

ME SERIES

1/2 through 1-1/2 HP
Effluent Pumps



Double Seal



Single Seal

THE MYERS ME SERIES EFFLUENT PUMPS ARE DESIGNED SPECIFICALLY FOR TODAY'S EFFLUENT PRESSURE DISTRIBUTION MOUNDS, TRENCHES AND HIGH FLOW DRAINAGE APPLICATIONS. The ME Series effluent pumps with their efficient two vane, enclosed impellers, provide the ideal performance for optimum dosing. ME Series pumps are constructed of only corrosion resistant materials like cast iron, stainless steel and thermoplastics to assure that they will perform for years to come in the harsh effluent environment and drainage applications. For more information, call your Myers distributor today or the Myers Ashland, Ohio sales office at 419-289-6898.

ADVANTAGES BY DESIGN

IDEAL FOR USE IN MOUND AND TRENCH PRESSURE DISTRIBUTION SYSTEMS

- High efficiency, two vane, enclosed impeller provides ideal performance for most efficient dosing.
- Impeller passes full 3/4 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 ME SERIES EFFLUENT 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	120 gpm	454 lpm
Heads To	95 ft.	28.9 m
Max. Spherical Solids	3/4 in.	19 mm
Liquids Handling	domestic effluent & drain water	
Intermittent Liquid Temp.	up to 140° F	up to 60° C
Motor Electrical Data	1/2 HP, 115 volts, 1 ph 1/2 to 1-1/2 HP, 230 volts, 1 ph 200, 230, 460, 575 volts, 3 ph oil-filled, permanent split capacitor type, 1 ph, 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	24 in.	61 cm
Duplex	36 in.	91.4 cm

Construction Materials	
Motor Housing, Volute	cast iron, Class 30, ASTM A48
Enclosed Two Vane Impeller	Standard Optional
Impeller Wear Ring	304 SST
Volute Sealing Ring	Buna-N
Shaft	416 SST
Power Cord	1/2 HP, 1 Ph 3/4 - 1-1/2 HP, 1 Ph All 3 Ph
Shaft Seals	Standard Optional Opt. Lower
Fasteners	300 Series SST

WHERE INNOVATION MEETS TRADITION

Myers[®]

Pentair Water

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.

BEARINGS

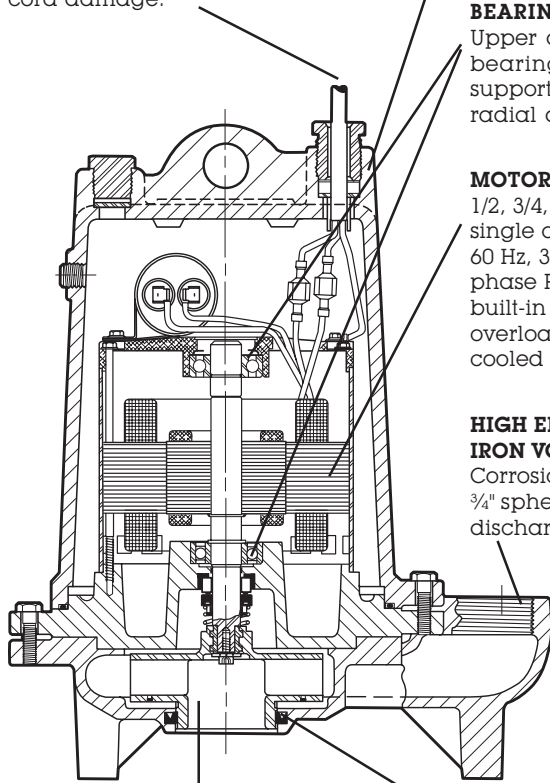
Upper and lower ball bearings support rotor. Take radial and thrust loads.

MOTOR

1/2, 3/4, 1 and 1-1/2 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 EFFICIENCY CAST IRON VOLUTE

Corrosion resistant. Passes 3/4" spherical solids. 2" NPT discharge.



ENCLOSED TWO VANE IMPELLER

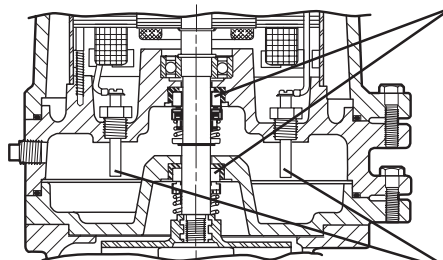
High efficiency. Passes 3/4" spherical solids with stainless steel wear ring. Optional bronze construction available.

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.

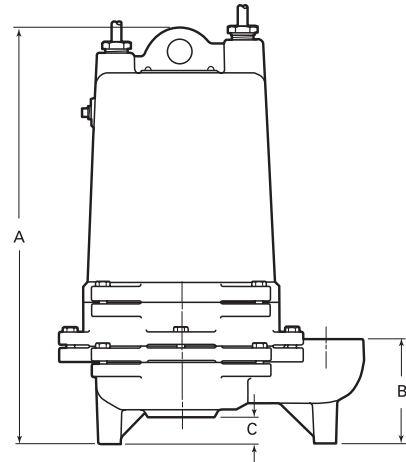
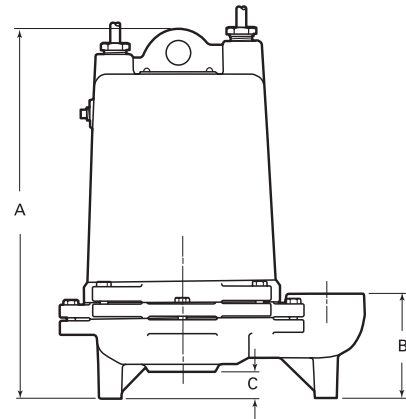
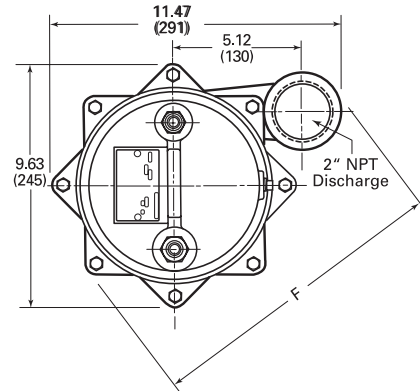


SEAL LEAK PROBES

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

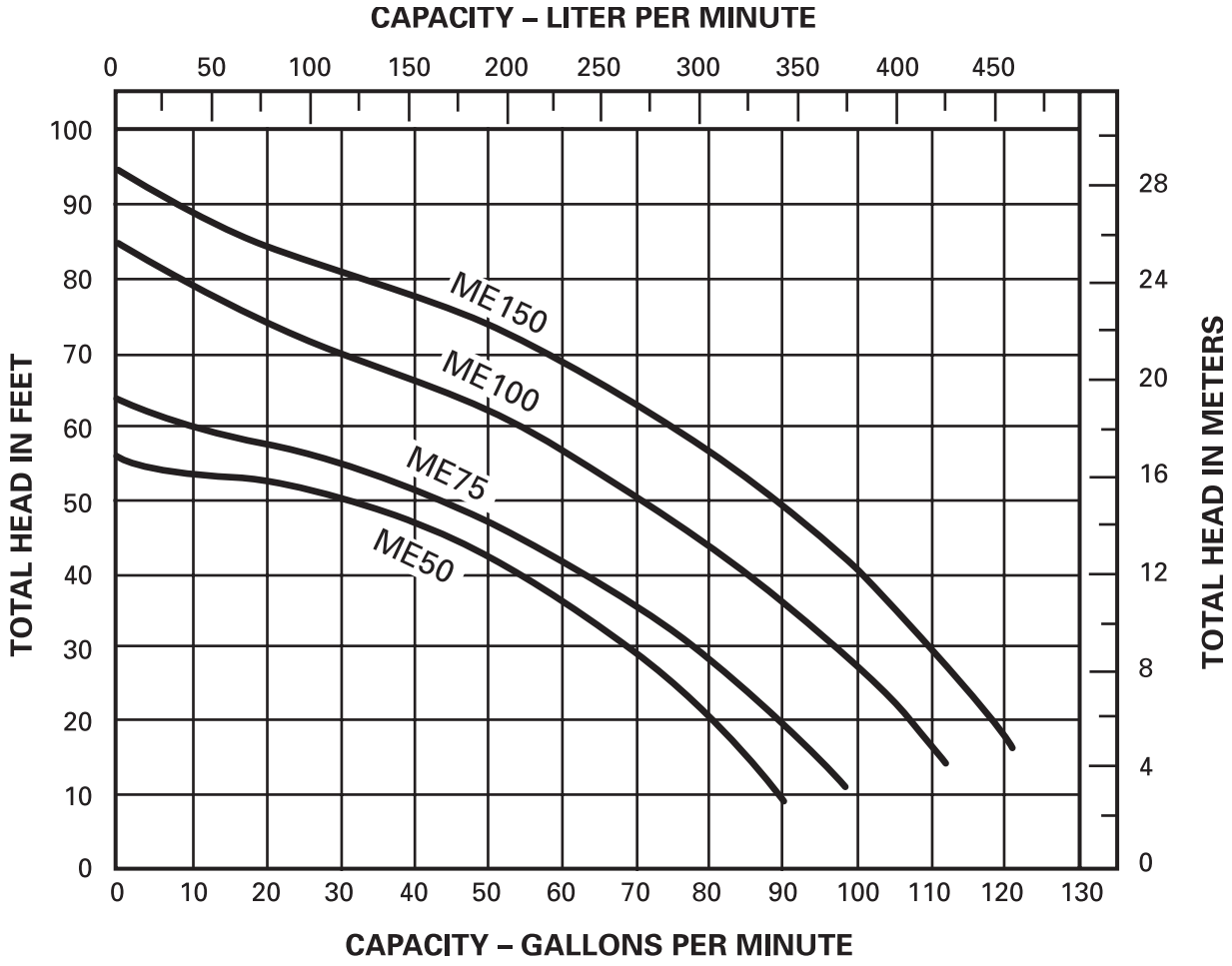
DIMENSIONS

(dimensions in mm)



Model Series	Inches (millimeters)			
	A	B	C	F
ME50S	16.8 (427)	4.09 (104)	1.03 (26)	12.13 (308)
ME50D	18.6 (472)	4.09 (104)	1.03 (26)	12.13 (308)
ME75S, ME100S, ME150S	16.8 (427)	4.0 (102)	1.06 (27)	12.5 (318)
ME75D, ME100D, ME150D	18.6 (472)	4.0 (102)	1.06 (27)	12.5 (318)

PUMP PERFORMANCE



ME SERIES

SPECIFICATIONS

EFFLUENT PUMPS - Pump(s) shall be F. E. Myers ME series double seal effluent 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 septic tank effluent and be capable of passing 3/4 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, 3/4, 1, or 1-1/2 hp as required. Motor shall operate at 3450 RPM and shall be for 115 volts (1/2 hp) 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 SJOW or 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 engineered thermoplastic or optional bronze. A stainless steel wear ring shall be molded into the neck of the plastic 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. 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 and chromate rinse and painted with a high quality air dry alkyd enamel.

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