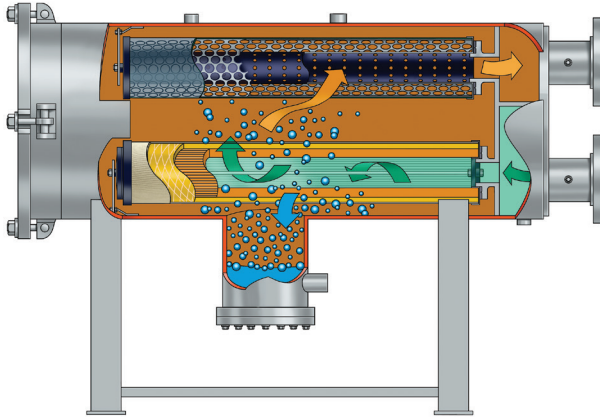


HCS Series (End Opening) Horizontal Coalescer Separators for Fixed Installations EI 1581, 6th Edition, Category C, Type S



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 HCS Series Horizontal Coalescer Separator housings fully comply with EI 1581, Category C, Type S requirements.

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

- 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
- Interior: Epoxy coated (EI 1541)
- Exterior: Prime coated
- Swing bolt head closures
- Hinged end opening cover
- Flanged inlet and outlet connections
- Buna-N o-ring closure seal
- Choice of rod or screw base coalescer cartridge mounting styles
- 4" inlet/outlet cleanout/inspection connections (when permitted by design)
- Knife edge cartridge mounting seals
- Spider plate attached to vessel wall

Options

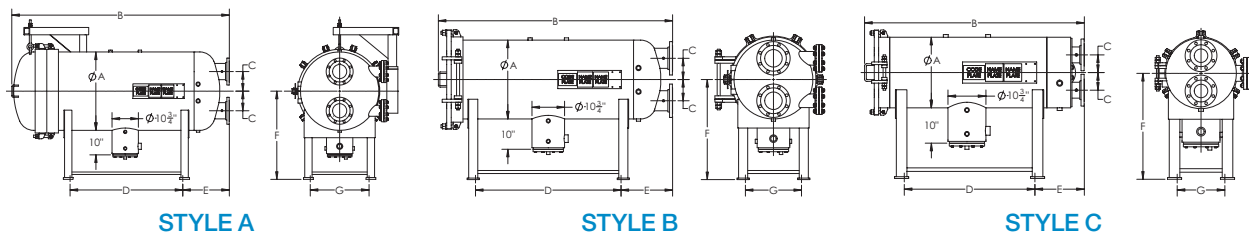
- Automatic air eliminator with check valve*
- Pressure relief valve*
- Differential pressure gauge*
- Pilot control valve
- Pilot tester
- Water slug control valve
- Electrical water-level alarm
- Water drain valves
- Liquid level gauge
- Blind cover for pilot control mounting flange
- Immersion heaters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

(* Mandatory for 6th Edition)

HCS Series (End Opening)

Horizontal Coalescer Separators for Fixed Installations

EI 1581, 6th Edition, Category C, Type S



DATA

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	kg	
HCS-222-1324	105	397	2	CAA22-5SB	1	SS324FA-5	24	91	425	193	Style C - Flat
HCS-322-1424	157	594	3	CAA22-5SB	1	SS424FB-5	29	110	500	227	Style C - Flat
HCS-333-1436	244	924	3	CAA33-5SB	1	SS436FB-5	38	144	550	249	Style C - Flat
HCS-343-133	334	1264	3	CAA43-5SB	1	SS633FB-5	60	227	700	318	Style C - Flat
HCS-443-143	445	1685	4	CAA43-5SB	1	SS643FF-5	72	273	775	352	Style C - Flat
HCS-556-233	686	2597	5	CAA56-5SB	2	SS633FF-5	107	405	950	431	Style B - Dished
HCS-756-248	1000	3785	7	CAA56-5SB	2	SS648FF-5	151	572	1325	601	Style B - Dished
HCS-856-340	1234	4671	8	CAA56-5SB	3	SS640FF-5	270	1022	1700	771	Style A - Dished
HCS-1056-348	1543	5841	10	CAA56-5SB	3	SS648FF-5	350	1325	1975	896	Style A - Dished

Other sizes available on request.

* Separators: If preferred, Teflon® separator cartridges can be used in place of Synthetic.

The separator cartridge model number's prefix would change from SS to ST. Example: SS324FA-5 would change to ST324FA-5

DIMENSIONS

MODEL NUMBER ⁽¹⁾	INLET/OUTLET DIAMETER		DIMENSIONS ⁽²⁾													
			A		B		C		D		E		F		G	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
HCS-222-1324	2	51	14	356	41½	1054	4	102	18	457	13½	343	25	635	9½	241
HCS-322-1424	3	76	16	406	39¾	1010	5	127	16	406	13½	343	28	711	10	254
HCS-333-1436	3	76	16	406	50½	1283	5	127	26	660	14	356	28	711	10	254
HCS-343-133	4	102	18	457	62½	1588	5	127	38	965	14	356	29	737	12	305
HCS-443-143	4	102	20	508	62¼	1581	5	127	37	940	14	356	30	762	13½	343
HCS-556-233	6	152	22	559	76	1930	6	152	49	1245	15	381	31	787	15½	394
HCS-756-248	6	152	26	660	77½	1969	7	178	49	1245	16½	419	33	838	18½	470
HCS-856-340	6	152	32	813	89	2261	8	203	48	1219	18	457	36	914	24	610
HCS-1056-348	8	203	36	914	91	2311	8	203	48	1219	19	483	38	965	27	686

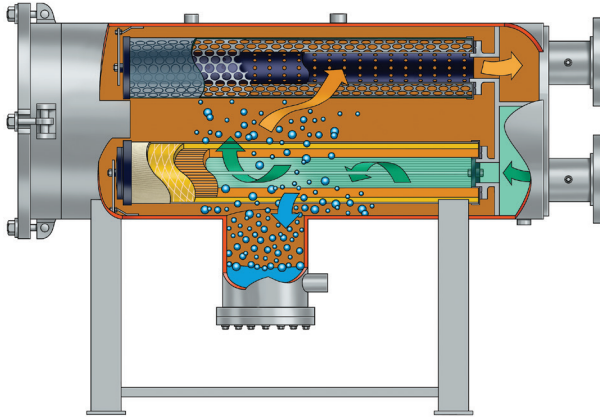
REFERENCE NOTES:

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

NOTES:

- All elements are mounted against knife edge seals.
- Nameplate to be stamped with EI classified data.
- Inlet chamber to be hydrostatic tested at 115 psi (793 kPa).
- 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: CAA33-5 = Rod Mount / CAA33-5SB = Screw Base

HCS Series (End Opening) Horizontal Coalescer Separators for Fixed Installations EI 1581, 6th 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 HCS Series Horizontal Coalescer Separator housings fully comply with EI 1581, Category M, Type S requirements.

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

- 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
- Interior: Epoxy coated (EI 1541)
- Exterior: Prime coated
- Swing bolt head closures
- Hinged end opening cover
- Flanged inlet and outlet connections
- Buna-N o-ring closure seal
- Choice of rod or screw base coalescer cartridge mounting styles
- 4" inlet/outlet cleanout/inspection connections (when permitted by design)
- Knife edge cartridge mounting seals
- Spider plate attached to vessel wall

Options

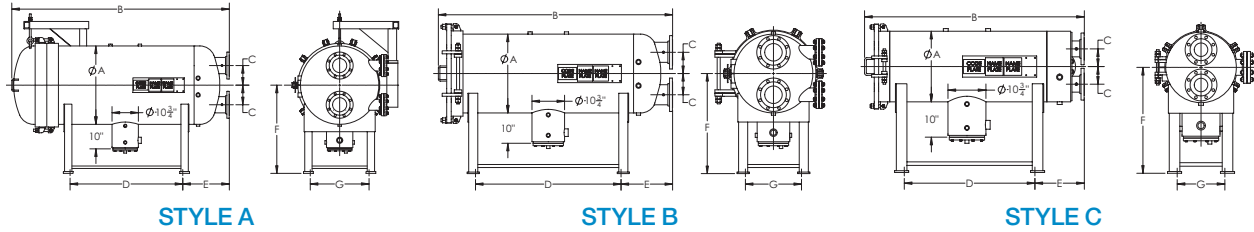
- Automatic air eliminator with check valve*
- Pressure relief valve*
- Differential pressure gauge*
- Pilot control valve
- Pilot tester
- Water slug control valve
- Electrical water-level alarm
- Water drain valves
- Liquid level gauge
- Blind cover for pilot control mounting flange
- Immersion heaters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

(* Mandatory for 6th Edition)

HCS Series (End Opening)

Horizontal Coalescer Separators for Fixed Installations

EI 1581, 6th Edition, Category M, Type S



DATA

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	kg	
HCS-322-1424	157	594	3	CM-22SB-5	1	SM-424FB-5	29	110	500	227	Style C - Flat
HCS-333-1436	243	920	3	CM-33SB-5	1	SM-436FB-5	38	144	550	249	Style C - Flat
HCS-438-138	302	1143	4	CM-38SB-5	1	SM-38FF-5	80	303	850	386	Style C - Flat
HCS-456-229	478	1809	4	CM-56SB-5	2	SM-29FB-5	129	488	1050	476	Style B - Dished
HCS-556-236	605	2290	5	CM-56SB-5	2	SM-36FF-5	151	572	1325	601	Style B - Dished
HCS-756-248	808	3059	7	CM-56SB-5	2	SM-48FF-5	226	856	1600	726	Style A - Dished

Other sizes available on request.

DIMENSIONS

MODEL NUMBER ⁽¹⁾	INLET/ OUTLET DIAMETER		DIMENSIONS ⁽²⁾													
			A		B		C		D		E		F		G	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
HCS-322-1424	3	76	16	406	39 ³ / ₄	1010	5	127	16	406	13 ¹ / ₂	343	28	711	10	254
HCS-333-1436	3	76	16	406	50 ¹ / ₂	1283	5	127	26	660	14	356	28	711	10	254
HCS-438-138	3	76	22	559	57 ¹ / ₄	1454	6	152	32	813	14	356	31	787	13 ¹ / ₂	343
HCS-456-229	4	102	24	610	77 ¹ / ₂	1969	6	152	48	1219	15	381	32	813	16 ¹ / ₂	419
HCS-556-236	6	152	26	660	77 ¹ / ₄	1969	7	178	48	1219	17	432	33	838	18 ¹ / ₂	470
HCS-756-248	6	152	32	813	75 ³ / ₄	1924	8	203	33	838	19	483	36	914	24	610

REFERENCE NOTES:

- (1) Model numbers include housing style and required cartridge mounting.
 (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 (793 kPa).
 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: CM-33-5 = Rod Mount / CM-33SB-5 = Screw Base

VCS Series
Vertical Coalescer Separators for
EI 1581, 6th 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 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

- 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

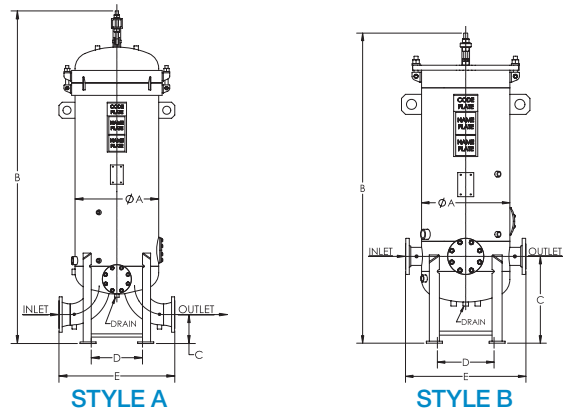
- Automatic air eliminator with check valve*
- Pressure relief valve*
- Differential pressure gauge*
- Pilot control valve
- Pilot tester
- Water slug control valve
- Electrical water-level alarm
- Water drain valves
- Liquid level gauge
- Blind cover for pilot control mounting flange
- Immersion heaters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

(* Mandatory for 6th Edition)

VCS Series

Vertical Coalescer Separators for

EI 1581, 6th Edition, Category C, Type S



DATA

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	¾	16	406	66¼	1683	20	508	10	254	24	610
VCS-328-218	3	76	¾	20	508	73½	1867	21	533	12¾	324	28	711
VCS-433-224	4	102	¾	22	559	80½	2045	21¾	552	14¼	362	30	762
VCS-543-243	6	152	¾	26	660	103½	2629	9	229	16	406	36	914
VCS-556-340	6	152	¾	26	660	109½	2781	9	229	16	406	36	914
VCS-656-344	6	152	¾	26	660	109½	2781	9	229	16	406	36	914
VCS-756-440	8	203	1½	28	711	114¼	2902	10	254	17½	445	45	1143
VCS-856-444	8	203	1½	30	762	115	2921	10	254	19½	495	46	1168
VCS-1056-544	8	203	1½	34	864	117½	2985	10	254	22¼	565	48	1219
VCS-1256-644	10	254	1½	36	914	123¾	3143	11	279	24¼	616	55	1397
VCS-1356-744	10	254	1½	38	1016	124¾	3169	11	279	26½	673	56	1422
VCS-1656-844	12	305	1½	42	1067	129¾	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:

- All elements are mounted against knife edge seals.
- Nameplate to be stamped with EI 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



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 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

- 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

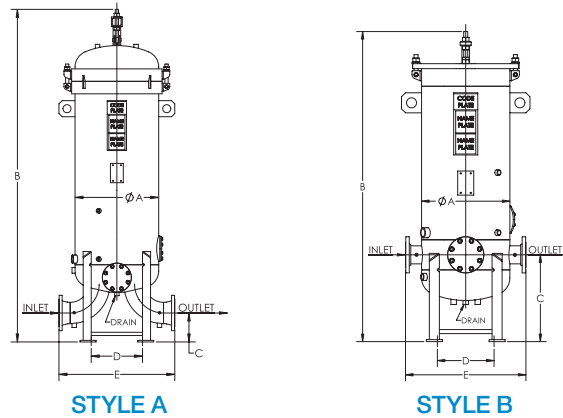
- Automatic air eliminator with check valve*
- Pressure relief valve*
- Differential pressure gauge*
- Pilot control valve
- Pilot tester
- Water slug control valve
- Electrical water-level alarm
- Water drain valves
- Liquid level gauge
- Blind cover for pilot control mounting flange
- Immersion heaters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

(* Mandatory for 6th Edition)

VCS Series

Vertical Coalescer Separators for

EI 1581, 6th Edition, Category M, Type S



DATA

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.

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	mm
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-956-540	8	203	1 1/2	32	813	115 3/4	2940	10	254	20 3/4	527	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	40	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:

- All elements are mounted against knife edge seals.
- Nameplate to be stamped with EI 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: CM-28-5 = Rod Mount / CM-28-5SB = Screw Base