

Standard Industrial Radial Droplet Separator

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



Application

- Removes mist and wetted particulate from an airstream.
- Used at the low point of a wetted duct system
- Various sizes built to service airflows ranging from 3,400cfm to 35,000cfm 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

- Liquid separator with a radial inlet and axial outlet
- Drain and high level overflow
- Inspection port and support legs

Benefits

- Simple, reliable, and easy to maintain
- Heavy duty construction

Function

- Air enters radially and large droplets separate due to impaction on the inner wall and gravity. The water is then drained through the bottom drain connection.

Options

Size

Sizes ranging from 14.00in to 46.00in inside flange are available. Larger sizes are available upon request.

Pressure rating

Three different pressure ratings are offered: up to 15inWC, up to 30inWC, and up to 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.

High level overflow

The placement of the high level overflow is customer specified. A flapper valve can be supplied.

Support legs

Support legs can be provided attached or unattached for attachment in the field.

Materials

The materials offered suit a variety of different 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.

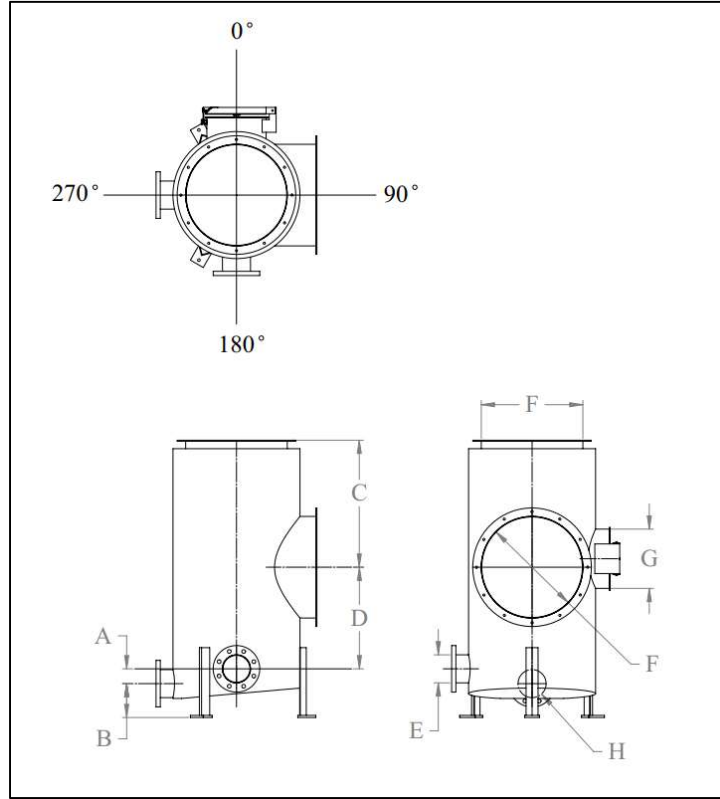
Inspection port

The inspection port placement and hinge side is customer specified.

Efficiency Rate

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

Data and dimensions



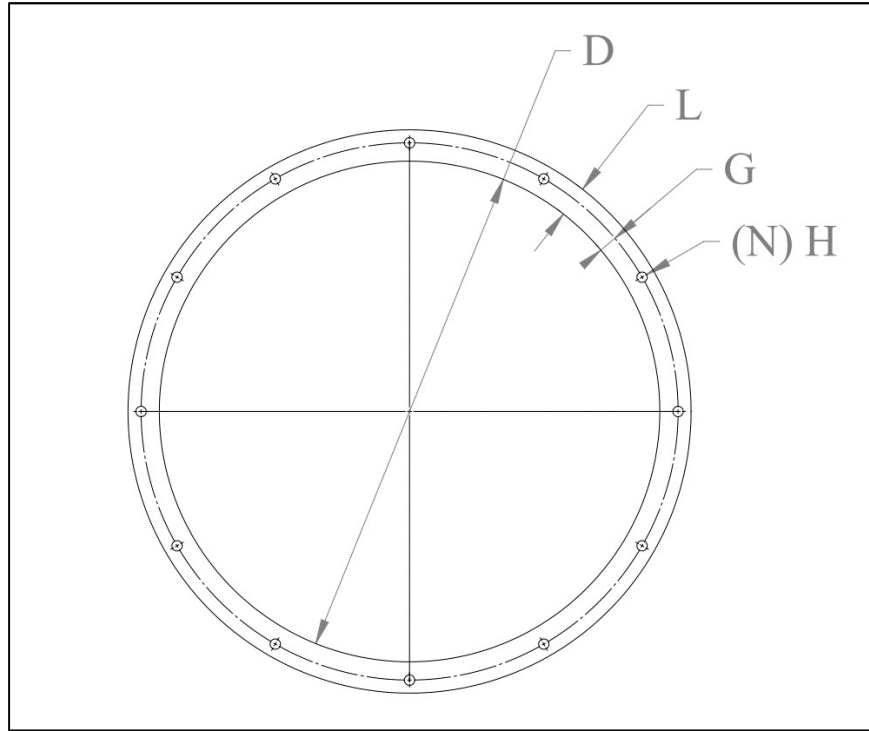
Item Number	"F" Inlet and Outlet Size	Nominal Pressure Rating	Nominal Capacity	"A"	"B"	"C"	"D"	"E" Overflow Size	"G" Inspection Port Size	"H" Drain Size
	inches	inWC	cfm	inches	inches	inches	inches	nominal pipe	inches	nominal pipe
DS-02-14-15	14.00	15	3,400	4.00	8.00	30.00	15.00	P4	14.00	P4
DS-02-14-30	14.00	30	3,400	4.00	8.00	30.00	15.00	P4	14.00	P4
DS-02-14-50	14.00	50	3,400	4.00	8.00	30.00	15.00	P4	14.00	P4
DS-02-16-15	16.00	15	4,300	4.00	8.00	29.00	16.00	P4	14.00	P4
DS-02-16-30	16.00	30	4,300	4.00	8.00	29.00	16.00	P4	14.00	P4
DS-02-16-50	16.00	50	4,300	4.00	8.00	29.00	16.00	P4	14.00	P4
DS-02-18-15	18.00	15	5,600	4.00	8.00	28.50	17.00	P4	14.00	P4
DS-02-18-30	18.00	30	5,600	4.00	8.00	28.50	17.00	P4	14.00	P4
DS-02-18-50	18.00	50	5,600	4.00	8.00	28.50	17.00	P4	14.00	P4
DS-02-20-15	20.00	15	6,800	4.00	8.00	28.00	18.00	P4	14.00	P4
DS-02-20-30	20.00	30	6,800	4.00	8.00	28.00	18.00	P4	14.00	P4
DS-02-20-50	20.00	50	6,800	4.00	8.00	28.00	18.00	P4	14.00	P4
DS-02-22-15	22.00	15	7,600	4.00	8.00	27.50	18.50	P6	14.00	P6
DS-02-22-30	22.00	30	7,600	4.00	8.00	27.50	18.50	P6	14.00	P6
DS-02-22-50	22.00	50	7,600	4.00	8.00	27.50	18.50	P6	14.00	P6
DS-02-24-15	24.00	15	9,350	4.00	8.00	39.00	19.50	P6	14.00	P6
DS-02-24-30	24.00	30	9,350	4.00	8.00	39.00	19.50	P6	14.00	P6
DS-02-24-50	24.00	50	9,350	4.00	8.00	39.00	19.50	P6	14.00	P6

Item Number	"F" Inlet and Outlet Size	Nominal Pressure Rating	Nominal Capacity	"A"	"B"	"C"	"D"	"E" Overflow Size	"G" Inspection Port Size	"H" Drain Size
	inches	inWC	cfm	inches	inches	inches	inches	Nominal Pipe	inches	Nominal Pipe
DS-02-26-15	26.00	15	11,100	6.00	8.00	37.00	20.50	P6	14.00	P6
DS-02-26-30	26.00	30	11,100	6.00	8.00	37.00	20.50	P6	14.00	P6
DS-02-26-50	26.00	50	11,100	6.00	8.00	37.00	20.50	P6	14.00	P6
DS-02-28-15	28.00	15	12,500	6.00	8.00	35.00	22.00	P6	14.00	P6
DS-02-28-30	28.00	30	12,500	6.00	8.00	35.00	22.00	P6	14.00	P6
DS-02-28-50	28.00	50	12,500	6.00	8.00	35.00	22.00	P6	14.00	P6
DS-02-30-15	30.00	15	15,200	6.00	8.00	32.00	23.00	P8	14.00	P8
DS-02-30-30	30.00	30	15,200	6.00	8.00	32.00	23.00	P8	14.00	P8
DS-02-30-50	30.00	50	15,200	6.00	8.00	32.00	23.00	P8	14.00	P8
DS-02-32-15	32.00	15	16,800	6.00	8.00	31.50	24.00	P8	18.00	P8
DS-02-32-30	32.00	30	16,800	6.00	8.00	31.50	24.00	P8	18.00	P8
DS-02-32-50	32.00	50	16,800	6.00	8.00	31.50	24.00	P8	18.00	P8
DS-02-34-15	34.00	15	18,700	6.00	8.00	31.00	25.50	P8	18.00	P8
DS-02-34-30	34.00	30	18,700	6.00	8.00	31.00	25.50	P8	18.00	P8
DS-02-34-50	34.00	50	18,700	6.00	8.00	31.00	25.50	P8	18.00	P8
DS-02-36-15	36.00	15	22,000	8.50	10.00	43.00	26.50	P8	18.00	P8
DS-02-36-30	36.00	30	22,000	8.50	10.00	43.00	26.50	P8	18.00	P8
DS-02-36-50	36.00	50	22,000	8.50	10.00	43.00	26.50	P8	18.00	P8
DS-02-38-15	38.00	15	24,200	8.50	10.00	42.50	28.00	P8	18.00	P8
DS-02-38-30	38.00	30	24,200	8.50	10.00	42.50	28.00	P8	18.00	P8
DS-02-38-50	38.00	50	24,200	8.50	10.00	42.50	28.00	P8	18.00	P8
DS-02-40-15	40.00	15	26,800	8.50	10.00	42.00	29.50	P8	18.00	P8
DS-02-40-30	40.00	30	26,800	8.50	10.00	42.00	29.50	P8	18.00	P8
DS-02-40-50	40.00	50	26,800	8.50	10.00	42.00	29.50	P8	18.00	P8
DS-02-42-15	42.00	15	30,000	8.50	10.00	40.00	31.00	P10	18.00	P10
DS-02-42-30	42.00	30	30,000	8.50	10.00	40.00	31.00	P10	18.00	P10
DS-02-42-50	42.00	50	30,000	8.50	10.00	40.00	31.00	P10	18.00	P10
DS-02-44-15	44.00	15	32,300	8.50	10.00	39.50	32.50	P10	18.00	P10
DS-02-44-30	44.00	30	32,300	8.50	10.00	39.50	32.50	P10	18.00	P10
DS-02-44-50	44.00	50	32,300	8.50	10.00	39.50	32.50	P10	18.00	P10
DS-02-46-15	46.00	15	35,000	8.50	10.00	39.00	34.00	P10	18.00	P10
DS-02-46-30	46.00	30	35,000	8.50	10.00	39.00	34.00	P10	18.00	P10
DS-02-46-50	46.00	50	35,000	8.50	10.00	39.00	34.00	P10	18.00	P10

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.

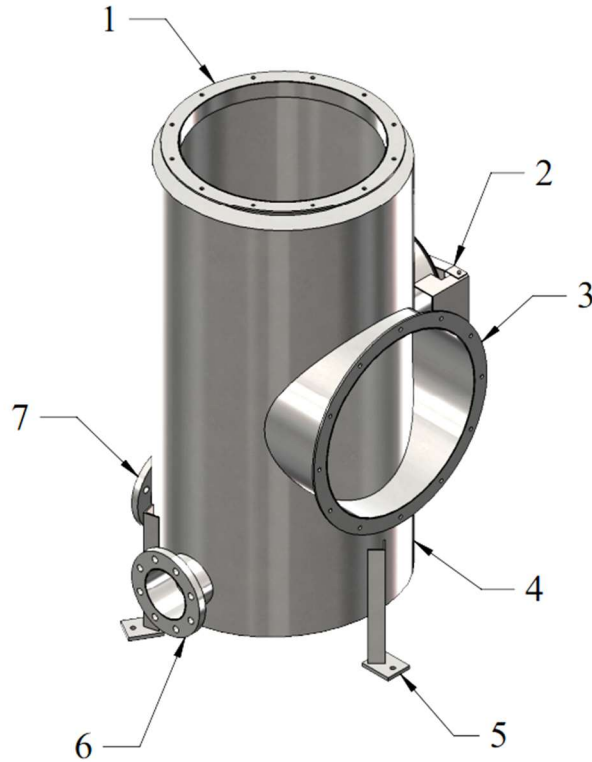
Standard round flange details



"D" Nominal Size		"L" Flange Leg	"G" Gauge	"N" Number of Holes	"H" Hole Diameter	Bolt Size
D _{LOWER} inches	D _{UPPER} 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	Outlet
2	1	Inspection port
3	1	Inlet
4	1	Tank
5	3	Support leg
6	1	Overflow drain
7	1	Drain

Notes

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

How to order

To fully specify the DS-02 Radial Droplet Separator, make a selection from the code boxes below.

Example: DS-02-30-1-1-1-30-S-L-C-C, shown below, is a radial droplet separator with 32.00in diameter connections, 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 support legs that will be attached in the field. The customer has specified the inspection port and overflow details.

1	2	3	4	5	6	7	8	9	10	11
DS	02	32	1	1	1	30	S	L	C	C
Specifications										
Please provide a drawing for our approval of the specified radial droplet separator with an inspection port at 0° and an observer's left hand hinge and an overflow drain at 180° with a flapper valve.										

1	Equipment type									
DS	Droplet Separator									
2	Equipment sub-type									
02	Radial Droplet Separator									
3	Nominal size									
14	Nominal ø14.00in [ø355.6mm], 3,400cfm				32	Nominal ø32.00in [ø812.8mm], 16,800cfm				
16	Nominal ø16.00in [ø406.4mm], 4,300cfm				34	Nominal ø34.00in [ø863.6mm], 18,700cfm				
18	Nominal ø18.00in [ø457.2mm], 5,600cfm				36	Nominal ø36.00in [ø914.4mm], 22,000cfm				
20	Nominal ø20.00in [ø508.0mm], 6,800cfm				38	Nominal ø38.00in [ø965.2mm], 24,200cfm				
22	Nominal ø22.00in [ø558.8mm], 7,600cfm				40	Nominal ø40.00in [ø1016.0mm], 26,800cfm				
24	Nominal ø24.00in [ø609.6mm], 9,350cfm				42	Nominal ø42.00in [ø1066.8mm], 30,000cfm				
26	Nominal ø26.00in [ø660.4mm], 11,100cfm				44	Nominal ø44.00in [ø1117.6mm], 32,300cfm				
28	Nominal ø28.00in [ø711.2mm], 12,500cfm				46	Nominal ø46.00in [ø1168.4mm], 35,000cfm				
30	Nominal ø30.00in [ø762.0mm], 15,200cfm				C	Customer Specified Size				
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	Support legs									
A	Shipped Attached				L	Shipped Loose				
10	Inspection port placement and hinge side									
C	Customer Specified									
11	Overflow drain placement and optional flapper valve									
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 for more information.

Contact@VentilationComponents.com