

xylem
Let's Solve Water

TECHNICAL BROCHURE
BAGSSERIES



AGS Series

AXIAL GRINDER PUMPS



 **GOULDS**
WATER TECHNOLOGY
a xylem brand

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 66 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.

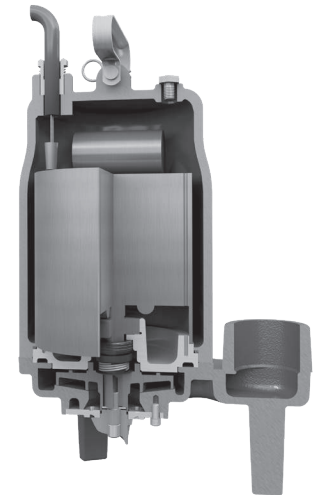
SPECIFICATIONS

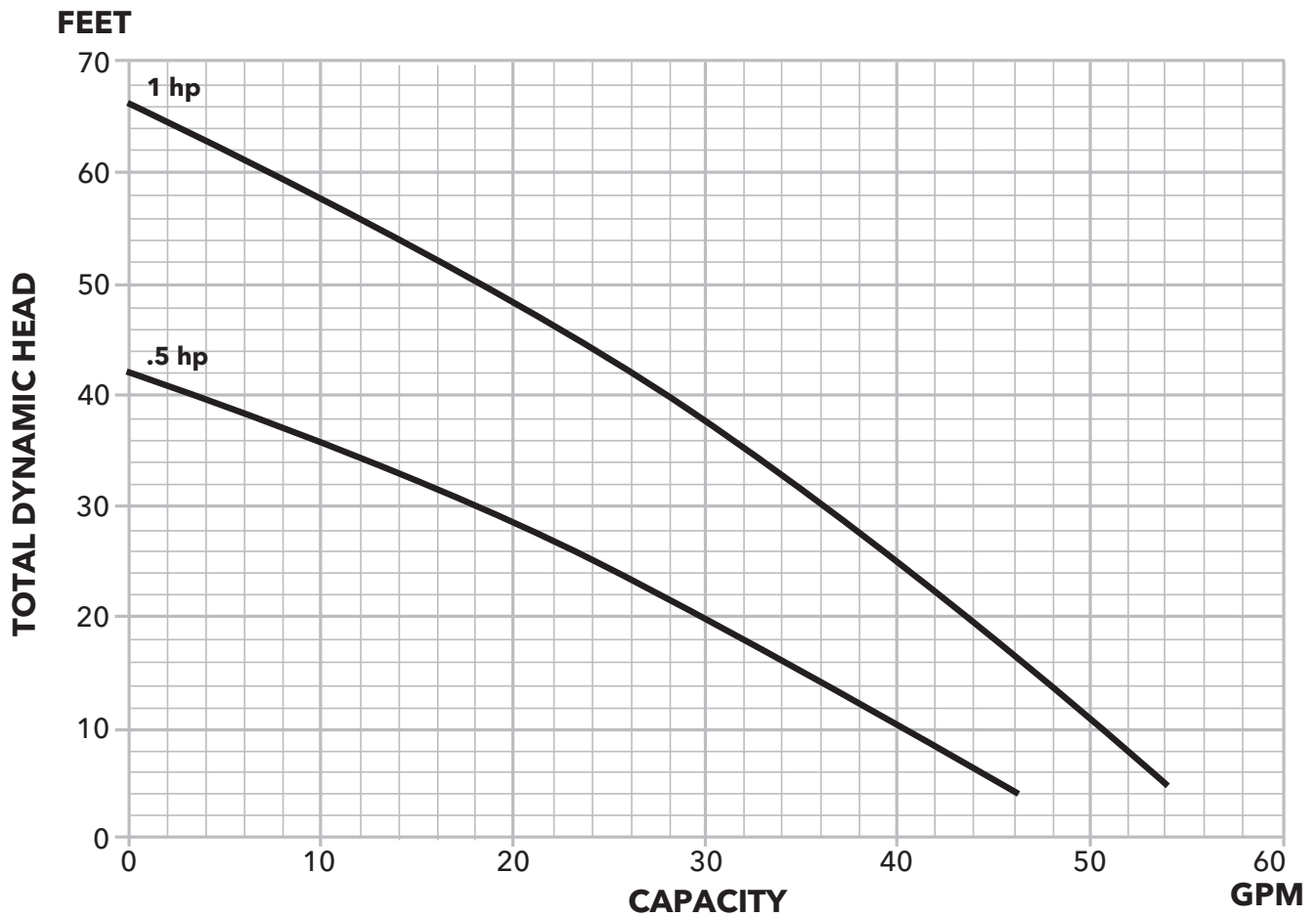
Pump:

- Capacities: to 53 gpm
- Total heads: to 66' TDH
- Discharge: 2" NPT
- 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, 0.5 and 1 hp 60 Hz, 3500 rpm, 115V and 230V CSCR 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			230			4.5				
AGS1011	1		115			11		4.25"		
AGS1012			230			5.5				

* Use piggyback float for automatic operation

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
	230			4.5	25.5	2.6		10
1	115			11	46	0.6		15
	230			5.5	25.5	2.6		10

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

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

STANDARD PARTS

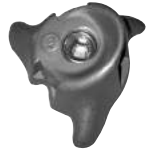
Ball Bearing - upper	Single row ball - SKF 6203-2Z
Ball Bearing - lower	Single row ball - SKF 6204-2Z
Mechanical Seal	Silicon carbide/silicon carbide; Type 16
O-Ring - motor cover	BUNA-N, AS 568A-166

CUTTER ASSEMBLY

8-hole cutting ring

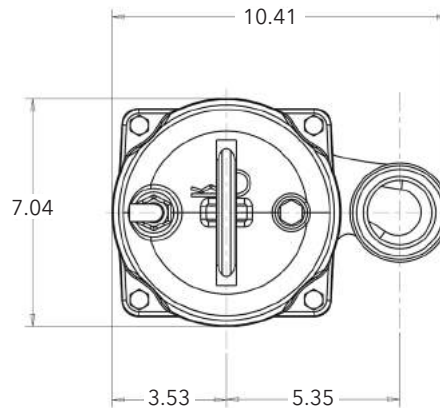
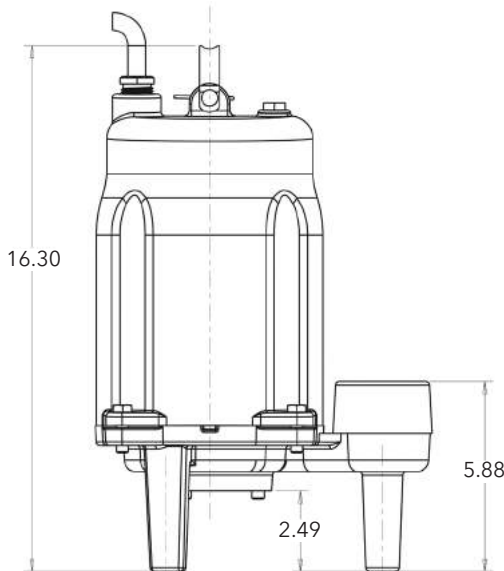


3 lobe cutter



DIMENSIONS

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



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Xylem Inc.
Phone: (866) 325-4210 • Fax: (888) 322-5877
www.xylem.com/gouldswatertechnology

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