

# CONDENSATOR

# 2.0

Barnes & Jones<sup>®</sup>  
INC.

## Series V Condensate System

The Condensator 2.0 Series V (vertical) is the fail-safe condensate recovery system for nearly all industrial and institutional applications. Because the Series V is self-actuating - it requires no electricity to operate - it is well suited to remote locations where it is impractical to supply electricity.

Series V Condensator 2.0's are also ideal where using electricity can be hazardous. This includes wet environments like sumps/pits, bottle washers, or laundry equipment, and explosive environments such as refineries, chemical plants or distillation towers.

Most important, the Series V allows maximum installation versatility to accommodate nearly any condensate handling requirement. The Series V is available in three different configurations: 1) Without receiver; 2) With receiver; And 3) as a turnkey, skid mounted package. Special models are also available for unique requirements, as well as duplex units for even greater capacities.

## Specifications

<b>Sizes:</b>	1", 1 1/2", 2", and 3"
<b>Connections:</b>	NPT
<b>Maximum Pressure:</b>	150 PSIG
<b>Maximum Temperature:</b>	450° F
<b>Vessel:</b>	Steel - ASME Certified
<b>Mechanism:</b>	Stainless Steel

## Applications

- Condensate temps greater than 185°F
- Remote locations with no electricity
- Wet/corrosive environments
- Upgrading from vacuum pumps
- Draining sump pits
- Returning condensate to boilers
- Explosive atmospheres
- Retrofit for existing receivers
- Closed Systems (no atmospheric vent)
- When you are constantly repairing burned out centrifugal pumps

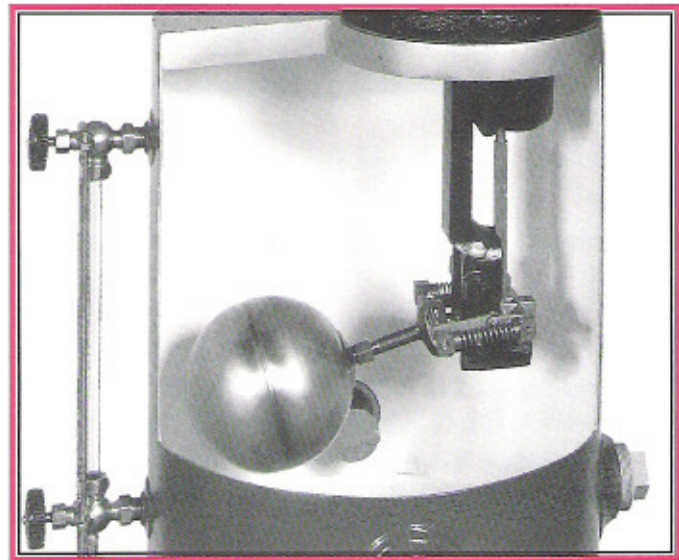


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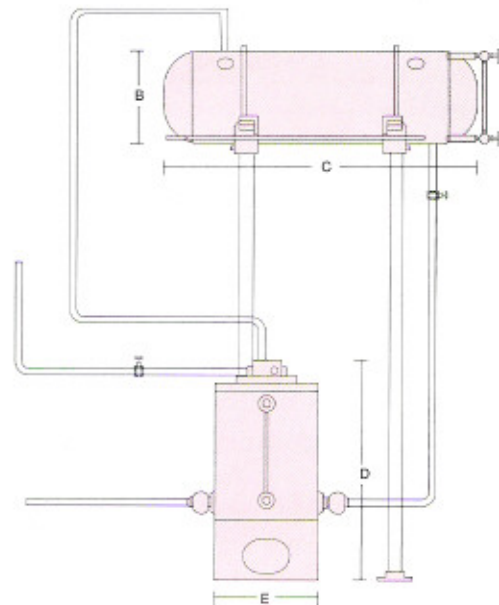
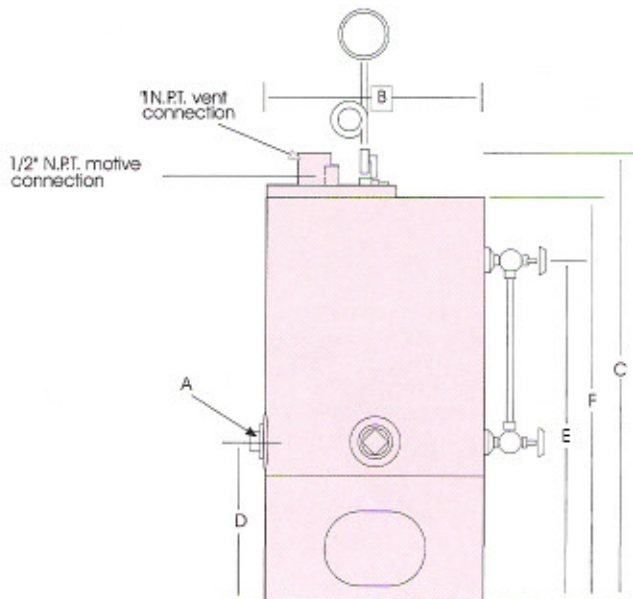
Barnes & Jones' Condensator 2.0 Series V offers complete design flexibility. Pump units may be located remotely from a single receiver or multiple receivers in your installation. Motive force can be system pressure or auxiliary compressed air.

This makes the Condensator 2.0 Series V ideal for both the upgrade and retrofit to existing systems and the top performer for reliability in new installations.



Model	*DIMENSIONS (in inches) Without Receiver						Estimated Shipping Weight (Lbs.)
	Pipe Size A	B	C	D	E	F	
V-1610	1	16	32.4	11.8	24.5	29	210
V-1615	1.5	16	32.4	11.8	24.5	29	225
V-1620	2	16	32.4	11.8	24.5	29	250
V-1630	3	16	32.4	11.8	24.5	29	295

\*Dimensions are subject to change at manufacturer's discretion.



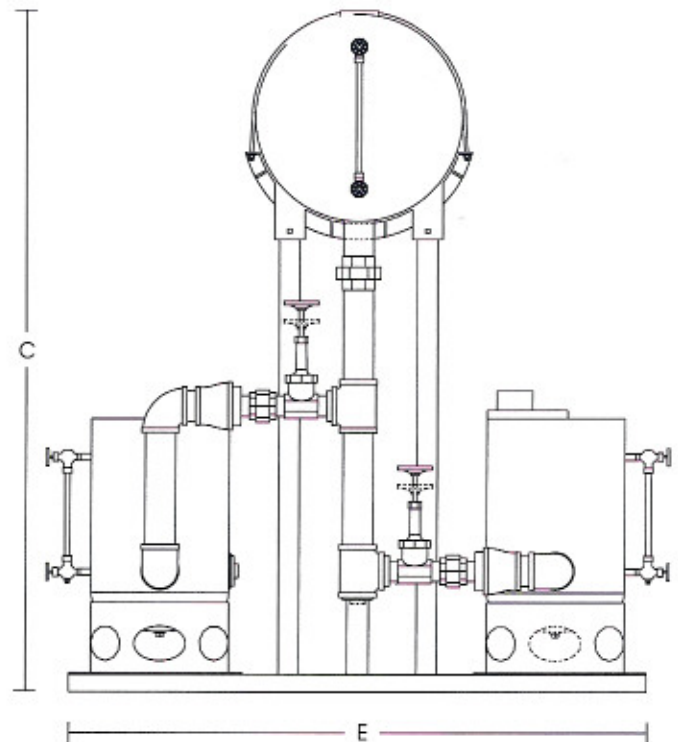
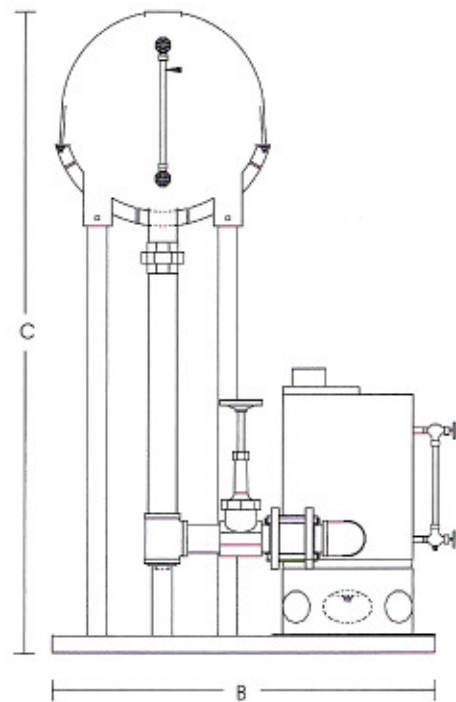
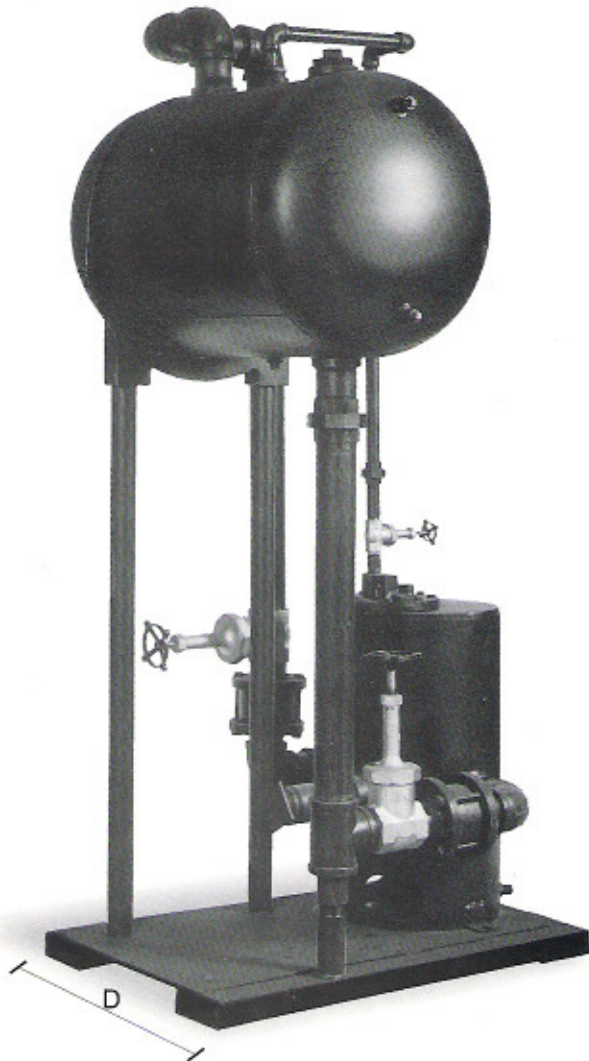
Model	*DIMENSIONS (in inches) with Receiver					Estimated Shipping Weight (Lbs.)
	Pipe Size A	B	C	D	E	
V-1610-R	1	14	37	32.4	16	400
V-1615-R	1.5	14	37	32.4	16	420
V-1620-R	2	14	37	32.4	16	465
V-1630-R	3	18	47	32.4	16	510

\*Dimensions are subject to change at manufacturer's discretion.



## Series V Skid Mounted Systems

For maximum ease of installation, the Condensator 2.0 Series V is available in single and duplex skid mounted packages, complete with receiver, framework and piping. Installation requires only connections to motive pressure, condensate return and discharge lines.



Model	*DIMENSIONS (in inches)					Simplex Weight (Lbs.)	Duplex Weight (Lbs.)
	PipeSize A	B	C	D	E		
V-1610-SM	1	47	79	26	67	610	870
V-1615-SM	1.5	47	79	26	67	625	890
V-1620-SM	2	47	79	26	67	650	925
V-1630-SM	3	47	79	26	67	665	1,300

\*Dimensions are subject to change at manufacturer's discretion.

# Quick Reference Sizing Chart

# Series V

Fill Head (in Feet)	Total Static Back Pressure (PSIG)	V-1610		V-1615		V-1620		V-1630	
		GPM	LB/HR	GPM	LB/HR	GPM	LB/HR	GPM	LB/HR
2	10	5.8	2,770	10.2	4,880	16.4	7,850	24.7	11,850
	20	5.8	2,760	10.1	4,850	16.2	7,780	24.4	11,690
	30	5.7	2,730	9.9	4,740	15.6	7,500	23.1	11,070
	40	5.5	2,660	9.3	4,460	14.3	6,840	20.1	9,670
3	10	6.4	3,060	12.6	6,050	17.6	8,440	28.3	13,600
	20	6.4	3,060	12.5	6,010	17.4	8,360	27.9	13,400
	30	6.3	3,020	12.2	5,840	16.7	8,030	26.2	12,580
	40	6.1	2,930	11.3	5,430	15.2	7,280	22.5	10,810
4	10	6.9	3,300	13.4	6,430	18.5	8,890	29.2	14,030
	20	6.9	3,290	13.3	6,380	18.3	8,890	28.8	13,820
	30	6.8	3,250	12.9	6,190	17.6	8,440	27.0	12,950
	40	6.5	3,140	11.9	5,730	15.9	7,610	23.1	11,090
5	10	7.3	3,500	14.0	6,730	19.3	9,260	29.9	14,370
	20	7.3	3,490	13.9	6,680	19.1	9,160	29.5	14,140
	30	7.2	3,440	13.5	6,480	18.3	8,770	27.6	13,240
	40	6.9	3,320	12.4	5,970	16.4	7,870	23.5	11,290
Skid Mount Model V	10	5.8	2,770	10.2	4,880	16.4	7,850	24.7	11,850
	20	5.8	2,760	10.1	4,850	16.2	7,780	24.4	11,690
	30	5.7	2,730	9.9	4,740	15.6	7,500	23.1	11,070
	40	5.5	2,660	9.3	4,460	14.3	6,840	20.1	9,670
<b>Check Valve and Pipe Size</b>		1 Inch		1.5 Inch		2 Inch		3 Inch	
<b>Recommended Receiver Capacities</b>		22.5 Gals		22.5 Gals.		22.5 Gals.		69.0 Gals.	

- Steam consumption is approximately 3 lbs./1000lbs. of liquid pumped.
- Variance in inlet and discharge pipe diameters can affect the actual capacity rating.
- Fill head is the actual distance between the top of pump tank and bottom of receiving chamber.
- Total static back pressure is the maximum height the fluid is pumped, plus the discharge line pressure.
- Motive pressure = Back pressure + 20 PSIG (1.4 bar).
- Approximately 1 cubic foot of condensate is discharged each cycle.
- Multiple units can be installed to handle capacities greater than indicated in the chart above.
- For installations requiring a stand-by pump, additional units can be installed.
- Consult your B&J representative or factory for application verification.
- Air consumption is approximately 15 cubic feet (0.04 cubic meters) per cycle.

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