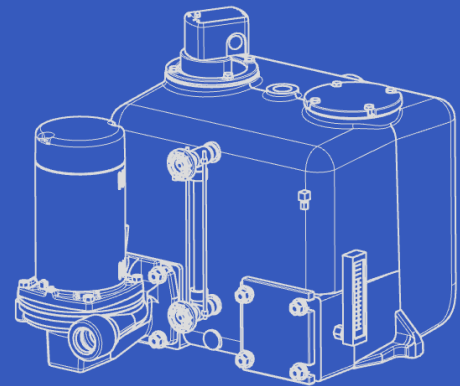
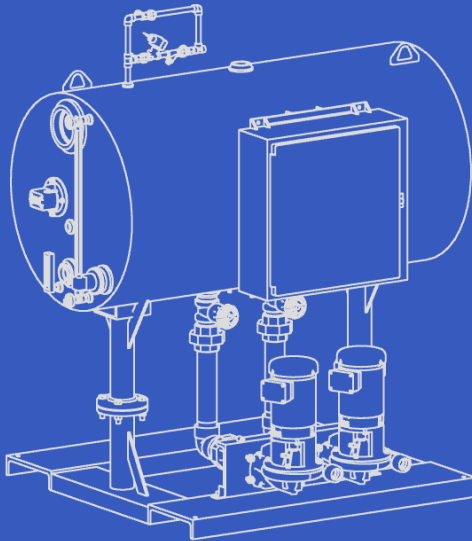
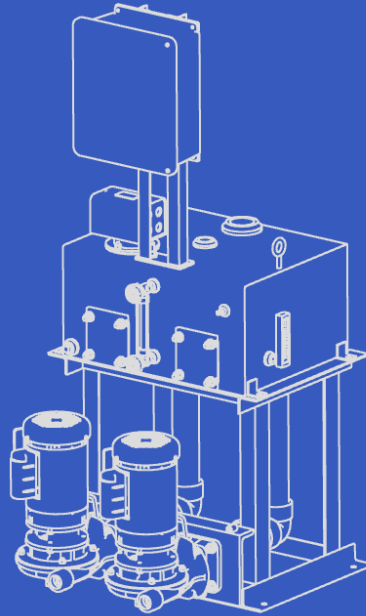
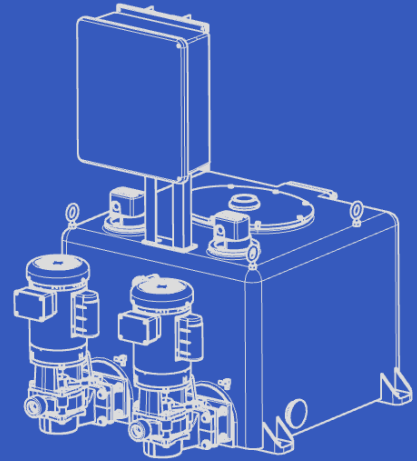
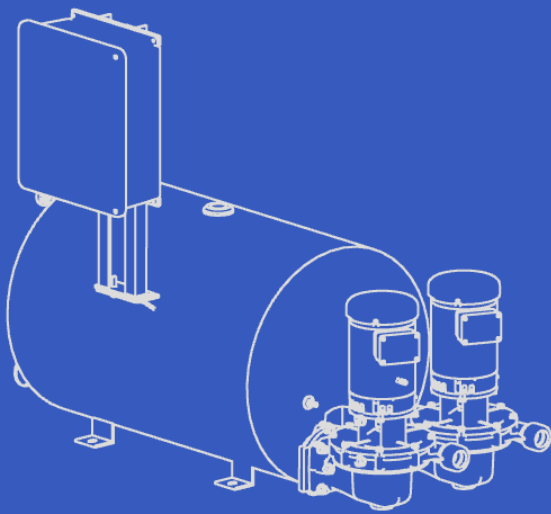


Skidmore®

A Swan Group Company



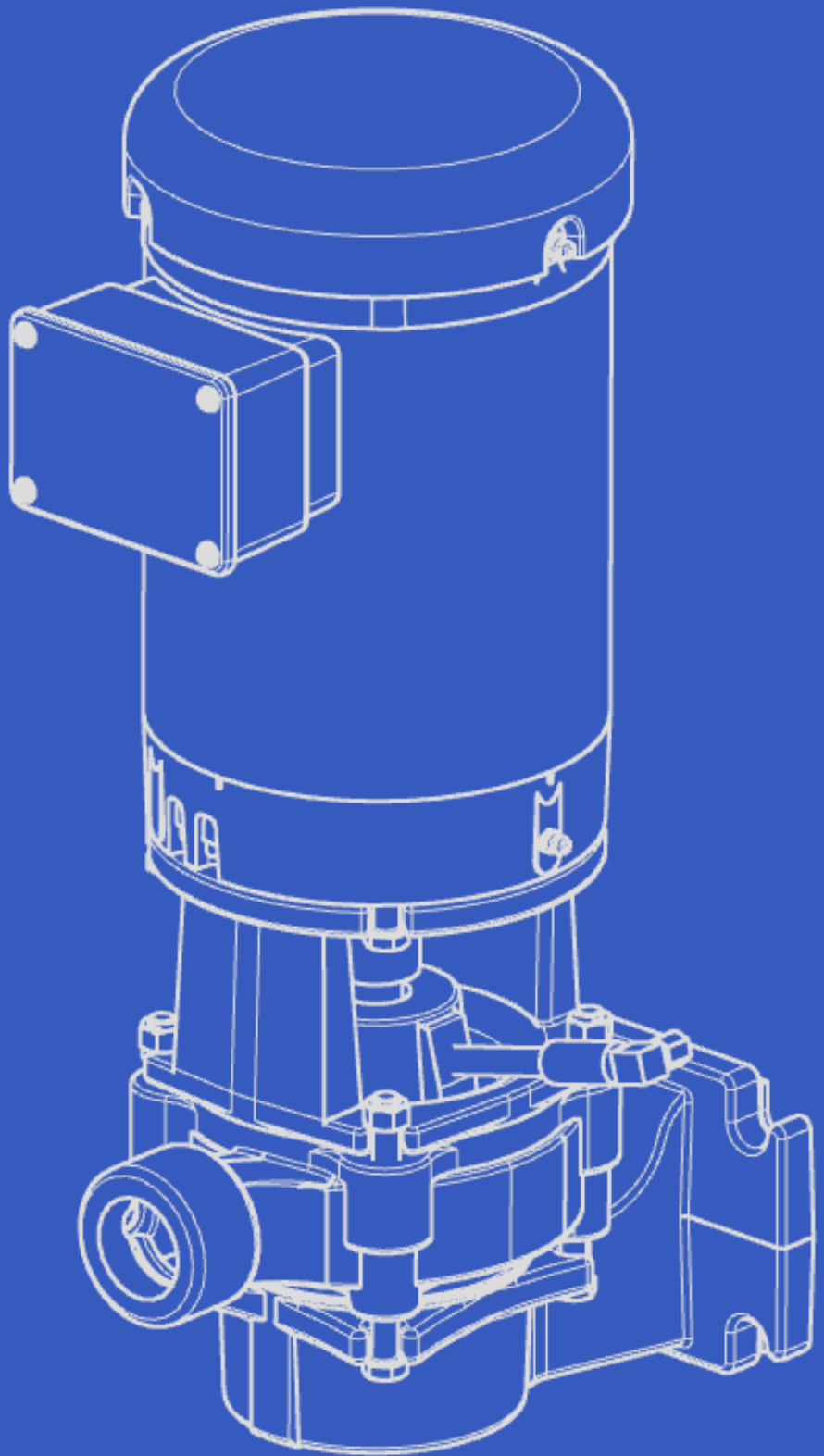
CONDENSATE, BOILER FEED
AND TRANSFER SYSTEMS

V-Series

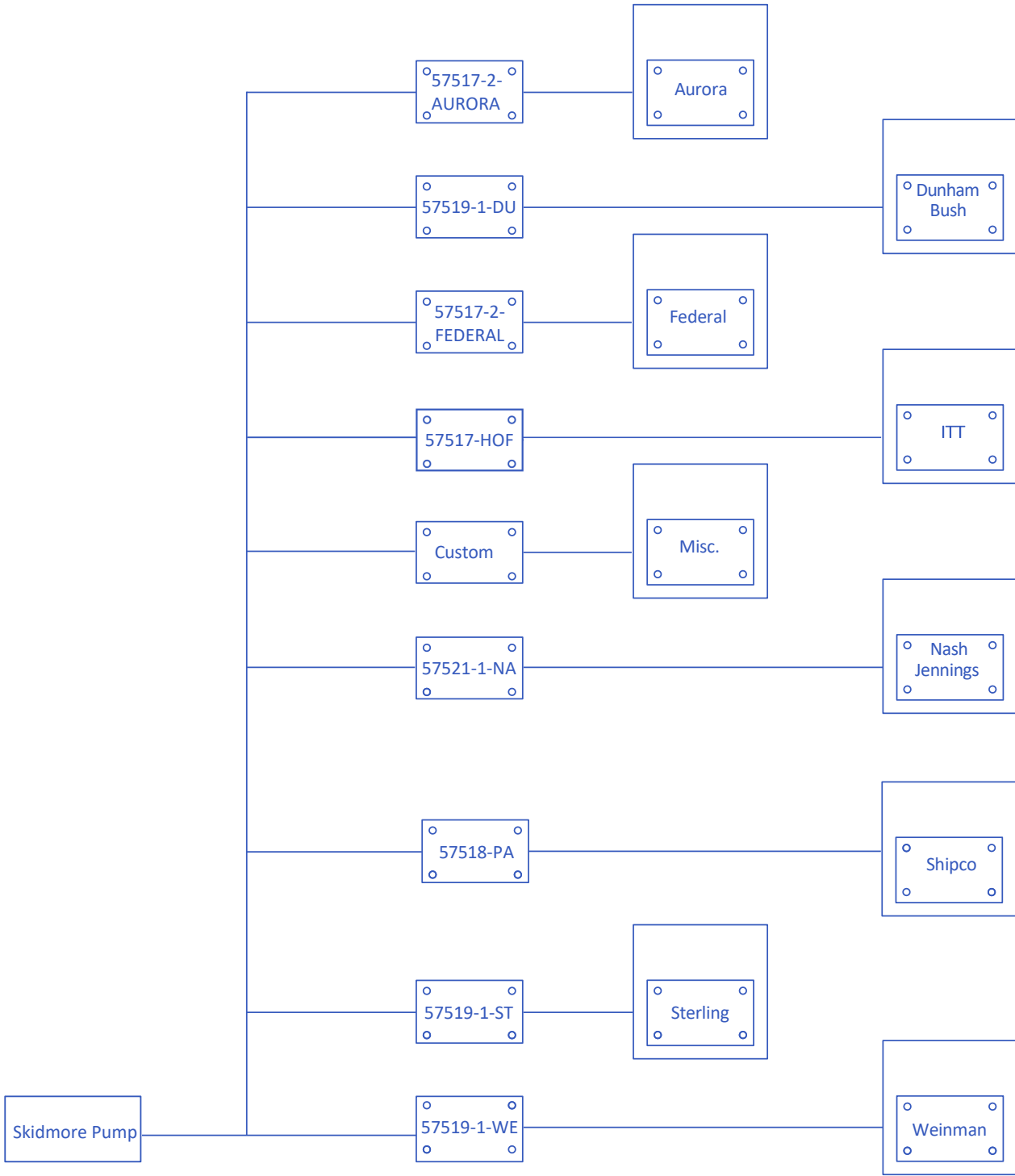
Complete Pump and Motor Assembly

V Series Features & Specifications

- Mechanical seals able to withstand temperatures up to 250°F
- Simple in-field hookup
- Easily customizable with special motors such as TEFC, explosion-proof, or wash-down
- Motors ranging from 1/3 HP to 10 HP are available in 115, 208, or 230 single phase or 208, 230, or 460 three phase. Speeds available in 1,750 RPM and 3,500 RPM
- Advanced bronze impeller and volute design make many of the pumps excellent for applications requiring less than 2ft. Net Positive Suction Head (NPSH)
- Durable cast iron standard construction with stainless steel construction available in the VPS line of pumps

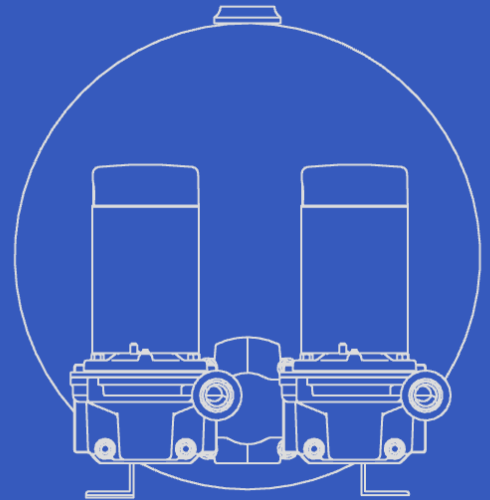


Interchangeability



V Series Units:

- Handles hot (210°F) or cold water.
 - Available as simplex or duplex for condensate return or boiler feed.
 - Low-profile options for low-headroom applications.
-



TYPICAL MODEL NUMBER

VCS - 1 0 0 0 - 1 .00

VCS	1	0	0	0	-	1	.00
Pump Line	Volute Size	Speed	Unused			Impeller Type	Impeller Trim
VCS		0 = 3450 RPM					
VJS		1 = 1750 RPM					
VES							
VNS							
VPS							

V-SERIES

V-Series Condensate Return

Capacity
1,000 to 100,000 sq. ft. EDR
Discharge Pressures
10-20 psi with 1,750 rpm units
10-75 psi with 3,450 rpm units

The V-Series condensate return quickly collects and returns condensate back to a boiler feed unit. The pump action is controlled by either a float switch (simplex) or a mechanical alternator (duplex) designed to energize the pump motor when liquid levels get too high. Various sizes of cast iron, carbon steel, and stainless steel receivers are available to meet just about any installation requirement.

ACCESSORIES AND OPTIONAL EQUIPMENT

Condensate Pumps -Standard Equipment

- Simplex units have opening blanked-off for the addition of a second pump at a later date.
- One float switch (simplex units)
- Mechanical alternator (duplex units -equalizes running time between the two pumps and provides emergency backup)
- Gauge glass and thermometer tappings
- Name-brand heavy-duty motors

Condensate Pumps -Optional Equipment

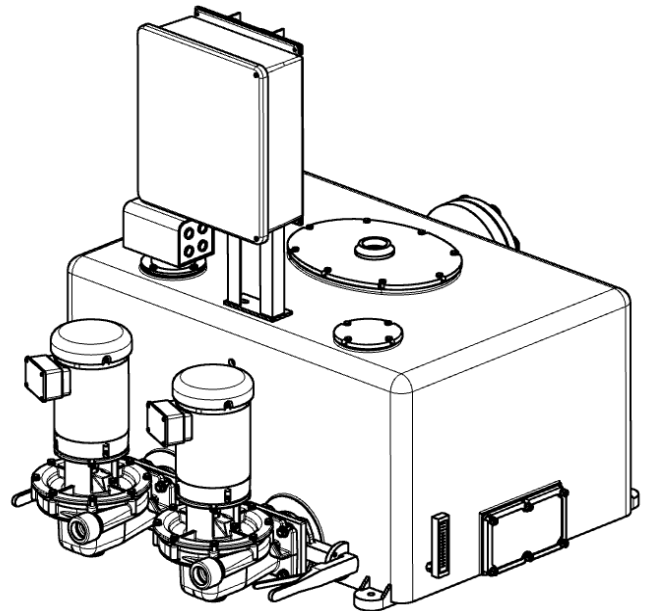
- Electrical control panel -factory mounted and wired
- Thermometer
- Two float switches (duplex units)
- Electric alternator - mounted on unit and factory-wired
- Suction isolation valves
- Inlet strainers -"Y" or basket type
- Gauge glass
- Stainless steel materials available
- Magnesium corrosion inhibitor
- Corrosion-resistant receiver linings (steel receivers)
- Discharge pressure gauges
- Discharge check valves
- Discharge gate valves
- Special motors -T.E.F.C., explosion-proof, wash-down duty
- Available in simplex, duplex, triplex, and quadruplex units
- Easily customizable with special motors such as TEFC, explosion-proof, or wash- down
- Steel and stainless steel receivers can be modified to fit just about any application.

TYPICAL APPLICATIONS

Condensate Pump Packages:

Skidmore® V-Series systems are complete, compact assemblies for returning water from a gravity steam condensate return system to a boiler feed system. These pumps will quickly and automatically lift condensate from extremely low to high return lines.

Cast iron, steel, and stainless steel receivers are available in capacities ranging from 15 to 110 gallons. Steel and stainless steel cylindrical receivers are available in 49 - 1000-gallon capacities



Cast Iron Receiver (Duplex Unit shown)

V-Series Boiler Feed

Capacity:

1,000 to 100,000 sq. ft. EDR

Discharge Pressures

10-20 psi with 1,750 rpm units

10-75 psi with 3,450 rpm units

The V-Series boiler feed is used to pump condensate and makeup water directly into the boiler(s). Pump action is controlled by a boiler-mounted level controller that senses boiler water level requirements. Each V-Series boiler feed pump comes equipped with a float-operated makeup valve to bring in makeup water. Various sizes of cast iron and carbon steel, and stainless steel receivers are available to meet just about any installation requirement.

ACCESSORIES AND OPTIONAL EQUIPMENT

Boiler Feed or Makeup Pumps-Standard Equipment

- Simplex units have opening blanked-off for the addition of a second pump at a later date
- Float-operated makeup valve
- Gauge glass and thermometer tappings
- Name-brand heavy-duty motors

Boiler Feed or Makeup Pumps - Optional Equipment

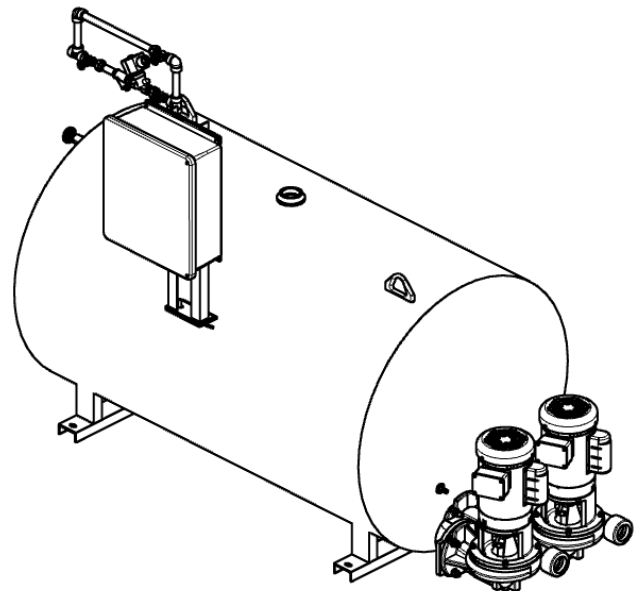
- Electrical control panel - factory mounted and wired
- Thermometer
- Makeup feeders - external type, or reverse acting float switch and solenoid valve type
- Magnesium corrosion inhibitor
- Corrosion-resistant receiver linings (steel receivers)
- Suction isolation valves
- Inlet strainers - "Y" or basket type
- Stainless steel materials available
- Gauge glass
- Three valve bypass and "Y" strainer assembly
- Feedwater pre-heaters
- Discharge pressure gauges
- Discharge check valves
- Discharge gate valves
- Low Water/ High Water Alarms
- Available in simplex, duplex, triplex, and quadruplex units
- Easily customizable with special motors such as TEFC, explosion-proof, or wash-down

TYPICAL APPLICATIONS

Boiler Feed Pump Packages:

Boiler feed pump systems pump and precisely control the condensate and make up water required by the boiler(s) in low-pressure steam applications. The fluid level in the boiler controls the pump action.

Heavy-duty, welded carbon and stainless steel receivers are available in rectangular or cylindrical configurations with capacities of 10 to 110 gallons and 49 to 1000, respectively. Consult your local representative for custom engineered receivers and rust-resistant linings.



Carbon Steel Receiver (Duplex Unit shown)

PUMP SELECTION CHART

CAPACITY SQ. FT. EDR	CAPACITY (GPM)	DISCH. PRESSURE (PSIG)	1750 RPM UNITS				3450 RPM				
			CATALOG NUMBER	MODEL NUMBER	MOTOR HP	DISCH. SIZE (IN)	CATALOG NUMBER	MODEL NUMBER	MOTOR HP	DISCH. SIZE (IN)	
1,000	1-1/2	10	VCS-11	VCS-1100-3.00	1/3	1-1/4					
		15	VCS-11-1/2	VCS-1100-2.00	1/3	1-1/4	VJS-11-1/2	VJS-1000-1.10	1/2	1-1/4	
		20	VCS-12	VCS-1100-1.00	1/3	1-1/4	VJS-12	VJS-1000-1.10	1/2	1-1/4	
		30					VCS-13	VCS-1000-3.04	3/4	1-1/4	
		40					VJS-13	VJS-1000-1.05	1/2	1-1/4	
		50					VCS-14	VCS-1000-3.00	1	1-1/4	
		60					VJS-14	VJS-1000-1.02	3/4	1-1/4	
2,000	3	10	VCS-21	VCS-1100-3.00	1/3	1-1/4					
		15	VCS-21-1/2	VCS-1100-2.00	1/3	1-1/4	VJS-21-1/2	VJS-1000-1.10	1/2	1-1/4	
		20	VCS-22	VCS-1100-1.00	1/3	1-1/4	VJS-22	VJS-1000-1.10	1/2	1-1/4	
		30					VCS-23	VCS-1000-3.04	3/4	1-1/4	
		40					VJS-23	VJS-1000-1.05	1/2	1-1/4	
		50					VCS-24	VCS-1000-3.00	1	1-1/4	
		60					VJS-24	VJS-1000-1.02	3/4	1-1/4	
4,000	6	10	VCS-41	VCS-1100-3.00	1/3	1-1/4					
		15	VCS-41-1/2	VCS-1100-2.00	1/3	1-1/4	VJS-41-1/2	VJS-1000-1.10	1/2	1-1/4	
		20	VCS-42	VCS-1100-1.00	1/2	1-1/4	VJS-42	VJS-1000-1.09	1/2	1-1/4	
		30					VCS-43	VCS-1000-3.04	3/4	1-1/4	
		40					VJS-43	VJS-1000-1.05	1/2	1-1/4	
		50					VCS-44	VCS-1000-3.00	1	1-1/4	
		60					VJS-44	VJS-1000-1.02	3/4	1-1/4	
6,000	9	10	VCS-61	VCS-1100-3.00	1/3	1-1/4					
		15	VCS-61-1/2	VCS-1100-2.00	1/3	1-1/4	VJS-61-1/2	VJS-1000-1.10	1/2	1-1/4	
		20	VCS-62	VCS-1100-1.00	1/2	1-1/4	VJS-62	VJS-1000-1.09	1/2	1-1/4	
		25	VES-62-1/2	VES-1100-1.05	3/4	1-1/2	VNS-62	VNS-1000-1.12**	1/2	1-1/4	
		30	VES-63	VES-1100-1.01	1	1-1/2	VCS-63	VCS-1000-3.04	3/4	1-1/4	
		40					VNS-63	VNS-1000-1.06**	3/4	1-1/4	
		50					VJS-63	VJS-1000-1.05	1/2	1-1/4	
8,000	12	10	VCS-81	VCS-1100-3.00	1/3	1-1/4					
		15	VCS-81-1/2	VCS-1100-2.00	1/3	1-1/4	VJS-81-1/2	VJS-1000-1.10	1/2	1-1/4	
		20	VCS-82	VCS-1100-1.00	1/2	1-1/4	VJS-82	VJS-1000-1.09	1/2	1-1/4	
		25	VES-82-1/2	VES-1100-1.05	3/4	1-1/2					
		30	VES-83	VES-1100-1.01	1	1-1/2	VCS-83	VCS-1000-3.04	3/4	1-1/4	
		40					VJS-83	VJS-1000-1.05	1/2	1-1/4	
		50					VCS-84	VCS-1000-3.00	1	1-1/4	

*Only 3-Phase motors available

*Models in BLUE designates 2 Ft. NPSH capability

**VPS stainless steel pumps may be substituted for any VNS model

NOTE: We may need to increase HP when using TEFC or Explosion Proof motors. Consult factory for HP.

PUMP SELECTION CHART (continued)

CAPACITY SQ. FT. EDR	CAPACITY (GPM)	DISCH. PRESSURE (PSIG)	1750 RPM UNITS				3450 RPM			
			CATALOG NUMBER	MODEL NUMBER	MOTOR HP	DISCH. SIZE (IN)	CATALOG NUMBER	MODEL NUMBER	MOTOR HP	DISCH. SIZE (IN)
10,000	15	10	VCS-101	VCS-1100-3.00	1/3	1-1/4				
		15	VCS-101-1/2	VCS-1100-2.00	1/2	1-1/4	VJS-101-1/2	VJS-1000-1.08	1/2	1-1/4
		20	VCS-102	VCS-1100-1.00	1/2	1-1/4	VJS-102	VJS-1000-1.08	1/2	1-1/4
		25	VES-102-1/2	VES-1100-1.05	3/4	1-1/2	VNS-102	VNS-1000-1.12**	1/2	1-1/4
		30	VES-103	VES-1100-1.01	1-1/2	1-1/2	VCS-103	VCS-1000-3.04	3/4	1-1/4
							VNS-103	VNS-1000-1.06**	3/4	1-1/4
							VJS-103	VJS-1000-1.05	3/4	1-1/4
							VCS-104	VCS-1000-3.00	1	1-1/4
		40					VNS-104	VNS-1000-1.00**	1-1/2	1-1/4
							VJS-104	VJS-1000-1.02	1	1-1/4
VCS-105	VCS-1000-2.03						1-1/2	1-1/4		
VJS-105	VJS-2000-1.00						1-1/2	1-1/2		
50					VCS-106	VCS-1000-2.00	2	1-1/4		
60										
75					VCS-107-1/2	VCS-1000-1.02	3	1-1/4		
15,000	22-1/2	10	VCS-151	VCS-2100-1.09	1/3	1-1/2				
		15	VCS-151-1/2	VCS-1100-1.02	1/2	1-1/4	VJS-151-1/2	VJS-1000-1.08	1/2	1-1/4
		20	VES-152	VES-1100-1.07	3/4	1-1/2	VJS-152	VJS-1000-1.07	1/2	1-1/4
		25	VES-152-1/2	VES-1100-1.05	1	1-1/2	VNS-152	VNS-1000-1.11**	1/2	1-1/4
		30	VES-153	VES-1100-1.01	1-1/2	1-1/2	VCS-153	VCS-1000-3.03	1	1-1/4
							VNS-153	VNS-1000-1.06**	1	1-1/4
							VJS-153	VJS-1000-1.05	3/4	1-1/4
							VCS-154	VCS-1000-3.00	1-1/2	1-1/4
		40					VNS-154	VNS-1000-1.00**	1-1/2	1-1/4
							VJS-154	VJS-1000-1.02	1	1-1/4
VCS-155	VCS-1000-2.03						2	1-1/4		
VJS-155	VJS-2000-1.00						1-1/2	1-1/2		
50					VCS-156	VCS-1000-2.00	2	1-1/4		
60										
75					VCS-157-1/2	VCS-1000-1.02	3	1-1/4		
20,000	30	10	VCS-201	VCS-2100-1.09	1/3	1-1/2				
		15	VCS-201-1/2	VCS-1100-1.01	1/2	1-1/4	VJS-201-1/2	VJS-1000-1.07	1/2	1-1/4
		20	VES-202	VES-1100-1.07	3/4	1-1/2	VJS-202	VJS-1000-1.06	3/4	1-1/4
		25	VES-202-1/2	VES-1100-1.05	1	1-1/2	VNS-202	VNS-1000-1.11**	3/4	1-1/4
		30	VES-203	VES-1100-1.01	1-1/2	1-1/2	VCS-203	VCS-1000-3.02	1-1/2	1-1/4
							VNS-203	VNS-1000-1.04**	1	1-1/4
							VJS-203	VJS-1000-1.02	1	1-1/4
							VCS-204	VCS-1000-3.00	1-1/2	1-1/4
		40					VNS-204	VNS-1000-1.00**	2	1-1/4
							VJS-204	VJS-2000-1.03	1-1/2	1-1/2
VCS-205	VCS-1000-2.03						2	1-1/4		
VJS-205	VJS-2000-1.00						1-1/2	1-1/2		
50					VCS-206	VCS-1000-2.00	3	1-1/4		
60										
75					VCS-207-1/2	VCS-1000-1.02	5	1-1/4		
25,000	37-1/2	10	VCS-251	VCS-2100-1.09	1/2	1-1/2				
		15	VES-251-1/2	VES-1100-1.09	3/4	1-1/2	VJS-251-1/2	VJS-1000-1.06	3/4	1-1/4
		20	VES-252	VES-1100-1.07	3/4	1-1/2	VJS-252	VJS-1000-1.06	3/4	1-1/4
		25	VES-252-1/2	VES-1100-1.05	1-1/2	1-1/2				
		30	VES-253	VES-1100-1.01	1-1/2	1-1/2	VCS-253	VCS-1000-3.02	1-1/2	1-1/4
							VJS-253	VJS-1000-1.01	1	1-1/4
							VCS-254	VCS-1000-2.07	2	1-1/4
							VJS-254	VJS-2000-1.02	1-1/2	1-1/2
40					VCS-255	VCS-2000-1.08	3	1-1/2		
50					VCS-256	VCS-1000-1.05	3	1-1/4		
60										
70					VCS-257-1/2	VCS-2000-1.01	5	1-1/2		

*Only 3-Phase motors available

*Models in BLUE designates 2 Ft. NPSH capability

**VPS stainless steel pumps may be substituted for any VNS model

NOTE: We may need to increase HP when using TEFC or Explosion Proof motors. Consult factory for HP.

PUMP SELECTION CHART (continued)

CAPACITY SQ. FT.	CAPACITY (GPM)	DISCH. PRESSURE	1750 RPM UNITS				3450 RPM				
			CATALOG NUMBER	MODEL NUMBER	MOTOR	DISCH.	CATALOG	MODEL NUMBER	MOTOR HP	DISCH.	
30,000	45	10	VCS-301	VCS-2100-1.09	1/2	1-1/2					
		15	VES-301-1/2	VES-1100-1.08	3/4	1-1/2	VJS-301-1/2	VJS-1000-1.03	1	1-1/4	
		20	VES-302	VES-1100-1.07	1	1-1/2	VJS-302	VJS-1000-1.02	1	1-1/4	
		25	VES-302-1/2	VES-1100-1.05	1-1/2	1-1/2	VNS-302	VNS-1000-1.10**	1	1-1/4	
		30	VES-303	VES-1100-1.01	1-1/2	1-1/2	VCS-303	VCS-1000-3.02	1-1/2	1-1/4	
							VNS-303	VNS-1000-1.02**	1-1/2	1-1/4	
							VJS-303	VJS-2000-1.05	1-1/2	1-1/2	
							VCS-304	VCS-1000-2.05	2	1-1/4	
							VNS-304	VNS-2000-1.09**	3	2	
					VJS-304	VJS-2000-1.02	2	1-1/2			
					VCS-305	VCS-2000-1.08	3	1-1/2			
					VNS-305	VNS-2000-1.04**	5	2			
					VCS-306	VCS-1000-1.05	3	1-1/4			
					VNS-306	VNS-2000-1.01**	5	2			
					VCS-307-1/2	VCS-2000-1.01	7-1/2	1-1/2			
40,000	60	10	VCS-401	VCS-2100-1.05	3/4	1-1/2					
		15	VCS-401-1/2	VCS-2100-1.02	1	1-1/2	VJS-401-1/2	VJS-2000-1.06	1-1/2	1-1/2	
		20	VES-402	VES-1100-1.06	1-1/2	1-1/2	VJS-402	VJS-2000-1.05	1-1/2	1-1/2	
		25	VES-402-1/2	VES-1100-1.04	1-1/2	1-1/2	VNS-402	VNS-2000-1.17**	1-1/2	2	
		30	VES-403	VES-1100-1.01	2	1-1/2	VCS-403	VCS-2000-2.01	2	1-1/2	
							VNS-403	VNS-2000-1.12**	3	2	
							VJS-403	VJS-2000-1.02	1-1/2	1-1/2	
							VCS-404	VCS-2000-1.12	3	1-1/2	
							VNS-404	VNS-2000-1.09**	3	2	
					VCS-405	VCS-2000-1.07	5	1-1/2			
					VNS-405	VNS-2000-1.04**	5	2			
					VCS-406	VCS-2000-1.03	5	1-1/2			
					VNS-406	VNS-2000-1.00**	5	2			
					VCS-407-1/2	VCS-2000-1.01	7-1/2	1-1/2			
50,000	75	10	VCS-501	VCS-3100-1.09	1	2					
		15	VCS-501-1/2	VCS-3100-1.03	1-1/2	2	VJS-501-1/2	VJS-2000-1.05	1-1/2	1-1/2	
		20	VES-502	VES-1100-1.05	1-1/2	1-1/2	VJS-502	VJS-2000-1.02	1-1/2	1-1/2	
		25	VES-502-1/2	VES-1100-1.03	2	1-1/2	VNS-502	VNS-2000-1.16**	2	2	
		30					VCS-503	VCS-2000-2.01	3	1-1/2	
							VNS-503	VNS-2000-1.11**	3	2	
							VJS-503	VJS-2000-1.01	2	1-1/2	
							VCS-504	VCS-2000-1.11	3	1-1/2	
							VNS-504	VNS-2000-1.08**	3	2	
					VCS-505	VCS-2000-1.07	5	1-1/2			
					VNS-505	VNS-2000-1.03**	5	2			
					VCS-506	VCS-2000-1.03	5	1-1/2			
					VCS-507-1/2	VCS-2000-1.00	7-1/2	1-1/2			
60,000	90	20					VNS-602	VNS-2000-1.15**	2	2	
		30					VNS-603	VNS-2000-1.11**	3	2	
		40					VNS-604	VNS-2000-1.06**	5	2	
		50					VNS-605	VNS-2000-1.03**	7-1/2	2	
65,000	97-1/2	10	VCS-651	VCS-3100-1.07	1-1/2	2					
		15	VCS-651-1/2	VCS-3100-1.01	1-1/2	2	VJS-651-1/2	VJS-2000-1.01	2	1-1/2	
		20	VES-652	VES-1100-1.02	2	1-1/2	VJS-652	VJS-2000-1.01	2	1-1/2	
		30					VCS-653	VCS-3000-1.18	3	2	
		40					VCS-654	VCS-3000-1.14	5	2	
		50					VCS-655	VCS-2000-1.06	5	1-1/2	
60					VCS-656	VCS-3000-1.06	7-1/2	2			
80,000	120	10	VCS-801	VCS-3100-1.05	1-1/2	2					
		15	VCS-801-1/2	VCS-3100-1.00	2	2					
		20					VCS-802	VCS-2000-2.00	3	1-1/2	
		30					VCS-803	VCS-3000-1.17	5	2	
		40					VCS-804	VCS-3000-1.13	5	2	
		50					VCS-805	VCS-3000-1.09	1-1/2	2	
60					VCS-806	VCS-3000-1.05	7-1/2	2			
100,000	150	10	VCS-1001	VCS-3100-1.01	1-1/2	2					
		15					VCS-1001-1/2	VCS-3000-1.23	2	2	
		20					VCS-1002	VCS-2000-1.10	5	1-1/2	
		30					VCS-1003	VCS-3000-1.15	5	2	
		40					VCS-1004	VCS-3000-1.11	5	2	
		50					VCS-1005	VCS-3000-1.07	7-1/2	2	
60					VCS-1006	VCS-3000-1.03	10	2			

*Only 3-Phase motors available

*Models in BLUE designates 2 Ft. NPSH capability

**VPS stainless steel pumps may be substituted for any VNS model

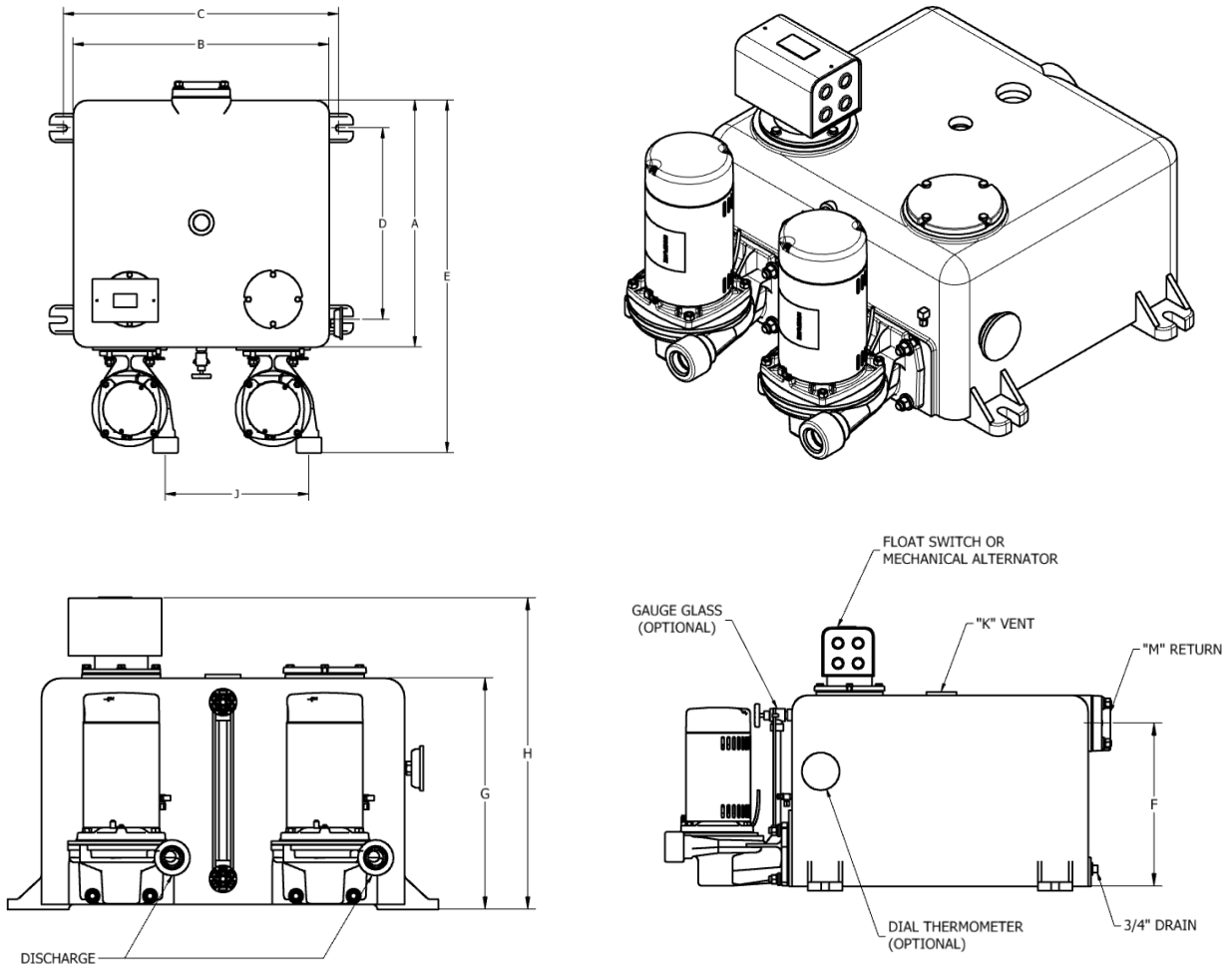
NOTE: We may need to increase HP when using TEFC or Explosion Proof motors. Consult factory for HP.

DIMENSION DATA

V SERIES PUMPS WITH RECTANGULAR CAST IRON

RECEIVERS Simplex or Duplex Condensate or Boiler Feed

Units



Rectangular Cast Iron Receivers											
APPROXIMATE DIMENSIONS (in)											
Receiver Size (GAL)	A	B	C	D	E	F	G	H	J	K	M
15	15	17-1/4	19-7/8	N/A	25-3/4	13-1/8	15-3/4	21-3/8	11	1	2
21	20-3/4	22-3/4	25-1/2	14-7/8	31-7/8	9-3/4	12-3/8	18-1/2	12	1-1/4	2
45	25-3/4	26-3/4	28-3/4	20	36-7/8	14	17	23	15	1-1/2	2-1/2
65	28-1/2	28-1/2	30-1/2	22-3/4	39-7/8	18-9/16	21-7/8	28-1/8	15	2	3
110	30	42	36-1/4	32	41	19-1/8	22-3/8	28-3/8	15	2	5

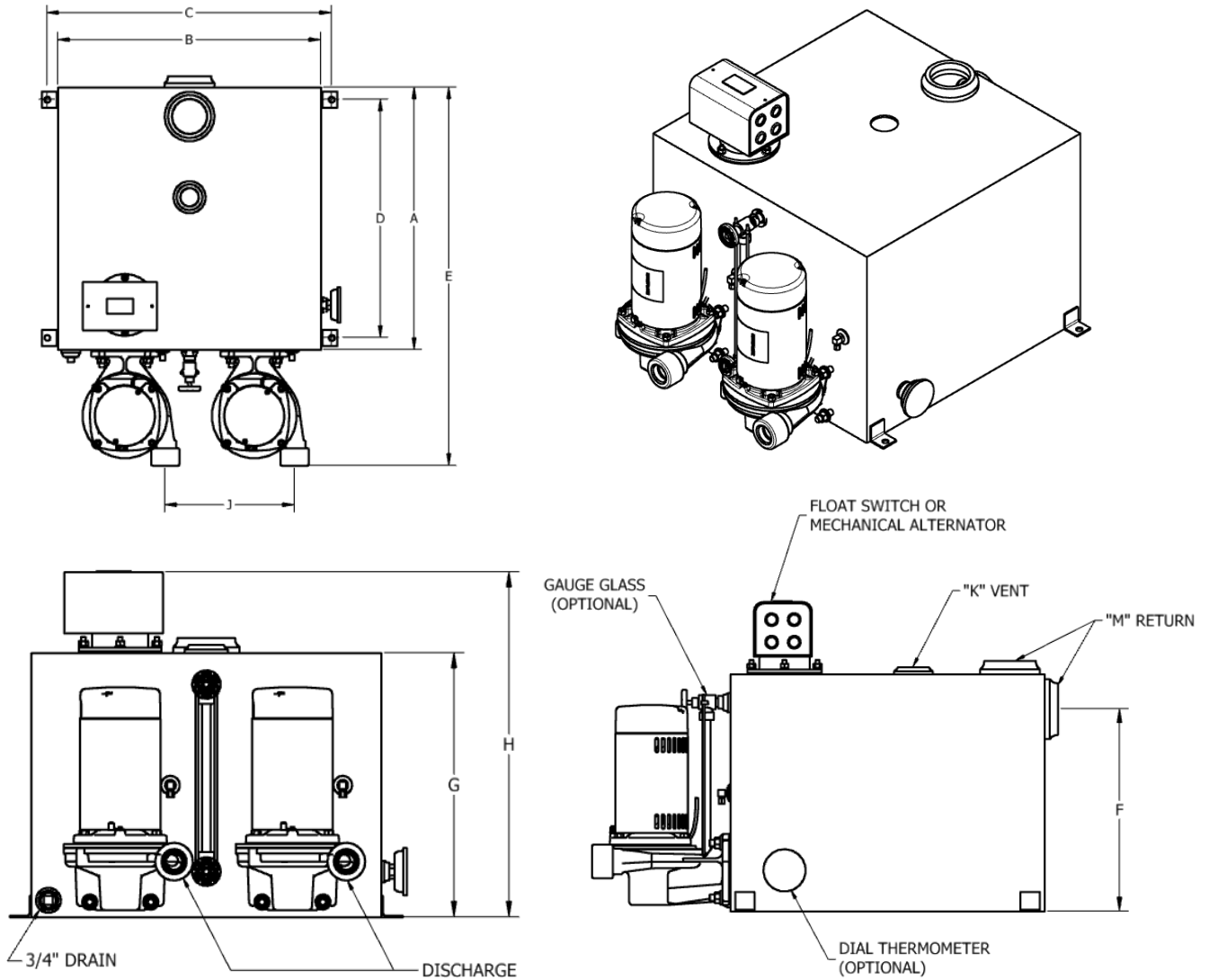
Duplex units shown with VJS Pumps

NOTE: For dimension "E" add 1 for VNS/VPs, 2-3/8 for VCS, or 3-1/4 for VES

DIMENSION DATA

V SERIES PUMPS WITH RECTANGULAR STEEL OR STAINLESS STEEL

RECEIVERS Simplex or Duplex Condensate or Boiler Feed Units



Rectangular Steel & Stainless Steel Receivers

APPROXIMATE DIMENSIONS (in)

Receiver Size (GAL)	A	B	C	D	E	F	G	H	J	K	M
21	18-3/8	24-3/8	26-3/8	16	29-1/8	9-13/16	12-3/8	18-1/8	12	1-1/4	2-1/2
45	24-3/8	24-3/8	26-3/8	22-1/8	35-1/8	15-11/16	18-3/8	24-1/8	12	1-1/2	3
65	24-3/8	24-3/8	26-3/8	22-1/8	35-1/8	21-11/16	24-3/8	30-1/8	12	2	3
110	30-1/2	43	45	25	41-1/4	16-9/16	20-1/2	26-3/16	22	2	4

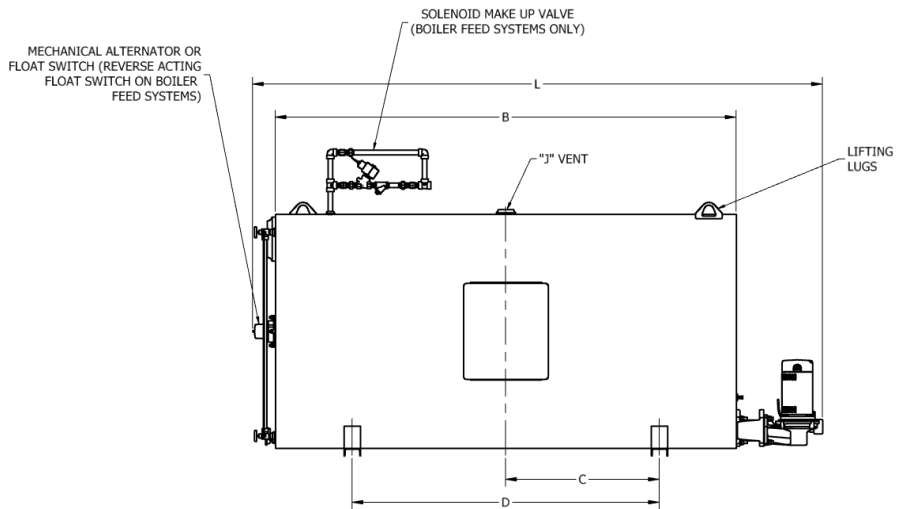
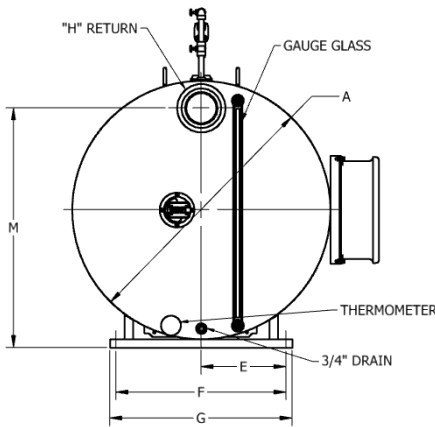
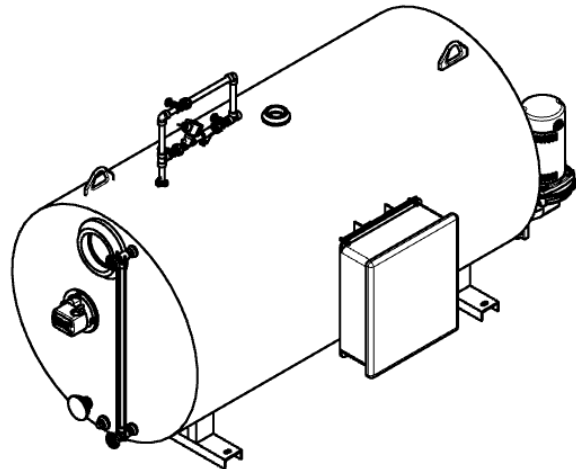
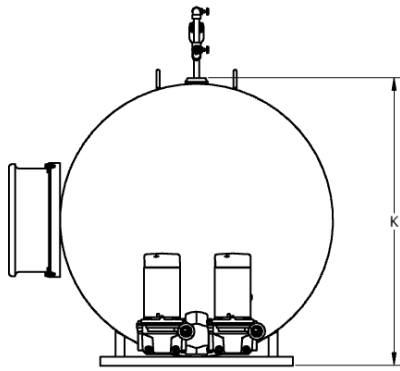
Duplex units shown with VJS Pumps

NOTE: For dimension "E" add 1 for VNS/VPS, 2-3/8 for VCS, or 3-1/4 for VES

DIMENSION DATA

V SERIES PUMPS WITH CYLINDRICAL STEEL OR STAINLESS STEEL RECEIVERS

Simplex or Duplex Condensate or Boiler Feed Units



Cylindrical Steel & Stainless Steel Receivers

APPROXIMATE DIMENSIONS (in)

Receiver Size (GAL)	A	B	C	D	E	F	G	H	J	K	L	M
49	22	30	10-1/2	21	7-1/2	15	17	2-1/2	1-1/4	23	49-1/2	20
71	24	36	10-1/2	21	7-1/2	15	17	3	1-1/2	25-1/2	55-1/2	21-9/16
117	24	60	15	30	7-1/2	15	17	4	2	25-1/2	79-1/2	21-9/16
209	32	60	24	48	14	28	30	5	2	34-1/2	79-1/2	29
260	36	60	24	48	14	28	30	5	2	38-1/2	79-1/2	33-1/8
370	36	84	28	56	14	28	30	5	2	38-1/2	103-1/2	33-1/8
500	42	84	28	56	14	28	30	5	2	44-3/4	103-1/2	39-1/2
650	42	108	28	56	14	28	30	5	2	44-3/4	127-1/2	39-1/2
750	48	96	28	56	19	38	40	5	2	50-3/4	115-1/2	45-1/2
1000	48	132	48	96	19	38	40	5	2	50-3/4	151-1/2	45-1/2

Duplex units shown with VJS Pumps

NOTE: For dimension "L" add 1 for VNS/VPS, 2-3/8 for VCS, or 3-1/4 for VES

TYPICAL ENGINEERING SPECIFICATIONS

1. Duplex Condensate Pump with Cast Iron, Steel or Stainless Steel Receiver

- 1.1 Furnish and install according to plans and manufacturer's instructions the quantity of condensate pump units as shown on the drawings. Each unit shall consist of one (1) condensate receiver, (2) condensate pumps, and (1) mechanical alternator.
- 1.2 A. The condensate pumps shall be centrifugal design; permanently aligned and driven by vertical close-coupled drip-proof motors with drip covers. The motor and rotating parts shall be removable without disturbing the suction or discharge piping. Pumps shall be constructed with cast iron bodies, bronze fitted, with enclosed bronze centrifugal impeller, stainless steel shaft, driplless mechanical seals suitable for 250°F, mechanical seal face flushing line with vent to receiver. Capacities and electrical characteristics shall be as scheduled on the drawings.
- 1.2 B. The condensate pumps shall be centrifugal design; permanently aligned and driven by vertical close-coupled drip-proof motors with drip covers. The motor and rotating parts shall be removable without disturbing the suction or discharge piping. Pumps shall be constructed with stainless steel bodies, an enclosed bronze centrifugal impeller, a stainless steel shaft, driplless mechanical seals suitable for 250°F, a mechanical seal face flushing line with a vent to the receiver. Capacities and electrical characteristics shall be as scheduled on the drawings.
- 1.3 The receiver shall be manufactured of rust resisting steel or cast iron and shall have a capacity of not less than that shown on the drawings. Receiver shall be equipped with water level gauge glass, and one (1) mechanical alternator. Factory provided and wired Nema I UL electrical control panel with: (1) disconnect, (1) fuse block or circuit breaker per pump, (1) magnetic starter with overload per pump, (1) HOA selector switch per pump, (1) control circuit transformer on all 3-phase.

Skidmore® Model No.	Pump Capacity (GPM)	Pump Discharge Pressure (psig)	Motor Power (HP)	Motor Speed (RPM)	Motor Voltage (V)	Motor Phase	Motor Frequency (HZ)	Tank Capacity	Tank Material

2. Duplex Boiler Feed with Cast Iron or Steel Receiver

- 2.1 Furnish and install according to plans and manufacturer's instructions the quantity of boiler feed units as shown on the drawings. Each unit shall consist of one (1) steel boiler feed receiver, two (2) boiler feed pumps, one (1) water make-up assembly, electrical controls, and accessories.
- 2.2 A. The boiler feed pumps shall be centrifugal design, permanently aligned, and driven by a vertical close-coupled drip-proof motor with a drip cover. The motor and rotating parts shall be removable without disturbing the suction or discharge piping. Pumps shall be constructed with cast iron bodies, bronze fitted, with enclosed bronze centrifugal impeller, stainless steel shaft, driplless mechanical seals suitable for 250°F, mechanical seal face flushing line with vent to receiver. Capacities and electrical characteristics shall be as scheduled on the drawings.
- 2.2 B. The boiler feed pumps shall be centrifugal design, permanently aligned, and driven by a vertical close-coupled drip-proof motor with a drip cover. The motor and rotating parts shall be removable without disturbing the suction or discharge piping. Pumps shall be constructed with stainless steel bodies, an enclosed bronze centrifugal impeller, a stainless steel shaft, driplless mechanical seals suitable for 250°F, and a mechanical seal face flushing line with a vent to the receiver. Capacities and electrical characteristics shall be as scheduled on the drawings.
- 2.3 The receiver shall be manufactured of rust resistant steel and shall have a capacity of not less than that shown on drawings. Receiver shall be equipped with water level gauge glass, two (2) isolation valves between pump and receiver, dial thermometer, and Skidmore® makeup water valve with capacity equal to one (1) boiler feed pump. Factory provided and wired Nema I UL electrical control panel with: (1) disconnect, (1) fuse block or circuit breaker per pump, (1) magnetic starter with overload per pump, (1) HOA selector switch per pump, (1) control circuit transformer on all 3-phase.

Skidmore® Model No.	Pump Capacity (GPM)	Pump Discharge Pressure (psig)	Motor Power (HP)	Motor Speed (RPM)	Motor Voltage (V)	Motor Phase	Motor Frequency (HZ)	Tank Capacity	Tank Material

Makeup Water Supply Pressure (psig)	Number of Boilers Serving	Number Standby



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Skidmore has been building the highest-quality condensate return pumps, boiler feed systems, vacuum systems, and accessories since 1921. From custom designs to compact solutions—our skilled representatives are armed with the knowledge and expertise to assist you in the selection, design, installation and service of your pump system. They are backed by a highly skilled team of application specialists who will provide solutions to custom engineering questions or special building capabilities and are committed to developing the most energy efficient pump to fulfill your needs. Every pump that leaves our factory has been carefully crafted and tested against the strictest standards, ensuring you receive the highest-quality product possible.

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