

Pump Data Sheet - Patterson HVAC Pumps

Company: Intermountain Hydror
 Name: Cache County Mountain Crest
 Date: 09/24/2018

Tags: P-7
 1800RPM Premium Efficient Motor 460/3/60
 Pump and Motor Weight: 134lbs

REVIEWED
 Reviewed only as to the general conformity with the design concept. The Engineer does not warrant or represent that the information contained on this drawing is either accurate or complete. Sole responsibility for correct design, details and dimensions shall remain with the contractor submitting the drawing. The review of this shop drawing shall not, in any way, relieve the contractor from complying with all requirements of the contract.
BRENKMAN & COMPANY
 By: stephen.sadler
 Date: 10/31/2018



Pump:

Model: V1.5A7A-CC Dimensions: Suction: 1.5 in
 Type: VIL Discharge: 1.5 in
 Synch Speed: 1800 rpm
 Dia: 5.875 in
 Size: 1.5x1.5x7.25
 Impeller: D05-90063
 Specific Speeds: Ns: 838
 Nss: 1879

Fluid:

Name: Water
 SG: 1 Vapor Pressure: 0.256 psi a
 Density: 62.4 lb/ft³ Atm Pressure: 14.7 psi a
 Viscosity: 1.1 cP
 Temperature: 60 °F

Search Criteria:

Flow: 39 US gpm Near Miss: ---
 Head: 29 ft Static Head: 0 ft

Pump Limits:

Temperature: --- Sphere Size: ---
 Wkg Pressure: ---

Motor:

Standard: NEMA Size: 1 hp
 Enclosure: ODP Speed: 1800 rpm
 Frame: See Chart
 Sizing Criteria: Max Power on Design Curve

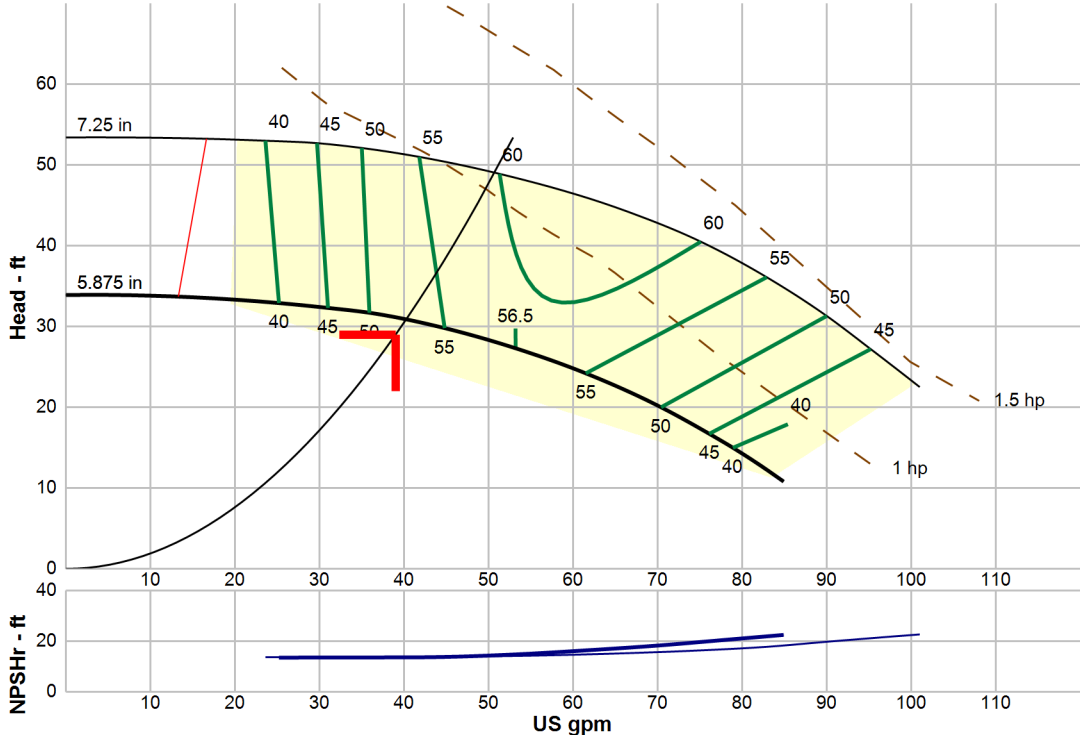
Pump Selection Warnings:

None

--- Duty Point ---
 Flow: 40.2 US gpm
 Head: 30.8 ft
 Eff: 52.4%
 Power: 0.593 hp
 NPSHr: 13.7 ft
 Speed: 1750 rpm

--- Design Curve ---
 Shutoff Head: 33.9 ft
 Shutoff dP: 14.7 psi
 Min Flow: 13.3 US gpm
 BEP: 56.5% @ 53.2 US gpm
 NOL Power:
 0.772 hp @ 84.9 US gpm

--- Max Curve ---
 Max Power:
 1.45 hp @ 95.2 US gpm



Refer to Working Pressure vs. Temperature chart for maximum rated working pressure. All data are subject to change. Consult factory for certified data.

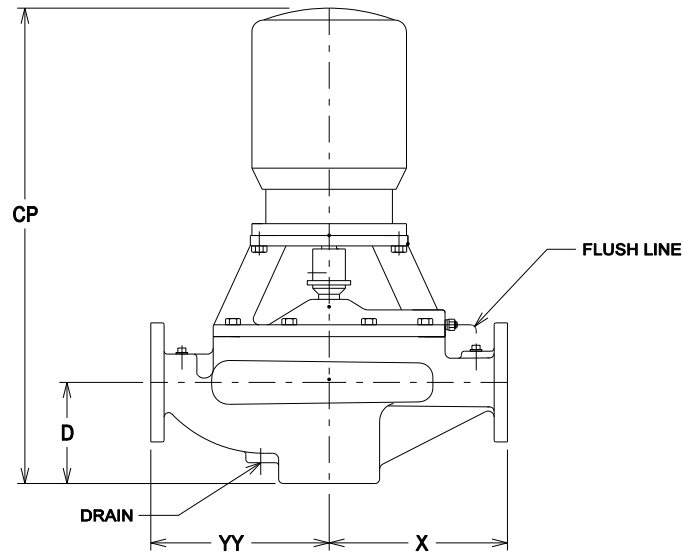
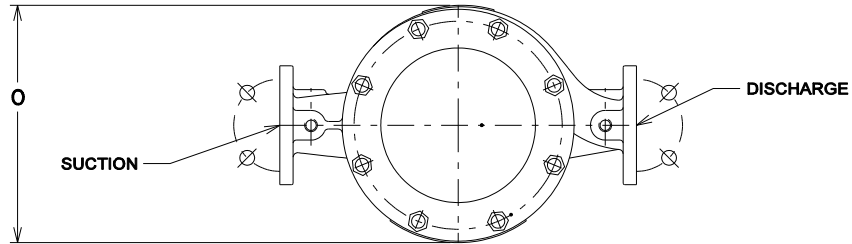
Performance Evaluation:

Flow	Speed	Head	Efficiency	Power	NPSHr
US gpm	rpm	ft	%	hp	ft
46.8	1750	29.2	55.4	0.622	14
39	1750	31	51.7	0.588	13.7
31.2	1750	32.3	45.2	0.563	13.6
23.4	1750	33	38.4	0.512	13.5
15.6	1750	33.3	31.7	0.46	13.5

VIL VERTICAL INLINE PUMPS OUTLINE DIMENSIONS, TYPE CS, 1800 RPM

NOTE: ALL DATA SUBJECT TO CHANGE. CONTACT FACTORY FOR CERTIFIED DATA.

NOTE: 1/4" NPT SUCTION & DISCHARGE
GAUGE TAP CONNECTIONS



ALL DIMENSIONS ARE IN INCHES

MODEL	DISCH SIZE	SUCT SIZE	DISCHARGE FLANGE DRILLING		SUCTION FLANGE DRILLING	* WORKING PRESSURE	MOTOR FRAMES	MOTOR H.P.	CP	D	O	X	YY
			STD	OPT									
V1.5A7A-CS	1.5	1.5	125#	X	125#	175	56C	.75	20 1/8	4 1/4	10	7 1/2	7 1/2

* REFER TO WORKING PRESSURE VS. TEMPERATURE CHART FOR TEMPERATURE EFFECTS