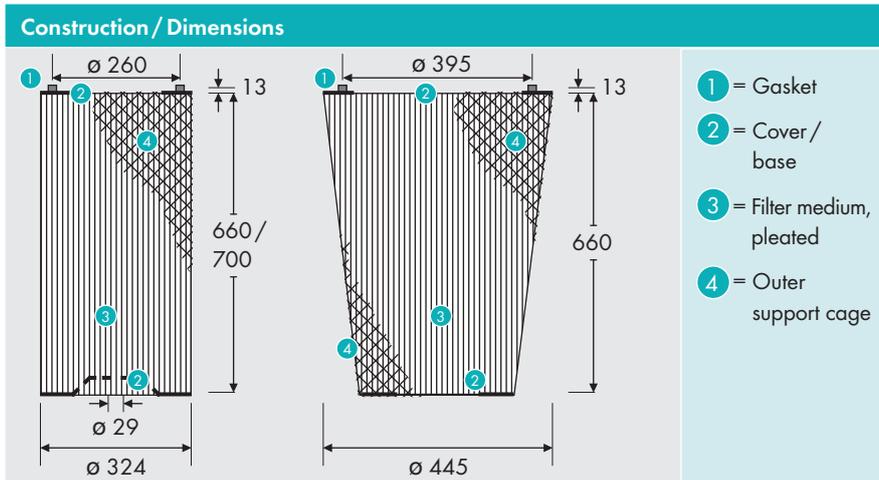


# The self-cleaning cartridge solution for turbomachinery systems

## Pulse-jet filter cartridges – GTS series



### The application

Viledon® self-cleaning pulse-jet filter cartridges of GTS series are used in supply air filtration systems for gas turbines and turbo-compressors in both on and offshore applications.

### The concept

GTS cartridges with their **optimized self-cleaning characteristics maximize useful lifetimes and significantly enhance the cost lifecycle for supply of air filtration** in turbomachinery systems. Here they meet the

stringent requirements for clean air quality, particularly under critical on-site conditions where self-cleaning cartridges are required and when process safety does not permit any compromises.

This series is a new generation of Viledon® filtration world core products and has been stringently tested for pulse-ability properties thus offering the user one of the best self-cleaning cartridges on the market.

### The characteristics and the benefits

- Innovative high-strength synthetic microfiber nonwoven with water-repellent coating that allows the cartridge to **maintain excellent operational characteristics** in all climatic conditions.
- The filter media ensure **high arrestance, high dust holding capacity** (prior to self-cleaning), **low average pressure drop and high cost efficiency**. This makes the GTS particularly suitable for locations with high dust concentrations in the ambient air.
- GTS cartridges have been **optimized in terms of filtering area, pleat depth and number of pleats** which means the active filtering area remains completely effective over its entire operating lifetime.
- To minimize corrosion and handling damage, the inner and outer support cage and base end caps are made of galvanized steel or stainless steel. All components are cast together to ensure **leak-proof operation** as well as **high security against dust penetration** during pulse operation.
- The foamed-on EPDM gasket ensures **optimized sealing** against the mounting plate.
- Besides the versions shown the cartridges can be obtained in a **variety of other dimensions**, stainless steel end caps and support cages.

Technical data					
Cartridge dimension / outer diameter	mm	GTS 324-445 W66SO-Set	GTS 445 K66SO	GTS 324 W66SO	GTS 324 W70SO
Overall height	mm	1,330	660	660	700
Filter medium		Synthetic microfiber nonwoven			
Filtering area	m <sup>2</sup>	40.1	22.0	18.1	19.2
Material for cover, base, support cages		Steel, galvanized			
Gasket		EPDM			
Moisture-resistance (rel. hum.)	%	100			
Thermal stability: continuous stress / temporary peaks	°C	70   80			

# Technical filter test data

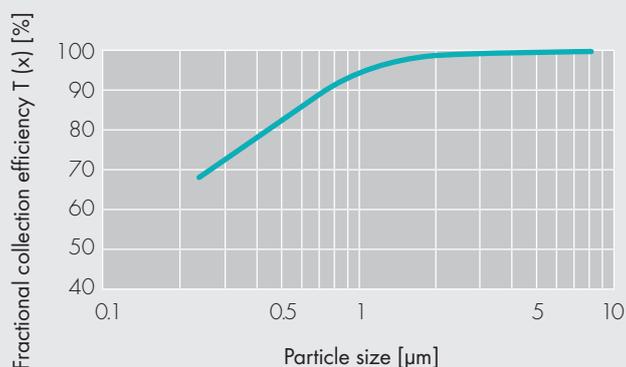
## Fractional collection efficiency curve

### GTS 324 W66S0

#### \*Test conditions:

Test at nominal flow rate: 1,100 m<sup>3</sup>/h, test aerosol: DEHS,  
test with laser particle counter in test channel according to EN 779.

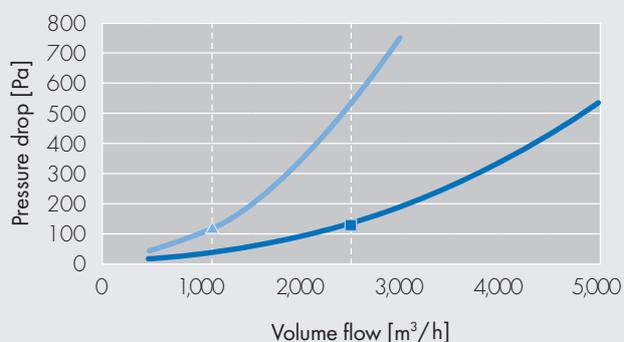
### Fractional collection efficiency\* GTS 324 W66S0



## Pressure drop curves

### GTS 324 W66S0

### GTS 324-445 W66S0-Set



Key data		GTS 324-445 W66S0-Set	GTS 445 K66S0	GTS 324 W66S0	GTS 324 W70S0
Filter class (EN 779:2012)		F9			
Initial arrestance	%	99.9			
Average arrestance	%	99.9			
Initial efficiency	%	74			
Minimum efficiency after isopropanol (IPA) treatment	%	≥70			
Average efficiency	%	98			
Dust holding capacity (ASHRAE/450 Pa)**	g	approx. 1,800	-	approx. 700	approx. 750
Nominal volume flow rate	m <sup>3</sup> /h	2,500	1,400	1,100	1,100
Maximum volume flow rate	m <sup>3</sup> /h	3,500	2,000	1,500	1,500
Initial pressure drop at nominal volume flow rate	Pa	130	-	115	115
Recommended final pressure drop	Pa	800			
Maximum permissible operating pressure	Pa	3,000			

\*\* The filter class is determined to a final pressure drop of 450 Pa in accordance with EN 779.

The figures given are mean values subject to tolerances due to the normal production fluctuations. Our explicit written confirmation is always required for the correctness and applicability of the information involved in any particular case.

Subject to technical alterations.

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