

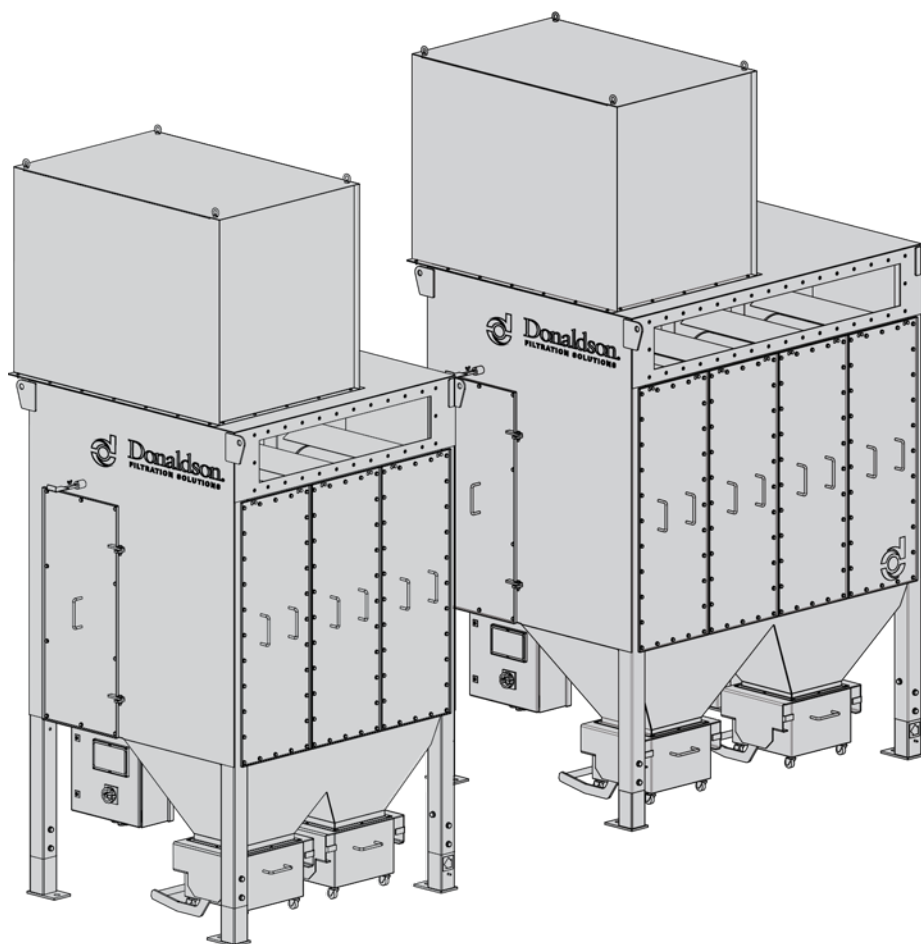


Donaldson
FILTRATION SOLUTIONS

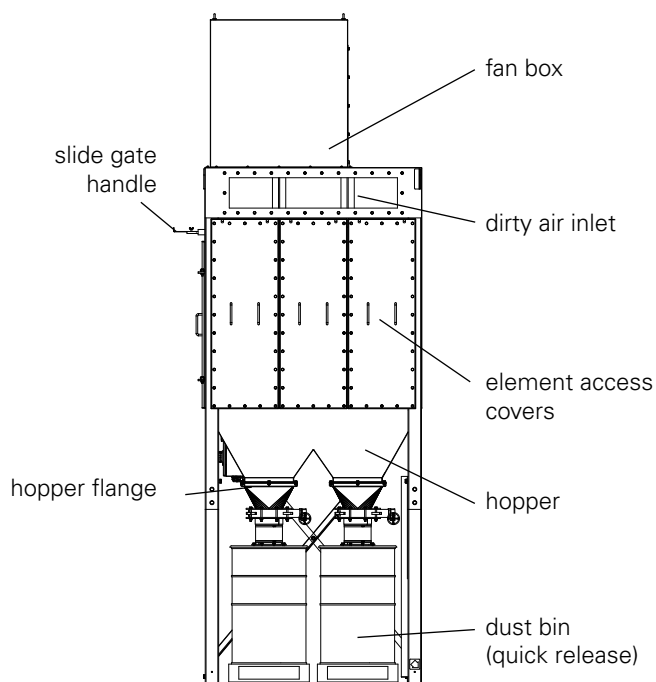
TECHNICAL DATASHEET

DFPRE Dust Collectors

Series DFPRE 9L - 12L

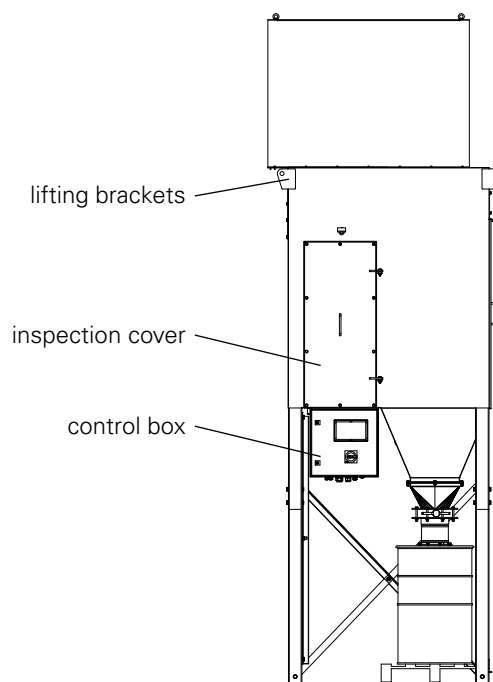


DESIGN SPECIFICATIONS



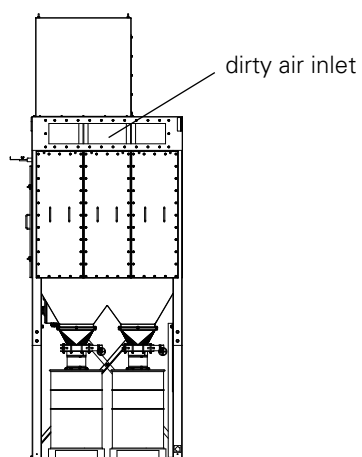
FRONT VIEW

9L shown with
200 L drum



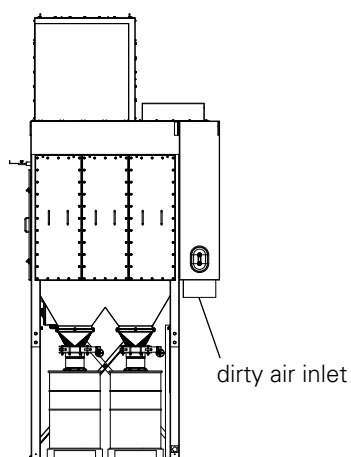
SIDE VIEW

9L shown with
200 L drum



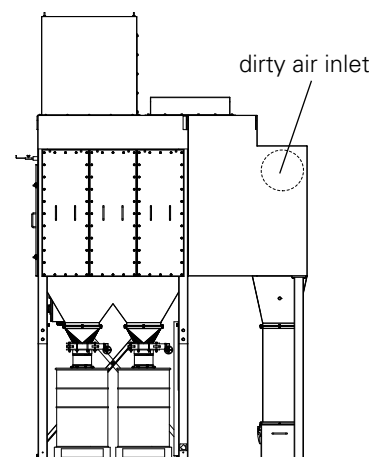
STANDARD

9L shown with
200 L drum



SPARKTRAP

9L shown with
200 L drum



CYCLOPEEL

9L shown with
200 L drum

DESIGN LIMITS

Operating temperature: -10° to +40°C

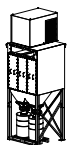
Maximum operating pressure: -5 kPa (500 mm WG)*

Wind load rating: 160 km/h

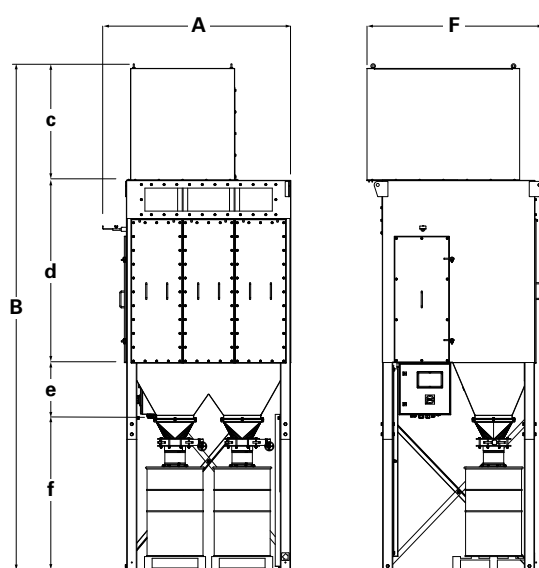
Finishing: Acrylated alkyd paint colour RAL 5019 (blue) - semi gloss

* for use in positive pressure contact engineering

DIMENSIONS & SPECIFICATIONS 9L STANDARD

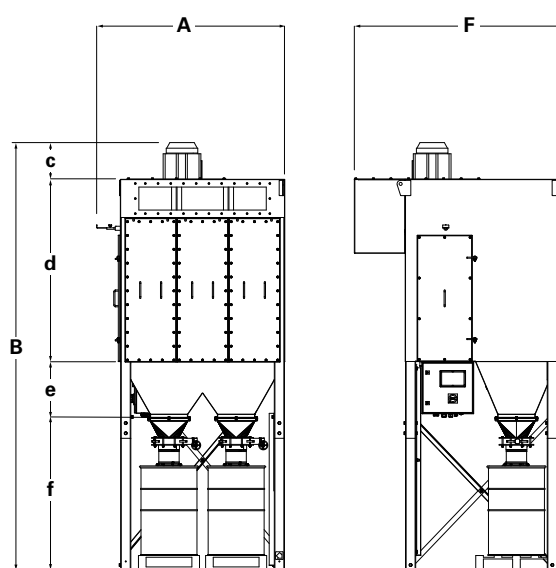


DFPRE 9L STANDARD



ROOF MOUNTED FAN

shown with 200 L drum



PARTIALLY INTEGRATED FAN

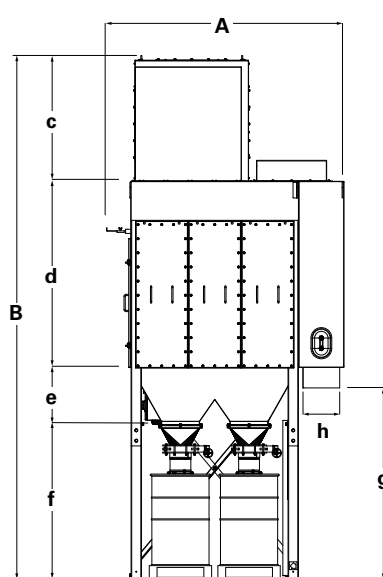
shown with 200 L drum

Model	No. of cartridges	No. of valves	Fan	Dust disposal system	Dimensions (mm)						
					A	B	c	d	e	f	F
DFPRE 9L	9	9	Roof mounted	200 L drum	1789	4991	1146	1790	555	1500	1730
				85 L drum	1789	4556	1146	1790	555	1065	1730
				hook-on dustbin	1789	4056	1146	1790	555	565	1730
				quick release	1789	3891	1146	1790	555	400	1730
			Partially integrated	200 L drum	1789	4206	361	1790	555	1500	2079
				85 L drum	1789	3771	361	1790	555	1065	2079
				hook-on dustbin	1789	3271	361	1790	555	565	2079
				quick release	1789	3106	361	1790	555	400	2079

DIMENSIONS & SPECIFICATIONS 9L SPARKTRAP

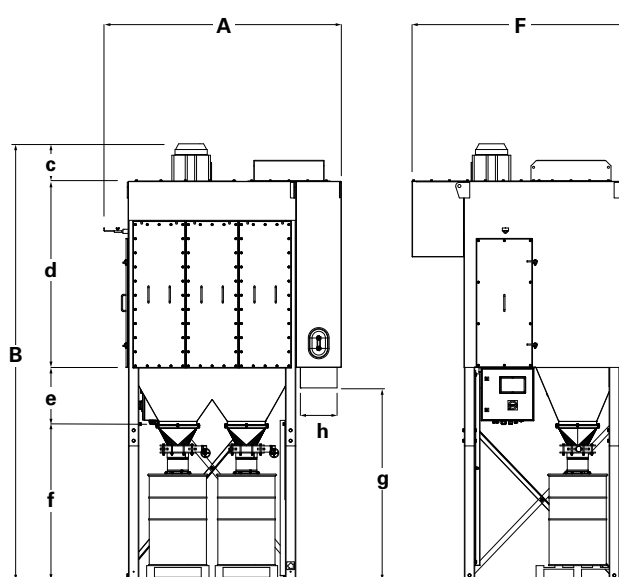


DFPRE 9L SPARKTRAP



ROOF MOUNTED FAN

shown with 200 L drum

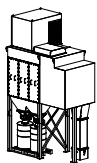


PARTIALLY INTEGRATED FAN

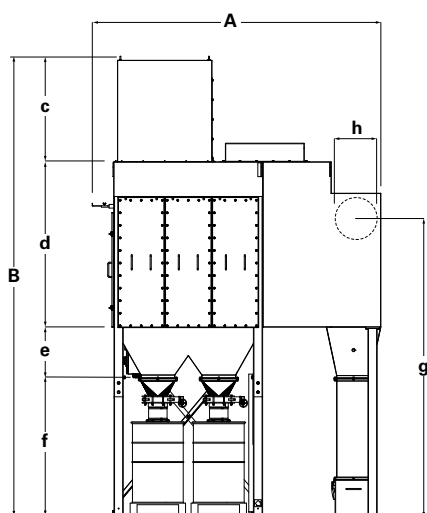
shown with 200 L drum

Model	No. of cartridges	No. of valves	Fan	Dust disposal system	Dimensions (mm)								
					A	B	c	d	e	f	g	h	F
DFPRE 9L Sparktrap	9	9	Roof mounted	200 L drum	2227	4991	1146	1790	555	1500	1858	353	1730
				85 L drum	2227	4556	1146	1790	555	1065	1423	353	1730
				hook-on dustbin	2227	4056	1146	1790	555	565	923	353	1730
				quick release	2227	3891	1146	1790	555	400	758	353	1730
			Partially integrated	200 L drum	2227	4206	361	1790	555	1500	1858	353	2079
				85 L drum	2227	3771	361	1790	555	1065	1423	353	2079
				hook-on dustbin	2227	3271	361	1790	555	565	923	353	2079
				quick release	2227	3106	361	1790	555	400	758	353	2079

DIMENSIONS & SPECIFICATIONS 9L CYCLOPEEL

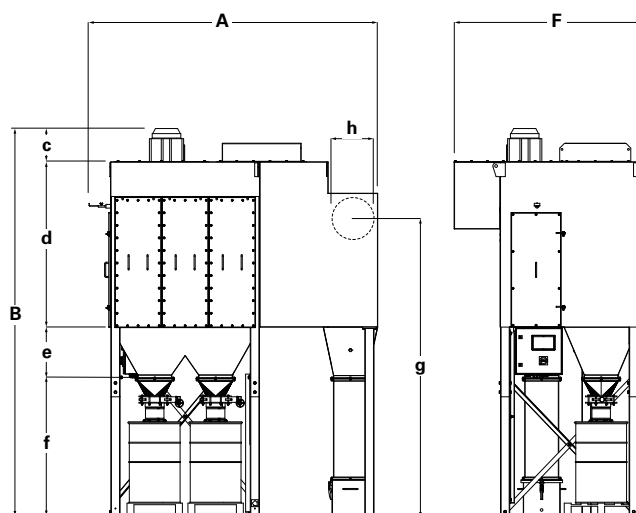


DFPRE 9L CYCLOPEEL



ROOF MOUNTED FAN

shown with 200 L drum



PARTIALLY INTEGRATED FAN

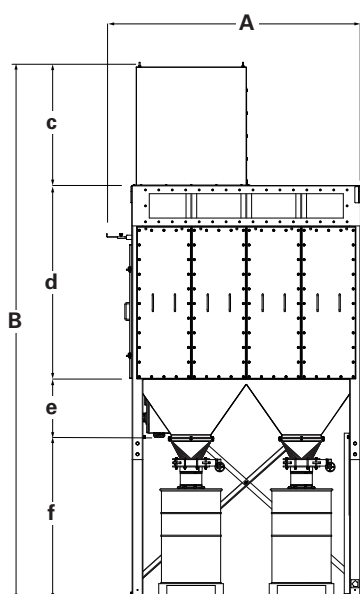
shown with 200 L drum

Model	No. of cartridges	No. of valves	Fan	Dust disposal system	Dimensions (mm)								
					A	B	c	d	e	f	g	h	F
DFPRE 9L Cyclopeel	9	9	Roof mounted	200 L drum	3067	4991	1146	1790	555	1500	3237	NW450	1730
				85 L drum	3067	4556	1146	1790	555	1065	2799	NW450	1730
				hook-on dustbin	3067	4056	1146	1790	555	565	2299	NW450	1730
				quick release	3067	3891	1146	1790	555	400	2134	NW450	1730
			Partially integrated	200 L drum	3067	4206	361	1790	555	1500	3237	NW450	2079
				85 L drum	3067	3771	361	1790	555	1065	2799	NW450	2079
				hook-on dustbin	3067	3271	361	1790	555	565	2299	NW450	2079
				quick release	3067	3106	361	1790	555	400	2134	NW450	2079

DIMENSIONS & SPECIFICATIONS 12L STANDARD

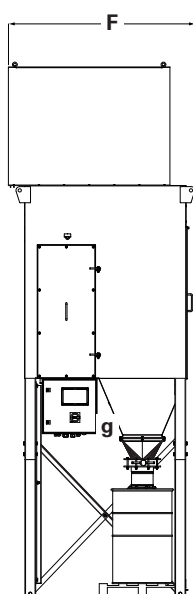


DFPRE 12L STANDARD



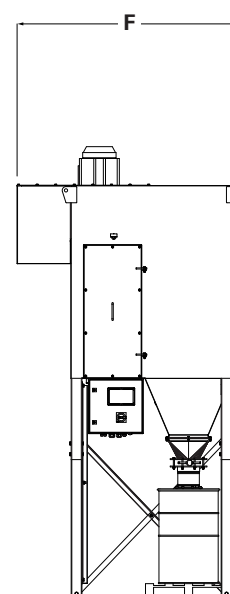
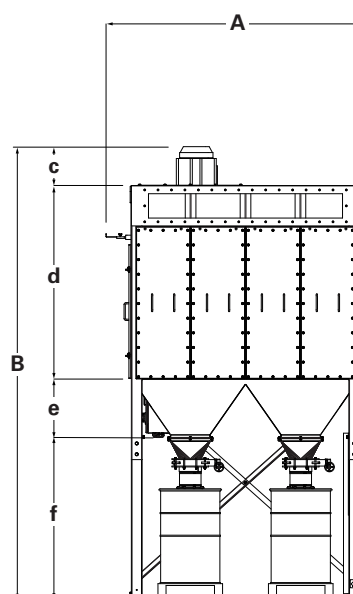
ROOF MOUNTED FAN

shown with 200 L drum



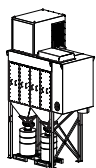
PARTIALLY INTEGRATED FAN

shown with 200 L drum

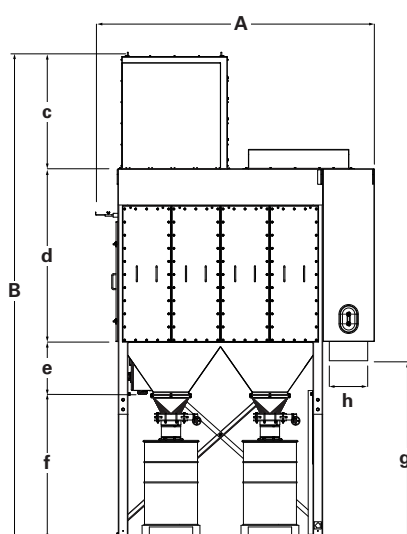


Model	No. of cartridges	No. of valves	Fan	Dust disposal system	Dimensions (mm)						
					A	B	c	d	e	f	F
DFPRE 12L	12	12	Roof mounted	200 L drum	2299	4991	1146	1790	555	1500	1730
				85 L drum	2299	4556	1146	1790	555	1065	1730
				hook-on dustbin	2299	4056	1146	1790	555	565	1730
				quick release	2299	3891	1146	1790	555	400	1730
			Partially integrated	200 L drum	2299	4206	361	1790	555	1500	2079
				85 L drum	2299	3771	361	1790	555	1065	2079
				hook-on dustbin	2299	3271	361	1790	555	565	2079
				quick release	2299	3106	361	1790	555	400	2079

DIMENSIONS & SPECIFICATIONS 12L SPARKTRAP

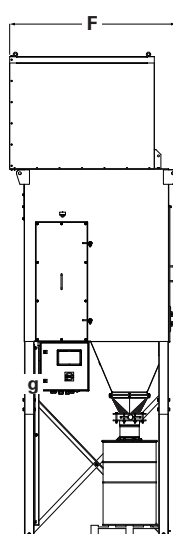


DFPRE 12L SPARKTRAP



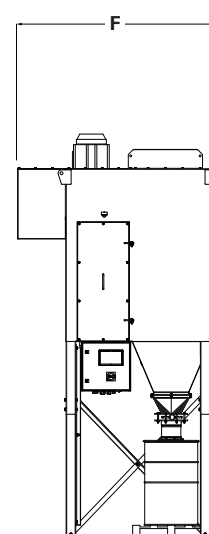
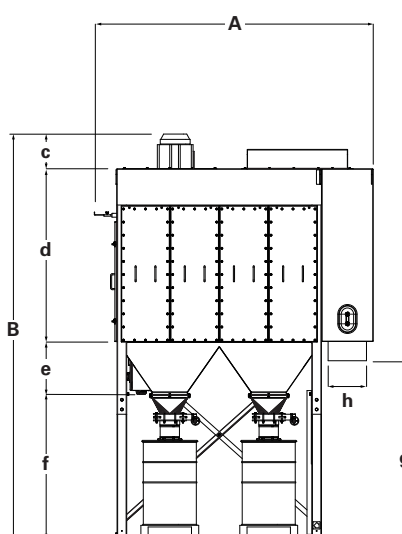
ROOF MOUNTED FAN

shown with 200 L drum



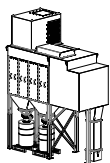
PARTIALLY INTEGRATED FAN

shown with 200 L drum

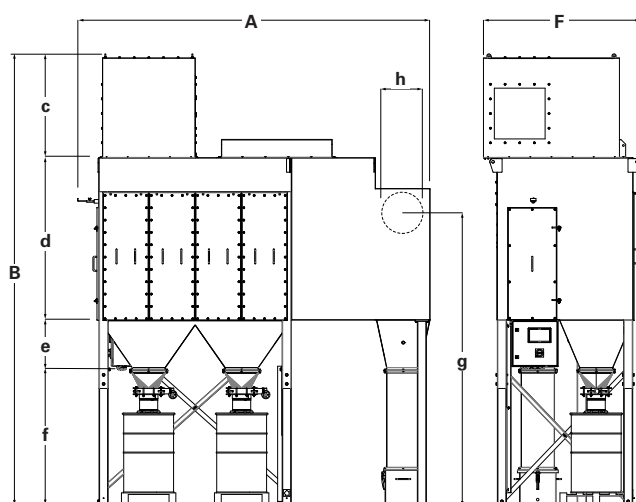


Model	No. of cartridges	No. of valves	Fan	Dust disposal system	Dimensions (mm)								
					A	B	c	d	e	f	g	h	F
DFPRE 12L Sparktrap	12	12	Roof mounted	200 L drum	2832	4991	1146	1790	555	1500	1858	353	1730
				85 L drum	2832	4556	1146	1790	555	1065	1423	353	1730
				hook-on dustbin	2832	4056	1146	1790	555	565	923	353	1730
				quick release	2832	3891	1146	1790	555	400	758	353	1730
			Partially integrated	200 L drum	2832	4206	361	1790	555	1500	1858	353	2079
				85 L drum	2832	3771	361	1790	555	1065	1423	353	2079
				hook-on dustbin	2832	3271	361	1790	555	565	923	353	2079
				quick release	2832	3106	361	1790	555	400	758	353	2079

DIMENSIONS & SPECIFICATIONS 12L CYCLOPEEL

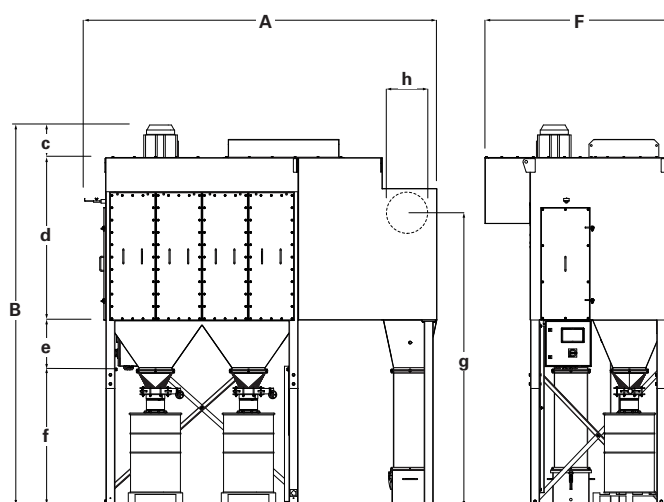


DFPRE 12L CYCLOPEEL



ROOF MOUNTED FAN

shown with 200 L drum



PARTIALLY INTEGRATED FAN

shown with 200 L drum

Model	No. of cartridges	No. of valves	Fan	Dust disposal system	Dimensions (mm)								
					A	B	c	d	e	f	g	h	F
DFPRE 12L Cyclopeel	12	12	Roof mounted	200 L drum	3827	4991	1146	1790	555	1500	3171	NW560	1730
				85 L drum	3827	4556	1146	1790	555	1065	2736	NW560	1730
				hook-on dustbin	3827	4056	1146	1790	555	565	2236	NW560	1730
				quick release	3827	3891	1146	1790	555	400	2071	NW560	1730
			Partially integrated	200 L drum	3827	4206	361	1790	555	1500	3171	NW560	2079
				85 L drum	3827	3771	361	1790	555	1065	2736	NW560	2079
				hook-on dustbin	3827	3271	361	1790	555	565	2236	NW560	2079
				quick release	3827	3106	361	1790	555	400	2071	NW560	2079

COLLECTOR WEIGHTS

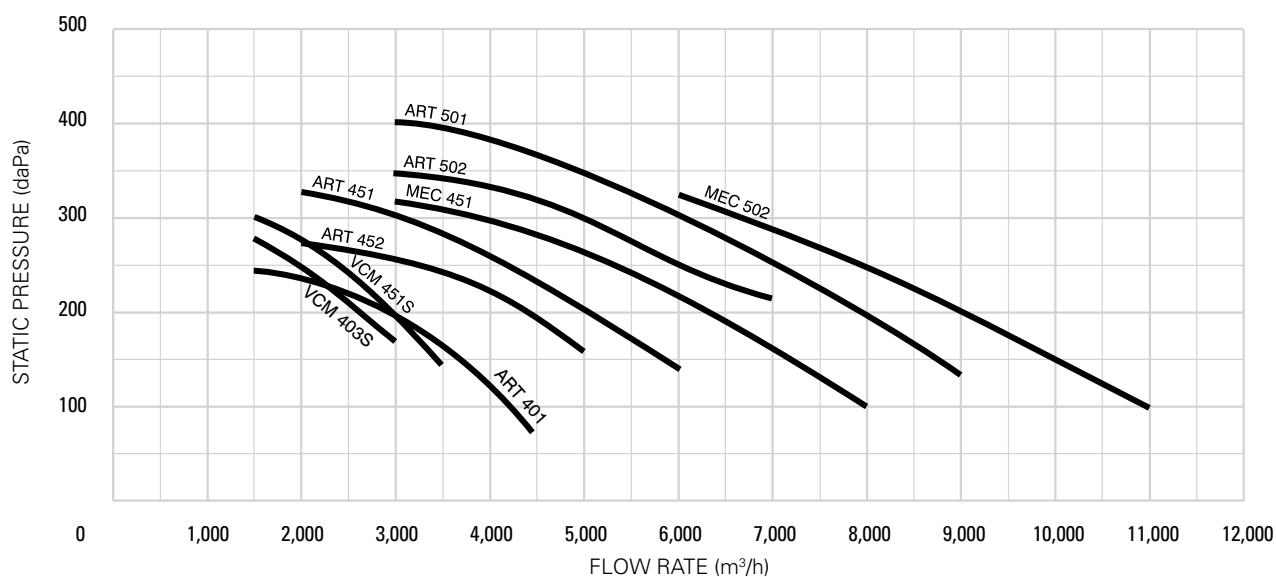
Model	Type	Weight (in kg)
DFPRE 9L	Standard	1375
	Sparktrap	1621
	Cyclopeel	1833
DFPRE 12L	Standard	1582
	Sparktrap	1860
	Cyclopeel	2095
Weights include filter cartridges and are for collectors prior to first use, i.e. with no dust collected. Excludes shipped loose items like fan set, fan box, legs and dust disposal system.		

FAN SETS

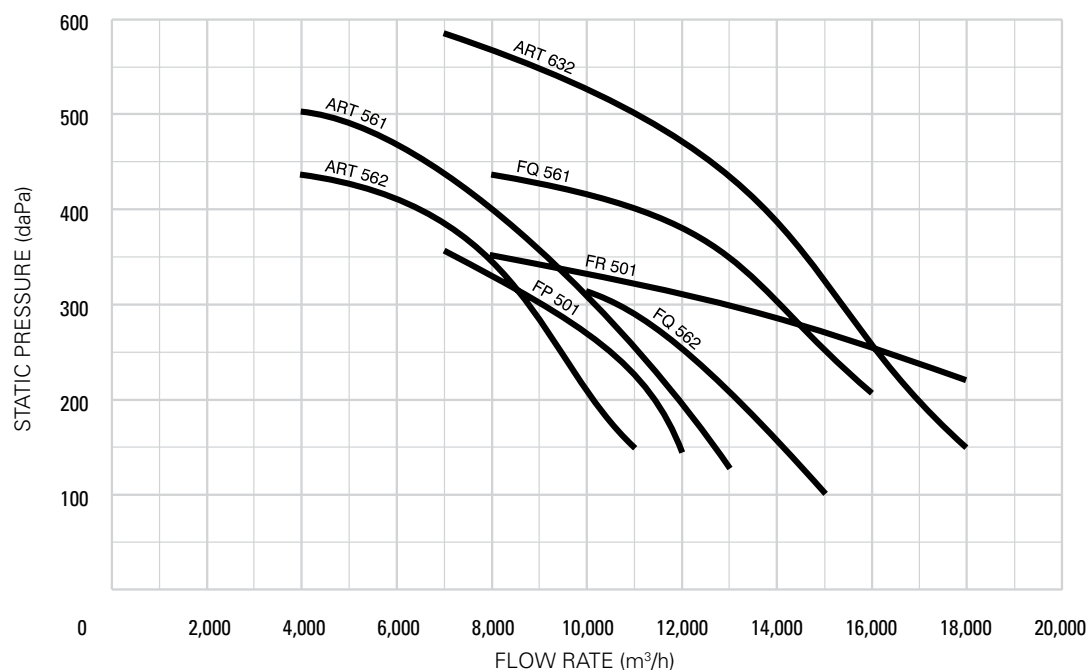
Fan type	Power (in kW)	Frequency	Weight (in kg)
VCM 403S	2.2	50	41
VCM 451S	3	50	70
ART 452	4	50	98
ART 451	5.5	60	110
MEC 451	7.5	60	159
ART 502	7.5	60	151
ART 501	11	50	208
MEC 502	11	60	239

Fan type	Power (in kW)	Frequency	Weight (in kg)
ART 562	11	50	230
FP 501	11	50	251
ART 561	15	50	250
FQ 562	15	50	310
FQ 561	18.5	50	304
FR 501	18.5	50	207
ART 632	22	50	346

FAN PERFORMANCE CURVES



FAN PERFORMANCE CURVES (2.2 to 11 kW)



FAN PERFORMANCE CURVES (11 TO 22 KW)

FAN SELECTION

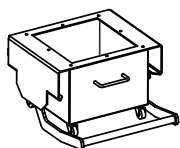
These curves indicate static pressure available at fan inlet for a given application, when fitted into a collector.

To select the most suitable fan for a given application:

- 1 Determine the air volume, in m³/h, needed to entrain the dust.
- 2 Estimate pressure drop through connected system – i.e. between point of entrainment and collector inlet.
- 3 Assess pressure drop over dust collector, prior to replacing filter cartridges, usually 100 daPa.
- 4 The sum of **2** and **3** = static pressure at inlet.
- 5 Consult graph for fan performance available.

DUST DISPOSAL OPTIONS

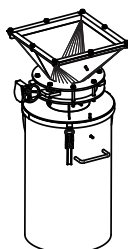
**QUICK RELEASE
DUST BIN**



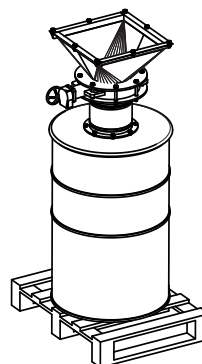
**HOOK ON
DUST BIN**



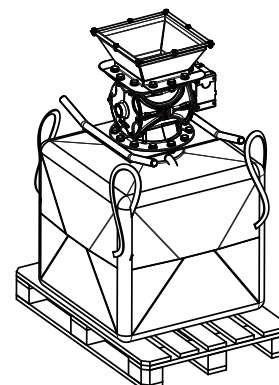
85 L DRUM



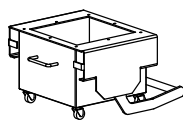
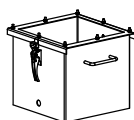
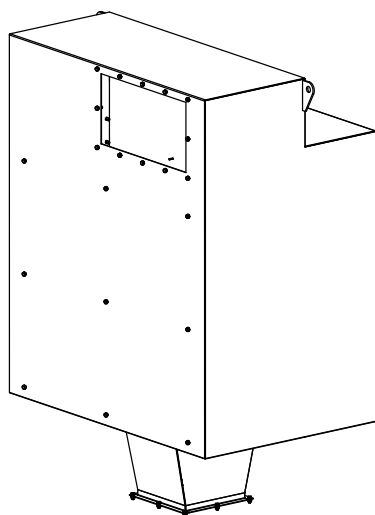
200 L DRUM



BIG BAG



Dust disposal options	Hopper clearance (in mm)	Approx. weight (in kg)
quick release dust bin	400	40
hook-on dust bin	400	22
85 L drum	1065	15
200 L drum	1500	40
Big-bag (excluding bag and rotary airlock)	1800	18

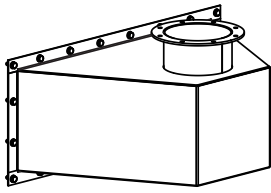


**HOOK ON
DUST BIN**

**QUICK RELEASE
DUST BIN**

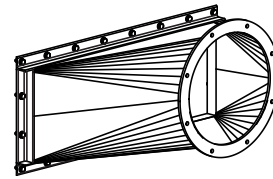
Dust disposal options Cyclopeel	Hopper clearance (in mm)
quick release dust bin	400
hook-on dust bin	400
hook-on dust bin with caster	565

INLET OPTIONS - AVAILABLE SIZES



Abrasive resistant inlet box

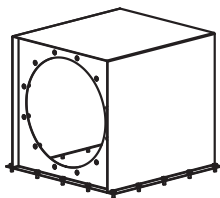
NW315
NW400
NW450
NW500
NW630
NW710



Front inlet transition piece

NW450
NW500
NW630
NW710

OUTLET OPTIONS



Outletbox NW500

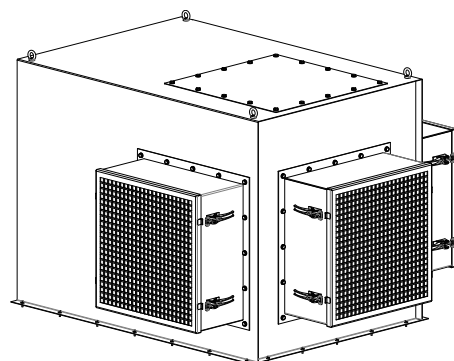


Outletbox deflector

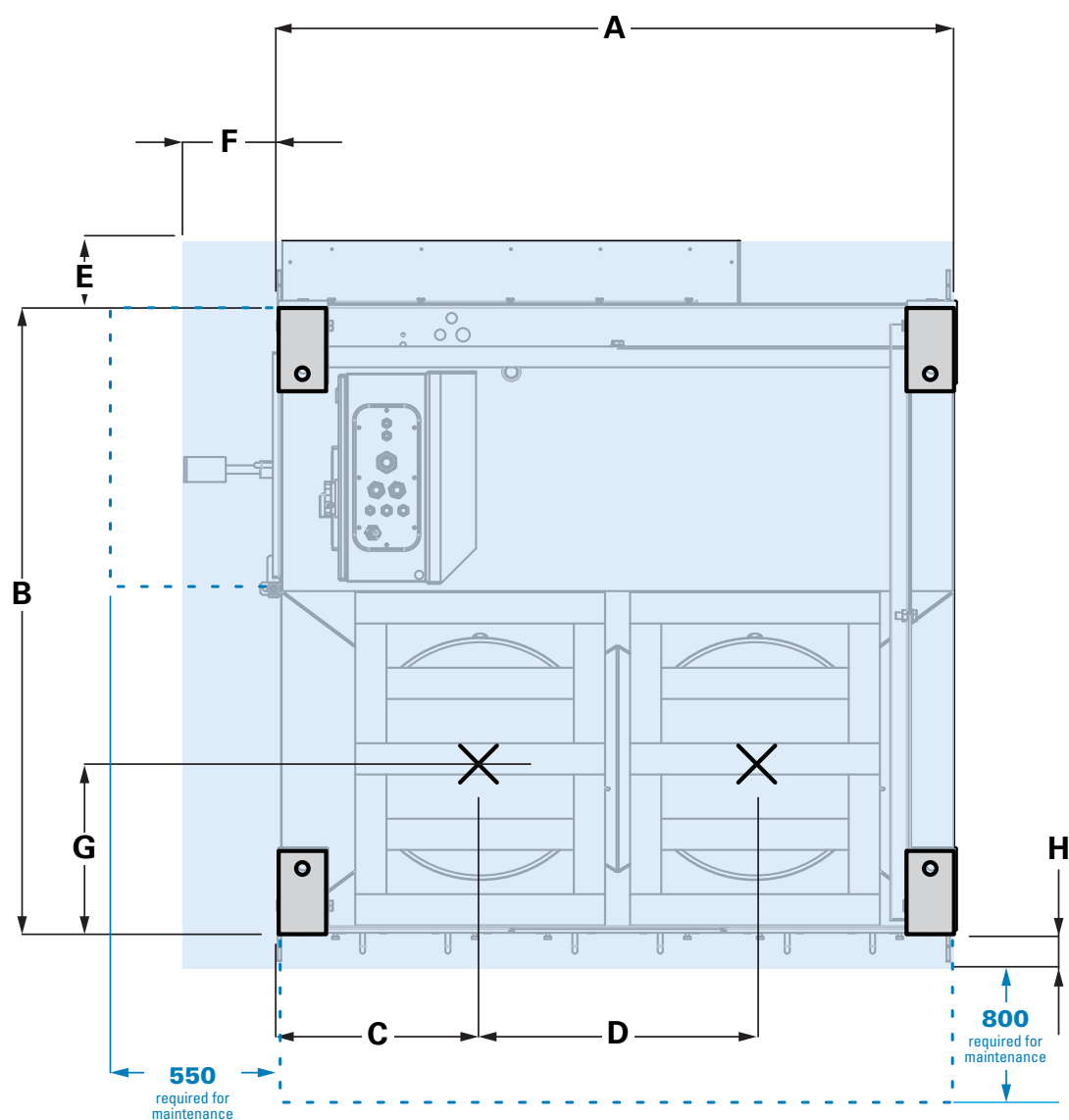
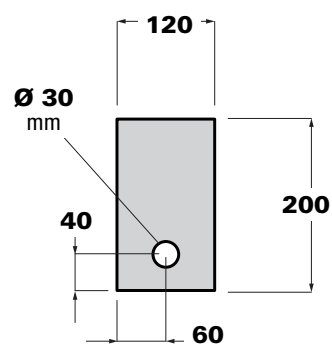
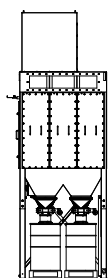
HEPA OPTION

Roof mounted fanbox with HEPA

up to 4 HEPA filters, each capable to handle 4000 CMH

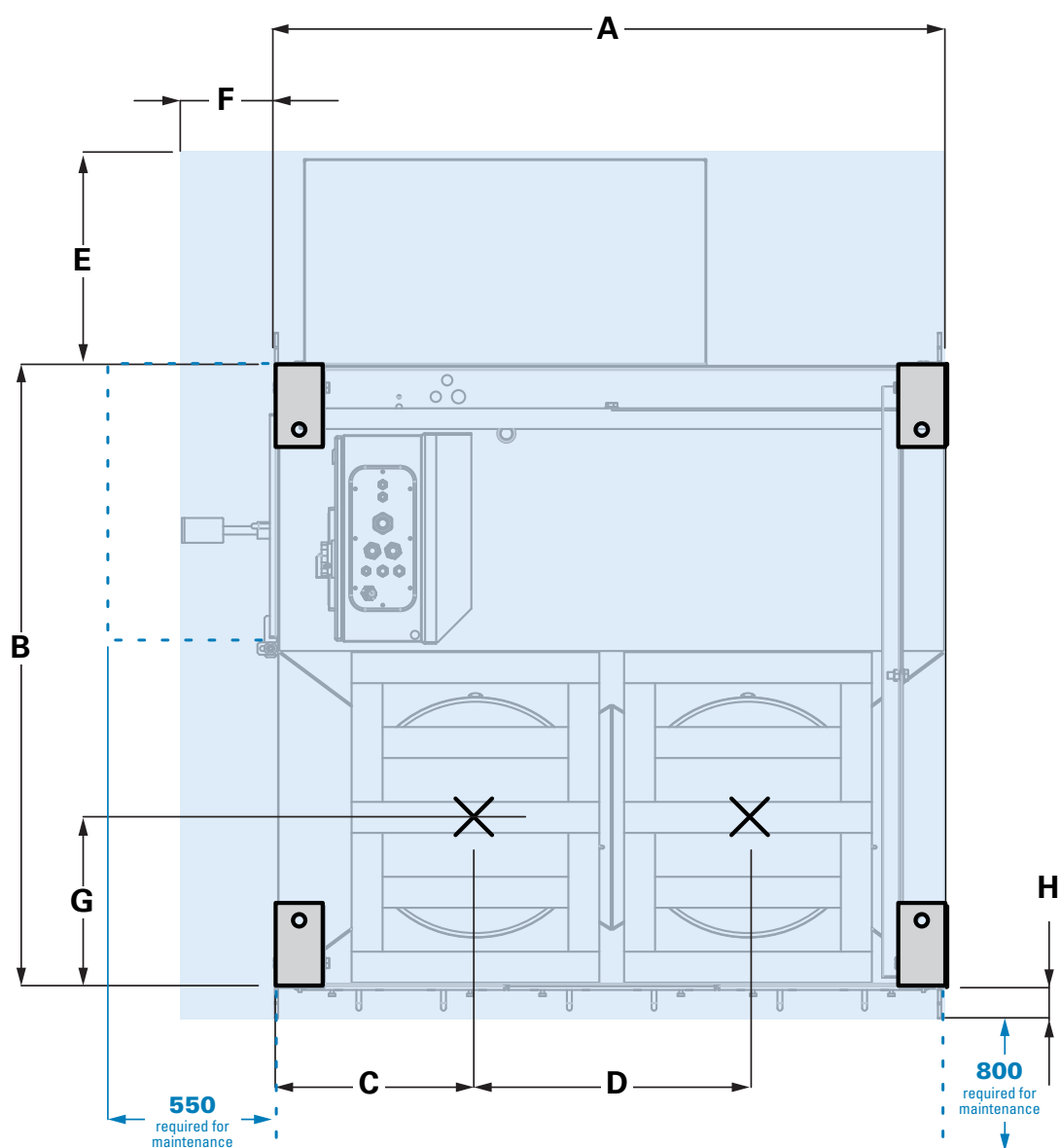
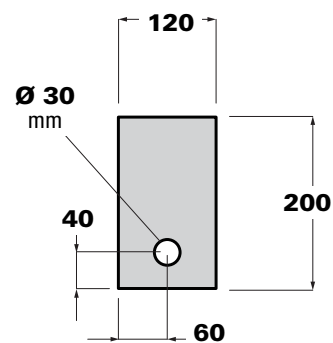
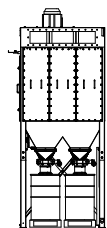


FOUNDATION DETAILS - 9L - STANDARD - ROOF MOUNTED FAN



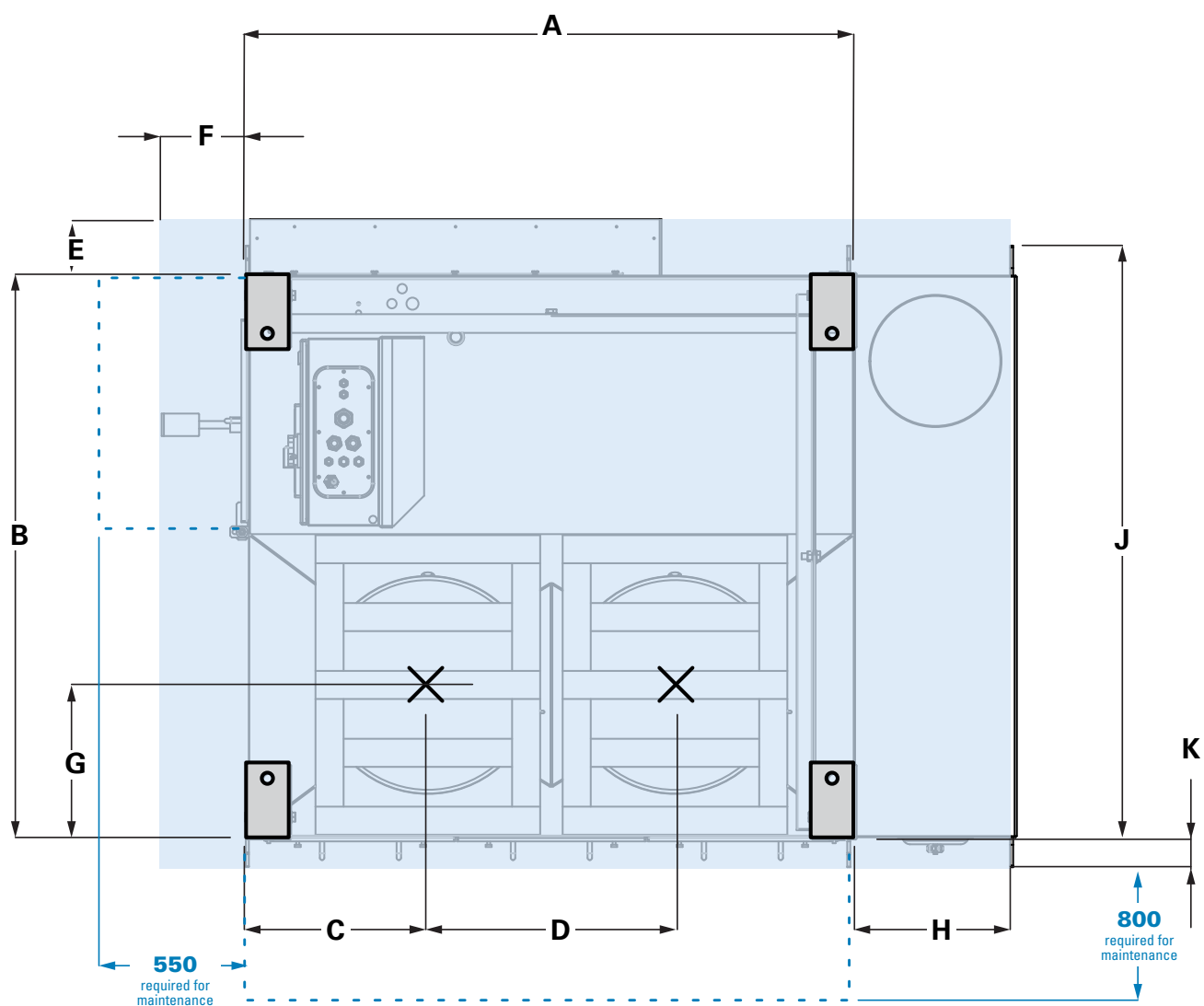
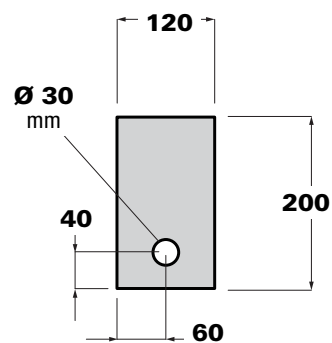
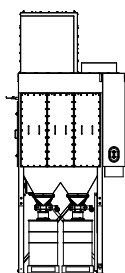
9L - Standard - Roof mounted fan dimensions (in mm)							
A	B	C	D	E	F	G	H
1360	1513	485	666	143.5	166	413	73

FOUNDATION DETAILS - 9L - STANDARD - PARTIALLY INTEGRATED FAN



9L - Standard - Partially integrated fan dimensions (in mm)							
A	B	C	D	E	F	G	H
1360	1513	485	666	493	166	413	73

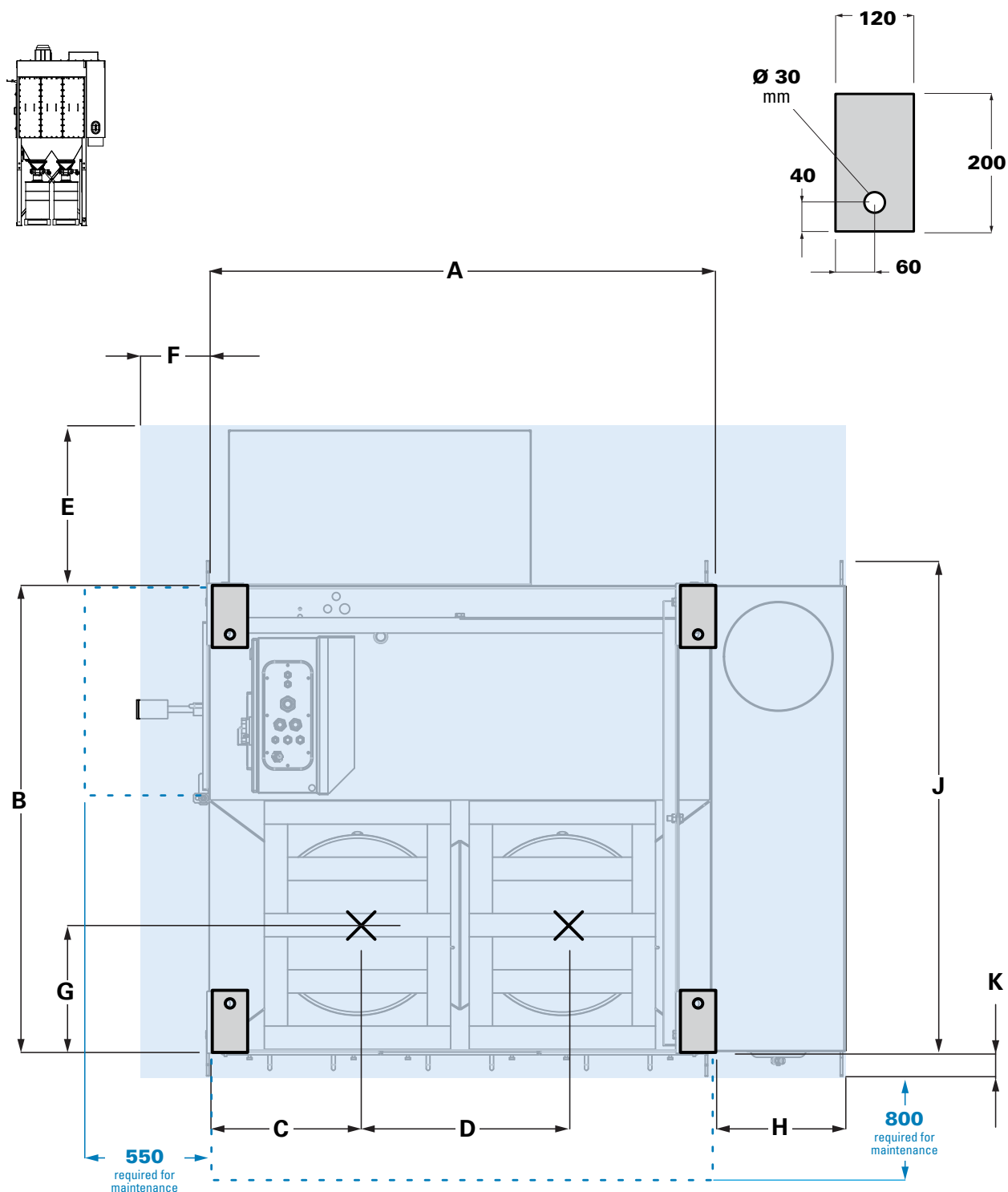
FOUNDATION DETAILS - 9L - SPARKTRAP - ROOF MOUNTED FAN



9L - Sparktrap - Roof mounted fan
dimensions (in mm)

A	B	C	D	E	F	G	H	J	K
1360	1513	485	666	143.5	166	413	428	1586	73

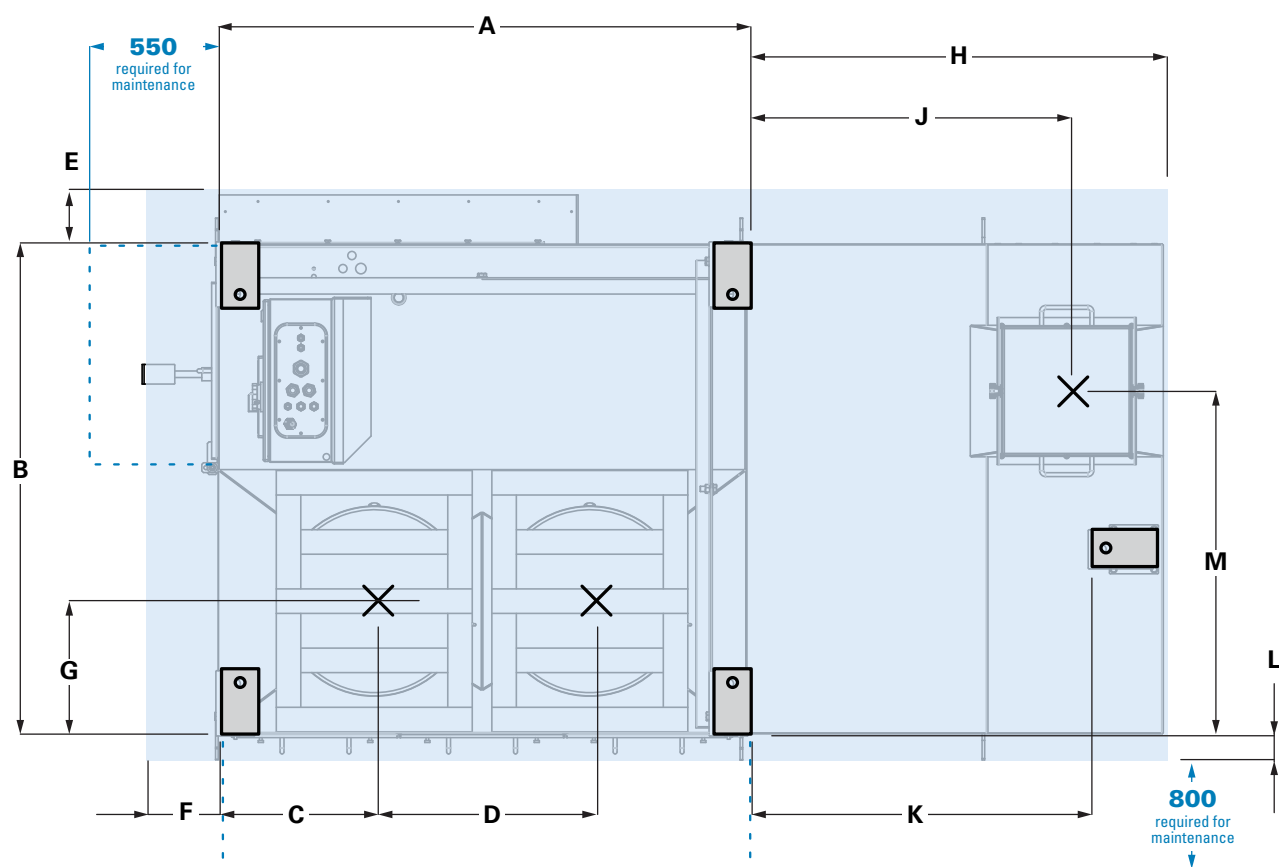
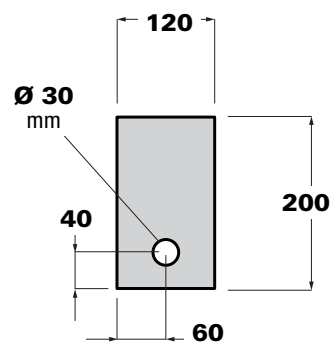
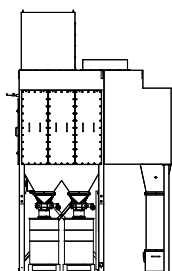
FOUNDATION DETAILS - 9L - SPARKTRAP - PARTIALLY INTEGRATED FAN



9L - Sparktrap - Partially integrated fan
dimensions (in mm)

A	B	C	D	E	F	G	H	J	K
1360	1513	485	666	493	166	413	428	1586	73

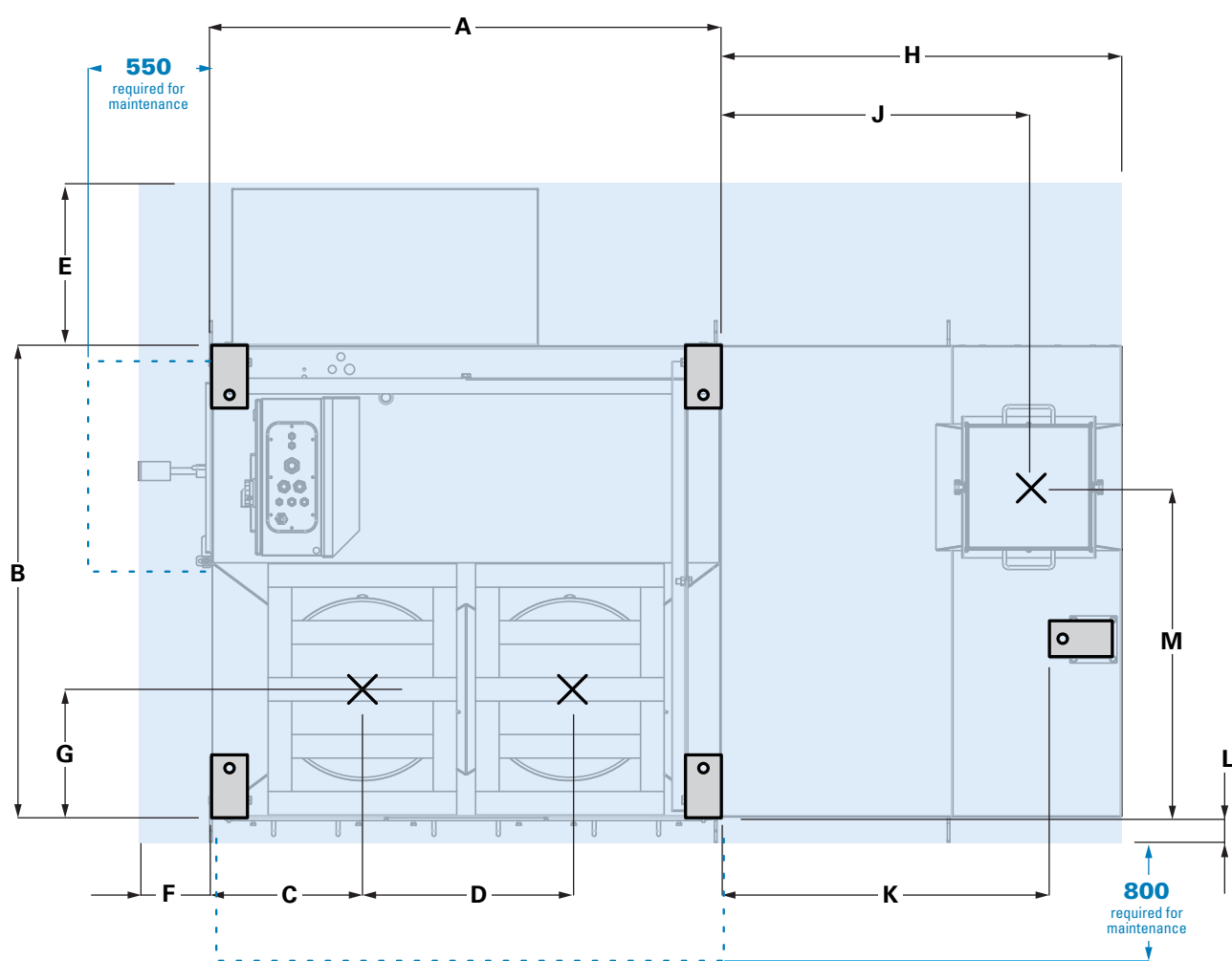
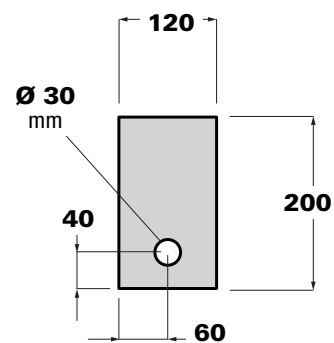
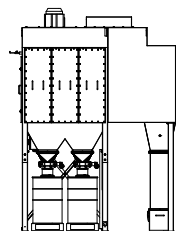
FOUNDATION DETAILS - 9L - CYCLOPEEL - ROOF MOUNTED FAN



9L - Cyclopeel - Roof mounted fan
dimensions (in mm)

A	B	C	D	E	F	G	H	J	K	L	M
1360	1513	485	666	143.5	166	413	1278	982	1041	73	1056

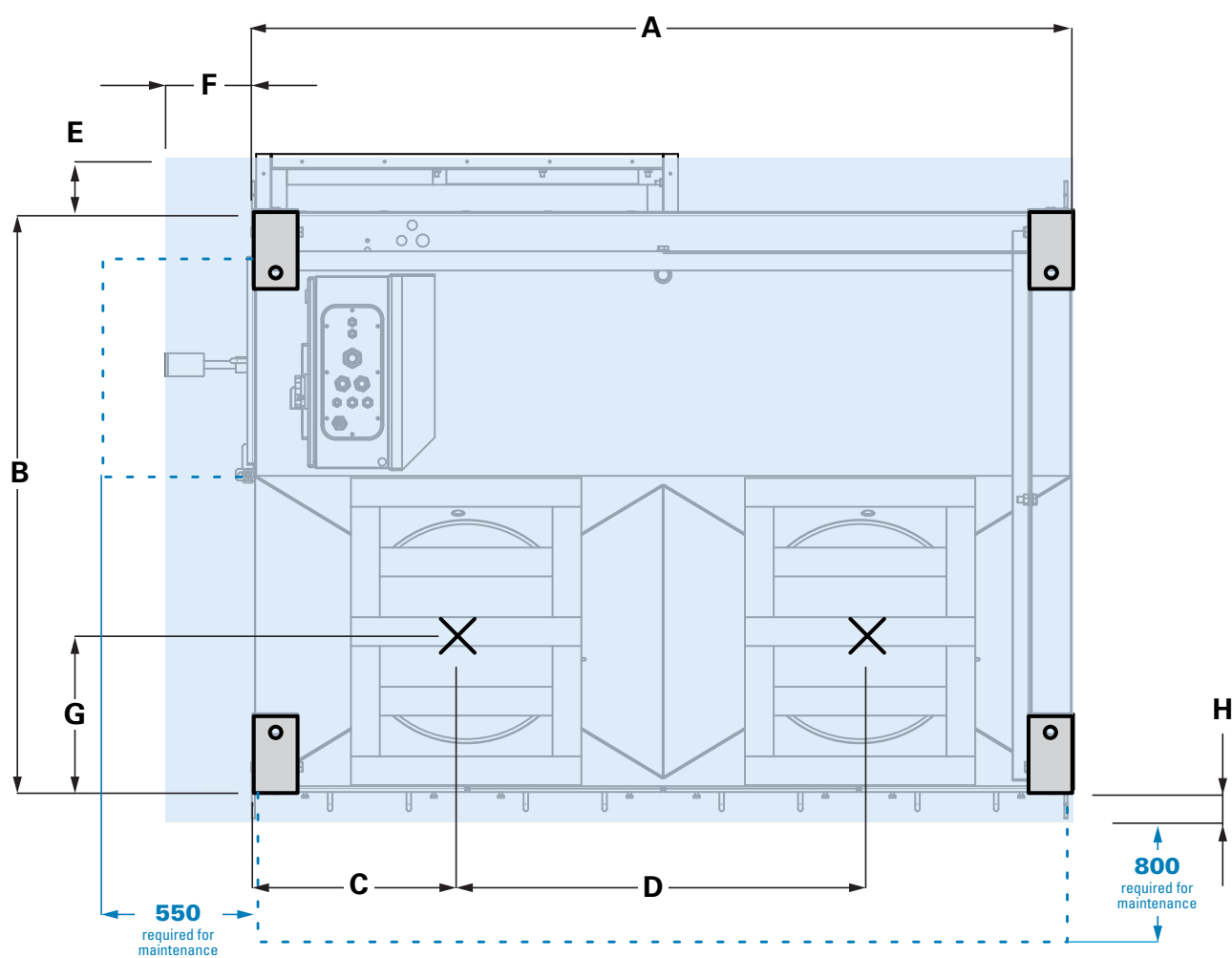
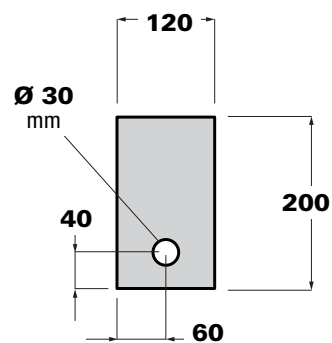
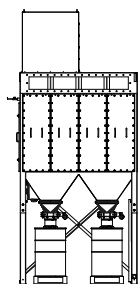
FOUNDATION DETAILS - 9L - CYCLOPEEL - PARTIALLY INTEGRATED FAN



9L - Cyclopeel - Partially integrated fan
dimensions (in mm)

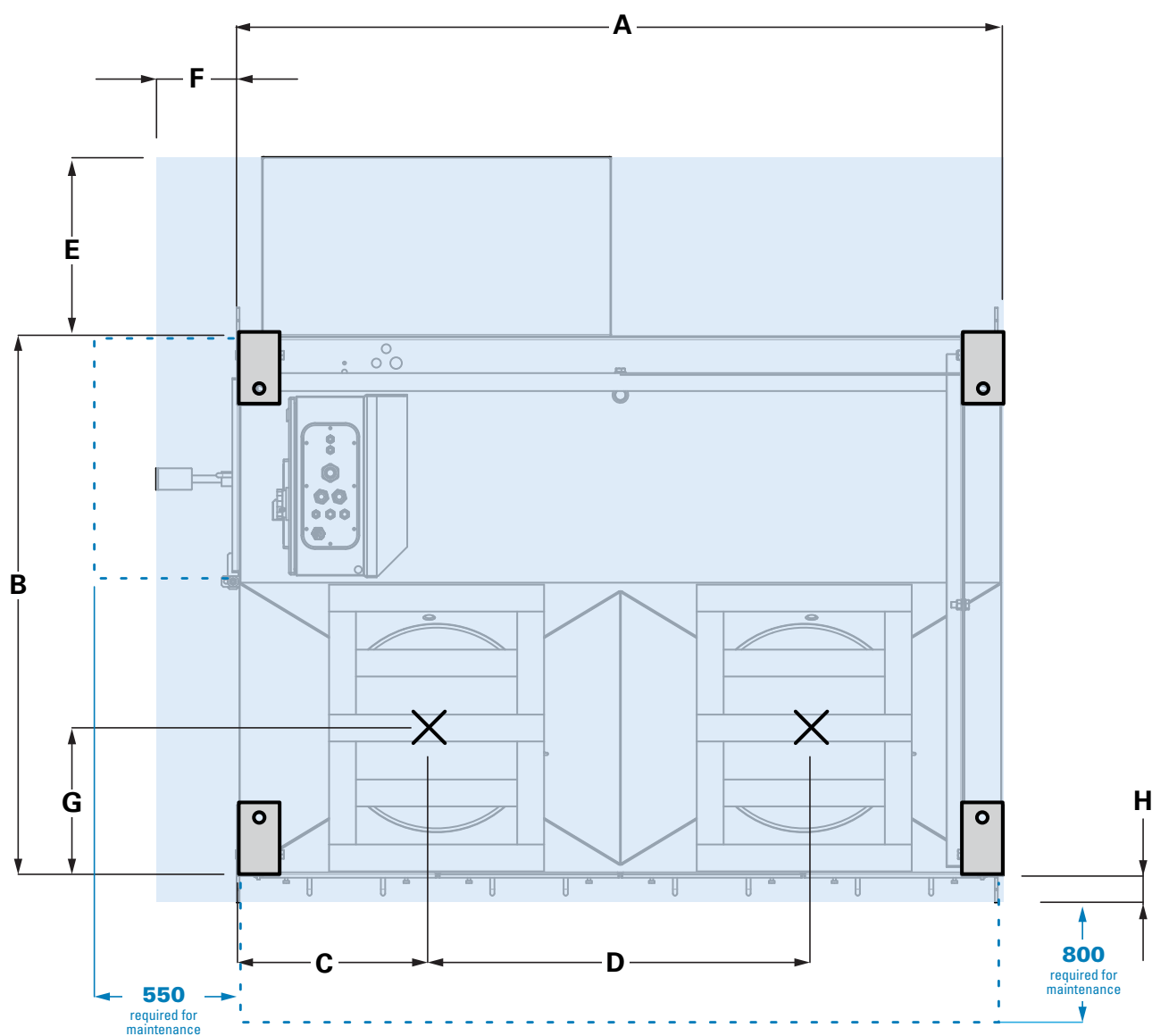
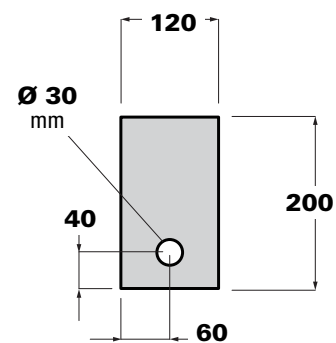
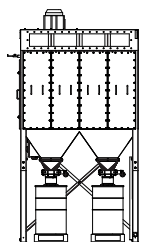
A	B	C	D	E	F	G	H	J	K	L	M
1360	1513	485	666	493	166	413	1278	982	1041	73	1056

FOUNDATION DETAILS - 12L - STANDARD - ROOF MOUNTED FAN



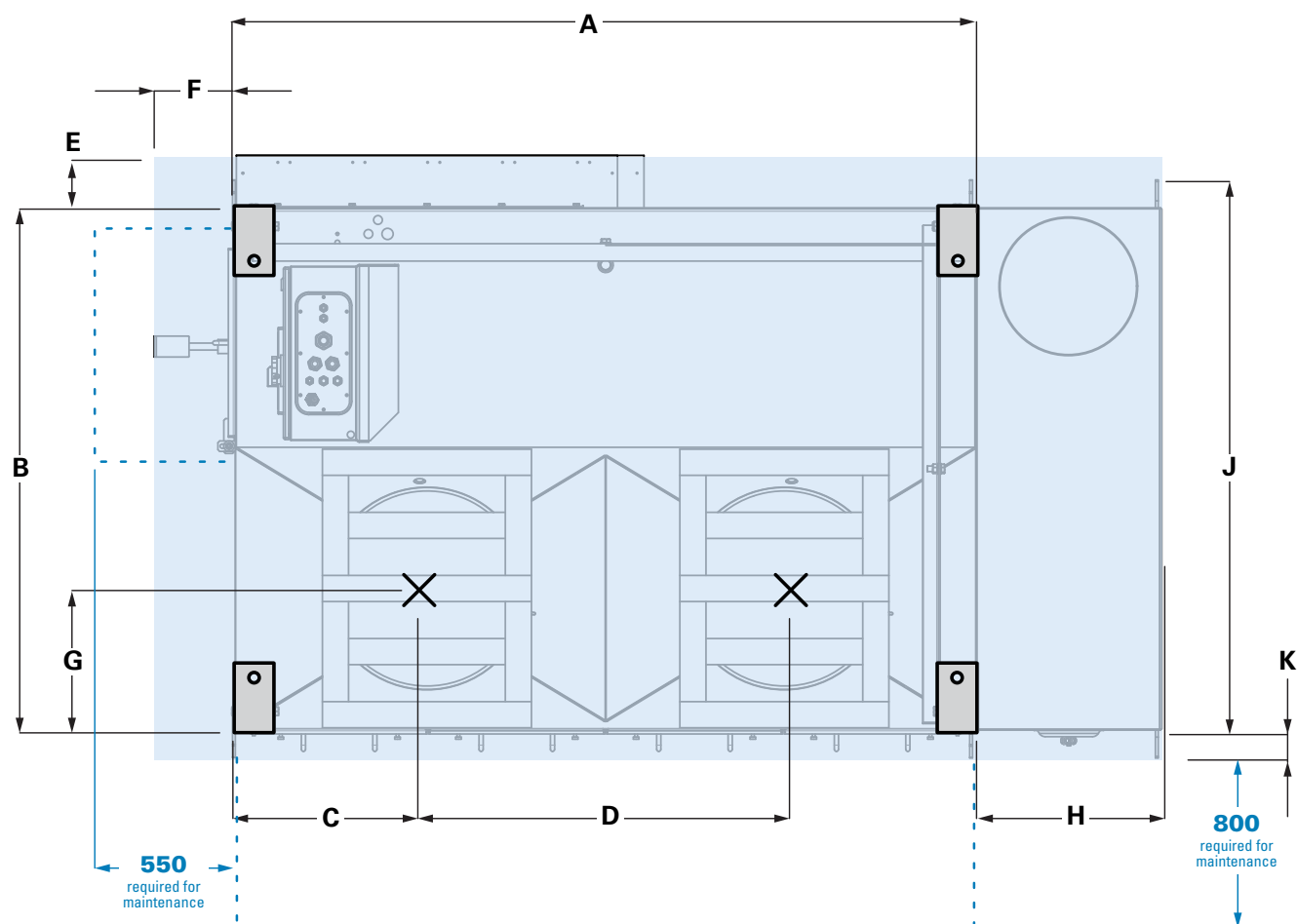
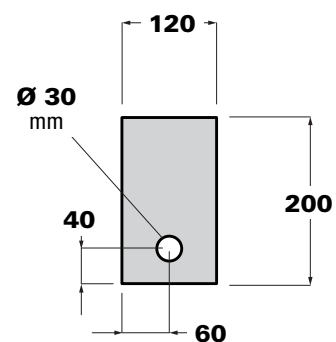
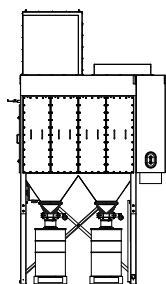
12L - Standard - Roof mounted fan dimensions (in mm)							
A	B	C	D	E	F	G	H
2140	1513	557	1026	143,5	173	413	74

FOUNDATION DETAILS - 12L - STANDARD - PARTIALLY INTEGRATED FAN



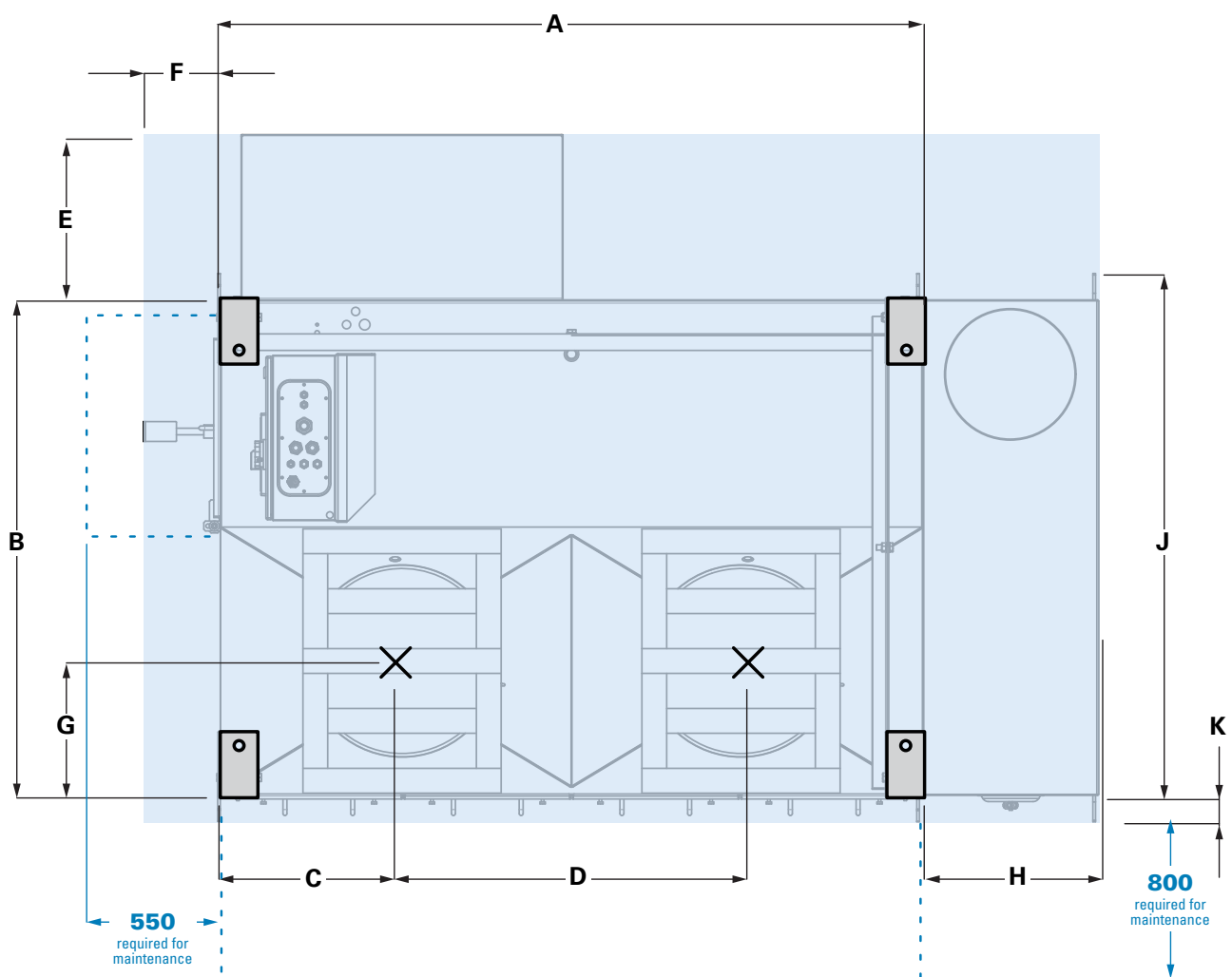
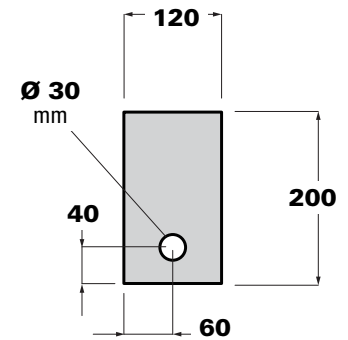
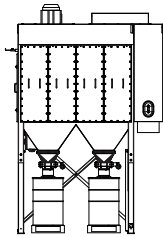
12L - Standard - Partially integrated fan dimensions (in mm)							
A	B	C	D	E	F	G	H
2140	1513	557	1026	493	173	173	74

FOUNDATION DETAILS - 12L - SPARKTRAP - ROOF MOUNTED FAN



12L - Sparktrap - Roof mounted fan dimensions (in mm)									
A	B	C	D	E	F	G	H	J	K
2140	1513	557	1026	143,5	173	413	533	1586	74

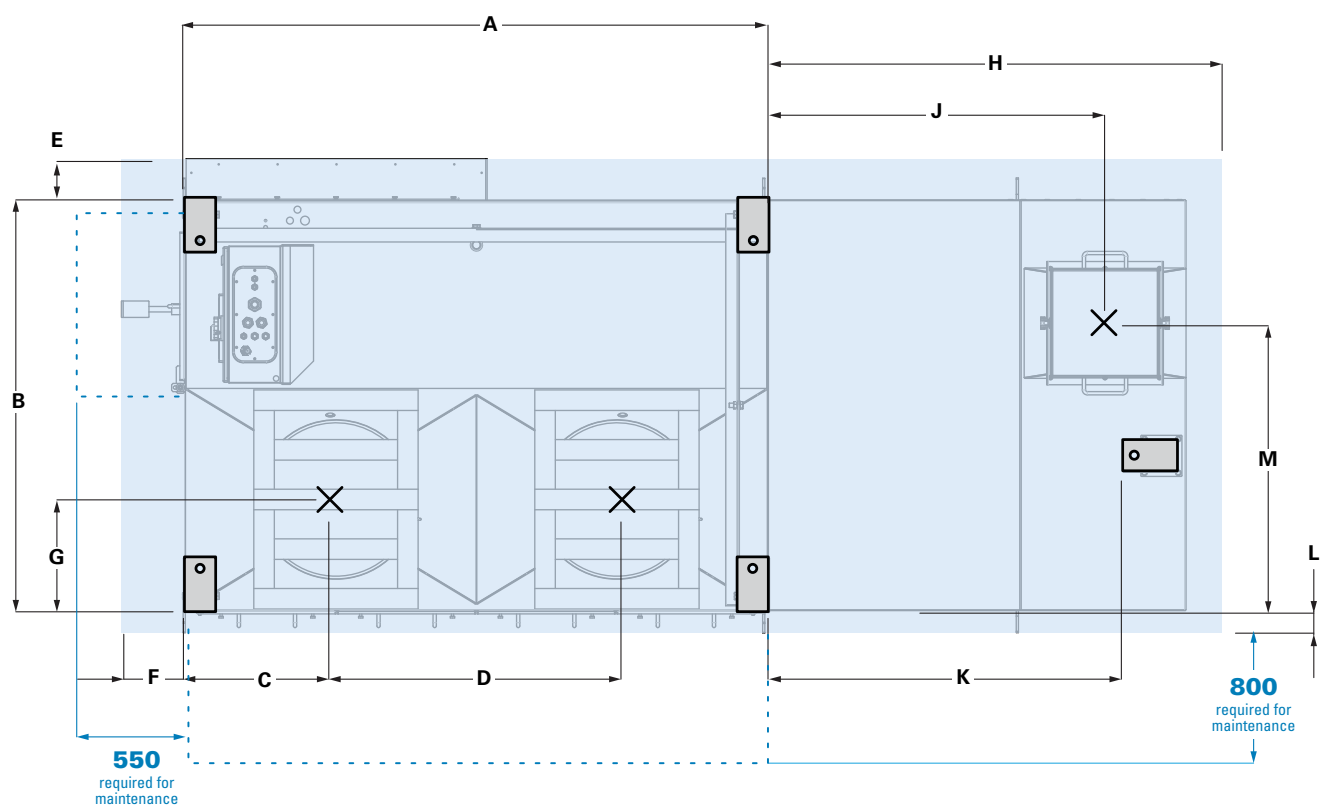
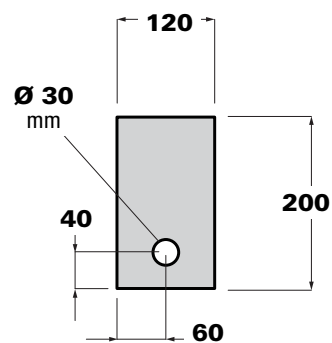
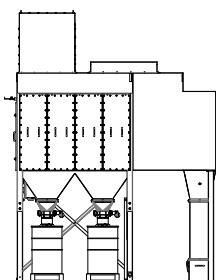
FOUNDATION DETAILS - 12L - SPARKTRAP - PARTIALLY INTEGRATED FAN



12L - Sparktrap - Partially integrated fan
dimensions (in mm)

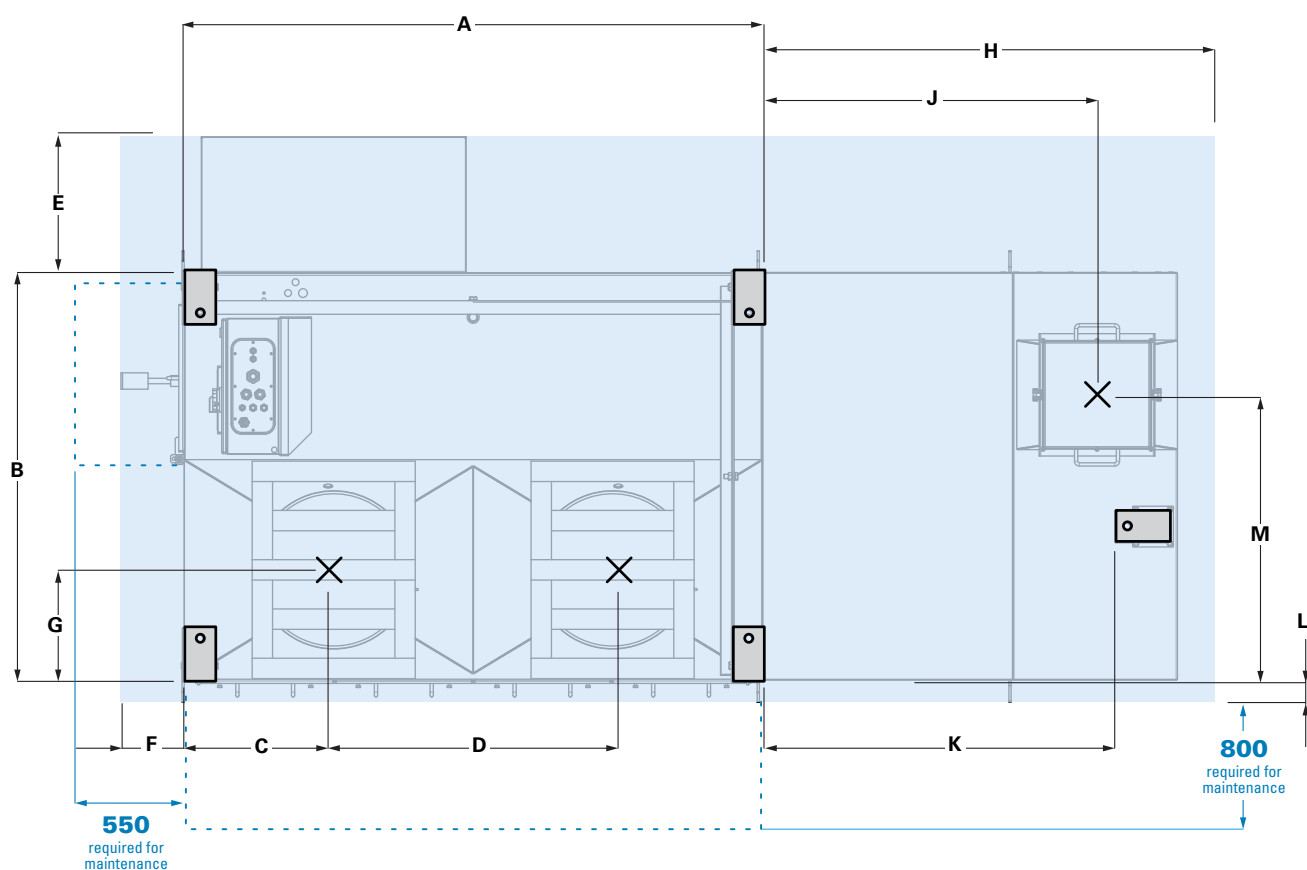
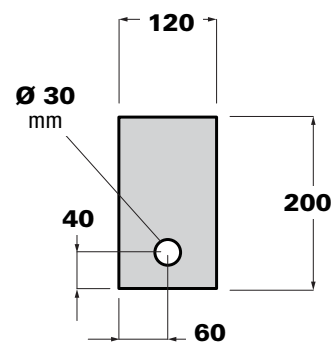
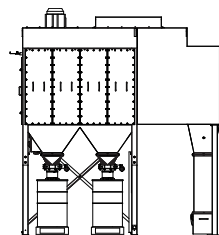
A	B	C	D	E	F	G	H	J	K
2140	1513	557	1026	493	173	173	533	1586	74

FOUNDATION DETAILS - 12L - CYCLOPEEL - ROOF MOUNTED FAN



12L - Cyclopeel - Roof mounted fan dimensions (in mm)											
A	B	C	D	E	F	G	H	J	K	L	M
2140	1513	557	1026	143,5	173	413	1521	1225	1291	74	1056,5

FOUNDATION DETAILS - 12L - CYCLOPEEL - PARTIALLY INTEGRATED FAN



12L - Cyclopeel - Partially integrated fan
dimensions (in mm)

A	B	C	D	E	F	G	H	J	K	L	M
2140	1513	557	1026	493	173	173	1521	1225	1291	74	1056,5

ELECTRICAL REQUIREMENTS

Fully automatic cleaning mechanism: C-Powerbox
Pulse interval time: 12 s
Control box protection class: IP65
Input voltage: 400 V Δ 50 Hz

NOISE EMISSION

Noise emission declaration of the DFPRE 6L, measured according to EN-ISO 11201: 2010, running at maximum fan speed and 5 pulses per minute at 6 Bar with noise insulation foam:

The A-weighted emission sound pressure level re. 20 μ Pa	76 dB
associated total uncertainty K_{pA}	2.5 dB

The declaration is in conformance with ISO 4871.

MANIFOLD DESIGN DETAILS

Design pressure: 8 bar
Maximum operating pressure, PS: 7 bar (101.5 psig)
Test pressure: 11.5 bar
Design temperature: -20° to +70°C
Manifold volume: DFPRE 9L: 13 liters
 DFPRE 12L: 13 liters
Product of pressure and capacity: DFPRE 9L: 91 bar liters
 DFPRE 12L: 91 bar liters
Material used for manifold construction: Structural hollow section according to EN13445

COMPRESSED AIR REQUIREMENTS

Max. 7 bar
Pressure range 6-7 bar
Clean air (max. particle size 50 μ m)
Free of condensate at working temperature
Max. oil content: 3 mg/m³
Approximate compressed air usage*: $\pm$ 51 litres per pulse
 ($\pm$ 15.3 Nm³/h for 12 s pulse interval at 7 bar)
 * The indicated value is the consumption per valve

STANDARD FEATURES & AVAILABLE OPTIONS

Unit options

Execution for outside installation
Variable hopper clearance
Full range of dust disposal systems
Compressed air – oil/water separator and accessories
Full range of fan sets
CAP insulation foam
Full range of filter cartridges
Bin balance pipe kit
DFS Feeder for the absorption of oily substances

Cartridge options

Filter assembly DFE 660mm Ultra-Web®
Filter assembly DFE 660mm Ultra-Web® Earthed
Filter assembly DFE 660mm Ultra-Web® Flame Retardant
Filter assembly DFE 660mm Ultra-Web® Flame Retardant Earthed
Filter assembly DFE 660mm Ultra-Web® on SpunBond
Filter assembly DFE 660mm Ultra-Web® on SpunBond Earthed
Filter assembly DFE 660mm Ultra-Web® on SpunBond Anti-Static
Filter assembly DFE 660mm Ultra-Web® Anti-Static
Filter assembly DFE 660mm Torit-TEX®
Filter assembly DFE 660mm Torit-TEX® Earthed
Filter assembly DFE 660mm Torit-TEX® Anti-Static
Filter assembly DFE 660mm Ultra-Web® No Liner
Filter assembly DFE 660mm Ultra-Web® Flame Retardant No Liner
Filter assembly DFE 660mm Ultra-Web® Stainless Steel
Filter assembly DFE 660mm Fibra-Web®
Filter assembly DFE 660mm Fibra-Web® Earthed
Filter assembly DFE 660mm Fibra-Web® Flame Retardant
Filter assembly DFE 660mm Thermo-Web®
Filter assembly DFE 660mm Thermo-Web® Earthed
Filter assembly DFE 660mm Kevlar Nomex (high temp)

NOTES

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin black lines. There are no margins, text, or other markings on the page.

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