



# CYCLONE SEPARATOR

## MODEL DC-L/DC-LS/DC-LUS

### DURABLE TWO-STAGE CYCLONE SEPARATOR FOR STEAM, AIR AND GASES

#### Benefits

Two stage separator efficiently disentrains moisture from steam, air and inert gases to ensure high quality production.

1. Two stage separator designed to eliminate entrained condensate and solids 10 µm or larger when operating between 50% and 100% of the design flow rate.
2. Pressure loss of less than 1 psi when properly used.
3. No moving parts and self-cleaning design ensure long life.
4. Stamped to ASME code for unfired pressure vessels (ASME Code Section VIII, Div.1).
5. All welded, maintenance-free construction.
6. Up-flow, down-flow and horizontal-flow configurations available to meet special installation requirements at low cost.



#### Specifications

Model	DC-L		DC-LS	DC-LUS
Connection	Flanged	<b>Flanged</b>	<b>Flanged</b>	Flanged
Size (in)	6, 8, 10, 12	<b>6, 8, 10, 12</b>	<b>6, 8, 10, 12, 14, 16, 18, 20</b>	6, 8, 10, 12, 14, 16, 18, 20
Pressure Rating	Class 150	Class 300	Class 600	Class 600
Maximum Operating Pressure (psig)	PMO 150	300	550	550
Maximum Operating Temperature (°F)	TMO 500	500	650	650
Maximum Allowable Pressure (psig)	PMA 150	300	550	550
Maximum Allowable Temperature (°F)	TMA 500	500	650	650
Flow Configuration *	Horizontal / Vertical Down-Flow			Vertical Up-Flow
Applicable Fluids **	Steam, Air, Inert Gas			

\* Flow configuration diagrams shown on reverse

\*\* Do not use for toxic, flammable, or otherwise hazardous fluids.

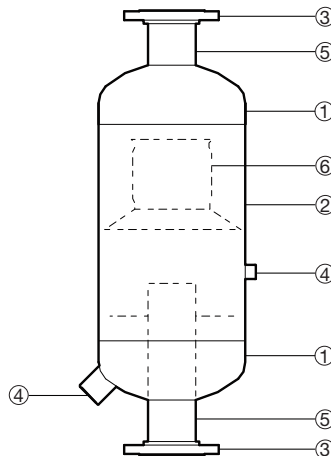
**Connections and sizes in bold are standard**



To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

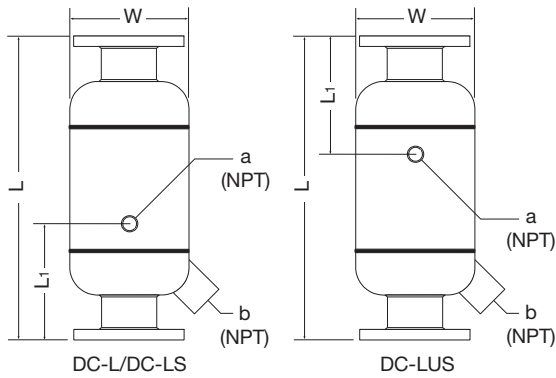
No.	Description	Material*	ASTM/AISI
①	Heads	Carbon Steel	SA516-70
②	Shell	Carbon Steel	SA106-B/C / SA516-70
③	Flanges	Carbon Steel	SA105
④	Fittings	Carbon Steel	SA105
⑤	Pipe	Carbon Steel	SA106-B/C
⑥	Element	Stainless Steel	SA285

\* Materials and configuration shown for DC-L only. DC-LS and DC-LUS may use different materials/configuration. Contact TLV for details.



**Dimensions**

● **DC-L/DC-LS/DC-LUS** Flanged



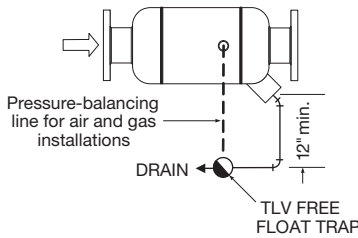
**DC-L/DC-LS/DC-LUS** Flanged (in)

Model	Size	L			L1*	φW	a	b	Weight** (lb)
		Connects to ASME Class							
		150RF	<b>300RF</b>	600RF					
DC-L	6	34	34	—	12	14	1/2	2	175(234)
	8	44	44	—	16	16	3/4	2	272(412)
	10	52	52	—	19 1/2	20	3/4	2 1/2	462(724)
	12	66	66	—	23	24	3/4	2 1/2	776(848)
DC-LS	6	—	—	38	13 (12)	14	1/2	2	336
	8	—	—	46	17 (13)	16	3/4	2	650
	10	—	—	54	20 1/2 (15)	20	3/4	2 1/2	935
	12	—	—	68	24 (19)	24	3/4	2 1/2	1748
DC-LUS	14	—	—	74	25 (21)	24	3/4	2 1/2	2118
	16	—	—	78	31 (23)	30	3/4	2 1/2	2575
	18	—	—	90	35 (26)	30	3/4	3	3340
	20	—	—	96	37 (30)	36	3/4	3	4930

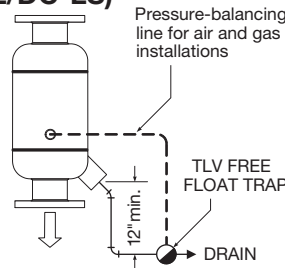
\* DC-LUS L1 figures are in ( ) **Flange classes in bold are standard**  
 \*\* 300RF weight is in ( )

**Installation Configuration**

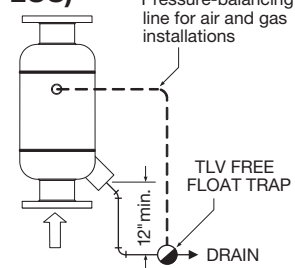
**Horizontal Installation (DC-L/DC-LS)**



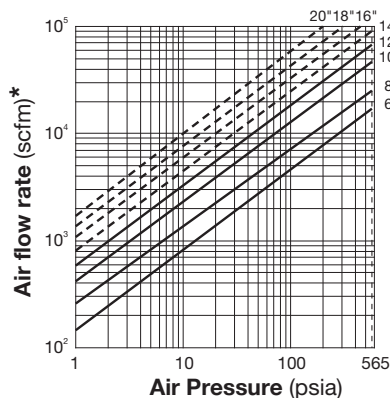
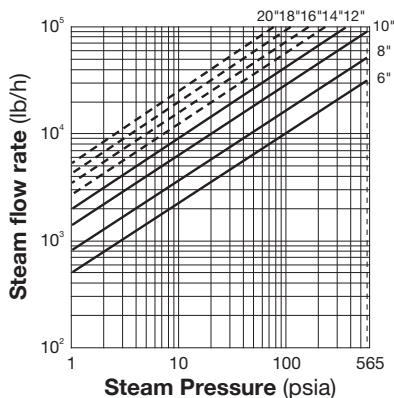
**Vertical Down-Flow Installation (DC-L/DC-LS)**



**Vertical Up-Flow Installation (DC-LUS)**



**Flow Rate (for Saturated Steam and Air)**



— : Standard - - - - : Option

\* Air at 68 °F and atmospheric pressure.

NOTE: The charts to the left are used to determine the required nominal size for a given steam/air pressure and flow rate.

Find the intersection of the pressure and flow rate of the system. If the intersection falls between two sizes, choose the larger size to assure capacity; DO NOT undersize.

The pressure is listed as absolute pressure, not gauge pressure. Contact TLV for sizing information for gas use.



**CAUTION** DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE. Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

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