



MSB4SD



MS3SD

**MYERS<sup>®</sup>**  
MODELS MS3SD/MSB3SD  
& MS4SD/MSB4SD  
**SUBMERSIBLE SEWAGE PUMP**



# MYERS® MODELS MS3SD/MSB3SD MS4SD/MSB4SD

## SUBMERSIBLE SEWAGE PUMP

Myers MS3SD/MSB3SD & MS4SD/MSB4SD 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**

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 MS3SD/MSB3SD & MS4SD/MSB4SD 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.

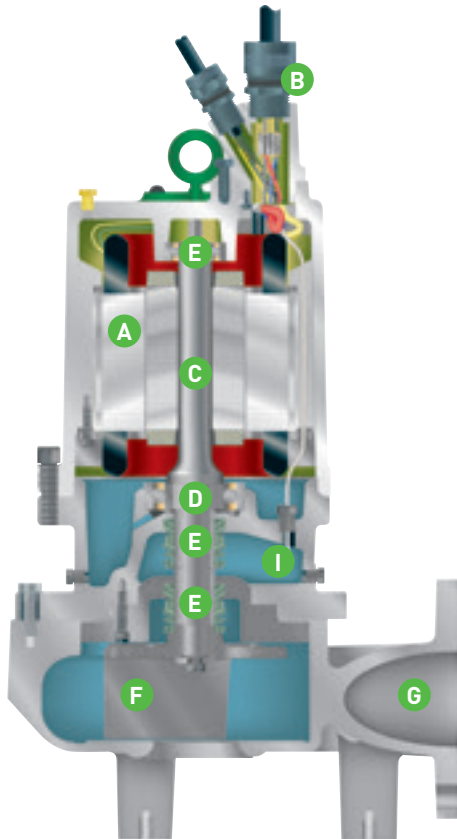
This corrosion-resistant NEMA 4X panel also includes float indicator L.E.D.'s, allowing float monitoring without removal of wet well cover.



Product Capabilities		
Capacities To	385 GPM (MS3SD/MSB3SD) 620 GPM (MS4SD/MSB4SD)	1457 L/Min (MS3SD/MSB3SD) 2347 L/Min (MS4SD/MSB4SD)
Heads To	46 ft. 14 m	
Solids Handling	2-1/2 in. (MS3SD/MSB3SD) 3 in. (MS4SD/MSB4SD)	63.5 mm (MS3SD/MSB3SD) 76 mm (MS4SD/MSB4SD)
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	1150/1750 RPM 1, 2 & 3 hp (MS3SD/MSB3SD) 2, 3, 5 & 7-1/2 hp (MS4SD/MSB4SD) 208, 230, 440 & 575 volts 1 & 3 phase, 60 Hz	
Std. Third Party Approvals	CSA	
Acceptable pH Range	6 - 9	
Specific Gravity	.9 - 1.1	
Viscosity	28 - 35 SSU	
Discharge, Horizontal	3 in. (MS3SD/MSB3SD) 4 in. (MS4SD/MSB4SD)	76 mm (MS3SD/MSB3SD) 101.6 mm (MS4SD/MSB4SD)

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

# 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.

## 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

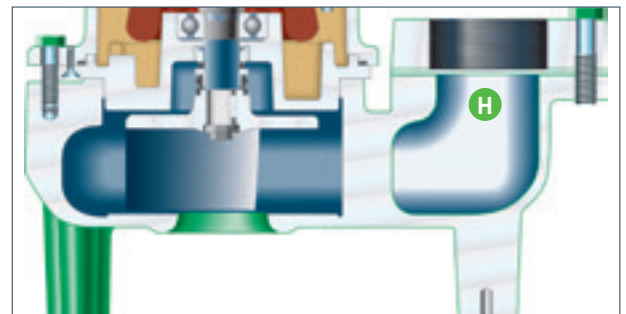
Model MS3SD handles 2-1/2 inch spherical solids and has a flanged 3 inch horizontal discharge. Model MS4SD handles 3 inch spherical solids and has a flanged 4 inch horizontal discharge.

## H. Vertical Discharge

Model MSB3SD handles 2-1/2 inch spherical solids and has a flanged 3 inch vertical discharge. Model MSB4SD handles 3 inch spherical solids and has a flanged 4 inch vertical discharge.

## I. Sensor Probe

A seal-failure sensor probe (for connection to a seal failure alarm) is standard on three-phase units and available as an option on single phase models.

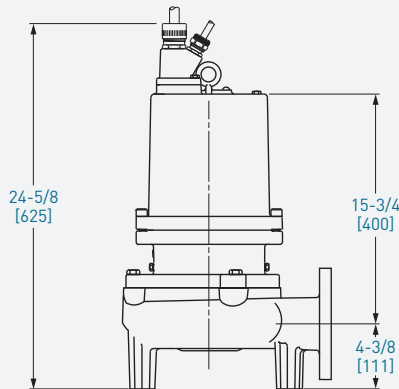
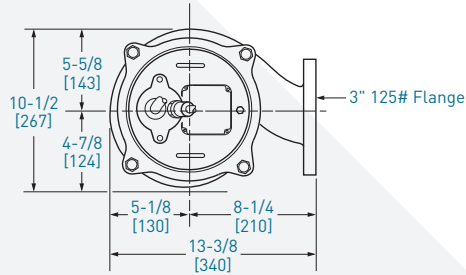


- Oil-filled motor for cooler operation, longer life and less maintenance. The dielectric oil effectively dissipates heat and lubricates upper and lower ball bearings.
- Manufactured with carbon and ceramic faced mechanical shaft seal.
- Standard construction is cast iron.
- 400 Series stainless steel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

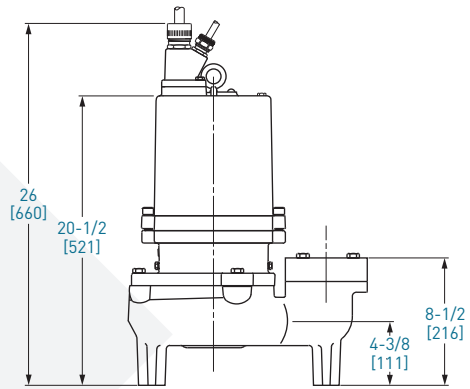
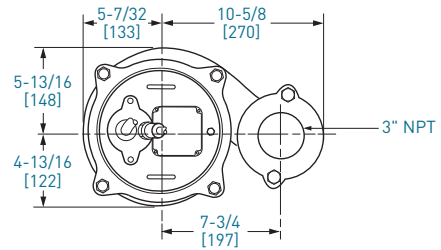
# Pump Dimensions

(Dimensions in mm)

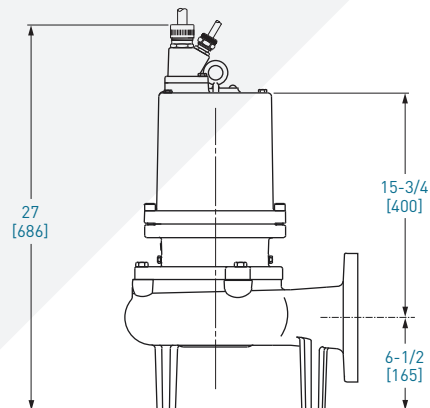
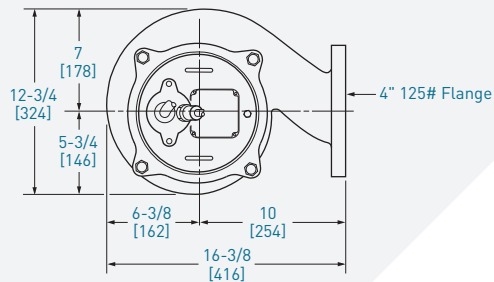
**MS3SD**



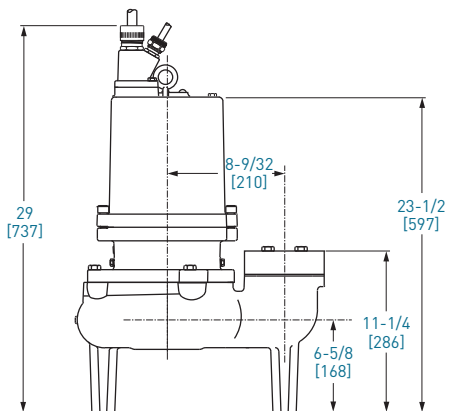
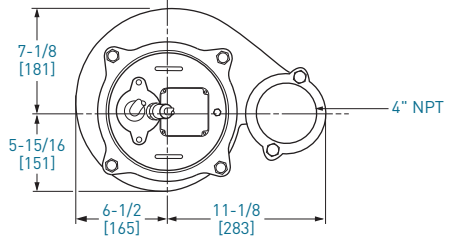
**MSB3SD**



**MS4SD**



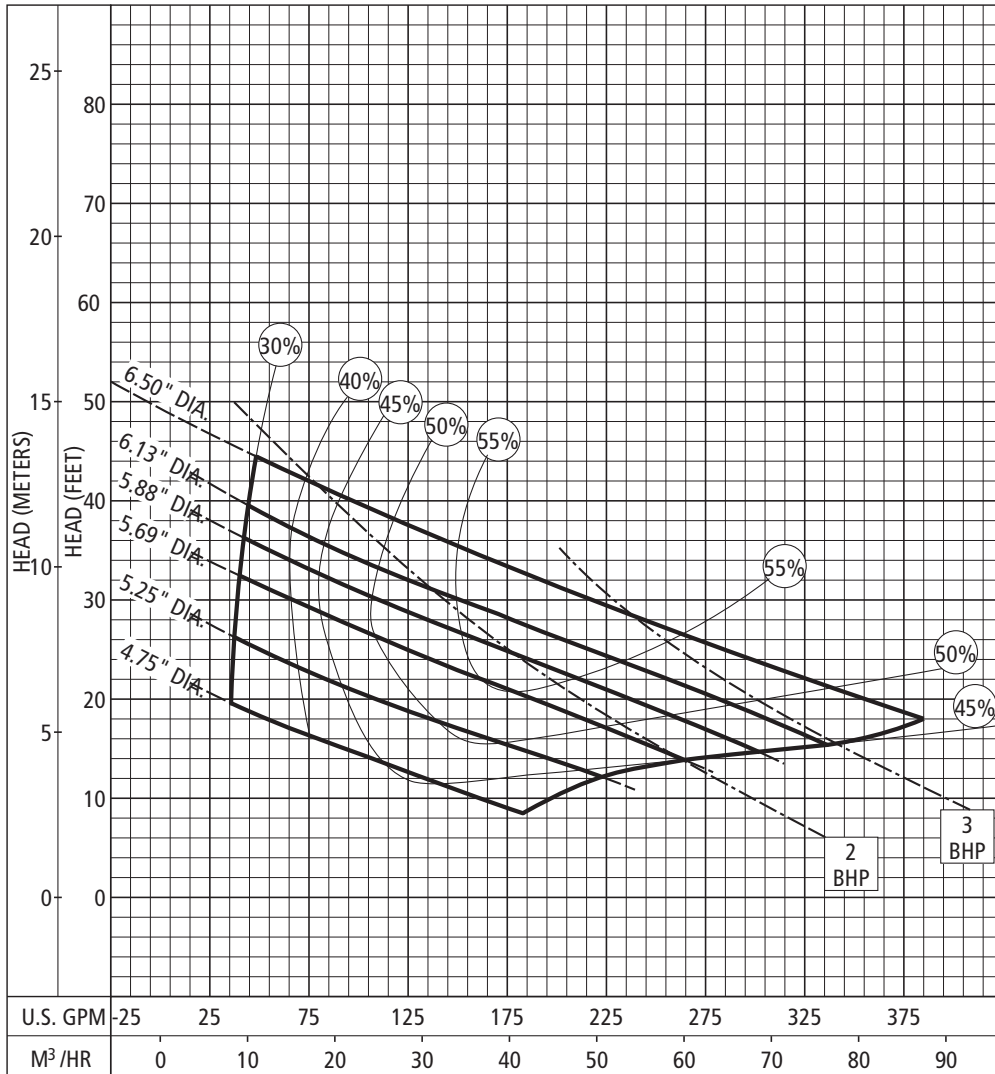
**MSB4SD**



# Performance Data

## MS3SD/MSB3SD

1750 RPM



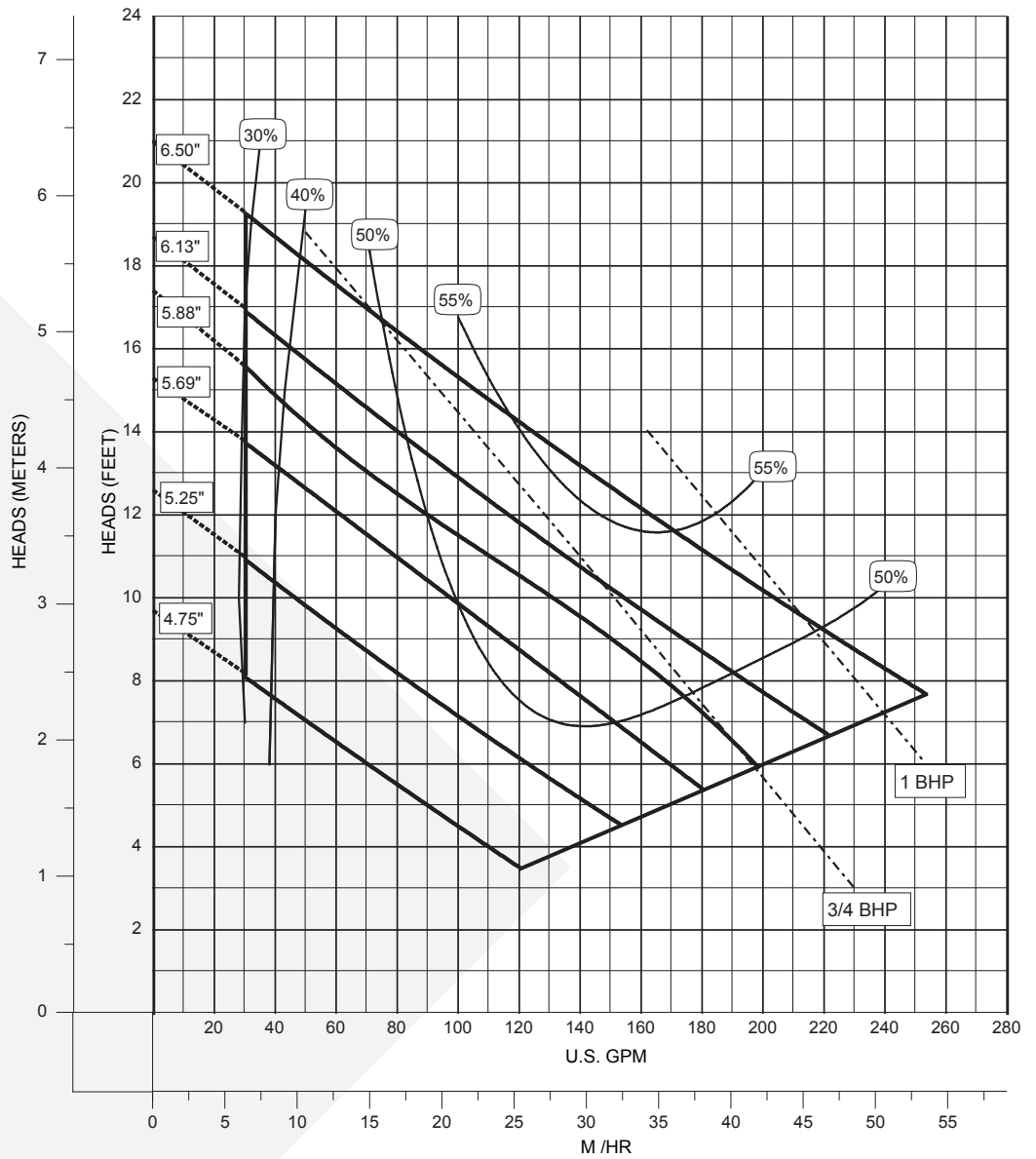
Available Models		Motor Electrical Data									
Standard	HP	Volts	Phase	Hertz	Full Load Amps	Full Load kW	Locked Rotor Amps	Start KVA	Full Load KVA	NEC Code Letter	Service Factor
MS(B)3SD200M2-4	2	230	1	60	12.8	2.6	66	15.2	2.9	J	1.2
MS(B)3SD200M6-4	2	208	3	60	7.8	2.2	49	17.6	2.4	K	1.2
MS(B)3SD200M3-4	2	230	3	60	6.8	2.2	44	17.5	2.3	K	1.2
MS(B)3SD200M4-4	2	460	3	60	3.4	2.2	22	17.5	2.3	K	1.2
MS(B)3SD200M5-4	2	575	3	60	2.7	2.2	18	17.9	2.3	K	1.2
MS(B)3SD300M2-4	3	230	1	60	17.1	3.5	100	23	3.9	J	1.2
MS(B)3SD300M6-4	3	208	3	60	10.9	3.5	49	17.6	3.8	G	1.2
MS(B)3SD300M3-4	3	230	3	60	9.5	3.7	44	17.5	3.8	G	1.2
MS(B)3SD300M4-4	3	460	3	60	4.8	3.7	22	17.5	3.8	G	1.2
MS(B)3SD300M5-4	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

# Performance Data

## MS3SD/MSB3SD

1150 RPM



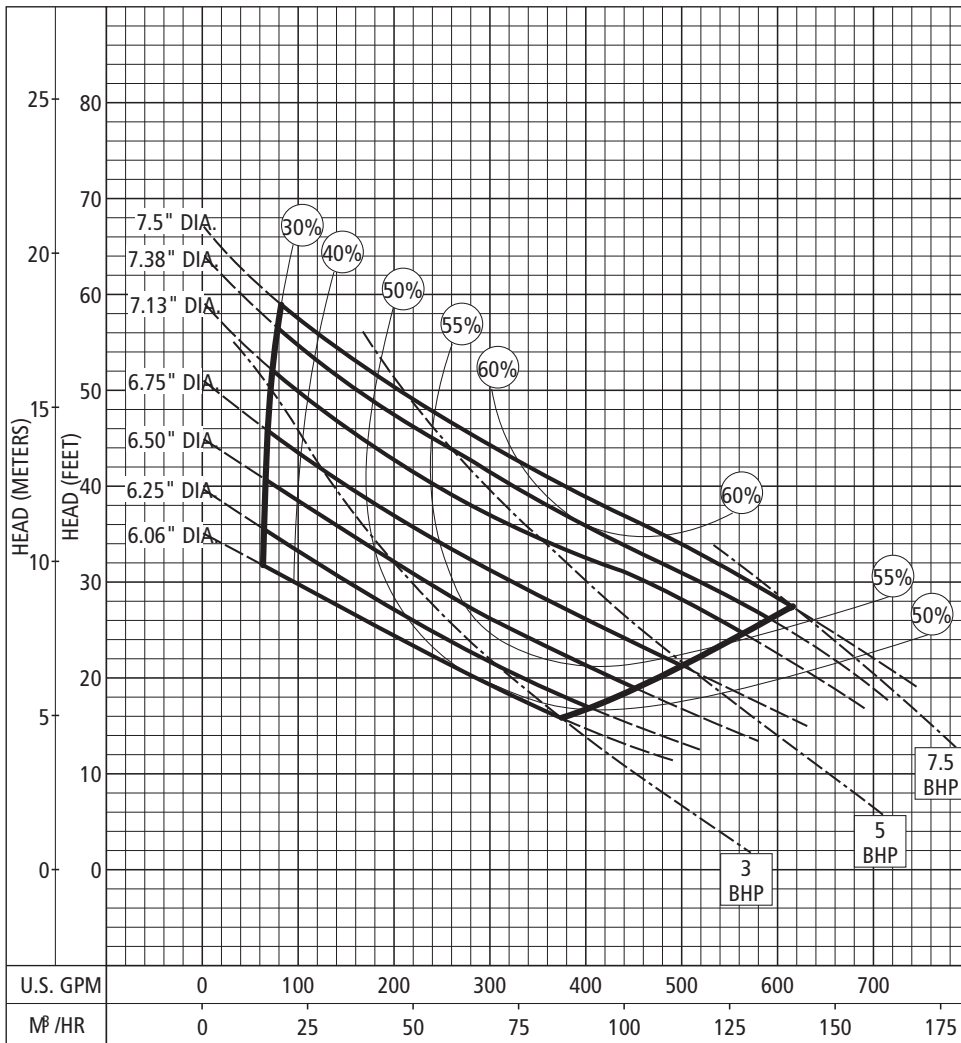
Available Models				Motor Electrical Data							
Standard	HP	Volts	Phase	Hertz	Full Load Amps	Full Load KW	Locked Rotor Amps	Start KVA	Full Load KVA	NEC Code Letter	Service Factor
MS(B)3SD100M7-6	1	208	1	60	9.4	1	54	11.2	1.9	N	1.2
MS(B)3SD100M2-6	1	230	1	60	8.2	1.3	42	9.7	1.9	L	1.2
MS(B)3SD100M6-6	1	208	3	60	4.3	1.1	27	9.7	1.5	L	1.2
MS(B)3SD100M3-6	1	230	3	60	3.8	1.1	23	9.2	1.5	L	1.2
MS(B)3SD100M4-6	1	460	3	60	1.9	1.1	11	8.8	1.5	K	1.2
MS(B)3SD100M5-6	1	575	3	60	1.5	1.1	7	7	1.5	H	1.2

Motor Efficiency %						Power Factor %			
HP	Phase	Service Factor Load	100% Load	75% Load	50% Load	Service Factor Load	100% Load	75% Load	50% Load
1	1	59	57	52	43	75	70	65	54
1	3	71	70	68	61	74	71	64	54

# Performance Data

## MS4SD/MSB4SD

1750 RPM



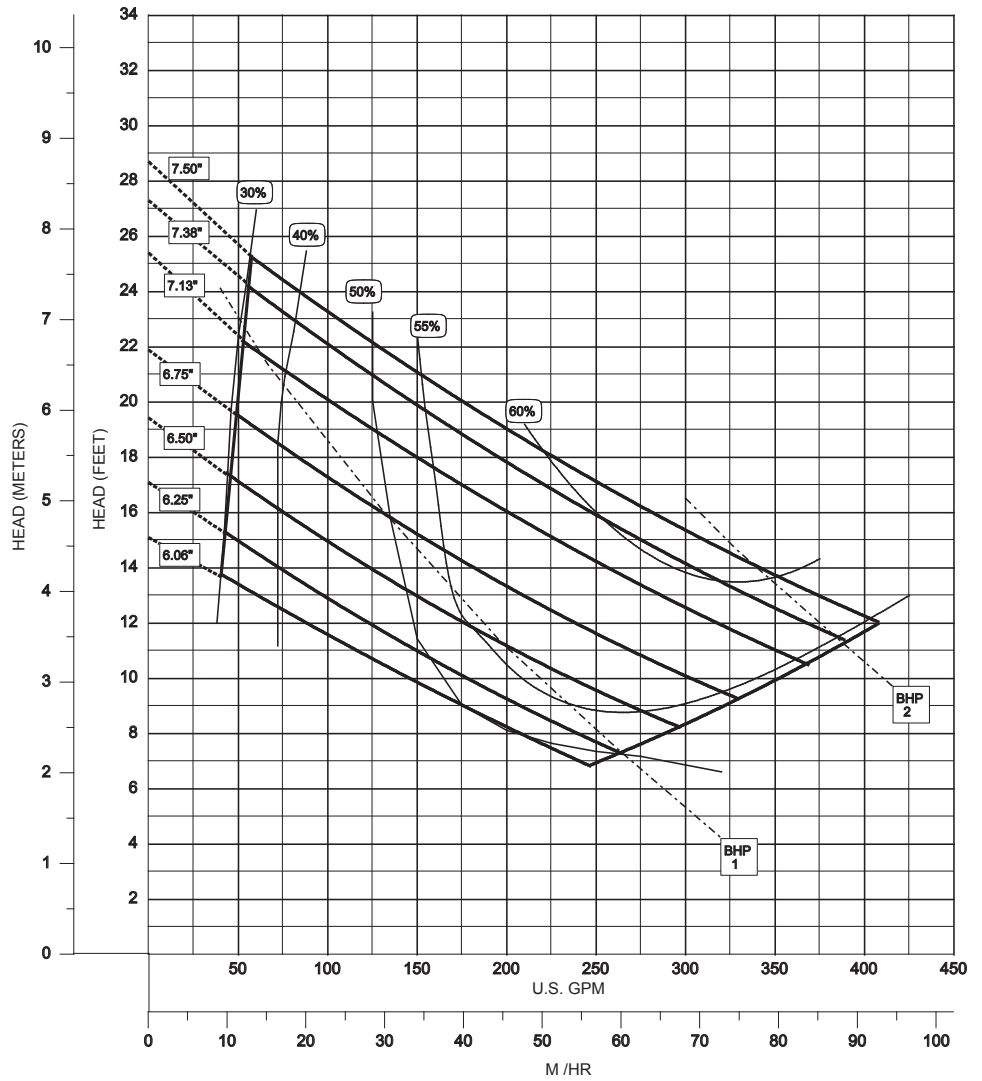
Available Models		Motor Electrical Data										
Standard	HP	Volts	Phase	Hertz	Full Load Amps	Full Load kW	Locked Rotor Amps	Start KVA	Full Load KVA	NEC Code Letter	Service Factor	
MS(B)4SD300M2-4	3	230	1	60	17.1	3.5	100	23.0	3.9	J	1.2	
MS(B)4SD300M6-4	3	208	3	60	10.9	3.5	49	17.6	3.8	G	1.2	
MS(B)4SD300M3-4	3	230	3	60	9.5	3.7	44	17.5	3.8	G	1.2	
MS(B)4SD300M4-4	3	460	3	60	4.8	3.7	22	17.5	3.8	G	1.2	
MS(B)4SD300M5-4	3	575	3	60	3.8	3.6	18	17.9	3.8	G	1.2	
MS(B)4SD500M2-4	5	230	1	60	29.5	5.4	108	24.8	6.8	E	1.2	
MS(B)4SD500M6-4	5	208	3	60	17.6	5.5	106	38.1	6.3	J	1.2	
MS(B)4SD500M3-4	5	230	3	60	15.3	5.4	96	38.2	6.1	J	1.2	
MS(B)4SD500M4-4	5	460	3	60	7.6	5.4	48	38.2	6.0	J	1.2	
MS(B)4SD500M5-4	5	575	3	60	6.1	5.4	39	38.8	6.1	J	1.2	
MS(B)4SD750M6-4	7-1/2	208	3	60	29.0	10.1	135	48.6	10.4	H	1.2	
MS(B)4SD750M3-4	7-1/2	230	3	60	25.2	8.3	122	48.5	10.0	H	1.2	
MS(B)4SD750M4-4	7-1/2	460	3	60	12.6	8.3	61	48.5	10.0	H	1.2	
MS(B)4SD750M5-4	7-1/2	575	3	60	10.1	6.9	49	48.7	10.0	H	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
3	1	73	73	69	62	88	85	79	70
3	3	72	72	70	64	88	88	85	79
5	1	69	69	67	59	88	86	82	72
5	3	76	75	73	68	81	76	68	58
7.5	3	76	76	74	69	80	75	67	54

# Performance Data

## MS3SD/MSB3SD

1150 RPM



Available Models				Motor Electrical Data								
Standard	HP	Volts	Phase	Hertz	Full Load Amps	Full Load KW	Locked Rotor Amps	Start KVA	Full Load KVA	NEC Code Letter	Service Factor	
MS(B)4SD200M7-6	2	208	1	60	18.6	2.6	82	17.1	3.9	K	1.2	
MS(B)4SD200M2-6	2	230	1	60	17	2.6	71	16.3	3.9	K	1.2	
MS(B)4SD200M6-6	2	208	3	60	8.4	2.4	43	15.5	2.9	J	1.2	
MS(B)4SD200M3-6	2	230	3	60	7.3	2.2	42	16.7	2.9	K	1.2	
MS(B)4SD200M4-6	2	460	3	60	3.6	2.2	21	16.7	2.9	K	1.2	
MS(B)4SD200M5-6	2	575	3	60	2.9	2.2	17	16.9	2.9	K	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	60	59	55	47	73	68	60	50
2	3	74	74	73	67	73	70	62	52



1101 MYERS PARKWAY  
ASHLAND, OHIO 44805  
PH: 855-274-8947  
WWW.FEMYERS.COM

490 PINEBUSH ROAD, UNIT 4  
CAMBRIDGE, ONTARIO, CANADA N1T 0A5  
PH: 800-363-7867  
WWW.FEMYERS.COM

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.  
M12423ENG 02/09/18 © 2018 Pentair plc. All Rights Reserved.