

MW50 SERIES

1/2 Horsepower
2" Solids Handling Sewage Pumps



THE MYERS MW50 SERIES SEWAGE PUMPS PROVIDE **BIG PERFORMANCE IN A SMALL PACKAGE.** The enclosed two-vane impeller provides the flow and head required for residential and light commercial sewage applications, and passes a full 2" diameter solid. The MW50 is constructed of only the highest quality corrosion resistant materials - cast iron, stainless steel and engineered thermoplastics - for many years of service in harsh sewage environment. The MW50 is available in manual models for use with external controls or automatic models with piggyback mechanical float. For more information, call your Myers distributor or the Myers Ohio sales office at 419-289-6898.

ADVANTAGES BY DESIGN

TWO VANE IMPELLER DESIGN PROVIDES MAXIMUM EFFICIENCY

- Enclosed design for high efficiency pump.
- Eliminates possibility of jamming between impeller and volute.
- Passes a full 2 inch solid.
- Original performance can be restored if wear occurs by replacing volute seal ring.

DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- Permanent split capacitor motor eliminates starting switches and relays which are prone to fail.

THE MW50 IS DESIGNED FOR MANY YEARS OF MAINTENANCE FREE OPERATION

- Positive sealing, quick connect power cord and piggyback float switch make replacement simple if service is ever necessary.
- Field tested, wide angle, mercury-free mechanical float switch provides maximum draw down. (Automatic models only.)
- Long flexible Type 6 seal provides high pressure sealing with improved seal face protection by location.
- Lower ball bearing eliminates sleeve bearing wear and significantly reduces motor wear.
- Low amp draw from the efficient PSC motor means less heat build-up.

PRODUCT CAPABILITIES

Capacities To	135 gpm	510 lpm
Heads To	27 ft.	8.23 m
Solids Handling	2 in.	50.6 mm
Liquids Handling	domestic sewage and drain water	
Intermittent Liquid Temp.	140°F	60°C
Motor Electrical Data	1/2 hp, 1625 rpm, PSC 115 volt, 9.0 amp, 1Ø, 60 Hz 230 volt, 4.5 amp, 1Ø, 60 Hz	
Third Party Approval	CSA, UL	
Acceptable pH Range	6 - 9	
Specific Gravity	.9 - 1.1	
Viscosity	28-35 SSU	
Discharge, NPT	2 in.	50.8 mm
Minimum Sump Dia.		
Simplex	24 in.	61 cm
Duplex	36 in.	91.4 cm

Construction Materials

Motor Housing	cast iron, class 30, ASTM A48
Motor Bearings	ball bearing-lower, top-sleeve
Enclosed 2-Vane Impeller	engineered thermoplastic
Impeller Wear Ring	304 SST
Volute	thermoplastic
Volute Seal Ring	HUVA cup
Power, Control Cords	20 ft. 16/3 SJTW/SJTW-A
Mechanical Seal	Type 6 - carbon/ceramic
Fasteners	300 series SST

WHERE INNOVATION MEETS TRADITION

Myers[®]
Pentair Water

MECHANICAL FLOAT SWITCH

Mercury-free, 90° angle operation. (Piggyback models only.)

PLUG
Provides watertight seal.

POWER CORD
Quick-connect watertight fitting is replaceable from pump exterior

MOTOR HOUSING
Cast iron for efficient heat transfer and corrosion resistance.

OVERLOAD SWITCH
Built-in to protect against overload conditions.

THRUST WASHER, SLEEVE BEARINGS
Enhance smooth operation and extend pump life.

MOTOR
½ HP, 1625 RPM, 60 Hz, 115 or 230V, PSC single phase. Oil-cooled and lubricated.

ROTARY SHAFT SEAL
Carbon, ceramic faces.

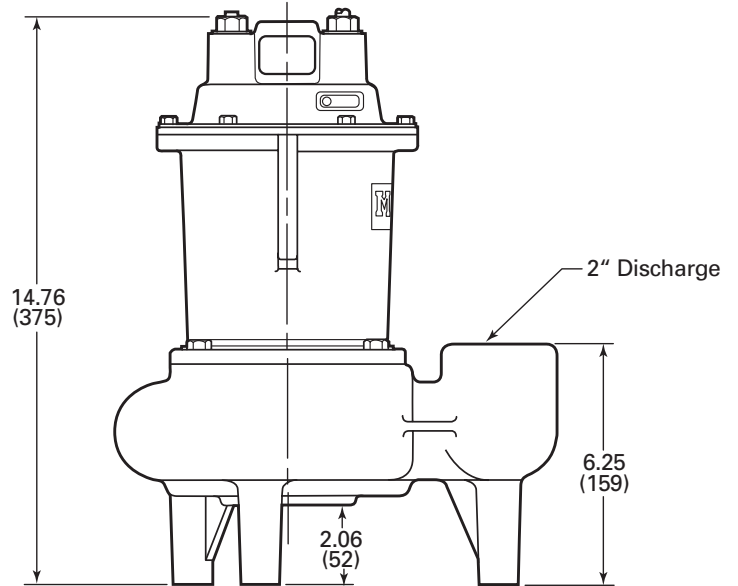
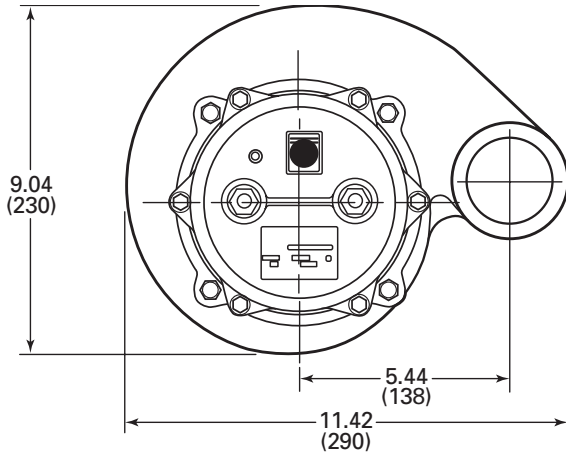
HIGH EFFICIENCY VOLUTE
Passes 2" spherical solids. 2" NPT discharge.

ENCLOSED TWO VANE IMPELLER
High efficiency, passes 2" spherical solids, with stainless steel wear ring. Engineered thermoplastic.

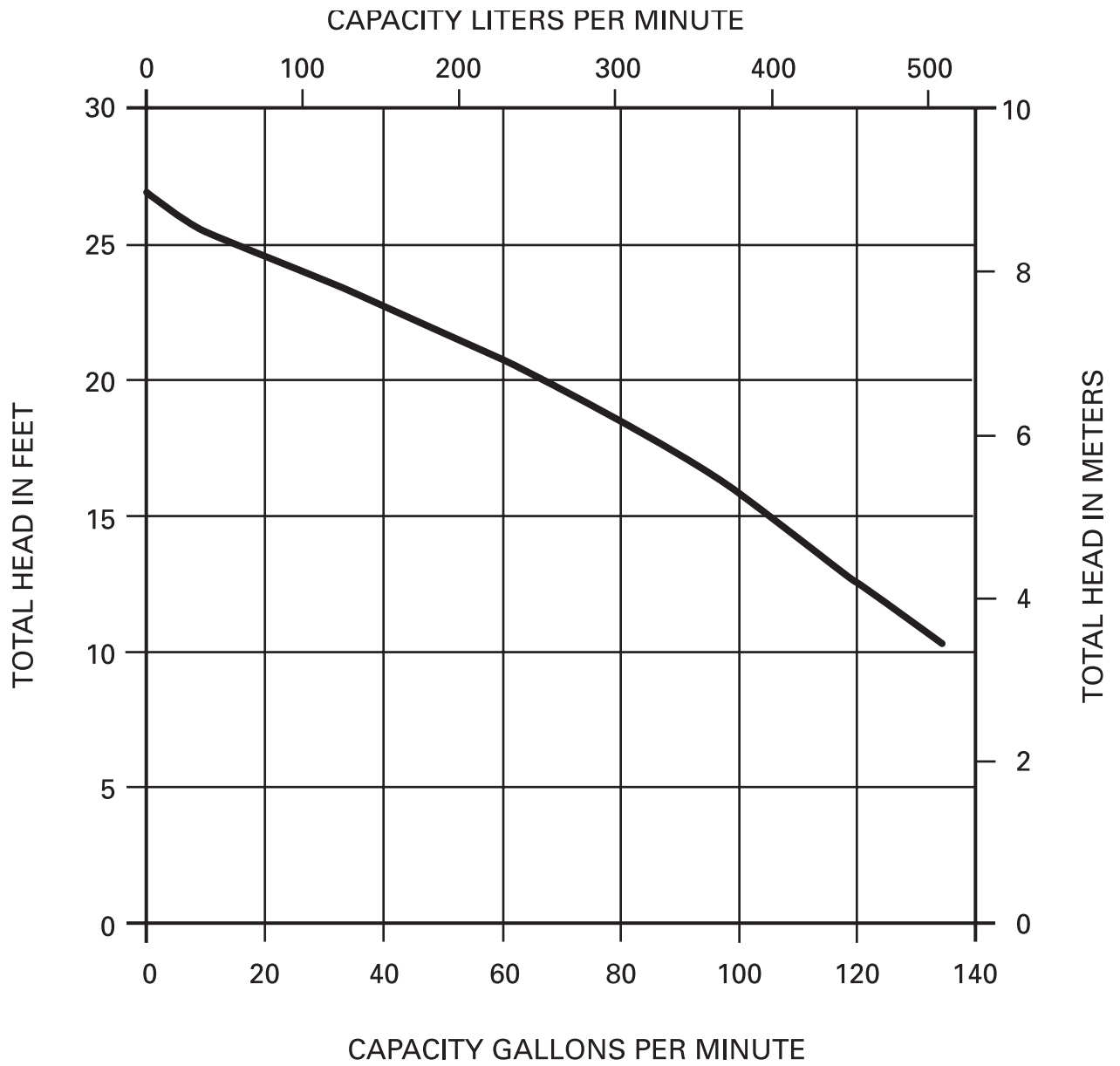
VOLUTE/IMPELLER SEAL RING
Maintains high efficiency and reduces recirculation. Replaceable.

DIMENSIONS

[] Dimensions in mm



PUMP PERFORMANCE



MW50 SERIES

SPECIFICATIONS

SEWAGE PUMPS - Pump(s) shall be F. E. Myers MW50 series sewage pumps selected in accordance with the following design criteria:

Number of Pumps:	_____
Primary Design Flow:	_____
Primary Design Head:	_____
Minimum Shut-off Head:	27'
Motor Horsepower:	1/2
Motor Speed:	1625 RPM
Electrical:	115 Volts, 1 PH, 60 Hz or 230 Volts, 1 PH, 60 Hz

PUMP - The pump shall be designed to handle raw sewage and be capable of passing 2 inch spherical solids. The pump shall be capable of handling liquids with temperatures to 140°F intermittent.

MOTOR - The pump motor shall be of the submersible type rated 1/2 hp at 1625 RPM and shall be for _____ 115 volts or _____ 230 volts single phase, 60 cycles. Single phase motor shall be of the permanent split capacitor type with no relays or starting switches. Stator winding shall be of the open type with Class A insulation rated for 105°C maximum operating temperature. The winding housing shall be filled with clean dielectric oil to lubricate bearings and seals, and transfer heat from the windings to the outer shell. The motor winding assembly shall be pressed into the stator housing for best alignment and heat transfer.

The motor shall be capable of operating over the full range of the performance curve without overloading the motor and causing any objectionable noise or vibration. The motor shall have two bearings to support the rotor; an upper sleeve bearing to accommodate radial loads and a lower sleeve bearing with thrust pad to take thrust and radial loads.

A heat sensor thermostat and overload shall be attached to the top end of the motor windings and shall be wired in series with the windings to stop the motor if the motor winding temperature reaches 221°F. The overload thermostat shall reset automatically when the motor cools to a safe operating temperature.

POWER AND SWITCH CORD - The motor power cord shall be 20 feet SJTW type. The power cord shall be of the positive sealing, quick-disconnect type. The power cable connection shall be sealed at the motor entrance by means of a compression nut which serves to make a positive electrical connection and prevent water from entering the cable jacket and motor housing.

OPTIONAL CONTROL SWITCH - The sewage pump shall be controlled by an optional piggy-back float switch. The float switch shall be of the mechanical, non-mercury type and be capable of directly controlling the pump motor without the need for an external control panel.

SHAFT SEAL - The motor shall be protected by a rotating mechanical shaft seal. The seals shall have carbon and ceramic seal faces lapped to a tolerance of one light band. Metal parts and springs for seals shall be 300 series stainless steel.

PUMP IMPELLER - The pump impeller shall be of the two vane enclosed type. The impeller shall be constructed of engineered thermoplastic or optional bronze. A stainless steel wear ring shall be pressed onto the neck of the impeller to provide a sealing surface. A replaceable Buna-N sealing cup shall effect a seal between the volute and impeller in order to maintain high efficiency and prevent recirculation.

MOTOR CASTINGS - The motor housing castings shall be of high tensile strength Class 30 gray cast iron. Castings shall be treated with phosphate and chromate rinse and painted with a high quality air dry alkyd enamel for corrosion protection.

PUMP CASE - The pump case shall be a high efficiency volute design capable of passing 2 inch spherical solids. The pump volute shall be constructed of high tensile strength Class 30 gray cast iron.

FASTENERS - All exposed fasteners shall be of 300 series stainless steel.

THIRD PARTY APPROVALS - The pump shall be UL and CSA listed.