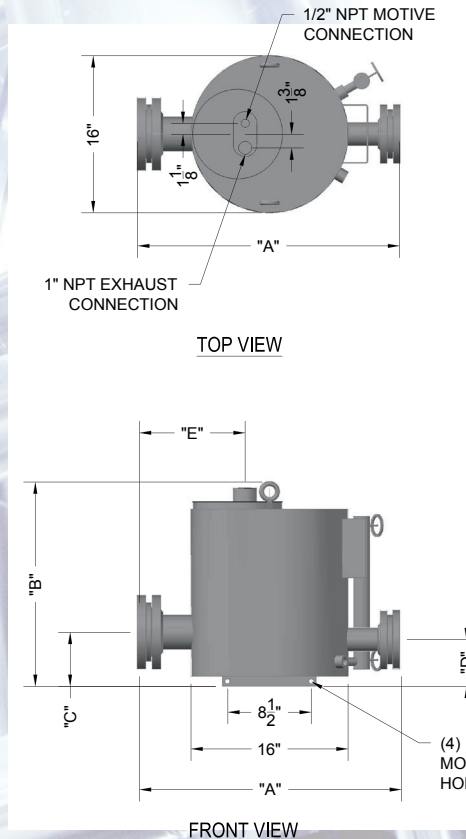




POP-HC High Capacity STEAM FIRED CONDENSATE PUMP 1.5", 2", 3" x 2"



Model	POP-HC High Capacity
Pump Body	ASME Carbon Steel
Inlet Connection	ASME Carbon Steel
Outlet Connection	ASME Carbon Steel
Top Mech Mount Plate	Carbon Steel
Check Valves	316 Stainless Steel
PMO Pressure Max Operating	150 PSIG
TMO Temperature Max Operating	450°F

ASME Code Section VIII Stamped and Constructed

FEATURES MADE IN USA

- "High Capacity" Design for High Capacity and space saving Installations
- Engineered with the unique "Single Compression Spring" design which extends the pump life many cycles over any competitor.
- ASME Code Section VIII Stamped Carbon Steel Body, extra heavy carbon steel inlet/outlet and connections eliminates internal condensate corrosion
- Sight glass with internal check valves standard
- All Stainless Steel internal Mechanism parts and check valves for long life and ultimate corrosion resistance
- 100% Steam Tested before shipment eliminates troublesome startups
- Operates using steam, air and other gases as the motive power
- Totally non electric and can be used in NEMA 4,7,9 and 4X locations

SAMPLE SPECIFICATIONS

The POP-HC Non-Electric pressure operated pump shall be capable of operating with a maximum motive pressure of 150 psig steam, air or other gas supply. The pump body shall be ASME Code Section VIII constructed and stamped 150 psig @ 450°F steel. The internal pump mechanism shall be of the single compression spring design with the mechanism assembly constructed of stainless steel. The motive and steam valves shall be stainless steel hardened to Rockwell 40C. Pump shall be furnished complete with stainless steel wafer type check valves and shall be steam tested with certification papers before shipment. 316 Stainless Steel Complete Pump Available

DIMENSIONS --- INCHES

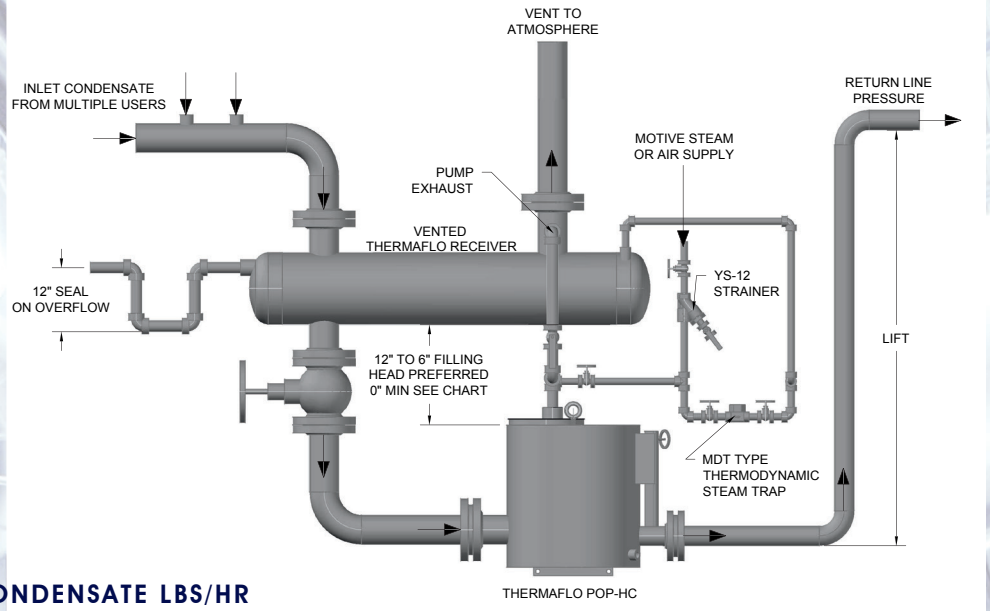
SIZE	A	B	C	D	E	DRY WT / FLOODED WT (LBS)
1.5" X 1.5"	26.5	28.9	5.5	4.8	15.8	189 / 307
2" X 2"	26.5	28.9	5.5	4.8	15.8	190 / 308
3" X 2"	26.5	28.9	5.5	4.8	15.8	191 / 309

Cover	SA516 Grade 70 Carbon Steel- 1.25" Thick Steel
Body	A105 Carbon Steel
Cover Studs and Buts	B7 Carbon Steel
Bottom Plate	SA516 heavy Carbon Steel
Inlet Nozzle and Flange	A105 Seamless Carbon Steel
Outlet Nozzle and Flange	A105 Seamless Carbon Steel
Inlet Steam Valve	Hardened Stainless Steel 40 RC
Vent Valve	Hardened Stainless Steel 40 RC
Mechanism Yoke	Stainless Steel
Ball Float	Stainless Steel
Internal Compression Spring	Inconel x 750
Other Internal Mechanism Parts	Stainless Steel
Check Valves	316 Stainless Steel
Inlet and Outlet Mating Flanges	SA105 Carbon Steel

POP-HC HIGH CAPACITY STEAM FIRED CONDENSATE PUMP

TYPICAL OPEN LOOP VENTED RECEIVER

The open loop POP-HC hookup utilizes condensate from several users into a vented receiver, as shown, that is vented to atmosphere. This equalizes the pressure from the various condensate sources. Any flash steam generated is vented to atmosphere. However, the POP can be hooked up in a "closed loop" piping arrangement for draining single steam users. Refer to the Thermaflo POPHC Series hookup manual.



CAPACITIES STEAM MOTIVE CONDENSATE LBS/HR

MOTIVE PRESSURE PSIG	TOTAL BACK PRESSURE PSIG	1.5" X 1.5" 12" FILL HEAD	2" X 2" 12" FILL HEAD	3" X 2" 12" FILL HEAD
10	5	2719	5755	7128
10	2	3986	10019	9560
25	15	4129	7458	8303
25	10	5397	9662	9996
25	5	5544	11497	10880
50	40	2732	5082	6055
50	25	5399	10098	10867
50	10	6816	11774	12883
75	60	2806	5399	5927
75	40	5424	8791	10336
75	15	7484	11606	13130
100	80	4171	6125	6811
100	60	5544	8303	9082
100	40	6641	11286	12176
100	25	7146	11962	12945
125	115	2930	4858	5491
125	10	4843	6217	6917
125	80	5953	8224	8936
125	60	7028	10006	10811
125	40	7305	10510	11999
125	25	7690	12314	13545
150	100	4269	6072	7247
150	80	5614	7511	9214
150	60	7379	9200	11048
150	40	8259	10798	12395
150	25	12487	13325	14296

USING THE SIZING CHART

This sizing chart determines the size of the POP-HC Pressure Operated Pump when the motive steam/air, back pressure and lbs/hr condensate load are known. The motive pressure is selected on the left hand column. The second column represents the total back pressure the pump is discharging against. Select the lbs/hr that matches your application and the POP-LP pump size.

Example shown: 100 psig motive pressure, 40 psig total back pressure, 12176 LBS/HR required, 3"x2" POP-HC selected.

For Sizing Example

Note: When using air as a motive force multiply the capacities 1.20.

CAPACITY CORRECTIONS FACTORS FOR ALTERNATE FILL HEADS

PUMP INLET SIZE	FILLING HEAD			
	0"	6"	12"	18"
1.5"	.45	.85	1.00	1.10
2"	.45	.85	1.00	1.10
3"	.45	.85	1.00	1.10

ACCESSORIES

- Brass Gauge Glass with internal check valves and isolation valves
- Reflex type Gauge Glass
- Insulation Cover
- Cycle Counter for monitoring the amount of liquid pumped
- Cycle Counter with Digital Output

OPERATING CHARACTERISTICS

- Pump Cycle per Discharge
- Average Steam Consumption – 3LBS of steam per 1,000 LBS of liquid