FVF

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FLOW – VORTEXFLOW (FVF)

What are FVF?

FVFs are high-efficiency hydrocyclones, fundamental equipment for industrial processes that require the efficient separation of solid particles in liquid suspensions. Using centrifugal force, they enable precise separation, ensuring superior results in various applications such as mining, water treatment, and recycling processes. Hydrocyclones can be single, work in series, or parallel with others, depending on the customer's specification.

Main Applications:



- Mining: Mineral separation, fines recovery, and coal washing.
- Water Treatment: Removal of suspended solids in wastewater or potable water.
- Chemical Industry: Classification of particles in chemical suspensions.
- Recycling: Filtering and separating materials in recycling processes.

Why choose our hydrocyclones?

- High Performance: Designed to deliver superior performance even in the most demanding conditions.
- State-of-the-art Technology: Precision-engineered equipment for consistent results.
- Customization: We offer tailor-made solutions, tailoring our hydrocyclones to the specific needs of our customers.
- Flexibility: Modular top output and Apex to give diverse conditions to our customers.
- Low pressure loss tangential input and dispensing efficiency.
- Own cone insert design to maximize efficiencies.



Technical Characteristics:

- Variable diameters for different processing flows.
- Compact and modular model, facilitating installation and maintenance.
- Available in different construction materials: carbon steel, stainless steel, among others, to meet various industrial requirements.



Differential:

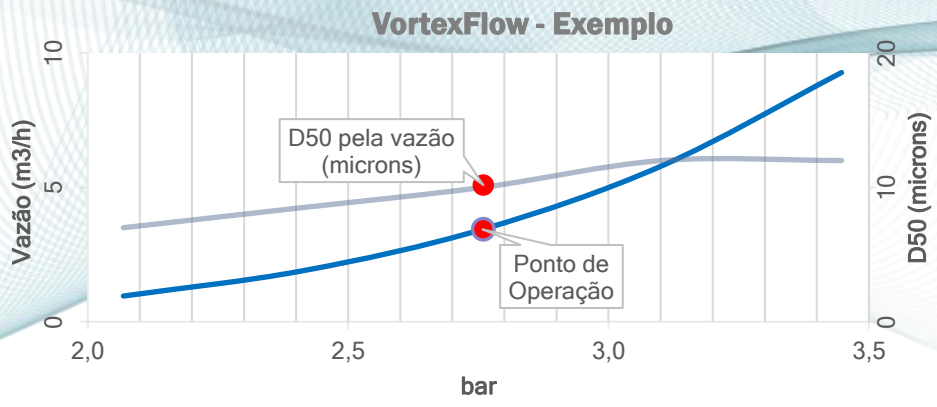
- Extensively tested equipment
- Separation Guarantee
- We are skilled at indicating the D50 and the operating point

Cutting-edge engineering

Several simulations were made to arrive at the FVF design.

Thus, we are able to ensure the performance and data of our hydrocyclones.



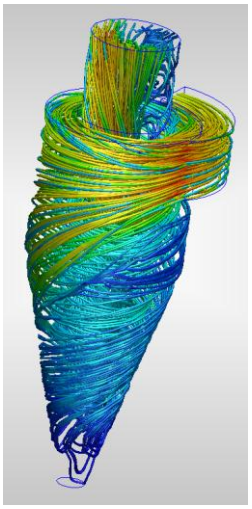


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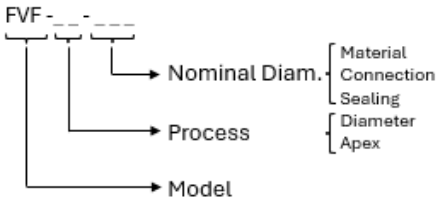
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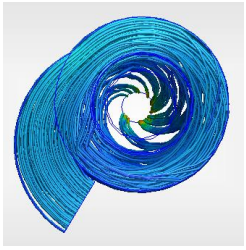
Technical Data

Diameter	Flow rate (L/h)	Height (mm)	Inlet Nozzle	Overflow	Appex Output	Appex (mm)
2”	1.140 - 2.800	108	1/2"	1”	1”	3 - 6
3”	3.420 - 5.700	149	1”	1”	1”	6 - 9
4”	11.400 - 13.680	181	2”	1.1/2”	1.1/2”	8 - 12
6”	17.100 - 19.380	194	3”	2”	2”	12 - 15



Specification





Material	Code
Carbon Steel	1
Stainless Steel 304	2
Stainless Steel 316	3

Connection	Code
SMS	1
TC	2
Soldering Tip	3
Flange	4
BSP	5
NPT	6

Sealing	Code
PTFE	1
NBR	2
Viton	3
EPDM	4
Graphite	5

Example: FVF-39-214: FVF 3" hydrocyclone with 9mm appex in SS304 with SMS connection and EPDM

Safety Instruction:

☞ Power Shutdown:

Before beginning any maintenance procedures or adjustments, ensure that the equipment is completely switched off and disconnected from the electrical power source. Use locking and signaling devices to prevent accidental connections.

☞ Pressure and vacuum check:

The hydrocyclone can operate under pressure. Before beginning any operation or maintenance, check that the internal pressure of the equipment has been completely relieved. Avoid releasing pressure quickly or abruptly, as this can create a risk of injury.

☞ Temperature Check:

The hydrocyclone can operate under high temperature. Before starting any operation or maintenance, wait for the temperature of the equipment to return to temperatures suitable for handling.

☞ Maintenance:

Replacement of all gaskets is necessary in order to avoid leakage of product and/or chemical elements. The standard service life of the gaskets is 1 (one) year. Depending on the type of material being used, the lifespan can be reduced.



During the operation and maintenance of the hydrocyclone, it is mandatory to use appropriate PPE (Personal Protective Equipment), such as:

- Safety helmet;
- Goggles;
- Key money;
- Safety boots;
- Among others;

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