

## EPG SurePump<sup>™</sup> Key Features

August 2015 | Bulletin 2051

Unique design places at least four wheels in contact with riser pipe surface at all times assuring easy installation and retrieval of the pump.

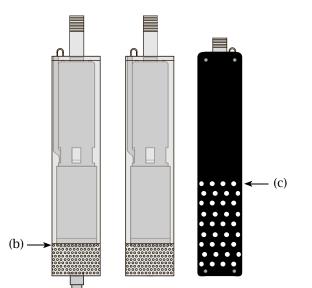
The patented submersible level sensor is mounted along the central axis of the sump drainer, is removable from the bottom and assures accurate, repeatable level control.

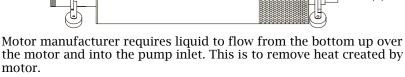
SurePump runs cooler than other pumps because the intake screen is located below the motor (b). The sealed top assures that the liquid is only drawn from the bottom, over the motor.

Sensor remains in same position in relation to inlet (a).

Allows lowest level shut off point in comparison to all competitors.

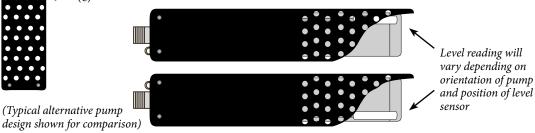
- · Patented design
- · Stainless Steel Outer Housing
- Better heat transfer (30x better than HDPE)
- Does not sag from heat buildup
- Bottom Inlet
- · Better cooling of the motor





Alternative HDPE design does not have cooling flow over bottom motor bearing (c). Motors tend to run hot and fail in two to three years.

In addition, the pump & motor may spin inside the HDPE housing from the torque of a pump cycle. Designs incorporating a machined end-cap to prevent spinning will further impede motor cooling.



Common Materials	Thermal Conductivity (Watts / Meter-Kelvin)	Notes for Reference
Copper	400	Common Heat Sink Material
Aluminum	200	Common Heat Sink Material
Iron	60	
Steel	45	
Stainless Steel	16	
HDPE	0.5	
PVC	0.2	
Wool	0.07	Common Insulator
Fiberglass	0.04	Common Insulator

## **Product Feature Comparison**

Typical Alternative	EPG
Modified water well pumps which are designed for vertical operation	Specifically designed, patented and constructed pump for vertical and horizontal applications
Pump bearings, & seal rings made of Teflon	E-glide bearings and seal rings, proven to outlast Teflon 4 to 1
Teflon bearings not recommended for horizontal use	E-glide bearings provide long life of pump in horizontal position
Plastic shroud allows leachate to enter at top of motor, does not cool motor	Stainless Steel sealed sump drainer forces leachate over the motor per manufacturer's requirement
Offers 1 year limited warranty	Offer 3 year and 5 year warranties
Control Panels built by others	UL inspected and in-house UL shop assembly to UL 508A/698A and other standards requirements
Pumps and control panels not tested together at factory	100% factory testing of pumps with control panels prior to shipping
No Arc Flash rating applied or labeled, not OSHA compliant	Arc flash rating evaluation & labeled on all control panels, OSHA compliant
Short Circuit Current Rating not applied and labeled	SCCR label on all control panels, complies with OSHA requirements
Motor lead made from water well lead, splice to unrated power cable	No-splice motor lead with chemical resistant, waterproof fluid block at motor. UL, CSA, and CE rated cable used.
Employs commercial cable not rated for submergence as motor lead	EPG's motor lead has a waterproof and chemically resistant jacket. UL, CSA, and CE rated cable used.
Plastic shroud on pump difficult to install in flatter risers	Sump drainer with wheels at top & bottom, easy to install and remove
Level sensor mounted randomly inside plastic housing, difficult to disassemble and remove with no guarantee of vertical location	Level sensor mounted directly on bottom center, easy to remove, always in same location
No test stand used for QA/QC	Certified test stand for testing of pumps and panels as one system
Uses variety of pumps and motors including water well pumps & motors	EPG SurePumps use Franklin "special application" motors
Field installation checklist not used	Installation checklist used to assure proper function and long life
Very limited service staff and/or telephone customer support	Knowledgeable and experienced service and repair staff at the factory & throughout North America
No training, education or information sharing	SWANA approved yearly service school for diagnostics, repair, technical instruction, and installation
No factory trained installation offered, uses subcontractors	Highly experienced, factory trained installation & start-up people available in all parts of the U.S.
Very limited technical support for landfill design engineers	5 Engineers on staff provide assistance to design engineers and site operators
Product & Personal protection by circuit breaker, does not include Type 2 Coordinated Protection	Fuses used to provide Type 2 Coordinated Protection to protect personnel and equipment with SCCR rating of 30K

<sup>\*\*\*</sup> This data is based in part by years of field observation and information obtained from various landfill personnel. \*\*\*