



Inline 3" Circulator Pumps

- **Cast Iron or Silicon Bronze Construction**
- **EPDM Mechanical Seal and Casing O-ring**
- **Optional Buna-N Mechanical Seal and O-Ring**
- **Silicon Bronze Impeller**
- **Includes Mounting Flange Kit for 3" NPT**
- **Max Working Pressure 150 PSI**
- **Max. Temperature 225°F (107° C)***
- **Max. Flow 150 GPM**
- **Max. Head 28 ft. (12 PSI)**
- **Single Phase or Three Phase TEFC 56C Motor**

Patterson Inline Circulator Pumps are designed for continuous duty industrial/commercial systems. Pumps are available in a variety of material configurations to meet your specifications. Pumps are powered by a 56C NEMA frame electric motor with 1/2" conduit connection. Pumps are interchangeable with other manufacturers, see cross reference on specification page.

Patterson Inline Circulator Pumps are reliable, cost effective and low maintenance. Pumps are available "Off-the-Shelf" for fast 24 hour shipment. For use with non-flammable liquids which are compatible with pump component materials.

*Max. temperature applies to water only.

INDUSTRIAL DUTY 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.

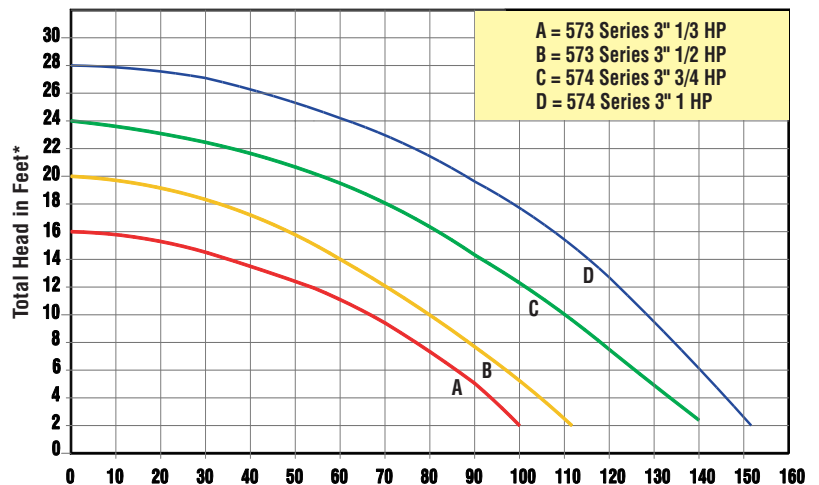
**BRENKMAN
& COMPANY**

By: hbrenkman
Date: 09-05-2018



**5740-97 Bronze
Circulator Pump**

Performance of Inline Circulator Pumps



Capacity in US Gallons per Minute @ 1725 RPM

*Convert to PSI, divide by 2.31 Liquid-Water specific gravity 1.0

Inline 3" Circulator Pumps

Pump Dimensional & Specification Data

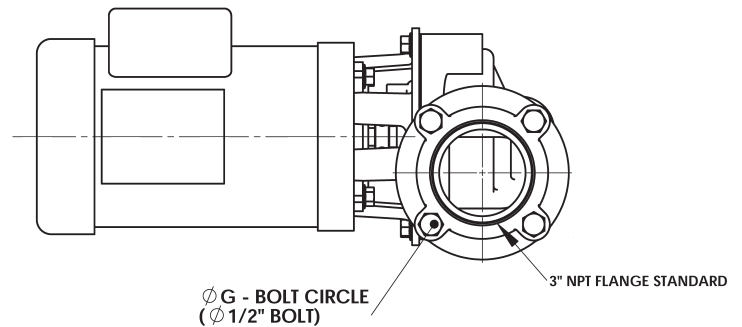
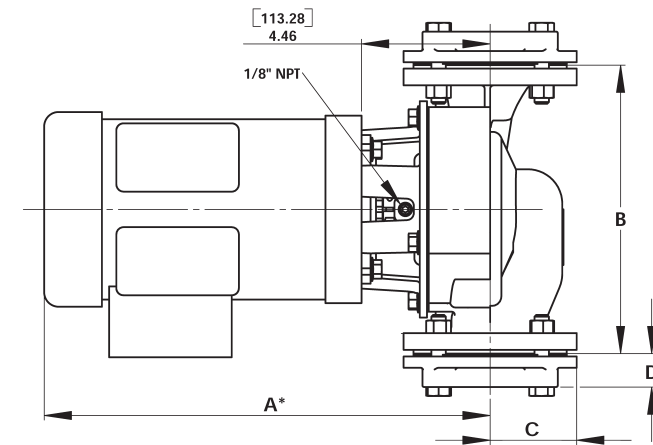
C.Iron Model	Curve	Ship WT. (lbs.)	Bronze Model	Ship WT (lbs.)	HP	PH	ENC	VAC 60hz	FL AMPS	A*	B	C	D	E	F	G
5735-95	A	72	5735-97	78	1/3	1	TEFC	115/230	7/4	14	10	3	1.12	5	3	5.05
5736-95	A	69	5736-97	75	1/3	3	TEFC	230/460	2/1	14	10	3	1.12	5	3	5.05
5730-95	B	77	5730-97	84	1/2	1	TEFC	115/230	9/5	14	10	3	1.12	5	3	5.05
5731-95	B	71	5731-97	77	1/2	3	TEFC	230/460	3/2	14	10	3	1.12	5	3	5.05
5745-95	C	83	5745-97	90	3/4	1	TEFC	115/230	12/6	15	12	3	1.12	5	3.25	5.05
5746-95	C	77	5746-97	84	3/4	3	TEFC	230/460	3/2	15	12	3	1.12	5	3.25	5.05
5740-95	D	90	5740-97	97	1	1	TEFC	115/230	14/7	15	12	3	1.12	5	3.25	5.05
5741-95	D	84	5741-97	91	1	3	TEFC	230/460	4/2	15	12	3	1.12	5	3.25	5.05

NOTE: Electric supply for ALL motors must be within $\pm 10\%$ of nameplate voltage rating (Ex. 230V $\pm 10\%$ = 207 to 253)

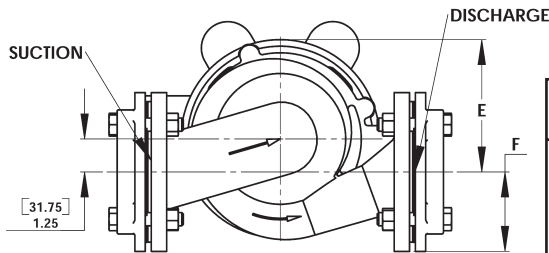
NOTE: Dimensions have a tolerance of $\pm 1/8"$

When ordering add the correct -9x suffix to model number indicating material selection

*This dimension may vary due to motor manufacturer's specifications



Pumps are designed to mount horizontally or vertically



Manufacturers Cross Reference

AMT SERIES	Flange to Flange Width	Bell & Gossett Series (C.Iron)	Bell & Gossett Series (Bronze)	Armstrong Series	TACO Series	Dayton (C.Iron)
5735/5736	10	LD3	LD3AB	S-45	122	4RC99
5730/5731	10	HD3	HD3AB	S-46	131	4RD12
5745/5746	12	PD-35S	PDB35S	S-55	132	4RD13
5740/5741	12	PD-37S	PDB37S	S-56	133	4RD14

Standard Features

- Mounting Flange Kit for 3" NPT, which includes (2) flanges, (2) gaskets, and fasteners
- 4-Bolt flange allows 360° mounting rotation in 90° increments
- 1/8" NPT seal wash/vent port
- EPDM Mechanical Seal and O-Rings
- Optional Buna-N Mechanical Seal and O-Ring Available
- Stainless Steel (300 series) Stub Shaft
- High Efficiency Closed Impeller
- Standard NEMA 56C motor mounting dimensions
- Available in either Single Phase or Three Phase TEFC 56C Motors

Pump Data Sheet - Patterson HVAC Pumps

Company:
Name:
Date: 08/30/2018



Pump:			
Model:	573-574 Series	Dimensions:	Suction: ---
Type:	CIRC		Discharge: ---
Synch Speed:	1800 rpm		
Line:	1 HP/574		
Size:	3		

Fluid:			
Name:	Water		
SG:	1	Vapor Pressure:	0.256 psi a
Density:	62.4 lb/ft ³	Atm Pressure:	14.7 psi a
Viscosity:	1.1 cP		
Temperature:	60 °F		

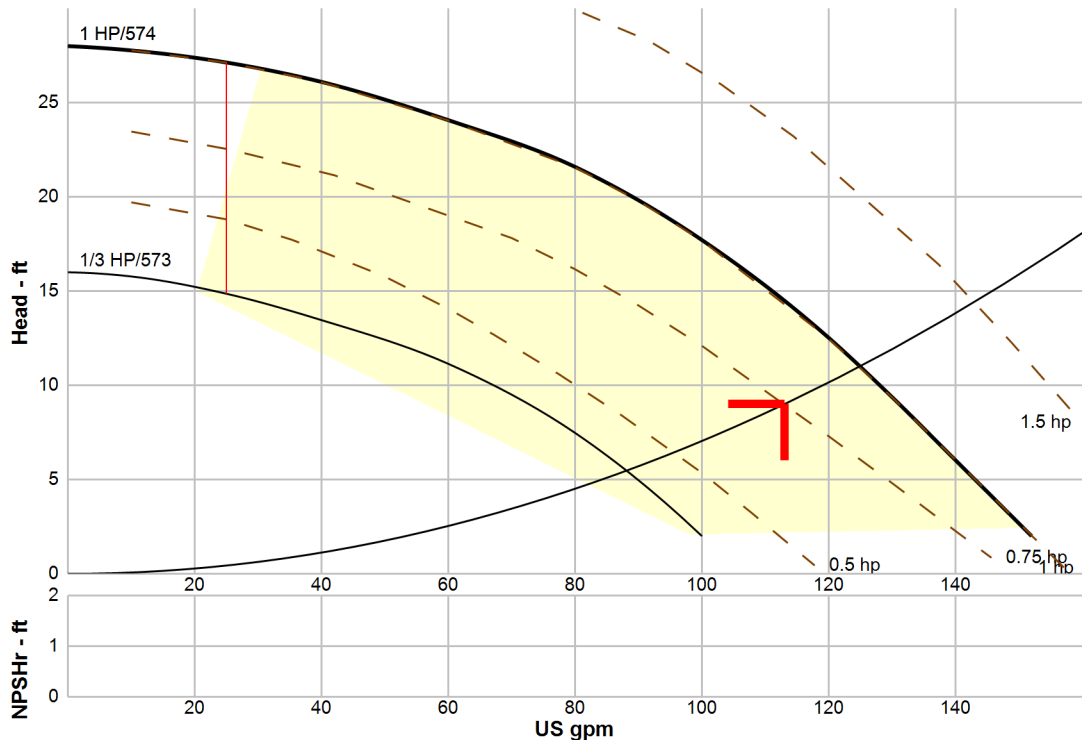
Search Criteria:			
Flow:	113 US gpm	Near Miss:	---
Head:	9 ft	Static Head:	0 ft

Pump Limits:			
Temperature:	---	Sphere Size:	---
Wkg Pressure:	---		

Motor:			
Standard:	NEMA	Size:	1.5 hp
Enclosure:	TEFC	Speed:	1800 rpm
Frame:	See Chart		
Sizing Criteria:	Max Power on Design Curve		

Pump Selection Warnings:
None

--- Duty Point ---	
Flow:	125 US gpm
Head:	11 ft
Eff:	---
Power:	1 hp
NPSHr:	---
Speed:	1725 rpm
--- Design Curve ---	
Shutoff Head:	28 ft
Shutoff dP:	12.1 psi
Min Flow:	25 US gpm
BEP:	---
NOL Power:	
	1 hp @ 60 US gpm
--- Max Curve ---	
Max Power:	
	1 hp @ 60 US gpm



Performance Evaluation:						
Flow	Speed	Head	Efficiency	Power	NPSHr	
US gpm	rpm	ft	%	hp		
136	1725	7.36	---	1	---	
113	1725	14.3	---	1	---	
90.4	1725	19.7	---	1	---	
67.8	1725	23.1	---	1	---	
45.2	1725	25.6	---	1	---	