

Applications

GPD series circulator pumps are specifically designed for heating systems or cooling system, boiler/hydronic heating, ground source heat pumps, air to water heat pump, solar water heating, and hot-water recirculation. The pumps can also be used to supply water circulation for cooling air-conditioning systems.



Running Conditions

- Ambient temperature : Max. 104°F (40°C)
- Liquid temperature: 36°F (2°C) ~ 230°F (110°C)
- System pressure : Max. 145 psi.
- To avoid damage to the pump bearing , the inlet minimum water pressure should be maintained as follow:

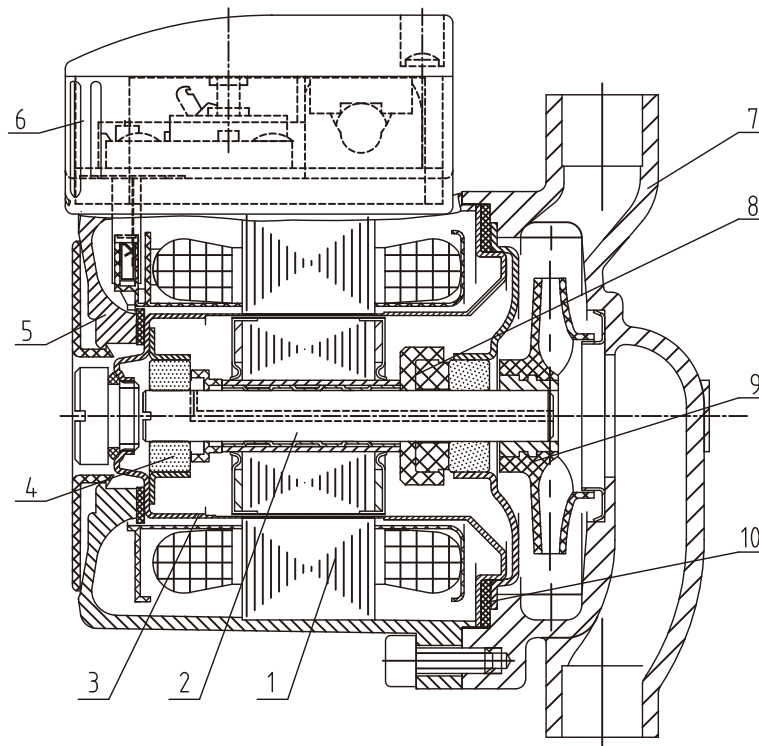
Liquid Temperature	185°F (85°C)	194°F (90°C)	230°F (110°C)
Entrance Pressure	2 ft (0.6m) Head	10 ft (3m) Head	33 ft (10m) Head
	0.7psi (0.05bar)	4psi (0.28bar)	14.5psi(1bar)

- Pumped liquids are designed for potable or clean water not containing any solid particles, fibers and mineral oil; and non-corrosive and non-explosive liquids.
- The ambient temperature for standard pumps with a permissible liquid temperature from 36°F(2°C) to 230°F (110°C) should always lower than the liquid temperature, as otherwise condensation may form in the stator housing.

Structure of Pump

- The main parts of pump include: pump body, impeller, stator, rotor, shielded sets, and vent plug.
- Pump does not use mechanical seal ; stator and rotor are sealed with stainless steel. The overall pump structure is sealed with two heat-resistant rubber gaskets to avoid leakage.
- The pump bearing is lubricated and cooled by the pumped water.
- The motor is class H with thermal protection.

Structural Diagram



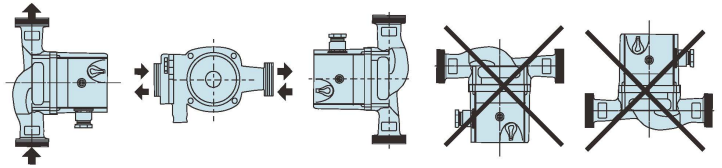
No.	Spare Parts	Material
1	Stator	Cold rolled silicon steel plate
2	Shaft	Ceramic
3	Shield Cover	Stainless steel
4	Bearing	Ceramic
5	Stator Housing	Aluminium
6	Terminal Box	Composite
7	Pump Housing(Volute)	Cast iron/bronze/stainless steel
8	Thrust Bearing	Graphite
9	Impeller	Composite
10	O-ring and gaskets	EPDM Rubber

Product Selection

- Pump model selection is based on the requirement of flow, head and power source.
 - The pipe connection is flanges standard.
- Cast iron type is generally considered for the closed systems pumping water or water/glycol mixtures, such as boiler heating and radiant floor heating; etc. However, when water condition is not compatible with cast iron, we recommend bronze or stainless steel. You can use in open circuit if anti-corrosion is added.
 - Bronze and stainless steel types are considered for open system pumping portable water such as hot-water recirculation and domestic hot-water heating; etc.

Installation

Pump must be always installed with horizontal shaft.
GPD series pumps are intended for indoor use only.



Product code

GPD 15 – 6 S () F C
 1 2 3 4 5 6 7

- GPD-----GPD series pump _____
- 15-----Diameter of the suction _____
- 6-----The maximum head of pump (m) _____
- S-----3 speed _____
- ()-----Pump material _____
 (): Cast iron (no letter = cast iron)
 B: Bronze
 N: Stainless steel
- F-----Pipe connection style: _____
 F: Flange
 FR: Vertical flange
- C-----With check valve _____

Model Type: GPD15-6SFC



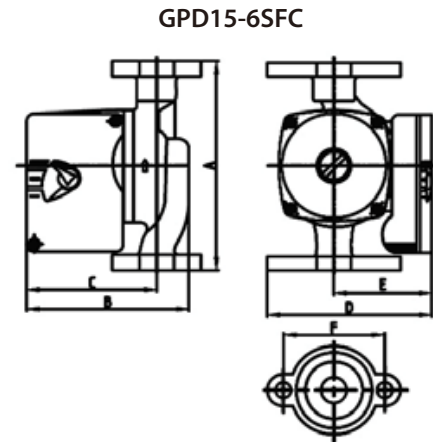
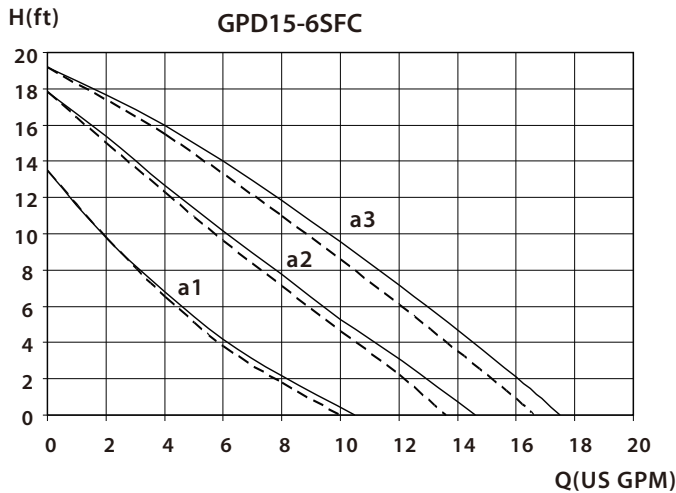
Note:

1. Motor : 2-pole single-phase
2. Liquid temperature: 36°F ~ 230°F (2°C ~110°C)
3. Max. system pressure: 145psi (1MPa)
4. Certification :



Performance Curve

Installation Drawing



"——"without check valve, "- - - -"with check valve.

Performance Parameter Form

Model Type	Max. Flow(gpm)	Max. Head(ft)	Votls(V)	Amps(A)	Watts(W)	Capacitor	Curve	System type
GPD15-6SFC	17	19	115	0.9/0.7/0.5	100/70/55	10uf/250V	a3/a2/a1	Closed

Installation Size Form

Model type	A	B	C	D	E	F	Connection type and size	Shipping weight(lbs)
GPD15-6SFC	6 1/2	5 2/5	4	5 1/16	3	3 5/32	GF 15 flange (2) 1/2" dia. bolt holes	7.25

Model Type: GPD25-10SFC



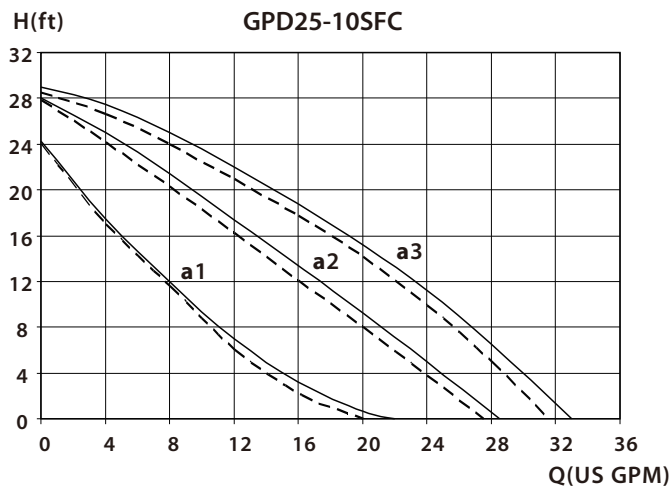
Note:

- 1. Motor : 2-pole single-phase
- 2. Liquid temperature: 36°F ~ 230°F (2°C ~110°C)
- 3. Max. system pressure: 145psi (1MPa)

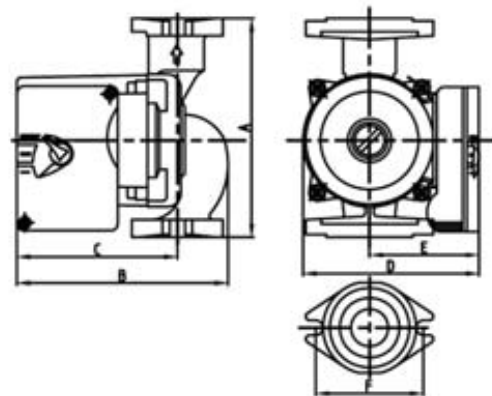
4. Certification : 

Installation Drawing

Performance Curve



GPD25-10SFC



"——"without check valve, "- - -"with check valve.

Performance Parameter Form

Model Type	Max. Flow(gpm)	Max. Head(ft)	Votls(V)	Amps(A)	Watts(W)	Capacitor	Curve	System type
GPD25-10SFC	32	30	115	1.6	185/170/150	20uf/450V	a3/a2/a1	Closed

Installation Size Form

Model type	A	B	C	D	E	F	Connection type and size	Shipping weight(lbs)
GPD25-10SFC	6 1/2	6	4 3/4	5 5/16	3 1/4	3 5/32	GF 25 flange (2) 1/2" dia. bolt holes	11.25