



## FEATURES

**Impeller:** Cast iron multi-vane vortex style, with rip vane on the back edge of the impeller for removing stringy solids.

**V model designation** for vortex impeller

**Casing:** Cast iron 2" NPT volute with volute self-cleaning design for non-clogging.

**Efficient air-filled motor**

**Dual Mechanical Seals:** For standard and Explosion Proof models, Tungsten Carbide vs. Ceramic seal faces standard on outer seals.  
Carbon vs. Ceramic seal faces standard on inner seals.

**Seal Sensor / High Temperature Probe:** Located in motor housing. If pumpage should begin to leak past lower seal it indicates to pump control panel a fault has occurred. **Requires MiniCAS device in the control panel.**

Capable of running dry without damage to components.

Designed for continuous operation, when fully submerged.

**Explosion-proof FM** available as option. FM approved.

**Shaft:** Corrosion resistant, 400 series stainless steel. Taper lock and impeller bolt on all models to guard against component damage on accidental reverse rotation.

**Fasteners:** 300 series stainless steel  
Grease for life bearings



# 2GV Plus

SUBMERSIBLE 2" SEWAGE PUMP - DUAL SEAL WITH SEAL SENSOR PROBE

### APPLICATIONS

Specifically designed for the following uses:

- Sewage systems
- Dewatering/Effluent
- Water transfer
- Light industrial
- Commercial applications

Anywhere waste or drainage must be disposed of quickly, quietly and efficiently.

### SPECIFICATIONS

#### Pump:

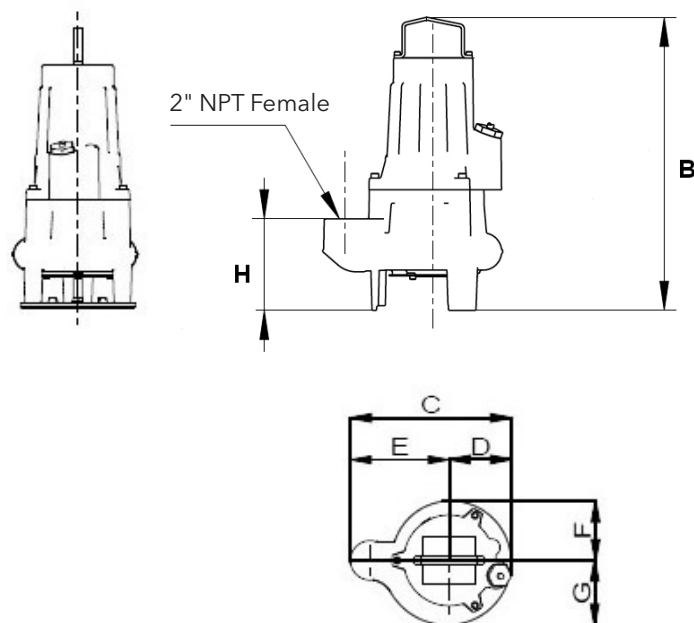
- Maximum soft solid size: 2"
- Capacities: up to 275 GPM
- Total heads: up to 82' TDH
- Discharge size: 2" NPT

#### Motor:

- Maximum ambient temperature: 104° F (40° C) continuous duty
- Rated for continuous duty when fully submerged
- Insulation: Class H; XP = F Class
- 60 Hertz
- Single row ball bearings
- 400 Series stainless steel keyed shaft
- Requires overload protection in panel (not included)
- Includes high temperature sensor for winding protection

### AIR-FILLED MOTOR

- Efficient heat dissipation
- Run dry capability
- Class H insulation; XP = F Class
- Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits and can be operated continuously without damage when fully submerged.
- Bearings: Upper and lower heavy duty ball bearing construction for precision positioning of parts and to carry thrust loads.
- High temperature winding protection
- Cord: Severe duty rated, oil and water resistant. 30 foot standard.
- O-ring: Assures positive sealing against contaminants and oil leakage.



### DIMENSIONS

Model Number	Phase	B	C	D	E	F	G	H
2GV	3Ø	19.80" [503]	12.17" [309]	4.69" [119]	7.48" [190]	4.53" [115]	4.92" [125]	6.18" [157]
2GVX	3Ø	19.80" [503]	12.17" [309]	4.69" [119]	7.48" [190]	4.53" [115]	4.92" [125]	6.18" [157]

### MODEL AND MOTOR INFORMATION

Model No.	HP	Volts	Phase/Hz	Rated Current (Amps)	RPM	Imp. Dia. In (mm)	Insulation Class	Run Cap. (mfd/volt)	Start Cap. (mfd/ volt)	Resistance (Ohms)	Aux. Resis-tance (Ohms)	Start Current (LR Amps)	Rated Motor kVA [Code]	Rated Motor Eff. (%)	Rated Power Factor (cos phi)	Starting Torque (NIM)	Max. Torque (NIM)	Pump Weight (lbs.)	Cable Size with water detector and thermostats	
2GV3812AD	3.8 (2.8 Kw)	200	3/60	12.0	3450	"A" 4.65" (118 mm)	H	N/A	N/A	N/A	N/A	61	5.6 [G]	78.6	0.89	20.0	21.0	85	14AWG/7	
2GV3813AD		230		10.0								1.38	65	6.9 [H]	82.7	0.84	22.0			25.0
2GV3814AD		460		5.0								5.52	32	6.8 [H]	82.7	0.84	22.0			25.0
2GV3815AD		575		3.8								4.69	23	6.1 [G]	82.3	0.89	20.0			22.0
2GV3012BD	3.0 (2.2 Kw)	200		10.3		0.57						61	5.6 [G]	78.6	0.89	20.0	21.0			
2GV3013BD		230		8.6		1.38						65	6.9 [H]	82.7	0.84	22.0	25.0			
2GV3014BD		460		4.3		5.52						32	6.8 [H]	82.7	0.84	22.0	25.0			
2GV3015BD		575		3.3		4.69						23	6.1 [G]	82.3	0.89	20.0	22.0			
2GV2312CD	2.3 (1.7 Kw)	200		8.2		0.57						61	5.6 [G]	78.6	0.89	20.0	21.0			
2GV2313CD		230		6.8		1.38						65	6.9 [H]	82.7	0.84	22.0	25.0			
2GV2314CD		460		3.4		5.52						32	6.8 [H]	82.7	0.84	22.0	25.0			
2GV2315CD		575		2.6		4.69						23	6.1 [G]	82.3	0.89	20.0	22.0			
2GV1812DD	1.8 (1.3 Kw)	200		7.7		0.57						61	5.6 [G]	78.6	0.89	20.0	21.0			
2GV1813DD		230		6.4		1.38						65	6.9 [H]	82.7	0.84	22.0	25.0			
2GV1814DD		460		3.2		5.52						32	6.8 [H]	82.7	0.84	22.0	25.0			
2GV1815DD		575		2.4		4.69						23	6.1 [G]	82.3	0.89	20.0	22.0			
2GV3812ADX	3.8	200	12.0	0.57	61	5.6 [G]	78.6	0.89	20.0	21.0										
2GV3813ADX		230	10.0	0.69	65	6.9 [H]	82.7	0.84	22.0	25.0										
2GV3814ADX		460	5.0	3.06	32	6.8 [G]	82.7	0.84	22.0	25.0										
2GV3815ADX		575	3.8	4.69	23	6.1 [G]	82.3	0.89	20.0	22.0										
2GV3012BDX	3	200	10.3	0.57	61	5.6 [G]	78.6	0.89	20.0	21.0										
2GV3013BDX		230	8.6	0.69	65	6.9 [H]	82.7	0.84	22.0	25.0										
2GV3014BDX		460	4.3	3.06	32	6.8 [G]	82.7	0.84	22.0	25.0										
2GV3015BDX		575	3.3	4.69	23	6.1 [G]	82.3	0.89	20.0	22.0										
2GV2312CDX	2.3	200	8.2	0.57	61	5.6 [G]	78.6	0.89	20.0	21.0										
2GV2313CDX		230	6.8	0.69	65	6.9 [H]	82.7	0.84	22.0	25.0										
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2GV1815DDX		575	2.4	4.69	23	6.1 [G]	82.3	0.89	20.0	22.0										

## APPLICATION DATA

Maximum Working Pressure	75 PSI (5 bar) - Standard
	150 PSI (10 bar) - Explosion Proof
Maximum Submergence	66 feet (20 m)
Minimum Submergence	Fully submerged for continuous operation
Maximum Environmental Temperature	40°C (104°F) continuous operation

## CONSTRUCTION DETAILS

Power / Sensor Cable	14/7, type SOW: three phase
Motor Cover	Gray Cast Iron - ASTM A48 Class 30
Seal / Bearing Housing	Gray Cast Iron - ASTM A48 Class 30
Casing	Gray Cast Iron - ASTM A48 Class 30
Impeller	Vortex Cast Iron
Motor Shaft	AISI 400 Series Stainless Steel
Motor Design	Air filled Class H; XP = Class F
Motor Overload Protection	Three Phase: require ambient compensated Class 10, quick trip overloads in the control panel.
Motor Seal Fail / High Temp. Detection	Seal fail sensor and high temp. in motor chamber. Class 10, quick trip overloads in the control panel.
External Hardware	300 Series Stainless steel
Impeller Type	Vortex with pump out vanes on back shroud
Oil Capacity - Seal Chamber	20.3 ounces

## MATERIALS OF CONSTRUCTION

Item No.	Part Name	Material Standard				
		Mech. Seal	Service	Rotary	Stationary	Elastomers
1	Impeller	Cast Iron or Stainless Steel				
2	Motor Cover	Cast Iron				
3	Shaft	400 Series SS				
4	Fasteners	300 Series SS				
5	Ball Bearings	Steel				
6	Cord	SOW, 30 feet				
7	O-Ring	BUNA-N				
8	STD	Mild abrasives	Carbon / Ceramic - Upper Tung. Carb. / Ceramic - Lower		Nitrile or Viton*	300 Series SS

\* Depending on size and style.

## NOMENCLATURE DESCRIPTION

### 1st Character - Discharge Size

2 = 2" discharge

### 2nd and 3rd Characters - Series/Solids Size

GV = Vortex

### 4th Character - HP

18 = 1.8 HP

23 = 2.3 HP

30 = 3.0 HP

38 = 3.8 HP

### 5th Character - Speed/RPM

1 = 60 Hz/3500 RPM

### 6th Character - Phase/Voltage

2 = three phase, 200 V

3 = three phase, 230 V

4 = three phase, 460 V

5 = three phase, 575 V

### 7th Character - Impeller Diameter

Vortex

A = 4.65"

B = 4.37"

C = 4.09"

D = 3.86"

### 8th Character - Cord Length

D = 30' (standard)

J = 100' (optional)

### 9th Character

X = Explosion Proof



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