



AGS Series

AXIAL GRINDER PUMPS



FEATURES

Design: Capable of grinding domestic sewage in the modern wastewater stream.

Cutter System: Stainless steel, axial lobe-cutter design with 8-hole cutting plate, capable of 4.9 million bites per hour and TDH up to 120 feet.

Impeller: Cast Iron semi open 2 vane impeller.

Casing: Cast iron, volute type for high efficiency. Adaptable for guide rail system.

Motor: Fully submerged in oil-filled chamber. High grade turbine oil surrounds motor for more efficient heat dissipation, permanent lubrication of bearings and mechanical seal, and protection against outside environment.

Motor Shaft: 300 series stainless steel.

Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.

Bearings: Upper and lower single row sealed ball bearings for precision positioning of parts and to carry all radial and thrust loads.

Mechanical Seal: Hardfaced silicon carbide on silicon carbide for longer life, stainless steel metal parts, BUNA-N elastomers.

Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking.

O-Ring: Assures positive sealing against contaminants and oil leakage.

Paint: Electro-coat paint process protects all casting surfaces.

May be used with optional guide rail. See Fittings or Pump Removal Systems.

AGENCY LISTINGS



Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association

APPLICATIONS

Designed for residential/light commercial/small office sewage (2" pump replacement and new construction) or anywhere modern wastewater flushables are creating clogging issues.

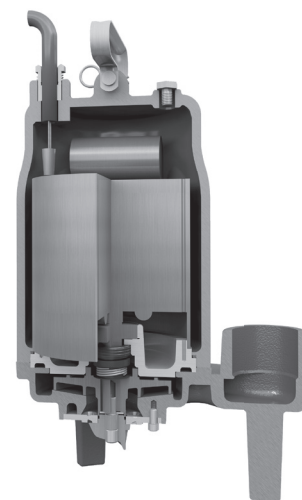
SPECIFICATIONS

Pump:

- Capacities: to 53 gpm
- Total heads: to 120' TDH
- Temperature: Class F insulation - 104°F (40°C) maximum continuous, 140°F (60°C) maximum intermittent
- Single mechanical seal: silicon carbide rotary/silicon carbide stationary, 300 series stainless steel metal parts, BUNA-N elastomers
- Fasteners: 300 series stainless steel
- Axial cutter and plate: 440C hardened stainless steel

Motor:

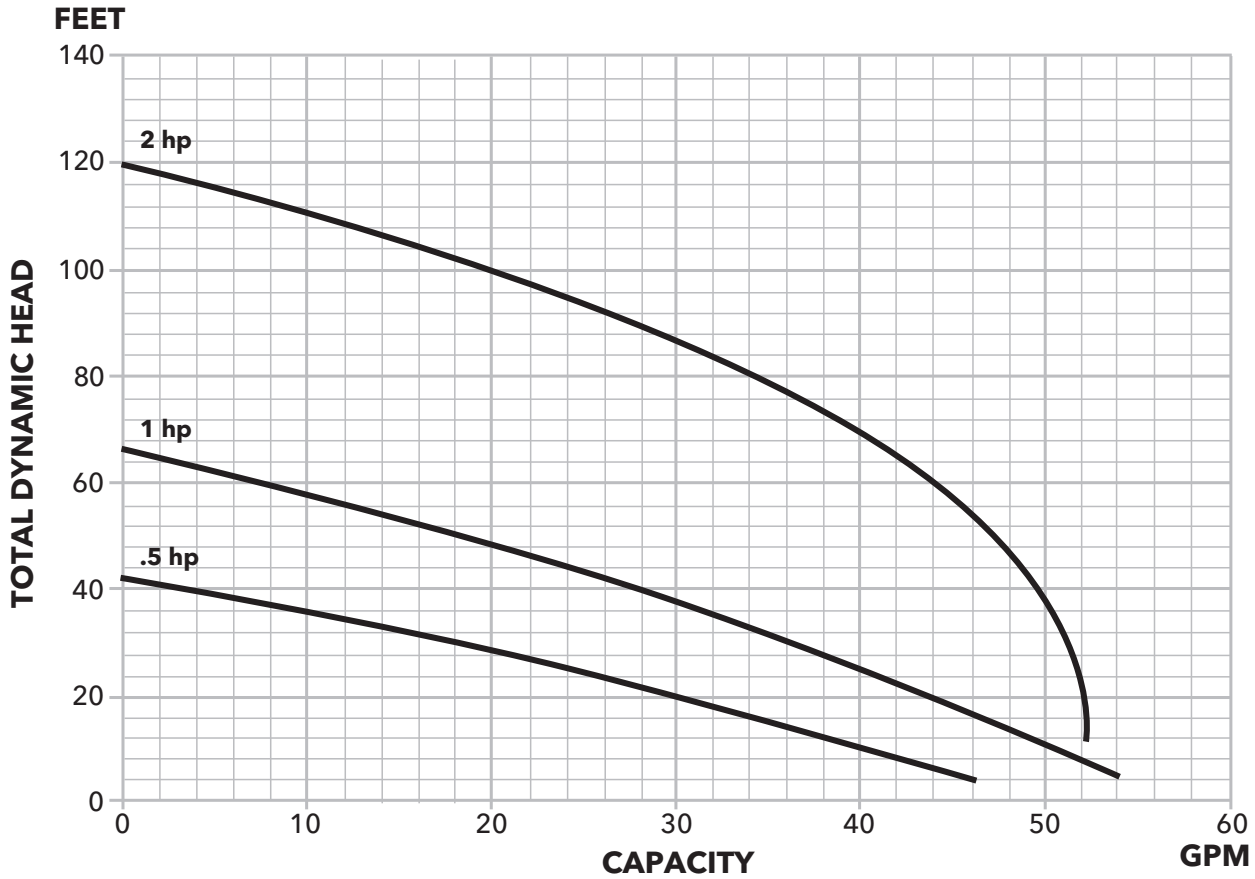
- Single-phase motor with on winding thermal protector. No external capacitor kits required.
- Class F insulation
- Shaft: 300 series stainless steel threaded design
- Bearings: Single row sealed ball bearings, upper and lower
- Power cord with a 115V or 230V NEMA three prong grounding plug. Allows connection to a piggyback float switch. 20 foot long cable.



MODEL INFORMATION

| Order Number | HP | Phase | Volts | RPM | Operation | Maximum Amps | Discharge Size | Impeller Diameter | Power Cord | Weight (lbs.) |
|--------------|---------|-------|---------|------|-----------|--------------|----------------|-------------------|--------------------------|---------------|
| AGS0511 | 0.5 | 1 | 115 | 3500 | Manual* | 9 | 2" | 3.5" | 20' SJTOW with NEMA plug | 65 |
| AGS0512 | | | 208-230 | | | 4.5 | | 4.25" | | |
| AGS1011 | 115 | | 11 | | | | | | | |
| AGS1012 | 208-230 | | 5.5 | | | | | | | |
| AGS2012 | 2 | | | | | 15 | 1.25" | 5.69" | | 96 |

* Piggyback float can be purchased separately or get the float with the pump by adding the suffix "PB" to each pump. Ex. AGS0511PB is the pump with a 115V 20' Cord Piggyback N/O Mechanical Float Switch.

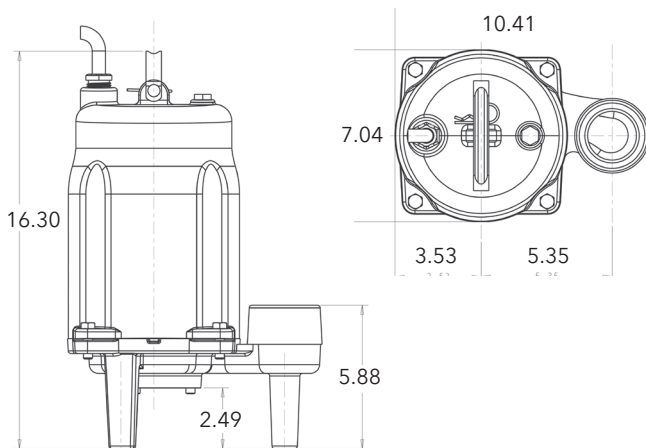


MOTOR DATA

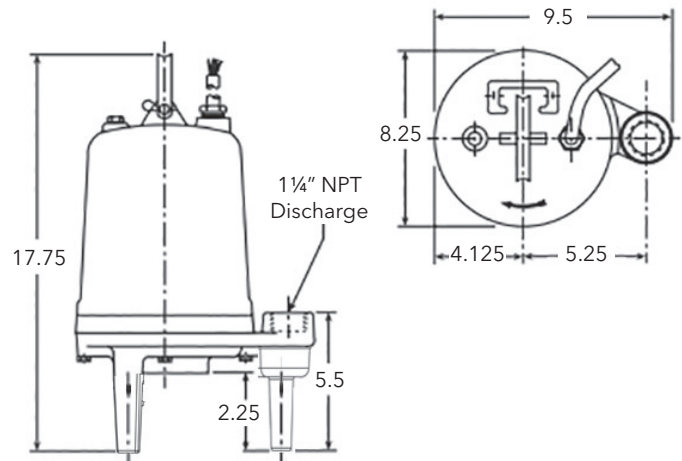
| HP | Volts | Phase | RPM | Maximum Amps | LRA | Resistance | Power Cable | Fuse/Circuit Breaker |
|-----|---------|-------|------|--------------|------|------------|-------------|----------------------|
| | | | | | | Line-Line | | |
| 0.5 | 115 | 1 | 3500 | 9 | 46 | 0.6 | SJTOW 14/3 | 15 |
| | 208-230 | | | 4.5 | 25.5 | 2.6 | | 10 |
| 1 | 115 | | | 11 | 46 | 0.6 | | 15 |
| | 208-230 | | | 5.5 | 25.5 | 2.6 | | 10 |
| 2 | 208-230 | | | 15 | 59 | 1.1 | | 30 |

DIMENSIONS (All dimensions are in inches. Do not use for construction purposes.)

AGS 0511, 0512 & 1011 (in inches):



AGS 2012 (in inches):



APPLICATION DATA

| | |
|--|--|
| Minimum Casing Thickness | 5/16" |
| Casing Corrosion Allowance | 1/8" |
| Maximum Working Pressure | 50 psi |
| Maximum Submergence | 50 feet |
| Minimum Submergence | Fully submerged for continuous operation |
| | 6" below top of motor for intermittent operation |
| Maximum Environmental Temperature | 40°C (104°F) continuous operation |
| | 60°C (140°F) intermittent operation |
| Maximum Number of Evenly Distributed Starts per hour | 10 |
| Bearings | B-10 life of 30,000 hours min. |
| Minimum Basin Size | Simplex - 24" x 24" |
| | Duplex - 36" x 36" Fiberglass |
| 2" Maximum Discharge Pipe Diameter | Requires a minimum flow of 21 gpm to maintain a 2 ft./sec. scouring velocity |

STANDARD PARTS

| | |
|----------------------|--|
| Ball Bearing - upper | Single row ball - SKF 6203-2Z |
| Ball Bearing - lower | Single row ball - SKF 6204-2Z |
| Mechanical Seal | Silicon carbide/silicon carbide; Type 16 |
| O-Ring - motor cover | BUNA-N, AS 568A-166 |

STANDARD PANEL OPTIONS

| Pump Order Number | K-Series | | Boulay Series | |
|-------------------|-----------|-----------|---------------|--------|
| | Simplex | Duplex | Simplex | Duplex |
| AGS0511 | KS19020WF | KD19020WF | S10020 | D10020 |
| AGS0512 | KS19020WF | KD19020WF | S10020 | D10020 |
| AGS1011 | KS19020WF | KD19020WF | S10020 | D10020 |
| AGS1012 | KS19020WF | KD19020WF | S10020 | D10020 |
| AGS2012 | KS19020WF | KD19020WF | S10020 | D10020 |



K-SERIES

- NEMA 4X dead front outdoor rated enclosure
- Red LED alarm beacon
- HOA selector switch
- Field wiring terminal block
- Single phase models handle 120, 208 and 230V service
- Three phase models handle 200, 230 and 460V service
- Requires separate control/alarm power feed
- See brochure "BCPKSDPANELS" for additional information



CUTTER ASSEMBLY

8-hole cutting ring



3 lobe cutter



CONSTRUCTION DETAILS

| | |
|------------------------------|---|
| Power Cable - type | 14/3 SJTOW with NEMA Plug |
| Motor Cover | Gray cast iron - ASTM A48, Class 30 |
| Bearing Housing | Gray cast iron - ASTM A48, Class 30 |
| Seal Housing | Gray cast iron - ASTM A48, Class 30 |
| Casing | Gray cast iron - ASTM A48, Class 30 |
| Impeller | Gray cast iron - ASTM A48, Class 30 |
| Motor Shaft | AISI 300 series stainless steel |
| Motor Design | NEMA 48 frame, oil filled with Class F insulation |
| Motor Overload Protection | On winding thermal protector - auto reset |
| External Hardware | 300 series stainless steel |
| Impeller Type | Semi-opened with pump out vanes on back shroud |
| Cutter | Type 440C hardened stainless steel |
| Oil Capacity - motor chamber | .57 gallons |

Note: Boulay Series part numbers have additional available features, see below for more information.
Note: K Series panel part numbers include floats, to order without float switches, remove the 'WF' suffix. Boulay Series panels do not include float switches.



BOULAY SERIES

- NEMA 4X outdoor rated enclosure
- Red alarm beacon
- HOA selector switch
- Through door pump run light(s)
- Through door alarm test and horn silence button
- Single phase models handle 120, 208 and 230V service
- Three phase models handle 200, 230, 460 and 575V service
- Accepts single or dual power feed
- See brochure "BCP3 R11" for additional information on simplex models
- See brochure "BCP4 R14" for additional information on duplex models



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