
VCS Series
Vertical Coalescer Separators for
EI 1581, 7th Edition, Category C, Type S



Category C Coalescer Separator housings are for commercial aviation fuel. Type S qualifications can be used at all filtration points in an aviation fueling system. Type S is meant to be used at filtration points where significant levels of water and dirt in the product can be expected. Facet VCS Series Vertical Coalescer Separator housings fully comply with EI 1581, Category C, Type S requirements.

Reliable Performance

Facet coalescer separators are a result of 80 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

- EI 1596 Design & Construction
- 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 (EI 1541)
- 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 to drain connection
- 4" inlet/outlet cleanout/inspection connections (when permitted by design)
- Connections provided for options listed below

Options

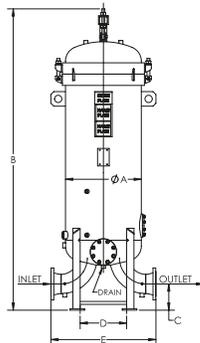
- Automatic air eliminator with check valve*
- Pressure relief valve*
- Differential pressure gauge*
- Pilot control valve
- Pilot tester
- Water slug control valve
- Electrical water-level alarm
- Water drain valves
- Liquid level gauge
- Blind cover for pilot control mounting flange
- Immersion heaters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

(* Mandatory for 7th Edition)

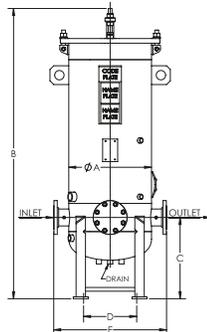
VCS Series

Vertical Coalescer Separators for

EI 1581, 7th Edition, Category C, Type S



STYLE A



STYLE B



MODEL NUMBER ⁽¹⁾	FLOW RATE		REQUIRED CARTRIDGES				HOUSING LIQUID VOLUME		HOUSING DRY WEIGHT		HOUSING TYPE
	AVIATION FUEL EI 1581, CAT. C, TYPE S		COALESCER		SEPARATOR						
	gpm	lpm	qty	Model	qty	Model	gal	ltr	lbs	kgs	
VCS-222-116	109	413	2	CAA22-5SB	1	SS616FB-5	35	132	525	238	Style B - Flat
VCS-328-218	222	840	3	CAA28-5SB	2	SS618FB-5	65	246	750	340	Style B - Flat
VCS-433-224	333	1261	4	CAA33-5SB	2	SS624FB-5	90	341	900	408	Style B - Flat
VCS-543-243	609	2305	5	CAA43-5SB	2	SS643FB-5	165	625	1200	544	Style A - Dished
VCS-556-340	782	2960	5	CAA56-5SB	3	SS640FB-5	180	681	1225	556	Style A - Dished
VCS-656-344	938	3551	6	CAA56-5SB	3	SS644FB-5	180	681	1250	567	Style A - Dished
VCS-756-440	1095	4145	7	CAA56-5SB	4	SS640FB-5	210	795	1525	692	Style A - Dished
VCS-856-444	1251	4736	8	CAA56-5SB	4	SS644FB-5	250	946	1675	760	Style A - Dished
VCS-1056-544	1564	5920	10	CAA56-5SB	5	SS644FB-5	320	1211	1875	850	Style A - Dished
VCS-1256-644	1877	7105	12	CAA56-5SB	6	SS644FB-5	385	1457	2575	1168	Style A - Dished
VCS-1356-744	2034	7700	13	CAA56-5SB	7	SS644FB-5	465	1760	2600	1179	Style A - Dished
VCS-1656-844	2500	9464	16	CAA56-5SB	8	SS644FB-5	530	2006	3000	1361	Style A - Dished

Other sizes available on request.

* Separators: If preferred, Teflon® separator cartridges can be used. Consult Factory for flow rates.

The separator cartridge model number's prefix would change from SS to ST. Example: SS644FB-5 would change to ST644FB-5

DIMENSIONS

MODEL NUMBER ⁽¹⁾	INLET/OUTLET DIAMETER		MAIN DRAIN	DIMENSIONS ⁽²⁾									
				A		B		C		D		E	
	in	mm		in	in	mm	in	mm	in	mm	in	mm	in
VCS-222-116	2	51	3/4	16	406	66 1/4	1683	20	508	10	254	24	610
VCS-328-218	3	76	3/4	20	508	73 1/2	1867	21	533	12 3/4	324	28	711
VCS-433-224	4	102	3/4	22	559	80 1/2	2045	21 3/4	552	14 1/4	362	30	762
VCS-543-243	6	152	3/4	26	660	103 1/2	2629	9	229	16	406	36	914
VCS-556-340	6	152	3/4	26	660	109 1/2	2781	9	229	16	406	36	914
VCS-656-344	6	152	3/4	26	660	109 1/2	2781	9	229	16	406	36	914
VCS-756-440	8	203	1 1/2	28	711	114 1/4	2902	10	254	17 1/2	445	45	1143
VCS-856-444	8	203	1 1/2	30	762	115	2921	10	254	19 1/2	495	46	1168
VCS-1056-544	8	203	1 1/2	34	864	117 1/2	2985	10	254	22 1/4	565	48	1219
VCS-1256-644	10	254	1 1/2	36	914	123 3/4	3143	11	279	24 1/4	616	55	1397
VCS-1356-744	10	254	1 1/2	38	1016	124 3/4	3169	11	279	26 1/2	673	56	1422
VCS-1656-844	12	305	1 1/2	42	1067	129 3/4	3296	12	305	28	711	66	1676

REFERENCE NOTES:

- (1) Model numbers include housing and required cartridges.
- (2) Dimensions are approximate and should not be used for installation purposes.

NOTES:

- a. All elements are mounted against knife edge seals.
- b. Nameplate to be stamped with EI classified data.
- c. Inlet chamber to be hydrostatic tested at 115 psi.
- d. 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

VCS Series
Vertical Coalescer Separators for
EI 1581, 7th Edition, Category M, Type S



Category M Coalescer Separator housings are for Military JP-8 or JP-5 fuel. Type S qualifications can be used at all filtration points in an aviation fueling system. Type S is meant to be used at filtration points where significant levels of water and dirt in the product can be expected. Facet VCS Series Vertical Coalescer Separator housings fully comply with EI 1581, Category M, Type S requirements.

Reliable Performance

Facet coalescer separators are a result of 80 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

- EI 1596 Design & Construction
- 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 (EI 1541)
- 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 to drain connection
- 4" inlet/outlet cleanout/inspection connections (when permitted by design)
- Connections provided for options listed below

Options

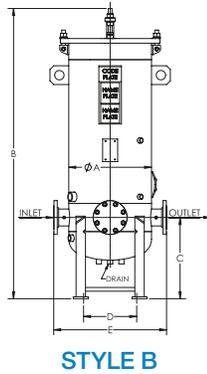
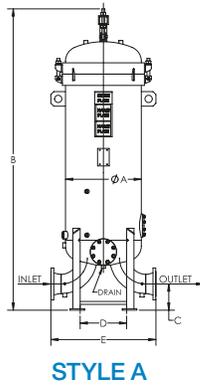
- Automatic air eliminator with check valve*
- Pressure relief valve*
- Differential pressure gauge*
- Pilot control valve
- Pilot tester
- Water slug control valve
- Electrical water-level alarm
- Water drain valves
- Liquid level gauge
- Blind cover for pilot control mounting flange
- Immersion heaters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

(* Mandatory for 7th Edition)

VCS Series

Vertical Coalescer Separators for

EI 1581, 7th Edition, Category M, Type S



MODEL NUMBER ⁽¹⁾	FLOW RATE		REQUIRED CARTRIDGES				HOUSING LIQUID VOLUME		HOUSING DRY WEIGHT		HOUSING TYPE
	AVIATION FUEL EI 1581 CAT. M, TYPE S		COALESCER		SEPARATOR						
	gpm	lpm	qty	Model	qty	Model	gal	ltr	lbs	kg	
VCS-222-116	85	322	2	CM-22SB-5	1	SM-16FB-5	35	132	525	238	Style B - Flat
VCS-328-218	173	655	3	CM-28SB-5	2	SM-18FB-5	65	246	750	340	Style B - Flat
VCS-433-224	260	984	4	CM-33SB-5	2	SM-24FB-5	90	341	900	408	Style B - Flat
VCS-543-243	474	1794	5	CM-43SB-5	2	SM-43FB-5	165	625	1200	544	Style A - Dished
VCS-556-340	609	2305	5	CM-56SB-5	3	SM-40FB-5	180	681	1225	556	Style A - Dished
VCS-656-344	730	2763	6	CM-56SB-5	3	SM-44FB-5	180	681	1250	567	Style A - Dished
VCS-756-440	852	3225	7	CM-56SB-5	4	SM-40FB-5	210	795	1525	692	Style A - Dished
VCS-856-444	974	3687	8	CM-56SB-5	4	SM-44FB-5	250	946	1675	760	Style A - Dished
VCS-956-540	1096	4149	9	CM-56SB-5	5	SM-40FB-5	285	1079	1800	816	Style A - Dished
VCS-1056-544	1218	4611	10	CM-56SB-5	5	SM-44FB-5	320	1211	1875	850	Style A - Dished
VCS-1256-644	1461	5530	12	CM-56SB-5	6	SM-44FB-5	385	1457	2575	1168	Style A - Dished
VCS-1356-744	1583	5992	13	CM-56SB-5	7	SM-44FB-5	465	1760	2600	1179	Style A - Dished
VCS-1656-844	1944	7359	16	CM-56SB-5	8	SM-44FB-5	530	2006	3000	1361	Style A - Dished

Other sizes available on request.

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