

#### Wastewater

# **Goulds Pumps**

WS\_BHF Series Model 3887BHF

Submersible Sewage Pump

Prosurance available for residential applications.



# GGOULDS PUMPS

Goulds Pumps is a brand of ITT Corporation.

www.goulds.com

## **FEATURES**

- Impeller: Cast iron, enclosed, non-clog, dynamically balanced with pump out vanes for mechanical seal protection.
- Casing: Cast iron flanged volute type for maximum efficiency. Designed for easy installation on A10-20 slide rail or base elbow rail systems.
- Mechanical Seal: Silicon Carbide vs. Silicon Carbide sealing faces for superior abrasive resistance, stainless steel metal parts, BUNA-N elastomers.
- Shaft: Corrosion resistant, 300 series stainless steel. Threaded design.

  Locknut on all models to guard against component damage on accidental reverse rotation.
- Fasteners: 300 series stainless steel.
- Capable of running dry without damage to components.
- Designed for continuous operation, when fully submerged.

# **AGENCY LISTINGS**



Tested to UL 778 and CSA 22.2 108 Standards By Canadian Standards Association — File #LR38549 Goulds Pumps is ISO 9001 Registered.

Engineered for life



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#### **APPLICATIONS**

Specifically designed for the following uses:

- Homes
- Water transfer
- Sewage systems
- Light industrial
- Dewatering/Effluent
- Commercial applications

Anywhere waste or drainage must be disposed of quickly, quietly and efficiently.

#### **SPECIFICATIONS**

#### Pump

- Solids handling capabilities: 2" maximum.
- Capacities: up to 220 GPM.
- Total heads: up to 81 feet TDH.
- Discharge size: 2" NPT threaded companion flange as standard. 3" option available but must be ordered separately. (Order no. A1-3)
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.

#### MOTORS

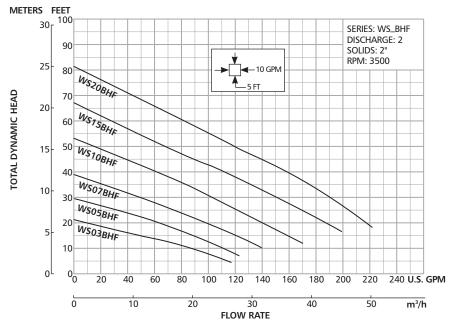
- Fully submerged in high grade turbine oil for lubrication and efficient heat transfer. All ratings are within the working limits of the motor.
- Class B insulation on 1/3-11/2 HP models.
- Class F insulation on 2 HP models.

#### Single phase (60 Hz):

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- $\frac{1}{3}$  1 HP models have NEMA three prong grounding plugs.
- 1½ HP and larger units have bare lead cord ends.

#### Three phase (60 Hz):

- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.
- **Designed for Continuos Operation**: Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
- Bearings: Upper and lower heavy duty ball bearing construction.
- Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
- Motor Cover O-ring: Assures positive sealing against contaminant and oil leakage.





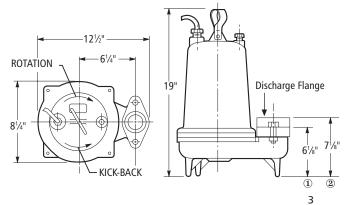
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#### **MOTOR AND MODEL INFORMATION**

ORDER					IMPELLER	MAX.	LOCKED	KVA CODE	FULL LOAD MOTOR EFF. %	RESISTANCE	
NUMBER	HP	PHASE	VOLTS	RPM	DIA. (IN.)	AMPS	ROTOR AMPS			START	LINE-LINE
WS0311BHF	0.33	1	115	_	2.94	12.4	46.0	M	54	7.5	1.0
WS0318BHF	0.33	1	208			6.8	31.0	K	68	9.7	2.4
WS0312BHF	0.33	1	230			6.2	34.5	М	53	9.6	4.0
WS0511BHF	0.5	1	115		3.19	14.5	46.0	М	54	7.5	1.0
WS0518BHF	0.5	1	208			8.4	31.0	K	68	9.7	2.4
WS0512BHF	0.5	1	230			7.6	34.5	М	53	9.6	4.0
WS0538BHF	0.5	3	200	3500		4.9	22.6	R	68	_	3.8
WS0532BHF	0.5	3	230			3.6	18.8	R	70	_	5.8
WS0534BHF	0.5	3	460			1.8	9.4	R	70	_	23.2
WS0537BHF	0.5	3	575			1.5	7.5	R	62	_	35.3
WS0718BHF	0.75	1	208			11.0	31.0	K	68	9.7	2.4
WS0712BHF	0.75	1	230			10.0	27.5	J	65	12.2	2.7
WS0738BHF	0.75	3	200		3.44	6.2	20.6	L	64	_	5.7
WS0732BHF	0.75	3	230			5.4	15.7	K	68	_	8.6
WS0734BHF	0.75	3	460			2.7	7.9	K	68	_	34.2
WS0737BHF	0.75	3	575			2.2	9.9	L	78	_	26.5
WS1018BHF	1	1	208	3300		14.5	59.0	K	68	9.3	1.1
WS1012BHF	1	1	230			13.0	36.2	J	69	10.3	2.1
WS1038BHF	1	3	200		3.75	8.6	27.6	М	77	_	2.7
WS1032BHF	1	3	230		3.75	7.5	24.1	L	79	_	4.1
WS1034BHF	1	3	460	_		3.8	12.1	L	79	_	16.2
WS1037BHF	1	3	575			3.1	9.9	L	78	_	26.5
WS1512BHF	1.5	1	230		4.00	18.0	52.0	J	67	2.76	0.53
WS1538BHF	1.5	3	200			10.0	42.4	K	78	_	1.7
WS1532BHF	1.5	3	230			9.6	42.4	K	78	_	1.7
WS1534BHF	1.5	3	460			4.8	21.2	K	78	_	6.6
WS1537BHF	1.5	3	575			3.9	16.3	L	78	_	10.5
WS2012BHF	2	1	230		4.44	18.0	49.6	F	78	3.2	1.1
WS2038BHF	2	3	200			12.0	42.4	K	78	_	1.7
WS2032BHF	2	3	230			11.6	42.4	K	78	_	1.7
WS2034BHF	2	3	460			5.8	21.2	K	78	_	6.6
WS2037BHF	2	3	575			4.7	16.3	L	78	_	10.5

#### **DIMENSIONS**

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



#### **Discharge Flange:**

- ② 3" NPT optional (order an A1-3)



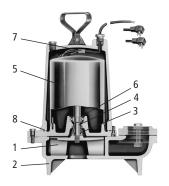
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#### PERFORMANCE RATINGS (gallons per minute)

Order No.		WS03BHF	WS05BHF	WS07BHF	WS10BHF	WS15BHF	WS20BHF	
HP▶		1/3	1/2	3/4	1	11/2	2	
RPM ►		3500	3500	3500	3500	3500	3500	
	10 ▶	86	110	140	-	-	Ī	
	15	48	88	120	158	_	_	
	20	-	62	98	139	186	217	
	25	_	32	74	120	170	204	
	30	_	-	49	101	150	190	
te d	35	_	-	21	82	130	175	
Total Head Feet of Water	40	_	-	-	60	110	159	
otal et of	45	_	-	-	38	88	140	
Tee	50	_	-	-	-	67	120	
	55	_	-	-	-	47	100	
	60	_	_	_	_	29	80	
	65	_	_	_	_	_	62	
	70	_	_	_	_	_	43	
	75	_	_	_	_	_	23	

#### **COMPONENTS** (for reference only)

Item No.	Description		
1	Impeller		
2	Casing		
3	Mechanical Seal		
4	Motor Shaft		
5	Motor		
6	Ball Bearings		
7	Power Cable		
8	Casing O-Ring		



\* For repair parts, reference repair parts book.



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SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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