TECHNICAL BROCHURE

B3GVPLUS R3



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.

rasieners: 500 series stainless stee



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:

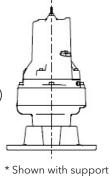
- Maximum soft solid size: 21/2"
- Capacities: up to 575 GPM
- Total heads: up to 152' TDH
- Discharge size: 3" ANSI Flange

Motor:

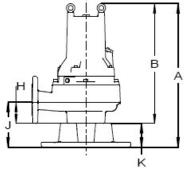
- Maximum ambient temperature: 104° F (40° C) continuous duty
- Rated for continuous duty when fully submerged
- Insulation: Class H
- 60 Hertz
- Single row ball bearings
- 400 Series stainless steel taper lock shaft
- Requires overload protection in panel (not included)
- Includes high temperature sensor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

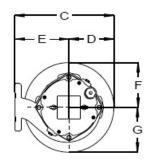


- Efficient heat dissipation
- Run dry capability
- Class H insulation
- Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits and can be operated continuously without damage when fully submerged.
- Bearings: Upper and lower heavy duty ball bearing 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
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

MODEL AND MOTOR INFORMATION

Model No.	Ч	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																																
3GV1112AD		200		30.0		"A"			0.327		250	7.9 [J]	89.1	0.90	45.0	80.0	0																																		
3GV1113AD	11.0	230		26.0		5.71"				0.289		224	8.1 [K]	89.2	0.88	43.0	81.0																																		
3GV1114AD	(8.2 Kw)	460		13.0		(145				1.156		112	0.1[K]	07.2	07.2 0.00	43.0	01.0																																		
3GV1115AD		575		11.0		mm)				2.470		96	8.7 [K]	89.1	0.86	49.0	88.0																																		
3GV9512BD		200		26.5		"B"				(0.327		250	7.9 [J]	89.1	0.90	45.0	80.0																																	
3GV9513BD	9.5 (7.1 Kw)	230		23.0		5.43"				0.289		224	8.1 [K]	89.2	0.88	43.0	81.0																																		
3GV9514BD		460		11.5		(138 mm)				1.156		112																																							
3GV9515BD		575		9.7		"C"					2.470		96	8.7 [K]	89.1	0.86	49.0	88.0	235	10AWG / 3-2-1-GC																															
3GV8212CD	8.2	200		23.7							0.327		250	7.9 [J]	89.1	0.90	45.0	80.0																																	
3GV8213CD	(6.1	230		20.6		5.12"				0.289		224	8.1 [K]	89.2	0.88	43.0	81.0																																		
3GV8214CD 3GV8215CD	Kw)	460 575		10.3 8.7	-	(130 mm)	(130 mm)			1.156 2.470		112 96	0 7 [1]	89.1	0.9/	49.0	88.0																																		
3GV6215CD 3GV6512DD		200		20.7									0.327	-	250	8.7 [K] 7.9 [J]	89.1	0.86	49.0																																
3GV6513DD	6.5	200		18.0		"D"													N/A	N/A	0.327		230	7.7 [J]	07.1	0.70	43.0	00.0																							
3GV6513DD	(4.9	460	3/60	9.0	3450	3450	3450	4.84" H (123 H	Н	N/A	A N/A	I/A N/A	N/A	V/A N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.156	N/A	112	8.1 [K]	89.2	0.88	43.0	81.0
3GV6515DD	Kw)	575		7.6		(120 mm)												2.470		96	8.7 [K]	89.1	0.86 49.0 88.0																												
3GV6412FD		200		18.0		"F" 4.65"										1.120		127	6.8 [H]	84.8	0.89	27.0	38.0																												
3GV6413FD	6.4	230		16.0												-				-		1.050		110	6.8 [H]	85.3	0.89	23.0	38.0																						
3GV6414FD	(4.8 Kw)	460		8.0		(118	"118 mm) "G"																-													4.200		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																								
3GV5512GD		200		15.3		"G" 4.29" (109 mm) "H"					1.120		127	6.8 [H]	84.8	0.89	27.0	38.0																																	
3GV5513GD	5.5	230		13.6											1.050		110	6.8 [H]	85.3	0.89	23.0	38.0	150	140000 /7																											
3GV5514GD	(4.1 Kw)	460		6.8]		(109									4.200		54	6.7 [H]	84.9	0.89	25.0	38.0	150	14AWG / 7																										
3GV5515GD		575		5.4							9.730		43	6.7 [H]	84.5	0.90	26.0	37.0																																	
3GV4412HD		200		13.1							1.120		127	6.8 [H]	84.8	0.89	27.0	38.0																																	
3GV4413HD	4.4	230		11.6	11.6	11.6											3.98"				1.050		110	6.8 [H]	85.3	0.89	23.0	38.0																							
3GV4414HD	(3.3 Kw)	460		5.8		(101																									4.200		54	6.7 [H]	84.9	0.89	25.0	38.0													
3GV4415HD		575		4.6		mm)				9.730		43	6.7 [H]	84.5	0.90	26.0	37.0																																		

APPLICATION DATA

Maximum Marking Prossure	75 PSI (5 bar) - Standard				
Maximum Working Pressure	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 - 6.5 HP and up				
Power / Sensor Cable	10/3-2-1 GC, type: three phase - 6.5 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				
Motor Overload Protection	Three Phase: require ambient compen- sated Class 10, quick trip overloads in the control panel.				
Motor Seal Fail / High Temp. Detection	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	Part Name		Material						
No.	Fart Nan	le	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	ble	SOW, 30 feet						
7	O-Ring		BUNA-N						
	Service	Rotary	Stationary	Elastomers	Metal Parts				
8	Upper	Carbon	/ Ceramic	300					
	Outer	Tungsten Ca	rbide / Ceramic	Nitrile	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

- 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



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