



### Downflo® Oval 1 Dust Collector Specifications

MODEL	HEIGHT	WIDTH	DEPTH	ULTRA-WEB® FILTER CARTRIDGE	FIBRE-WEB® FILTER CARTRIDGE	NUMBER OF CARTRIDGES
	(MM)	(MM)	(MM)	MEDIA AREA	MEDIA AREA	
DFO 2-8	3310	1138	2099	141 m²	66 m²	8
DFO 2-12	3310	1635	2099	211 m²	99 m²	12
DFO 2-16	3310	2146	2099	282 m²	132 m²	16
DFO 3-12	3783	1138	2099	211 m²	99 m²	12
DFO 3-18	3783	1635	2099	317 m²	149 m²	18
DFO 3-24	3783	2146	2099	423 m²	199 m²	24
DFO 3-36	3783	3140	2099	635 m²	298 m²	36
DFO 3-48	3783	4148	2099	847 m²	397 m²	48
DFO 4-16	4256	1138	2099	282 m²	132 m²	16
DFO 4-24	4256	1635	2099	423 m²	199 m²	24
DFO 4-32	4256	2146	2099	564 m²	265 m²	32
DFO 4-40	4256	2643	2099	706 m²	331 m²	40
DFO 4-48	4256	3140	2099	847 m²	397 m²	48
DFO 4-56	4256	3651	2099	988 m²	463 m²	56
DFO 4-64	4256	4148	2099	1129 m²	529 m²	64
DFO 4-72	4256	4645	2099	1270 m²	596 m²	72
DFO 4-80	4256	5156	2099	1412 m²	662 m²	80
DFO 4-88	4256	5653	2099	1553 m²	728 m²	88
DFO 4-96	4256	6150	2099	1694 m²	794 m²	96
DFO 4-104	4256	6661	2099	1835 m²	860 m²	104
DFO 4-112	4256	7158	2099	1976 m²	926 m²	112
DFO 4-120	4256	7655	2099	2118 m²	993 m²	120
DFO 4-128	4256	8166	2099	2259 m²	1059 m²	128
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### Standard Features

Oval 1 Cartridges

Expansion Panels

 Horizontal Clean Air Plenum Quick Release Access Cover Clamp
Multiple Inlet & Outlet Connections

Improved Cleaning Efficiency

### Options and Accessories

Ultra-Web<sup>®</sup> Media

Ultra-Web<sup>®</sup> Flame Retardant Media

Fibre-Web® Media

IPC ΔP Controller

 Weatherproofing for External Installations

Static Earthing

 Variable Hopper Clearance and Support Height

- Range of Dust Disposal Systems
- Sprinkler Pack
- Vibrator Pack

IPC Controller

- Explosion Protection
- Inlet-Outlet Adaptors
- Abrasion Resistant Inlet
- Pressure Regulator
- Bin Balance Connection Pack

## Company Profile

Torit DCE is world-renowned for the quality of its products and application expertise. It also offers the widest choice of dust, fume and oil mist control products, solutions and services available. These are supported worldwide with a dedicated network of wholly owned distributors and authorised agents.

\* After Market Service \*

package covering:

\* Installation \* Commissioning

\* Spare parts

\* Technical support group

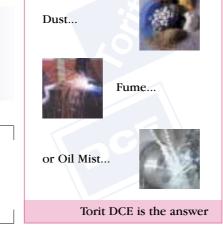
\* Complete turnkey installations

\* COSHH testing & inspection scheme \* Service and maintenance scheme

Torit DCE products are supported by a fully inclusive after sales and technical support service With 80 years' experience, Torit DCE provides the strength to deliver proven solutions to numerous environmental

Torit DCE designs, manufactures and installs a complete range of collection equipment. These products use a wide variety of media including: cartridge technology, spun-bonded polyester modules, fabric bags and rigid sintered elements. Torit DCE also designs and installs complete systems based on its leading range of products.









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Torit DCE reserve the right to after design without notice. Freedom from patent restrictions must not be assumed.

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Downflo® Oval 1

Donaldson Dust Collection Group







Torit DCE is the innovation leader in dust and fume control systems. With over 80 year's experience, we understand dust, fume and oil mist problems better than anyone, and more importantly we understand how these problems are best dealt with. Torit DCE engineers systems to the highest possible standards to protect people, machinery and the environment.

With ever increasing demands being placed upon production efficiency, reduced downtime and minimal maintenance, manufacturing industries require dust collectors that not only deliver exacting standards of filtration efficiency but also demonstrate a longevity of service to match demanding production schedules.

In order to meet these new challenges our design engineers have developed the next generation in dust control technology:

the Downflo® Oval 1. The Downflo® Oval 1 is a revolution in dust control. It combines the high quality engineering associated with Torit DCE and some unique features which increase efficiency whilst reducing maintenance frequency.

## Downflo® Oval 1

It will change the way you think about dust control equipment

A re-designed cabinet, unique filter cartridges and optimised cleaning system allow the **Downflo® Oval 1** to handle in excess of 10% more airflow whilst actually reducing internal case velocities and prolonging media life. Maintenance is also easier with new quick-release access cover handles.

# Increased efficiency









Shown: Oval 1 filter media with 38mm pleats

The design of the **Downflo® Oval 1** filter cartridge is new and improved. Like its name suggests the construction is Oval and the elliptical shape of the **Downflo® Oval 1** filter cartridges enables the pleats of the filter media to be shorter and of a more open nature. Traditionally circular cartridges with a 50mm pleat depth are more prone to the pleat walls bending resulting in the pleat tips touching and trapping dust, preventing its expulsion. This gives rise to poor cleaning efficiency and reduced media life. With the **Downflo® Oval 1** the pleat depth is reduced to 38mm providing a stronger more uniform stiffness and improving eleaning efficiencies whilst increasing media life.

The filter cleaning system has also been enhanced utilising newer high specification valves delivering increased peak pressures throughout the cleaning cycle. As a result, cleaning efficiencies have been increased by almost 30%.

The new pleat design and shape, enhanced cleaning system and Ultra-Web® media make an exciting combination. Ultra-Web® media features a layer of Eon™ fine fibres that capture even sub-micron particulate at the media's surface. This aids the formation of an even dust cake that can be easily pulsed off, making the cleaning effectiveness of the **Downflo® Oval 1** collector truly exceptional.



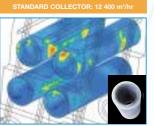
Downflo® Oval 1 Cartridges

# Improved airflow path





The removal of internal stiffeners and addition of expansion panels have improved the Downflo® Oval 1's casing. The cross-sectional area has, therefore, been increased without comprising structural integrity. Inside the casing the Oval cartridges provide more space between filters adding to a reduction in case velocities thus reducing abrasion. All these attributes add up to a significant improvement in filter media life, reduced operating costs and in many cases a smaller footprint which maximises costly factory floor space.



DOWNFLO® OVAL 1 COLLECTOR: 15 500 m³/hr

Shown: Fluid flow modelling software showing velocity contours of 16 cartridge collectors

The red colour in these Fluent™ velocity contour diagrams shows areas of high velocity. Even with a significant increase in airflow through the same casing the **Downflo® Oval 1** collector demonstrates significantly fewer 'hot spots' and subsequently a lower potential for media abrasion which is the most common cause of premature media failure.

\*Fluent is a trademark of Fluent Inc.

# Maintenance is quick, simple and secure with the Downflo® Oval 1

Cartridges are light and easy to remove with quick release handles fitted to cartridge covers. Complicated, time consuming filter changes are a thing of the past.



