight (Kg)	Gross Weight (Kg)	Package volume (m^3)	Limit Flow (m^3/h)	Description	Code
2" Thread H	319	165	230	540	12,5	13	0,032	22	2" vertical filter	**FV2D**
3" Thread H	275	165	230	666	15,5	16	0,070	50	3" vertical filter	**FV3D**
2" Thread M	450	165	605	520	13,5	17,5	0,070	22	2" Y filter	**FY2D**
3" Flange	500	165	750	520	21,5	22	0,089	50	3" Y filter	**FY3D**
4'' Flange	290	165	1480	290	38	60	0,157	80	4" double body filter	**FD4D**
									High security cartridge of parallel discs (For filters FV2D and FY2D)	**CA2R**
									High security cartridge of parallel discs (For filters FV3D, FY3D and FD4D)	**CA3R**

*** Consult page 44 for option with programmer and number of stations.***

3. **Screen** Filters

Physical filtration occurs in screen filters due to the retention of solids in suspension in water between the holes of the sieve. The screen behaves like a sieve that allows dirt with a smaller particle size than its holes to pass through, and retains grains larger than the holes.

4. Screen Lama.

CLASSIFICATION

According to the backwashing process :
- Electric automatic filters
- Hydraulic automatic filters
- Half-automatic
- Manual

According to the construction material:
- Plastic. Glass fiber reinforced polyamide
- Carbon steel painted in polyester epoxy

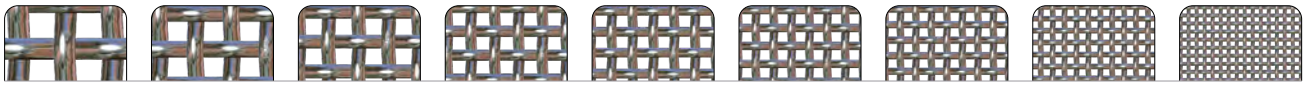
- Standard screen for automatic filters **0,190 mm.**
- Standard screen for manual filters **0,130 mm.**

FULL INJECTED NEW CARTRIDGE

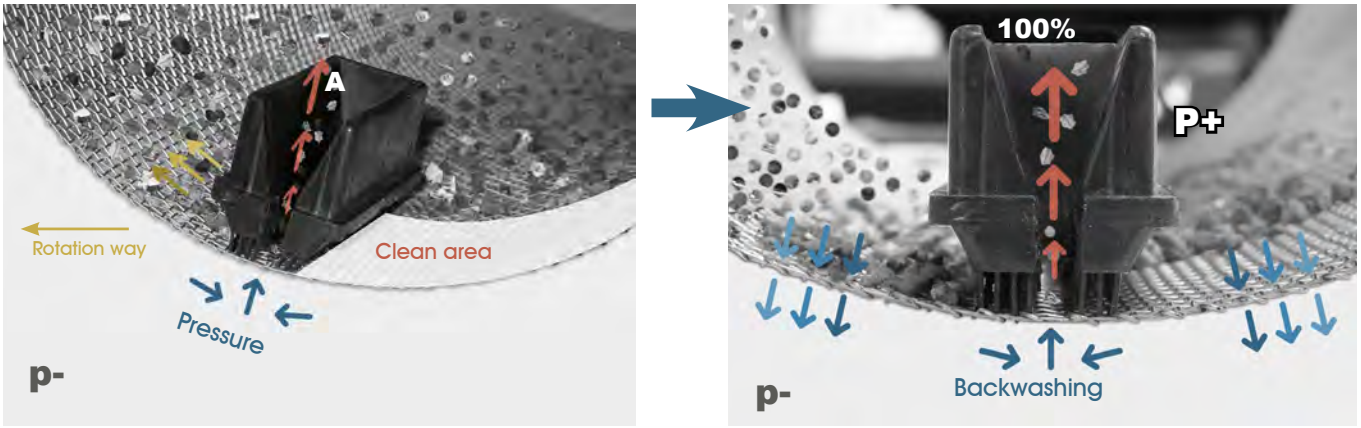
NEW PRODUCT

- Great performance
- Registered design.
- More resistant
- **It is available for 0,190 mm black colour for automatic standard screen and 0,130 mm red colour for manual standard screen.**

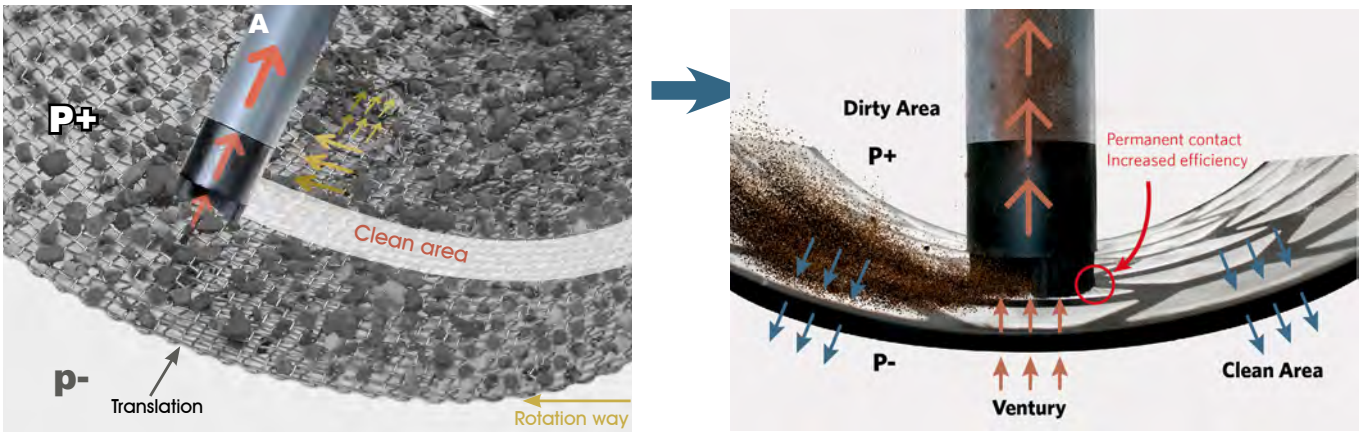
SCREEN SIZE



ELECTRIC AUTOMATIC FILTER



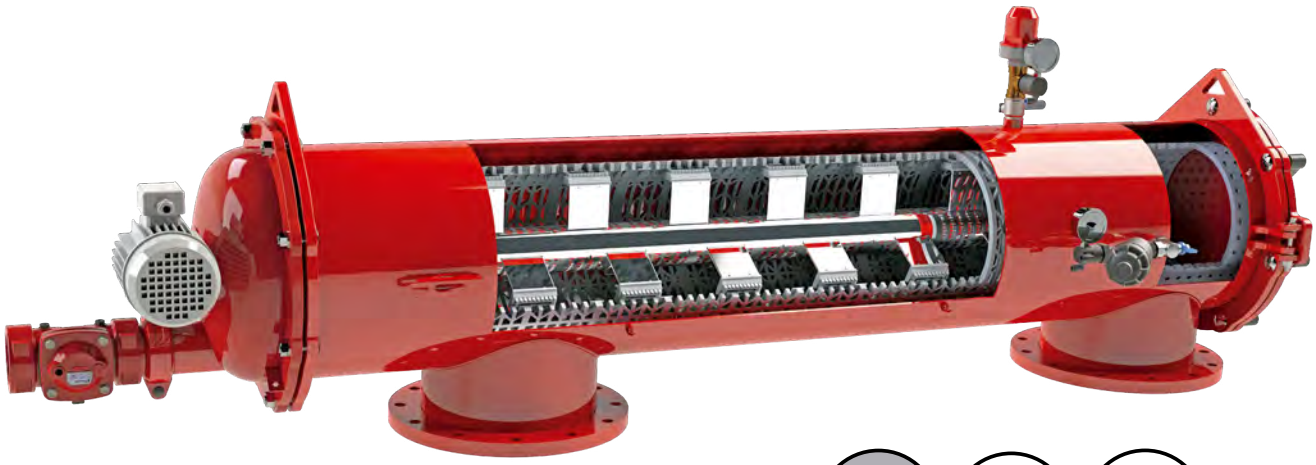
HYDRAULIC AUTOMATIC FILTER



4.1 Automatic Screen. ELECTRIC SELFCLEANING FILTER

INFORMATION

The basic filters are composed of the its cartridge, the inhalation mechanism with the rubber nozzles, the electric motor and the drainage valve.



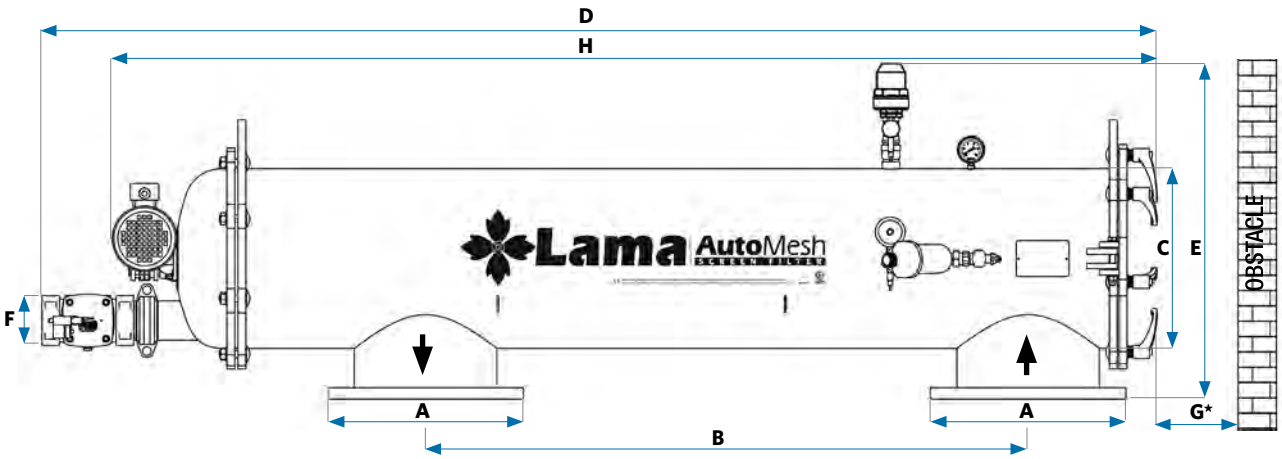
2,5 BACKWASHING PRESSURE Kg/cm²

Available PRES MAX 16 Kg/cm² 228 psi

PRES MAX 10 Kg/cm² 142 psi

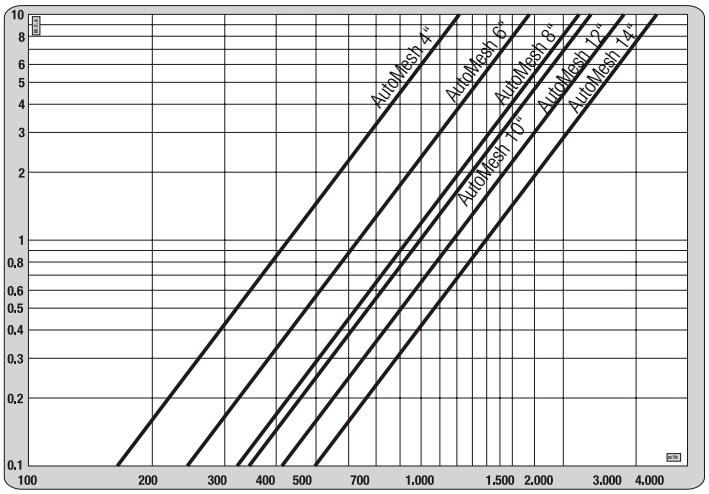
nanoPLUS TECHNOLOGY

A	B (mm)	C (mm)	D (mm)	E (mm)	F (Ø)	G* (mm)	H (mm)	Net Weight (Kg)	Package Dimension (mm)	Package Weight (Kg)	Package volume (m^3)	Code
4" Flange	450	406	1590	760	3" Vic	1270	1440	190	1900x700x850	210	1,024	**AM4S**
4" Flange	800	406	1995	741	3" Vic	1270	1835	195	1900x700x850	214	1,024	**AM6B4S**
6" Flange	800	406	2010	760	3" Vic	1270	1840	195	1900x700x850	214	1,024	**AM6S**
8" Flange	1100	406	2145	760	3" Vic	1405	1975	210	2050x700x850	250	1,105	**AM8S**
10" Flange	1100	406	2415	760	3" Vic	1675	2240	235	2320x700x850	275	1,250	**AM10S**
12" Flange	1370	406	2550	760	3" Vic	1810	2380	276	2540x700x870	302	1,323	**AM12S**
14" Flange	1.370	600	2.415	795	3" Vic	1.400	2380	525	2500x820x850	570	1,92	**A14ETXLS**



- ***Security area** for the cartridge removal.
- **Please ask for low pressure cleaning options.**

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 190 µm.

Flow Limit 3m H.D.	Connection	Max. recommended flow (m^3/h)		Screen Surface (cm^2)	Filtration Surface (cm^2)	Backwashing flow (m^3/h)	Backwashing Water Quantity (l)	Backwashing time (minimum)	Number of cartridges sections	Code
		< 50ppm	50/100ppm							
700	4" Flange	230	139	5.980	8.058	75	105	5"	5	**AM4S**
700	4" Flange	350	211	9.568	12.893	120	167	5"	8	**AM6B4S**
1050	6" Flange	350	211	9.568	12.893	120	167	5"	8	**AM6S**
1400	8" Flange	470	284	10.764	14.089	135	188	5"	9	**AM8S**
1480	10" Flange	490	296	13.156	16.481	165	229	5"	11	**AM10S**
1800	12" Flange	600	363	14.352	17.677	180	250	5"	12	**AM12S**
2.760	14" Flange	938	567	18.313	29.030	210	292	5"	-	**A14ETXLS**
							Rubber nozzle	**New**		**BAAG**
							Electric motor with control box 220V			**MOEB050**

Cartridge section	Ø outside 310 mm	Height 142 mm	0,190 mm screen	**T28P135**
Cartridge section	Ø outside 310 mm	Height 142 mm	0,130 mm screen	**T28P13R**

Kit RIO 8 programmer	**Including:** Programmer, pressure sensors, solenoid and microtube.	**Code: RIO8AMS**

- **During the cleaning step** it is not included the opening and closing valve duration.
- Ask us in case of a **stabilizing valve** is needed.

*** Consult page 44 for more number of stations of the RIO programmer***

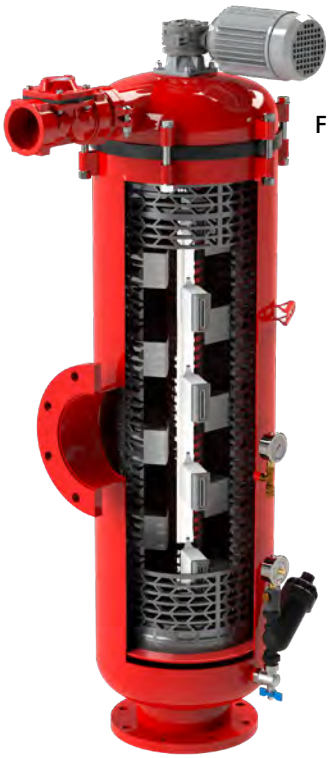

Lama
AutoMesh
Lama
AutoMesh
Lama
AutoMesh
Lama
AutoMesh

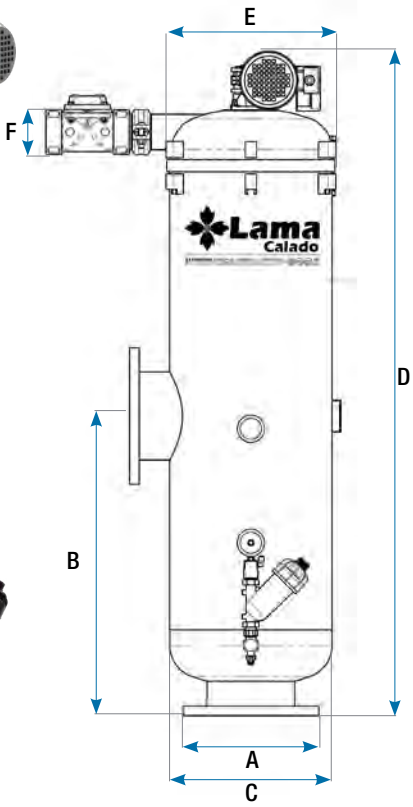
4.2 Automatic screen. ELECTRIC SELFCLEANING FILTER

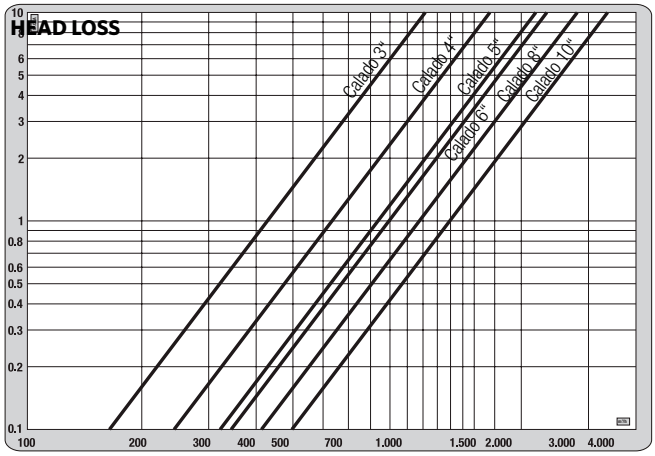
Calado

INFORMATION

Equipment: filter + electric motor + drainage valve + preasure sensors + manometre







Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 190 µm.

2,5 BACKWASHING PRESSURE Kg/cm² | Available PRES MAX 16 Kg/cm² 228 psi | PRES MAX 10 Kg/cm² 142 psi | nanoPLUS TECHNOLOGY

A	B (mm)	C (mm)	D (mm)	E (mm)	F	Net Weight (Kg)	Gross Weight (Kg)	Package volume (m^3)	Model
3" Thread H	316	406	880	660	2" Thread H	113,5	159,5	0,53	**Calado 3"**
4" Flange	486	406	1.131	713	2" Thread H	119	169	0,58	**Calado 4"**
5" Flange	600	406	1.100	664	2" Thread H	125	175	0,77	**Calado 5"**
6" Flange	585	406	1.292	729	2" Thread H	152	229,5	0,91	**Calado 6"**
8" Flange	750	406	1.647	815	3" Thread H	199	280	1,18	**Calado 8"**
10" Flange	750	406	1.700	664	3" Vic	215	300	1,3	**Calado 10"**

Flow Limit 3m H.D.	Max. recommended flow (m^3/h)		Filtration Surface (cm^2)	Backwashing Pression (Kg/cm^2)	Backwashing flow (m^3/h)	Wash Water Quantity (l)	Backwashing time (minimum)	Code
	< 50ppm	50 / 100ppm						
374	127	77	2.533	1	22	25	5"	**A3CMSVS**
670	227	137	4.180	1	39	38	5"	**A4CMSVS**
768	261	158	4.500	1	45,5	43	5"	**A5CMSVS**
1.010	343	207	6.035	1	58,5	76	5"	**A6CMSVS**
1.321	449	271	9.283	1	83,5	88	5"	**A8CMS**
1.408	479	289	9.990	1	90	113,75	5"	**A10CMS**

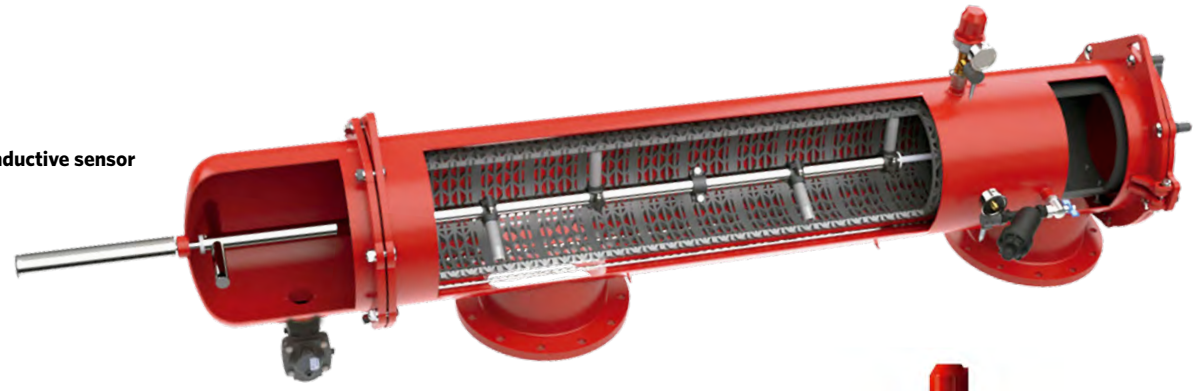
*** Consult page 44 for option with programmer and number of stations.***

4.3 Automatic Screen. HYDRAULIC SELFCLEANING FILTER EKOL.U.

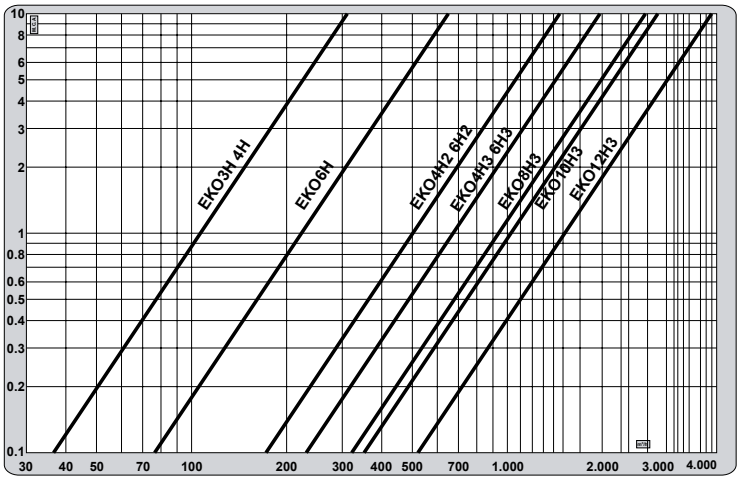
INFORMATION

The filters are composed of the its cartridge, the inhalation mechanism with the **new plastic nozzles** and the drainage valve.

With **inductive sensor**



HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 190 µm.

2,5 BACKWASHING PRESSURE Kg/cm²

Available PRES MAX 16 Kg/cm² 228 psi

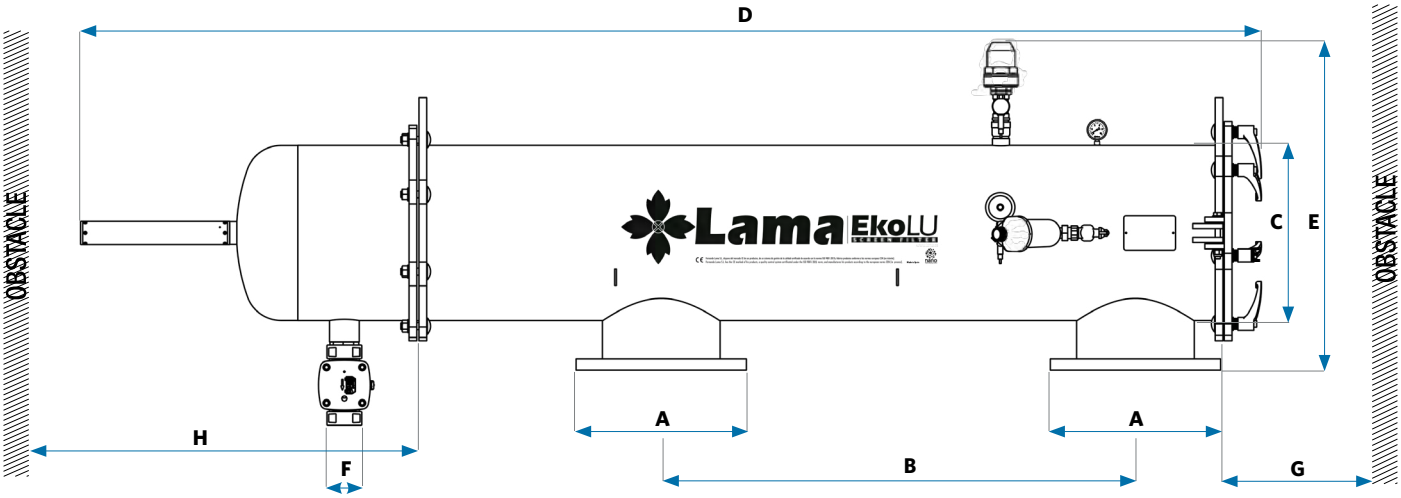
PRES MAX 10 Kg/cm² 142 psi

nanoPLUS TECHNOLOGY

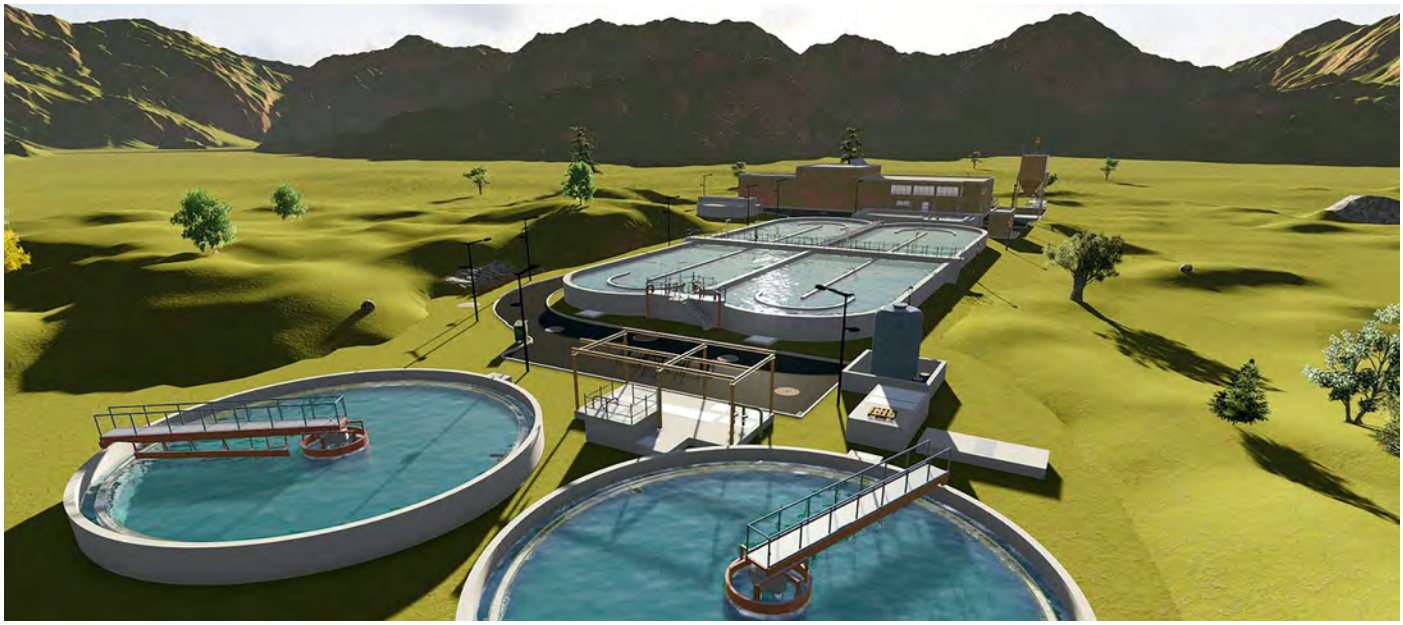
Flow Limit 3m H.D.	Max. recommended flow (m^3/h)		Filtration Surface (cm^2)	Backwashing Pression (Kg/m^3)	Backwashing flow (m^3/h)	Backwashing Water Quantity (l)	Backwashing time (minimum)	Number of cartridges sections	Code
	< 50ppm	50/100ppm							
180	70	37	1593	3378	6,2	34,4	20"	2 x **T14P176**	**EKO3HS**
180	70	37	1593	3378	6,2	34,4	20"	2 x **T14P176**	**EKO4HS**
720	280	150	6370	8155	15,5	215	50"	8 x **T14P176**	**EKO4H2S**
1050	350	211	9568	12893	12,4	172	50"	8 x **T28P135**	**EKO4H3S**
370	144	77	3185	4970	12,4	68,8	20"	4 x **T14P176**	**EKO6HS**
720	280	150	6370	8155	15,5	215	50"	8 x **T14P176**	**EKO6H2S**
1050	350	211	9568	12893	12,4	172	50"	8 x **T28P135**	**EKO6H3S**
1400	470	284	10764	14089	15,5	215	50"	9 x **T28P135**	**EKO8H3S**
1480	490	296	13156	16481	18,6	258	50"	11 x **T28P135**	**EKO10H3S**
1800	600	363	14352	17677	18,6	258	50"	12 x **T28P135**	**EKO12H3S**

Cartridge section	Ø outside 310 mm	Height 142 mm	0,190 mm screen	**T28P135**
Cartridge section	Ø outside 160 mm	Height 176 mm	0,190 mm screen	**T14P176**
Cartridge section	Ø outside 310 mm	Height 142 mm	0,130 mm screen	**T28P13R**
Cartridge section	Ø outside 160 mm	Height 176 mm	0,130 mm screen	**T14P17R**

Kit programador Mini's	**Including**: solenoid, differential pressure regulator and microtube	**Código: FLMSPRES**



A (Ø)	B (mm)	C (mm)	D (mm)	E (mm)	F (Ø)	G* (mm)	H (mm)	Net Weight (Kg)	Package Dimension (mm)	Package Weight (Kg)	Package volume (m^3)	Code
3" Flange	450	220	1.240	370	1" H	355	365	50	1200x600x310	55	0,223	**EKO3HS**
4" Flange	450	220	1240	370	1" H	355	365	50	1200x600x310	55	0,223	**EKO4HS**
4" Flange	900	220	2600	370	2" H	355	1421	75	2310x700x850	115	1,37	**EKO4H2S**
4" Flange	800	406	2280	760	2" H	1270	80	185	2070x700x850	226	1,23	**EKO4H3S**
6" Flange	750	220	1600	370	1" ½ H	355	717	68	1420x700x850	110	0,26	**EKO6HS**
6" Flange	900	220	2600	370	2" H	355	1421	75	2310x700x850	120	1,37	**EKO6H2S**
6" Flange	800	406	2280	760	2" H	1270	80	190	2050x700x850	226	1,21	**EKO6H3S**
8" Flange	1100	406	2415	760	2" H	1405	80	205	2200x700x850	240	1,30	**EKO8H3S**
10" Flange	1100	406	2685	760	2" H	1675	80	230	2400x700x850	270	1,42	**EKO10H3S**
12" Flange	1370	406	2820	760	2" H	1810	80	245	2600x700x850	280	1,54	**EKO12H3S**



- **Please ask for low pressure cleaning options.**

- **Mini's programme**r wash duration with **only one filter is automatic.** The programmer is not modifiable by the end user, it can be used with batteries, 220V or 12V power.

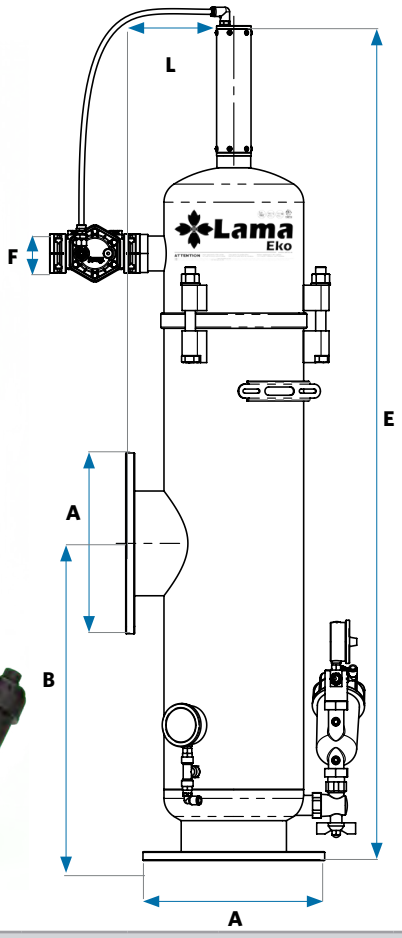
*** Consult page 44 for other option with RIO programmer and number of stations.***

Eko

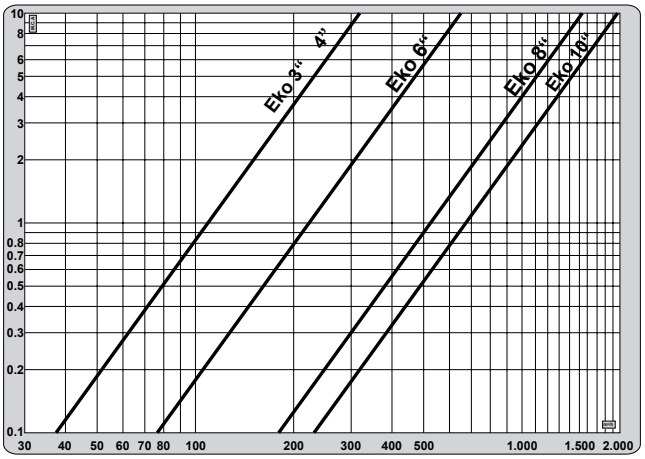
4.4 Automatic Screen. HYDRAULIC SELFCLEANING FILTER EKO

With **inductive sensor**

EKO6VS



HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 190 µm.

2,5 BACKWASHING PRESSURE Kg/cm²

Available PRES MAX 16 Kg/cm² 228 psi

PRES MAX 10 Kg/cm² 142 psi

nanoPLUS TECHNOLOGY

A (Ø)	B (mm)	E (mm)	F (Ø)	L (mm)	Net Weight (Kg)	Package Dimension (mm)	Package Weight (Kg)	Package volume (m^3)	Code
3" Flange	300	975	1" H	170	32	860x700x460	41	0,276	**EKO3VS**
4" Flange	300	975	1" H	170	33	860x700x460	42	0,276	**EKO4VS**
4" Flange	300	1176	1" ½ H	170	44	1260x800x550	64	0,276	**EKO4VLS**
6" Flange	500	1320	1" ½ H	170	56	1260x800x550	76	0,554	**EKO6VS**
8" Flange	585	1450	2" H	303	110	1390x700x850	130	0,827	**EKO8VS**
10" Flange	750	1854	2" H	303	129	1800x700x850	159	1,071	**EKO10VS**

Flow Limit 3m H.D.	Max. recommended flow (m^3/h)		Filtration Surface (cm^2)	Backwashing flow (m^3/h)	Backwashing Water Quantity (l)	Backwashing time (minimum)	Prices (€)	Code
	< 50ppm	50/100ppm					Nº of cartridges	
180	70	37	1593	6,2	34,4	20"	2 x **T14P176**	**EKO3VS**
180	70	37	1593	6,2	34,4	20"	2 x **T14P176**	**EKO4VS**
180	107	57	2389	12,4	69	20"	3 x **T14P176**	**EKO4VLS**
370	144	77	3185	12,4	69	20"	4 x **T14P176**	**EKO6VS**
725	280	150	5980	14,4	80	20"	5 x **T28P135**	**EKO8VS**
1120	432	232	9568	20	111	20"	8 x **T28P135**	**EKO10VS**

Cartridge section	Ø outside 310 mm	Height 142 mm	0,190 mm screen	**T28P135**
Cartridge section	Ø outside 160 mm	Height 176 mm	0,190 mm screen	**T14P176**
Cartridge section	Ø outside 310 mm	Height 142 mm	0,130 mm screen	**T28P13R**
Cartridge section	Ø outside 160 mm	Height 176 mm	0,130 mm screen	**T14P17R**

Kit programador Mini's	**Including**: solenoid, differential pressure regulator and microtube	**Code: FLMSPRES**

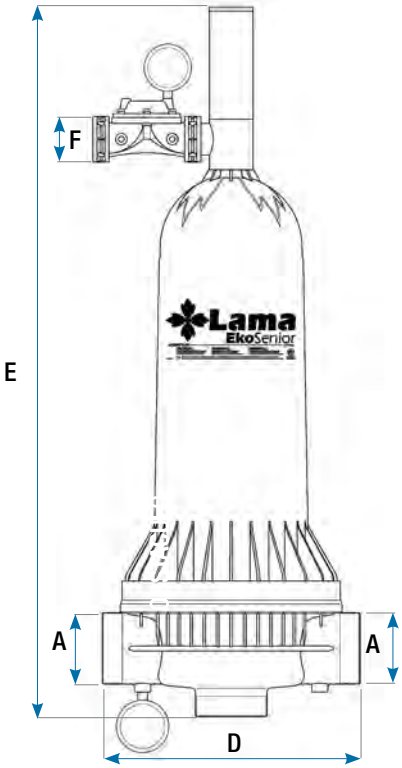
- **Mini's programme**r wash duration with **only one filter is automatic.** The programmer is not modifiable by the end user, it can be used with batteries, 220V or 12V power.

*** Consult page 44 for other option with RIO programmer and number of stations.***

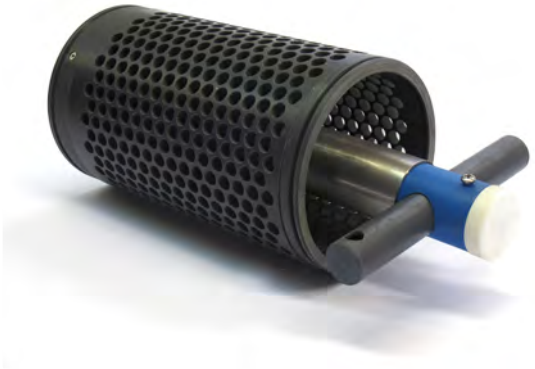
4.5 Automatic Screen. HYDRAULIC SELFCLEANING FILTER EKOSENIOR

EkoSenior

With **inductive sensor**



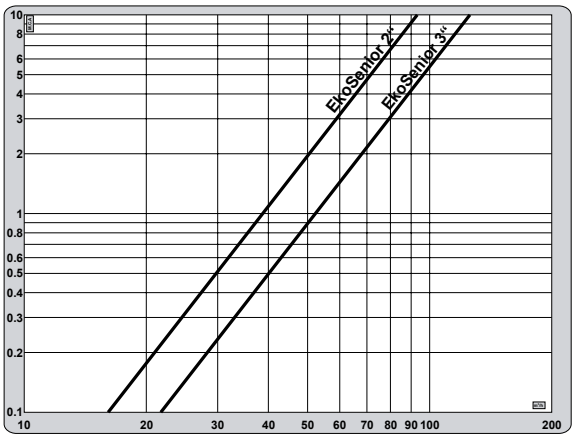
EKOSE2S



PRES MAX 8 Kg/cm² 114 psi

2,5 BACKWASHING PRESSURE Kg/cm²

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 190 µm.

A (⌀)	D (mm)	E (mm)	F (⌀)	Net Weight (Kg)	Package Dimension (mm)	Package Weight (Kg)	Package volume (m^3)	Code
2" M	320	707	1" H	8	860 x 600 x 350	10	0,180	**EKOSE2S**
3" M	320	886	1" H	11	860 x 600 x 350	13	0,180	**EKOSE3S**

Flow Limit 3m H.D.	Max. recommended flow (m^3/h)		Filtration Surface (cm^2)	Backwashing flow (m^3/h)	Backwashing time (minimum)	Code
	< 50ppm	50/100ppm				
59	20	12	591	4	20"	**EKOSE2S**
80	40	24	1.040	6	20"	**EKOSE3S**
CEKS220	2" filtering cartridge 190 µm		---	**CEKS320**	3" filtering cartridge 190 µm	---

Kit programador Mini's	**Including**: solenoid, differential pressure regulator and microtube	**Code: FLMSPRES**

- **Mini's programme**r wash duration with **only one filter is automatic.** The programmer is not modifiable by the end user, it can be used with batteries, 220V or 12V power.

*** Consult page 44 for other option with RIO programmer and number of stations.***

- Please ask for any other filtering screen size.

SeniorManual

4.6 Manual Screen Filters. 2", 2"XL, 3"XS AND 3" SENIOR FILTER

2" **Senior thread**

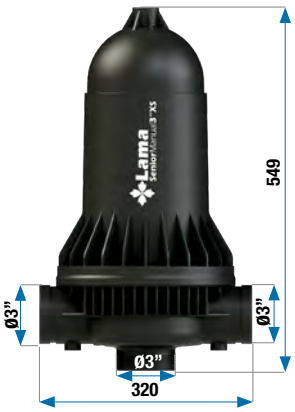
3" **Senior connection**

PRES MAX 8 Kg/cm² 142 psi

Senior 2"

Senior 2"XL

Senior 3"

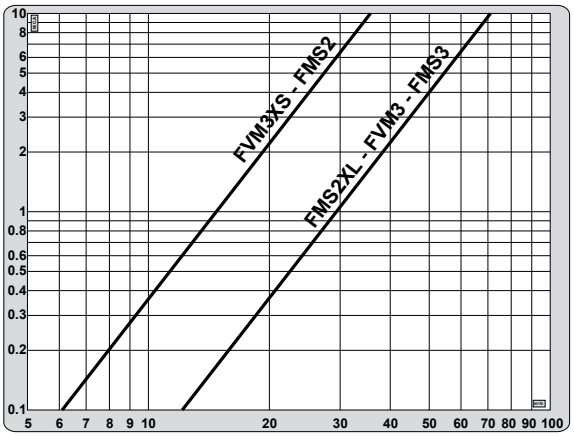


Senior 3"XS

PRES MAX 10 Kg/cm² 142 psi

FMS3AB

HEAD LOSS



Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 130 µm.

Filtration Surface (cm^2)	Net Weight (Kg)	Gross Weight (Kg)	Package volume (m^3)	Limit Flow (m^3/h)	Description	Code
1.240	5,5	6	0,04	25	Senior 2" · Screen · Thread B.S.P.	**FMS2**
1.085	5,5	6	0,04	25	Senior 2" · Screen centrifuge · Thread B.S.P.	**FCS2**
1.795	7,5	8	0,07	45	Senior 2" XL · Screen · Thread B.S.P. / N.P.T.	**FMS2XL**
1.240	6,5	7	0,04	25	Senior 3"XS · Screen · Vic	**FMS3XS**
1.550	7	8	0,07	50	Senior 3" · Screen · Vic	**FMS3AB**
1.550	7	8	0,07	50	Senior 3" · Screen · Vic	**FVM3**
1.550	7	8	0,07	50	Senior 3" · Screen · Thread B.S.P.	**FMS3**
1.485	7	8	0,07	33	Senior 3" · Screen centrifuge · Vic	**FVC3**
1.485	7	8	0,07	33	Senior 3" · Screen centrifuge · Thread B.S.P.	**FCS3**

*** Consult page 44 for option with programmer and number of stations.***

4.7 Manual Screen Filters. METAL SCREEN FILTERS

Metálicos

FILTERING ELEMENT

Thermo soldered stainless steal mesh located in a cylindrical structure of drilled PVC. The standard mesh size is 0,130 mm, but it is available in other sizes (from 0,01 to 3 mm) Please ask for prices.

Available PRES MAX 16 Kg/cm² 228 psi

nano TECHNOLOGY

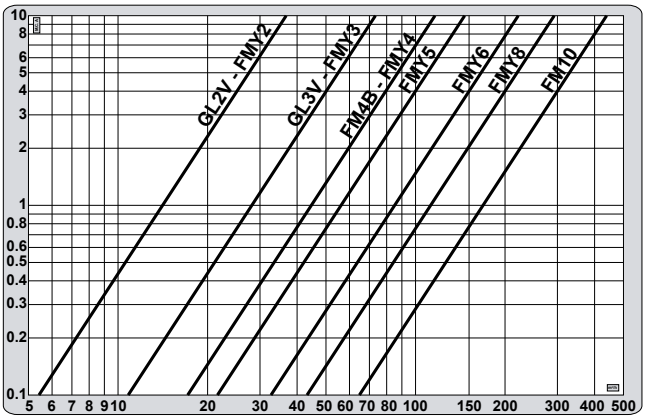
PRES MAX 10 Kg/cm² 142 psi

FM3000

FM4000

FM6000

HEAD LOSS



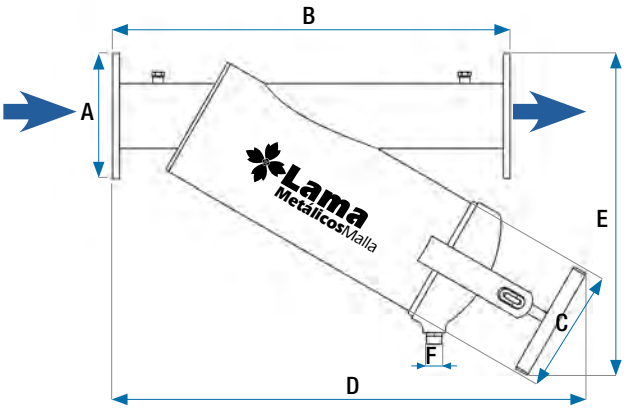
Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 130 µm.

A	B (mm)	C (mm)	D (mm)	E (mm)	Filtration surface (cm²)	Net Weight (Kg)	Gross Weight (Kg)	Package volume (m³)	Limit Flow(m³/h)	Description	Code
2" Thread H	319	165	230	540	1037	11,5	12	0,032	25	2" vertical (external screen)	**GL2V**
3" Thread H	275	165	230	666	1443	14	15	0,070	50	3" vertical (external screen)	**GL3V**
2" Thread M	450	165	605	504	1037	12,5	13	0,048	25	2" leaning (external screen)	**FMY2**
3" Flange	500	165	752	500	1490	20	21	0,089	50	3" leaning (external screen)	**FMY3**
3" Flange	500	219	500	446	1593	20	22	0,089	50	3" leaning (injected screen)	**FM3000**
4" Flange	700	219	785	500	2162	30,5	43	0,250	80	4" leaning (external screen)	**FM4B**
4" Flange	700	250	825	600	2897	36,5	50	0,250	80	4" leaning (external screen)	**FMY4**
4" Flange	700	219	700	549	2389	37	50	0,250	80	4" leaning (injected screen)	**FM4000**
5" Flange	700	250	825	600	2897	40,5	65	0,250	100	5" leaning (external screen)	**FMY5**
6" Flange	730	320	986	923	5038	65	65	0,432	150	6" leaning (external screen)	**FMY6**
6" Flange	700	219	840	672	3185	65	65	0,432	150	6" leaning (injected screen)	**FM6000**
8" Flange	900	430	1340	1250	10897	100	153	0,890	200	8" leaning (external screen)	**FMY8**
10" Flange	1000	430	1525	1430	13112	105	190	1,270	300	10" leaning (external screen)	**FM10**
4" Flange	649	250	840	310	2897	39	40	0,158	80	4" horizontal (inside screen)	**FML4**
6" Flange	1420	320	1680	380	8454	Ask	101	0,230	150	6" horizontal (inside screen)	**FML6**
6" Flange	995	219	1250	350	4778	70	72	0,200	150	4" horizontal (injected screen)	**FML6000**
8" Flange	1645	320	1930	270	9868	Ask	Ask	Ask	200	8" horizontal (inside screen)	**FML8**
10" Flange	1623	430	1950	540	15327	Ask	Ask	Ask	300	10" horizontal (inside screen)	**F10L**
12" Flange	1848	430	2250	590	17541	Ask	Ask	Ask	420	12" horizontal (inside screen)	**F12L**
16" Flange	1689	600	2143	840	21783	Ask	Ask	Ask	850	16" horizontal (inside screen)	**F16L**

*** Consult page 44 for option with programmer and number of stations.***

Metálicos

4.8 Screen Centrifuge. METAL FILTERS



FC4C

FCY6

A	B (mm)	C (mm)	D (mm)	E (mm)	F	Net Weight (Kg)	Gross Weight (Kg)	Package volume (m^3)	Limit Flow (m^3/h)	Filtration Surface (cm^2)	Description	Code
2" Thread M	450	165	660	560	3/4"	16	18	0,089	22	1.071	2" centrifuge filter	**FCY2**
3" Flange	500	165	825	570	3/4"	23	26	0,158	37,7	1.590	3"centrifuge filter	**FCY3**
4'' Flange	700	219	840	575	3/4"	33	46	0,250	73,5	2.312	4" centrifuge filter	**FC4C**
5'' Flange	700	250	990	650	3/4"	40	68	0,250	73,5	3.116	5" centrifuge filter	**FCY5**
6'' Flange	730	320	995	900	3/4"	68	88	0,432	148	5.404	6" centrifuge filter	**FCY6**
										Waste store, valve and programmer		Ask

4.8 Screen Semiautomatic. METAL FILTERS

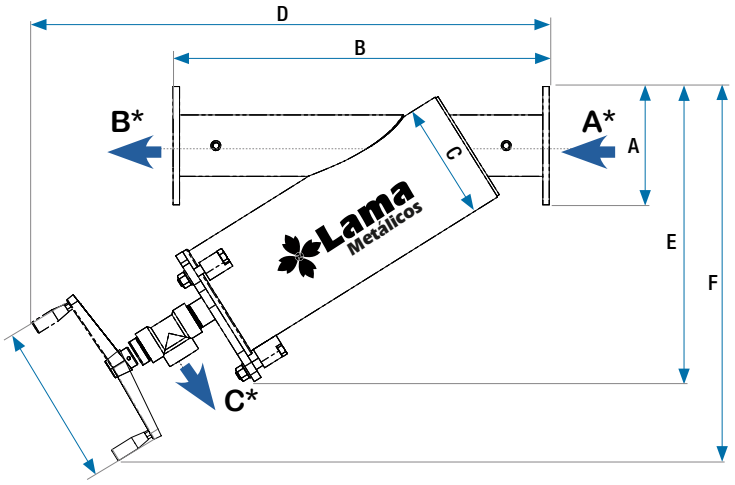
FILTERING ELEMENT

Thermo soldered stainless steal mesh located in a cylindrical structure of drilled PVC. The standard mesh size is 0,130 mm, but it is available in other sizes (from 0,01 to 3 mm) Please ask for prices

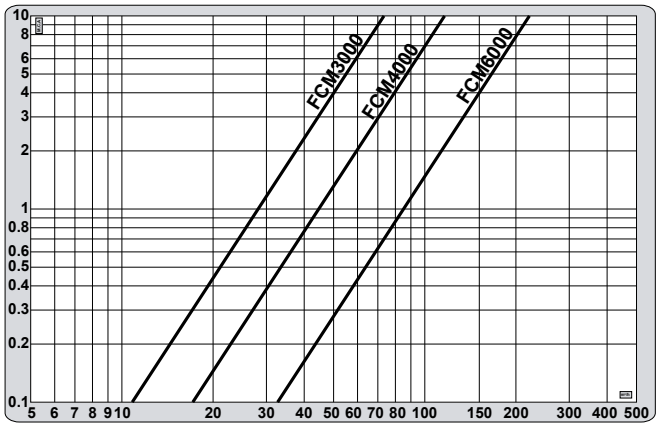
FCM6000

FCM4000

FCM3000



HEAD LOSS

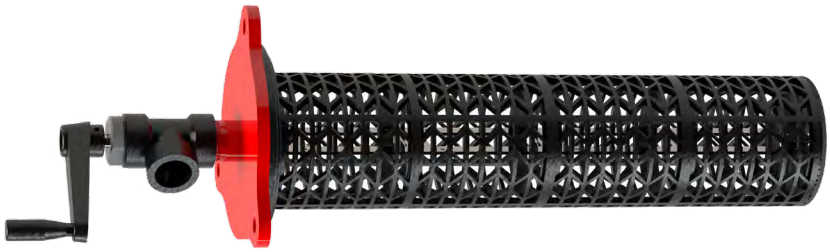


Results obtained in our factory with approved measuring instruments, using clean water as a liquid for assessment and Lama screen of 190 µm.

disponible PRES MAX 16 Kg/cm² 228 psi

PRES MAX 8 Kg/cm² 114 psi

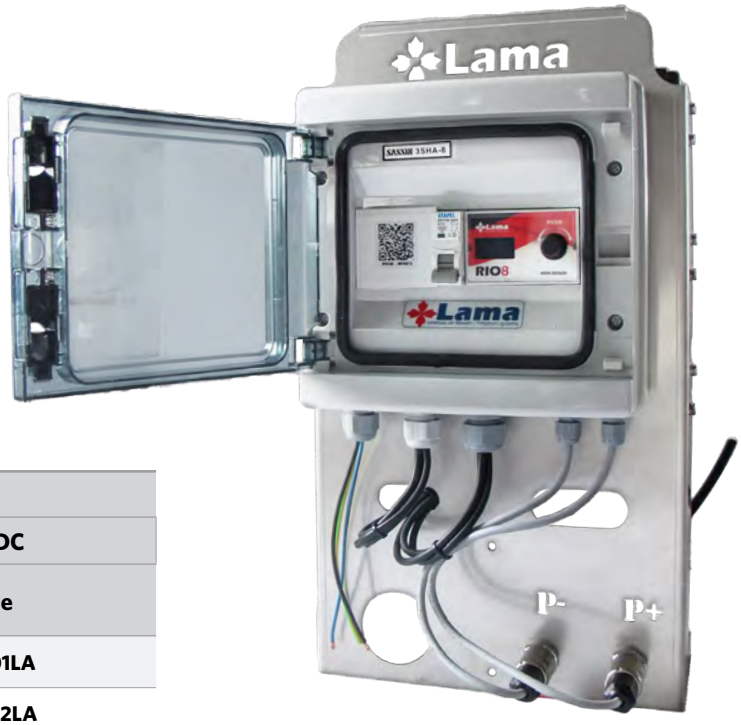
nano TECHNOLOGY



A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Filtration surface (cm²)	Net Weight (Kg)	Limit flow (m³/h)	Code
3" Flange	500	220	765	450	595	1593	27	45,8	**FCM3000**
4" Flange	700	220	970	970	700	2389	37	73,5	**FCM4000**
6" Flange	700	220	1110	675	825	3185	47	159,6	**FCM6000**

*** Consult page 44 for option with programmer and number of stations.***

Programmer



RIO Programmer

KIT RIO DESCRIPTION

-RIO Programmer
-Pivot swivel
-Solenoid
-Pressure sensors
-Microtube

		Model	
		220V AC	12V DC
		Code	Code
Filters	1	CE1001SC	CE2001LA
	2	CE1002SC	CE2002LA
	3	CE1003SC	CE2003LA
	4	CE1004SC	CE2004LA
	5	CE1005SC	CE2005LA
	6	CE1006SC	CE2006LA
	7	CE1007SC	CE2007LA
	8	CE1008SC	CE2008LA
	9	CE1009SC	CE2009LA
	10	CE1010SC	CE2010LA
	11	CE1011SC	CE2011LA
	12	CE1012SC	CE2012LA
	13	CE1013SC	CE2013LA
	14	CE1014SC	CE2014LA
	15	CE1015SC	CE2015LA
	16	CE1016SC	CE2016LA

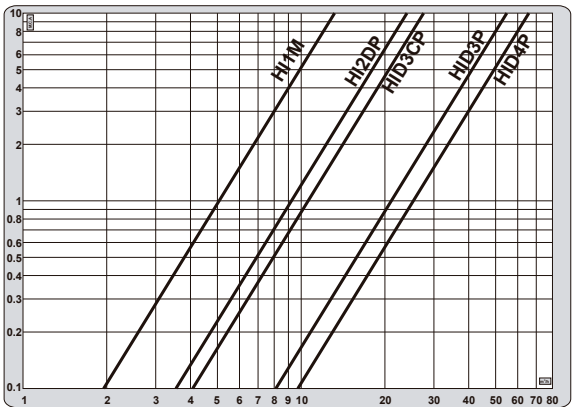
Programmer support	PPCS1M

- Ask us for **more stations.**

Hidrociclón

No standard configuration

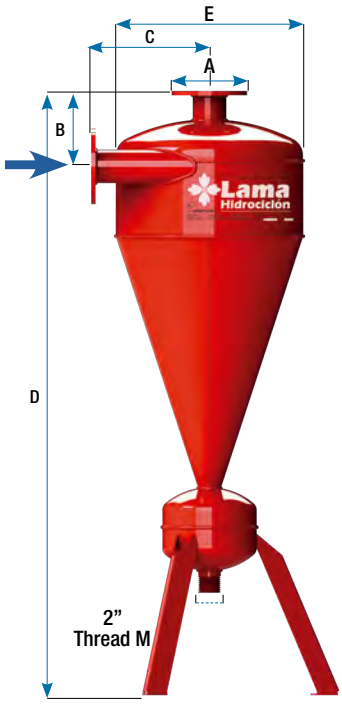
HEAD LOSS



Available
PRES MAX 16 Kg/cm²
228 psi

PRES MAX 10 Kg/cm²
142 psi

nano TECHNOLOGY



Hydrocyclon 3" (HID3)

A	B (mm)	C (mm)	D (mm)	E (mm)	Net Weight (Kg)	Gross Weight (Kg)	Package volume (m^3)	Limit Flow (m^3/h)	Description	Code
1½" Thread M	102	130	462	168	9,20	9,20	0,06	12	1½" Hydrocyclone	**HI1M**
2" Vic	140	185	1.057	250	21,80	21,80	0,35	22	2" Hydrocyclone Vic	**HID2P**
2" Thread M	200	245	1.117	250	21,80	21,80	0,35	22	2" Hydrocyclone + Thread	**HI2EP**
3" Flange	165	210	1.208	300	29,80	49,80	0,56	25	3" Hydrocyclone	**HID3CP**
3" Flange	200	313	1.600	500	50,60	76,60	1,14	50	3" Hydrocyclone	**HID3P**
4" Flange	225	302	1.600	500	50,60	76,60	1,14	60	4" Hydrocyclone	**HID4P**
									Automatic cleaning kit 2" 220V (Valve, timer, transformer, solenoid and filter) for one hydrocyclone	**KL2C**
									Automatic cleaning kit 2" batteries (Valve, programmer, solenoid and filter) for one hydrocyclone	**KL2MO**
									Hydrocyclone support 1½"	**SH1M**

Flow Limit 4m H.D.	Max. recommended flow (m^3/h)	Description	Code without drainage collector	Code with drainage collector
32	44	Station made by 2 HID2 Ø4"	**HID2PX2**	**HID2P2D**
74	100	Station made by 2 HID3 Ø6"	**HID3PX2**	**HID3P2D**
111	150	Station made by 3 HID3 Ø6"	**HID3PX3**	**HID3P3D**
148	200	Station made by 4 HID3 Ø8"	**HID3PX4**	**HID3P4D**
222	300	Station made by 6 HID3 Ø10"	**HID3PX6**	**HID3P6D**
90	120	Station made by 2 HID4 Ø6"	**HID4PX2**	**HID4P2D**
135	180	Station made by 3 HID4 Ø8"	**HID4PX3**	**HID4P3D**
180	240	Station made by 4 HID4 Ø8"	**HID4PX4**	**HID4P4D**
270	360	Station made by 6 HID4 Ø10"	**HID4PX6**	**HID4P6D**

GloboValve

MATERIALS

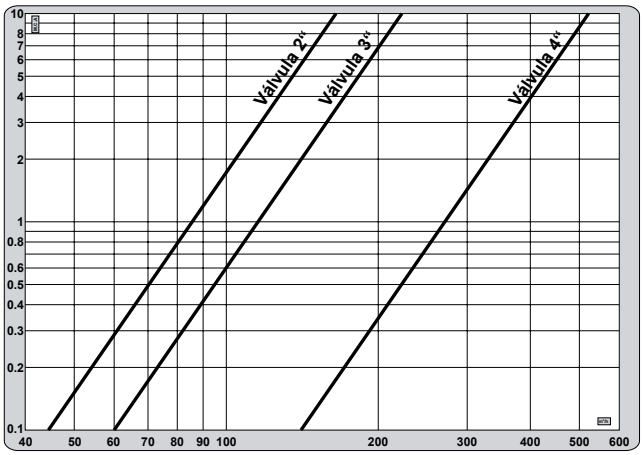
Body: cast steel
Membrane: synthetic rubber nitrile 60 º Shore
Shaft: stainless steel
Shafts valve: vulcanized rubber
Cover: glass fiber reinforced polyamide

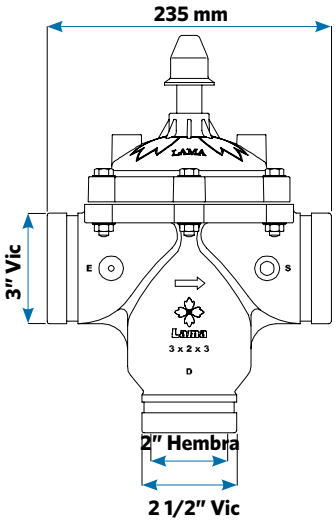
Available PRES MAX 16 Kg/cm² 228 psi

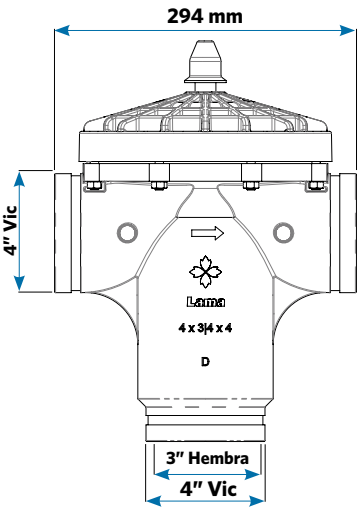
PRES MAX 10 Kg/cm² 142 psi

nano TECHNOLOGY

HEAD LOSS







Max. recommended flow (m^3/h)		Weight (Kg)	Package volume (m^3)	Description	Code
Principal	Drainage				
60	32	8	0,026	3x2x3 Globo basic connection VIC (unequipped)	**VN32**
150	61	17	0,043	4x3 / 4 x 4 Globo basic connection VIC (unequipped)	**VN44**
60	32	8	0,026	3x2x3 Globo connection VIC, equipped with solenoid 24V AC N.C.	**VC32**
150	61	17	0,043	4x3 / 4x4 Globo connection VIC, equipped with solenoid 24V AC N.C	**VC44**

GloboPlastic

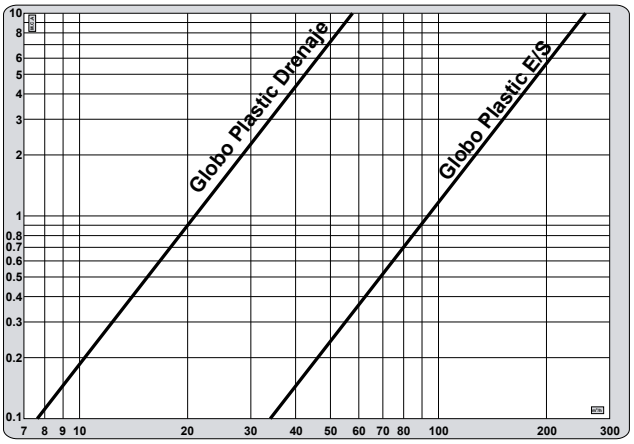
MATERIALS

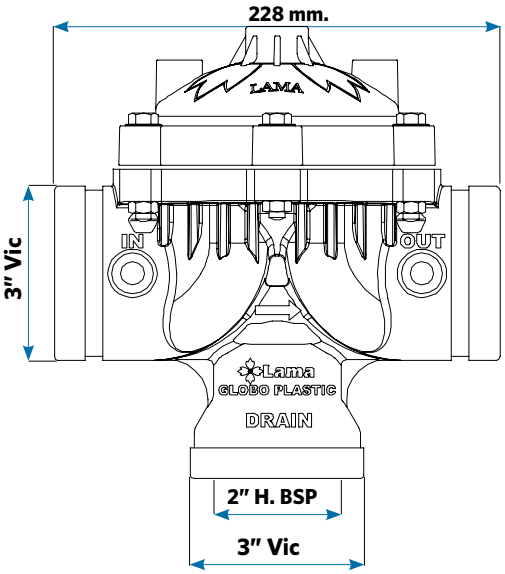
Body: glass fiber reinforced polyamide
Membrane: synthetic rubber nitrile 60 º Shore
Shaft: stainless steel
Shaft valve: vulcanized rubber
Cover: glass fiber reinforced polyamide

Available PRES MAX 16 Kg/cm² 228 psi

PRES MAX 10 Kg/cm² 142 psi

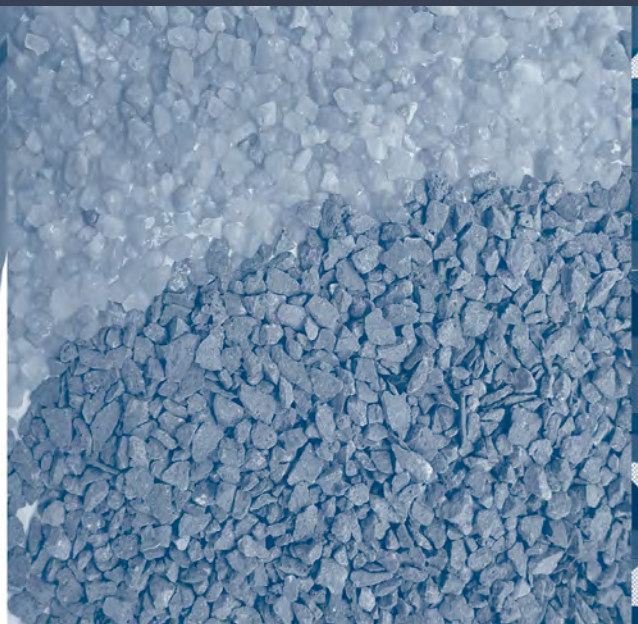
HEAD LOSS

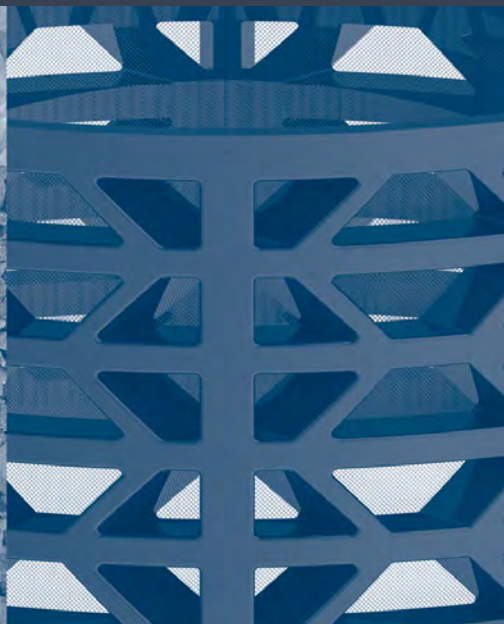




Max. recommended flow (m^3/h)		Weight (Kg)	Package volume (m^3)	Description	Code
Principal	Drainage				
60	32	2	0,026	3x2x3 Globo Plastic connection VIC (unequipped)	**VP32**
60	32	2,5	0,026	3 x 2 x 3 Globo Plastic connection VIC, equipped with solenoid 24V AC N.C.	**VPE3**
60	32	3	0,030	3 x 2 x 3 Globo Plastic: 2 connection VIC + 2 flanges (unequipped)	**VP32BRI**

Accesoires & spare parts





Accesorires

Description	Code
New programmer Mini'S no adjusted for filters EKO, EKOLU and EKOSENIOR (valid for 220V and 12V)	**FLMS**
New programmer Mini'S no adjusted for filters EKO, EKOLU and EKOSENIOR + PRESSURE GAUGE (valid for 220V and 12V)	**FLMSPRE**
New programmerr **RIO**	**RIO8P**
New programmer **RIO 16**	**RIO16**
New touch programmer	**-**
1/4'' LAMA glycerine pressure gauge (Rank of measure from 0 to 10 Kg/cm²) Please ask for others ranks	**MANO**
Pressure gauge with maximun indicator of 10 Kg/cm²	**MANA**
LAMA differential pressostat (0-1 Kg/cm²) Electric signal	**PRES**
Pressure sensor for programmers	**SPI8**
Hydraulic relay (Equipped)	**CSLC**
Hydraulic relay (Unequipped)	**CEBM**
Standard solenoid 1/8'' 24 VAC N.C.	**SLNC**
Standard solenoid 1/8'' 24 VAC N.A.	**SLNA**
Latch solenoid 1/8''	**LACH**
12V Battery equipped with charge controller and waterproof case	**BATEEQ**
Battery 12V	**BATE**
Solar collector 12V	**PLAC**
1'' Hydraulic plastic valve	**VH1P**
1½'' Hydraulic plastic valve	**VH112P**
2'' Hydraulic plastic valve	**VH2P**
2'' Hydraulic metallic valve	**VHC2**
3'' Hydraulic metallic valve	**VH3C**
LAMA`s 2'' automatic suction pad, double effect	**VE2L**
LAMA`s 1'' automatic suction pad, double effect	**VE1L**
LAMA`s 1'' sphere suction pad, double effect	**VV1L**
Option connection flange 3'' valve 3×2×3	**KCV3**
Option Connection flange 4'' valve 3×2×3	**KCV4**
Grooved VIC 2'' to thread BSP 2'' (Metal)	**PON2**
Grooved VIC 3'' to thread BSP 3'' (Metal)	**PON3**
Grooved VIC 4'' to thread BSP 4'' (Metal)	**PON4**

New Programmer **RIO**

Programmer **Mini´S**

Hydraulic relay

Sensor

Solenoid

Suction pad 1''

Suction pad 2''

Grooved Vic

Accesorires

Description	Code
220V Electrical motor for suction scanner	**MOEL220**
3'' LAMA stabilizing valve completely equipped	**VSL3**
4'' LAMA stabilizing valve completely equipped	**VSL4**
6'' LAMA stabilizing valve completely equipped	**VSL6**
8'' LAMA stabilizing valve completely equipped	**VSL8**
10'' LAMA stabilizing valve completely equipped	**VSL1**
12'' LAMA stabilizing valve completely equipped	**VS12**
14'' LAMA stabilizing valve completely equipped	**VS14**
3'' LAMA stabilizing valve completely equipped for ITS	**VSL3INT**
4'' LAMA stabilizing valve completely equipped for ITS	**VSL4INT**
6'' LAMA stabilizing valve completely equipped for ITS	**VSL6INT**
8'' LAMA stabilizing valve completely equipped for ITS	**VSL8INT**
10'' LAMA stabilizing valve completely equipped for ITS	**VSL0INT**
12'' LAMA stabilizing valve completely equipped for ITS	**VS12INT**
14'' LAMA stabilizing valve completely equipped for ITS	**VS14INT**
Butterfly valve ''Sandwich'' 3''	**VMP3**
Butterfly valve''Vic'' 3''	**VM3V**
Butterfly valve ''Sandwich'' 4''	**VMP4**
Butterfly valve ''Sandwich'' 5''	**VMP5**
Butterfly valve ''Sandwich'' 6''	**VMP6**
Butterfly valve ''Sandwich'' 8''	**VMP8**
2'' VIC conection	**VIC2**
3'' VIC conection	**VIC3**
4'' VIC conection	**VIC4**
6'' VIC conection	**VIC6**
3'' Plastic VIC conection	**VIC3PLA**
4'' Plastic VIC conection	**VIC4PLA**
3''-2'' VIC conection	**VIC32**
4''-3'' VIC conection	**VIC43**
2'' Female thread BSP to 2'' VIC grooved (plastic) and joint ring	**RHV2**
3'' Female thread BSP to 3'' VIC grooved (Plastic) and joint ring	**RHV3**
3'' DIN 2546 flange to 3'' VIC grooved (Metal)	**B3EV**
4'' DIN 2546 flange to 4'' VIC grooved (Metal)	**B4EV**
3'' DIN 2546 flange to 3'' female thread BSP (Metal)	**BR3H**
3'' Flange other norms to 3'' female thread BSP (Metal)	**-**

Electric motor

Stabilizing valve completely

Butterfly valve

Vic connection

Vic plastic

Disc spare parts

Filter Code	FILTERING CARTRIDGE		CLOSING JOINTS			
	NEW		UPPER		LOWER	
	Code	Size (mm)	Code	Size (mm)	Code	Size (mm)
FV2D	**CA2R**	110 x 345	**JFMA**	175 x 90	**JFMB**	150 x 85
FV3D	**CA3R**	110 x 495	**JFMA**	175 x 90	**JFMB**	150 x 85
FY2D	**CA2R**	110 x 345	**JFMA**	175 x 90	**JFMB**	150 x 85
FY3D	**CA3R**	110 x 495	**JFMA**	175 x 90	**JFMB**	150 x 85
FD4D	**(2)CA3R**	110 x 495	**(2)JFMA**	175 x 90	**(2)JFPD**	120 x 80
FDS2	**CS2R**	110 x 345	**-**	-	**T103**	98 x 3
FVD3/FDS3	**CS3R**	110 x 500	**-**	-	**T103**	98 x 3
FDC2	**CRC2**	110 x 325	**T103**	98 x 3	**-**	-
FVA3/FDC3	**CRC3**	110 x 470	**T103**	98 x 3	**-**	-

Number of disc in an Autosenior filter	Size	Tower number	190µ	130µ	100µ	250µ	50µ	20µ
FAS3TR	3"	1	337	401	-	335	500	510
FA4P	4"	2	337	401	-	335	500	510

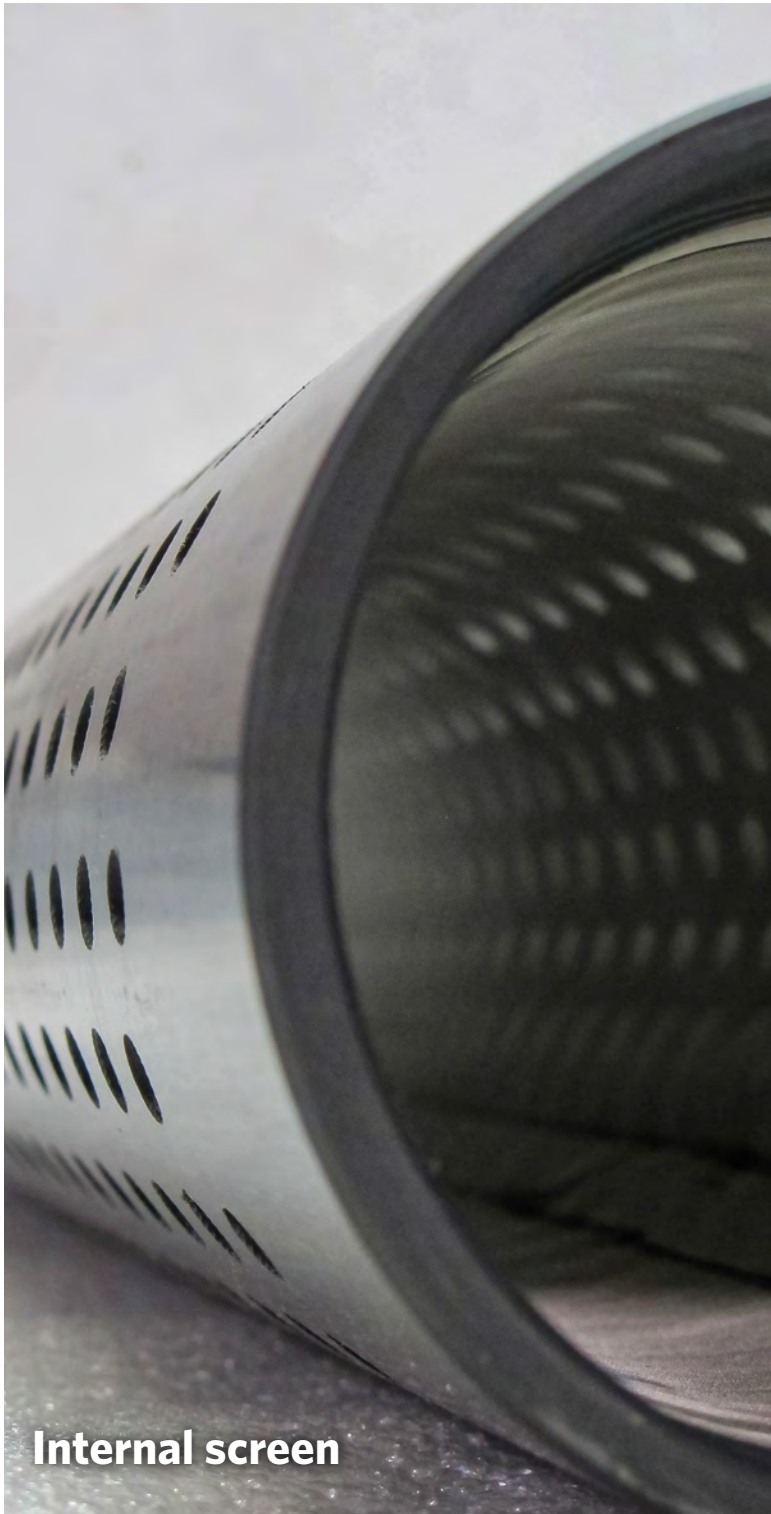
Description	Code
LAMA parallel green disc (disc opening 20 microns)	**ANVE**
LAMA parallel blue disc (disc opening 50 microns)	**ANAZ**
LAMA parallel orange disc (disc opening 100 microns)	**ANNA**
LAMA parallel yellow disc (disc opening 115 microns)	**ANAM**
LAMA parallel red disc (disc opening 190 microns)	**ANIL**
LAMA parallel brown disc (disc opening 250 microns)	**ANMA**

Sand spare parts

Ø Body (mm.)	CENTRAL COLLECTOR	VOLCANIC SAND CODE ARBA	CLOSING JOINTS			
	Code	Code	UPPER		LOWER	
			Code	Size (mm)	Code	Size (mm)
350 Collectors	**TEU1**	**30 Kg**	**J175**	175 x 145	**TML2** (blockage)	-
500 Collectors	**TE1½**	**100 Kg**	**J175**	175 x 145	**J175**	175 x 145
700 Collectors	**TEU2**	**200 Kg**	**J175**	175 x 145	**J175**	175 x 145
800 Collectors	**TE3C**	**300 Kg**	**J175**	175 x 145	**J175**	175 x 145
950 Collectors	**TEU3**	**500 Kg**	**J175**	175 x 145	**J175**	175 x 145
1.200 Collectors	**TEU4**	**800 Kg**	**J175**	175 x 145	**J175**	175 x 145
700 Mushrooms	**(21 units)**	**170 Kg**	**J175**	175 x 145	**J175**	175 x 145
950 Mushrooms	**(24 units)**	**420 Kg**	**J175**	175 x 145	**J175**	175 x 145
1.200 Mushrooms	**(24 units)**	**700 Kg**	**J175**	175 x 145	**J175**	175 x 145

Injected screen

External screen



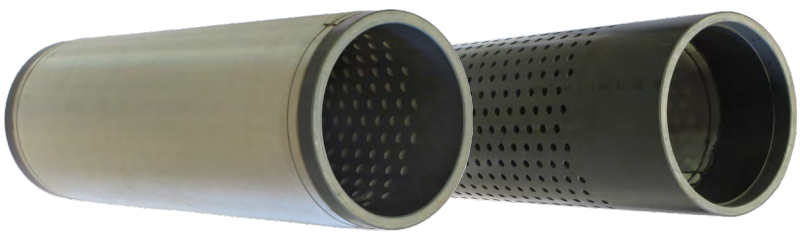
Internal screen

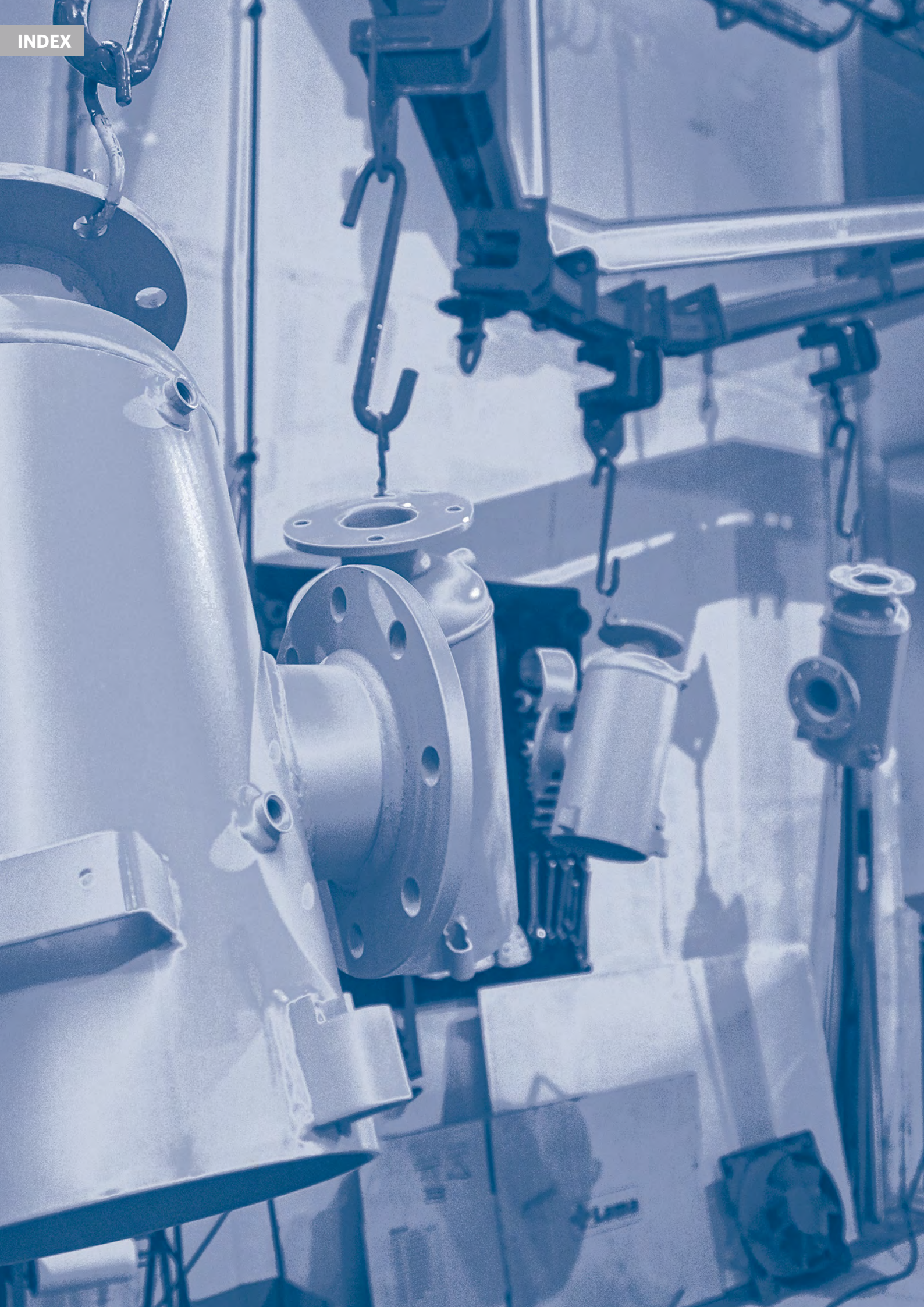
Screen spare parts

Filter Code	FILTERING CARTRIDGE			CLOSING JOINTS			
	NEW		SCREEN REPLACEMENT	COVER JOINT		INSIDE JOINT	
	Code	Size (mm)	Code	Code	Size (mm)	Code	Size (mm)
GL2V	CGL2*	110 x 344	MGL2	JFMA	175 x 90	JFMB	150 x 85
GL3V	CFM3*	110 x 494	MFM3	JFMA	175 x 90	JFMB	150 x 85
FMY2	CGL2*	110 X 344	MGL2	JFMA	175 x 90	JFMB	150 x 85
FMY3	CFM3*	110 x 494	MFM3	JFMA	175 x 90	JFMB	150 x 85
FM4B	CF4B*	160 x 488	MF4B	J4BA	230 x 125	J4BB	205 x 125
FMY4	CFM4	160 x 654	MFM4	JTLA	260 x 130	JTLB	235 x 125
FMY5	CFM5	160 x 654	MFM5	JTLA	260 x 130	JTLB	235 x 125
FMY6	CFM6	200 x 891	MFM6	JF6A	335 x 160	JF6B	215 x 165
FMY8	CFM8	315 x 1230	MFM8	J315/JA35	330 x 275	J315	330 x 275
FM10	CF10	315 x 1480	MF10	J315/JA35	330 x 275	J315	330 x 275
FML4	CFM5	160 x 654	MFM5	JTLA	130 x 260	JTLB	235 x 125
FML6	CFL6	200 x 1495	MFL6	JF6A	160 x 335	JF6B	215 x 165
FML8	CFL8	200 x 1745	MFL8	JF6A	160 x 335	JF6B	215 x 165
F10L	CL10	315 x 1730	ML10	J315/JA35	330 x 275	J315	330 x 275
F12L	CL12	315 x 1980	ML12	J315/JA35	330 x 275	J400	-
F16L	CL16	400 x 1874	ML16	JB24	-	T103	98 x 3
FMS2	CMS2*	110 x 348	MMS2	-	-	T103	98 x 3
FVM3/FMS3	CMS3*	110 x 501	MMS3	-	-	T103	98 x 3
A1MI	CA11/2	160 x 210	MA1½	JCA2	230 x 65	JFA2	210 x 127
A2CI	CAU2	160 x 280	MAU2	JCA2	230 x 65	JFA2	210 x 127
A3CI	CAU3	315 x 280	MAU3	JCA4	420 x 95	J315	330 x 275
A4CI	CAU4	315 x 463	MAU4	JCA4	420 x 95	J315	330 x 275
A5CI	CAU5	315 x 519	MAU5	JCA4	420 x 95	J315	330 x 275
A6CI	CAU6	315 x 668	MAU6	JCA4	420 x 95	J315	330 x 275
A8ETMBI	C8EG200	315 x 1039	MA8ET	JCA4	420 x 95	J315	330 x 275
A10ETBI	C10EG20	315 x 1095	M10C	JCA4	420 x 95	J315	330 x 275
A12ETBI	C12EG20	315 x 1299	M12A	JCA4	420 x 95	J315	330 x 275
FCY2	CFY2	110 x 344	MFY2	JFMA	175 x 90	JC3B	150 x deflector
FCY3	CFY3	110 x 494	MFY3	JFMA	175 x 90	JC3B	150 x deflector
FC4C	CF4C	160 x 488	MF4C	J4BA	230 x 125	J4CB	205 x deflector
FCY5	CFM5	160 x 654	MFM5	JTLA	260 x 130	JC4B	235 x deflector
FCY6	CFY6	200 x 891	MFY6	JF6A	335 x 160	JF6B	215 x 165
FCS2	CCS2	110 x 331	MCS2	T103	98 x 3	JFSA	120 x deflector
FVC3/FCS3	CCS3	110 x 480	MCS3	T103	98 x 3	JFSA	120 x deflector

Codes having an asterisk * mean that the filtration cartridge has an outside screen.

Cartridge section	Ø 282	135 mm	0,190 mm screen	**T28P135**
Cartridge section	Ø 144	176 mm	0,190 mm screen	**T14P176**
Cartridge section	Ø 282	135 mm	0,130 mm screen	**T28P13R**
Cartridge section	Ø 144	176 mm	0,130 mm screen	**T14P17R**





Sales Conditions

ORDERS

All orders must be made in writing and signed by a duly accredited person, indicating the place of destination and means of transport for the goods. Orders can be anticipated by telephone and must be ratified in writing. The accepted orders will be subject to the terms and conditions of sale of **FERNANDO LAMA S.L.U.** and **LAMA SISTEMAS DE FILTRADO S.L.U.**
Orders must be placed by e-mail to the address:
lama@lama.es
If it is a new item, you must indicate the quantity and the code or trade name of it.
- If it is a spare material, in addition to the quantity and the code or trade name of the selected item, you must also indicate the lot number or the purchase invoice of the station for which the spare parts are intended.
- If it is an old equipment, we have the necessary spare parts and you can request them in writing in any of the ways mentioned above.

On our website you can find all descriptions and take apart of the equipment you need **www.lama.es**

Our goods are served under reservation of title until full payment of the debt according to Law 3/2004 of December 29.

SHIPPING

Unanticipated freight and costs (packaging, sea and air shipments) are under the **responsibility and risk of the buyer**; as well as the import documentation in the countries of destination and the extra documents required by the banks.

The **goods always travel at the risk of the buyer**, and the insurance is at the buyer's expense. The company considers the goods to be ready for dispatch correctly packed and placed on the truck, at the factory. Please check the goods received. In the event of any incident, please leave a written record on the agency's delivery note. Any damage produced during transport must be claimed to the agency offering the service within a maximum period of 24 hours from receipt of the goods.

LAMA sells EX-WORKS.

RETURN

No returns or claims will be accepted after 15 days of receipt.

Returns will be charged with **10% of the invoiced amount for packaging costs** and must come with their original packaging in perfect condition.
The use of the products for aims and pressures different from the recommended ones, will exempt to **FERNANDO LAMA, S.L.U.** and **LAMA SISTEMAS DE FILTRADO, S.L.U.**, of any responsibility.

Payment

CASH

Those orders paid to **LAMA SISTEMAS DE FILTRADO S.L.U. or FERNANDO LAMA S.L.U.,** before the expedition of the material, are considered cash sales.

DEFERRED PAYMENT

Applicable only to distributors who have met the company's business requirements. Payment will be made, at the latest, **60 days after the invoice date** (Law 15/2010 of July 5th), direct debited, accepted by bank transfer and guaranteed by the insurance company.

The method of payment by confirming will lead to an increase in financial expenses of **2.5%.**

The **first order** (new customer) **will be made in cash**.
The materials remain the property of the manufacturer until **full payment is made.**
Orders will be accepted and invoiced at the prices in force on the **date of dispatch**.
FERNANDO LAMA S.L.U. or **LAMA SISTEMAS DE FILTRADO S.L.U.** can **change the prices without notifying the customer.**
The expressed prices in the price list do not include taxes.
In the event of non-payment, **interest on arrears** and other costs incurred **shall be borne by the purchaser.**
The invoice will be in **euros (€)**.

Lama
Sistemas de filtrado / Filtration systems

IMPORTANT WARNING: the price tariff for the current fiscal year 2023, that is published herein, is merely informative, and is an estimation, so it could undergo changes throughout the year due to possible changes in the price of raw materials. The company is neither subject to nor obliged to maintain the prices indicated in the tariff, nor to publish any potential variation thereof. The version of the website https://lama.es/distribuidores-lama is the current and updated version.

Lama
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