

Dust filter cartridge

120 OK/OZ

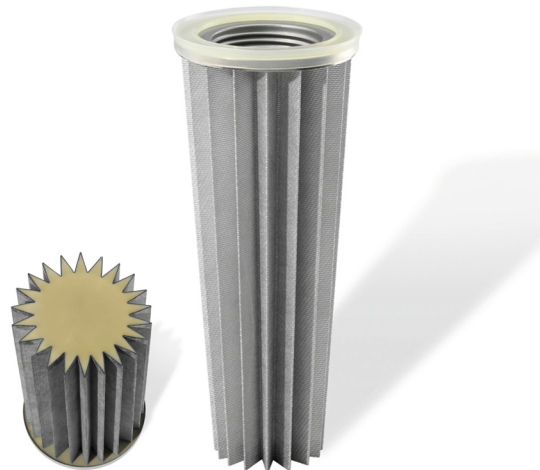
Ø 120 mm, open pleat at bottom

1. Features

Star-pleated MAHLE 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.

According to the special design and the FDA release, this type of filter is especially suitable for applications in the food and pharma industry. By the use of a special sealing concept (silicone form sealing) and our "Open Pleat" technology, product accumulations will be avoided in process. Therefore an optimised cleaning effect of the cartridges will be secured.

Regular, extensive material and performance tests are the key to the consistently high quality of MAHLE 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

- High loading capacity
- Very good cleaning properties
- Defined pleat allocation for best performance
- High stability
- Installation on the raw gas side
- Universally suitable
- Application in pharmaceuticals and food industry thanks FDA approval acc. to 21 CFR Ch. I § 177.1550)
- Avoid of product accumulation in process
- Secured operation
- Optimised filter media
- Optimised energy efficiency
- Worldwide distribution

2. Technical Data

Materials

Inner core:	Stainless steel V4A (1.4571/AISI 316)
End caps:	at top Stainless steel V4A (1.4571/AISI 316) below open pleat, PU (polyurethane)
Seal:	self-adhesive needle felt alternative: NBR form seal, black (FDA, electrically conductive) Silicone form seal, transparent (FDA)
Filter material:	Ti 07 - Electrically conductive polyester fleece with PTFE membrane Ti 08 - Electrically conductive polyester fleece Ti 15 - Polyester fleece Other filter materials on request

Cleaning

Nozzle:	Multi-jet nozzle G3/8
Cleaning pressure:	6 bar (max. 7 bar)
Differential pressure:	max. 18 mbar
Compressed air consumption per cleaning pulse:	9 l (fad)
Compressed air reservoir capacity:	approx. 2 l per filter cartridge

Technical data is subject to change without notice!

3. Type number key, Description and Dimensions

3.1 Type number key

Type	Design	Filter media	Filter surface	Material	Version	Ordering example
852	065	Ti 07	-0.2	V4A	FDA	852 065 Ti 07 -0.2 V4A FDA

3.2 Description

These dust filter cartridges were developed by MAHLE Industriefiltration GmbH for particularly challenging filtration tasks in the food and pharmaceuticals. The cartridge design facilitates optimum cleaning of the filter cake in conjunction with the MAHLE multi-jet nozzle. The optimum cleaning effect will be especially enhanced by our special "Open Pleat" technology. The dust filter cartridge has a closed bottom end cap.

3.3 Dimensions

Type designation	Version	Fig.	Length L [mm]	Filter surface [m ²]	Max. vol. flow* [m ³ /h]	Starting pressure loss** [Pa]	Max. operating temperature [°C]
852 067 Ti ...	cyl.	1	80	0.06	6	< 250	80 (standard) depending on gas/material
852 923 Ti ...	cyl.	1	200	0.15	15		
852 065 Ti ...	cyl.	1	300	0.25	20		
852 935 Ti ...	con.	2	300	0.19	18		

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

** Depending on volume flow and filter media

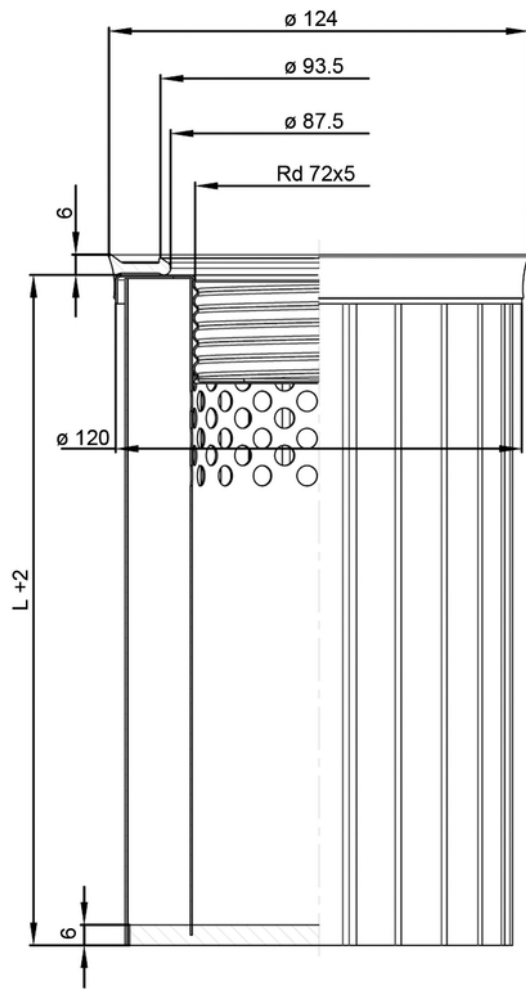


Fig. 1 852 067, 852 923, 852 065

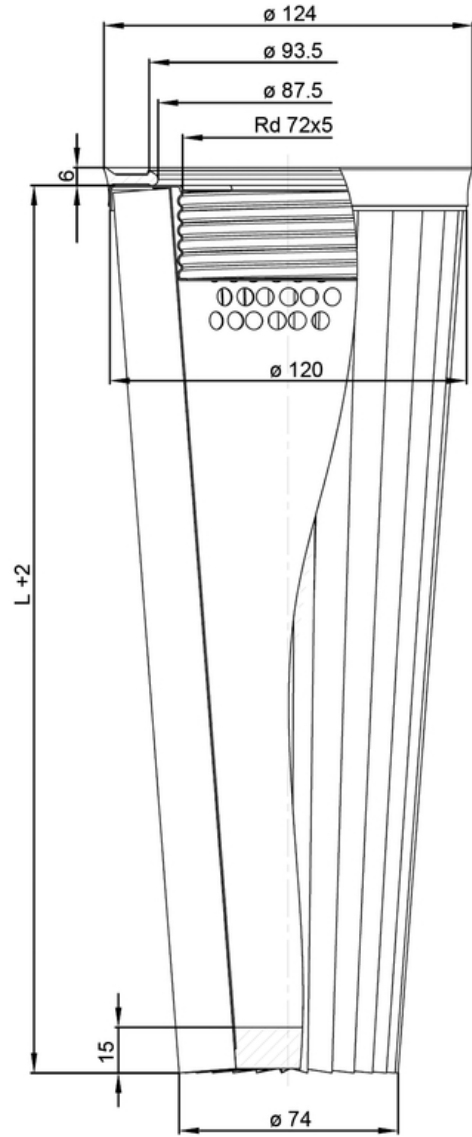
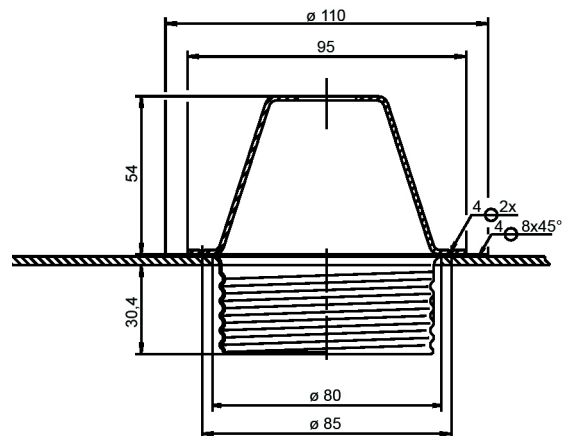


Fig. 2 852 935

4. Installation

The dust filter cartridge can be mounted on and dismantled from the filter plate using the Rd72x5 thread adapter - no tools required (max. torque 15 Nm).

A hole with a diameter of 80 mm must be drilled in the filter plate in order to mount the thread adapter. The stirrup and the thread adapter should be spot-welded to the filter plate as shown in the drawing.



5. Accessories

Order number	Designation
79382318	Thread adapter Rd72x5 stainless steel V4A - AISI 316
79741232	MJD 12 raw gas 3/8
76103105	Nozzle-M12 3/8 stainless steel 1.4301 with snap ring (Z)
79733882	Nozzle-M12 3/8 Alu with snap ring (Z)
70375129	Form seal 120/089.0/13.0 SI FDA
70512635	Form seal 120/089.0/13.0 NBR FDA electrically conductive
76315329	Adapter Rd60x4/Rd72x5 stainless steel V4A - AISI 316
79747148	Adapter Rd73x4/Rd72x5 stainless steel V4A - AISI 316
76139950	Adapter Rd74x4/Rd72x5 stainless steel V4A - AISI 316
78314528	Adapter cleaned gas Rd72x5, stainless steel V4A - AISI 316

6. Cleaning

We recommend cleaning the dust filter cartridge with the MAHLE multi-jet nozzle. The optimised geometry of the multi-jet nozzle guarantees excellent cleaning results with a significantly lower noise level. The multi-jet nozzle is available from MAHLE in aluminium or stainless steel. It can also be purchased as part of the MAHLE 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.

The special design of the cartridges enable to clean them wet in installed or non-installed condition. Please attend to the cleaning procedure of the filter media.



6. 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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