

MULTIDUST BANK

CENTRAL FILTER SYSTEM

The MultiDust Bank (MDB) is a central filter system that consists of modular components. Automatic filter cleaning by compressed air pulses inside each filter cartridge.

The product type corresponds with the number of filter cartridges. Larger configurations on request.

Filter cartridges, extraction fan and control equipment to be selected and ordered separately.



APPLICATIONS

The MultiDust Bank is intended to be used for the following applications:

- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- stick/MMAW welding

Combined with an OilShield (limestone feeder) the MultiDust Bank is also suitable for:

- oil mist
- heavy oil mist in welding fume



Do **not** use the MultiDust Bank for the following applications or in the following circumstances:

- aluminium laser cutting
- extraction of aggressive fumes and gases (e.g. from acids, from alkaline, from soldering paste containing lithium)
- extraction of hot gases (more than 70°C/158°F continuously)
- grinding aluminum and magnesium
- flame spraying
- extraction of cement, saw dust, wood dust etc.
- sucking cigarettes, cigars, oiled tissues and other burning particles, objects and acids
- explosive environments or explosive substances/gases



SPECIFICATIONS

Physical dimensions and properties

Material (housing):	electro-zinc coated steel (according to DIN EN 10152)	
<ul style="list-style-type: none"> • steel grade • steel grade no. 	<ul style="list-style-type: none"> • DC01+ZE • 1.0330 	
Colour:	<ul style="list-style-type: none"> • black RAL 9005 • grey RAL 9035 	
Weight (net):	kg	lbs.
• MDB-BM/2 (module)	80	176
• MDB-BM/4 (module)	109	240
• MDB-4	300	661
• MDB-6	380	838
• MDB-8/H	455	1003
• MDB-8/V	420	926
• MDB-10/V	480	1058
• MDB-12	575	1268
• MDB-12/H	680	1499
• MDB-12/V	630	1389

Weight (net):	kg	lbs.
• MDB-16	795	1753
• MDB-16/H	1485	3274
• MDB-16/V	805	1775
• MDB-20	915	2017
• MDB-24/H	1135	2502
• MDB-24/V	1110	2447
• MDB-32/H	1485	3274
• MDB-32/V	1435	3164
• MDB-36	1695	3737
• MDB-48/H	2170	4784
• MDB-48/V	2155	4751
• MDB-64	2760	6085

Filter cartridges

Filter cartridges are not included and must be selected and ordered separately. For more details: refer to the separate data sheet.

Available filter cartridges:	Filter material:
<ul style="list-style-type: none"> • CART-D • CART-C • CART-E • CART-PTFE • CART-MB 	<ul style="list-style-type: none"> • 100% polyester • 100% polyester with aluminium coating (antistatic) • PTFE impregnated polyester • 100% polyester with PTFE membrane • 80/20 cellulose/spunbond polyester fibre with polyester nanofibre overlay

Compressed air system


Contents compressed air tank	11 litres (2.9 gallon)
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	12 mm push-in fitting
Compressed air consumption	40-50 nl/pulse (1.4-1.8 ft ³ /pulse)

Electrical data

Input voltage for compressed air valves	24V AC
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■ Ambient conditions	
Process temperature:	<ul style="list-style-type: none"> • min. 5°C (41°F) • nom. 20°C (68°F) • max. 70°C (158°F)
Max. relative humidity	90%
Outdoor use allowed	yes, if protected against precipitation
Storage conditions	<ul style="list-style-type: none"> • 5-45°C (41-113°F) • relative humidity max. 75%
■ Options and accessories	
DB-TROLLEY	dustbin trolley
MD-315/MDB MD-400/MDB MD-500/MDB	manual damper with cut-off blade
BPF	prefilter module
CAR-KIT	compressed air regulator
MDB-PG KIT	pressure gauge
■ Control equipment (not included)	
Filter control only:	<ul style="list-style-type: none"> • control equipment for the compressed air valves of the MDB
Filter + fan control:	<ul style="list-style-type: none"> • control box with pressure sensor for use with SCP-MDB • system control panel with frequency inverter for SIF fan with MDB
■ Scope of supply	
Filter system in modular components; refer to table COMPONENTS on page 9.	
■ Order information	
Article no.:	<ul style="list-style-type: none"> • individual components refer to table COMPONENTS on page 9 • complete filter system refer to table SHIPPING DATA on page 10
■ Shipping data	
Gross weight	refer to table SHIPPING DATA on page 10
Packing dimensions	refer to table SHIPPING DATA on page 10
Harmonized Tariff Code	8421.3920.90
Country of origin	Netherlands

APPROVALS/CERTIFICATES

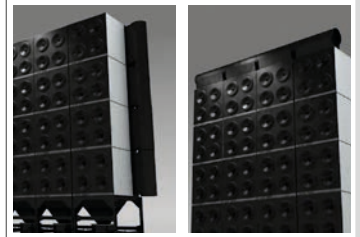
	
MDB + CART-D + precoat PRECO-N (min. 33 g/m ²):	MDB = IFA-W2 certified
MDB + CART-PTFE:	MDB = IFA-W3 certified

FEATURES

Modular design; expandable when business and workload grows.



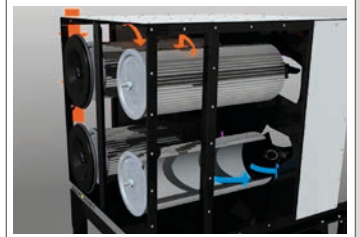
Flexible inlet and outlet position.



Air inlet module with two deflector plates.



Efficient filtration of dust and welding fume.



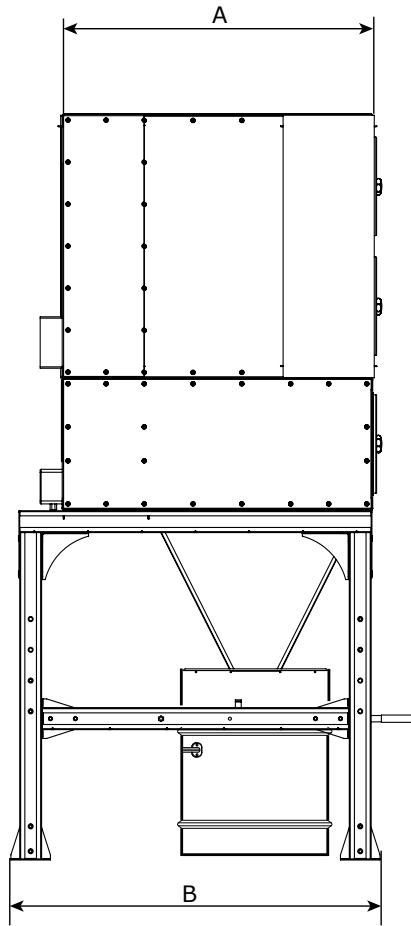
The effective Ram-Air filter cleaning system: individually cleaning of the filter cartridges by compressed air pulses.



Easy-to-handle dustbin (90 litres) on trolley, incl. lifting pin and handles.



DIMENSIONS

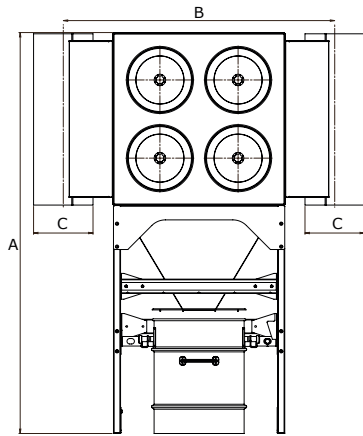


	mm	inch
A	1060	41.7
B	1310	51.6

Side view

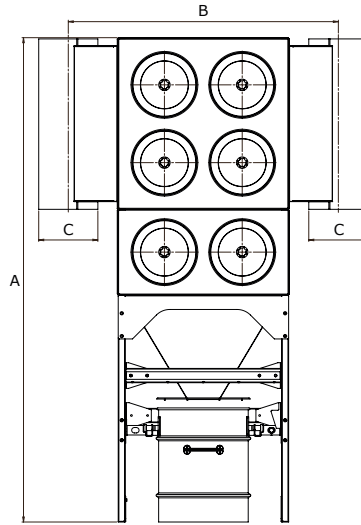
Front view: refer to next pages

MDB-4



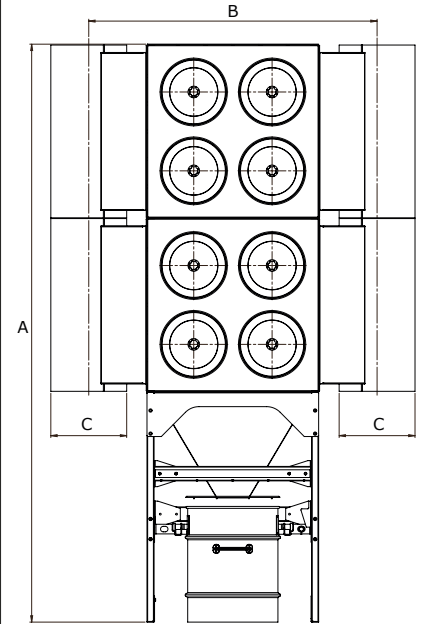
	mm	inch
A	2100	82.7
B	1420	55.9
C	Ø 315	Ø 12.4

MDB-6



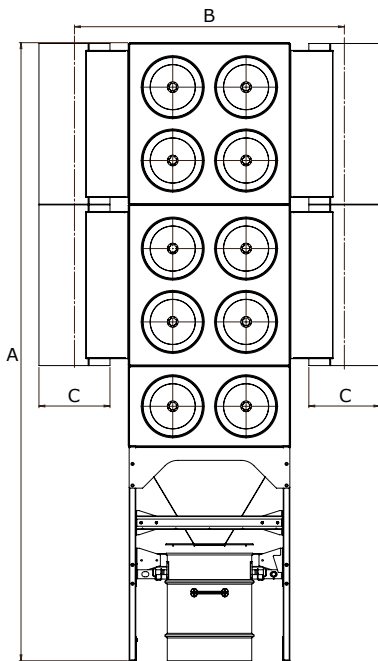
	mm	inch
A	2550	100.4
B	1420	55.9
C	Ø 315	Ø 12.4

MDB-8/V



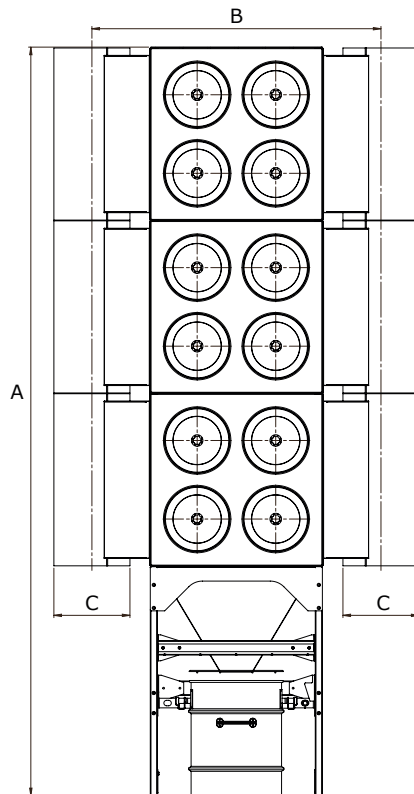
	mm	inch
A	2300	90.6
B	1505	59.3
C	Ø 400	Ø 15.7

MDB-10/V



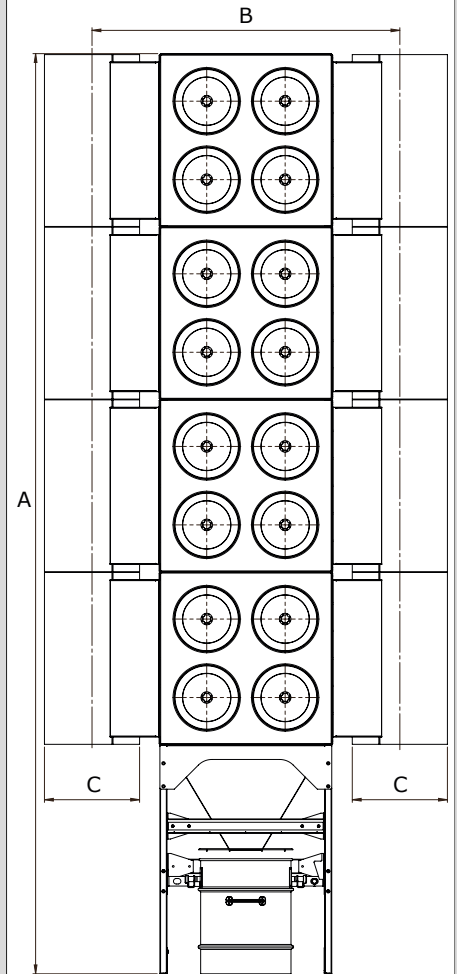
	mm	inch
A	3450	135.8
B	1505	59.3
C	Ø 400	Ø 15.7

MDB-12/V



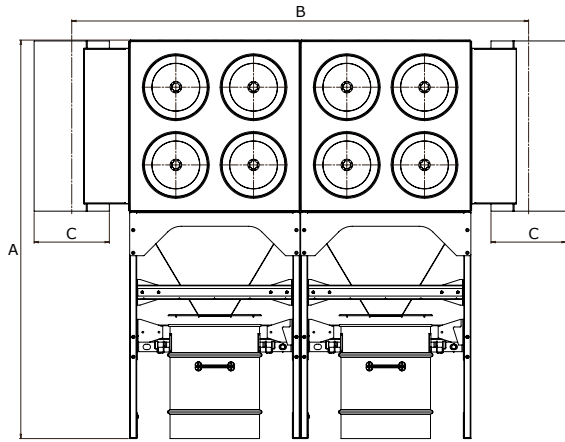
	mm	inch
A	3900	153.5
B	1505	59.3
C	Ø 400	Ø 15.7

MDB-16/V



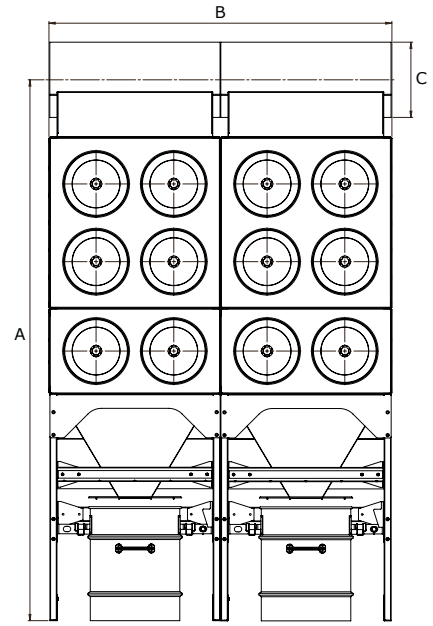
	mm	inch
A	4800	189.0
B	1605	63.2
C	Ø 500	Ø 19.7

MDB-8/H



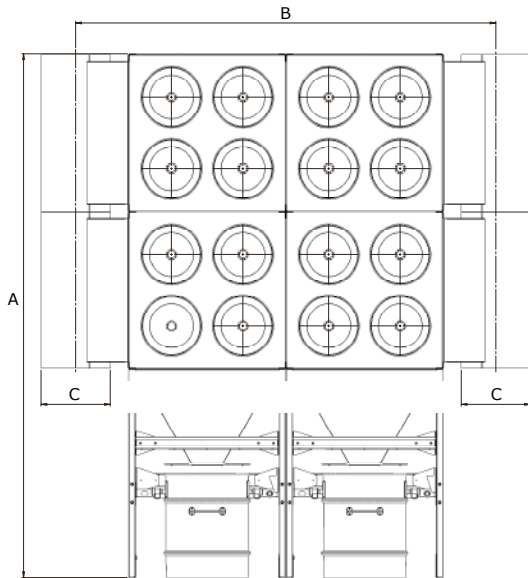
	mm	inch
A	2100	82.7
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-12



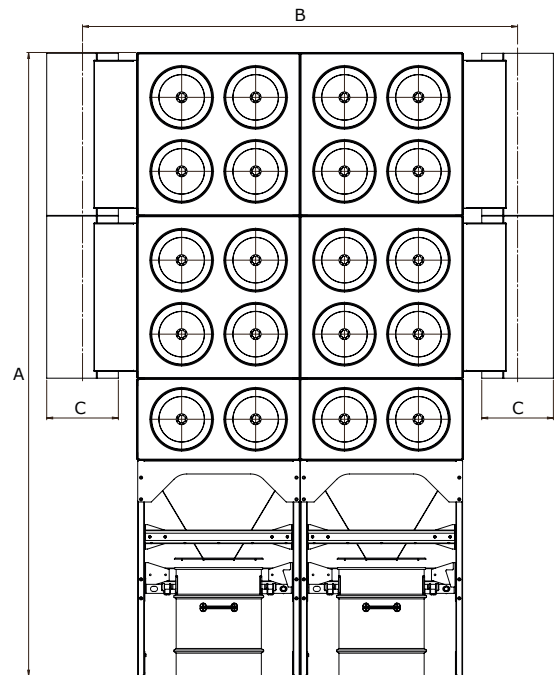
	mm	inch
A	2850	112.2
B	1805	71.1
C	Ø 400	Ø 15.7

MDB-16



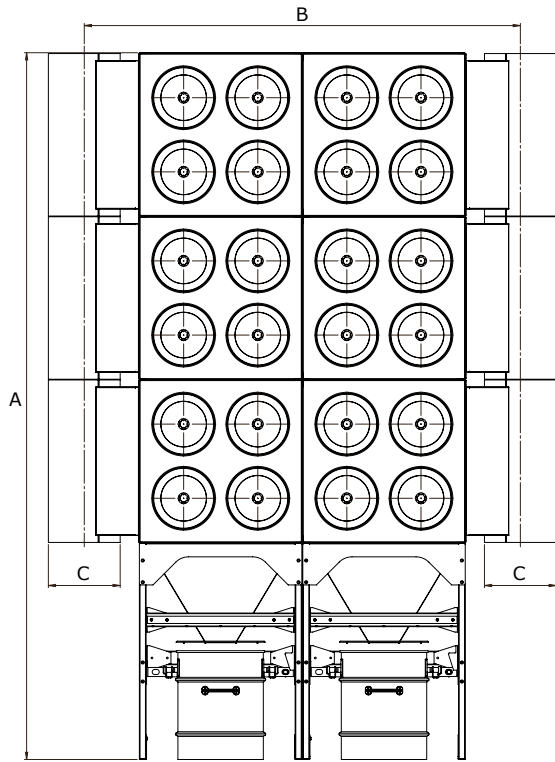
	mm	inch
A	3000	118.1
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-20



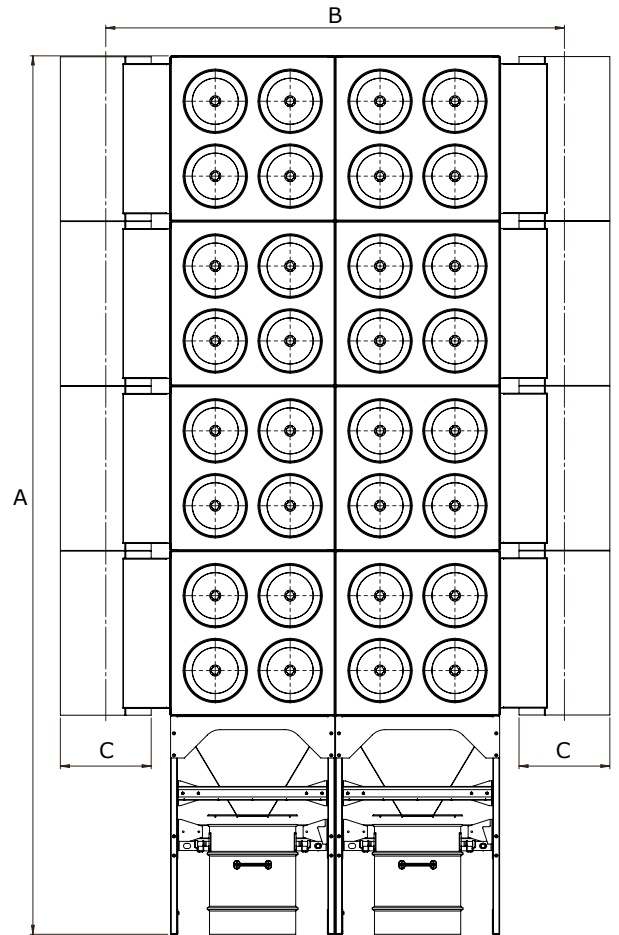
	mm	inch
A	3450	135.8
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-24/V



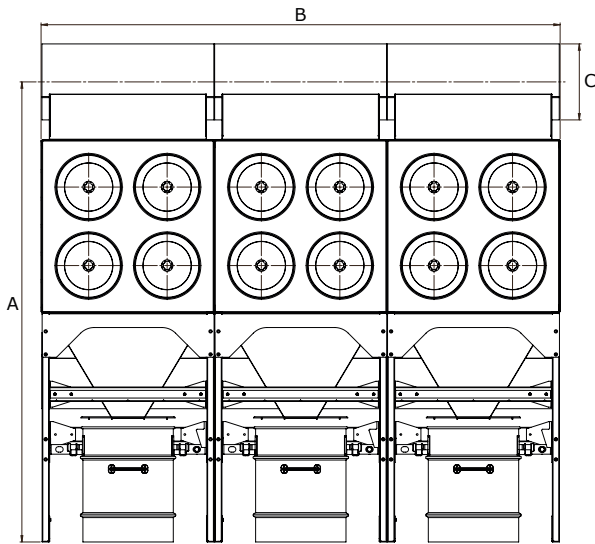
	mm	inch
A	3900	153.3
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-32/V



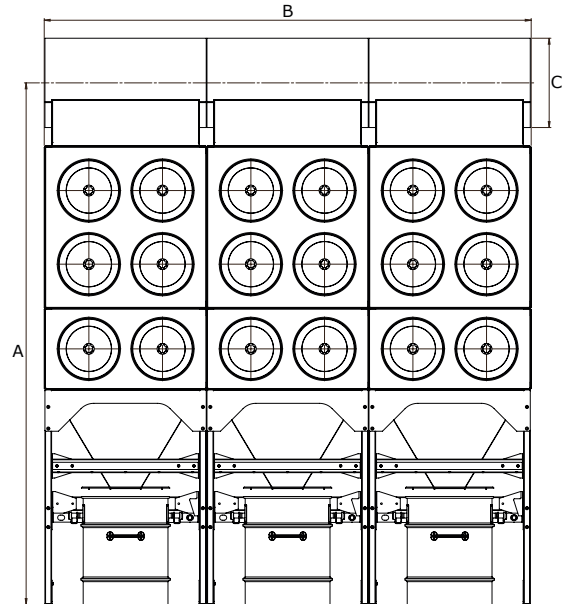
	mm	inch
A	4800	189.0
B	2505	98.6
C	Ø 500	Ø 19.7

MDB-12/H



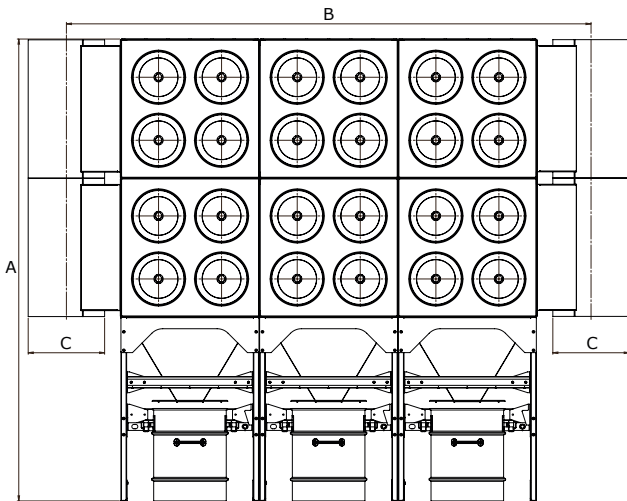
	mm	inch
A	2400	94.5
B	2705	106.5
C	Ø 400	Ø 15.7

MDB-18



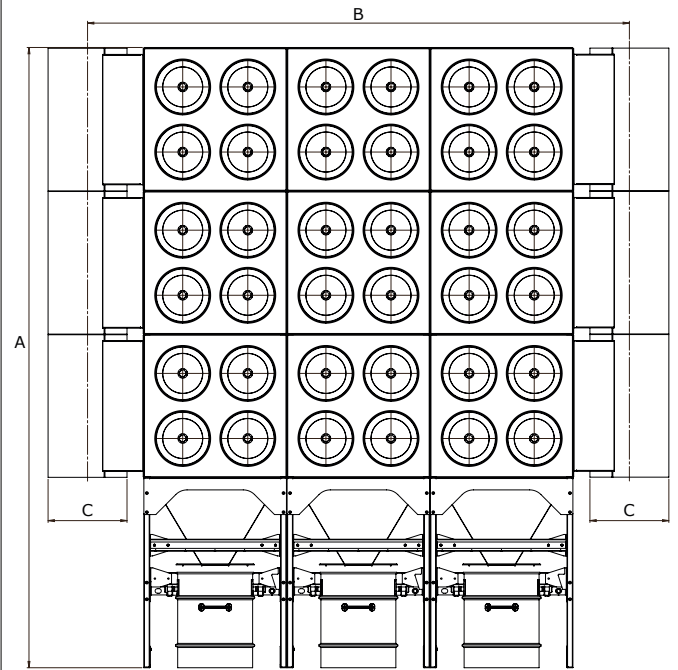
	mm	inch
A	2900	114.2
B	2705	106.5
C	Ø 500	Ø 19.7

MDB-24/H



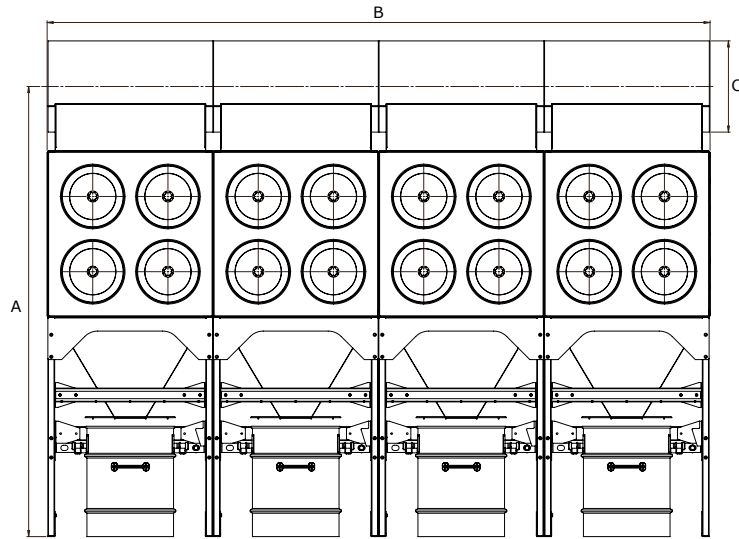
	mm	inch
A	3000	118.1
B	3405	134.1
C	Ø 500	Ø 19.7

MDB-36



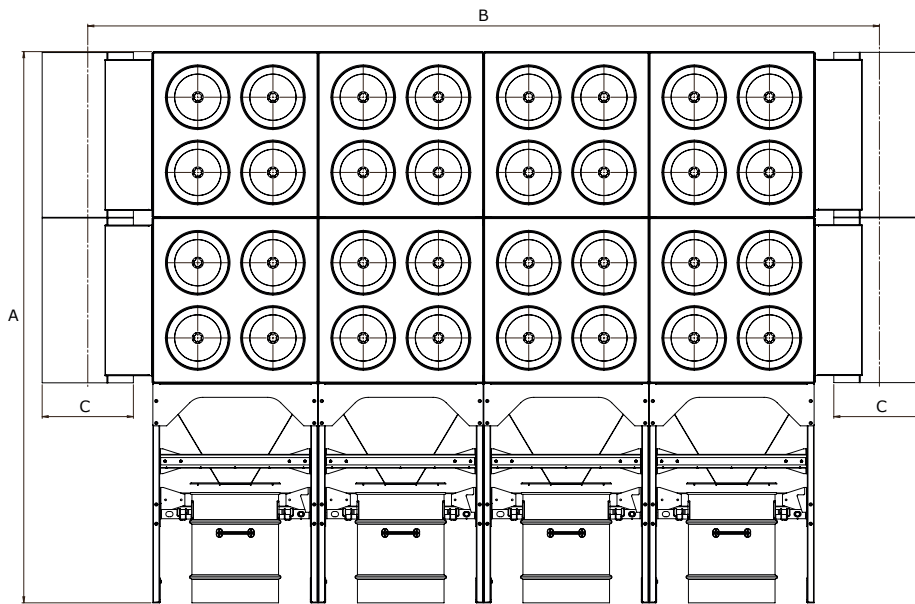
	mm	inch
A	3900	153.5
B	3405	134.1
C	Ø 500	Ø 19.7

MDB-16/H



	mm	inch
A	2450	94.7
B	3605	141.9
C	Ø 500	Ø 19.7

MDB-32/H



	mm	inch
A	3000	118.1
B	4305	169.5
C	Ø 500	Ø 19.7

COMPONENTS

An MDB unit consists of the following components:			Filter modules			Cover plates				Mounting frame + dustbin			Air inlet modules			Air outlet modules		
Type	Art. no.	Orientation	MDB-BM/2	MDB-BM/4	MDB JOIN KIT	MDB-COVER/S	MDB-COVER/M	MDB-COVER/U	MDB-COVER/2	FRAME MDB	MDB-HOPPER	DB-90	MDB-INLET/315	MDB-INLET/400	MDB-INLET/500	MDB-OUTLET/315	MDB-OUTLET/400	MDB-OUTLET/500
MDB-4	0000100844	square		1		4	3	1		1	1	1	1			1		
MDB-6	0000100845	square	1	1	1	4	3	1	2	1	1	1	1			1		
MDB-8/H	0000100846	horizontal		2	1	6	4	2		2	2	2		1				1
MDB-8/V	0000100847	vertical		2	1	6	5	1		1	1	1		2				2
MDB-10/V	0000100848	vertical	1	2	2	6	5	1	2	1	1	1		2				2
MDB-12	0000100849	square	2	2	3	6	4		2	2	2	2		2				2
MDB-12/H	0000100850	horizontal		3	2	7	5			3	3	3		3				3
MDB-12/V	0000100851	vertical		3	2	8	7	1		1	1	1		3				3
MDB-16	0000100852	square		4	4	4	6	2		2	2	2		4				4
MDB-16/H	0000100853	horizontal		4	3	8	6			4	4	4			4			4
MDB-16/V	0000100854	vertical		4	3	10	9	1		1	1	1			4			4
MDB-18	0000100855	square	3	3	5	7	5		2	3	3	3			3			3
MDB-20	0000100856	square	2	4	6	4	6	2	2	2	2	2		4				4
MDB-24/H	0000100857	horizontal		6	7	6	7	3		3	3	3			4			4
MDB-24/V	0000100858	vertical		6	7	4	8	2		2	2	2		6				6
MDB-32/H	0000100859	horizontal		8	10	8	8	4		4	4	4			4			4
MDB-32/V	0000100860	vertical		8	10	4	10	2		2	2	2			8			8
MDB-36	0000100861	square		9	12	3	9	3		3	3	3			6			6

SHIPPING DATA

Type	Art. no.	Description	Gross weight		Packing dimensions		
			kg	lbs.	mm	inch.	
MDB-BM/2	0000100863	Module for 2 filter cartridges	76	168	1000 x 1200 x 630	39.4 x 47.2 x 24.8	*
MDB-BM/4	0000100862	Module for 4 filter cartridges	121	267	1000 x 1200 x 1080	39.4 x 47.2 x 42.5	*
MDB-COVER/S	0000100864	Cover plate 890 x 275 mm	3,5	8	1200 x 300 x 25	47.2 x 11.8 x 1.0	
MDB-COVER/M	0000100865	Cover plate 890 x 500 mm	6	13	1200 x 510 x 25	47.2 x 20.1 x 1.0	
MDB-COVER/U	0000100866	Cover plate 890 x 275 mm	3	6.5	1200 x 300 x 25	47.2 x 11.8 x 1.0	
MDB-COVER/2	0000100867	Cover pate 1050 x 440 mm	6	13	1200 x 460 x 25	47.2 x 18.1 x 1.0	
MDB-FRAME	0000100877	Mounting frame	60	132	1350 x 430 x 270	53.1 x 16.9 x 10.6	
MDB-HOPPER	0000100870	Hopper	25	55	800 x 1200 x 570	31.5 x 47.2 x 22.4	
DB-90	0000100868	Dustbin	12,5	28	600 x 600 x 670	23.6 x 23.6 x 26.4	
DB-TROLLEY	0000100869	Dustbin trolley	3,5	8	660 x 660 x 130	26.0 x 26.0 x 5.1	
MDB-INLET/315	0000100871	Air inlet module Ø 315 mm	16	35	1200 x 320 x 450	47.2 x 12.6 x 17.7	
MDB-INLET/400	0000100872	Air inlet module Ø 400 mm	26,5	58	800 x 1200 x 570	31.5 x 47.2 x 22.4	
MDB-INLET/500	0000100873	Air inlet module Ø 500 mm	31	68	800 x 1200 x 570	31.5 x 47.2 x 22.4	
MDB-OUTLET/315	0000100874	Air outlet module Ø 315 mm	11	24	1200 x 320 x 450	47.2 x 12.6 x 17.7	
MDB-OUTLET/400	0000100875	Air outlet module Ø 400 mm	18	40	800 x 1200 x 450	31.5 x 47.2 x 17.7	
MDB-OUTLET/500	0000100876	Air outlet module Ø 500 mm	23	51	800 x 1200 x 450	31.5 x 47.2 x 17.7	
MDB-JOIN-KIT	0000100885	Connection material	0,15	0.33	250 x 330 x 40	10.0 x 13.0 x 1.6	

* incl. pallet

Product type

MultiDust Bank

Article no.

refer to table: COMPONENTS

Product category

central filter systems

Version

300714/E

Always check the latest version on www.plymovent.com