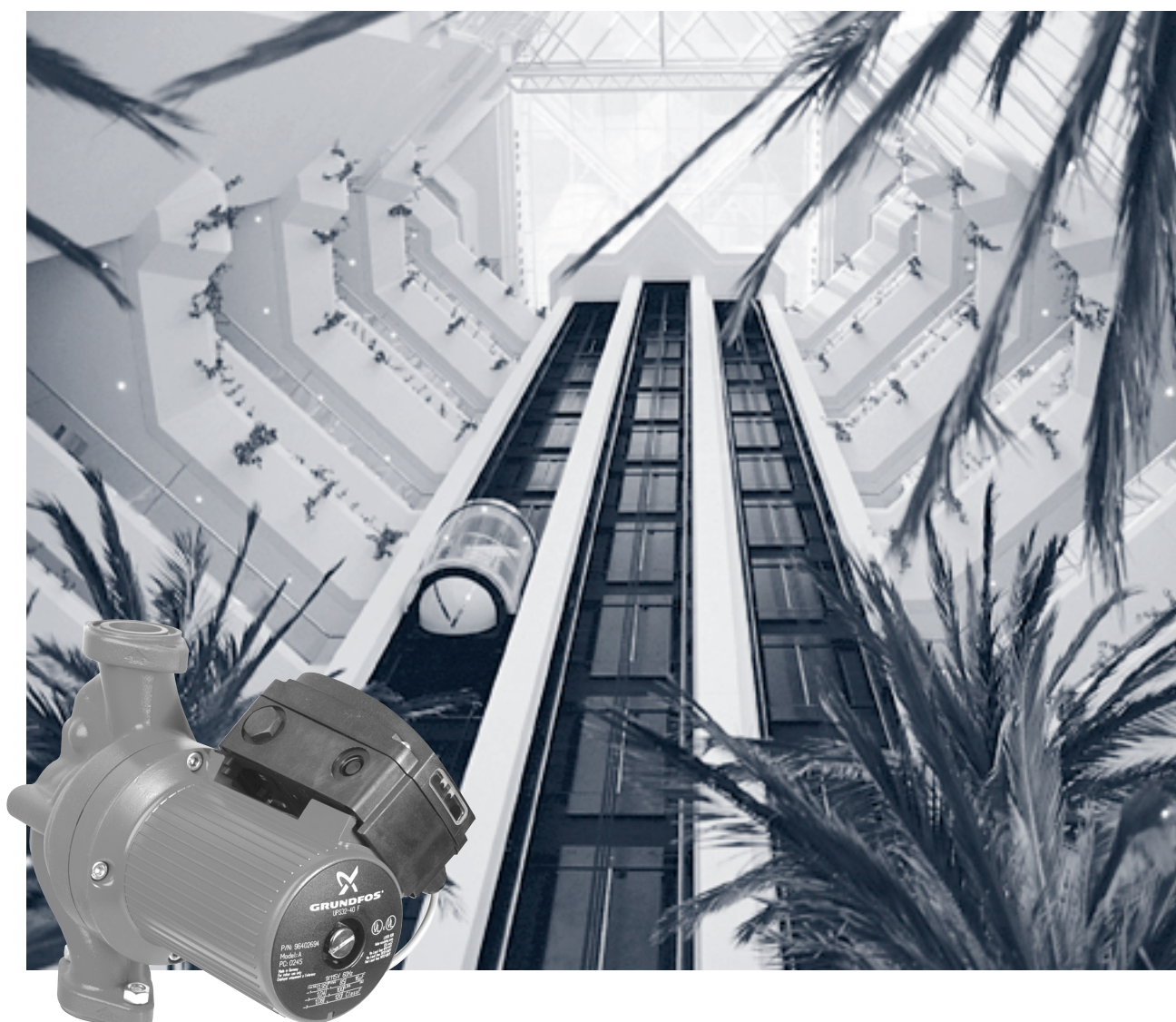


GRUNDFOS PRODUCT GUIDE

VersaFlo®

UP and UPS circulator pumps
60 Hz



BE > THINK > INNOVATE >

GRUNDFOS 

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- to successfully develop, produce, and sell high quality pumps and pumping systems worldwide, contributing to a better quality of life and healthier environment



Bjerringbro, Denmark



Fresno, California



Olathe, Kansas



Monterrey, Mexico



Allentown, Pennsylvania



Oakville, Ontario

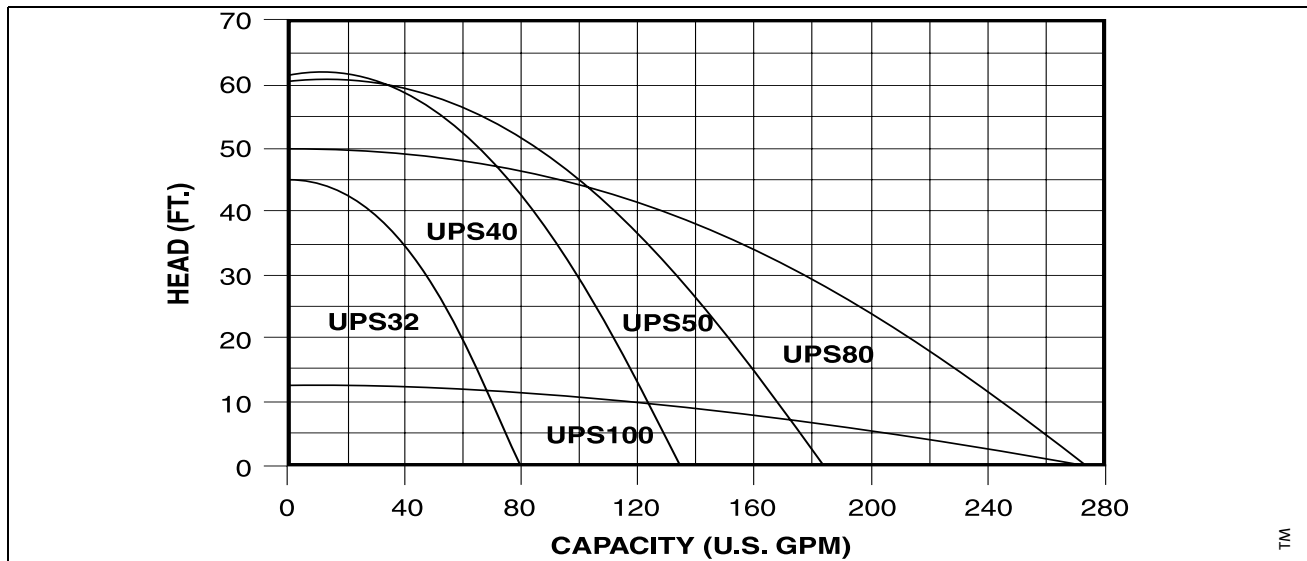
- One of the 3 largest pump companies in the world with over 11,000 employees world wide
- World headquarters in Denmark
- North American headquarters in Kansas City (Olathe) - Manufacturing in Fresno, California
- 60 companies in 40 countries
- More than 10 million pumps produced annually worldwide
- North American companies operating in USA, Canada and Mexico
- Continuous reinvestment in growth and development enables the company to **BE** responsible, **THINK** ahead, and **INNOVATE**

Cross Reference Guide: B&G, TACO and Armstrong to Grundfos

Grundfos Model UPS	HP	Port to Port Length	Flange Size	B & G Series 60 & 80	HP	Port to Port Length	Flange Size	Taco Series 1600	HP	Port to Port Length	Flange Size	Armstrong Series H	HP	Port to Port Length	Flange Size
32-40	1/3	11"	1-1/4"									H-32	1/6	8-1/2"	1-1/4"
32-80	1/2	11"	1-1/4"	6011	1/4	11"	1-1/4"	1600	1/4	10-1/4"	1-1/2"	H-52	1/3	11-1/2"	1-1/4"
32-160	3/4	13-1/2"	1-1/2"	6016	3/4	13-1/2"	1-1/2"	1614	3/4	13-1/2"	1-1/2"	H-64	3/4	13-1/2"	1-1/2"
40-40	1/3	13-1/2"	1-1/2"									H-52	1/3	11-1/2"	1/4"
40-80/4	1/2	13-1/2"	1-1/2"									H-53	1/2	11-1/2"	1-1/2"
40-80/2	3/4	13-1/2"	1-1/2"	6013	1/2	11-1/2"	1-1/2"	1612	1/2	13-1/2"	1-1/2"	H-53	1/2	11-1/2"	1-1/2"
40-80/2	3/4	13-1/2"	1-1/2"	6015	1/2	13-1/2"	1-1/2"	1612	1/2	13-1/2"	1-1/2"	H-63	1/2	13-1/2"	1-1/2"
40-160	3/4	11-1/2"	1-1/2"									H-67	1	14"	2"
40-240	1-1/2	13-1/2"	1-1/2"	6017	1	13-1/2"	1-1/2"	1616	1-1/2	14-1/2"	2"	H-65	1	13-1/2"	1-1/2"
50-40	1/3	14"	2"									H-53	1/2	11-1/2"	1-1/2"
50-80/4	3/4	11-1/2"	2"									H-54	3/4	11-1/2"	2"
50-80/2	3/4	11-1/2"	2"	6014	3/4	11-1/2"	2"	1632	3/4	13-1/2"	2"	H-54	3/4	11-1/2"	2"
50-160	1-1/2	14"	2"	6019	1	14"	2"	1634	1	13-1/2"	2"	H-67	1	14"	2"
50-160	1-1/2	14"	2"	6020	1-1/2	14"	2"	1634	1	13-1/2"	2"	H-68	1-1/2	14"	2"
50-240	2	14"	2"	6021	2	14"	2"					10603D	3	18"	3"
80-40	1/2	19"	3" ANSI									105028	1/2	11-1/2"	2"
80-80	1-1/2	19"	3" ANSI	801	1-1/2	19"	3" ANSI					10603D	1-1/2	18"	3"
80-160	3	19"	3" ANSI	802	3	19"	3" ANSI					10603D	3	18"	3"
100-40	3	19"	3" ANSI	803	3	19"	3" ANSI					10603D	3	18"	3"
	1	21"	4" ANSI									10603D	1	18"	3"
	2	21"	4" ANSI	806	2	21"	4" ANSI					10603D	2	18"	3"
	3	21"	4" ANSI	807	3	21"	4" ANSI					10603D	3	18"	3"

NOTE: Not all dimensions of cross referenced models are alike (eg. flange to flange and flange size dimensions may vary.)

Performance Range, VersaFlo UPS



Product Range

Model	Flow U.S. GPM	Head FEET	PH	MAX. RPM	Flange	Page #
UP 43-70F	15-100	1-23	1	3450	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	76
UP 43-110F	15-105	1-37	1	3450	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	78
UPS 32-40/4	9-52	1-11	1, 3	1750	1 1/2" NON ANSI 4 bolt w/ (4) 5/8" dia holes	14
UPS 32-80/2	9-67	1-25	1, 3	3450	1 1/4" NON ANSI 2 bolt w/ (2) 1/2" dia holes	16
UPS 32-160/2	9-76	1-45	1, 3	3450	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	18
UPS 40-40/4	13-85	1-11	1, 3	1750	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	20
UPS 40-80/2	13-105	1-30	1, 3	3450	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	22
UPS 40-80/4	13-120	1-25	1, 3	1750	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	24
UPS 40-160/2	13-110	1-46	1, 3	3450	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	26
UPS 40-240/2	13-130	1-62	1, 3	3450	1 1/2" NON ANSI 2 bolt w/ (2) 1/2" dia holes	28
UPS 50-40/4	20-125	1-12	1, 3	1750	2" NON ANSI 4bolt w/ (4) 9/16" dia holes	30
UPS 50-80/4	20-160	1-24	1, 3	1750	2" NON ANSI 4bolt w/ (4) 9/16" dia holes	32
UPS 50-80/2	20-150	1-30	1, 3	3450	2" NON ANSI 4bolt w/ (4) 9/16" dia holes	34
UPS 50-160/2	20-170	1-46	1, 3	3450	2" NON ANSI 4bolt w/ (4) 9/16" dia holes	36
UPS 50-240/2	20-180	1-62	3	3450	2" NON ANSI 4bolt w/ (4) 9/16" dia holes	38
UPS 80-40/4	30-200	1-13	3	1750	3" ANSI R.F.	40
UPS 80-80/4	30-260	1-25	3	1750	3" ANSI R.F.	42
UPS 80-160/2	30-275	1-49	3	3450	3" ANSI R.F.	44
UPS 100-40/4	30-270	1-12	3	1750	4" ANSI R.F.	46

VersaFlo UPS Type Key

Example	UPS	32	-40	(/2)	(B)	F
Type range (UP - 1 speed, UPS - 3 speed)						
Nominal flange diameter [mm]						
Max. head [dm]						
Number of motor poles (only if available both as 2 and 4-pole motor)						
(B) = Pump with bronze housing () = Pump with cast iron housing						
Pump with bronze housing						

Applications

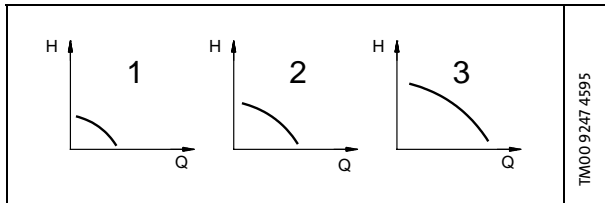
Grundfos circulator pumps, types VersaFlo UP, UPS are designed for circulation of liquids in heating and air-conditioning systems. Pumps with bronze pump housings are suitable for circulation in domestic hot water systems.

VersaFlo UPS pumps are a complete line of circulator pumps with three speeds.

The pumps come both as single and dual-head pumps.

Speed switch

The pump offers three speeds for adjustment of pump performance to the system in question.



The speeds of the various speed switch positions are shown in the table below:

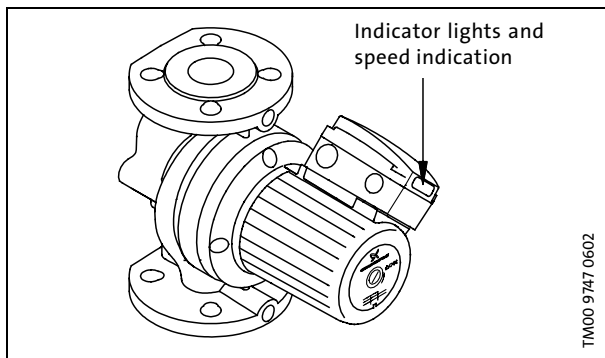
Switch position	Speed in % of maximum speed	
	Single-phase pumps	Three-phase pumps
1	approx. 60%	approx. 70%
2	approx. 80%	approx. 85%
3	100%	100%

Speed Selection (two speed, 3x460V & 575V)

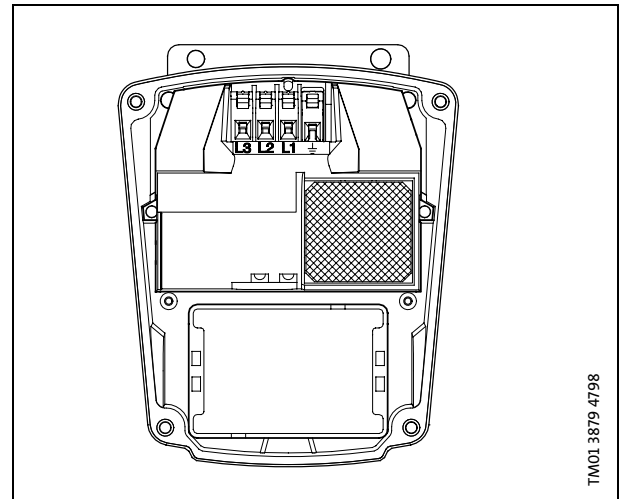
The speed setting in the terminal box can be changed to two positions. The speed in the two positions appears in the table below

Speed Step	Speed in % of Maximum
1	approx. 75%
2	100%

Change to a lower speed enables reduction in energy consumption and less noise in the system.



Pumps with protection module (standard)



Protection module

The protection module is supplied as standard for single-head and dual-head pumps.

With a protection module, the pump can be connected directly to line voltage, as the built-in protection against overheating protects the pump at all three speeds. Furthermore, the module has two indicator lights.

Protection module indicator lights

The function of the indicator lights is shown in the table below.

Indicator lights		Description
Green	Red	
Off	Off	The pump has been stopped. The electricity supply has been switched off, thermally cut out or a phase is missing.
On	Off	The pump is operating.
On	On	Three-phase pumps only: (not 460V, 575V) The pump is operating, but the direction of rotation is not correct.
Off	On	The pump is cut out by the thermal switch.

Note: Pumps with protection module must not be connected to a frequency converter.

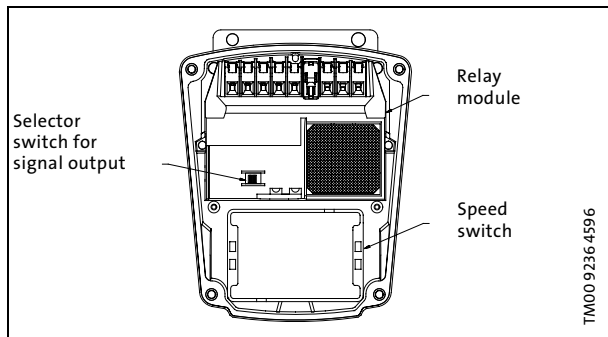
Relay module

The relay module is an **optional extra** for single-head and dual-head pumps.

The module enables direct connection of the pump to line voltage and an external operating or fault indication device. The signal output for an external signal device can be set to activate during operation or fault by means of the selector switch.

The signal outputs of relay modules in dual-head pumps can be interconnected so that the pumps are operating alternately as duty pump and standby pump.

The pump is connected directly to line voltage as the pump incorporates overload protection at all three speeds. If the pump has been cut out by the thermal overload switch, it will restart automatically when it has cooled to normal temperature.



Indicator lights on relay module

The indicator lights on pumps with relay module have more detailed operating and fault indications.

All pumps with relay module are equipped with a green and a red indicator light. Their functions are as shown in the table below.

Signal output of relay module

The relay module is equipped with a signal output for external operating or fault indication.

By means of the selector switch, the output can be used as:

- Operation signal output between terminals 2 and 3 or
- Fault signal output between terminals 1 and 3.

Functions of indicator lights and signal output

Indicator lights		Signal output		Description
Green	Red	Operation	Fault	
Off	Off			The pump has been stopped. The electricity supply has been switched off or a phase is missing.
Permanently on	Off			The pump is running.
Permanently on	Permanently on			Only three-phase pumps: The pump is running, but with wrong direction of rotation.
Off	Permanently on			The pump has been cut out by the thermal overload switch.
Flashes	Off			The pump has been stopped by an external on/off switch.
Flashes	Permanently on			The pump is or has been cut out by the thermal overload switch and it has been stopped by an external on/off switch.

Note: Pumps with relay module must not be connected to a frequency converter.

Electrical data

Supply voltage and frequency

UPS, USA: 115, 208-230 V, 1 phase 60 Hz,
208-230, 460, 575V, 3 phase 60 Hz.

Motor protection: The pump requires no external motor protection if the motor is fitted with a protection module.

Back-up fuse: Max. 10 A.

Electrical Connection

The electrical connection and protection should be carried out in accordance with the latest edition of the National Electrical Code, local codes and regulations by a qualified electrician.

Warning: Never make any connections in the pump terminal box unless the electrical supply has been switched off.

- The pump must be grounded
- The pump must be connected to an external main power switch.

The operating voltage and frequency are marked on the pump nameplate. Make sure that the motor is suitable for the electrical supply it is being installed to.

The pump should be grounded to protect against indirect contact and a ground fault interrupter can be used as extra protection.

Multi-Speed Pump (1 & 3 phase)

All single and 3 phase pumps are equipped with built-in, automatic resetting, thermal overload protection at all three speeds.

Two-Speed Pump (3 phase, 3X460V & 575V)

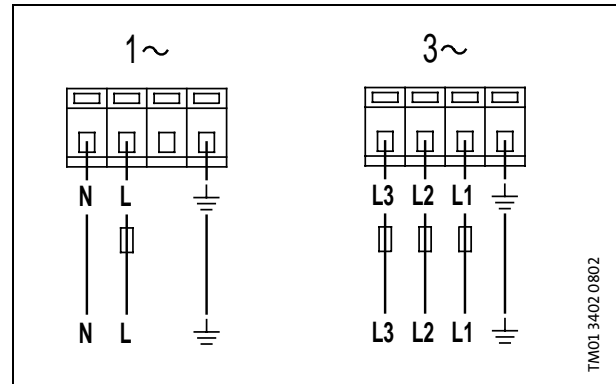
The pump must be connected to the electrical supply via an external contactor. The contactor must be connected to the built in thermal overload switch terminals P1 and P2 (3x460V & 575V) to protect the pump against overloading at both speeds.

OR: If the pump is protected by means of a motor starter, the starter must be set to the current consumption of the pump at the selected speed. The motor starter setting must be changed every time the pump speed is changed. The current consumption at the individual speeds is stated on the pump nameplate.

Protection module (standard)

The pump is connected directly to line voltage, as the pump features built-in protection against overheating at all three speeds.

The figure below shows the electrical connection of single-phase and three-phase pumps.

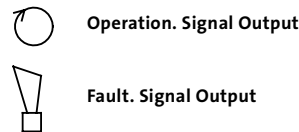


*Except 460, 575 Volt

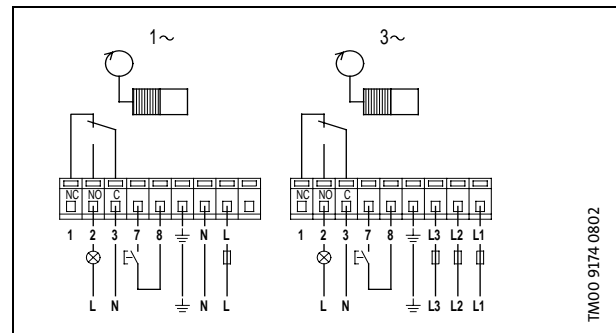
Relay module

The pump is connected directly to line voltage as it incorporates protection against overheating at all three speeds.

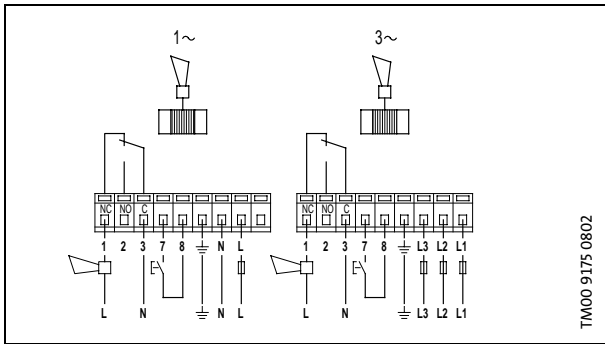
The relay module has a signal output for an external operating or fault signal device. By means of the selector switch the signal output can be used as operation or fault signal output:



Operating indication wiring diagram



Fault indication wiring diagram



Standby operation with pump 2 as duty pump and pump 1 as standby pump. (requires 2-wire cable)

VersaFlo UPS 3X460V & 575V

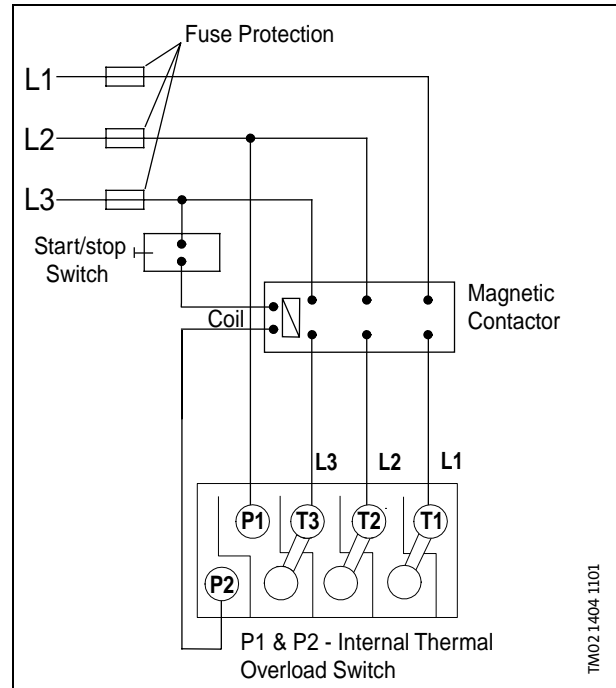
Since the 3x460V and 575V pumps are not equipped with protection modules or relay modules all motor protection must be provided external to the pump. In addition wiring the pumps for alternating or standby operation must be accomplished using external devices.

The pump must be connected to line voltage thru an external contactor. The contactor is to be connected to the pump's built-in thermal overload switch at terminals P1 and P2 to protect the pump against overheating on both speeds.

Note: If the pump is also protected by means of a motor starter, the starter must be set to the current consumption of the pump at the chosen speed. The motor starter setting must be changed every time the pump speed is changed. The current consumption at the various speeds is stated on the pump nameplate.

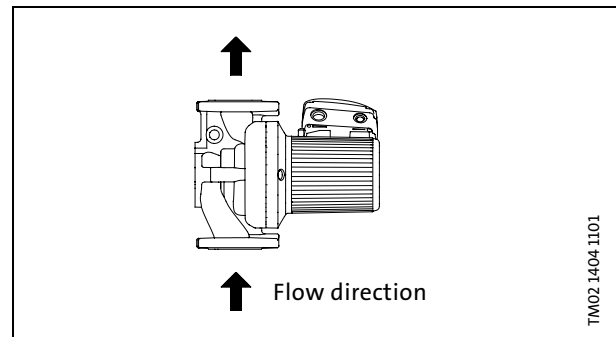
Wiring Diagram

Shows the electrical connections when using a magnetic contactor and start/stop switch using the internal thermal overload switch.

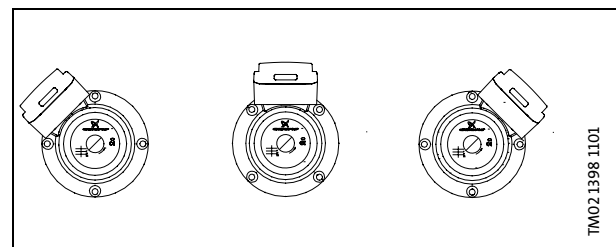


Installation

The pump must be installed with horizontal motor shaft.



Possible terminal box positions



Construction, VersaFlo UP, UPS

The VersaFlo UP, UPS pumps are of the canned rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing. The bearings are lubricated by the pumped liquid.

Attention has been focused on using as few materials as possible, and the use of materials that might cause problems in connection with disposal have been omitted.

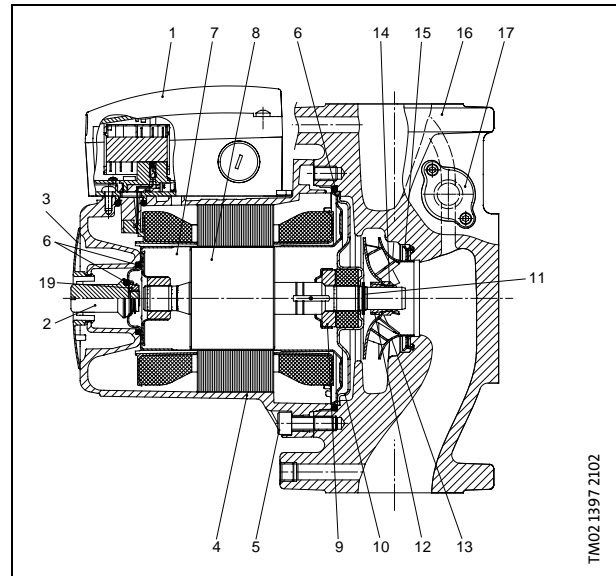
The pump features:

- Motor with three speeds. (UPS models)
- Dual voltage motor. (UP models)
- Ceramic radial bearings.
- Carbon thrust bearing.
- Stainless steel rotor can, bearing plate and rotor cladding.
- Stator housing in aluminium alloy.
- Cast iron or bronze pump housing.
- Stator with built-in thermal overload switch.

Material specification, VersaFlo UP, UPS

Pos.	Description	Material	AISI, ASTM
1	Terminal box	Composite PA66	
2	Inspection screw	Brass with nickel	AISI 303 SS
3	Nameplate	Composite PA66	
4	Stator housing	Aluminium AISi 10Cu2	
	Stator windings	Copper wire	
	Stator caps	Composite PETP	
5	Cheese-head screw	Steel 8.8	
6	O-rings	EPDM rubber	
7	Outer bearing ring	Ceramic Al2O3	
	Rotor can	Stainless steel	AISI 304 SS
8	Shaft (cast iron pumps)	Stainless steel	AISI 303 SS
	Rotor cladding	Stainless steel	AISI 304 SS
9	Thrust bearing	Carbon MY 106	
10	Bearing plate	Stainless steel	AISI 304 SS
	Inner bearing ring	Aluminium oxide/SiC	
11	Stop ring	Bronze CuSn ₆	
12	Split cone	Stainless steel	AISI 303 SS
13	Impeller	Stainless steel	AISI 304 SS
14	Nut	Stainless steel	AISI 303 SS
15	Neck ring	Stainless steel / PTFE	
16	Pump housing	Cast iron	EN-GJL-250
17	Plug for sensor hole	Brass/Stainless steel	
	Non-return flap	EPDM rubber	
19	Splash protection	Stainless steel	

Sectional drawing, UPS



Pump

In-line cast iron and bronze spiral pump housing.

Flange dimensions for USA are according to individual submittal data the flanges have ¼ NPT pressure gauge tappings. Tapped holes are provided on the underside of the pumps. These holes can be used for fitting the pump to a base plate or bracket by means of hexagon screws. The pump housing is provided with a replaceable stainless steel/Teflon neck ring. The ring reduces to a minimum the amount of liquid running from the discharge side of the impeller to the suction side.

Impeller

The impeller is made of stainless steel, AISI 304 SS.

As the impeller is made of stainless steel sheet, it can be pressed into the correct hydraulic form.

Installation

VersaFlo UP, UPS pumps can be installed in horizontal and vertical pipes.

Note: The motor must never point downwards.

The pumps must be installed in such a way that strain from the pipework is not transferred to the pump housing.

The pump may be suspended direct in the pipes, provided the pipework can support the pump. If not, the pump must be installed on a mounting bracket or base plate.

In humid locations, a drain hole in the motor must be opened. The drain hole must always point downwards.

Pumped liquids

CAUTION: This pump is intended for use with water only.

Your VersaFlo UPS pump can be used to circulate

- Potable hot water
- Water for hydronic heating
- Cooling water
- In domestic hot water systems it is advisable to use bronze pumps (VersaFlo UPS model) only for water with a degree of hardness lower than 14 grains per gallon of hardness. For water with a higher degree of hardness, a direct coupled VersaFlo TP pump is recommended.
- If the pump is installed in a heating system, the water should meet the requirements of accepted standards on water quality in heating systems.

The pump is lubricated and cooled by the liquid being pumped. Therefore, the pumped liquid must always be allowed to circulate through the pump. Extended periods without circulation will cause premature wear to the bearings and excessive motor heat. The pumped liquid must also meet the following requirements:

The EPDM O-rings fitted as standard are primarily suitable for water.

Temperature limits

Ambient air temperature, UPS : 32°F to 104°F.

Fluid temperature, UPS:

Fluid temperature, open systems: 140°F.

Fluid temperature, closed systems: 230°F.

Technical data

Relative humidity:Max. 95%.

Sound-pressure level:The sound-pressure level of the pump is lower than 41 dB(A) (reference: 20 μPa).

Max. working pressure:145 psi.

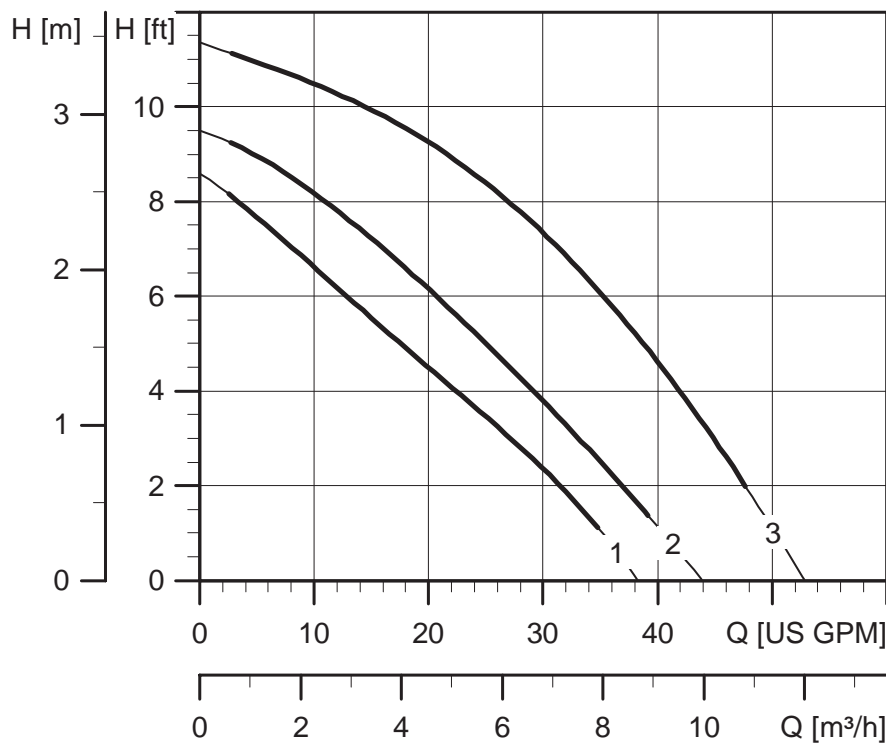
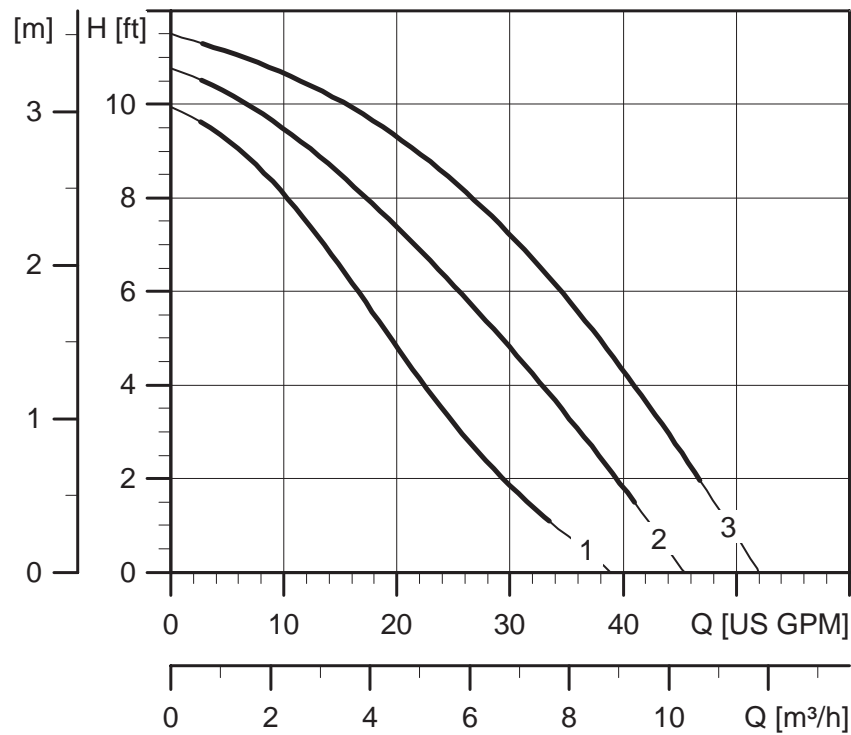
UPS Model	At These Liquid Temps					
	167°F 75°C		194°F 90°C		230°F 110°C	
	[psi]	hf	[psi]	hf	[psi]	hf
32-40	0.7	1.6	2.2	5.1	21.0	48.5
32-80	0.7	1.6	5.1	11.8	23.9	55.2
32-160	11.6	26.8	16.0	37.0	34.1	78.8
40-40	0.7	1.6	4.4	10.2	23.2	53.6
40-80/4	0.7	1.6	1.5	3.5	18.1	41.8
40-80/2	6.5	15.0	10.9	25.2	29.0	67.0
40-160	5.1	11.8	9.4	21.7	27.6	63.8
40-240	11.6	26.8	16.0	37.0	34.1	78.8
50-40	0.7	1.6	2.9	6.6	21.8	50.4
50-80/4	0.7	1.6	4.4	10.2	23.2	53.6
50-80/2	4.4	10.2	8.7	20.1	26.8	61.9
50-160	11.6	26.8	16.0	37.0	34.1	78.8
50-240	10.2	23.6	14.5	33.5	32.6	75.1
80-40	11.6	26.8	16.0	37.0	34.1	78.8
80-80	14.5	33.5	18.9	43.7	37.0	85.5
80-160	21.8	50.4	26.1	60.3	43.5	100.5
100-40	27.6	63.8	31.9	73.7	50.0	115.5

The pumping of liquids with densities or kinematic viscosities higher than those of water will cause

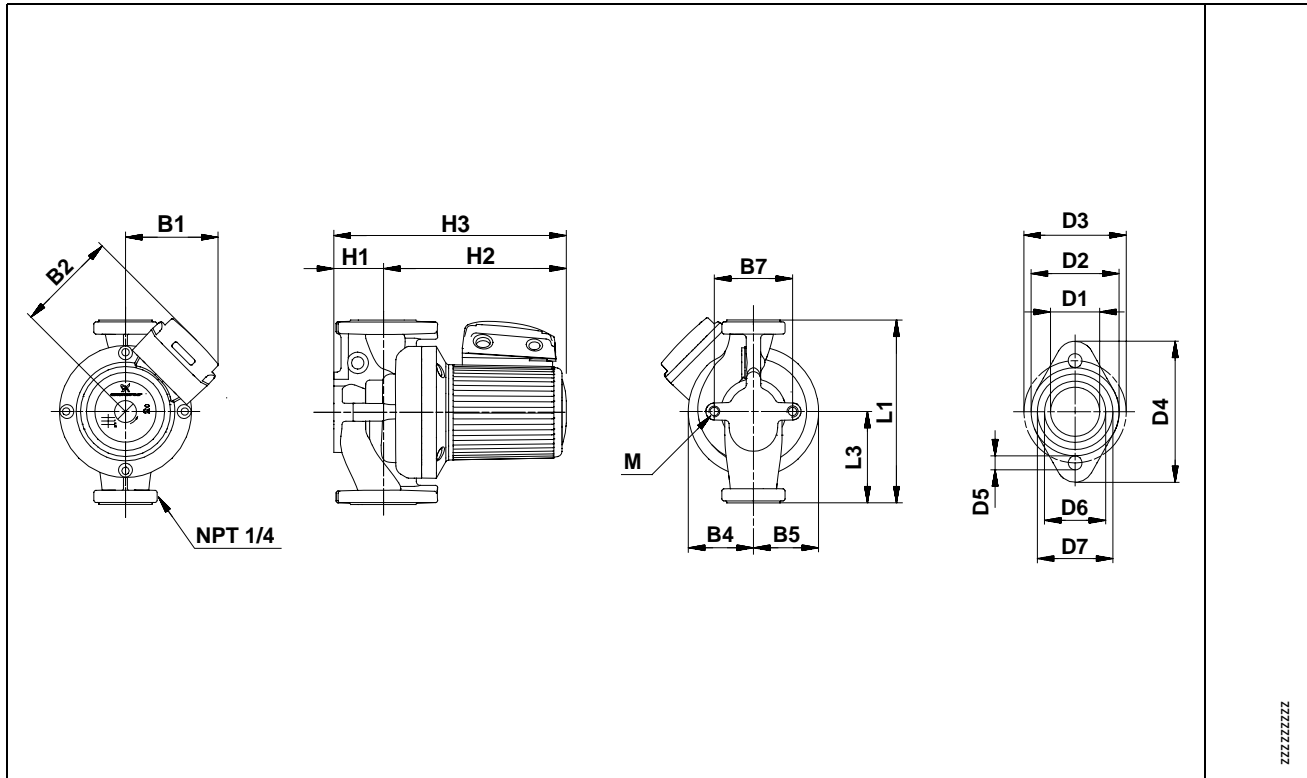
- a considerable pressure drop,
- a drop in the hydraulic performance,
- a rise in the power consumption.

In these situations contact Grundfos for assistance.

UPS 32-40



UPS 32-40



ZZZZZZZZ

Electrical Data, Weights and Dimensions

Pump Type	Nomin al HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)															Net Wt.	
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4	D6		D7
UPS32-40/4	1/3	1	1 1/4 (32)	115 or 230	11 (279)	5 1/2 (140)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 3/16 (81)	2 11/16 (68)	9 1/2 (242)	12 3/16 (310)	17/16 (37)	2 9/16 (65)	3 1/2 (89)	4 5/8 (117)	1 13/16 (46)	2 1/4 (57)	39
	1/3	3	1 1/4 (32)	208/230, 460*, 575*	11 (279)	5 1/2 (140)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 3/16 (81)	2 11/16 (68)	9 1/2 (242)	12 3/16 (310)	17/16 (37)	2 9/16 (65)	3 1/2 (89)	4 5/8 (117)	1 13/16 (46)	2 1/4 (57)	39

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 9-53 U.S. GPM

Head Range: 1-12.5 FEET

Maximum Working Pressure: 145 PSI

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

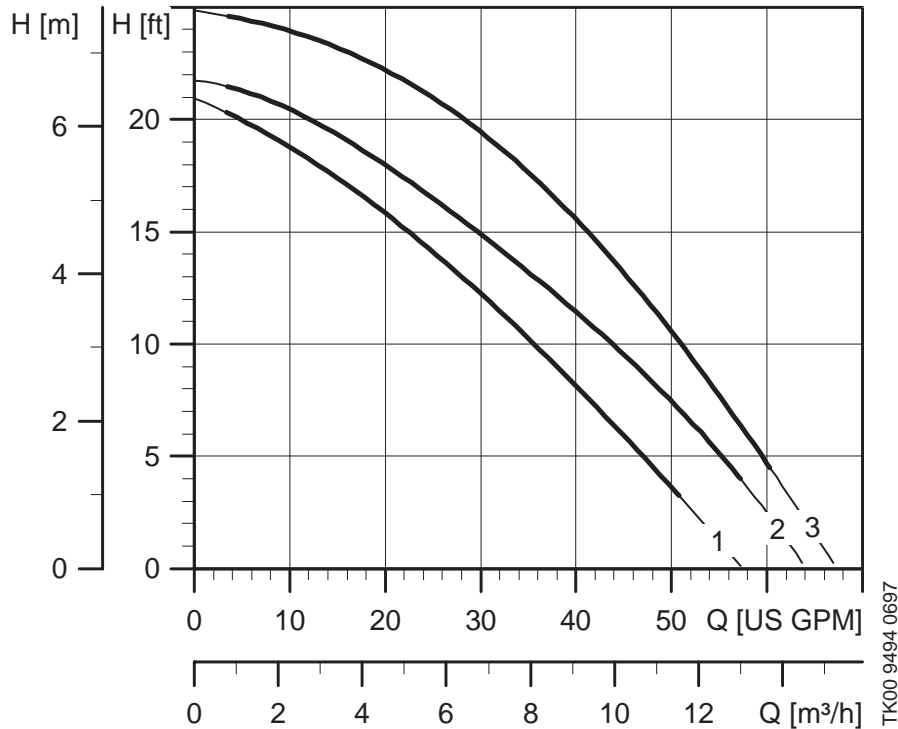
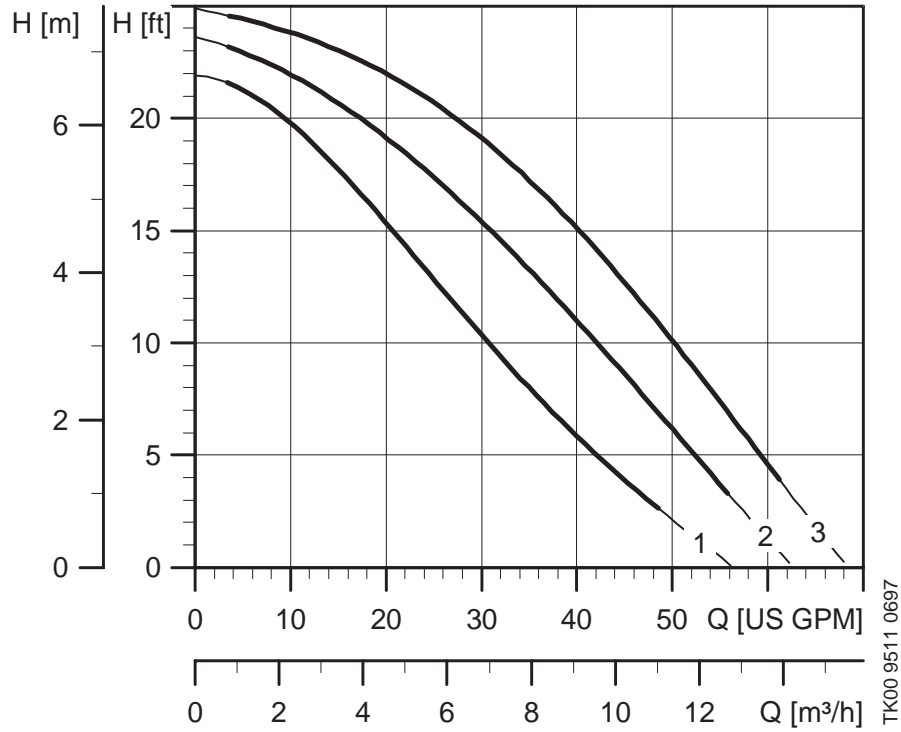
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/2" ANSI 2bolt with (2) 5/8" diameter holes

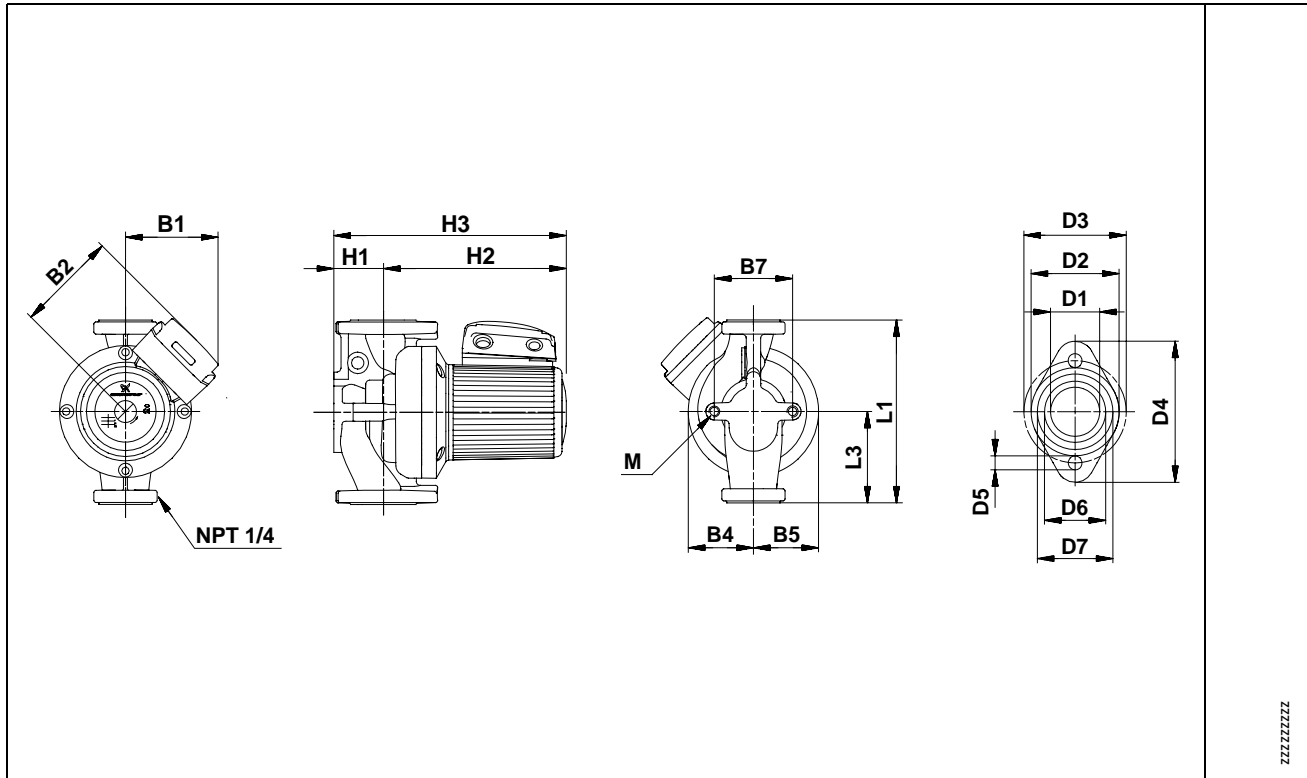
Ambient Air Temperature 32°F (0°C) - 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	5.1 Ft. - 2.2 PSI	48.5 Ft. - 21.0 PSI

UPS 32-80



UPS 32-80



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)															Net Wt.	
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4	D6		D7
UPS32-80/2	1/2	1	1 1/4 (32)	115 or 230	11 (279)	5 1/2 (140)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 3/16 (81)	2 11/16 (68)	9 7/16 (239)	12 1/16 (307)	1 7/16 (37)	2 9/16 (65)	3 7/16 (87)	4 5/8 (117)	1 13/16 (46)	2 1/4 (57)	39
	1/2	3	1 1/4 (32)	208/230, 460*, 575*	11 (279)	5 1/2 (140)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 3/16 (81)	2 11/16 (68)	9 7/16 (239)	12 1/16 (307)	1 7/16 (37)	2 9/16 (65)	3 7/16 (87)	4 5/8 (117)	1 13/16 (46)	2 1/4 (57)	39

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 9-68 U.S. GPM

Head Range: 1-25 FEET

Maximum Working Pressure: 145 PSI

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

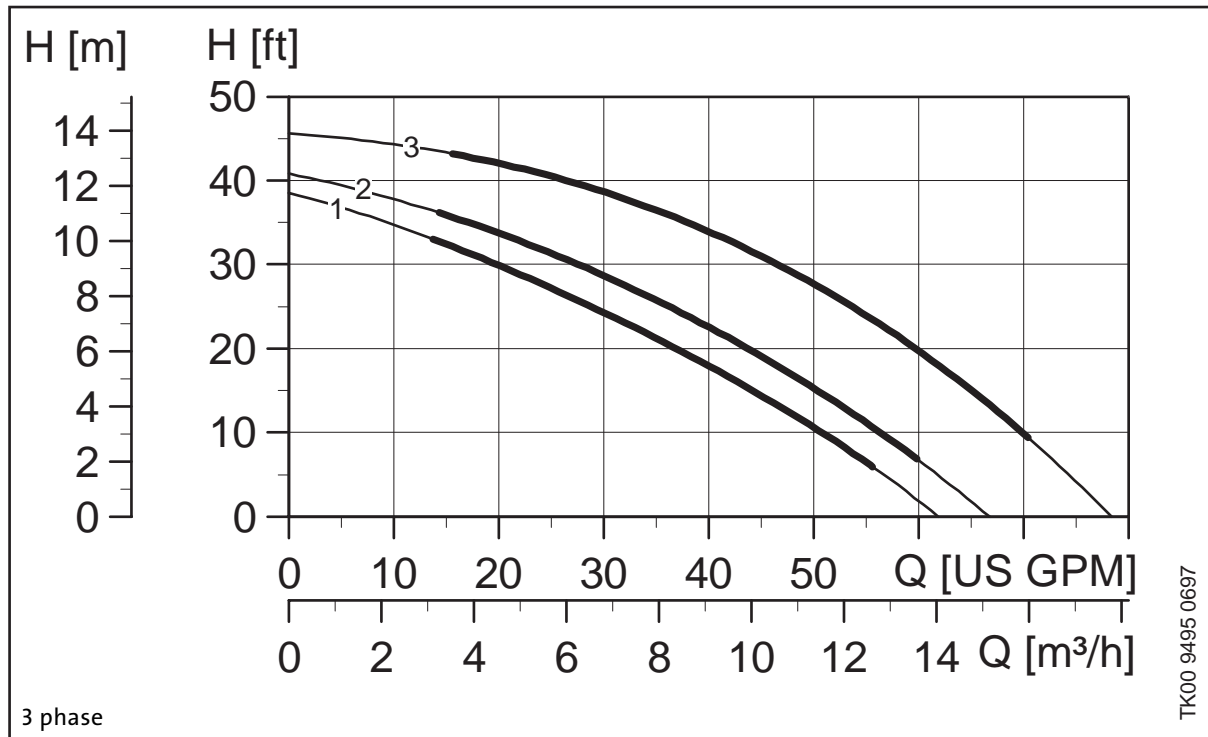
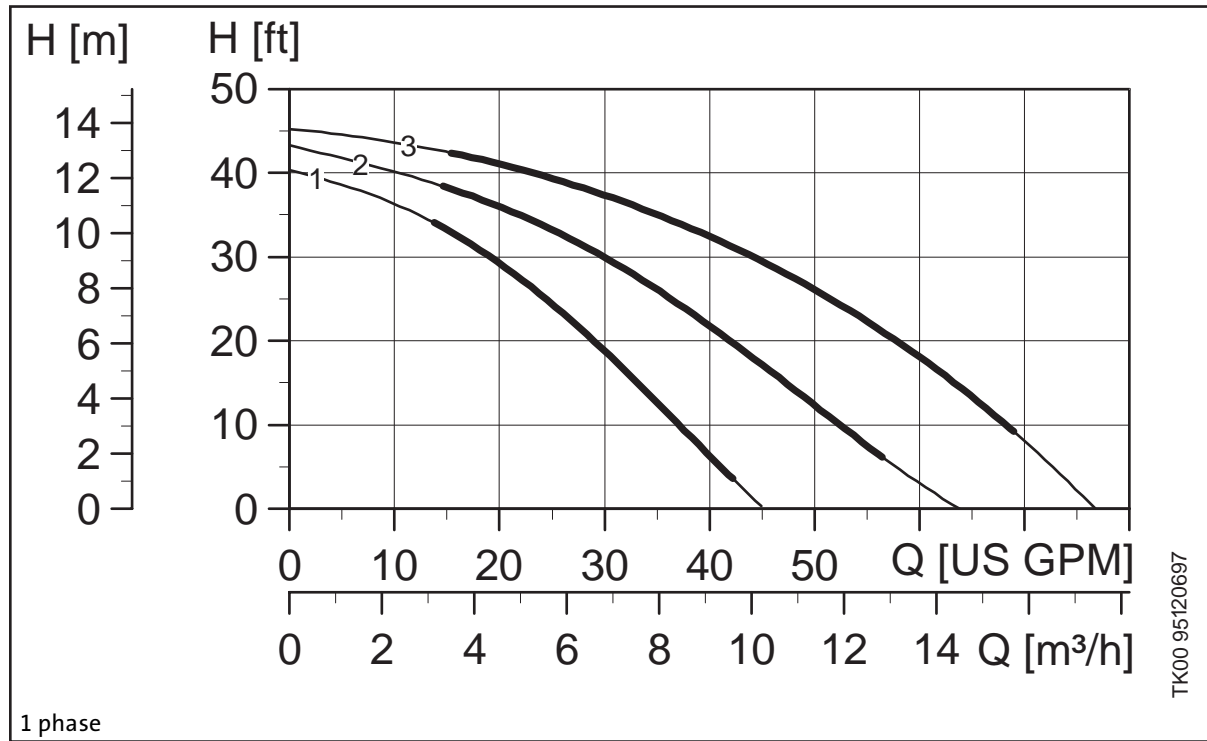
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/4" 2 bolt with (2) 1/2" diameter holes

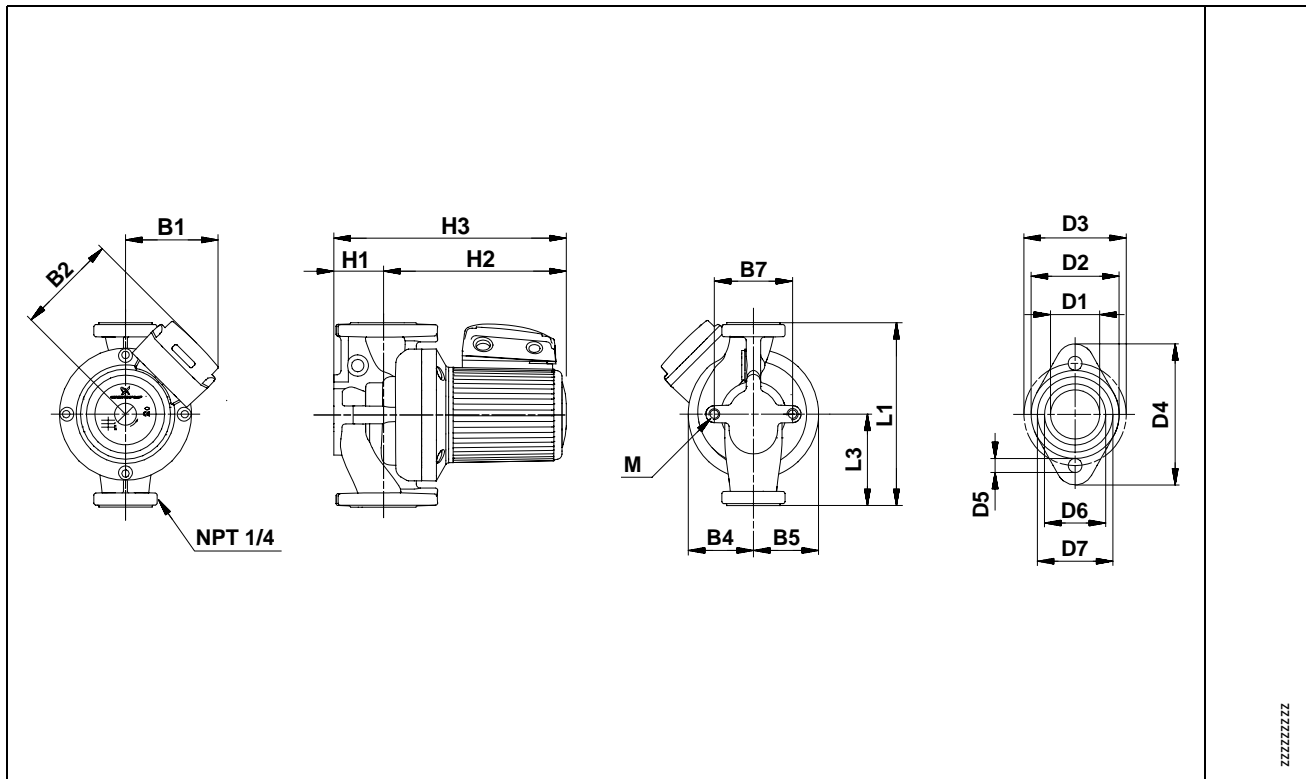
Ambient Air Temperature 32°F (0°C) - 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	11.8 Ft. - 5.1 PSI	55.2 Ft. - 23.9 PSI

UPS 32-160



UPS 32-160



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UPS32-160/2	3/4	1	1 1/2 (38)	115 or 230	11 (279)	5 1/2 (140)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 3/16 (81)	2 11/16 (68)	9 7/16 (240)	12 1/8 (308)	1 7/16 (36)	2 1/2 (64)	3 7/16 (87)	4 5/8 (117)	1 13/16 (46)	2 1/4 (57)	38
	3/4	3	1 1/2 (38)	208/230, 460*, 575*	11 (279)	5 1/2 (140)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 3/16 (81)	2 11/16 (68)	9 7/16 (240)	12 1/8 (308)	1 7/16 (36)	2 1/2 (64)	3 7/16 (87)	4 5/8 (117)	1 13/16 (46)	2 1/4 (57)	38

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 9-78 U.S. GPM

Head Range: 1-46 FEET

Maximum Working Pressure: 145 PSI

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

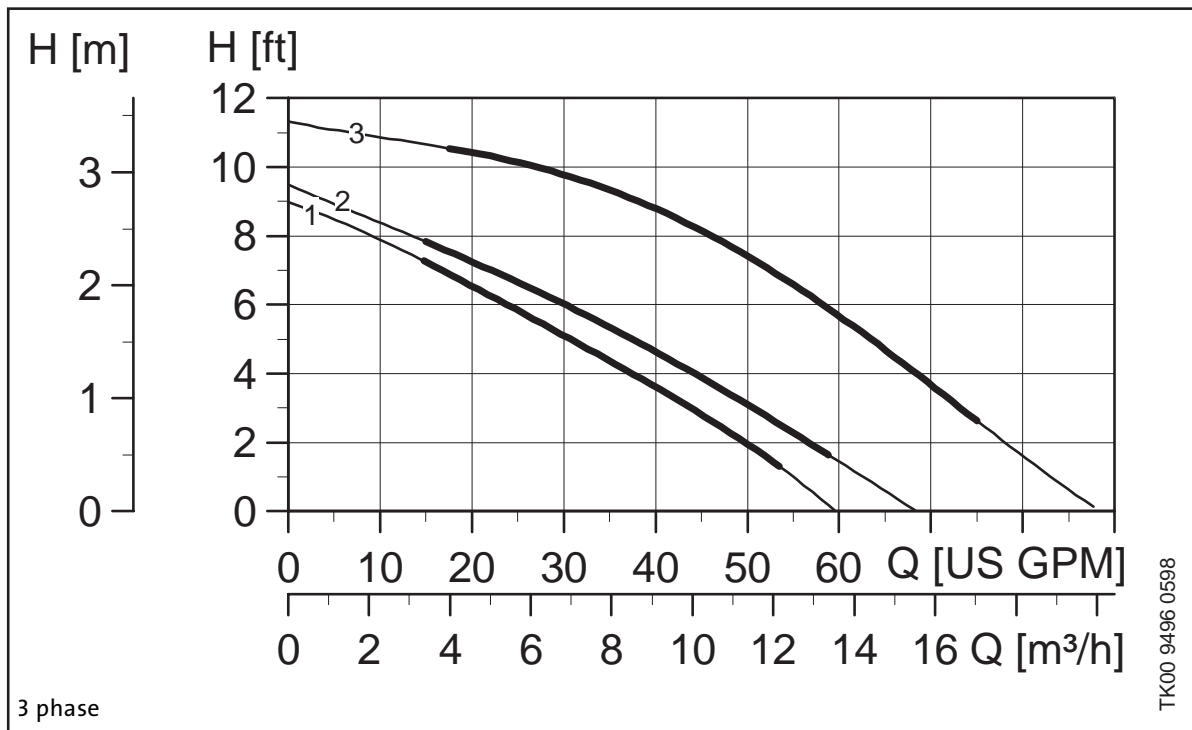
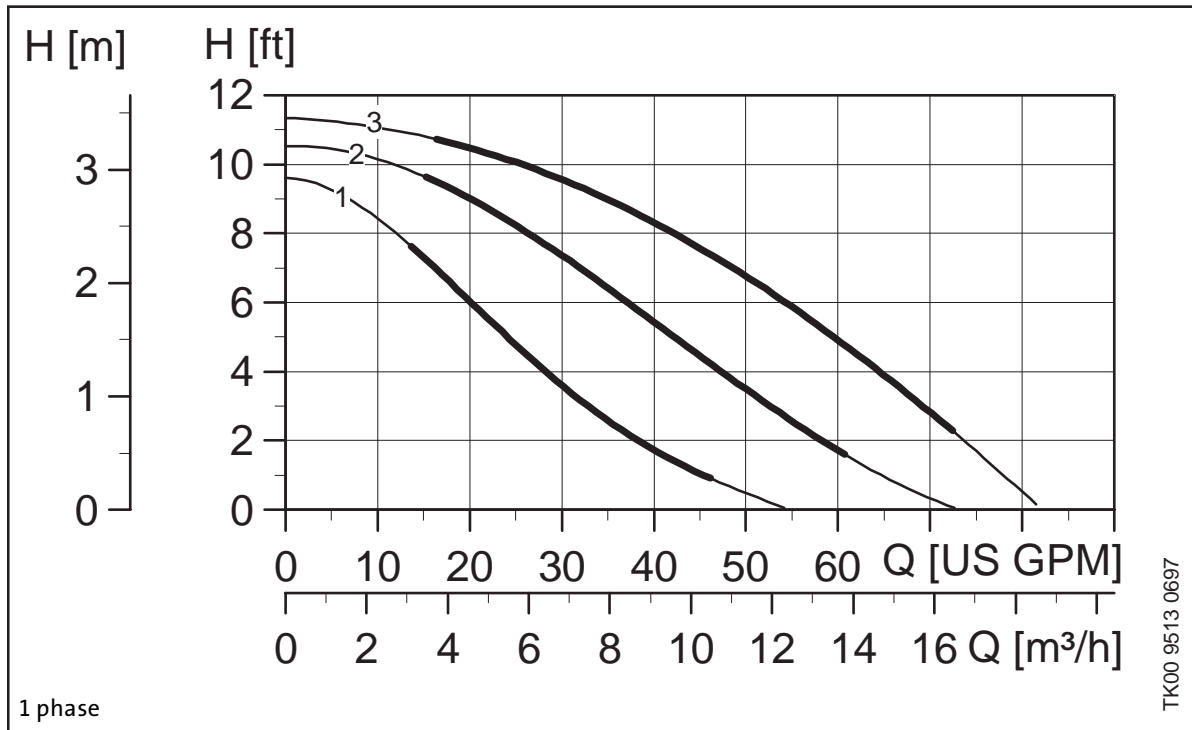
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/2" 2 bolt with (2) 1/2" diameter holes

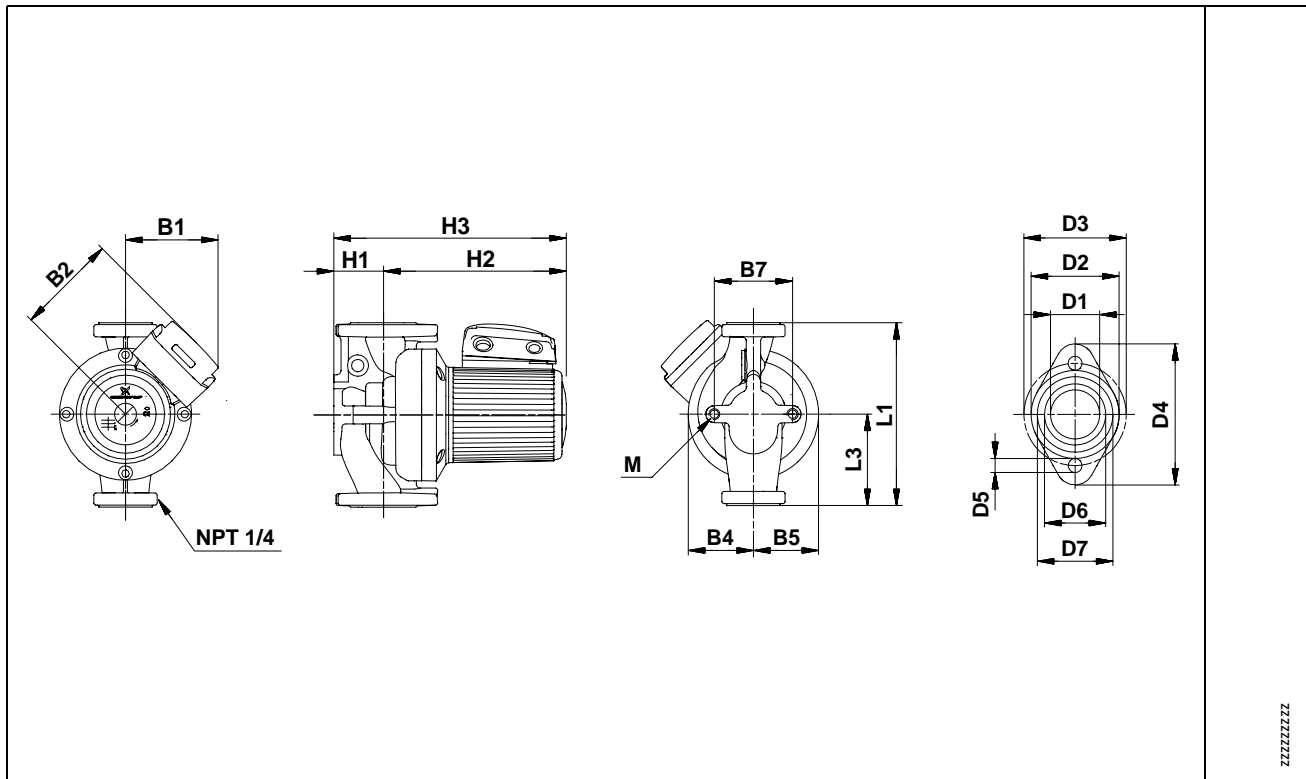
Ambient Air Temperature 32°F (0°C) - 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
26.8 Ft. - 11.6 PSI	37 Ft. - 16.0 PSI	78.8 Ft. - 34.1 PSI

UPS 40-40



UPS 40-40



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UPS40-40/4	1/3	1	1 1/2 (38)	115 or 230	13 1/2 (343)	6 3/4 (171)	5 5/16 (135)	5 9/16 (141)	3 3/8 (86)	3 (76)	4 3/4 (121)	2 11/16 (68)	9 11/16 (246)	12 3/8 (314)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	44
	1/3	3	1 1/2 (38)	208/230, 460*, 575*	13 1/2 (343)	6 3/4 (171)	5 5/16 (135)	5 9/16 (141)	3 3/8 (86)	3 (76)	4 3/4 (121)	2 11/16 (68)	9 11/16 (246)	12 3/8 (314)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	44

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 13-82 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 1-11 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

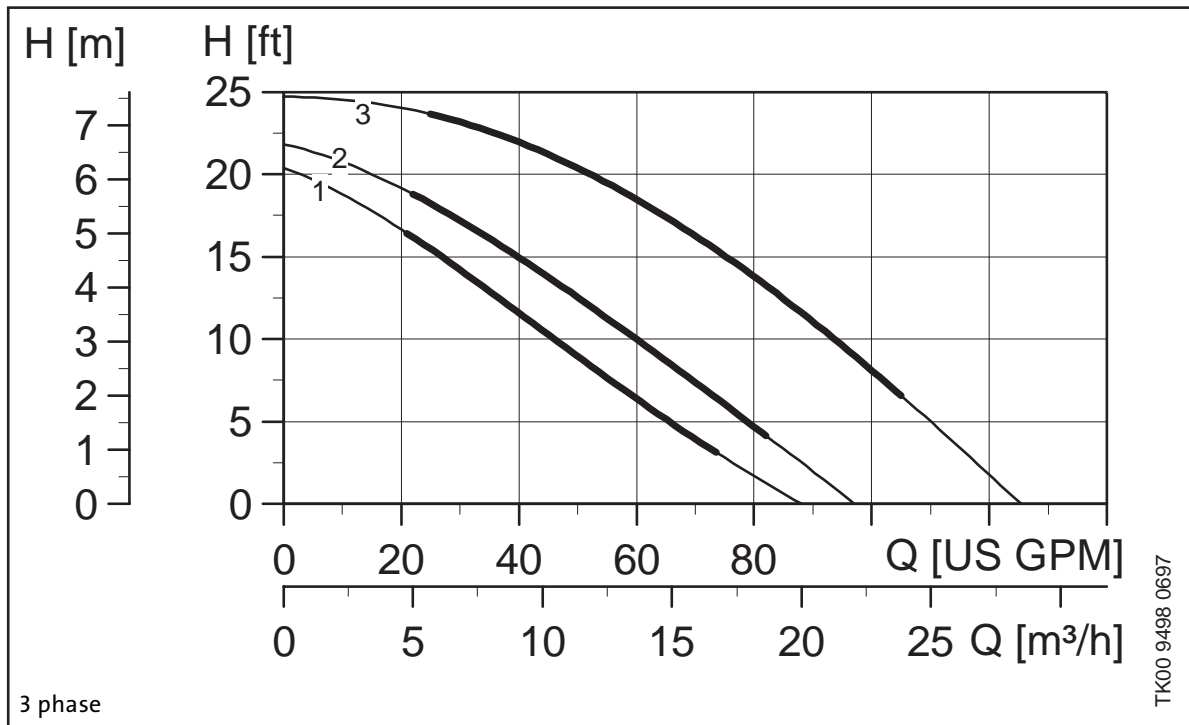
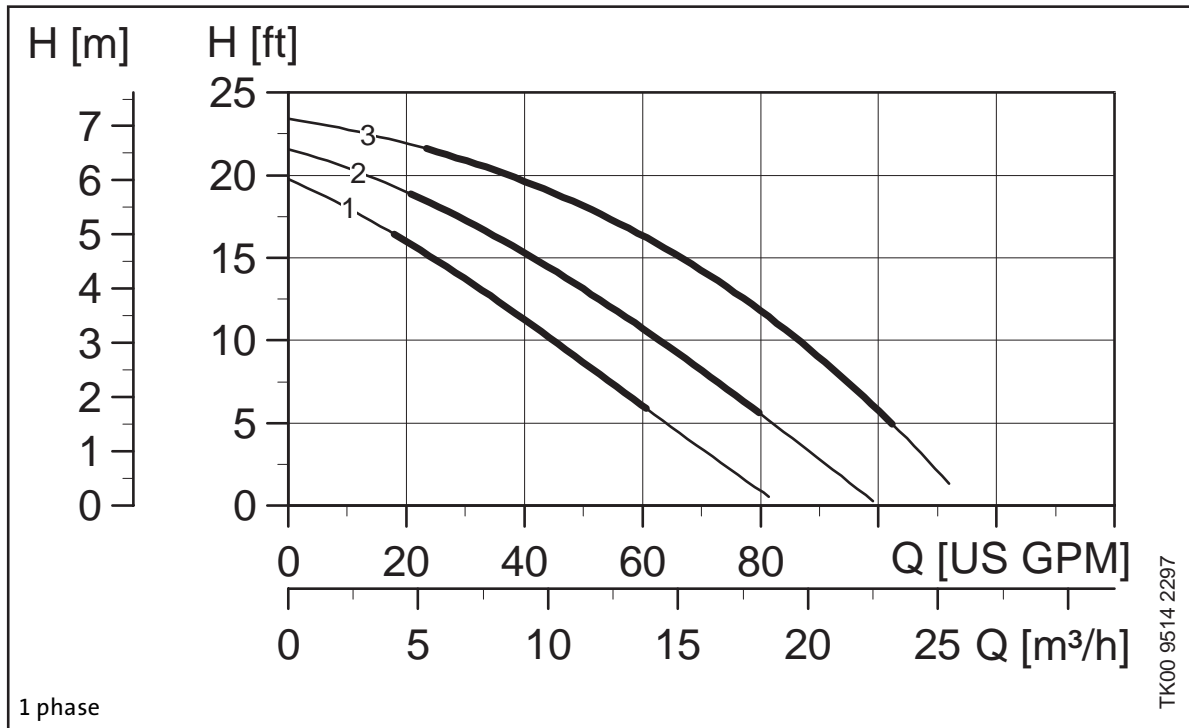
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/2", 2-Bolt with (2) 1/2" dia. holes

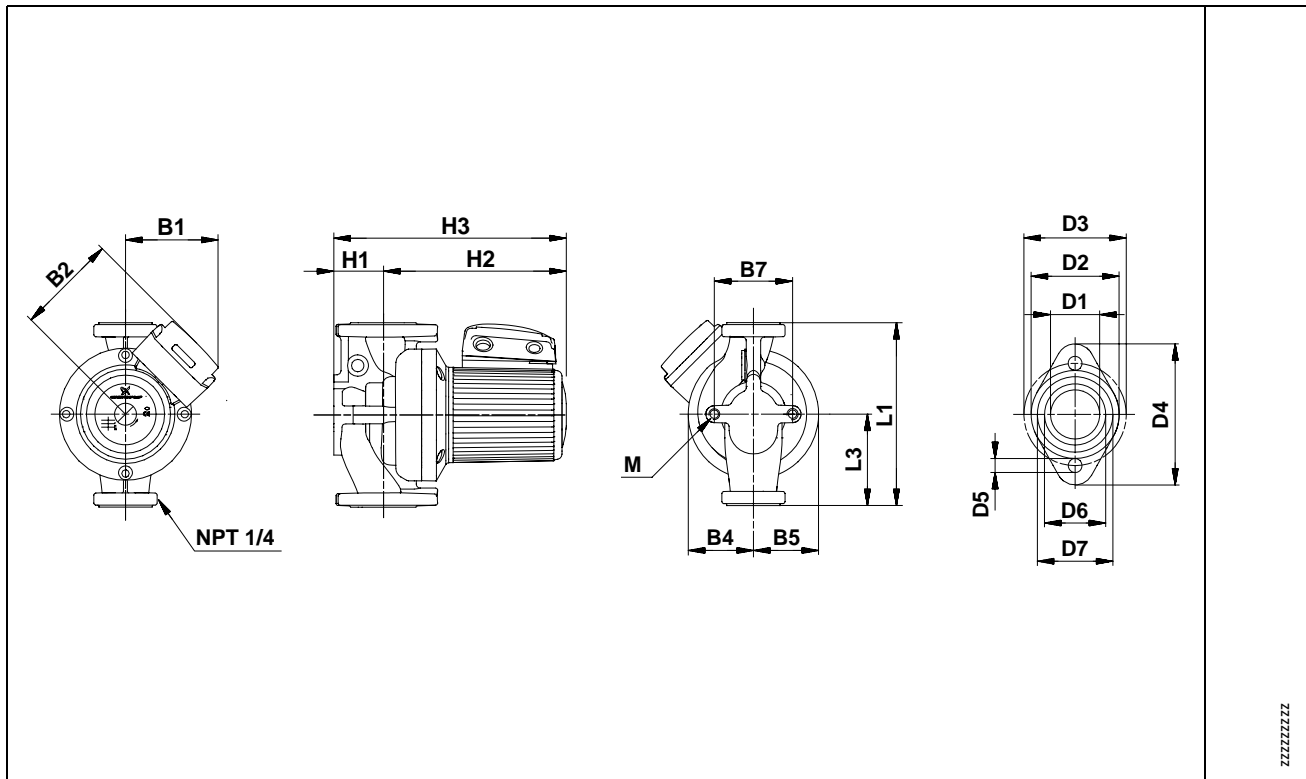
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	10.2 Ft. - 4.4 PSI	53.6 Ft. - 23.2 PSI

UPS 40-80/4



UPS 40-80/4



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UPS40-80/4	1/2	1	1 1/2 (38)	115 or 230	13 1/2 (343)	6 3/4 (171)	5 3/4 (147)	6 5/8 (169)	3 15/16 (100)	3 15/16 (100)	4 3/4 (121)	3 (76)	9 (228)	12 (305)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	62
	1/2	3	1 1/2 (38)	208/230, 460*, 575*	13 1/2 (343)	6 3/4 (171)	5 3/4 (147)	6 5/8 (169)	3 15/16 (100)	3 15/16 (100)	4 3/4 (121)	3 (76)	9 (228)	12 (305)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	62

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 20-115 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 1-23 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

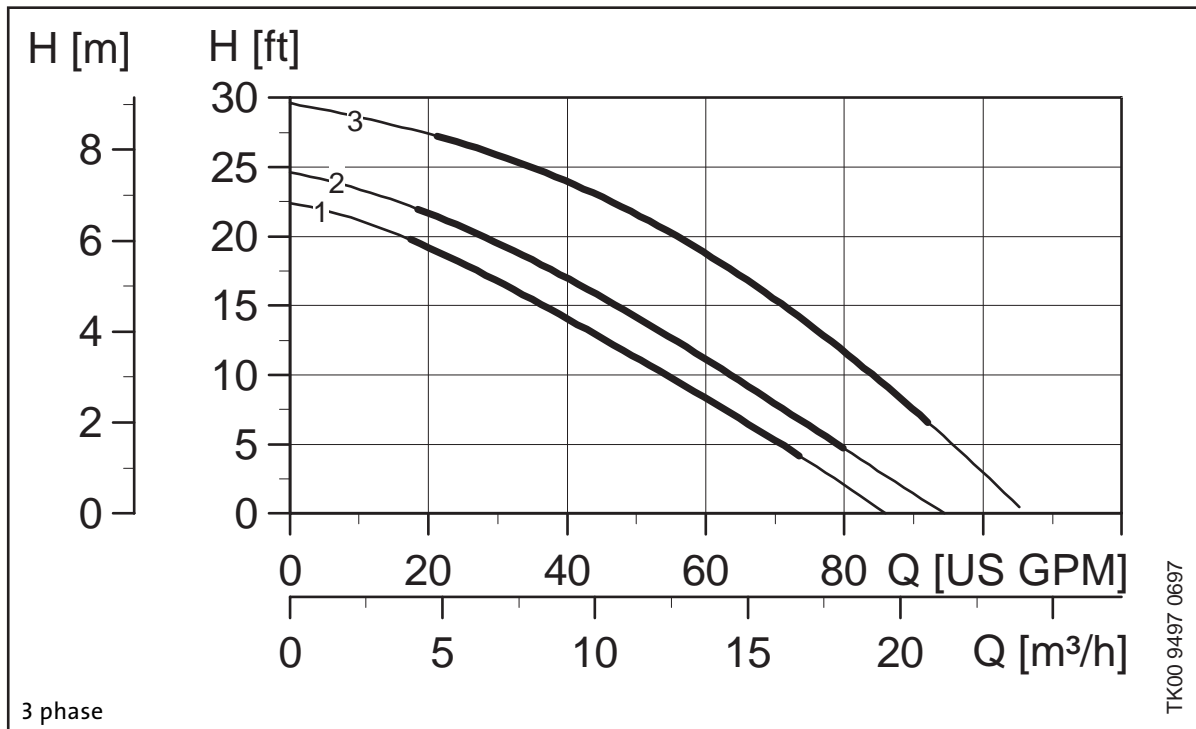
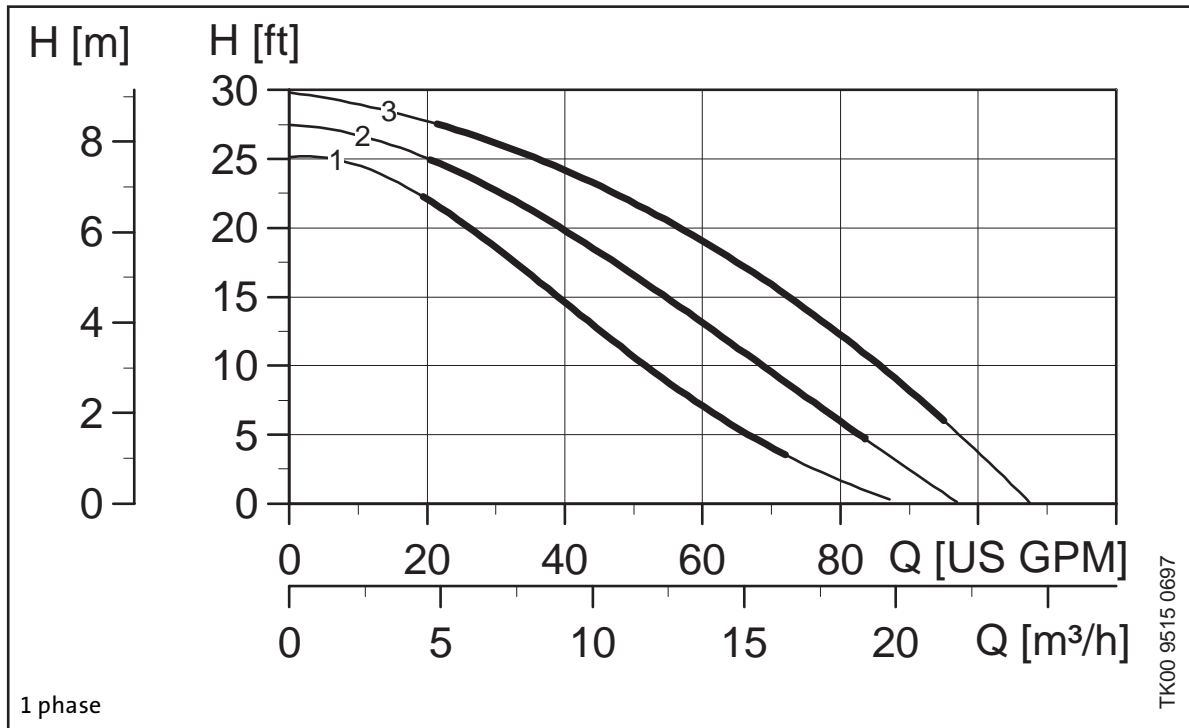
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/2", 2-Bolt with (2) 1/2" dia. holes

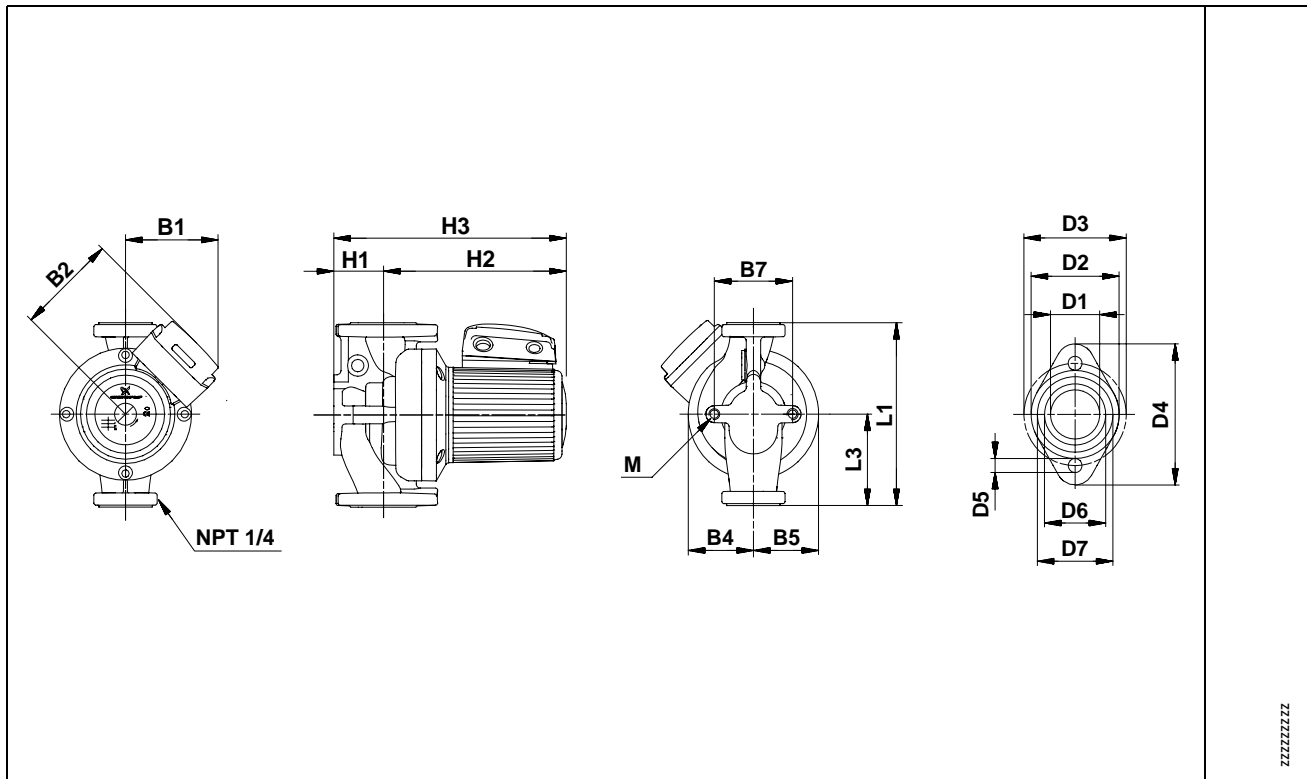
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	3.5 Ft. - 1.5 PSI	41.8 Ft. - 18.1 PSI

UPS 40-80/2



UPS 40-80/2



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UPS40-80/2	3/4	1	1 1/2 (38)	115 or 230	13 1/2 (343)	6 3/4 (171)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 1/8 (80)	2 11/16 (68)	9 5/8 (245)	12 5/16 (313)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	44
	3/4	3	1 1/2 (38)	208/230, 460*, 575*	13 1/2 (343)	6 3/4 (171)	5 5/16 (135)	5 9/16 (141)	3 (76)	3 (76)	3 1/8 (80)	2 11/16 (68)	9 5/8 (245)	12 5/16 (313)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	44

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 20-107 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 1-30 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

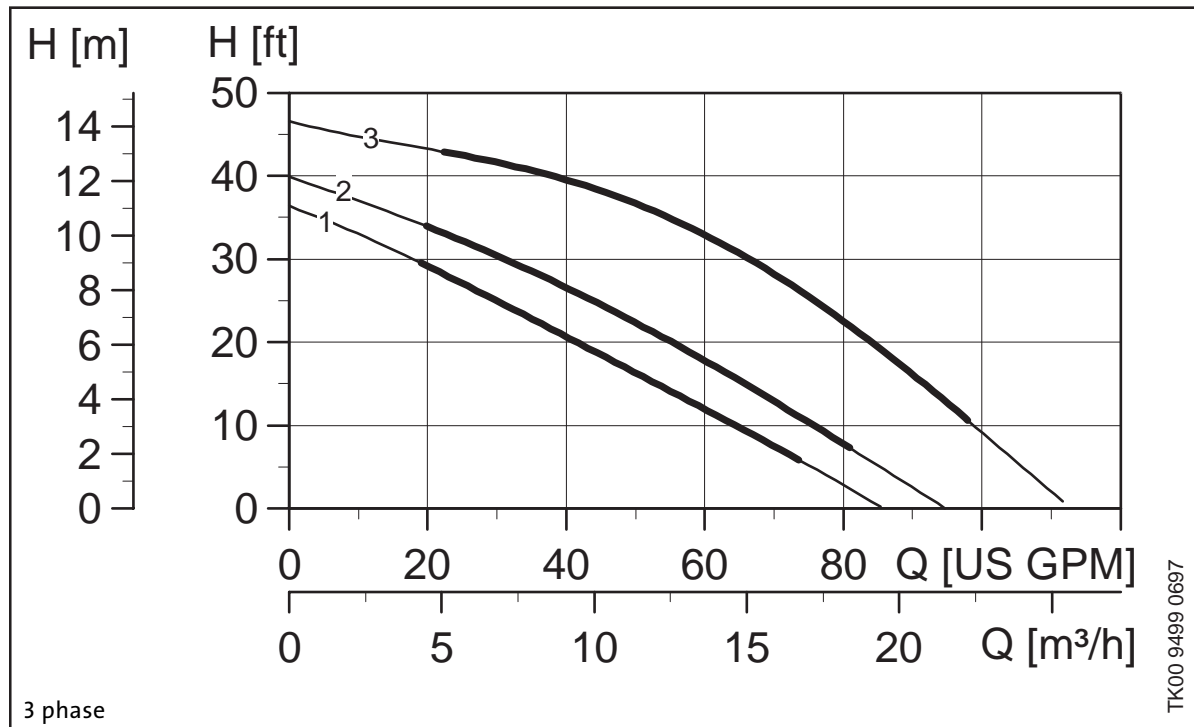
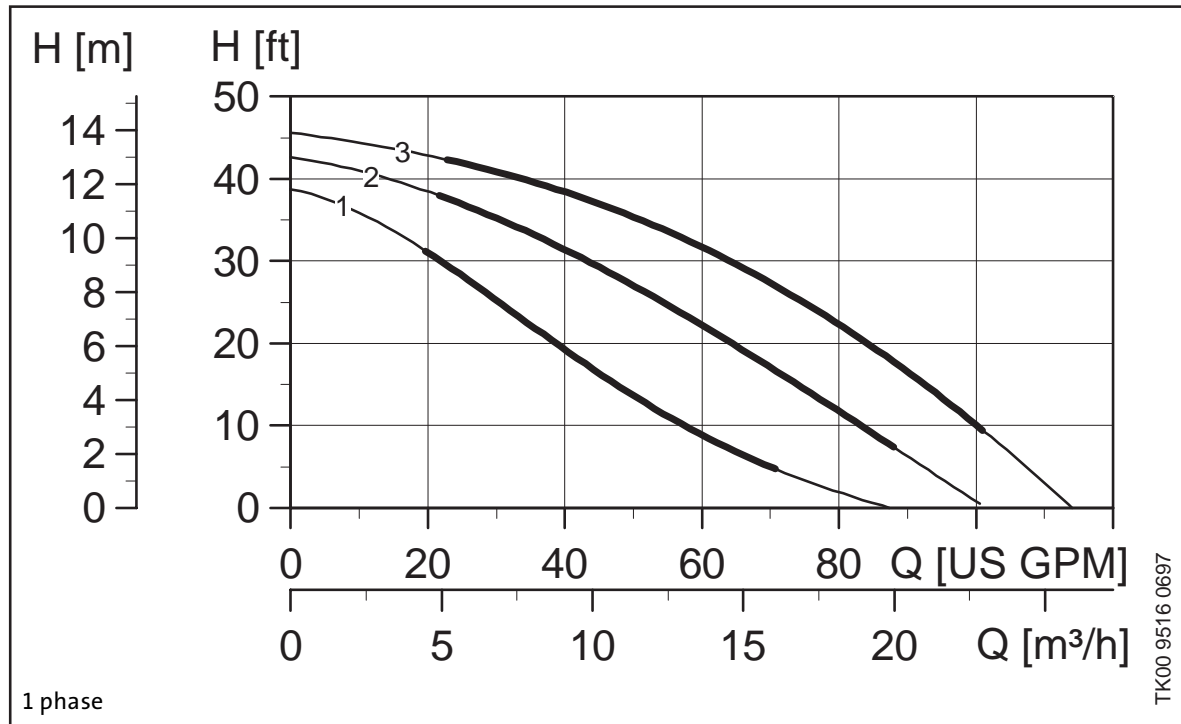
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/2", 2-Bolt with (2) 1/2" dia. holes

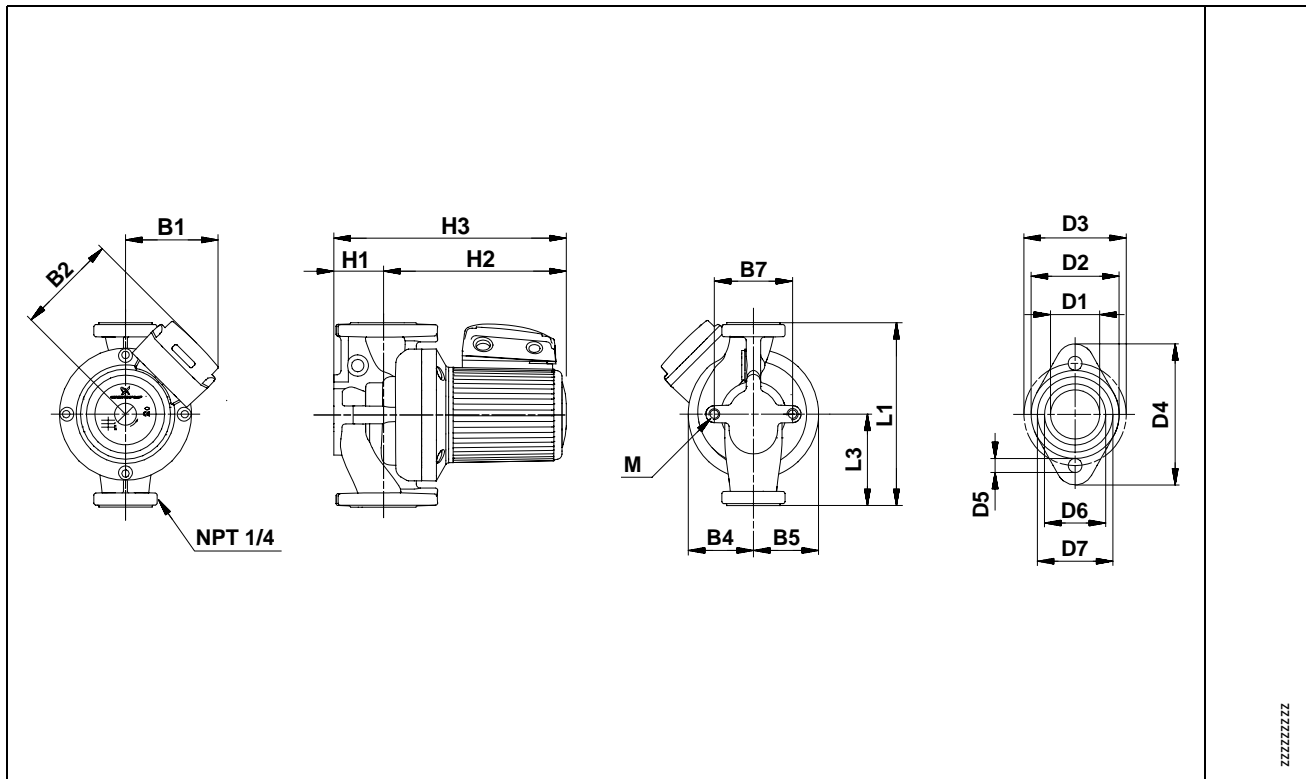
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
15 Ft. - 6.5 PSI	25.2 Ft. - 10.9 PSI	67 Ft. - 29.0 PSI

UPS 40-160



UPS 40-160



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UPS40-160/2	3/4	1	1 1/2 (38)	115 or 230	11 1/2 (292)	5 3/4 (147)	5 3/4 (147)	6 5/8 (169)	3 15/16 (100)	3 15/16 (100)	3 3/16 (81)	2 15/16 (74)	9 (228)	11 5/8 (296)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	50
	3/4	3	1 1/2 (38)	208/230, 460*, 575*	11 1/2 (292)	5 3/4 (147)	5 3/4 (147)	6 5/8 (169)	3 15/16 (100)	3 15/16 (100)	3 3/16 (81)	2 15/16 (74)	9 (228)	11 5/8 (296)	1 11/16 (43)	2 7/8 (73)	3 7/8 (99)	5 (127)	2 1/16 (52)	2 9/16 (65)	50

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 20-117 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 1-46 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

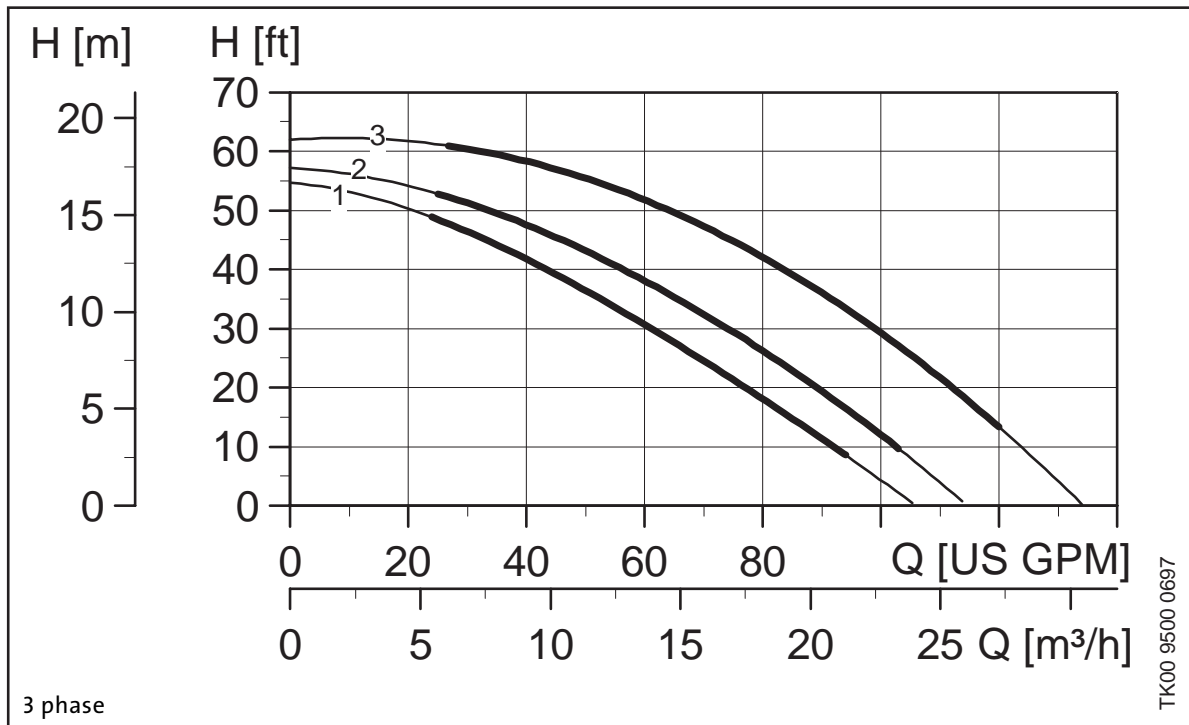
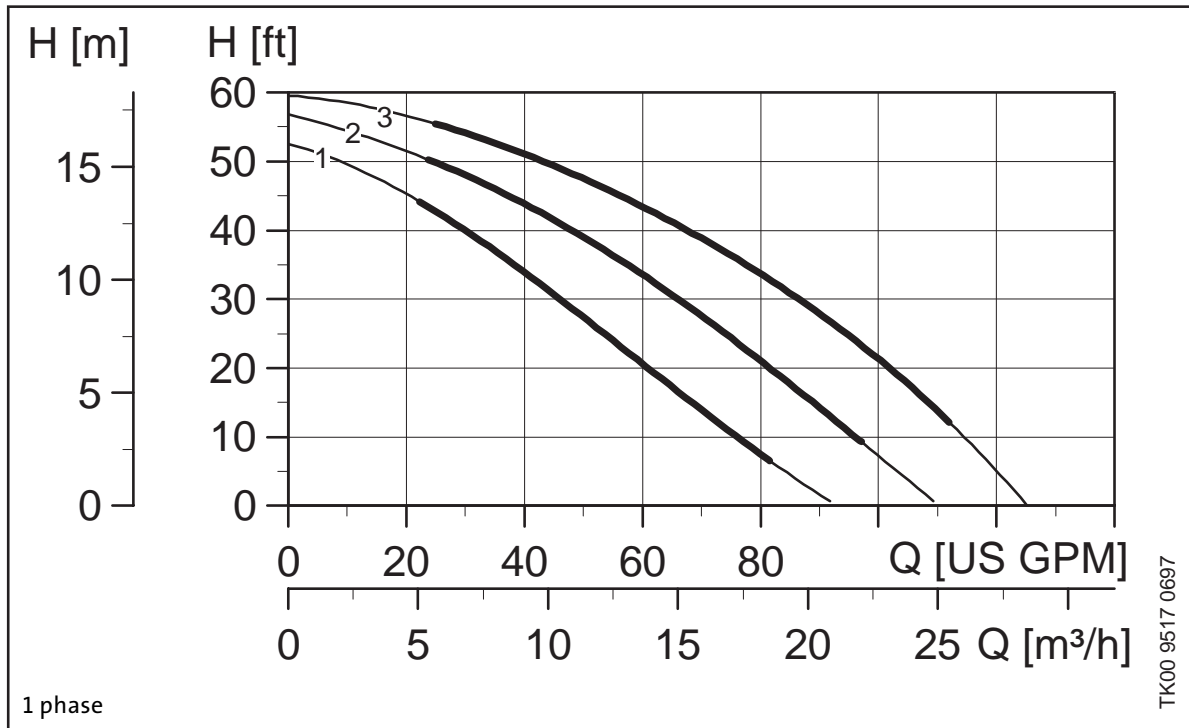
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/2", 2-Bolt with (2) 1/2" dia. holes

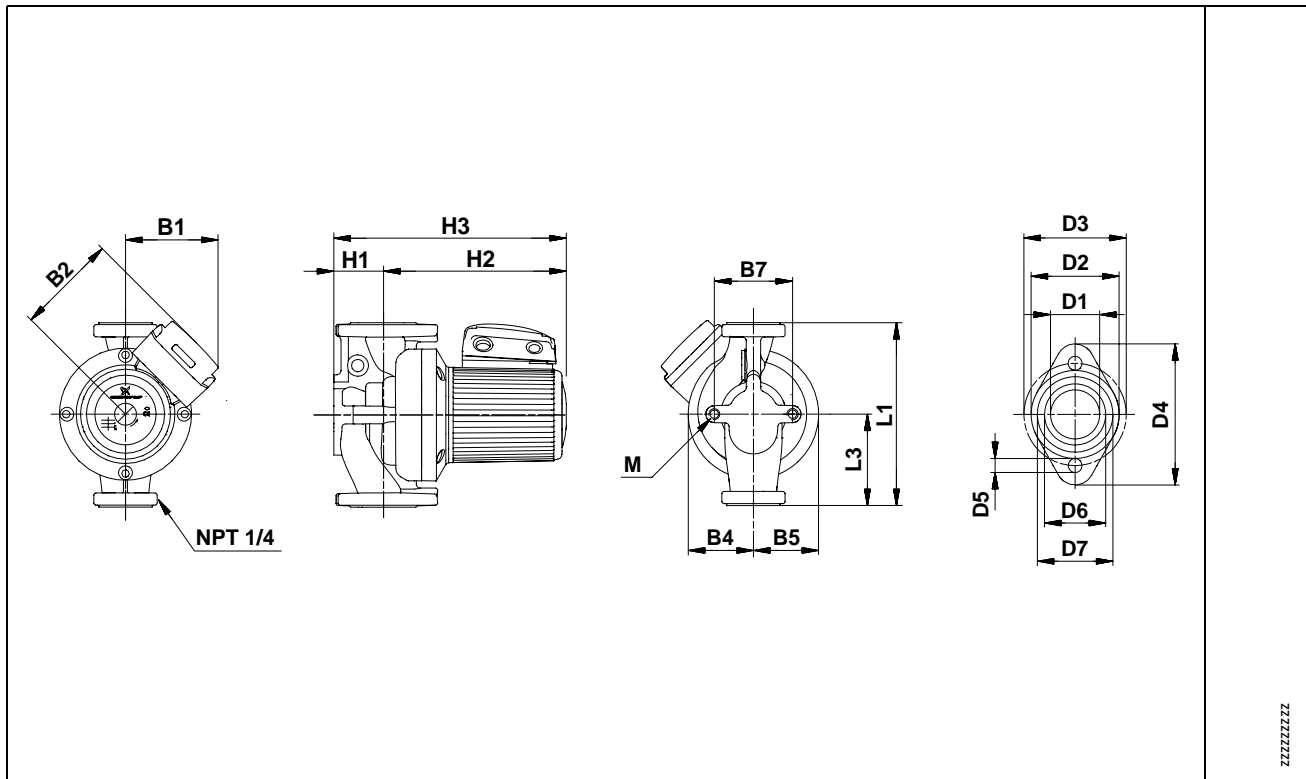
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
11.8 Ft. - 5.1 PSI	21.7 Ft. - 9.4 PSI	63.8 Ft. - 27.6 PSI

UPS 40-240



UPS 40-240



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UPS40-240/2	1 1/2	1	1 1/2 (38)	230	13 1/2 (343)	6 3/4 (171)	5 3/4 (147)	6 5/8 (169)	4 (102)	4 (102)	3 3/16 (81)	2 11/16 (68)	11 1/16 (281)	13 3/4 (349)	1 11/16 (43)	2 7/8 (73)	3 7/16 (87)	5 (127)	2 1/16 (52)	2 9/16 (65)	62
	1 1/2	3	1 1/2 (38)	208/230, 460*, 575*	13 1/2 (343)	6 3/4 (171)	5 3/4 (147)	6 5/8 (169)	4 (102)	4 (102)	3 3/16 (81)	2 11/16 (68)	11 1/16 (281)	13 3/4 (349)	1 11/16 (43)	2 7/8 (73)	3 7/16 (87)	5 (127)	2 1/16 (52)	2 9/16 (65)	62

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 22-125 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 0-60 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

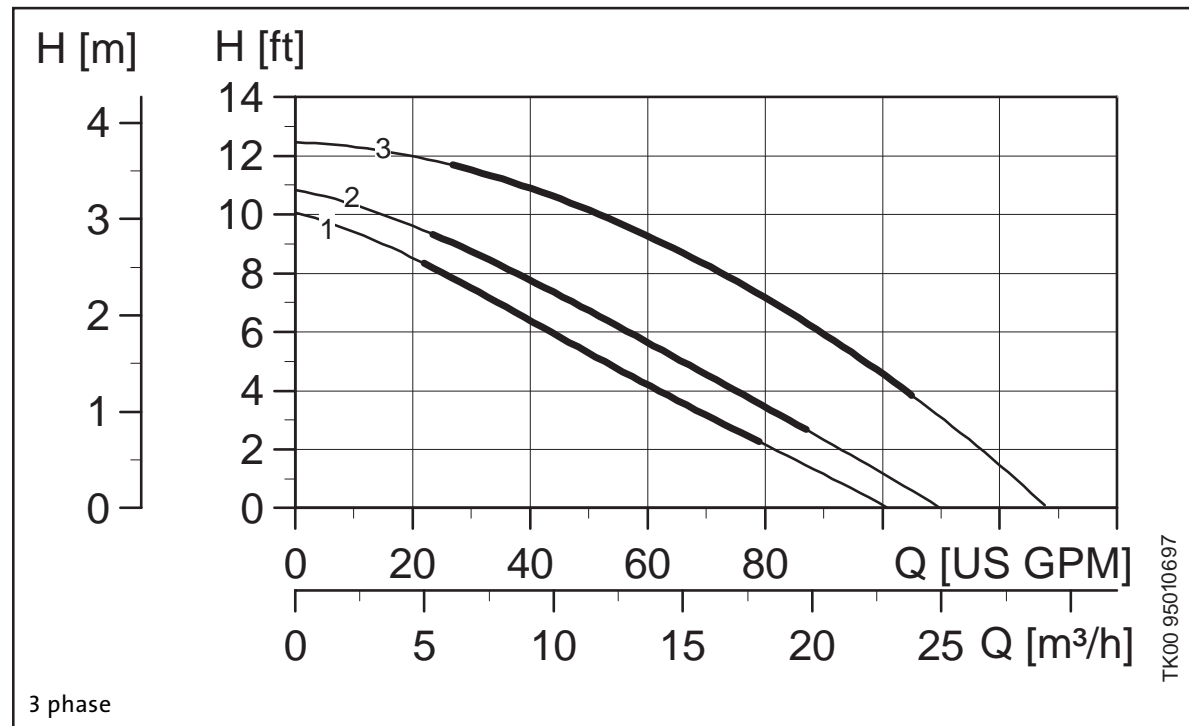
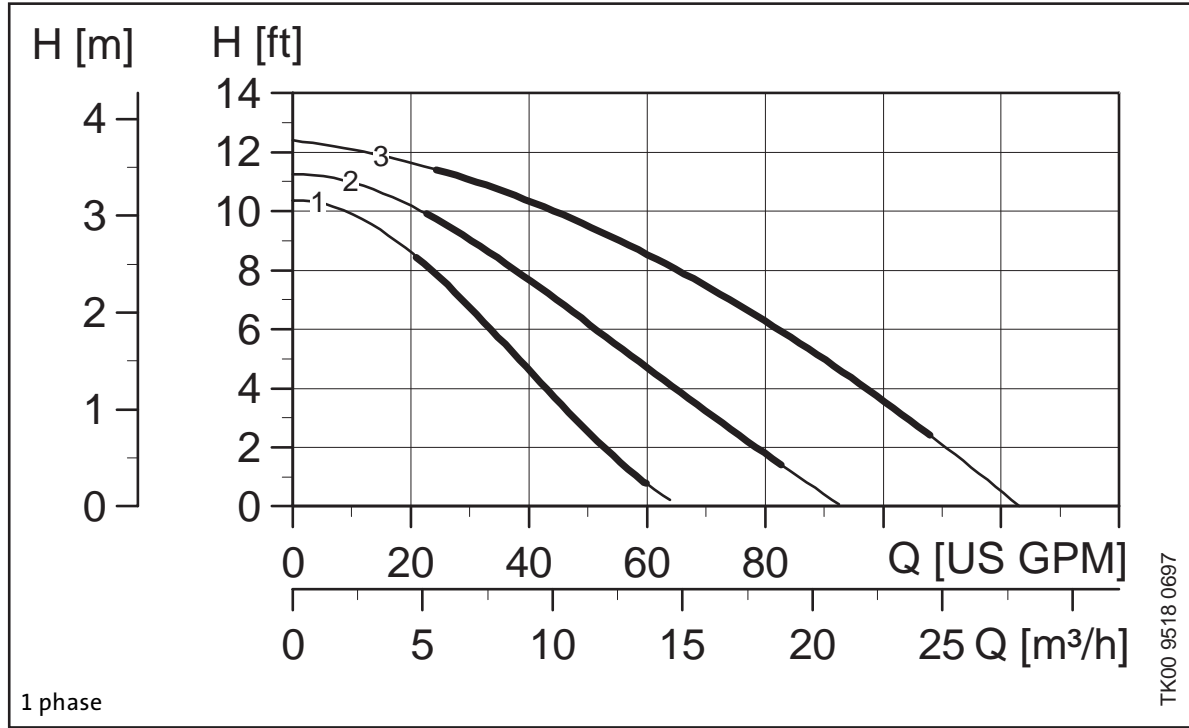
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON ANSI) 1 1/2", 2-Bolt with (2) 1/2" dia. holes

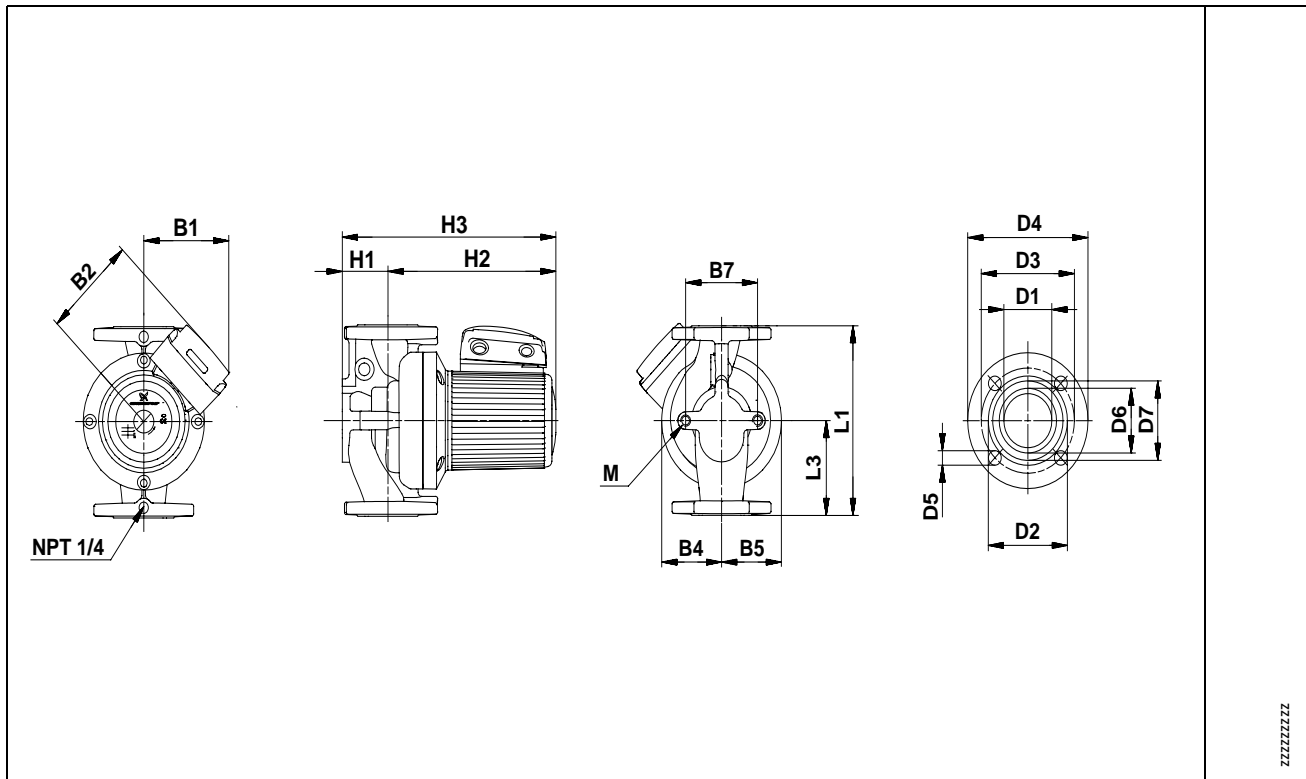
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
26.8 Ft. - 11.6 PSI	37 Ft. - 16.0 PSI	78.8 Ft. - 34.1 PSI

UPS 50-40



UPS 50-40



Electrical Data, Weights and Dimensions

Pump Type	Nomin al HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UP550-40/4	1/3	1	2 (51)	115 or 230	14 (356)	7 (178)	5 5/16 (135)	5 9/16 (141)	3 9/16 (90)	3 (76)	4 3/4 (160)	3 1/4 (83)	10 1/8 (257)	13 1/8 (339)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	54
	1/3	3	2 (51)	208/230, 460*, 575*	14 (356)	7 (178)	5 5/16 (135)	5 9/16 (141)	3 9/16 (90)	3 (76)	4 3/4 (160)	3 1/4 (83)	10 1/8 (257)	13 1/8 (339)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	54

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 20-122 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 0-12.5 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

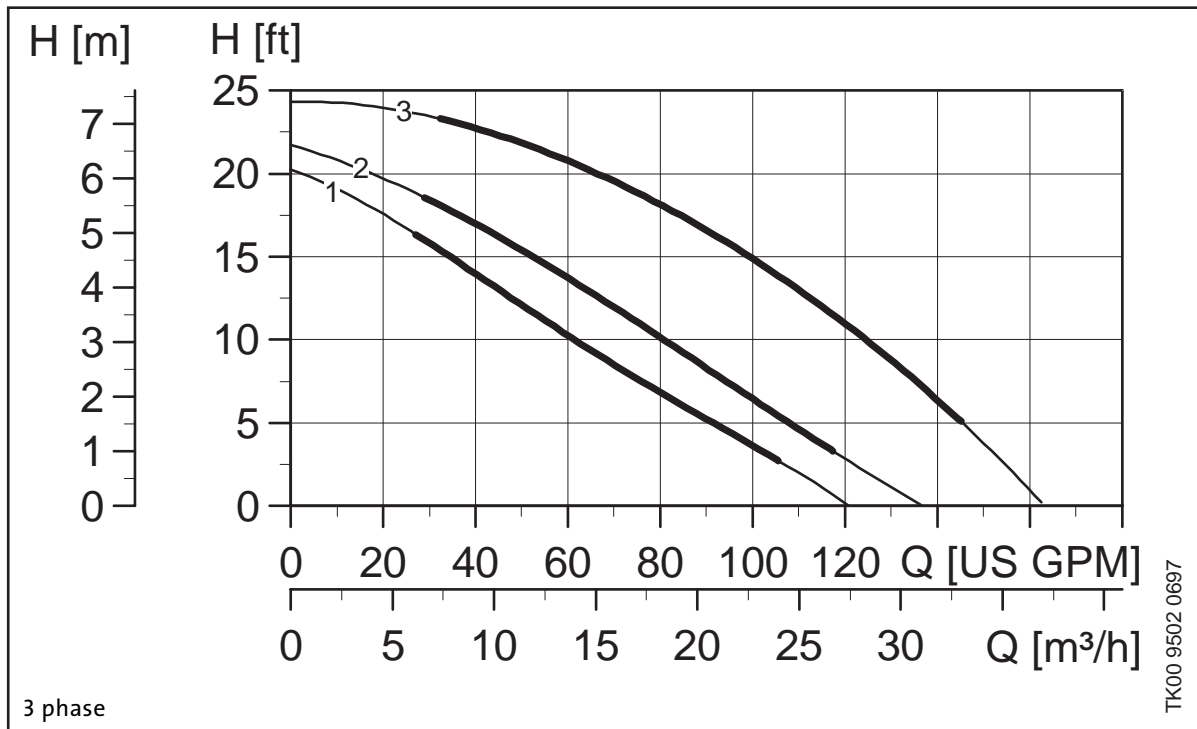
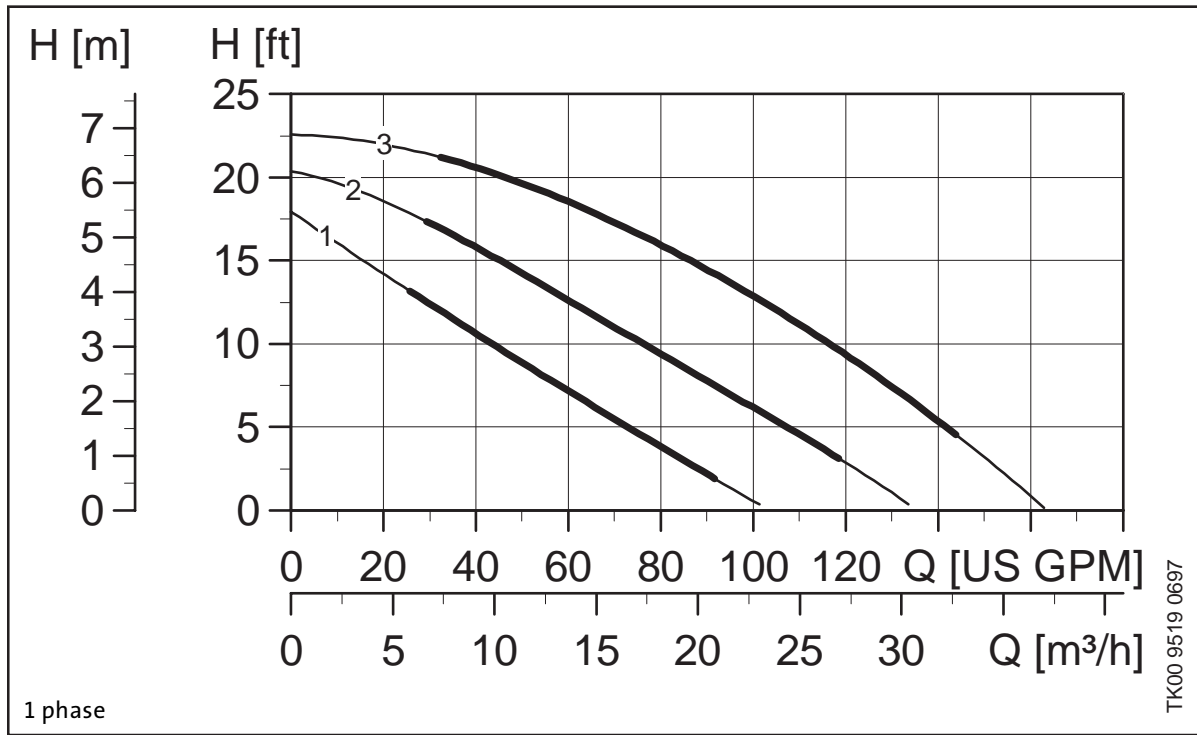
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON-ANSI) 2", 4-Bolt with (4) 9/16" dia. holes

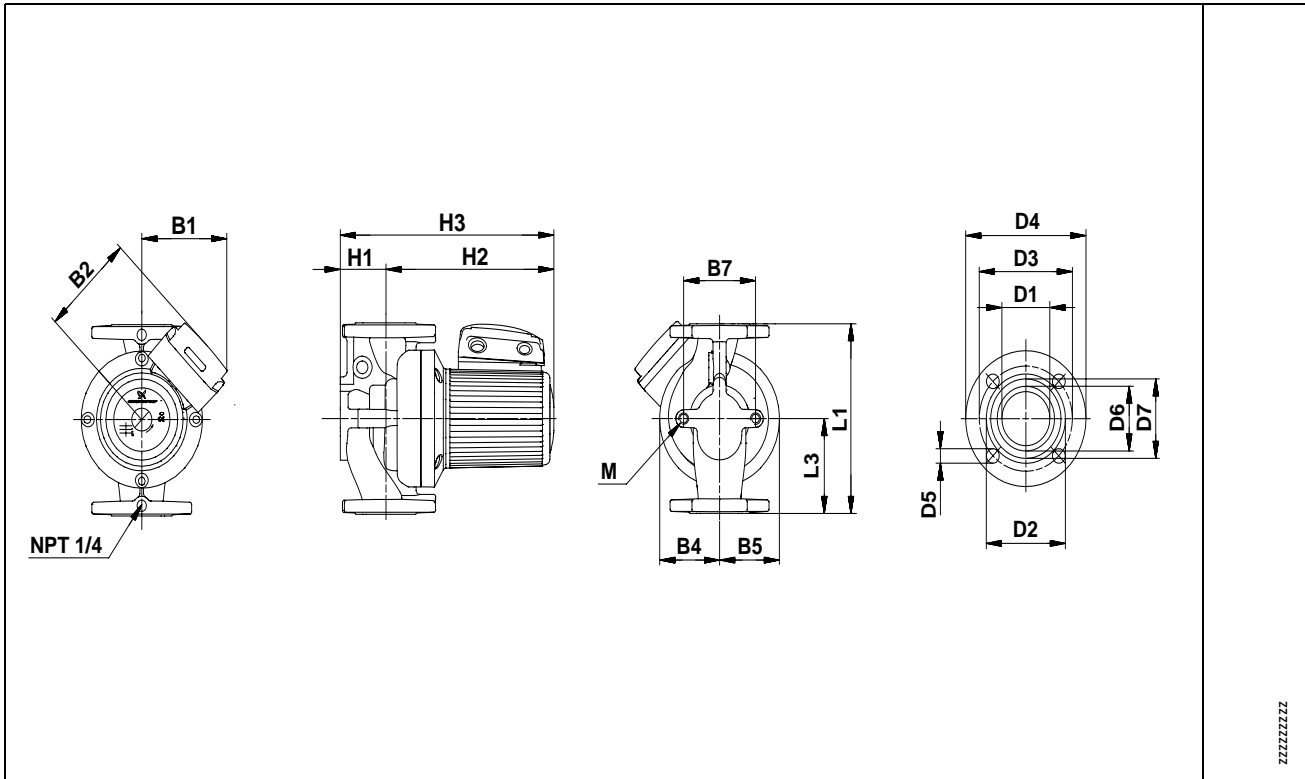
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	6.7 Ft. - 2.9 PSI	50.4 Ft. - 21.8 PSI

UPS 50-80/4



UPS 50-80/4



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UP550-80/4	3/4	1	2 (51)	115 or 230	14 (356)	7 (178)	5 3/4 (146)	6 11/16 (170)	4 3/8 (111)	3 15/16 (100)	4 3/4 (121)	3 1/4 (83)	10 7/8 (277)	14 1/8 (359)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	71
	3/4	3	2 (51)	208/230, 460*, 575*	14 (356)	7 (178)	5 3/4 (146)	6 11/16 (170)	4 3/8 (111)	3 15/16 (100)	4 3/4 (121)	3 1/4 (83)	10 7/8 (277)	14 1/8 (359)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	71

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

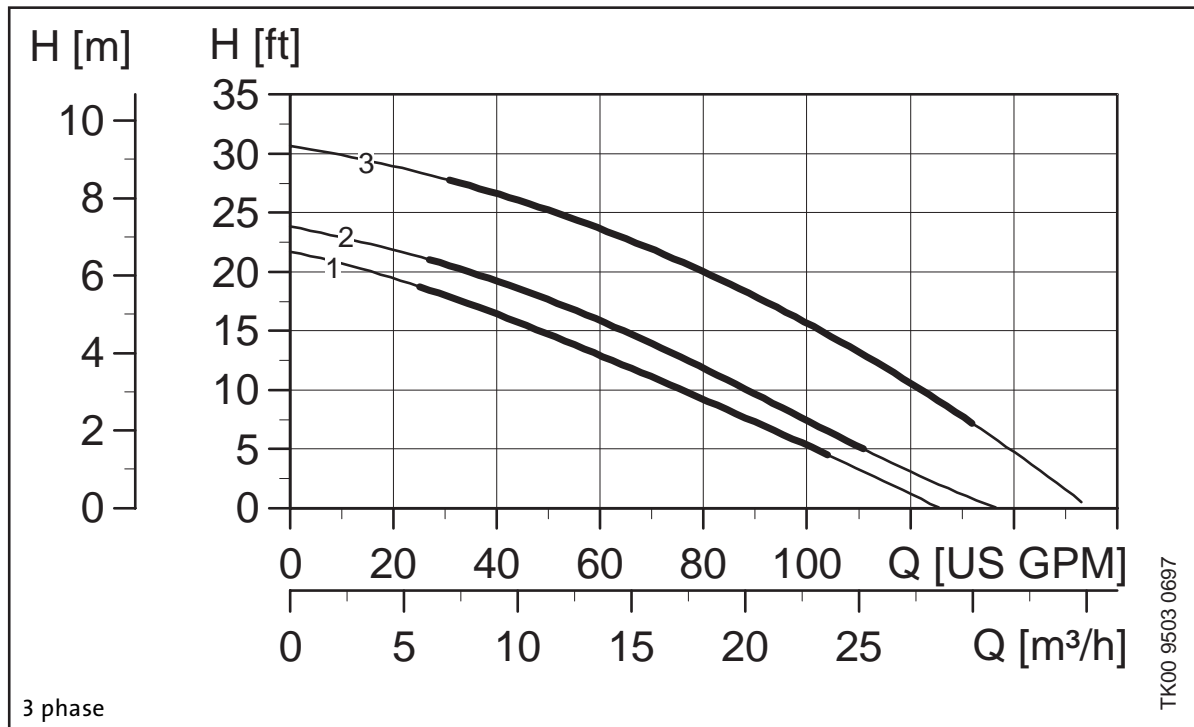
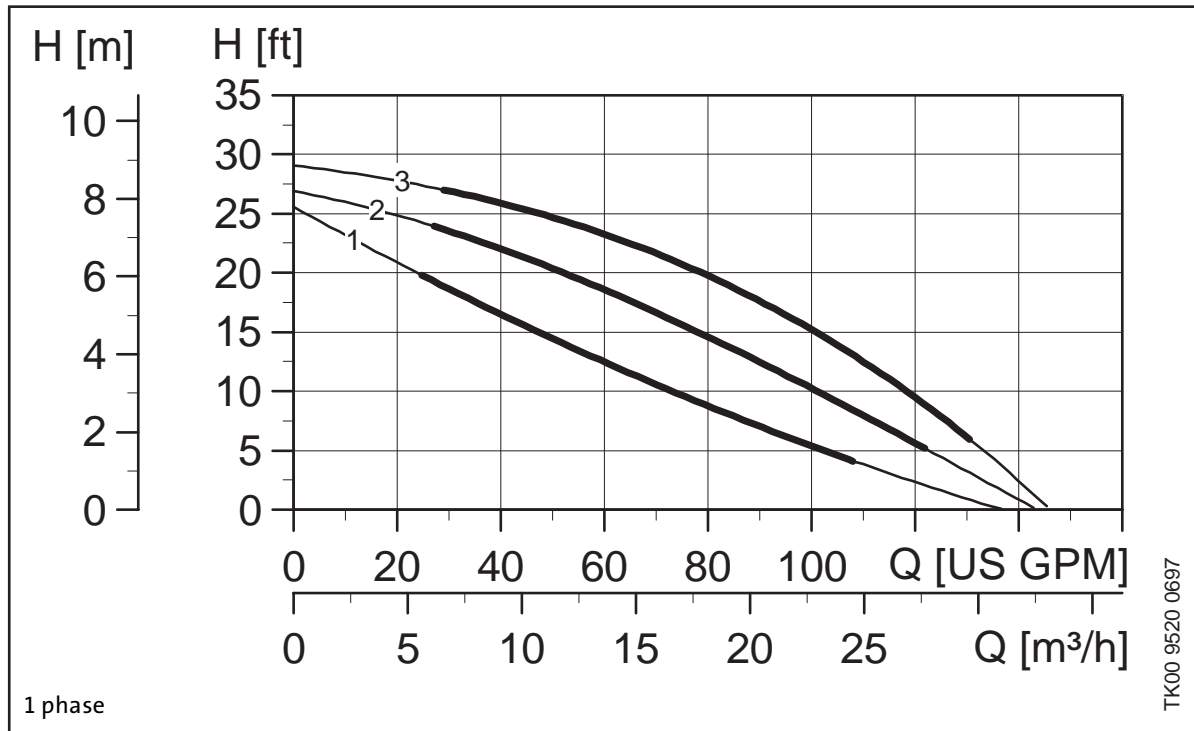
Technical Data

Flow Range: 25-162 U.S. GPM
Maximum Working Pressure: 145 PSI
Head Range: 0-22.5 FEET

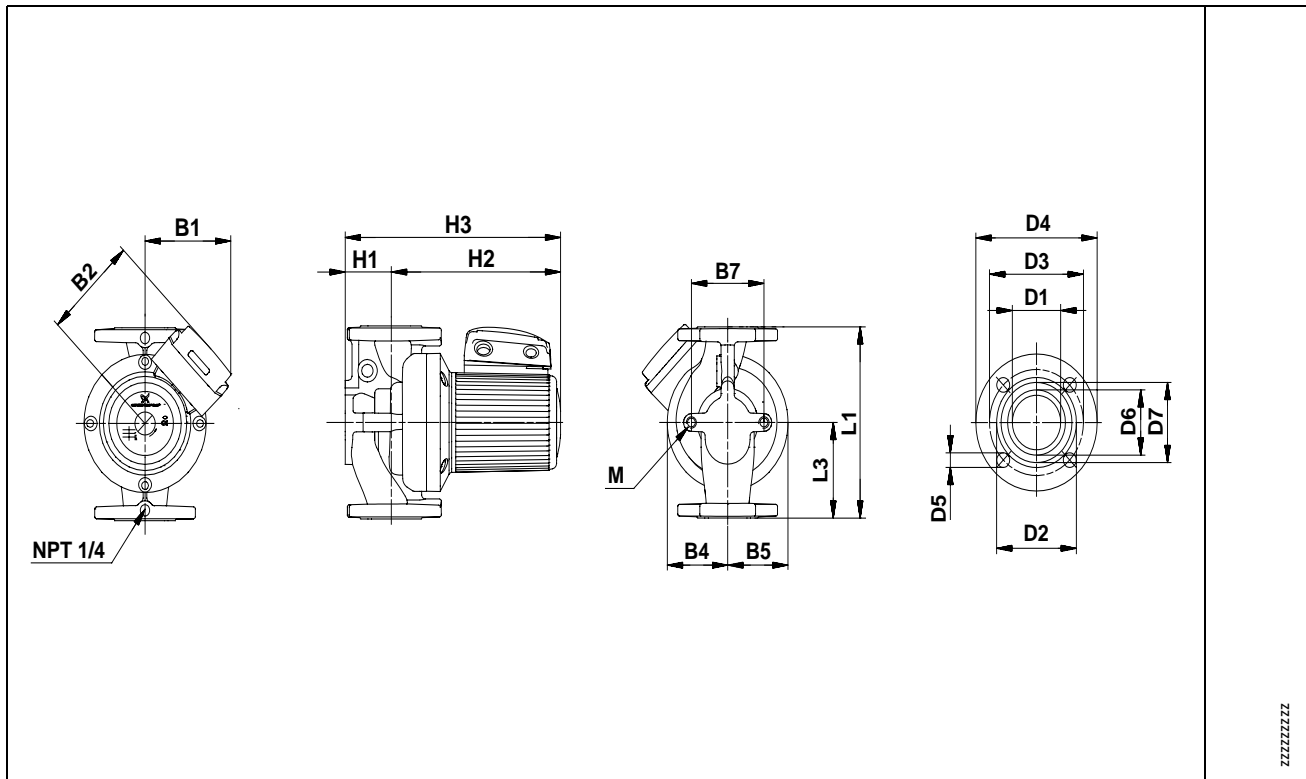
Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)
Flanges: (NON-ANSI) 2", 4-Bolt with (4) 9/16" dia. holes
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	10.2 Ft. - 4.4 PSI	53.6 Ft. - 23.2 PSI

UPS 50-80/2



UPS 50-80/2



Electrical Data, Weights and Dimensions

Pump Type	Nomin al HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UP550-80/2	3/4	1	2 (51)	115 or 230	14 (356)	7 (178)	5 5/16 (135)	5 9/16 (141)	3 3/4 (95)	3 (76)	4 3/4 (121)	3 (76)	9 7/8 (251)	12 13/16 (326)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	54
	3/4	3	2 (51)	208/230, 460*, 575*	14 (356)	7 (178)	5 5/16 (135)	5 9/16 (141)	3 3/4 (95)	3 (76)	4 3/4 (121)	3 (76)	9 7/8 (251)	12 13/16 (326)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	54

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

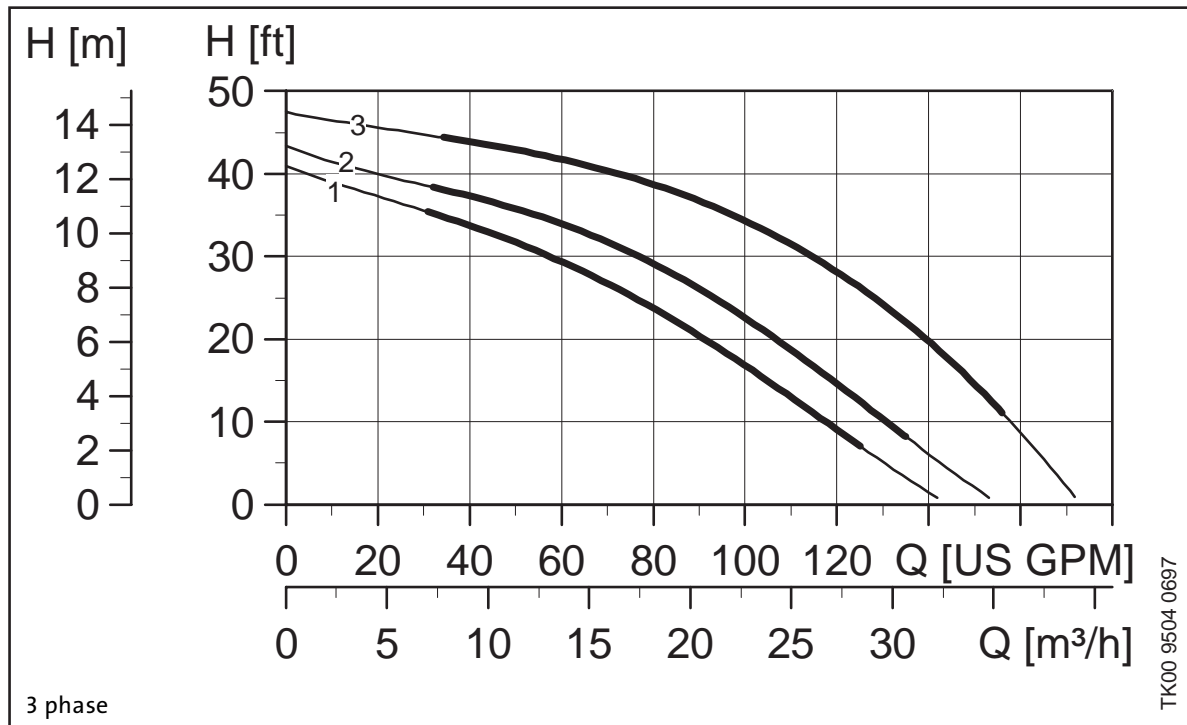
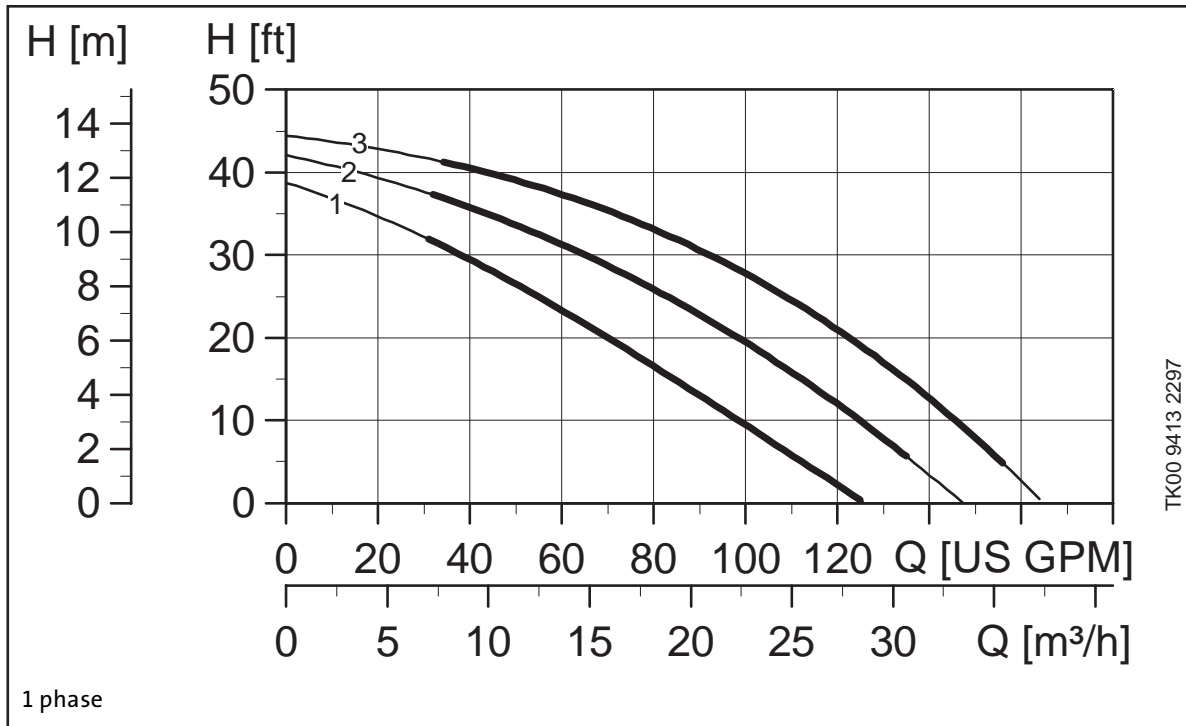
Technical Data

Flow Range: 25-145 U.S. GPM
Maximum Working Pressure: 145 PSI
Head Range: 0-30 FEET

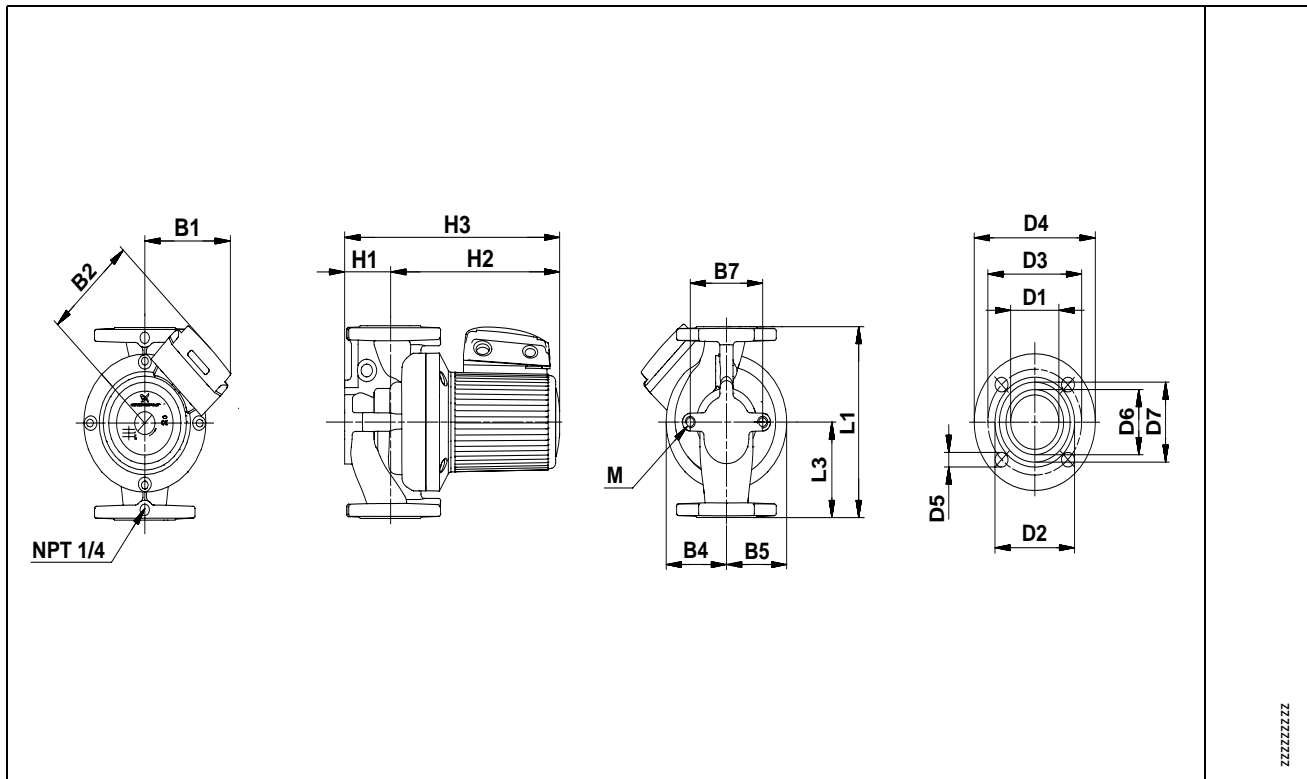
Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)
Flanges: (NON-ANSI) 2", 4-Bolt with (4) 9/16" dia. holes
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
10.2 Ft. - 4.4 PSI	20.1 Ft. - 8.7 PSI	61.9 Ft. - 26.8 PSI

UPS 50-160



UPS 50-160



Electrical Data, Weights and Dimensions

Pump Type	Nomin al HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4		D6	D7
UP550-160/2	1 1/2	1	2 (51)	230	14 (356)	7 (178)	5 3/4 (146)	6 11/16 (170)	3 15/16 (100)	3 15/16 (100)	4 3/4 (121)	3 (76)	10 13/16 (274)	13 3/4 (349)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	66
	1 1/2	3	2 (51)	208/230, 460*, 575*	14 (356)	7 (178)	5 3/4 (146)	6 11/16 (170)	3 15/16 (100)	3 15/16 (100)	4 3/4 (121)	3 (76)	10 13/16 (274)	13 3/4 (349)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	66

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 30-170 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 1-47 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

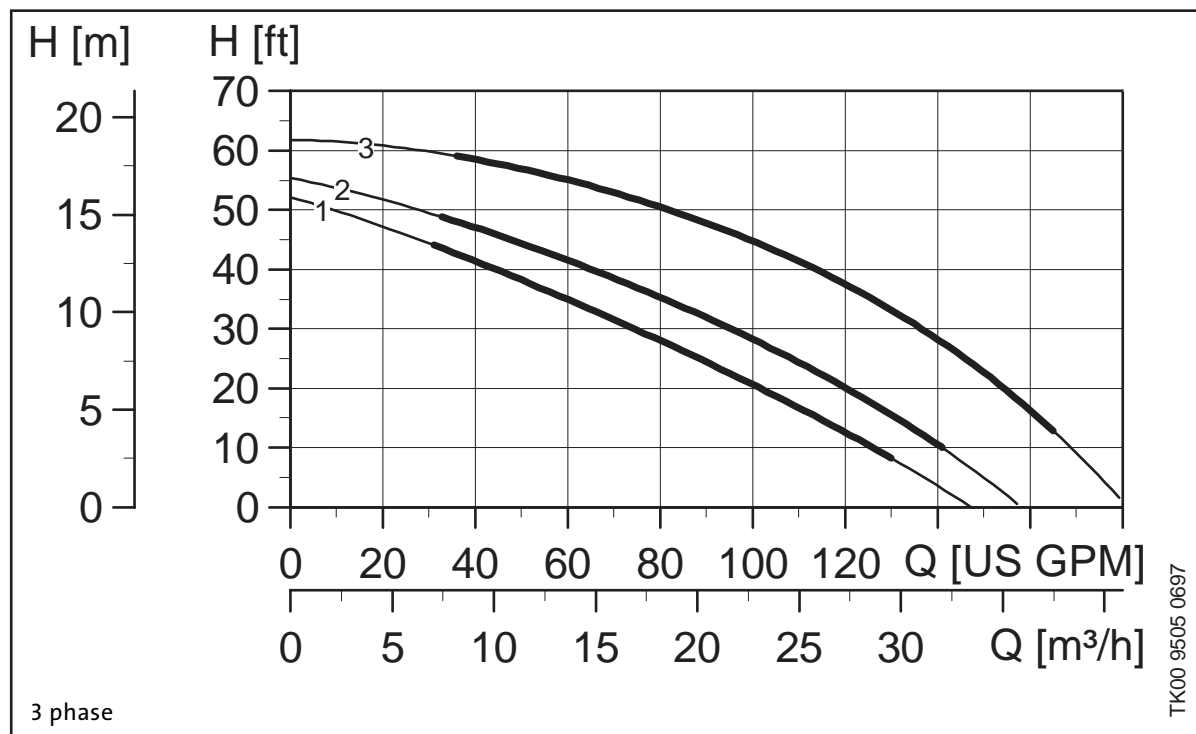
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON-ANSI) 2", 4-Bolt with (4) 9/16" dia. holes

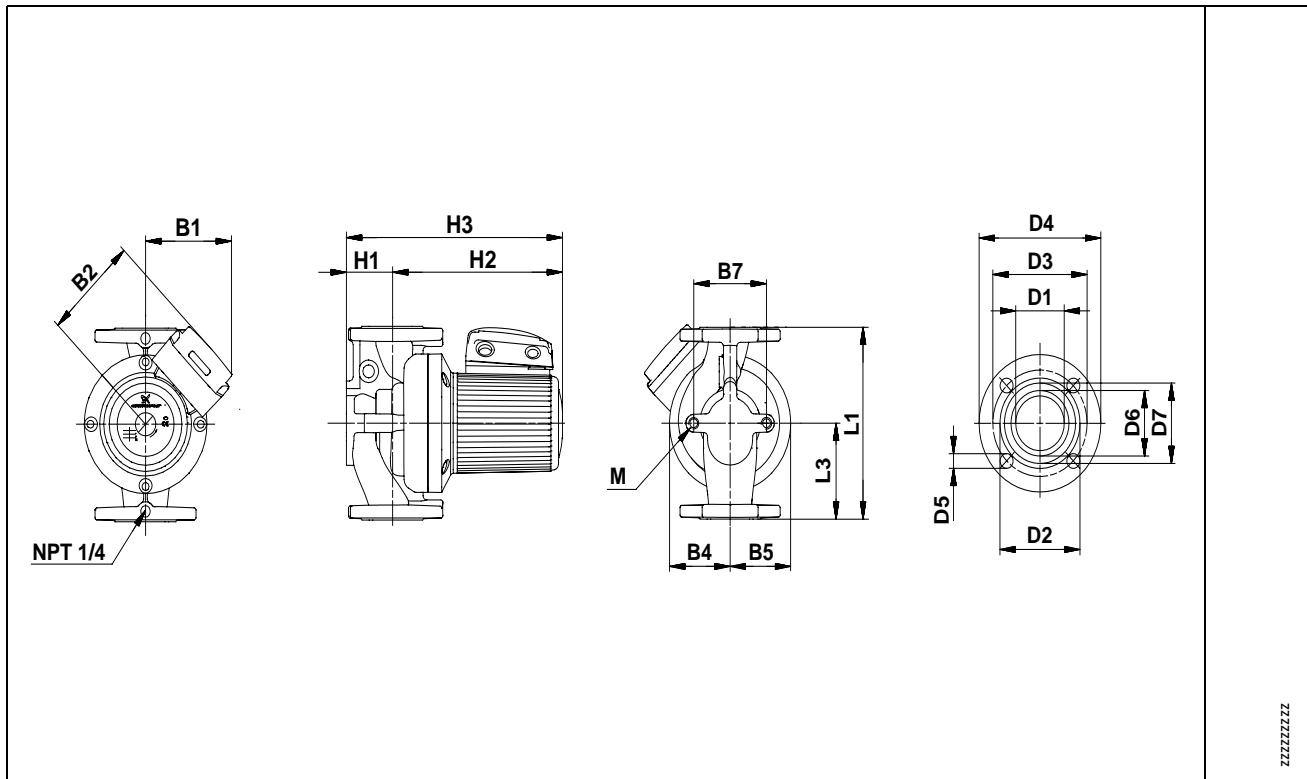
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
26.8 Ft. - 11.6 PSI	37 Ft. - 16.0 PSI	78.8 Ft. - 34.1 PSI

UPS 50-240



UPS 50-240



Electrical Data, Weights and Dimensions

Pump Type	Nomina l HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)																Net Wt.
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4	D6	D7	
UPSS0-240/2	2	3	2 (51)	208/230, 460*, 575*	14 (356)	7 (178)	5 3/4 (146)	6 11/16 (170)	3 15/16 (100)	3 15/16 (100)	4 3/4 (121)	3 (76)	10 3/4 (273)	13 11/16 (348)	2 1/8 (54)	3 7/16 (87)	4 1/16 (103)	5 1/4 (133)	2 1/2 (64)	3 1/16 (78)	69

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 30-180 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 0-62 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

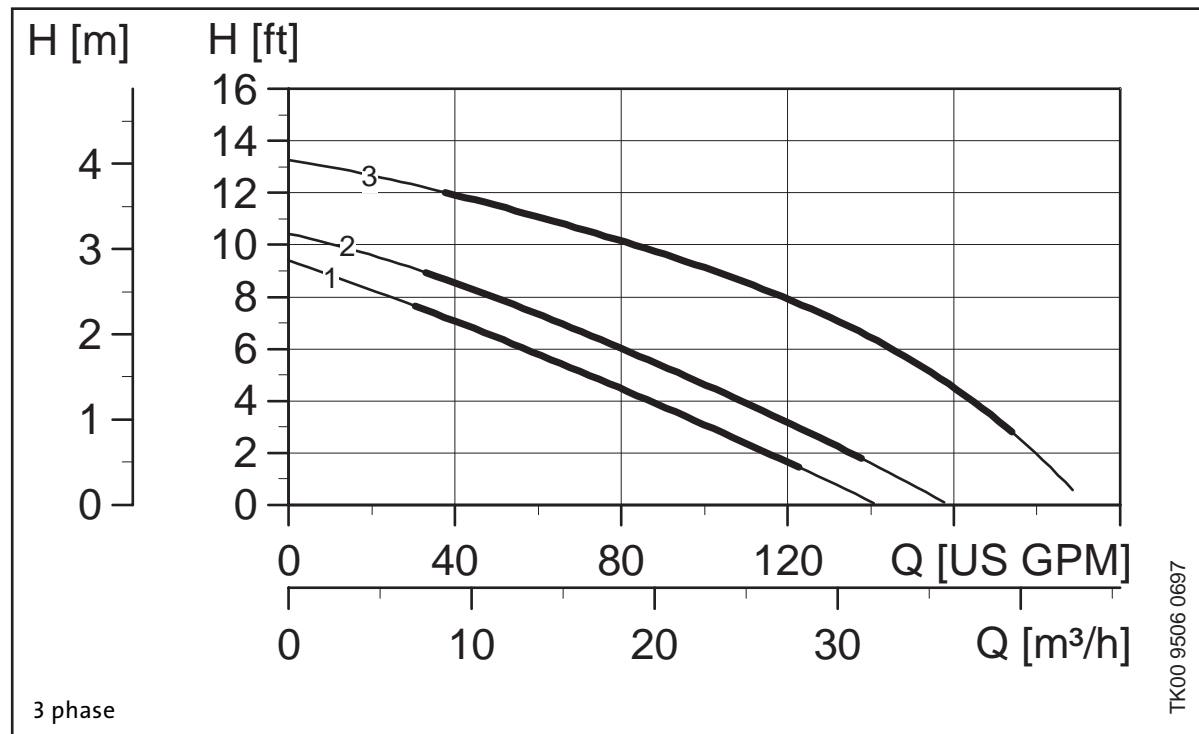
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (NON-ANSI) 2", 4-Bolt with (4) 9/16" dia. holes

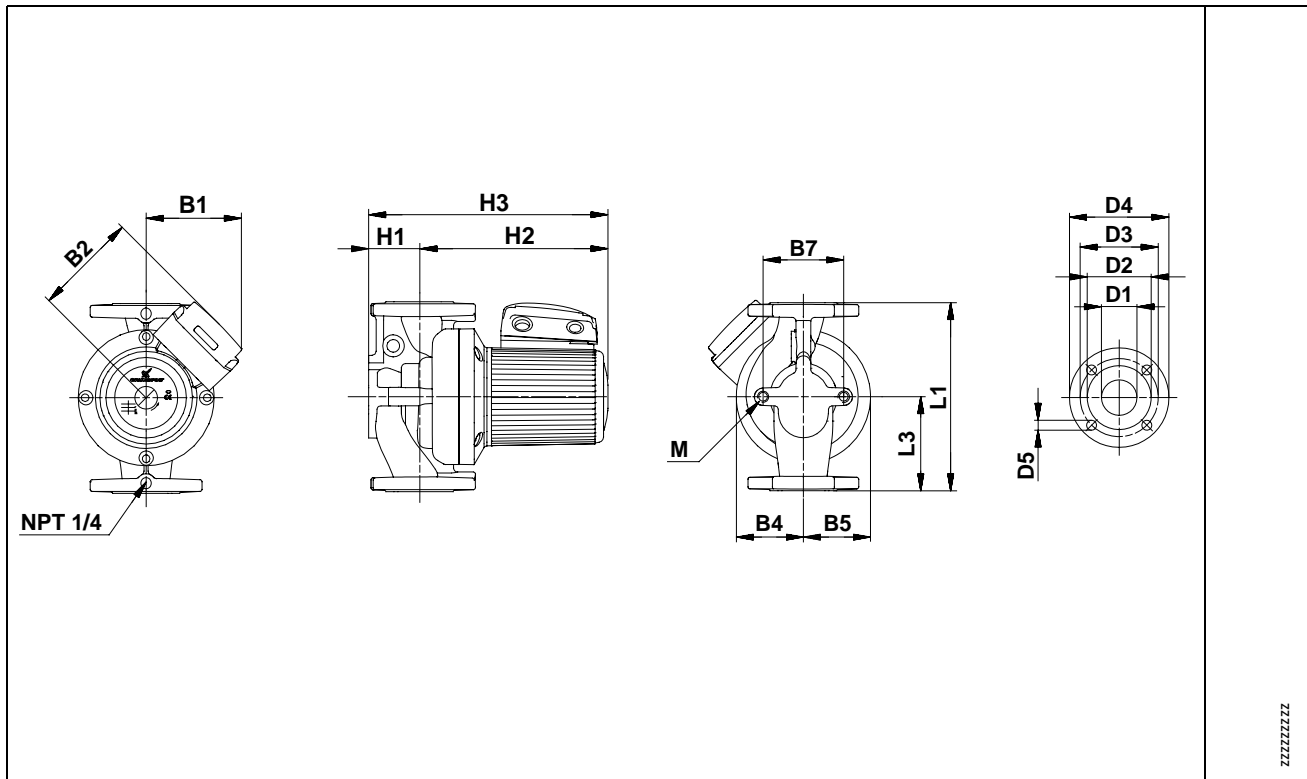
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
23.6 Ft. - 10.2 PSI	33.5 Ft. - 14.5 PSI	75.3 Ft. - 32.6 PSI

UPS 80-40



UPS 80-40



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)													Net Wt.	
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3		D4
UPS80-40/4	1/2	3	3 (76)	208/230 or 460*	19 (483)	9 1/2 (241)	5 3/4 (146)	6 11/16 (170)	5 (127)	3 15/16 (100)	6 5/16 (160)	3 13/16 (97)	9 7/16 (240)	13 1/8 (337)	3 3/16 (81)	5 (127)	6 (152)	7 9/16 (192)	95

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

Technical Data

Flow Range: 30-190 U.S. GPM

Maximum Working Pressure: 145 PSI

Head Range: 1-13 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)

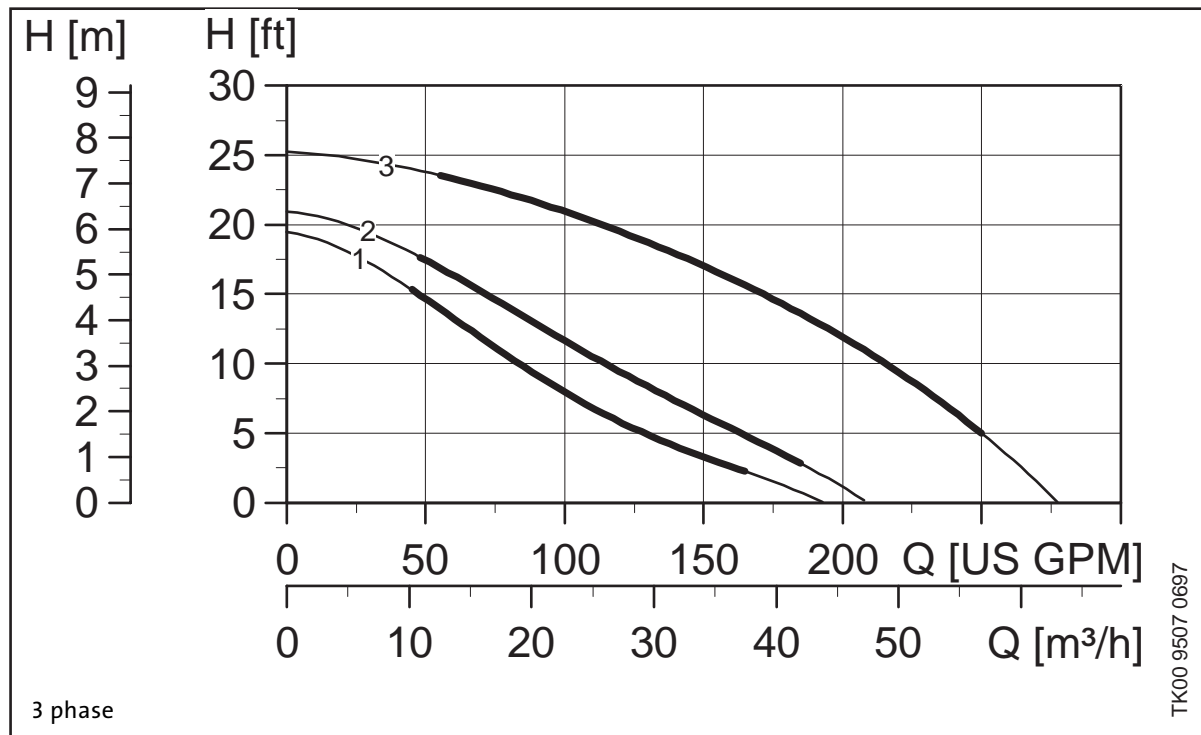
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)

Flanges: (ANSI R.F.) 3"

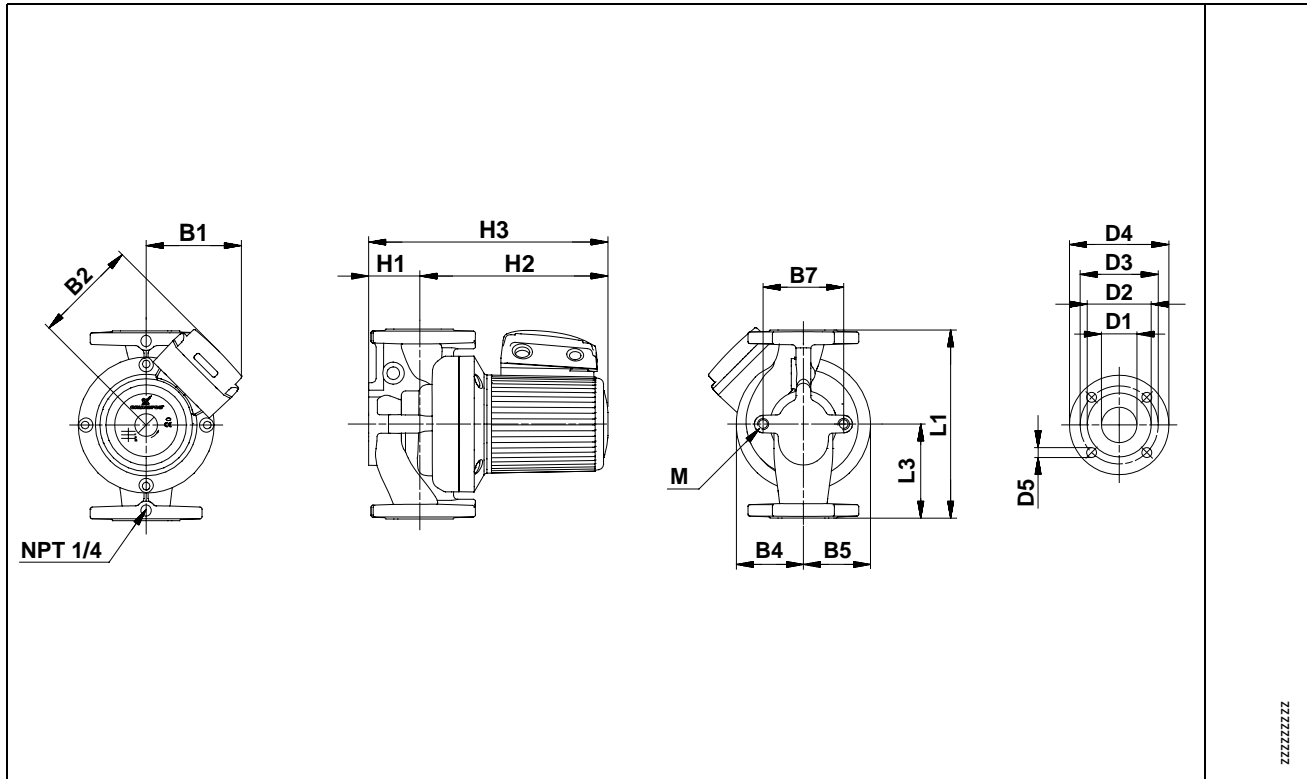
Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
26.8 Ft. - 11.6 PSI	37 Ft. - 16.0 PSI	78.8 Ft. - 34.1 PSI

UPS 80-80



UPS 80-80



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)													Net Wt.	
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3		D4
UPS80-80/4	1 1/2	3	3 (76)	208/230	19 (483)	9 1/2 (241)	5 3/4 (146)	6 11/16 (170)	5 (127)	3 15/16 (100)	6 5/16 (160)	3 13/16 (97)	11 1/4 (285)	15 1/16 (382)	3 3/16 (81)	5 (127)	6 (152)	7 9/16 (192)	104

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

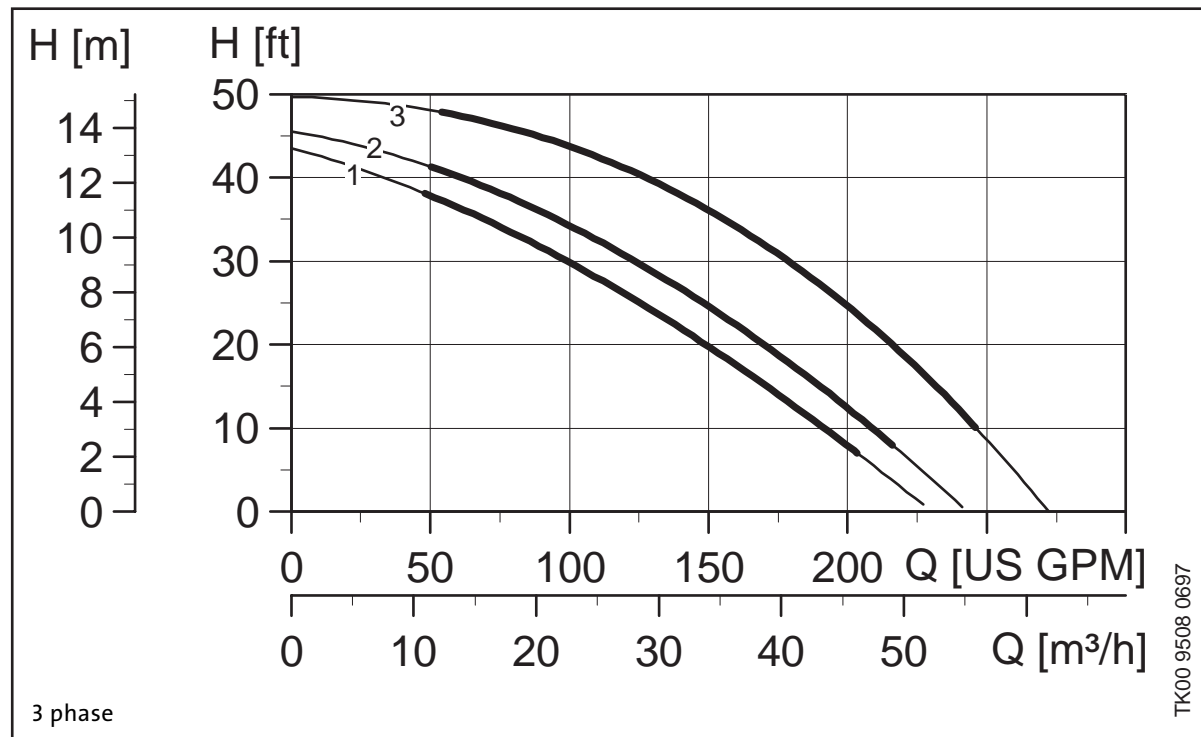
Technical Data

Flow Range: 40-275 U.S. GPM
 Maximum Working Pressure: 145 PSI
 Head Range: 1-25 FEET

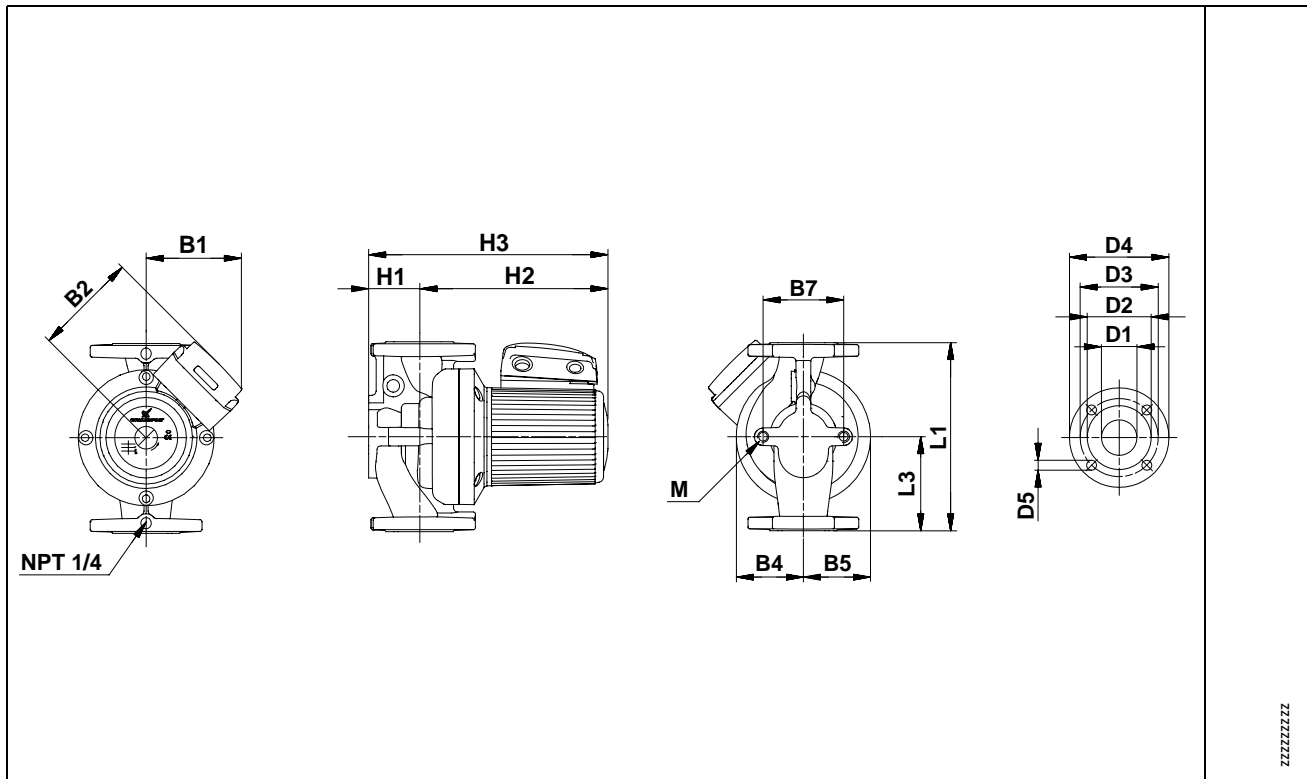
Temperature Range (Open Systems): 14°F (-10°C) - 140°F (60°C)
 Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)
 Flanges: (ANSI R.F.) 3"
 Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
33.5 Ft. - 14.5 PSI	43.7 Ft. - 18.9 PSI	85.5 Ft. - 37.0 PSI

UPS 80-160



UPS 80-160



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)														Net Wt.
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4	
UPS80-160/2	3	3	3 (76)	208/230 or 460*	19 (483)	9 1/2 (241)	5 3/4 (146)	6 11/16 (170)	3 15/16 (100)	3 15/16 (100)	6 5/16 (160)	3 13/16 (97)	11 5/16 (287)	15 1/8 (384)	3 3/16 (81)	5 (127)	6 (152)	7 9/16 (192)	104

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

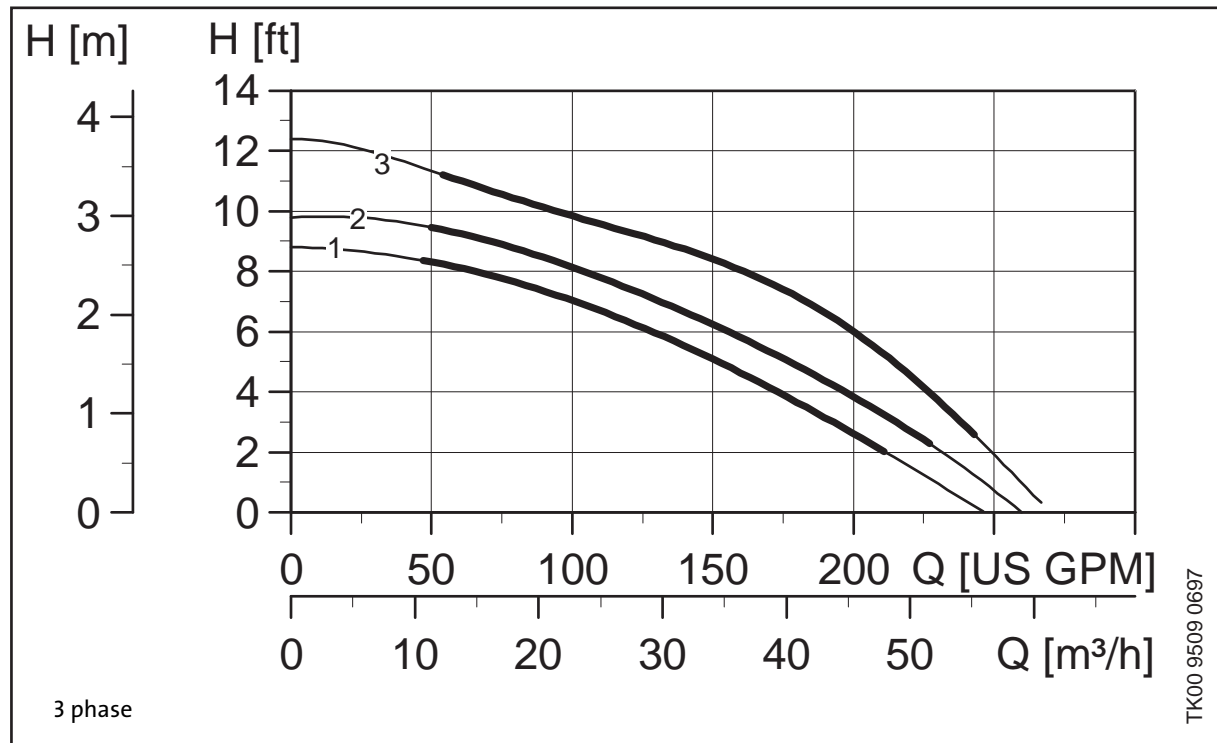
Technical Data

Flow Range: 50-275 U.S. GPM
 Maximum Working Pressure: 145 PSI
 Head Range: 1-50 FEET

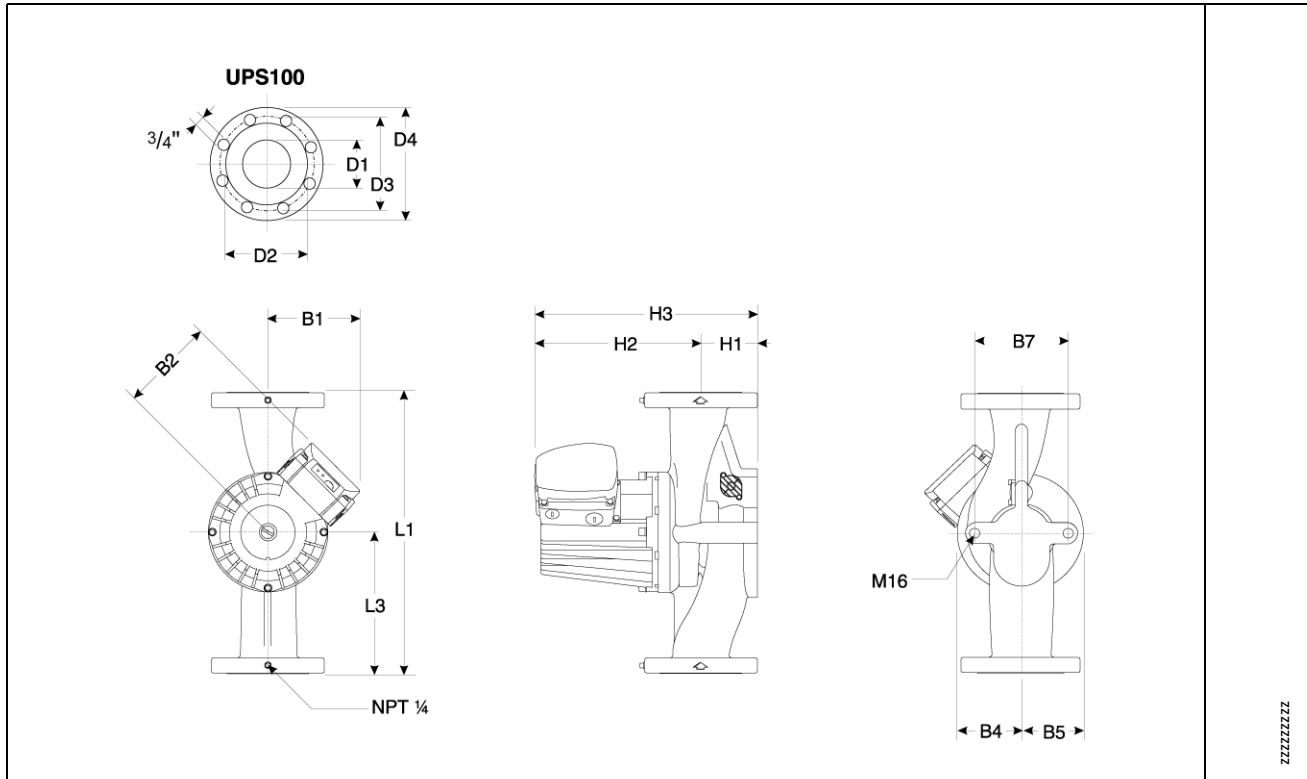
Temperature Range (Open Systems): 14°F (-10°C) - 140°F* (60°C)
 Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)
 Flanges: (ANSI R.F.) 3"
 Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	5.1 Ft. - 2.2 PSI	48.5 Ft. - 21.0 PSI

UPS 100-40



UPS 100-40



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)												Net Wt.		
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2		D3	D4
UPS100-40/4	1	3	4 (102)	208/230 or 460*	21 (533)	10 1/2 (267)	5 3/4 (146)	6 11/16 (170)	5 1/8 (130)	3 15/16 (100)	6 5/16 (160)	4 13/16 (122)	12 5/16 (313)	17 1/8 (435)	4 3/16 (106)	6 3/16 (157)	7 1/2 (191)	9 1/16 (230)	122.5

NOTE: *460/575 volt models are two speed only - speeds 2 & 3

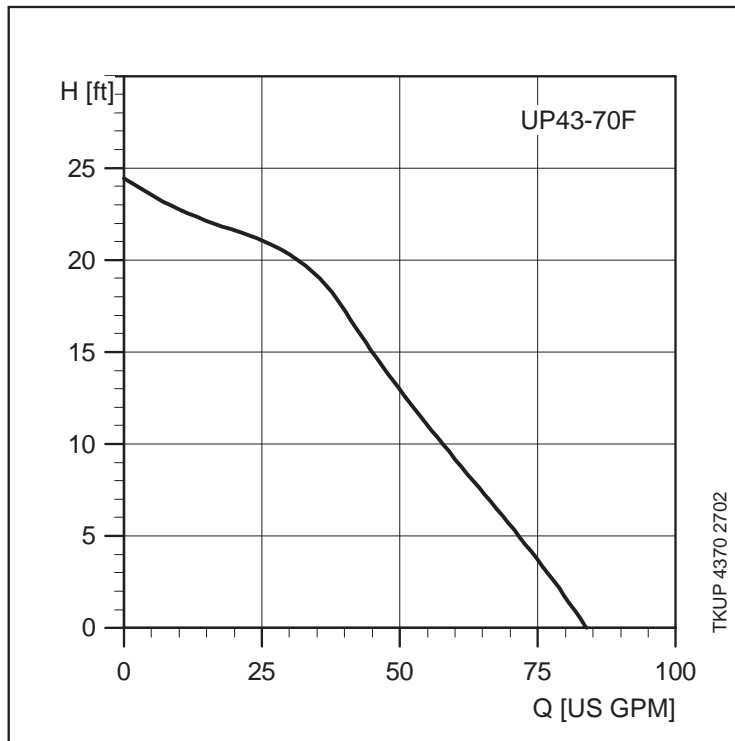
Technical Data

Flow Range: 50-275 U.S. GPM
 Maximum Working Pressure: 145 PSI
 Head Range: 1-12.5 FEET

Temperature Range (Open Systems): 14°F (-10°C) - 140°F (60°C)
 Temperature Range (Closed Systems): 14°F (-10°C) - 230°F (110°C)
 Flanges: (ANSI R.F.) 4"
 Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

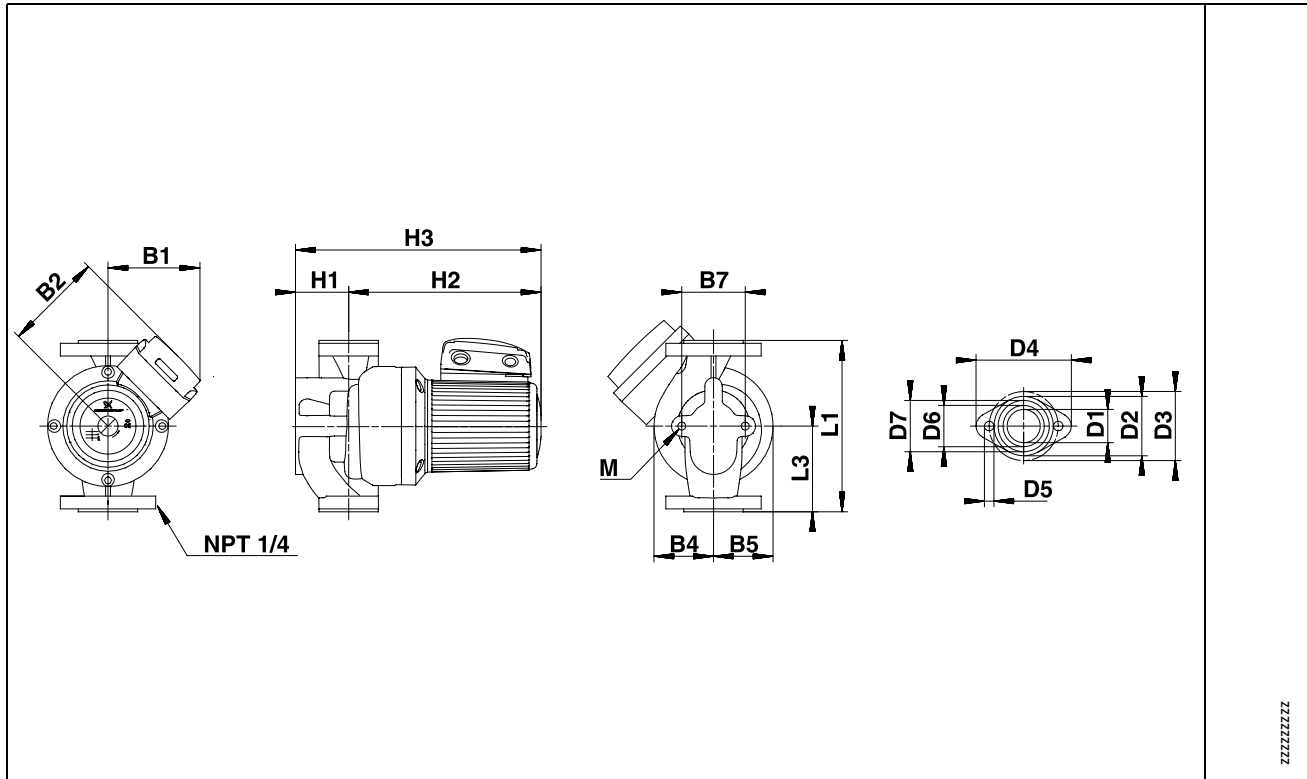
MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	5.1 Ft. - 2.2 PSI	48.5 Ft. - 21.0 PSI

UP 43-70



1 phase

UP 43-70



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)																	Net Wt.
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4	D6	D7		
UP43-70F	1/2	1	1 1/2 (101)	115, 230	8 1/2 (216)	4 1/4 (108)	5 1/4 (133)	5 9/16 (141)	2 15/16 (75)	2 15/16 (75)	3 1/8 (80)	2 5/8 (67)	9 5/8 (244)	12 3/16 (310)	1 5/8 (42)	2 5/16 (75)	3 7/16 (87)	4 3/4 (120)	2 1/16 (52)	2 1/2 (64)	33.7	

Technical Data

Flow Range: 15-85 U.S. GPM

Head Range: 1-23 FEET

Maximum Working Pressure: 145 PSI

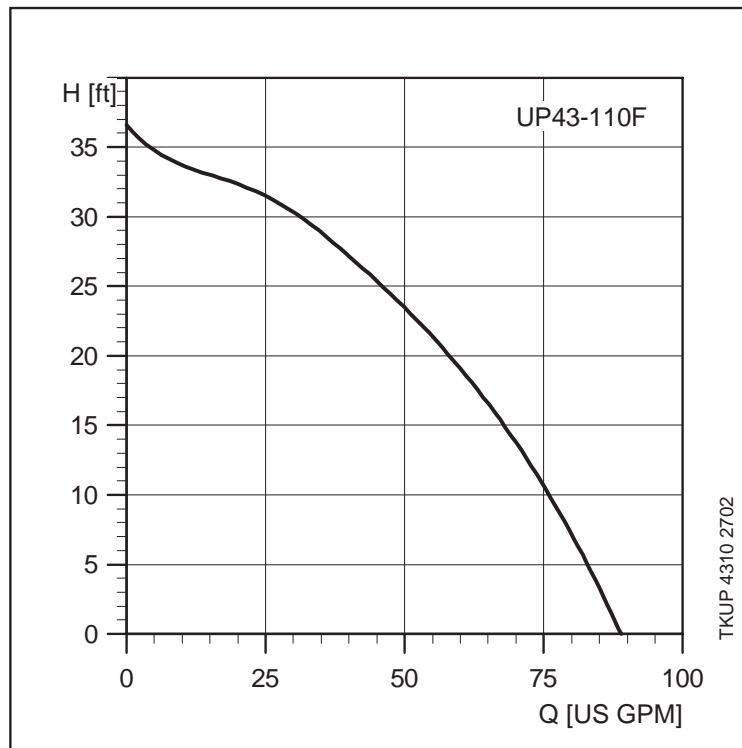
Temperature Range (Closed Systems): 14°F (-10°C) - 230°F* (110°C)

Flanges: (NON ANSI) 1 1/2" 2 Bolt with (2) 1/2" dia holes

Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

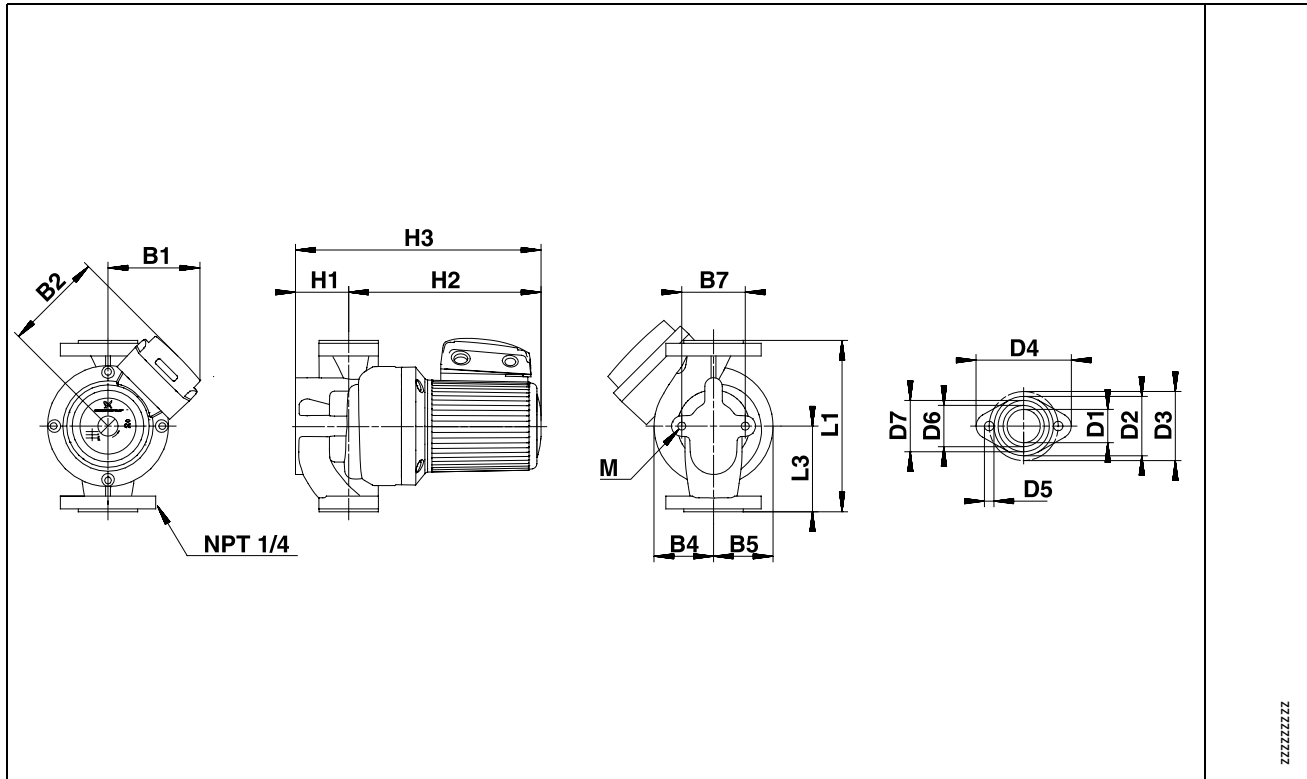
MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	5.1 Ft. - 2.2 PSI	48.5 Ft. - 21.0 PSI

UP 43-110



1 phase

UP 43-110



Electrical Data, Weights and Dimensions

Pump Type	Nominal HP at Speed 3	PH	Suc. Disc Size	Volts	Dimensions [inches] (mm)																	Net Wt.
					L1	L3	B1	B2	B4	B5	B7	H1	H2	H3	D1	D2	D3	D4	D6	D7		
UP43-110F	3/4	1	1 1/2 (101)	115, 230	8 1/2 (216)	4 1/4 (108)	5 1/4 (133)	5 9/16 (141)	2 15/16 (75)	2 15/16 (75)	3 1/8 (80)	2 5/8 (67)	9 5/8 (244)	12 3/16 (310)	1 5/8 (42)	2 5/16 (75)	3 7/16 (87)	4 3/4 (120)	2 1/16 52	2 1/2 (64)	34.2	

Technical Data

Flow Range: 15-90 U.S. GPM

Head Range: 1-37 FEET

Maximum Working Pressure: 145 PSI

Temperature Range (Closed Systems): 14°F (-10°C) - 230°F* (110°C)

Flanges: (NON ANSI) 1 1/2" 2 Bolt with (2) 1/2" dia holes

Ambient Air Temperature: 32°F (0°C) to 104°F (40°C)

MINIMUM INLET PRESSURE		
Fluid Temperature		
167°F (75°C)	194° (90°C)	230° (110°C)
1.6 Ft. - 0.7 PSI	5.1 Ft. - 2.2 PSI	48.5 Ft. - 21.0 PSI

Technical Product List

MODEL	CAST IRON PRODUCT No.	BRONZE PRODUCT No.	Max. HP Speed 3	PH	VOLTAGE	SPEED	MAX. RPM	I-MAX AMPS	P-MAX WATTS	I-START AMPS
UPS32-40/4	96402694	96402699	1/3	1	115	3	1712	1.08	120	2.10
						2	1667	1.04	100	2.02
						1	1594	0.95	85	1.85
	96402695	96402700		230	3	1712	0.54	120	1.00	
					2	1667	0.52	100	0.96	
					1	1594	0.47	85	0.87	
	96402696	96402701	3	208-230	3	1721	0.56	115	1.60	
					2	1580	0.26	75	0.74	
					1	1496	0.24	65	0.69	
	96402697	96402702		460	2	1721	0.28	115	0.82	
					1	1580	0.13	75	0.38	
					2	1721	0.22	115	0.66	
96402698	96402703	575	1	1580	0.10	75	0.30			
			3	3495	2.66	280	7.10			
			2	3400	2.50	260	6.67			
UPS32-80/2	96402708	96402713	1/2	1	115	3	3495	2.66	280	7.10
						2	3400	2.50	260	6.67
						1	3281	2.50	250	6.67
	96402709	96402714		230	3	3495	1.34	280	3.50	
					2	3400	1.26	260	3.29	
					1	3281	1.26	250	3.29	
	96402710	96402715	3	208-230	3	3495	1.10	280	6.00	
					2	3269	0.72	235	3.93	
					1	3194	0.58	195	3.16	
	96402711	96402716		460	2	3495	0.55	280	3.00	
					1	3269	0.36	235	1.96	
					2	3495	0.44	280	2.40	
96402712	96402717	575	2	3495	0.44	280	2.40			
			1	3269	0.29	235	1.60			
			3	3477	5.80	625	14.60			
UPS32-160/2	96402730	96402739	3/4	1	115	3	3477	5.80	625	14.60
						2	3399	5.80	600	14.60
						1	3281	5.50	555	13.84
	96402733	96402740		230	3	3477	2.90	625	6.70	
					2	3399	2.90	600	6.70	
					1	3281	2.75	555	6.35	
	96402736	96402741	3	208-230	3	3487	1.96	600	9.30	
					2	3292	1.25	430	5.93	
					1	3201	1.12	380	5.31	
	96402737	96402742		460	2	3487	0.98	600	4.70	
					1	3292	0.63	430	3.02	
					2	3487	0.78	600	3.76	
96402738	96402743	575	2	3487	0.78	600	3.76			
			1	3292	0.5	430	2.40			
			3	1711	1.60	170	3.10			
UPS40-40/4	96402748	96402753	1/3	1	115	3	1711	1.60	170	3.10
						2	1654	1.48	150	2.87
						1	1575	1.34	125	2.60
	96402749	96402754		230	3	1711	0.80	170	1.50	
					2	1654	0.74	150	1.39	
					1	1575	0.66	125	1.24	
	96402750	96402755	3	208-230	3	1720	0.88	260	2.50	
					2	1561	0.42	120	1.19	
					1	1512	0.36	100	1.02	
	96402751	96402756		460	2	1720	0.44	260	1.30	
					1	1561	0.21	120	0.62	
					2	1720	0.33	186	1.04	
96402752	96402757	575	2	1720	0.33	186	1.04			
			1	1561	0.17	120	0.50			
			3	1688	5.50	565	9.50			
UPS40-80/4	96404948	96404953	1/2	1	115	3	1688	5.50	565	9.50
						2	1587	5.15	485	8.90
						1	1450	4.30	410	7.43
	96404949	96404954		230	3	1688	2.75	565	4.70	
					2	1587	2.60	485	4.44	
					1	1450	2.15	410	3.67	
	96404950	96404955	3	208-230	3	1708	1.98	550	7.10	
					2	1640	1.20	370	4.30	
					1	1584	1.00	305	3.59	
	96404951	96404956		460	2	1708	0.99	550	4.70	
					1	1640	0.60	370	4.44	
					2	1708	0.78	550	3.76	
96404952	96404957	575	2	1708	0.78	550	3.76			
			1	1640	0.48	370	3.55			

MODEL	CAST IRON PRODUCT No.	BRONZE PRODUCT No.	Max. HP Speed 3	PH	VOLTAGE	SPEED	MAX. RPM	I-MAX AMPS	P-MAX WATTS	I-START AMPS			
UPS40-80/2	96402762	96402767	3/4	1	115	3	3455	4.45	480	11.00			
						2	3321	4.40	450	10.88			
						1	3194	4.40	440	10.88			
	96402763	96402768			230	3	3455	2.24	480	5.60			
						2	3321	2.20	450	5.50			
						1	3194	2.18	440	5.45			
	96402764	96402769			208-230	3	3	3432	1.45	440	7.40		
							2	3126	0.94	320	4.80		
							1	2984	0.86	290	4.39		
	96402765	96402770		460		2	3	3432	0.73	440	3.70		
							1	3126	0.47	320	2.38		
	96402766	96402771		575		2	3432	0.58	440	2.96			
	UPS40-160/2	96402782		96402787		3/4	1	115	3	3447	8.40	890	18.60
									2	3332	7.45	760	16.50
									1	3162	6.95	690	15.39
96402783		96402788	230	3	3			3463	4.20	890	9.30		
					2			3202	3.75	760	8.30		
					1			3055	3.45	690	7.64		
96402784		96402789	208-230	3	3			3463	2.50	800	12.40		
					2			3202	1.75	570	8.68		
					1			3055	1.55	500	7.69		
96402785		96402790		460	2		3	3463	1.25	800	6.20		
							1	3202	0.88	570	4.36		
96402786		96402791		575	2		3463	1.00	800	4.96			
UPS40-240/2		96402797		96402804	1-1/2		1	230	3	3412	6.20	1350	11.80
									2	3322	5.55	1200	10.56
									1	3196	5.15	1100	9.80
	96402798	96402805	208-230	3		3		3524	4.50	1440	23.80		
						2		3388	3.25	1100	17.19		
						1		3312	2.95	990	15.60		
	96402799	96402807		460		2		3	3524	2.25	1440	11.60	
								1	3388	1.63	1100	8.40	
	96402801	96402809		575		2		3524	1.80	1440	9.28		
	UPS50-40/4	96402814		96402819		1/3	1	115	3	1714	2.66	285	5.20
									2	1659	2.60	244	5.08
									1	1593	2.20	204	4.30
		96402815	96402820	230				3	3	1714	1.32	285	2.60
									2	1659	1.30	244	2.56
									1	1593	1.10	204	2.17
96402816		96402821	208-230	3	3			1733	1.40	270	4.60		
					2			1615	0.66	170	2.17		
					1			1555	0.54	150	1.77		
96402817		96402822		460	2		3	1733	0.70	270	2.30		
							1	1615	0.33	170	1.08		
96402818		96402823		575	2		1733	0.56	270	1.84			
UPS50-80/4		96404958		96404963	3/4		1	115	3	1694	7.55	720	13.20
									2	1607	6.85	620	11.98
									1	1491	5.15	480	9.00
	96404959	96404964	230	3		3		1747	3.80	720	6.50		
						2		1643	3.40	620	5.82		
						1		1586	2.60	480	4.45		
	96404960	96404965	208-230	3		3		1747	2.44	640	8.50		
						2		1643	1.44	450	5.02		
						1		1586	1.24	390	4.32		
	96404961	96404966		460		2	3	1747	1.22	640	4.30		
							1	1643	0.72	450	2.54		
	96404962	96404967		575		2	1747	.98	640	3.44			
						1	1643	.58	450	2.00			

MODEL	CAST IRON PRODUCT No.	BRONZE PRODUCT No.	Max. HP Speed 3	PH	VOLTAGE	SPEED	MAX. RPM	I-MAX AMPS	P-MAX WATTS	I-START AMPS			
UPS50-80/2	96402834	96402843	3/4	1	115	3	3426	5.85	630	14.60			
						2	3282	5.70	610	14.23			
						1	3050	5.80	600	14.48			
	96402836	96402844		230	3	3426	2.95	630	7.30				
					2	3282	2.85	610	7.05				
					1	3050	2.90	600	7.18				
	96402838	96402845	3	208-230	3	3428	1.92	610	9.30				
					2	3010	1.20	440	5.81				
					1	2872	1.08	400	5.23				
	96402840	96402846		460	2	3428	0.96	610	4.70				
					1	3010	0.60	440	2.94				
					96402842	96402847	575	2	3428	0.77	610	3.76	
1	3010	0.48	440	2.40									
UPS50-160/2	96411613	96411614	1-1/2	1				230	3	3395	5.80	1250	26.50
					2	3294	5.20		1100	23.76			
					1	3144	4.85		1050	22.16			
	96402860	96402866		208-230	3	3395	4.00	1300	22.80				
					2	3294	3.00	1000	17.10				
					1	3144	2.75	950	15.68				
	96402861	96402868	460	2	3509	2.00	1300	11.40					
				1	3339	1.50	1000	8.55					
				96402862	96402870	575	2	3509	1.60	1300	9.12		
	1	3339					1.20	1000	6.84				
	UPS50-240/2	96402882					96402885	2	3	208-230	3	3496	5.30
				2	3296	3.95					1300	23.10	
1			3186	3.50	1150	20.47							
96402883		96402886	460	2	3496	2.65	1700		15.40				
				1	3296	1.98	1300		11.51				
				96402884	96402887	575	2		3496	2.12	1700	12.32	
1		3296	1.68				1300	9.21					
UPS80-40/4		96402894	96402899				1/2	3	208-230	3	1733	1.62	380
				2	1546	0.87				260	3.81		
				1	1439	0.77				230	3.37		
		96402895	96402900	460	2	1733		0.81	380	3.50			
					1	1546		0.44	260	1.90			
	96402896				96402901	575		2	1733	0.65	380	2.80	
		1	1546	0.35			260	1.52					
		UPS80-80/4	96402908	96402913			1-1/2	3	208-230	3	1729	3.60	1050
	2				1598	2.08				660	6.82		
	1				1536	1.72				550	5.64		
	UPS80-160/2		96402920	96402923	3	3		208-230	3	3513	6.35	2050	31.00
									2	3351	4.20	1550	20.50
1									3270	4.05	1500	19.77	
96402921			96402924	460		2	3513	3.18	2050	15.40			
						1	3351	2.10	1550	10.17			
						96402922	96402925	575	2	3513	2.54	2050	12.32
1			3351	1.68	1550				8.14				
UPS100-40/4			96402934	96402937	1				3	208-230	3	1712	2.50
						2	1520	1.38			435	5.96	
		1				1433	1.24	390			5.36		
		96402935	96402938	460		2	1712	1.24	670	5.40			
						1	1520	0.70	435	3.05			
	96402936					96401961	575	2	1712	1.00	570	4.32	
		1	1520	0.55	435			2.44					

Note: 3-phase, 460v & 575v models are 2 speed only.

VersaFlo UP							
Pump Type	Product Number	HP	PH	Voltage	I-MAX AMPS	P-MAX AMPS	I-START AMPS
UP43-70	96439644	1/2	1	115/230	3.4/1.8	400	
UP43-110	96439643	3/4	1	115/230	4.9/2.5	570	

Accessories, UPS

The following accessories are available for UPS pumps:

- protection module
- relay module
- mating flanges

Mating flanges, UPS

The flange kit comprises:

- 2 ANSI flanges with internal thread (NPT)
- 2 gaskets, bolts and nuts

Product numbers of mating flanges

Pumps with cast iron pump housing		
Pump type	Size	Product number
UPS 32-40/4	11/4	519603
UPS 32-80/2	11/4	519603
UPS 32-160/2	11/2	539605
UPS 40-40/4	11/2	539605
UPS 40-80/2	11/2	539605
UPS 40-80/4	11/2	539605
UPS 40-160/2	11/2	539605
UPS 40-240/2	11/2	539605
UPS 50-40/4	2	96409354
UPS 50-80/4	2	96409354
UPS 50-80/2	2	96409354
UPS 50-160/2	2	96409354
UPS 50-240/2	2	96409354
UPS 80-40/4	3	569601
UPS 80-80/4	3	569601
UPS 80-160/2	3	569601
UPS 100-40/4	4	579801

Pumps with bronze pump housing		
Pump type	Size	Product number
UPS 32-40/4	11/4	96409356
UPS 32-80/2	11/4	96409356
UPS 32-160/2	11/2	539615
UPS 40-40/4	11/2	539615
UPS 40-80/2	11/2	539615
UPS 40-80/4	11/2	539615
UPS 40-160/2	11/2	539615
UPS 40-240/2	11/2	539615
UPS 50-40/4	2	96409355
UPS 50-80/4	2	96409355
UPS 50-80/2	2	96409355
UPS 50-160/2	2	96409355
UPS 50-240/2	2	96409355
UPS 80-40/4	3	569611
UPS 80-80/4	3	569611
UPS 80-160/2	3	569611
UPS 100-40/4	4	96409357

Protection modules, UPS - Standard

Voltage [V]	Product number
All 1 phase X 115V	96427457
All 1 phase X 230V	96427458
All 3 phase X 208-230V	96427459

Relay module, UPS - Optional

Relay modules for single-head pumps

Voltage [V]	Product number
All 1 phase X 115V	96409246
All 1 phase X 230V	96409247
All 3 phase X 208-230V	96409250

Submittal data sheet



Company name: _____
Prepared by: _____
Phone number: () - _____
Fax number: () - _____
Date: _____ Page 1 of: _____
Quote number: _____

Client Information

Project title: _____	Client name: _____
Reference number: _____	Client number: _____
Client contact: _____	Client phone no: () - _____

Location Information

For: _____	Unit: _____
Site: _____	Service: _____
Address: _____	City: _____ State: _____ Zip Code: _____

Technical Data

Flow (GPM) _____
Head (Ft) _____
Motor _____
Max Fluid Temp _____
Min Fluid Temp _____
Max Working Pressure _____
Min Required Inlet Pressure _____
Connection Type and Size _____

Motor Information

HP: _____
Phase: _____
Voltage: _____
Enclosure: _____

Pump Information

Model Information from Type Key and Codes: _____	
Quantity Required: _____	Example: UP-S-15-58-FC
Minimum required flow: _____	NPSH required at duty point: _____
Product Guide additional information pages	
Materials page number: _____	Performance curve page number: _____
Technical data page number: _____	Motor data page number: _____

Custom-built pump information (optional): _____

Additional Information

L-UPS-PG-01 Rev. 02/03
Printed in the USA

Subject to alterations.