

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 construction with large unobstructed passage way to pass large solids.
Efficient air-filled motor
- Stand:** Optional stand for mounting without slide rail configuration. Part number: 7482200
- Dual Mechanical Seals:**
- Up to 5 HP:**
For standard pumps, Tungsten Carbide vs. Ceramic seal faces standard on outer seals.
Carbon vs. Ceramic standard on inner seals.
 - Over 5 HP:**
Tungsten Carbide vs. Tungsten Carbide faces standard on outer seals. Tungsten Carbide vs. Carbon standard on inner seals.
All elastomers shall be nitrile.
 - For All Explosion Proof:**
Tungsten Carbide vs. Ceramic faces standard on outer and inner seals. < 5 HP use viton elastomers, > 5 HP use nitrile.
 - 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 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



4GV Plus

SUBMERSIBLE 4" 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:

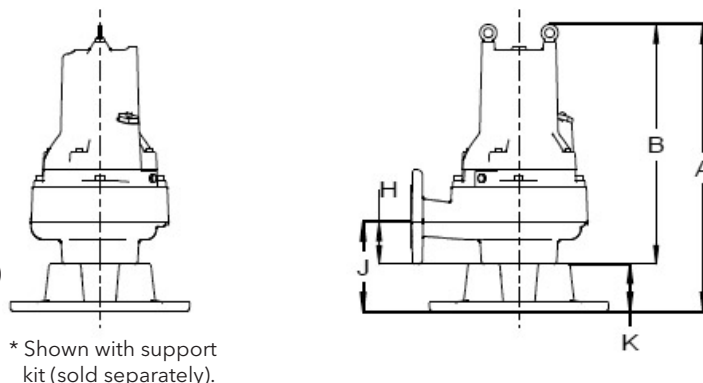
- Maximum soft solid size: 3"
- Capacities: up to 1200 GPM
- Total heads: up to 80' TDH
- Discharge size: 4" ANSI Flange

Motor:

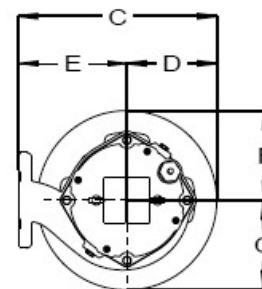
- Maximum ambient temperature: 104° F (40° C) continuous duty
- Rated for continuous duty when fully submerged
- Insulation: Class H
- 60 Hertz
- Single row ball bearings
- 400 Series stainless steel taper lock shaft
- Requires external motor components for single phase (not included)
- Requires overload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

AIR-FILLED MOTOR

- Efficient heat dissipation
- Run dry capability
- Class H insulation
- 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.



* Shown with support kit (sold separately).



DIMENSIONS

Model No.	A	B	C	D	E	F	G	H	J	K
4GV A, B, C, D Impeller	30.47" [774]	26.54" [674]	17.13" [435]	7.48" [190]	9.65" [245]	7.48" [190]	7.48" [190]	4.84" [123]	8.78" [223]	3.94" [100]
4GV F, G, H Impeller	26.50" [673]	22.56" [573]	16.34" [415]	7.48" [190]	8.86" [225]	7.48" [190]	7.48" [190]	4.72" [120]	8.66" [220]	3.94" [100]

Stand Optional, Part no. 15K80

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. Resistance (Ohms)	Start Current (LR Amps)	Rated Motor kVA [Code]	Rated Motor Eff. (%)	Rated Power Factor (cos phi)	Starting Torque (NM)	Max. Torque (NM)	Pump Weight (lbs.)	Cable Size with water detector and thermostats	Capacitor Kits						
4GV1022AD	10.0 (7.5 Kw)	200	3 / 60	31.0	1750	"A" 7.95" (202 mm)	H	N/A	N/A	0.505	N/A	157	5.4 [F]	85.1	0.83	60.0	98.3	270	10AWG / 3-2-1-GC							
4GV1023AD		230		27.0						0.500		136		84.7	0.82	58.0	97.4									
4GV1024AD		460		14.0						2.000		68	84.9	0.82	61.0	99.7										
4GV1025AD		575		11.0						4.230		56	5.5 [F]	84.9	0.82	61.0	99.7									
4GV7528BD	7.5 (5.6 Kw)	208	1 / 60	40.0		"B" 7.28" (185 mm)		105mfd/400v	655mfd/330v	0.325	0.650	123	3.4 [A]	82.7	0.87	36.0	125.0				CP-752GB					
4GV7521BD		230		35.0				85mfg/400v	570mfd/330v	0.383	0.766	107	3.3 [A]	82.2	0.85	33.0	130.0				CP-754GB					
4GV7522BD	7.5 (5.6 Kw)	200	3 / 60	23.5		"B" 7.28" (185 mm)		N/A	N/A	0.505	N/A	157	5.4 [F]	85.1	0.83	60.0	98.3			270	10AWG / 3-2-1-GC					
4GV7523BD		230		21.2						0.500		136		84.7	0.82	58.0	97.4									
4GV7524BD		460		10.6						2.000		68	84.9	0.82	61.0	99.7										
4GV7525BD		575		8.3						4.230		56	5.5 [F]	84.9	0.82	61.0	99.7									
4GV6028CD	6.0 (4.5 Kw)	208	1 / 60	31.5		1750		"C" 6.69" (170 mm)	H	105mfd/400v	655mfd/330v	0.325	0.650	123	3.4 [A]	82.7	0.87			36.0	125.0		CP-752GB			
4GV6021CD		230		28.5						85mfg/400v	570mfd/330v	0.383	0.766	107	3.3 [A]	82.2	0.85			33.0	130.0		CP-754GB			
4GV6022CD	6.0 (4.5 Kw)	200	3 / 60	19.0				"C" 6.69" (170 mm)		N/A	N/A	0.505	N/A	157	5.4 [F]	85.1	0.83			60.0	98.3	270	10AWG / 3-2-1-GC			
4GV6023CD		230		17.2								0.500		136		84.7	0.82			58.0	97.4					
4GV6024CD		460		8.6								2.000		68	84.9	0.82	61.0			99.7						
4GV6025CD		575		6.8								4.230		56	5.5 [F]	84.9	0.82			61.0	99.7					
4GV5022FD	5.0 (3.7 Kw)	200	3 / 60	16.0				1750		"F" 6.89" (175 mm)	H	N/A	N/A	1.430	N/A	83	5.8 [G]			80.3	0.82	42.0	51.6	160	14AWG / 7	
4GV5023FD		230		14.0	1.300		67							5.4 [F]		80.2	0.85	38.0	47.9							
4GV5024FD		460		6.8	5.200		34							5.5 [F]		80.2	0.85	38.0	47.9							
4GV5025FD		575		5.8	11.900		30							6.0 [G]		79.8	0.81	42.0	52.4							
4GV4028GD	4.0 (3.0 Kw)	208	1 / 60	19.0	1750		"G" 6.30" (160 mm)			H		80mfd/400v	420mfd/330v	0.846	1.692	83	4.3 [D]	77.9	0.96	19.0	58.0		CP-42GB			
4GV4021GD		230		17.0								65mfd/400v	350mfd/330v	1.130	2.260	77	4.4 [D]	78.1	0.98	19.0	53.0		CP-44GB			
4GV4022GD	4.0 (3.0 Kw)	200	3 / 60	14.8			"G" 6.30" (160 mm)					N/A	N/A	1.430	N/A	83	5.8 [G]	80.3	0.82	42.0	51.6	160	14AWG / 7			
4GV4023GD		230		12.6										1.300		67	5.4 [F]	80.2	0.85	38.0	47.9					
4GV4024GD		460		6.3										5.200		34	5.5 [F]	80.2	0.85	38.0	47.9					
4GV4025GD		575		5.4										11.900		30	6.0 [G]	79.8	0.81	42.0	52.4					
4GV3128HD	3.1 (2.3 Kw)	208	1 / 60	17.4			1750					"H" 5.79" (147 mm)	H	80mfd/400v	420mfd/330v	0.846	1.692	83	4.3 [D]	77.9	0.96	19.0	58.0			
4GV3121HD		230		14.7		65mfd/400v			350mfd/330v					1.130	2.260	77	4.4 [D]	78.1	0.98	19.0	53.0		CP-44GB			
4GV3122HD	3.1 (2.3 Kw)	200	3 / 60	13.2		"H" 5.79" (147 mm)			N/A			N/A		1.430	N/A	83	5.8 [G]	80.3	0.82	42.0	51.6	160	14AWG / 7			
4GV3123HD		230		11.2										1.300		67	5.4 [F]	80.2	0.85	38.0	47.9					
4GV3124HD		460		5.6										5.200		34	5.5 [F]	80.2	0.85	38.0	47.9					
4GV3125HD		575		4.8										11.900		30	6.0 [G]	79.8	0.81	42.0	52.4					

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	10/3-2-1 GC, type: three phase - 5.1 HP and up			
	10/3-2-1 GC, type: single and three phase - 5.0 HP and less			
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	Cast Iron			
Motor Shaft	AISI 400 Series Stainless Steel			
Motor Design	Air filled Class H			
Single Phase Capacitors	HP	Volt	Run	Start
	Up to 5.0 HP	208	80 MFD / 400V	420 MFD / 330V
		230	65 MFD / 400V	350 MFD / 330V
	5.1 HP and up	208	105 MFD / 400V	655 MFD / 330V
230		85 MFD / 400V	570 MFD / 330V	
Motor Overload Protection	Single/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 an oil-filled seal chamber. Connect to optional relays in control panel.			
External Hardware	300 Series Stainless steel			
Impeller Type	Vortex with pump out vanes on back shroud			
Oil Capacity - Seal Chamber	33.8 ounces			

MATERIALS OF CONSTRUCTION

Item No.	Part Name	Material Standard			
		1	Impeller	Cast Iron	
2	Motor Cover	Cast Iron			
3	Shaft	400 SS			
4	Fasteners	300 SS			
5	Ball Bearings	Steel			
6	Power Cable	SOW, 30 feet			
7	O-Ring	BUNA-N			
8	Service	Rotary	Stationary	Elasto- mers	Metal Parts
	Inner	Carbon / Ceramic		Nitrile	300 Series SS
	Outer	Tungsten Carbide / Ceramic			

NOMENCLATURE DESCRIPTION

1st Character - Discharge Size

4 = 4" discharge

2nd and 3rd Characters - Series/Solids Size

GV = Vortex

4th Character - HP

31 = 3.1 HP

40 = 4.0 HP

50 = 5.0 HP

51 = 5.1 HP

60 = 6.0 HP

75 = 7.5 HP

10 = 10.0 HP

5th Character - Mechanical Seals

2 = 60 Hz/1750 RPM

6th Character - Phase/Voltage

1 = single phase, 230 V

8 = single phase, 208 V

2 = three phase, 200 V

3 = three phase, 230 V

4 = three phase, 460 V

5 = three phase, 575 V

7th Character - Impeller Diameter

A = 8.50" E = 7.05"

B = 7.91" G = 6.57"

C = 7.24" H = 6.10"

D = 6.81"

8th Character - Cord Length

D = 30' (standard)

J = 100' (optional)

9th Character

X = Explosion Proof



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