

CONDENSATOR

2.0

Series H Condensate System

Barnes & Jones[®]
INC.

Designed to provide years of maintenance free operation, for institutional and industrial applications, the Condensator 2.0 Model H is externally powered and has single tank capacities from 3.9 GPM or 1,887 lbs./hr. up to 186.9 GPM or 89,712 lbs./hr.

Applications

- Condensate temps greater than 185°F
- Hospital/Institutional equipment such as coils, heaters, steam absorption chillers, and evaporators
- Upgrading from vacuum pumps
- Returning condensate to boilers
- Retrofit for existing receivers
- Closed Systems (no atmospheric vent)

Specifications

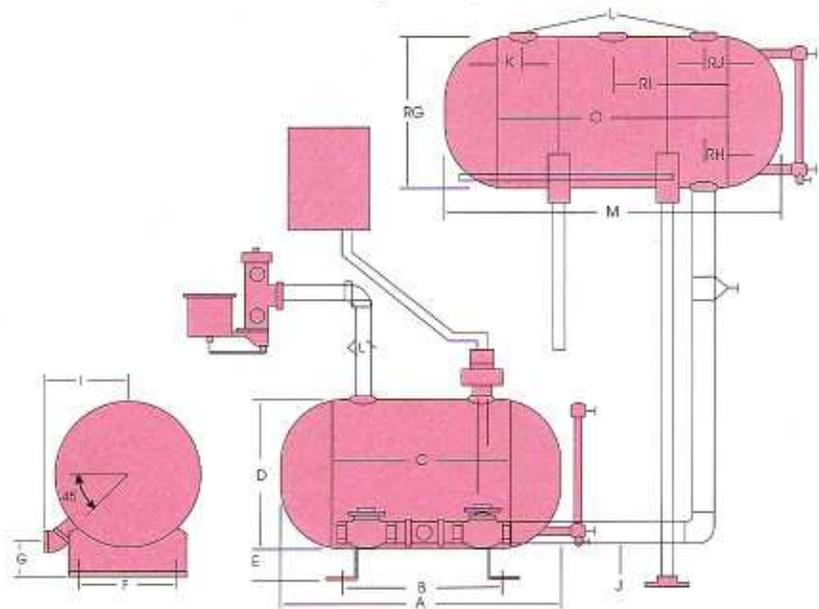
Vessel: Steel (ASME Cert)

Mechanism: 3 way valve of ductile iron with stainless push rod and either stainless valves and seats or composition disc and bronze seat.

Maximum Temperature: 450 F (243° C)

Maximum Pressure: 150 PSIG Steam

Sizes: 1", 1¼", 1½", 2", 2½", 3", 4", 6"



Model	Dimensions (in inches)																	Estimated Shipping Weight (Lbs.)		
	A	B	C	D	E	F	G	RG*	H	RH*	I	RI*	J	RJ*	K	L	M	O	*	
H-5	25	12	18	10	4	5	3.81	10	3.5	3	6	9	1	3	2	2	26	19	120	185
H-10	37	22	28	14	4	9	4.63	14	4	4	7.75	14	1.25	4	4	2	37	28	200	315
H-20	35	18	24	18	4	11	4.81	18	4	4	9.5	12	1.5	4	4	2	35	24	245	415
H-40	47	30	36	18	4	11	5.13	18	4	4	10	18	2	4	4	3	47	36	255	470
H-50	40	20	26	24	4	15	5.5	24	4	4	12.81	13	2.5	4	4	3	40	26	360	585
H-65	44	24	30	24	4	15	5	24	4	4	13.25	15	3	4	4	3	44	30	370	615
H-110	56	36	42	24	8.6	15	4.5	24	4	4	16.13	21	4	4	4	4 Flgd	56	42	495	795
H-150	66	42	48	30	10.5	21	7.25	30	4	5	18.5	24	6	5	5	6 Flgd	66	48	700	1215
H-200	60	30	36	42	9	25	6.12	30	4	5	23.88	52.5	6	5	5	6 Flgd	123	105	1100	1915

* Specification applies to Series H models with receiver

Condensator 2.0 Series H

Quick Reference Sizing Chart

Fill Head (in Feet)	Total Static Back Pressure (PSIG)	H-5		H-10		H-20		H-40		H-50	
		GPM	LB/HR	GPM	LB/HR	GPM	LB/HR	GPM	LB/HR	GPM	LB/HR
0.5	10	4.3	2,044	5.9	2,816	10.9	5,246	14.2	6,797	22.2	10,675
	20	4.1	1,966	5.6	2,708	10.5	5,044	13.6	6,536	21.4	10,265
	30	4.0	1,907	5.5	2,627	10.2	4,893	13.2	6,340	20.7	9,957
	40	3.9	1,887	5.4	2,600	10.1	4,843	13.1	6,274	20.5	9,854
1	10	4.7	2,246	6.4	3,096	11.8	5,641	15.4	7,388	24.4	11,731
	20	4.5	2,160	6.2	2,976	11.3	5,424	14.8	7,104	23.5	11,280
	30	4.4	2,096	6.0	2,887	11.0	5,261	14.4	6,891	22.8	10,942
	40	4.3	2,074	6.0	2,857	10.8	5,207	14.2	6,820	22.6	10,829
1.5	10	5.1	2,449	7.0	3,374	12.8	6,149	16.6	7,979	26.6	12,787
	20	4.9	2,354	6.8	3,244	12.3	5,912	16.0	7,672	25.6	12,295
	30	4.8	2,284	6.6	3,147	11.9	5,735	15.5	7,442	24.8	11,926
	40	4.7	2,260	6.5	3,114	11.8	5,676	15.3	7,365	24.6	11,803
2	10	5.5	2,651	7.6	3,652	13.7	6,600	17.7	8,496	28.8	13,843
	20	5.3	2,549	7.3	3,512	13.2	6,346	17.0	8,170	27.7	13,310
	30	5.2	2,472	7.1	3,406	12.8	6,156	16.5	7,925	26.9	12,911
	40	5.1	2,447	7.0	3,371	12.7	6,092	16.3	7,843	26.6	12,778
3	10	6.7	3,212	9.2	4,395	16.6	7,954	21.9	10,491	34.9	16,776
	20	6.4	3,069	8.8	4,226	15.9	7,648	21.0	10,088	33.6	16,130
	30	6.2	2,995	8.5	4,099	15.5	7,418	20.4	9,785	32.6	15,646
	40	6.2	2,965	8.5	4,057	15.3	7,342	20.2	9,684	32.3	15,485
4	10	7.5	3,617	10.3	4,395	18.5	8,856	23.2	11,156	39.3	18,887
	20	7.2	3,478	9.9	4,226	17.7	8,516	22.3	10,727	37.8	18,161
	30	7.0	3,373	9.6	4,099	17.2	8,260	21.7	10,405	36.7	17,616
	40	7.0	3,338	9.5	4,057	17.0	8,175	21.5	10,298	36.3	17,434
5	10	8.3	3,999	11.5	5,509	20.4	9,815	25.6	12,264	43.7	20,999
	20	8.0	3,845	11.0	5,297	19.7	9,438	24.6	11,793	42.1	20,191
	30	7.8	3,729	10.7	5,138	19.1	9,155	23.8	11,439	40.8	19,585
	40	7.7	3,691	10.6	5,085	18.9	9,060	23.6	11,321	40.4	19,384
Skid Mount Model H	10	6.3	3,010	8.8	4,209	16.3	7,841	21.9	10,491	32.7	15,720
	20	6.0	2,894	8.4	4,047	15.7	7,539	21.0	10,088	31.5	15,115
	30	5.8	2,806	8.2	3,926	15.2	7,313	20.4	9,785	30.5	14,662
	40	5.8	2,779	8.1	3,885	15.1	7,238	20.2	9,684	30.2	14,511
Check Valve and Pipe Size		1 Inch		1.25 Inch		1.5 Inch		2 Inch		2.5 Inch	
Capacity Pumped per Cycle		7.5 Gals.		11.3 Gals.		20.7 Gals.		27.7 Gals.		41.0 Gals.	
Recommended Receiver Capacities		7.5 Gals		22.5 Gals.		34.0 Gals.		47.0 Gals.		69.0 Gals.	

- Above based on motive pressure being 20 PSIG higher than total static back pressure.
- For unvented systems, multiply actual capacity by 1.09.
- For compressed air as motive force, multiply actual capacity by 1.5 (for vented systems only).

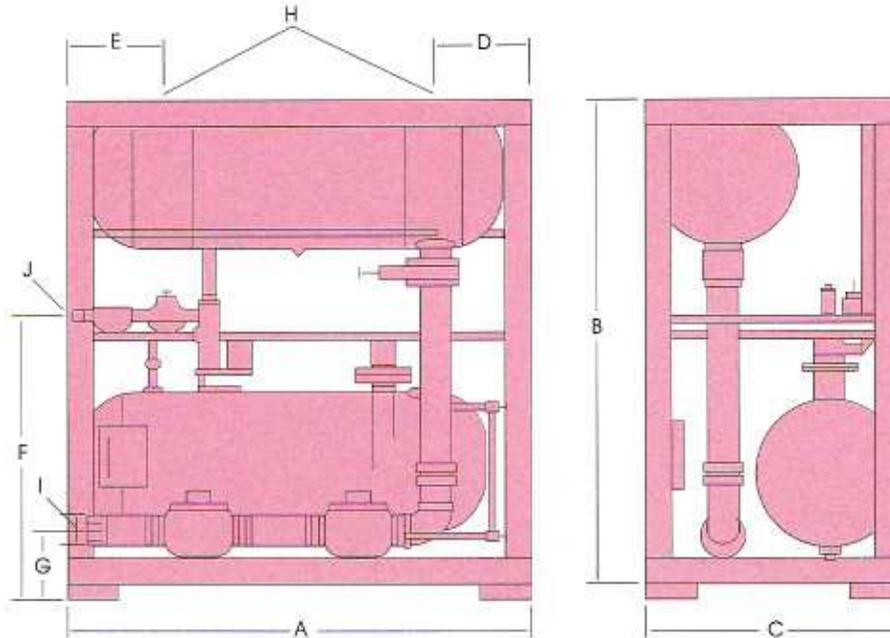
Quick Reference Sizing Chart

Fill Head (in Feet)	Total Static Back Pressure (PSIG)	H-65		H-110		H-150		H-200	
		GPM	LB/HR	GPM	LB/HR	GPM	LB/HR	GPM	LB/HR
0.5	10	28.6	13,719	36.0	17,262	61.9	29,720	97.0	46,581
	20	27.5	13,191	34.6	16,598	59.5	28,577	93.3	44,790
	30	26.7	12,796	33.5	16,100	57.7	27,719	90.5	43,446
	40	26.4	12,664	33.2	15,934	57.2	27,434	89.6	42,998
1	10	31.4	15,076	39.5	18,970	76.4	36,691	119.8	57,508
	20	30.2	14,496	38.0	18,240	73.5	35,280	115.2	55,296
	30	29.3	14,061	36.9	17,693	71.3	34,222	111.7	53,637
	40	29.0	13,916	36.5	17,510	70.6	33,869	110.6	53,084
1.5	10	34.2	16,433	41.9	20,108	81.0	38,893	127.0	60,958
	20	32.9	15,801	40.3	19,334	77.9	37,397	122.1	58,614
	30	31.9	15,327	39.1	18,754	75.6	36,275	118.4	56,855
	40	31.6	15,169	38.7	18,561	74.8	35,901	117.2	56,269
2	10	37.1	17,789	46.6	22,384	89.4	42,929	140.2	67,284
	20	35.6	17,105	44.8	21,523	86.0	41,278	134.8	64,696
	30	34.6	16,592	43.5	20,878	83.4	40,039	130.7	62,755
	40	34.2	16,421	43.0	20,662	82.6	39,626	129.4	62,108
3	10	44.9	21,558	56.5	27,127	104.0	49,900	162.9	78,211
	20	43.2	20,729	54.3	26,083	100.0	47,981	156.7	75,203
	30	41.9	20,107	52.7	25,301	97.0	46,541	152.0	72,946
	40	41.5	19,900	52.2	25,040	96.0	46,062	150.4	72,194
4	10	50.6	24,272	63.6	30,541	119.2	57,238	186.9	89,712
	20	48.6	23,339	61.2	29,366	114.7	55,037	179.7	86,262
	30	47.2	22,368	59.3	28,485	111.2	53,386	174.3	83,674
	40	46.7	22,405	58.7	28,192	110.1	52,835	172.5	82,811
5	10	56.2	26,986	70.7	33,956	119.2	57,238	186.9	89,712
	20	54.1	25,948	68.0	32,650	114.7	55,037	179.7	86,262
	30	52.4	25,169	66.0	31,670	111.2	53,386	174.3	83,674
	40	51.9	24,910	65.3	31,344	110.1	52,835	172.5	82,811
Skid Mount Model H	10	42.1	20,202	53.0	25,419	89.4	42,929	140.2	67,284
	20	40.5	19,425	50.9	24,442	86.0	41,278	134.8	64,696
	30	39.3	18,842	49.4	23,708	83.4	40,039	130.7	62,755
	40	38.8	18,648	48.9	23,464	82.6	39,626	129.4	62,108
Check Valve and Pipe Size		3 Inch		4 Inch		6 Inch		6 Inch	
Capacity Pumped per Cycle		53.7 Gals.		67.6 Gals.		115.5 Gals.		180.0 Gals.	
Recommended Receiver Capacities		76 Gals		98.0 Gals.		182.0 Gals.		340.0 Gals.	

- Total static back pressure is the maximum height the fluid is pumped, plus the discharge line pressure.
- Fill head is the distance between the top of the pumping chamber and the bottom of the receiving chamber.
- Consult your Barnes & Jones representative or factory for application verification.

The Condensator 2.0 Series H is available as a turn-key, skid mounted package, complete with receiver, pump mechanism, frame, piping, and wiring. All that is required upon delivery is a final hook-up to

your plant mechanical system. On all Series H Models, the 3-way valve that controls the operating cycle can be mounted remotely from the unit to facilitate convenient control and observation.



Model	*Dimensions (in inches)										Estimated Shipping Weight (Lbs.)
	A	B	C	D	E	F	G	H	I	J	
H-5-FP	36	51	22	11.75	10.25	29	6.5	2	1	0.75	400
H-10-FP	48	60	26	15.75	12.25	34.5	7.5	2	1.25	0.75	540
H-20-FP	45.5	67.5	31.6	15.25	14.25	38.75	7.5	2	1.5	1	680
H-40-FP	55	76.6	32	15.5	11.7	39	7.9	3	2	1.5	800
H-50-FP	58.6	78.6	42.5	17.6	23	45	8	3	2.5	1.5	1,000
H-65-FP	58.6	79.6	42.5	17.6	19	45	8	3	3	2	1,165
H-110-FP	73.5	82	43.4	20	19	45	7.25	4 Flgd.	4	2	1,600
H-150-FP	108	91	57	21	49	56	8	6 Flgd.	6	2	2,500
H-200-FP	138	111.5	62	21.5	21.5	65	9.75	6 Flgd.	6	2	3,000

* Dimensions are subject to change at the manufacturer's discretion

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