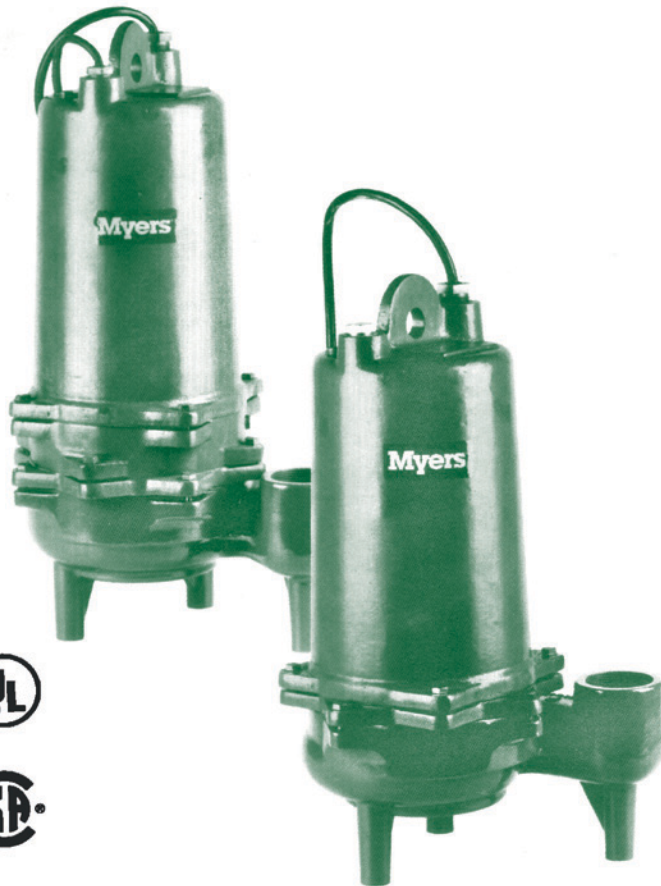


MW Series

2" Solids Handling Sewage Pumps
Single and Double Seal



THE HEAVY-DUTY MYERS MW SERIES SEWAGE PUMPS ARE DESIGNED FOR USE IN LIGHT COMMERCIAL AND RESIDENTIAL RAW SEWAGE APPLICATIONS. MW pumps will pass a full 2" sphere. The enclosed two-vane impeller provides high efficiency pumping and will handle stringy, trashy solids normally found in raw sewage applications. Ideal for a variety of sewage applications ranging from private household to light commercial installations. Available in double seal configuration for extended motor life. Call your Myers distributor, or the Myers Ohio sales office at 419-289-6898 for more details.

ADVANTAGES BY DESIGN IDEAL FOR USE IN RESIDENTIAL AND LIGHT COMMERCIAL SEWAGE APPLICATIONS

- High efficiency, two-vane, enclosed impeller provides ideal pump performance.
- Impeller passes full 2 inch solids.
- Enclosed impeller design eliminates possibility of jamming or corrosion between impeller and volute.

DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE.

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- High torque, permanent split capacitor (PSC), single phase motors. No starting switches or relays to wear out.
- Optional seal leak probe warns of seal leak condition. (Dual seal motors only.) Helps prevent costly motor damage.
- Motors have on winding current and temperature sensitive overload. (Single phase only.)

THE MW SERIES SEWAGE PUMPS ARE DESIGNED FOR YEARS OF MAINTENANCE FREE OPERATION.

- Volute seal ring is replaceable. Restores pump to original performance if wear should occur.
- Motor is held in place by four screws. Easily removed if service is ever needed.

PRODUCT CAPABILITIES

Capacities To	165 gpm	624 lpm
Heads To	70 ft.	21.3 m
Solids Handling Capacity	2 in. dia.	50.8 mm
Liquids Handling	domestic sewage and drain water	
Intermittent Liquid Temp.	up to 140°F	up to 60°C
Available Motors	½ to 2 HP, 208, 230 volts, 1Ø 200, 230, 460, 575 volts, 3Ø oil-filled, permanent split capacitor type, 1Ø 3450 rpm, 60 Hz	
Motor Insulation	Class B (130°C)	
Third Party Approvals	UL, CSA	
Acceptable pH Range	6 - 9	
Specific Gravity	.9 - 1.1	
Viscosity	28 - 35 SSU	
Discharge, NPT	2 in.	50.8 mm
Min. Sump Dia. Simplex Duplex	24 in. 36 in.	61 cm 91.4 cm

Construction Materials

Motor Housing, Volute	cast iron, Class 30, ASTM A48
Enclosed Two Vane Impeller Standard Optional	cast iron, Class 30, ASTM A48 bronze
Impeller Wear Ring	304 SST
Volute Sealing Ring	Buna-N
Shaft	416 SST
Power Cord All 1 Phase All 3 Phase	20 ft. 14/3 SJOW 20 ft. 14/4 SOOW
Shaft Seals Standard Optional Opt. Lower	single carbon & ceramic tandem carbon & ceramic tungsten carbide
Fasteners	300 Series SST

WHERE INNOVATION MEETS TRADITION



Myers[®]
ENGINEERED PRODUCTS

POWER CORD

Jacket sealed with compression fittings. Individual wires potted with epoxy to prevent wicking in case of cord damage.

MOTOR HOUSING

Cast iron for efficient heat transfer and corrosion resistance.

BALL BEARINGS

Upper and lower ball bearings support shaft and rotor and take axial and radial loads.

MOTOR

1/2, 1, 1 1/2, and 2 HP single or three phase, 60 Hz, 3450 rpm. Single phase PSC motors have built-in on winding overload protection, oil-cooled and lubricated.

HIGH EFFICIENT CAST IRON VOLUTE

Corrosion resistant. Passes 2" spherical solids. 2" NPT discharge.

ENCLOSED TWO-VANE IMPELLER

High efficiency. Passes 2" spherical solids. Standard ductile iron or optional bronze construction available.

VOLUTE/IMPELLER SEAL RING

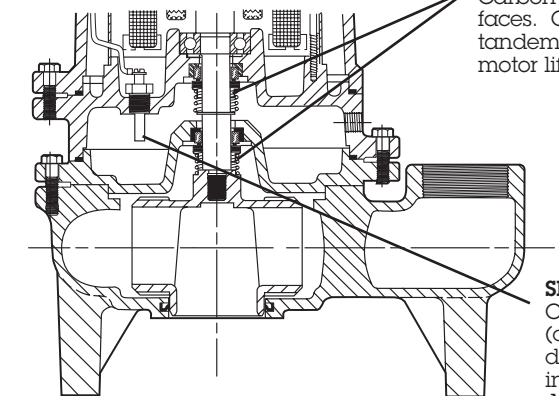
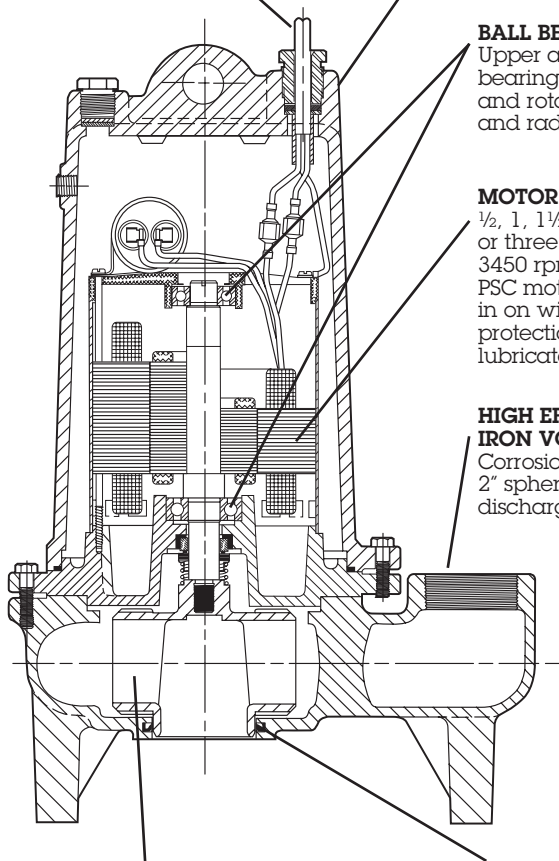
Maintains high efficiency and reduces recirculation. Replaceable.

SHAFT SEAL(S)

Carbon and ceramic faces. Optional dual tandem seals. Extends motor life.

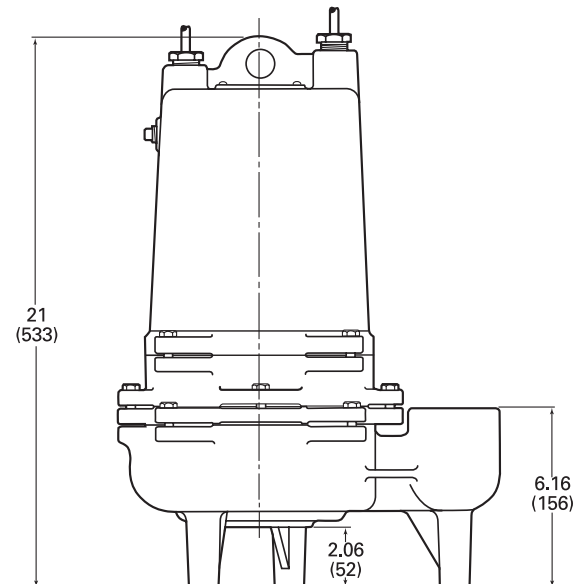
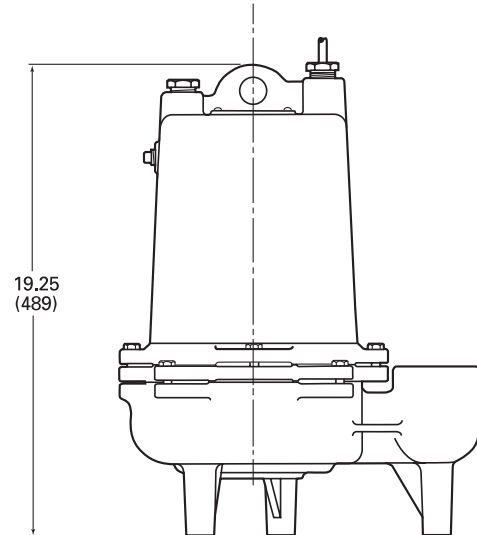
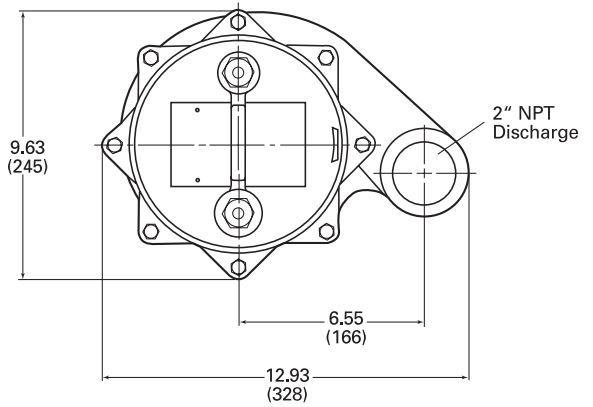
SEAL LEAK PROBE

Optional probes (dual seal only) detect water leakage in seal housing. Activates warning light.

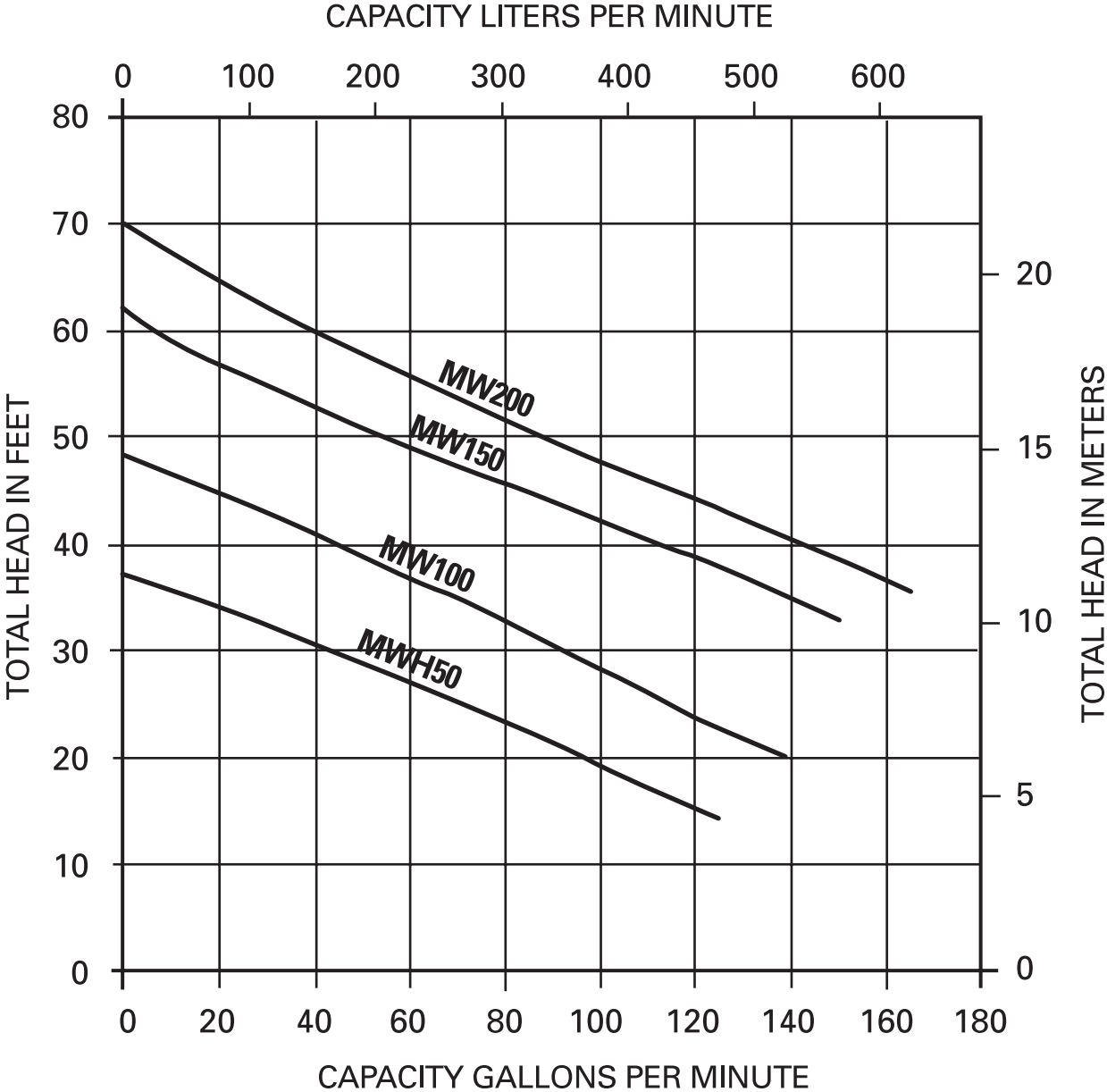


DIMENSIONS

() Dimensions in mm



PUMP PERFORMANCE



MW Series

SPECIFICATIONS

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

Number of Pumps:	_____
Primary Design Flow:	_____
Primary Design Head:	_____
Minimum Shut-off Head:	_____
Motor Horsepower:	_____
Motor Speed:	3450 RPM
Electrical:	_____

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 and shall be capable of running dry without damage to the seals or bearings.

MOTOR - The pump motor shall be of the submersible type rated 1/2, 1, 1-1/2 or 2 hp as required. Motor shall operate at 3450 RPM and shall be for 208 or 230 volts single phase, or 200, 230, 460, or 575 volts, 3 phase, 60 cycles. Single phase motors shall be of the permanent split capacitor type with no relays or starting switches. Three phase motors shall be squirrel cage induction type. Stator winding shall be of the open type with Class B insulation rated for 130°C maximum operating temperature. The winding housing will be filled with clean dielectric oil to lubricate bearings, seals, and transfer heat from the windings to the outer shell. The motor assembly shall be of the standard frame design and shall be secured in place by four threaded fasteners allowing for easy field serviceability.

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 common motor pump shaft shall be of 416 stainless steel and shall be heat shrunk into the die cast motor rotor. The motor shall have two bearings to support the rotor; an upper ball bearing to accommodate radial loads and a lower ball bearing to take thrust and radial loads. Ball bearings shall be designed for a B-10 life of 50,000 hours.

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 266°F. The overload thermostat shall reset automatically when the motor cools to a safe operating temperature. Three phase motors shall be protected by 3 leg overload relay in control box. Overload shall be of the quick trip ambient compensated type and shall have manual reset button.

POWER CORD - The motor power cord shall be SOOW. The cable jacket shall be sealed at the motor entrance by means of a rubber compression washer and compression nut. A heat shrink tube filled with epoxy shall seal the outer cable jacket and the individual leads to prevent water from entering the motor housing.

SHAFT SEAL (Single Seal) - The motor shall be protected by a rotating mechanical shaft seal. The seal 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.

SHAFT SEAL (Double Seal) - The motor shall be protected by two (2) rotating mechanical shaft seals mounted in tandem with an oil filled chamber separating the seals. 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. Two electrical sensing probes shall be mounted in the seal chamber to detect any water leakage past the lower seal. The sensing probes shall be connected to a red warning light in the control panel. The warning light shall serve to indicate a seal leak condition and shall not stop the pump.

PUMP IMPELLER - The pump impeller shall be of the two vane enclosed type. The impeller shall be constructed of ductile iron or optional bronze. A replaceable Buna-N sealing cup shall effect a seal between the volute and impeller in order to maintain high efficiency and prevent recirculation. The impeller shall be threaded onto the 416 stainless steel pump/motor shaft.

PUMP AND MOTOR CASTINGS - All castings shall be of high tensile strength Class 30 gray cast iron. Castings shall be treated with phosphate rinse and painted with a high quality air dry alkyd enamel.

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

