

# MDB-DILUTER PRO

## ENVIRONMENTAL DILUTER SYSTEM

The MDB-Diluter is a free-standing filtration system that prevents accumulation of welding fume by continuous filtration of polluted air. The system consists of a filter unit, a fan in a sound-absorbing case, an outlet unit with adjustable outlet nozzles and a silencer. The MDB-Diluter is supplied with intelligent control equipment ControlPro. The fan speed is pressure controlled by a frequency inverter.

The filter unit is provided with a spark arrester and filter cartridges. It contains the RamAir™ pulse amplifier for automatic filter cleaning. The dust and dirt particles end up in the dustbin underneath.



### APPLICATIONS

The MDB-Diluter is intended to be used for the following applications:

- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- stick/MMAW welding
- (very) heavy dust load



### SPECIFICATIONS

■ Physical dimensions and properties	
Inlet diameter: • fan (internal diameter)	• Ø 401 mm (15.79 in.)
Outlet diameter: • filter unit • fan (internal diameter)	• Ø 400 mm (15.75 in.) • Ø 501 mm (19.72 in.)
Material: • housing  • fan • fan housing • outlet unit with nozzles  • silencer	• electro-zinc coated steel (according to DIN EN 10152) • steel • steel with aluminium profiles • zinc-plated steel and aluminium • zinc-plated steel
Colour: • housing • cover plates • frame	• black RAL 9005 • grey RAL 7035 • black RAL 9005
Weight (net)	
Capacity of dustbin	80 litres (21 gallon)
■ Filter cartridges	
Type	CART-PTFE/15
Material	BiCo spunbond polyester with PTFE membrane
Filter surface area	8 x 15 m <sup>2</sup> = 120 m <sup>2</sup>
Welding fume class	W3 compliant (EN-ISO 15012-1:2013)
■ Compressed air system	
Required compressed air quality	dry and oil-free according to ISO 8573-3 class 6
Required pressure	4-5 bar (60-75 PSI)
Compressed air connection	push-in fitting: • in: G 3/8 in. • out: 12 mm

Compressed air consumption	40-50 nl/pulse (1.4-1.8 ft <sup>3</sup> /pulse)	
■ Performance		
Fan type	radial	
Airflow (max.): • unrestricted • operational	m <sup>3</sup> /h 12.000 9.000	CFM 7,063 5,297
Throw	max. 50 m (164 ft)	
Speed of revolutions	2920 rpm at 50 Hz	
Noise level	<70 dB(A)	
■ Electrical data		
Power consumption fan	7,5 kW (10 HP)	
Available connection voltages	400-690V/3~/50Hz (435) 480V/3~/60Hz (536) 600V/3~/60Hz (636)	
Insulation class fan	F with PTC	
Nominal current	13,9 A	
Protection class	IP 54	
■ Ambient conditions		
Operating temperature: • min. • nom. • max.	5°C (41°F) 20°C (68°F) 70°C (158°F)	
Max. relative humidity	90%	
Suitable for outdoor use	no	
Storage conditions	• 5-45°C (41-113°F) • relative humidity max. 75%	
■ Scope of supply		
Central filter unit MDB-8/V – Air inlet module – Spark arrester – Frame – Dustbin – Dustbin trolley – Fan – Frame fan – Silencer – Duct 1,5 m (5 ft) / Ø 500 mm (19.7 in.) – Outlet unit with 6 nozzles – Control equipment, incl. HMI and frequency inverter		
■ Order information		
Article no.:	Type:	
• 0000118982	MDB-8/Diluter PRO (435)	
• 0000119051	MDB-8/Diluter PRO (536)	
• 0000119052	MDB-8/Diluter PRO (636)	

■ Logistics data		
	Gross weight (incl. pallet):	Packing dimensions:
Pallet 1		
Pallet 2		
Pallet 3		
Pallet 4		
Pallet 5		
Harmonized Tariff Code	8537.1091.90	
Country of origin	the Netherlands	

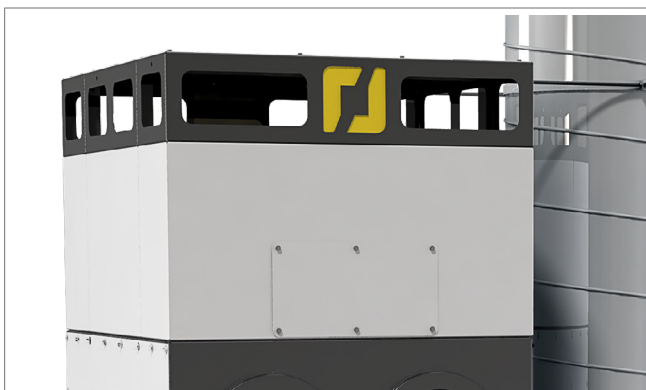
## FEATURES & BENEFITS



The effective RamAir™ filter cleaning system: individually cleaning of the filter cartridges by compressed air pulses



ControlPro control equipment:  
intelligent control panel + HMI with extensive feature package for fan/filter control; remote access via network



360° air inlet

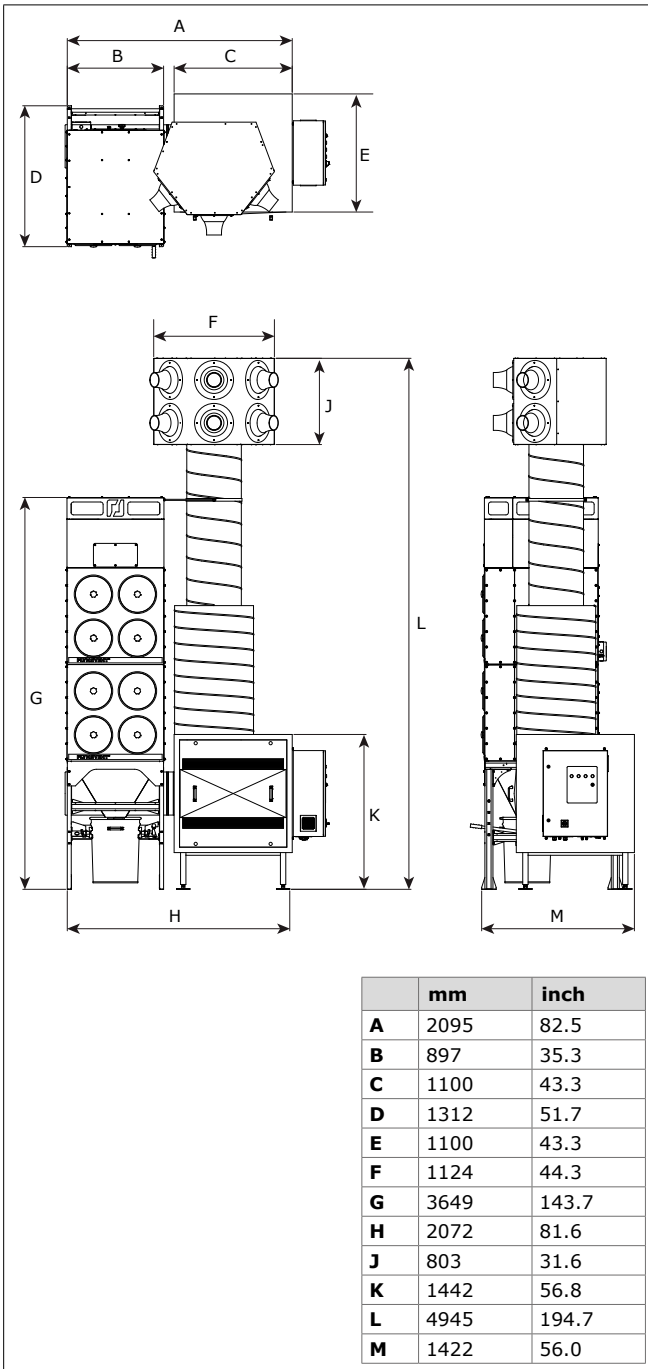
## APPROVALS/CERTIFICATES

	On fan motor and frequency inverter
	Directive 2011/65/EC (RoHS) valid as of 8 June 2011

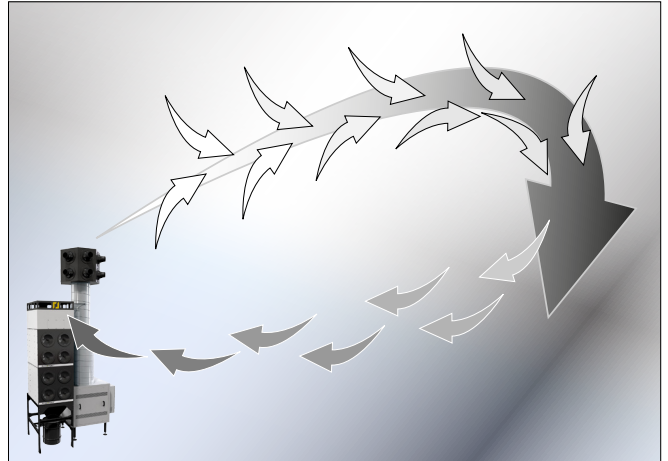


Adjustable outlet nozzles

**DIMENSIONS**



**WORKING PRINCIPLE**



**Application restrictions**

Do **not** use the product for the following applications or in the following circumstances: oil mist | extraction of hot gases (more than 45°C/113°F continuously) | sucking cigarettes, cigars, oiled tissues and other burning particles, objects and acids | explosive environments of explosive substances/gases



Product type

**MDB-Diluter PRO**

Article no.

*refer to Order information*

Product category

general filtration systems

Version

260919/A

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