## FUNDAMENTALS OF OPERATION

SERVICE
The water enters the filter $(I \mathbb{N})$, then crosses a prefiltration chamber (1) from out to in and then through the fine secondary filter (3), from in to out. The prefilter prevents passage of larger suspended matter in order to protect the cleaning components in the second stage.The water is filtered to the required degree in the second stage before passing to service (4) Filtration in the second stage is effected by a polyester sleeve of the desired micron rating , fitted over an internal support mesh.

SERVICE

| Valve (5) | Closed |
| :--- | :--- |
| Motor (6) | Off |



## SELF CLEANING CYCLE

The deposition of suspended particles on the filter sleeve impedes water flow across it and hence causes a pressure differential $(\Delta P)$ across the filter sleeve. The self cleaning cycle is initiated when the pressure differential reaches a pre-set value, adjustable between 0.3 and 1 bar. A signal:

- opens the drain valve (5)
- starts the electric motor (6) which drives the rotation of the suction nozzle shaft

The particles on the internal surface of the sleeve are removed through the suction nozzles and discharged through the drain valve. The suction effect is created by opening the discharge valve and the cleaning cycle has a duration of 15 secs. The unit continues to supply water to service during the cleaning cycle

CLEANING


## CONTROLLER

A control panel mounted either on the body or separate from the unit, controls the cleaning cycle on receipt of a signal from the pressure differential switch or by manual initiation. The control panel has an alarm fitted to indicate malfunction of the cleaning cycle. The cleaning cycle may be activated manually in the control panel.



DIFFERENTIAL PRESSURE GAUGE 92

The FILBLUE 3000 automatic selfcleaning filter is designed to remove all suspended solids from surface waters (rivers, lakes and seawater), well water and waste water. Recommended applications include:-

| - Prefiltration for ultrafiltration (UF) plants | - Process water | - Irrigation |
| :--- | :--- | :--- |
| - Prefiltration for reverse osmosis (RO) plants | - Evaporative cooling towers | - Aquaculture |
| - Prefiltration for water treatment plants | - Heat exchangers | - Protection of spray nozzles |


| TECHNICAL FEATURES | $\begin{aligned} & \text { FILBLUE } \\ & 300080-15 \end{aligned}$ | $\begin{aligned} & \text { FILBLUE } \\ & 3000100-30 \end{aligned}$ | $\begin{aligned} & \text { FILBLUE } \\ & 3000150-45 \end{aligned}$ | $\begin{aligned} & \text { FILBLUE } \\ & 3000200-60 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Code | F3000316080 | F3000316100 | F3000316150 | F3000316200 |
| Surface area $\mathrm{cm}^{2}$ | 1500 | 3000 | 4500 | 6000 |
| Connections IN/OUT | DN80 | DN100 | DN150 | DN200 |
| Drain | D50 mm | D50 mm | D50 mm | D50 mm |
| Cleaning feed | D25 mm | D25 mm | D25 mm | D25 mm |
| Flow rate at 3 Bar | 1,2 | 2,4 | 3,6 | 4,8 |
| Cleaning Sec. | 80 | 80 | 90 | 120 |
| Pressure min-max Bar | 0,5-10 16 Bar (On request) |  |  |  |
| Temperature max - ${ }^{\circ} \mathrm{C}$ | 60 | 60 | 60 | 60 |
| pH min-max | 5-8 | 5-8 | 5-8 | 5-8 |
| Electric power Volt | 38050 Hz (Other voltages available on request) |  |  |  |
| Power Watt | 180 | 180 | 180 | 180 |
| Solenoid valve Volt/Watt | 24 AC/6 | 24 AC/6 | 24 AC/6 | 24 AC/6 |
| Air pressure Bar | 2-8 (Hydraulic supply on request) |  |  |  |
| Max diam. inlet particles mm | 5 | 5 | 5 | 5 |
| Flow rate*: |  |  |  |  |
| $300 \mu \mathrm{~m}$ | 80 | 130 | 200 | 300 |
| $200 \mu \mathrm{~m}$ | 80 | 130 | 200 | 300 |
| $125 \mu \mathrm{~m}$ (standard) | 80 | 130 | 200 | 300 |
| $80 \mu \mathrm{~m}$ | 72 | 117 | 180 | 270 |
| $50 \mu \mathrm{~m}$ | 67 | 110 | 169 | 254 |
| $25 \mu \mathrm{~m}$ | 39 | 63 | 97 | 146 |
| Size**: |  |  |  |  |
| A (mm) | 1245 | 1490 | 1735 | 1980 |
| B (mm) | 580 | 580 | 600 | 600 |
| $C$ (mm) | 400 | 400 | 400 | 400 |
| D (mm) | 345 | 460 | 585 | 700 |
| E (mm) | 250 | 370 | 495 | 615 |
| F(mm)* Cartridge Extraction | 700 | 900 | 1150 | 1400 |
| Weight kg | 38 | 42 | 50 | 62 |
| Packaging***: |  |  |  |  |
| G (mm) | 1310 | 1555 | 1800 | 2050 |
| H (mm) | 470 | 470 | 470 | 470 |
| 1 (mm) | 600 | 600 | 600 | 600 |
| Weight (kg) | 44 | 49 | 56 | 70 |


| Component: |  |
| :---: | :---: |
| Body | AISI 316 decapped, MIG welding. Upon request Duplex (SAF2205) |
| End cap | AISI 316. Upon request Duplex (SAF2205) |
| Flange connections | AISI 316. PN10 UNI2277 |
| Thread connections | GAS thread UNI338-66 |
| Prefilter | PVC |
| Sleeve internal support | PVC |
| Filtration sleeve | Polyester - filtration gradients available: 300, 200, 125, 80, 50, 25 micron |
| Inner protective casing | PP |
| Spray nozzle | PVDF |
| Nozzle support | PVC |
| Nozzles support pipe | PVC |
| Internal seals | NBR |
| Reduction gear | Aluminium and carbon steel |
| Electric motor | Painted Aluminium |
| Pneumatic solenoid valve | Aluminium five ways |
| Panel control | ABS IP65 with frontal screen |
| Differential pressure gauge | Aluminium with AISI 316 parts in contact with water |
| Drain valve | PVC ball valve - Female glued - With pneumatic attuator double effect |
| Wash water inlet valve | PVC ball valve - Female glued - With pneumatic attuator double effect |
| Inlet valve | Cast iron butterfly valve - Lens in AISI 316 - With pneumatic attuator double effect |
| Outlet valve | AISI 316 one way valve with spring |
| Vent | PP automatic |
| Pressure gauges | INOX - Diameter 2"1/2-0-10 Bar |
| Accessories (Plugs and reducers) | PP - PVC |

* Max clean water flow rate in $\mathrm{m}^{3} / \mathrm{h}$ at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar.
** Measurements may be changed by the manufacturer without notice.
*** The packaging may be changed by the manufacturer without notice.


FUNDAMENTALS OF OPERATION

## SERVICE

The water enters the filter (IN), then crosses a inlet chamber (9) from out to in and then through the fine secondary filter (2), from in to out. The prefilter prevents passage of larger suspended matter in order to protect the cleaning components in the second stage.The water is filtered to the required degree in the second stage before passing to service (3). Filtration in the second stage is effected by a polyester sleeve of the desired micron rating, fitted over an internal support mesh.

SERVICE

| Valve (1) | Open |
| :--- | :--- |
| Valve (3) | Open |
| Valve (4) | Closed |
| Valve (5) | Closed |
| Motor $(7)$ | Off |



## SELF CLEANING CYCLE

The deposition of suspended particles on the filter sleeve impedes water flow across it and hence causes a pressure differential (DP) across the filter sleeve. The self cleaning cycle is initiated when the pressure differential reaches a pre-set value, adjustable between 0.3 and 1 bar. The sleeve is washed by a series of pressurised water jets in a three stage cycle:-

- The inlet valve (1) closes and the non return valve (3) prevents a back flow
- The drain valve (4) opens and the filter empties
- The wash water inlet valve (5) opens and the electric motor (7) initiates the rotation of spray nozzles directed onto the polyester filter sleeve.
The cleaning cycle requires a supply of clean water (preferably filtered) at a minimum pressure of 2 bar. The cleaning cycle takes between 80-120 seconds.
CLEANING

| Valve (1) | Closed |
| :--- | :--- |
| Valve (3) | Closed |
| Valve (4) | Open |
| Valve (5) | Open |
| Motor (7) | On |


SEDIMENT CARTRIDGES


CARTRIDGES FR-N QUALITY COMPARISON TEST

Under exact same working conditions, AQUA Cartridge clearly shows it's very high efficient filtering capacity against the evident "breakdown" of the competitor.

O.RING and SEALS:

| Buna N | B | Silicone | S |
| :--- | :--- | :--- | :--- |
| Viton | V | Teflon | T |
| Neoprene | N | Vinyl <br> Plastisol | VP |
| PVC | P |  |  |

Cartridges

Our depth cartridges FR-N Series are designed to obtain a high efficiency and filtration of various liquids having impurity. Using only 100\% pure polypropylene they are manufactured through state of the art technology. They are generally used in applications that require extremely high quality filtration. During the manufacturing process, the polypropylene is mixed with compressed hot air. Then it is stratified on a rigid polypropylene core through a continues and constant rotating movement. This process infuses and intersects the polypropylene fibres amongst themselves. This creates the so called "Depth Cartridge" guaranteeing a uniform filtration along all the surface of the cartridge.

The Polypropylene fibres used are always and only of first choice which processed at high temperatures welds them together eliminating any possibility of losing particles or residuals. The range vary from 1 to 90 micron and standard lengths are 9 " $3 / 4$ to 40 ". The cartridges are made up as one whole piece no matter what length.

## PECULIAR CHARACTERISTICS:

- High Depth Filtration
- Constant filtration on all surface
- High Yield
- High resistance to compression
- High Stability
- Lower pressure drop
- No residual or particle loss


## FILTER EFFICIENCY:

The FR-N Cartridges are fully tested to achieve at least 95\% filtration efficiency. This means that a 10 micron FR-N Cartridge will filter $95 \%$ of particles having a diameter of 10 micron or more. The extraordinary filtration capability of the FR-N cartridges is obtained thanks to its wide filtering surface and compactness which is distributed along all the surface of the cartridge itself. The cartridges need the be changed when a loss in pressure drop is detected or in any case when the specific filtering application requires it.

| FLOW RATE (lt/h) |  |  |  |  |  | 40" |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MICRON |  | 9"3/4 | 20" | 23" | 30" |  |
| 1 | FRN | 800 | 1400 |  | 2000 | 2600 |
| 5 | FRN | 1500 | 2700 |  | 3800 | 4800 |
| 10 | FRN | 2000 | 3600 |  | 5000 | 6400 |
| 20 | FRN | 2500 | 4500 |  | 6200 | 8000 |
| 30 | FRN | 2600 | 4600 |  | 6500 | 8000 |
| 50 | FRN | 2600 | 4600 |  | 6500 | 8000 |
| 90 | FRN | 2700 | 4800 |  | 6800 | 8000 |
| 1-10 | FRN-DG | 900 | 1500 |  | 2100 | 2700 |
| 5-20 | FRN-DG | 1600 | 2800 |  | 3900 | 4900 |
| 20-50 | FRN-DG | 2600 | 4600 |  | 6300 | 8100 |
| 1 | FRN-BIG | 800 | 1400 |  |  |  |
| 5 | FRN-BIG | 1500 | 2700 |  |  |  |
| 20 | FRN-BIG | 2500 | 4500 |  |  |  |
| 50 | FRN-BIG | 2600 | 4600 |  |  |  |
| 1-10 | FRN-BIG-DG | 800 | 1600 |  | 2400 |  |
| 5-20 | FRN-BIG-DG | 1800 | 3200 |  | 4800 |  |
| 20-50 | FRN-BIG-DG | 2700 | 4800 |  | 6000 |  |
| 1-10 | FON |  |  | 8000 |  | 16000 |
| 5-20 | FON |  |  | 15000 |  | 30000 |
| 20-50 | FON |  |  | 20000 |  | 40000 |
| 50-90 | FON |  |  | 25000 |  | 50000 |
| 1 | CL |  | 6000 |  |  | 12000 |
| 5 | CL |  | 12000 |  |  | 24000 |
| 10 | CL |  | 15000 |  |  | 30000 |
| 20 | CL |  | 18000 |  |  | 36000 |
| 40 | CL |  | 25000 |  |  | 50000 |
| 70 | CL |  | 25000 |  |  | 50000 |
| 90 | CL |  | 25000 |  |  | 50000 |
| 5-20 | CL |  | 13000 |  |  | 26000 |
| 20-50 | CL |  | 20000 |  |  | 40000 |
| 1-10 | FR-N-FIP |  |  |  |  | 16000 |
| 5-20 | FR-N-FIP |  |  |  |  | 30000 |
| 20-50 | FR-N-FIP |  |  |  |  | 40000 |
| 50-90 | FR-N-FIP |  |  |  |  | 50000 |

## APPLICATIONS:

The FR-N cartridges can be used as end-
line filtration or as pre-filtration.
Applications:
Water treatment
Electronic/Nuclear
Biotechnology/Fine chemicals
Food/Beverage
Coatings/Resins
General Industrial
Pharmaceutical/Cosmetics
Bulk chemicals/Petrochemicals
Galvanic




TECHNICAL FEATURES

| TECHICAL FEATURES | FR-N | FR-N-DG |
| :---: | :---: | :---: |
| Raw material | 100\% PP | 100\% PP |
| Core | 100\% PP | 100\% PP |
| Outer cage | - | - |
| End caps | DOE, 3, 8, 7F, 7 | DOE, 3, 8, 7F, 7 |
| O-Ring / Gasket | - | - |
| Length | 9"3/4-10"-20"-30"-40" | 9"3/4-10"-20"-30"-40" |
| Inner diameter | 28 mm | 28 mm |
| Outer diameter | 63 mm | 68 mm |
| Micron rating | 1/3/5/10/20/30/50/90 | 1-10/5-20/20-50 |
| Efficiency | 95\% | 95\% |
| Pressure |  |  |
| Max working pressure Max differential pressure | 6 bar 0,8 bar | 6 bar <br> 0,8 bar |
| Temperature |  |  |
| Max working temperature | $80^{\circ} \mathrm{C}$ | $80^{\circ} \mathrm{C}$ |

Note: Max flow rate at $20^{\circ} \mathrm{C}$ and differential pressure $0,15 \mathrm{bar}$

MELT BLOWN CARTRIDGES series FR-N-DG

| COD | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :--- | ---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A424025D | $1-10$ | $9 " 3 / 4$ | 75 | 12,00 | 0,093 |
| A424027D | $5-20$ | $9^{\prime \prime} 3 / 4$ | 75 | 12,00 | 0,093 |
| A424029D | $20-50$ | $9^{\prime \prime} 3 / 4$ | 75 | 12,00 | 0,093 |
| A424033D | $1-10$ | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A424035D | $5-20$ | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A424037D | $20-50$ | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A424041D | $1-10$ | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A424043D | $5-20$ | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A424045D | $20-50$ | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A424049D | $1-10$ | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A424051D | $5-20$ | $30 "$ | 15 | 7,50 | 0,061 |
| A424053D | $20-50$ | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A424057D | $1-10$ | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |
| A424059D | $5-20$ | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |
| A424061D | $20-50$ | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |

MELT BLOWN CARTRIDGES series FR-N

| COD | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4240250 | 1 | 9"3/4 | 75 | 12,00 | 0,093 |
| A4240260 | 3 | 9"3/4 | 75 | 12,00 | 0,093 |
| A4240270 | 5 | 9"3/4 | 75 | 12,00 | 0,093 |
| A4240280 | 10 | 9"3/4 | 75 | 12,00 | 0,093 |
| A4240290 | 20 | 9"3/4 | 75 | 12,00 | 0,093 |
| A4240300 | 30 | 9"3/4 | 75 | 12,00 | 0,093 |
| A4240310 | 50 | 9"3/4 | 75 | 14,00 | 0,093 |
| A4240320 | 90 | 9"3/4 | 75 | 14,00 | 0,093 |
| A4240330 | 1 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4240340 | 3 | 10" | 75 | 12,00 | 0,093 |
| A4240350 | 5 | 10" | 75 | 12,00 | 0,093 |
| A4240360 | 10 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4240370 | 20 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4240380 | 30 | 10" | 75 | 12,00 | 0,093 |
| A4240390 | 50 | 10" | 75 | 14,00 | 0,093 |
| A4240400 | 90 | 10" | 75 | 14,00 | 0,093 |
| A4240410 | 1 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4240420 | 3 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4240430 | 5 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4240440 | 10 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4240450 | 20 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4240460 | 30 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4240470 | 50 | $20^{\prime \prime}$ | 30 | 14,00 | 0,093 |
| A4240480 | 90 | $20^{\prime \prime}$ | 30 | 14,00 | 0,093 |
| A4240490 | 1 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4240500 | 3 | 30" | 15 | 7,50 | 0,061 |
| A4240510 | 5 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4240520 | 10 | 30" | 15 | 7,50 | 0,061 |
| A4240530 | 20 | 30" | 15 | 7,50 | 0,061 |
| A4240540 | 30 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4240550 | 50 | $30^{\prime \prime}$ | 15 | 9,00 | 0,061 |
| A4240560 | 90 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4240570 | 1 | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |
| A4240580 | 3 | 40" | 15 | 11,00 | 0,076 |
| A4240590 | 5 | 40" | 15 | 11,00 | 0,076 |
| A4240600 | 10 | 40" | 15 | 11,00 | 0,076 |
| A4240610 | 20 | 40" | 15 | 11,00 | 0,076 |
| A4240620 | 30 | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |
| A4240630 | 50 | $40^{\prime \prime}$ | 15 | 14,50 | 0,076 |
| A4240640 | 90 | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |


|  | TECHNICAL FEATURES | FR-N BIG | FR-N BIG - DG |
| :---: | :---: | :---: | :---: |
| $\Gamma$ | Raw material | 100\% PP | 100\% PP |
|  | Core | 100\% PP | 100\% PP |
|  | Outer cage | - | - |
| $\bigcirc$ | End caps | DOE | DOE |
|  | O-Ring / Gasket | - | - |
|  | Length | 9"3/4-20" | 9"3/4-20"-30" |
|  | Inner diameter | 28 mm | $28 \mathrm{~mm}-38 \mathrm{~mm}$ |
|  | Outer diameter | 114 mm | 120 mm |
|  | Micron rating | 1/5/20/50 | 1-10/5-20/20-50 |
|  | Efficiency | 95\% | 95\% |
| Pressure | Pressure |  |  |
|  | Max working pressure Max differential pressure | $6 \text { bar }$ $0,8 \text { bar }$ | $\begin{aligned} & 6 \text { bar } \\ & 0,8 \text { bar } \end{aligned}$ |
|  | Temperature |  |  |
|  | Max working temperature | $80^{\circ} \mathrm{C}$ | $80^{\circ} \mathrm{C}$ |
|  | Note: Max flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar |  |  |
| $\square$ |  |  |  |

MELT BLOWN CARTRIDGES series FR-N AQUA BIG

| COD | MICRON | LENGTH | QUANTITY | Kg | V0LUME |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4270100 | 1 | 9"3/4 | 8 | 4,50 | 0,036 |
| A4270120 | 5 | 9"3/4 | 8 | 4,50 | 0,036 |
| A4270140 | 20 | 9"3/4 | 8 | 4,50 | 0,036 |
| A4270150 | 50 | 9"3/4 | 8 | 4,50 | 0,036 |
| A4270110 | 1 | $20^{\prime \prime}$ | 4 | 3,60 | 0,036 |
| A4270200 | 5 | $20^{\prime \prime}$ | 4 | 3,60 | 0,036 |
| A4270220 | 20 | $20^{\prime \prime}$ | 4 | 3,60 | 0,036 |
| A4270230 | 50 | $20 "$ | 4 | 3,60 | 0,036 |
| A427010E | 1-10 | 9"3/4 | 8 | 6,00 | 0,036 |
| A427012E | 5-20 | 9"3/4 | 8 | 4,50 | 0,036 |
| A427014E | 20-50 | 9"3/4 | 8 | 4,50 | 0,036 |
| A427011E | 1-10 | $20^{\prime \prime}$ | 4 | 5,00 | 0,036 |
| A427020E | 5-20 | $20 "$ | 4 | 3,60 | 0,036 |
| A427022E | 20-50 | $20 "$ | 4 | 3,60 | 0,036 |
| A427009S | 1-10 | $30^{\prime \prime} ø 38 \mathrm{~mm}$ | 4 | 7,50 | 0,054 |
| A427005S | 5-20 | $30^{\prime \prime} \emptyset 38 \mathrm{~mm}$ | 4 | 5,40 | 0,054 |
| A427006S | 20-50 | $30^{\prime \prime} ø 38 \mathrm{~mm}$ | 4 | 5,40 | 0,054 |

MELT BLOWN CARTRIDGES series FR-N AQUA BIG DG

| COD | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A427010E | $1-10$ | $9 " 3 / 4$ | 8 | 6,00 | 0,036 |
| A427012E | $5-20$ | $9 " 3 / 4$ | 8 | 4,50 | 0,036 |
| A427014E | $20-50$ | $9 " 3 / 4$ | 8 | 4,50 | 0,036 |
|  |  |  | 4 | 5,00 | 0,036 |
| A427011E | $1-10$ | $20 "$ | 4 | 3,60 | 0,036 |
| A427020E | $5-20$ | $20^{\prime \prime}$ | 4 | 3,60 | 0,036 |
| A427022E | $20-50$ | $20^{\prime \prime}$ |  |  |  |
|  |  |  | 4 | 7,50 | 0,054 |
| A427009S | $1-10$ | $30 " \varnothing 38 \mathrm{~mm}$ | 4 | 5,40 | 0,054 |
| A427005S | $5-20$ | $30 " \varnothing 38 \mathrm{~mm}$ | 4 | 5,40 | 0,054 |
| A427006S | $20-50$ | $30 " \varnothing 38 \mathrm{~mm}$ |  |  |  |



MELT BLOWN CARTRIDGES series FON for BIG ONE

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4310060 |  |  | box | box | package |
| A4310030 | $5-20$ | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
| A4310040 | $20-50$ | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
| A4310080 | $50-90$ | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
|  |  | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
| A4310050 | $1-10$ | $40^{\prime \prime}$ |  |  |  |
| A4310010 | $5-20$ | $40^{\prime \prime}$ | 1 | 3,60 | 0,033 |
| A4310020 | $20-50$ | $40^{\prime \prime}$ | 1 | 3,60 | 0,033 |
| A4310070 | $50-90$ | $40^{\prime \prime}$ | 1 | 3,60 | 0,033 |

MELT BLOWN CARTRIDGES series CL

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4290210 |  |  | box | box | package |
| A4290220 | 5 | $20^{\prime \prime}$ | 8 | 7,80 | 0,11 |
| A4290240 | 20 | $20^{\prime \prime}$ | 8 | 7,80 | 0,11 |
| A4290010 | 1 | $20^{\prime \prime}$ | 8 | 7,80 | 0,11 |
| A4290030 | 5 | $40^{\prime \prime}$ | 4 | 7,80 | 0,11 |
| A4290050 | 20 | $40^{\prime \prime}$ | 4 | 7,80 | 0,11 |
|  | $40^{\prime \prime}$ | 4 | 7,80 | 0,11 |  |
| A4290110 | $5-20$ | $40^{\prime \prime}$ | 4 | 7,80 | 0,11 |
| A4290100 | $20-50$ | $40^{\prime \prime}$ | 4 | 7,80 | 0,11 |

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FR-N FIP
TECHNICAL FEATURES
$100 \%$ PP

| Raw material | $100 \%$ PP |
| :--- | :--- |
| Core | $100 \%$ PP |
| Outer cage | - |
| End caps | FIP |
| O.Ring/Gasket | B, S, V. |
| Lenght | $40 "$ |
| Inner diameter | 76 mm |
| Outer diameter | $147,5 \mathrm{~mm}$ |
| Micron rating | $1-10,5-20,20-50,50-90$ DUAL GRADIENT |
| Efficiency | $95 \%$ |

Pressure


## Applications

| Water treatment | Sea water and brackish water |
| :--- | :--- |

Other applications only after written approval of the manufacturer
Electronic/Nuclear - Biotechnology/Fine chemicals - Food/Beverage - Coatings/Resins
General Industrial - Pharmaceutical/Cosmetics - Bulk chemicals/Petrochemicals - Galvanic

CARTRIDGES series PP MELT-BLOWN FRN-FIP DG

| COD | MICRON | LENGTH | QUANTITY | Kg | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | $\mathrm{I} / \mathrm{h}^{*}$ |
| A4310090 | $1-10$ | $40^{\prime \prime}$ | 1 | 3,60 | 16000 |
| A4310100 | $5-20$ | $40^{\prime \prime}$ | 1 | 3,60 | 30000 |
| A4310110 | $20-50$ | $40^{\prime \prime}$ | 1 | 3,60 | 40000 |
| A4310120 | $50-90$ | $40^{\prime \prime}$ | 1 | 3,60 | 50000 |



## INTERNAL STRUCTURE

 OF THE CARTDRIGE

## FR-A LINE

Our depth cartridges series FRA are the final result of the deep knowledge of polypropylene raw material characteristics combined with innovating technologies and cartridge manufacturing process know-how.

FRA filter cartridges have been specially designed to stop impurity particles from filtered liquids, with extremely high efficiency at low pressure drop and high absorption.

FRA filter cartridges are made of polypropylene at the melt blown technology. The melted polymer is blown in the stream of hot air and forms thin micron diameters fibers. These, still hot fibres, create a micro-bridges at all points of contacts, which combine while further cooling down. Such three-dimensional, rigid nets of fibers forms a filter layer, with improved resistance against squashing. The fibre diameter and a porosity of the filter layer are controlled in production process, to obtain so-called "absolute" i.e. 99.98\% efficiency cartridges.


Maintenance of adequate space between fibres enables easy flow of the liquid and ensures high elimination of impurities. The production process is patented.

FRA filter cartridges consist of two different fiber layers, winded on a rigid polypropylene core. The outer filter layer acts as a pre-filter and the inner one, called final filter, provides the absolute removal of particles of the diameter depending on the type of the cartridge.

## Each filter layer

consists of a few crossing sublayers and each sublayer consists of dozens of individual layers of the fibre. The porosity of the both layers changes in such a way, to minimize the pressure drop and maximize cartridge dirt holding capacity.

## ADVANTAGES

- FRA ensure filter efficiency 99,98\% for the particles of the diameter specified with the cartridge code (higher for bigger particles).
- Thanks to the high porosity and exceptionally compact construction FRA provides the low pressure drop and the high capacity of dirt holding, stands high difference of the pressure and do not release particles already captured
- Single fibers or its pieces do not leave the FRA during operation due to mutual connections of the fibers.
- High chemical resistance of the polypropylene fibers enables contact with almost all kind of the liquid media.
- High quality of used polypropylene (FDA certificate) permits for contact with food and also application in pharmacy.
- No contact with oil and silicone during production process enables using FRA for varnish- and paint production.
- FRA is perfectly suitable for clarifying of big streams of liquid, with relatively low impurities concentration. They are advised when complete removal of all particles of given diameter is required PRE-FILTER FINAL FILTER.

PRESSURE DROP [bar]


FLOW RATE (It/h)

| MICRON |  | 9"3/4 | 20" | 30" | 40" |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0,5 | FRA | 250 | 400 | 600 | 800 |
| 1 | FRA | 300 | 550 | 800 | 1000 |
| 3 | FRA | 400 | 700 | 1000 | 1300 |
| 5 | FRA | 600 | 1100 | 1600 | 2000 |
| 10 | FRA | 800 | 1500 | 2200 | 4000 |
| 20 | FRA | 1000 | 1900 | 2800 | 4000 |
| 50 | FRA | 1200 | 2300 | 3100 | 4000 |
| 90 | FRA | 1400 | 2600 | 3300 | 4000 | FR-A line


| TECHNICAL FEATURES | FR-A |
| :--- | :--- |
| Raw material | $100 \%$ PP |
| Core | $100 \%$ PP |
| Outer cage | - |
| End caps | DOE, 3, 8, 7F, 7 |
| O.Ring/Gasket | PP |
| Lenght | $9 " 3 / 4-10 "-20^{\prime \prime}-30 "-40 "$ |
| Inner diameter | 28 mm |
| Outer diameter | 64 mm |
| Micron rating | $0,5,1,5,10,20,50,70,90,120,150$ |
| Efficiency | $99,98 \%$ |
| Pressure | 6 bar |
| Max working pressure | $0,8 \mathrm{bar}$ |
| Max differential pressure | 80 |
| Temperature | $80^{\circ} \mathrm{C}$ |
| Max working temperature |  |

Note: Max water flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar

| COD | MICRON | LENGTH | QUANTITY | Kg | V0LUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4250300 | 0,5 | $9 " 3 / 4$ | 75 | 12,00 | 0,093 |
| A4250310 | 1 | $9^{\prime \prime} / 4$ | 75 | 12,00 | 0,093 |
| A4250330 | 5 | $9 " 3 / 4$ | 75 | 12,00 | 0,093 |
| A4250340 | 10 | $9 " 3 / 4$ | 75 | 12,00 | 0,093 |
| A4250350 | 20 | $9 " 3 / 4$ | 75 | 12,00 | 0,093 |
| A4250370 | 0,5 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4250380 | 1 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4250400 | 5 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4250410 | 10 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4250430 | 20 | $10^{\prime \prime}$ | 75 | 12,00 | 0,093 |
| A4250460 | 0,5 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4250470 | 1 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4250490 | 5 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4250480 | 10 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4250500 | 20 | $20^{\prime \prime}$ | 30 | 12,70 | 0,093 |
| A4250550 | 0,5 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4250560 | 1 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4250530 | 5 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4250540 | 10 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4250580 | 20 | $30^{\prime \prime}$ | 15 | 7,50 | 0,061 |
| A4250640 | 0,5 | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |
| A4250650 | 1 | $40^{\prime \prime}$ | 15 | 11,00 | 0,076 |
| A4250670 | 5 | $40^{\prime \prime}$ | 11,00 | 0,076 |  |
| A4250680 | 10 | $40^{\prime \prime}$ | 11,00 | 0,076 |  |
| A4250740 | 20 | $40^{\prime \prime}$ | 15 | 0,076 |  |

Note: on request the following micron rating are available: 50, 70, 90, 120, 150.
On request Absolute cartridges for AQUA BIG and BIG ONE housings are available, as well as Absolute Coreless $20^{\prime \prime}$ and $40^{\prime \prime}$ cartridges.

SEDIMENT CARTRIDGES

Our Polypropylene wound cartridges are part of the depth and deforming cartridge series.
They are manufactured using only $100 \%$ pure non-toxic polypropylene yarn. This series offers an excellent ratio between cost/quality, even though usually referred to as "economic-type" they are manufactured so as to guarantee a high nominal filtration level.
In this series we have 2 main types of Wound PP Cartridges

## Wound Cartridge Carded Wash

## - Oil residual 0,07\%

Because of its characteristics, this wash carded yarn is of superior quality. It is manufactured using only first choice raw materials and during the process of extrusion \&t twist it undergoes a wash treatment at very high temperatures eliminating oil residuals used beforehand of the manufacturing process itself. To increase its resistance, it is then carded and no further oils are added thus guaranteeing a completely non-toxic natural polypropylene yarn.

The yarn's appearance is uniform, homogenous and very strong. This will allow a very compact construction of the cartridge itself and through a precise pattern mounting, it will achieve remarkable increase in the filtration surface. Therefore as a consequence, an increase in cartridge life. All this to achieve a higher filtration efficiency at an excellent cost/quality ratio.

## Wound Cartridge Open-end Wash

## - Oil residual 0,2\%

This yarn is manufactured using machinery that allows a shorter production period and therefore a more economically priced product. The raw material used for this product is exactly the same as the Wash Carded type. The only difference is that it is not carded after the process of extrusion \& twist but simple manufactured around a BCF (by extrusion spun yarn) making it compact and uniform. Although less compact than the carded one, it still yields a satisfying filtration performance at lower costs. Amongst the inconveniences of this cartridge is that at the beginning of use
it creates a small amount of foam that after a short period will disappear. Even if the foam is non-toxic, in certain applications it could cause minor problems to the post-filtration unit. Therefore it is important to know were such cartridge will be applied to avoid any inconvenience.

The inside core of the filter is rigid and in Polypropylene which guarantees stability. The lengths range from 4" to 40 and the micron range from 1 to 100 .


Note: Max water flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar

WOUND PP CARTRIDGES series FA

| COD | QUANTITY | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | package |  |  | box | box | package |
| A4010250 | 2 | 1 | 9"3/4 | 72 | 19,20 | 0,077 |
| A4010260 | 2 | 3 | 9"3/4 | 72 | 14,90 | 0,077 |
| A4010270 | 2 | 5 | 9"3/4 | 72 | 19,20 | 0,077 |
| A4010280 | 2 | 10 | 9"3/4 | 72 | 14,90 | 0,077 |
| A4010290 | 2 | 20 | 9"3/4 | 72 | 13,60 | 0,077 |
| A4010300 | 2 | 30 | 9"3/4 | 72 | 13,60 | 0,077 |
| A4010310 | 2 | 50 | 9"3/4 | 72 | 13,60 | 0,077 |
| A4010320 | 2 | 100 | 9"3/4 | 72 | 13,60 | 0,077 |
| A4010330 | 2 | 1 | 10" | 72 | 19,60 | 0,077 |
| A4010340 | 2 | 3 | 10" | 72 | 19,60 | 0,077 |
| A4010350 | 2 | 5 | 10" | 72 | 15,30 | 0,077 |
| A4010360 | 2 | 10 | 10" | 72 | 15,30 | 0,077 |
| A4010370 | 2 | 20 | 10" | 72 | 13,50 | 0,077 |
| A4010380 | 2 | 30 | 10" | 72 | 13,50 | 0,077 |
| A4010390 | 2 | 50 | 10" | 72 | 13,50 | 0,077 |
| A4010400 | 2 | 100 | 10" | 72 | 13,50 | 0,077 |
| A4010410 | 1 | 1 | $20^{\prime \prime}$ | 36 | 16,30 | 0,077 |
| A4010420 | 1 | 3 | $20^{\prime \prime}$ | 36 | 16,30 | 0,077 |
| A4010430 | 1 | 5 | 20" | 36 | 14,40 | 0,077 |
| A4010440 | 1 | 10 | $20^{\prime \prime}$ | 36 | 14,40 | 0,077 |
| A4010450 | 1 | 20 | $20^{\prime \prime}$ | 36 | 13,20 | 0,077 |
| A4010460 | 1 | 30 | $20^{\prime \prime}$ | 36 | 13,20 | 0,077 |
| A4010470 | 1 | 50 | 20" | 36 | 13,20 | 0,077 |
| A4010480 | 1 | 100 | $20^{\prime \prime}$ | 36 | 12,30 | 0,077 |
| A4010490 | 1 | 1 | 30" | 20 | 13,30 | 0,088 |
| A4010500 | 1 | 3 | 30" | 20 | 13,30 | 0,088 |
| A4010510 | 1 | 5 | 30" | 20 | 12,00 | 0,088 |
| A4010520 | 1 | 10 | 30" | 20 | 12,00 | 0,088 |
| A4010530 | 1 | 20 | 30" | 20 | 10,60 | 0,088 |
| A4010540 | 1 | 30 | 30" | 20 | 10,60 | 0,088 |
| A4010550 | 1 | 50 | 30" | 20 | 10,60 | 0,088 |
| A4010560 | 1 | 100 | 30" | 20 | 10,20 | 0,088 |
| A4010570 | 1 | 1 | 40" | 20 | 19,10 | 1,150 |
| A4010580 | 1 | 3 | 40" | 20 | 19,10 | 1,150 |
| A4010590 | 1 | 5 | $40^{\prime \prime}$ | 20 | 17,80 | 1,150 |
| A4010600 | 1 | 10 | 40" | 20 | 17,80 | 1,150 |
| A4010610 | 1 | 20 | 40" | 20 | 17,00 | 1,150 |
| A4010620 | 1 | 30 | $40^{\prime \prime}$ | 20 | 17,00 | 1,150 |
| A4010630 | 1 | 50 | 40" | 20 | 17,00 | 1,150 |
| A4010640 | 1 | 100 | 40" | 20 | 16,50 | 1,150 |

WOUND PP CARTRIDGES series FA for 1 " $1 / 4-1$ " $1 / 2-2$ " inlets/outlets

| COD | QUANTITY | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | package |  |  | box | box | package |
| A4011450 | 2 | 5 | 7 " | 108 | 16,00 | 0,077 |
| A4011440 | 2 | 20 | 7 " | 108 | 14,30 | 0,077 |
| A4010680 | 2 | 100 | 7 " | 108 | 14,30 | 0,077 |
|  |  |  |  |  |  |  |
| A4010790 | 2 | 5 | $9 " 3 / 4$ | 72 | 14,90 | 0,077 |
| A4010690 | 2 | 20 | $9 " 3 / 4$ | 72 | 13,60 | 0,077 |
| A4011460 | 2 | 100 | $9 " 3 / 4$ | 72 | 13,60 | 0,077 |

WOUND PP CARTRIDGES series FA AQUA BIG

| COD | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4010780 | 1 | 9"3/4 | 18 | 15,40 | 0,077 |
| A4010650 | 5 | 9"3/4 | 18 | 14,60 | 0,077 |
| A4010770 | 10 | 9"3/4 | 18 | 14,60 | 0,077 |
| A4010660 | 20 | 9"3/4 | 18 | 14,60 | 0,077 |
| A4011400 | 50 | 9"3/4 | 18 | 12,40 | 0,077 |
| A4011200 | 100 | 9"3/4 | 18 | 12,40 | 0,077 |
| A4010900 | 1 | $20^{\prime \prime}$ | 9 | 17,60 | 0,077 |
| A4010700 | 5 | $20^{\prime \prime}$ | 9 | 16,70 | 0,077 |
| A4011410 | 10 | $20^{\prime \prime}$ | 9 | 16,70 | 0,077 |
| A4010710 | 20 | 20" | 9 | 16,70 | 0,077 |
| A4010890 | 50 | $20^{\prime \prime}$ | 9 | 13,50 | 0,077 |
| A4011140 | 100 | $20{ }^{\prime \prime}$ | 9 | 13,50 | 0,077 |
| A4011740 | 1 | 30" D. 38 mm | 9 | 26,40 | 0,088 |
| A4011750 | 5 | 30" D. 38 mm | 9 | 25,00 | 0,088 |
| A4011760 | 10 | 30" D. 38 mm | 9 | 25,00 | 0,088 |
| A4011770 | 20 | 30" D. 38 mm | 9 | 25,00 | 0,088 |
| A4011780 | 50 | 30" D. 38 mm | 9 | 20,20 | 0,088 |
| A4011790 | 100 | 30" D. 38 mm | 9 | 20,20 | 0,088 |

WOUND PP CARTRIDGES series FA BIG ONE

| COD | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4018010 | 1 | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
| A4018020 | 5 | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
| A4018030 | 20 | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
| A4018040 | 50 | $23^{\prime \prime}$ | 1 | 2,20 | 0,021 |
| A4018050 | 1 | $40^{\prime \prime}$ | 1 | 3,60 | 0,033 |
| A4018060 | 5 | $40^{\prime \prime}$ | 1 | 3,60 | 0,033 |
| A4018070 | 20 | $40^{\prime \prime}$ | 1 | 3,60 | 0,033 |
| A4018080 | 50 | $40^{\prime \prime}$ | 1 | 3,60 | 0,033 |



Applications
Water treatment

## Sea water and brackish water

Other applications only after written approval of the manufacturer
Electronic/Nuclear - Biotechnology/Fine chemicals - Food/Beverage - Coatings/Resins
General Industrial - Pharmaceutical/Cosmetics - Bulk chemicals/Petrochemicals - Galvanic
CARTRIDGES series PP MELT-BLOWN FA FIP

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4018140 | 1 |  | box | box | $\mathrm{I} / h^{*}$ |
| A4018150 | 5 | $40^{\prime \prime}$ | 1 | 3,60 | 11200 |
| A4018160 | 20 | $40^{\prime \prime}$ | 1 | 3,60 | 21000 |
| A4018170 | 50 | $40^{\prime \prime}$ | 1 | 3,60 | 28000 |



## CARTRIDGES PLEATED

## Note:

CE AQUAPRO, PL AQUAPRO, PLAB AQUAPRO, PL99G, PL FON, $P L C L$, max flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar.
QTEC and VTEC max flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,07 bar.

Pleated cartridges represent a valid filtering solution for diverse applications.
Certified raw materials are used and have particular technical characteristics that give the cartridge reliability and resistance.
An important factor of quality is the mechanical resistance. In both cases of Polyester or Cellulose cartridges, the resistance is given by using 100\% pure endless fibres. After pleating, which takes into account fixed parameters (pleats dimensions and quantity) that guarantee maximum efficiency, the element is mounted around a polypropylene rigid core thus assuring stability. It is then all placed inside a polypropylene cage which both ends are closed by end caps. The pleated cartridge allows a vast filtering surface while the PP cage has symmetric slots along all the surface of the cage itself therefore allowing the water to flow equally along all the
ides of the cartridge and avoiding the water penetrating just one specific area. This results in a longer life and major efficiency. The Polyester cartridges, contrary to Cellulose types, can be reused over and over again without loss of efficiency. It is obvious though that the life of these cartridges depend on the working conditions. Even though the maintenance is frequent, It is recommended not to use such cartridges under extreme conditions. Due to the fact that bacteria will undoubtedly grow and nest within the fibre, simply washing a cartridge does not mean it will last forever. Therefore as all washable cartridges, it is recommended to frequently change them in order to guarantee a safe filtration. Thanks to its compatibility with a vast numbers of chemicals, polyester can be used also in specific applications where other materials are not compatible with reagents
and/or chemical solvents.
Regarding the applications of Polyester and Cellulose cartridges, these are particularly adequate for use in potable water because the raw materials used are compatible.

## APPLICATIONS

CELLULOSE:
Water treatment - Pharmaceutical/Cosmetics Galvanic - Paint Industry - Ink Industry Emulsion

POLYESTER:
Water treatment-Electronic/NuclearBiotechnology/Fine chemicals-Food/Beverage-Coatings/Resins-General Industrial-
Pharmaceutical/Cosmetics-Bulk chemicals/Petrochemicals

## FLOW RATE (It/h)

| MICRON |  | 9"3/4 | 20" | 23" | 30" | 40" |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | CE AQUAPRO | 1800 | 3400 |  | 4000 | 4000 |
| 3 | PL AQUAPRO | 1000 | 2000 |  | 4000 | 4000 |
| 20 | PL AQUAPRO | 2000 | 3600 |  | 4200 | 4400 |
| 50 | PL AQUAPRO | 2500 | 4300 |  | 4600 | 4800 |
| 20 | PLAQUAPRO BIG | 2300 | 4300 |  | 5000 |  |
| 50 | PLAQUAPRO BIG | 2800 | 4800 |  | 5000 |  |
| 0,6 | PL99G | 900 | 1800 |  | 2700 | 3600 |
| 1 | PL99G | 1000 | 2000 |  | 3000 | 4000 |
| 3 | PL99G | 1200 | 2400 |  | 3600 | 4200 |
| 5 | PL99G | 1500 | 3000 |  | 4000 | 4400 |
| 10 | PL99G | 1800 | 3600 |  | 4300 | 4600 |
| 20 | PL99G | 2200 | 4000 |  | 4600 | 4800 |
| 30 | PL99G | 2300 | 4200 |  | 4800 | 5000 |
| 50 | PL99G | 2500 | 4300 |  | 5000 | 5000 |
| 80 | PL99G | 2600 | 4500 |  | 5000 | 5000 |
| 3 | PL BIG ONE |  |  | 14000 |  | 28000 |
| 20 | PL BIG ONE |  |  | 22000 |  | 44000 |
| 50 | PL BIG ONE |  |  | 27000 |  | 54000 |
| 5 | PLCL |  | 14000 |  |  | 28000 |
| 20 | PLCL |  | 20000 |  |  | 40000 |
| 50 | PLCL |  | 25000 |  |  | 50000 |
| 0,1 | QTEC | 200 | 400 |  | 600 | 800 |
| 0,2 | OTEC | 500 | 1000 |  | 1500 | 2000 |
| 0,4 | QTEC | 1500 | 3000 |  | 4000 | 4000 |
| 0,05 | VTEC | 20 | 40 |  | 60 | 80 |
| 0,1 | VTEC | 66 | 132 |  | 198 | 264 |
| 0,2 | VTEC | 400 | 800 |  | 1200 | 1600 |
| 0,4 | VTEC | 600 | 1200 |  | 1800 | 2400 |
| 0,6 | VTEC | 800 | 1600 |  | 2400 | 3200 |
| 1 | VTEC | 900 | 1800 |  | 2700 | 3600 |
| 0,6 | PP99G | 900 | 1800 |  | 2700 | 3600 |
| 1 | PP99G | 1000 | 2000 |  | 3000 | 4000 |
| 5 | PP99G | 1500 | 3000 |  | 4000 | 4400 |
| 20 | PP99G | 2200 | 4000 |  | 4600 | 4800 |
| 50 | PP99G | 2500 | 4300 |  | 5000 | 5000 |
| 80 | PP99G | 2600 | 4500 |  | 5000 | 5000 |
| 5-20 | PP95CL |  |  |  |  | 30000 |
| 20-50 | PP95CL |  |  |  |  | 45000 |
| 5 | PL-FIP |  |  |  |  | 30000 |
| 20 | PL-FIP |  |  |  |  | 40000 |
| 5 | PP-FIP |  |  |  |  | 30000 |
| 20 | PP-FIP |  |  |  |  | 40000 |
| 1 | RLA-PL-FIP |  |  |  |  | 16000 |
| 5 | RLA-PL-FIP |  |  |  |  | 30000 |
| 20 | RLA-PL-FIP |  |  |  |  | 40000 |
| 1 | RLA-PL-FON |  |  | 8000 |  |  |
| 5 | RLA-PL-FON |  |  | 15000 |  |  |
| 20 | RLA-PL-FON |  |  | 20000 |  |  |
| 1 | RLA-PL-FON |  |  |  |  | 16000 |
| 5 | RLA-PL-FON |  |  |  |  | 30000 |
| 20 | RLA-PL-FON |  |  |  |  | 40000 |

TECHNICAL FEATURES
CE AQUA PRO

| Raw material: | CELLULOSE |
| :---: | :---: |
| Core: | PP |
| Outer cage: | PP |
| End caps: | DOE-PP |
| O-Ring / Gasket: | NBR |
| Length: | 9"3/4, 20", 30", 40" |
| Inner diameter: | 28 mm |
| Outer diameter: | 70 mm |
| Micron rating: | 15 |
| Efficiency: | 85\% |
| Pressure: |  |
| Max working pressure: <br> Max diferential pressure: | $\begin{aligned} & 6 \text { bar } \\ & 0,8 \text { bar } \end{aligned}$ |
| Temperature: |  |
| Max working temperature: | $65^{\circ} \mathrm{C}$ |

PLEATED CELLULOSE CARTRIDGES series CE AQUA PRO

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4070080 | 15 | $9 " 3 / 4$ | 15 | 4,30 | 0,030 |
| A4070100 | 15 | $20^{\prime \prime}$ | 15 | 8,42 | 0,035 |
| A4070130 | 15 | $30^{\prime \prime}$ | 20 | 13,00 | 0,088 |
| A4070120 | 15 | $40^{\prime \prime}$ | 20 | 17,20 | 1,150 |




PLEATED POLYESTER CARTRIDGES series PL AQUA PRO

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4080230 | 3 |  | box | box | package |
| A4080140 | 20 | $9 " 3 / 4$ | 15 | 4,70 | 0,030 |
| A4080150 | 50 | $9 " 3 / 4$ | 15 | 4,70 | 0,030 |
| A4080240 | 3 | $9^{\prime \prime} 3 / 4$ | 15 | 4,70 | 0,030 |
| A4080160 | 20 | $20^{\prime \prime}$ | 15 | 9,07 | 0,035 |
| A4080170 | 50 | $20^{\prime \prime}$ | 15 | 9,07 | 0,035 |
| A4080510 | 3 | $20^{\prime \prime}$ | 15 | 9,07 | 0,035 |
| A4080520 | 20 | $30^{\prime \prime}$ | 20 | 14,00 | 0,088 |
| A4080530 | 50 | $30^{\prime \prime}$ | 20 | 14,00 | 0,088 |
| A4080540 | 3 | $40^{\prime \prime}$ | 20 | 18,00 | 0,088 |
| A4080550 | 20 | $40^{\prime \prime}$ | 20 | 18,00 | 1,150 |
| A4080560 | 50 | $40^{\prime \prime}$ | 20 | 18,00 | 1,150 |

PLEATED POLYESTER CARTRIDGES series PL AQUA PRO BIG

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4080180 | 20 |  | box | box | package |
| A4080190 | 50 | $9^{\prime \prime} 3 / 4$ | 6 | 4,32 | 0,030 |
| A4080200 | 20 | $20^{\prime \prime}$ | 6 | 4,32 | 0,030 |
| A4080210 | 50 | $20^{\prime \prime}$ | 6 | 8,69 | 0,035 |
| A4080570 | 20 | $30^{\prime \prime} \mathrm{D} .38$ | 6 | 8,69 | 0,035 |
| A4080580 | 50 | $30^{\prime \prime} \mathrm{D} .38$ | 9 | 12,80 | 0,088 |

PLEATED POLYESTER CARTRIDGES series PL BIG ONE

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4088010 | 3 |  | box | box | package |
| A4088020 | 20 | $23^{\prime \prime}$ | 1 | 1,30 | 0,021 |
| A4088030 | 50 | $23^{\prime \prime}$ | 1 | 1,30 | 0,021 |
| A4088040 | 3 | $23^{\prime \prime}$ | 1 | 1,30 | 0,021 |
| A4088050 | 20 | $40^{\prime \prime}$ | 1 | 2,20 | 0,033 |
| A4088060 | 50 | $40^{\prime \prime}$ | 1 | 2,20 | 0,033 |



Applications:
Water treatment
| Sea water and brackish water
Other applications only after written approval of the manufacturer
Electronic/Nuclear - Biotechnology/Fine chemicals - Food/Beverage - Coatings/Resins
General Industrial - Pharmaceutical/Cosmetics - Bulk chemicals/Petrochemicals


CARTRIDGES series Pleated Polyester PL FIP

| COD | MICRON | LENGTH | QUANTITY | Kg | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | $\mathrm{I} / \mathrm{h}^{*}$ |
| A4088080 | 5 | $40^{\prime \prime}$ | 1 | 3,60 | 30000 |
| A4088090 | 20 | $40^{\prime \prime}$ | 1 | 3,60 | 40000 |

ECHNICAL FEATURES
RLA PL FIP


Applications
Water treatment
Sea water and brackish water

Other applications only after written approval of the manufacturer
Electronic/Nuclear - Biotechnology/Fine chemicals - Food/Beverage - Coatings/Resins
General Industrial - Pharmaceutical/Cosmetics - Bulk chemicals/Petrochemicals
CARTRIDGES series Pleated Polyester Sleeve RLA PL FIP

| COD | MICRON | LENGTH | QUANTITY | Kg | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | $60 x$ | $1 / h^{*}$ |
| A4038050 | 1 | $40^{\prime \prime}$ | 1 | 3,60 | 16000 |
| A4038060 | 5 | $40^{\prime \prime}$ | 1 | 3,60 | 30000 |
| A4038070 | 20 | $40^{\prime \prime}$ | 1 | 3,60 | 40000 |




## Applications

Water treatment
Sea water and brackish water
Other applications only after written approval of the manufacturer
Electronic/Nuclear - Biotechnology/Fine chemicals - Food/Beverage - Coatings/Resins General Industrial - Pharmaceutical/Cosmetics - Bulk chemicals/Petrochemicals

CARTRIDGES series Pleated Polyester Sleeve RLA PL FON

| COD | MICRON | LENGTH | QUANTITY | Kg | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | $1 / h^{*}$ |
| A4038080 | 1 | $23^{\prime \prime}$ | 1 | 2,20 | 8000 |
| A4038090 | 5 | $23^{\prime \prime}$ | 1 | 2,20 | 15000 |
| A4038100 | 20 | $23^{\prime \prime}$ | 1 | 2,20 | 20000 |
| A4038110 | 1 | $40^{\prime \prime}$ | 1 | 3,60 | 16000 |
| A4038120 | 5 | $40^{\prime \prime}$ | 1 | 3,60 | 30000 |
| A4038130 | 20 | $40^{\prime \prime}$ | 1 | 3,60 | 40000 |



PLEATED POLYESTER CARTRIDGES series PL 99 G

| COD | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A408G010 | 0,6 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G020 | 1 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G030 | 3 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G040 | 5 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G050 | 10 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G060 | 20 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G070 | 30 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G080 | 50 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G090 | 80 | 9"3/4 | 15 | 4,70 | 0,030 |
| A408G100 | 0,6 | 20 " | 15 | 9,10 | 0,035 |
| A408G110 | 1 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G120 | 3 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G130 | 5 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G140 | 10 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G150 | 20 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G160 | 30 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G170 | 50 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G180 | 80 | $20^{\prime \prime}$ | 15 | 9,10 | 0,035 |
| A408G190 | 0,6 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G200 | 1 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G210 | 3 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G220 | 5 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G230 | 10 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G240 | 20 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G250 | 30 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G260 | 50 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G270 | 80 | $30^{\prime \prime}$ | 15 | 14,00 | 0,088 |
| A408G280 | 0,6 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G290 | 1 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G300 | 3 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G310 | 5 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G320 | 10 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G330 | 20 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G340 | 30 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G350 | 50 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |
| A408G360 | 80 | $40^{\prime \prime}$ | 15 | 18,00 | 1,15 |

PLEATED POLYESTER CARTRIDGES series PL CL

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4089010 | 5 |  | box | box | package |
| A4089020 | 20 | $20^{\prime \prime}$ | 1 | 0,80 | 0,021 |
| A4089030 | 50 | $20^{\prime \prime}$ | 1 | 0,80 | 0,021 |
| A4089040 | 5 | $20^{\prime \prime}$ | 1 | 0,80 | 0,021 |
| A4089050 | 20 | $40^{\prime \prime}$ | 1 | 1,60 | 0,033 |
| A4089060 | 50 | $40^{\prime \prime}$ | 1 | 1,60 | 0,033 |

[^1]

PLEATED POLYPROPYLENE CARTRIDGES series PP 99 G


| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A451G010 |  |  | box | box | package |
| A451G020 | 0,6 | $9 " 3 / 4$ | 15 | 6 | 0,035 |
| A451G030 | 1 | $9 " 3 / 4$ | 15 | 6 | 0,035 |
| A451G040 | 5 | $9 " 3 / 4$ | 15 | 6 | 0,035 |
| A451G050 | 20 | $9 " 3 / 4$ | 15 | 6 | 0,035 |
| A451G060 | 50 | $9 " 3 / 4$ | 15 | 6 | 0,035 |
| A451G070 | 80 | $9 " 3 / 4$ | 15 | 6 | 0,035 |
| A451G080 | 0,6 | $20^{\prime \prime}$ | 15 | 12 | 0,059 |
| A451G090 | 1 | $20^{\prime \prime}$ | 15 | 12 | 0,059 |
| A451G100 | 5 | $20^{\prime \prime}$ | 15 | 12 | 0,059 |
| A451G110 | 20 | $20^{\prime \prime}$ | 15 | 12 | 0,059 |
| A451G120 | 50 | $20^{\prime \prime}$ | 15 | 12 | 0,059 |
| A451G130 | 80 | $20^{\prime \prime}$ | 15 | 12 | 0,059 |
| A451G140 | 0,6 | $30^{\prime \prime}$ | 15 | 18 | 0,082 |
| A451G150 | 1 | $30^{\prime \prime}$ | 15 | 18 | 0,082 |
| A451G160 | 5 | $30^{\prime \prime}$ | 15 | 18 | 0,082 |
| A451G170 | 20 | $30^{\prime \prime}$ | 15 | 18 | 0,082 |
| A451G180 | 50 | $30^{\prime \prime}$ | 15 | 18 | 0,082 |
| A451G190 | 80 | $30^{\prime \prime}$ | 15 | 18 | 0,082 |
| A451G200 | 0,6 | $40^{\prime \prime}$ | 15 | 24 | 1,05 |
| A451G210 | 1 | $40^{\prime \prime}$ | 15 | 24 | 1,05 |
| A451G220 | 5 | $40^{\prime \prime}$ | 15 | 24 | 1,05 |
| A451G230 | 20 | $40^{\prime \prime}$ | 15 | 24 | 1,05 |
| A451G240 | 50 | $40^{\prime \prime}$ | 15 | 24 | 1,05 |
|  | $80 "$ | 15 | 24 | 1,05 |  |

PLEATED POLYPROPYLENE CARTRIDGES series PP 95 CL

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4519010 |  |  | box | box | package |
| A4519020 | $20-50$ | $40^{\prime \prime}$ | 1 | 3,50 | 0,033 |



Applications

CARTRIDGES series Pleated Polypropylene PP FIP

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | $\mathrm{I} / \mathrm{h}^{*}$ |
| A4088100 | 5 | $40^{\prime \prime}$ | 1 | 3,60 | 30000 |
| A4088110 | 20 | $40^{\prime \prime}$ | 1 | 3,60 | 40000 |

WASHABLE NET CARTRIDGES

The washable Net Cartridges are called surface cartridges and have a nondeforming structure.

The inside core is manufactured using Talc Filled Polypropylene and a nylon net is welded.

The homogenous Net has physical and mechanical characteristics. The square mesh allows a uniform flow along all the surface of the cartridge itself thus minimizes the possibility of clogging. Manufactured using monofilament fibres that enable uniform openings It also allows an accurate capacity of filtration while avoiding pressure drop.

Also thanks to Its smooth surface it is very easy to wash and non shedding.

The washable net cartridges give a nominal filtration with efficiency of $80 \%$. When properly utilized, they can be used over and over again maintaining a constant efficiency.

The available lengths range from 5 " to 20" and the microns range from a minimum of 90 micron upwards. All in compliance to EC regulations.

THE WASHABLE NET
CARTRIDGE IS IDEAL FOR:
Suspended Solids, Sand, Slime, Rust.

## APPLICATIONS:

Water treatment,
General Industry,
Agricultural,
Water pumps and Domestic applications.

## FLOW RATE (It/h)

| MICRON |  | 9"3/4 | 20" | 23" | 30" | 40" |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80 | RLA-AB, D. 38 mm | 6000 | 7000 |  | 8000 |  |
| 250 | RLA-AB, D. 38 mm | 6500 | 7800 |  | 9000 |  |
| 80 | RLA BIG ONE |  |  | 34000 |  | 60000 |
| 250 | RLA BIG ONE |  |  | 37000 |  | 65000 |
| 80 | RLA-FIP |  |  |  |  | 50000 |
| 250 | RLA-FIP |  |  |  |  | 50000 |



| TECHNICAL FEATURES | RLA AB | RLA BIG ONE |
| :---: | :---: | :---: |
| Raw material: | PA | PA |
| Core: | PP | PP |
| Outer cage: | PP | PP |
| End caps: | DOE-PP | FON |
| 0-Ring / Gasket: | NBR | B, V |
| Length: | 9"3/4, 20", 30" | 23", 40" |
| Inner diameter: | 36 mm | 76 mm |
| Outer diameter: | 115 mm | $147,5 \mathrm{~mm}$ |
| Micron rating: | 80, 250 | 80, 250 |
| Efficiency: | 80\% | 80\% |
| Pressure: |  |  |
| Max working pressure: | 6 bar | 6 bar |
| Max diferential pressure: | 0,8 bar | 0,8 bar |
| Temperature: |  |  |
| Max working temperature: | $80^{\circ} \mathrm{C}$ | $80^{\circ} \mathrm{C}$ |

Note: Max water flow rate at $20^{\circ} \mathrm{C}$ and diferential pressure 0,15 bar

WASHABLE NET CARTRIDGES series RLA AB

| COD | MICRON | LENGTH | QUANTITY | Kg | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4030510 | 80 |  | box | box | $1 / h^{*}$ |
| A4030520 | 250 | $9^{\prime \prime} 3 / 4^{\prime \prime}$ | 6 | 6 | 0,030 |
| A4030530 | 80 | $20^{\prime \prime}$ | 6 | 6 | 0,030 |
| A4030540 | 250 | $20^{\prime \prime}$ | 6 | 6 | 0,035 |
| A4030550 | 80 | $30^{\prime \prime}$ | 6 | 6 | 0,035 |
| A4030560 | 250 | $30^{\prime \prime}$ | - | 9 | 0,088 |

WASHABLE NET CARTRIDGES series RLA BIG ONE

| COD | MICRON | LENGTH | QUANTITY | Kg | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4038010 | 80 | $23^{\prime \prime}$ | 1 | 2,00 | 0,021 |
| A4038020 | 250 | $23^{\prime \prime}$ | 1 | 2,00 | 0,021 |
| A4038030 | 80 | $40^{\prime \prime}$ | 1 | 3,30 | 0,033 |
| A4038040 | 250 | $40^{\prime \prime}$ | 1 | 3,30 | 0,033 |


|  | TECHNICAL FEATURES | RLA FIP |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw material: | Nylon Net |  |  |  |
|  | Core: | PP |  |  |  |
| -1 | Outer cage: | - |  |  |  |
|  | End caps: | FIP |  |  |  |
|  | O-Ring / Gasket: | NBR - VITON |  |  |  |
|  | Length: | 40" |  |  |  |
|  | Inner diameter: | 76 mm |  |  |  |
|  | Outer diameter: | $147,5 \mathrm{~mm}$ |  |  |  |
| $\bigcirc$ | Micron rating: | 80-250 |  |  |  |
|  | Efficiency: | 80\% |  |  |  |
|  | Pressure: |  |  |  |  |
|  | Max working pressure: | 6 bar |  |  |  |
|  | Max diferential pressure suggested: | 0,8 bar |  |  |  |
|  | Temperature: |  |  |  |  |
|  | Max working temperature: | $80^{\circ} \mathrm{C}$ |  |  |  |
|  | Note: Max water flow rate at $20^{\circ} \mathrm{C}$ a | ential pressure 0,15 bar |  |  |  |

CARTRIDGES series Nylon Net RLA FIP

| COD | MICRON | LENGTH | QUANTITY | Kg | FLOW |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | $1 / h^{*}$ |
| A4038140 | 80 | $40^{\prime \prime}$ | 1 | 3,20 | 50000 |
| A4038150 | 250 | $40^{\prime \prime}$ | 1 | 3,20 | 50000 |




STAINLESS STEEL CARTRIDGES

Stainless steel net cartridges are so-called "surface cartridges" with non deforming structure.

They are well indicated for difficult applications such as filtering of corrosive liquids or were high temperatures apply.

They are available in the following versions. - Series AC75S; non-pleated stainless steel with end caps in stainless steel - Series AC75PS; pleated stainless steel with end caps in stainless steel

Because of its structure, stainless steel has no particle migration therefore especially suitable for those applications were drinkable water is being processed.

Being pleated, the AC75PS series grant a much higher surface of filtration in the amount of 4 times a standard AC75S version which are non-pleated. Therefore they are more efficient when high flow is required and were a high percentage of contaminated particles are present in the liquid itself.

The Stainless steel net has a special structure called REPS that thanks to its characteristics makes it very strong and of high filtering efficiency. All end caps are electrically welded and no resin or glues are used.

Pleated stainless steel cartridges, series AC75PS can withstand pressures of 6 bars without deforming. In any case it is always suggested not to exceed 3 bars.

All stainless steel cartridges are washable and therefore can be used time and time again. It can be done by backwashing them or washed with special chemicals.

APPLICATIONS:
Water Treatment,
Food and beverage, Oil, Alimentary, Syrups General Industries, Paint, resins, Bulk chemicals/Petrochemicals, polymer, fuel, lubricant, Sewage water.
. -


| ) | technical features | AC 75 S | AC 75 PS |
| :---: | :---: | :---: | :---: |
|  | Raw material: | SS | SS |
| 1 | Core: | AISI 304 | AISI 304 |
|  | Outer cage: | - | - |
| $\square$ | End caps: | DOE | AISI 304 - DOE |
| - | O-Ring / Gasket: | B, V, T. | B, V, T |
| 4 | Length: | 9"3/4-20"-30"-40" | 9"3/4-20"-30"-40" |
|  | Inner diameter: | 27 mm | 27 mm |
| ค | Outer diameter: | 70 mm | 70 mm |
|  | Micron rating: | 5, 25, 70, 100 | 5, 25, 70, 100 |
| 1 | Efficiency: | 75\% | 75\% |
| 1 | Pressure: |  |  |
| , | Max working pressure: | 6 bar | 6 bar |
| I | Max diferential pressure: | 0,8 bar | 0,8 bar |
|  | Temperature: |  |  |
|  | Max working temperature: | $80^{\circ} \mathrm{C}-360^{\circ} \mathrm{C}$ | $80^{\circ} \mathrm{C}-360^{\circ} \mathrm{C}$ |
|  | Note: Max water flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar |  |  |

STAINLESS STEEL CARTRIDGES series AC 75 S

|  |  |  |  |
| :--- | ---: | :--- | :--- |
|  |  |  | box |
| A4050500 | 5 | $9 " 3 / 4$ | 6 |
| A4050510 | 25 | $9 " 3 / 4$ | 6 |
| A4050520 | 70 | $9 " 3 / 4$ | 6 |
| A4050530 | 100 | $9 " 3 / 4$ | 6 |
| A4050540 | 5 | $20^{\prime \prime}$ | 6 |
| A4050550 | 25 | $20^{\prime \prime}$ | 6 |
| A4050560 | 70 | $20^{\prime \prime}$ | 6 |
| A4050570 | 100 | $20^{\prime \prime}$ | 6 |
| A4050580 | 5 | $30^{\prime \prime}$ | 6 |
| A4050590 | 25 | $30^{\prime \prime}$ | 6 |
| A4050600 | 70 | $30^{\prime \prime}$ | 6 |
| A4050610 | 100 | $30^{\prime \prime}$ | 6 |
| A4050620 | 5 | $40^{\prime \prime}$ | 6 |
| A4050630 | 25 | $40^{\prime \prime}$ | 6 |
| A4050640 | 70 | $40^{\prime \prime}$ | 6 |
| A4050650 | 100 | $40^{\prime \prime}$ | 6 |

STAINLESS STEEL CARTRIDGES series AC 75 PS - AISI 304 end caps

|  |  |  | box |
| :--- | ---: | :---: | :---: |
| A405050P | 5 | $9 " 3 / 4$ | 6 |
| A405051P | 25 | $9 " 3 / 4$ | 6 |
| A405052P | 70 | $9 " 3 / 4$ | 6 |
| A405053P | 100 | $9 " 3 / 4$ | 6 |
| A405054P | 5 | $20^{\prime \prime}$ | 6 |
| A405055P | 25 | $20^{\prime \prime}$ | 6 |
| A405056P | 70 | $20^{\prime \prime}$ | 6 |
| A405057P | 100 | $20^{\prime \prime}$ | 6 |
| A405058P | 5 | $30^{\prime \prime}$ | 6 |
| A405059P | 25 | $30^{\prime \prime}$ | 6 |
| A405060P | 70 | $30^{\prime \prime}$ | 6 |
| A405061P | 100 | $30^{\prime \prime}$ | 6 |
| A405062P | 5 | $40^{\prime \prime}$ | 6 |
| A405063P | 25 | $40^{\prime \prime}$ | 6 |
| A405064P | 70 | $40^{\prime \prime}$ | 6 |
| A405065P | 100 | $40^{\prime \prime}$ | 6 |

CARBON CARTRIDGES

These Cartridges act by means of a physicochemical property of the active carbon (adsorption) and in some cases associated with the filtration action of various filtering materials.
AQUA uses various active granulated carbon, suggesting the most appropriate types according to the conditions and diverse needs of filtering required. Our active granulated carbon extracted from vegetable coco fruit has characteristics that are very suitable for treating water in general.

These active carbon cartridges have the following specifications:
Grain Hardness
$=$ Insignificance presence of Carbon Powder Residuals.
Very high surface filtration area
(up to $1500 \mathrm{~m} 2 / \mathrm{gr}$ )
= High Adsorption
$=$ Longer life
Very high Holding Capacity
= High Adsorption
Insignificant presence of ash
= Less impurity
The general characteristics in understanding what makes a very efficient carbon cartridge are the following:

- Pre-Filtration

Treatment of water beforehand, through a pre-filtration action which permits a first treatment of the water itself allowing a longer life to the cartridge

- Absorption performance of the carbon It is determined by the quality and quantity of carbon used. Also the contact time has a very important impact on the final result. In fact the longer the water remains in contact with the carbon (flow rate) the stronger the carbon adsorption effect will be, thus purifying the water.


## - Post-Filtration

Treatment of water after hand, through a post-filtration action which permits a further treatment of the water itself and eliminating any suspended carbon residuals

Having all three the above elements will no doubt reduce the flow rate. This means a better performance of the process because it optimises the active carbon action. Active carbon will in the end saturate and the life time depends on how the cartridge is being used. We highly recommend following the instructions on our data sheet relevant to each type of carbon cartridge.

Thanks to the exceptional quality of our Melt Blown Pre \& Post filtration, our GAC active carbon cartridges guarantee a perfect and superior quality cartridge. These pre \& post filters not only will withhold all suspended particles and carbon fines but also will regulate the water flow thus assuring a perfect removal of chlorine. Laboratory tests confirm the excellent quality of our GAC Cartridge.

## APPLICATIONS

Water treatment
Electronic/Nuclear Biotechnology/Fine chemicals Food/Beverage General Industrial
Pharmaceutical/Cosmetics Bulk chemicals/Petrochemicals

## GAC line

| TECHNICAL FEATURES | GAC-CC-BIG | CTO-E-BIG |
| :---: | :---: | :---: |
| Filter media: | G.A.C. - Acid washed | ACTIVE CARBON |
|  | Coconut shell granular active carbon | BLOCK |
| Pre filter: | PP | PES |
| Post filter: | PP | PES |
| Core: | - | - |
| Out cage: | PP | - |
| End caps: | DOE-PP | DOE-PP |
| O-Ring / Gasket: | NBR | - |
| Length: | 9"3/4-20" | 9"3/4-20" |
| Inner diameter: | 26 mm | 36 mm |
| Outer diameter: | 120 mm | 115 mm |
| Micron rating: |  |  |
| Pre filter micron | 40 | 10 |
| Post filter micron | 40 | - |
| Efficiency (pre and post filter): | 95\% | 95\% |
| Pressure: |  |  |
| Max working pressure: <br> Max diferential pressure: | 6 bar <br> 0,8 bar | 6 bar 0,8 bar |
| Temperature: |  |  |
| Max working temperature: | $50^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{C}$ |

Note: Max water flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar

ACTIVE CARBON CARTRIDGES series GAC-40 CC BIG
GRANULAR-ACTIVATED CARBON / PRE-POST 40 MICRON FILTER

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4120620 | 40 |  | box | box | package |
| A4120630 | 40 | $9 " 3 / 4$ | 6 | 8,28 | 0,030 |

CHLORINE REDUCTION:

| MODEL | LENGTH | RECOMMENDED FLOW RATE | FLOW RATE |
| :--- | :---: | :---: | :---: |
| GAC-40 CC BIG |  | $\mathrm{m}^{3} / \mathrm{h}$ | Chlorine reduction |
| GAC-40 CC BIG | $9 " 3 / 4$ | 8 lm at $0,2 \mathrm{bar}$ | 20.000 l at 8 lpm |

All chlorine reduction is from 2 ppm free chlorine to $<0,5 \mathrm{ppm}$.
Some data is extrapolated

CARBON BLOCK CARTRIDGES series CTO-E for AQUA BIG

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A4220110 |  |  | box | box | package |
| A4220120 | 10 | $9 " 3 / 4$ | 12 | 18 | 0,053 |

CHLORINE REDUCTION:

| MODEL | LENGTH | RECOMMENDED FLOW RATE | FLOW RATE |
| :--- | :---: | :---: | :---: |
| CTO-E-BIG |  | $\mathrm{m}^{3} / \mathrm{h}$ | Chlorine reduction |
| CTO-E-BIG | $9 " 3 / 4$ | $8 \mathrm{pm} \mathrm{a} 0,2 \mathrm{bar}$ | 25.000 at 8 lpm |

All chlorine reduction is from 2 ppm free chlorine to $<0,5 \mathrm{ppm}$.
Some data is extrapolated

RESIN CARTRIDGES

Cartridges with ionic exchange resin are used for eliminating ionic substance which are present in water.

According to the type of filter media used, they can by applied for treating water with calcium and magnesium, reducing the presence of iron and obtain de-mineralized water.

All cartridges are assembled with a pre and post filtration. This optimizes the efficiency of the resin for water inbound and improves the quality of the treated water outbound.

Similar to the GAC cartridges, the Pre \&t post filters are made of melt blown which is of the same technology used for our FR-N cartridges. This technology guarantees a very efficient filtering action.

## APPLICATIONS:

Water Tretment
General Industries
Laboratory

| TECHNICAL FEATURES | RC-BIG | R-DEMI BIG | FE-BIG |
| :---: | :---: | :---: | :---: |
| Filter media: | CATION RESIN | MIX BED RESIN | SILICA CRYSTALS |
| Pre filter: | PP | PP | PP |
| Post filter: | PP | PP | PP |
| Core: | - | - | - |
| Out cage: | PP | PP | PP |
| End caps: | DOE-PP | DOE-PP | DOE-PP |
| O-Ring / Gasket: | NBR | NBR | NBR |
| Length: | 9"3/4-20" | 9"3/4-20" | 9"3/4-20" |
| Inner diameter: | 26 mm | 26 mm | 26 mm |
| Outer diameter: | 120 mm | 120 mm | 120 mm |
| Micron rating: |  |  |  |
| Pre filter micron | 5 | 5 | 40 |
| Post filter micron | 5 | 5 | 40 |
| Efficiency (pre and post filter): | 95\% | 95\% | 95\% |
| Pressure: |  |  |  |
| Max working pressure: | 6 bar | 6 bar | 6 bar |
| Max differential pressure: | 0,8 bar | 0,8 bar | 0,8 bar |
| Temperature: |  |  |  |
| Max working temperature: | $38^{\circ} \mathrm{C}$ | $38^{\circ} \mathrm{C}$ | $38^{\circ} \mathrm{C}$ |

Note: Max water flow rate at $20^{\circ} \mathrm{C}$ and differential pressure 0,15 bar
CATION EXCHANGE RESIN CARTRIDGES
series RC-BIG / PRE-POST 5 MICRON FILTER

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4150050 | 5 | $9^{\prime \prime} 3 / 4$ | 6 | 12,13 | 0,030 |
| A4150060 | 5 | $20^{\prime \prime}$ | 6 | 28,50 | 0,035 |

IONIC EXCHANGE RESIN CARTRIDGES
series R-DEMI-BIG / PRE-POST 5 MICRON FILTER

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4150090 | 5 | $9^{\prime \prime} 3 / 4$ | 6 | 12,13 | 0,030 |
| A4150100 | 5 | $20^{\prime \prime}$ | 6 | 28,10 | 0,035 |

IRON REMOVAL CARTRIDGES series FE / PRE-POST 40 MICRON FILTER

| COD | MICRON | LENGTH | QUANTITY | $\mathbf{K g}$ | VOLUME |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | box | box | package |
| A4150110 | 40 | $20^{\prime \prime}$ | 6 | 28,10 | 0,035 |


| APPROXIMATE LIFE OF CARTRIDGE |  |  |  |
| :---: | :---: | :---: | :---: |
| iron level in water | total It water used | $\mathbf{1 0 0 0}$ It day 4 people | 500 It day 2 people |
| 5 ppm | 60.000 | 60 days | 120 days |
| 4 ppm | 83.000 | 83 days | 166 days |
| 3 ppm | 105.000 | 105 days | 210 days |
| 2 ppm | 158.000 | 158 days | 316 days |
| 1 ppm | 310.000 | 310 days | 620 days |
| $0,5 \mathrm{ppm}$ | 620.000 | 620 days | 1.240 days |

Note (1): in order to use silica crystals, the following characteristics are required:

- minimum water hardness of $5^{\circ} \mathrm{Fr}$.
- minimum $80 \mathrm{mg} / \mathrm{I}$ TDS (total dissolved solids)

Note (2): high iron concentration inside the water may cause unpleasant taste and smell. In this case it's advisable to use an active carbon cartridge, series GAC-CC-BIG.

| $\begin{aligned} & 1=\text { RECCOMENDED } \\ & 2=\text { SUITABLE } \\ & 3=\text { NOT RECCOMENDED } \end{aligned}$ |  |  |  |  | 寽 |  | $\underset{i}{2}$ |  | 会 | $\begin{aligned} & \text { z } \\ & \text { 윽 } \end{aligned}$ | Z | $\begin{aligned} & \underset{M}{N} \\ & \frac{\bar{T}}{4} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MINERAL ACID |  |  |  |  |  |  |  |  |  |  |  |  |
| HYDROCHLORIC ACID |  | 20 | 1 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 3 |
| CHROMIC ACID |  | 30 | 1 | 2 | 1 | * | * | * | * | 1 | 1 | 2 |
| HYDROFLUORIC ACID |  | 40 | 1 | 3 | 2 | 1 | * | A | A | 1 | 3 | 3 |
| PHOSPHORIC ACID |  | 50 | 1 | 3 | 1 | 1 | * | 1 | 2 | 2 | 1 | 2 |
| NITRIC ACID |  | 10 | 1 | 3 | 2 | 1 | 2 | 1 | 3 | 1 | 1 | 1 |
| SULPHURIC ACID |  | 25 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 3 |
| ACQUA REGIA |  |  | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| ORGANIC ACID |  |  |  |  |  |  |  |  |  |  |  |  |
| ACETIC ACID |  | 50 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 1 |
| BENZOIC ACID |  |  | 1 | 2 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| BUTYRIC ACID |  | 80 | 1 | 1 | 1 | 1 | * | 1 | * | 2 | 3 | 2 |
| FORMIC ACID |  |  | 1 | 3 | 1 | 1 | * | 1 | * | * | 2 | 2 |
| LACTIC ACID |  | 25 | 1 | 3 | 1 | 1 | * | 1 | * | 1 | 2 | 2 |
| OLEIC ACID |  |  | 2 | 1 | 1 | 2 | * | 2 | * | 2 | 1 | 2 |
| OXALIC ACID |  |  | 2 | 3 | 1 | 2 | * | 2 | * | 1 | 1 | 2 |
| SALICYLIC ACID |  |  | 1 | 1 | 2 | 1 | * | 1 | * | 1 | 1 | * |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| SALTS |  |  |  |  |  |  |  |  |  |  |  |  |
| SODIUM ACETATE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 3 | 1 | 1 |
| SODIUM BENZOATE |  |  | 1 | 2 | 1 | 1 | * | 1 | * | * | 1 | * |
| SODIUM BISULPATE |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| SODIUM BROMIDE |  |  | 1 | 2 | 1 | 1 | * | 1 | * | 1 | 1 | * |
| SODIUM CHYANID |  |  | 1 | 2 | 1 | 1 | * | 1 | * | 1 | 1 | 1 |
| ALUMINIUM CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 3 |
| AMMONIUM CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 3 |
| BARIUM CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| CALCIUM CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| FERRIC CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 3 |
| MAGNESIUM CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| SODIUM CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| ZINC CHLORIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| SODIUM NITRATE |  |  | 1 | 2 | 1 | 1 | * | 1 | * | 2 | 1 | 1 |
| ALUMINIUM SULPHATE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 3 |
| COPPER SULPHATE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| SODIUM SULPHATE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| SODIUM SULPHIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| BASE |  |  |  |  |  |  |  |  |  |  |  |  |
| CALCIUM CARBONATE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 1 |
| POTASSIUM CARBONATE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 2 | 2 |
| SODIUM CARBONATE |  |  | 1 | 1 | 2 | 1 | * | 1 | * | 1 | 1 | 1 |
| AMMONIUM HYDROXIDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 2 | 1 | 1 |
| CALCIUM HYDROXYDE |  |  | 1 | 1 | 1 | 1 | * | 1 | * | 1 | 1 | 1 |
| POTASSIUM HYDROXYDE |  |  | 1 | 2 | 3 | 1 | * | 1 | * | 2 | 1 | 2 |
| SODIUM HYDROXYDE |  | 50 | 1 | 2 | 3 | 1 | * | 1 | * | 2 | 1 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| OXIDIZING AGENTS |  |  |  |  |  |  |  |  |  |  |  |  |
| PERACET ACID |  | 40 | 1 | 2 | 2 | 1 | * | 1 | * | 1 | 3 | * |
| POTASSIUM BICHROMATE |  |  | 1 | 2 | 1 | 1 | * | 1 | * | 1 | 1 | 1 |
| BROMINE |  |  | 3 | 3 | 2 | 3 | * | 3 | * | 2 | 2 | 3 |
| SODIUM CHLORITE |  |  | 1 | 3 | 3 | 1 | * | 1 | * | 1 | 1 | 2 |
| POTASIUM CHLORITE |  |  | 1 | 2 | 2 | 1 | * | 1 | * | 1 | 1 | 1 |
| CHLORINE |  |  | 3 | 3 | 2 | 3 | * | 3 | * | 1 | 1 | 3 |


|  |  |  |  |  | $\begin{aligned} & \stackrel{\sim}{4} \\ & \stackrel{\sim}{む} \\ & 0 \\ & 0 \end{aligned}$ |  | $\underset{i}{2}$ |  | $\underset{\sim}{\sim}$ | $\begin{aligned} & \text { z } \\ & \hline \end{aligned}$ | u | $\begin{aligned} & \underset{\sim}{\text { I }} \\ & \frac{\bar{n}}{\mathbb{4}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FLUORINE |  |  | 3 | 3 | 2 | 3 | * | 3 | * | 2 | * | 3 |
| SODIUM HYPOCHLORITE |  | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 |
| OZONO |  |  | 2 | 3 | 1 | 2 | * | 2 | * | 1 | 2 | * |
| POTASSIUM PERMANGANATE |  | 10 | 1 | 3 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| HYDROGEN PEROXIDE |  | 30 | 1 | 3 | 1 | 1 | * | 1 | * | 1 | 1 | 2 |
| IODINE SOLUTION |  |  | 1 | 3 | 2 | 1 | * | 1 | * | 1 | 3 | 3 |
| CALCIUM HYPOCLORITE |  | 20 | 1 | 3 | 1 | 1 | * | 1 | * | 2 | 1 | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| ORGANIC SOLVENTS |  |  |  |  |  |  |  |  |  |  |  |  |
| AMYL ACETATE |  |  | 1 | 2 | 1 | 1 | * | 1 | * | 3 | 3 | 1 |
| BUTYL ACETATE |  |  | 2 | 1 | 1 | 2 | * | 2 | * | 3 | 3 | 1 |
| ETHYL ACETATE |  |  | 2 | 1 | 1 | 2 | * | 2 | * | 3 | 3 | 2 |
| ACETONE |  | 100 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 3 | 3 | 1 |
| AMYL ALCOHOL |  |  | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 2 | 2 | 1 |
| ETHIL ALCOHOL |  | 90 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| METHYL ALCOHOL |  | 100 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 2 | 2 | 1 |
| BENZENE |  | 100 | 2 | 1 | 1 | 2 | 3 | 2 | 3 | 1 | 3 | 2 |
| CARBON BISULFIDE |  |  | 3 | 1 | 2 | 3 | 3 | 3 | * | 1 | 3 | 3 |
| CYCLOHEXANONE |  |  | 2 | 1 | 1 | 2 | * | 2 | * | 3 | 3 | * |
| CHLOROFORM |  |  | 3 | 3 | 1 | 3 | * | 3 | * | 2 | 3 | 1 |
| ETHIL CHLORIDE |  |  | 2 | 1 | 1 | 2 | * | 2 | * | 1 | 3 | 1 |
| ETHER BENZENE |  |  | 3 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| ETHYL ETHER |  |  | 2 | 1 | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 2 |
| DIETHYLENE GLYCOL |  |  | 1 | 1 | 2 | 1 | * | 1 | * | 1 | * | 1 |
| ETHYLENE GLYCOL |  |  | 2 | 1 | 1 | 2 | 3 | 2 | 3 | 1 | 1 | 1 |
| PROPYLENE GLYCOL |  |  | 3 | 1 | 1 | 3 | 3 | 3 | 3 | 1 | * | 1 |
| METHYL ETHYL KETONE |  |  | 2 | 1 | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 1 |
| CARBON TETRACHLORIDE |  |  | 3 | 1 | 1 | 3 | 3 | 3 | 3 | 2 | 3 | 1 |
| TOLUENE |  |  | 3 | 1 | 1 | 3 | 3 | 2 | 3 | 2 | 3 | 1 |
| TRICHLOROETHYLENE |  |  | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 1 | 3 | 1 |
| XYLENE |  |  | 3 | 1 | 1 | 3 | 3 | 3 | 3 | 1 | 3 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| MISCELLANEOUS |  |  |  |  |  |  |  |  |  |  |  |  |
| ACETALDEHIDE IN WATER |  |  | 2 | 2 | 2 | 2 | * | 2 | * | * | * | 1 |
| ANILINE |  |  | 2 | 1 | 1 | 2 | * | 2 | * | 2 | 3 | 1 |
| BENZALDEHYDE IN WATER |  |  | 2 | 2 | 1 | 2 | 3 | 2 | 3 | 3 | 3 | 1 |
| CRESOL |  |  | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 1 |
| PHENOL |  |  | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 2 |
| FORMALDEHYDE |  | 40 | 1 | 1 | 1 | 1 | * | 1 | * | 3 | 2 | 1 |
| GLYCERINE |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| NAPHTHA |  |  | 2 | 1 | 1 | 2 | 3 | 2 | * | 1 | 3 | 1 |
| NITROBENZENE |  |  | 1 | 2 | 2 | 1 | 3 | 1 | * | 2 | 3 | 1 |
| MINERAL OIL |  |  | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 |
| TRICRESYL PHOSPHATE |  |  | 3 | 1 | 1 | 3 | * | 3 | * | 2 | 3 | 1 |
| BEER |  |  | 1 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| INKS |  |  | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 |
| OLIVE OIL |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| SEA WATER |  |  | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 3 |
| WINE |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| WHISKEY |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| MILK |  |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

FILTER MEDIA


## Warranty

All the articles produced by Aqua are under warranty for a period of one year from the date of purchase. The terms of warranty require that:
■ The article be used following the instructions printed by the manufacturer, Aqua.

- Installation and maintenance be carried out following the instructions of the manufacturer, Aqua.
- Goods under warranty be replaced only upon submission of faulty material and upon verification of the nature of the defect, which will be considered in light of technical data available from the data-base in the Aqua engineering department, where the results of daily product testing are recorded.
- Warranty be limited to replacement of the faulty part only, to the exclusion of any other claim by the customer for direct or indirect damages caused by the product.
■ The customer pay all labor and transport expenses necessary for replacement of the part covered by the warranty.
- Any warranty on Aqua products be suspended upon failure to comply with the general regulations printed by the manufacturer, or failure to comply with the relevant European regulations in force.


## General Sales Terms

1) Aqua accepts only written orders and reserves the right to confirm all orders.
2) Failure to comply with sales terms, including payment for the goods sold, will automatically result in the suspension of any delivery underway or any previously accepted orders.
3) The goods are sold EX FACTORY, meaning that the customer is authorized to collect the goods in the way deemed appropriate.
4) In the absence of specific instructions, Aqua will dispatch the goods at their own discretion.
5) Aqua accept no liability for the goods after they have left the Aqua warehouses, therefore whoever picks up the goods will have to check to make sure the packages are in good condition and that there is the correct number of pieces, notwithstanding of the type of packing used.
6) Aqua reserve the right to make changes in the technical specifications and prices of its products, without 7) providing advance notification.

Any litigation that may arise will be judged by the Competent Court of Reggio Emilia, the applicable law and the italian law.

Note


[^0]:    Note: on request the following micron rating are available: 10, 40, 70, 90.

[^1]:    Note: on request other micron rating are available.

