

MG200 Series

2 HP Grinder Pumps
for Residential and Pressure Sewer
Applications



THE MG200 SERIES ARE 2 HP SUBMERSIBLE GRINDER PUMPS DESIGNED TO BE RUGGED AND ECONOMICAL FOR RESIDENTIAL AND PRESSURE SEWAGE APPLICATIONS. Long discharge runs or high static heads are not a problem. The MG200 Series feature a patented cutter mechanism and recessed impeller design to effectively macerate typical domestic sewage solids into a fine slurry.

Myers offers a complete turn-key system for simple selection and installation. No complicated control panel is required. For years of trouble-free service go with the leader in grinder pump technology. Contact your local Myers representative or the Myers Ohio sales office at 419/289-1144.

ADVANTAGES BY DESIGN

IDEAL FOR USE IN PRESSURE SEWER SYSTEMS.

- Choice of standard, high head or high flow designs.
- Recessed impeller provides steep non-overloading operating curve.

DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE.

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- Recessed impeller reduces radial bearing loads, increases bearing life.
- High torque capacitor starts single phase motor for assured starting under heavy load. No external capacitor needed.
- Heavy duty, 2 hp listed, wide angle float switch.
- On-winding current and temperature sensitive overload.

THE MG200 SERIES IS DESIGNED FOR EASY MAINTENANCE.

- Shredding ring and grinder impeller are replaceable without dismantling pump or motor.

PRODUCT CAPABILITIES

Capacities To	70 gpm	260 lpm
Heads To	138 ft.	42 m
Liquids Handling	domestic raw sewage	
Intermittent Liquid Temp.	up to 140° F	up to 60° C
Winding Insulation Temp. (Class F)	311° F	155° C
Motor Electrical Data	2 hp 3450 rpm 1 ph - capacitor start/run. 230 volt; 60 Hz, 15.0 amps	
Third Party Approvals	CSA, UL listed	
Acceptable pH Range	6-9	
Specific Gravity	.9-1.1	
Viscosity	28-35 SSU	
Discharge, NPT	1¼ in.	31.75 mm
Min. Sump Dia. Simplex Duplex	24 in. 36 in.	61.0 cm 91.4 cm

Construction Materials

Motor Housing, Seal Housing, Volute Case	cast iron, Class 30, ASTM A48
Power Cord, 20'	14/3 SJOW/SJOW-A
Mechanical Seal Std. Opt.	carbon & ceramic tungsten carbide
Pump, Motor Shaft	416 SST
Fasteners	300 Series SST
Shredding Ring Grinder Impeller	440 SST, 58-60 Rockwell
Recessed Impeller	eng. thermoplastic (MG/MGF) ductile iron (MGH)

WHERE INNOVATION MEETS TRADITION

Myers[®]

Pentair Water

POWERFUL MOTOR

2 hp, 3450 RPM, 230V, 1 phase. High torque oil-filled motor conducts heat and lubricates bearings. Class F VFD/continuous duty rated.

CABLE ENTRY SYSTEM

Provides double seal protection. Cable jacket sealed by compression fitting. Individual wires sealed by potting epoxy. Power cord can be replaced without disturbing motor.

OVERLOAD-HEAT SENSOR

Protects motor from burn-out due to excessive heat from any overload condition. Automatically resets when motor has cooled.

SHAFT SEAL

Single carbon and ceramic faced seal. Oil lubricated.

VOLUTE CASE

Cast iron, 1 1/4" vertical, flanged discharge.

IMPELLER

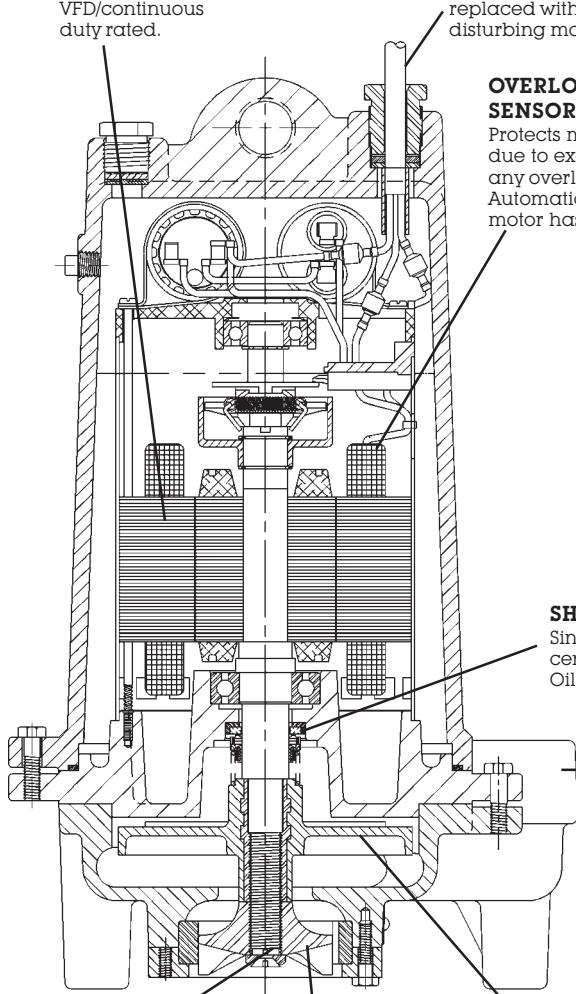
Engineered thermoplastic recessed impeller handles ground slurry without clogging or binding. Provides unobstructed flow passage. Reduces radial loads. pump-out vanes help keep trash from seal, reduces pressure at seal face.

SHAFT AND FASTENERS

The shaft and all fasteners are made from corrosion resistant stainless steel.

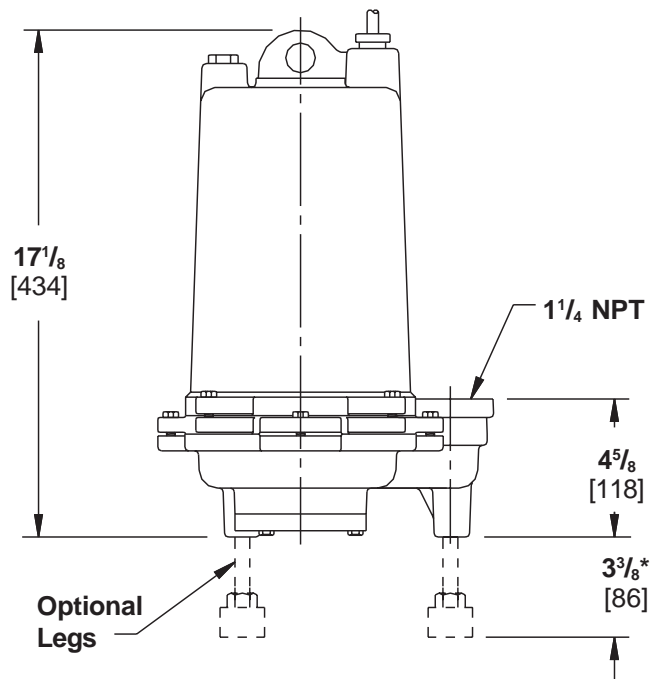
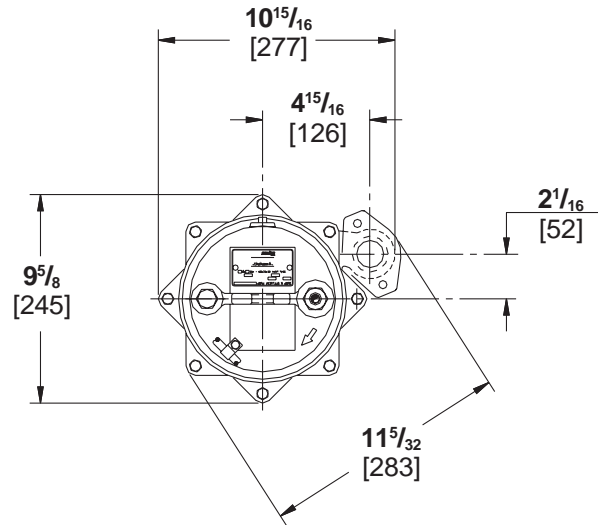
GRINDER ASSEMBLY

Grinder impeller and shredding ring are replaceable without dismantling pump. Constructed of 440 SST hardened to 56-60 Rockwell.



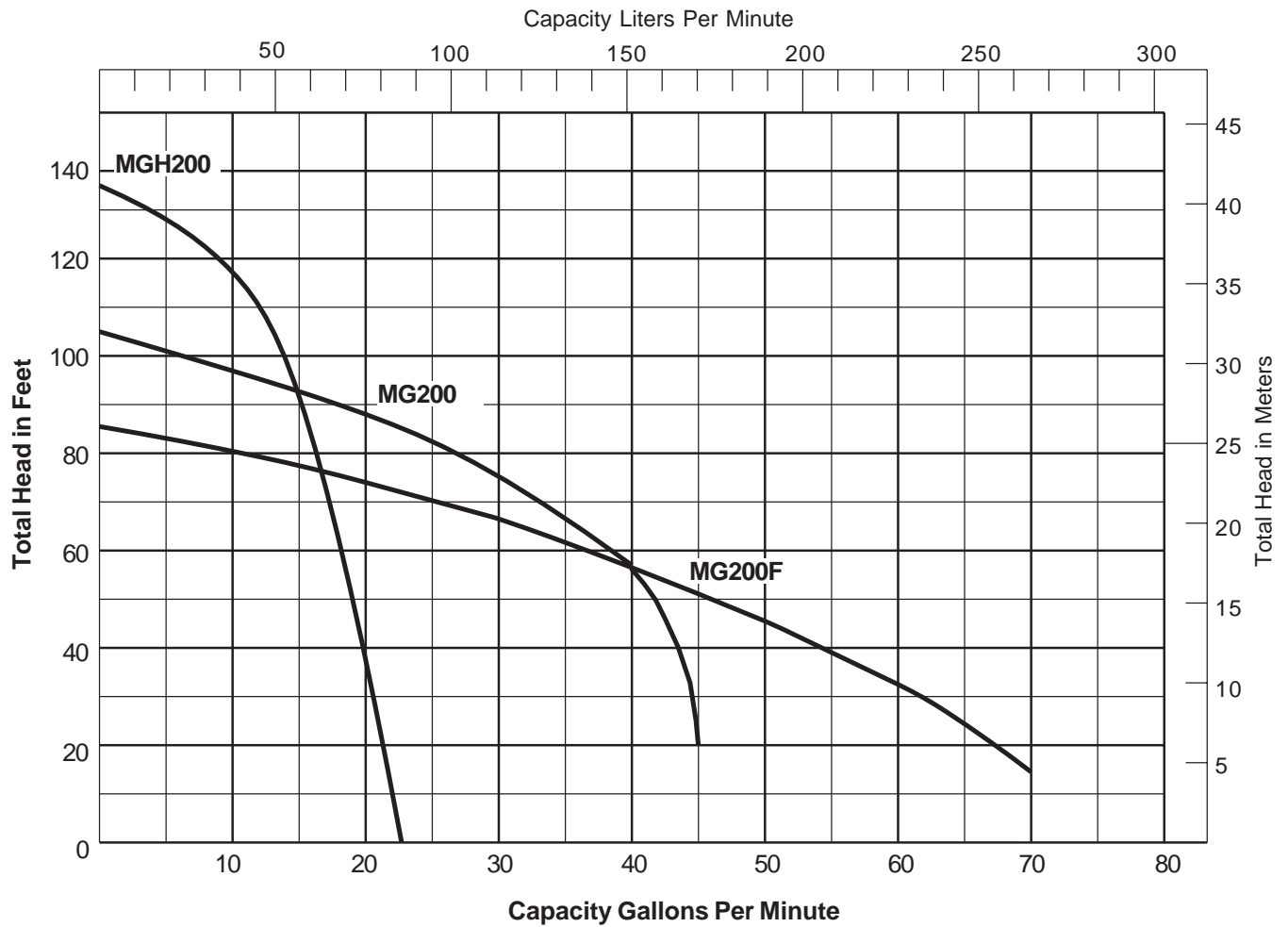
DIMENSIONS

[] Dimensions in mm



* Leg kit required when not using guide rail liftout system.

PUMP PERFORMANCE



Available Models		Motor Electrical Data								
Standard	HP	Volts	Phase	Start Amps	Run Amps	Run KW	Start KVA	Run KVA	NEC Code Letter	Service Factor
MG200-21	2	230	1	51.9	15.0	2.9	11.9	3.5	G	1.25
MG200-21P	2	230	1	51.9	15.0	2.9	11.9	3.5	G	1.25
MG200F-21	2	230	1	51.9	15.0	2.9	11.9	3.5	G	1.25
MG200F-21P	2	230	1	51.9	15.0	2.9	11.9	3.5	G	1.25
MGH200-21	2	230	1	51.9	15.0	2.9	11.9	3.5	G	1.25
MGH200-21P	2	230	1	51.9	15.0	2.9	11.9	3.5	G	1.25

MG200 Series

SPECIFICATIONS

PUMP MODEL - Pump shall be of the centrifugal type, Myers model MG200 Series, with an integrally built-in grinder unit and submersible type motor. The grinder unit shall be capable of macerating all material in normal domestic and commercial sewage, including reasonable amounts of foreign objects such as small wood, sticks, plastic, thin rubber, sanitary napkins, disposable diapers and the like, to a fine slurry that will pass freely through the pump and 1¼" discharge pipe. Discharge shall be 1¼" NPT.

OPERATING CONDITIONS - Pump shall have a capacity of _____ GPM at a total head of _____ feet and shall use a 2 HP motor operating at 3450 RPM.

MOTOR - Pump motor shall be of the submersible type rated 2 horsepower at 3450 RPM. Motor shall be for 60 Hz., single phase, 230 volts. Motor shall be capacitor start, capacitor run type for high starting torque. Motors rated for VFD/continuous duty operation.

Stator winding shall be of the open type with Class F insulation, good for 155° C (311° F) maximum operating temperature. Winding housing shall be filled with a clean, high dielectric oil that lubricates bearings and seals and transfers heat from windings and rotor to outer shell. Air-filled motors which do not have the superior heat dissipating capabilities of oil-filled motors shall not be considered equal.

Motor shall have two heavy-duty ball bearings to support pump shaft and take radial and thrust loads. Ball bearings shall be designed for 50,000 hours B-10 life. Stator shall be bolted to seal plate for easy motor replacement.

The motor shall have a heat sensor thermostat and overload attached to the top end of the motor windings to stop the motor if the motor winding temperature reaches 200° F. The high temperature shutoff will cause the pump to cease operation, should a control failure cause the pump to run in a dry wet well. The thermostat shall reset automatically when the motor cools to a safe operating temperature.

The common motor pump and grinder shaft shall be of #416 stainless steel threaded to take pump impeller and grinder impeller.

SEALS - Motor shall be protected by one rotary mechanical seal.

Seal face shall be carbon and ceramic and lapped to a flatness of one light band.

PUMP IMPELLER - The pump impeller shall be of the recessed Myers type to provide an open unobstructed passage through the volute for the ground solids. Impeller shall be engineered thermoplastic (MG/MGF) or ductile iron (MGH) and shall be threaded onto stainless steel shaft.

GRINDER CONSTRUCTION - Grinder assembly shall consist of grinder impeller and shredding ring and shall be mounted directly below the volute passage. Grinder impeller to be threaded onto stainless shaft and shall be locked with screw and washer. The shredding ring shall be pressed into an iron holding flange for easy removal. The flange shall be provided with tapped back-off holes so that screws can be used to push the shredding ring from housing. All grinding of solids shall be from action of the impeller against the shredding ring.

Both grinder impellers and shredding ring shall be of 440C stainless steel hardened to 58-60 Rockwell C.

CORROSION PROTECTION - All iron castings shall be pre-treated with phosphate and chromic rinse and to be painted before machining, and all machined surfaces exposed to the sewage water to be re-painted. All fasteners to be 302 stainless steel.

POWER CORD - The motor power cord shall be 14 GA SJOW/SJOWA 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.

LEVEL CONTROL - An automatic control is provided by a heavy-duty UL/CSA listed float switch tethered to the side of the pump, having a piggyback plug on one end. This piggyback float switch operates the pump directly without need of control panel.