

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:

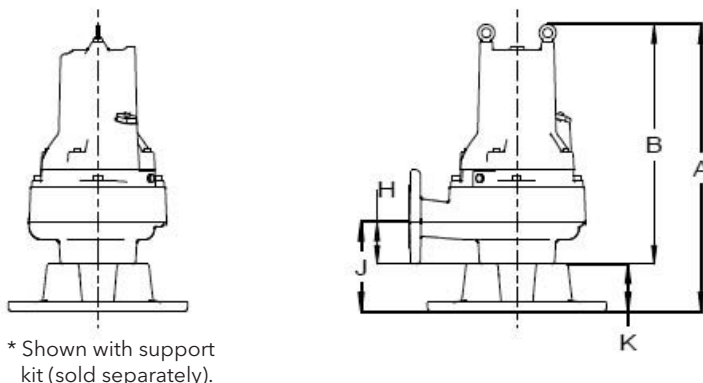
- Maximum soft solid size: 3"
- Capacities: up to 1200 GPM
- Total heads: up to 80' TDH
- Discharge size: 4" ANSI Flange

Motor:

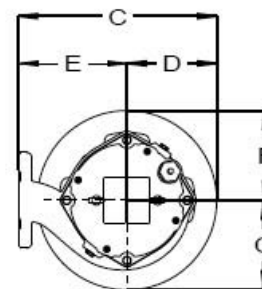
- Maximum ambient temperature: 104° F (40° C) continuous duty
- Rated for continuous duty when fully submerged
- Insulation: Class H
- 60 Hertz
- Single row ball bearings
- 400 Series stainless steel taper lock shaft
- Requires external motor components for single phase (not included)
- Requires overload 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 | 84.7 | 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) | H | 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) | 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 | |
| 4GV7523BD | | 230 | | 21.2 | | | | | | 0.500 | | 136 | | 84.7 | 0.82 | 58.0 | 97.4 | | | | | |
| 4GV7524BD | | 460 | | 10.6 | | | | | | 2.000 | | 68 | 84.7 | 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 | | "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) | 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 | |
| 4GV6023CD | | 230 | | 17.2 | | | | | | 0.500 | | 136 | | 84.7 | 0.82 | 58.0 | 97.4 | | | | | |
| 4GV6024CD | | 460 | | 8.6 | | | | | | 2.000 | | 68 | 84.7 | 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 | | "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 | "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) | H | 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 | "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 | | CP-42GB | | | | |
| 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) | H | 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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