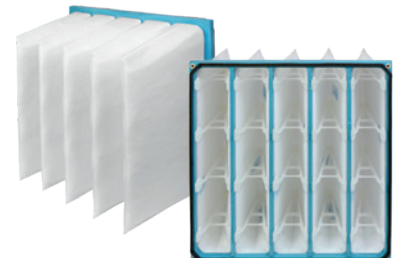


# HYDROMAXX REVERSE POCKET FILTERS

viledon®

FOR EXCELLENT COALESCING AND PREFILTRATION PROTECTION WITH THE UNIQUE MODULAR CLIP-ON SYSTEM

FILTER TYPE	FILTER CLASS TO ISO 16890	FILTER CLASS TO EN 779:2012
hydroMaxx	ISO ePM10 50%	G 4



## The application

Viledon® hydroMaxx reverse pocket filters are the next generation of coalescer filters following the field-proven F45R pocket filter range. Offering high operational reliability and cost-efficiency they are ideally suited for intake air prefiltration at coastal, offshore and other high humidity locations of

- gas turbines in power generation and in the oil and gas industry,
- compressors and diesel and gas engines.

One of the greatest challenges in turbomachinery intake air filtration applications is water carry through or saturation of the filter system. These effects are responsible for a rapid pressure differential increase, gas turbine shut down(s) as well as the occurrence of high levels of fouling due to breakthrough of sub-micron moisture droplets containing salt particles and hydrocarbons. Viledon® hydroMaxx pocket filters help overcome these challenges and outperform traditional pocket filters in terms of coalescing properties and lifetimes.

## Their characteristics and benefits

hydroMaxx pocket filters offer four main benefits in one filtration concept.

1. The reverse media's **hydrophobic**, progressive nonwoven **composition** functions as a **reliable coalescer** for water particles. This feature enables the water droplets to combine and drain down from the vertical pockets. Thus salt and hydrocarbon ingress will be substantially reduced.
2. **Superior dust handling**. Thanks to the reverse media concept, dust is not readily stored as in a traditional pocket filter. The hydroMaxx utilizes a self-supporting, integrated cage system to optimize performance.
3. **Maximized functional reliability** thanks to the leak-proof welded edge configuration of the filter pockets, foam-sealed into a PUR front frame, and dimensionally stable construction of the filter element as a whole.
4. Various **2-in-1 filtration system solutions** based on the **unique modular clip-on system**. This design allows close coupling to either the intermediate or the final filter without any structural modifications.

## The special features

- Progressively structured hydrophobic, high-performance nonwovens made inhouse from non-breaking synthetic-organic fibers are used as filter media.
- The integrated plastic support cage ensures optimum stability as well as easy, timesaving mounting or change of the filter element.
- Pre-installed couplings at the four corners can be used for combination with other pre or final filters by using the patented Viledon® modular clip-on system.
- The pocket filters are free of glass fibers, non-corroding, self-extinguishing to DIN 53438 (Fire class F1) and microbiologically inactive.



Fully integrated supporting ribs avoid collapsing pockets



Couplings on the hydroMaxx and pins on the main filter allow fast and safe installation



hydroMaxx clipped on main filter

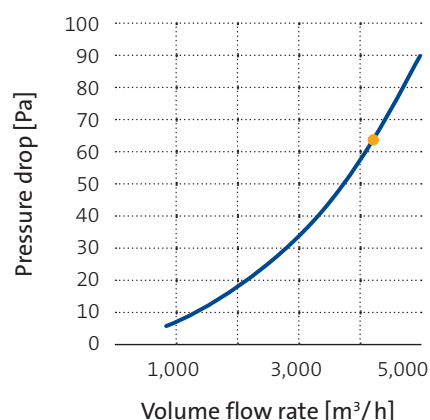
HYDROMAXX: ECONOMIC. RESILIENT. SPACE-SAVING.

IN ALL CONDITIONS: ONSHORE, COASTAL, OFFSHORE

KEY DATA		1/1
Nominal volume flow rate	m <sup>3</sup> /h	4,250
Face velocity	m/s	3.8
Initial pressure drop	Pa	65
Class to ISO 16890		ePM10 50%
Particulate matter efficiency ISO ePM10	%	51
Initial gravimetric arrestance	%	73
Filter class to EN 779:2012		G4
Recom. final pressure drop	Pa	375
Dust holding capacity approx. (AC Fine / 375 Pa)	g	1,500
Water retention (Viledon® water spray test – new state) 2 hours at 30 liters/hour	%	100

GEOMETRIES AVAILABLE		1/1
Filtering area	m <sup>2</sup>	1.8
Weight approx.	kg	1.7
Header frame	mm	558 × 558
Overall depth	mm	345 raw gas side
Number of pockets		5
Thermal stability	°C	70
Moisture resistance	%	100

Initial pressure drop curve



— hydroMaxx

● Nominal volume flow rate

+
+

**hydroMaxx benefits at a glance**

- Excellent coalescing properties with “front of filter” drainage effect which stops moisture droplets from passing to the 2<sup>nd</sup> filter stage.
- Enhanced prefilter lifetime thanks to water repellent properties.
- The unique Viledon® modular clip-on system allows close coupling to various intermediate or final filters → various 2-in-1 filtration solutions without any structural modifications.
- Timesaving installation and filter change-out option even when the machine is running.
- High operational reliability – in particular reduced carry through of salt particles and hydrocarbons.
- Self-supporting, integrated cage system for optimized performance.
- Offers compact, space-saving, multi-stage filtration system solutions.

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