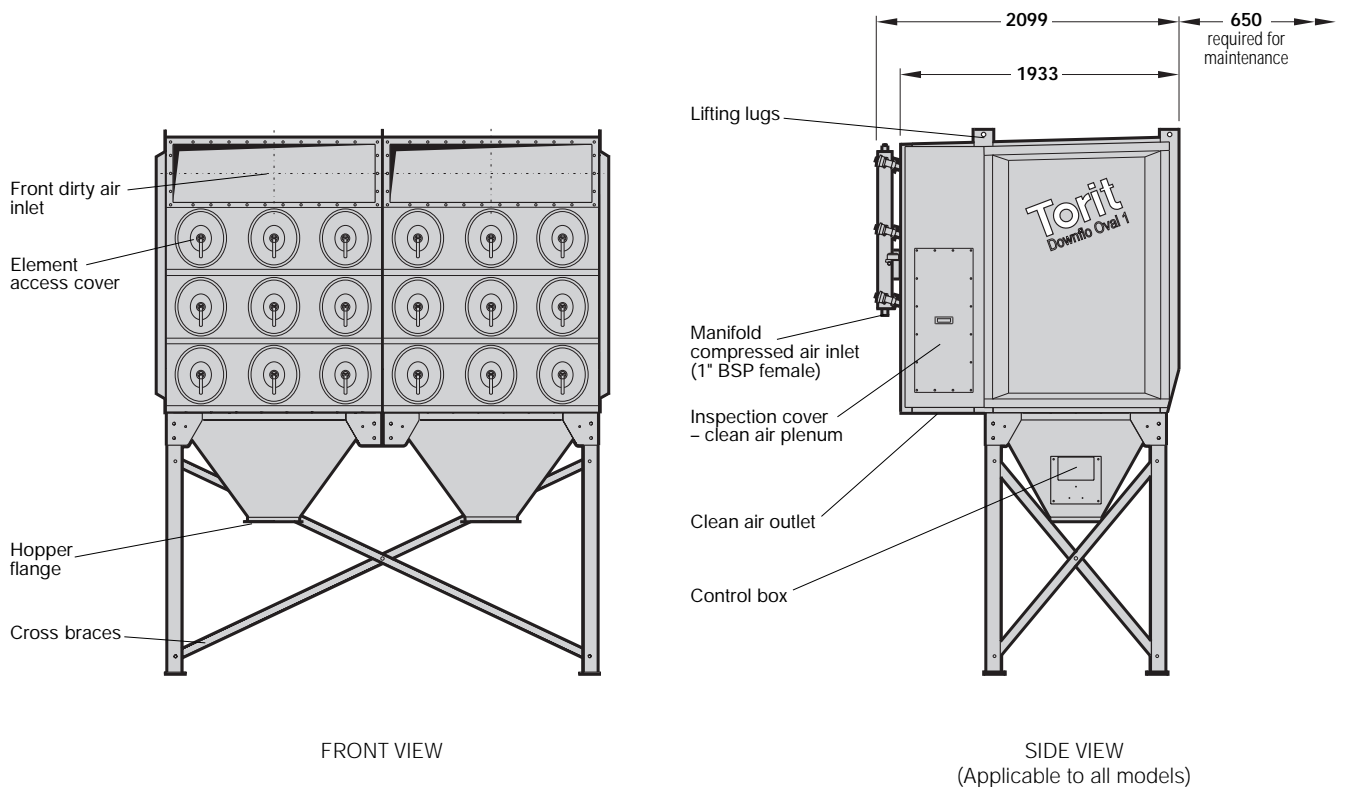


# Downflo® Oval 1 Dust Collector



## DFO standard dust collector

Model DFO 3-36 illustrated.

### DESIGN SPECIFICATIONS (standard equipment)

**Operating temperature:**  $-10^{\circ}$  to  $+65^{\circ}\text{C}$

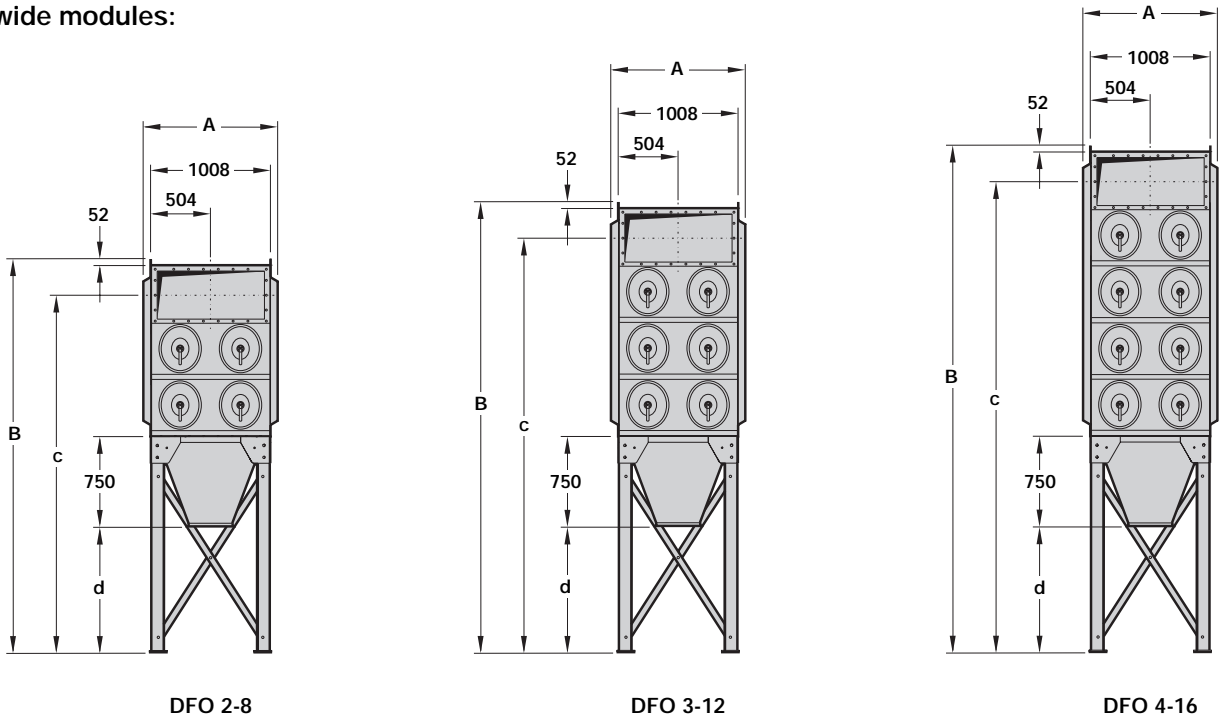
**Maximum operating pressure range:**  $\pm 5$  kPa (500 mm WG)

**Wind load rating:** 160 km/h

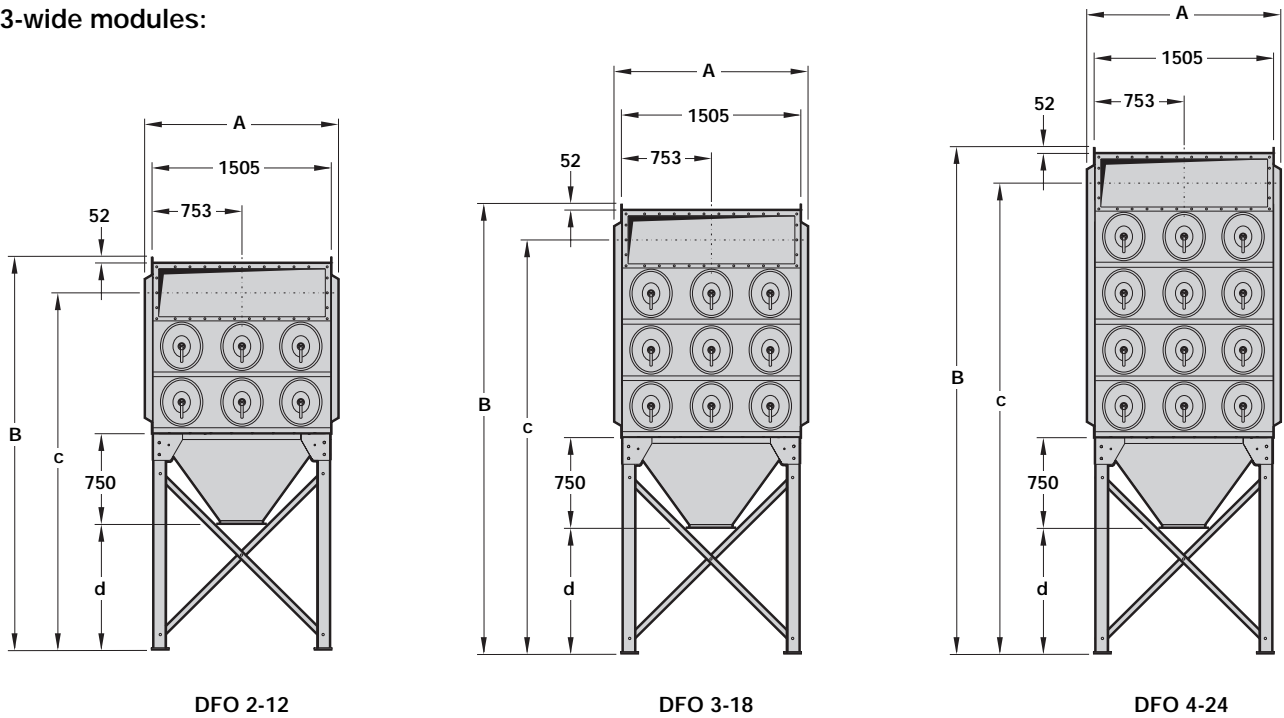
**Finishing:** Acrylated alkyd paint colour RAL 5019 (blue) – semi gloss

**Downflo® Oval 1 Dust Collector**

**2-wide modules:**



**3-wide modules:**



FRONT VIEWS

**DFO standard dust collector**

Refer also to 'Specifications' table on page 3.

Larger collectors are configured from suitable combinations of the above modules – refer also to page 4.

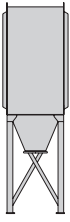
## Downflo® Oval 1 Dust Collector

Model	No. of modules*	Filtration area Ultra Web®	No. of filter elements	No. of valves	DIMENSIONS in mm				Approx. net weight
					A	B	c	d	
DFO 2-8	1	141.2 m <sup>2</sup>	8	4	1138	2645	2340	400	810 kg**▲
					1138	3310	3005	1065	
					1138	3745	3440	1500	
DFO 2-12	1	211.8 m <sup>2</sup>	12	6	1635	2645	2340	400	975 kg**▲
					1635	3310	3005	1065	
					1635	3745	3440	1500	
DFO 2-16	2	282.4 m <sup>2</sup>	16	8	2146	2645	2340	400	1270 kg**▲
					2146	3310	3005	1065	
					2146	3745	3440	1500	
DFO 3-12	1	211.8 m <sup>2</sup>	12	6	1138	3118	2813	400	960 kg**▲
					1138	3783	3478	1065	
					1138	4218	3913	1500	
DFO 3-18	1	317.7 m <sup>2</sup>	18	9	1635	3118	2813	400	1170 kg**▲
					1635	3783	3478	1065	
					1635	4218	3913	1500	
DFO 3-24	2	423.6 m <sup>2</sup>	24	12	2146	3118	2813	400	1700 kg**▲
					2146	3783	3478	1065	
					2146	4218	3913	1500	
DFO 3-36	2	635.4 m <sup>2</sup>	36	18	3140	3118	2813	400	2075 kg**▲
					3140	3783	3478	1065	
					3140	4218	3913	1500	
DFO 3-48	3	847.2 m <sup>2</sup>	48	24	4148	3118	2813	400	2690 kg**▲
					4148	3783	3478	1065	
					4148	4218	3913	1500	
DFO 4-16	1	282.4 m <sup>2</sup>	16	8	1138	3591	3286	400	1120 kg**▲
					1138	4256	3951	1065	
					1138	4691	4386	1500	
DFO 4-24	1	423.6 m <sup>2</sup>	24	12	1635	3591	3286	400	1365 kg**▲
					1635	4256	3951	1065	
					1635	4691	4386	1500	
DFO 4-32	2	564.8 m <sup>2</sup>	32	16	2146	3591	3286	400	1790 kg**▲
					2146	4256	3951	1065	
					2146	4691	4386	1500	
DFO 4-40	2	706.0 m <sup>2</sup>	40	20	2643	3591	3286	400	2135 kg**▲
					2643	4256	3951	1065	
					2643	4691	4386	1500	
DFO 4-48	2	847.2 m <sup>2</sup>	48	24	3140	3591	3286	400	2490 kg**▲
					3140	4256	3951	1065	
					3140	4691	4386	1500	
DFO 4-56	3	988.4 m <sup>2</sup>	56	28	3651	3591	3286	400	2765 kg**▲
					3651	4256	3951	1065	
					3651	4691	4386	1500	
DFO 4-64	3	1129.6 m <sup>2</sup>	64	32	4148	3591	3286	400	3190 kg**▲
					4148	4256	3951	1065	
					4148	4691	4386	1500	
DFO 4-72	3	1270.8 m <sup>2</sup>	72	36	4645	3591	3286	400	3615 kg**▲
					4645	4256	3951	1065	
					4645	4691	4386	1500	
DFO 4-80	4	1412.0 m <sup>2</sup>	80	40	5156	3591	3286	400	4000 kg**▲
					5156	4256	3951	1065	
					5156	4691	4386	1500	
DFO 4-88	4	1553.2 m <sup>2</sup>	88	44	5653	3591	3286	400	4275 kg**▲
					5653	4256	3951	1065	
					5653	4691	4386	1500	
DFO 4-96	4	1694.4 m <sup>2</sup>	96	48	6150	3591	3286	400	4570 kg**▲
					6150	4256	3951	1065	
					6150	4691	4386	1500	
DFO 4-104	5	1835.6 m <sup>2</sup>	104	52	6661	3591	3286	400	4935 kg**▲
					6661	4256	3951	1065	
					6661	4691	4386	1500	
DFO 4-112	5	1976.8 m <sup>2</sup>	112	56	7158	3591	3286	400	6240 kg**▲
					7158	4256	3951	1065	
					7158	4691	4386	1500	
DFO 4-120	5	2118.0 m <sup>2</sup>	120	60	7655	3591	3286	400	6425 kg**▲
					7655	4256	3951	1065	
					7655	4691	4386	1500	
DFO 4-128	6	2259.2 m <sup>2</sup>	128	64	8166	3591	3286	400	6850 kg**▲
					8166	4256	3951	1065	
					8166	4691	4386	1500	

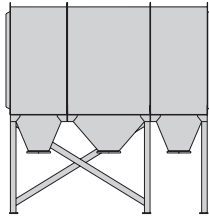
\*For module configurations refer to pages 2 and 4. \*\*Indicates heaviest configuration (1500 mm hopper clearance).

For reinforced units refer to detailed outlines. ▲Increase weight by 15% for reinforced units.

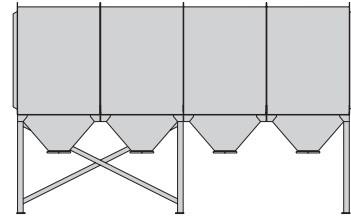
**Downflo® Oval 1 Dust Collector**



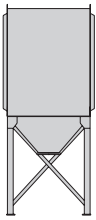
DFO 2-8  
DFO 3-12  
DFO 4-16



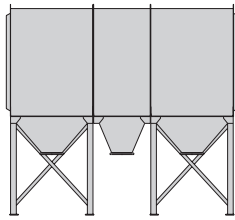
DFO 4-56



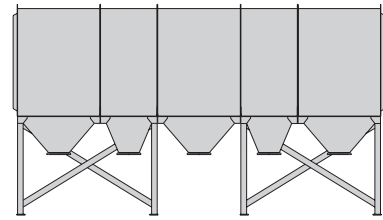
DFO 4-96



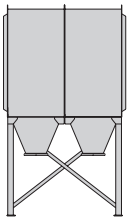
DFO 2-12  
DFO 3-18  
DFO 4-24



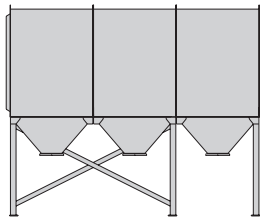
DFO 3-48  
DFO 4-64



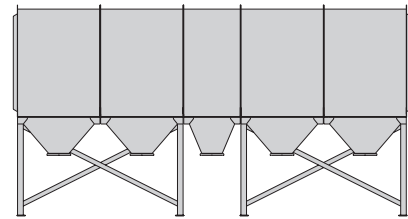
DFO 4-104



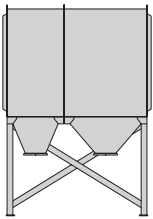
DFO 2-16\*  
DFO 3-24\*  
DFO 4-32\*



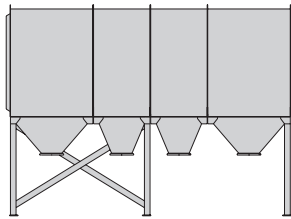
DFO 4-72



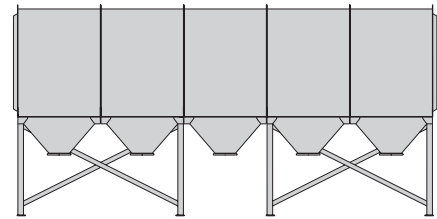
DFO 4-112



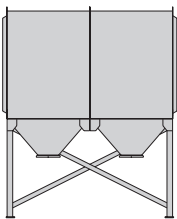
DFO 4-40



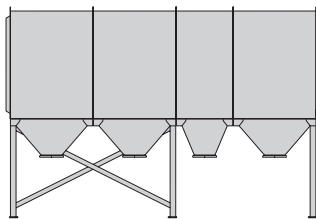
DFO 4-80



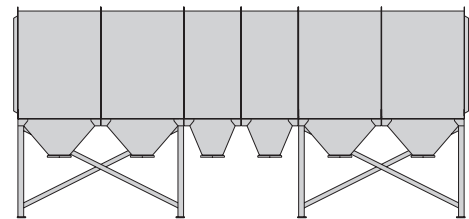
DFO 4-120



DFO 3-36  
DFO 4-48



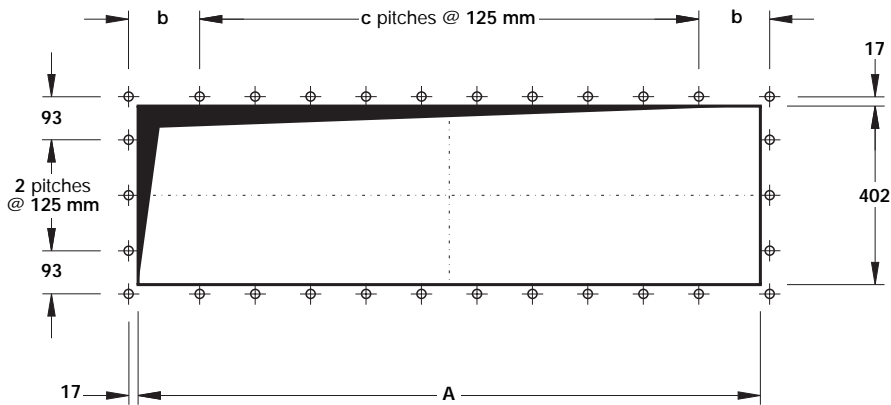
DFO 4-88



DFO 4-128

**Module configurations**

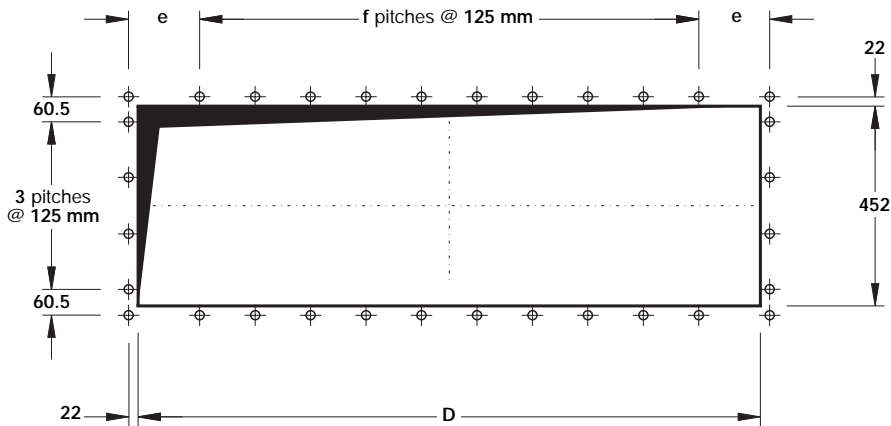
\*Single hopper is also available for these models.



**Dirty air inlet details**

3-wide module illustrated.

	Nominal □	DIMENSIONS in mm			No. of holes (M10 threaded)
		A	b	c	
2-wide module	400 x 930	932	170.5	5	22
3-wide module	400 x 1400	1402	155.5	9	30

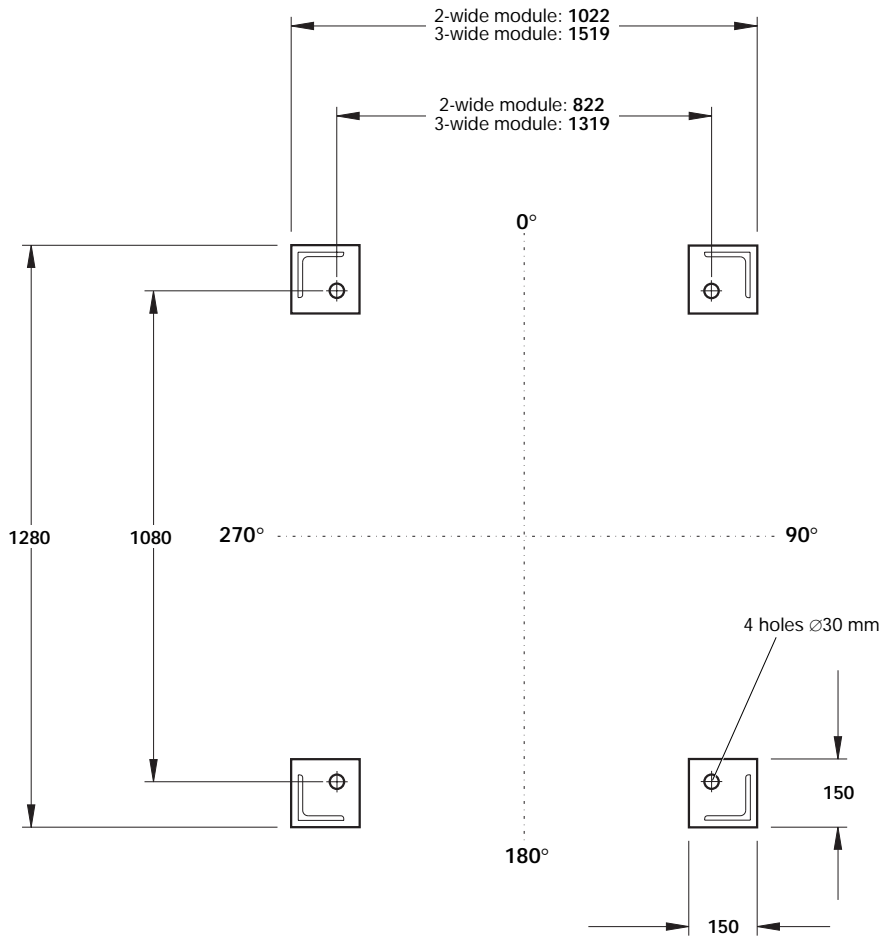


**Clean air outlet details**

3-wide module illustrated.

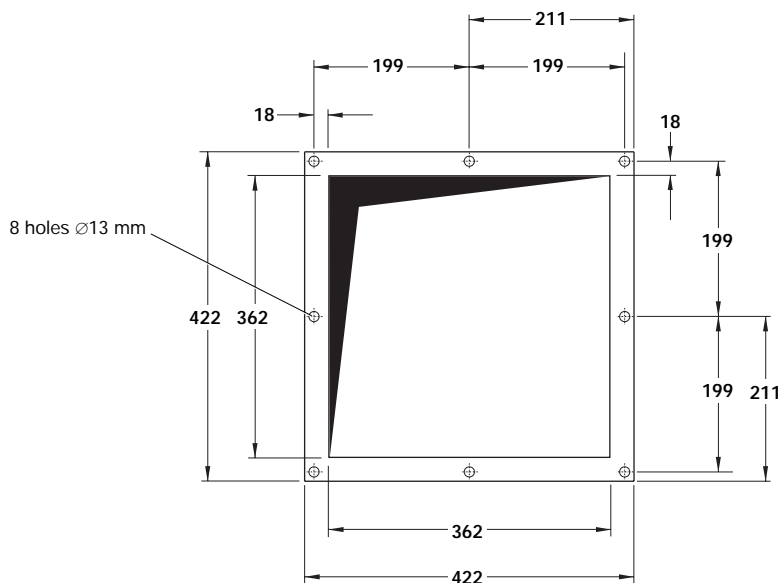
	D	DIMENSIONS in mm		No. of holes (M10 threaded)
		e	f	
2-wide module	902	160.5	5	24
3-wide module	1399	159	9	32

**Downflo® Oval 1 Dust Collector**



**Foundation details for standard models**

2-wide module illustrated.

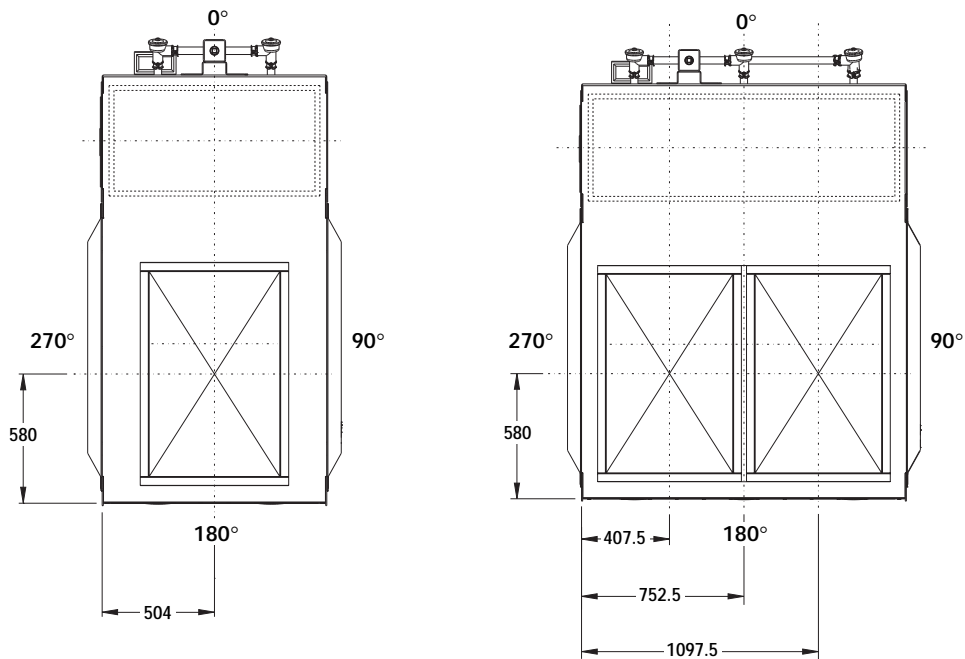


**Hopper flange details (362 x 362)**

**REINFORCED VERSION SPECIFICATIONS**

Model	No. of bursting panels (586 x 920 mm)	Vent area (m <sup>2</sup> )	Activation overpressure Pstat (bar)	INSIDE (<3m vent)			OUTSIDE (free venting)		
				Pmax (bar)	Kst (bar.m/s)	Hazard class	Pmax (bar)	Kst (bar.m/s)	Hazard class
DFO 2-8	1	0.5	0.1	12	395	3	12	417	3
DFO 2-12	2	1.0	0.1	12	659	3	12	680	3
DFO 2-16	2	1.0	0.1	12	395	3	12	417	3
DFO 2-16 SH	2	1.0	0.1	12	470	3	12	489	3
DFO 3-12	1	0.5	0.1	12	310	3	12	335	3
DFO 3-18	2	1.0	0.1	12	516	3	12	542	3
DFO 3-24	2	1.0	0.1	12	310	3	12	335	3
DFO 3-24 SH	2	1.0	0.1	12	382	3	12	403	3
DFO 3-36	4	2.0	0.1	12	516	3	12	542	3
DFO 3-48	5	2.5	0.1	12	310	3	12	335	3
DFO 4-16	1	0.5	0.1	10	304	2	10	335	3
DFO 4-24	2	1.0	0.1	12	423	3	12	453	3
DFO 4-32	2	1.0	0.1	10	304	3	10	335	3
DFO 4-32 SH	2	1.0	0.1	12	317	3	12	340	3
DFO 4-40	3	1.5	0.1	10	304	2	10	335	3
DFO 4-48	4	2.0	0.1	12	423	3	12	453	3
DFO 4-56	4	2.0	0.1	10	304	2	10	335	3
DFO 4-64	5	2.5	0.1	10	304	2	10	335	3
DFO 4-72	6	3.0	0.1	12	423	3	12	453	3
DFO 4-80	6	3.0	0.1	10	304	2	10	335	3
DFO 4-88	7	3.5	0.1	10	304	2	10	335	3
DFO 4-96	8	4.0	0.1	12	423	3	12	453	3
DFO 4-104	8	4.0	0.1	10	304	2	10	335	3
DFO 4-112	9	4.5	0.1	10	304	2	10	335	3
DFO 4-120	10	5.0	0.1	12	423	3	12	453	3
DFO 4-128	10	5.0	0.1	10	304	2	10	335	3

Pred = 0.66 bar



TOP VIEW (2-WIDE MODULE)

TOP VIEW (3-WIDE MODULE)

**DFO reinforced version – standard venting position**

(Refer to detailed outlines for reinforced units)

## COMPRESSED AIR REQUIREMENTS

Max. 7 bar  
Pressure range 6-7 bar  
Clean air (max. particle size 50 µm)  
Free of condensate at working temperature  
Max. oil content: 3 mg/m<sup>3</sup>  
Approx. compressed air usage\*: ±45 Nlitres per pulse  
(±16.2 Nm<sup>3</sup>/h for 10 s pulse interval at 7 bar)

\* The indicated value is the consumption per valve

## ELECTRICAL SPECIFICATIONS

### Controls

Full automatic cleaning mechanism: IPC / IPC (ΔP) controller  
Pulse time: 100 ms  
Interval time: 12 s  
Voltage input: 24V DC, 110V AC or 230V AC; 1 ph; 50 Hz; 0.15 kW  
Protection class: IP65  
Solenoid voltage: 24V DC

## NOISE LEVEL \*

### Pulse noise\*

LpAeq: ≤ 78 dB (A-weighted equivalent continuous sound pressure level)  
ΔLi: ≤ 10 dB (impulsive noise content)

\* Measurement according to DIN 45635/1 at 1m distance, with 6 bar compressed air pressure, pulse interval of 15s, semi-free field conditions and usual tolerance ±2 dB.

## OPTIONS

- Execution for outside installation
- Full range of filter elements
- Variable hopper clearance
- Pulse noise attenuation down to LpAeq ≤ 70 dB
- Full range of dust disposal systems
- Front inlet adaptor pieces
- Abrasive inlet boxes
- Earthing
- Vibrator
- Sprinkler
- Oil/water separator
- Platform
- Bag in / Bag out
- Full range of fan sets and ducting



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