



3DWS

SUBMERSIBLE SEWAGE PUMPS



Bell & Gossett
a xylem brand

FEATURES

Impeller: Cast iron, two vane semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

Casing: Heavy duty cast iron, volute type for maximum efficiency. 3" flange conforms to 125 # ANSI standard. Connects to A10-30 guide rail system.

Dual Mechanical Seals: Silicon carbide vs. silicon carbide outer seal and ceramic vs. carbon inner seal, stainless steel metal parts, BUNA-N elastomers. Upper and lower shaft seals are positioned independently and are separated by an oil-filled chamber.

Seal Sensor Probe: Located in oil-filled chamber. If pumpage should begin to leak past lower seal it indicates to pump control panel a fault has occurred. Requires optional Seal Fail Circuit in the control panel.

Shaft: 300 series stainless steel keyed design. Fasteners: 300 series stainless steel.

Capable of running dry without damage to components.

APPLICATIONS

Used in a variety of residential, commercial and industrial applications such as:

- Sewage systems
- Hospitals
- Flood and pollution control
- Trailer courts
- Dewatering/Effluent
- Motels
- Farms

SPECIFICATIONS

Pump:

- Maximum solid size: 2.5"
- Discharge size: 3", 125 # ANSI flange
- Maximum capacity: 470 GPM
- Maximum total head: 65 feet
- 300 Series stainless steel fasteners
- 20' Power cord
- Standard silicon carbide/silicon carbide outer seal

Motor:

- Maximum ambient temperature: 104° F (40° C) continuous duty, 140° F (60° C) intermittent duty
- Rated for continuous duty when fully submerged
- Insulation: Class F
- 60 Hertz
- Single row ball bearings
- 300 Series stainless steel keyed shaft

Single Phase:

- 1.5 - 5 HP; 208 and 230 volts
- Built-in thermal overloads with automatic reset
- Built-in capacitors

Three Phase:

- 1.5 - 5 HP; 200, 230, 460 and 575 volts
- Class 10 overload protection must be provided in control panel
- PSC design

MOTORS

- Fully submerged in oil-filled chamber. High grade turbine oil surrounds motor for more efficient heat dissipation, permanent lubrication of bearings and mechanical seal for complete protection against outside environment.
- Class F 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.
- Power and Control Cables: Severe duty rated, oil and water resistant. Epoxy seal on motor end.

AGENCY LISTINGS



Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association
File #LR218526

Wastewater

Order No.	HP	Phase	Volts	RPM	Impeller		Maximum Amps	L.R. Amps	KVA Code	Power Cable	F.L. Motor Efficiency %	Resistance		Weight (lbs.)
					Dia. (in.)	Code						Start	Line-Line	
3DWS1F2A2E1A	1.5	1	208	1750	5.25	E	15.0	50.8	B	14/3	80	1.1	0.9	192
3DWS1F3A2E1A			230				13.5	29.5	E		70	1.4	1.8	
3DWS3F2A2E1A		3	200				11.5	40.9	H	14/4	81	NA	1.7	190
3DWS3F3A2E1A			230				10.0	40.0	F		83		2.3	
3DWS3F4A2E1A			460				5.0	20.0	F		83		9.3	
3DWS3F5A2E1A			575				4.0	14.4	H		74		14.8	
3DWS1F2A2D1A	1.5	1	208	1750	6.50	D	15.0	50.8	B	14/3	80	1.1	0.9	192
3DWS1F3A2D1A			230				13.5	29.5	E		70	1.4	1.8	
3DWS3F2A2D1A		3	200				11.5	40.9	H	14/4	81	NA	1.7	190
3DWS3F3A2D1A			230				10.0	40.0	F		83		2.3	
3DWS3F4A2D1A			460				5.0	20.0	F		83		9.3	
3DWS3F5A2D1A			575				4.0	14.4	H		74		14.8	
3DWS1G2A2C1A	2	1	208	1750	7.00	C	19.0	50.8	B	14/3	80	1.1	0.9	196
3DWS1G3A2C1A			230				16.0	36.9	D		75	1.4	1.5	
3DWS3G2A2C1A		3	200				11.5	40.9	H	14/4	81	NA	1.7	194
3DWS3G3A2C1A			230				10.0	40.0	F		83		2.3	
3DWS3G4A2C1A			460				5.0	20.0	F		83		9.3	
3DWS3G5A2C1A			575				4.0	14.4	H		74		14.8	
3DWS1H2A2B1A	3	1	208	1750	7.25	B	25.5	50.8	B	10/3	80	1.1	0.9	205
3DWS1H3A2B1A			230				21.5	46.4	C		79	1.0	1.0	
3DWS3H2A2B1A		3	200				15.2	53.8	G	10/4	85	NA	1.3	200
3DWS3H3A2B1A			230				12.0	49.5	H		83		1.9	
3DWS3H4A2B1A			460				6.0	24.8	H		83		7.5	
3DWS3H5A2B1A			575				4.8	17.3	G		78		11.6	
3DWS1J3A2A1A	5	1	230	1750	8.00	A	26.5	57.7	A	10/3	80	1.0	0.8	210
3DWS3J2A2A1A		3	200				18.8	73.9	F	10/4	84	NA	0.9	205
3DWS3J3A2A1A			230				16.4	63.6	E		85		1.2	
3DWS3J4A2A1A			460				8.2	31.8	E	14/4	85		4.8	
3DWS3J5A2A1A			575				6.8	22.8	E		80		7.4	

NOMENCLATURE DESCRIPTION

1st - 3rd Characters

3 = 3" 125# ANSI Flanged Discharge
D = Dual Seal with Seal Fail (moisture) Sensors
W = Wastewater (Sewage)

4th Character - Impeller Design

S = Semi-open Impeller

5th Character - Phase

1 = Single Phase
3 = Three Phase
4 = Three Phase with On-Winding, Pilot Duty,
Thermal Sensors

6th Character - Horsepower

F = 1.5 G = 2 H = 3 J = 5

7th Character - Voltage

1 = 115 2 = 200/3Ø or 208/1Ø
3 = 230 4 = 460
5 = 575

8th Character - Discharge Style

A = ANSI Vertical Flange for Horizontal Discharge

9th Character - Motor RPM / Hertz

2 = 1750/60

10th Character - Impeller Code

A = 8.0" 5 HP D = 6.5" 1.5 HP
B = 7.25" 3 HP E = 5.25" 1.5 HP
C = 7.0" 2 HP T = SPECIAL TRIM

11th Character - Lower (outer) Mechanical Seal

1 = Standard Lower Seal - Silicon carbide/silicon carbide,
BUNA elastomers and 304 SS metal parts.
2 = Optional Lower Seal - Silicon carbide/tungsten carbide,
BUNA elastomers and 304 SS metal parts.

12th Character - Cord Length

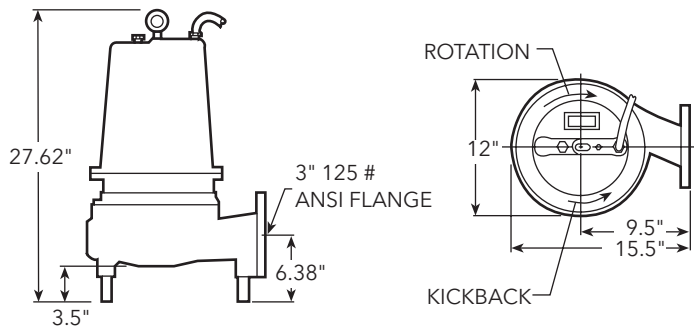
A = 20' (standard) D = 30' F = 50' J = 100'

13th Character - Options

1 = Silicon bronze impeller 3 = Both 1 & 2
2 = Epoxy coating

DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



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