

Dalamatic® Dust Collectors



Dalamatic®

Proven Performance, Compact Design

The versatile Donaldson® Torit® Dalamatic series of dust collectors deliver a powerful solution for nearly any dust filtration application. These collectors come in two models: the Dalamatic Cased (DLMC) is a stand alone collector that can be ducted to many different applications; the Dalamatic Insertable (DLMV) is a versatile collector that can be inserted into various applications, such as bins, silos, bunkers, storage vessels or transfer points. Both models are continuous-duty dust collectors designed to handle the most difficult product recovery applications.

*Simply
the Best
Dust Collectors Available*

Dalamatics Offer:

- **Continuous collection** Provides continuous filtration of high dust concentrations at high filtration velocities and constant levels of resistance in almost any industry and application.
- **Compact design** Unique modular design allows for installation in the most space restricted areas. Envelope-shaped bags maximize the amount of media in a given space and allow for increased space between bags, minimizing the chances of bridging.
- **Fewer bag changes** Patented envelope-shaped RN487™ bags are scrim-supported singed polyester, promoting longer bag life.
- **Versatility** A full range of sizes and types of bags are available for a wide variety of dust collection applications.
- **5-year warranty**



DLMC 1/2/15



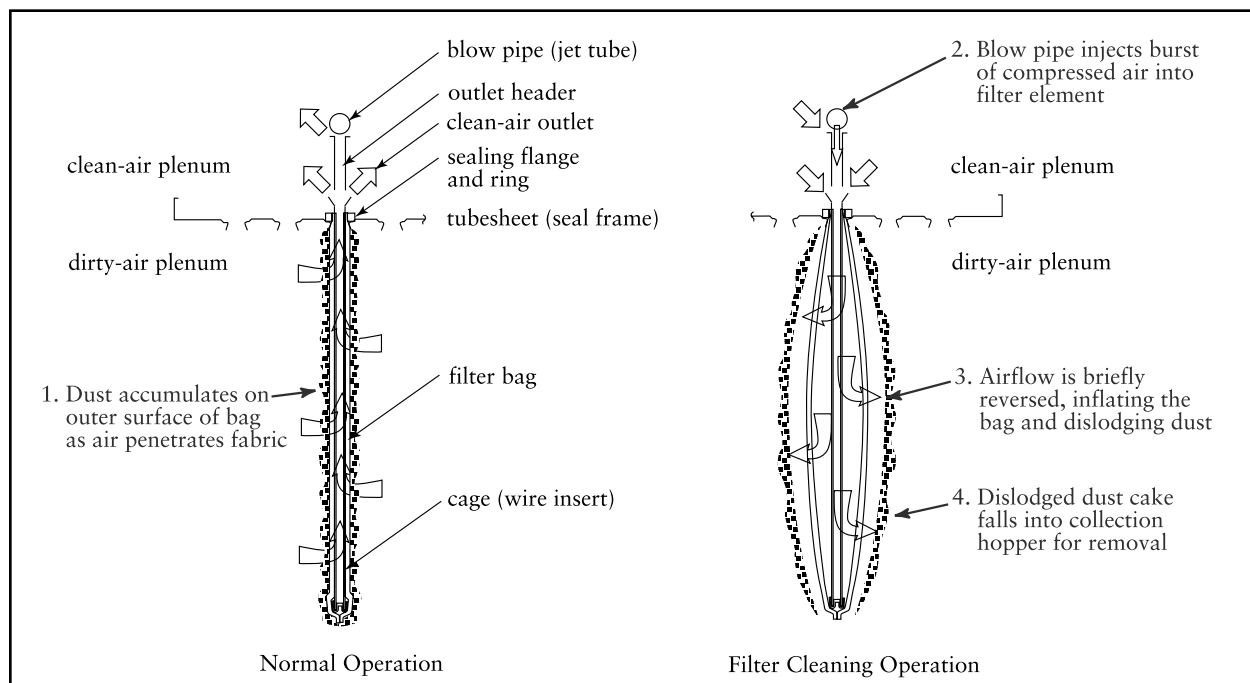
DLMV 45/15 FAD

Flexible, Effective Filter Media

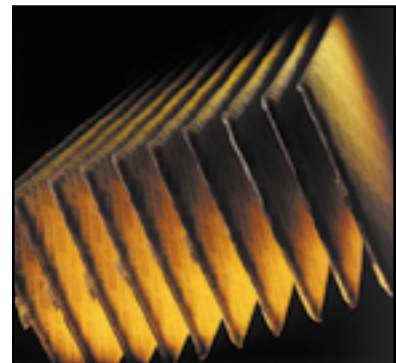
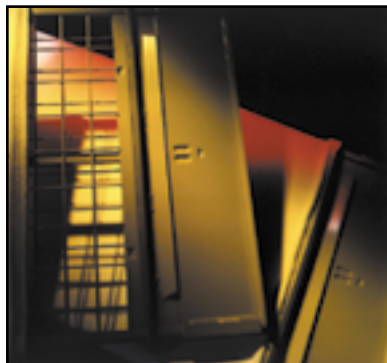
Efficient Media Design Dalamatic dust collectors use a patented RN487 filter media comprised of a flat fabric bag manufactured to the highest tolerances. The bag is mounted on a unique wire frame to ensure optimum airflow and thorough cleaning of the fabric.

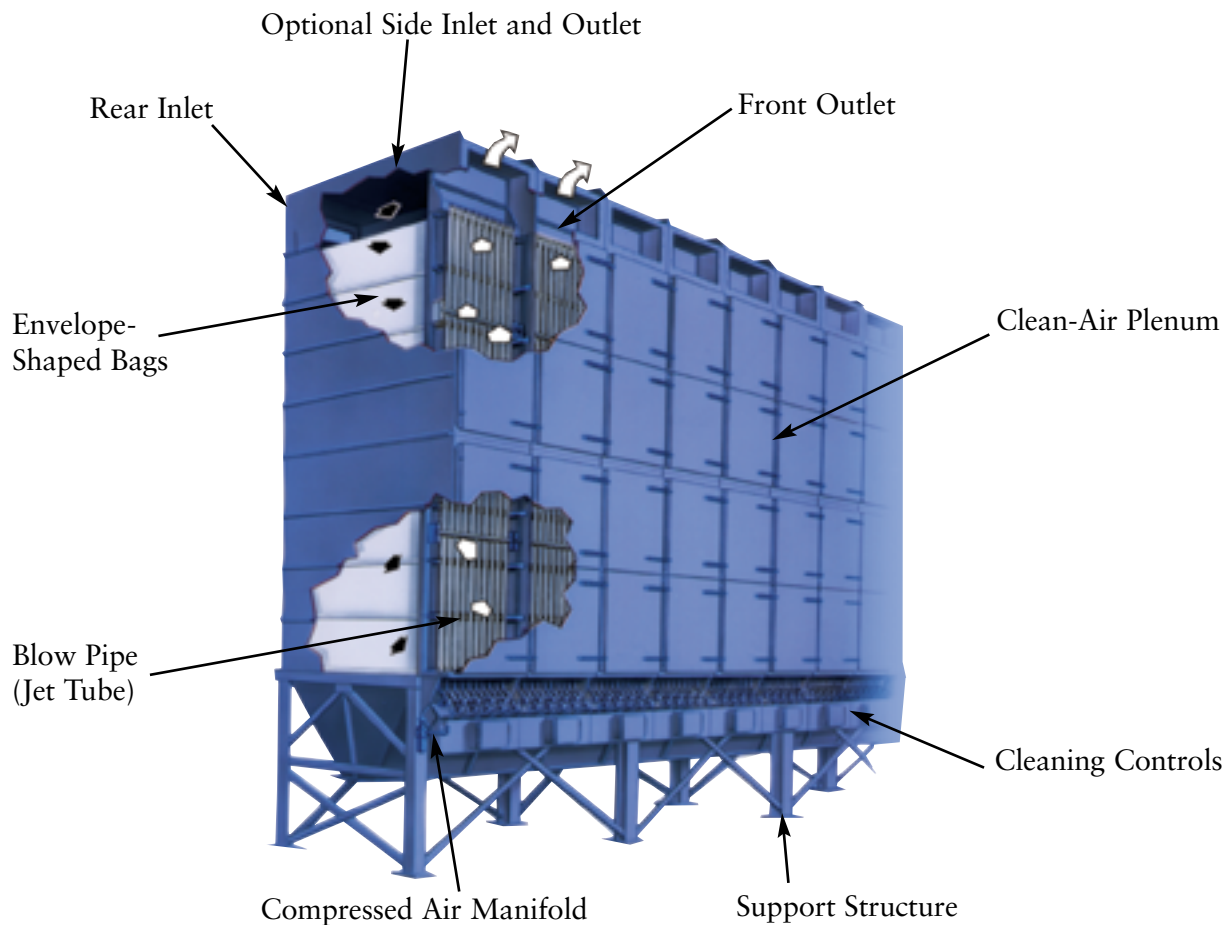
The unique operation of the bag helps achieve high filtration efficiencies. First, dust accumulates on the outer surface of the bag as air penetrates the fabric. Next, the blow pipe (jet tube) injects a burst of compressed air into the filter bag. Airflow is then briefly reversed, inflating the bag and dislodging dust. Finally, the dislodged dust cake falls into the collection hopper for final removal or directly back into the process.

Principles of Filtration



Patented Performance The patented RN487 filter media is designed with a compact, envelope shape. Each polyester bag is scrim-supported and singed for more surface loading and longer life.



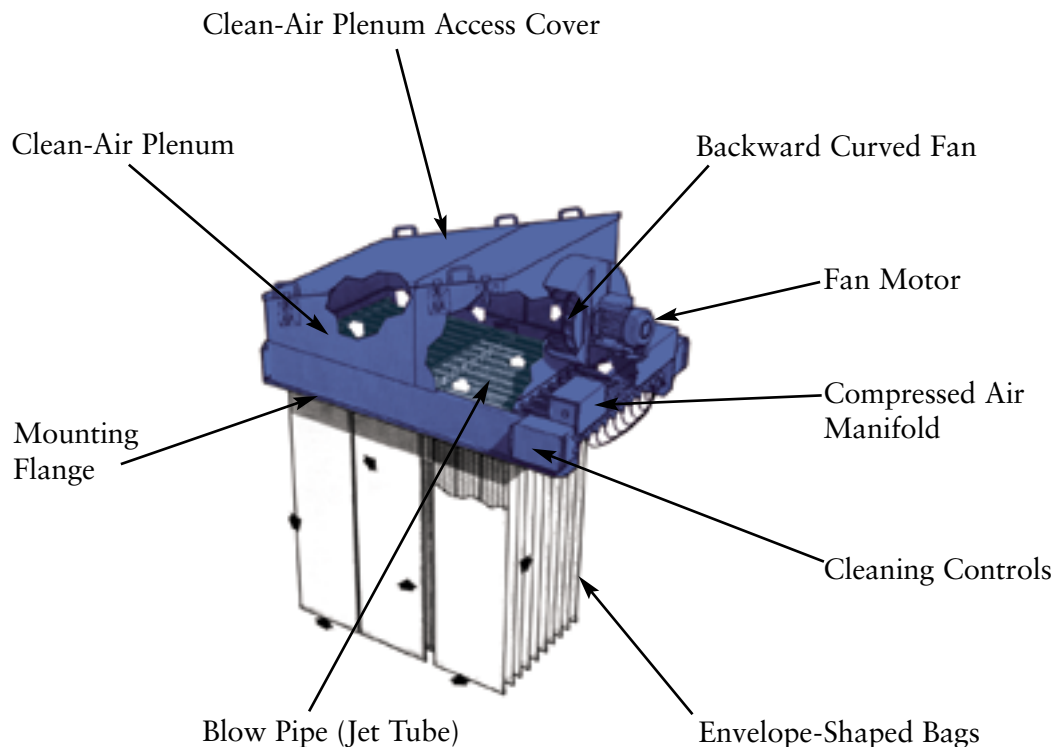
Cased Sizes & Operations

Dalmatic Cased multi-module dust collectors contain filter media from 323 to 15,000 square feet. Using a basic module size with 160 square feet of media, each collector is built in banks and tiers to provide the capacity and configuration required to filter air volumes ranging from 1,500 up to 150,000 cfm.

The DLMC dust collectors can also be installed face to face (double-banked), which reduces required platforms and ductwork, retains the advantages of easy access for maintenance and permits even more flexibility in making the best use of available space.

- Envelope-shaped bags provide maximum filter area per given space and ensure efficient cleaning
- Standard units are equipped with RN487 bags and horizontal bag removal
- Modular design gives dimensional and capacity flexibility
- Downward airflow pattern minimizes dust re-entrainment
- Standard leg pack meets 100 mph and seismic zone 4 requirements

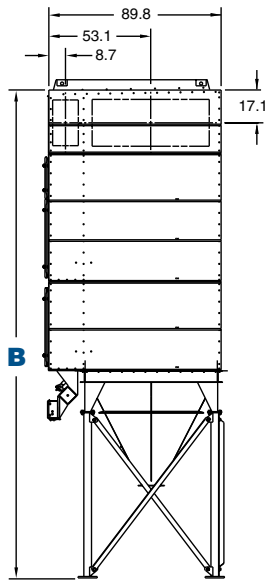
Insertable Sizes & Operations



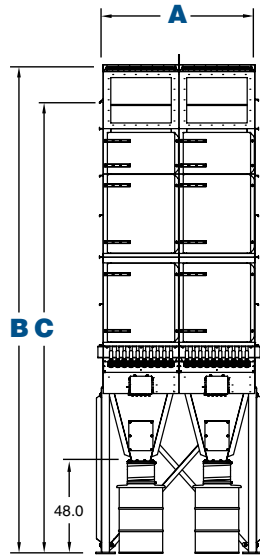
Dalamatic Insertable dust collectors are designed to handle high dust concentrations and filter velocities in bins, silos, bunkers and other storage vessels. Simply inserted into a storage vessel or silo, it provides continuous filtration of conveying or displaced air and maintains a high collection efficiency at constant system resistance. The DLMV collectors are available for a wide variety of applications in the handling, processing and storage of bulk materials and powders.

- Five configurations to suit most process applications
- Uses positive pressure of the conveying air or can be fan powered for pneumatic conveying applications
- Bags can be installed hanging vertically, horizontally or any angle in between
- Can be inserted into hood enclosures at belt transfer points, bucket elevator casings, ribbon blenders and receiving hoppers for clamshell unloaders
- Insertable approach reduces or eliminates ducting costs; minimized ducting can also result in reduced energy costs

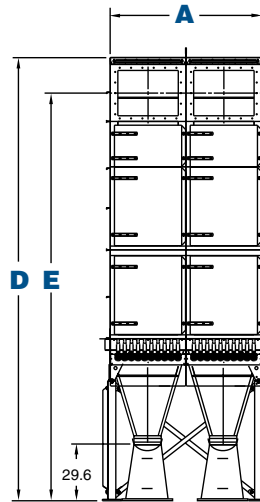
Cased Dimensions & Specifications



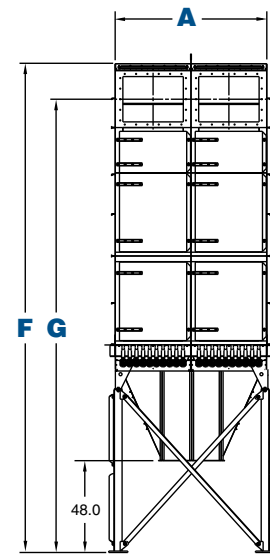
**Side View
Pyramid Hopper**
(2/5/15 Model)



**Pyramid
Hopper***
(2/5/15 Model)



**UMA
Hopper**
(2/5/15 Model with
4 Cu. Ft. Bins)



**Trough
Hopper**
(2/5/15 Model)

DLMC Model	Cloth Area (ft ²)	No. of Banks	No. of Tiers	No. of Bags	No. of Valves	Shipping Weight (lbs)		
						With Pyramid Hopper	With Hopper for UMA 4 cu. ft. Bin	With Trough Hopper
1/2/15	323	1	2	20	10	2650	2475	N/A
1/3/15	485	1	3	30	10	2995	2820	N/A
1/4/15	645	1	4	40	10	3625	3450	N/A
2/2/15	645	2	2	40	20	4130	3920	3820
1/5/15	810	1	5	50	10	4110	4000	N/A
2/3/15	970	2	3	60	20	4880	4670	4580
1/7/15	1130	1	7	70	10	4960	4790	N/A
2/4/15	1290	2	4	80	20	6100	5880	5790
3/3/15	1454	3	3	90	30	6780	6510	6300
2/5/15	1620	2	5	100	20	6920	6710	6610
2/6/15	1938	2	6	120	20	7640	7420	7330
3/5/15	2423	3	5	150	30	9840	9570	9360
2/8/15	2584	2	8	160	20	9550	9330	9240
3/6/15	2907	3	6	180	30	10860	10590	10380
4/5/15	3230	4	5	200	40	13085	12720	12120
3/7/15	3392	3	7	210	30	12070	11795	11585
3/8/15	3876	3	8	240	30	14605	14335	14130
4/8/15	5168	4	8	320	40	17665	17300	16690

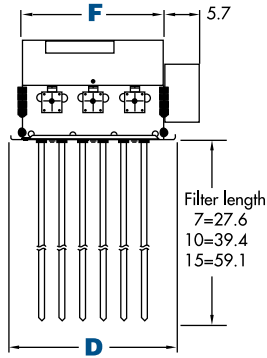
* With optional 55-gallon drum adapter (drum not included).

Cased Dimensions & Specifications

DLMC Model	Dimensions (inches)						
	A	B	Pyramid C	D	UMA E	F	Trough G
1/2/15	39.5	166.5	157.3	142.7	133.5	N/A	N/A
1/3/15	39.5	187.2	177.9	163.4	154.1	N/A	N/A
1/4/15	39.5	228.7	210.4	204.9	186.6	N/A	N/A
1/5/15	39.5	254.3	236.0	230.5	212.2	N/A	N/A
1/7/15	39.5	295.6	277.3	271.8	253.5	N/A	N/A
2/2/15	79.0	166.5	157.3	142.7	133.5	160.5	151.2
2/3/15	79.0	187.2	177.9	163.4	154.1	181.1	171.9
2/4/15	79.0	228.7	210.4	204.9	186.6	222.7	204.4
2/5/15	79.0	254.3	236.0	230.5	212.2	248.3	220.0
2/6/15	79.0	275.0	256.7	251.2	232.9	268.9	250.6
2/8/15	79.0	316.3	298.0	292.5	274.2	310.3	292.0
3/3/15	118.4	187.2	177.9	163.4	154.1	181.1	171.9
3/5/15	118.4	254.3	236.0	230.5	212.2	248.3	230.0
3/6/15	118.4	275.0	256.7	251.2	232.9	268.9	250.6
3/7/15	118.4	295.6	277.3	271.9	253.5	289.6	271.3
3/8/15	118.4	316.3	298.0	292.5	274.2	310.3	292.0
4/5/15	158.0	254.3	236.0	230.5	212.2	248.3	230.0
4/8/15	158.0	316.3	298.0	292.5	274.2	310.3	292.0

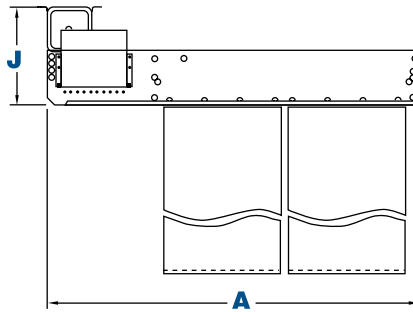
DLMC Operating Conditions	Standard	Optional
Seismic Rating (zone)	4	—
Wind Load Rating (mph)	100	—
Housing Rating ("wg)	0-20	21-45
Compressed Air Required (psig)	55-90	—
Temperature Range	15°F to 140°F	140°F to 400°F

Insertable Dimensions & Specifications



DLMV Type B

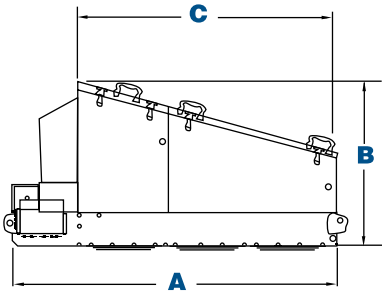
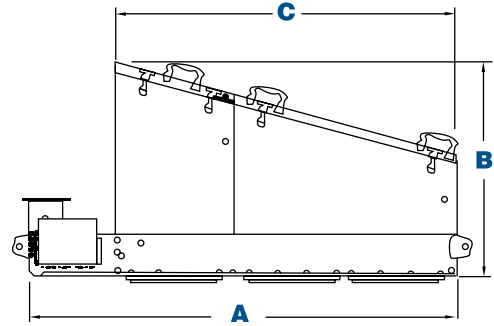
Basic filter for pressure systems located indoors.



DLMV Type H

(Type B plus exit header)

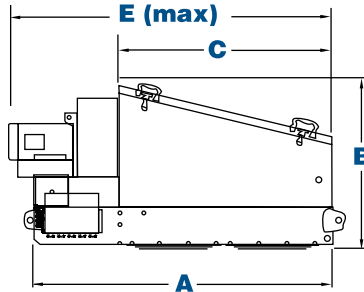
Filter with exit header for connection to a fan or discharge ducting.
The filter is weatherproof and suitable for indoor and outdoor application.



DLMV Type W

(Type H plus weather cowl)

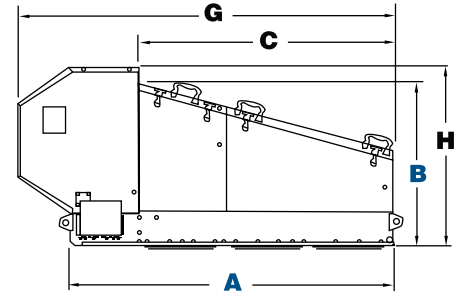
Filter with a weather cowl for pressure systems where the filter is located outdoors or exposed to adverse conditions.



DLMV Type F

(Type H plus integral fan)

Weatherproof filter fitted with an integral fan for negative pressure applications.



DLMV Type FAD

(Type F plus acoustic diffuser)

Weatherproof filter fitted with an integral fan and acoustic diffuser for quiet operation.

DLMV Model	No. of Bags	Dimensions (inches)								
		A	B	C	D	E	F	G	H	J
4/7, 6/10, 9/15	6	38.3	36.8	33.8	27.5	43.1	29.1	57.4	43.3	14.7
7/7, 10/10, 15/15	10	38.3	36.8	33.8	43.3	43.1	39.8	57.4	43.3	14.7
8/7, 12/10, 18/15	12	62.2	36.8	44.5	27.6	64.0	29.1	71.6	43.3	15.7
14/7, 20/10	20	62.3	36.8	44.5	43.3	67.0	39.8	71.7	43.3	15.8
30/15	20	62.3	37.6	44.5	43.3	68.4	39.8	71.7	43.3	15.8
21/7, 30/10, 45/15	30	85.9	42.9	68.1	43.3	93.1	39.8	100.0	46.8	15.8
60/15	40	112.2	42.9	88.8	43.3	113.3	39.8	120.7	46.8	15.8

Insertable Dimensions & Specifications

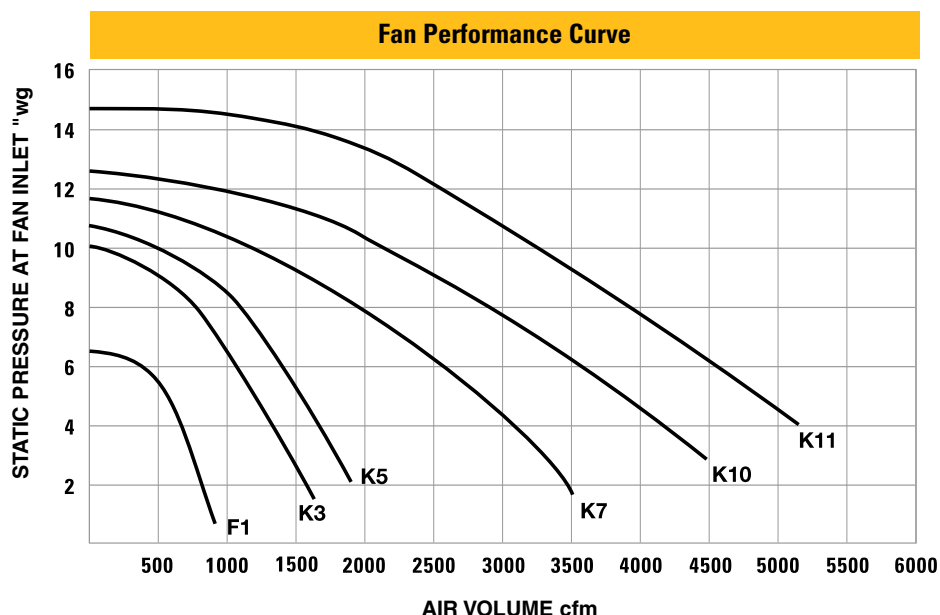
DLMV Model	Cloth Area (ft ²)	4:1 cfm	6:1 cfm	8:1 cfm	No. of Valves	Fan	Motor (hp)	Type B	Shipping Weight (lbs)			
									Type H	Type W	Type F	Type FAD
4/7	43	172	258	344	3	F1	1	231	320	331	430	523
6/10	64	256	384	512	3	F1	1	251	340	351	450	543
7/7	75	300	450	600	5	F1	1	353	474	485	584	688
						K3	2				595	699
8/7	86	344	516	688	6	F1	1	375	518	529	628	727
						K3	2				640	739
9/15	97	388	582	776	3	F1	1	273	362	373	472	565
						K3	2				483	576
10/10	108	432	648	864	5	F1	1	386	507	519	617	721
						K3	2				628	732
12/10	129	516	774	1032	6	K3	2	414	558	569	679	778
						K5	3				712	811
14/7	150	600	900	1200	5	K3	2	606	794	805	915	1025
						K5	3				948	1058
15/15	161	644	966	1288	5	K3	2	423	545	556	666	770
						K5	3				699	803
18/15	194	776	1164	1552	6	K3	2	459	602	613	723	822
						K5	3				756	855
						K7	5				833	932
20/10	215	860	1290	1720	5	K3	2	672	860	871	981	1091
						K5	3				1014	1124
						K7	5				1091	1201
21/7	226	904	1356	1808	15	K3	2	794	1058	1080	1179	1307
						K5	3				1213	1341
						K7	5				1290	1418
30/10	323	1292	1938	2584	15	K5	3	893	1157	1179	1312	1440
						K7	5				1389	1517
						K10	7.5				1561	1689
30/15	323	1292	1938	2584	10	K5	3	750	935	946	1089	1199
						K7	5				1168	1278
						K10	7.5				1321	1431
45/15	484	1936	2904	3872	15	K7	5	1003	1268	1290	1499	1627
						K10	7.5				1671	1799
						K11	10				1758	1886
60/15	646	2584	3876	5168	20	K11	10	1323	1878	1900	2374	2506

DLMV Operating Conditions	Standard	Optional
Pressure Limits	Type B, W and H: -16"wg Type F: As fan performance curves from shut-off to ambient pressure	
Compressed Air Required (psig)	65-90	
Temperature Range	14°F to 140°F	140°F to 250°F (not Type F)

Insertable Performance Selections

To select the most suitable fan for your applications

- 1) Determine the air volume flow (cfm) needed to give effective venting and dust control
- 2) Estimate pressure or suction ("wg) in the housing in which the dust filter is inserted
- 3) Assess the operational pressure drop ("wg) across the clean side and dirty side of the filtering element – usually between 2 to 4 "wg
- 4) The sum of 2 and 3 gives the pressure ("wg) required for fan selection purposes
- 5) Consult graph for fan performance available



Insertable Weighted Sound Pressure Levels

All readings were taken in semi-reverberant surroundings 3'3" radius from the equipment housing and 5'3" above base level, using a precision sound level meter and octave filter.

	F1 (1 hp)	K3 (2 hp)	K5 (3 hp)	K7 (5 hp)	K10 (7.5 hp)	K11 (10 hp)
With acoustic diffuser*	76 dB(A)	73 dB(A)	74 dB(A)	76 dB(A)	79 dB(A)**	84 dB(A)
Without acoustic diffuser	91 dB(A)	89 dB(A)	92 dB(A)	93 dB(A)	94 dB(A)	97 dB(A)

Noise measurements of installed equipment may vary due to site conditions.

* These measurements refer to standard outlet position.

** Estimated data.

Standard Features & Options

Standard Features for DLMC:

- Factory-Installed 16 oz. Scrim-Supported, Singed Polyester Filter Bags
- Standard Leg Packs Meet Seismic Zone 4 and 100 mph Requirements
- Trough Hopper, UMA Hopper, Pyramid Hopper, or 2 and 3 Bank Single Outlet Hopper
- Solid-State Control Panels and Valves Mounted in a UL®* Type 4 Enclosure
- 5-Year Warranty

Equipment Options for DLMC:

- Antistatic Filter Bags
- Variety of Bag Media Options
- Stainless-Steel Construction
- NEMA 9 Electrical Enclosure
- High Temperature Modifications up to 400° F
- Magnehelic®** Gauge
- Photohelic®** Gauge
- Torit Delta P Controller
- Moisture Separator and Pressure Regulator Package
- Quick-Release Filter Clamps
- Ladder, Cage and Platform Assemblies that Meet OSHA Safety Guidelines
- Rear Dirty Air Plenum Access Door
- Explosion Relief Vents
- Sprinklers

Standard Features for DLMV:

- 16 oz. Scrim-Supported, Singed Polyester Filter Bags
- Solid-State Control Panels and Valves Mounted in a UL®* Type 4 Enclosure
- 5-Year Warranty

Equipment Options for DLMV:

- Antistatic Filter Bags
- Variety of Bag Media Options
- Acoustic Diffuser (Silencer)
- Stainless-Steel Construction
- NEMA 9 Electrical Enclosure
- High Temperature Modifications up to 250° F
- Magnehelic®** Gauge
- Photohelic®** Gauge
- Torit Delta P Controller
- Moisture Separator and Pressure Regulator Package
- Quick-Release Filter Clamps
- Explosion-Proof Motors
- Vertical or Horizontal Upstands

* UL is a registered trademark of Underwriter Laboratories, Inc.

** Magnehelic and Photohelic are registered trademarks of Dwyer Instruments, Inc.

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Donaldson® Torit® Look to Donaldson Torit for all of your air filtration needs. Although you may not always see our products, you can breathe easier knowing we're there.

Customer Support For nearly 90 years, Donaldson Torit has been the leading innovator of air filtration solutions that make manufacturing plants a cleaner, safer environment for employees the world over. Driven by an unwavering commitment to customer support, Donaldson Torit is the name more manufacturers around the globe trust to deliver the most efficient and productive dust, mist and fume collectors and filter media.

Unparalleled Innovation Whether our customers need a single collector or a multi-faceted collection system, Donaldson Torit has the solution. The expanse of Donaldson Torit's innovative product line is unmatched, offering unparalleled filtration systems, ancillary parts and replacement filters. From central, source and ambient systems to baghouse, envelope and cartridge technologies, Donaldson Torit has the expertise to provide filtration solutions for virtually any application.

Global Reach Donaldson Torit manufactures and markets its filtration products throughout the world. As more manufacturers continue to expand and grow their operations globally, Donaldson Torit will be there to serve and support our customers' needs.

Rely on the Industry Leader When it comes to air filtration, you need a partner you can trust. Rely on the world leader in air filtration—Donaldson Torit.



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