

## Submittal Data

 ${\it NP}_{\it non-pressurized}$  flow center, single/ double pump: NPxx ,NPPxx, & NPPxx-CKB



Project Name:		Representative:	Representative:			
Contractor:		Engineer:				
Ref/P.O. #:		Date:				
Submitted by:		Date:				
Qtv:	Part #:	Description:				

### **Technical Data**

Circulators: Grundfos UPMXL 25-124 (vari. speed)\*; UPS26-99 (3 speed), UP26-99 and/or

UP26-116 (single speed)

Cabinet: ABS plastic

NPP Valve Cabinet: Powder-coated sheet metal
Tank: Polyvinyl chloride (PVC)
Insulation: CFC-free polyurethane foam

Valves: 1", 3-way, 4-position flushing and isolation/service valve, composite valve

body and spool, NBR seals, stainless steel retaining ring

\*Available with standard or inverse profile PWM signal.

#### **Electrical Data**

<u>UPS26-99 motor</u>: 208-230V, 60 Hz, single phase, 2-pole UL and CSA approved, internal thermal overload protection, insulation class F, three speed

<u>UPMXL 25-124 motor</u>: ECM, 208-230V, 50/60 Hz, single phase, 2-pole, ETL<sub>C/US</sub> approved (meets UL and CSA requirements), electronically protected, insulation class F, 0.04 to 1.5 Amps, variable speed, PWM controlled via external signal

<u>UP26-116 motor</u>: 208-230V, 60 Hz, single phase, 2-pole UL and CSA approved, internal

thermal overload protection, insulation class F, single speed

<u>UP26-99 motor</u>: 208-230V, 60 Hz, single phase, 2-pole UL and CSA approved, internal thermal overload protection, insulation class F, single speed

							Pump
Pump		Nominal		Amps @	Watts @		Housing
Motor	Speed	HP	Volts	230V*	230V*	Capacitor	(Volute)
	High			0.9	196		
UPS26-99	Medium	1/6	208-230	0.8	179	5μF/400V	Cast Iron
	Low			0.7	150	]	
UPMXL 25-124	Variable	N/A	208-230	0.04-1.5	3-180	N/A	Cast Iron
UP26-116		1/6	208-230	1.8	385	2.5μF/380V	Cast Iron
UP26-99		1/6	208 - 230	1.07	245	2.5μF/380V	Cast Iron

<sup>\*</sup>Data is maximum for UPS26-99. UPMXL 25-124 varies with RPM.

Part Number	Pump PWM Input Type	Heat Pump Controls		
NP1L,NP2L,NP2M,NPF NPP2L, or NPP2M	1L, Standard Profile	AXB		
NP1N, NP2N, NPP1N or NPP2N	' Inverted Profile	DXM2		

#### Notes:

- 1. All variable speed pumps need an external controller to vary the RPM of the pumps.
- 2. Pumps with Standard Profile PWM input will run full speed when no signal is present (i.e. the PWM input cable is disconnected).
- 3. The UPC-GEO controller outputs a signal for Standard PWM Profile pumps.

Max. fluid temp.: 140°F [60°C] Min. fluid temp.: 20°F [-7°C]

Max. operating press.: 13 psig [89.6 kPa] Max. ambient air temp.: 104°F [40°C] Max. ambient relative humidity: 80%

## **Approved Antifreeze**

Propylene Glycol Methanol Ethanol

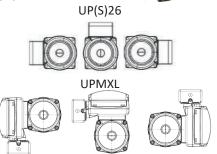
### Mounting

Flow center is designed for indoor installation only.

Flow center must be installed in an upright position as shown to the right.

The terminal box(s) should be located in one of the following orientations:

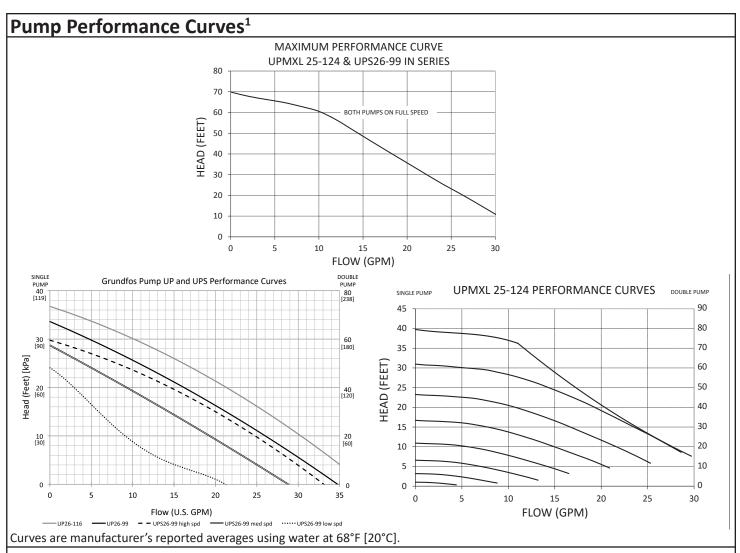




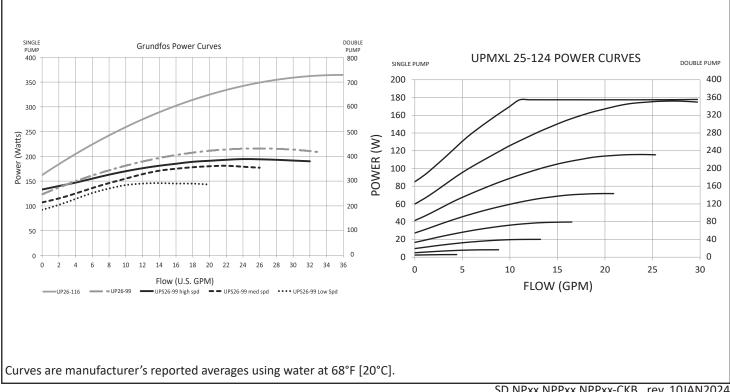


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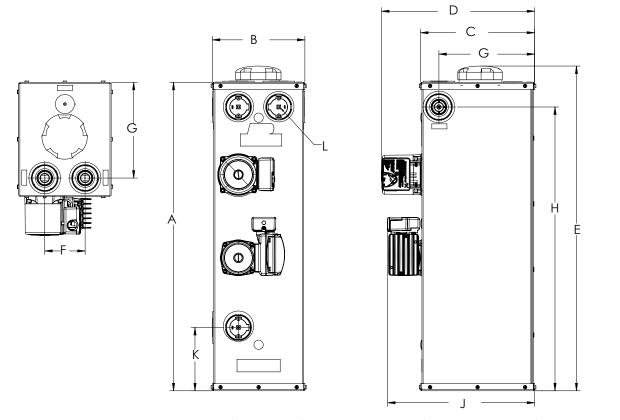


# Pump Power Curves<sup>1</sup>

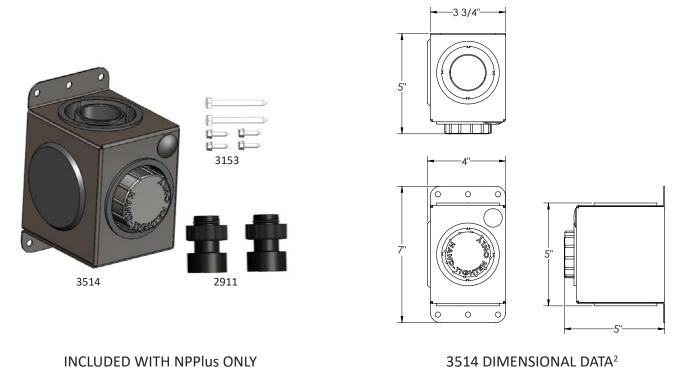


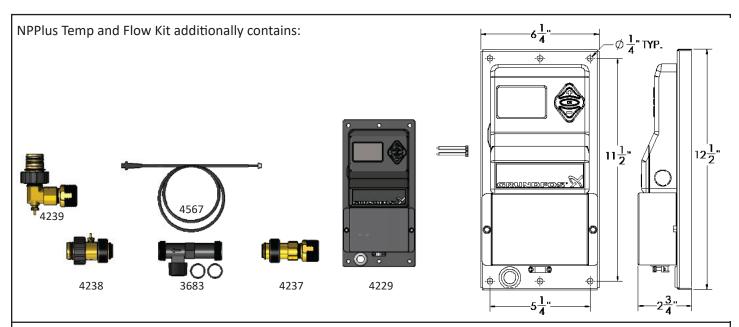
# **Dimensional Data<sup>2</sup>**

	Α	В	С	D	Е	F	G	Н	J	K	L
Inches	30-5/8	9-1/8	11-1/4	15-1/8	32-1/8	4	9-1/2	28-1/8	14-5/8	6-1/4	3/8" DRIVE
CM	77.8	23.2	28.6	38.4	81.6	10.2	24.1	71.4	37.1	15.9	SOCKET



NP flow centers require two Flo-Link™ (double O-ring) transition fittings. Typically, PE fusion or PVC glue fittings are used for the ground loop; a hose kit or PVC glue fitting is used for the heat pump connection. NPP flow centers include an additional 3-way flushing/ isolation valve with mounting hardware and two 1-1/4″ HPDE fusion adapters for the ground loop connections (see below). The flow center is typically connected to the heat pump with a hose kit (not included).





### **Available Models**

		1
PART NUMBER	DESCRIPTION	WEIGHT (LBS)
1271*	NP1 UPS26-99 (3-Speed) 230V, 60Hz, Grundfos, cast iron, foamed	45
1272*	NP2 UPS26-99 (3-Speed) 230V, 60Hz, Grundfos, cast iron, foamed, QTY 2	50
1273*	NP1 UP26-116 230V, 60Hz, Grundfos, cast iron, foamed	45
1274*	NP2 UP26-116 230V, 60Hz, Grundfos, cast iron, foamed, QTY 2	50
1338**	NP1 PLUS, UPS26-99 (3-Speed) 230V, 60Hz, Grundfos, cast iron, foamed	52
1339**	NP2 PLUS, UPS26-99 (3-Speed) 230V, 60Hz, Grundfos, cast iron, foamed, QTY 2	58
1340**	NP1 PLUS, UP26-116 230V, Grundfos, cast iron, foamed	52
1341**	NP2 PLUS, UP26-116 230V, Grundfos, cast iron, foamed, QTY 2	58
NP1L*	NP1 UPMXL 25-124, 208-230V, 50-60Hz, Grundfos, cast iron,	43
NPP1L**	NP1 PLUS, UPMXL 25-124, 208-230V, 50-60Hz, Grundfos, cast iron, foamed	57
NPP1L-CKB***	NP1 PLUS KIT, UPMXL 25-124, TEMP & FLOW CNTRL	71
NP1N*	NP1 UPMXL 25-124 INV PWM, 208-230V, 50-60Hz, Grundfos, cast iron, foamed	42
NPP1N**	NP1 PLUS, UPMXL 25-124 INV PWM, 208-230V, 50-60Hz, Grundfos, cast iron, foamed	57
NP2L*	NP2 UPMXL 25-124 (2), 208-230V, 50-60Hz, Grundfos, cast iron, foamed	51
NPP2L**	NP2 PLUS, UPMXL 25-124 (2), 208-230V, 50-60Hz, Grundfos, cast iron, foamed	65
NP2M*	NP2 UPMXL 25-124 + UPS26-99, 208-230V, 50-60Hz, Grundfos, cast iron, foamed	49
NPP2M**	NP2 PLUS, UPMXL 25-124 + UPS26-99, 208-230V, 50-60Hz, Grundfos, cast iron, foamed	64
NPP2M-CKB***	NP1 PLUS KIT, UPMXL 25-124 + UPS26-99, TEMP & FLOW CNTRL	
NP2P*	NP2 UPMXL 25-124 INV PWM + UPS26-99, 208-230V, 50-60Hz, Grundfos, cast iron, foamed	49
NPP2P**	NP2 PLUS, UPMXL INV + UPS26-99, 208-230V, 50-60Hz, Grundfos, cast iron, foamed	64

<sup>\*</sup>Requires: Flo-Link adapter set (use PN 3425 for PVC, PN 2911 for PE fusion)

\*\*\* Includes NPPlus (\*\*) components and controller (see graphic above).

- 1. Variable speed pumps operate in between maximum and minimum curves. Intermediate curves are provided for reference.
- 2. Dimensional data provided for informational purposes and is rounded to nearest  $\frac{1}{16}$ . Metric data is a simple conversion of imperial data and should not be considered more accurate.
- 3. Two pump flow center may be field modified to a one pump flow center by replacing the constant speed UP(S)26 pump with a blank plate (PN 3480).



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<sup>\*\*</sup>Include: Ground loop fittings (PE fusion x Flo-Link) and an additional insulated 3-way valve (see previous page);
Requires: Heat pump connections