



# VORTEX HP

Hydrocyclonic Filter  
Covered by patent application



**MAX  
PRESSURE**  
10 bar



**FILTRATION  
DEGREE**  
20-80 micron



**MAX FLOW  
RATE**  
5-440 m<sup>3</sup>/h



**FILTER  
TYPE**  
Manual

## TYPE



MANUAL

## CLEANING

HYDRO  
CYCLONIC

## CHARACTERISTICS

NON - STOP  
FLOWPOTABLE  
WATER\*

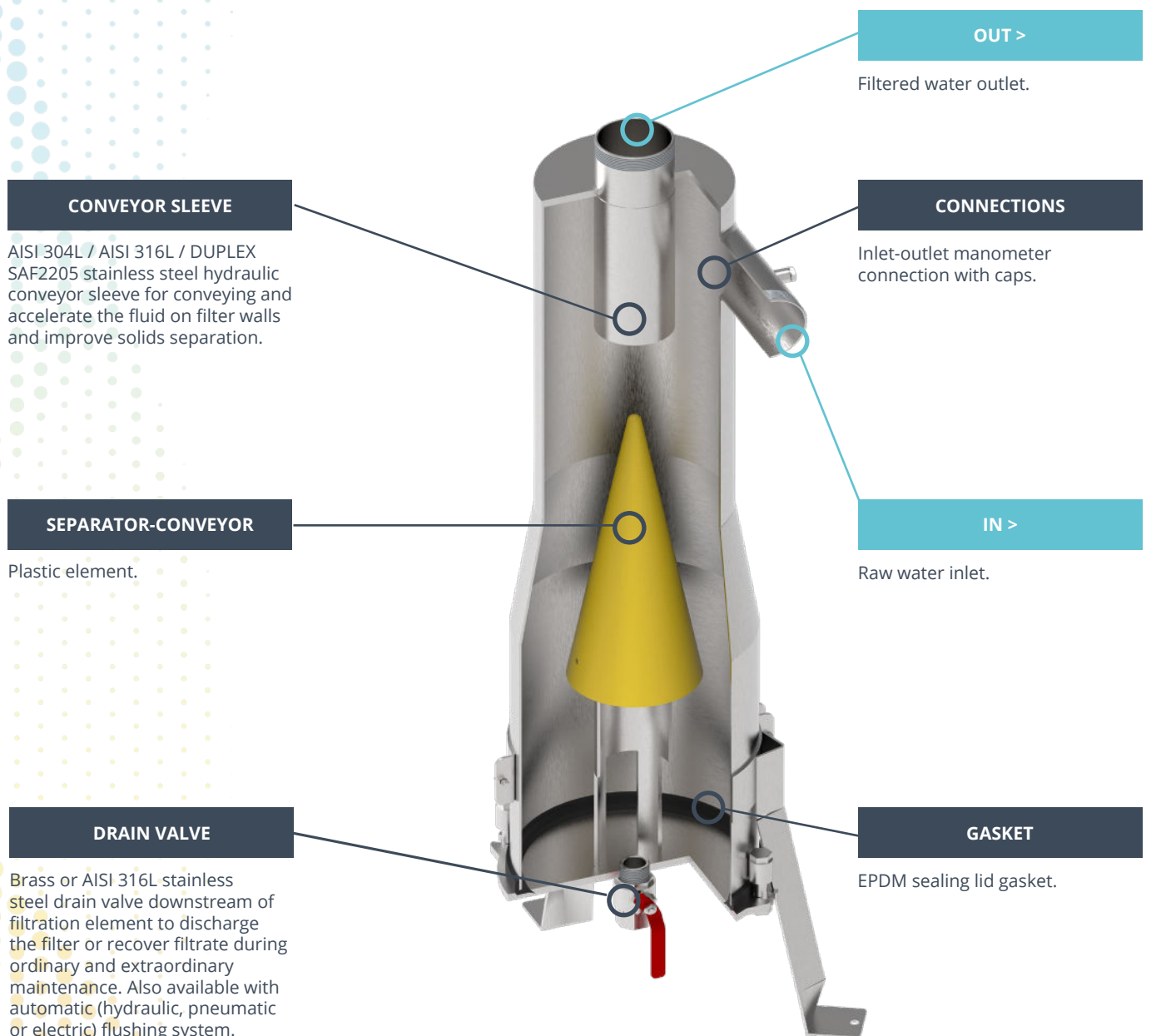
## APPLICATIONS



HVAC/R

FOOD &  
BEVERAGE

INDUSTRY

WASTE WATER  
TREATMENT

\*Non-standard features available upon request.

The company reserves the right to make partial or total changes to products without prior notice and declines all liability.

## TECHNICAL SPECIFICATIONS

### GENERAL DATA

|                              |                        |
|------------------------------|------------------------|
| <b>FLOW RATE</b>             | 5 - 440 m³/h           |
| <b>MIN FILTRATION DEGREE</b> | 30 µm 60% - 50 µm 100% |
| <b>MAX FLOW RATE</b>         | 10 bar (145 psi)       |
| <b>MAX TEMPERATURE</b>       | 60°C (140°F)           |
| <b>SALINITY</b>              | < 10.000 ppm TDS       |
| <b>ACIDITY</b>               | pH 3 ÷ 9               |

### MATERIALS

|                          |                                        |
|--------------------------|----------------------------------------|
| <b>FILTER BODY</b>       | AISI 304L / AISI 316L / DUPLEX SAF2205 |
| <b>LID</b>               | AISI 304L / AISI 316L / DUPLEX SAF2205 |
| <b>BODY SUPPORT</b>      | AISI 304L                              |
| <b>DEFLECTOR</b>         | AISI 304L / AISI 316L / DUPLEX SAF2205 |
| <b>GASKETS</b>           | EPDM / NBR / VITON/ SILICON            |
| <b>SURFACE TREATMENT</b> | Pickling and passivation               |

### AUTOMATIC DRAIN VALVE

A kit to automate the filter discharge is available on request; it can be supplied pneumatic or motorised and includes all elements necessary for installation and operation.

The kit can be equipped with a SATICON electronic control unit to control and manage the cleaning cycles or without control to be able to manage the cycles using its own controller or an existing control panel.



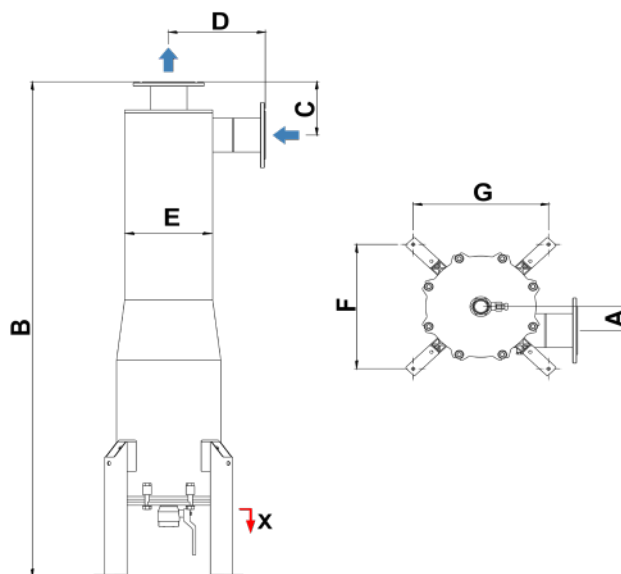
PNEUMATIC AUTOMATIC DISCHARGE KIT



ELECTRIC AUTOMATIC DISCHARGE KIT

### ON REQUEST

- Other constructive pressures.



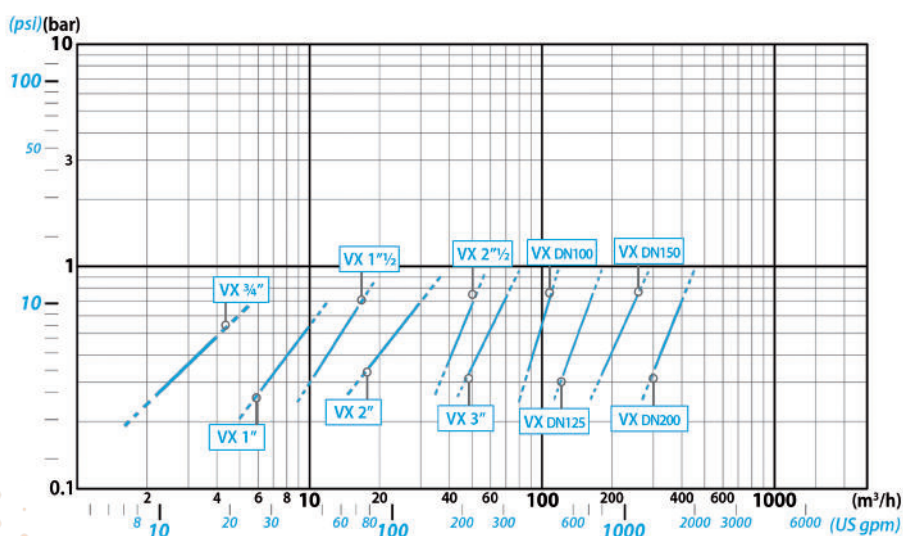
| MODEL      | IN/OUT    | DRAIN     | Qmin* |        | Qmax* |        | DIMENSIONS (mm) |      |     |     |     |     |     | WEIGHT**<br>kg |
|------------|-----------|-----------|-------|--------|-------|--------|-----------------|------|-----|-----|-----|-----|-----|----------------|
|            |           |           | m³/h  | US gpm | m³/h  | US gpm | A               | B    | C   | D   | E   | F   | G   |                |
| VX HP ¾"   | ¾" BSPP   | ½" BSPP   | 2     | 9      | 5     | 22     | 24              | 590  | 95  | 110 | 76  | 240 | 205 | 5              |
| VX HP 1"   | 1" BSPP   | ¾" BSPP   | 5     | 22     | 12    | 53     | 28              | 670  | 100 | 120 | 89  | 255 | 220 | 7              |
| VX HP 1" ½ | 1" ½ BSPP | 1" BSPP   | 10    | 44     | 18    | 79     | 33              | 960  | 120 | 160 | 114 | 320 | 290 | 18             |
| VX HP 2"   | 2" BSPP   | 1" BSPP   | 15    | 66     | 35    | 154    | 40              | 1010 | 125 | 190 | 140 | 330 | 285 | 23             |
| VX HP 2" ½ | 2" ½ BSPP | 1" BSPP   | 30    | 132    | 50    | 220    | 46              | 1170 | 135 | 200 | 168 | 375 | 325 | 35             |
| VX HP 3"   | 3" BSPP   | 1" BSPP   | 45    | 198    | 80    | 352    | 65              | 1315 | 155 | 230 | 219 | 425 | 365 | 40             |
| VX HP 80   | DN80      | 1" BSPP   | 45    | 198    | 80    | 352    | 65              | 1315 | 155 | 230 | 219 | 425 | 365 | 44             |
| VX HP 100  | DN100     | 1" ½ BSPP | 80    | 352    | 115   | 506    | 81              | 1670 | 195 | 300 | 273 | 420 | 420 | 70             |
| VX HP 125  | DN125     | 1" ½ BSPP | 115   | 506    | 170   | 748    | 92              | 1870 | 195 | 350 | 234 | 480 | 480 | 110            |
| VX HP 150  | DN150     | 1" ½ BSPP | 170   | 748    | 275   | 1210   | 119             | 2500 | 232 | 400 | 406 | 500 | 500 | 155            |
| VX HP 200  | DN200     | 2" BSPP   | 275   | 1210   | 440   | 1936   | 144             | 3080 | 240 | 455 | 508 | 625 | 625 | 190            |

Dimensions are indicative. We advise to contact SATI technical support for further information.

\* Flow rates are referred to filters with 20 °C, NTU < 1 water flow.

\*\* Weight excluding automation and packaging.

## PRESSURE LOSS



Pressure drop is referred to filters with 20 °C con NTU < 1 water flow.