TECHNICAL BROCHURE

B3GVPLUS

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 6.4 HP: For standard pumps, Tungsten Carbide vs. Ceramic seal faces standard on outer seals. Carbon vs. Ceramic standard on inner seals.

Over 6.4 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. All elastomers shall be viton.

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

3GV Plus

SUBMERSIBLE 3" 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: 21/2"
- Capacities: up to 575 GPM
- Total heads: up to 152' TDH
- Discharge size: 3" 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	Е	F	G	н	J	к
3GV	27.95"	24.02"	15.75"	7.48"	8.27"	7.48"	7.48"	3.94"	7.87"	3.94"
A, B, C, D Impeller	[710]	[610]	[400]	[190]	[210]	[190]	[190]	[100]	[200]	[100]
3GV	24.53"	20.59"	15.35"	7.48"	7.87"	7.48"	7.48"	3.94"	7.87"	3.94"
F, G, H Impeller	[623]	[523]	[390]	[190]	[200]	[190]	[190]	[100]	[200]	[100]

Stand Optional, Part no. 15K80

Goulds Water Technology

Wastewater

MODEL AND MOTOR INFORMATION

Model No.	HP	Volts	Phase/ Hz	Rated Cur- rent (Amps)	RPM	Imp. Dia. In (mm)	In- sula- tion Class	Run Cap. (mfd/ volt)	Start Cap. (mfd/ volt)	Resis- tance (Ohms)	Aux. Resis- tance (Ohms)	Start Cur- rent (LR Amps)	Rated Motor kVA [Code]	Rated Motor Eff. (%)	Rated Power Factor (cos phi)	Start- ing Torque (NM)	Max. Torque (NM)	Pump Weight (Ibs.)	Cable Size with water detector and ther- mostats	Capaci- tor Kits			
3GV1112AD		200		30.0						0.327		250	7.9 [J]	89.1	0.90	45.0	80.0						
3GV1113AD	11.0	230		26.0		5 71"				0.289		224											
3GV1114AD	(8.2 Kw)	460	3/60	13.0	-	(145		N/A	N/A	1.156	6 N/A	112	8.1 [K]	89.2	0.88	43.0	81.0						
3GV1115AD		575		11.0		mm)				2.470	-	96	8.7 [K]	89.1	0.86	49.0	88.0						
3GV9511BD		230	1/60	40.0	- 5			70mdf/400v	670mfd/330v	0.194	0.388	138	3.3 [B]	84.0	0.87	15.0	79.0	1	CF	CP-954GB			
3GV9512BD	95	200		26.5		"B"				0.327		250	7.9 [J]	89.1	0.90	45.0	80.0						
3GV9513BD	(7.1	230		23.0		5.43"				0.289		224	0.4.[1/]		0.00	42.0	04.0	1					
3GV9514BD	Kw)	460	3/60	11.5		(138 mm)		N/A	N/A	1.156	N/A	112	- 8.1[K]	89.2	0.88	43.0	81.0						
3GV9515BD	1	575	1	9.7	1					2.470	1	96	8.7 [K]	89.1	0.86	49.0	88.0	1					
3GV8218CD		208	1.1.10	40.0	1		1	85mfd/400v	885mfd/330v	0.164	0.328	169	3.7 [C]	83.1	0.82	15.0	84.0	1		CP-952GB			
3GV8211CD	1	230 1/60	1/60	37.0	1	"C"		70mdf/400v	670mfd/330v	0.194	0.388	138	3.3 [B]	84.0	0.87	15.0	79.0	235	10AWG/	CP-954GB			
3GV8212CD	8.2	8.2 (6.1 Kw) 230 460 3 / 60	3/60	23.7	3.7	5.12"				0.327		250	7.9 [J]	89.1	0.90	45.0	80.0	1	3-2-1-GC				
3GV8213CD	(6.1 Kw)) 3/60	30	20.6]	(130		NI/A	NI/A	0.289		224	0.1.[1/]	00.2	0.00	42.0	01.0]			
3GV8214CD	,				10.3]	mm)		IN/A	IN/A	1.156	N/A	112	12 8.1[K]	89.2	.2 0.88	0.88 43.0	81.0					
3GV8215CD	1	575]	8.7						2.470]	96	8.7 [K]	89.1	0.86	49.0	88.0						
3GV6518DD		208	1//0	39.0			1	85mfd/400v	885mfd/330v	0.164	0.328	169	3.7 [C]	83.1	0.82	15.0	84.0			CP-952GB			
3GV6511DD]	230	1/00	33.0		"D"		70mdf/400v	670mfd/330v	0.194	0.388	138	3.3 [B]	84.0	0.87	15.0	79.0			CP-954GB			
3GV6512DD	6.5	200		20.7	20.7 8.0 9.0 3450 (12 mr	4.84" (123		Ν/Δ		0.327	0.327	250 7.9 [J	7.9 [J]	89.1	0.90	45.0	80.0						
3GV6513DD	(4.9 Kw)	230	2//0	18.0			Н		Ν/Δ	0.289		224	01[V]	20.2	0.00	12.0	81.0						
3GV6514DD		460	3/00	9.0		m	mm)		IN/A	IN/A	1	1.156	156	112	0.1[K]	07.2	0.00	43.0	01.0				
3GV6515DD		575		7.6						2.470		96	8.7 [K]	89.1	0.86	49.0	88.0						
3GV6412FD		200		18.0	- "F 4.6	"F"				1.120		127	6.8 [H]	84.8	0.89	27.0	38.0						
3GV6413FD	6.4	230	3/60 16.0			4.6				4.65"		N/A	N/A	1.050	N/A	110	6.8 [H]	85.3	0.89	23.0	38.0		
3GV6414FD	(4.0 Kw)	(4.0 Kw) 460 37.00	8.0		(118		IN/A	IN/A	4.200	IN/A	54	6.7 [H]	84.9	0.89	25.0	38.0							
3GV6415FD		575		6.3]]	mm)				9.730		43	6.7 [H]	84.5	0.90	26.0	37.0					
3GV5518GD		208	1/60	25.0				70mfd/400v	650mfd/330v	0.617	1.234	109	4.1 [C]	80.3	1.00	16.0	37.0			CP-552GB			
3GV5511GD		230	1700	22.0		"G"		60mfd/400v	520mfd/330v	0.825	1.650	96	4.0 [C]	80.5	1.00	15.0	34.0			CP-554GB			
3GV5512GD	5.5	200		15.3		4.29"				1.120		127	6.8 [H]	84.8	0.89	27.0	38.0						
3GV5513GD	Kw)	230	3/60	13.6		(109		N/A	NI/A	N/A	1.050	N/A	110	6.8 [H]	85.3	0.89	23.0	38.0	150	14AWG			
3GV5514GD		460		6.8		mm)	mm)	mm)			1077	4.200	4.200 N/A	54	6.7 [H]	84.9	0.89	25.0	38.0	150	/7		
3GV5515GD		575		5.4						9.730		43	6.7 [H]	84.5	0.90	26.0	37.0						
3GV4418HD		208	1/60	21.0						70mfd/400v	650mfd/330v	0.617	1.234	109	4.1 [C]	80.3	1.00	16.0	37.0			CP-552GB	
3GV4411HD		230	1700	18.0		"H"		60mfd/400v	520mfd/330v	0.825	1.650	96	4.0 [C]	80.5	1.00	15.0	34.0			CP-554GB			
3GV4412HD	4.4	200	-	13.1		3.98"				1.120		127	6.8 [H]	84.8	0.89	27.0	38.0	-					
3GV4413HD	(3.3 Kw)	230	3/60	11.6		(101		N/A	N/A	1.050	N/A	110	6.8 [H]	85.3	0.89	23.0	38.0						
3GV4414HD		460		5.8	-					4.200		54	6.7 [H]	84.9	0.89	25.0	38.0	-					
3GV4415HD		575		4.6						9.730		43	6.7 [H]	84.5	0.90	26.0	37.0						

APPLICATION DATA

Maximum Marking Processo	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

		10/3-2-1 GC, type: three phase - 6.5 HP and up						
Power / Sensor Cable	9	10/3-2-1 GC, type: single and three phase - 6.5 HP and less						
Motor Cover		Gray Cast Iron - ASTM A48 Class 30						
Seal / Bearing Hous	Gray Cast Iron - ASTM A48 Class 30							
Casing		Gray Ca	ast Iron - ASTM A4	8 Class 30				
Impeller		Cast Irc	n					
Motor Shaft		AISI 40	0 Series Stainless S	Steel				
Motor Design		Air fille	d Class H					
	HP	Volt	Run	Start				
	11 HP	208 85 MFD / 400V		885 MFD / 330V				
Single Phase	6.5 HP	230	70 MFD / 400V	670 MFD / 330V				
Capacitors	6.4 HP	208	70 MFD / 400V	650 MFD / 330V				
	4.4 HP	230	60 MFD / 400V	520 MFD / 330V				
Motor Overload Prot	ection	Single/Three Phase: require ambient com- pensated Class 10, quick trip overloads in the control panel.						
Motor Seal Fail / Hig Detection	ıh Temp.	Seal fail sensor and high temp. in motor 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	Deut Nam			Material							
No.	Part Nan	ne		Standard							
1	Impeller			Cast Iron							
2	Motor Co	over		Cast Iron							
3	Shaft			400 SS							
4	Fasteners	6		300 SS							
5	Ball Bear	ings		Steel							
6	Power Ca	able		SOW, 30 feet							
7	O-Ring			BUNA-N							
0	Service Rotary S		tationary	Elasto- mers	Metal Parts						
8	Upper	Carbo	n / C	eramic	300						
	Outer	Tungsten C	arbid	e / Ceramic	INIGHE	Series SS					

NOMENCLATURE DESCRIPTION

1st Character - Discharge Size

3 = 3" discharge

2nd and 3rd Characters - Series/Solids Size GV = Vortex

4th Character - HP

44 = 4.4 HP	82 = 8.2 HP
55 = 5.5 HP	95 = 9.5 HP
64 = 6.4 HP	11 = 11.0 HP
65 = 6.5 HP	

5th Character - Mechanical Seals

1 = 60 Hz/3500 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

 $\begin{array}{ll} \underline{Vortex} \\ A = 5.71" & F = 4.65" \\ B = 5.43" & G = 4.29" \\ C = 5.12" & H = 3.98" \\ D = 4.84" \end{array}$

8th Character - Cord Length

D = 30' (standard) J = 100' (optional)

9th Character

X = Explosion Proof

xylem Let's Solve Water

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