



# PV

SUBMERSIBLE VORTEX SEWAGE PUMP

### FEATURES

- Corrosion resistant construction
- Cast iron body
- Thermoplastic impeller and cover.
- Upper sleeve and lower heavy duty ball bearing construction.
- Motor is permanently lubricated for extended service life.
- Powered for continuous operation.
- Vortex impeller is recessed to allow free flow through casing.

- All ratings are within the working limits of the motor.
- Replaceable power cord, 10' and 20' standard lengths, heavy duty 16/3 SJTW with NEMA three prong, 115 or 230 volt grounding plug.
- Complete unit is heavy duty, portable and compact.
- Mechanical seal is carbon, ceramic, BUNA and stainless steel.
- Stainless steel fasteners

### APPLICATIONS

Specially designed for the following uses:

- Residential sewage systems
- Heavy duty sump/dewatering
- Water transfer

### SPECIFICATIONS

#### Pump

- Discharge: 2" NPT
- Maximum capacity: 100 GPM
- Maximum head: 22' TDH
- Vortex Impeller
- Solids handling: 2" maximum sphere.
- Temperature: 104° F (40° C) maximum, continuous when fully submerged.
- Automatic models include a float switch.
- Manual models available.
- Pumping range: see performance chart or curve.

### MOTOR

- Single phase
- 60 Hertz
- 115 and 230 volt
- Built-in thermal overload protection with automatic reset.
- Class B insulation
- Oil-filled design
- High strength carbon steel shaft
- .40 and .50 HP, 3400 RPM
- PSC design

### AGENCY LISTINGS



Tested to UL 778 and CSA 22.2 108 Standards  
By Canadian Standards Association  
File #LR38549

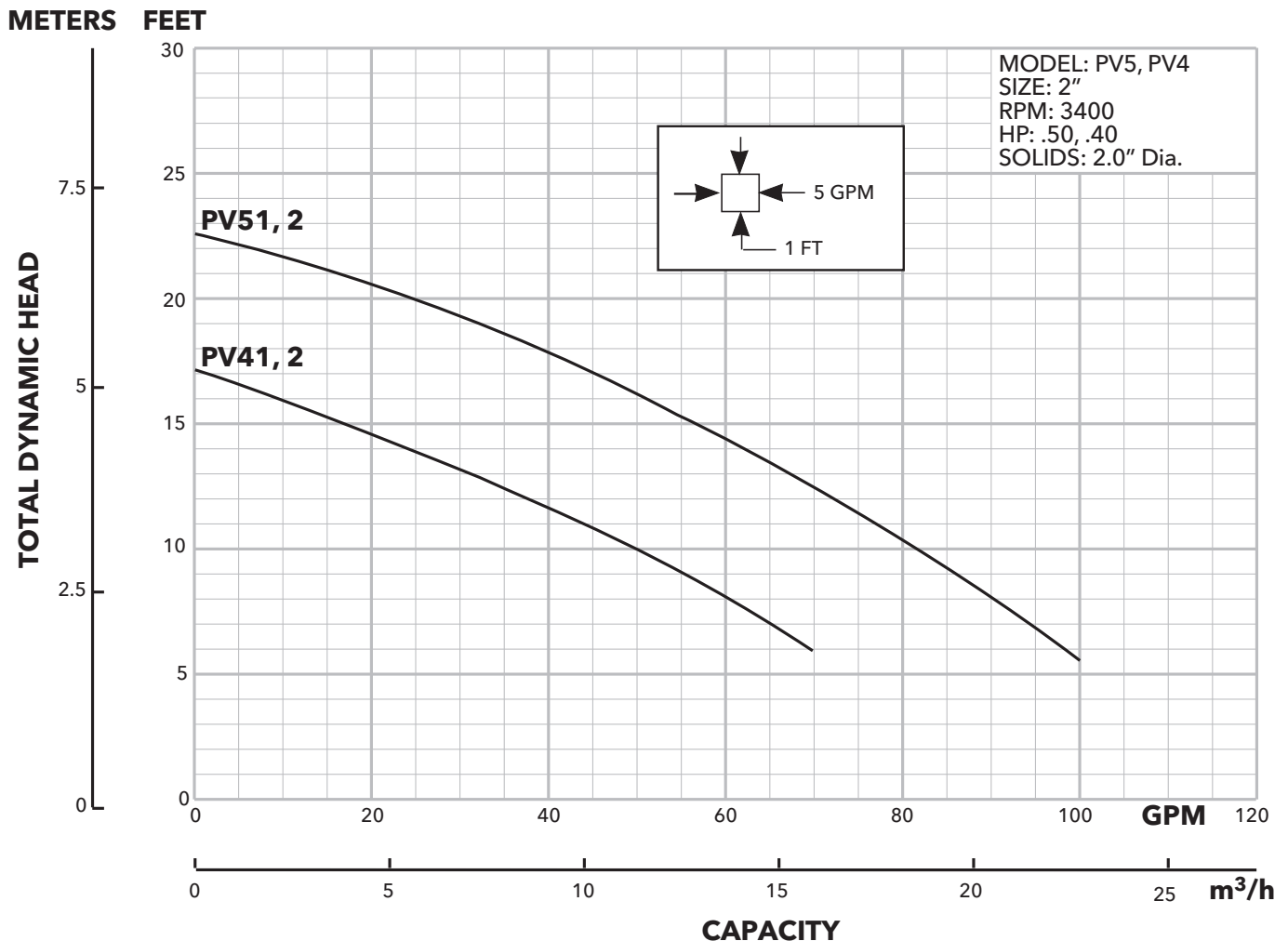
### MODEL INFORMATION

Order No.	HP	Volts	Max. Amps	Minimum Circuit Breaker	Phase	RPM	Float Switch Style	Power Cord Length	Discharge Connection	Maximum Solids Size	Minimum Basin Diameter	Shipping Weight lbs/kg
PV41M	0.4	115	10	20	1	3400	Plug / No Switch	10'	2"	2"	18"	44
PV41AV							T-Spliced Vertical					
PV41A1							T-Spliced Wide Angle					
PV41P1							Piggyback Wide Angle					
PV41MF							Plug / No Switch	20'				
PV41P1F							Piggyback Wide Angle					
PV51M	0.5	115	13.0	20			Plug / No Switch	10'				
PV51AV							T-Spliced Vertical					
PV51A1							T-Spliced Wide Angle					
PV51P1							Piggyback Wide Angle					
PV51MF							Plug / No Switch	20'				
PV51P1F							Piggyback Wide Angle					
PV52MF	230	6.5	15	Plug / No Switch	20'							
PV52P1F				Piggyback Wide Angle								

### PERFORMANCE CHARTS

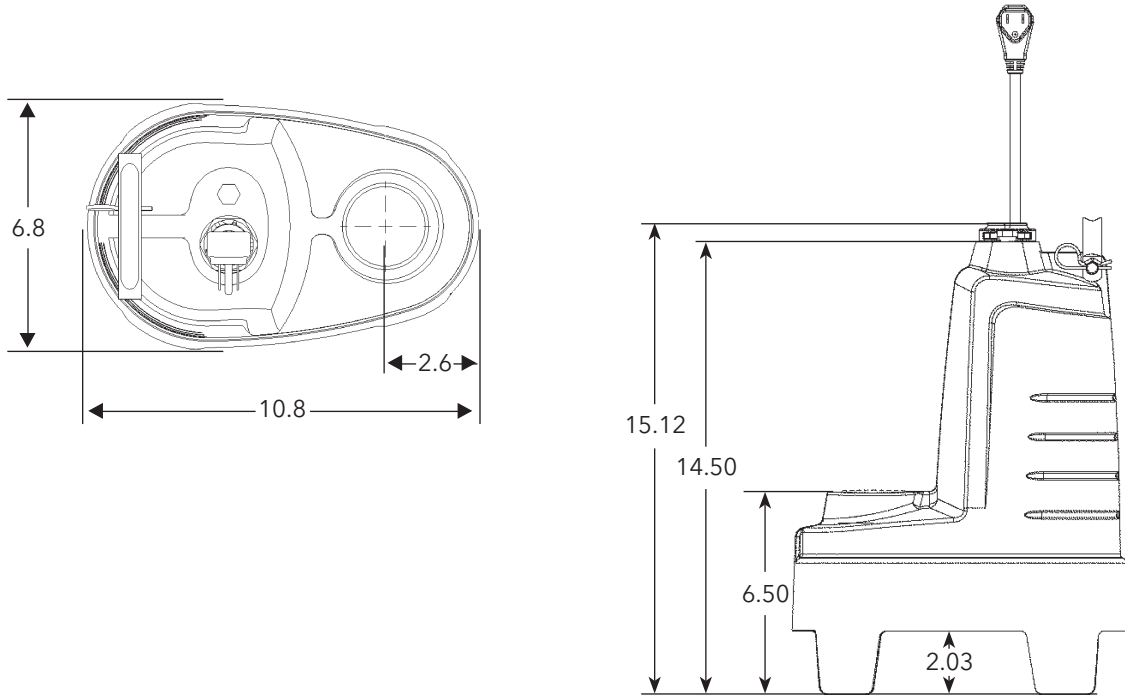
These charts show actual system performance with friction loss factored in for various discharge pipe lengths. Calculations and performance based on a system with 2" PVC, schedule 40 plastic pipe (C150), (4) 90° elbows, (1) check valve and (1) shut-off valve. Wastewater requires a minimum scouring velocity of 21 gpm for 2" pipe. Shaded areas do not provide minimum scouring velocity - use only for gray water with no solids.

Pipe Length (Feet)	GPM									
	Vertical Head (Feet)									
	2	4	6	8	10	12	14	16	18	20
25	95	89	83	77	70	62	53	45	35	22
50	83	78	73	67	61	55	48	40	31	20
75	76	71	66	61	55	50	43	37	28	18
100	69	65	61	56	51	46	40	33	26	17
150	60	57	53	49	45	40	35	29	23	16
200	54	51	48	44	40	36	32	27	21	14
250	49	47	44	40	37	33	29	24	19	13
300	46	43	40	37	34	31	27	23	18	12



## DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



**xylem**  
Let's Solve Water

Xylem Inc.  
2881 East Bayard Street Ext., Suite A  
Seneca Falls, NY 13148  
Phone: (866) 325-4210  
Fax: (888) 322-5877  
[www.xylem.com/goulds](http://www.xylem.com/goulds)

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