

Dust filter cartridge

145/156/220/328 NKH

Ø 145/156/220/328 mm, conical with hook-shaped flange

1. Features

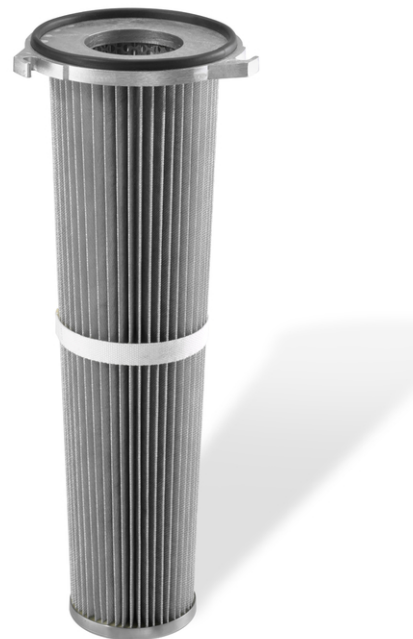
Star-pleated Filtration Group dust filter cartridges are used to separate very fine particles from gases. The gas flows inward through the cartridge and is discharged via the open end cap on the top.

The conical shape is the outcome of the cartridge's superior flow behaviour and strength. Its performance has been significantly enhanced by the improved cleaning performance and the optimised flow conditions, especially in dust removal filters with jet pulse cleaning. This is also supported by a special method of element pleat stabilisation.

Regular, extensive material and performance tests are the key to the consistently high quality of Filtration Group dust cartridges. A team of dedicated engineers in our applications department and modern development laboratories constantly endeavour to mature and perfect our products. Applications tests both on the customer's side and in our own facilities form the backbone of affordable and reliable products.

Characteristics

- Very high loading capacity
- Improved cleaning properties
- Optimised flow conditions
- High stability
- Installation on the raw or clean gas side
- Universally suitable
- For high volumen flow
- Optimised filter media
- Worldwide distribution



2. Technical Data

Materials

Inner core:	Galvanized steel (standard)
End caps:	Galvanized steel/aluminium (standard)
Seal:	NBR-seal fitted into notch (ø 328 NKH version glued in)
Filter material:	Ti 07/1 - Electrostatical conductive polyester fleece with PTFE membrane Ti 08 - Electrostatical conductive polyester fleece, aluminium coated Ti 15 - Polyester fleece Ti 19 - Cellulose/polyester carrier with PP meltblown Other filter materials on request

Cleaning

Nozzle:	ø 145/156 mm - Multi jet nozzle G3/8 ø 220 mm - Multi jet nozzle G3/4 ø 328 mm - Multi jet nozzle G1
Cleaning pressure:	4 to 6 bar (max. 7 bar)
Differential pressure:	max. 18 mbar
Compressed air consumption per cleaning pulse:	6 to 90 l (fad)
Compressed air reservoir capacity:	approx. 2 - 32 l per filter cartridge/cleaning pulse

Technical data is subject to change without notice!

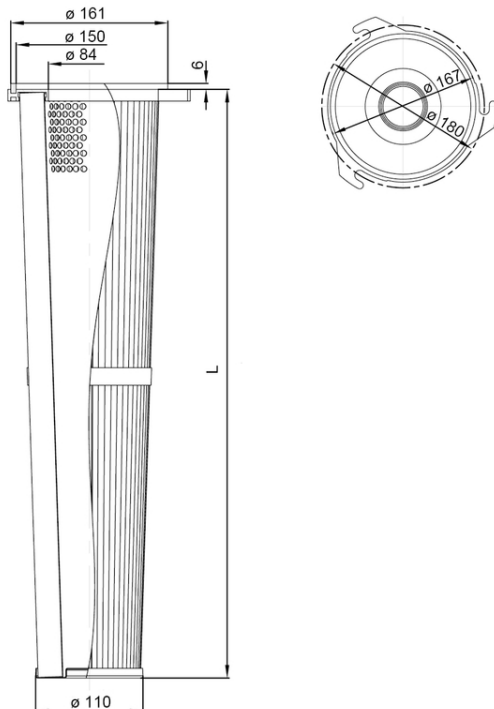
3. Type number key, description and dimensions

3.1 Type number key

Type	Series	Filter material	Filter surface	Material	Design
852	039	Ti 07/1	-2.7		BAND Example

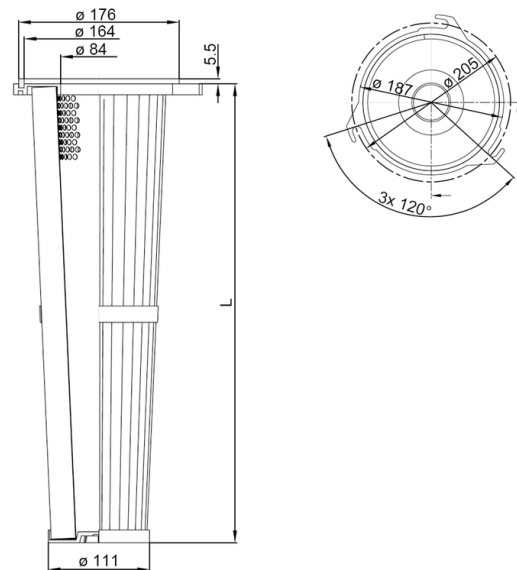
3.2 Description 145 NKH

The dust filter cartridge has a closed bottom end cap. It will be raw or clean gas side mounted with a hook-shaped flange. The filter cartridge is fixed to the filter plate via three studs. We recommend cleaning the dust filter cartridge with the Filtration Group multi-jet nozzle. Recommended hole in the filter plate for clean gas side installation 149 mm.



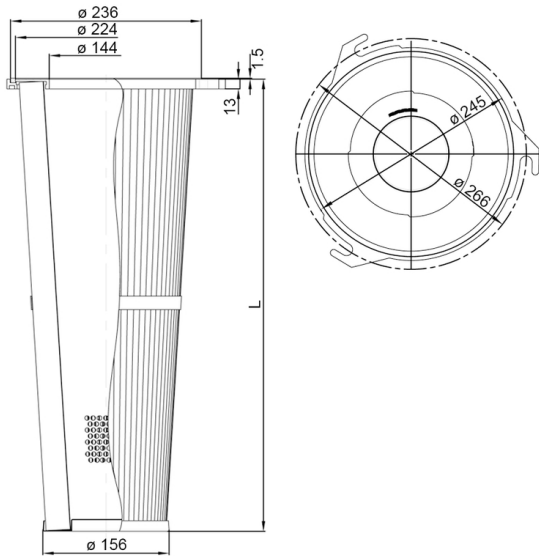
3.3 Description 156 NKH

The dust filter cartridge has a closed bottom end cap. It will be raw or clean gas side mounted with a hook-shaped flange. The filter cartridge is fixed to the filter plate via three studs. We recommend cleaning the dust filter cartridge with the Filtration Group multi-jet nozzle. Recommended hole in the filter plate for clean gas side installation 160 mm.



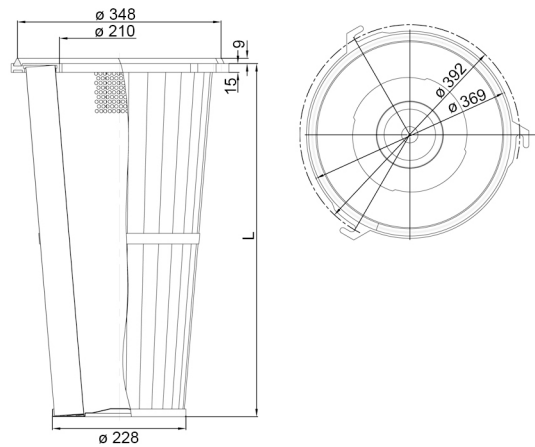
3.4 Description 220 NKH

The dust filter cartridge has a closed bottom end cap. It will be raw or clean gas side mounted with a hook-shaped flange. The cartridge is fixed to the filter plate via three studs. We recommend cleaning the dust filter cartridge with the Filtration Group multi-jet nozzle. Hole in the filter plate for clean gas side installation 225 mm.



3.5 Description 328 NKH

The dust filter cartridge has a closed bottom end cap. It will be raw or clean gas side mounted with a hook-shaped flange. The cartridge is fixed to the filter plate via three studs. We recommend cleaning the dust filter cartridge with the Filtration Group multi-jet nozzle. Hole in the filter plate for clean gas side installation 333 mm.



Several filter media are available for filter elements (see data sheet filter media).

3.6 Dimensions 145 NKH

Type designation	Length L [mm]	Filter surface [m ²]	Max. vol. flow* [m ³ /h]	Start pressure loss** [Pa]	Max. operating temperature*** [°C]
852 082 Ti ...	600	1.6	165	> 250	80 (standard)
852 039 Ti ...	1000	2.7	275		

3.7 Dimensions 156 NKH

Type designation	Length L [mm]	Filter surface [m ²]	Max. vol. flow* [m ³ /h]	Start pressure loss** [Pa]	Max. operating temperature*** [°C]
852 097 Ti ...	500	1.8	185	> 250	80 (standard)

3.8 Dimensions 220 NKH

Type designation	Length L [mm]	Filter surface [m ²]	Max. vol. flow* [m ³ /h]	Start pressure loss** [Pa]	Max. operating temperature*** [°C]
852 018 Ti ...	600	4	380	> 250	80 (standard)
852 056 Ti ...	1000	5.0/6.0	620		

3.9 Dimensions 328 NKH

Type designation	Length L [mm]	Filter surface [m ²]	Max. vol. flow* [m ³ /h]	Start pressure loss** [Pa]	Max. operating temperature*** [°C]
852 061 Ti ...	600	7.5	765	> 250	80 (standard)
852 041 Ti ...	1000	12.5	1275		
852 051 Ti ...	1200	12/15	1530		

* Depending on the air to media ratio of 1.7 m³/m² min

** Depending on volume flow and filter media

*** Depending on media/materials, higher temperature ranges on request

4. Installation

4.1 Raw gas side installation

Three studs with loosened nuts are welded on the filter plate. The cartridge have to be hooked onto the nuts on the raw gas side. The cartridge will be fixed to the filter plate by fastening the nuts. For deinstalling the nuts have to be loosened and the cartridge can be removed downward from the unit easily.

4.1 Clean gas side installation

Three studs with loosened nuts are welded on the filter plate. The cartridge have to be pushed through the hole in the filter plate from the clean gas side. The cartridge will be fixed to the filter plate by fastening the nuts. For deinstalling the nuts have to be loosened and the cartridge can be removed upward from the unit easily.

5. Accessories

Order number	Designation	Cartridge ø [mm]
76360275	Nozzle-M12 3/8 Alu	145/156
70343824	Nozzle-M16 3/4 Alu Multijet	220
76381198	Nozzle-M32 1 Alu SE Multijet	328

6. Cleaning

We recommend cleaning the dust filter cartridge with the Filtration Group multi-jet nozzle. The optimized geometry of the multi-jet nozzle guarantees excellent cleaning results with a significantly lower noise level.

The multi-jet nozzle is available from Filtration Group in aluminium or stainless steel. It can also be purchased as part of the Filtration Group MJD cleaning unit, comprising the nozzle, a stirrup and various small assembly components. The stirrup maintains an optimum distance from the cartridge to ensure maximum cleaning efficiency.



7. Design

Please contact us for detailed technical information, any open questions and for general expert advice. Completion of the relevant questionnaire would facilitate in the coordination of all important parameters. Comprehensive documentation on our product range, cleaning units and cartridges can be provided.

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