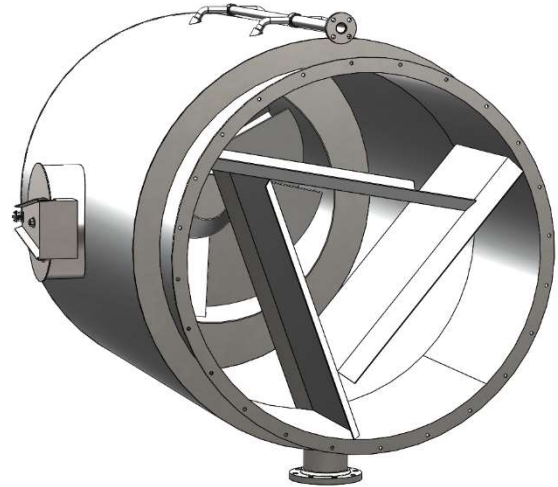


# Standard Industrial Axial Droplet Separator



VentilationComponents.com's axial droplet separators are durable and cost effective.

## Application

- Removes mist from an airstream.
- Vertical or horizontal flow configuration
- Various sizes built to suit airflows ranging from 4,300cfm to 89,400cfm are available, with larger sizes available upon request
- Pressure ratings ranging from 15inWC to 50inWC available, with higher pressure ratings up to 100inWC available upon request

## Features

- Compact centrifugal separator with stationary impeller blades at inlet
- Concentric axial inlet and outlet
- Drain and inspection port
- Optional high level overflow
- Intermittent cleaning showers

## Benefits

- Compact design
- Uses intermittent cleaning water system for reduced water consumption
- Simple, reliable, and easy to maintain
- Heavy duty construction

## Function

- An internal vortex is created as the air enters through the stationary impeller blades, causing droplets to separate due to centrifugal action
- The water is drained through the drain connection
- The rotation of the airflow is halted as the air exits through the vortex breaker

## Options

### Capacity

Nominal capacities ranging from 4,300cfm to 89,400cfm are available. Larger capacities are available upon request.

### Pressure rating

Three standard pressure ratings are offered: 15inWC, 30inWC, and 50inWC. Custom pressure ratings up to 100inWC are available upon request.

### Flange bolt pattern

The flange bolt patterns follow our standard. Different patterns are available upon request.

### Inspection port

The inspection port placement and hinge side is customer specified.

### Orientation

Vertical up flow or horizontal configurations are available.

## Materials

The materials offered suit a variety of applications.

### Internal material

- 316 stainless steel

### External material

- 304 stainless steel

### Hardware material

- 316 stainless steel

### Gasket material

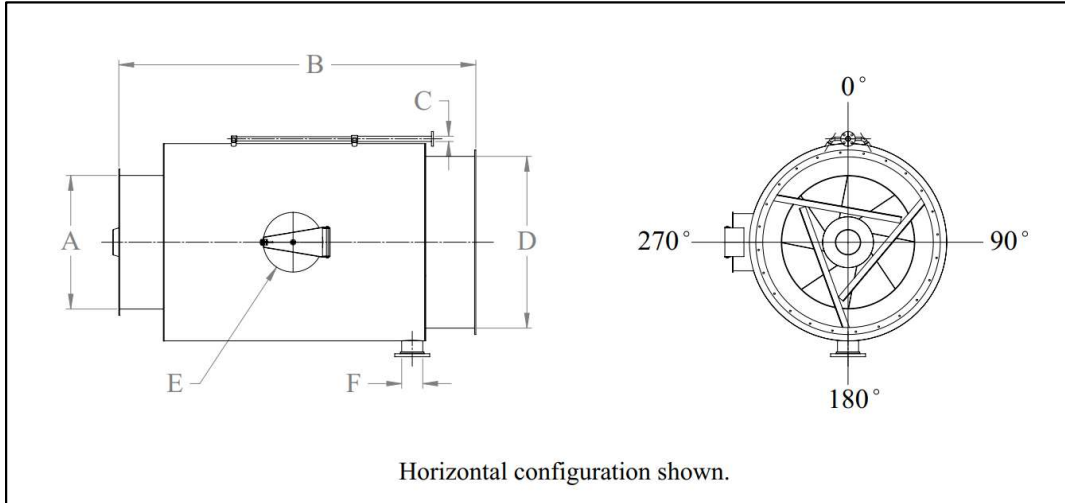
- EPDM

Other materials not listed are available upon request.

## Efficiency Rate

The efficiency of the separator is application dependent and is provided during the ordering stage.

### Data and dimensions



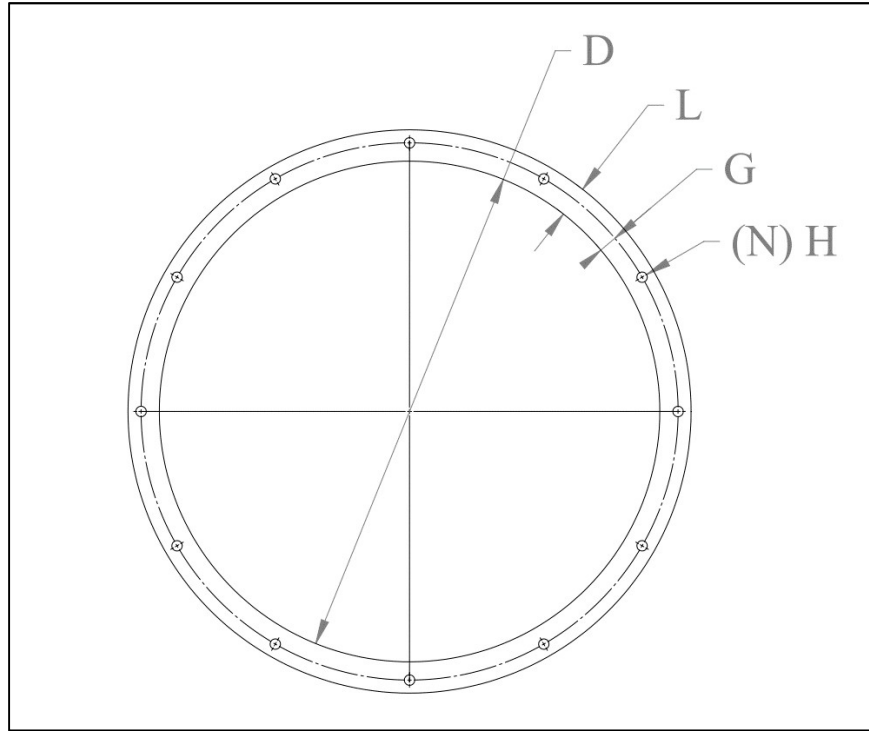
Item Number	Nominal Capacity	Nominal Pressure Rating	"A" Inlet Size	"B" Overall Length	"C" Spray Shower Inlet Pipe Size	"D" Outlet Size	"E" Inspection Port Size
	cfm	inWC	inches	inches	nominal pipe	inches	inches
DS-03-4300-15	4,300	15	14.00	44.00	P0.75	17.00	14.00
DS-03-4300-30	4,300	30	14.00	44.00	P0.75	17.00	14.00
DS-03-4300-50	4,300	50	14.00	44.00	P0.75	17.00	14.00
DS-03-5600-15	5,600	15	16.00	48.00	P0.75	19.00	14.00
DS-03-5600-30	5,600	30	16.00	48.00	P0.75	19.00	14.00
DS-03-5600-50	5,600	50	16.00	48.00	P0.75	19.00	14.00
DS-03-7100-15	7,100	15	18.00	54.00	P0.75	21.00	14.00
DS-03-7100-30	7,100	30	18.00	54.00	P0.75	21.00	14.00
DS-03-7100-50	7,100	50	18.00	54.00	P0.75	21.00	14.00
DS-03-8700-15	8,700	15	20.00	60.50	P0.75	24.00	14.00
DS-03-8700-30	8,700	30	20.00	60.50	P0.75	24.00	14.00
DS-03-8700-50	8,700	50	20.00	60.50	P0.75	24.00	14.00
DS-03-10600-15	10,600	15	22.00	67.00	P0.75	26.00	14.00
DS-03-10600-30	10,600	30	22.00	67.00	P0.75	26.00	14.00
DS-03-10600-50	10,600	50	22.00	67.00	P0.75	26.00	14.00
DS-03-12600-15	12,600	15	24.00	74.00	P1	28.00	14.00
DS-03-12600-30	12,600	30	24.00	74.00	P1	28.00	14.00
DS-03-12600-50	12,600	50	24.00	74.00	P1	28.00	14.00
DS-03-14700-15	14,700	15	26.00	78.00	P1	30.00	14.00
DS-03-14700-30	14,700	30	26.00	78.00	P1	30.00	14.00
DS-03-14700-50	14,700	50	26.00	78.00	P1	30.00	14.00
DS-03-17100-15	17,100	15	28.00	81.00	P1	33.00	14.00
DS-03-17100-30	17,100	30	28.00	81.00	P1	33.00	14.00
DS-03-17100-50	17,100	50	28.00	81.00	P1	33.00	14.00
DS-03-19600-15	19,600	15	30.00	85.00	P1	35.00	14.00
DS-03-19600-30	19,600	30	30.00	85.00	P1	35.00	14.00
DS-03-19600-50	19,600	50	30.00	85.00	P1	35.00	14.00
DS-03-22300-15	22,300	15	32.00	90.50	P1	37.00	14.00
DS-03-22300-30	22,300	30	32.00	90.50	P1	37.00	14.00
DS-03-22300-50	22,300	50	32.00	90.50	P1	37.00	14.00

Item Number	Nominal Capacity	Nominal Pressure Rating	"A" Inlet Size	"B" Overall Length	"C" Spray Shower Inlet Pipe Size	"D" Outlet Size	"E" Inspection Port Size
	cfm	inWC	inches	inches	nominal pipe	inches	inches
DS-03-25200-15	25,200	15	34.00	94.25	P1	40.00	14.00
DS-03-25200-30	25,200	30	34.00	94.25	P1	40.00	14.00
DS-03-25200-50	25,200	50	34.00	94.25	P1	40.00	14.00
DS-03-28300-15	28,300	15	36.00	99.00	P1	42.00	14.00
DS-03-28300-30	28,300	30	36.00	99.00	P1	42.00	14.00
DS-03-28300-50	28,300	50	36.00	99.00	P1	42.00	14.00
DS-03-31500-15	31,500	15	38.00	104.00	P1	44.00	14.00
DS-03-31500-30	31,500	30	38.00	104.00	P1	44.00	14.00
DS-03-31500-50	31,500	50	38.00	104.00	P1	44.00	14.00
DS-03-34900-15	34,900	15	40.00	108.00	P1	47.00	14.00
DS-03-34900-30	34,900	30	40.00	108.00	P1	47.00	14.00
DS-03-34900-50	34,900	50	40.00	108.00	P1	47.00	14.00
DS-03-38500-15	38,500	15	42.00	115.00	P1	49.00	14.00
DS-03-38500-30	38,500	30	42.00	115.00	P1	49.00	14.00
DS-03-38500-50	38,500	50	42.00	115.00	P1	49.00	14.00
DS-03-42200-15	42,200	15	44.00	117.00	P1	51.00	18.00
DS-03-42200-30	42,200	30	44.00	117.00	P1	51.00	18.00
DS-03-42200-50	42,200	50	44.00	117.00	P1	51.00	18.00
DS-03-46200-15	46,200	15	46.00	123.00	P1.5	53.00	18.00
DS-03-46200-30	46,200	30	46.00	123.00	P1.5	53.00	18.00
DS-03-46200-50	46,200	50	46.00	123.00	P1.5	53.00	18.00
DS-03-50300-15	50,300	15	48.00	126.00	P1.5	56.00	18.00
DS-03-50300-30	50,300	30	48.00	126.00	P1.5	56.00	18.00
DS-03-50300-50	50,300	50	48.00	126.00	P1.5	56.00	18.00
DS-03-54500-15	54,500	15	50.00	131.25	P1.5	58.00	18.00
DS-03-54500-30	54,500	30	50.00	131.25	P1.5	58.00	18.00
DS-03-54500-50	54,500	50	50.00	131.25	P1.5	58.00	18.00
DS-03-59000-15	59,000	15	52.00	136.00	P1.5	60.00	18.00
DS-03-59000-30	59,000	30	52.00	136.00	P1.5	60.00	18.00
DS-03-59000-50	59,000	50	52.00	136.00	P1.5	60.00	18.00
DS-03-63600-15	63,600	15	54.00	141.50	P1.5	63.00	18.00
DS-03-63600-30	63,600	30	54.00	141.50	P1.5	63.00	18.00
DS-03-63600-50	63,600	50	54.00	141.50	P1.5	63.00	18.00
DS-03-68400-15	68,400	15	56.00	146.00	P1.5	65.00	18.00
DS-03-68400-30	68,400	30	56.00	146.00	P1.5	65.00	18.00
DS-03-68400-50	68,400	50	56.00	146.00	P1.5	65.00	18.00
DS-03-73400-15	73,400	15	58.00	151.00	P1.5	67.00	18.00
DS-03-73400-30	73,400	30	58.00	151.00	P1.5	67.00	18.00
DS-03-73400-50	73,400	50	58.00	151.00	P1.5	67.00	18.00
DS-03-78500-15	78,500	15	60.00	156.00	P1.5	70.00	18.00
DS-03-78500-30	78,500	30	60.00	156.00	P1.5	70.00	18.00
DS-03-78500-50	78,500	50	60.00	156.00	P1.5	70.00	18.00
DS-03-83900-15	83,900	15	62.00	162.00	P1.5	72.00	18.00
DS-03-83900-30	83,900	30	62.00	162.00	P1.5	72.00	18.00
DS-03-83900-50	83,900	50	62.00	162.00	P1.5	72.00	18.00
DS-03-89400-15	89,400	15	64.00	167.50	P1.5	74.00	18.00
DS-03-89400-30	89,400	30	64.00	167.50	P1.5	74.00	18.00
DS-03-89400-50	89,400	50	64.00	167.50	P1.5	74.00	18.00

Notes

1. 3D model files and general arrangement drawings with installation details available upon order.
2. Customer to specify inspection port and overflow position, and inspection port hinge side.
3. Drain location dependent upon configuration type.

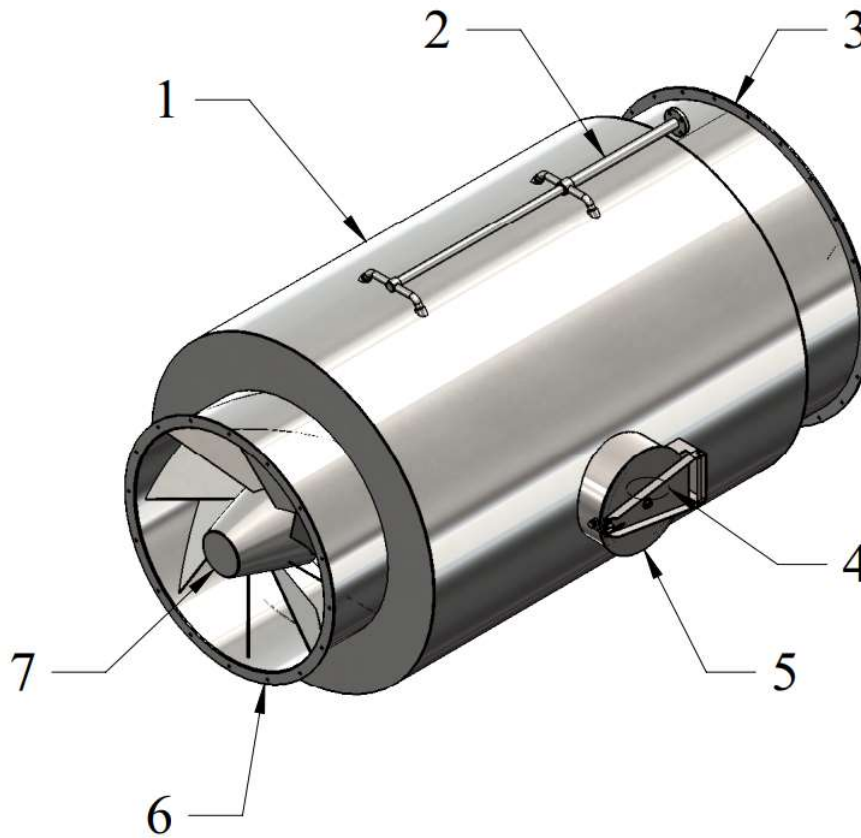
### Standard round flange details



"D" Nominal Size		"L" Flange Leg	"G" Gauge	"N" Number of Holes	"H" Hole Diameter	Bolt Size
D <sub>LOWER</sub> inches	D <sub>UPPER</sub> inches					
0	8.00	1.50	0.875	4	0.500	3/8
8.01	16.00	1.50	0.875	8	0.500	3/8
16.01	24.00	1.50	0.875	12	0.500	3/8
24.01	31.00	1.50	0.875	16	0.500	3/8
31.01	39.00	2.00	1.125	20	0.500	3/8
39.01	46.00	2.50	1.375	24	0.625	1/2
46.01	54.00	2.50	1.375	28	0.625	1/2
54.01	62.00	2.50	1.375	32	0.625	1/2
62.01	70.00	2.50	1.375	36	0.625	1/2
70.01	78.00	2.50	1.375	40	0.625	1/2
78.01	86.00	3.00	1.750	44	0.625	1/2
86.01	94.00	3.00	1.750	48	0.625	1/2
94.01	101.00	3.00	1.750	52	0.625	1/2
101.01	108.00	4.00	2.250	56	0.625	1/2
108.01	120.00	4.00	2.250	60	0.625	1/2

Notes

1. Holes always land on centerlines.



### Parts list

Number	Quantity	Description
1	1	Centrifugal separator tank
2	1	Intermittent cleaning water system
3	1	Outlet with vortex breaker
4	1	Drain
5	3	Inspection port
6	1	Inlet
7	1	Stationary impeller

#### Notes

1. All hardware provided, unit is assembled when delivered.

## How to order

To fully specify the DS-03 Axial Droplet Separator, make a selection from the code boxes below.

**Example:** DS-03-22300-1-1-1-30-S-H-C, shown below, is an axial droplet separator with a nominal 22,300cfm capacity, 316 stainless steel as the internal material, 304 stainless steel as the external material, 316 stainless steel hardware, a 30inWC pressure rating, our standard bolt pattern, and a horizontal flow orientation. The customer has specified the inspection port details.

1	2	3	4	5	6	7	8	9	10
DS	03	22300	1	1	1	30	S	H	C
Specifications									
Please provide a drawing for our approval of the specified axial droplet separator with an inspection port at 270° and an observer's left hand hinge.									

1	Equipment type		
DS	Droplet Separator		
2	Equipment sub-type		
03	Axial Droplet Separator		
3	Capacity		
4300	Nominal 4,300cfm	38500	Nominal 38,500cfm
5600	Nominal 5,600cfm	42200	Nominal 42,200cfm
7100	Nominal 7,100cfm	46200	Nominal 46,200cfm
8700	Nominal 8,700cfm	50300	Nominal 50,300cfm
10600	Nominal 10,600cfm	54500	Nominal 54,500cfm
12600	Nominal 12,600cfm	59000	Nominal 59,000cfm
14700	Nominal 14,700cfm	63600	Nominal 63,600cfm
17100	Nominal 17,100cfm	68400	Nominal 68,400cfm
19600	Nominal 19,600cfm	73400	Nominal 73,400cfm
22300	Nominal 22,300cfm	78500	Nominal 78,500cfm
25200	Nominal 25,200cfm	83900	Nominal 83,900cfm
28300	Nominal 28,300cfm	89400	Nominal 89,400cfm
31500	Nominal 31,500cfm	C	Customer Specified Capacity
34900	Nominal 34,900cfm		
4	Internal material		
1	316 Stainless Steel	C	Customer Specified Material
5	External material		
1	304 Stainless Steel	C	Customer Specified Material
6	Hardware material		
1	316 Stainless Steel	C	Customer Specified Material
7	Pressure rating		
15	15inWC, Up to 4500fpm	50	50inWC, Up to 4500fpm
30	30inWC, Up to 4500fpm	C	Customer Specified Pressure Rating
8	Flange bolt patterns		
S	Standard	C	Customer Specified Flange Bolt Pattern
9	Orientation		
V	Vertical Up Flow	H	Horizontal
10	Inspection port placement and hinge side		
C	Customer Specified		

Many types of customizations are available upon request.



**Note:** There are various factors which should be considered when selecting a droplet separator for a specific application. Some of these factors are outside of the scope of this data sheet. If you have any questions regarding the application, compatibility, or use of this droplet separator, contact [VentilationComponents.com](http://VentilationComponents.com) for more information.



Contact@VentilationComponents.com