

Cleaning unit MJD

for dust cartridges up to Ø 328 mm

1. Features

The MAHLE cleaning system MJD is a very cost and cleaning efficient jet pulse cleaning system for dust filter cartridges.

By a aimed air flow with the optimized multi-jet nozzle, we can reach a regular cleaning over the whole length of the cartridge.

The cleaning system is available for the different cartridge diameter in optimized sizes. Depending on the application the cleaning system (MJD) is available in aluminium/steel zinc plated, as the standard or stainless steel, as a special version.

Characteristics

- Extremely effective
- Extreme energy efficiency
- Uniform cleaning
- Optimized cleaning efficiency in the upper and bottom part of the cartridge
- Versions for both the untreated and cleaned gas sides
- Compatible to the Rotating Wing (G1 valve)
- Low noise level
- Minimal consumption of compressed air due of the optimised nozzle geometry
- Worldwide distribution

In relation with the MAHLE cartridge the multi-jet cleaning system (MJD) is providing a very efficient and economic solution for a lot of applications.

The optimized multi-jet nozzle (MJD), comparing to the conventional nozzle or jet pipe, shows huge advantages. The advantages are given in the noise reduction (up to 8 dB), energy efficiency and cleaning efficiency.

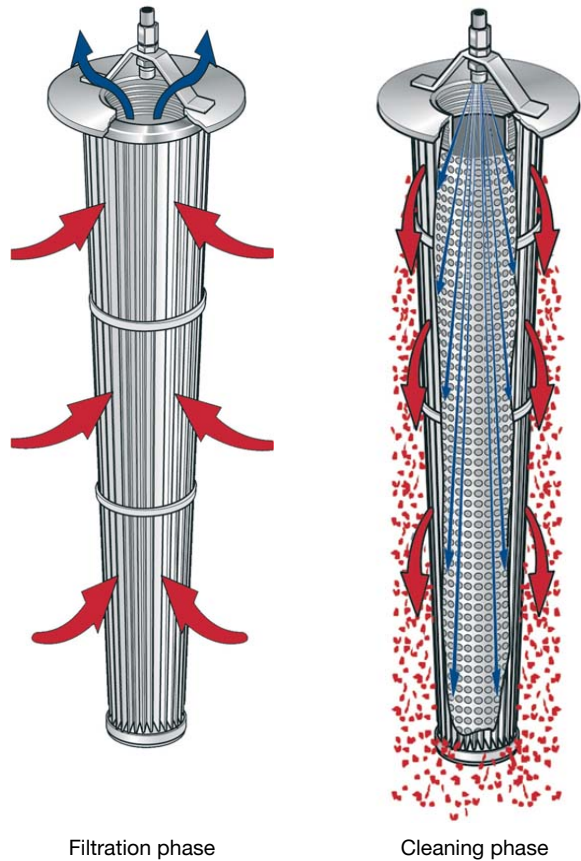
Thereby you go easy on environment and the live time of the cartridges will increase considerable.



2. Funktion

During the filtration phase dust particles are separated on the cartridge surface. A filter cake forms, which will be cleaned at a time control or differential pressure related.

At the cleaning we get a very quick expansion of the pressure vessel volume in a short time. These will reverse the flow direction and blow off the filter cake.



3. Technical data

Cleaning unit for dust cartridges with an outside diameter up to 328 mm.

Standard version multi-jet nozzle

Material: Aluminium

Special version multi-jet nozzle

Material: stainless steel (1.4301)

Standard and special version

Differential pressure

via filter plate: max. 15 mbar*

Cleaning medium: Oil, dust and condensate-free compressed air at operating temperature

Compressed air

connection: G3/8 , G3/4, G1 male*

Compressed air: 5 bar to 6 bar (max. 7 bar)

Pulse duration: 0.1 s to 0.3 s



Multi-jet nozzle during cleaning

Compressed air consumption

Type designation	Capacity of pressure vessel [l]	Compressed air consumption per cleaning impuls [l] (fad)
MJD-12	10	20 - 30
MJD-16	16	36 - 60
MJD-32	32	68 - 92

* Depends on cartridge geometry

Technical data is subject to change without notice!

4. Ordering example

4.1 Type number key for cleaning units

Type of cleaning

MJD Multi-jet nozzle for conical and cylindrical cartridges

RLD Rotating wing for cylindrical cartridges

RLK Rotating wing for conical cartridges

Cartridge diameter

-12 120 mm

-16 160 mm

-32 328 mm

Cartridge length and mode of installation

00 Independent of length, installation for example via round thread or bayonet

03 300 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock

06 600 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock

10 1000 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock

12 1200 mm, installation MJD/RLD via tie rod or RLK via Quick-Lock

Installation side of cartridge

REIN Installation on cleaned gas side

ROH Installation on untreated gas side

Versions

A1 Nozzle aluminium or galvanized or coated steel, RLD/K with ball bearing

V1 Nozzle aluminium or stainless steel, RLD with plain bearing

V2 Stainless steel, RLD with plain bearing

OS Only RLD/K with ball bearing without baffle plate, Nozzle aluminium or coated steel

MLD -16 00 REIN A1 Ordering example

4.2 Order numbers

Order number	Cleaning unit	Cartridge geometry	Cartridge mounting
79741232	MJD-12 00 ROH A1 VP	up to Ø 120 mm	Untreated gas side
76925655	MJD-12 00 REIN A1 VP		Cleaned gas side
70375835	MJD-12 00 ROH V2 VP		
70343901	MJD-16 00 ROH A1 VP	up to Ø 220 mm	Untreated gas side
70343906	MJD-16 00 ROH V2 VP		
79741240	MJD-16 00 REIN A1 VP		Cleaned gas side
79356379	MJD-32 03 ROH A1 VP	Ø 328 mm	Untreated gas side
79356387	MJD-32 06 ROH A1 VP		
79356395	MJD-32 10 ROH A1 VP		
70304809	MJD-32 00 ROH A1 VP	Quick-Lock Ø 328 mm	

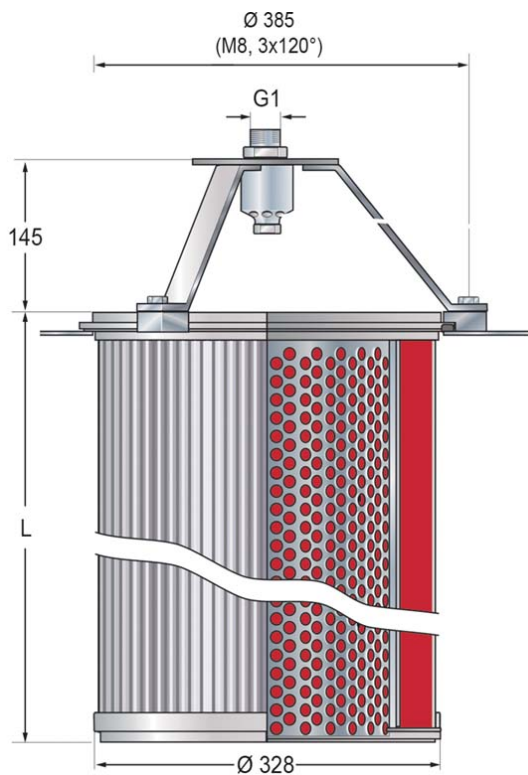
5. Accessories

Order numbers	Designation
79791104	Holding bolts PA6, pack of 3
77838568	Centre ring EL 033, galvanized steel
77934326	Centre ring EL 033, V2A stainless steel
77885031	Centre ring 2E 033, galvanized steel
78215220	Centre ring 2E 033, V2A stainless steel
76161913	Reusable end cap, galvanized steel
76161921	Reusable end cap, V4A stainless steel

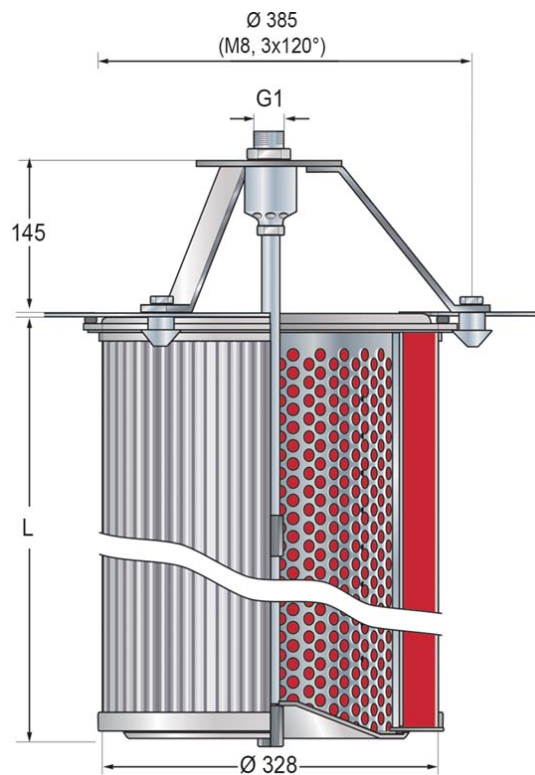
6. Installation

The multi-jet nozzle can be supplied for installation on the untreated or cleaned gas side.

A membrane valve must be provided on the pressure vessel for each cleaning unit. The cartridges are individually cleaned to ensure the least possible impairment to the volume flow and optimal cleaning results. The membrane valves can be controlled according to a time control or a differential pressure limit.



Installation on the cleaned gas side



Installation on the untreated gas side

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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