MSB3S

# MYERS® MODELS MS3S/MSB3S SUBMERSIBLE SEWAGE PUMP





MS3S

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## **MYERS**<sup>®</sup> MODELS MS3S/MSB3S 3" SUBMERSIBLE SEWAGE PUMP

Myers MS3S/MSB3S model pumps are suited for wet-well installation in a wide variety of municipal, industrial and building trades applications. Their solids handling ability makes them a wise choice for:

- Municipal sewage lift stations
- Industrial sewage transfer
- Dewatering of storm water

Myers MS3S/MSB3S sewage pumps are designed to transfer raw sewage with solids as large as 2-1/2 inches through pipes up to 3 inches in diameter.

Sewage pumps are necessary to move sewage from a building to the sewer system, and in many cases, from the sewer system to a treatment plant. In the case of larger commercial installations, collection systems are designed to accumulate and transfer the wastewater efficiently. Examples of this are motels, apartment buildings or industrial plants that tie in with sewer mains or on-site treatment facilities.

For commercial or high volume applications, the usual procedure is to incorporate at least two pumps as a duplex system in conjunction with control panel, a guide system and quick disconnect discharge system.

The MS3S/MSB3S pumps can be used with the Myers pultruded I-beam rail system to accomplish this. This corrosion-resistant system permits the pump(s) to be lowered into position without entering or reaching into the wet well. An exclusive self-sealing flange eliminates the need to bolt pump to the piping. When the pump is activated, a neoprene diaphragm forms an effective seal between the discharge flange and the base elbow flange. A Myers control panel will ensure proper start components and equal pump alternation.

This corrosion-resistant NEMA 4X panel also includes float indicator L.E.D.'s, allowing float monitoring without removal of wet well cover.

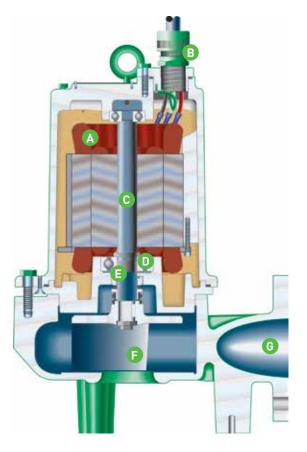
Product Capabilities								
Capacities To	385 GPM	87 M <sup>3</sup> /HR						
Heads To	46 ft.	14 m						
Solids Handling	2-1/2 in.	63.5 mm						
Liquids Handling	Sewage Transfer,							
	Drain Water, Effluent							
Intermittent Liquid Temp.	up to 140°F	up to 60°C						
Winding Insulation Temp. (Class F)	311°F	591°C						
Available Motors	1750 RPM 2 & 3 hp 208, 230, 460 & 575 volts 1 & 3 phase, 60 Hz							
Std. Third Party Approvals	CS	CSA						
Acceptable pH Range	6 - 9							
Specific Gravity	.9 – 1.1							
Viscosity	28 – 35 SSU							
Discharge, Horizontal	3 in.	76 mm						



Construction Materials						
Motor Housing, Seal Housing, Cord Cap and Volute Case	Cast Iron ASTM A-48 Class 30					
Impeller	Ductile Iron, ASTM A536					
Power and Control Cord	SOOW, W					
Mechanical Seals	Standard – Carbon/Ceramic/Nitrile, Type 21					
Pump, Motor Shaft	400 SST					
Fasteners	300 Series SST					

Note: Consult factory for applications outside these recommendations.

# Pump Features



#### A. Motor

The fully enclosed oil-filled motor efficiently dissipates heat and locks out moisture so you receive reliable pumping service.

#### B. CPE Jacketed Power Cord

Sealed by both the cord grip and the epoxy barrier.

#### c. Stainless Steel Shaft

Eliminates corrosion and fatigue to give longer pump life. The minimum shaft overhang decreases deflection and increases bearing and seal life.

#### **D.** Ball Bearings

The heavy duty ball bearings, upper (radial) and lower (thrust), are submerged in oil to provide permanent lubrication and ensure long service life.

- Oil-filled motor for cooler operation, longer life and less maintenance. The dielectric oil effectively dissipates heat and lubricates upper and lower ball bearings.
- Manufactured with carbon and ceramic faced mechanical shaft seal.
- Standard construction is cast iron.
- 400 Series stainless steel shafts.

#### E. Mechanical Seal

Constructed with a ceramic stationary face and a carbon rotating face for long service life.

#### F. Impeller

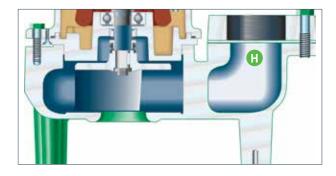
Two-vane, semi-open design for efficient operation without clogging. The impeller has pump-out vanes to prevent material buildup around shaft and seal.

#### **G.** Horizontal Discharge

Model MS3S handles 2-1/2 inch spherical solids and has a flanged 3 inch horizontal discharge.

#### H. Vertical Discharge

Model MSB3S handles 2-1/2 inch spherical solids and has a flanged 3 inch vertical discharge.



- Field serviceable; pumps have 300 Series stainless steel fasteners for easy teardown.
- Single phase motors are capacitor start, capacitor run with capacitors located in control panel. Contact distributor for proper Myers<sup>®</sup> control panel sizing.
- Semiopen, two-vane sewage type impellers have pump-out vanes on back shrouds to prevent stringy materials from building up around shaft and seal.

### Models MS3S and MSB3S Performance Data and Dimensions

25

HEAD (METERS) 10 15 HEAD (FEET) 30 45

2 2

U.S. GPM M<sup>3</sup>/HR

1750 RPM

20 75

90

2030

75 10 20

7 n

40 45 50 55

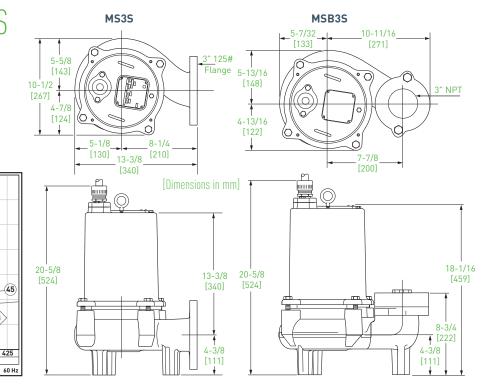
(55)

2

325 375 70 80 90

(50)

3



Available Models	Motor Electrical Data										
					Full Load		Locked Rotor			NEC Code	
Standard	HP	Volts	Phase	Hertz	Amps	Full Load kW	Amps	Start KVA	Full Load KVA	Letter	Service Factor
MS(B)3S200M2-4	2	230	1	60	12.8	2.6	66	15.2	2.9	J	1.2
MS(B)3S200M6-4	2	208	3	60	7.8	2.2	49	17.6	2.4	К	1.2
MS(B)3S200M3-4	2	230	3	60	6.8	2.2	44	17.5	2.3	К	1.2
MS(B)3S200M4-4	2	460	3	60	3.4	2.2	22	17.5	2.3	К	1.2
MS(B)3S200M5-4	2	575	3	60	2.7	2.2	18	17.9	2.3	К	1.2
MS(B)3S300M2-4	3	230	1	60	17.1	3.5	100	23	3.9	J	1.2
MS(B)3S300M6-4	3	208	3	60	10.9	3.5	49	17.6	3.8	G	1.2
MS(B)3S300M3-4	3	230	3	60	9.5	3.7	44	17.5	3.8	G	1.2
MS(B)3S300M4-4	3	460	3	60	4.8	3.7	22	17.5	3.8	G	1.2
MS(B)3S300M5-4	3	575	3	60	3.8	3.6	18	17.9	3.8	G	1.2

Motor Efficiencies and Power Factor									
Motor Efficiency %					Power Factor %				
HP	Phase	Service Factor Load	100% Load	75% Load	50% Load	Service Factor Load	100% Load	75% Load	50% Load
2	1	73	76	75	71	88	89	85	77
2	3	72	69	65	56	83	76	69	59
3	1	73	73	69	62	88	85	79	70
3	3	72	72	70	64	88	88	85	79



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