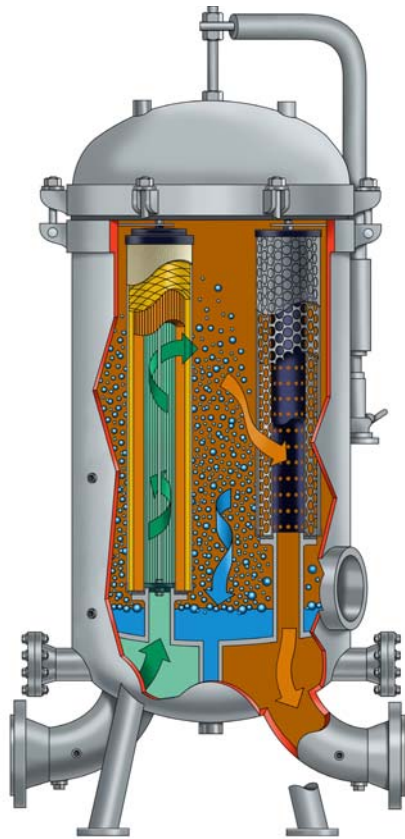


# Vertical Coalescer Separators for API-1581, Category C, Type S, 5th Edition



Facet VCS Series two-stage vertical coalescer separator housings are mechanical devices designed to filter solids and separate two immiscible liquids. They have been qualified after full-scale, witnessed testing to the Fifth Edition of API Bulletin 1581.

## RELIABLE PERFORMANCE

Facet coalescer separators are a result of over 50 years of continuous research and development to meet the ever demanding performance requirements in the aviation fuel handling industry. This, along with proven field performance, demonstrates Facet's ability to provide quality products that meet current specifications as well as specific customer requirements for installations in refineries, bulk storage terminals, heliports, airports, etc.

## STANDARD HOUSING DESIGN

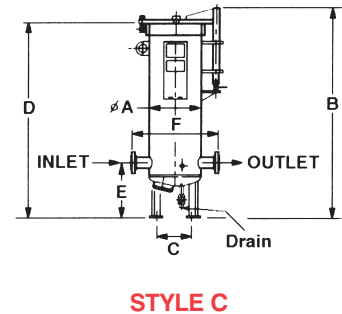
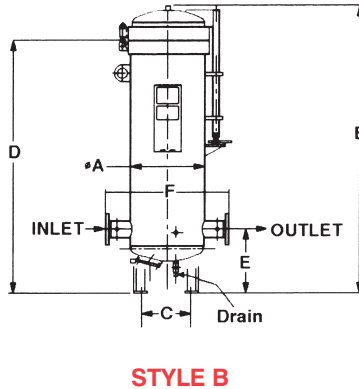
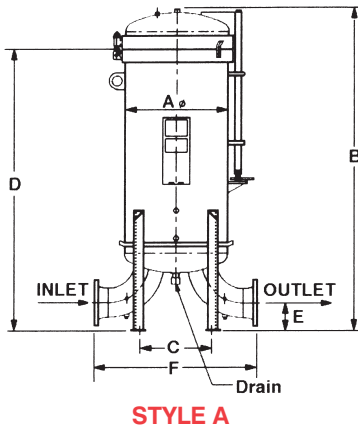
- Welded carbon steel construction—other materials available on request
- ASME Code, Section VIII construction, stamped and certified
- Design pressure: 150 psi @ 250°F—other design pressures available on request
- Inlet, outlet and drain connections permanently marked
- Choice of rod or screw base coalescer cartridge mounting styles
- Interior: Epoxy coated (MIL-C-4556)
- Exterior: Prime coated
- Swing bolt head closures
- Buna-N o-ring closure seal
- Knife edge cartridge mounting seals
- Headlift furnished on 18" (457 mm) OD and larger
- Spider plate attached to vessel wall
- Sloping cartridge plate
- 4" inlet/outlet cleanout/inspection connections (when permitted by design)
- Connections provided for options listed below

## OPTIONS

- \* Automatic air eliminator with check valve
- \* Pressure relief valve
- \* Differential pressure gauge
- Pilot control valve
- Pilot tester
- Water slug control valve
- Electrical water-level alarm
- Water drain valves
- Liquid level gauge
- Blind cover for pilot control mounting flange
- Immersion heaters
- Sampling probe
- Working platform and ladder

(\* Mandatory for 5<sup>th</sup> Edition)

# Vertical Coalescer Separators for API-1581, Category C, Type S, 5th Edition



## DATA

MODEL NUMBER <sup>(1)</sup>	FLOW RATE		REQUIRED CARTRIDGES				HOUSING LIQUID VOLUME		HOUSING DRY WEIGHT		HOUSING TYPE
	AVIATION FUEL API 1581, CATEGORY C, TYPE S		COALESCER		SEPARATOR		gals.	ltrs.	lbs.	kgs.	
	gpm	lpm	qty.	model	qty.	model					
VCS-222-116	100	400	2	CAA22-5SB	1	SS616FB-5	32	121	613	278	Style C - Flat
VCS-328-218	200	800	3	CAA28-5SB	2	SS618FB-5	74	280	834	378	Style C - Flat
VCS-433-224	300	1200	4	CAA33-5SB	2	SS624FB-5	106	401	963	437	Style B - Dished
VCS-543-243	600	2300	5	CAA43-5SB	2	SS643FB-5	169	640	1411	640	Style A - Dished
VCS-556-340	750	2900	5	CAA56-5SB	3	SS640FB-5	199	753	1485	674	Style A - Dished
VCS-656-344	900	3500	6	CAA56-5SB	3	SS644FB-5	199	753	1490	676	Style A - Dished
VCS-756-440	1000	4000	7	CAA56-5SB	4	SS640FB-5	262	992	1725	782	Style A - Dished
VCS-856-444	1250	4730	8	CAA56-5SB	4	SS644FB-5	262	992	1740	789	Style A - Dished
VCS-1056-544	1500	5900	10	CAA56-5SB	5	SS644FB-5	341	1291	1940	880	Style A - Dished
VCS-1256-644	1800	7100	12	CAA56-5SB	6	SS644FB-5	380	1438	2270	1030	Style A - Dished
VCS-1356-744	2000	7600	13	CAA56-5SB	7	SS644FB-5	420	1590	2600	1179	Style A - Dished
VCS-1656-844	2500	9460	16	CAA56-5SB	8	SS644FB-5	495	1874	3250	1474	Style A - Dished

Other sizes available on request.

## DIMENSIONS

MODEL NUMBER <sup>(1)</sup>	INLET/OUTLET DIAMETER			MAIN DRAIN	DIMENSIONS <sup>(2)</sup>											
					A		B		C		D		E		F	
	in.	mm.	in.		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
VCS-222-116	2	51	3/4	16	406	55	1397	9 7/8	250	54 1/2	1384	21	533	28	711	
VCS-328-218	3	76	3/4	20	508	60	1524	12 3/4	323	57 1/2	1461	21	533	32	813	
VCS-433-224	4	76	3/4	22	559	78	1981	14 1/8	359	64 1/2	1638	21	533	34	864	
VCS-543-243	6	152	3/4	26	660	92	2337	17 3/8	441	79	2007	7	178	36	914	
VCS-556-340	6	152	3/4	26	660	96	2438	17 3/8	441	83 1/2	2121	7	178	36	914	
VCS-656-344	6	152	3/4	26	660	96	2438	17 3/8	441	83 1/2	2121	7	178	36	914	
VCS-756-440	8	203	1 1/2	30	762	111	2819	18 3/4	476	88	2235	9	229	47	1194	
VCS-856-444	8	203	1 1/2	30	762	111	2819	19 1/8	486	88	2235	9	229	47	1194	
VCS-1056-544	8	203	1 1/2	34	864	114	2896	21 1/8	549	89 1/2	2273	9	229	47	1194	
VCS-1256-644	10	254	1 1/2	36	914	119	3023	23 1/2	596	91 1/2	2324	10	254	54	1372	
VCS-1356-744	10	254	1 1/2	38	965	119	3023	25 1/2	648	91 1/2	2324	10	254	54	1372	
VCS-1656-844	12	305	1 1/2	42	1067	127	3226	27 1/4	692	98 1/2	2500	12	304	63	1600	

All dimensions, weights and volumes are approximate and are for estimating purposes only.

### REFERENCE NOTES:

- Model numbers include housing and required cartridges.
- Dimensions are based on standard 150 psi housing design pressure, are approximate and should not be used for installation purposes.

### NOTES:

- All elements are mounted against knife edge seals.
- Nameplate to be stamped with API classified data.
- Inlet chamber to be hydrostatic tested at 115 psi.
- Coalescer cartridges are offered with a choice of rod or screw base mounting. The suffix "SB" will be added to the coalescer model number when screw base is required.  
**Example:**CAA28-5 = Rod Mount  
 CAA28-5SB = Screw Base

Due to our continuing program of improvement, specifications are subject to change without notice.