

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 MDB is supplied including intelligent control equipment ControlPro or ControlGo for the magnetic valves and the fan (refer to separate product data sheets).

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

Filter cartridges and extraction fan 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



SPECIFICATIONS

Physical dimensions and properties

Material (housing):	electro-zinc coated steel (according to DIN EN 10152)	
• steel grade	• DC01+ZE	
• steel grade no.	• 1.0330	
Colour:		
• housing	• black RAL 9005	
• cover plates	• grey RAL 7035	
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
• 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:

- CART-D Premium Plus
- CART-D Premium
- CART-D Economy
- CART-C
- CART-E
- CART-PTFE
- CART-MB

Filter material:

- BiCo spunbond polyester
- spunbond polyester
- cellulose
- BiCo spunbond polyester with aluminium coating (antistatic)
- BiCo spunbond polyester + PTFE impregnation
- BiCo spunbond polyester + PTFE membrane
- cellulose with polypropylene microfiber overlay, electrostatically charged

Compressed air system

Volume 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	push-in fitting: • in: 3/8 in. • out: 12 mm
Compressed air consumption	40-50 nl/pulse (1.4-1.8 ft ³ /pulse)

Electrical data


Input voltage for magnetic valves	24V DC
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Ambient conditions

Process temperature:	
• 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%
■ Control equipment	
ControlPro	control panel + HMI
ControlGo	control panel
<i>Refer to the product data sheets for additional fan control equipment</i>	
■ Options and accessories	
DB-TROLLEY/80	dustbin trolley
MD-315/MDB MD-400/MDB MD-500/MDB	manual damper with cut-off blade
BPF	prefilter module
PT-1000 PT-2500	pressure transmitter
MDB-PG KIT	pressure gauge (for MDB GO)
■ Scope of supply	
Filter system in modular components; refer to table COMPONENTS on page 9. Additionally: MDB seal assembly sets SealApplicator	
■ Order information	
Article no.:	
<ul style="list-style-type: none"> • individual components • complete filter system 	<ul style="list-style-type: none"> • refer to table COMPONENTS on page 9 • 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

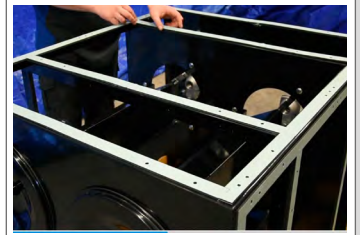
	
MDB + CART-PTFE/10	MDB = IFA-W3 certified
MDB + CART-PTFE/15	

FEATURES

Modular design; expandable when business and workload grows.



Optimum resistency against negative pressure and shock waves due to innovative double-sided adhesive AllTight™ sealing method.



Flexible inlet and outlet position.



Intelligent control equipment;

- Control panel + HMI: **ControlPro**
- Control panel: **ControlGo**



Efficient filtration of dust and welding fume.



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



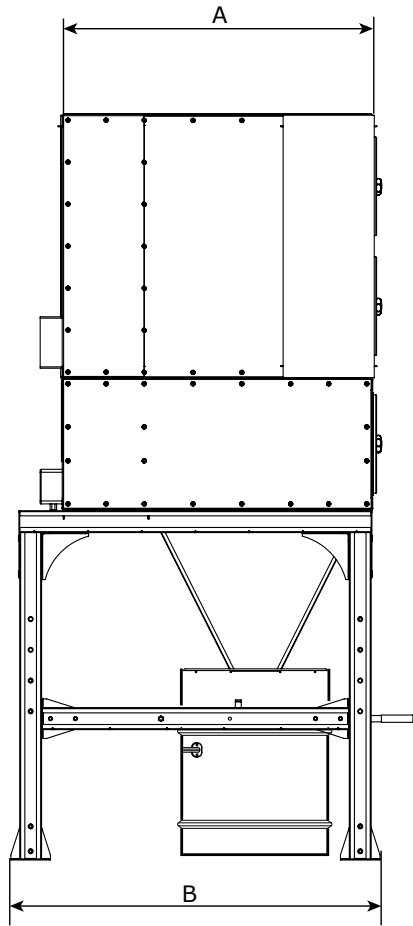
Easy-to-handle dustbin (80 litres) on trolley (option), incl. lifting pin and handles.



Application restrictions

Do **not** use the product 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

DIMENSIONS

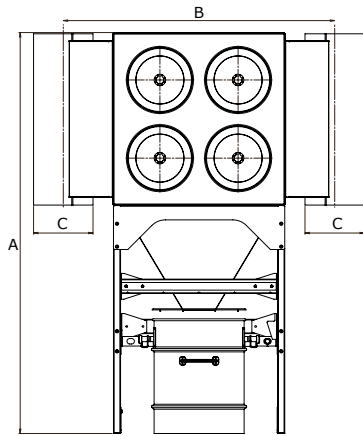


	mm	inch
A	1060	41.7
B	1310	51.6

Side view

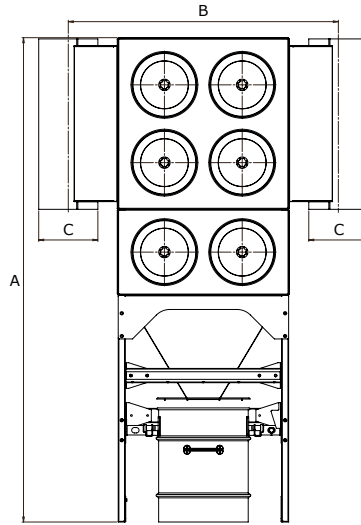
Front view: refer to next pages

MDB-4



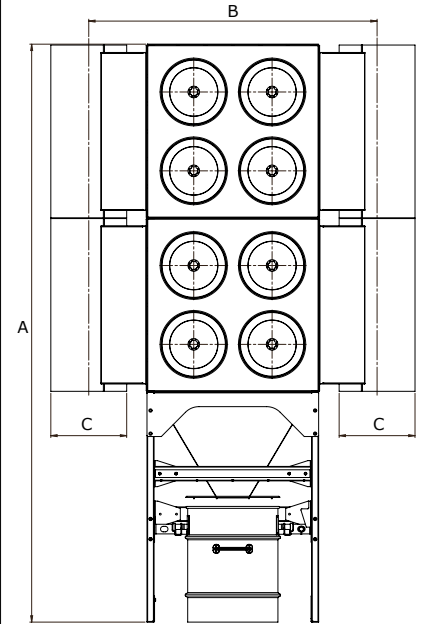
	mm	inch
A	2100	82.7
B	1420	55.9
C	Ø 315	Ø 12.4

MDB-6



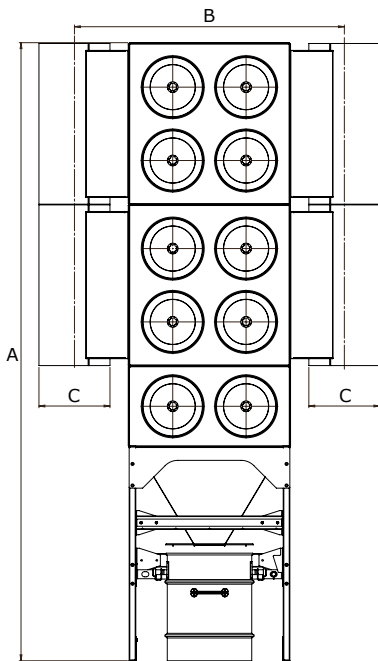
	mm	inch
A	2550	100.4
B	1420	55.9
C	Ø 315	Ø 12.4

MDB-8/V



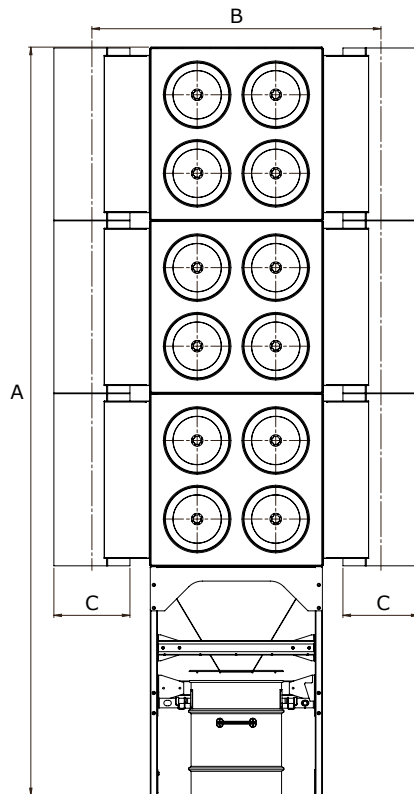
	mm	inch
A	3000	118.1
B	1505	59.3
C	Ø 400	Ø 15.7

MDB-10/V



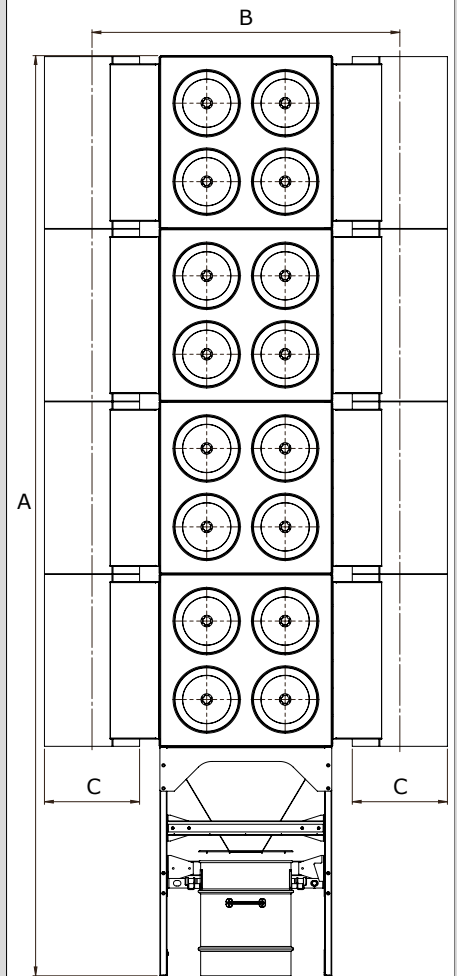
	mm	inch
A	3450	135.8
B	1505	59.3
C	Ø 400	Ø 15.7

MDB-12/V



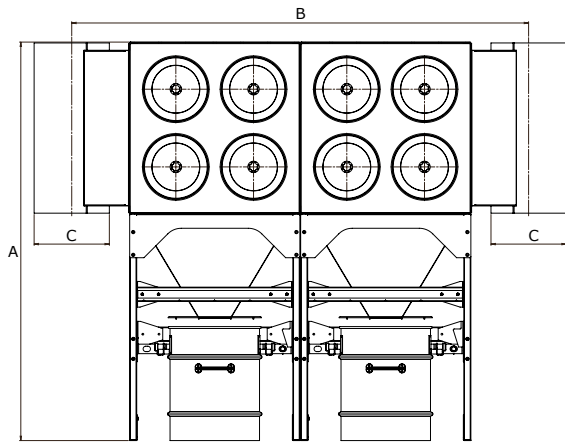
	mm	inch
A	3900	153.5
B	1505	59.3
C	Ø 400	Ø 15.7

MDB-16/V



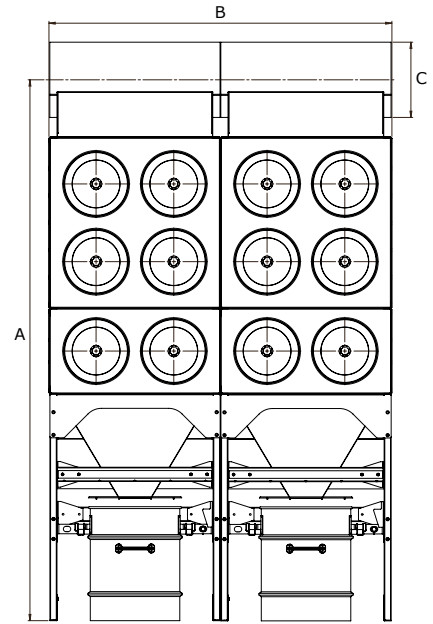
	mm	inch
A	4800	189.0
B	1605	63.2
C	Ø 500	Ø 19.7

MDB-8/H



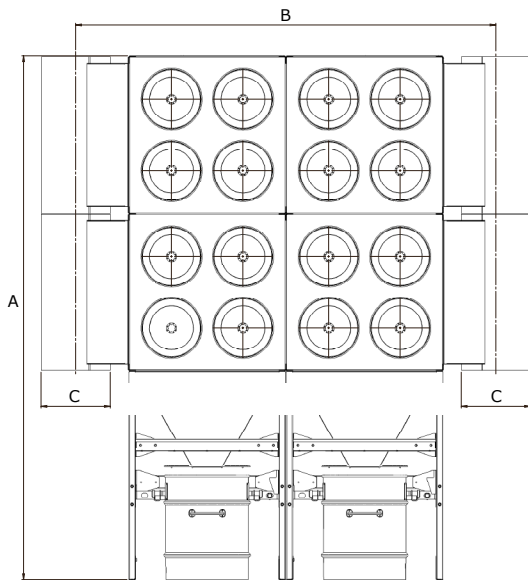
	mm	inch
A	2100	82.7
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-12



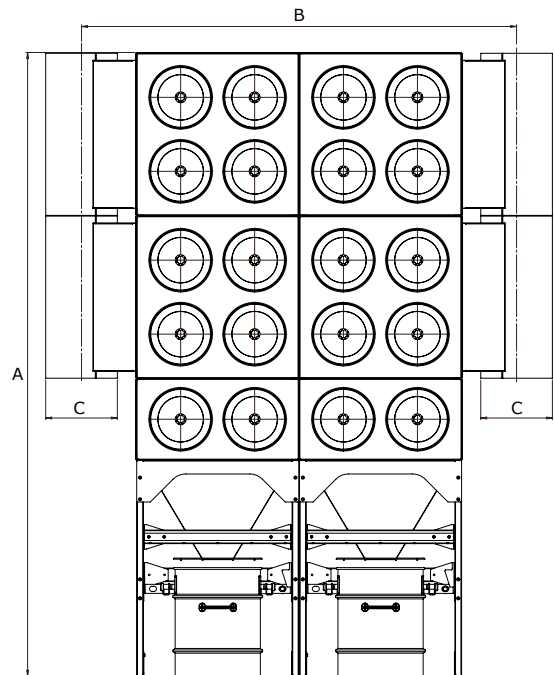
	mm	inch
A	2850	112.2
B	1805	71.1
C	Ø 400	Ø 15.7

MDB-16



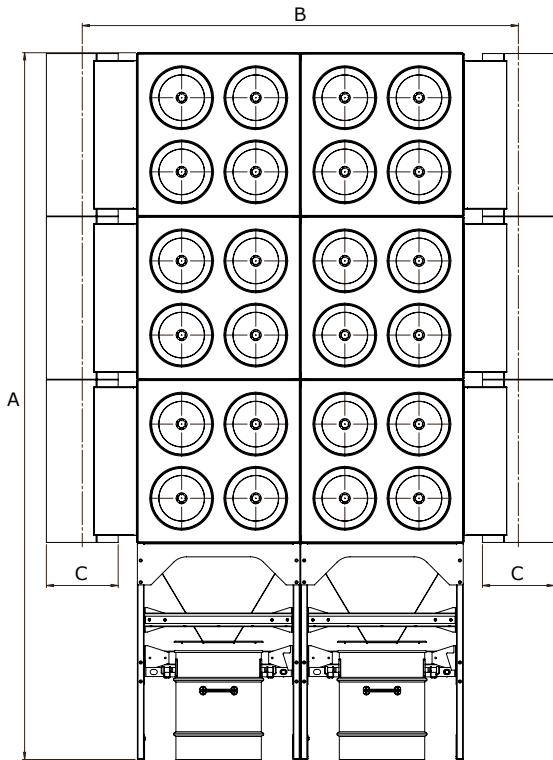
	mm	inch
A	3000	118.1
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-20



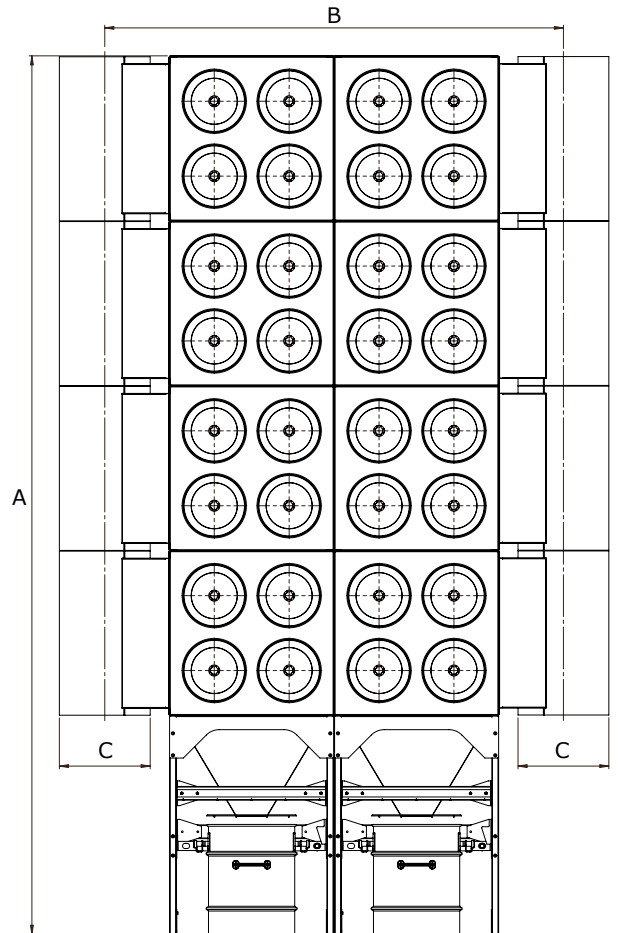
	mm	inch
A	3450	135.8
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-24/V



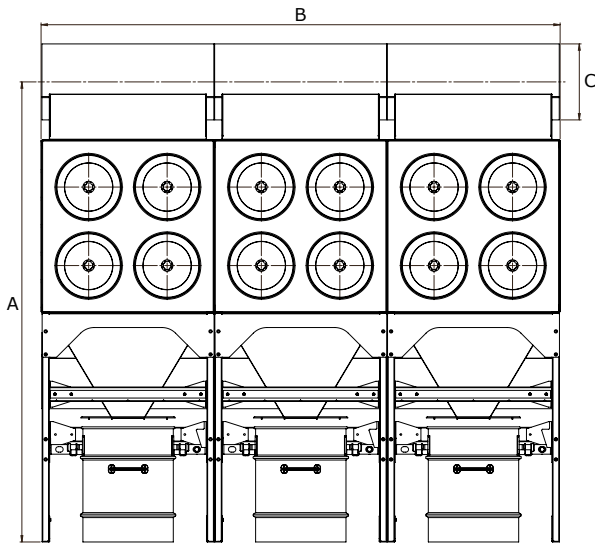
	mm	inch
A	3900	153.3
B	2405	94.7
C	Ø 400	Ø 15.7

MDB-32/V



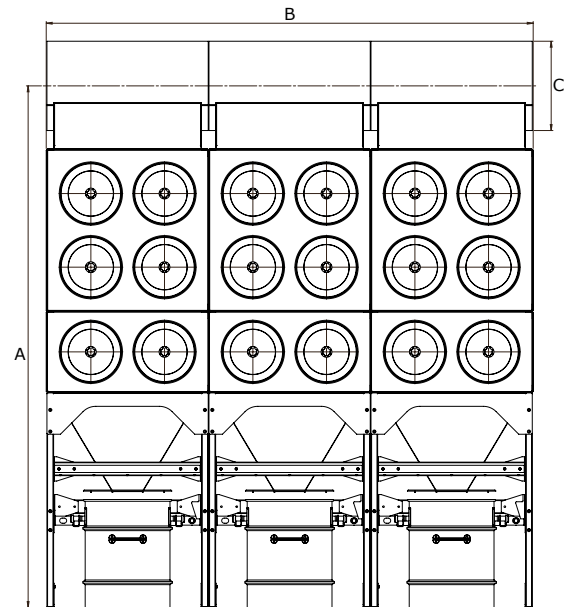
	mm	inch
A	4800	189.0
B	2505	98.6
C	Ø 500	Ø 19.7

MDB-12/H



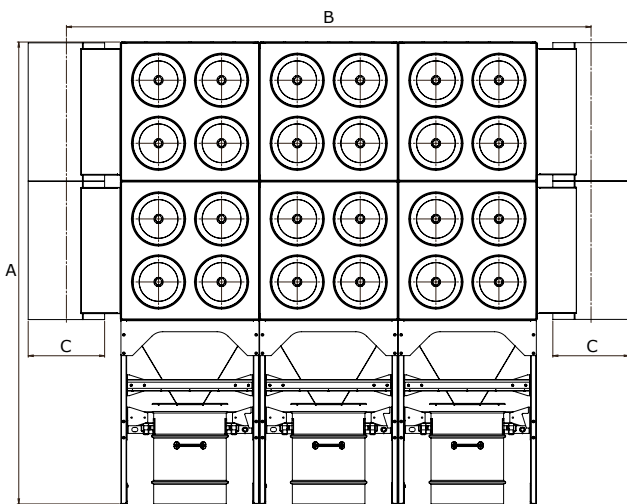
	mm	inch
A	2400	94.5
B	2705	106.5
C	Ø 400	Ø 15.7

MDB-18



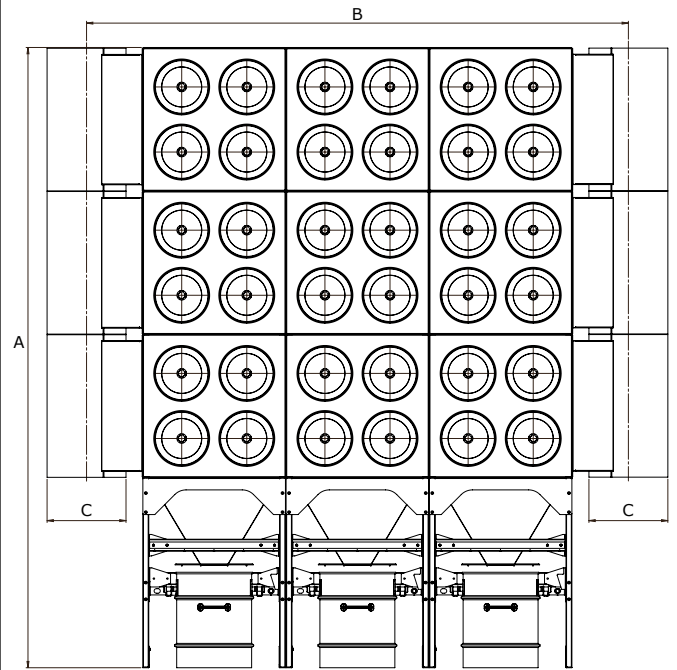
	mm	inch
A	2900	114.2
B	2705	106.5
C	Ø 500	Ø 19.7

MDB-24/H



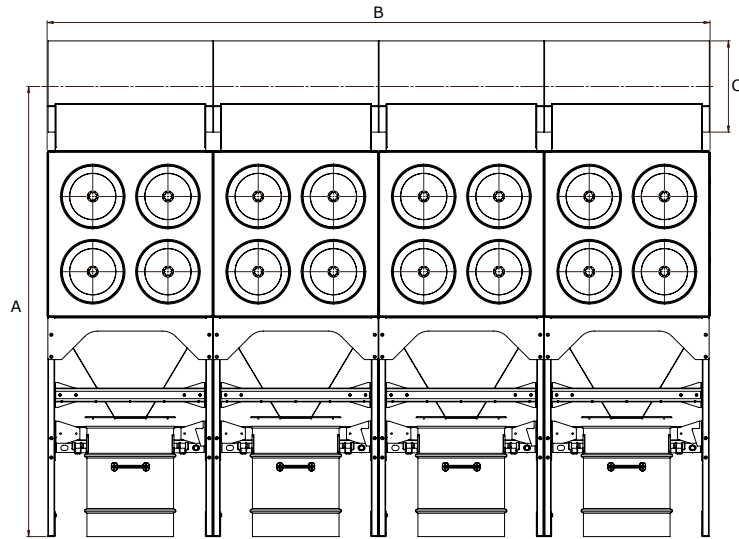
	mm	inch
A	3000	118.1
B	3405	134.1
C	Ø 500	Ø 19.7

MDB-36



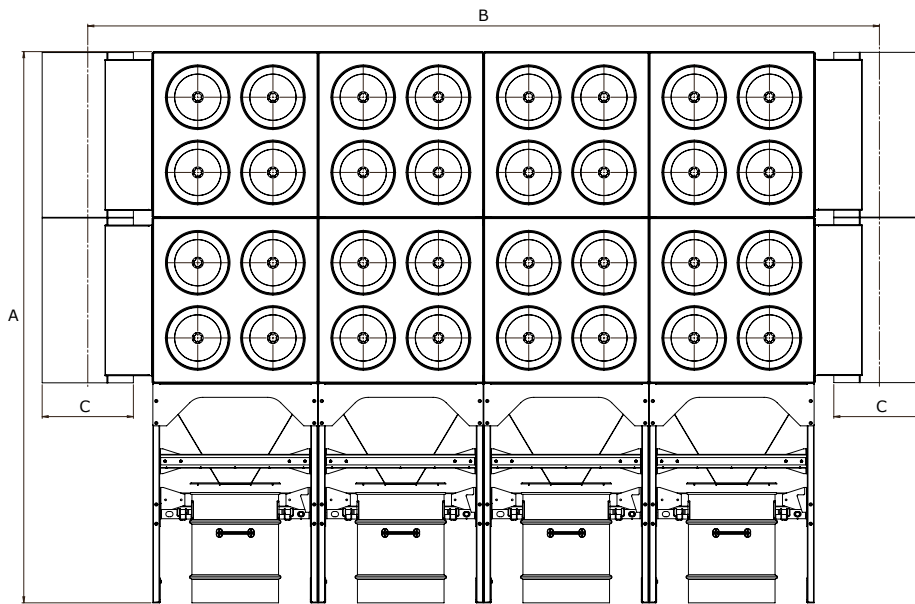
	mm	inch
A	3900	153.5
B	3405	134.1
C	Ø 500	Ø 19.7

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 main 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/80	DB-80	DB-TROLLEY/80 *)	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			1		
MDB-6	0000100845	square	1	1	1	4	3	1	2	1	1	1	1	1			1		
MDB-8/H	0000100846	horizontal		2	1	6	4	2		2	2	2	2		1			1	
MDB-8/V	0000100847	vertical		2	1	6	5	1		1	1	1	1		2			2	
MDB-10/V	0000100848	vertical	1	2	2	6	5	1	2	1	1	1	1		2			2	
MDB-12	0000100849	square	2	2	3	6	4		2	2	2	2	2		2			2	
MDB-12/H	0000100850	horizontal		3	2	7	5			3	3	3	3		3			3	
MDB-12/V	0000100851	vertical		3	2	8	7	1		1	1	1	1		3			3	
MDB-16	0000100852	square		4	4	4	6	2		2	2	2	2		4			4	
MDB-16/H	0000100853	horizontal		4	3	8	6			4	4	4	4			4			4
MDB-16/V	0000100854	vertical		4	3	10	9	1		1	1	1	1			4			4
MDB-18	0000100855	square	3	3	5	7	5		2	3	3	3	3			3			3
MDB-20	0000100856	square	2	4	6	4	6	2	2	2	2	2	2		4			4	
MDB-24/H	0000100857	horizontal		6	7	6	7	3		3	3	3	3			4			4
MDB-24/V	0000100858	vertical		6	7	4	8	2		2	2	2	2		6			6	
MDB-32/H	0000100859	horizontal		8	10	8	8	4		4	4	4	4			4			4
MDB-32/V	0000100860	vertical		8	10	4	10	2		2	2	2	2			8			8
MDB-36	0000100861	square		9	12	3	9	3		3	3	3	3			6			6

*) Option

PACKAGES

MultiDust Bank including intelligent control panel:

ControlGo (control panel)	
Type	Art. no.
MDB-4 GO	0000112253
MDB-6 GO	0000112254
MDB-8/H GO	0000112255
MDB-8/V GO	0000112256
MDB-10/V GO	0000112257
MDB-12 GO	0000112258
MDB-12/H GO	0000112259
MDB-12/V GO	0000112260
MDB-16 GO	0000112261
MDB-16/H GO	0000112262
MDB-16/V GO	0000112263
MDB-18 GO	0000112264
MDB-20 GO	0000112265
MDB-24/H GO	0000112266
MDB-24/V GO	0000112267
MDB-32/H GO	0000112268
MDB-32/V GO	0000112269
MDB-36 GO	0000112270

ControlPro (control panel + HMI)	
Type	Art. no.
MDB-4 PRO	0000112271
MDB-6 PRO	0000112272
MDB-8/H PRO	0000112273
MDB-8/V PRO	0000112274
MDB-10/V PRO	0000112275
MDB-12 PRO	0000112276
MDB-12/H PRO	0000112277
MDB-12/V PRO	0000112278
MDB-16 PRO	0000112279
MDB-16/H PRO	0000112280
MDB-16/V PRO	0000112281
MDB-18 PRO	0000112282
MDB-20 PRO	0000112283
MDB-24/H PRO	0000112284
MDB-24/V PRO	0000112285
MDB-32/H PRO	0000112286
MDB-32/V PRO	0000112287
MDB-36 PRO	0000112288

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/80	0000111341	Hopper	25	55	800 x 1200 x 570	31.5 x 47.2 x 22.4	
DB-80	0000111381	Dustbin	12,5	28	600 x 600 x 670	23.6 x 23.6 x 26.4	
DB-TROLLEY/80	0000111387	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

050917/L

Always check the latest version on www.plymovent.com