TECHNICAL BROCHURE

B4GVPLUS R2



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



Wastewater

Goulds Water Technology

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.



kit (sold separately).





DIMENSIONS

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

Stand Optional, Part no. 15K80

Goulds Water Technology

MODEL AND MOTOR INFORMATION

Model No.	НР	Volts	Phase/Hz	Rated Current (Amps)	RPM	Impeller Diameter In (mm)	Insulation Class	Run Capacitor (mfd/ volt)	Start Capacitor (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 (Ibs.)	Cable Size with water detector and thermostats	Capacitor Kits								
4GV1022AD		200		31.0						0.505		157		85.1	0.83	60.0	98.3											
4GV1023AD	10.0	230	2 / / 0	27.0	7.0	A 7.95"		N1/A	N/A -	0.500		136	5.4 [F]	047	0.00	50.0	07.4	1										
4GV1024AD	(7.5 Kw)	460	3/60	14.0		(202		N/A		2.000	IN/A	68		84.7	0.82	58.0	97.4											
4GV1025AD		575		11.0		mm)				4.230		56	5.5 [F]	84.9	0.82	61.0	99.7											
4GV7528BD		208	1//0	40.0				105mfd/400v	655mfd/330v	0.325	0.650	123	3.4 [A]	82.7	0.87	36.0	125.0]		CP-752B								
4GV7521BD]	230	1/00	35.0		"D"		85mfg/400v	570mfd/330v	0.383	0.766	107	3.3 [A]	82.2	0.85	33.0	130.0			CP-754B								
4GV7522BD	7.5	200		23.5		7.28"				0.505		157		85.1	0.83	60.0	98.3											
4GV7523BD	(5.0 Kw)	230	2/40	21.2		(185		NI/A	NI/A	0.500		136	136 5.4 [F]	047	0.02	E0 0	07.4	070	10AWG/									
4GV7524BD		460	3/00	10.6		mm)		IN/A	N/A N/A -	2.000	IN/A 68		04./	0.02 58	56.0	0 97.4	2/0	3-2-1-GC										
4GV7525BD		575		8.3						4.230		56	5.5 [F]	84.9	0.82	61.0	99.7	-										
4GV6028CD		208	1/40	31.5	31.5 28.5			105mfd/400v	655mfd/330v	0.325	0.650	123	3.4 [A]	82.7	0.87	36.0	125.0		CP-752B									
4GV6021CD		230	1700	28.5				85mfg/400v	570mfd/330v	0.383	0.766	107	3.3 [A]	82.2	0.85	33.0	130.0			CP-754B								
4GV6022CD	6.0	200		19.0		"C"		N/A		0.505		157	5.4 [F]	85.1	0.83	60.0	98.3											
4GV6023CD	(4.5 Kw)	230	2/60	0 17.2		(170			N/A	0.500		136		Q/ 7	0 0 2	580 0	07.4											
4GV6024CD		460	3700	8.6	1750 r	mm)				2.000	IN/A	68		04.7	0.02	50.0	77.4											
4GV6025CD		575		6.8			Ц			4.230		56	5.5 [F]	84.9	0.82	61.0	99.7											
4GV5022FD		200		16.0	1750				1.430		83	5.8 [G]	80.3	0.82	42.0	51.6												
4GV5023FD	5.0	230	2/40	14.0	0	6.89"			N/A	1.300	1.300	67	5.4 [F]	80.2	0.85	38.0	47.9											
4GV5024FD	(3.7 Kw)	460	3700	6.8	(175			IN/A	5.200	00 IN/A	34	5.5 [F]	80.2	0.85	38.0	47.9												
4GV5025FD		575		5.8						11.900	1.900	30	6.0 [G]	79.8	0.81	42.0	52.4											
4GV4028GD		208	1/60	19.0]											80mfd/400v	420mfd/330v	0.846	1.692	83	4.3 [D]	77.9	0.96	19.0	58.0			CP-42B
4GV4021GD		230	17.00	17.0		"G"		65mfd/400v	350mfd/330v	1.130	2.260	77	4.4 [D]	78.1	0.98	19.0	53.0			CP-44B								
4GV4022GD	4.0 (3.0 Kw) 230 2 (60 14.8 12.6 (30) (160 (160)	200		14.8		6.30"				1.430		83	5.8 [G]	80.3	0.82	42.0	51.6											
4GV4023GD			N/A	NI/A	1.300	1.300	67	5.4 [F] 80.2	80.2	0.85	38.0	47.9	140	1/1AWG / 7														
4GV4024GD		460	5700	6.3		mm)			11/7	5.200		34	5.5 [F]	80.2	0.85	38.0	47.9	100	14AWG77									
4GV4025GD		575		5.4						11.900		30	6.0 [G]	79.8	0.81	42.0	52.4											
4GV3128HD		208	1/60	17.4				80mfd/400v	420mfd/330v	0.846	1.692	83	4.3 [D]	77.9	0.96	19.0	58.0			CP-42B								
4GV3121HD		230	17.00	14.7		 "Ц"		65mfd/400v)v 350mfd/330v	1.130	2.260	77	4.4 [D]	78.1	0.98	19.0	53.0			CP-44B								
4GV3122HD	3.1	200		13.2		5.79"				1.430		83	5.8 [G]	80.3	0.82	42.0	51.6											
4GV3123HD	(2.5 Kw)	230	3/60	11.2		(147 mm)		N/A	N/A	1.300	Ν/Δ	67	5.4 [F]	80.2	0.85	38.0	47.9											
4GV3124HD		460	5700	5.6				11/7	11/7	5.200	IN/A	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 Marking Prossure	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

Dawar / Canada Cala		10/3-2-1 GC, type: three phase - 5.1 HP and up						
Power / Sensor Cab	le	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 Hou	sing	Gray Cast Iron - ASTM A48 Class 30						
Casing		Gray Cast Iron - ASTM A48 Class 30						
Impeller		Cast Ir	on					
Motor Shaft		AISI 4	00 Series Stainless S	Steel				
Motor Design		Air fille	ed Class H					
	HP	Volt	Run	Start				
	Up to	208	80 MFD / 400V	420 MFD / 330V				
Capacitors	5.0 HP	230	65 MFD / 400V	350 MFD / 330V				
Capacitors	5.1 HP	208	105 MFD / 400V	655 MFD / 330V				
	and up	230	30 85 MFD / 400V 570 MFD					
Motor Overload Pro	otection	Single/Three Phase: require ambient com- pensated Class 10, quick trip overloads in the control panel.						
Motor Seal Fail / Hi Temp. Detection	gh	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

ltem No.	Part Nan	ne		Material Standard						
1	Impeller			Cast Iron						
2	Motor Co	over		Cast Iron						
3	Shaft			400 SS						
4	Fasteners	5		300 SS						
5	Ball Bear	ings		Steel						
6	Power Ca	able		SOW, 30 feet						
7	O-Ring			BUNA-N						
8	Service	Rotary	Stationary		Elasto- mers	Metal Parts				
	Inner	Carbo	n / Ce	eramic	300					
	Outer	Tungsten C	arbid	e / Ceramic	intille	Series SS				

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 HP50 = 5.0 HP51 = 5.1 HP 60 = 6.0 HP75 = 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

- E = 7.05" A = 8.50" 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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