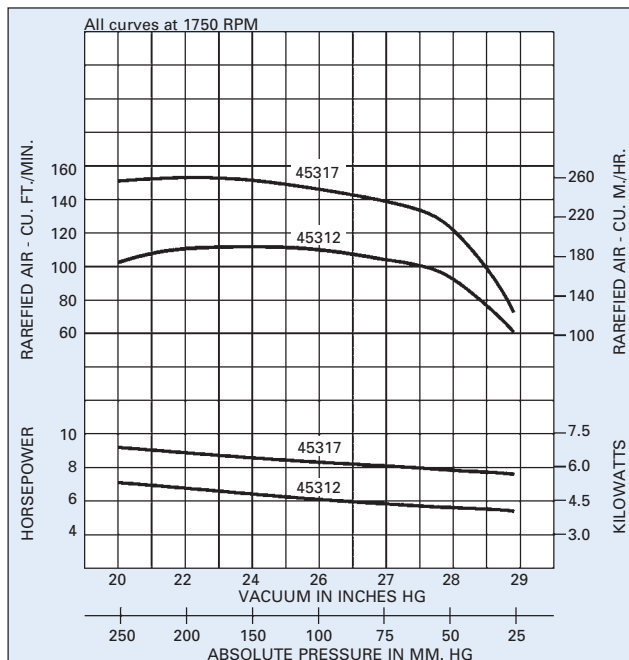


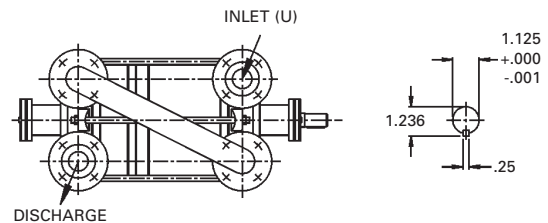
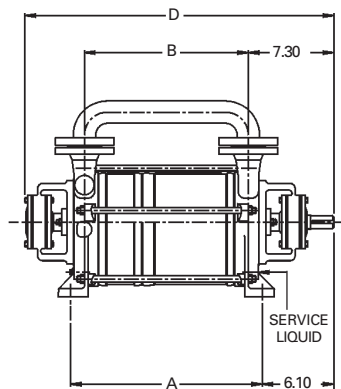
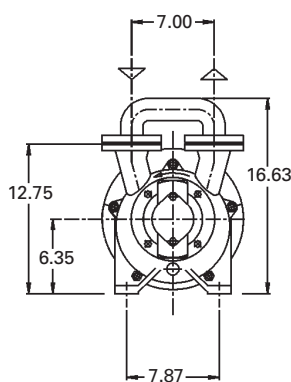


Dimensions (inches)

Pump Model	A	B	C	D
45312	13.33	10.97		23.27
45317	16.28	13.92		26.22

For connection sizes/ratings and motor sizes refer to engineering data table on reverse.

For baseplate mounting, please obtain factory certified dimensions.



Capacity Table

Pump Model - LPH 45312

Speed (RPM)	20" Hg 252 Torr		22.5" Hg 188 Torr		25" Hg 125 Torr		27.5" Hg 61.5 Torr		28" Hg 49 Torr		28.7" Hg 31 Torr		28.9" Hg 25 Torr	
	acfm	HP	acfm	HP	acfm	HP	acfm	HP	acfm	HP	acfm	HP	acfm	HP
1750	102	7.1	110	6.7	112	6.2	102	5.7	95	5.6	70	5.5	61	5.4
1450	83	5.2	88	5.0	93	4.6	86	4.2	80	4.2	60	4.2	53	4.2
1150	57	3.8	61	3.5	66	3.4	68	3.0	64	2.8	48	2.7	42	2.7

Pump Model - LPH 45317

1750	150	9.2	155	8.8	150	8.4	136	8.0	125	7.8	90	7.7	73	7.6
1450	102	6.3	109	6.2	114	6.0	110	5.4	105	5.0	76	5.0	60	5.0
1150	74	4.6	80	4.6	87	4.4	82	3.7	78	3.6	58	3.4	48	3.4

Pump Model

This data represents average values for pumps in standard materials. Capacity in actual cubic feet per minute at 68°F (20°C) using 60°F (16°C) water as a service liquid. Vacuum in inches Hg. Barometric pressure at sea level 29.92" Hg abs. (760 Torr). All performance data per HEI standards; subject to SIHI standard tolerances.

All data subject to change without notice.

ENGINEERING DATA

PUMP MODEL	45312	45317
Gas Conn. Size/Rating (U)	1½"/150 RF	1½"/150 RF
Service Liq. Line Size/Rating (U _B)	½"/NPT	½"/NPT
Cont. Drain Size/Rating (U _{se})	N/A	N/A
1 Motor (@ 1750 rpm) HP	7.5	10
Bare Pump Wt. (lb)	170	190
Direct Dr. Basemount (lbs.)	397	489
5 Min. V-Belt Sheave Dia.	6.3"	6.3"
Separator Model - XBA	1340	1340
Separator Size - Recirc. (Gal.)	10	10
2/3 Norm. Max. Gas Temp. (°F)	200	200
3 Max. Service Liq. Temp. (°F)	180	180
4 Sound Level @ 27.6" HgV (dBA)	66	66
Moment of Inertia W _r ² (lb. ft ²)	1.56	2.26
Casing Max. Working Pressure (psi)	30	30
Pneumatic Test Pressure (psig)	15	15

- For operation from 16 to 22.5" Hg vac., use motor with 1.15 SF.
- Max. gas temperature with saturated gases.
- Higher temperatures possible on request.
- At 3 ft., 1750 RPM w/o motor (not certified).
- Special pump bearings required for V-Belt applications.

SERVICE LIQUID RATES (USGPM)

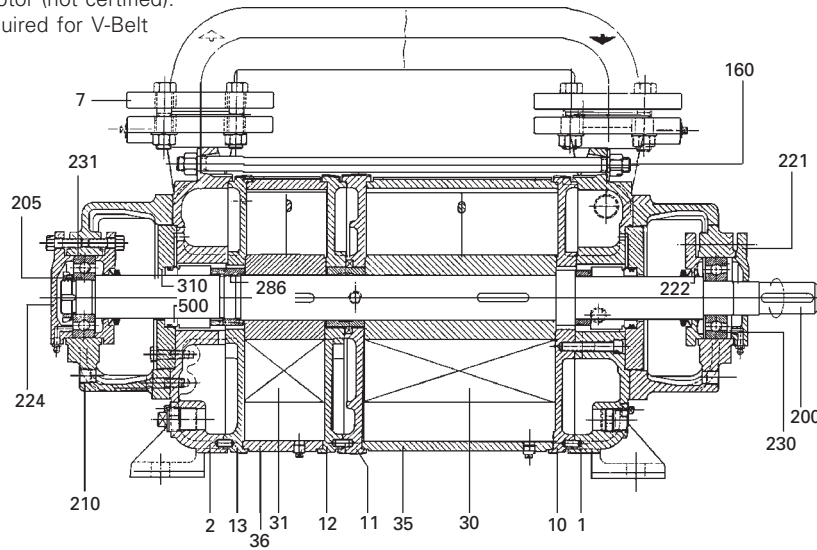
PUMP MODEL - LPH 45312															
Pump Speed	20" Hg 252 Torr			25" Hg 252 Torr			28" Hg 49 Torr			28.7" Hg 31 Torr			28.9" Hg 25 Torr		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
1750	3.2	1.7	1.2	3.4	1.6	1.1	3.5	1.6	1.0	3.5	1.6	1.0	3.5	1.5	1.0
1450		1.4	0.9		1.4	0.9		1.3	0.8		1.3	0.8		1.3	0.8
1150		1.1	0.7		1.2	0.7		1.0	0.6		1.0	0.6		1.0	0.6

PUMP MODEL - LPH 45317															
Pump Speed	20" Hg 252 Torr			25" Hg 252 Torr			28" Hg 49 Torr			28.7" Hg 31 Torr			28.9" Hg 25 Torr		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
1750	3.3	1.9	1.4	3.8	2.0	1.4	4.0	2.0	1.3	4.1	2.0	1.3	4.1	2.0	1.3
1450		1.6	1.1		1.7	1.1		1.6	1.0		1.6	1.0		1.6	1.0
1150		1.1	0.7		1.2	0.7		1.3	0.8		1.5	0.9		1.5	0.9

PUMP MODEL															

Column 'A' is the flow in USGPM required - once through.
 Column 'B' is the make-up flow required when make-up water is 5°C (9°F) cooler than service water.
 Column 'C' is the make-up flow when make-up water is 10°C (18°F) cooler than service water.

SECTIONAL



Standard rotation 'AB' (clockwise) viewed from driven end. 'AL' (counter clockwise) upon request.

PARTS LIST

1. Suction Cover	13. Intermediate	200. Shaft	230. Bearing
2. Discharge Cover	30. Impeller	205. Bearing Nut	231. Bearing
7. Bypass Manifold	31. Impeller	210. Bearing Housing	286. Impeller Nut
10. Intermediate	35. Centerbody	221. Bearing Cover	310. Seal Cover
11. Intermediate	36. Centerbody	222. Bearing Cover	500. Mechanical Seal
12. Intermediate	160. Tie Bolt Assembly	224. Bearing Cover	

MATERIALS

ITEM	0A	0B	4B
Casing - Wetted	Cast Iron	Cast Iron	316 SS
Intermediates	Cast Iron	Cast Iron	B316 SS
Impeller(s)	Bronze	Ductile Iron	316 SS
Shaft	431 SS	431 SS	316 SS
Shaft Sleeves	N/A	N/A	N/A
Shaft Sealing	AAA ⁶	AAA ⁶	AAB ⁷
Casing - Non Wetted	Cast Iron	Cast Iron	Cast Iron

⁶ AAA = single bellows seal with buna elastomers, carbon vs ceramic faces ⁷ AAB = single bellows seal with viton elastomers, carbon vs SiC faces

All data subject to change without notice.