

Professional Plumbing Products Catalog

Introduction

Registered Trademarks

Barnes® is registered trademark of Crane Pumps & Systems, Inc.

UL® is a registered trademark of Underwriters Laboratories Inc.

CSA® is a registered trademark of Canadian Standards Association.

Other brand and product names are trademarks or registered trademarks of their respective holders.

NOTICE:

Performance and dimensional data presented in this catalog are for planning purposes only and are subject to change without notice.

Consult your authorized Barnes distributor for specific details and the latest information, or call Crane Pumps & Systems, Inc. direct at (937) 778-8947.

Introduction

This catalog is serialized and will be registered to you and/or your firm upon receipt of the registration card in the front of the binder. Catalog pages are subject to change without notice. As specifications are updated and new products introduced, new updated pages will be mailed to holders of this catalog.

IT IS IMPORTANT THAT YOU RETURN THE REGISTRATION CARD PROMPTLY!

WITHOUT THE CARD, WE CAN NOT KEEP YOUR CATALOG CURRENT. Equally important, when you receive new and updated material, promptly place the material in the proper section and page sequence. Each page will have a page block that contains the SECTION, PAGE NUMBER, and DATE.

This catalog is contains the following sections;

Introduction
Warranty and Service

Section A: Sump Pumps
Section B: Submersible Effluent Pumps
Section C: Submersible Non-Clog Pumps
Section D: Panels & Controls
Section E: Basins & Accessories
Section F: Grinder Pumps
Section H: Fountain Pumps
Section I: Portable Submersible Pumps

Model Nomenclature Chart

For Submersible Pumps

BARNES®

Professional Plumbing

www.cranepumps.com

Introduction

THE FOLLOWING MODEL NOMENCLATURE IS USED IN SECTIONS B AND C.

DISCHARGE SIZE:

* = 1.25" Discharge
* = 1.50" Discharge
2 = 2" Discharge
3 = 3" Discharge

NAMEPLATE HORSEPOWER:

5 = 0.5HP
20 = 2HP
50 = 5HP

MOTOR, PHASE & VOLTAGE:

0=200 Volt ,1 Phase,60 Hz.
1=115 Volt ,1 Phase,60 Hz.
2=230 Volt ,1 Phase,60 Hz.
3=230 Volt ,3 Phase,60 Hz.
4=460 Volt ,3 Phase,60 Hz.
5=575 Volt ,3 Phase,60 Hz.
6=200 Volt ,3 Phase,60 Hz.
7=200/230 Volt ,1 Phase,60 Hz.
8=230/460 Volt ,3 Phase,60 Hz.
9=200/230 Volt ,3 Phase,60 Hz.
T=380 Volt ,3 Phase, 60Hz.
V=415 Volt ,3 Phase, 50 Hz.
W=110 Volt, 1 Phase, 50 Hz.
X=220 Volt, 1 Phase, 50 Hz.
Y=220 Volt, 3 Phase, 50 Hz.
Z=380 Volt, 3 Phase, 50 Hz

†

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SE

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L

SERIES PUMP:

BP = Sump/Effluent
EH = Effluent
EHV = Effluent-Vortex
PGPP = Vortex Submersible Grinder
SE = Sewage Ejector
SEV = Sewage Ejector-Vortex
STEP = Septic Tank Effluent Pump
SF = Submersible Fountain
SFU = Submersible Fountain
SP = Sump/Effluent
UT = Utility

SPEED:

60Hz	(50Hz)
2=3450RPM	(2850)
4=1750RPM	(1425)
6=1150RPM	(950)
8=870RPM	(720)

DESIGN CODE:

A=Automatic (Swing type level control)
AU=Automatic (Swing type level control)
DS=Double Seal Oil Filled
HT=High Temperature
L =Oil Filled
S=Special
SS=Single Seal Oil Filled
VF=Vertical level control
X=Cord length variation

(*) Discharge designation is not used on these models.

(†) This model nomenclature does not apply to the following submersible Non-Clog pumps:

SE411, SE421, SE411HT, SE51, SE52, SE51HT, SE52HT & UT17.

Introduction

OUR ACCEPTANCE OF YOUR ORDER IS EXPRESSLY CONDITIONED ON THE GENERAL TERMS AND CONDITIONS SET FORTH BELOW AND ALL TERMS STATED ON THE FACE OF THIS FORM. THE CONTRACT SHALL NOT INCLUDE ANY DEVIATING OR ADDITIONAL TERMS UNLESS EXPRESSLY AGREED TO IN WRITING AND SIGNED BY AN OFFICER OF OUR COMPANY.

PRICES: All prices are subject to change without notice and all shipments will be invoiced at the price in effect at the time of shipment, except when otherwise agreed to in writing by our authorized representative. Published prices are for products of our standard design and construction and any item not covered by the most recent published price list must be referred to us for special pricing. Prices do not include freight. Weights shown in price lists are approximate shipping weights. The amount of any applicable present or future tax or other government charge upon the production, sale, shipment or use of goods ordered or sold is not in the price and will be added to billing unless you provide us with an appropriate exemption certificate.

QUOTATIONS: Prices quoted by us are valid for 30 days from date of quotation unless we have otherwise specified in writing. Clerical errors on quotations are subject to our correction and such errors will not be binding.

CANCELLATION AND REVISIONS: No purchase orders accepted and acknowledged by us may be cancelled or revised by you except with our prior written consent and upon payment of reasonable cancellation charges compensating us for all costs incurred in work done and material purchased. We reserve the right to determine what constitutes reasonable cancellation charges.

RETURN OF EQUIPMENT: No equipment shall be returned to us without first obtaining a written Returned Goods Authorization and shipping instructions from us. The returner must prepay the charges in full for transportation to our factory. Credit allowed for new, undamaged equipment of current standard design will be 80% of the invoiced price or current billing price, whichever is less. The minimum value of returned product is \$250 invoiced price or current billing price. Equipment which has been used, however slight, will not be accepted. Authorization will not be given for return of equipment, (1) which would, in our opinion, result in an excess in the amount of stock we normally carry, (2) not invoiced within the last 12 months, or (3) which is non-standard and manufactured specifically to a buyer's specifications. For non-standard equipment not of our manufacture, the only credit allowed will be such credit as may be allowed by the manufacturer of such equipment. Equipment must be returned within 30 days of the issuance of the Returned Goods Authorization. No item with a net value of less than \$35.00 will be authorized for return. Items not available for return are those that have a shelf life and hardware items. Unauthorized returns may be refused and/or returned freight collect.

CREDIT AND PAYMENT: Payment is due as noted on our invoice. Overdue accounts are subject to a service charge. All orders are subject to approval of our credit department and we may require full or partial payment in advance. Pro rata payments shall become due as shipments are made. If the shipments are delayed by you for any cause, payments shall become due from date on which we are prepared to make shipment and storage shall be at your risk and expense. If manufacture is delayed by you for any cause, a partial payment based upon the proportion of the order completed shall become due from the date on which we are notified of the delay.

SECURITY INTEREST: We shall have a lien on all goods sold as security for payment on the invoice price, and upon request you shall provide and execute a financing statement showing such lien.

DELIVERY: We will make reasonable effort to meet your delivery requirement provided you provide us, on a timely basis, all approvals, technical data, instructions and credit approval requirements needed for release of the shipment. However, all delivery and/or shipment dates are estimates only unless we have expressly guaranteed delivery of such dates in writing at your specific request. In no event shall we have any liability if delivery is delayed by strikes, labor disturbances, material shortages, plant calamities or disaster, acts of God, government actions, civil disturbance, the failure of any pre-supposed condition of the contract, withholding shipments due to credit clearance, or other interferences beyond our reasonable control, and the date of delivery shall be extended for a period of time equal to the time lost because of any such reason. Emergency Orders and Rush Orders: Contact the Sales Department for applicable handling fees.

SHIPPING: Unless you specify in writing and we acknowledge in writing, (A) goods will be boxed or crated as we may deem proper for protection against normal handling and for domestic shipment, (B) routing and manner of shipment will be at our discretion, and may be insured at your expense. An extra charge will be made for special handling. All shipments are F.O.B. point of manufacture. Delivery of goods to the initial carrier will constitute delivery to you and all goods will be shipped at your risk. A claim for loss or damage in transit must be entered with the carrier and prosecuted by you. Acceptance of material from a common carrier constitutes a waiver of any claims against us for delay, damage or loss.

GOVERNING LAW: It is understood and agreed that these Terms and Conditions of Sale shall be interpreted under and pursuant to the laws of the State of Ohio; you agree that any action at law or suit which is related to any contract of sale brought against us shall be filed in a federal or state court located in the State of Ohio.

Introduction

LIMITED WARRANTY: We warrant to our immediate customer and to the ultimate consumer that products of our manufacture will be free of defects in material and workmanship under normal use and service for the following time periods, when installed and maintained in accordance with our instructions.

Pump Products: One (1) year from date of installation or (24) twenty-four months from date of shipment, whichever occurs first. (Pump Products include pump ends only. Motors are warranted by their respective manufacturer. Submersible pump motors are covered under the standard CP&S one year warranty with the exception of those utilizing Reliance motors for which the Reliance motor warranty applies.) Cleaning Products: Twelve (12) months from date of installation or eighteen (18) months from date of shipment, whichever occurs first.

As used herein, "the ultimate consumer" is defined as the purchaser who first uses the product after its initial installation or, in the case of product designed for nonpermanent installation, the first owner who used the product. It is the purchaser's or any sub-vendee's obligation to make known to the ultimate consumer the terms and conditions of this warranty. This warranty gives you specific legal rights, and there may also be other rights which vary from state to state. In the event the product is covered by the Federal Consumer Product Warranties Law (1) the duration of any implied warranties associated with the product by virtue of said law is limited to the same duration as stated herein, (2) this warranty is a LIMITED WARRANTY, and (3) no claims of any nature whatsoever shall be made against us, until the ultimate consumer, his successor, or assigns, notifies us in writing of the defect, and delivers the product and/or defective part(s) freight prepaid to our factory or nearest authorized service station. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply. **THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF ANY AND ALL WARRANTIES WITH RESPECT TO ANY PRODUCT SHALL BE TO REPLACE OR REPAIR AT OUR ELECTION, F.O.B. POINT OF MANUFACTURE OR AUTHORIZED REPAIR STATION, SUCH PRODUCTS AND/OR PARTS AS PROVEN DEFECTIVE. THERE SHALL BE NO FURTHER LIABILITY, WHETHER BASED ON WARRANTY, NEGLIGENCE OR OTHERWISE.** Unless expressly stated otherwise, guarantees in the nature of performance specifications furnished in addition to the foregoing material and workmanship warranties on a product manufactured by us, if any, are subject to laboratory tests corrected for field performance. Any additional guarantees, in the nature of performance specifications must be in writing and such writing must be signed by our authorized representative. Due to inaccuracies in field testing if a conflict arises between the results of field testing conducted by or for user, and laboratory tests corrected for field performance, the latter shall control. Components or accessories supplied by us but manufactured by others are warranted only to the extent of and by the terms and conditions of the original manufacturer's warranty. **RECOMMENDATIONS FOR SPECIAL APPLICATIONS OR THOSE RESULTING FROM SYSTEMS ANALYSES AND EVALUATIONS WE CONDUCT WILL BE BASED ON OUR BEST AVAILABLE EXPERIENCE AND PUBLISHED INDUSTRY INFORMATION. SUCH RECOMMENDATIONS DO NOT CONSTITUTE A WARRANTY OF SATISFACTORY PERFORMANCE AND NO SUCH WARRANTY IS GIVEN.**

This warranty shall not apply when damage is caused by (a) improper installation, (b) improper voltage (c) lightning (d) sand or other abrasive material (e) scale or corrosion build-up due to excessive chemical content. Any modification of the original equipment will also void the warranty. We will not be responsible for loss, damage or labor cost due to interruption of service caused by defective parts. Neither will we accept charges incurred by others without our prior written approval.

This warranty is void if our inspection reveals the product was used in a manner inconsistent with normal industry practice and/or our specific recommendations. The purchaser is responsible for communication of all necessary information regarding the application and use of the product.

UNDER NO CIRCUMSTANCES WILL WE BE RESPONSIBLE FOR ANY OTHER DIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST INCOME, LABOR CHARGES, DELAYS IN PRODUCTION, IDLE PRODUCTION, WHICH DAMAGES ARE CAUSED BY ANY DEFECTS IN MATERIAL AND/OR WORKMANSHIP AND/OR DAMAGE OR DELAYS IN SHIPMENT. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No rights extended under this warranty shall be assigned to any other person, whether by operation of law or otherwise, without our prior written approval.

If any litigation is commenced between the parties hereto for the enforcement of any rights hereunder, the successful party in subject litigation shall be entitled to receive from the unsuccessful party all costs incurred in connection therewith, including a reasonable amount for attorney's fees.

YOUR ACCEPTANCE OF ANY GOODS SUPPLIED BY US, OR ON OUR BEHALF, SHALL, WITHOUT LIMITATION CONSTITUTE ACCEPTANCE OF ALL TERMS AND CONDITIONS STATED ABOVE.

Warranty and Service

Please Read This Before Installing Or Operating Pump. This information is provided for **SAFETY and to PREVENT EQUIPMENT PROBLEMS**. To help recognize this information, observe the following symbols:



IMPORTANT! Warns about hazards that can result in personal injury or indicates factors concerned with assembly, installation, operation, or maintenance which could result in damage to the machine or equipment if ignored.

CAUTION ! Warns about hazards that can or will cause minor personal injury or property damage if ignored. Used with symbols below.

WARNING ! Warns about hazards that can or will cause serious personal injury, death, or major property damage if ignored. Used with symbols below.



Hazardous fluids can cause fire or explosions, burns or death could result.



Extremely hot - Severe burns can occur on contact.



Biohazard can cause serious personal injury.



Hazardous fluids can cause hazardous pressure, eruptions or explosions could cause personal injury or property damage.



Rotating machinery Amputation or severe laceration can result.



Hazardous voltage can shock, burn or cause death.



Toxic Fumes - Breathing can cause nausea, fainting or death.



Eye protection required

Only qualified personnel should install, operate and repair pump. Any wiring of pumps should be performed by a qualified electrician.



WARNING ! - To reduce risk of electrical shock, pumps and control panels must be properly grounded in accordance with the National Electric Code (NEC) or the Canadian Electrical Code (CEC) and all applicable state, province, local codes and ordinances.



WARNING! - To reduce risk of electrical shock, always disconnect the pump from the power source before handling or servicing. Lock out power and tag.



WARNING! Operation against a closed discharge valve will cause premature bearing and seal failure on any pump, and on end suction and self priming pump the heat build may cause the generation of

steam with resulting dangerous pressures. It is recommended that a high case temperature switch or pressure relief valve be installed on the pump body.



CAUTION ! Never operate a pump with a plug-in type power cord without a ground fault circuit interrupter.



CAUTION! Pumps build up heat and pressure during operation-allow time for pumps to cool before handling or servicing.



WARNING! - DO NOT pump hazardous materials (flammable, caustic, etc.) unless the pump is specifically designed and designated to handle them.



Do not block or restrict discharge hose, as discharge hose may whip under pressure.



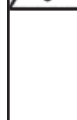
WARNING! - DO NOT wear loose clothing that may become entangled in the impeller or other moving parts.



WARNING! - Keep clear of suction and discharge openings. **DO NOT** insert fingers in pump with power connected.



Make sure lifting handles are securely fastened each time before lifting. **DO NOT** operate pump without safety devices in place. Always replace safety devices that have been removed during service or repair. Secure the pump in its operating position so it can not tip over, fall or slide.

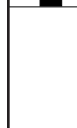


DO NOT exceed manufacturers recommendation for maximum performance, as this could cause the motor to overheat.

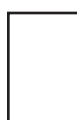
DO NOT remove cord and strain relief. Do not connect conduit to pump.



WARNING! Cable should be protected at all times to avoid punctures, cut, bruises and abrasions - inspect frequently. Never handle connected power cords with wet hands.



WARNING! To reduce risk of electrical shock, all wiring and junction connections should be made per the NEC or CEC and applicable state or province and local codes. Requirements may vary depending on usage and location.



WARNING! Submersible Pumps are not approved for use in swimming pools, recreational water installations, decorative fountains or any installation where human contact with the pumped fluid is common.



WARNING! Products Returned Must Be Cleaned, Sanitized, Or Decontaminated As Necessary Prior To Shipment, To Insure That Employees Will Not Be Exposed To Health Hazards In Handling Said Material. All Applicable Laws And Regulations Shall Apply.



Bronze/brass and bronze/brass fitted pumps may contain lead levels higher than considered safe for potable water systems. Lead is known to cause cancer and birth defects or other reproductive harm. Various government agencies have determined that leaded copper alloys should not be used in potable water applications. For non-leaded copper alloy materials of construction, please contact factory.



IMPORTANT! - Crane Pumps & Systems, Inc. is not responsible for losses, injury, or death resulting from a failure to observe these safety precautions, misuse or abuse of pumps or equipment.

Warranty and Service

Limited Warranty

We warrant to our immediate customer and to the ultimate consumer that products of our manufacture will be free of defects in material and workmanship under normal use and service for the following time periods, when installed and maintained in accordance with our instructions.

Pump Products: One (1) year from date of installation or (24) twenty-four months from date of shipment, whichever occurs first.

Cleaning Products: Twelve (12) months from date of installation or eighteen (18) months from date of shipment, whichever occurs first. As used herein, "the ultimate consumer" is defined as the purchaser who first uses the product after its initial installation or, in the case of product designed for non permanent installation, the first owner who used the product. It is the purchaser's or any sub-vendee's obligation to make known to the ultimate consumer the terms and conditions of this warranty. This warranty gives you specific legal rights, and there may also be other rights which vary from state to state. In the event the product is covered by the Federal Consumer Product Warranties Law (1) the duration of any implied warranties associated with the product by virtue of said law is limited to the same duration as stated herein, (2) this warranty is a LIMITED WARRANTY, and (3) no claims of any nature whatsoever shall be made against us, until the ultimate consumer, his successor, or assigns, notifies us in writing of the defect, and delivers the product and/or defective part(s) freight prepaid to our factory or nearest authorized service station. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply. **THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF ANY AND ALL WARRANTIES WITH RESPECT TO ANY PRODUCT SHALL BE TO REPLACE OR REPAIR AT OUR ELECTION, F.O.B. POINT OF MANUFACTURE OR AUTHORIZED REPAIR STATION, SUCH PRODUCTS AND/OR PARTS AS PROVEN DEFECTIVE. THERE SHALL BE NO FURTHER LIABILITY, WHETHER BASED ON WARRANTY, NEGLIGENCE OR OTHERWISE.** Unless expressly stated

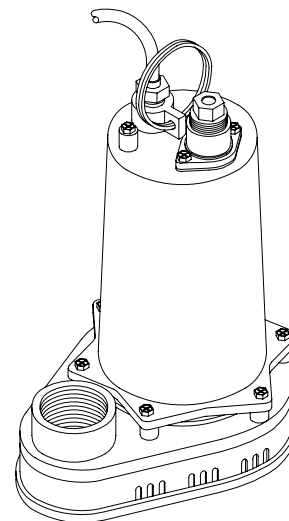
otherwise, guarantees in the nature of performance specifications furnished in addition to the foregoing material and workmanship warranties on a product manufactured by us, if any, are subject to laboratory tests corrected for field performance. Any additional guarantees, in the nature of performance specifications must be in writing and such writing must be signed by our authorized representative. Due to inaccuracies in field testing if a conflict arises between the results of field testing conducted by or for user, and laboratory tests corrected for field performance, the latter shall control. Components or accessories supplied by us but manufactured by others are warranted only to the extent of and by the terms and conditions of the original manufacturer's warranty. **RECOMMENDATIONS FOR SPECIAL APPLICATIONS OR THOSE RESULTING FROM SYSTEMS ANALYSES AND EVALUATIONS WE CONDUCT WILL BE BASED ON OUR BEST AVAILABLE EXPERIENCE AND PUBLISHED INDUSTRY INFORMATION. SUCH RECOMMENDATIONS DO NOT CONSTITUTE A WARRANTY OF SATISFACTORY PERFORMANCE AND NO SUCH WARRANTY IS GIVEN.**

This warranty shall not apply when damage is caused by (a) improper installation, (b) improper voltage (c) lightning (d) sand or other abrasive material (e) scale or corrosion build-up due to excessive chemical content. Any modification of the original equipment will also void the warranty. We will not be responsible for loss, damage or labor cost due to interruption of service caused by defective parts. Neither will we accept charges incurred by others without our prior written approval. This warranty is void if our inspection reveals the product was used in a manner inconsistent with normal industry practice and/or our specific recommendations. The purchaser is responsible for communication of all necessary information regarding the application and use of the product. **UNDER NO CIRCUMSTANCES WILL WE BE RESPONSIBLE FOR ANY OTHER DIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST INCOME, LABOR CHARGES, DELAYS IN PRODUCTION, IDLE PRODUCTION, WHICH DAMAGES ARE CAUSED BY ANY DEFECTS IN MATERIAL AND/OR WORKMANSHIP AND/OR DAMAGE OR DELAYS IN SHIPMENT. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

No rights extended under this warranty shall be assigned to any other person, whether by operation of law or otherwise, without our prior written approval.

Sump Pumps

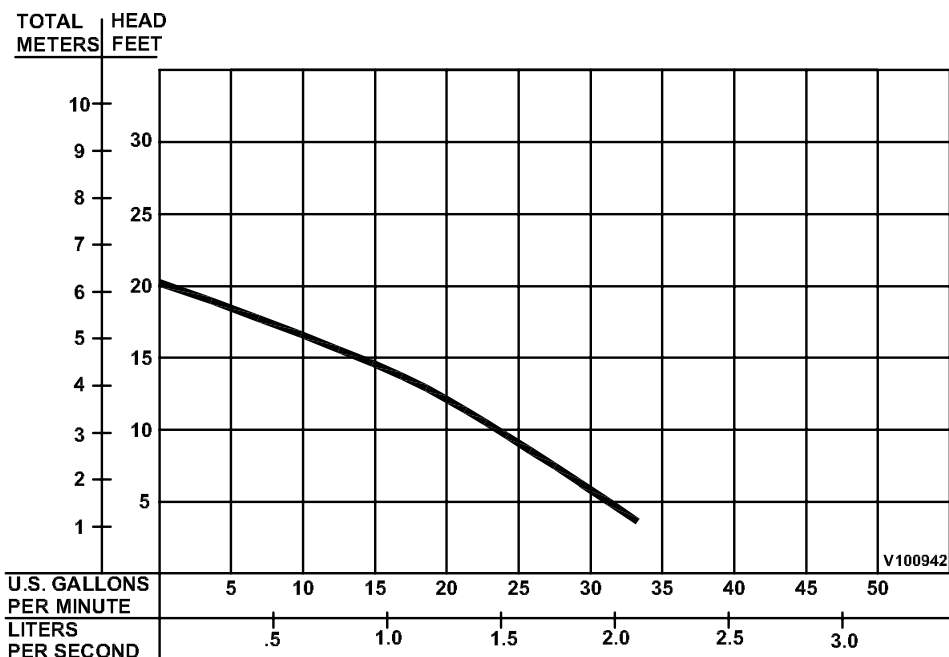
DISCHARGE 1½" NPT, Female, Vertical
LIQUID TEMPERATURE 77°F (25°C) Continuous
MOTOR HOUSING Cast Iron
PUMP BODY & STRAINER Thermoplastic
IMPELLER: Design Multi-Vane
Material Thermoplastic
SHAFT Carbon Steel
SQUARE RINGS Buna-N
HARDWARE 300 Series Stainless Steel
PAINT Air Dry Enamel
SEAL: Design Single Mechanical, Oil Filled
Material Carbon/Ceramic/Buna-N
CORD ENTRY 10 ft. (3m) Cord with plug and pressure Grommet for sealing and strain relief
LOWER BEARING: Design Sleeve
MOTOR: Design Oil Filled
Insulation Class B
LEVEL CONTROL:
 BP25A..... Wide Angle, Mechanical, 10 ft (3m) cord
 BP25VF..... Vertical Float, PVC, Snap Action, 10 ft (3m) cord.
MINIMUM SUMP DIA:
 BP25A..... 18" (457mm)
 BP25VF..... 11" (279mm)



Series: BP25A & BP25VF, 1/4HP, 3450RPM, 60Hz

c **SP**® US
 CSA 108
 UL 778
 LR16567

DESCRIPTION:
 GENERAL PURPOSE PUMP FOR RESIDENTIAL AND
 LIGHT INDUSTRIAL SUMP APPLICATIONS

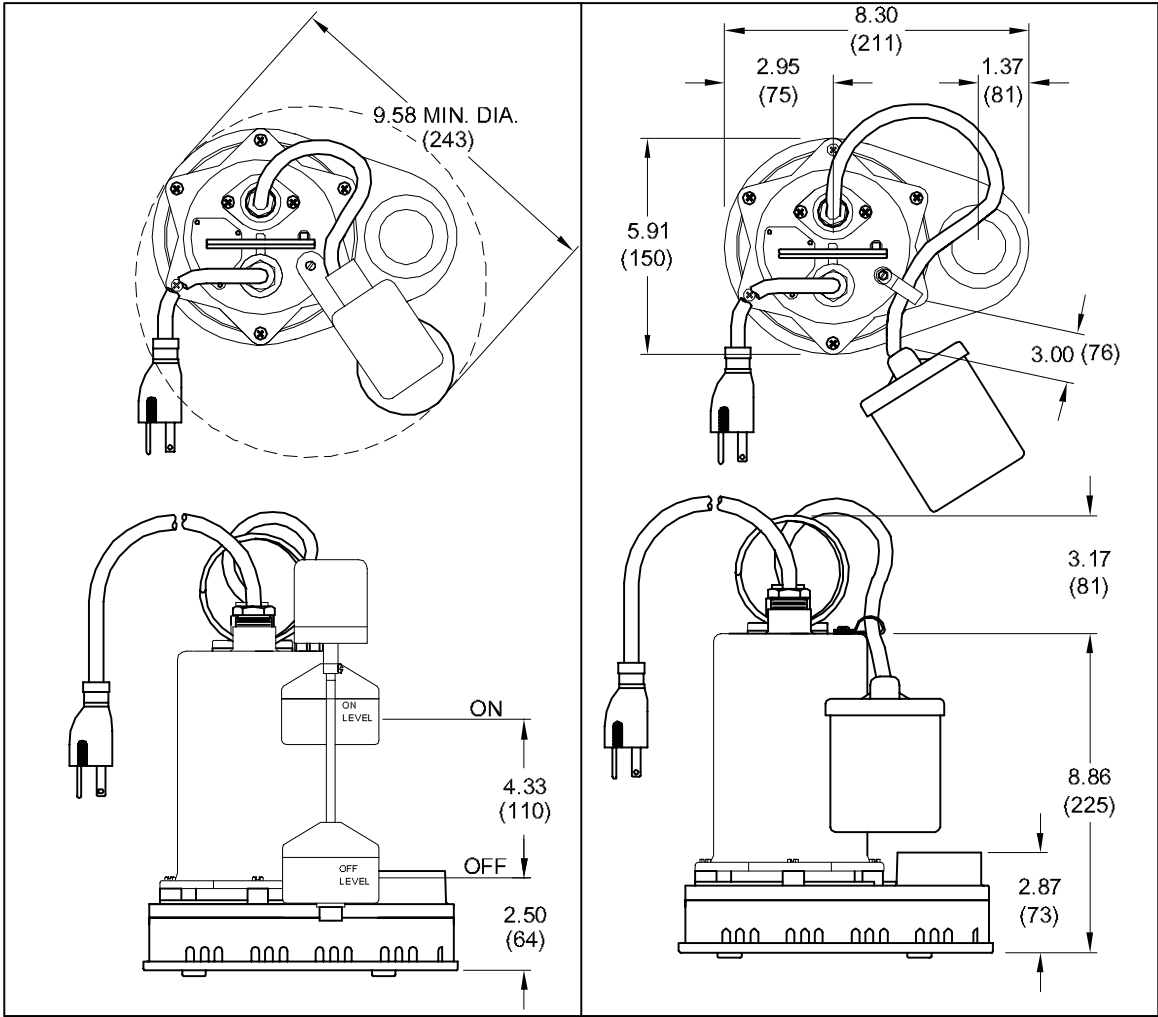


Testing is performed with
 water specific gravity of 1.0
 @ 68°F (20°C), other fluids
 may vary performance

Series **BP25A & BP25VF**

1/4" Spherical Solids Handling
Manual & Automatic - Submersible

Sump Pumps



Model: BP25VF

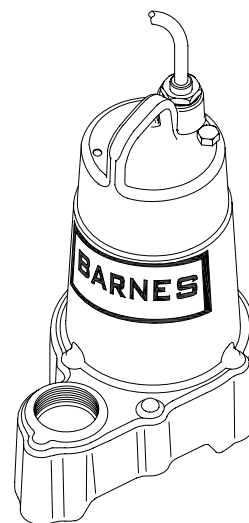
Model: BP25A

MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
BP25A	100943	1/4	115/1	60	3450	F	7.0	10 ft. (3m)	16/3	SJT
BP25VF	100944	1/4	115/1	60	3450	F	7.0	10 ft. (3m)	16/3	SJT

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP BODY & STRAINER	Thermoplastic
IMPELLER: <i>Design</i>	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
<i>Material</i>	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Type 21
<i>Material</i>	Silicon Carbide/Silicon Carbide/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	10 ft. (3m) or 20 ft. (6m) Cord with plug and Pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	Oil Filled
<i>Insulation</i>	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL:	
SP33	None
SP33A.....	Wide Angle, Mechanical, 10 ft (3m) cord or 20 ft (6m) cord
SP33VF	Vertical Float, PVC, Snap Action, 10 ft (3m) cord or 20 ft. (6m) cord
SP33D.....	Diaphragm switch, pressure operated, Snap Action, normally open, 10 Ft. (3m) cord
MINIMUM SUMP DIA:	
SP33A.....	18" (457mm)
SP33, SP33VF	
SP33D.....	11" (279mm)



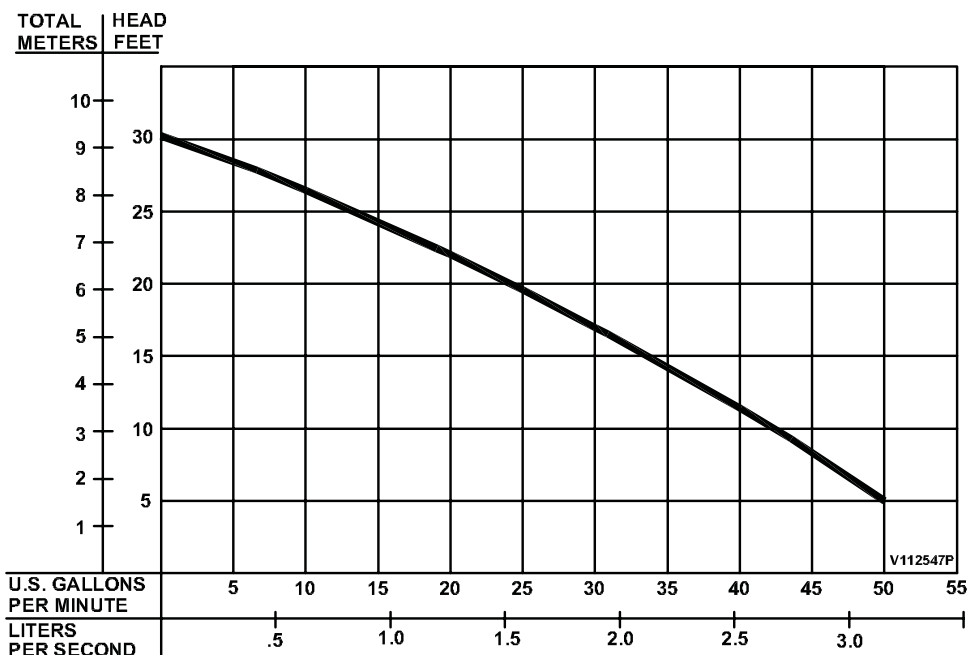
Series: SP33, 1/3HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS



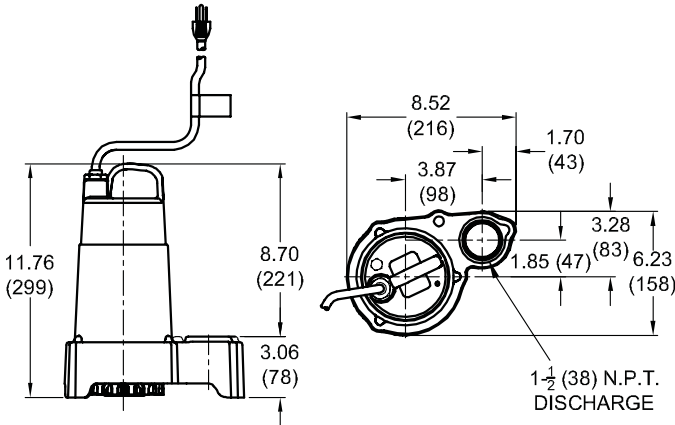
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP33

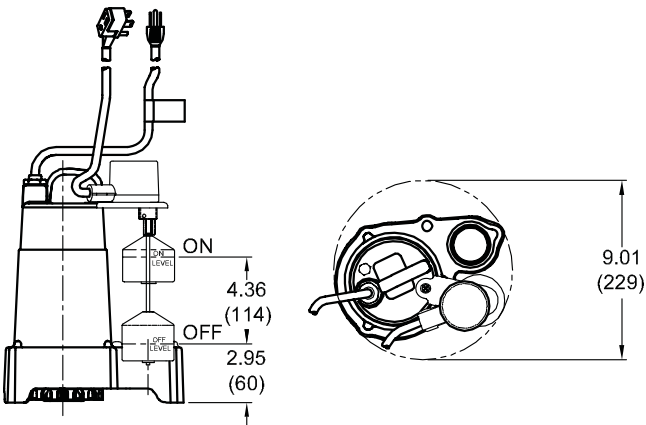
1/2" Spherical Solids Handling
Manual & Automatic, Submersible Sump /Effluent

Sump Pumps

Model: SP33

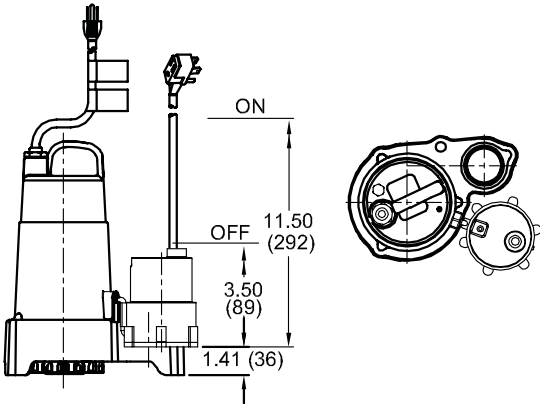


Model: SP33VF

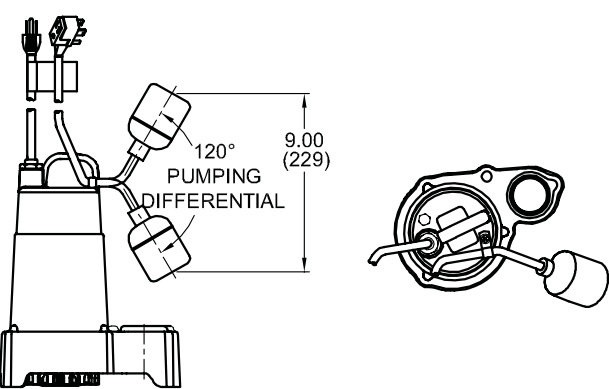


inches
(mm)

Model: SP33D



Model: SP33A



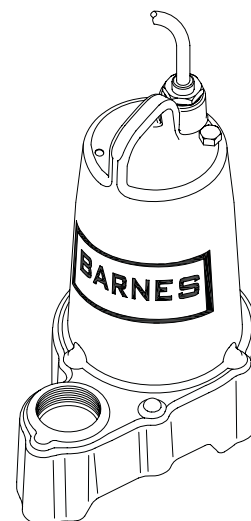
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP33	112547	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW
SP33X	112548	1/3	120/1	60	3450	B	5.8	20 ft. (6m)	14/3	SJTOW
SP33A	112549	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW
SP33AX	112550	1/3	120/1	60	3450	B	5.8	20 ft. (6m)	14/3	SJTOW
SP33VF	112551	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW
SP33VFX	112552	1/3	120/1	60	3450	B	5.8	20 ft. (6m)	14/3	SJTOW
SP33D	118371	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Sump Pumps

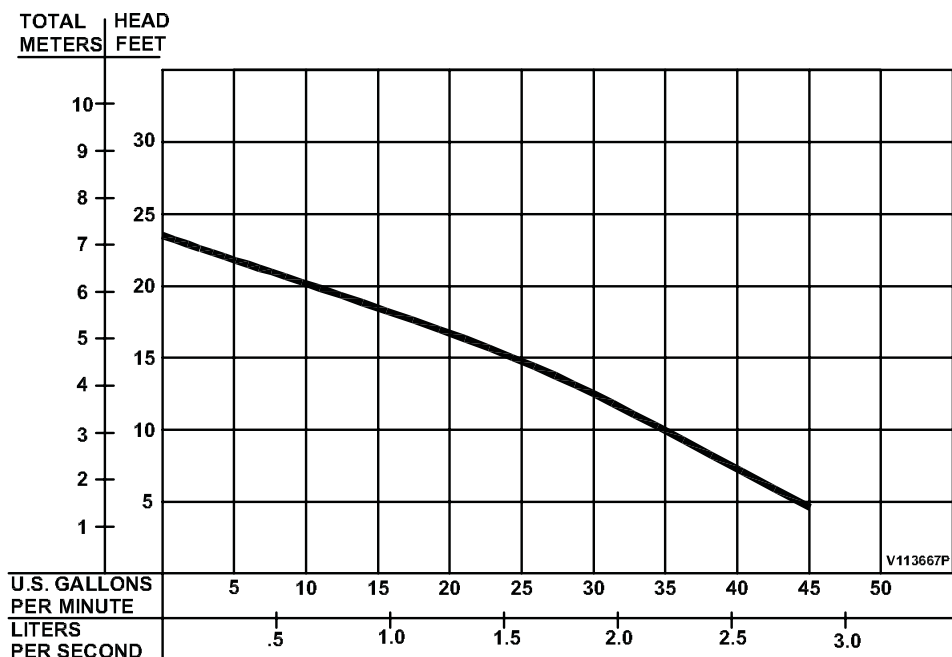
DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	185°F (85°C) Continuous, Fully Submerged
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Stainless
IMPELLER: <i>Design</i>	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
<i>Material</i>	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Type 21
<i>Material</i>	Silicon Carbide/Silicon Carbide/Buna-N
CORD ENTRY	20 ft. (6m) Cord with plug and Pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	Oil Filled
<i>Insulation</i>	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
MINIMUM SUMP DIA:	
SP33HT.....	12" (305mm)



Series: SP33HTX
1/3HP, 3450RPM, 60Hz

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS

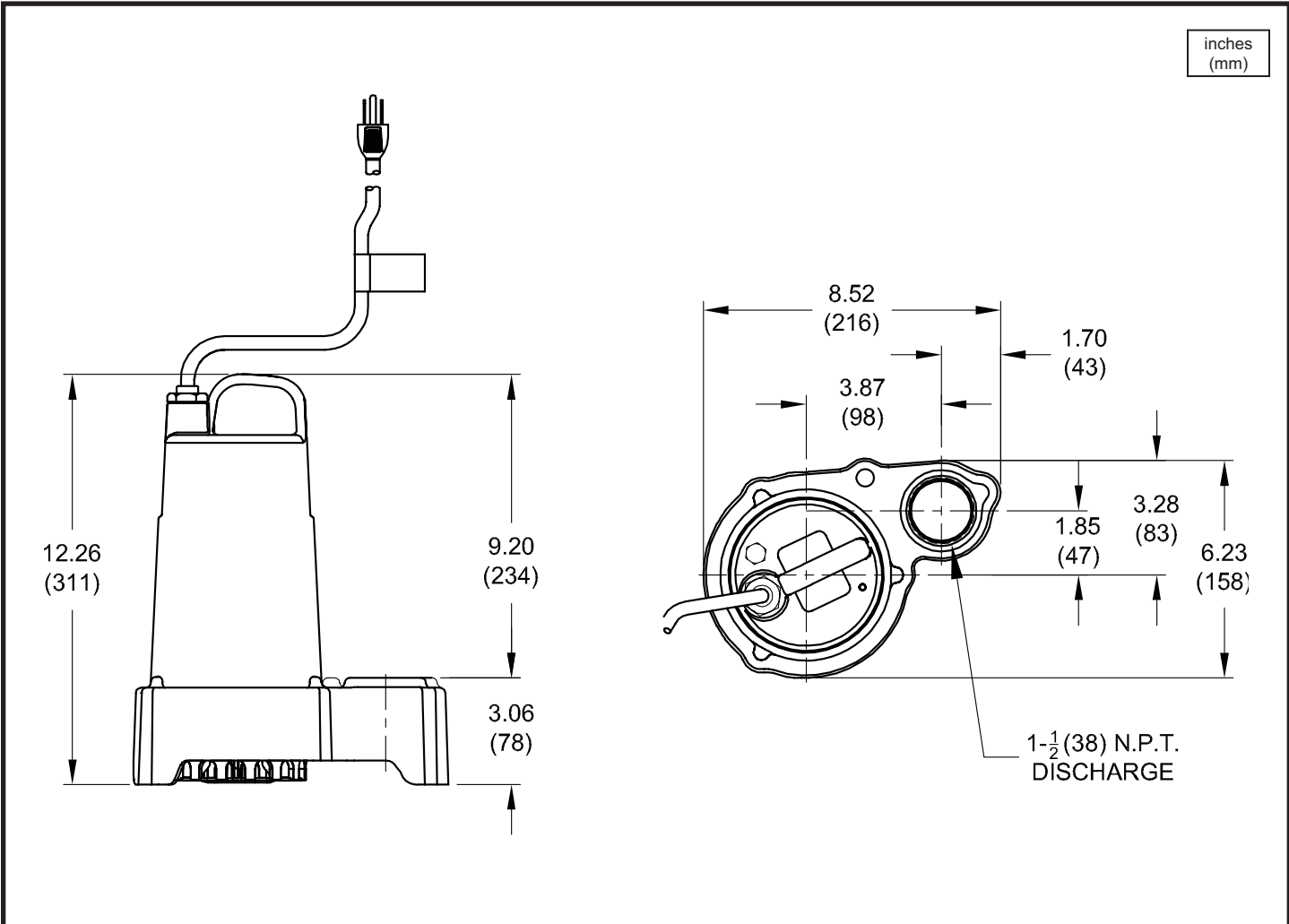


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP33HTX

High Temperature - 1/2" Spherical Solids Handling
Manual & Automatic, Submersible Sump /Effluent

Sump Pumps



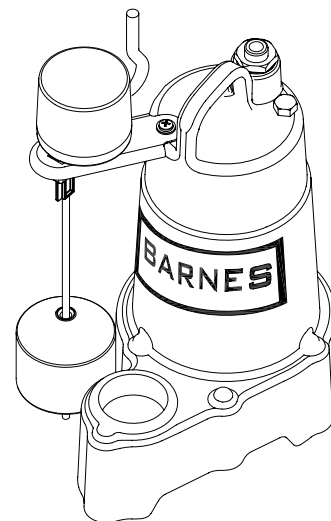
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP33HTX	113667	1/3	120/1	60	3450	B	4.1	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 4.) MUST USE A **HIGH TEMPERATURE** WIDE ANGLE LEVEL CONTROL IN HIGH TEMPERATURE APPLICATIONS.

Sump Pumps

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Thermoplastic
IMPELLER: <i>Design</i>	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
<i>Material</i>	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Type 21
<i>Material</i>	Silicon Carbide/Silicon Carbide/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	10 ft. (3m) or 20 ft. (6m) Cord with plug and Pressure grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	Oil Filled
<i>Insulation</i>	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	Vertical float, PVC, snap action, 10 ft (3m) or 20 ft. (6m) cord and integrated battery operated alarm (P/N: 112915) with 8 ft. (2.4m) cord. (See Section D page 9A for Alarm)
MINIMUM SUMP DIA	12" (305mm)



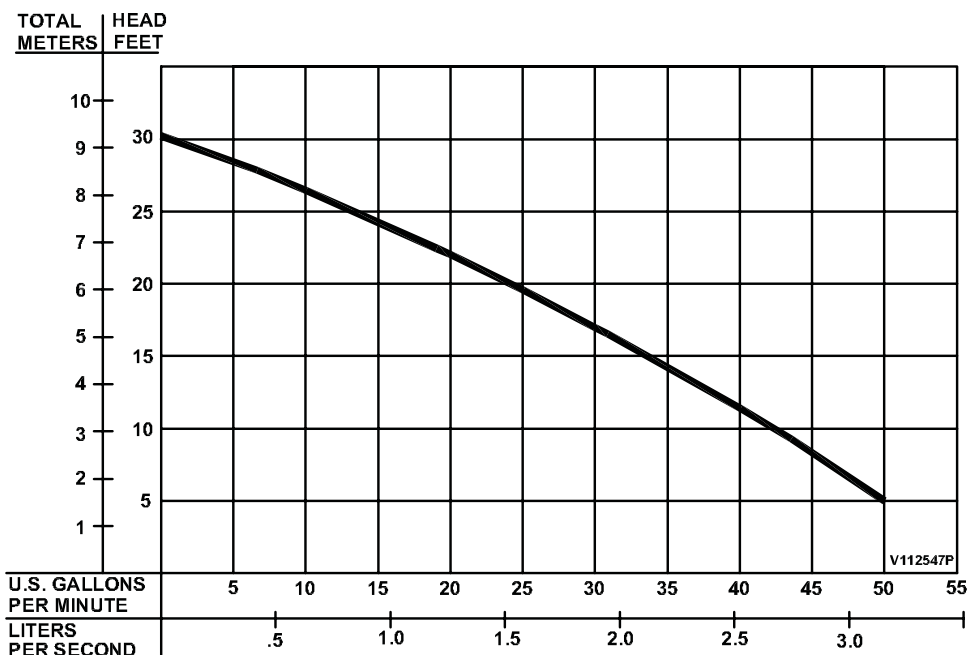
Series: SP33VFAL, 1/3HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS

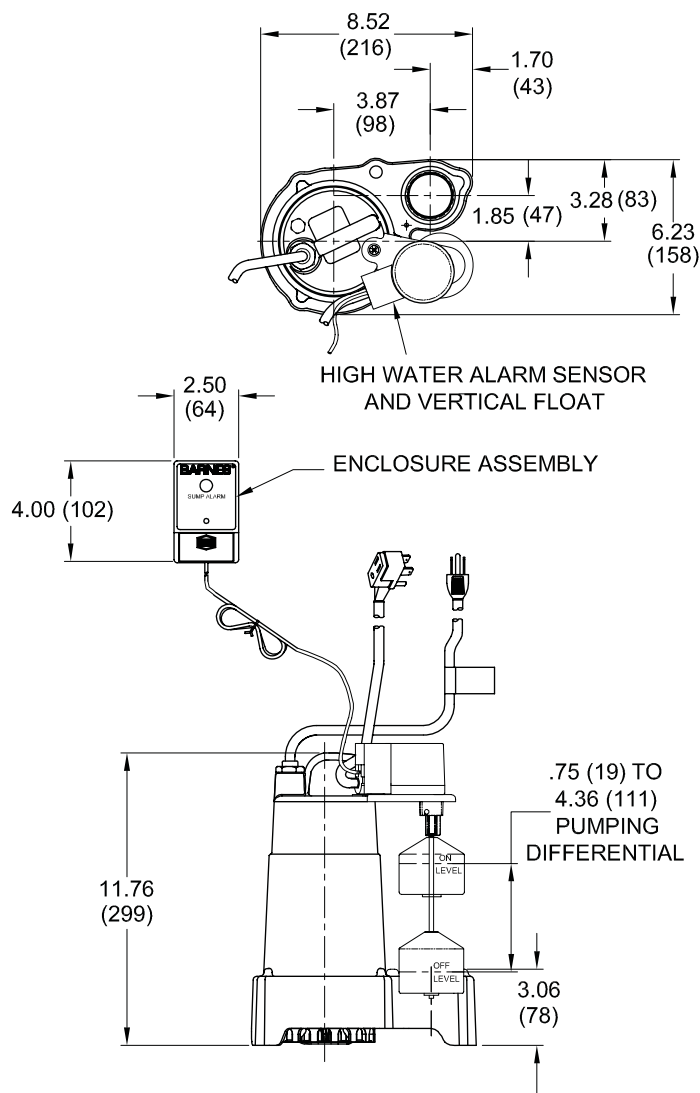


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Automatic w/Alarm, Submersible Sump /Effluent

www.cranepumps.com

Sump Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP33VFAL	112914	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW

4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

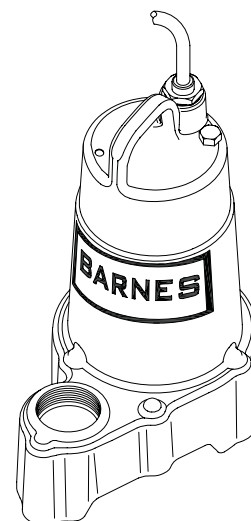
SECTION A
PAGE 8
DATE 4/04

A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Thermoplastic
IMPELLER: <i>Design</i>	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
<i>Material</i>	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Type 21
<i>Material</i>	Silicon Carbide/Silicon Carbide/Buna-N
CORD ENTRY	20 ft. (6m) Cord with plug and pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	Oil Filled
<i>Insulation</i>	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
SP50X.....	None
SP50AX.....	Wide angle, Mechanical, 20 ft. (6m) cord
SP50VFX	Vertical float, PVC, snap action, 20 ft (6m) cord
MINIMUM SUMP DIA:	
SP50AX.....	18" (457mm)
SP50X & SP50VXF	12" (305mm)



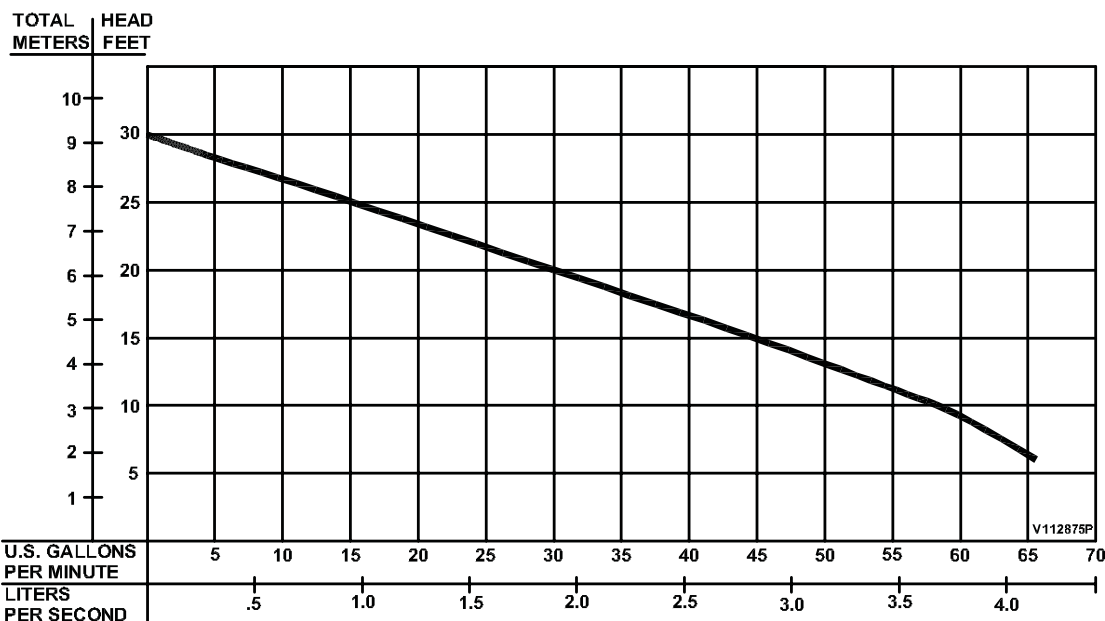
Series: SP50 1/2HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS

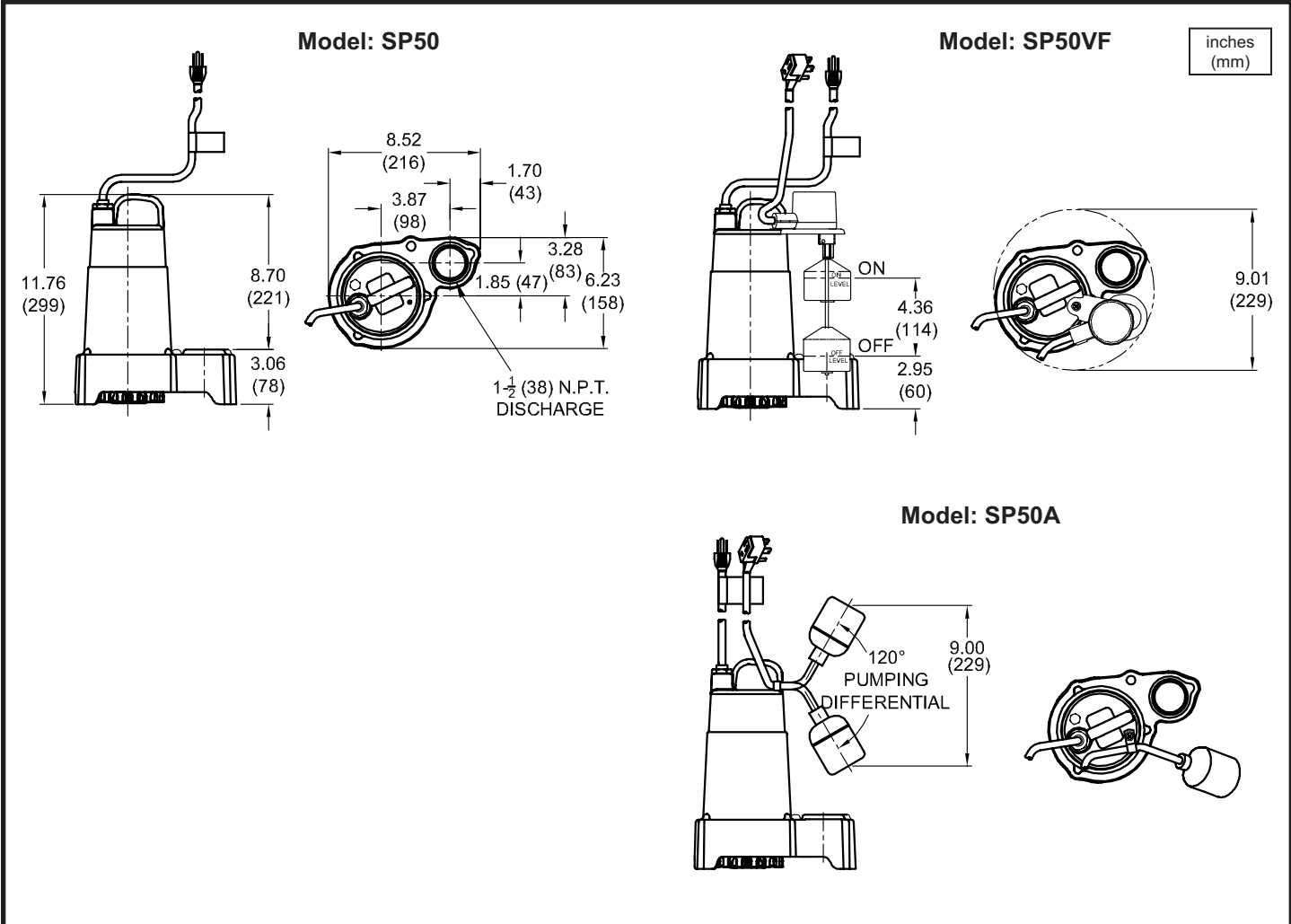


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP50

1/2" Spherical Solids Handling
Manual & Automatic, Submersible Sump /Effluent

Sump Pumps

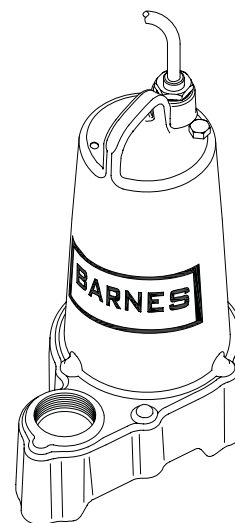


MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP50X	112875	1/2	120/1	60	3450	A	6.8	20 ft. (6m)	14/3	SJTOW
SP50AX	112877	1/2	120/1	60	3450	A	6.8	20 ft. (6m)	14/3	SJTOW
SP50VFX	112879	1/2	120/1	60	3450	A	6.8	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Thermoplastic
IMPELLER: <i>Design</i>	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
<i>Material</i>	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Type 21
<i>Material</i>	Silicon Carbide/Silicon Carbide/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	20 ft. (6m) Cord with plug and pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	Oil Filled
<i>Insulation</i>	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
SP75X.....	None
SP75AX.....	Wide angle, Mechanical, 20 ft. (6m) cord
SP75VFX	Vertical float, PVC, snap action, 20 ft. (6m) cord
MINIMUM SUMP DIA:	
SP75AX.....	18" (457mm)
SP75X & SP75VXF	12" (305mm)



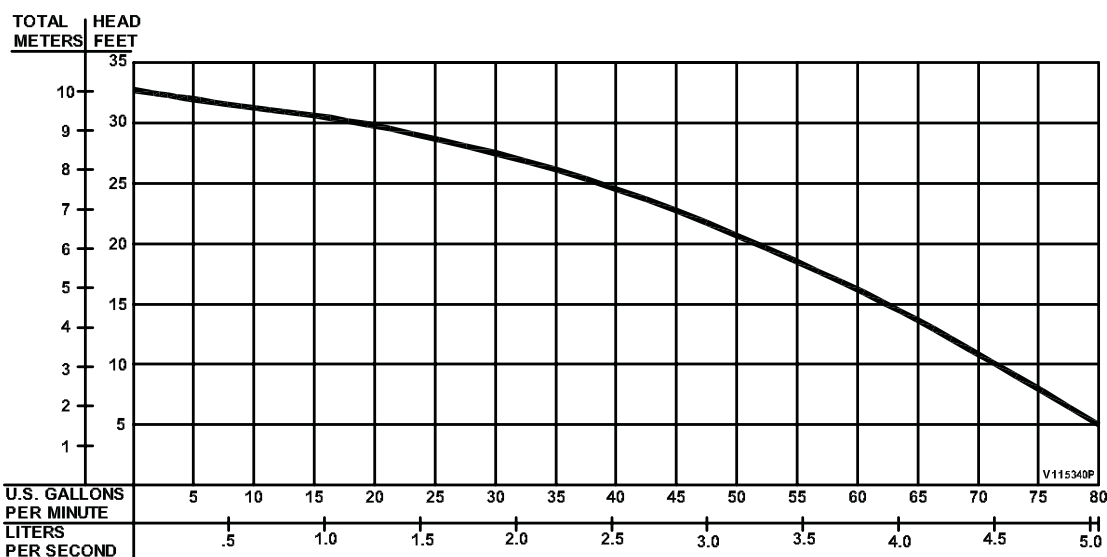
Series: SP75 3/4HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS

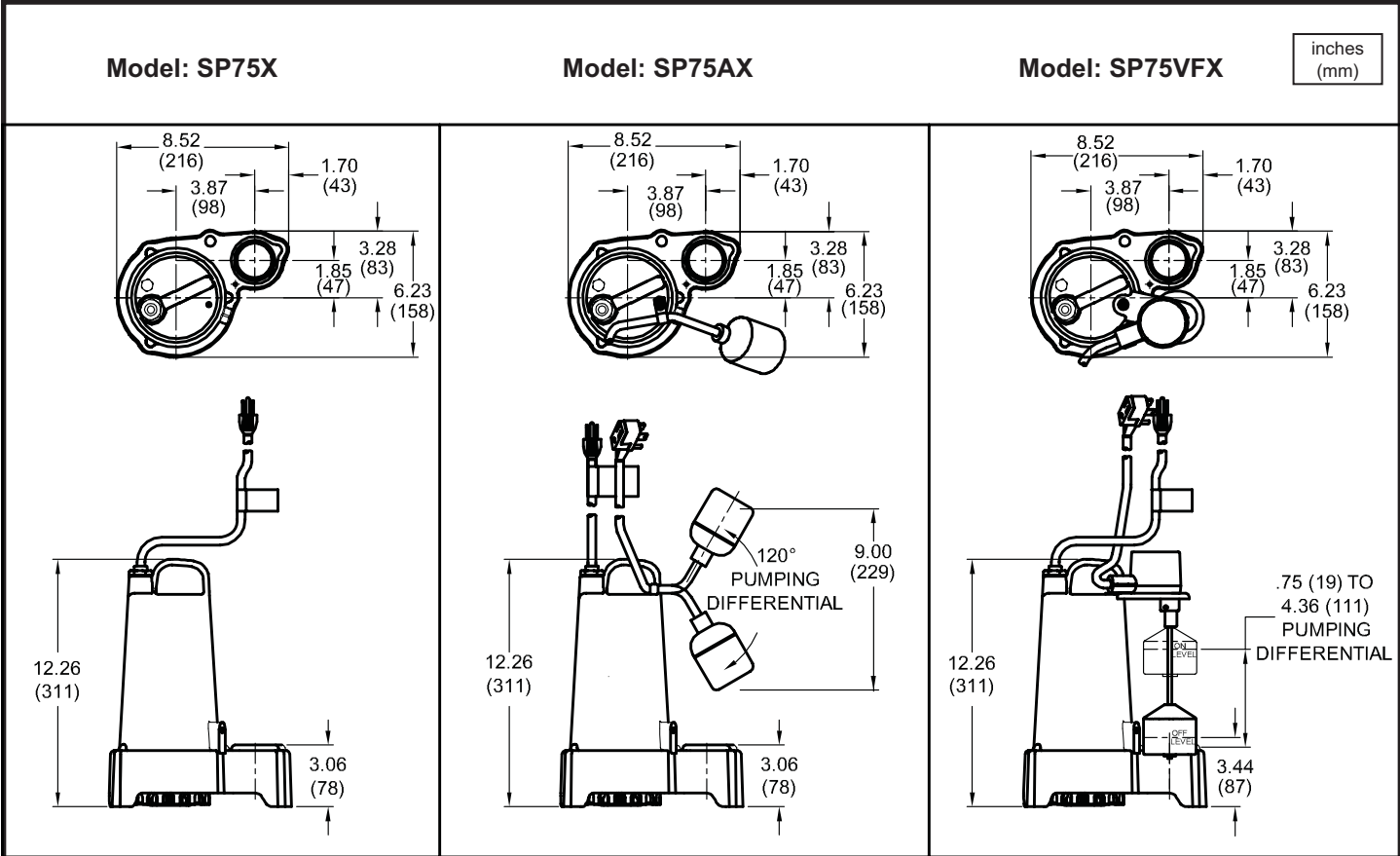


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP75X

1/2" Spherical Solids Handling
Manual & Automatic, Submersible Sump /Effluent

Sump Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP75X	115368	3/4	120/1	60	3450	H	9.8	20 ft. (6m)	14/3	SJTOW
SP75AX	115369	3/4	120/1	60	3450	H	9.8	20 ft. (6m)	14/3	SJTOW
SP75VFX	115370	3/4	120/1	60	3450	H	9.8	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

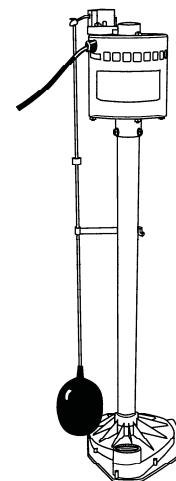
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Sump Pumps

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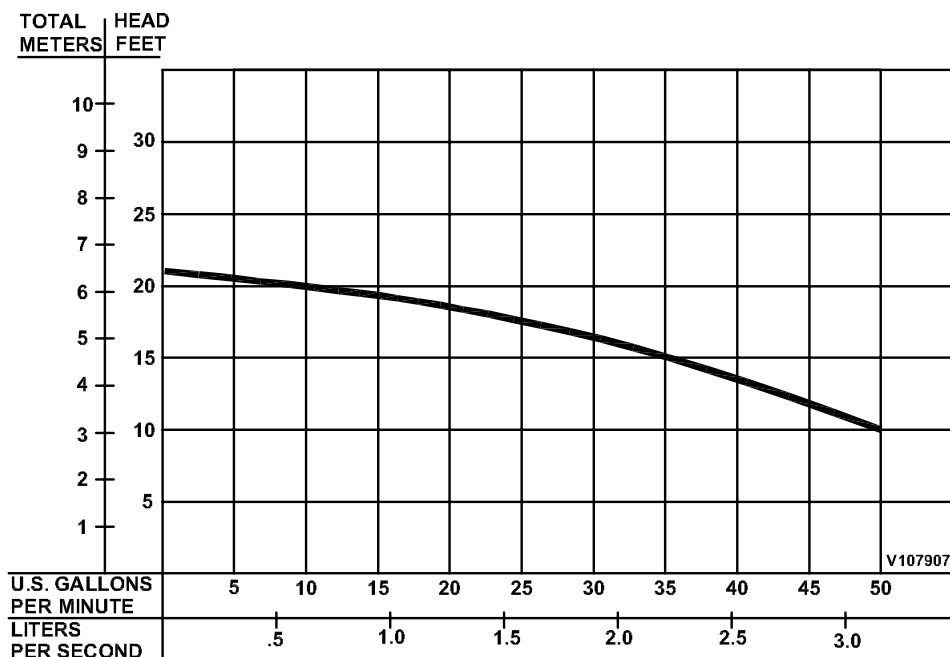
Sump Pumps

DISCHARGE 1¼" NPT, Female, Vertical
LIQUID TEMPERATURE 130°F (54°C) Continuous
BASE Polypropylene
COLUMN Polypropylene
FLOAT Polypropylene
FLOAT ROD Metal
IMPELLER: *Design* 2 Vane, Open
 Material Molded w/stainless steel insert
PUMP SHAFT Carbon Steel
HARDWARE Stainless Steel
CORD ENTRY 8 ft. (2m) cord with plug
MOTOR - UPPER BEARING Sleeve
MOTOR - LOWER BEARING Single Row, Ball
MOTOR: *Design* NEMA L Torque curve, Air filled
 Insulation Class B
MINIMUM SUMP DIA..... 12" (305mm)



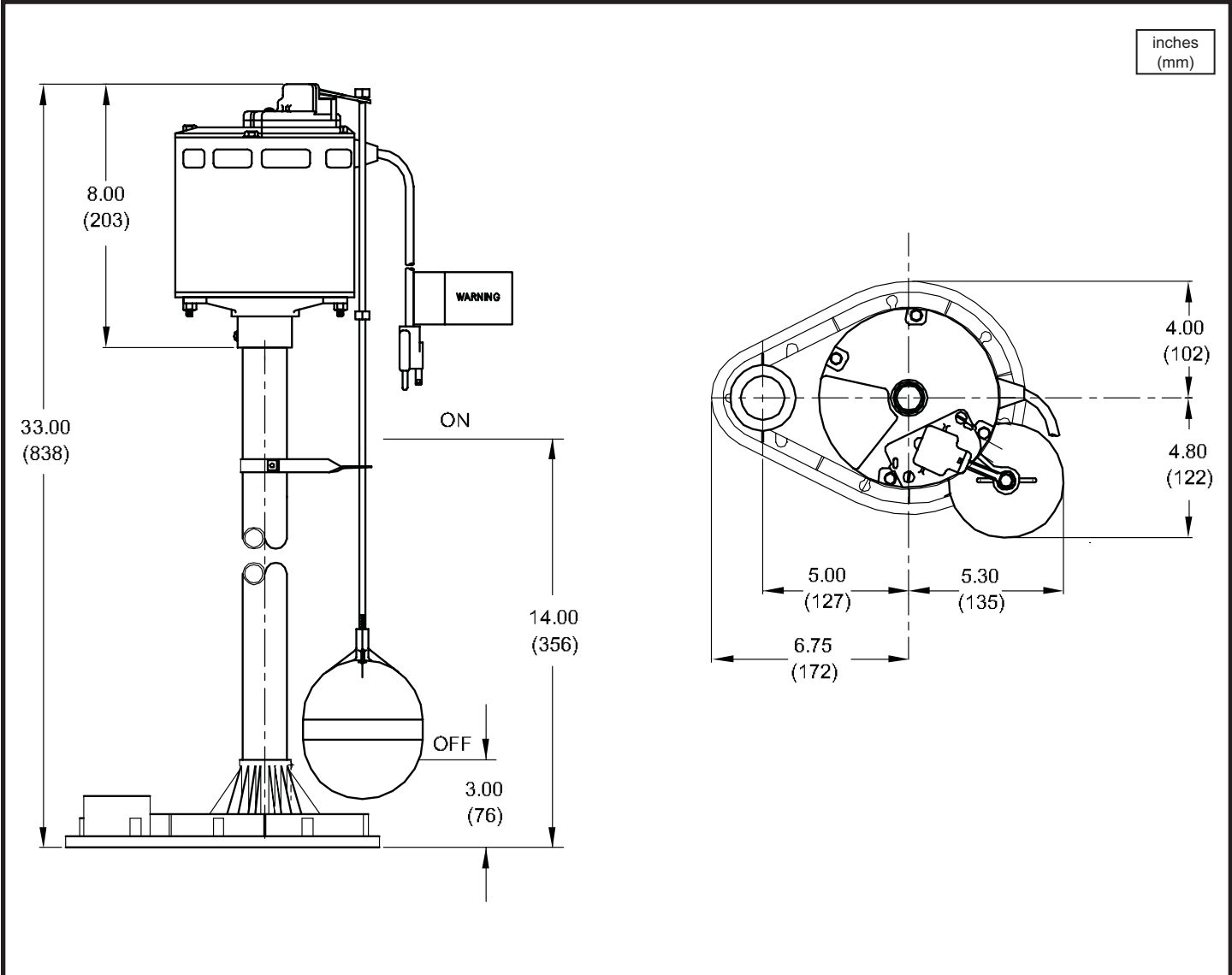
Series: 62P
1/3HP, 1725RPM, 60Hz

DESCRIPTION:
GENERAL PURPOSE PUMP FOR RESIDENTIAL AND
LIGHT INDUSTRIAL SUMP APPLICATIONS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Sump Pumps



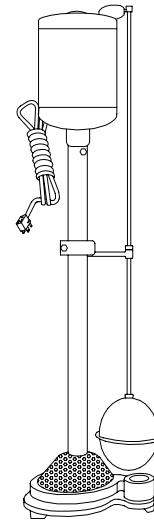
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS
62P	107907	1/3	120/1	60	1725	M	4.0	32.0

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Sump Pumps

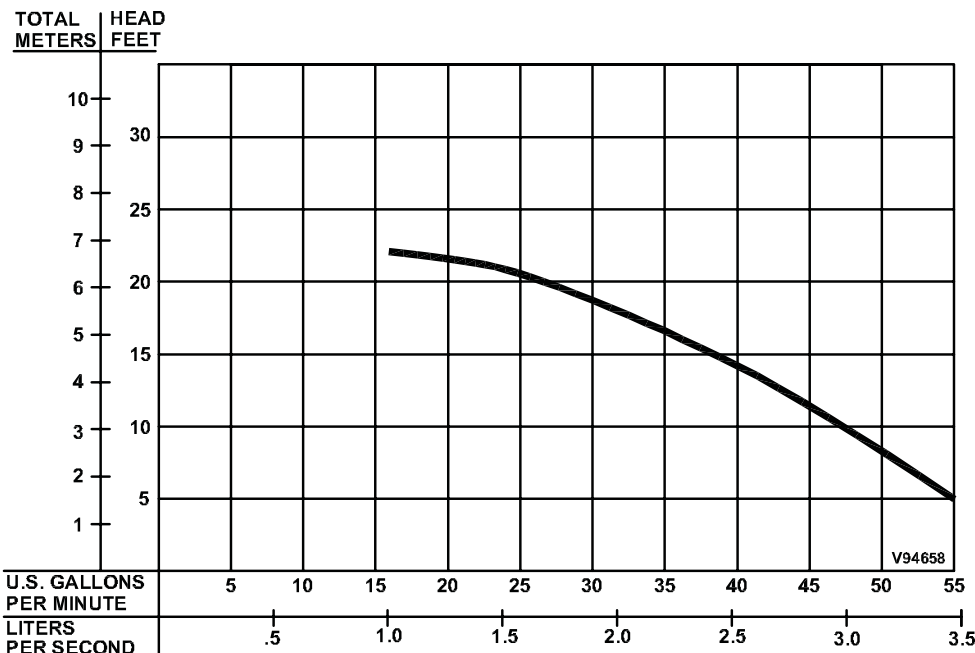
DISCHARGE	1¼" NPT, Female, Vertical
LIQUID TEMPERATURE	150°F (66°C) Continuous
BASE	Bronze
SCREEN	Brass
VOLUTE	Bronze
COLUMN	Bronze
FLOAT	Copper
FLOAT ROD	Brass, with adjustable stops
IMPELLER: Design	3 Vane, Open. Dynamically Balanced
.....	ISO G6.3
<i>Material</i>	Red Bronze
PUMP SHAFT	Stainless Steel
HARDWARE	Stainless Steel
CORD ENTRY	8 ft. (2m) cord with plug
MOTOR - UPPER BEARING	Sleeve
MOTOR - LOWER BEARING	Single Row, Ball
MOTOR: Design	NEMA L Torque curve, Air filled
<i>Insulation</i>	Class B
SINGLE PHASE	115 Volt, includes overload protection in motor



Series: 92B
1/3HP, 1750RPM, 60Hz

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS

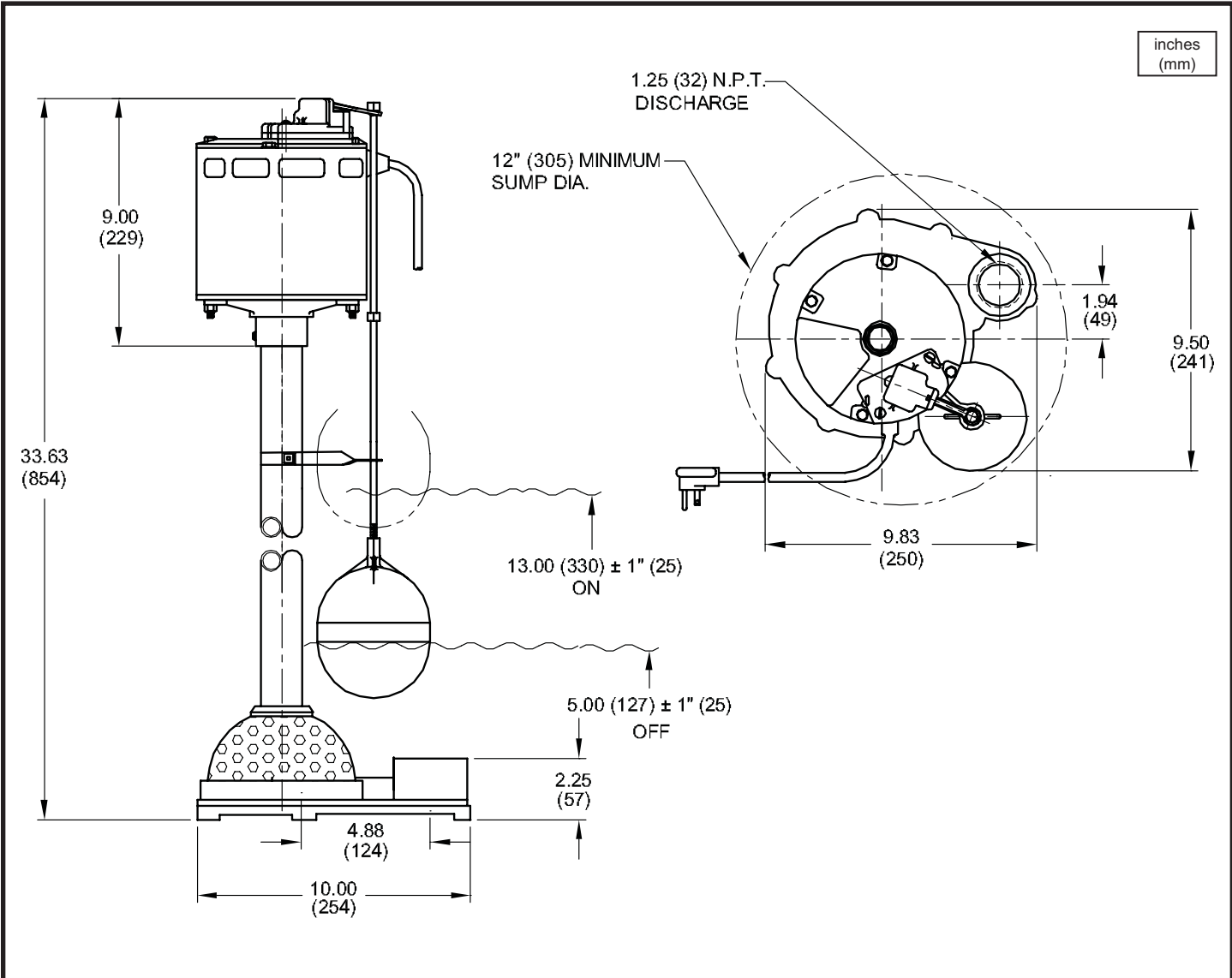


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 92B

Non-Submersible
Bronze

Sump Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS
92B	094659	1/3	115/1	60	1750	N	5.8	29.0

IMPORTANT !

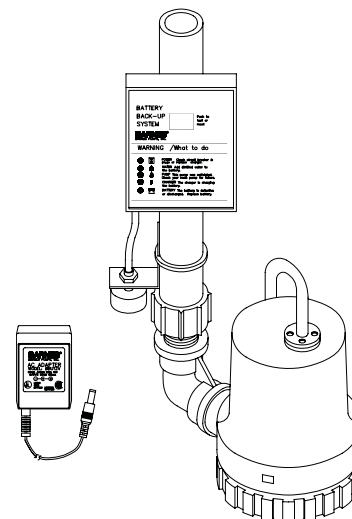
- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

DISCHARGE 1¼" NPT, Female, Vertical
LIQUID TEMPERATURE 150°F (66°C) Continuous
PUMP HOUSING Non-corrosive, may be used in fresh or salt water (resulting from water softener residue).
MOTOR Totally submersible, water cooled for longer life

The BUS can provide added protection for your home when installed. With the battery backup sump pump system your pumping power is never interrupted. The BUS switches automatically to battery power when the power fails, and it pumps along with your primary pump when there is more water coming into your sump than your main pump can handle. The BUS recharges automatically when power is restored and monitors battery and power conditions constantly. It will also detect irregularities, sounds an alarm and pinpoints problems and solutions on the control panel.

The alarm will sound to these potential problems;

- Battery needs water
- Battery is old and needs to be replaced
- Battery is discharge
- Battery is defective
- Power plug is out of wall
- Power is out
- Charger needs to be replaced
- Pump has been activated



Series: BUS Battery Backup

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS

Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

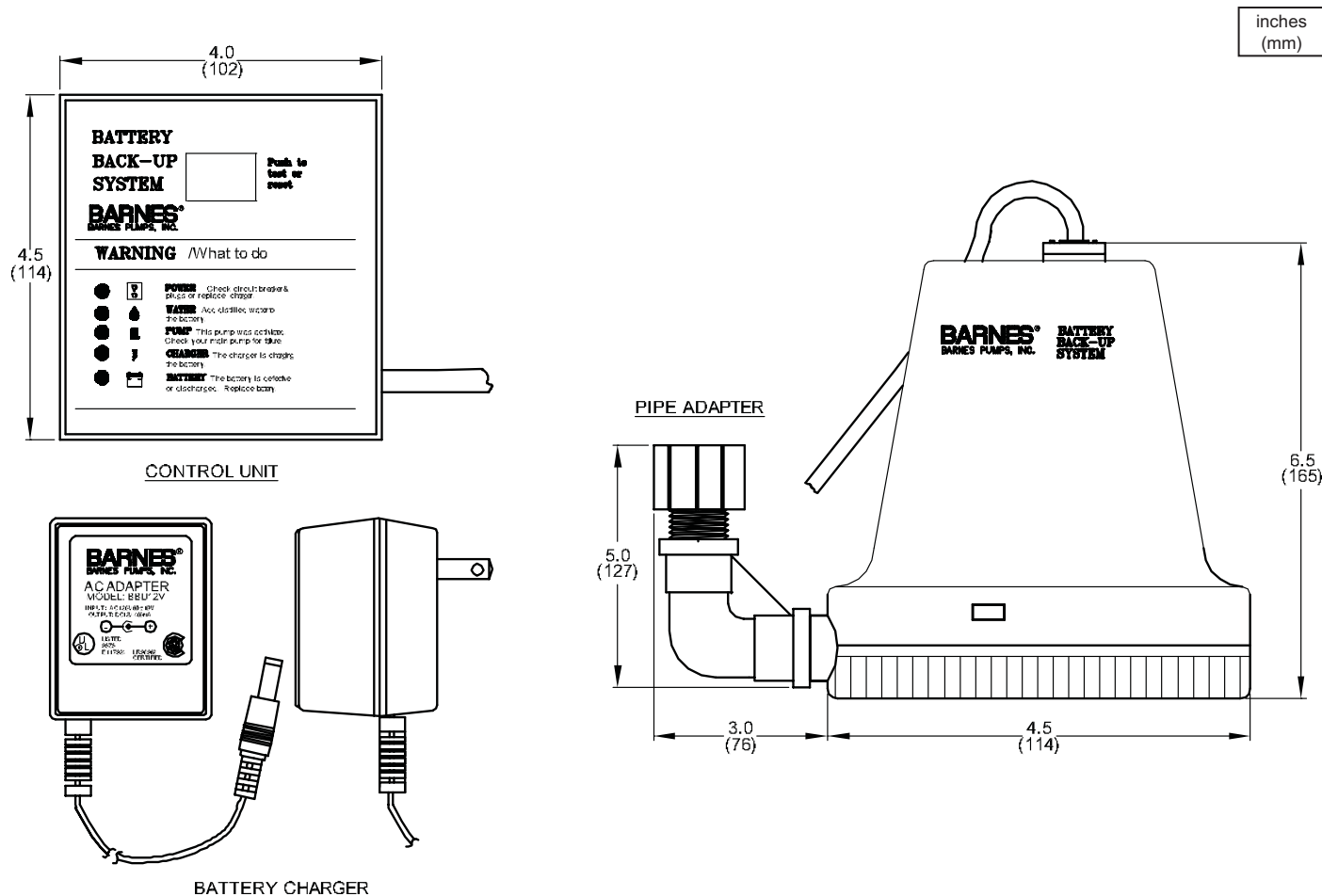
Battery Backup Submersible

BARNES®

Professional Plumbing

www.cranepumps.com

Sump Pumps



MODEL NUMBER	BUS
PART NUMBER	100940
PUMPING CAPACITY	1000 GPH @ 10 feet
POWER DRAW: NOTE: The lower the AMP draw, the longer the pump will run on the battery.	6 Amps @ 12 Volts
CHARGER STRENGTH: NOTE: The higher the AMPS, the faster the charger will recharge the battery.	0.4 Amps
Approx. time to recharge a fully discharged battery.	48 Hours
Approx. continuous pumping with recommended battery	6 - 12 Hours
A 12 Volt Deep Cycle Marine Battery is recommended (Not Supplied)	

IMPORTANT !

- 1.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

SECTION	A
PAGE	20
DATE	4/04

CRANE

A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Sump Pumps

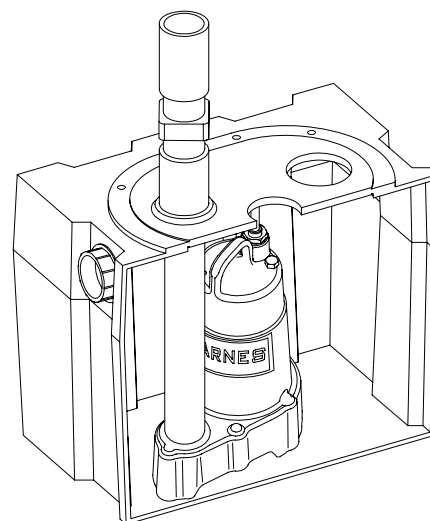
The Laundry Tray system is designed for above the floor "grey water" sump applications. Typical uses include laundry trays, wet bars, dehumidifiers, water softeners and air conditioner condensation. Manufactured with high quality polyethylene resins and tested to industry standards. The pre-assembled system comes complete with pump, tank, 1½" PVC discharge pipe and check valve (valve supplied loose).

FEATURES:

- All components are durable, corrosion-resistant polyethylene.
- Box and cover have a matching textured finish.
- 1-1/2" threaded "spin weld" insert for the inlet.
- Grommet discharge, vent and cord seals.
- Accommodates 1-1/2" discharge piping.
- Stainless steel bolts and encapsulated aluminum inserts
- Large 11 gallon capacity.
- 1/8" thick black closed cell foam gasket.
- Size: 12" x 16" x 14"
- Wall thickness 3/16"
- Package weight 365 lbs. (Includes pump)

MODEL	PART NO.	PUMP MODEL	PART NO.
SP33LT	112900	SP33VF	112551

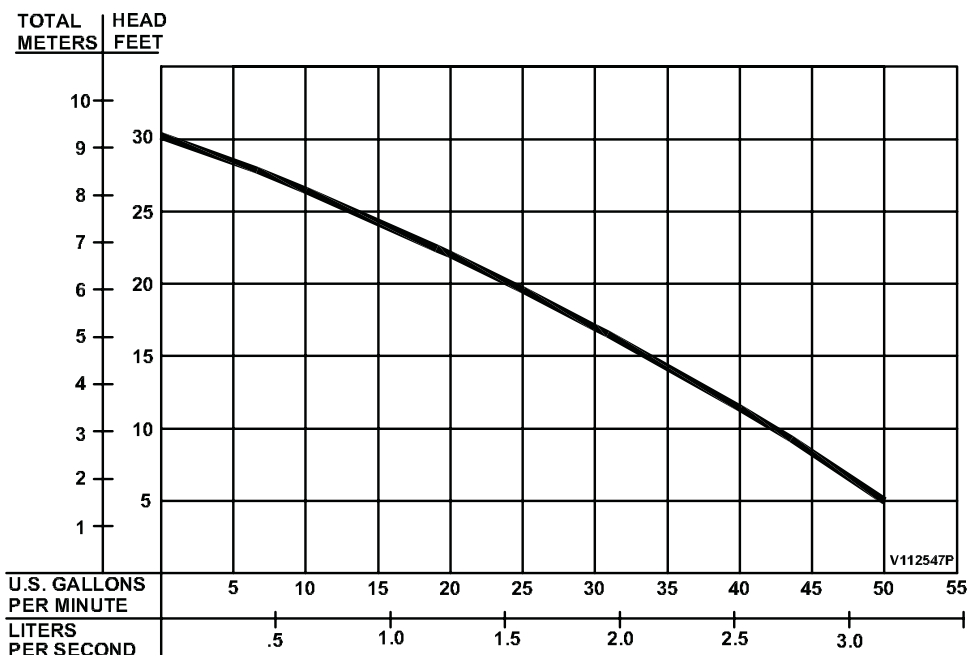
See Section A pages 1 and 2 for additional pump data.
See Section E for basin only.



Series: SP33LT, 60Hz
P/N: 112900

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

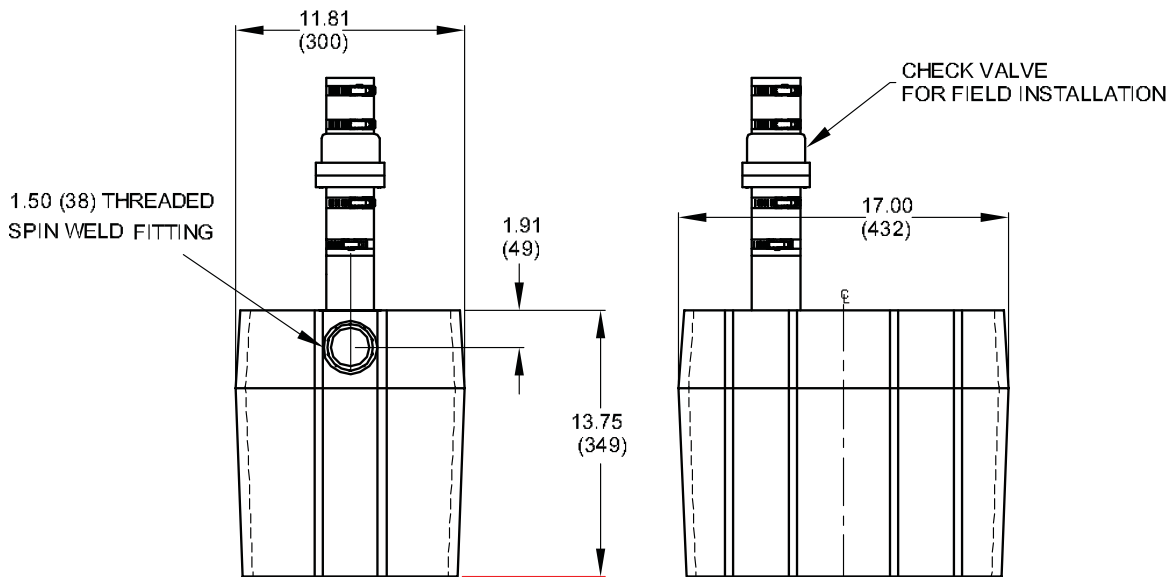
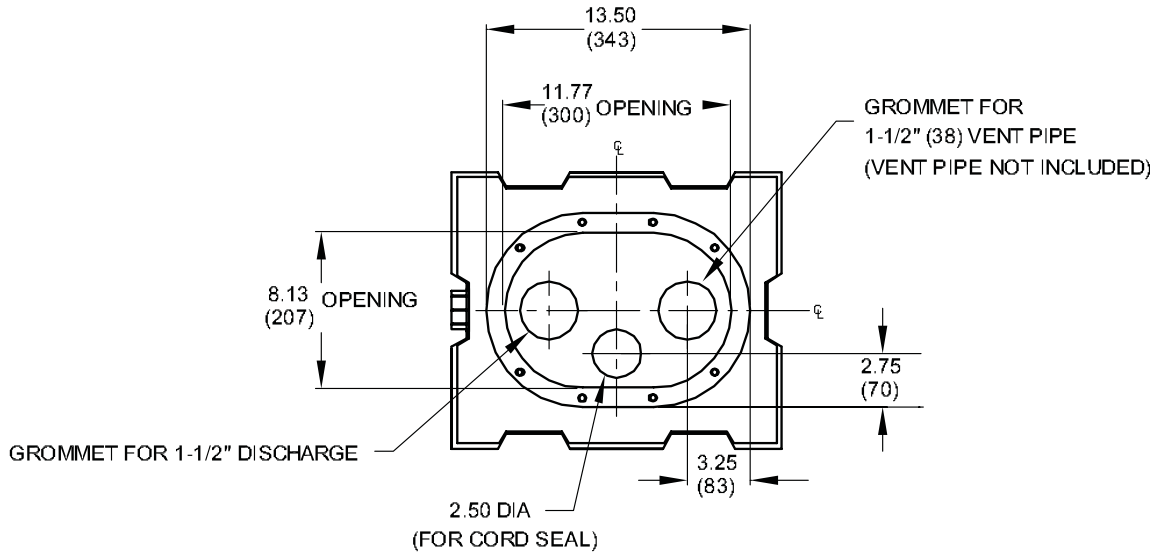
Series SP33LT

Laundry Tray
Sump Pump System

BARNES[®]
Professional Plumbing
www.cranepumps.com

Sump Pumps

inches
(mm)



IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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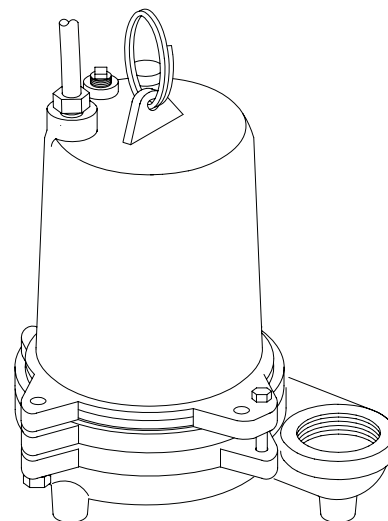
CRANE[®]

A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	
BP314	77°F (25°C) Continuous
BP324	104°F (40°C) Continuous
VOLUTE	(BP) Cast Iron, (BP-BR) Bronze
MOTOR HOUSING	(BP) Cast Iron, (BP-BR) Bronze
SEAL PLATE	(BP) Cast Iron, (BP-BR) Bronze
IMPELLER: <i>Design</i>	2 Vane open, Dynamically Balanced, ISO G6.3
<i>Material</i>	(BP) Polypropylene with stainless insert (BP-BR) Bronze 81-3-7-9
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil-Filled Reservoir, Secondary Exclusion Seal
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (5m) Quick Disconnect Cord with plug On 115 volt, Pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR, SINGLE PHASE	Permanent Split Capacitor (PSC). Oil Filled. Includes Overload Protection in Motor
<i>Insulation</i>	Class B
LEVEL CONTROLS	"A" - Wide Angle, PVC, Mechanical, 15 ft (5m) cord with Piggy-Back Plug, N/O "AU" - Wide Angle, Polypropylene, Mechanical, N/O, Integral to pump. ON and OFF points are adjustable "VF" - Vertical Float, PVC, Snap Action, 15 ft (5m) cord, with Piggy-Back plug. OFF point ONLY is adjustable
OPTIONAL EQUIPMENT	Seal Material, Additional Cable, Bronze Impeller



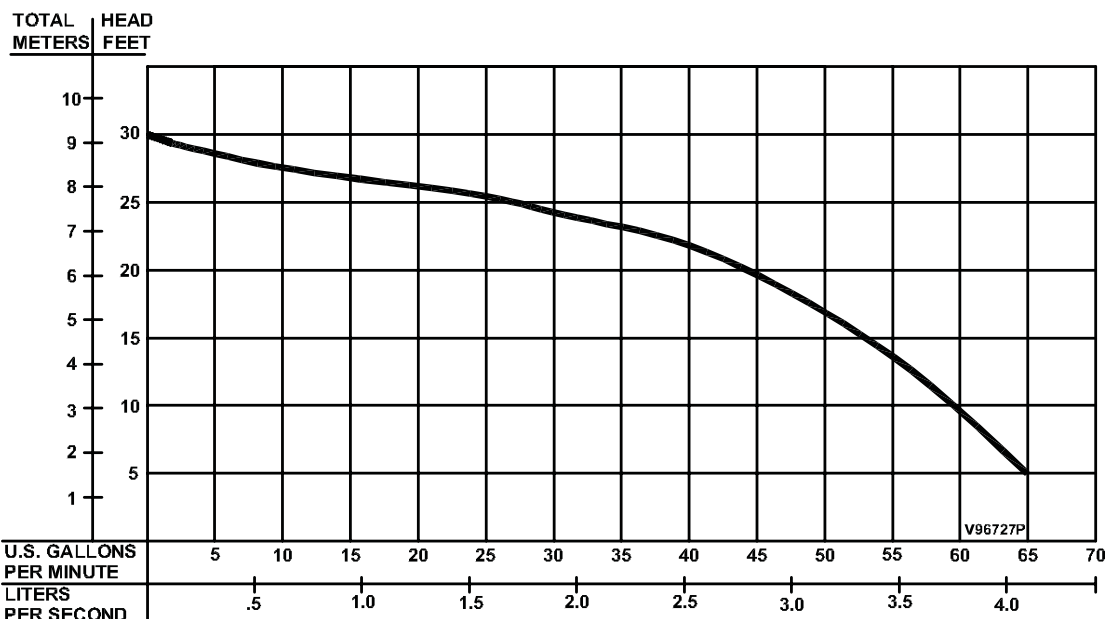
Series: BP314 & BP324 1/3HP, 1750RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND
LIGHT INDUSTRIAL SUMP APPLICATIONS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series BP

3/4" Spherical Solids Handling
Manual & Automatic - Submersible

BARNES®

Professional Plumbing

www.cranepumps.com

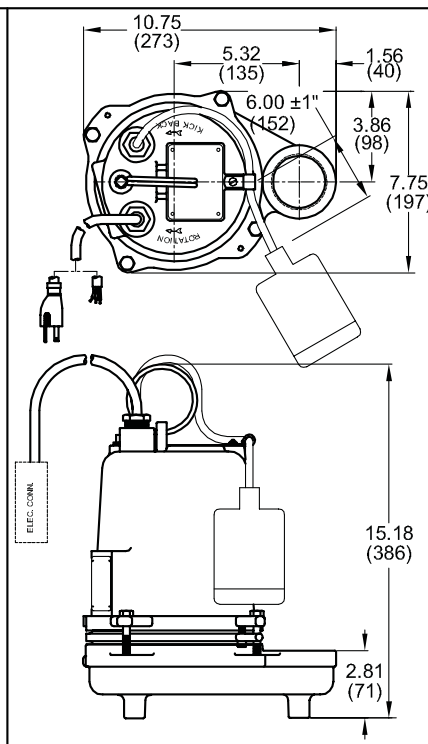
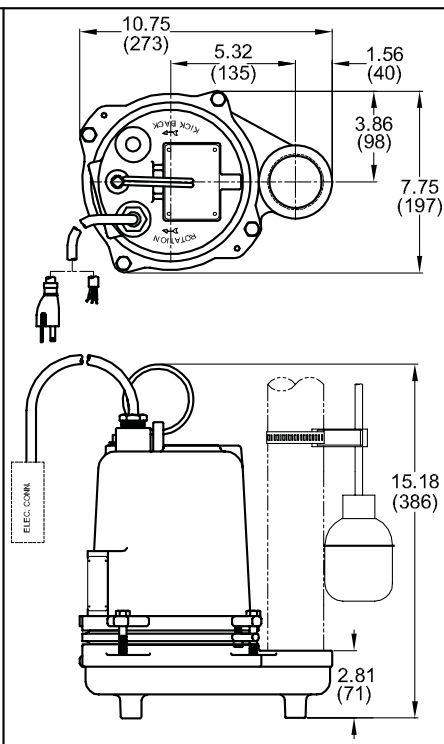
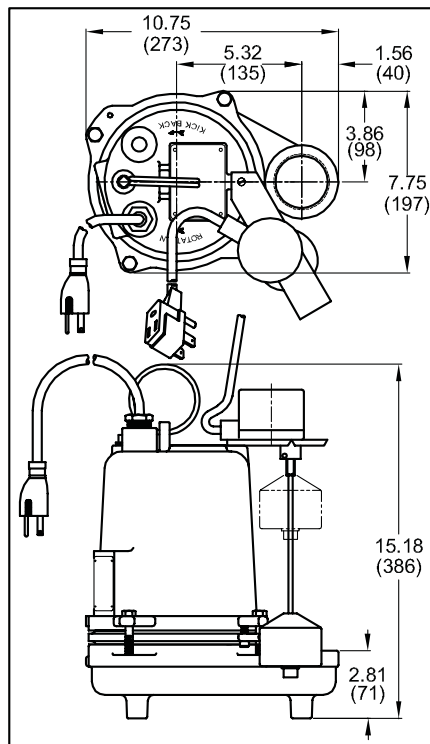
Sump Pumps

BP314VF, BP314VFBR

BP314A, BP314ABR,
BP314. BP314BR, BP324, BP324BR (Less Float)

BP314AU, BP314AUBR
BP324AU, BP324AUBR

inches
(mm)



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
BP314	096727	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314A	096728	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314AU	096729	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314VF	100834	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314BR	096732	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314ABR	096733	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314AUBR	096734	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314VFBR	100835	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP324	096730	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)
BP324AU	096731	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)
BP324BR	096735	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)
BP324AUBR	096736	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)

Mechanical Switch on BP-A, cord 16/2, SJOW, Piggy-Back Plug.

Mechanical Switch on BP-AU, cord 14/2, SJOW

Vertical Switch on BP-VF, cord 16/2, SJOW, Piggy-Back Plug

IMPORTANT !

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CRANE®

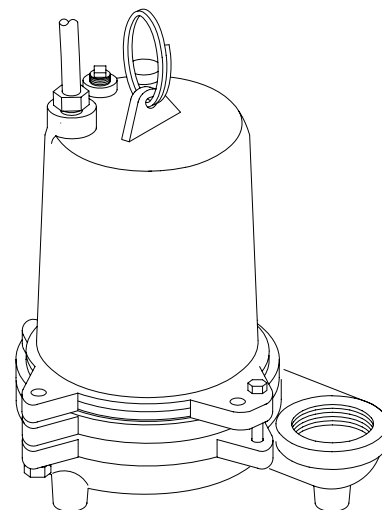
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Sump Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	200°F (93°C) Continuous
VOLUTE	(BP) Cast Iron, (BP-BR) Bronze
MOTOR HOUSING	(BP) Cast Iron, (BP-BR) Bronze
SEAL PLATE	(BP) Cast Iron, (BP-BR) Bronze
IMPELLER: <i>Design</i>	2 Vane open, Dynamically Balanced, ISO G6.3
<i>Material</i>	Bronze 81-3-7-9
SHAFT	416 Stainless Steel
SQUARE RINGS.....	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil-Filled Reservoir, Secondary Exclusion Seal
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (5m) Quick Disconnect Cord with plug On 115 volt, Pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR, SINGLE PHASE	Permanent Split Capacitor (PSC). Oil Filled. Includes Overload Protection in Motor
<i>Insulation</i>	Class B
LEVEL CONTROLS.....	"A" - High Temperature, Wide Angle, Mechanical, N/O, 15 ft (5m) cord with Piggy-Back Plug, "AU" - High Temperature, Wide Angle, Polypropylene, Mechanical, N/O Integral to pump. ON and OFF points are adjustable
OPTIONAL EQUIPMENT	Seal Material, Additional Cable

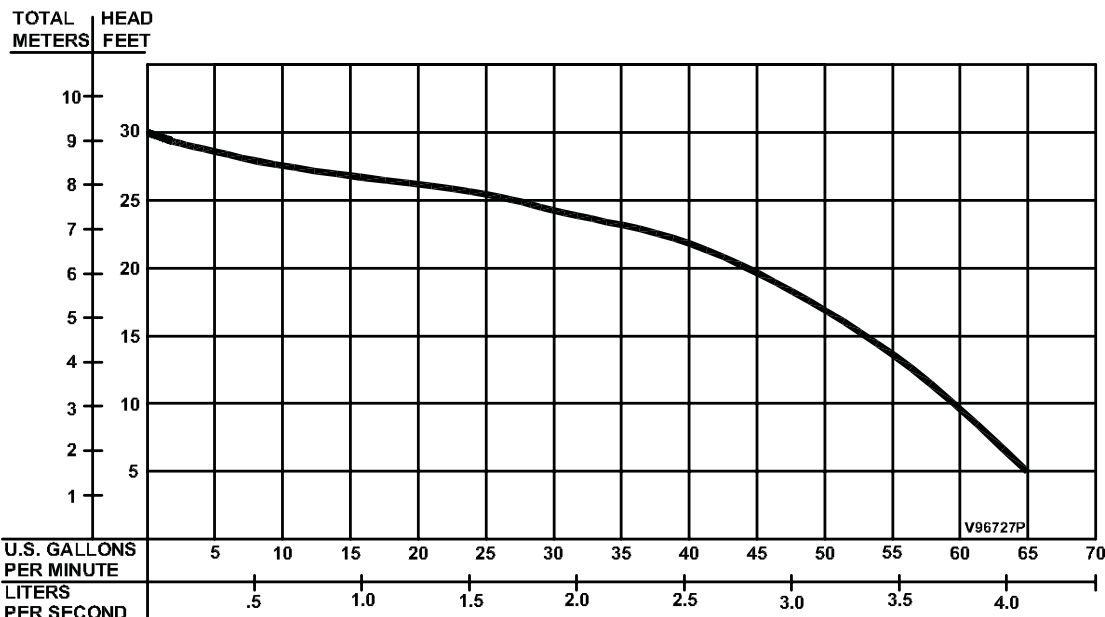


Series: BP314HT & BP324HT

**1/3HP, 1750RPM, 60Hz,
Cast Iron & Bronze**

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND
LIGHT INDUSTRIAL SUMP APPLICATIONS



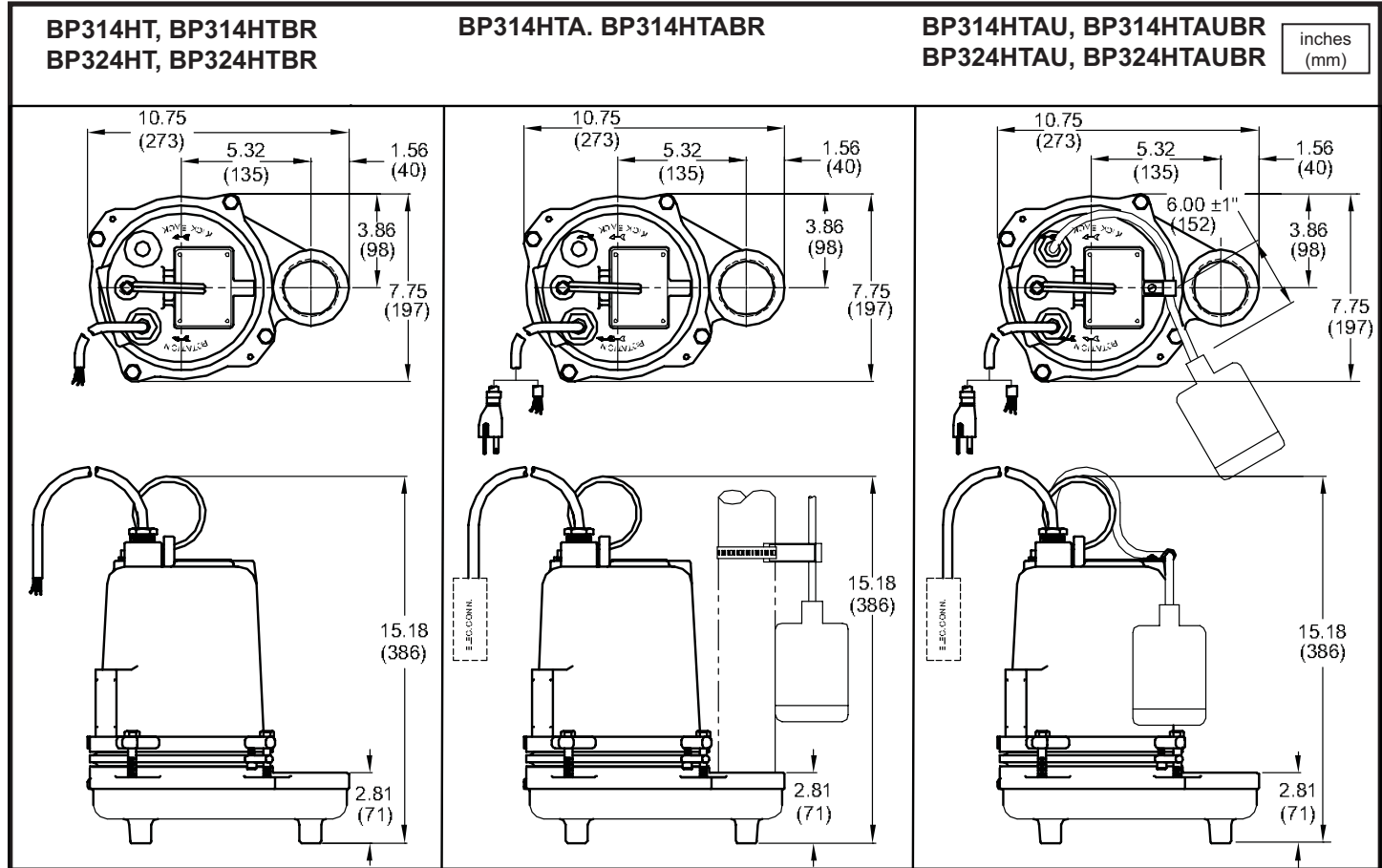
Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series BP-HT

High Temperature - 3/4" Spherical Solids Handling
Manual & Automatic - Submersible

BARNES®
Professional Plumbing
www.cranepumps.com

Sump Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
BP314HT	096737	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTA	096738	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTAU	096739	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTBR	096742	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTABR	096743	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTAUBR	096744	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP324HT	096740	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)
BP324HTAU	096741	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)
BP324HTBR	096745	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)
BP324HTAUBR	096746	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)

Mechanical Switch on BP314HTA, cord 14/2, SJOOW, 0.370 (9.4MM) O.D., Piggy-Back Plug.
Mechanical Switch on BP314HTAU & BP324HTAU, cord 14/2, SJOOW, 0.370 (9.4MM) O.D.

IMPORTANT !

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- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 4.) MUST USE A **HIGH TEMPERATURE** WIDE ANGLE LEVEL CONTROL IN HIGH TEMPERATURE APPLICATIONS.

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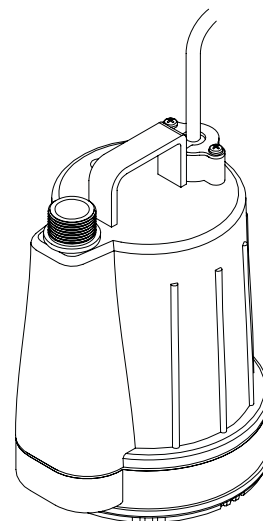
CRANE®

A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

DISCHARGE	3/4" G.H.T. Male, Vertical
LIQUID TEMPERATURE	77°F (25°C) Continuous
MOTOR HOUSING	Thermoplastic
PUMP STRAINER	Thermoplastic
IMPELLER: Design	2 Vane, Semi-open
Material	Thermoplastic
SHAFT	Steel
O-RINGS	Buna-N
HARDWARE	Stainless Steel
SEAL: Design	Single Mechanical, Type 6
Material	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (4.5m) Cord with plug and pressure Gromment for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR Design	Air-Filled
Insulation	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC). Includes Thermal Overload Protection in Motor



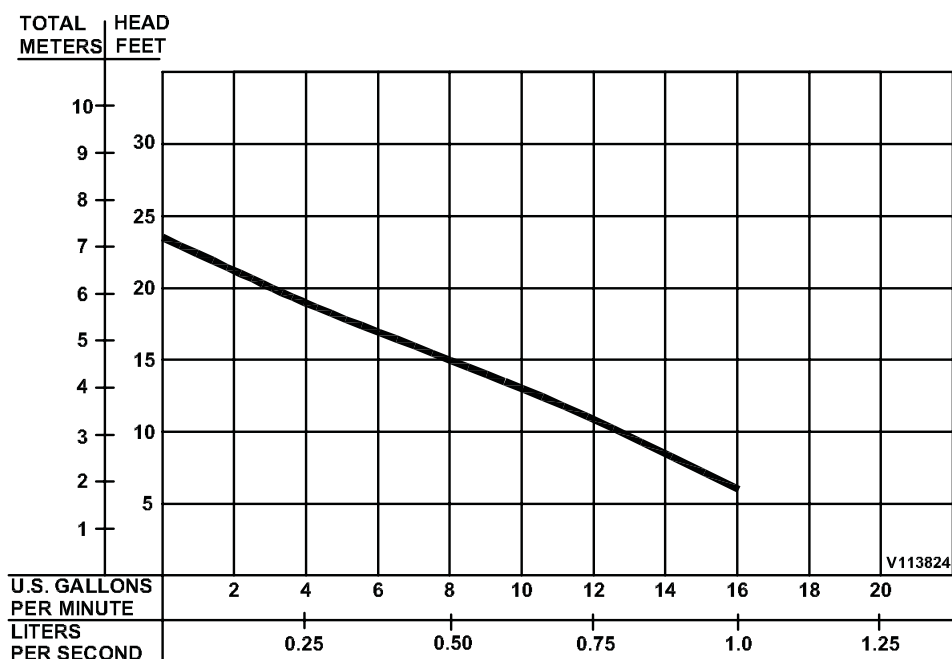
Series: UT17
1/6 HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

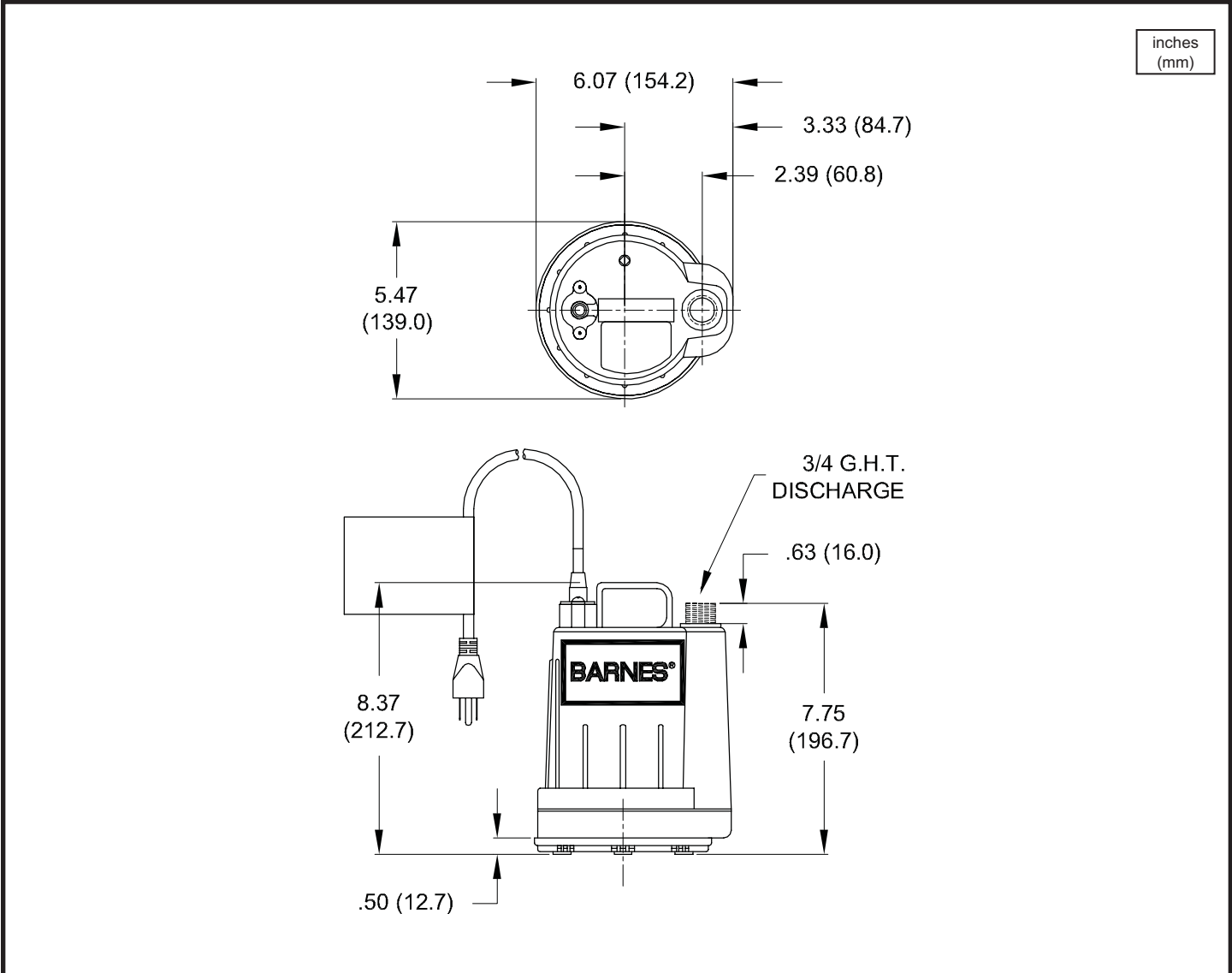
DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Sump Pumps



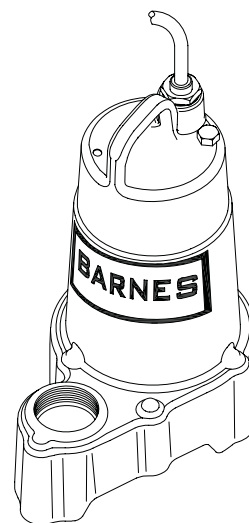
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
UT17	113824	1/6	120/1	60	3450	2.0	15 ft. (4.5m)	18/3	SJTW

IMPORTANT !

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Sump Pumps

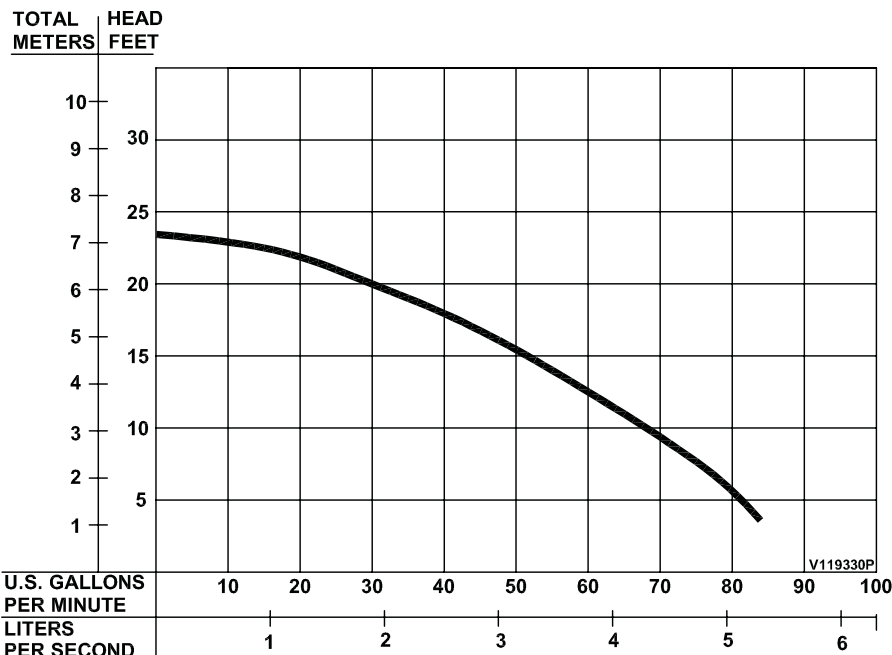
DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
BODY & STRAINER	Thermoplastic
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N Hardware - 300 Series Stainless
CORD ENTRY	20 ft. (6m) Quick connect cord with plug and pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
EP52X	None
EP52AX	Wide angle, Mechanical, 20 ft. (6m) cord with Piggy-Back plug
EP52VFX	Vertical float, PVC, snap action, 20 ft (6m) cord with Piggy-Back plug
MINIMUM SUMP DIA:	
EP52AX	18" (457mm)
EP52X & EP52VXF	12" (305mm)



Series: EP52X 1/2HP, 3450RPM, 60Hz

CS® US
CSA 108
UL 778
LR16567

DESCRIPTION:
GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series EP52X

3/4" Spherical Solids Handling
Manual & Automatic

Sump Pumps

Model: EP52X

13.00 (330.2)

3.56 (90)

8.52 (216)

3.87 (98)

1.70 (43)

3.28 (83)

1.85 (47)

6.23 (158)

1 1/2 (38) N.P.T. DISCHARGE

Model: EP52VFX

ON

OFF

4.36 (114)

3.92 (99)

9.01 (229)

Model: EP52AX

120° PUMPING DIFFERENTIAL

9.00 (229)

MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
EP52X	119330	1/2	240/1	60	3450	D	3.4	20 ft. (6m)	14/3	SJTOW
EP52AX	119411	1/2	240/1	60	3450	D	3.4	20 ft. (6m)	14/3	SJTOW
EP52VFX	119412	1/2	240/1	60	3450	D	3.4	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

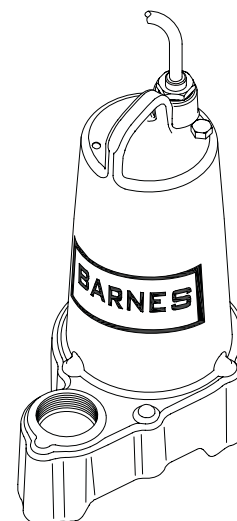
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2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.

3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.

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DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
BODY & STRAINER	Thermoplastic
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	20 ft. (6m) Quick connect cord with plug and pressure grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
EP72X	None
EP72AX	Wide angle, Mechanical, 20 ft. (6m) cord with Piggy-Back plug
EP72VFX	Vertical float, PVC, snap action, 20 ft. (6m) cord with Piggy-Back plug
MINIMUM SUMP DIA:	
EP72AX	18" (457mm)
EP72X & EP72VXF	12" (305mm)



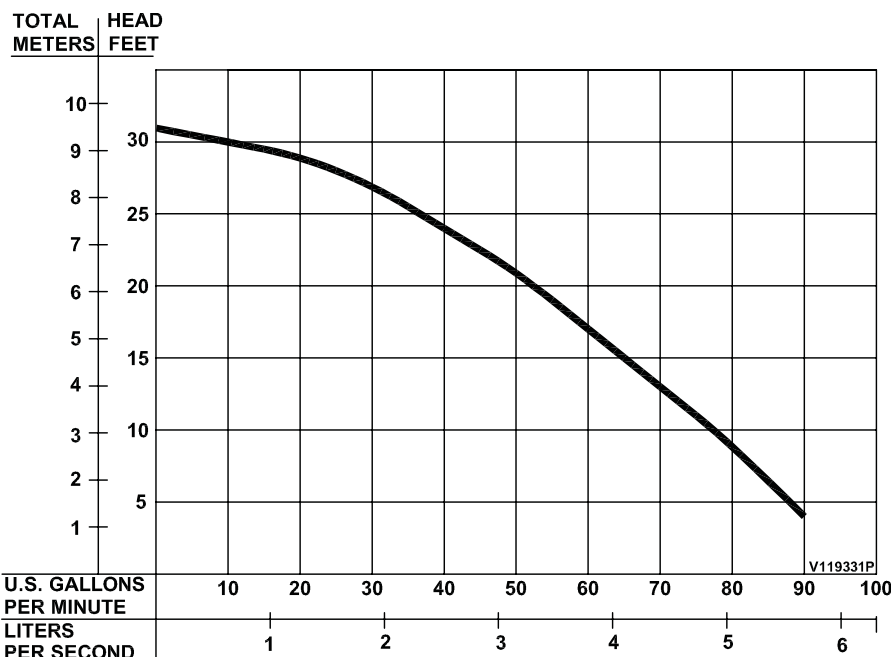
Series: EP72X 3/4HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

GENERAL PURPOSE PUMP FOR RESIDENTIAL AND LIGHT INDUSTRIAL SUMP APPLICATIONS



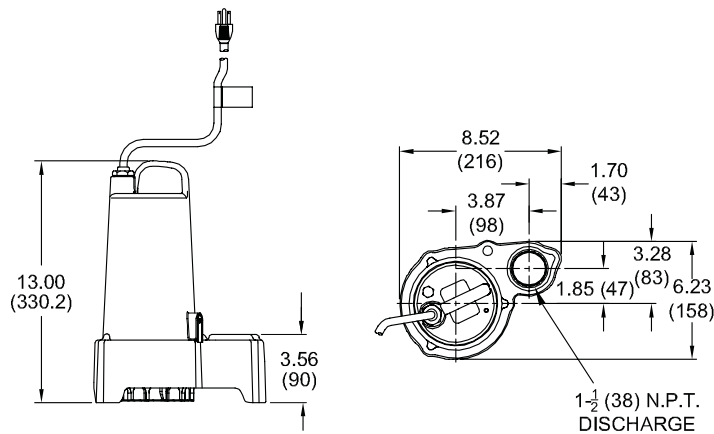
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series EP72X

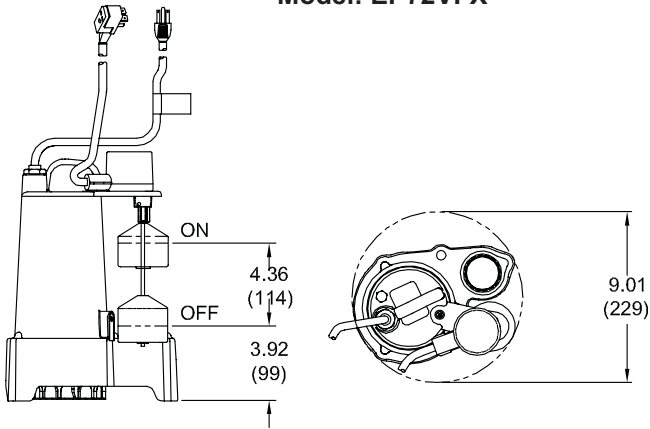
3/4" Spherical Solids Handling
Manual & Automatic

Sump Pumps

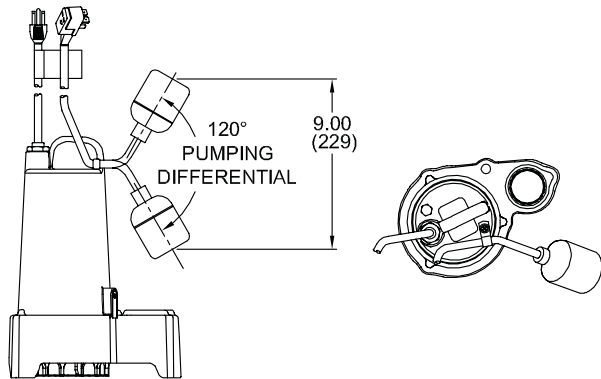
Model: EP72X



Model: EP72VFX



Model: EP72AX



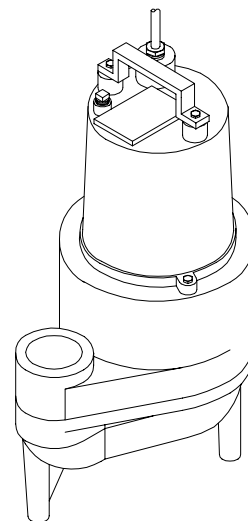
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
EP72X	119331	3/4	240/1	60	3450	A	4.3	20 ft. (6m)	14/3	SJTOW
EP72AX	119413	3/4	240/1	60	3450	A	4.3	20 ft. (6m)	14/3	SJTOW
EP72VFX	119414	3/4	240/1	60	3450	A	4.3	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

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Submersible Effluent Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	77°F (25°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP BODY	Cast Iron
IMPELLER: <i>Design</i>	Multi-Vane, Vortex
<i>Material</i>	Cast Iron
SHAFT	420 Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil Filled Reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	20 ft. (6m) Cord with plug and pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball
LOWER BEARING	Single Row, Ball
MOTOR: <i>Design</i>	Oil Filled
<i>Insulation</i>	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
LEVEL CONTROL:	
EHV412	None
EHV412A	Wide Angle, Mechanical, 20 ft (6m) cord Pipe Mounted
EHV412VF	Vertical Float, PVC, Snap Action
EHV412AT	Wide Angle, Mechanical, 20 ft (6m) cord Pump Mounted



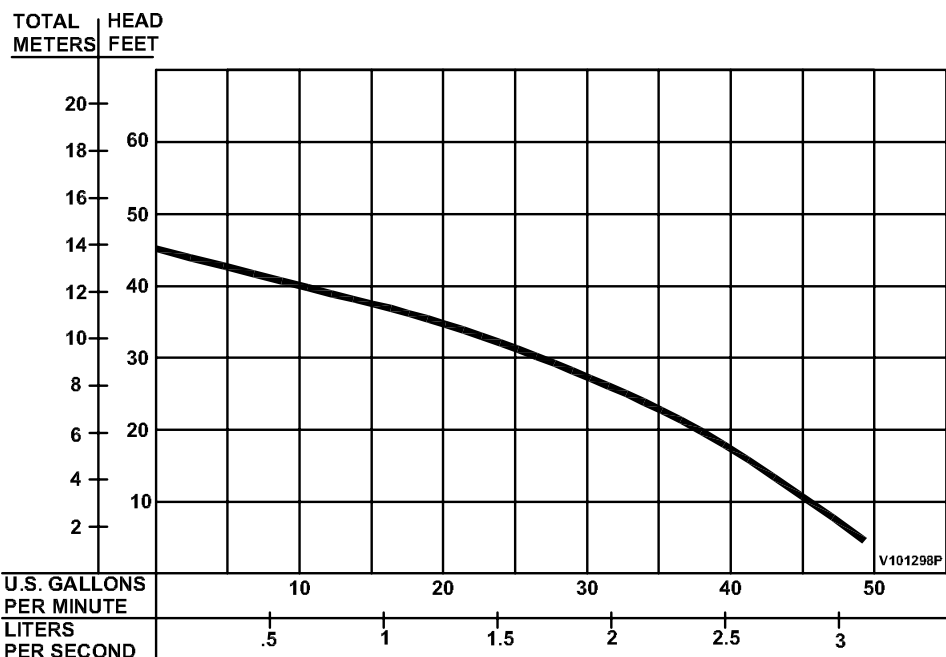
Series: EHV

0.5 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

DESCRIPTION:
PUMP IS DESIGNED FOR HANDLING SEWAGE
EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT
APPLICATIONS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series EHV

3/4" Spherical Solids Handling
Manual & Automatic

BARNES®

Professional Plumbing

www.cranepumps.com

Submersible Effluent Pumps

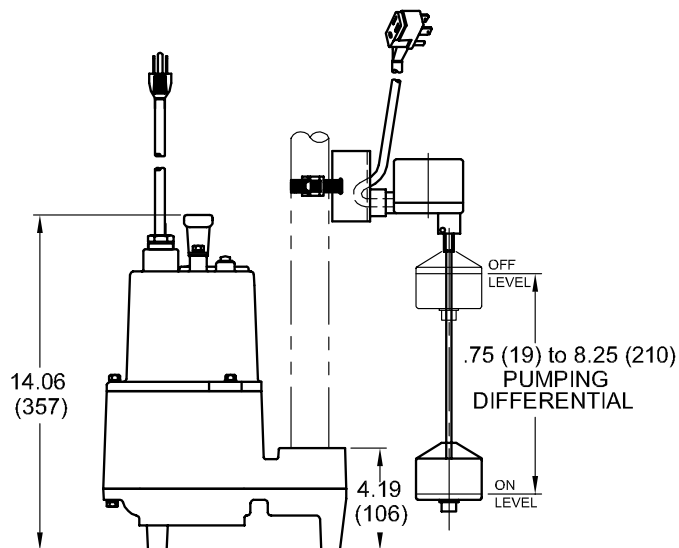
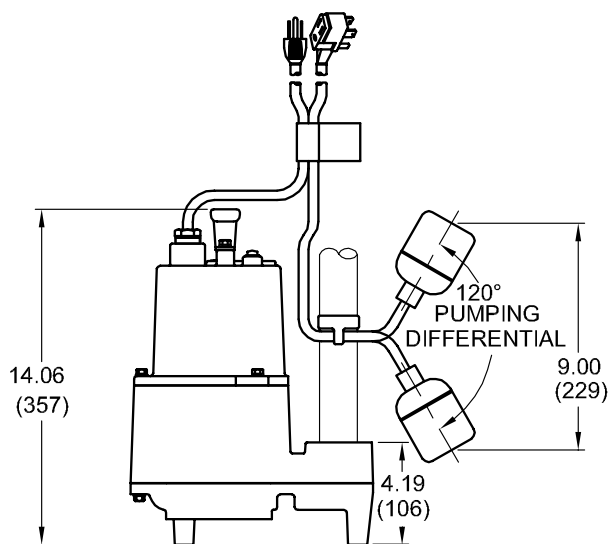
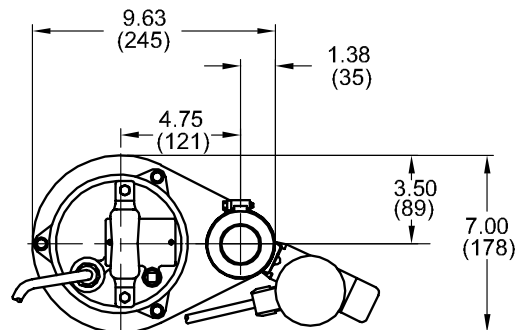
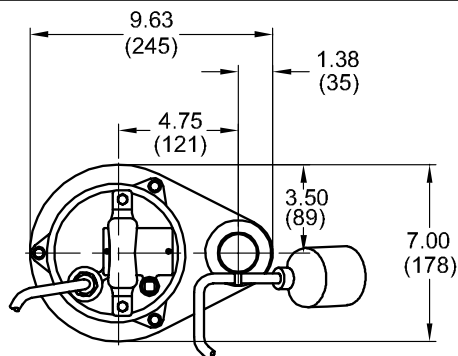
EHV412A

EHV412 (Less Float)

EHV412AT (Attached to Motor Housing)

EHV412VF

inches
(mm)



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
EHV412	101298	0.5	115/1	60	3450	H	6.4	20 ft. (6m)	14/3	SJTOW
EHV412A	103542	0.5	115/1	60	3450	H	6.4	20 ft. (6m)	14/3	SJTOW
EHV412VF	101300	0.5	115/1	60	3450	H	6.4	20 ft. (6m)	14/3	SJTOW
EHV412AT	103543	0.5	115/1	60	3450	H	6.4	20 ft. (6m)	14/3	SJTOW
EHV412	101298G	0.5	115/1	60	3450	H	6.4	30 ft. (9m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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PAGE 2
DATE 10/05

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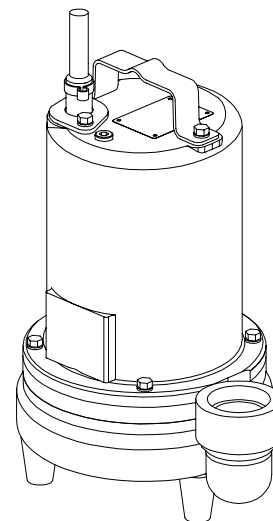
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Effluent Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	3 Vane, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Polypropylene with stainless steel insert
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



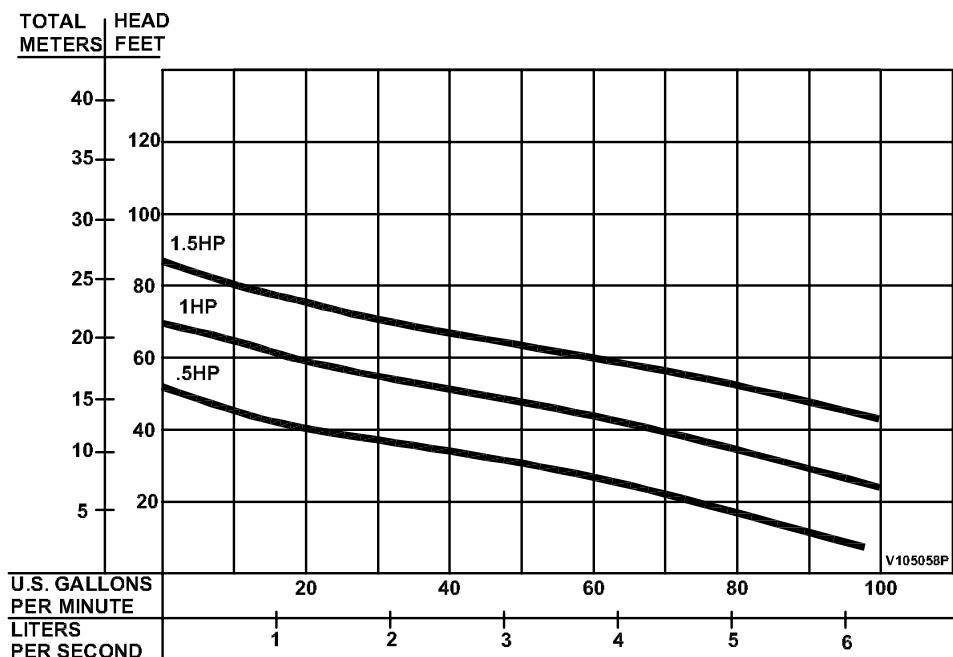
Series: EH-L
.5 - 1.5 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTLIC

DESCRIPTION:
PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS



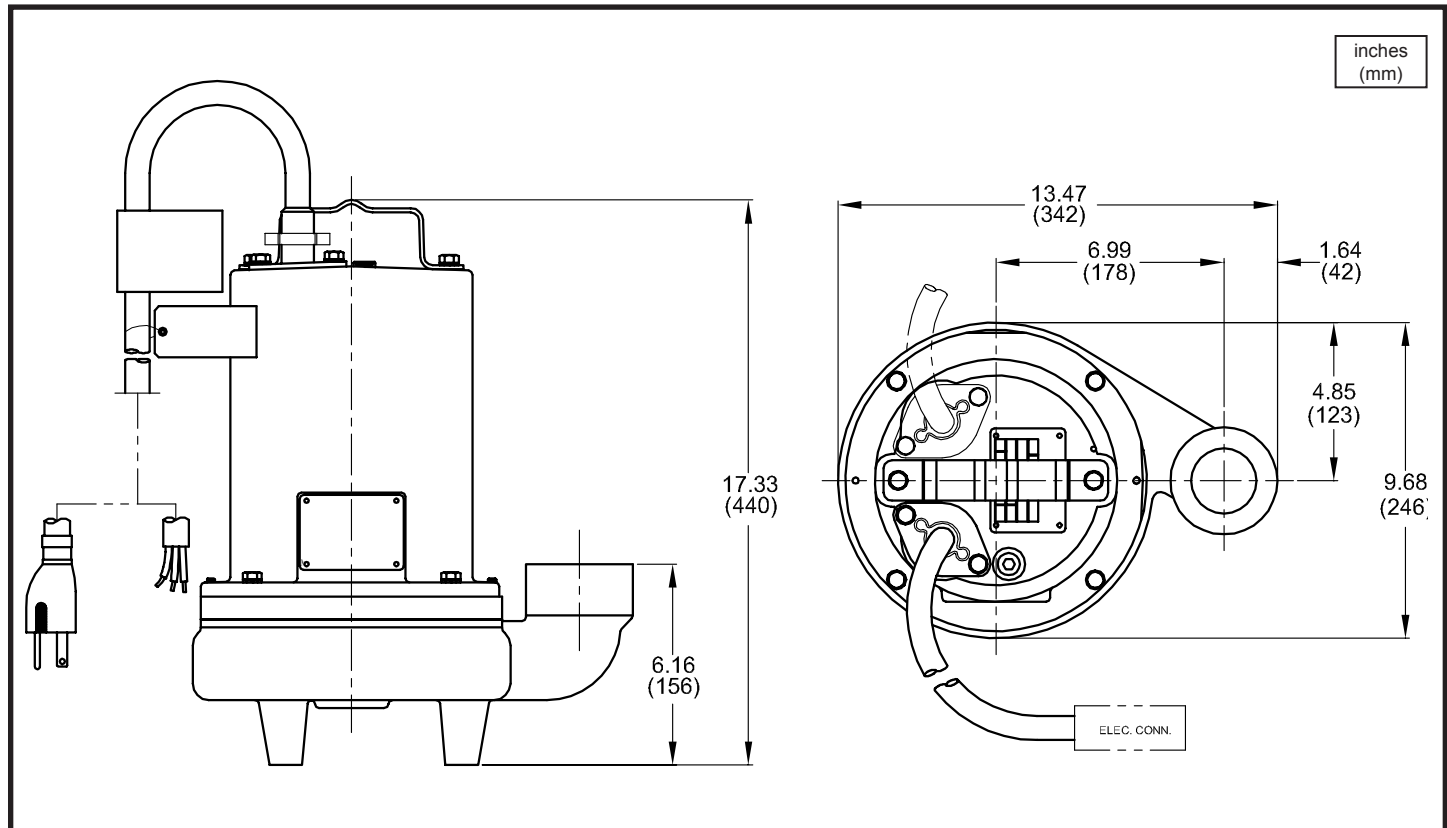
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series EH-L

3/4" Spherical Solids Handling
Single Seal

BARNES®
Professional Plumbing
www.cranepumps.com

Submersible Effluent Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
EH512L	105058	0.5	120/1	60	3450	G	11.4	24.6	14/3	SJTOW	0.375 (9.5)
EH522L	105059	0.5	240/1	60	3450	E	4.9	10.2	14/3	SOW	0.530 (13.5)
EH592L	105060	0.5	200/240/3	60	3450	P/R	4.2/4.5	19.9/18.4	14/4	SOW	0.570 (14.5)
EH542L	105061	0.5	480/3	60	3450	R	2.2	9.1	14/4	SOW	0.570 (14.5)
EH552L	105062	0.5	600/3	60	3450	T	1.7	8.7	14/4	SOW	0.570 (14.5)
EH1022L	105068	1.0	240/1	60	3450	F	8.1	21.8	14/3	SOW	0.530 (13.5)
EH1092L	105069	1.0	200/240/3	60	3450	H/J	8.1/6.2	19.9/18.4	14/4	SOW	0.570 (14.5)
EH1042L	105070	1.0	480/3	60	3450	J	3.1	9.1	14/4	SOW	0.570 (14.5)
EH1052L	105071	1.0	600/3	60	3450	L	2.8	8.7	14/4	SOW	0.570 (14.5)
EH1522L	105076	1.5	240/1	60	3450	E	10.9	30.6	14/3	SOW	0.530 (13.5)
EH1592L	105077	1.5	200/240/3	60	3450	H/F	7.8/7.0	29.2/18.7	14/4	SOW	0.570 (14.5)
EH1542L	105078	1.5	480/3	60	3450	K	3.5	14.6	14/4	SOW	0.570 (14.5)
EH1552L	105079	1.5	600/3	60	3450	K	2.7	11.6	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, .530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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CRANE®

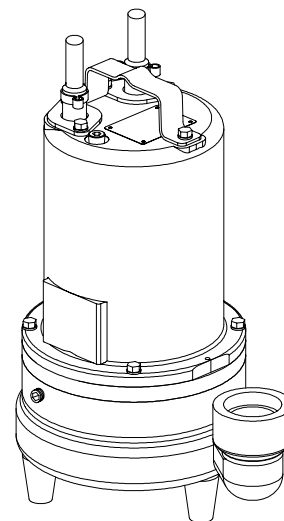
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Effluent Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	3 Vane, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Polypropylene with stainless steel insert
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil-Filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), Normally Open Moisture Sensors with cord (Requires Relay in control panel).



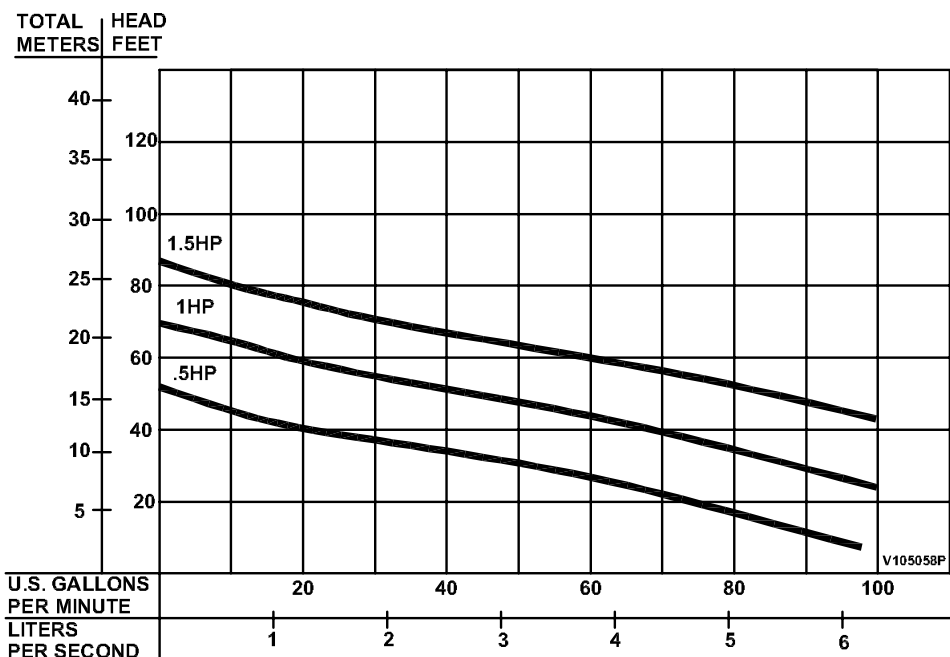
Series: EH-DS .5 - 1.5 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTLIC

DESCRIPTION:
PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series EH-DS

3/4" Spherical Solids Handling

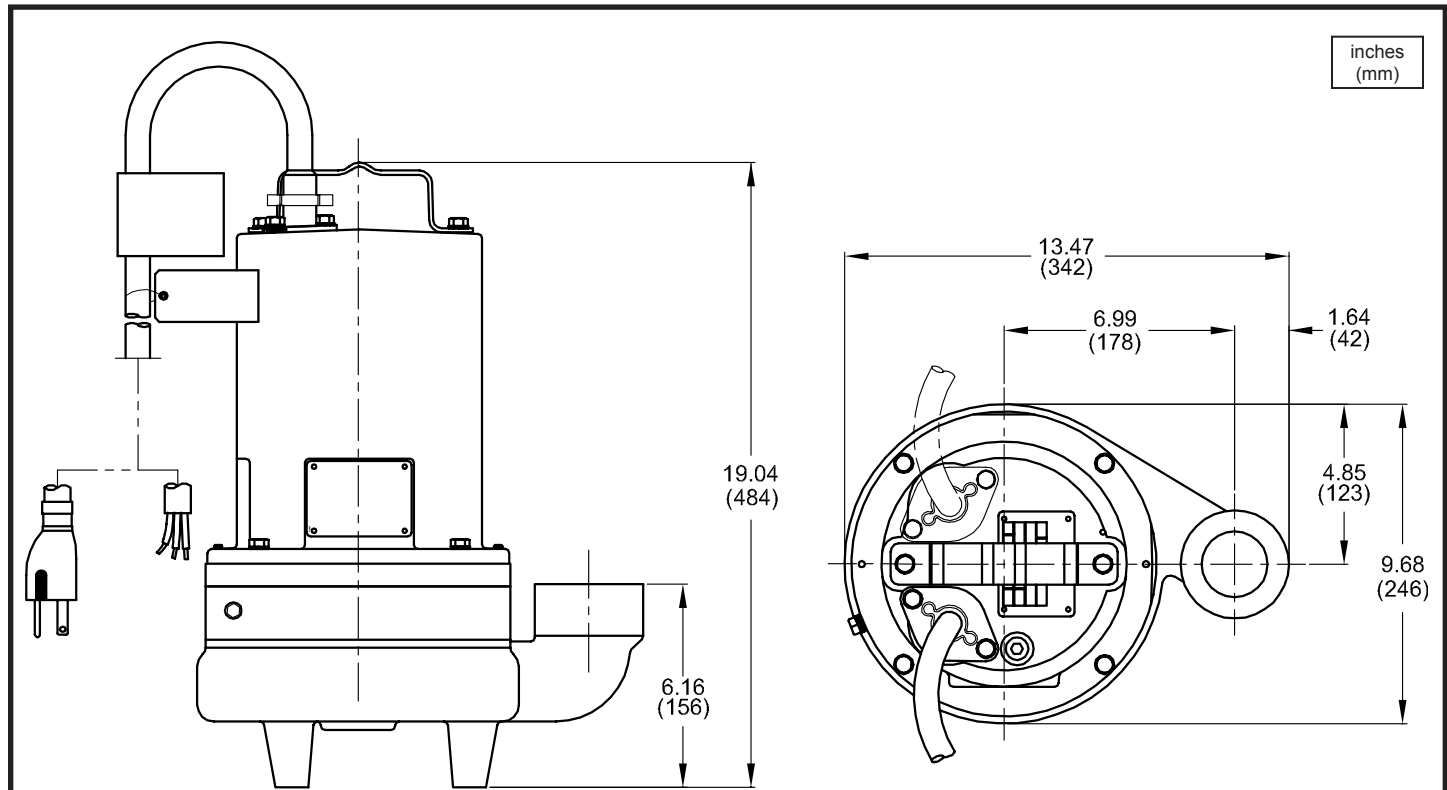
Double Seal

BARNES®

Professional Plumbing

www.cranepumps.com

Submersible Effluent Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
EH512DS	105063	0.5	120/1	60	3450	G	11.4	24.6	14/3	SJTOW	0.375 (9.5)
EH522DS	105064	0.5	240/1	60	3450	E	4.9	10.2	14/3	SOW	0.530 (13.5)
EH592DS	105065	0.5	200/240/3	60	3450	P/R	4.2/4.5	19.9/18.4	14/4	SOW	0.570 (14.5)
EH542DS	105066	0.5	480/3	60	3450	R	2.2	9.1	14/4	SOW	0.570 (14.5)
EH552DS	105067	0.5	600/3	60	3450	T	1.7	8.7	14/4	SOW	0.570 (14.5)
EH1022DS	105072	1.0	240/1	60	3450	F	8.1	21.8	14/3	SOW	0.530 (13.5)
EH1092DS	105073	1.0	200/240/3	60	3450	H/J	8.1/6.2	19.9/18.4	14/4	SOW	0.570 (14.5)
EH1042DS	105074	1.0	480/3	60	3450	J	3.1	9.1	14/4	SOW	0.570 (14.5)
EH1052DS	105075	1.0	600/3	60	3450	L	2.8	8.7	14/4	SOW	0.570 (14.5)
EH1522DS	105080	1.5	240/1	60	3450	E	10.9	30.6	14/3	SOW	0.530 (13.5)
EH1592DS	105081	1.5	200/240/3	60	3450	H/F	7.8/7.0	29.2/18.7	14/4	SOW	0.570 (14.5)
EH1542DS	105082	1.5	480/3	60	3450	K	3.5	14.6	14/4	SOW	0.570 (14.5)
EH1552DS	105083	1.5	600/3	60	3450	K	2.7	11.6	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, .530 (13.5mm) O.D.

OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.

OPTIONAL - Moisture and Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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CRANE®

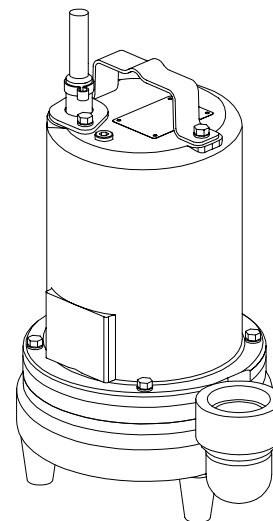
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Effluent Pumps

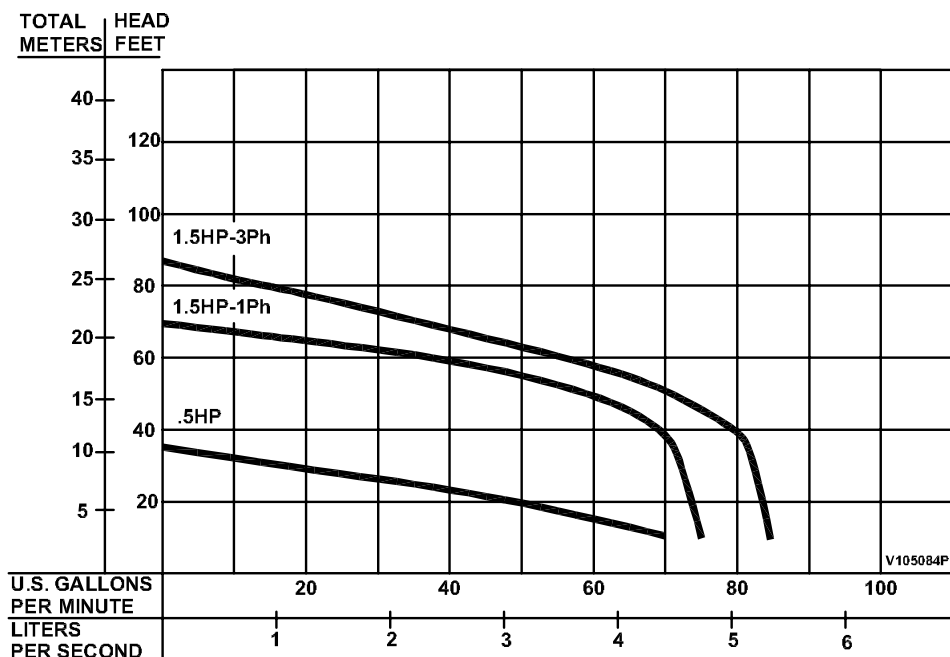
DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	200°F (93°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	3 Vane, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE:	
.5HP, 120Volt.....	Split Phase. Includes overload protection in motor
.5HP, 240Volt.....	Capacitor Start, Induction Run
	Includes Overload Protection in Motor
1.5HP	Permanent Split Capacitor (PSC)
	Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



Series: EH-HT .5 - 1.5 HP, 3450RPM, 60Hz

DESCRIPTION:

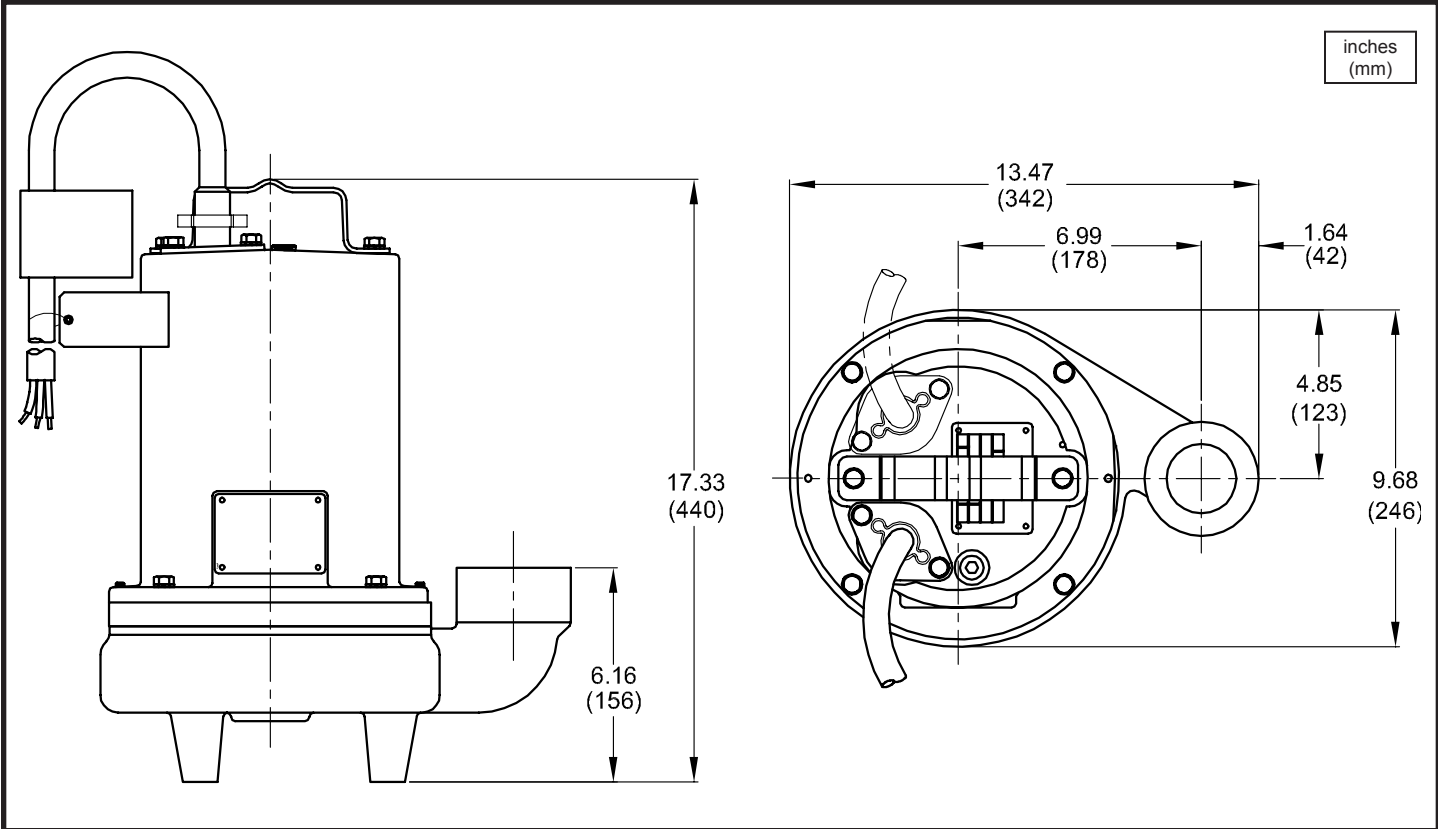
PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN **HIGH TEMPERATURE** SEPTIC TANK/EFFLUENT APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series EH-HT
3/4" Spherical Solids Handling
Single Seal, High Temperature

Submersible Effluent Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
EH512HT	105084	0.5	120/1	60	3450	M	10.6	47.9	14/3	SOW	0.530 (13.5)
EH522HT	105085	0.5	240/1	60	3450	K	5.3	18.5	14/3	SOW	0.530 (13.5)
EH1522HT	105093	1.5	240/1	60	3450	E	9.0	30.6	14/3	SOW	0.530 (13.5)
EH1592HT	105094	1.5	200/240/3	60	3450	H/F	7.8/7.0	29.2/18.7	14/4	SOW	0.570 (14.5)
EH1542HT	105095	1.5	480/3	60	3450	K	3.5	14.6	14/4	SOW	0.570 (14.5)

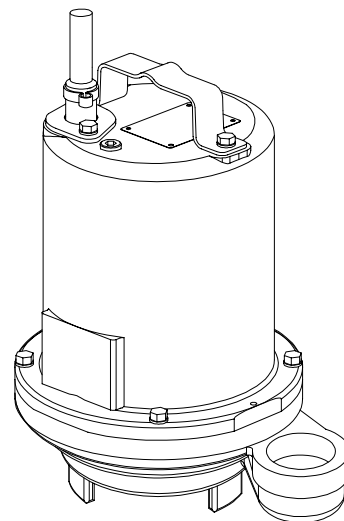
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, .530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 4.) MUST USE A **HIGH TEMPERATURE** WIDE ANGLE LEVEL CONTROL IN HIGH TEMPERATURE APPLICATIONS.

Submersible Effluent Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: Design	Single Vane, Enclosed
Material	Polypropylene with stainless steel insert
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical
Material	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
	15 ft. (5m) Cord with plug on 120 volt & 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: Design	NEMA L -Single Phase, NEMA B -Three phase
Insulation	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC)
	Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
LEVEL CONTROL	"A" - Wide Angle, PVC, Mechanical, Pipe Mounted, 15 ft. (4.6m) cord with Piggy-Back Plug
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



Series: STEP-SS .5 & 1HP, 3450RPM, 60Hz

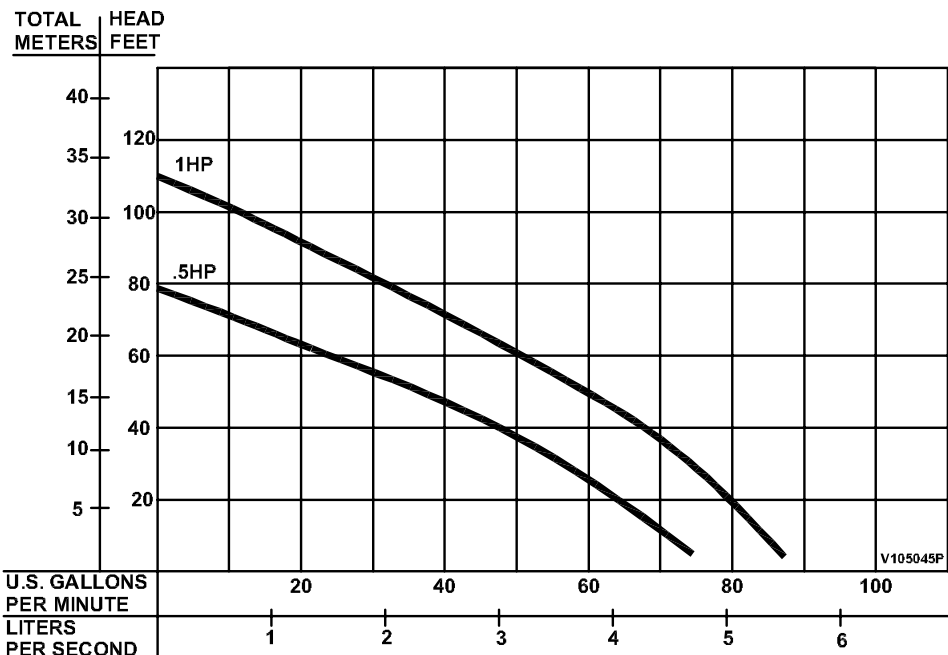


CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS

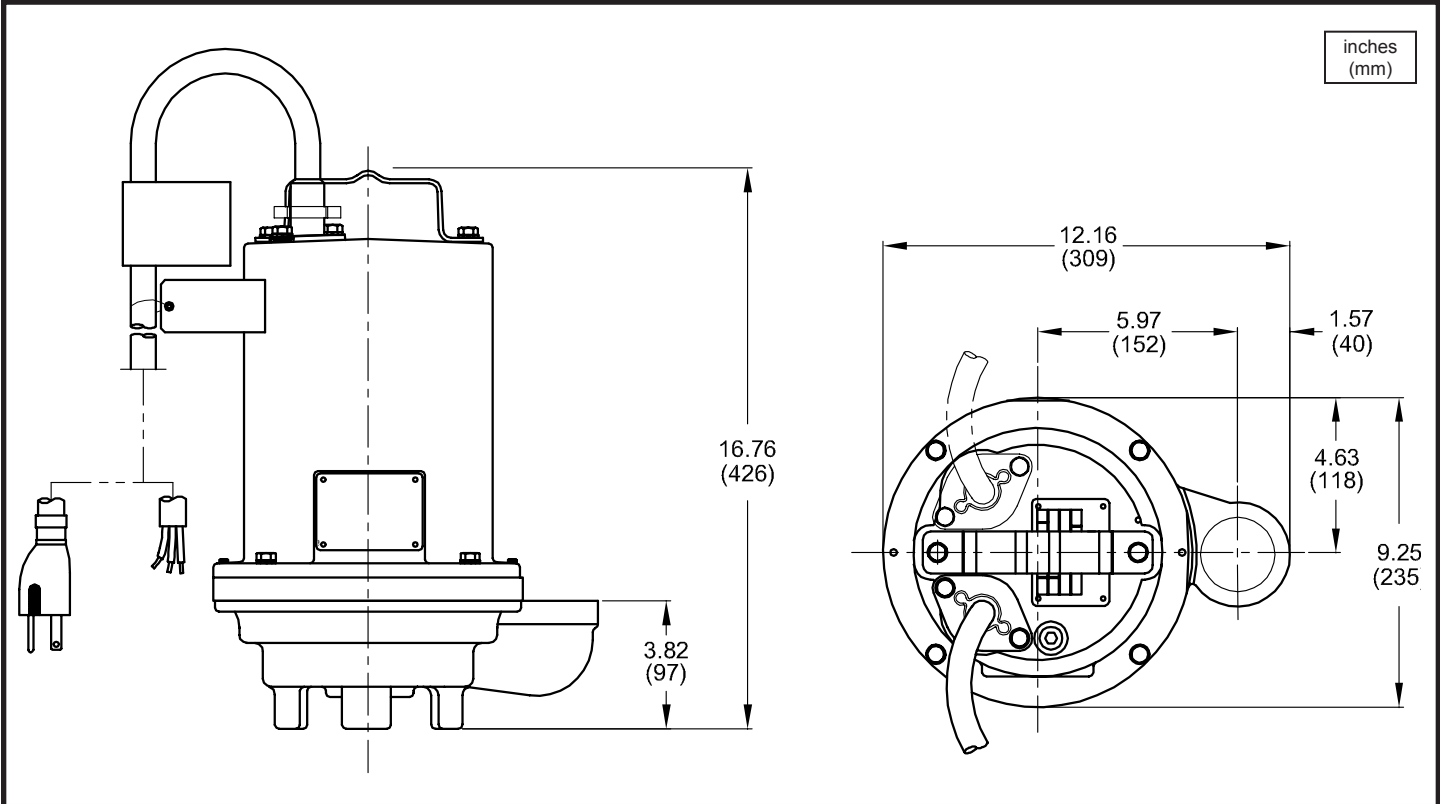


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series **STEP-SS**

3/4" Spherical Solids Handling
Single Seal

Submersible Effluent Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
STEP512SS	105045	0.5	120/1	60	3450	G	11.9	24.6	14/3	SJTOW	0.375 (9.5)
STEP512SSA	105045A	0.5	120/1	60	3450	G	11.9	24.6	14/3	SJTOW	0.375 (9.5)
STEP522SS	105046	0.5	240/1	60	3450	E	5.1	10.2	14/3	SOW	0.530 (13.5)
STEP592SS	105047	0.5	200/240/3	60	3450	P/R	4.5/4.5	19.9/18.4	14/4	SOW	0.570 (14.5)
STEP542SS	105048	0.5	480/3	60	3450	R	2.2	9.1	14/4	SOW	0.570 (14.5)
STEP552SS	105049	0.5	600/3	60	3450	T	1.8	8.7	14/4	SOW	0.570 (14.5)
STEP1022SS	105054	1.0	240/1	60	3450	F	8.3	21.8	14/3	SOW	0.530 (13.5)
STEP1022SSA	105054B	1.0	240/1	60	3450	F	8.3	21.8	14/3	SOW	0.530 (13.5)
STEP1092SS	105055	1.0	200/240/3	60	3450	H/J	5.9/5.6	19.9/18.4	14/4	SOW	0.570 (14.5)
STEP1042SS	105056	1.0	480/3	60	3450	J	2.8	9.1	14/4	SOW	0.570 (14.5)
STEP1052SS	105057	1.0	600/3	60	3450	L	2.2	8.7	14/4	SOW	0.570 (14.5)

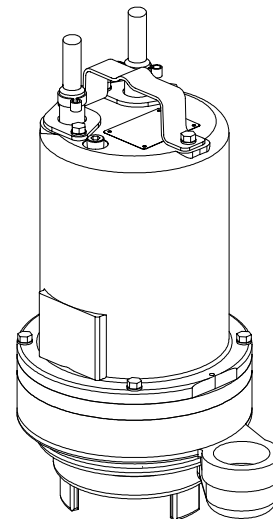
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, .530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Effluent Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Single Vane, Enclosed
<i>Material</i>	Polypropylene with stainless steel insert Dynamically Balanced, ISO G6.3
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil Filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), Normally Open Moisture Sensors with cord (Requires relay in control panel).



Series: STEP-DS
.5 & 1HP, 3450RPM, 60Hz

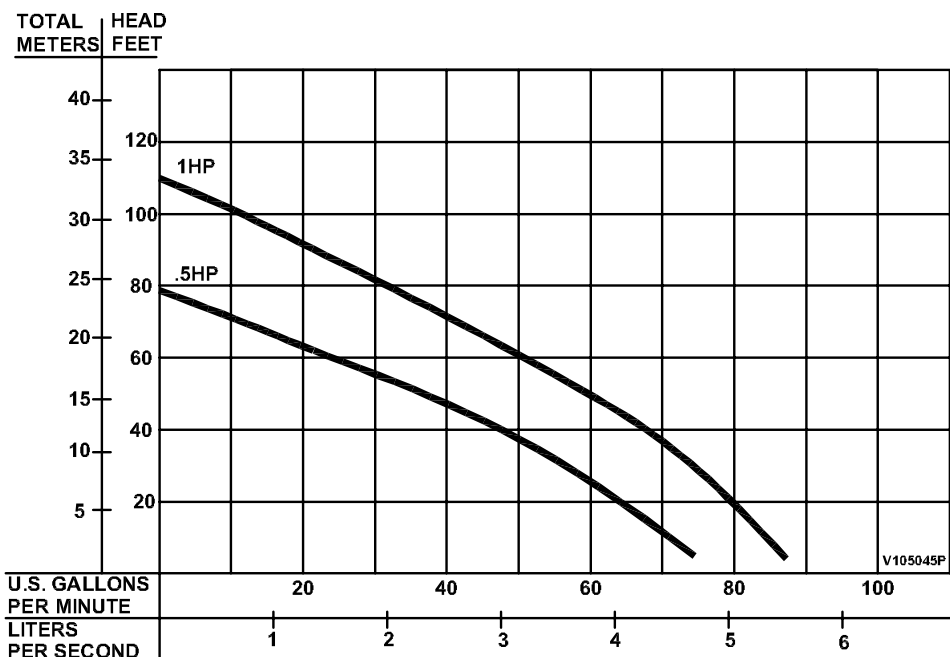


CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE
EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT
APPLICATIONS

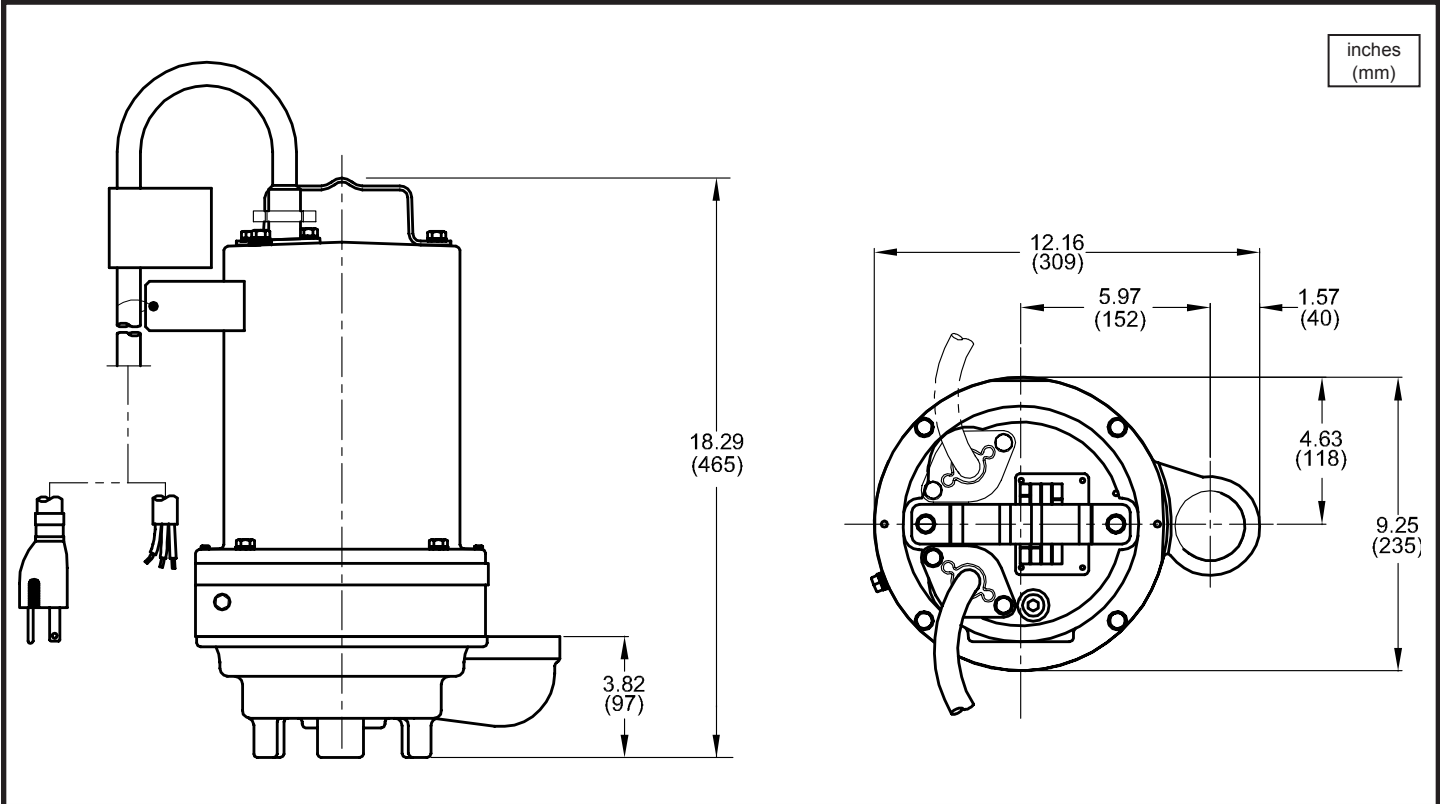


Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series **STEP-DS**

3/4" Spherical Solids Handling
Double Seal

Submersible Effluent Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
STEP512DS	105040	0.5	120/1	60	3450	G	11.9	24.6	14/3	SJTOW	0.375 (9.5)
STEP522DS	105041	0.5	240/1	60	3450	E	5.1	10.2	14/3	SOW	0.530 (13.5)
STEP592DS	105042	0.5	200/240/3	60	3450	P/R	4.5/4.5	19.9/18.4	14/4	SOW	0.570 (14.5)
STEP542DS	105043	0.5	480/3	60	3450	R	2.2	9.1	14/4	SOW	0.570 (14.5)
STEP552DS	105044	0.5	600/3	60	3450	T	1.8	8.7	14/4	SOW	0.570 (14.5)
STEP1022DS	105050	1.0	240/1	60	3450	F	8.3	21.8	14/3	SOW	0.530 (13.5)
STEP1092DS	105051	1.0	200/240/3	60	3450	H/J	5.9/5.6	19.9/18.4	14/4	SOW	0.570 (14.5)
STEP1042DS	105052	1.0	480/3	60	3450	J	2.8	9.1	14/4	SOW	0.570 (14.5)
STEP1052DS	105053	1.0	600/3	60	3450	L	2.2	8.7	14/4	SOW	0.570 (14.5)

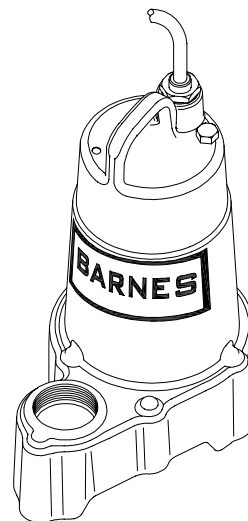
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, .530 (13.5mm) O.D.
OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.
OPTIONAL - Moisture and Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Effluent Pumps

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP BODY & STRAINER	Thermoplastic
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N
CORD ENTRY	10 ft. (3m) or 20 ft. (6m) Cord with plug and Pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL:	
SP33	None
SP33A.....	Wide Angle, Mechanical, 10 ft (3m) cord or 20 ft (6m) cord
SP33VF.....	Vertical Float, PVC, Snap Action,
SP33D.....	Diaphragm switch, pressure operated, Snap Action, normally open, 10 Ft. (3m) cord 10 ft (3m) cord or 20 ft. (6m) cord
MINIMUM SUMP DIA:	
SP33A.....	18" (457mm)
SP33, SP33VF	
SP33D.....	11" (279mm)



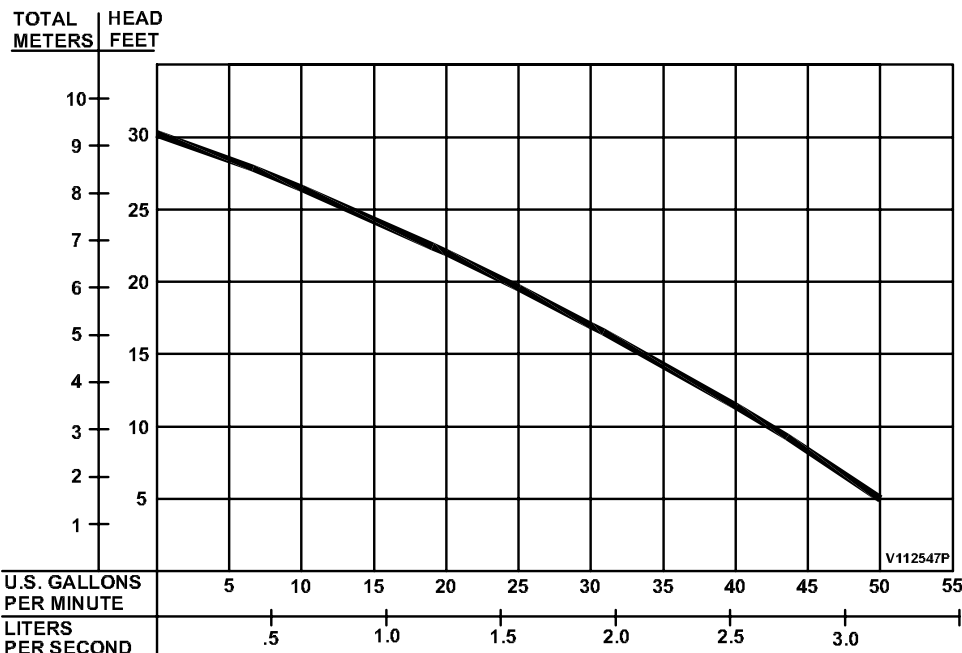
Series: SP33, 1/3HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP33

1/2" Spherical Solids Handling
Manual & Automatic, Sump /Effluent

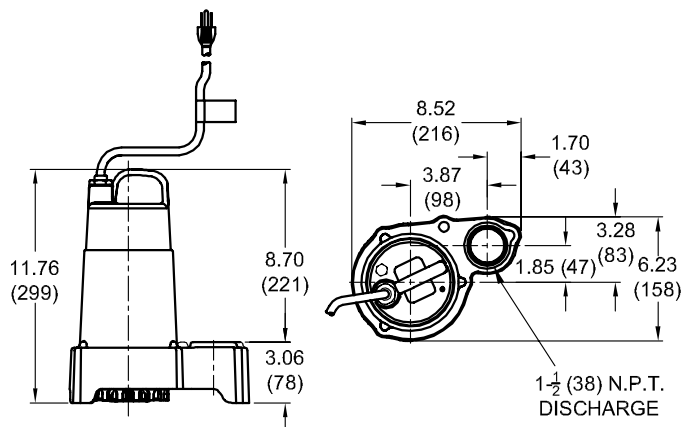
BARNES®

Professional Plumbing

www.cranepumps.com

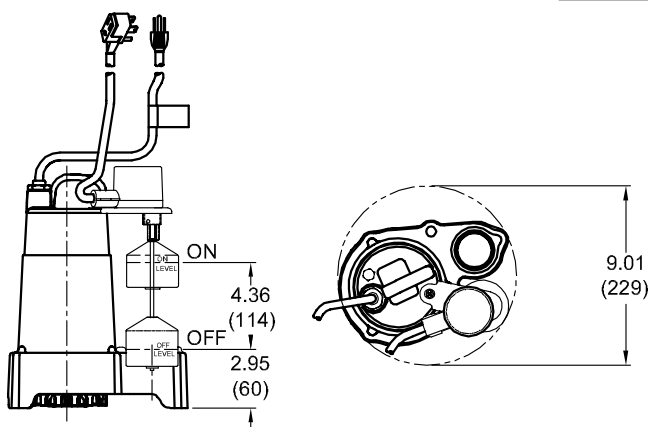
Submersible Effluent Pumps

Model: SP33

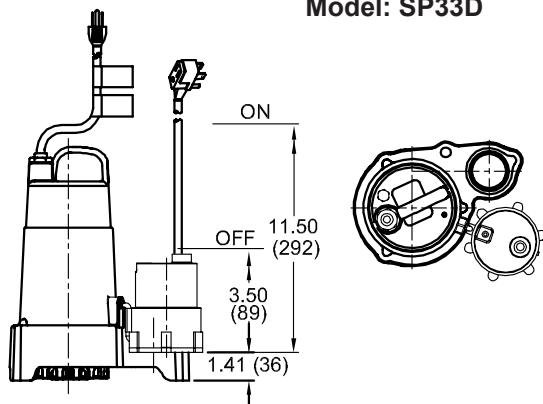


Model: SP33VF

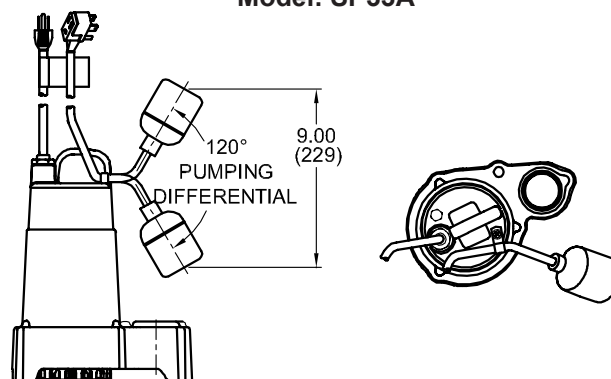
inches
(mm)



Model: SP33D



Model: SP33A



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP33	112547	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW
SP33X	112548	1/3	120/1	60	3450	B	5.8	20 ft. (6m)	14/3	SJTOW
SP33A	112549	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW
SP33AX	112550	1/3	120/1	60	3450	B	5.8	20 ft. (6m)	14/3	SJTOW
SP33VF	112551	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW
SP33VFX	112552	1/3	120/1	60	3450	B	5.8	20 ft. (6m)	14/3	SJTOW
SP33D	118371	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

SECTION B
PAGE 14
DATE 7/04

CRANE®

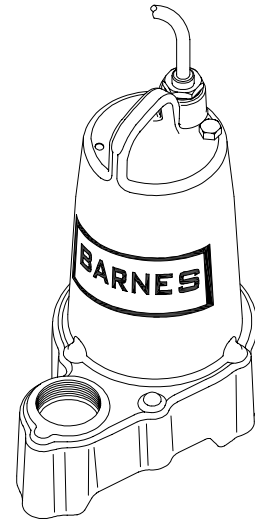
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Effluent Pumps

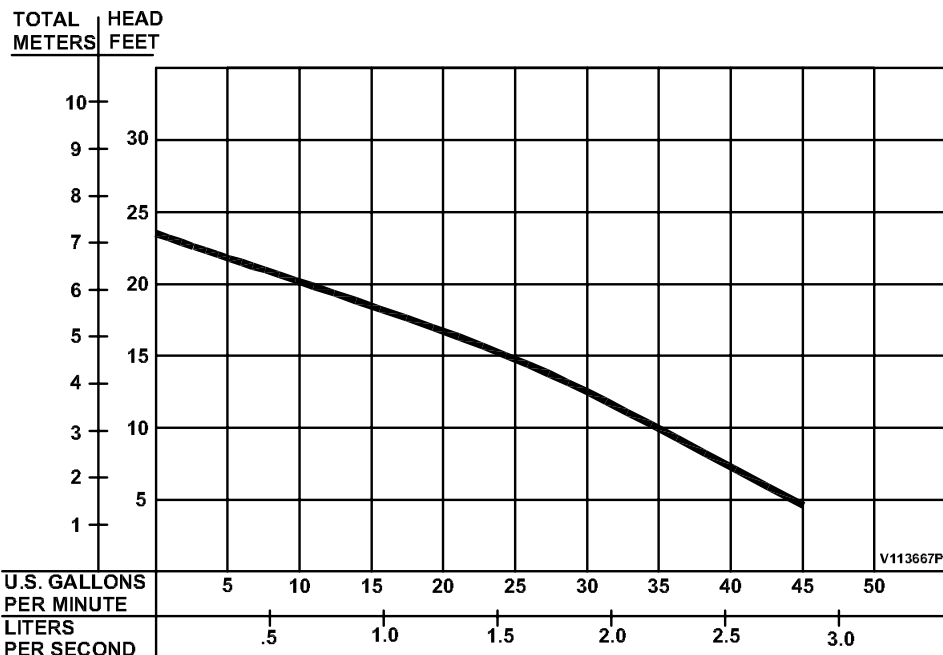
DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	185°F (85°C) Continuous, Fully Submerged
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Stainless
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N
CORD ENTRY	20 ft. (6m) Cord with plug and Pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
MINIMUM SUMP DIA:	
SP33HT.....	12" (305mm)



Series: SP33HTX
1/3HP, 3450RPM, 60Hz

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN **HIGH TEMPERATURE** SEPTIC TANK/EFFLUENT APPLICATIONS

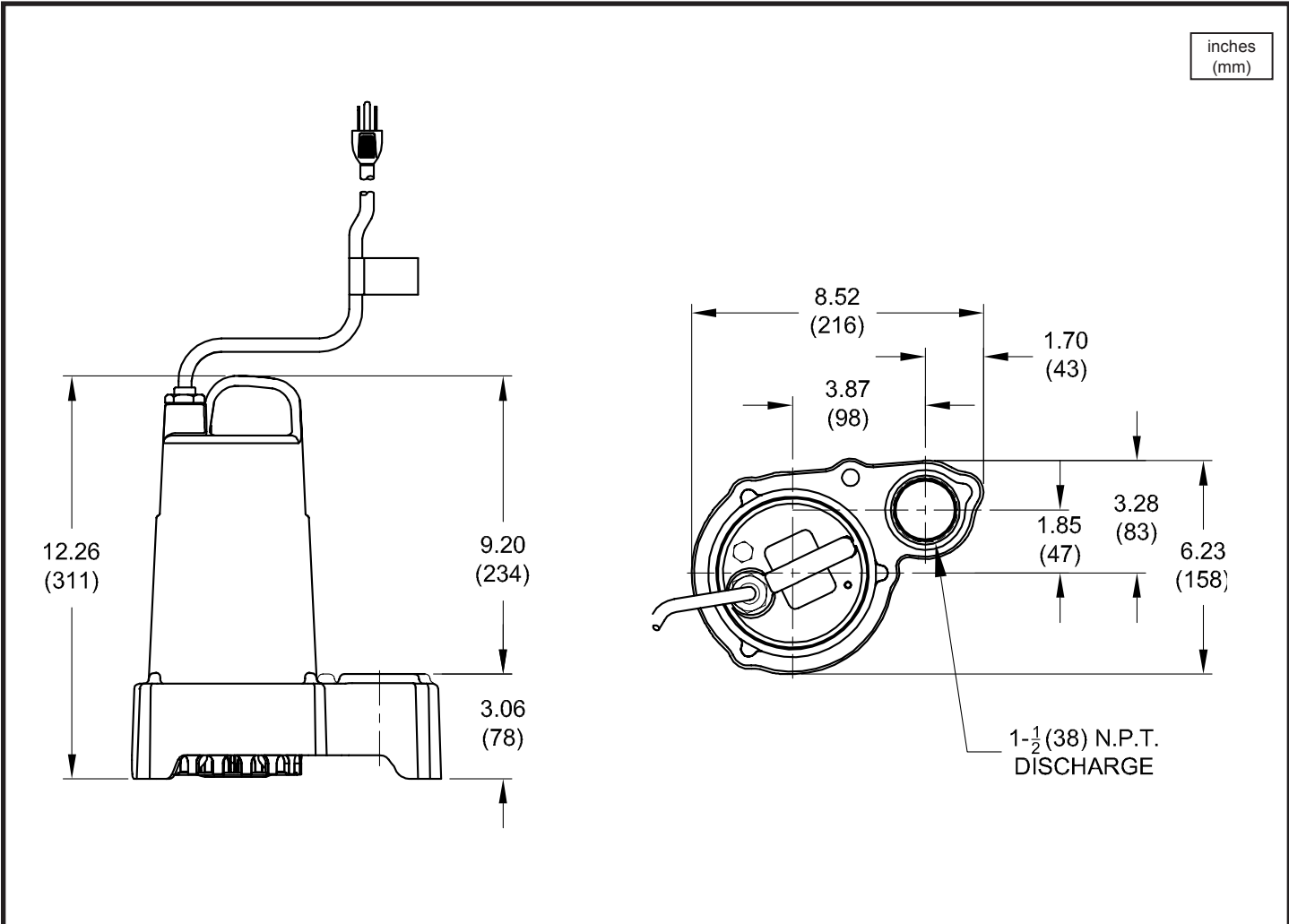


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP33HTX

High Temperature - 1/2" Spherical Solids Handling
Manual & Automatic, Sump /Effluent

Submersible Effluent Pumps



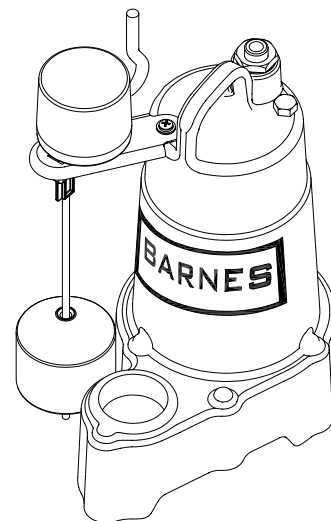
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP33HTX	113667	1/3	120/1	60	3450	B	4.1	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED “DRY” FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 4.) MUST USE A **HIGH TEMPERATURE** WIDE ANGLE LEVEL CONTROL IN HIGH TEMPERATURE APPLICATIONS.

Submersible Effluent Pumps

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Thermoplastic
IMPELLER: <i>Design</i>	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
<i>Material</i>	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Type 21
<i>Material</i>	Silicon Carbide/Silicon Carbide/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	10 ft. (3m) or 20 ft. (6m) Cord with plug and Pressure grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	Oil Filled
<i>Insulation</i>	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	Vertical float, PVC, snap action, 10 ft (3m) or 20 ft. (6m) cord and integrated battery operated alarm (P/N: 112915) with 8 ft. (2.4m) cord. (See Section D page 9A for Alarm)
MINIMUM SUMP DIA	12" (305mm)



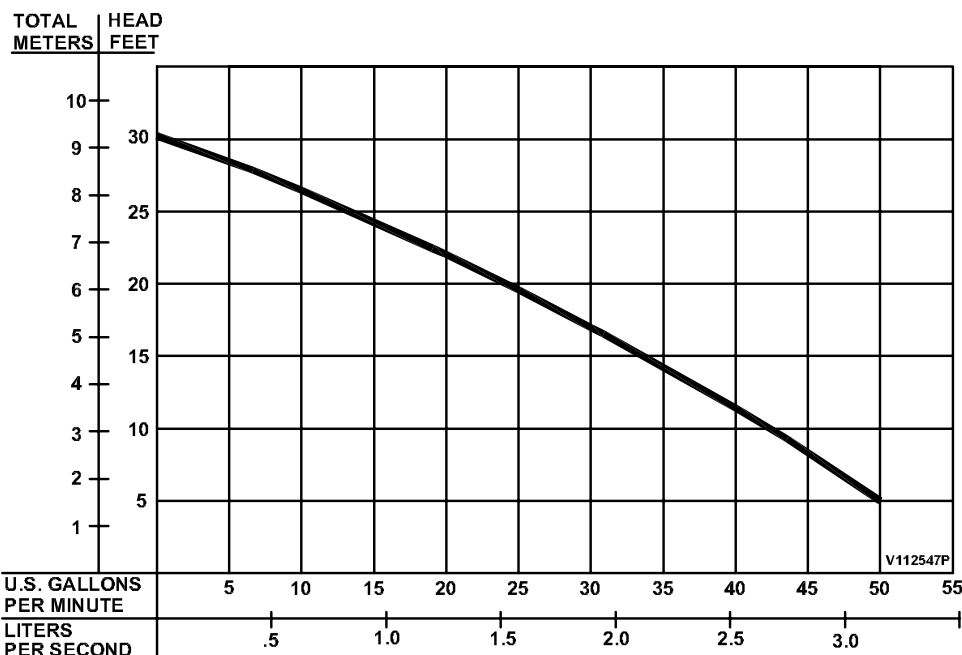
Series: SP33VFAL, 1/3HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS

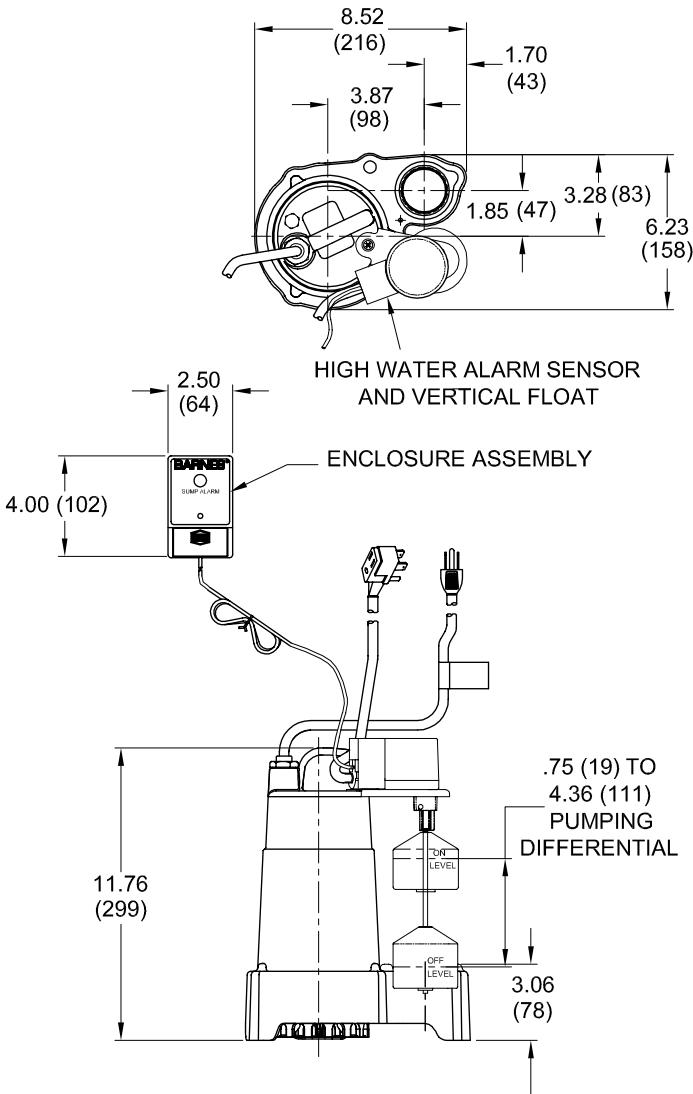


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP33VFAL

1/2" Spherical Solids Handling
Automatic w/Alarm, Sump /Effluent

Submersible Effluent Pumps



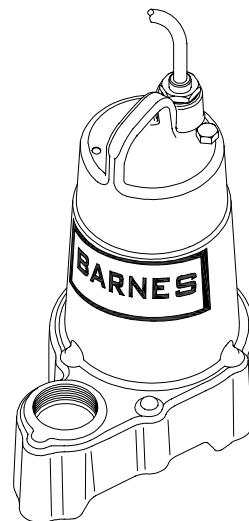
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP33VFAL	112914	1/3	120/1	60	3450	B	5.8	10 ft. (3m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Effluent Pumps

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Thermoplastic
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N
CORD ENTRY	20 ft. (6m) Cord with plug and pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation.....	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
SP50X.....	None
SP50AX.....	Wide angle, Mechanical, 20 ft. (6m) cord
SP50VFX	Vertical float, PVC, snap action, 20 ft (6m) cord
MINIMUM SUMP DIA:	
SP50AX.....	18" (457mm)
SP50X & SP50VXF	12" (305mm)



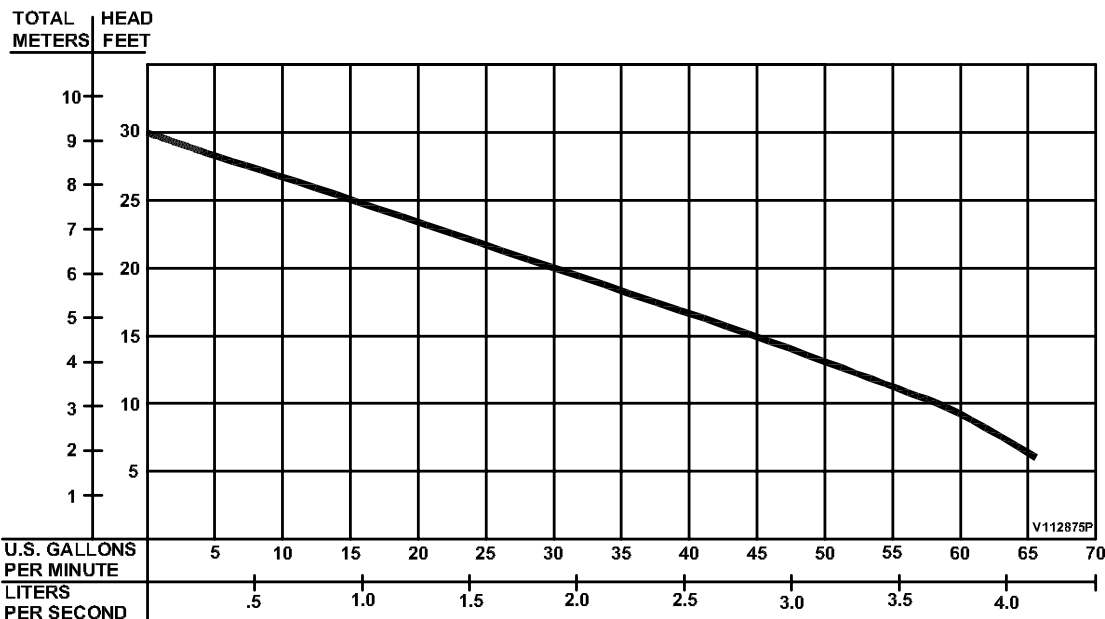
Series: SP50 1/2HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

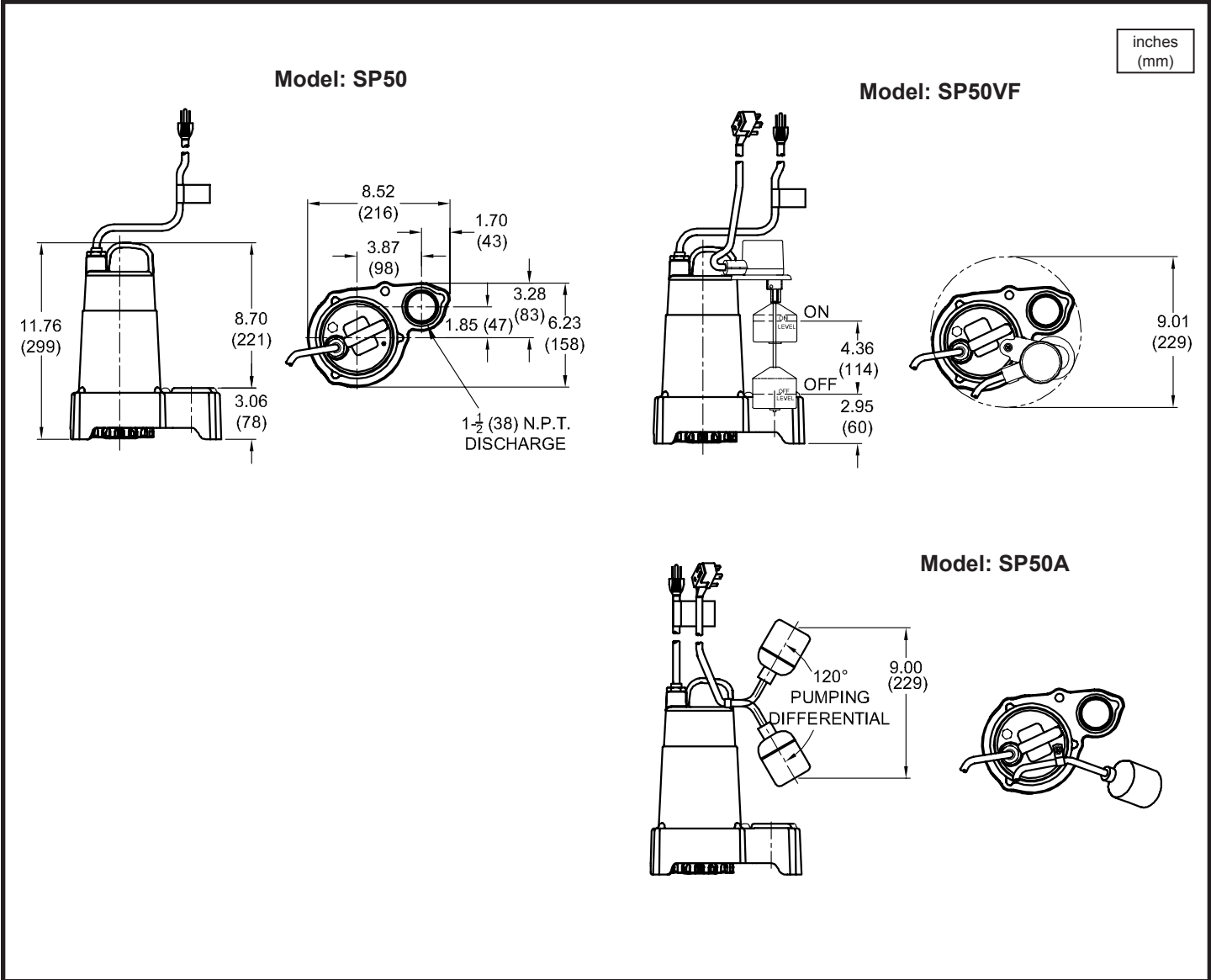
DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Submersible Effluent Pumps



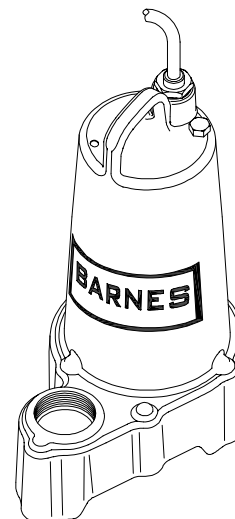
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP50X	112875	1/2	120/1	60	3450	A	6.8	20 ft. (6m)	14/3	SJTOW
SP50AX	112877	1/2	120/1	60	3450	A	6.8	20 ft. (6m)	14/3	SJTOW
SP50VFX	112879	1/2	120/1	60	3450	A	6.8	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Effluent Pumps

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Thermoplastic
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N
CORD ENTRY	20 ft. (6m) Cord with plug and pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation.....	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
SP75X.....	None
SP75AX.....	Wide angle, Mechanical, 20 ft. (6m) cord
SP75VFX	Vertical float, PVC, snap action, 20 ft. (6m) cord
MINIMUM SUMP DIA:	
SP75AX.....	18" (457mm)
SP75X & SP75VXF	12" (305mm)



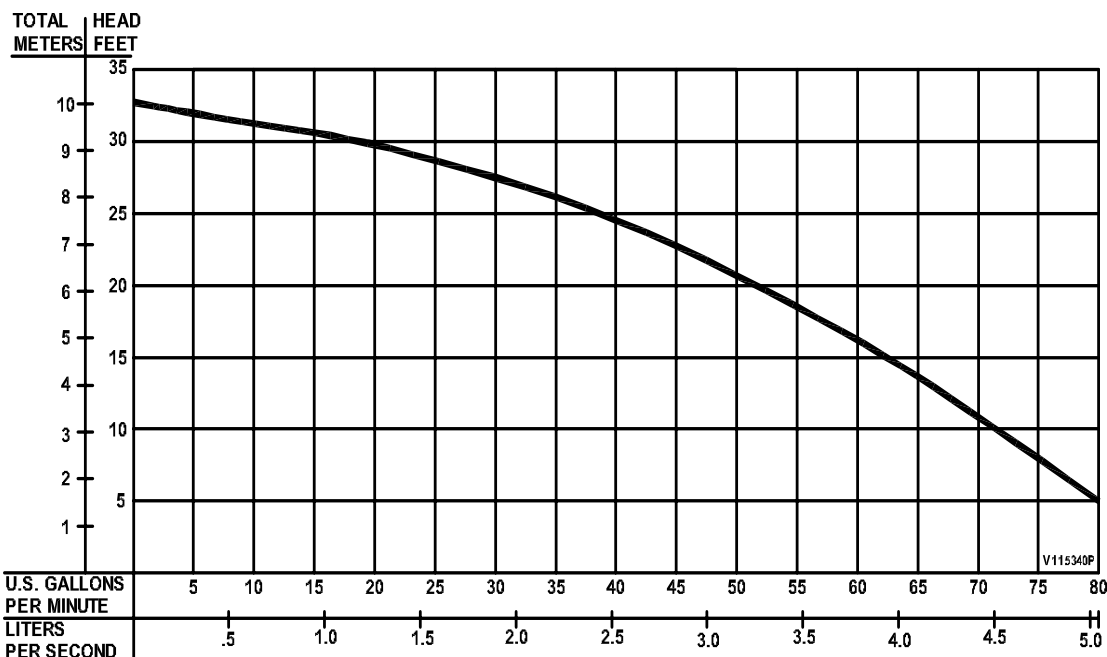
Series: SP75 3/4HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS

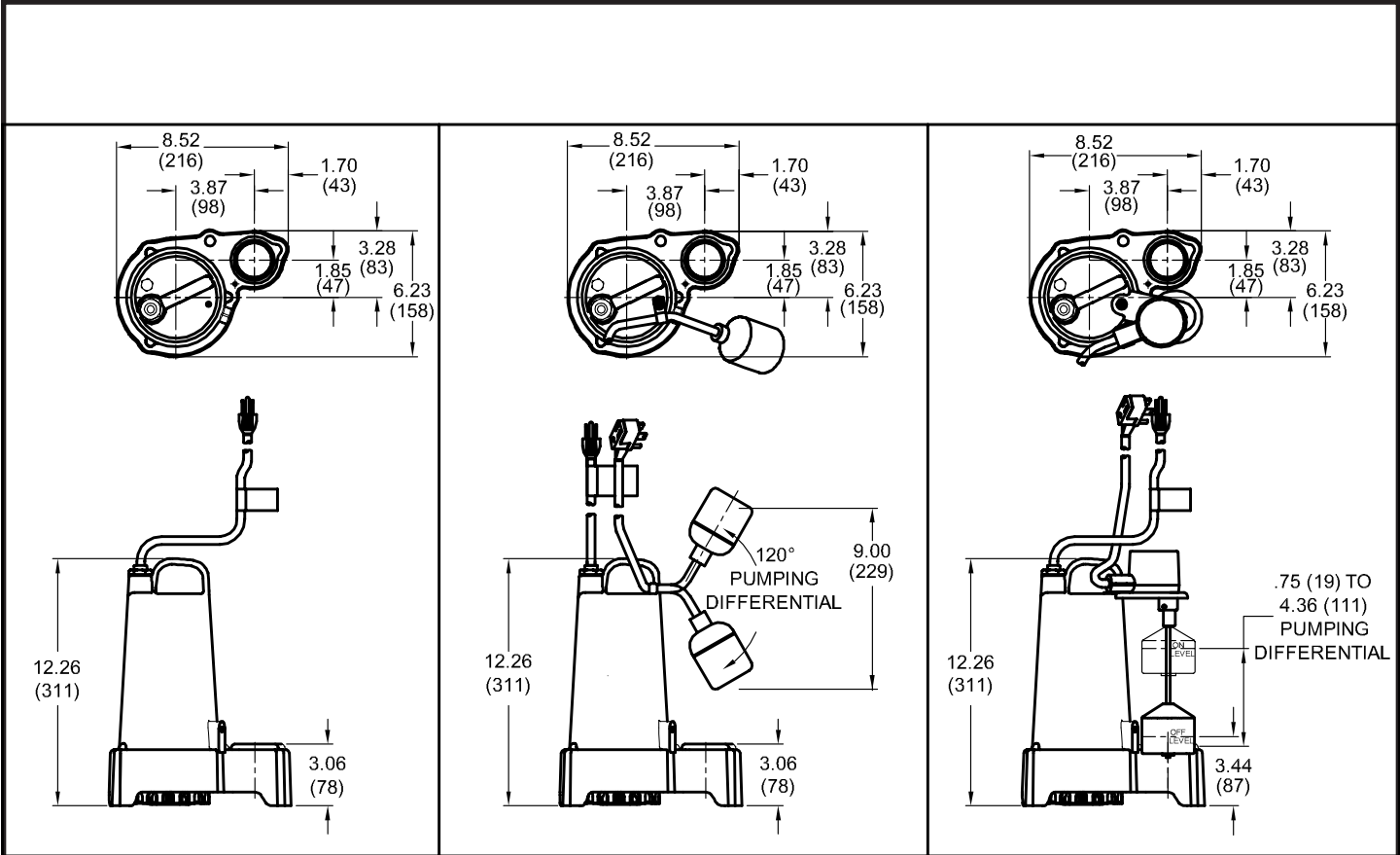


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SP75X

1/2" Spherical Solids Handling
Manual & Automatic, Sump /Effluent

Submersible Effluent Pumps



Model: SP75X

Model: SP75AX

Model: SP75VFX

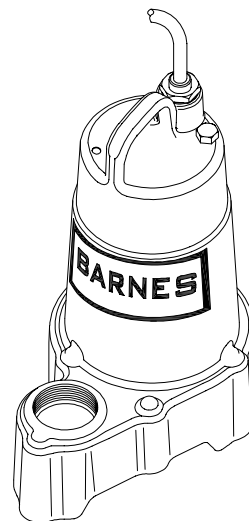
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SP75X	115368	3/4	120/1	60	3450	H	9.8	20 ft. (6m)	14/3	SJTOW
SP75AX	115369	3/4	120/1	60	3450	H	9.8	20 ft. (6m)	14/3	SJTOW
SP75VFX	115370	3/4	120/1	60	3450	H	9.8	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Effluent Pumps

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP STRAINER	Thermoplastic
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	20 ft. (6m) Quick connect Cord with plug and pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation.....	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
EP52X.....	None
EP52AX.....	Wide angle, Mechanical, 20 ft. (6m) cord with Piggy-Back plug
EP52VFX	Vertical float, PVC, snap action, 20 ft (6m) cord with Piggy-Back plug
MINIMUM SUMP DIA:	
ESP52AX	18" (457mm)
ESP52X & EP52VXF ..	12" (305mm)



Series: EP52X

1/2HP, 3450RPM, 60Hz

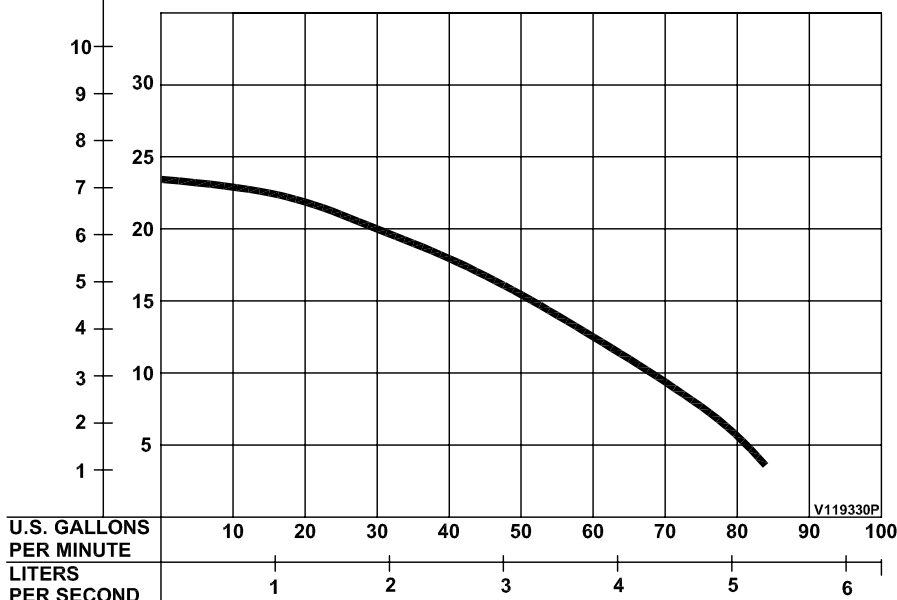


CSA 108
UL 778
LR16567

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS

TOTAL HEAD
METERS FEET

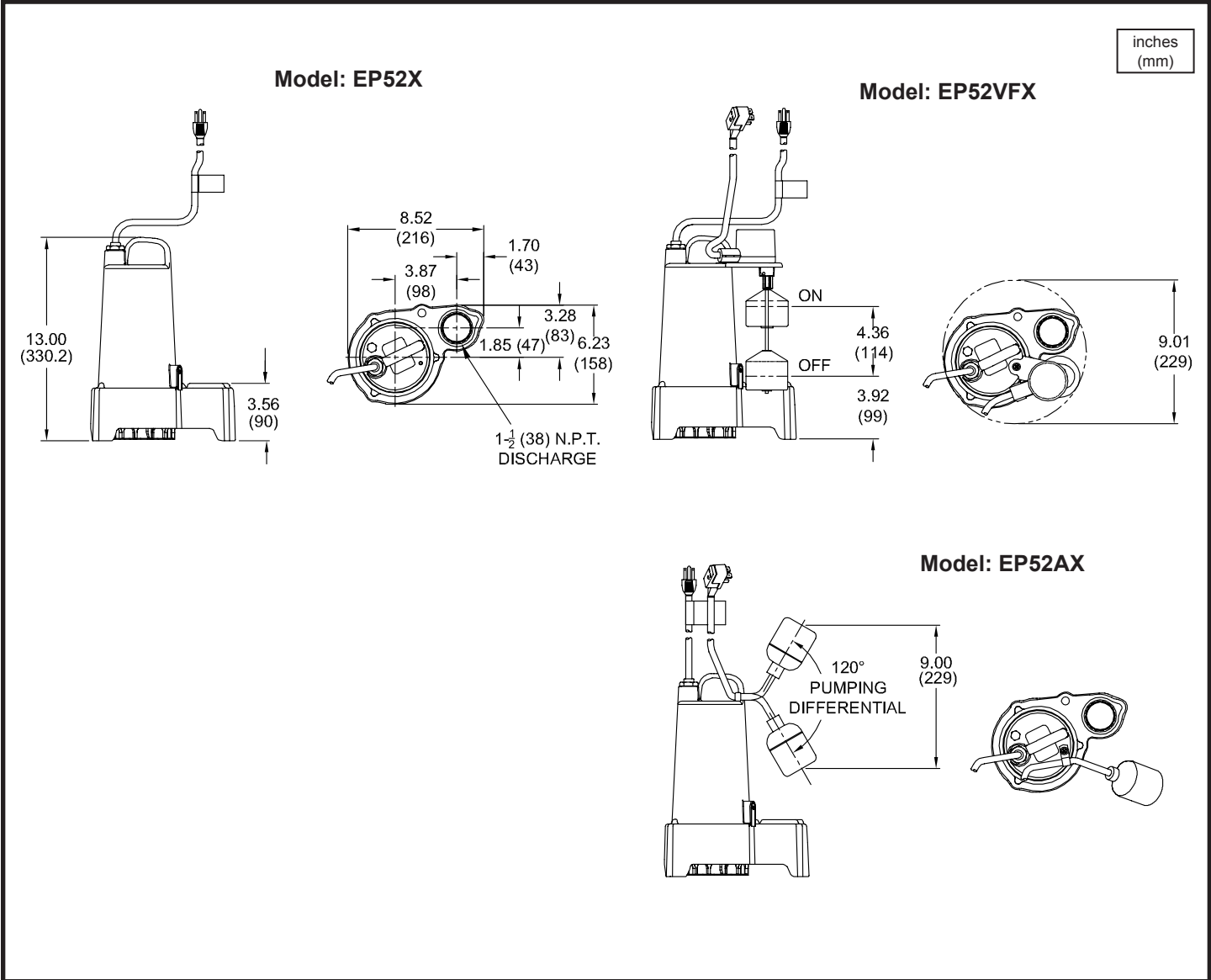


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series EP52X

3/4" Spherical Solids Handling
Manual & Automatic

Submersible Effluent Pumps



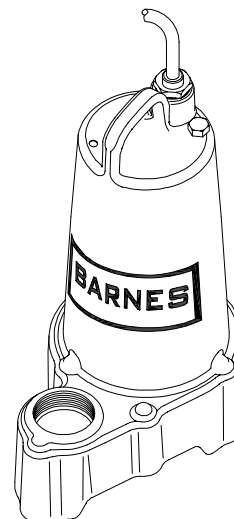
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
EP52X	119330	1/2	240/1	60	3450	D	3.4	20 ft. (6m)	14/3	SJTOW
EP52AX	119411	1/2	240/1	60	3450	D	3.4	20 ft. (6m)	14/3	SJTOW
EP52VFX	119412	1/2	240/1	60	3450	D	3.4	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Effluent Pumps

DISCHARGE	1½" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
MOTOR HOUSING	Cast Iron
BODY & STRAINER	Thermoplastic
IMPELLER: Design	10 Vane vortex, with pump out vanes on back side. Balanced, ISO G6.3
Material	Cast Iron
SHAFT	Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Type 21
Material	Silicon Carbide/Silicon Carbide/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	20 ft. (6m) Quick connect cord with plug and pressure grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation.....	Class B
SINGLE PHASE.....	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
LEVEL CONTROL	
EP72X.....	None
EP72AX.....	Wide angle, Mechanical, 20 ft. (6m) cord with Piggy-Back plug
EP72VFX	Vertical float, PVC, snap action, 20 ft. (6m) cord with Piggy-Back plug
MINIMUM SUMP DIA:	
EP72AX.....	18" (457mm)
EP72X & EP72VXF	12" (305mm)



Series: EP72X

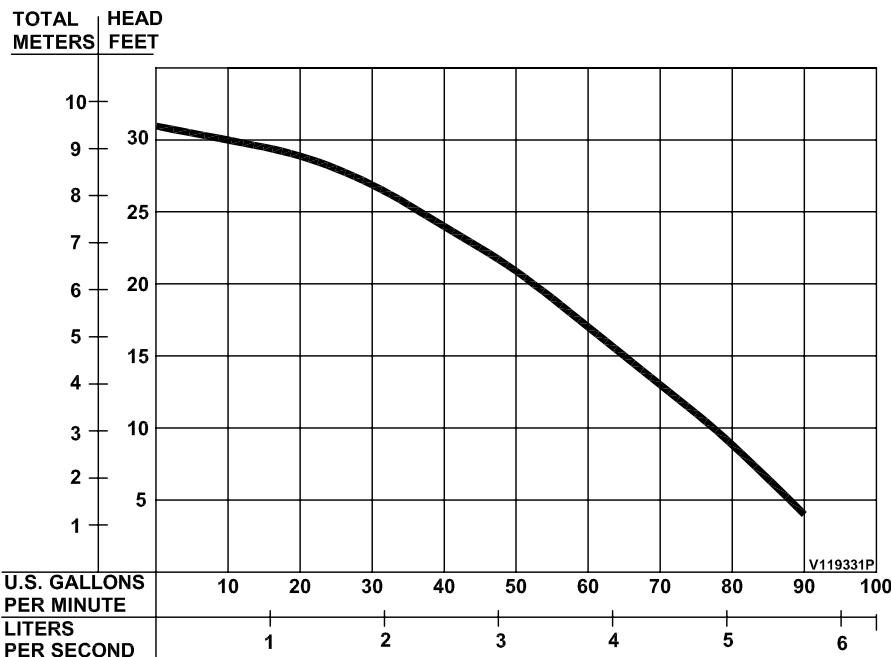
3/4HP, 3450RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT APPLICATIONS



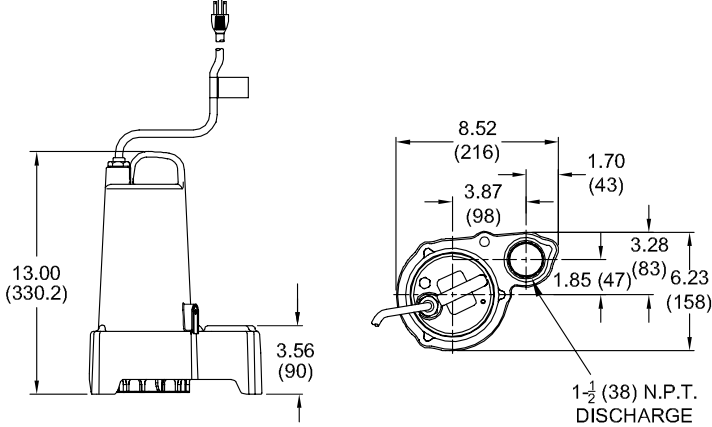
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series EP72X

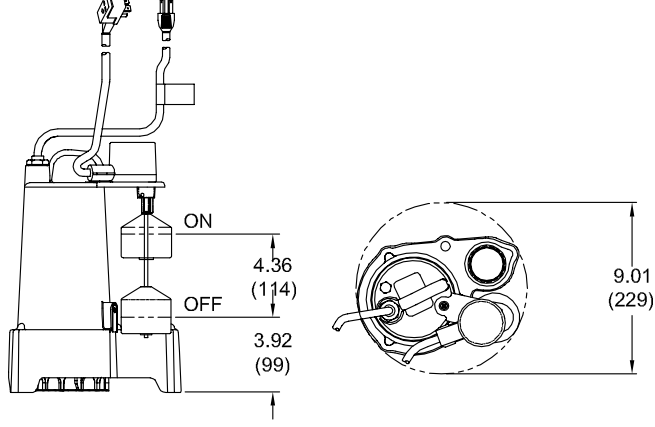
3/4" Spherical Solids Handling
Manual & Automatic

Submersible Effluent Pumps

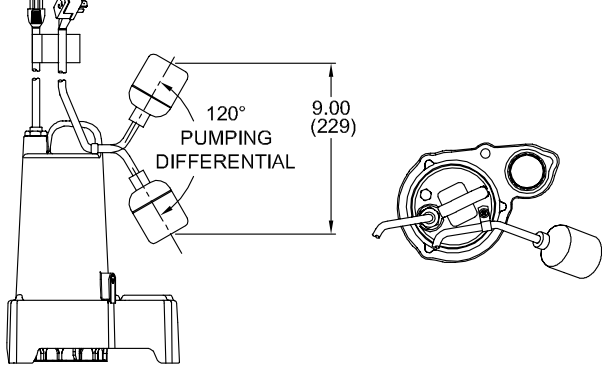
Model: EP72X



Model: EP72VFX



Model: EP72AX



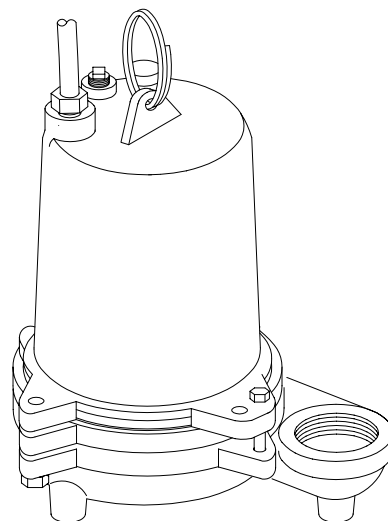
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
EP72X	119331	3/4	240/1	60	3450	A	4.3	20 ft. (6m)	14/3	SJTOW
EP72AX	119413	3/4	240/1	60	3450	A	4.3	20 ft. (6m)	14/3	SJTOW
EP72VFX	119414	3/4	240/1	60	3450	A	4.3	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Effluent Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	
BP314	77°F (25°C) Continuous
BP324	104°F (40°C) Continuous
VOLUTE	(BP) Cast Iron, (BP-BR) Bronze
MOTOR HOUSING	(BP) Cast Iron, (BP-BR) Bronze
SEAL PLATE	(BP) Cast Iron, (BP-BR) Bronze
IMPELLER: Design	2 Vane open, Dynamically Balanced, ISO G6.3
Material	(BP) Polypropylene with stainless insert (BP-BR) Bronze 81-3-7-9
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL:	
Design	Single Mechanical, Oil-Filled Reservoir, Secondary Exclusion Seal
Material	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (5m) Quick Disconnect Cord with plug On 115 volt, Pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR, SINGLE PHASE	Permanent Split Capacitor (PSC). Oil Filled. Includes Overload Protection in Motor
Insulation	Class B
LEVEL CONTROLS	"A" - Wide Angle, PVC, Mechanical, 15 ft (5m) cord with Piggy-Back Plug, N/O "AU" - Wide Angle, Polypropylene, Mechanical, N/O, Integral to pump. ON and OFF points are adjustable "VF" - Vertical Float, PVC, Snap Action, 15 ft (5m) cord, with Piggy-Back plug. OFF point ONLY is adjustable
OPTIONAL EQUIPMENT	Seal Material, Additional Cable, Bronze Impeller



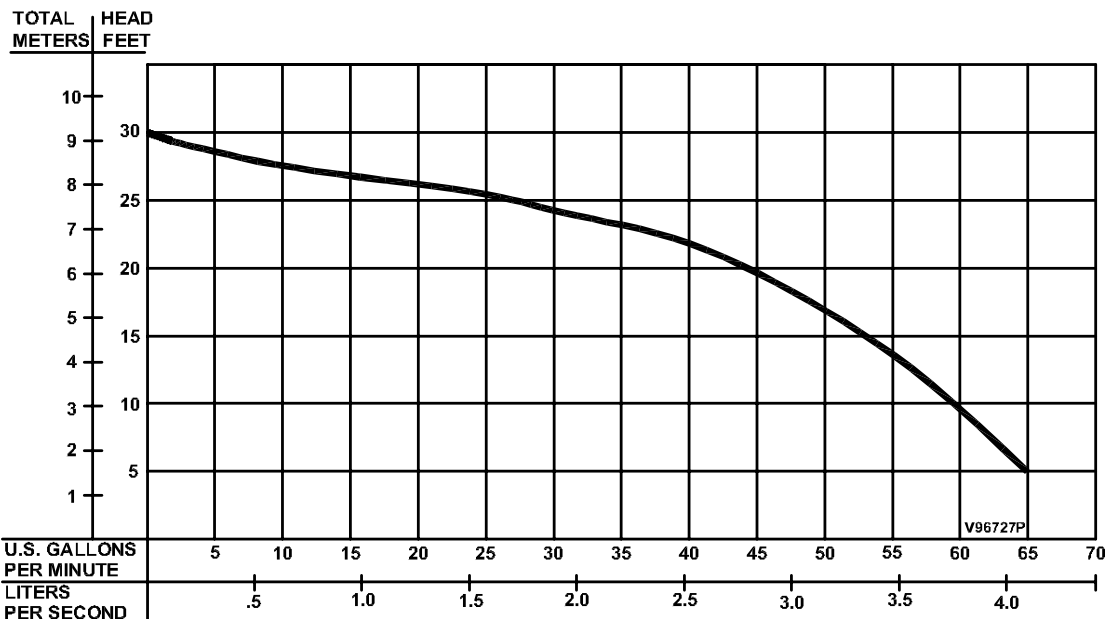
Series: BP314 & BP324 1/3HP, 1750RPM, 60Hz



CSA 108
UL 778
LR16567

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE
EFFLUENT IN TYPICAL SEPTIC TANK/EFFLUENT
APPLICATIONS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series BP

3/4" Spherical Solids Handling
Manual & Automatic - Submersible

BARNES®

Professional Plumbing

www.cranepumps.com

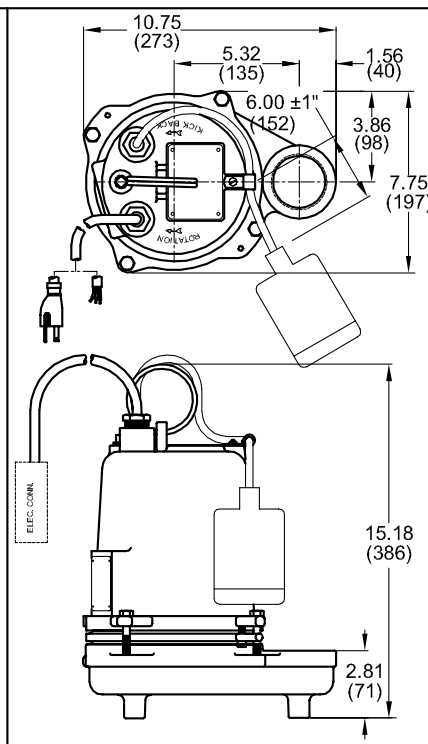
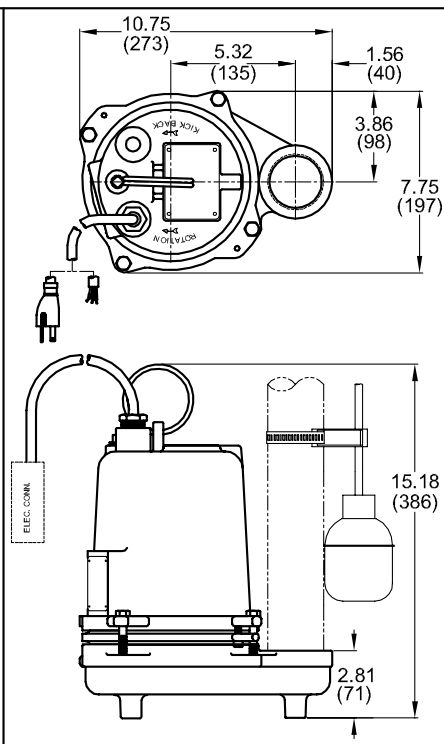
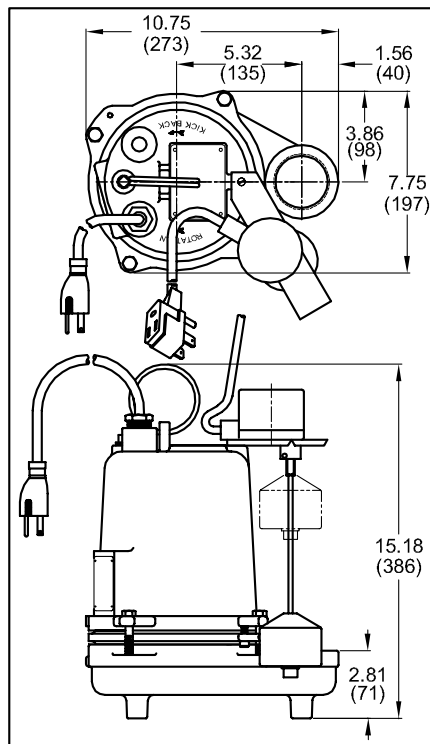
Submersible Effluent Pumps

BP314VF, BP314VFBR

BP314A, BP314ABR,
BP314. BP314BR, BP324, BP324BR (Less Float)

BP314AU, BP314AUBR
BP324AU, BP324AUBR

inches
(mm)



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
BP314	096727	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314A	096728	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314AU	096729	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314VF	100834	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314BR	096732	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314ABR	096733	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314AUBR	096734	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP314VFBR	100835	1/3	115/1	60	1750	A	8.0	19.0	14/3	SJTOW	0.375 (9.5)
BP324	096730	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)
BP324AU	096731	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)
BP324BR	096735	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)
BP324AUBR	096736	1/3	230/1	60	1750	A	4.0	13.0	14/3	SJTOW	0.375 (9.5)

Mechanical Switch on BP-A, cord 16/2, SJOW, Piggy-Back Plug.

Mechanical Switch on BP-AU, cord 14/2, SJOW

Vertical Switch on BP-VF, cord 16/2, SJOW, Piggy-Back Plug

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

SECTION B
PAGE 28
DATE 10/05

CRANE®

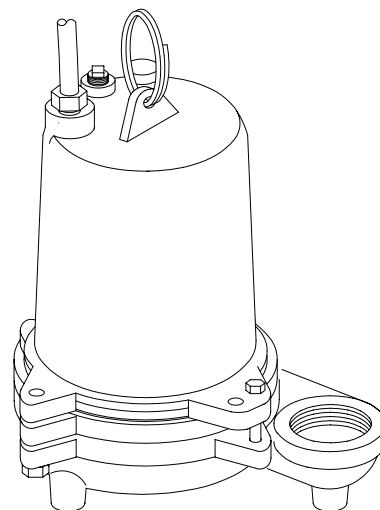
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Effluent Pumps

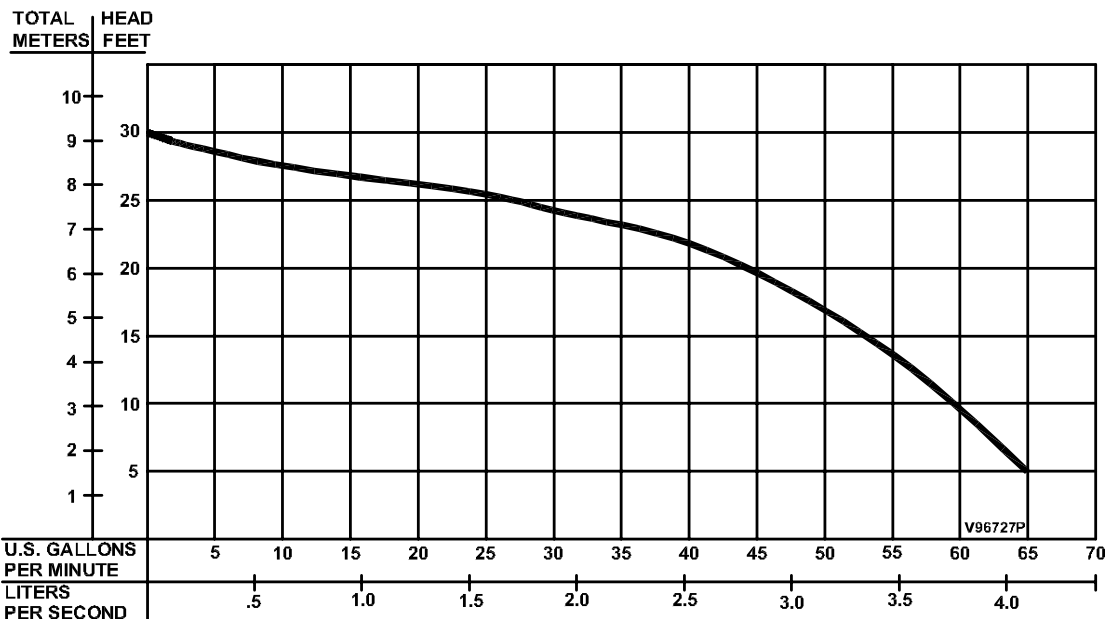
DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	200°F (93°C) Continuous
VOLUTE	(BP) Cast Iron, (BP-BR) Bronze
MOTOR HOUSING	(BP) Cast Iron, (BP-BR) Bronze
SEAL PLATE	(BP) Cast Iron, (BP-BR) Bronze
IMPELLER: <i>Design</i>	2 Vane open, Dynamically Balanced, ISO G6.3
<i>Material</i>	Bronze 81-3-7-9
SHAFT	416 Stainless Steel
SQUARE RINGS.....	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil-Filled Reservoir, Secondary Exclusion Seal
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (5m) Quick Disconnect Cord with plug On 115 volt, Pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR, SINGLE PHASE	Permanent Split Capacitor (PSC). Oil Filled. Includes Overload Protection in Motor
<i>Insulation</i>	Class B
LEVEL CONTROLS.....	"A" - High Temperature, Wide Angle, Mechanical, N/O, 15 ft (5m) cord with Piggy-Back Plug, "AU" - High Temperature, Wide Angle, Polypropylene, Mechanical, N/O Integral to pump. ON and OFF points are adjustable
OPTIONAL EQUIPMENT	Seal Material, Additional Cable



Series: BP314HT & BP324HT 1/3HP, 1750RPM, 60Hz, Cast Iron & Bronze

DESCRIPTION:

PUMP IS DESIGNED FOR HANDLING SEWAGE
EFFLUENT IN **HIGH TEMPERATURE** SEPTIC
TANK/EFFLUENT APPLICATIONS



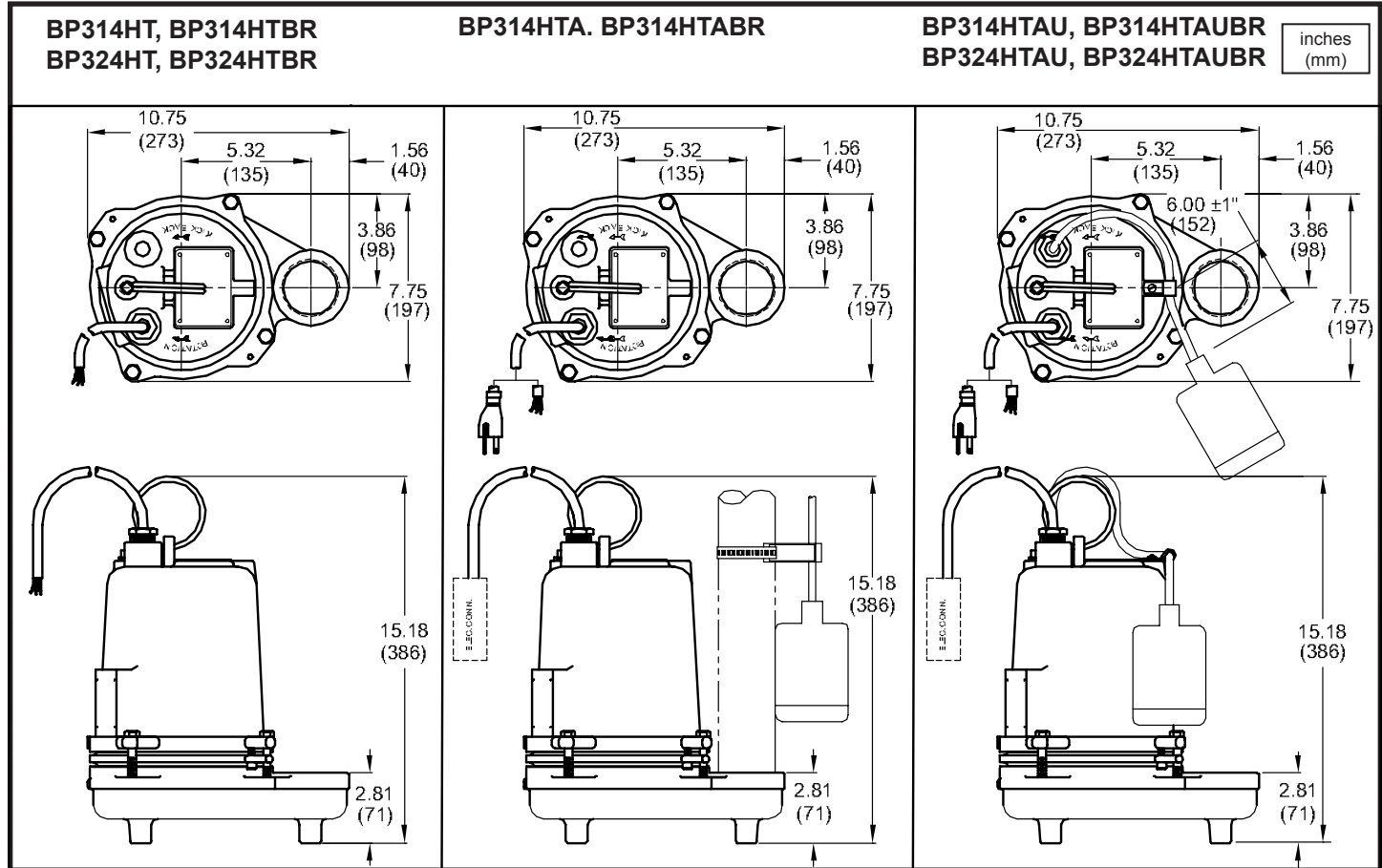
Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series BP-HT

High Temperature - 3/4" Spherical Solids Handling
Manual & Automatic - Submersible

BARNES®
Professional Plumbing
www.cranepumps.com

Submersible Effluent Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
BP314HT	096737	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTA	096738	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTAU	096739	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTBR	096742	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTABR	096743	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP314HTAUBR	096744	1/3	115/1	60	1750	A	8.0	19.0	14/3	SOOW	0.560 (14.2)
BP324HT	096740	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)
BP324HTAU	096741	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)
BP324HTBR	096745	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)
BP324HTAUBR	096746	1/3	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)

Mechanical Switch on BP314HTA, cord 14/2, SJOOW, 0.370 (9.4MM) O.D., Piggy-Back Plug.
Mechanical Switch on BP314HTAU & BP324HTAU, cord 14/2, SJOOW, 0.370 (9.4MM) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 4.) MUST USE A **HIGH TEMPERATURE** WIDE ANGLE LEVEL CONTROL IN HIGH TEMPERATURE APPLICATIONS.

SECTION B
PAGE 30
DATE 10/05

CRANE®

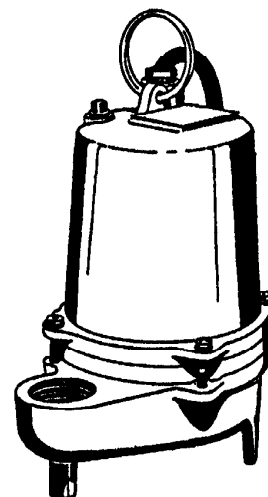
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	SE411: 77°F (25°C) Continuous SE421: 104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: Design	2 Vane, Open with pump out vanes on back side Dynamically Balanced, ISO G6.3
Material	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Oil Filled Reservoir, Secondary Exclusion Seal
Material	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware - 300 Series Stainless
UPPER BEARING	15 ft. (5m) Quick Disconnect Cord with plug On 115 Volt, Pressure Grommet for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: Design	NEMA L Torque Curve, Oil Filled, Squirrel Cage Induction
Insulation	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
LEVEL CONTROL	"A" - Wide Angle, PVC, Mechanical, 15 ft (5m) cord with Piggy-Back Plug, N/O "AU" - Wide Angle, Polypropylene, Mechanical, N/O Integral to pump. ON and OFF Points are adjustable "VF" - Vertical Float, PVC, Snap Action, 15 ft (5m) cord, with Piggy-Back plug. OFF point ONLY is adjustable
OPTIONAL EQUIPMENT	Seal Material, Additional Cord

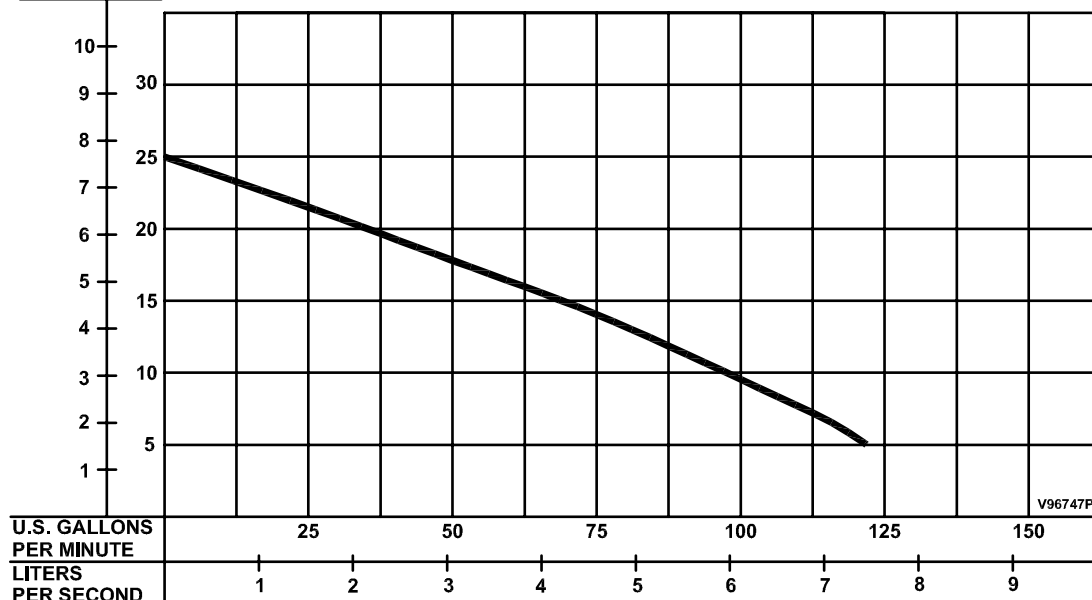


Series: SE (SE411 & SE421) .4HP, 1750RPM, 60Hz

CSA 108
UL 778
LR16567

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED
FOR TYPICAL RAW SEWAGE APPLICATIONS

TOTAL HEAD
METERS FEET



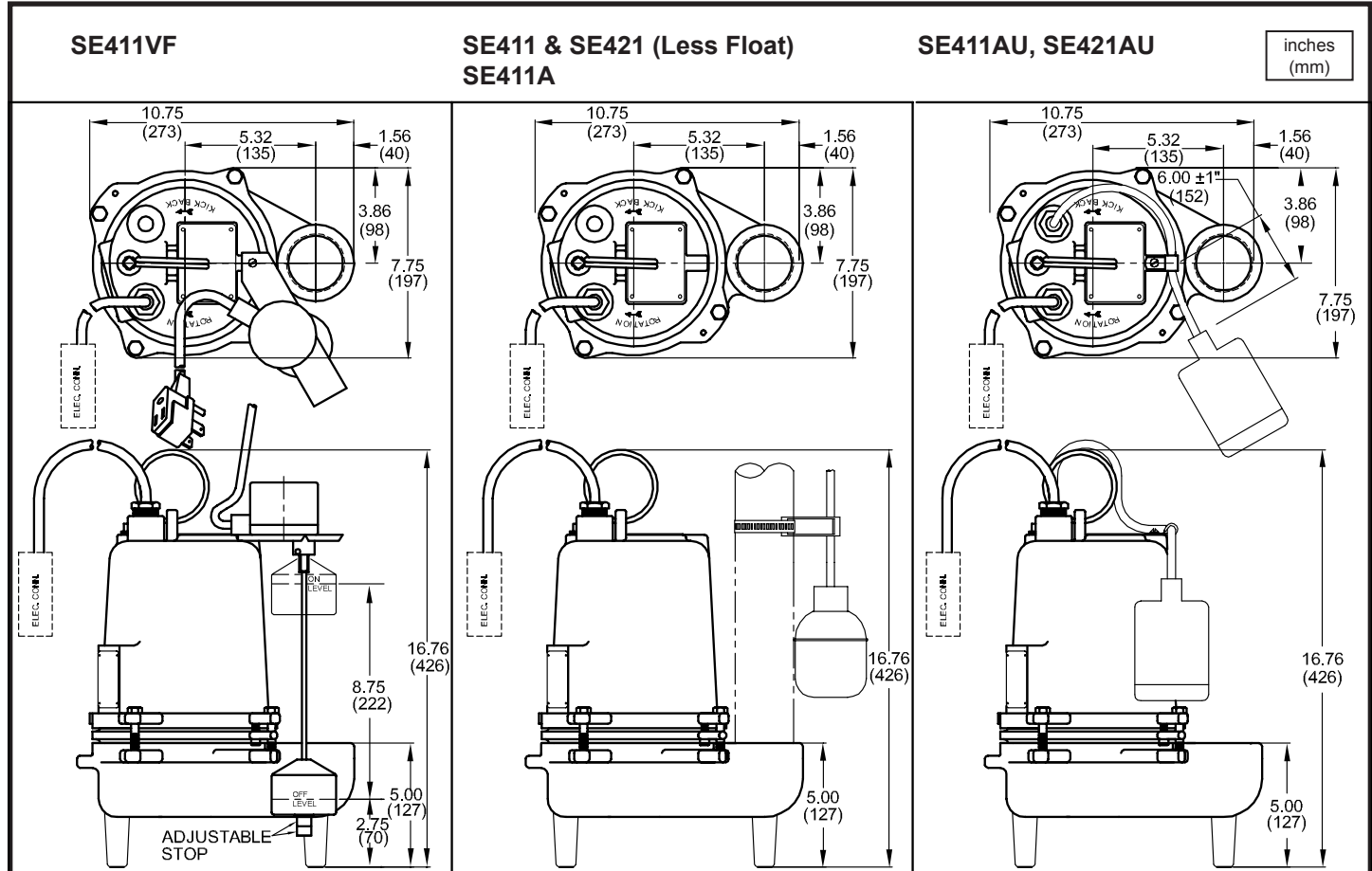
Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series SE

2" Spherical Solids Handling
Manual & Automatic

BARNES®
Professional Plumbing
www.cranepumps.com

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
SE411	096747	0.4	115/1	60	1750	C	12.0	19.0	14/3	SJTOW	0.375 (9.5)
SE411A	096748	0.4	115/1	60	1750	C	12.0	19.0	14/3	SJTOW	0.375 (9.5)
SE411AU	096749	0.4	115/1	60	1750	C	12.0	19.0	14/3	SJTOW	0.375 (9.5)
SE411VF	100836	0.4	115/1	60	1750	C	12.0	19.0	14/3	SJTOW	0.375 (9.5)
SE421	096750	0.4	230/1	60	1750	C	6.2	13.0	14/3	SJTOW	0.375 (9.5)
SE421AU	096751	0.4	230/1	60	1750	C	6.2	13.0	14/3	SJTOW	0.375 (9.5)

Mechanical Switch on SE-A, cord 16/2, SJOW, Piggy-Back Plug
Mechanical Switch on SE-AU, cord 14/2, SJOW, 0.370 (9.4mm) O.D.
Vertical Switch on SE-VF, cord 16/2, SJOW, 0.320 (8.1mm) O.D. Piggy-Back Plug

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

SECTION C
PAGE 2
DATE 4/04

CRANE®

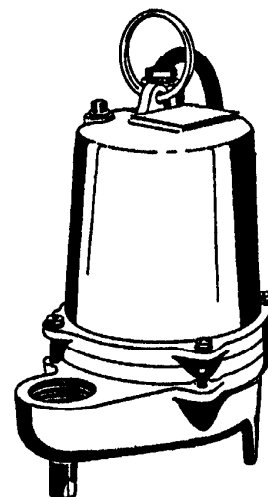
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	200°F (93°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, Open with pump out vanes on back side
	Dynamically Balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil Filled Reservoir, Secondary Exclusion Seal
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug On 115 volt, Pressure Grommet for sealing and strain relief
UPPER BEARING.....	Single Row, Ball, Oil Lubricated
LOWER BEARING.....	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	NEMA L Torque Curve, Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class F
SINGLE PHASE.....	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
LEVEL CONTROL	"A" - Wide Angle, PVC, Mechanical, 15 ft (5m) cord with Piggy-Back Plug, N/O
	"AU"- Wide Angle, Polypropylene, Mechanical, N/O Integral to pump. ON and OFF Points are adjustable
OPTIONAL EQUIPMENT	Seal Material, Additional Cord, Strainer

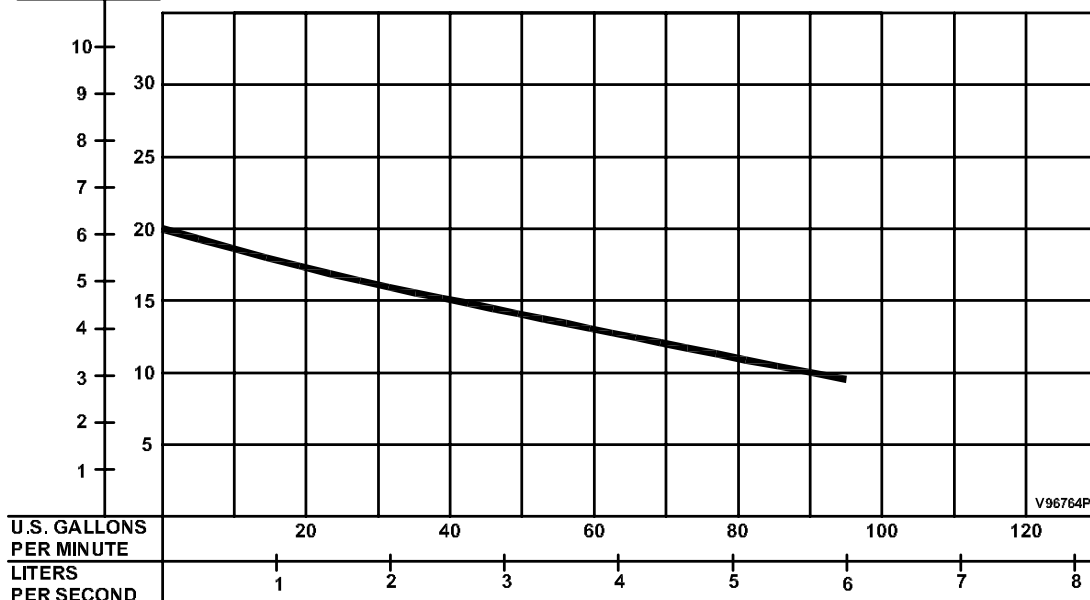


Series: SE-HT (SE411HT & SE421HT)
.4HP, 1750RPM, 60Hz

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED
FOR **HIGH TEMPERATURE** RAW SEWAGE
APPLICATIONS

TOTAL HEAD
METERS FEET

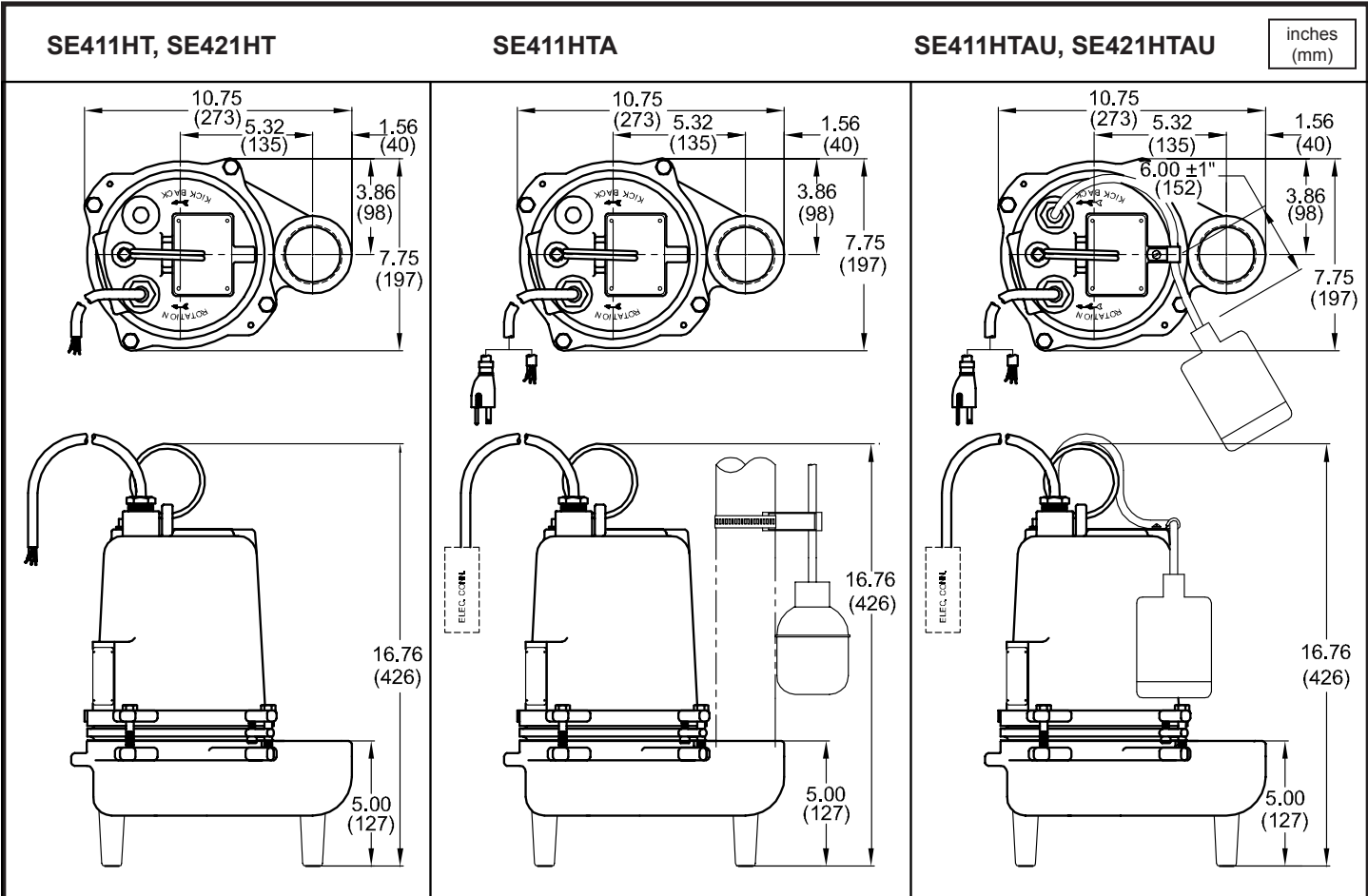


Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series SE-HT

2" Spherical Solids Handling
Manual & Automatic - High Temperature

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
SE411HT	096764	0.4	115/1	60	1750	A	10.0	26.0	14/3	SOOW	0.560 (14.2)
SE411HTA	096765	0.4	115/1	60	1750	A	10.0	26.0	14/3	SOOW	0.560 (14.2)
SE411HTAU	096766	0.4	115/1	60	1750	A	10.0	26.0	14/3	SOOW	0.560 (14.2)
SE421HT	096767	0.4	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)
SE421HTAU	096768	0.4	230/1	60	1750	A	4.0	13.0	14/3	SOOW	0.560 (14.2)

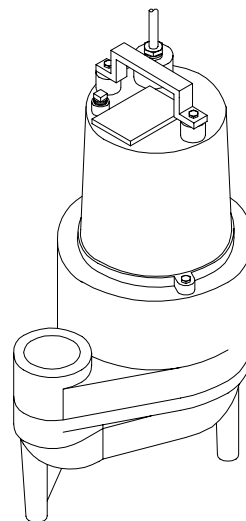
Mechanical Switch on SE-HTA, cord 14/2, SJOW, 0.370 (9.4mm) O.D. Piggy-Back Plug
Mechanical Switch on SE-HTAU, cord 14/2, SJOW, 0.370 (9.4mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 4.) MUST USE A **HIGH TEMPERATURE** WIDE ANGLE LEVEL CONTROL IN HIGH TEMPERATURE APPLICATIONS.

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	77°F (25°C) Continuous
MOTOR HOUSING	Cast Iron
PUMP BODY	Cast Iron
IMPELLER: Design	Multi-Vane, Vortex
Material	Cast Iron
SHAFT	416 Stainless Steel
O-RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
CORD ENTRY	20 ft. (6m) Quick Disconnect Cord with plug on 115 Volt, Pressure Grommet for sealing and strain relief
SEAL: Design	Single Mechanical, Oil Filled Reservoir
Material	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: Design	Oil Filled
Insulation	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
LEVEL CONTROL:	
SEV412	None
SEV412A	Wide Angle, Mechanical, 20 ft (6m) cord Pipe Mounted
SEV412VF	Vertical Float, PVC, Snap Action
SEV412VFT	Attached Vertical Float, PVC, Snap Action
SEV412AT	Wide Angle, Mechanical, 20 ft (6m) cord Pump Mounted

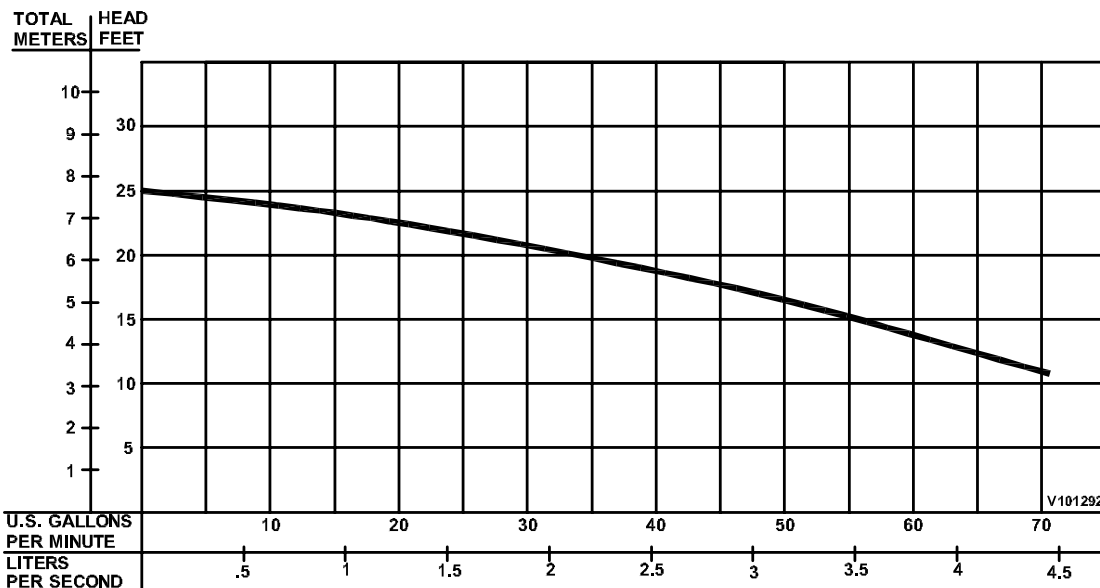


Series: SEV 0.5 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778
NRTLIC

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED
FOR TYPICAL RAW SEWAGE APPLICATIONS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series SEV

2" Spherical Solids Handling
Manual & Automatic

Submersible Non-Clog Pumps

SEV412VF

Top view dimensions: 9.63 (245), 4.75 (121), 1.38 (35), 3.50 (89), 7.00 (178).
Side view dimensions: 16.26 (413), 6.38 (162), .75 (19) to 8.25 (210) PUMPING DIFFERENTIAL.

SEV412A
SEV412 (Less Float)
SEV412AT (Attached to Motor Housing)

Top view dimensions: 9.63 (245), 4.75 (121), 1.38 (35), 3.50 (89), 7.00 (178).
Side view dimensions: 16.26 (413), 6.38 (162), 120° PUMPING DIFFERENTIAL, 9.00 (229).

SEV412VFT

Top view dimensions: 9.63 (245), 4.75 (121), 1.38 (35), 3.50 (89), 7.00 (178).
Side view dimensions: 16.26 (413), 6.38 (162), .75 (19) to 8.25 (210) PUMPING DIFFERENTIAL.

inches
(mm)

MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	CORD LENGTH	CORD SIZE	CORD TYPE
SEV412	101292	0.5	115/1	60	3450	H	10.50	20 ft. (6m)	14/3	SJTOW
SEV412A	101293	0.5	115/1	60	3450	H	10.50	20 ft. (6m)	14/3	SJTOW
SEV412VF	101294	0.5	115/1	60	3450	H	10.50	20 ft. (6m)	14/3	SJTOW
SEV412AT	103544	0.5	115/1	60	3450	H	10.50	20 ft. (6m)	14/3	SJTOW
SEV412VFT	110404	0.5	115/1	60	3450	H	10.50	20 ft. (6m)	14/3	SJTOW

IMPORTANT !

1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.

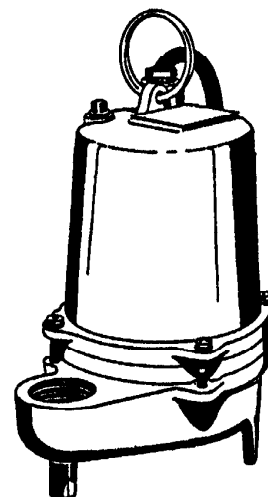
2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.

3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.

4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

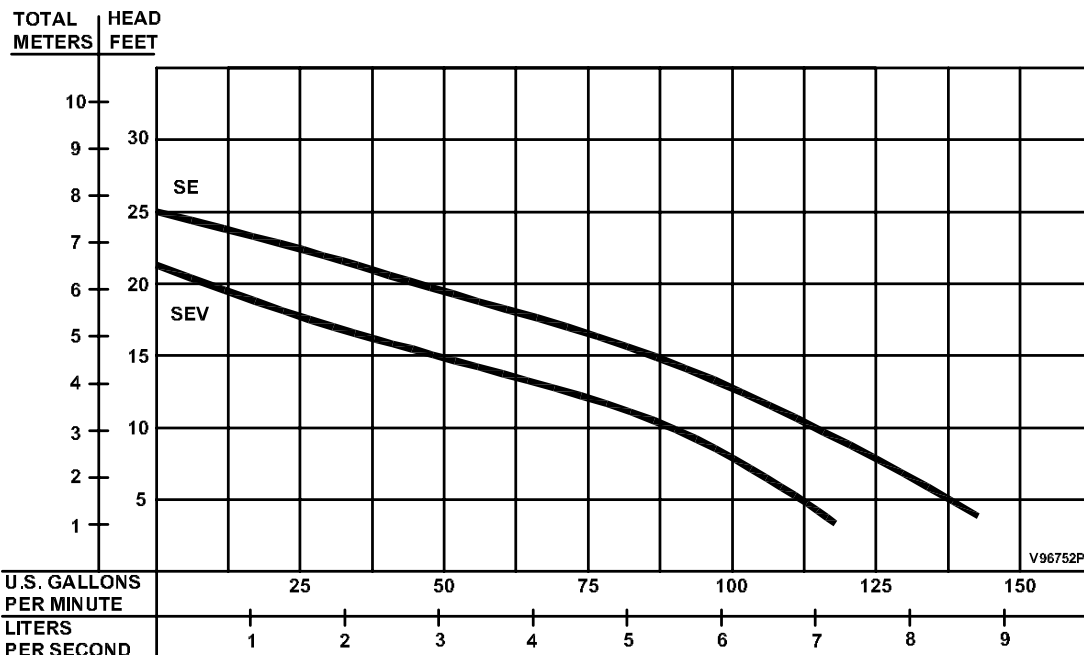
DISCHARGE	2" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: Design	SE - 2 Vane, Open. SEV - 12 Vane, Vortex. with pump out vanes on back side. Dynamically Balanced, ISO G6.3
Material	SE - Cast Iron ASTM A-48, Class 30 SEV - 81-3-7-9 Bronze
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Single Mechanical, Oil Filled Reservoir, Secondary Exclusion Seal
Material	Carbon/Ceramic/Buna-N Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Quick Disconnect Cord with plug On 115 Volt, Pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: Design	NEMA L Torque Curve, Oil Filled, Squirrel Cage Induction
Insulation	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
LEVEL CONTROL	"A" - Wide Angle, PVC, Mechanical, 15 ft (5m) cord with Piggy-Back Plug, N/O "AU" - Wide Angle, Polypropylene, Mechanical, N/O Integral to pump. ON and OFF Points are adjustable "VF" - Vertical Float, PVC, Snap Action, 15 ft (5m) cord, with Piggy-Back plug. OFF point ONLY is adjustable
OPTIONAL EQUIPMENT	Seal Material, Additional Cord



Series: SE & SEV .5HP, 1750RPM, 60Hz

CS® US
CSA 108
UL 778
LR16567

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED
FOR TYPICAL RAW SEWAGE APPLICATIONS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series SE & SEV

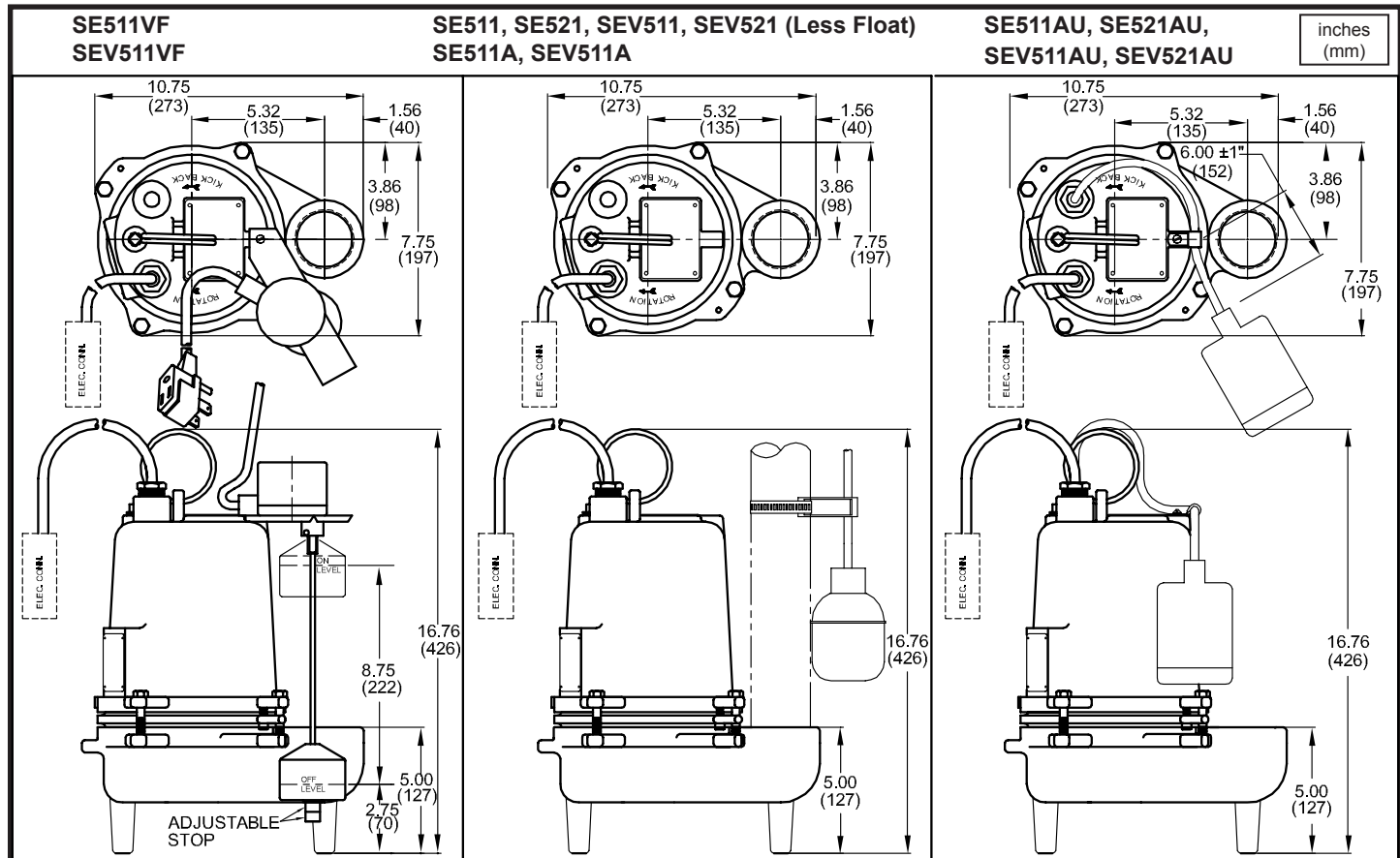
2" Spherical Solids Handling
Manual & Automatic

BARNES®

Professional Plumbing

www.cranepumps.com

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
SE511	096752	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SE511A	096753	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SE511AU	096754	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SE511VF	100837	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SE521	096755	0.5	230/1	60	1750	A	6.2	13.0	14/3	SJTOW	0.375 (9.5)
SE521AU	096756	0.5	230/1	60	1750	A	6.2	13.0	14/3	SJTOW	0.375 (9.5)
SEV511	096757	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SEV511A	096758	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SEV511AU	096759	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SEV511VF	100838	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)
SEV521	096760	0.5	230/1	60	1750	A	6.2	13.0	14/3	SJTOW	0.375 (9.5)
SEV521AU	096761	0.5	230/1	60	1750	A	6.2	13.0	14/3	SJTOW	0.375 (9.5)

Mechanical Switch on SE-A, cord 16/2, SJOW, Piggy-Back Plug

Mechanical Switch on SE-AU, cord 14/2, SJOW, 0.370 (9.4mm) O.D.

Vertical Switch on SE-VF, cord 16/2, SJOW, 0.320 (8.1mm) O.D. Piggy-Back Plug

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
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CRANE®

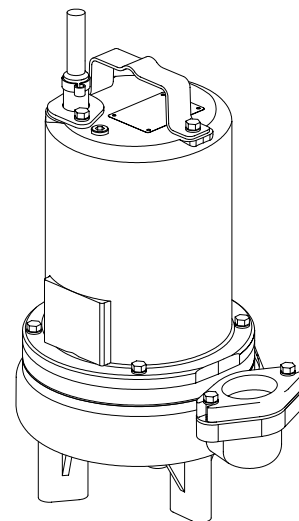
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. Requires overload Protection to be included in control panel
LEVEL CONTROL	"A" - Wide Angle, PVC, Mechanical, 15 ft (5m) cord with Piggy-Back Plug, N/O "AU"- Wide Angle, Polypropylene, Mechanical, N/O Integral to pump. ON and OFF Points are adjustable
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



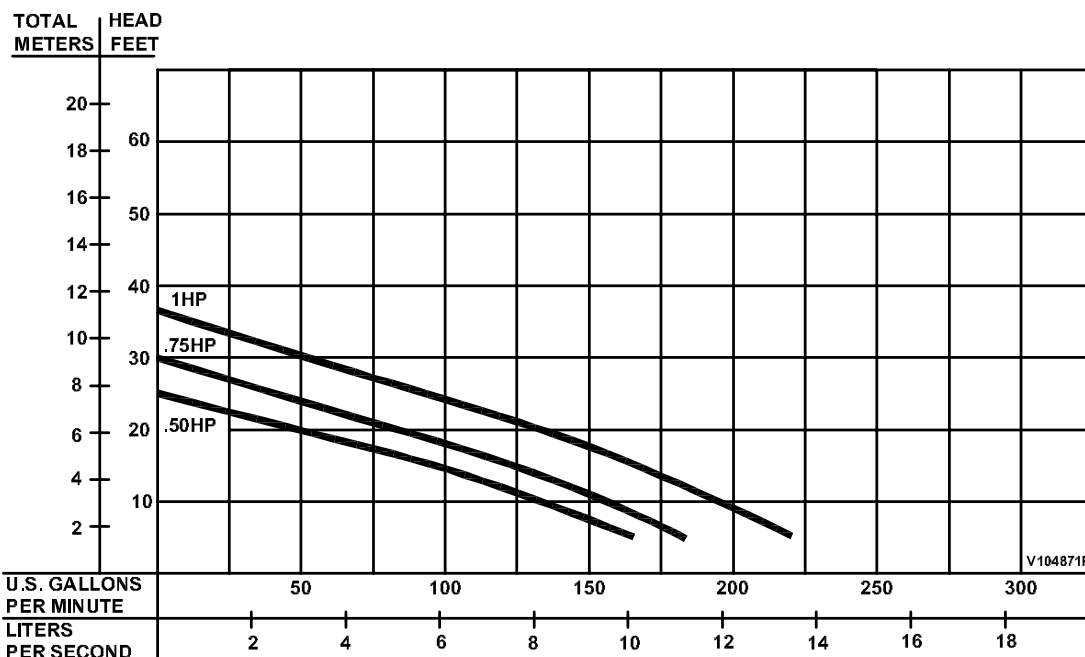
Series: SE (SE51 & SE52) .5 - 1.0 HP, 1750RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



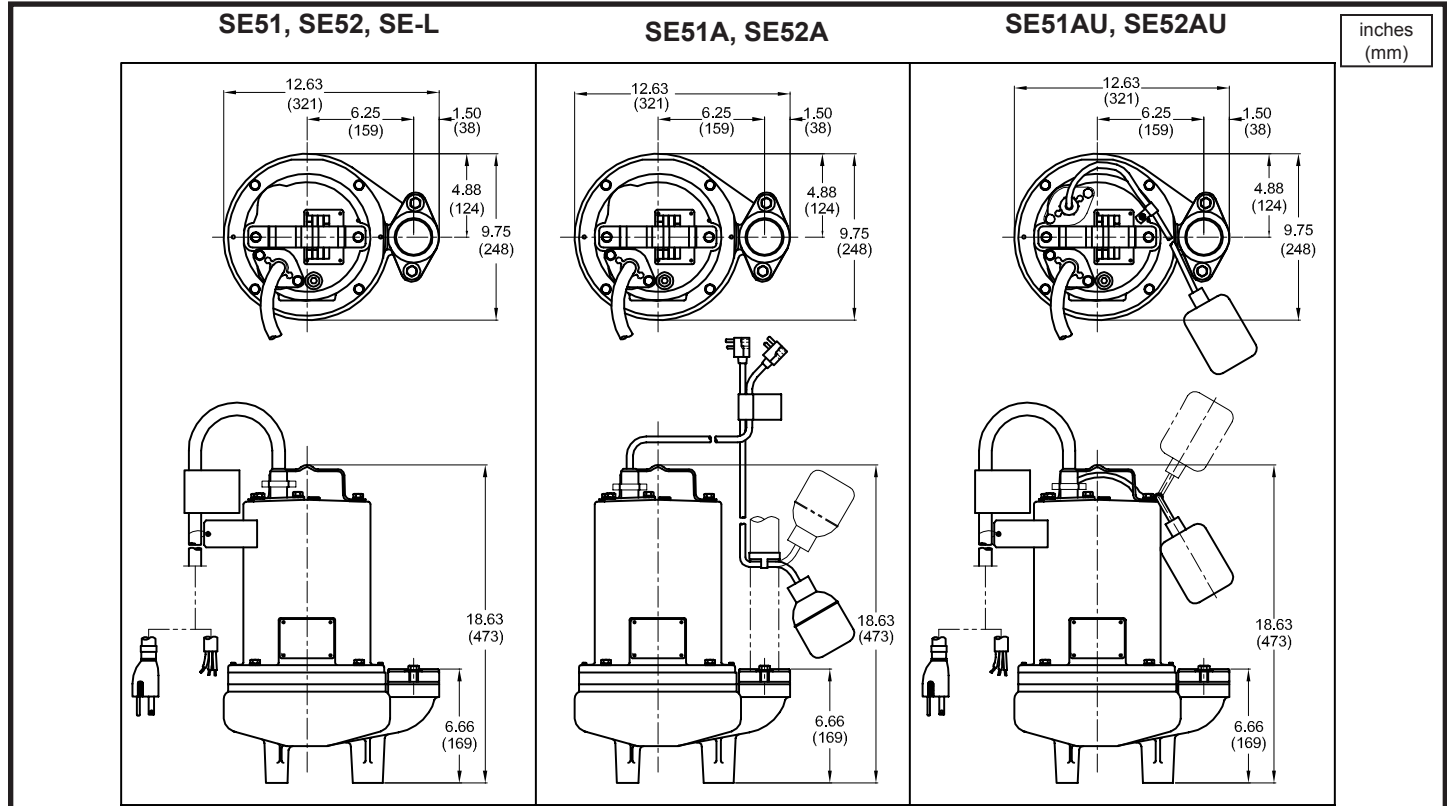
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SE-L

2" Spherical Solids Handling
Manual & Automatic

BARNES®
Professional Plumbing
www.cranepumps.com

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
SE51	104871	0.5	120/1	60	1750	F	11.6	21.3	14/3	SJTOW	0.375 (9.5)
SE51A	104872	0.5	120/1	60	1750	F	11.6	21.3	14/3	SJTOW	0.375 (9.5)
SE51AU	104873	0.5	120/1	60	1750	F	11.6	21.3	14/3	SJTOW	0.375 (9.5)
SE52	104874	0.5	240/1	60	1750	J	5.9	14.9	14/3	SOW	0.530 (13.5)
SE52AU	104875	0.5	240/1	60	1750	J	5.9	14.9	14/3	SOW	0.530 (13.5)
SE594L	104881	0.5	200-240/3	60	1750	H/L	3.2/3.0	9.8/11.0	14/4	SOW	0.570 (14.5)
SE544L	104882	0.5	480/3	60	1750	K	1.5	5.3	14/4	SOW	0.570 (14.5)
SE554L	104883	0.5	600/3	60	1750	H	1.0	3.4	14/4	SOW	0.570 (14.5)
SE774L	104884	0.75	200-240/1	60	1750	G/K	7.4/7.0	21.5/25.8	14/3	SOW	0.530 (13.5)
SE794L	104885	0.75	200-240/3	60	1750	H/K	4.8/4.5	13.7/15.4	14/4	SOW	0.570 (14.5)
SE744L	104886	0.75	480/3	60	1750	K	2.2	7.7	14/4	SOW	0.570 (14.5)
SE754L	104887	0.75	600/3	60	1750	L	1.5	7.2	14/4	SOW	0.570 (14.5)
SE1074L	104888	1.0	200-240/1	60	1750	D/G	8.8/8.3	21.5/25.8	14/3	SOW	0.530 (13.5)
SE1094L	104889	1.0	200-240/3	60	1750	E/H	5.1/4.9	13.7/15.4	14/4	SOW	0.570 (14.5)
SE1044L	104890	1.0	480/3	60	1750	H	2.4	7.7	14/4	SOW	0.570 (14.5)
SE1054L	104891	1.0	600/3	60	1750	J	1.9	7.2	14/4	SOW	0.570 (14.5)

Mechanical Switch on SE51A, cord 16/2, SJOW, 0.320 (8.1mm) O.D., Piggy-Back Plug

Mechanical Switch on SE-AU, cord 14/2, SJOW, 0.345 (8.8mm) O.D.

IMPORTANT !

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- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
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CRANE®

A Crane Co. Company

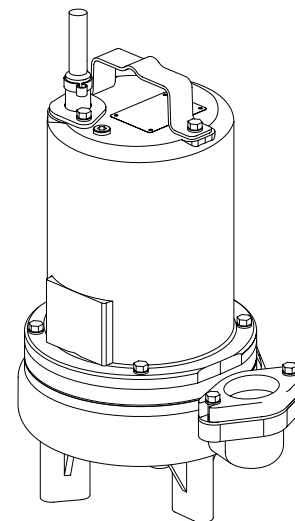
PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	200°F (98°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 & 240 Volt Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase Torque Curve Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class F
SINGLE PHASE	Includes Overload Protection in Motor
LEVEL CONTROL	"A" - Wide Angle, PVC, Mechanical, 15 ft (5m) cord with Piggy-Back Plug, N/O
	"AU"- Wide Angle, Polypropylene, Mechanical, N/O Integral to pump. ON and OFF Points are adjustable
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, *Inlet Strainer

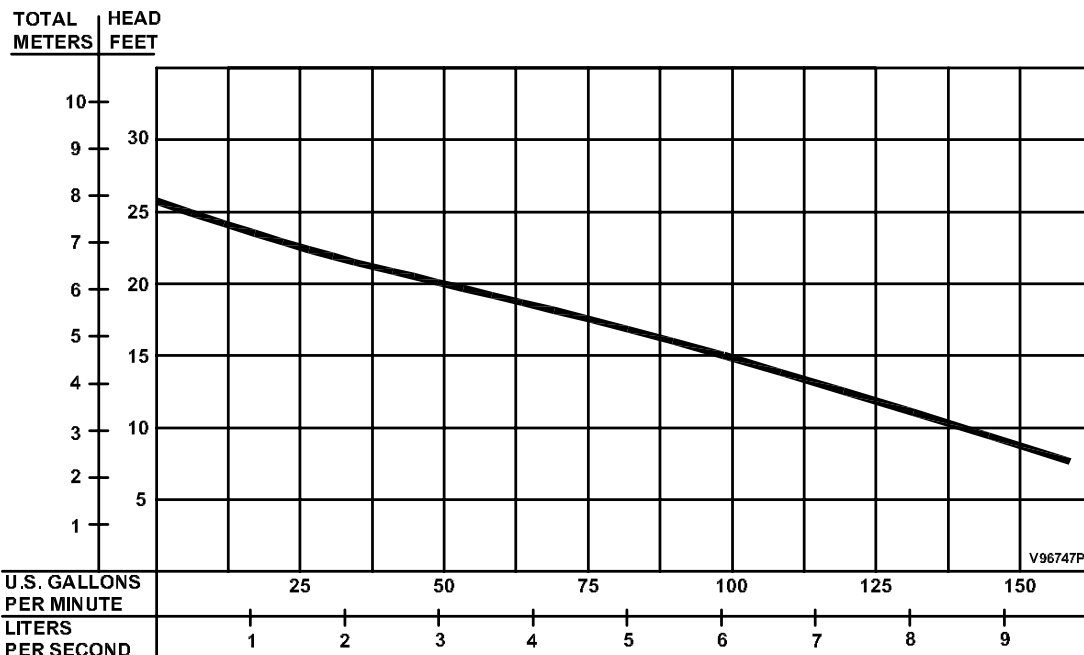
(* 3/4" Spherical solids handling with optional inlet strainer.)



Series: SE (SE51HT & SE52HT)
.5 HP, 1750RPM, 60Hz

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR **HIGH TEMPERATURE** RAW SEWAGE APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series SE-HT

2" Spherical Solids Handling
High Temperature - Manual & Automatic

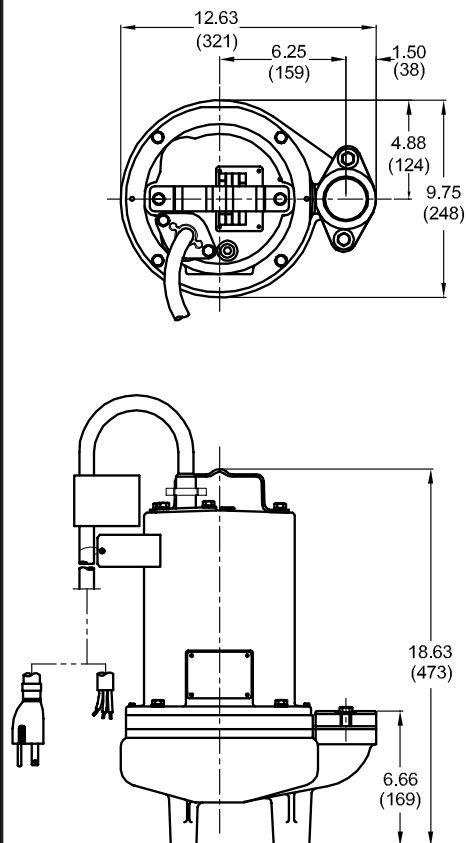
BARNES®

Professional Plumbing

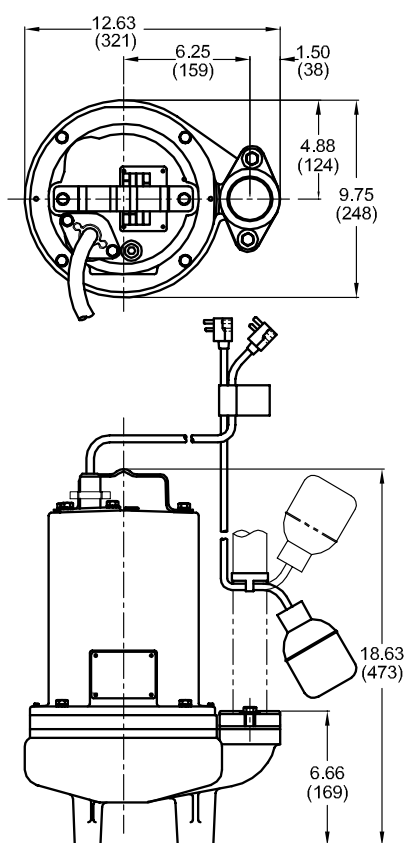
www.cranepumps.com

Submersible Non-Clog Pumps

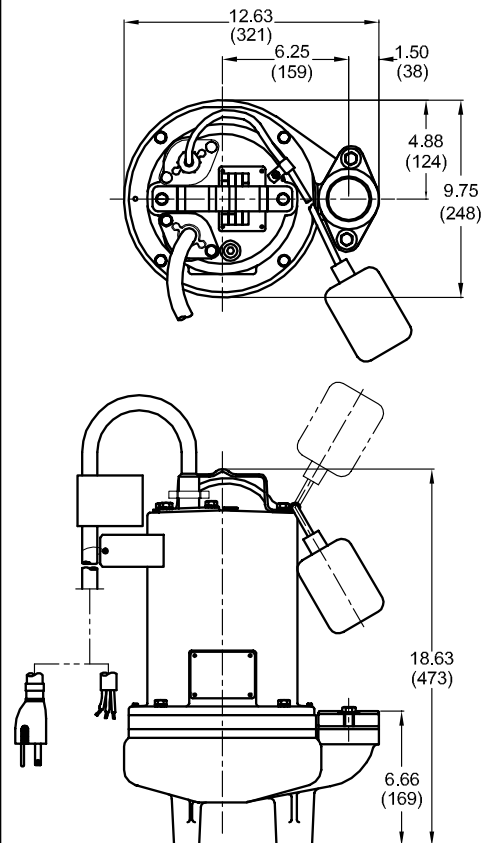
SE51HT, SE52HT



SE51HTA



SE51HTAU, SE52HTAU



inches
(mm)

MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
SE51HT	104876	0.5	120/1	60	1750	R	17.0	63.8	14/3	SOW	0.530 (13.5)
SE51HTA	104877	0.5	120/1	60	1750	R	17.0	63.8	14/3	SOW	0.530 (13.5)
SE51HTAU	104878	0.5	120/1	60	1750	R	17.0	63.8	14/3	SOW	0.530 (13.5)
SE52HT	104879	0.5	240/1	60	1750	R	8.5	30.1	14/3	SOW	0.530 (13.5)
SE52HTAU	104880	0.5	240/1	60	1750	R	8.5	30.1	14/3	SOW	0.530 (13.5)

Mechanical Switch on SE51HTA, cord 16/2, SJOW, 0.320 (8.1mm) O.D. Piggy-Back Plug

Mechanical Switch on SE51HTAU, cord 14/2, SJOW, 0.345 (8.8mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 3.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 4.) MUST USE A **HIGH TEMPERATURE** WIDE ANGLE LEVEL CONTROL IN HIGH TEMPERATURE APPLICATIONS.

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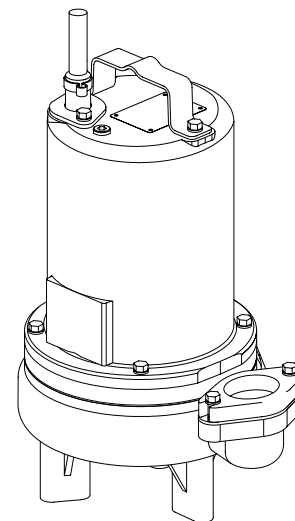
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
UPPER BEARING	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	Single Row, Ball, Oil lubricated
<i>Insulation</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
SINGLE PHASE	Class B
THREE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
OPTIONAL EQUIPMENT	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



Series: 2SEV-L .5 - 1 HP, 1750RPM, 60Hz

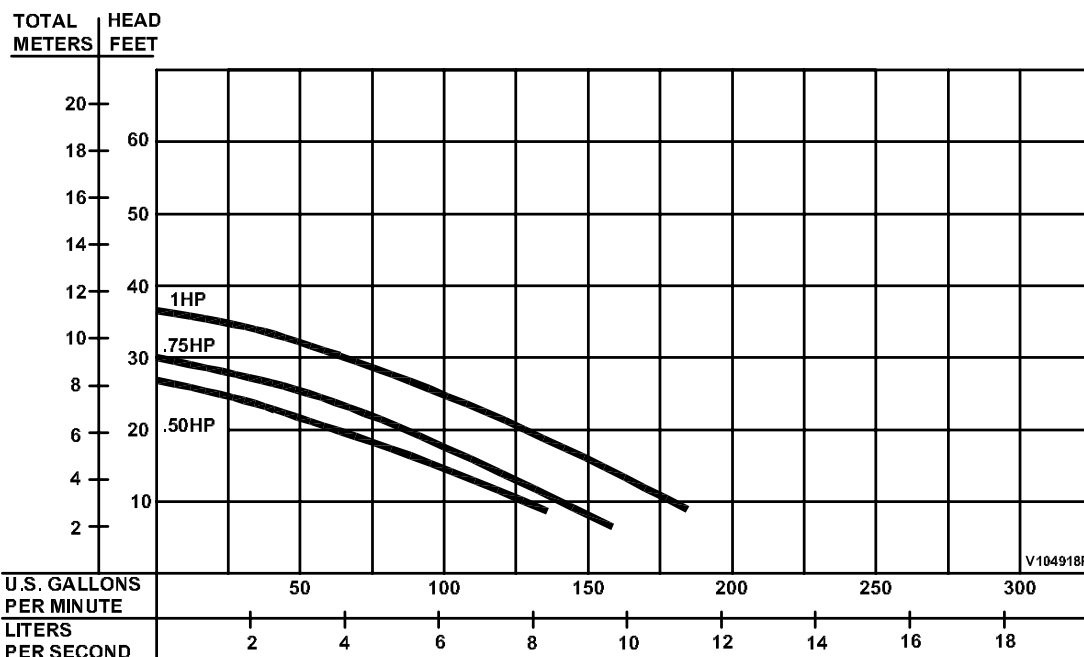


CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



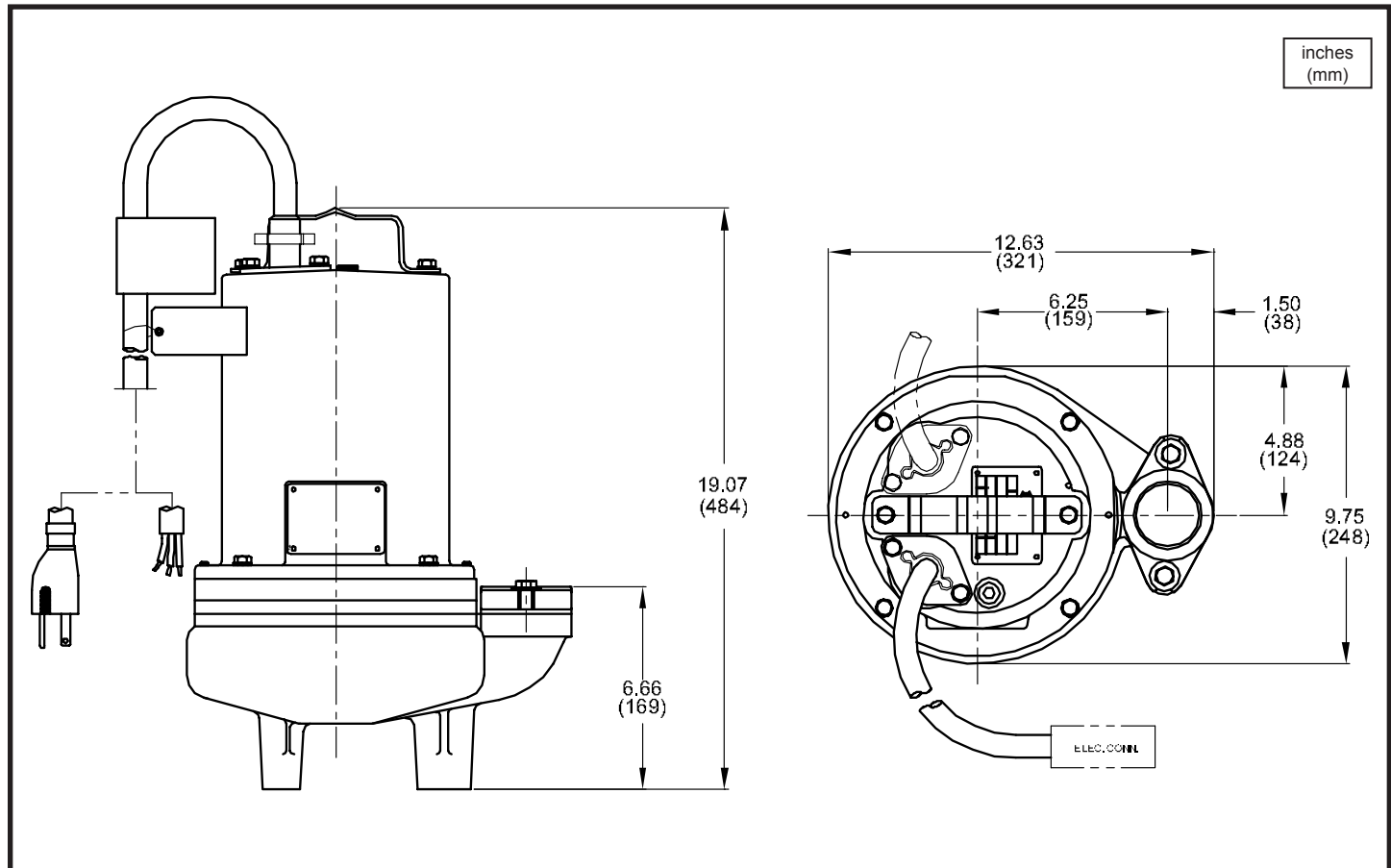
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 2SEV-L

2" Spherical Solids Handling
Vortex, Single Seal

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Professional Plumbing
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Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
2SEV514L	104918	0.5	120/1	60	1750	F	12.0	21.3	14/3	SJTOW	0.375 (9.5)
2SEV524L	104919	0.5	240/1	60	1750	J	6.3	14.9	14/3	SOW	0.530 (13.5)
2SEV594L	104920	0.5	200-240/3	60	1750	H/L	3.7/3.8	9.8/11.0	14/4	SOW	0.570 (14.5)
2SEV544L	104921	0.5	480/3	60	1750	K	1.9	5.3	14/4	SOW	0.570 (14.5)
2SEV554L	104922	0.5	600/3	60	1750	H	1.4	3.4	14/4	SOW	0.570 (14.5)
2SEV724L	104928	0.75	240/1	60	1750	K	7.1	25.8	14/3	SOW	0.530 (13.5)
2SEV794L	104929	0.75	200-240/3	60	1750	H/K	4.8/4.6	13.7/15.4	14/4	SOW	0.570 (14.5)
2SEV744L	104930	0.75	480/3	60	1750	K	2.3	7.7	14/4	SOW	0.570 (14.5)
2SEV754L	104931	0.75	600/3	60	1750	L	1.6	7.2	14/4	SOW	0.570 (14.5)
2SEV1024L	104936	1.0	240/1	60	1750	G	8.5	25.8	14/3	SOW	0.530 (13.5)
2SEV1094L	104937	1.0	200-240/3	60	1750	E/H	5.3/5.1	13.7/15.4	14/3	SOW	0.570 (14.5)
2SEV1044L	104938	1.0	480/3	60	1750	H	2.5	7.7	14/4	SOW	0.570 (14.5)
2SEV1054L	104939	1.0	600/3	60	1750	J	2.2	7.2	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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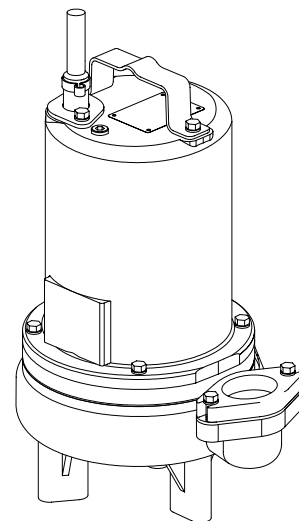
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
UPPER BEARING	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	Single Row, Ball, Oil lubricated
<i>Insulation</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
SINGLE PHASE	Class B
THREE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
OPTIONAL EQUIPMENT	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



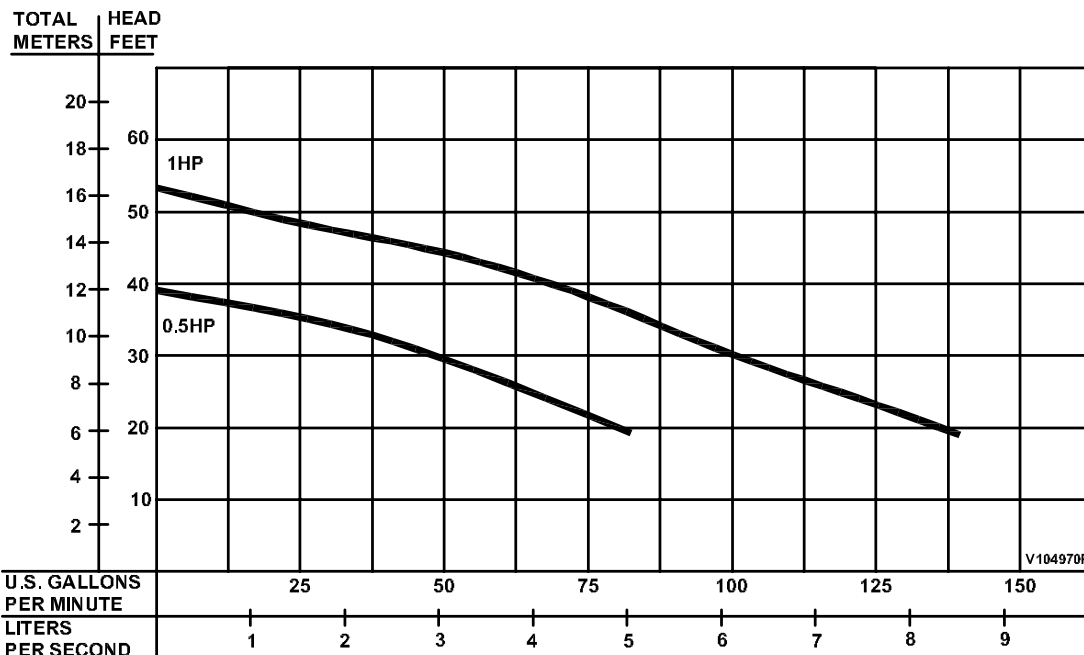
Series: 2SEV-L .5 & 1 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

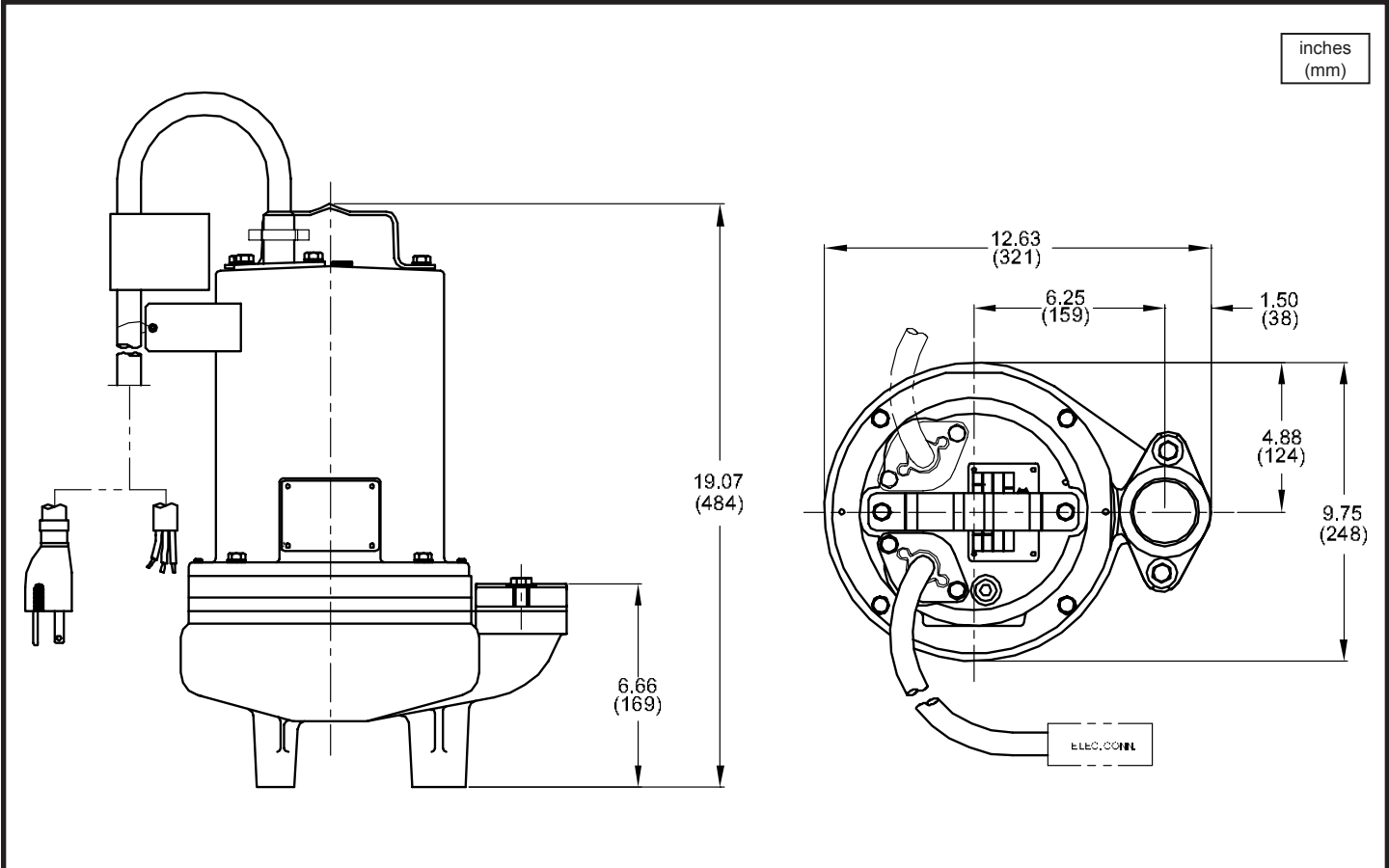


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 2SEV-L

2" Spherical Solids Handling
Vortex, Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
2SEV512L*	104970	0.5	120/1	60	3450	G	12.6	24.6	14/3	SJTOW	0.375 (9.5)
2SEV522L	104971	0.5	240/1	60	3450	E	6.0	10.2	14/3	SOW	0.530 (13.5)
2SEV592L	104972	0.5	200-240/3	60	3450	P/R	5.8/5.3	19.9/18.4	14/4	SOW	0.570 (14.5)
2SEV542L	104974	0.5	480/3	60	3450	R	2.6	9.1	14/4	SOW	0.570 (14.5)
2SEV552L	104975	0.5	600/3	60	3450	T	2.1	8.7	14/4	SOW	0.570 (14.5)
2SEV1022L	104982	1.0	240/1	60	3450	F	10.7	21.8	14/3	SOW	0.530 (13.5)
2SEV1092L	104983	1.0	200-240/3	60	3450	H/J	7.9/7.5	19.9/18.4	14/3	SOW	0.570 (14.5)
2SEV1042L	104985	1.0	480/3	60	3450	J	3.7	9.1	14/4	SOW	0.570 (14.5)
2SEV1052L	104986	1.0	600/3	60	3450	L	2.9	8.7	14/4	SOW	0.570 (14.5)

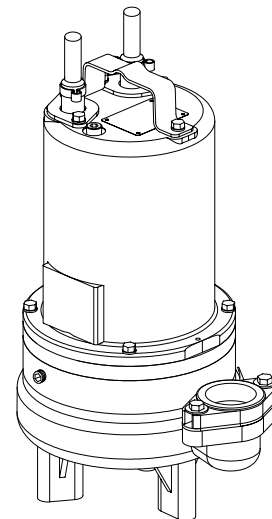
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.
(*) Pump is CSA listed **ONLY**.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
UPPER BEARING	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	Single Row, Ball, Oil lubricated
<i>Insulation</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
SINGLE PHASE	Class B
THREE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
OPTIONAL EQUIPMENT	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), Normally Open Moisture sensor with cord for DS pumps (Requires relay in control panel).

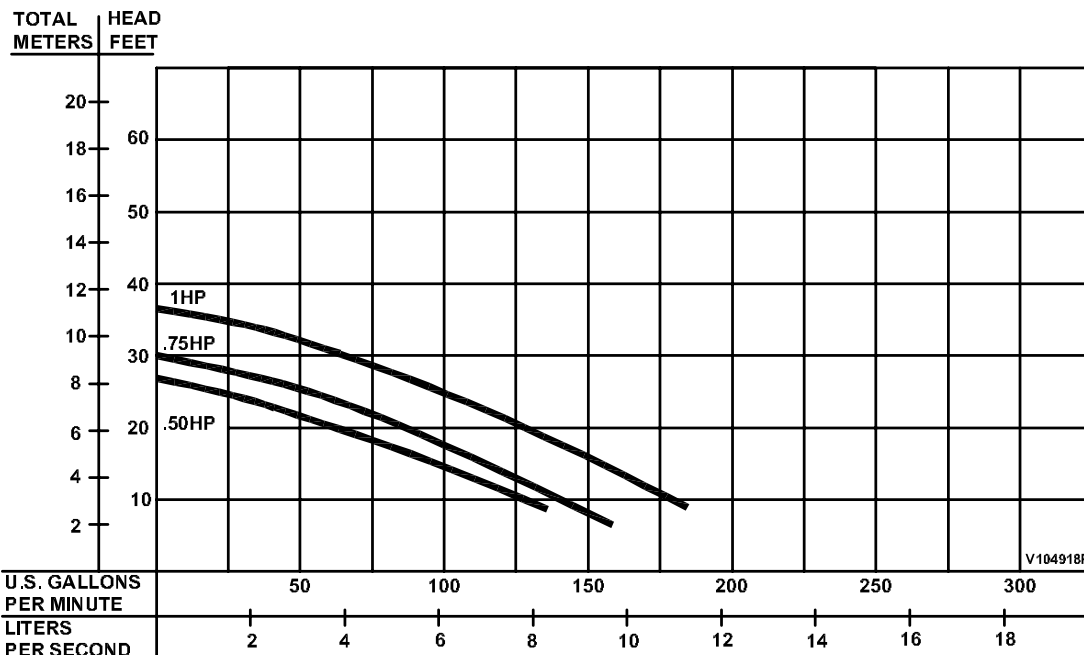


Series: 2SEV-DS .5 - 1 HP, 1750RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



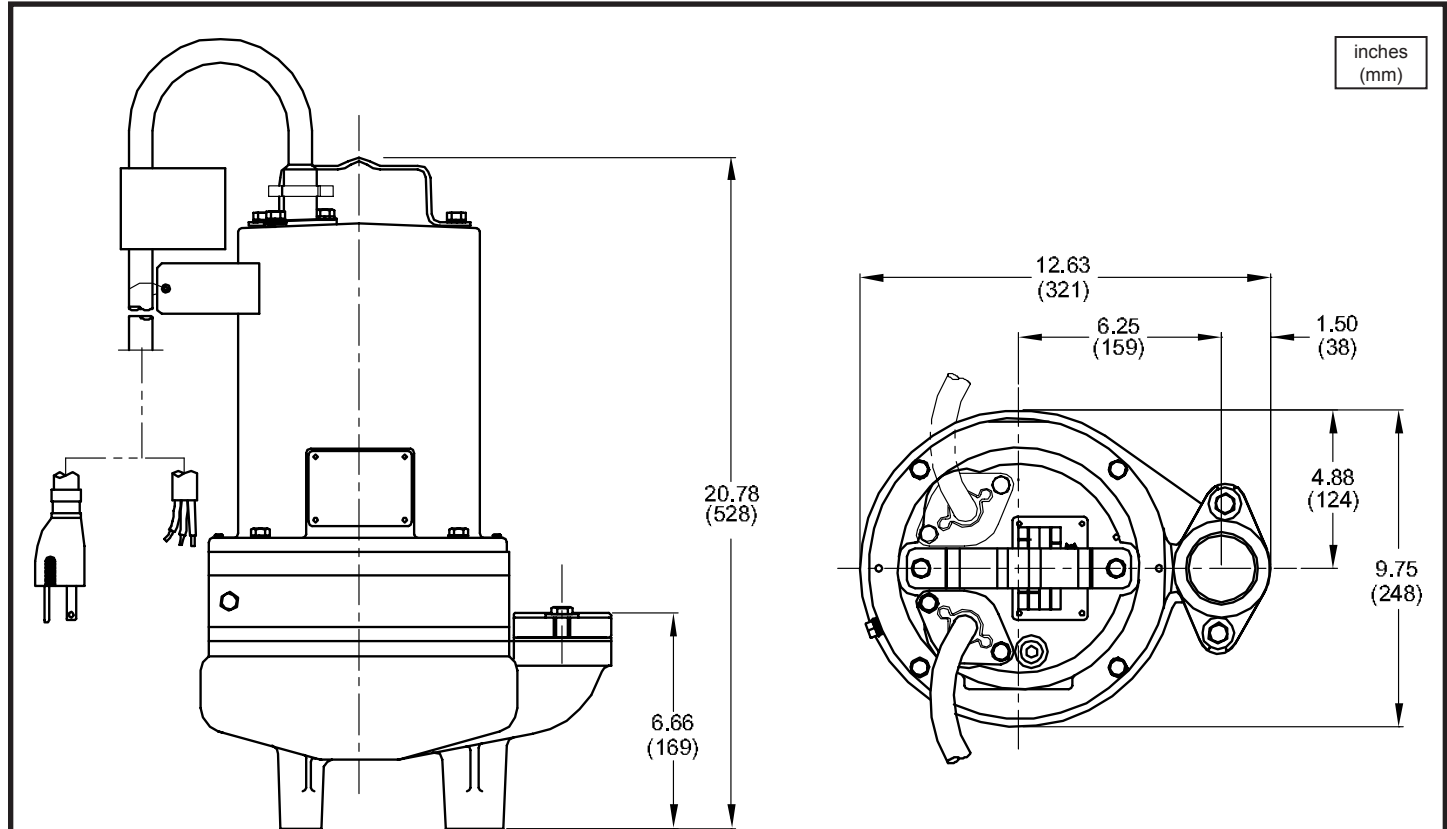
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 2SEV-DS

2" Spherical Solids Handling
Vortex, Double Seal

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Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
2SEV514DS	104923	0.5	120/1	60	1750	F	12.0	21.3	14/3	SJTOW	0.375 (9.5)
2SEV524DS	104924	0.5	240/1	60	1750	J	6.3	14.9	14/3	SOW	0.530 (13.5)
2SEV594DS	104925	0.5	200-240/3	60	1750	H/L	3.7/3.8	9.8/11.0	14/4	SOW	0.570 (14.5)
2SEV544DS	104926	0.5	480/3	60	1750	K	1.9	5.3	14/4	SOW	0.570 (14.5)
2SEV554DS	104927	0.5	600/3	60	1750	H	1.4	3.4	14/4	SOW	0.570 (14.5)
2SEV724DS	104932	0.75	240/1	60	1750	K	7.1	25.8	14/3	SOW	0.530 (13.5)
2SEV794DS	104933	0.75	200-240/3	60	1750	H/K	4.8/4.6	13.7/15.4	14/4	SOW	0.570 (14.5)
2SEV744DS	104934	0.75	480/3	60	1750	K	2.3	7.7	14/4	SOW	0.570 (14.5)
2SEV754DS	104935	0.75	600/3	60	1750	L	1.6	7.2	14/4	SOW	0.570 (14.5)
2SEV1024DS	104940	1.0	240/1	60	1750	G	8.5	25.8	14/3	SOW	0.530 (13.5)
2SEV1094DS	104941	1.0	200-240/3	60	1750	E/H	5.3/5.1	13.7/15.4	14/3	SOW	0.570 (14.5)
2SEV1044DS	104942	1.0	480/3	60	1750	H	2.5	7.7	14/4	SOW	0.570 (14.5)
2SEV1054DS	104943	1.0	600/3	60	1750	J	2.2	7.2	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.

OPTIONAL - Moisture & Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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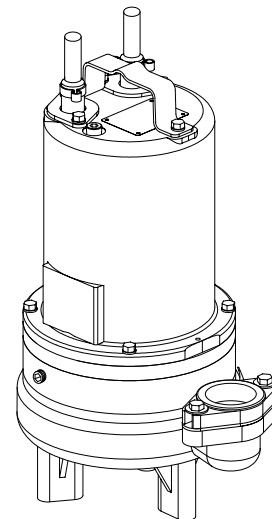
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
UPPER BEARING	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	Single Row, Ball, Oil lubricated
<i>Insulation</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
SINGLE PHASE	Class B
THREE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
OPTIONAL EQUIPMENT	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), Normally Open Moisture sensor with cord for DS pumps (Requires relay in control panel).



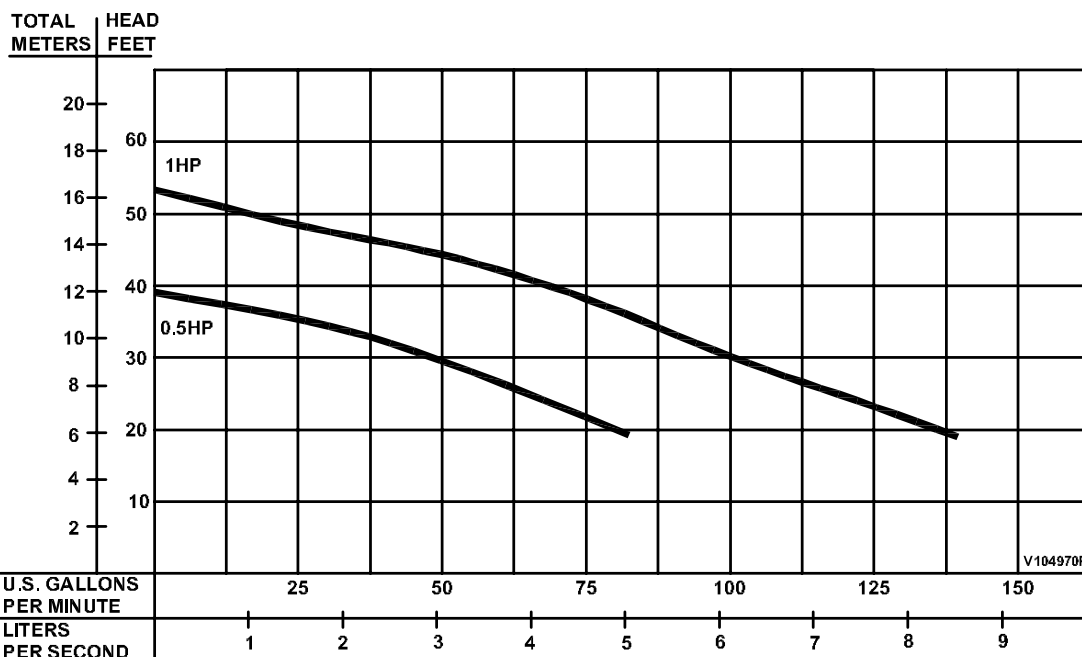
Series: 2SEV-DS .5 & 1 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

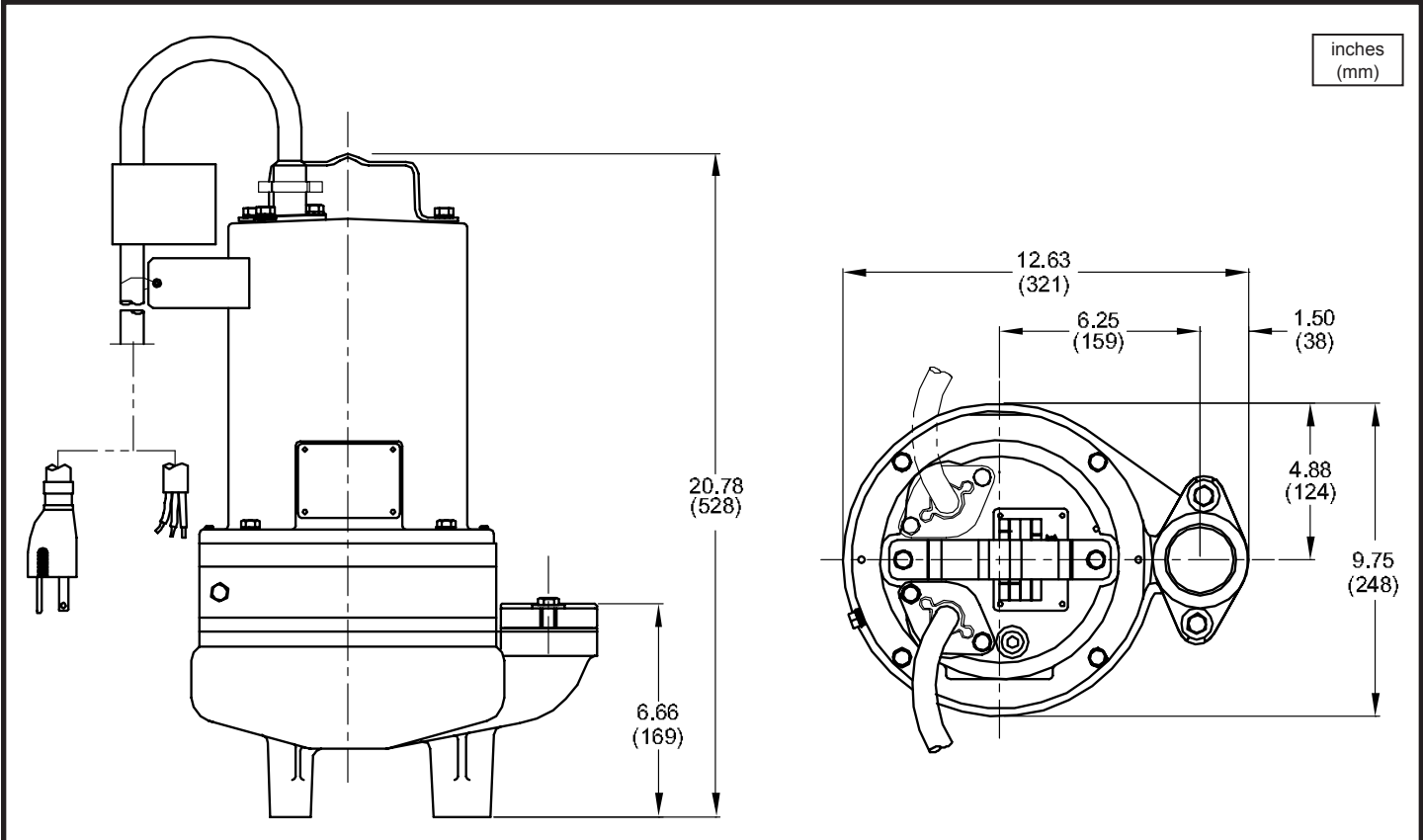


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 2SEV-DS

2" Spherical Solids Handling
Vortex, Double Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
2SEV512DS*	104976	0.5	120/1	60	3450	G	12.6	24.6	14/3	SJTOW	0.375 (9.5)
2SEV522DS	104977	0.5	240/1	60	3450	E	6.0	10.2	14/3	SOW	0.530 (13.5)
2SEV1022DS	104987	1.0	240/1	60	3450	F	10.7	21.8	14/3	SOW	0.530 (13.5)
2SEV1092DS	104988	1.0	200-240/3	60	3450	H/J	7.9/7.5	19.9/18.4	14/4	SOW	0.570 (14.5)
2SEV1042DS	104990	1.0	480/3	60	3450	J	3.7	9.1	14/4	SOW	0.570 (14.5)
2SEV1052DS	104991	1.0	600/3	60	3450	L	2.9	8.7	14/4	SOW	0.570 (14.5)

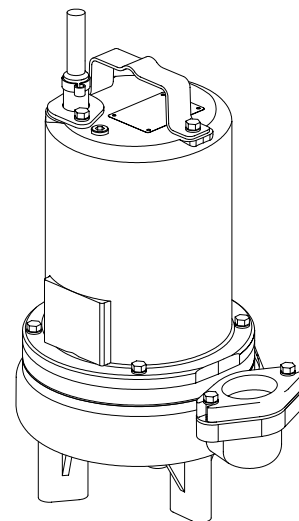
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.
OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.
OPTIONAL - Moisture & Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.
(*) Pump is CSA listed **ONLY**.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	85-5-5-5 Bronze
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
	20 ft. (6m) Cord. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC)
	Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), 3" NPT Discharge Adapter.



Series: 2SEV-L

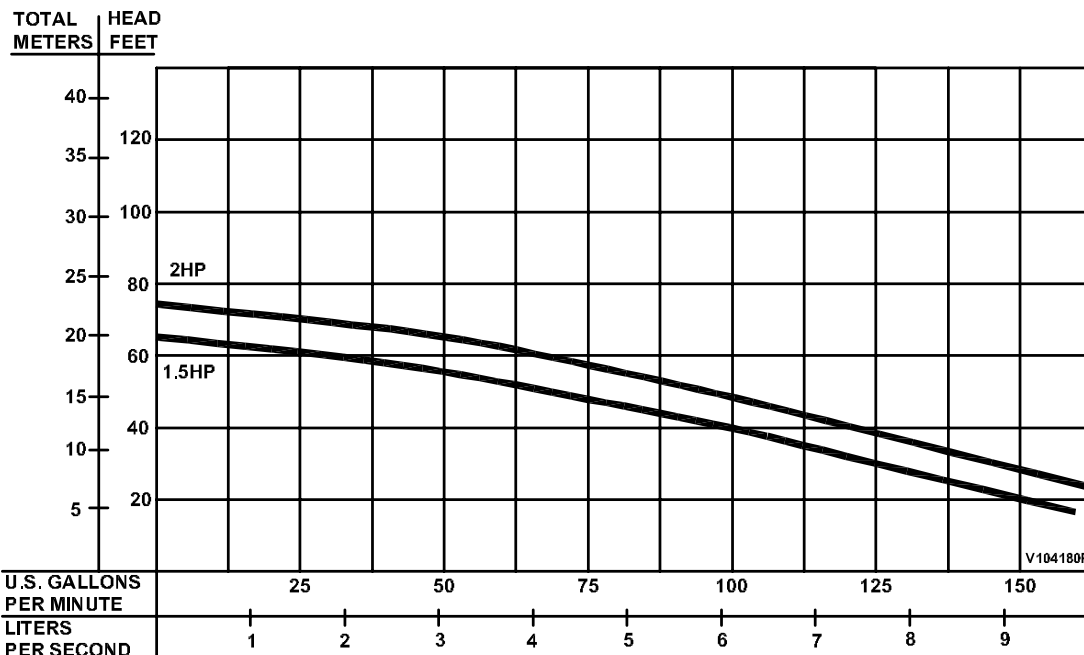
1.5 & 2HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

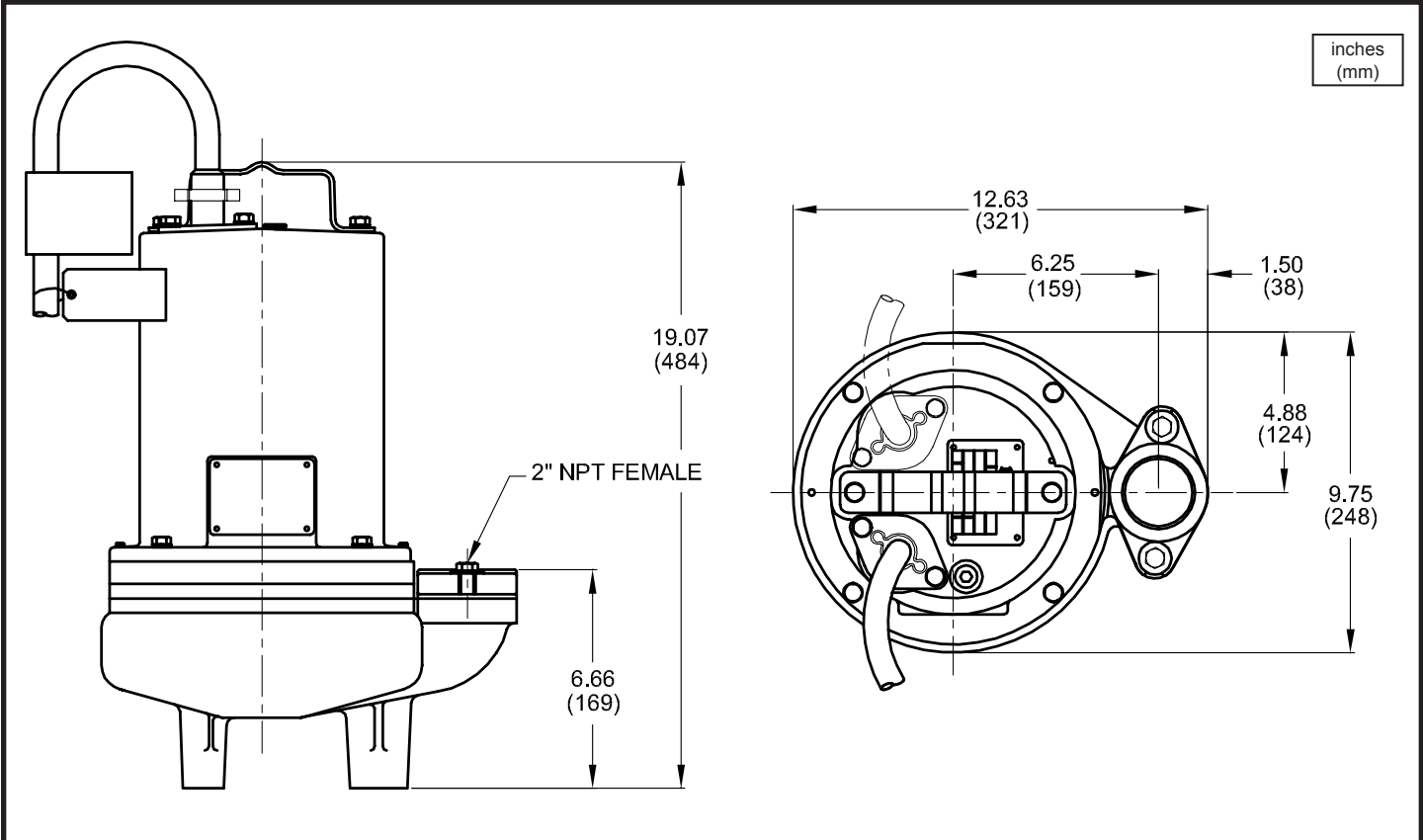


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 2SEV-L

2" Spherical Solids Handling
Vortex, Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
2SEV1522L	104187	1.5	240/1	60	3450	A	13.5	31.5	12/3	SOW	0.610 (15.5)
2SEV1592L	104188	1.5	200/240/3	60	3450	C	10.8/9.8	27.0	14/4	SOW	0.600 (15.2)
2SEV1542L	104189	1.5	480/3	60	3450	F	4.9	13.5	14/4	SOW	0.600 (15.2)
2SEV1552L	105774	1.5	600/3	60	3450	F	3.9	11.0	14/4	SOW	0.600 (15.2)
2SEV2022L	104190	2.0	240/1	60	3450	C	16.0	42.0	12/3	SOW	0.610 (15.5)
2SEV2092L	104191	2.0	200/240/3	60	3450	J	13.2/12.0	30.0	14/4	SOW	0.600 (15.2)
2SEV2042L	104192	2.0	480/3	60	3450	J	6.0	15.0	14/4	SOW	0.600 (15.2)
2SEV2052L	105775	2.0	600/3	60	3450	J	4.8	12.0	14/4	SOW	0.600 (15.2)

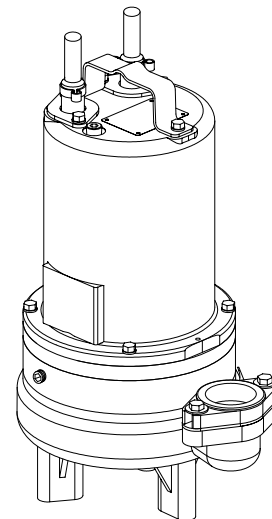
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	2" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	85-5-5-5 Bronze
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
.....	20 ft. (6m) Cord. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC)
.....	Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), 3" NPT Discharge Adapter.



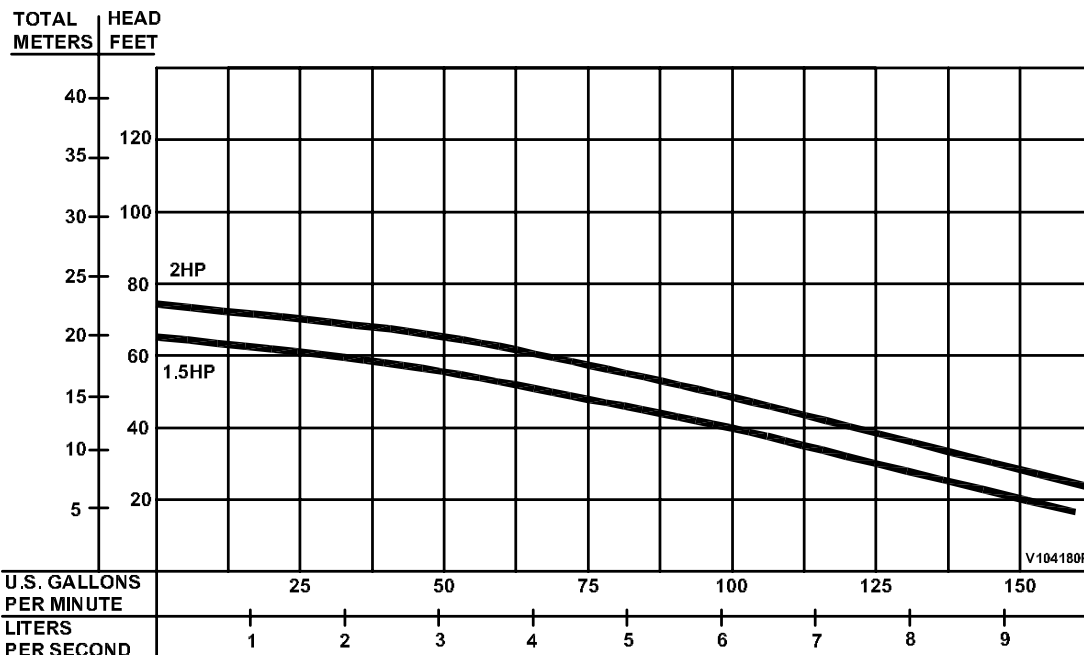
Series: 2SEV-DS 1.5 & 2HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

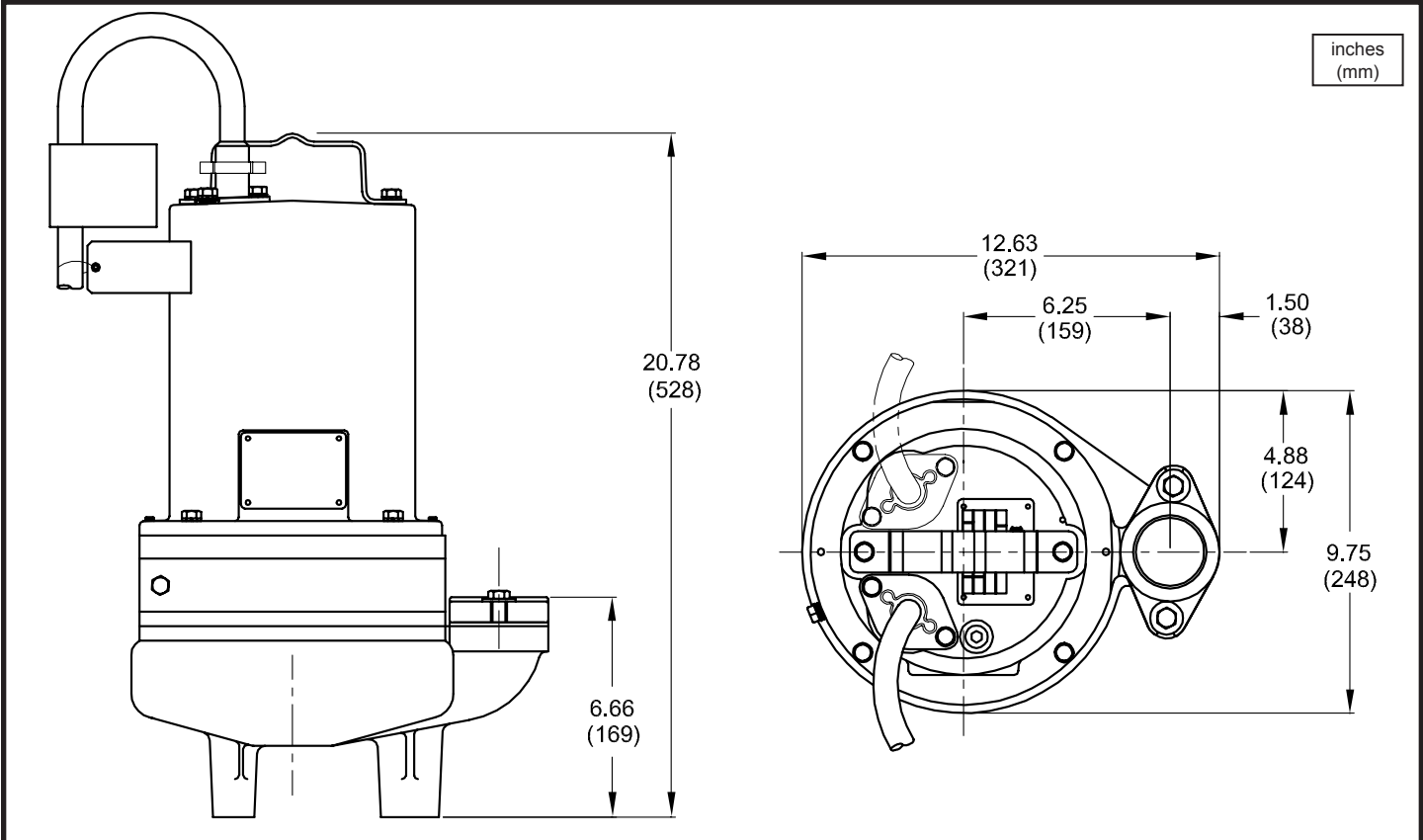
DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 2SEV-DS
2" Spherical Solids Handling
Vortex, Double Seal

Submersible Non-Clog Pumps



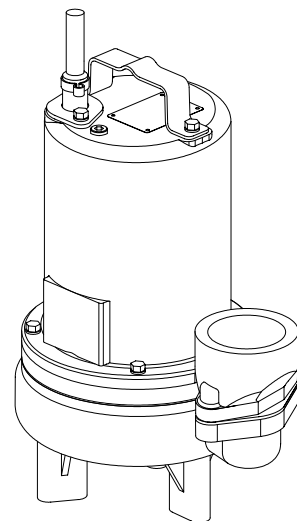
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
2SEV1522DS	107914	1.5	240/1	60	3450	A	13.5	31.5	12/3	SOW	0.610 (15.5)
2SEV1592DS	107915	1.5	200/240/3	60	3450	C	10.8/9.8	27.0	14/4	SOW	0.600 (15.2)
2SEV1542DS	107916	1.5	480/3	60	3450	F	4.9	13.5	14/4	SOW	0.600 (15.2)
2SEV1552DS	107917	1.5	600/3	60	3450	F	3.9	11.0	14/4	SOW	0.600 (15.2)
2SEV2022DS	107918	2.0	240/1	60	3450	C	16.0	42.0	12/3	SOW	0.610 (15.5)
2SEV2092DS	107919	2.0	200/240/3	60	3450	J	13.2/12.0	30.0	14/4	SOW	0.600 (15.2)
2SEV2042DS	107920	2.0	480/3	60	3450	J	6.0	15.0	14/4	SOW	0.600 (15.2)
2SEV2052DS	107921	2.0	600/3	60	3450	J	4.8	12.0	14/4	SOW	0.600 (15.2)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.
OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.
OPTIONAL - Moisture & Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.

- IMPORTANT !**
- 1.) PUMP MAY BE OPERATED “DRY” FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
 - 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
 - 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
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Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (5m) Cord. Plug on 120 Volt & .5HP. 240 Volt 1 Phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



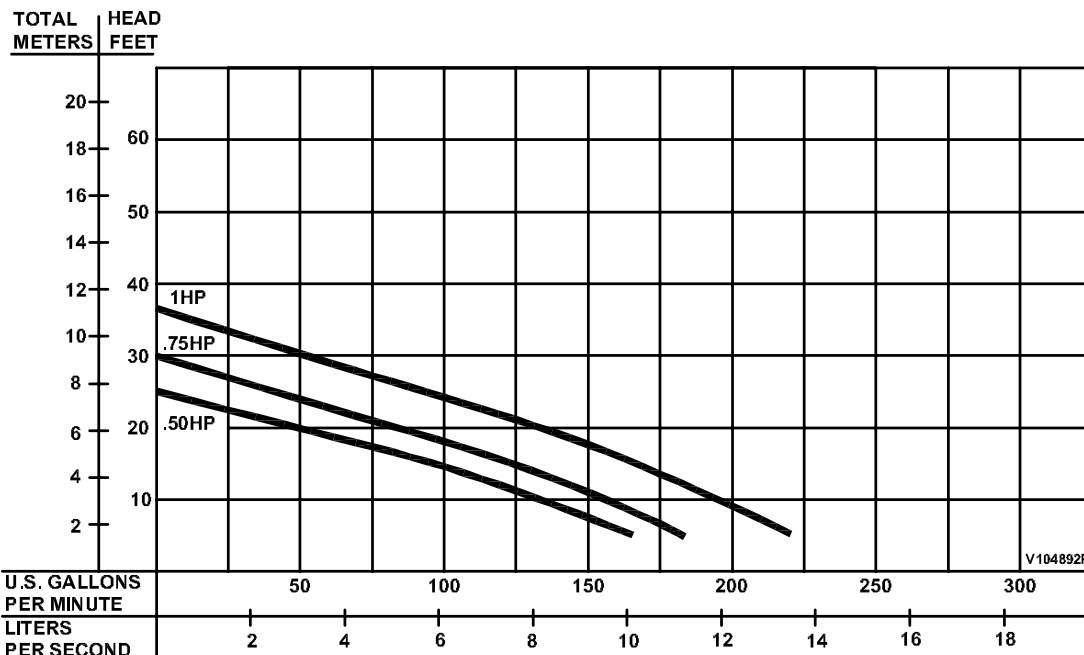
Series: 3SE-L .5 - 1HP, 1750RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-L

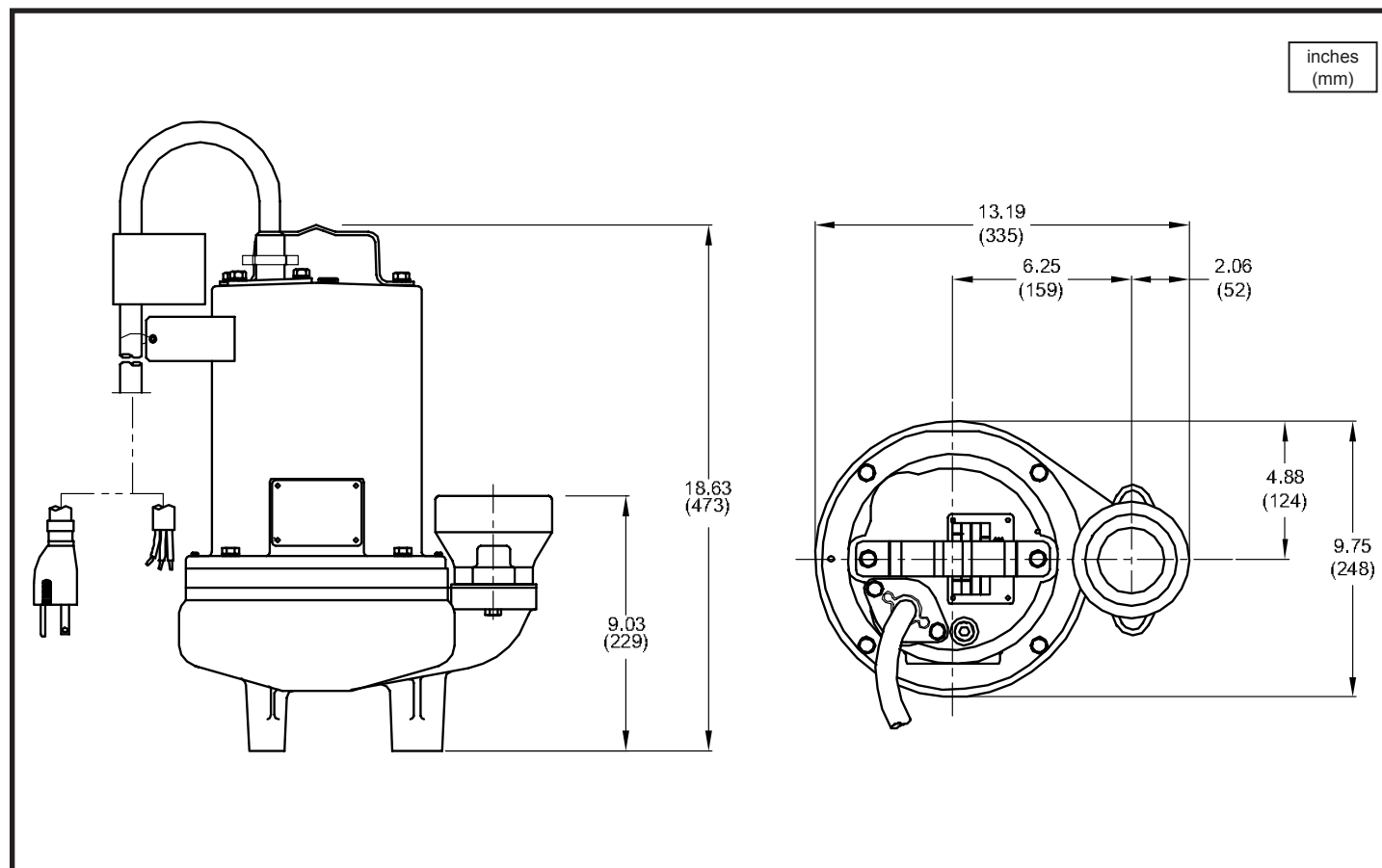
2" Spherical Solids Handling
Single Seal

BARNES®

Professional Plumbing

www.cranepumps.com

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE514L	104892	0.5	120/1	60	1750	F	11.6	21.3	14/3	SJTOW	0.375 (9.5)
3SE524L	104893	0.5	240/1	60	1750	J	5.9	14.9	14/3	SOW	0.530 (13.5)
3SE594L	104894	0.5	200-240/3	60	1750	H/L	3.2/3.0	9.8/11.0	14/4	SOW	0.570 (14.5)
3SE544L	104895	0.5	480/3	60	1750	K	1.5	5.3	14/4	SOW	0.570 (14.5)
3SE554L	104896	0.5	600/3	60	1750	H	1.0	3.4	14/4	SOW	0.570 (14.5)
3SE774L	104902	0.75	200-240/1	60	1750	G/K	7.4/7.0	21.5/25.8	14/3	SOW	0.530 (13.5)
3SE794L	104903	0.75	200-240/3	60	1750	H/K	4.8/4.5	13.7/15.4	14/4	SOW	0.570 (14.5)
3SE744L	104904	0.75	480/3	60	1750	K	2.2	7.7	14/4	SOW	0.570 (14.5)
3SE754L	104905	0.75	600/3	60	1750	L	1.5	7.2	14/4	SOW	0.570 (14.5)
3SE1074L	104910	1.0	200-240/1	60	1750	D/G	8.8/8.3	21.5/25.8	14/3	SOW	0.530 (13.5)
3SE1094L	104911	1.0	200-240/3	60	1750	E/H	5.14/4.9	13.7/15.4	14/3	SOW	0.570 (14.5)
3SE1044L	104912	1.0	480/3	60	1750	H	2.4	7.7	14/4	SOW	0.570 (14.5)
3SE1054L	104913	1.0	600/3	60	1750	J	1.9	7.2	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
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SECTION C
PAGE 26
DATE 4/04

CRANE®

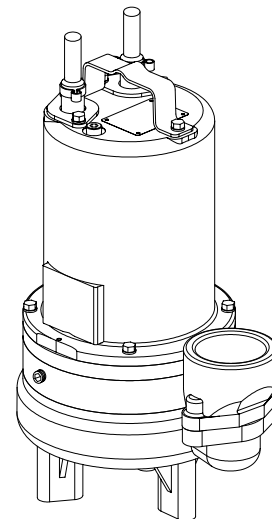
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), Normally Open Moisture sensor with cord for DS pumps (Requires relay in control panel).



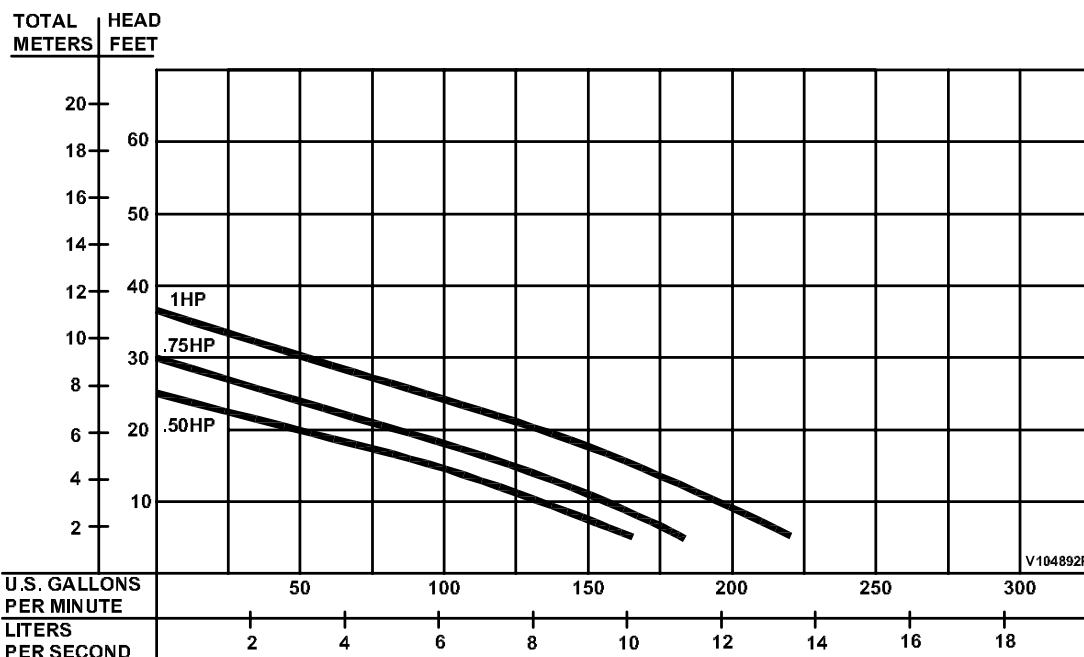
Series: 3SE-DS .5 - 1 HP, 1750RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

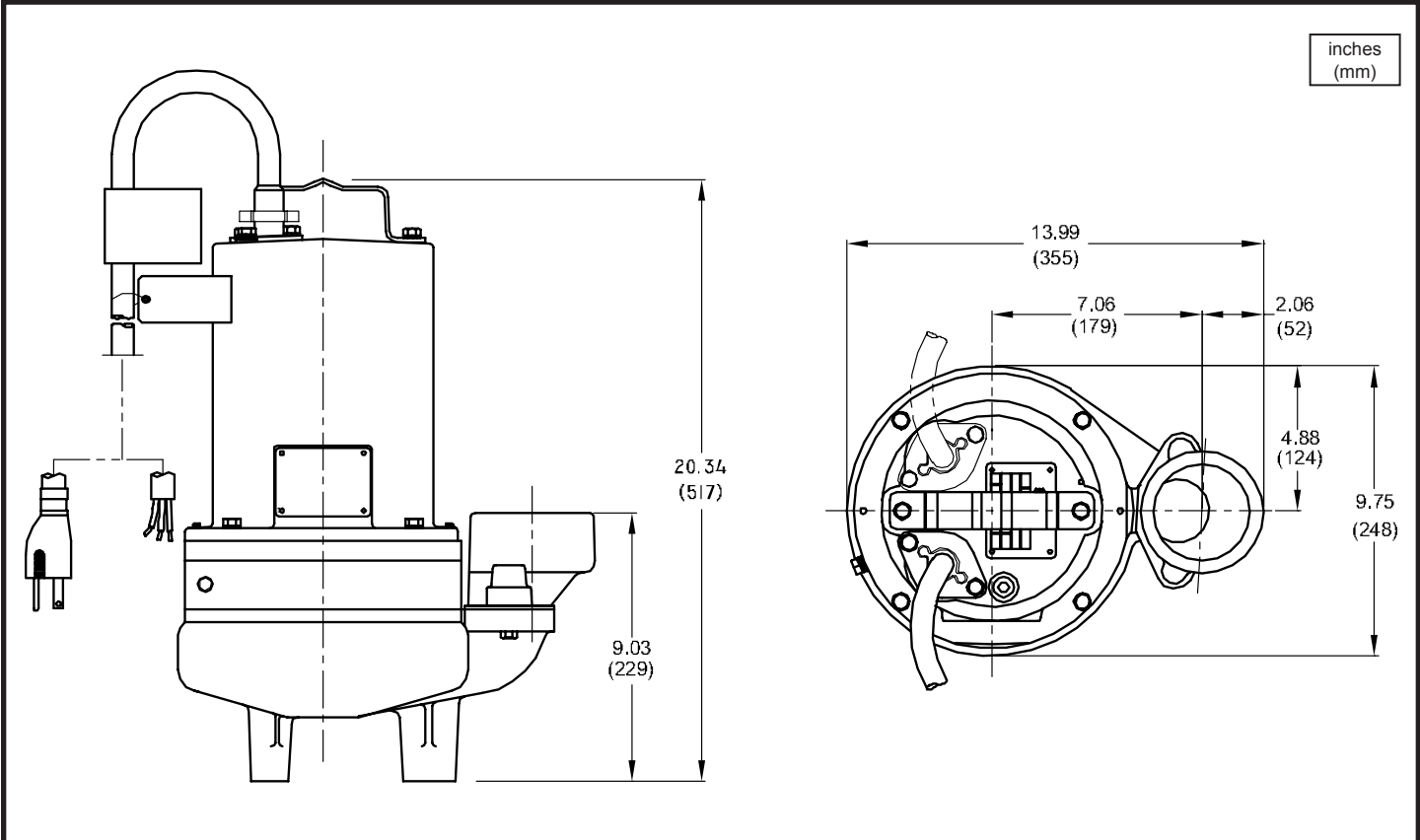


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-DS

2" Spherical Solids Handling
Double Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE514DS	104897	0.5	120/1	60	1750	F	11.6	21.3	14/3	SJTOW	0.375 (9.5)
3SE524DS	104898	0.5	240/1	60	1750	J	5.9	14.9	14/3	SOW	0.530 (13.5)
3SE594DS	104899	0.5	200-240/3	60	1750	H/L	3.2/3.0	9.8/11.0	14/4	SOW	0.570 (14.5)
3SE544DS	104900	0.5	480/3	60	1750	K	1.5	5.3	14/4	SOW	0.570 (14.5)
3SE554DS	104901	0.5	600/3	60	1750	H	1.0	3.4	14/4	SOW	0.570 (14.5)
3SE774DS	104906	0.75	200-240/1	60	1750	G/K	7.4/7.0	21.5/25.8	14/3	SOW	0.530 (13.5)
3SE794DS	104907	0.75	200-240/3	60	1750	H/K	4.8/4.5	13.7/15.4	14/4	SOW	0.570 (14.5)
3SE744DS	104908	0.75	480/3	60	1750	K	2.2	7.7	14/4	SOW	0.570 (14.5)
3SE754DS	104909	0.75	600/3	60	1750	L	1.5	7.2	14/4	SOW	0.570 (14.5)
3SE1074DS	104914	1.0	200-240/1	60	1750	D/G	8.8/8.3	21.5/25.8	14/3	SOW	0.530 (13.5)
3SE1094DS	104915	1.0	200-240/3	60	1750	E/H	5.14/4.9	13.7/15.4	14/3	SOW	0.570 (14.5)
3SE1044DS	104916	1.0	480/3	60	1750	H	2.4	7.7	14/4	SOW	0.570 (14.5)
3SE1054DS	104917	1.0	600/3	60	1750	J	1.9	7.2	14/4	SOW	0.570 (14.5)

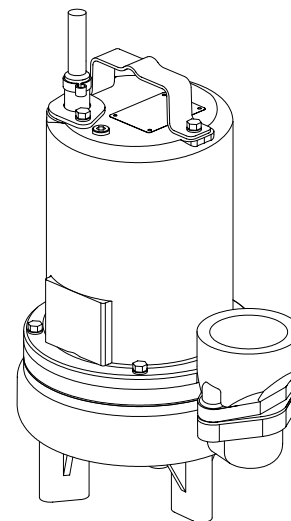
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.
OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.
OPTIONAL - Moisture & Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



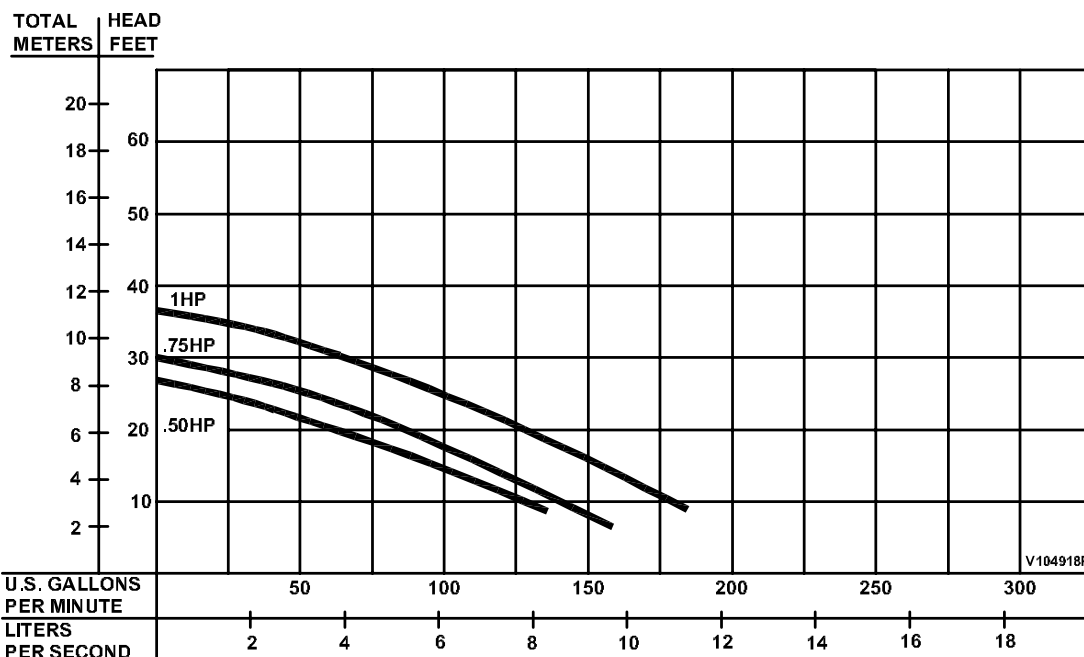
Series: 3SEV-L .5 - 1 HP, 1750RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

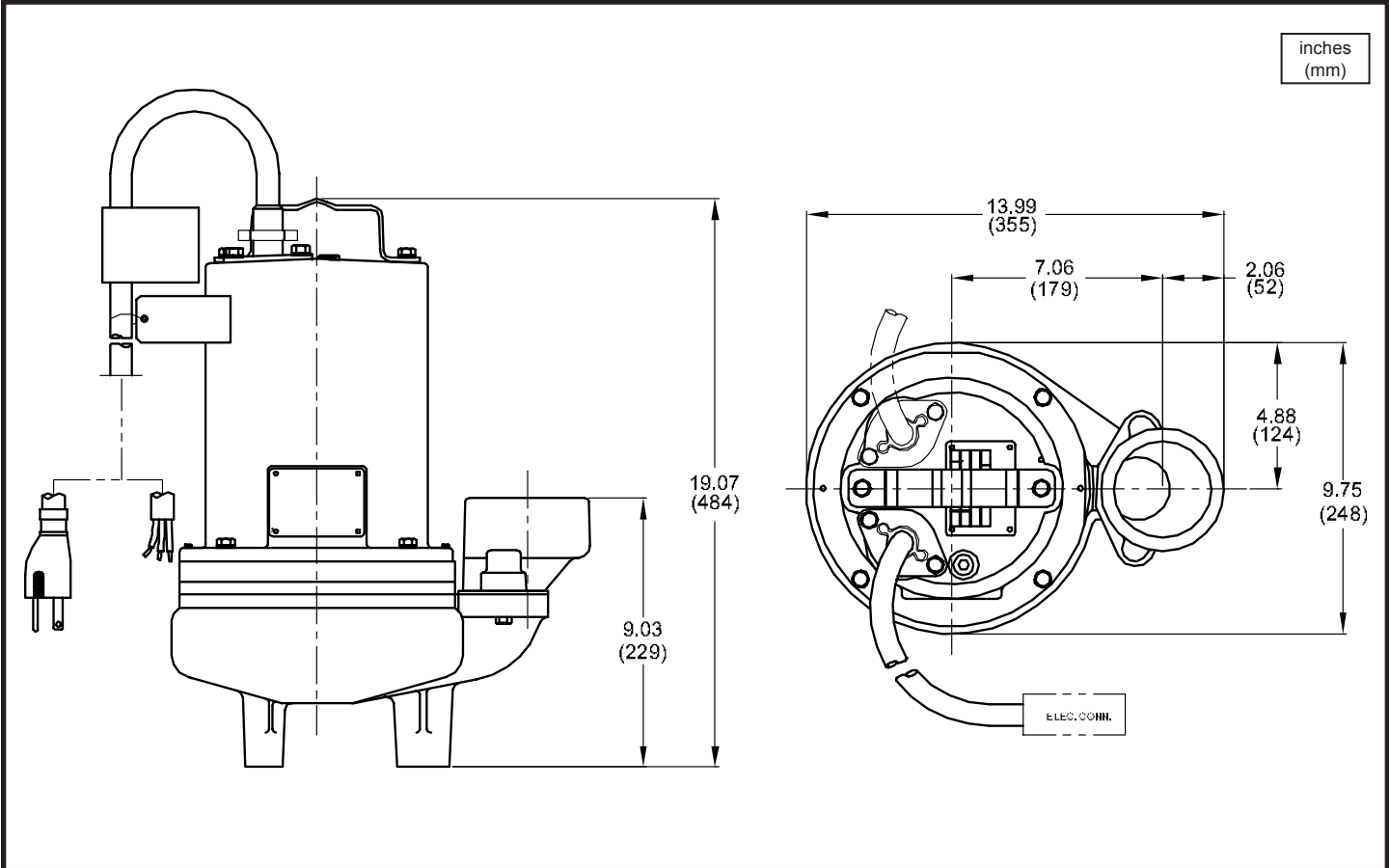


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SEV-L

2" Spherical Solids Handling
Vortex, Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SEV514L	104944	0.5	120/1	60	1750	F	12.0	21.3	14/3	SJTOW	0.375 (9.5)
3SEV524L	104945	0.5	240/1	60	1750	J	6.3	14.9	14/3	SOW	0.530 (13.5)
3SEV594L	104946	0.5	200-240/3	60	1750	H/L	3.7/3.8	9.8/11.0	14/4	SOW	0.570 (14.5)
3SEV544L	104947	0.5	480/3	60	1750	K	1.9	5.3	14/4	SOW	0.570 (14.5)
3SEV554L	104948	0.5	600/3	60	1750	H	1.4	3.4	14/4	SOW	0.570 (14.5)
3SEV724L	104954	0.75	240/1	60	1750	K	7.1	25.8	14/3	SOW	0.530 (13.5)
3SEV794L	104955	0.75	200-240/3	60	1750	H/K	4.8/4.6	13.7/15.4	14/4	SOW	0.570 (14.5)
3SEV744L	104956	0.75	480/3	60	1750	K	2.3	7.7	14/4	SOW	0.570 (14.5)
3SEV754L	104957	0.75	600/3	60	1750	L	1.6	7.2	14/4	SOW	0.570 (14.5)
3SEV1024L	104962	1.0	240/1	60	1750	G	8.5	25.8	14/3	SOW	0.530 (13.5)
3SEV1094L	104963	1.0	200-240/3	60	1750	E/H	5.3/5.1	13.7/15.4	14/3	SOW	0.570 (14.5)
3SEV1044L	104964	1.0	480/3	60	1750	H	2.5	7.7	14/4	SOW	0.570 (14.5)
3SEV1054L	104965	1.0	600/3	60	1750	J	2.2	7.2	14/4	SOW	0.570 (14.5)

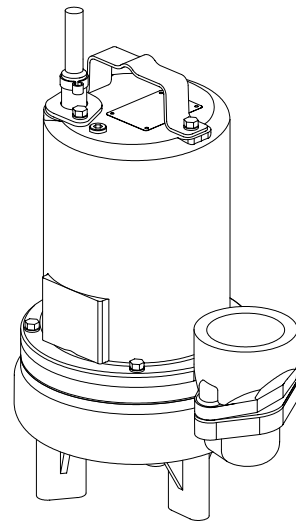
OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
UPPER BEARING	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	Single Row, Ball, Oil lubricated
<i>Insulation</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
SINGLE PHASE	Class B
THREE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
OPTIONAL EQUIPMENT	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



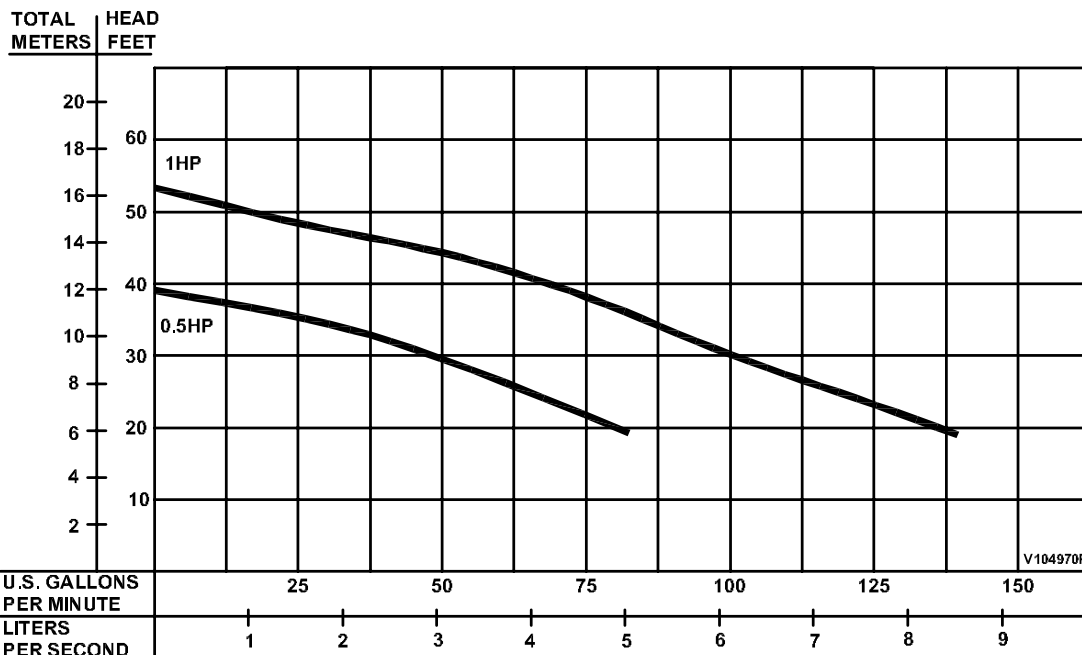
Series: 3SEV-L .5 & 1 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



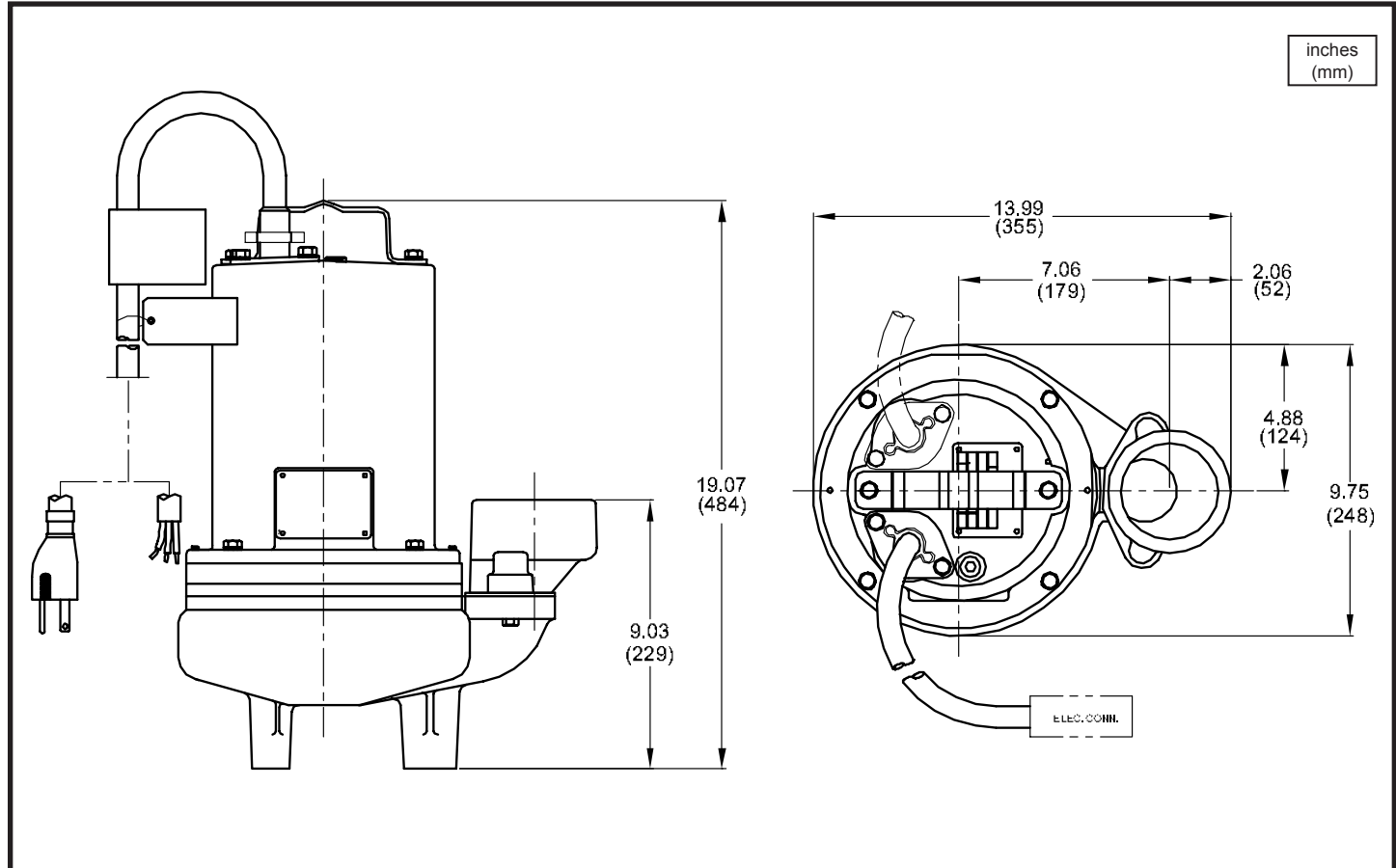
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SEV-L

2" Spherical Solids Handling
Vortex, Single Seal

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Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SEV512L*	104992	0.5	120/1	60	3450	G	12.6	24.6	14/3	SJTOW	0.375 (9.5)
3SEV522L	104993	0.5	240/1	60	3450	E	6.0	10.2	14/3	SOW	0.530 (13.5)
3SEV592L	104994	0.5	200-240/3	60	3450	P/R	5.8/5.3	19.9/18.4	14/4	SOW	0.570 (14.5)
3SEV542L	104996	0.5	480/3	60	3450	R	2.6	9.1	14/4	SOW	0.570 (14.5)
3SEV552L	104997	0.5	600/3	60	3450	T	2.1	8.7	14/4	SOW	0.570 (14.5)
3SEV1022L	105004	1.0	240/1	60	3450	F	10.7	21.8	14/3	SOW	0.530 (13.5)
3SEV1092L	105005	1.0	200-240/3	60	3450	H/J	7.9/7.5	19.9/18.4	14/4	SOW	0.570 (14.5)
3SEV1042L	105007	1.0	480/3	60	3450	J	3.7	9.1	14/4	SOW	0.570 (14.5)
3SEV1052L	105008	1.0	600/3	60	3450	L	2.9	8.7	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

(*) Pump is CSA listed **ONLY**.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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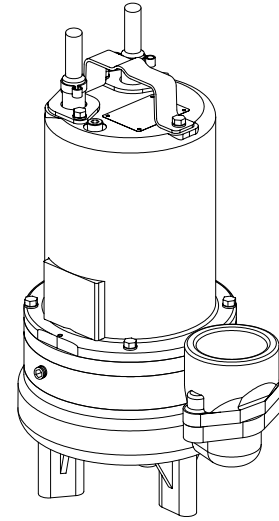
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), Normally Open Moisture sensor with cord for DS pumps (Requires relay in control panel).



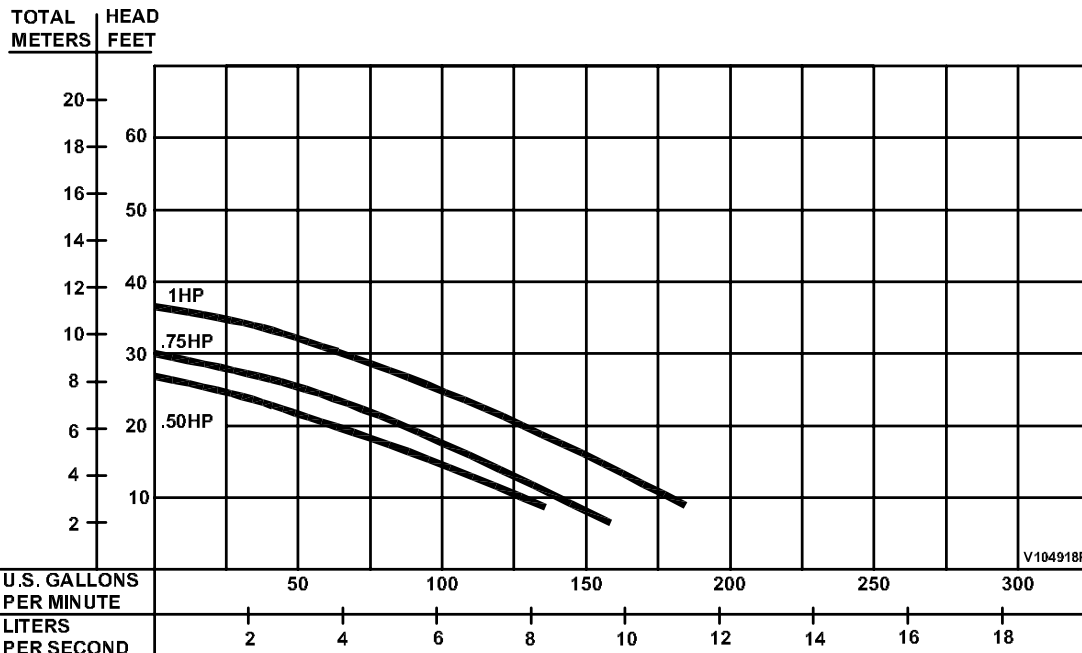
Series: 3SEV-DS
.5 - 1 HP, 1750RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



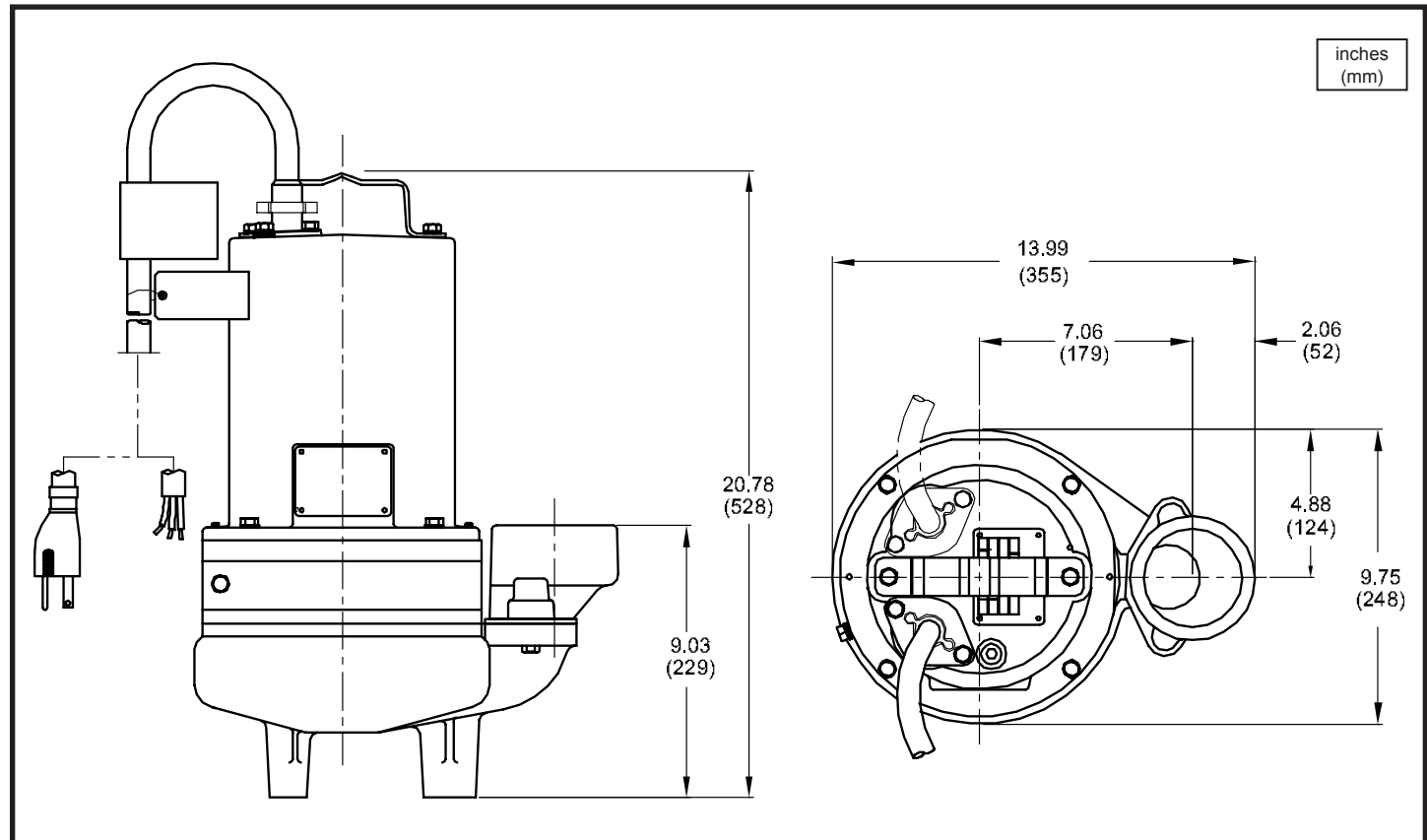
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SEV-DS

2" Spherical Solids Handling
Vortex, Double Seal

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Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
3SEV514DS	104949	0.5	120/1	60	1750	F	12.0	21.3	14/3	SJTOW	0.375 (9.5)
3SEV524DS	104950	0.5	240/1	60	1750	J	6.3	14.9	14/3	SOW	0.530 (13.5)
3SEV594DS	104951	0.5	200-240/3	60	1750	H/L	3.7/3.8	9.8/11.0	14/4	SOW	0.570 (14.5)
3SEV544DS	104952	0.5	480/3	60	1750	K	1.9	5.3	14/4	SOW	0.570 (14.5)
3SEV554DS	104953	0.5	600/3	60	1750	H	1.4	3.4	14/4	SOW	0.570 (14.5)
3SEV724DS	104958	0.75	240/1	60	1750	G/K	7.1	25.8	14/3	SOW	0.530 (13.5)
3SEV794DS	104959	0.75	200-240/3	60	1750	H/K	4.8/4.6	13.7/15.4	14/4	SOW	0.570 (14.5)
3SEV744DS	104960	0.75	480/3	60	1750	K	2.3	7.7	14/4	SOW	0.570 (14.5)
3SEV754DS	104961	0.75	600/3	60	1750	L	1.6	7.2	14/4	SOW	0.570 (14.5)
3SEV1024DS	104966	1.0	240/1	60	1750	D/G	8.5	25.8	14/3	SOW	0.530 (13.5)
3SEV1094DS	104967	1.0	200-240/3	60	1750	E/H	5.3/5.1	13.7/15.4	14/3	SOW	0.570 (14.5)
3SEV1044DS	104968	1.0	480/3	60	1750	H	2.5	7.7	14/4	SOW	0.570 (14.5)
3SEV1054DS	104969	1.0	600/3	60	1750	J	2.2	7.2	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.

OPTIONAL - Moisture & Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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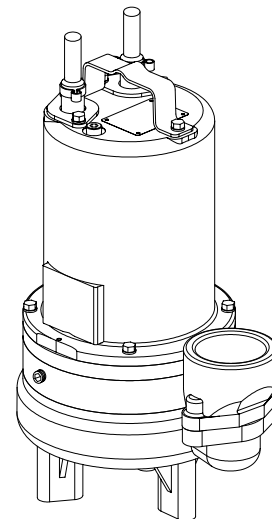
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical, Bolt-on Flange
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	Vortex, open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	15 ft. (5m) Cord with plug on 120 volt & .5HP, 240 volt, 1 phase. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel), Normally Open Moisture sensor with cord for DS pumps (Requires relay in control panel).



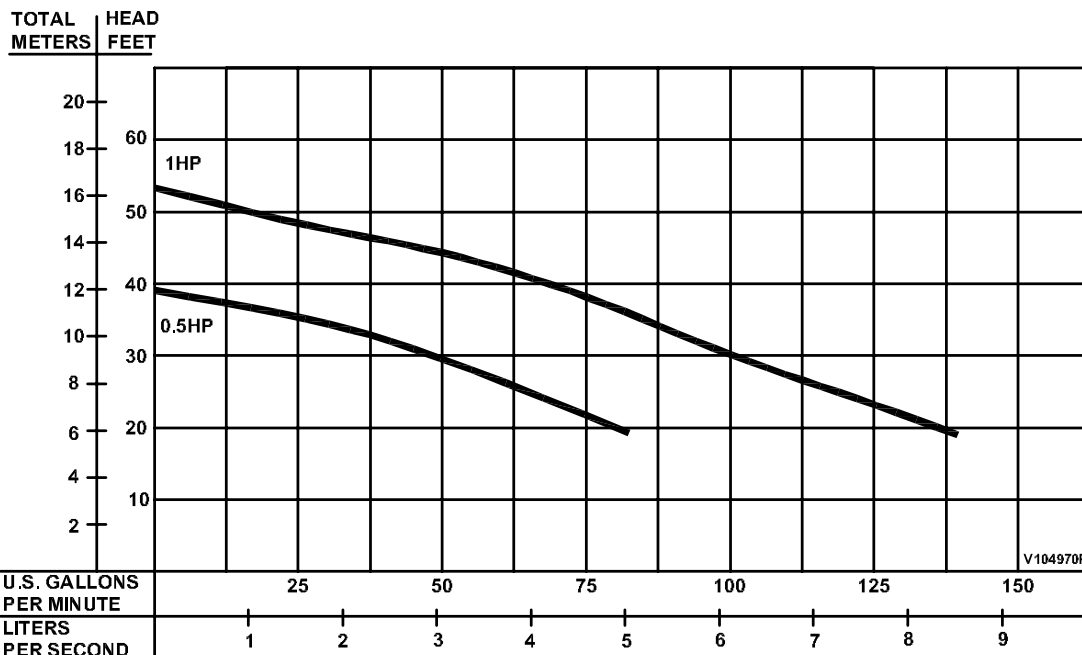
Series: 3SEV-DS
.5 & 1 HP, 3450RPM, 60Hz



CSA 108 - File No. LR16567
UL 778

NRTL/C

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



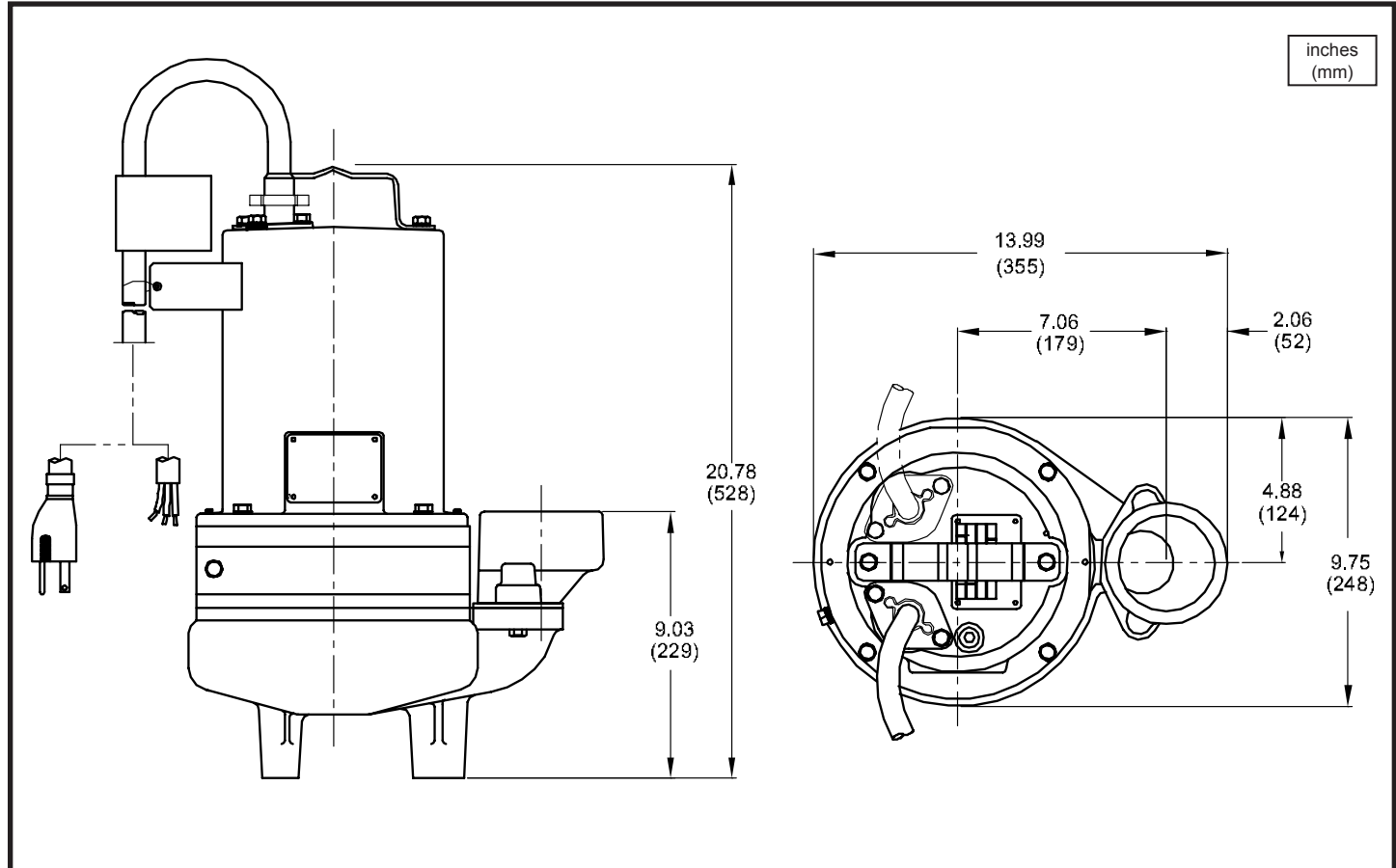
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SEV-DS

2" Spherical Solids Handling
Vortex, Double Seal

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Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
3SEV512DS*	104998	0.5	120/1	60	3450	G	12.6	24.6	14/3	SJTOW	0.375 (9.5)
3SEV522DS	104999	0.5	240/1	60	3450	E	6.0	10.2	14/3	SOW	0.530 (13.5)
3SEV592DS	105000	0.5	200-240/3	60	3450	P/R	5.8/5.3	19.9/18.4	14/4	SOW	0.570 (14.5)
3SEV542DS	105002	0.5	480/3	60	3450	R	2.6	9.1	14/4	SOW	0.570 (14.5)
3SEV552DS	105003	0.5	600/3	60	3450	T	2.1	8.7	14/4	SOW	0.570 (14.5)
3SEV1022DS	105009	1.0	240/1	60	3450	F	10.7	21.8	14/3	SOW	0.530 (13.5)
3SEV1092DS	105010	1.0	200-240/3	60	3450	H/J	7.9/7.5	19.9/18.4	14/4	SOW	0.570 (14.5)
3SEV1042DS	105012	1.0	480/3	60	3450	J	3.7	9.1	14/4	SOW	0.570 (14.5)
3SEV1052DS	105013	1.0	600/3	60	3450	L	2.9	8.7	14/4	SOW	0.570 (14.5)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/3 SOW, 0.530 (13.5mm) O.D.

OPTIONAL - Moisture sensor cord is 18/5 SOW, 0.470 (11.9mm) O.D.

OPTIONAL - Moisture & Temperature sensor cord for 3 phase models is 18/5 SOW, 0.470 (11.9mm) O.D.

(*) Pump is CSA listed **ONLY**.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

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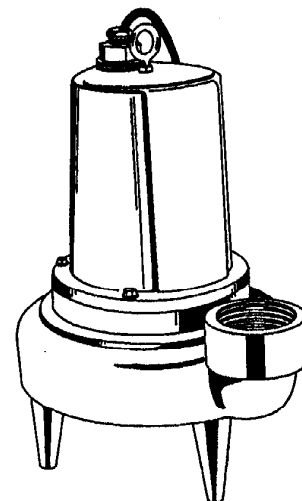
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	25 ft. (7.6m) Cord. Quick connect custom molded for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	200-240/480 is Tri-Voltage. 600V. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



Series: 3SE-L

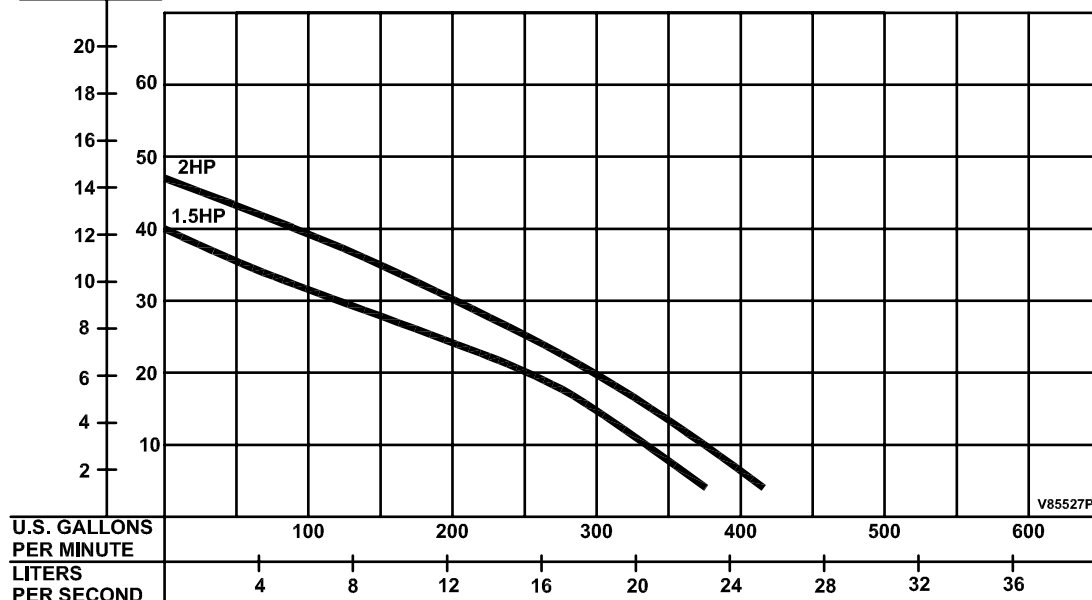
1.5 & 2HP, 1750RPM, 60Hz



Canadian Standards Association
File No. LR16567

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

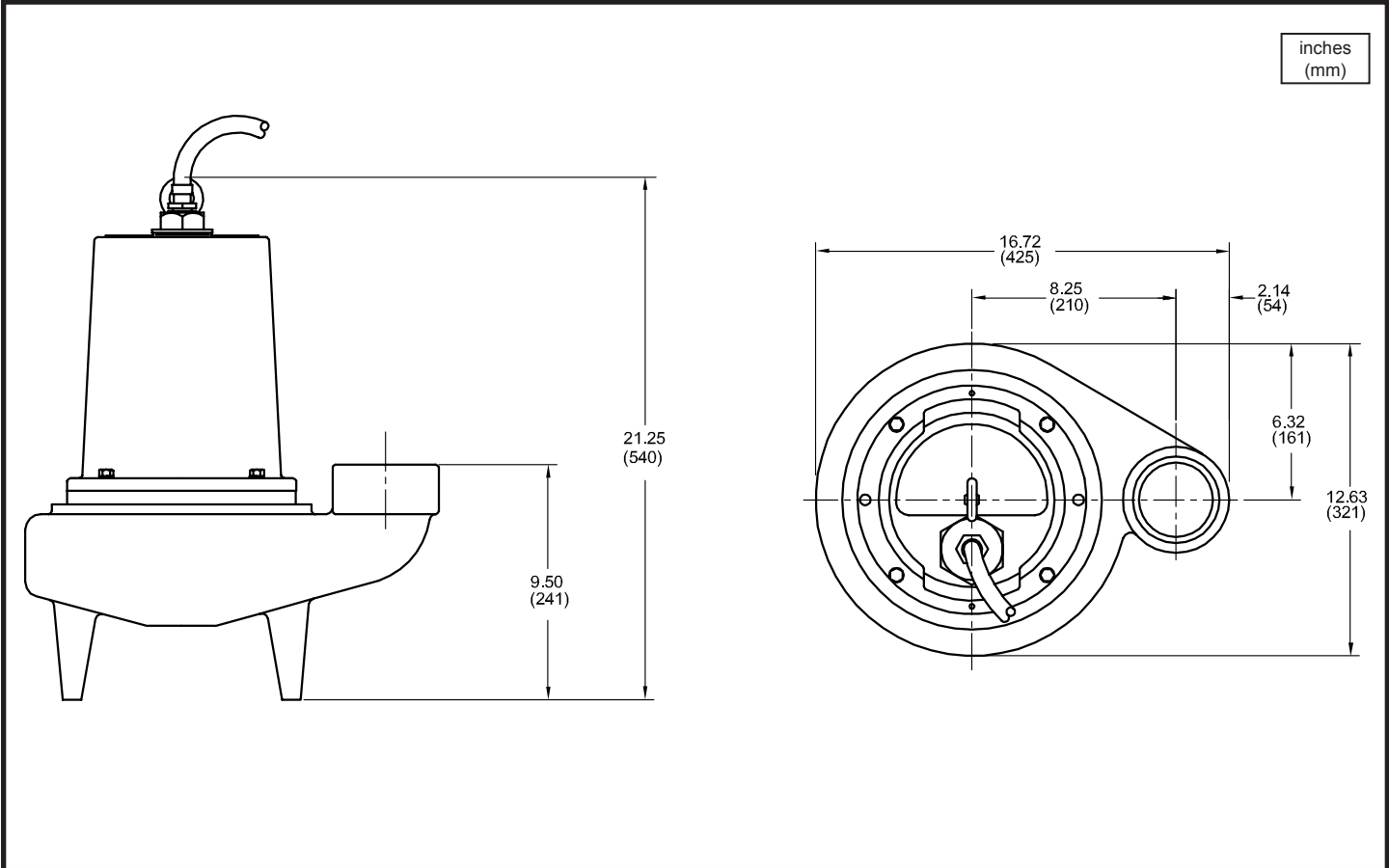
TOTAL HEAD
METERS FEET



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-L
2½" Spherical Solids Handling
Single Seal

Submersible Non-Clog Pumps



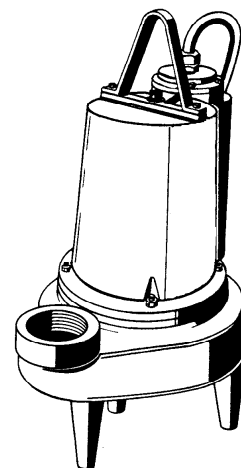
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE1524L	085527	1.5	230/1	60	1750	C	16.0	44.6	10/3	SOW	0.690 (17.5)
3SE1594L	085529	1.5	200-230/3	60	1750	D/G	13.3/11.6	35.8/41.2	10/4	SOW	0.750 (19.1)
3SE1544L	085530	1.5	460/3	60	1750	G	5.8	20.6	10/4	SOW	0.750 (19.1)
3SE1554L	089289	1.5	575/3	60	1750	G	4.6	16.4	10/4	SOW	0.750 (19.1)
3SE2024L	085531	2.0	230/1	60	1750	A	19.0	44.6	10/3	SOW	0.690 (17.5)
3SE2094L	085533	2.0	200-230/3	60	1750	B/D	15.2/13.2	35.8/41.2	10/4	SOW	0.750 (19.1)
3SE2044L	085534	2.0	460/3	60	1750	D	6.6	20.6	10/4	SOW	0.750 (19.1)
3SE2054L	089290	2.0	575/3	60	1750	D	5.2	16.4	10/4	SOW	0.750 (19.1)

OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !
1.) PUMP MAY BE OPERATED “DRY” FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

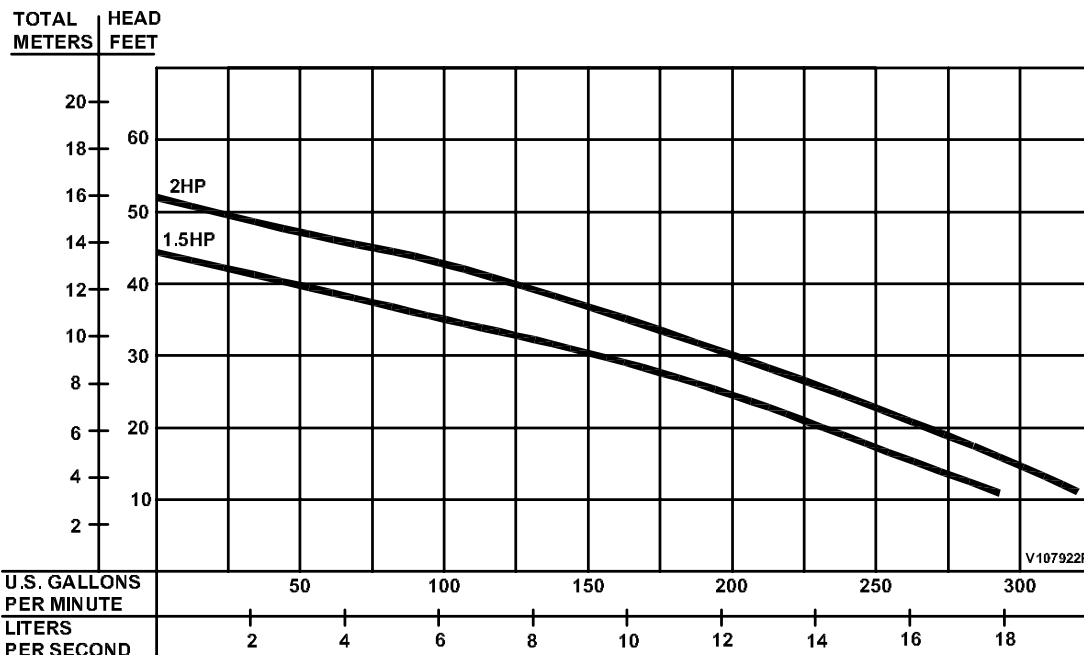
Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: Design	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
Material	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Inboard Single Mechanical, Oil filled reservoir with Seacondary Exclusion Seal
Material	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
	25 ft. (7.6m) Cord. Pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: Design	NEMA L -Single Phase, NEMA B -Three phase
Insulation	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC)
	Includes Overload Protection in Motor
THREE PHASE	200-230/460 is Tri-Voltage. Requires Overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



Series: 3SE-HD
1.5 & 2HP, 1750RPM, 60Hz

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

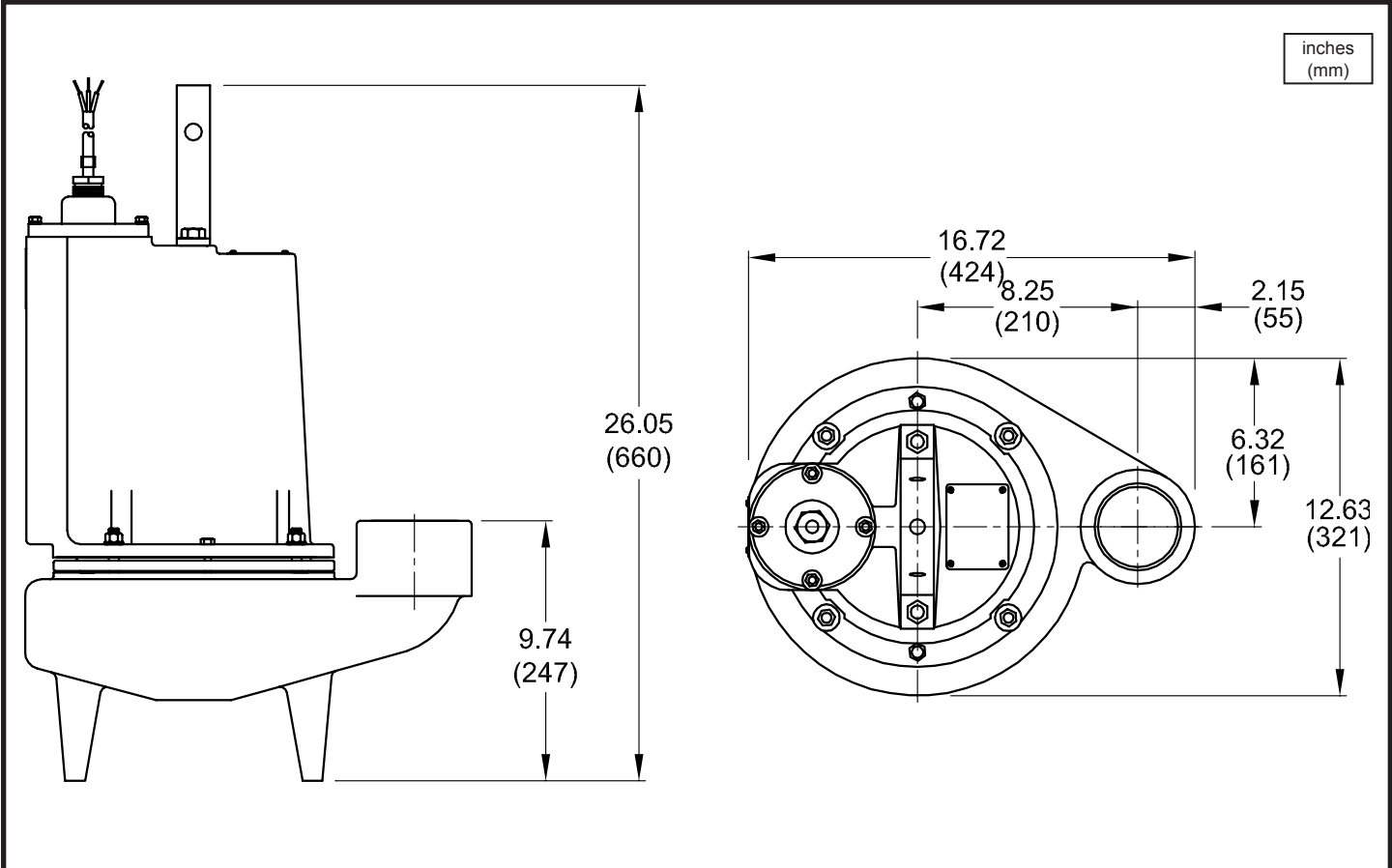


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-HD

2½" Spherical Solids Handling
Heavy Duty, Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE1524HD	107922	1.5	230/1	60	1750	B	12.6	23.0	10/3	SOW	0.690 (17.5)
3SE1594HD	107923	1.5	200-230/3	60	1750	H/L	8.8/8.0	30.4/36.0	10/4	SOW	0.750 (19.1)
3SE1544HD	107924	1.5	460/3	60	1750	L	4.0	17.5	10/4	SOW	0.750 (19.1)
3SE2024HD	107926	2.0	230/1	60	1750	B	14.5	29.0	10/3	SOW	0.690 (17.5)
3SE2094HD	107927	2.0	200-230/3	60	1750	J/M	15.4/14.0	44.1/50.8	10/4	SOW	0.750 (19.1)
3SE2044HD	107928	2.0	460/3	60	1750	M	7.0	25.4	10/4	SOW	0.750 (19.1)

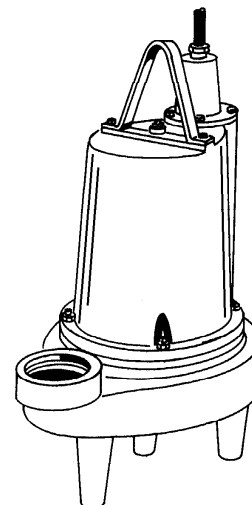
OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	25 ft. (7.6m) Cord.Epoxy sealed housing with secondary pressure grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	230/460 is Dual Voltage. Requires overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



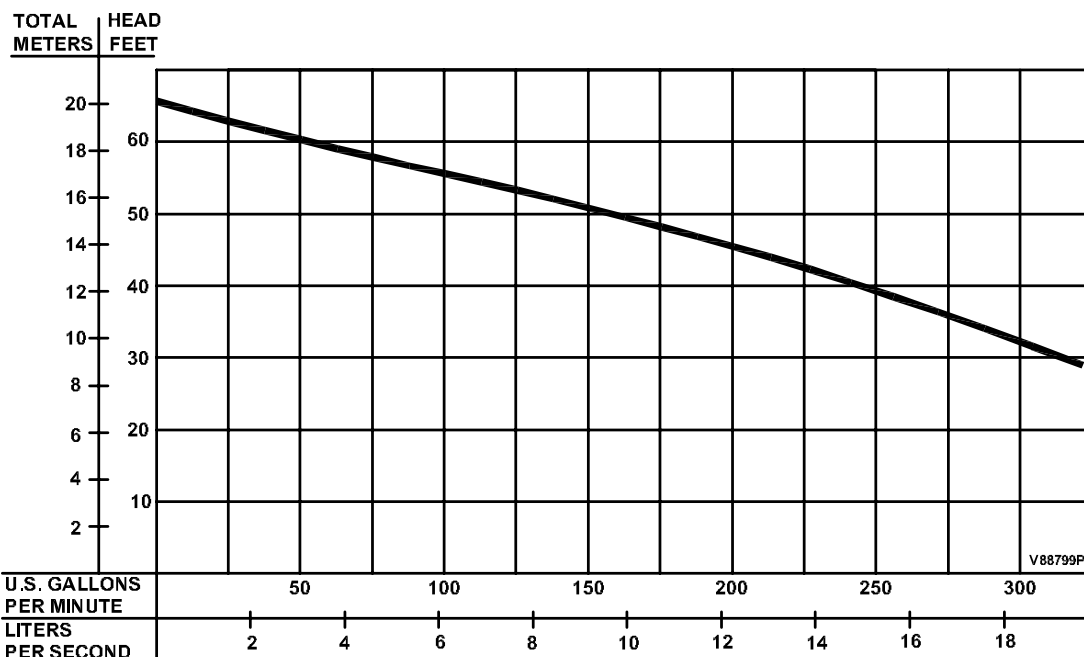
Series: 3SE-L 3HP, 1750RPM, 60Hz



Canadian Standards Association
File No. LR16567

DESCRIPTION:

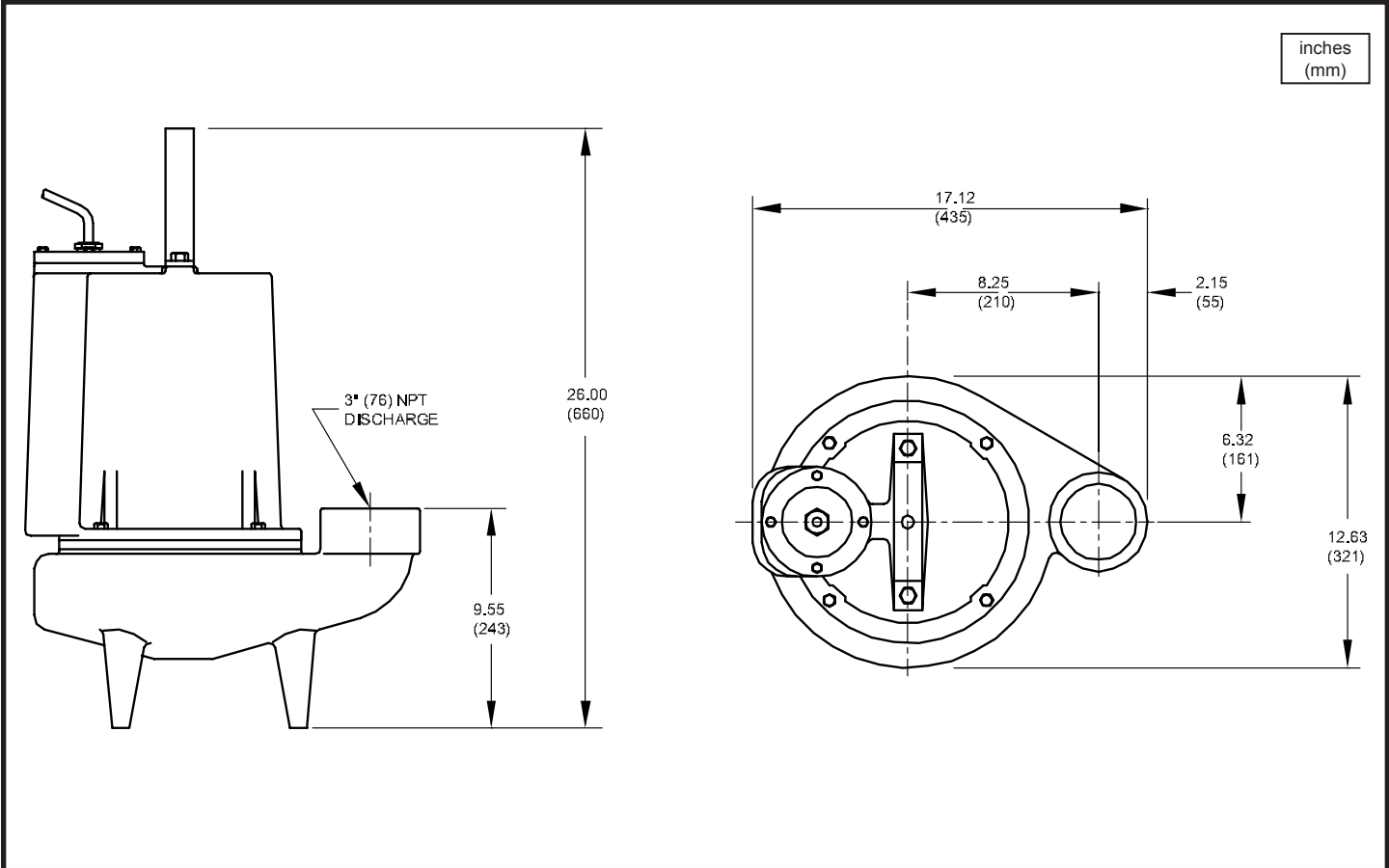
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-L
2½" Spherical Solids Handling
Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE3024L	088799	3.0	230/1	60	1750	A	28.0	59.0	10/3	SOW	0.690 (17.5)
3SE3034L	088800	3.0	230/3	60	1750	D	19.0	56.0	10/4	SOW	0.750 (19.1)
3SE3044L	088801	3.0	460/3	60	1750	D	9.0	28.0	10/4	SOW	0.750 (19.1)
3SE3054L	088802	3.0	575/3	60	1750	E	8.3	23.0	10/4	SOW	0.750 (19.1)

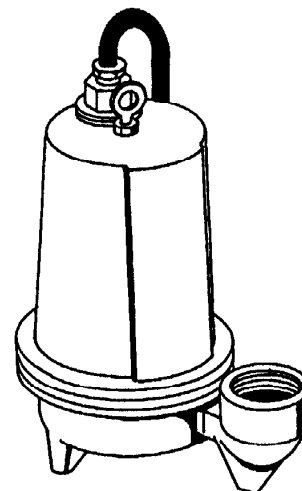
OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	25 ft. (7.6m) Cord. Pressure grommet for sealing and strain relief
UPPER BEARING:	
1.0 HP	Sleeve, Oil lubricated
1.5 & 2.0HP	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
	Torque Curve, Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class A for 1.0HP
	Class B for 1.5 & 2.0HP
SINGLE PHASE	Permanent Split Capacitor (PSC)
	Includes Overload Protection in Motor
THREE PHASE	200-230/460 is Tri-Voltage. Requires overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



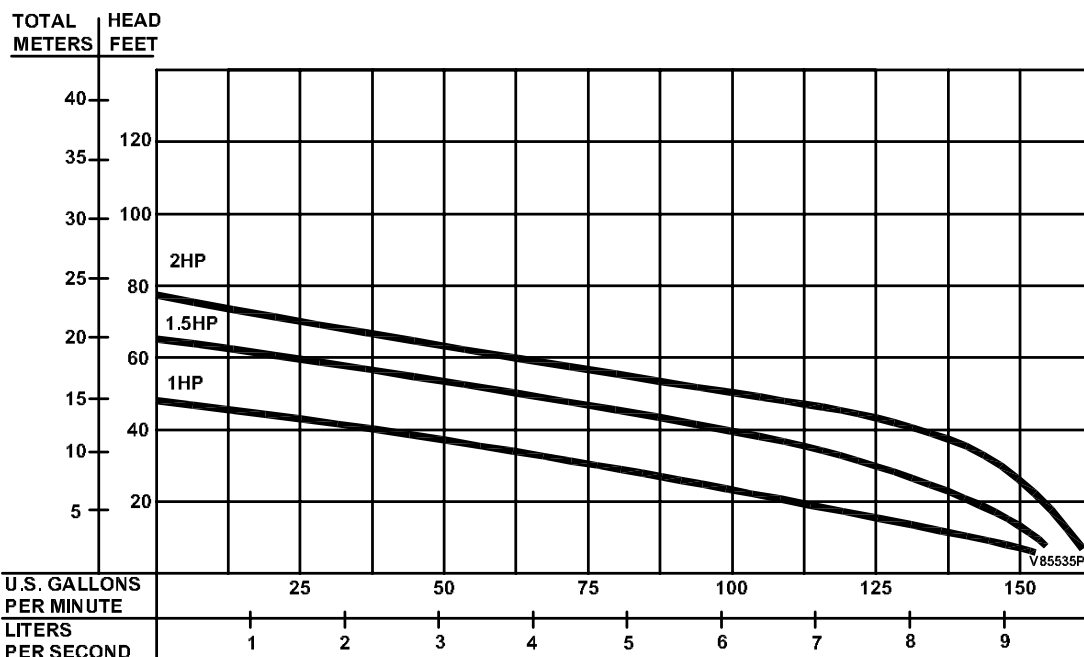
Series: 3SE-L 1.0, 1.5, 2HP, 3450RPM, 60Hz



Canadian Standards Association
File No. LR16567

DESCRIPTION:

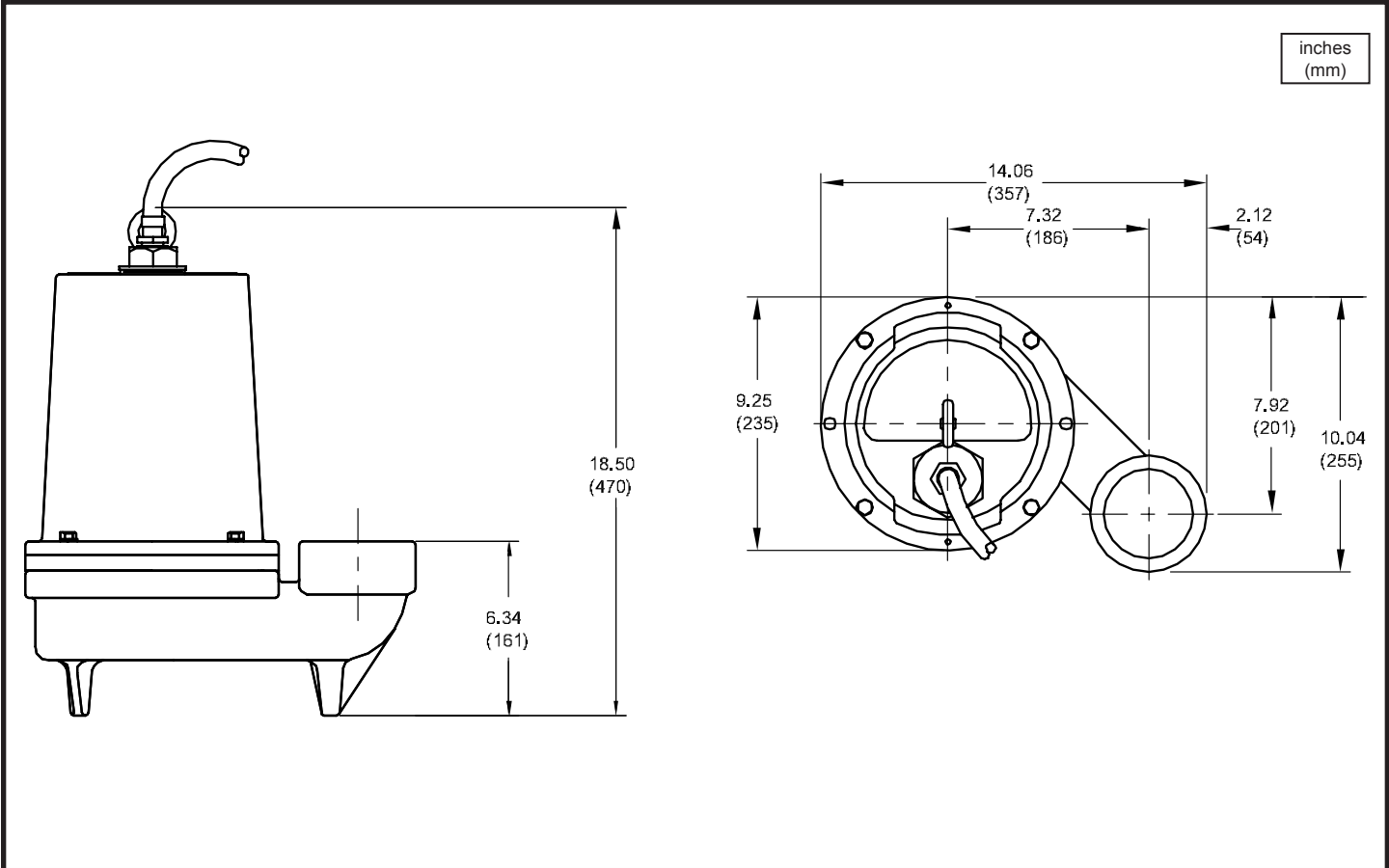
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-L
1½" Spherical Solids Handling
Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE1022L	085535	1.0	230/1	60	3450	A	8.5	17.0	10/3	SOW	0.690 (17.5)
3SE1092L	085536	1.0	200-230/3	60	3450	B/D	5.7/5.0	18.5/21.3	10/4	SOW	0.750 (19.1)
3SE1042L	085537	1.0	460/3	60	3450	D	2.5	10.7	10/4	SOW	0.750 (19.1)
3SE1052L	089291	1.0	575/3	60	3450	D	2.0	8.5	10/4	SOW	0.750 (19.1)
3SE1522L	085538	1.5	230/1	60	3450	A	12.0	31.0	10/3	SOW	0.690 (17.5)
3SE1592L	085539	1.5	200-230/3	60	3450	C/F	9.8/8.6	31.3/36.0	10/4	SOW	0.750 (19.1)
3SE1542L	085540	1.5	460/3	60	3450	F	4.3	18.0	10/4	SOW	0.750 (19.1)
3SE1552L	089292	1.5	575/3	60	3450	F	3.4	14.4	10/4	SOW	0.750 (19.1)
3SE2022L	085541	2.0	230/1	60	3450	A	13.5	31.0	10/3	SOW	0.690 (17.5)
3SE2092L	085542	2.0	200-230/3	60	3450	A/C	11.5/10.0	31.3/36.0	10/4	SOW	0.750 (19.1)
3SE2042L	085543	2.0	460/3	60	3450	C	5.0	18.0	10/4	SOW	0.750 (19.1)
3SE2052L	089293	2.0	575/3	60	3450	C	4.0	14.4	10/4	SOW	0.750 (19.1)

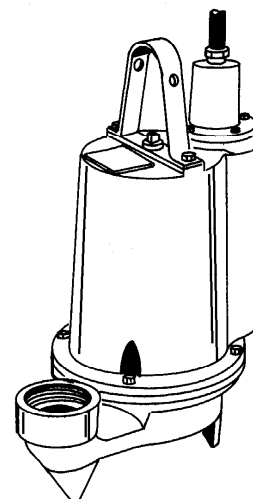
OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	25 ft. (7.6m) Cord. Pressure grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class B
THREE PHASE	230/460 is Dual Voltage. Requires overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Normally Closed Temperature Sensors with cord for 3 phase pumps (Requires relay in control panel),



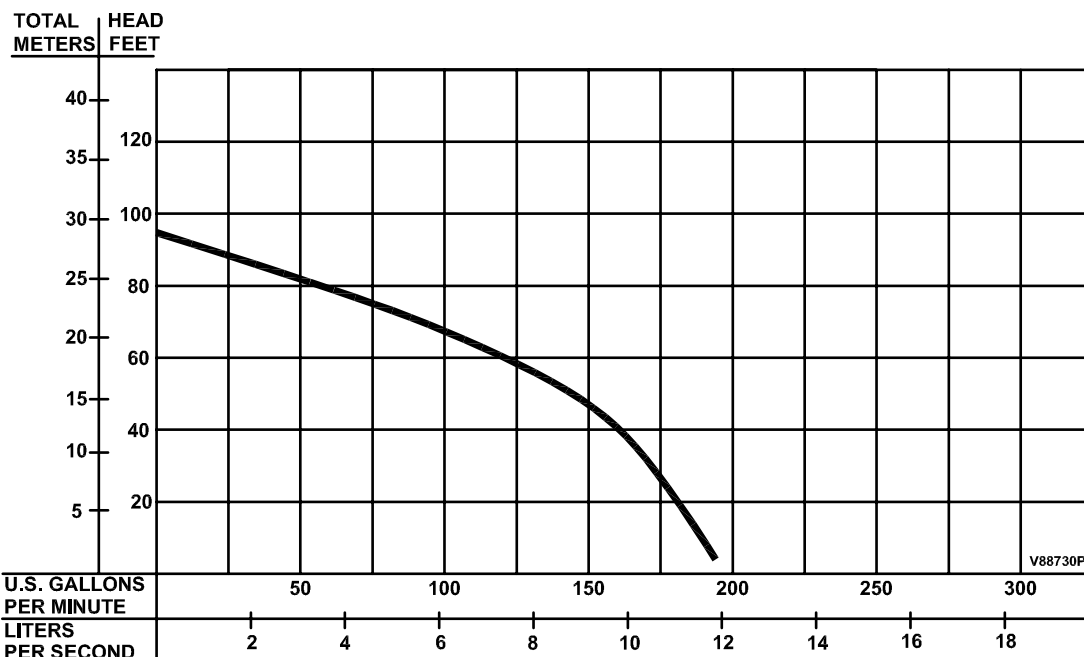
Series: 3SE-L 3HP, 3450RPM, 60Hz



Canadian Standards Association
File No. LR16567

DESCRIPTION:

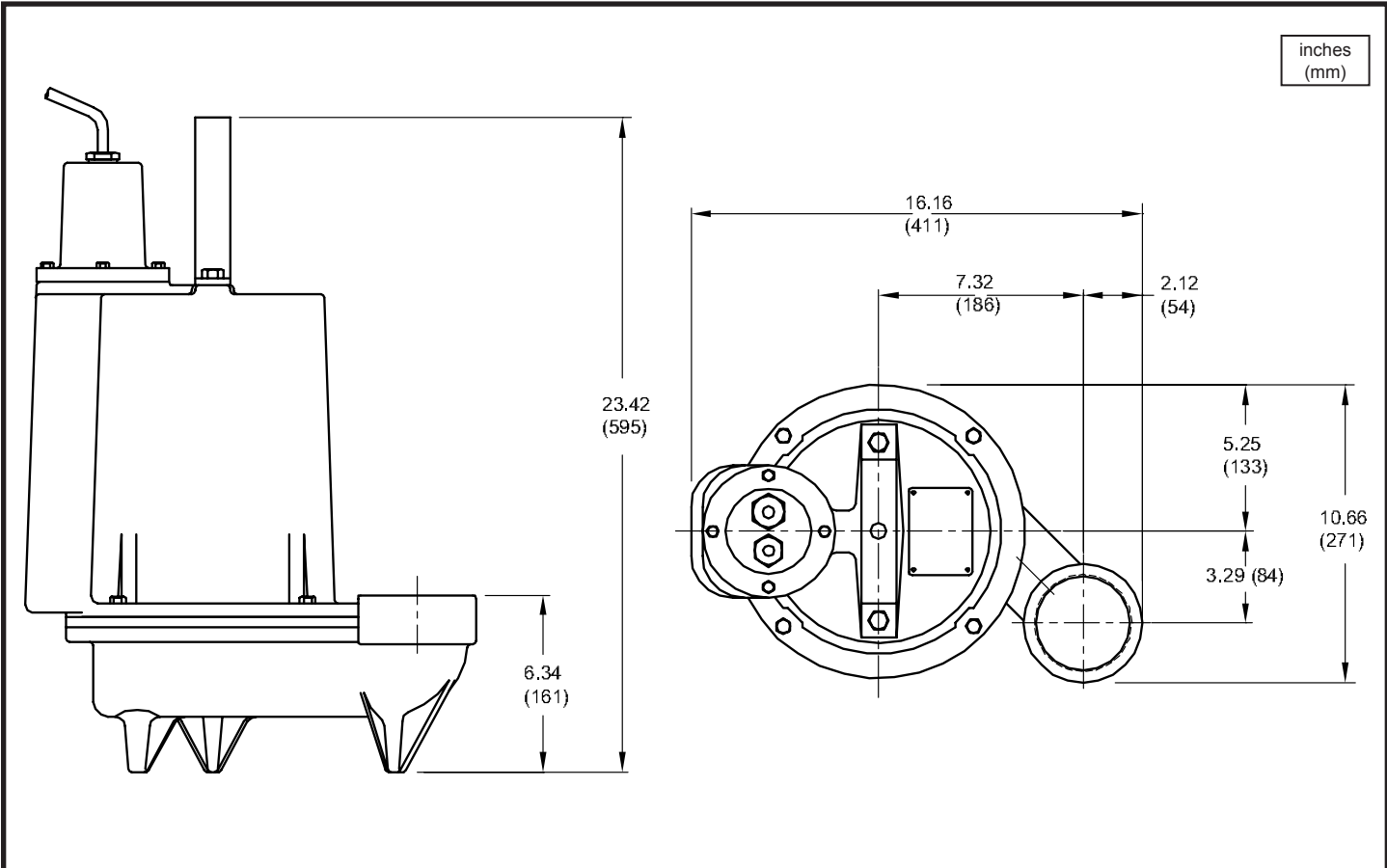
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-L
1½" Spherical Solids Handling
Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE3032L	088730	3.0	230/3	60	3450	B	16.4	40.0	10/4	SOW	0.750 (19.1)
3SE3042L	088731	3.0	460/3	60	3450	B	8.2	20.0	10/4	SOW	0.750 (19.1)
3SE3052L	088732	3.0	575/3	60	3450	B	6.5	16.0	10/4	SOW	0.750 (19.1)

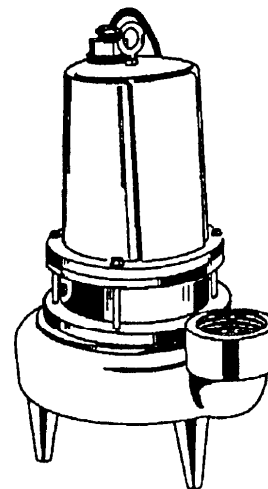
OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Tandem Mechanical, Oil filled reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	25 ft. (7.6m) Cord. Pressure grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
<i>Insulation</i>	Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC)
	Includes Overload Protection in Motor
THREE PHASE	200-230/460 is Tri-Voltage. Requires overload Protection to be included in control panel
MOISTURE SENSOR	Normally Open, Requires relay in control panel
TEMPERATURE SENSOR	Normally Closed, Requires relay in control panel. For three phase units ONLY
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord,



Series: 3SE-DS 1.5 & 2HP, 1750RPM, 60Hz

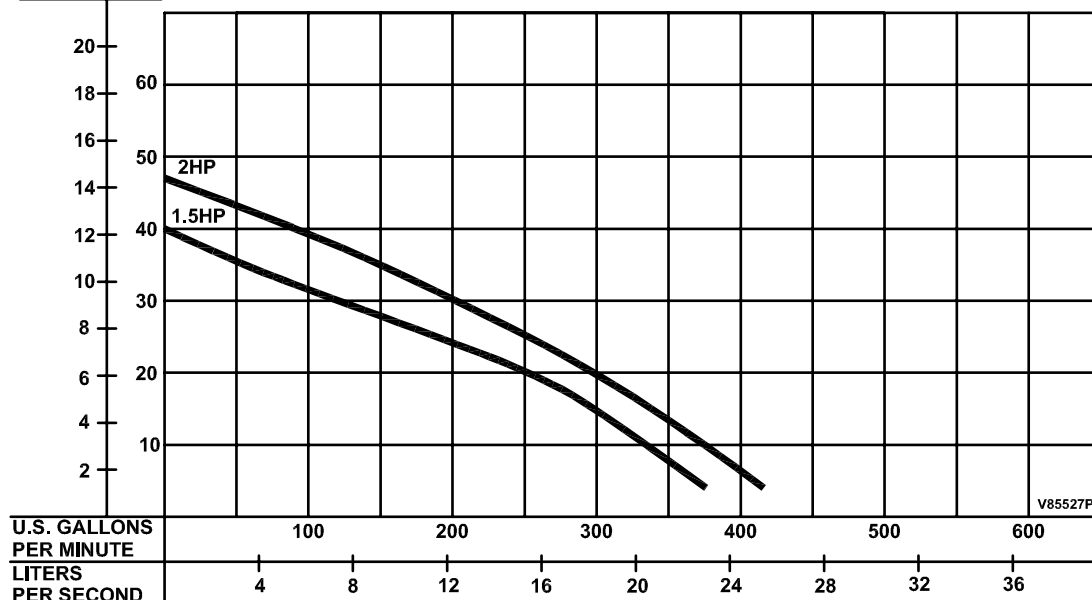


Canadian Standards Association
File No. LR16567

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

TOTAL HEAD
METERS FEET



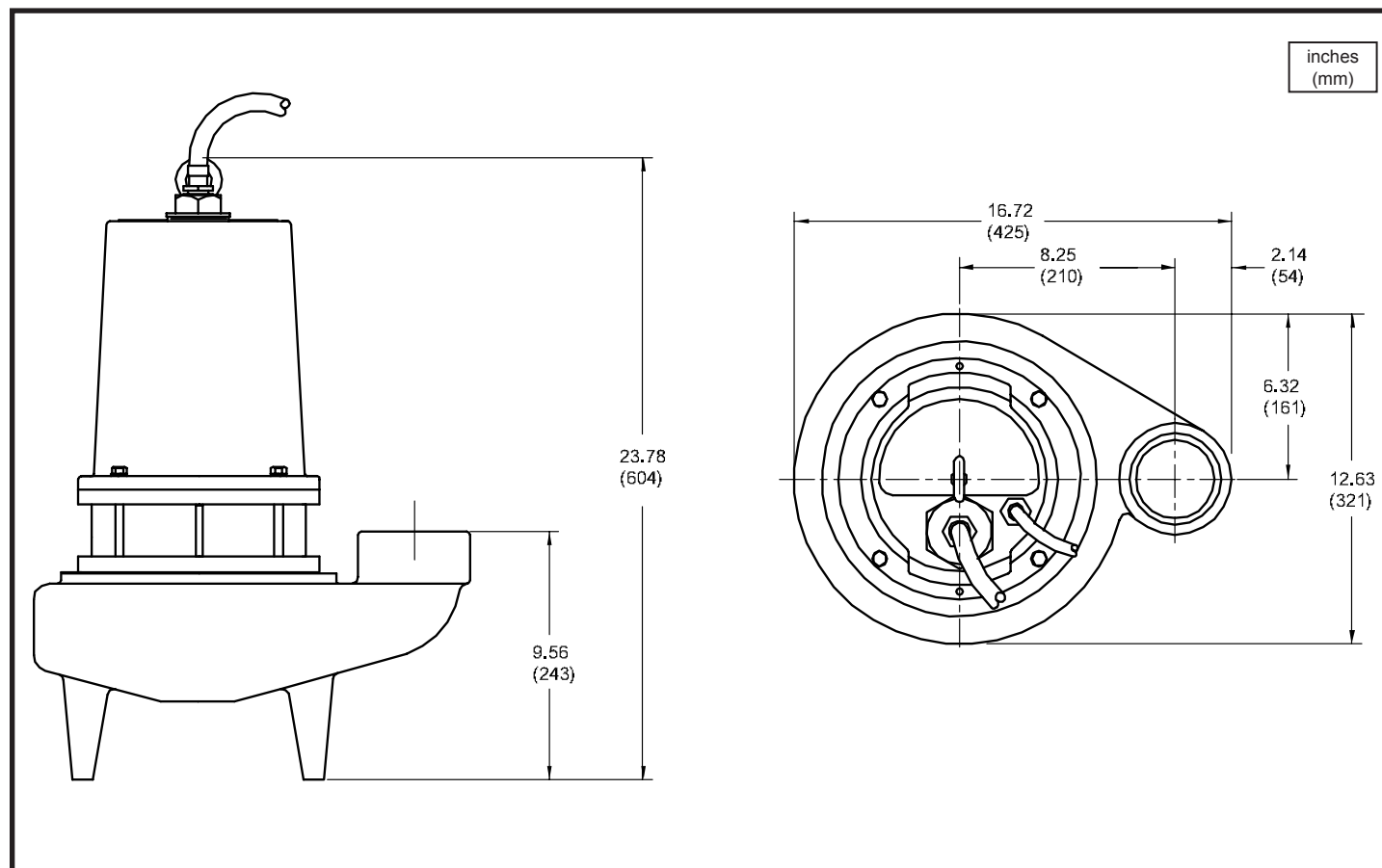
Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-DS

2½" Spherical Solids Handling
Double Seal

BARNES®
Professional Plumbing
www.cranepumps.com

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
3SE1524DS	084921	1.5	230/1	60	1750	C	16.0	44.6	10/3	SOW	0.690 (17.5)
3SE1594DS	084927	1.5	200-230/3	60	1750	D/G	13.3/11.6	35.8/41.2	10/4	SOW	0.750 (19.1)
3SE1544DS	084930	1.5	460/3	60	1750	G	5.8	20.6	10/4	SOW	0.750 (19.1)
3SE1554DS	089294	1.5	575/3	60	1750	G	4.6	16.4	10/4	SOW	0.750 (19.1)
3SE2024DS	084937	2.0	230/1	60	1750	A	19.0	44.6	10/3	SOW	0.690 (17.5)
3SE2094DS	084939	2.0	200-230/3	60	1750	B/D	15.2/13.2	35.8/41.2	10/4	SOW	0.750 (19.1)
3SE2044DS	084940	2.0	460/3	60	1750	D	6.6	20.6	10/4	SOW	0.750 (19.1)
3SE2054DS	089295	2.0	575/3	60	1750	D	5.2	16.4	10/4	SOW	0.750 (19.1)

Moisture & Temperature sensor cord for all models is 18/5 SOW, 0.476 O.D.

OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

SECTION C
PAGE 48
DATE 4/04

CRANE®

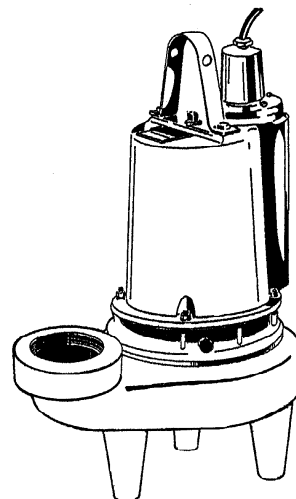
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Double Mechanical, Oil filled pressure equalized reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
UPPER BEARING	25 ft. (7.6m) Cord. Pressure grommet for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	Single Row, Ball, Oil lubricated
<i>Insulation</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction
SINGLE PHASE	Class B
THREE PHASE	Permanent Split Capacitor (PSC)
MOISTURE SENSOR	Includes Overload Protection in Motor
TEMPERATURE SENSOR	230/460 is Dual Voltage. Requires overload Protection to be included in control panel
OPTIONAL EQUIPMENT	Normally Open, Requires relay in control panel
	Normally Closed, Requires relay in control panel. For three phase units ONLY
	Seal Material, Impeller Trims, Additional cord,

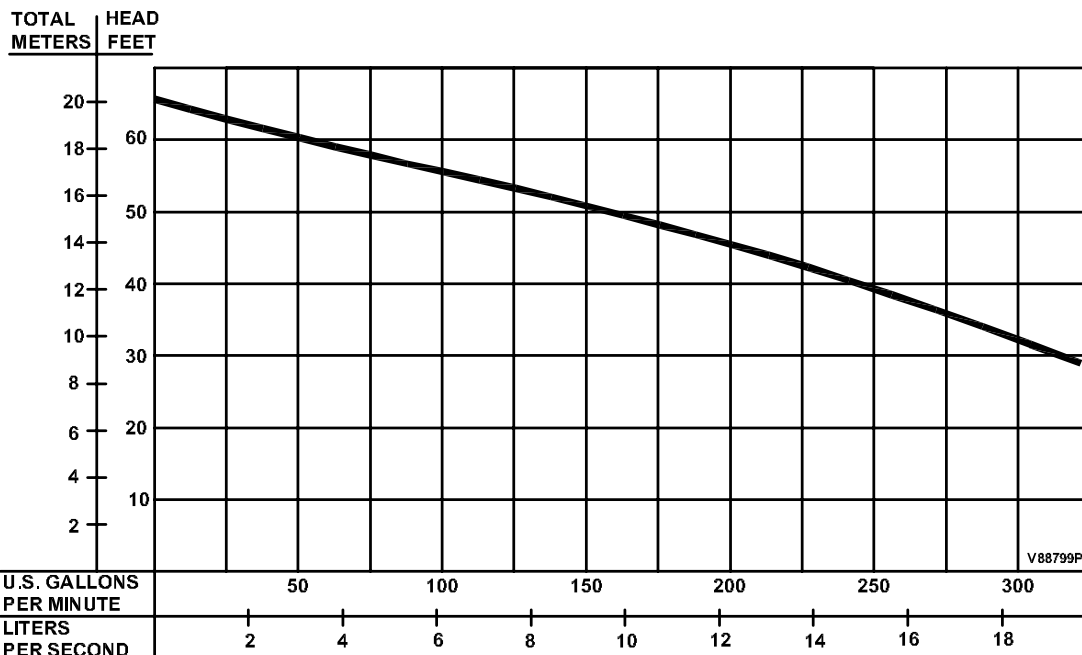


Series: 3SE-DS 3HP, 1750RPM, 60Hz



Canadian Standards Association
File No. LR16567

DESCRIPTION:
SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED
FOR TYPICAL RAW SEWAGE APPLICATIONS

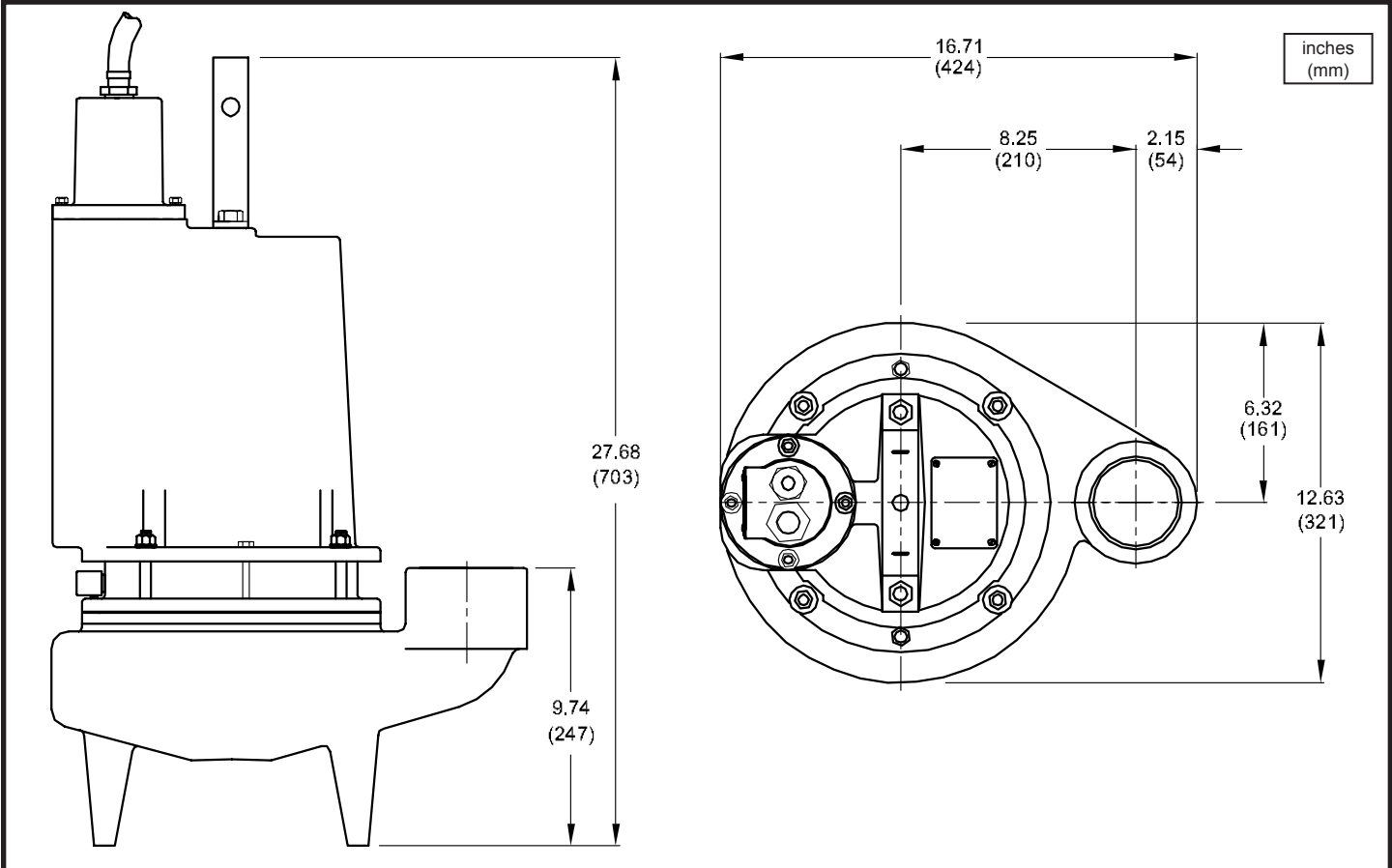


Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series 3SE-DS

2½" Spherical Solids Handling
Double Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE3024DS	088817	3.0	230/1	60	1750	A	28.0	59.0	10/3	SOW	0.690 (17.5)
3SE3034DS	088818	3.0	230/3	60	1750	D	19.0	56.0	10/4	SOW	0.750 (19.1)
3SE3044DS	088819	3.0	460/3	60	1750	D	9.0	28.0	10/4	SOW	0.750 (19.1)
3SE3054DS	088820	3.0	575/3	60	1750	E	8.3	23.0	10/4	SOW	0.750 (19.1)

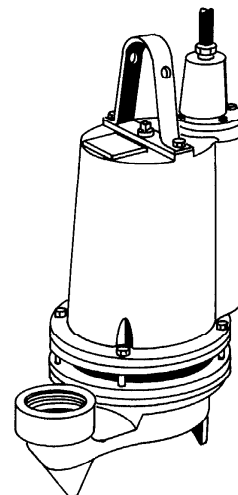
Moisture & Temperature sensor cord for all models is 18/5 SOW, 0.476 O.D.
OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
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Submersible Non-Clog Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Double Mechanical, Oil filled pressure equalized reservoir
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
	25 ft. (7.6m) Cord. Epoxy sealed housing with Secondary pressure grommet for sealing and strain relief
UPPER BEARING:	
1.0HP	Sleeve, Oil lubricated
1.5 thru 3.0HP	Single Row, Ball, Oil lubricated
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	NEMA L -Single Phase, NEMA B -Three phase
	Torque Curve, Oil Filled, Squirrel Cage Induction
<i>Insulation</i>	Class A for 1.0HP
	Class B for 1.5 thru 3.0HP
SINGLE PHASE	Permanent Split Capacitor (PSC)
	Includes Overload Protection in Motor
THREE PHASE	230/460 is Dual Voltage. Requires overload Protection to be included in control panel
MOISTURE SENSOR	Normally Open, Requires relay in control panel
TEMPERATURE SENSOR	Normally Closed, Requires relay in control panel.
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord,



Series: 3SE-DS

1.0 - 3HP, 3450RPM, 60Hz

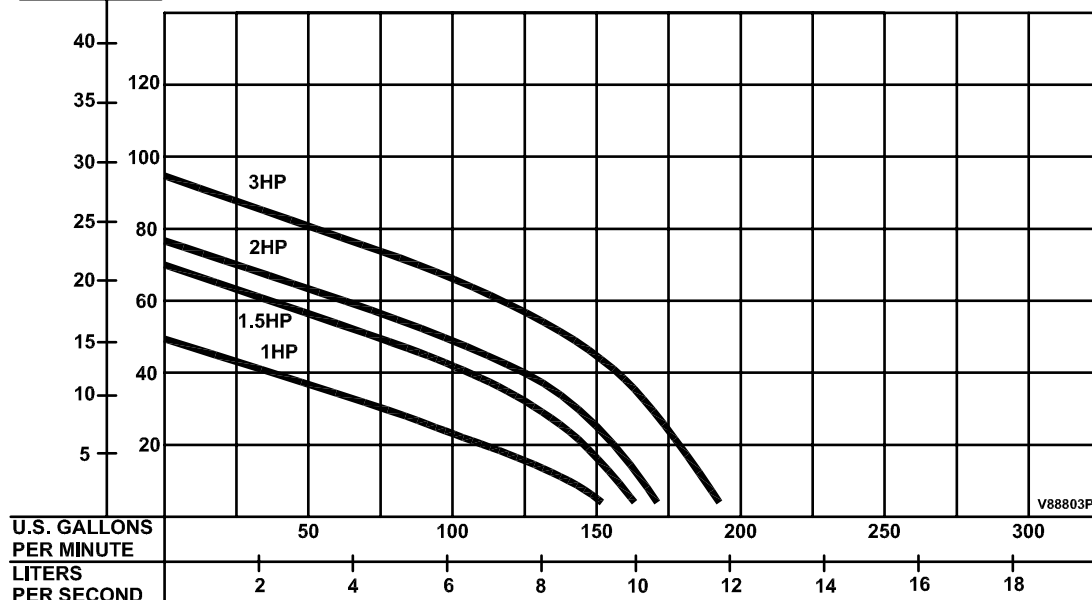


Canadian Standards Association
File No. LR16567

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

TOTAL HEAD
METERS FEET

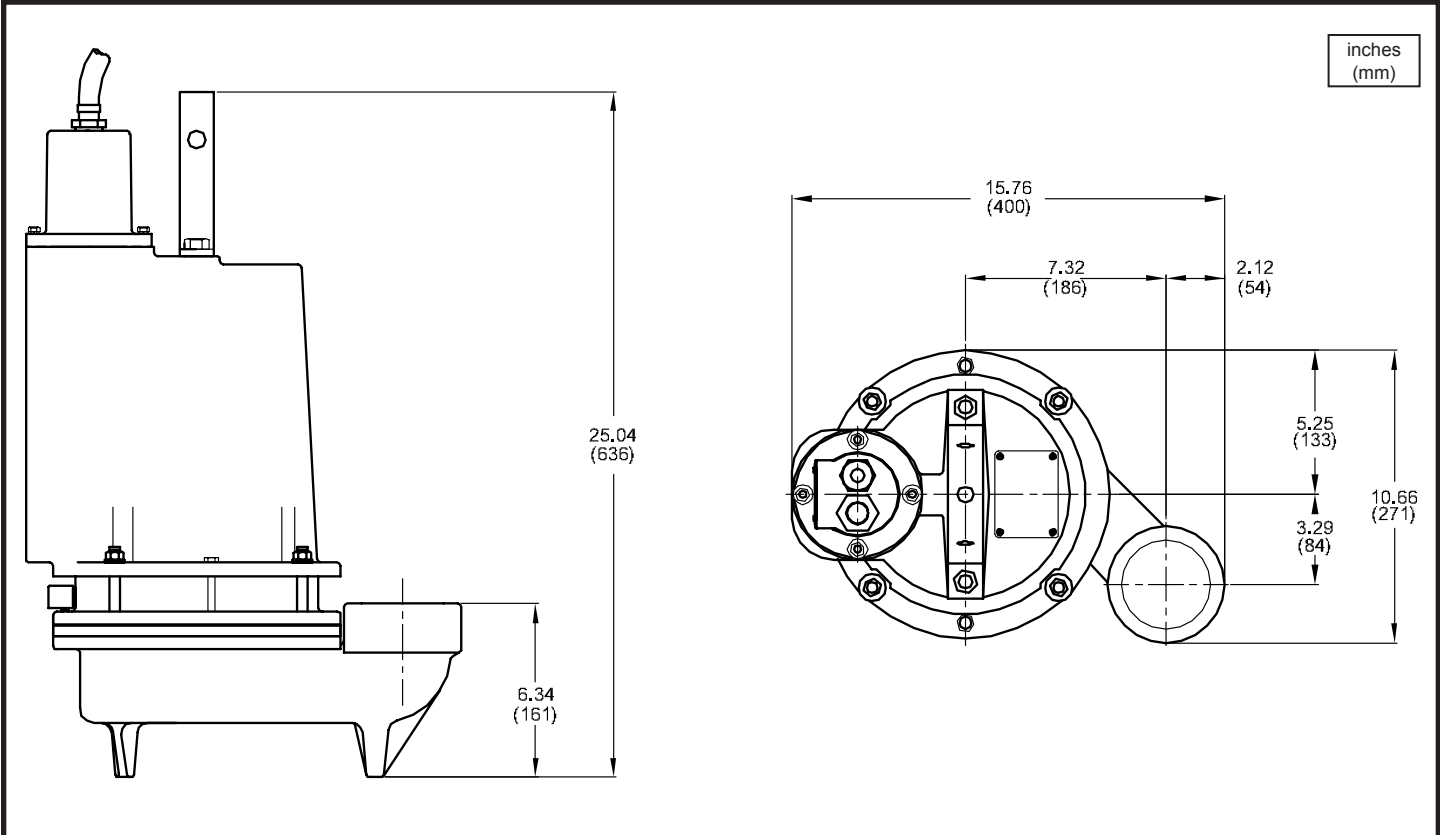


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 3SE-DS

1½" Spherical Solids Handling
Double Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
3SE1022DS	088803	1.0	230/1	60	3450	G	8.5	26.0	10/3	SOW	0.690 (17.5)
3SE1032DS	088804	1.0	230/3	60	3450	K	5.0	22.0	10/4	SOW	0.750 (19.1)
3SE1042DS	088805	1.0	460/3	60	3450	K	2.5	11.0	10/4	SOW	0.750 (19.1)
3SE1052DS	088806	1.0	575/3	60	3450	K	2.0	8.8	10/4	SOW	0.750 (19.1)
3SE1522DS	088807	1.5	230/1	60	3450	E	12.0	31.0	10/3	SOW	0.690 (17.5)
3SE1532DS	088808	1.5	230/3	60	3450	J	8.6	27.0	10/4	SOW	0.750 (19.1)
3SE1542DS	088809	1.5	460/3	60	3450	J	4.3	13.5	10/4	SOW	0.750 (19.1)
3SE1552DS	088810	1.5	575/3	60	3450	J	3.4	10.8	10/4	SOW	0.750 (19.1)
3SE2022DS	088811	2.0	230/1	60	3450	E	13.5	42.0	10/3	SOW	0.690 (17.5)
3SE2032DS	088812	2.0	230/3	60	3450	G	9.0	30.0	10/4	SOW	0.750 (19.1)
3SE2042DS	088813	2.0	460/3	60	3450	G	4.5	15.0	10/4	SOW	0.750 (19.1)
3SE2052DS	088814	2.0	575/3	60	3450	G	3.6	12.0	10/4	SOW	0.750 (19.1)
3SE3032DS	088815	3.0	230/3	60	3450	F	16.4	40.0	10/4	SOW	0.750 (19.1)
3SE3042DS	088816	3.0	460/3	60	3450	F	8.2	20.0	10/4	SOW	0.750 (19.1)
3SE3052DS	089296	3.0	575/3	60	3450	F	6.5	16.0	10/4	SOW	0.750 (19.1)

Moisture & Temperature sensor cord for all models is 18/5 SOW, 0.476 O.D.
OPTIONAL - Temperature sensor cord for 3 phase models is 14/2 SOW, 0.530 (13.5mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
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Submersible Non-Clog Pumps

SE411ASP or SEV412ASP:

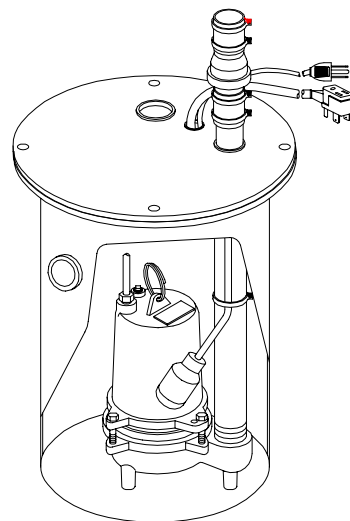
- One - **SE411A or SEV412A**,
60Hz Heavy duty sewage pump
- One - **Level Control**
Mechanical switch molded inside of a waterproof float. Single control turns pump on and off automatically.
- One - **1830 Polyethylene Basin**
18" (457mm) Dia. x 30" (762mm) Deep, with 4" (102mm) Inlet Hole.
- One - **4" (102mm) Flexible Pipe Fitting Inlet**
Super-tuff Sanoprene construction
- One - **18S22 Steel Cover**
With black powder coating, 2" (51mm) vent and 2" (51mm) Discharge and cord openings
- One - **2" (51mm) Vertical Check Valve**
With hose adaptors and clamps

Sch. 40 Discharge pipe, cover gasket, cover hardware, cord grommet, discharge and vent grommets also included.

SEV412ASPI:

A Pre-Assembled simplex package same as SEV412ASP except it is IAPMO approved.

For additional pump data see: Sect. C pages 1 & 2 for SE411 and
Sect. C pages 5 & 6 for SEV412.

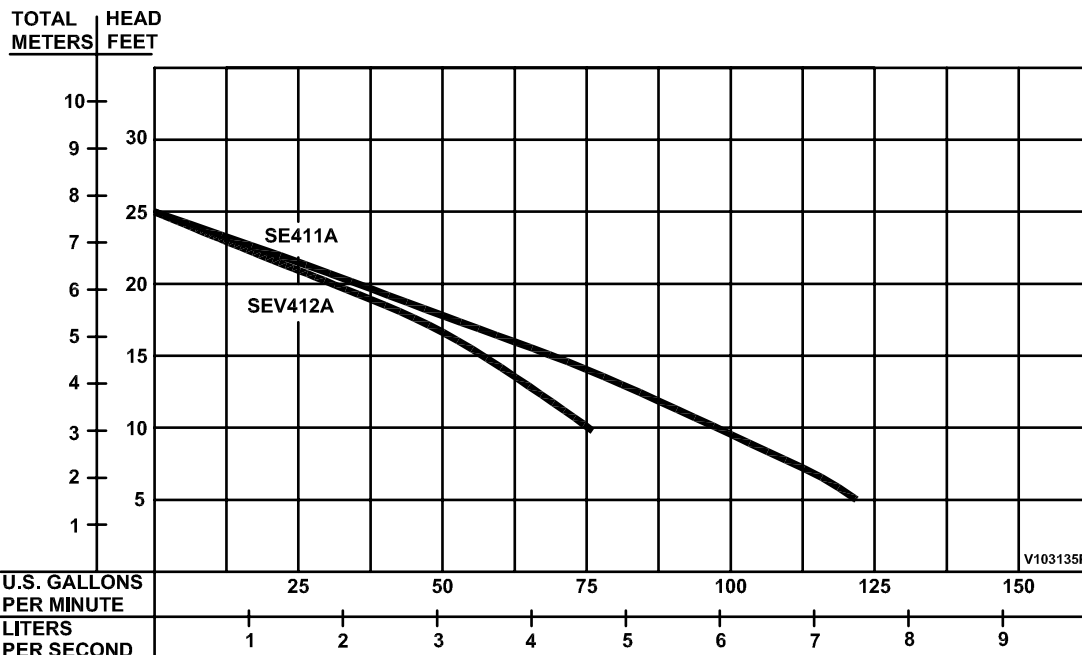


**Series: SE411ASP
SEV412ASP
SEV412ASPI***

(*) IAPMO APPROVED

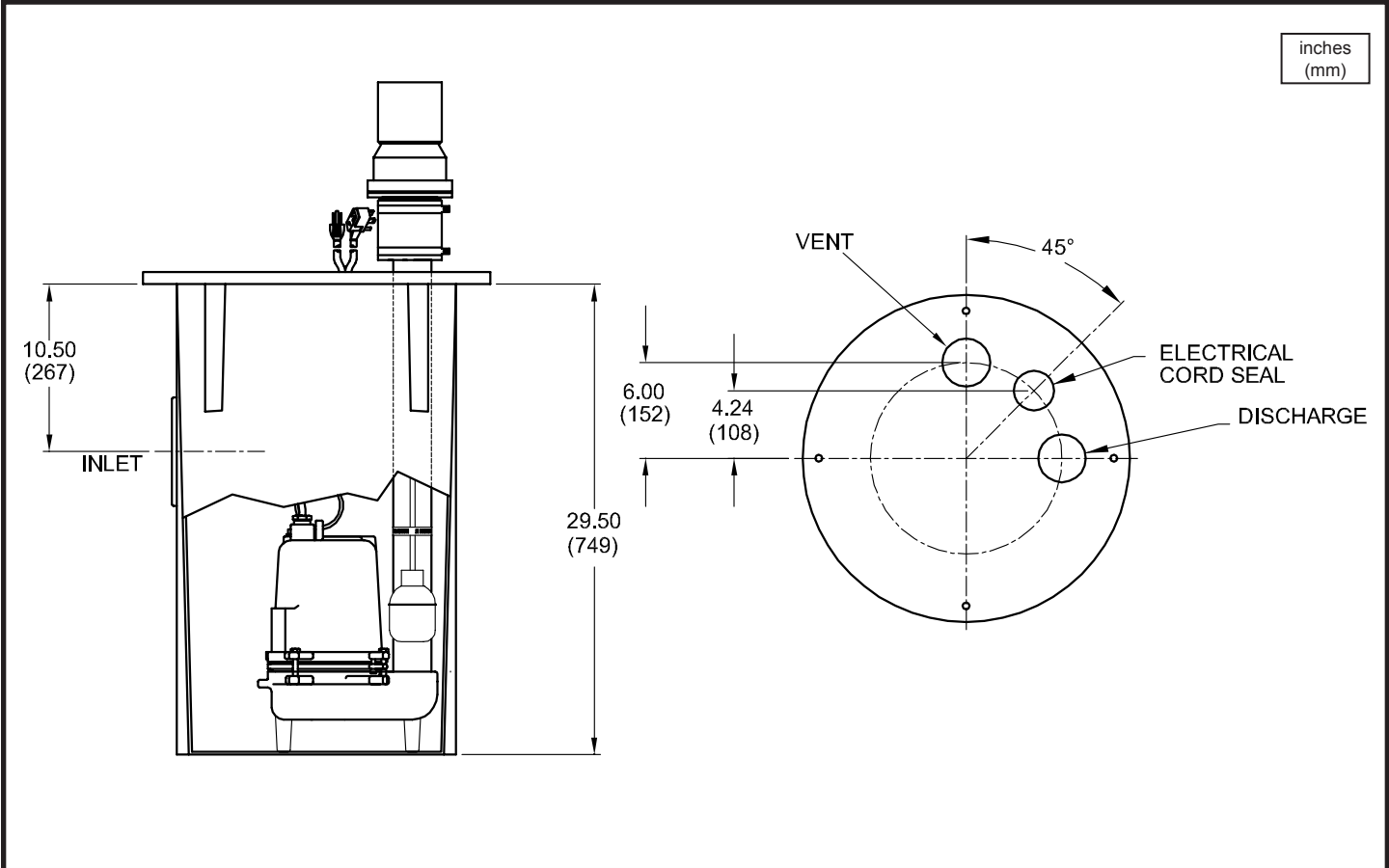
DESCRIPTION:

SIMPLEX SYSTEMS (ONE PUMP) ARE GOOD FOR RESIDENCES AND SMALL INDUSTRIAL SEWAGE OR SUMP APPLICATIONS. THEY ARE DESIGNED TO HANDLE WASTES FROM LAVATORIES, LAUNDRY TUBS, FLOOR DRAINS, WATER CLOSETS, ETC., AND WILL PUSH THE WATER FROM BELOW GROUND UP TO WHERE NORMAL DRAINAGE WILL HANDLE IT.



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Submersible Non-Clog Pumps



MODEL NO	PART NO	DISCHARGE SIZE inch (mm)	VENT SIZE inch (mm)	INLET SIZE inch (mm)
SE411ASP	103135	2" (51)	2" (51)	4" (102)
SEV412ASP	102160	2" (51)	2" (51)	4" (102)
SEV412ASPI	102161	2" (51)	2" (51)	4" (102)

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Submersible Non-Clog Pumps

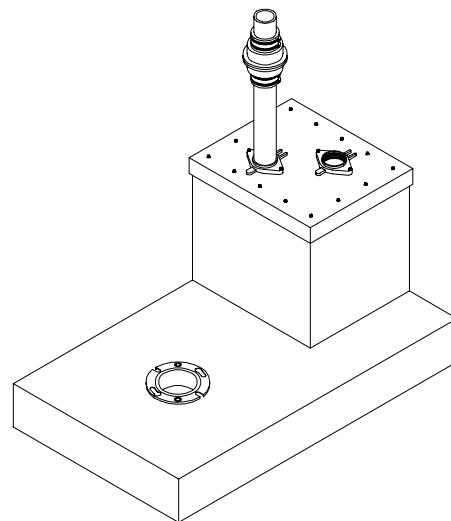
The Basement Genie Basin can be installed almost anywhere. It can accommodate a toilet, vanity, humidifier or shower. It is perfect for basements, family rooms, warehouses, factories and room additions. Fits almost anywhere and can be used with many toilet styles. The Basement Genie Basin can be installed free standing on any level surface (no need to destroy concrete floors) or the tank and all piping can be hidden behind a wall and under the floor.

System includes pump, basin, 2" PVC discharge pipe, 2" NPT vent flange, 2" straight discharge flange, 2" rubber gasket, cast iron closet flange, rubber cord grommet, 3/8" foam lid gasket, 2" check valve and hardware.

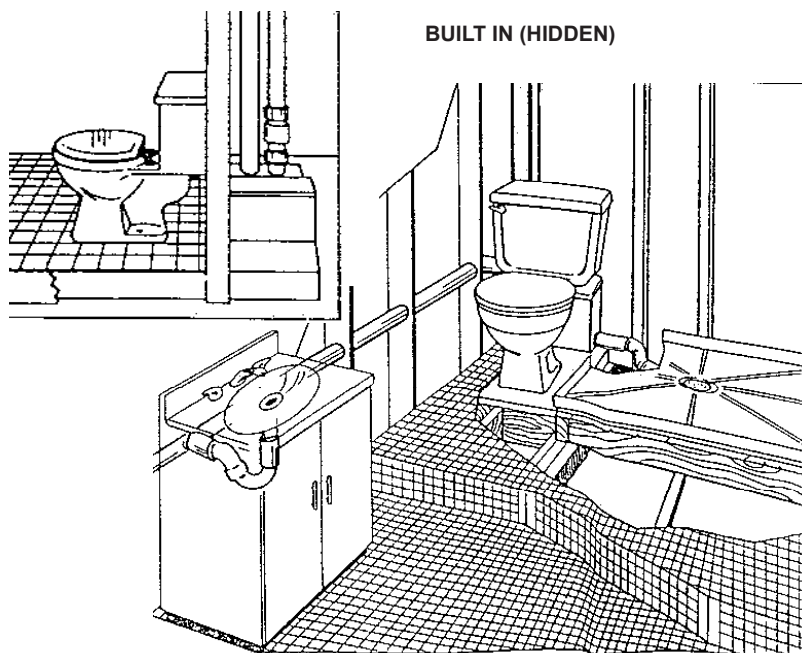
STANDARD COLOR..... White
MATERIAL Polyethylene
WEIGHT: BGBSEV412 92 lbs.
 BGBSE411 102 lbs

PART NUMBER	SYSTEM MODEL NUMBER	PUMP MODEL NUMBER	PUMP PART NUMBER	SEE PUMP DATA ON PAGES:
102147	BGBSEV412	SEV412VF	101294	Sect. C Pages 5 - 6
102148	BGBSE411	SE411VF	100836	Sect. C Pages 1 - 2

See Section E for basin only.

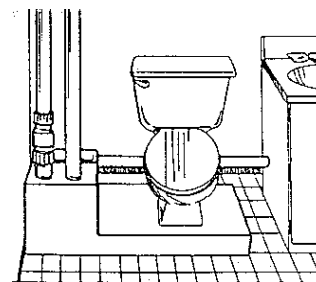


**Series: BGBSE411
BGBSEV412**

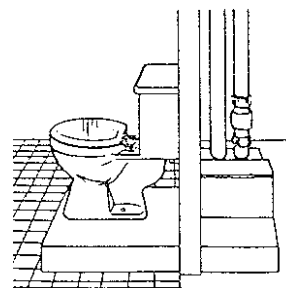


BUILT IN (HIDDEN)

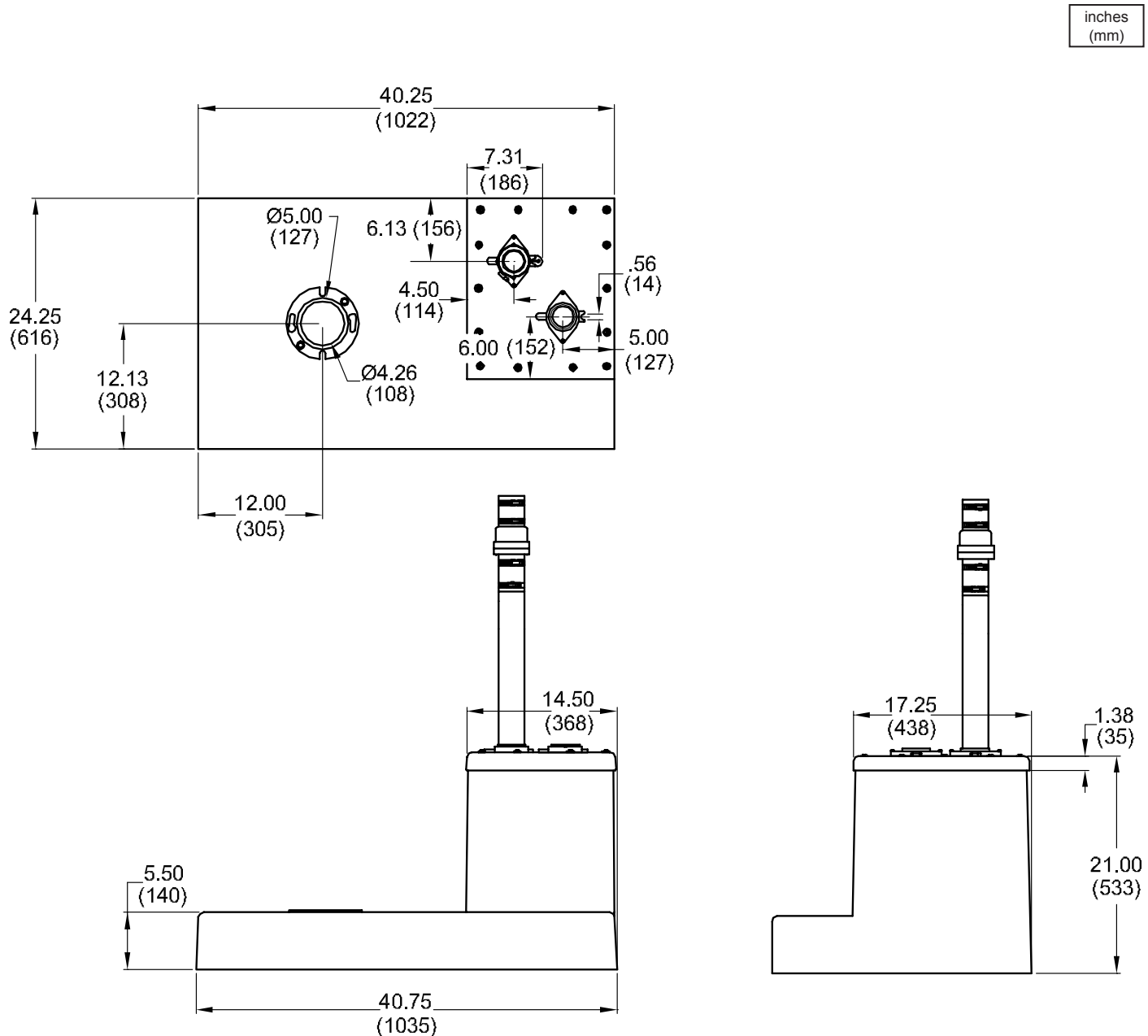
EXPOSED CORNER LOCATION



PARTIALLY EXPOSED ON TILE



Submersible Non-Clog Pumps



IMPORTANT !

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Submersible Non-Clog Pumps

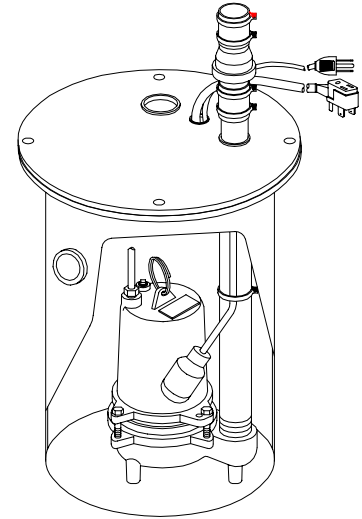
SE411-SP:

- One - **SE411, .4HP, 115 Volt, 60Hz**
Heavy duty sewage pump. Rugged cast iron body and impeller
- One - **Level Control P/N: 101758**
Mechanical switch molded inside of a waterproof float. Single control turns pump on and off automatically.
- One - **1830 Polyethylene Basin P/N: 076119**
18" (457mm) Dia. x 30" (762mm) Deep, with 4" (102mm) Inlet Hole.
- One - **4" (102mm) Flexible Pipe Fitting Inlet P/N: 076149**
Super-tuff Sanoprene construction
- One - **18S22 Steel Cover P/N: 076120**
With black powder coating, 2" (51mm) vent and 2" (51mm) Discharge and cord openings
- One - **2" (51mm) Vertical Check Valve P/N: 066828**
With hose adaptors and clamps

SE51-SP:

- One - **SE51, .5HP, 115 Volt, 60Hz**
Heavy duty sewage pump. Rugged cast iron body and impeller
- One - **Vertical Level Control P/N: 093474**
Vertical float, PVC, Snap action, 15 ft. (5m) cord w/Piggy-Back plug. OFF point only is adjustable.
- One - **1830 Polyethylene Basin P/N: 076119**
18" (457mm) Dia. x 30" (762mm) Deep, with 4" (102mm) Inlet Hole.
- One - **4" (102mm) Flexible Pipe Fitting Inlet P/N: 076149**
Super-tuff Sanoprene construction
- One - **18S22 Steel Cover P/N: 076120**
With black powder coating, 2" (51mm) vent and 2" (51mm) Discharge and cord openings
- One - **2" (51mm) Vertical Check Valve P/N: 066828**
With hose adaptors and clamps

NOTE: DISCHARGE PIPE NOT SUPPLIED.
Other accessories may be ordered separately.

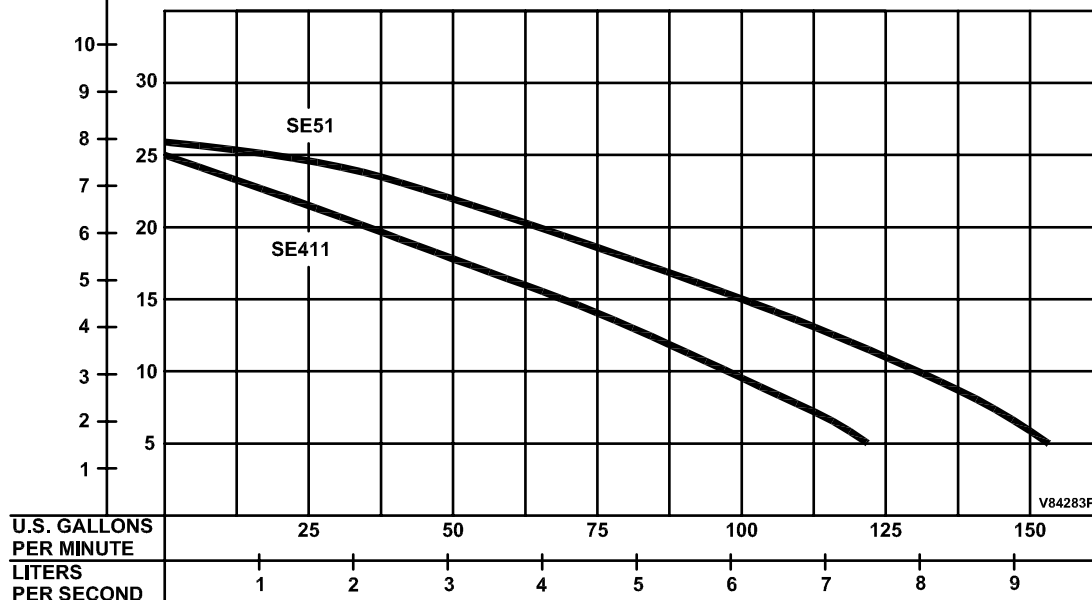


**Series: SE411-SP, 60Hz
SE51-SP, 60Hz**

DESCRIPTION:

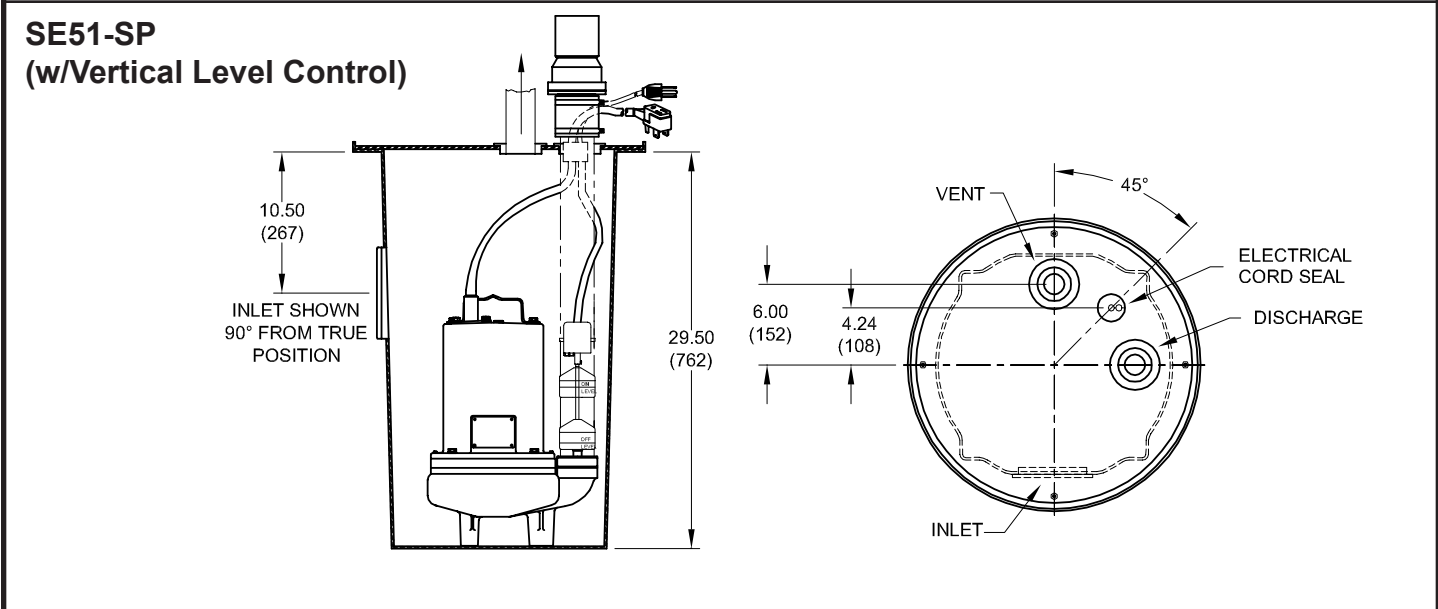
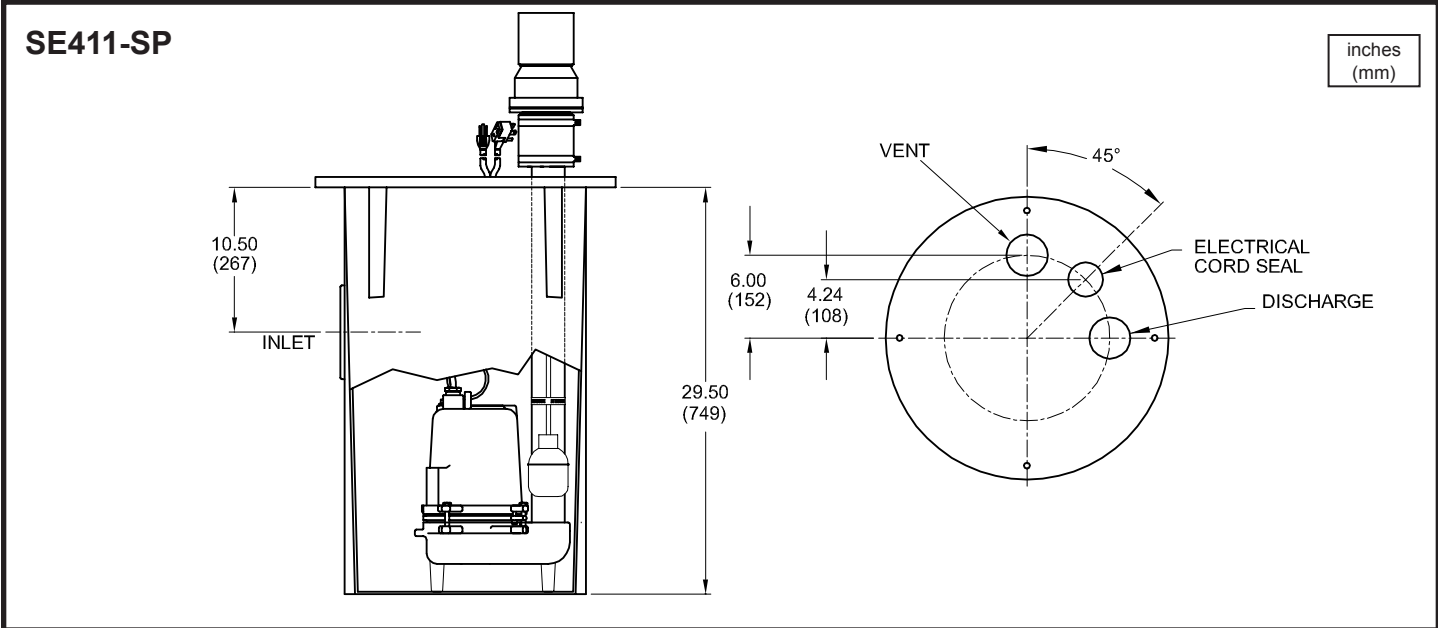
SIMPLEX SYSTEMS (ONE PUMP) ARE GOOD FOR RESIDENCES AND SMALL INDUSTRIAL SEWAGE OR SUMP APPLICATIONS. THEY ARE DESIGNED TO HANDLE WASTES FROM LAVATORIES, LAUNDRY TUBS, FLOOR DRAINS, WATER CLOSETS, ETC., AND WILL PUSH THE WATER FROM BELOW GROUND UP TO WHERE NORMAL DRAINAGE WILL HANDLE IT.

TOTAL HEAD
METERS FEET



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Submersible Non-Clog Pumps



MODEL NO	PART NO	DISCHARGE SIZE inch (mm)	VENT SIZE inch (mm)	INLET SIZE inch (mm)
SE411-SP	084283B	2" (51)	2" (51)	4" (102)
SE51-SP	105086	2" (51)	2" (51)	4" (102)
SEV412-SP	105367	2" (51)	2" (51)	4" (102)

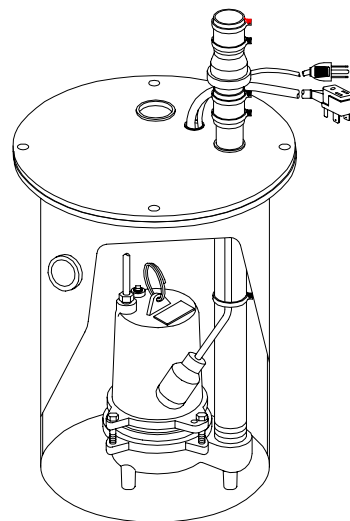
IMPORTANT !

- PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
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Submersible Non-Clog Pumps

SEV421-SP:

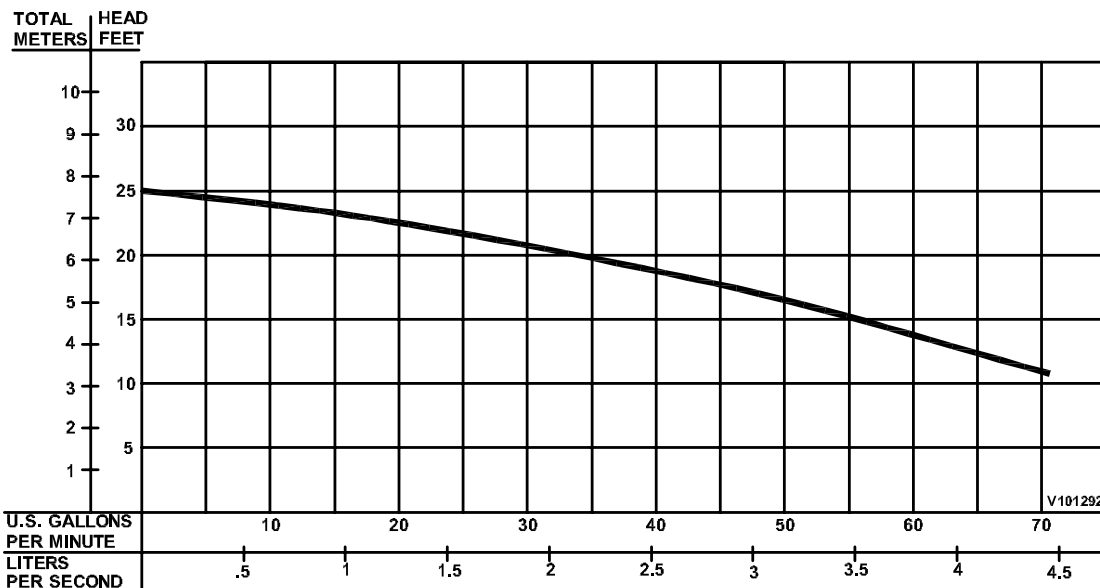
- One - **SEV421-SP, .5HP, 115 Volt, 60Hz**
Heavy duty sewage pump. Rugged cast iron body and impeller
- One - **Level Control P/N: 101758**
Mechanical switch molded inside of a waterproof float. Single control turns pump on and off automatically.
- One - **18x30 Polyethylene Basin P/N: 110699**
18" (457mm) Dia. x 30" (762mm) Deep, with 4" (102mm) Inlet Polyethylene structural foam, 30 US gallons (113.6 Liters) capacity, 1/4" (6.5mm) wall thickness
- One - **4" (102mm) Flexible Pipe Fitting Inlet P/N: 076149**
Super-tuff Sanoprene construction
- One - **10PS Cover P/N: 102227**
Polyethylene, 2" (51mm) vent and 2" (51mm) Discharge, gasket, cord grommet, two pipe grommets and four bolts with washers.
- One - **2" (51mm) Vertical Check Valve P/N: 066828**
With hose adaptors and clamps
- One - **Discharge pipe P/N: 104601**
PVC, Sch. 40, 32" (813mm) long



Series: SEV421-SP, 60Hz

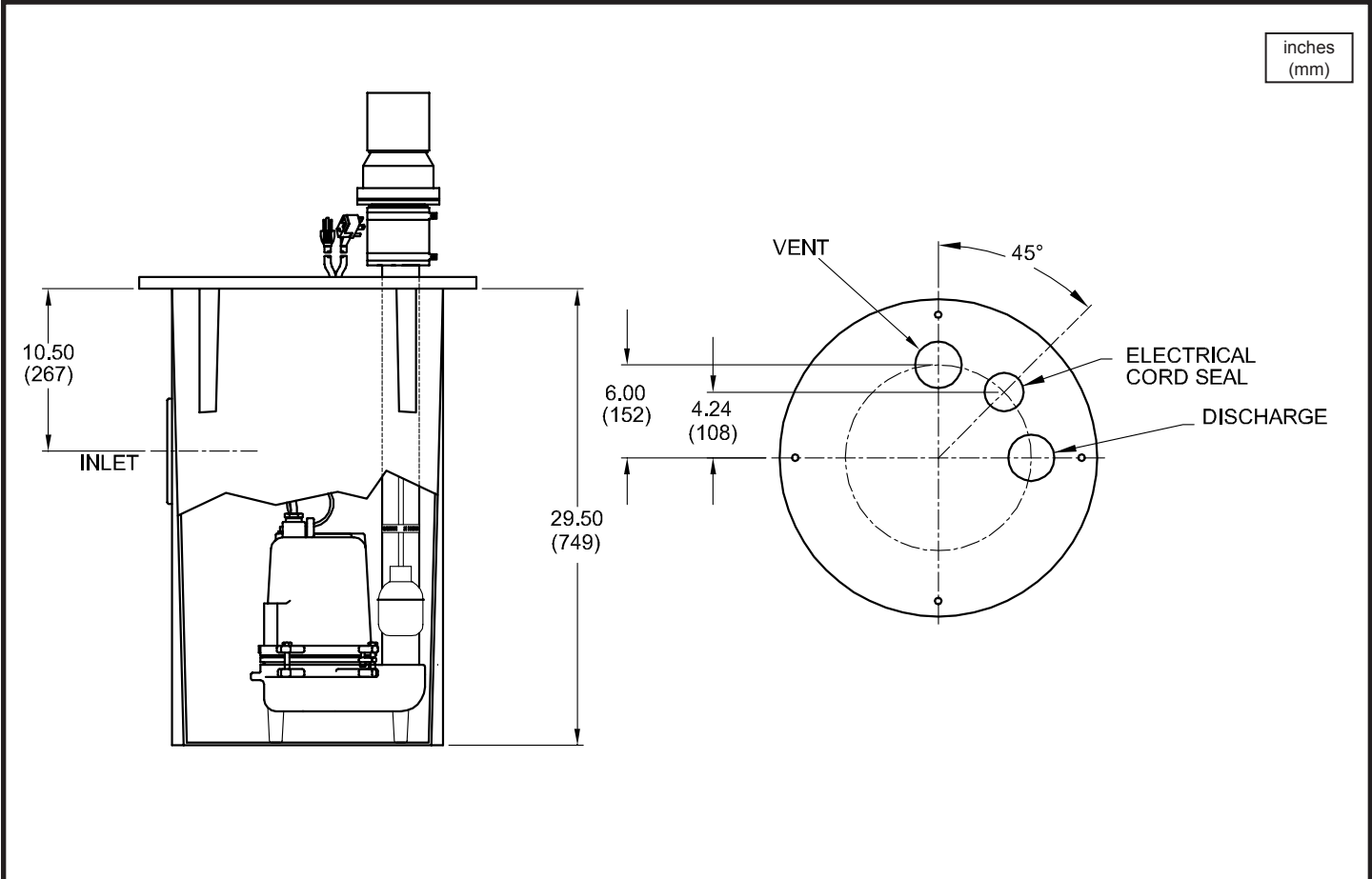
DESCRIPTION:

SIMPLEX SYSTEMS (ONE PUMP) ARE GOOD FOR RESIDENCES AND SMALL INDUSTRIAL SEWAGE OR SUMP APPLICATIONS. THEY ARE DESIGNED TO HANDLE WASTES FROM LAVATORIES, LAUNDRY TUBS, FLOOR DRAINS, WATER CLOSETS, ETC., AND WILL PUSH THE WATER FROM BELOW GROUND UP TO WHERE NORMAL DRAINAGE WILL HANDLE IT.



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Submersible Non-Clog Pumps



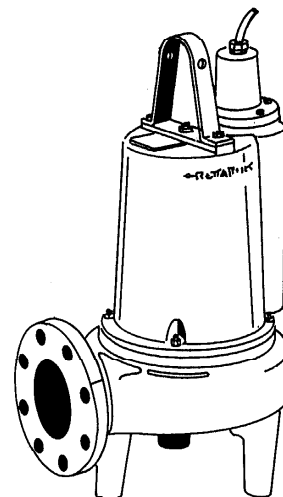
MODEL NO	PART NO	DISCHARGE SIZE inch (mm)	VENT SIZE inch (mm)	INLET SIZE inch (mm)
SE421-SP	105367	2" (51)	2" (51)	4" (102)

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Non-Clog Pumps

DISCHARGE	4", 125 lb, Flange Horizontal
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane, open with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical, Oil filled reservoir, with Secondary Exclusion seal
<i>Material</i>	Carbon/Ceramic/Buna-N
CORD ENTRY	Hardware -300 Series Stainless
UPPER BEARING	25 ft. (7.6m) Cord. Epoxy sealed housing with Secondary pressure grommet for sealing and strain relief
LOWER BEARING	Single Row, Ball, Oil lubricated
MOTOR: <i>Design</i>	Single Row, Ball, Oil lubricated
<i>Insulation</i>	NEMA L -Single Phase, NEMA B -Three phase Torque Curve, Oil Filled, Squirrel Cage Induction Class B
SINGLE PHASE	Permanent Split Capacitor (PSC) Includes Overload Protection in Motor
THREE PHASE	Tri Voltage 200-230/460. Requires overload Protection to be included in control panel
TEMPERATURE SENSOR	Normally Closed, Requires relay in control panel.
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Additional cord, Temperature sensor with cord.



Series: 4SE-SS

2.8, 3.7 & 5HP, 1750RPM, 60Hz

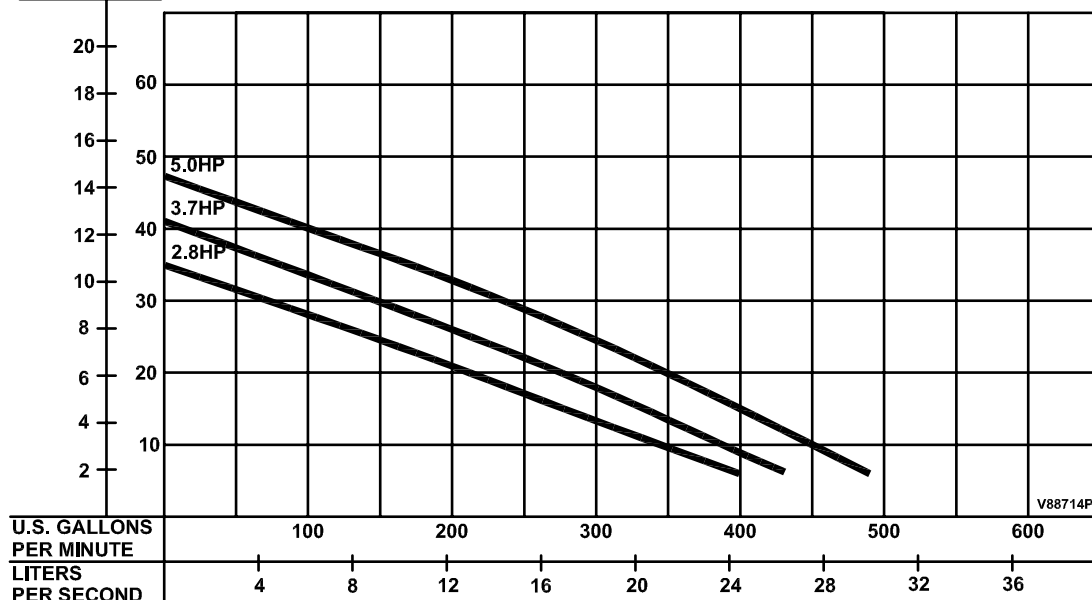


Canadian Standards Association
File No. LR16567

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP DESIGNED FOR TYPICAL RAW SEWAGE APPLICATIONS

TOTAL HEAD
METERS FEET

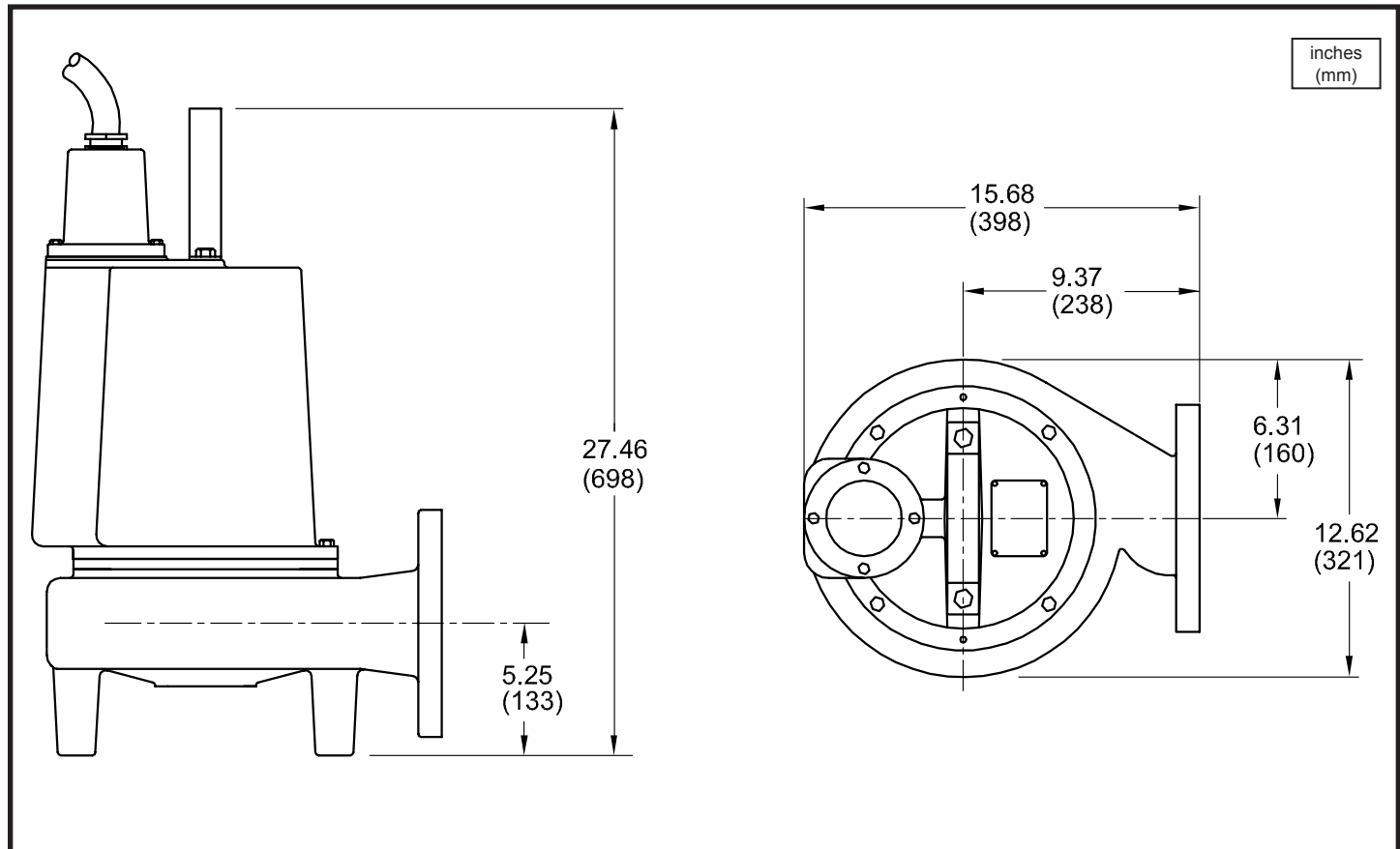


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 4SE-SS

2½" Spherical Solids Handling
Single Seal

Submersible Non-Clog Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
4SE2824SS	088714	2.8	230/1	60	1750	A	12.6	23.0	10/3	SOW	0.690 (17.5)
4SE2894SS	088715	2.8	200-230/3	60	1750	C/E	8.8/8.0	30.4/35.0	10/4	SOW	0.750 (19.1)
4SE2844SS	088716	2.8	460/3	60	1750	E	4.0	17.5	10/4	SOW	0.750 (19.1)
4SE2854SS	088717	2.8	575/3	60	1750	E	3.2	14.0	10/4	SOW	0.750 (19.1)
4SE3724SS	088718	3.7	230/1	60	1750	A	18.5	29.0	10/3	SOW	0.690 (17.5)
4SE3794SS	088719	3.7	200-230/3	60	1750	D/F	15.4/14.0	44.1/50.8	10/4	SOW	0.750 (19.1)
4SE3744SS	088720	3.7	460/3	60	1750	F	7.0	25.4	10/4	SOW	0.750 (19.1)
4SE3754SS	088721	3.7	575/3	60	1750	F	5.6	20.0	10/4	SOW	0.750 (19.1)
4SE5024SS	088722	5.0	230/1	60	1750	A	28.0	59.0	10/3	SOW	0.690 (17.5)
4SE5094SS	088723	5.0	200-230/3	60	1750	B/D	20.9/19.0	48.6/56.0	10/4	SOW	0.750 (19.1)
4SE5044SS	088724	5.0	460/3	60	1750	D	9.0	28.0	10/4	SOW	0.750 (19.1)
4SE5054SS	088725	5.0	575/3	60	1750	E	8.3	23.0	10/4	SOW	0.750 (19.1)

OPTIONAL - Temperature sensor cord for all phase models is 18/5 SOW, 0.476 (12.1mm) O.D.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
- 2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
- 3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
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Panels & Controls

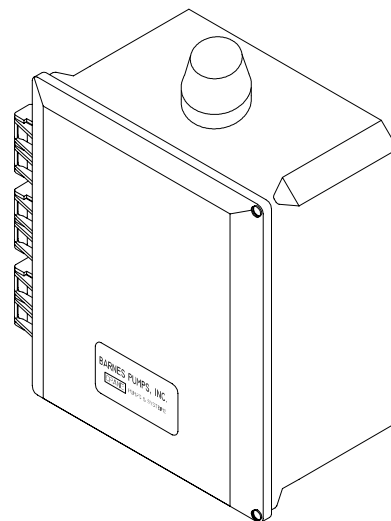
The Simplex controls are supplied in a NEMA 4X weathertight thermoplastic enclosure with removable mounting flanges for indoor/outdoor mounting.

Each will contain a two pole, amperage rated magnetic motor contactor for pump control and a circuit breaker for pump disconnects and branch circuit protection. A hand-off-automatic switch is provided for manual operation of the pump. Pump run, control power, and alarm power indicators are provided with separate control and alarm fuses.

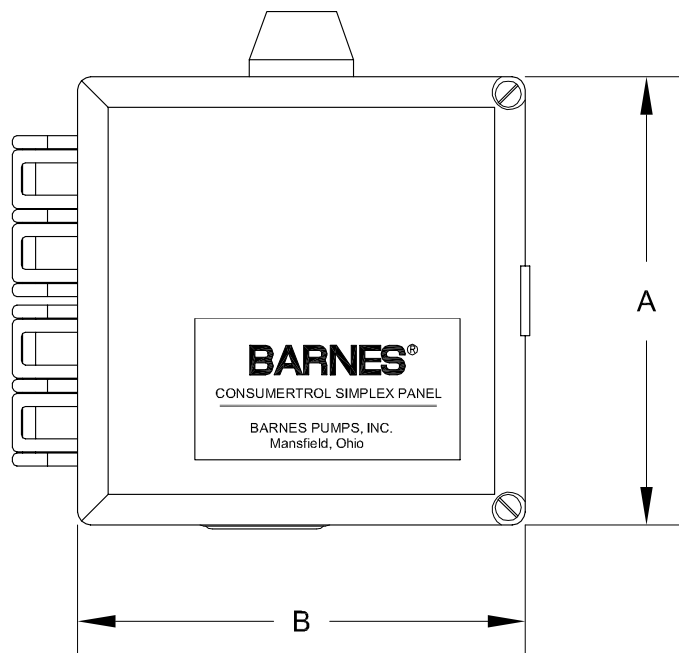
Terminal blocks are provided for customer connection of power, pump leads, and level switches or other pilot controls.

The Alarm package includes a top mounted, red beacon for 360° visual checks and a horn for audio warning of alarm conditions. A test-normal-silence switch is provided for testing of the alarm and silencing of the horn. A horn silence relay automatically resets the alarm horn after alarm condition has been resolved.

PART NO.	PUMP FULL LOAD AMPS	CIRCUIT BREAKER	CONTACTOR	PH
106480	0 - 7	2 Pole, 15 Amp	2 Pole, 20 Amp	1
106481	7 - 15	2 Pole, 20 Amp	2 Pole, 20 Amp	1
106482	15 - 20	2 Pole, 30 Amp	2 Pole, 30 Amp	1



Series: Simplex
P/N: 106480 thru 106482



inches
(mm)

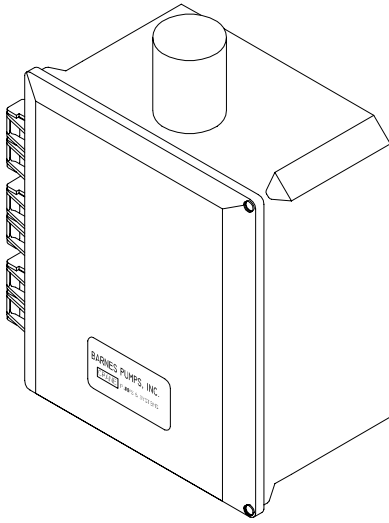
A - Height	B - Width	C - Depth
8 (203)	8 (203)	4 (102)

CONTROL PANELS

Single Phase, Duplex, Alternating
120/208/240 VAC

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Professional Plumbing
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Panels & Controls



The Duplex controls are supplied in a NEMA 4X weathertight thermoplastic enclosure with removable mounting flanges for indoor/outdoor mounting. Each will contain two pole, amperage rated magnetic motor contactors for pump control and circuit breakers for pump disconnects and branch circuit protection. Hand-off-automatic switches are provided for manual operation of the pumps. Pump run, float status, and control/alarm power indicators are provided as well as a control/alarm fuse and on/off switch.

Terminal blocks are provided for customer connection of power, pump leads, and level switches or other pilot controls. The alternating action equalizes pump wear. In addition to the alternating pump control, this system provides override control should either pump fail.

The Alarm package includes a top mounted red beacon for 360° visual checks and a horn for audio warning of alarm conditions. A test-normal-silence switch is provided for testing of the alarm and silencing of the horn. A horn silence relay automatically resets the alarm horn after alarm condition has been resolved.

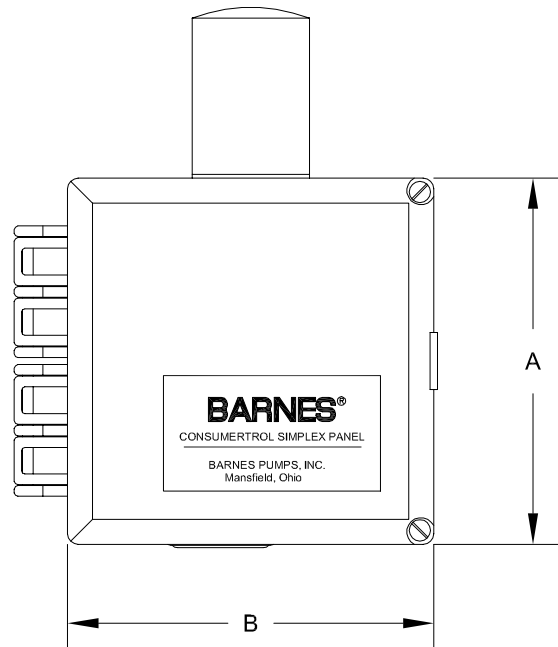
Series: Duplex
P/N: 106483 thru 106485



PART NO.	PUMP FULL LOAD AMPS	CIRCUIT BREAKER	CONTACTOR	PH
106483	0 - 7	2 Pole, 15 Amp	2 Pole, 25 Amp	1
106484	7 - 15	2 Pole, 20 Amp	2 Pole, 25 Amp	1
106485	15 - 20	2 Pole, 30 Amp	2 Pole, 25 Amp	1

inches
(mm)

A - Height	B - Width	C - Depth
12 (305)	10 (254)	6 (152)



SECTION D
PAGE 2
DATE 4/04

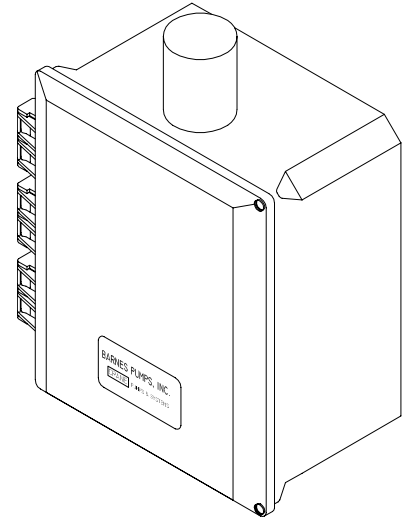
CRANE
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Panels & Controls

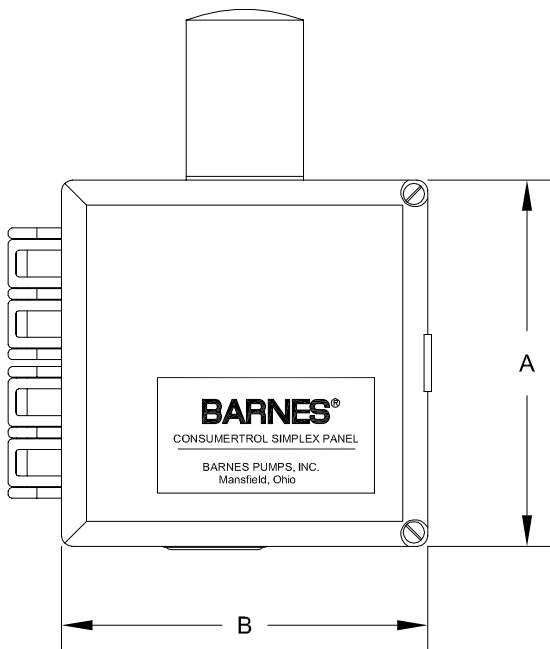
The Simplex controls are supplied in a NEMA 4X weathertight thermoplastic enclosure with removable flanges for indoor/outdoor mounting. Each will contain a three pole, amperage rated magnetic motor contactor for pump control and a motor protection switch that provides for adjustable overload, built-in circuit breaker, and pump disconnect. A multi-tap transformer for 208/240/480 VAC provides 120V control/alarm voltage. A hand-off-automatic switch is provided for manual operation of the pump. Pump run, control power, and alarm power indicators are provided with separate control and alarm fuses. Terminal blocks are provided for customer connection of power, pump leads, and level switches or other pilot controls. The Alarm package includes a top mounted red beacon for 360° visual checks and a horn for audio warning of alarm conditions. A test-normal-silence switch is provided for testing of the alarm and silencing of the horn. A horn silence relay automatically resets the alarm horn after alarm condition has been resolved.



Series: Simplex
P/N: 106486 thru 106497



PART NO.	PUMP FULL LOAD AMPS	CIRCUIT BREAKER	CONTACTOR
106486	1 - 1.6	Intregal w/Protector	17 AMP
106488	1.6 - 2.5	Intregal w/Protector	17 AMP
106490	2.5 - 4.0	Intregal w/Protector	17 AMP
106492	4.0 - 6.3	Intregal w/Protector	17 AMP
106494	6 - 10	Intregal w/Protector	17 AMP
106495	9 - 14	Intregal w/Protector	17 AMP
106497	13 - 18	Intregal w/Protector	25 AMP



inches
(mm)

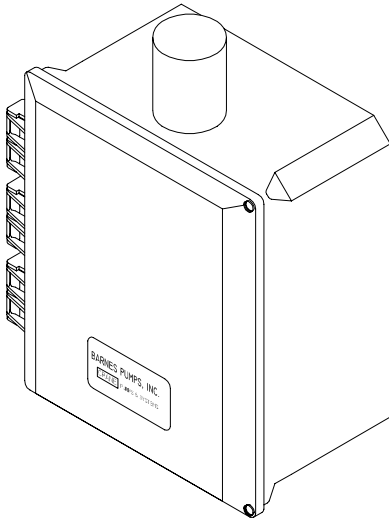
A - Height	B - Width	C - Depth
12 (305)	10 (254)	6 (152)

CONTROL PANELS

Three Phase, Duplex, Alternating
208/240/480 VAC

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Professional Plumbing
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Panels & Controls



The Duplex controls are supplied in a NEMA 4X weathertight thermoplastic enclosure with removable flanges for indoor/outdoor mounting. Each will contain three pole, amperage rated magnetic motor contactors for pump control and motor protection switches that provide for adjustable overloads, built-in circuit breakers, and pump disconnects.

A multi-tap transformer for 208/240/480 VAC provides 120V control/alarm voltage. Hand-off-automatic switches are provided for manual operation of the pumps. Pump run, float status, and control/alarm power indicators are provided as well as a control/alarm fuse and ON/OFF switch.

Terminal blocks are provided for customer connection of power, pump leads, and level switches or other pilot controls. The alternating action equalizes pump wear. In addition to the alternating pump control, this system provides override control should either pump fail. The Alarm package includes a top mounted red beacon for 360° visual checks and a horn for audio warning of alarm conditions. A test-normal-silence switch is provided for testing of the alarm and silencing of the horn. A horn silence relay automatically resets the alarm horn after alarm condition has been resolved.

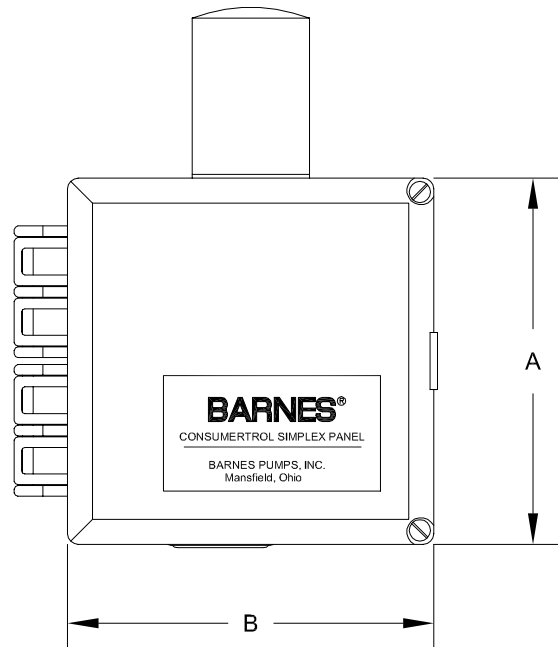
Series: Duplex
P/N: 106498 thru 106509



PART NO.	PUMP FULL LOAD AMPS	CIRCUIT BREAKER	CONTACTOR
106498	1 - 1.6	Intregal w/Protector	17 AMP
106500	1.6 - 2.5	Intregal w/Protector	17 AMP
106502	2.5 - 4.0	Intregal w/Protector	17 AMP
106504	4.0 - 6.3	Intregal w/Protector	17 AMP
106506	6 - 10	Intregal w/Protector	17 AMP
106507	9 - 14	Intregal w/Protector	17 AMP
106509	13 - 18	Intregal w/Protector	25 AMP

inches
(mm)

A - Height	B - Width	C - Depth
14 (356)	12 (305)	6 (152)



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DATE 4/04

CRANE®

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PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Panels & Controls

The Simplex pump contactor control is supplied in a NEMA Type I general purpose indoor enclosure to prevent accidental contact with the enclosed equipment.

The enclosure is formed of 16 gauge deep drawn steel with baked on gray epoxy paint. The enclosure will contain a two or three pole, amperage rated magnetic contactor for pump control. A normally open auxiliary interlock switch, rated 10 amperes minimum, provides control use with one or two float switches or a single pressure switch. Contactor coil, float switches and other pilot devices operated at line voltage (with the exception of 230 volt controls).

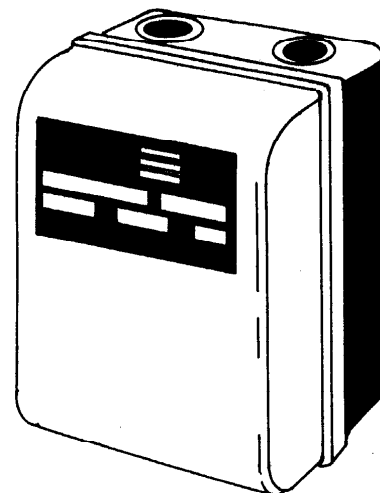
A terminal block is provided for customer connection of level switches, or other pilot controls, and/or a remote mounted alarm option. A toggle switch provides hand-off-automatic operation with spring return from the hand to off position to prevent damage to pump. An amber run light is mounted through the enclosure side to indicate pump run operation.

For 115 and 230 volt, 1 phase operation, up to 3 HP.

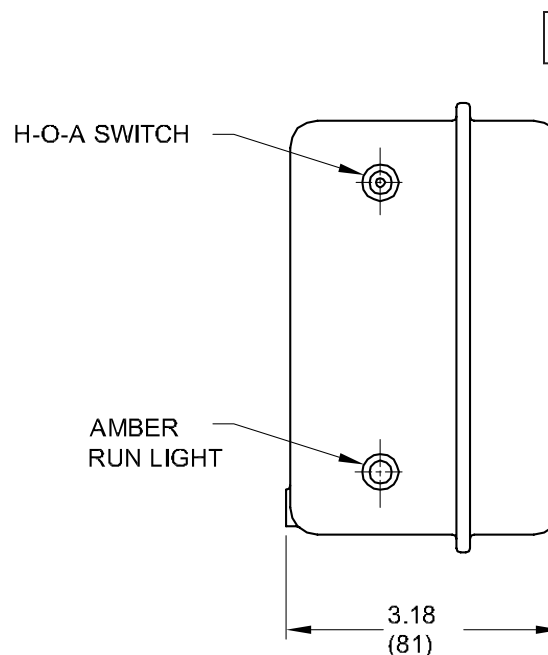
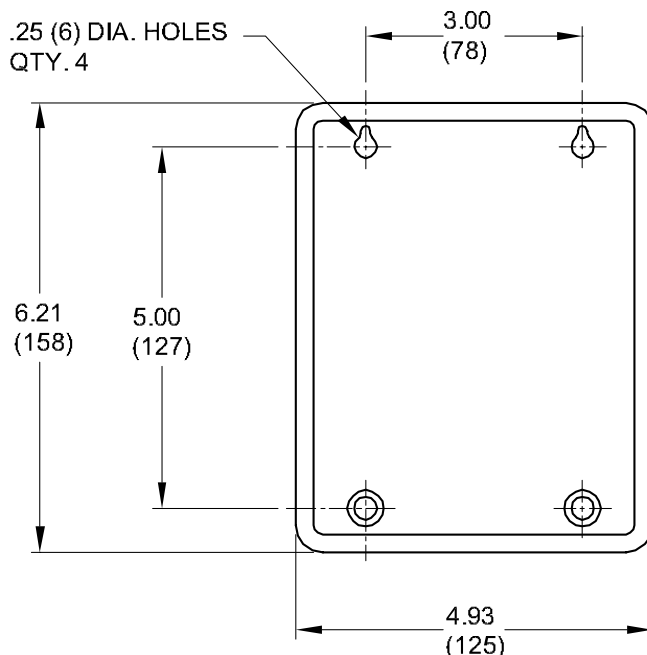
PART NO.	HP	VOLTS	PHASE
065557	Up to 3	115	1
065558	Up to 3	230	1

IMPORTANT!

1. Specify pump model and/or full load amps when ordering.
2. Circuit breakers NOT included
3. **FOR INDOOR USE ONLY.**



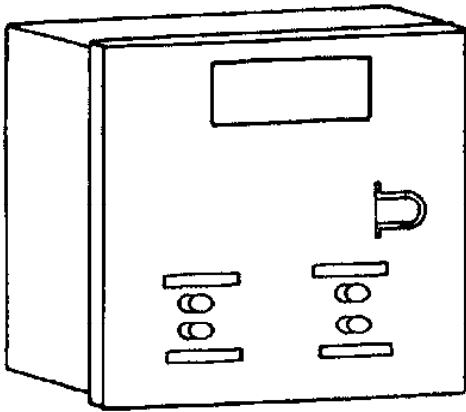
Series: Simplex
P/N: 065557, 115 Volt
P/N: 065558, 230 Volt



CONTACTOR

Duplex - NEMA 1

Panels & Controls



Series: Duplex - NEMA 1
1/3 HP - 3HP
115 & 230 Volt, 1 PH

FOR INDOOR USE ONLY.

The Duplex Contactors are recommended for systems requiring two (2) permanent split-phase capacitor (PSC) or shaded pole motor driven pumps with internal thermal protection.

Supplied in a NEMA 1, indoor mounting steel enclosure, the control contains two 1/3 to 3 horsepower rated contactor for single phase motor control. An alternator is supplied to provide standard duplex operation. The motor contactors are wired to a terminal block to provide control with 2 or 3 float switches, or a single pressure switch. Contactor coils, alternator coil, float switches and other pilot devices operate at line voltage. The hinged enclosure door mounts two hand-off-auto switches with spring return from the hand position to prevent pump damage. Amber lights, mounted above the switches, indicate pump operation.

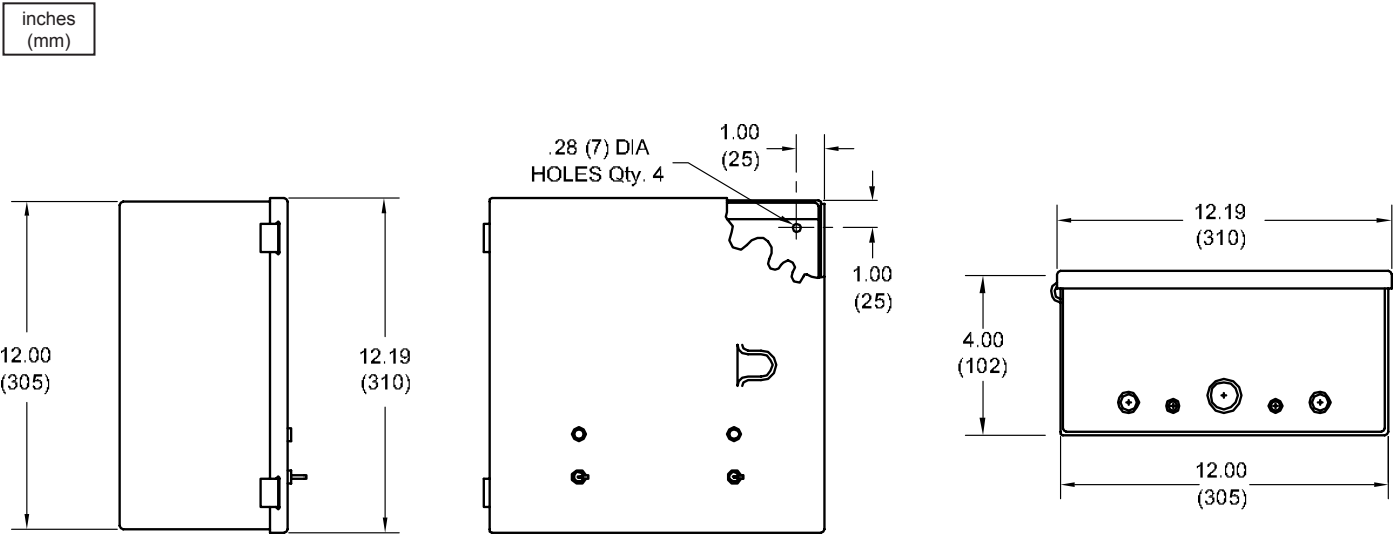
Terminals and terminal blocks are provided for all customer connections, motor leads, float switches and other pilot devices, and incoming line power.

The indoor NEMA 1 enclosure is finished in a gray enamel coating, inside and out, over phosphatized steel. Knock-outs are provided on the enclosure top and bottom for ease of installation. Mounting is provided through 4 holes through the rear of the enclosure.

PART NO.	HP	VOLTS	PHASE
082770	1/3 - 3	115	1
082771	1/3 - 3	230	1

IMPORTANT!

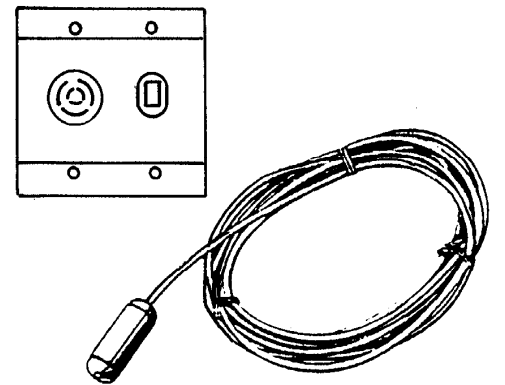
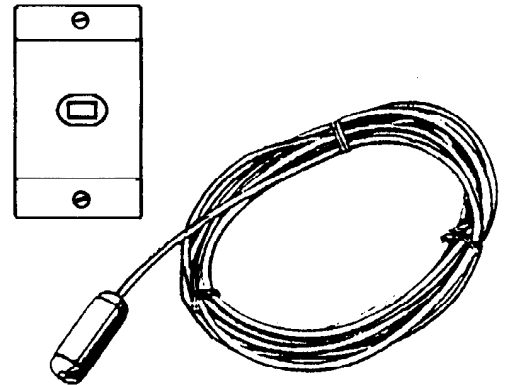
1. Specify pump model and/or full load amps when ordering.
2. Circuit breaker **NOT** included.



Panels & Controls

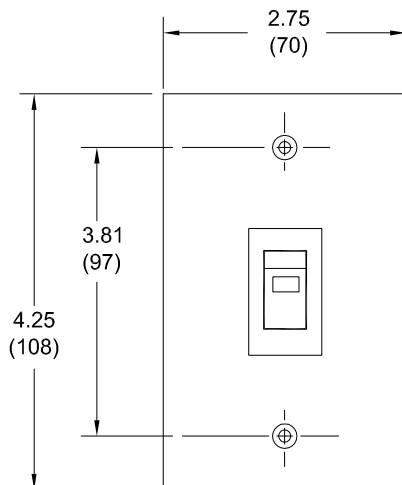
P/N: 061486 High Water Alarm includes stainless steel wall plate with red jewel light and one mercury level control with 10ft. (3M) of 18/2 cord.

P/N: 061487 High Water Alarm (Solid State) includes stainless steel wall plate, audible and visual alarm with silencer button and one mercury level control with 10ft. (3M) of 18/2 cord.

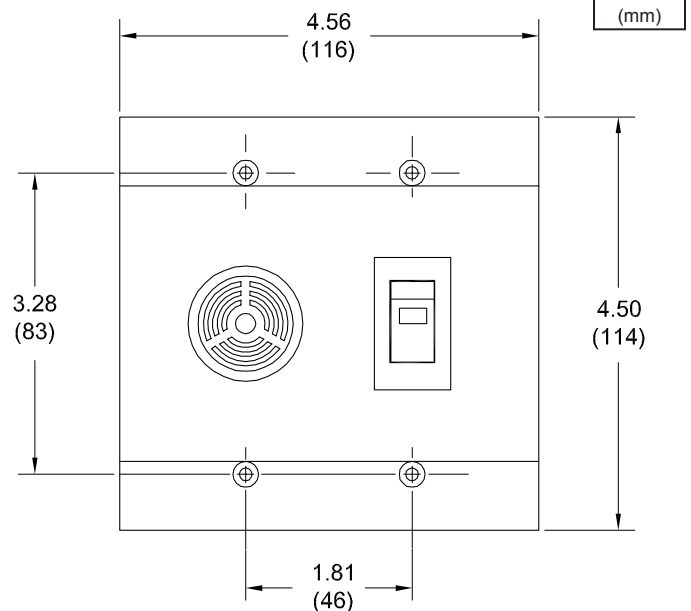


P/N: 061486 & 061487

P/N: 061486



P/N: 061487



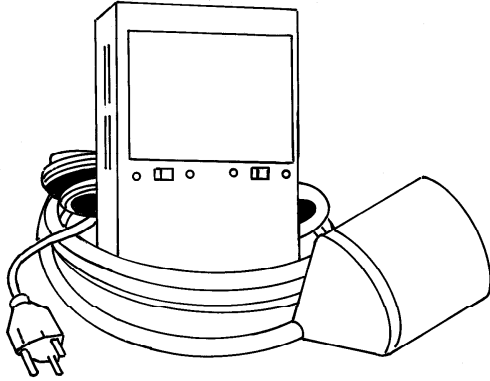
inches
(mm)

ALARM

NEMA 1 - Indoor
120 Volt

BARNES®
Professional Plumbing
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Panels & Controls



VOLTAGE..... Primary 120V, 50/60Hz with 6 ft. line cord.
WATTS 4.8 Watts Alarm Condition.
ENCLOSURE NEMA 1 metal enclosure with knock outs.
ALARM SWITCH CONNECTION TERMINAL:

Low voltage class 2 wiring.

ALARM HORN 86db (A) at 10ft.(3M)

ALARM FLOAT High impact resistant PVC Housing,
Mercury tilt switch hermetically sealed with
15ft. (5m) 18/2 SJOW water resistant
neoprene (CPE) cord with pipe clamp.

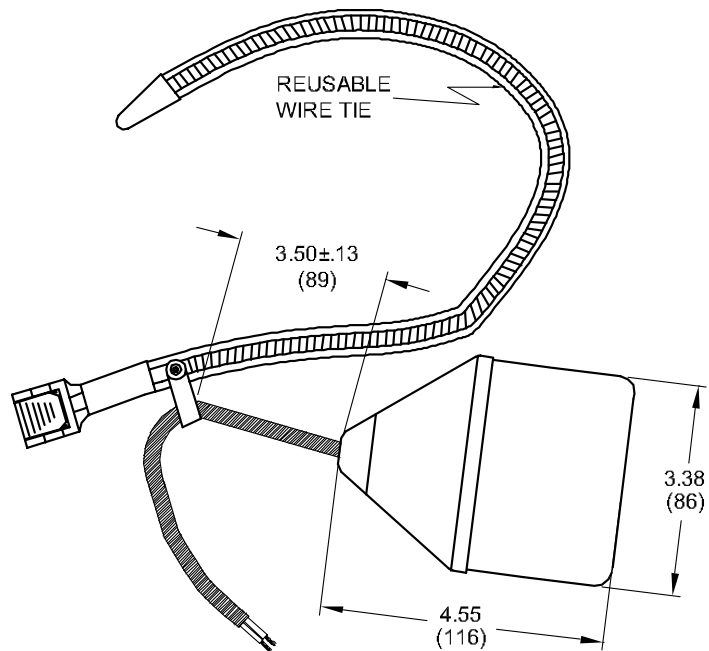
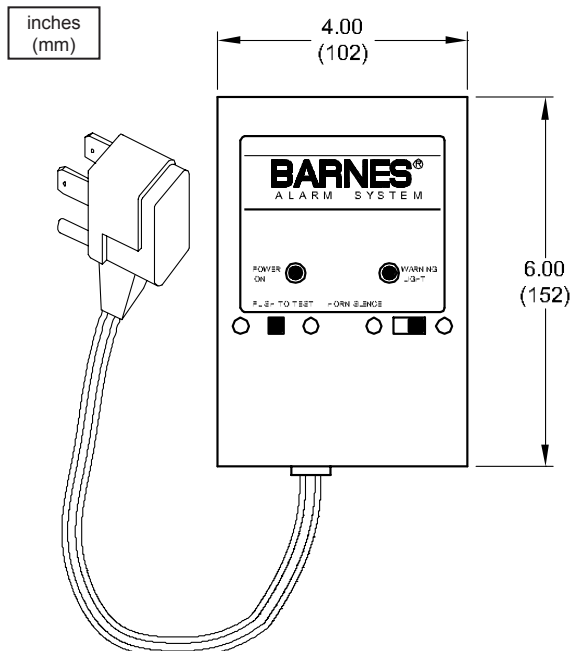
TEMPERATURE RATING:

140°F (60°C)

This Alarm System includes a NEMA 1 panel with red warning light, a green "power on" light, a push-to-test alarm button and a horn silence switch.

The liquid level alarm system is designed specifically for lift pump chambers and sump pump basins. The float switch is lowered into the tank and secured at the desired alarm level. When the liquid rises (high level alarm) or lowers (low level alarm), the float tips and activates a loud horn on the alarm panel. In addition, a red, solid-state warning light is activated. The horn can be turned off, but the warning light will remain on until the condition is remedied. An added green "power on" light assures that there is power to the alarm panel.

P/N: 100960



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CRANE

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PUMPS & SYSTEMS

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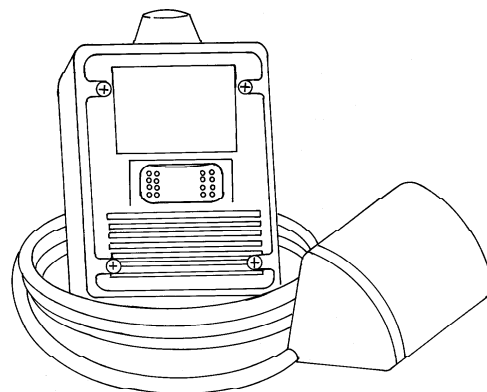
Panels & Controls

VOLTAGE.....Primary 120V, 50/60Hz
ENCLOSUREWater-tight, Thermoplastic, Type 3R
ALARM HORN85db (A) at 10ft.(3m)
ALARM LIGHTTop Mounted type 4X
ALARM FLOATHigh impact resistant PVC Housing,
Mercury tilt switch hermetically sealed
with 15ft. (5m) 18/2 SJOW water resistant
neoprene (CPE) cord with pipe clamp.

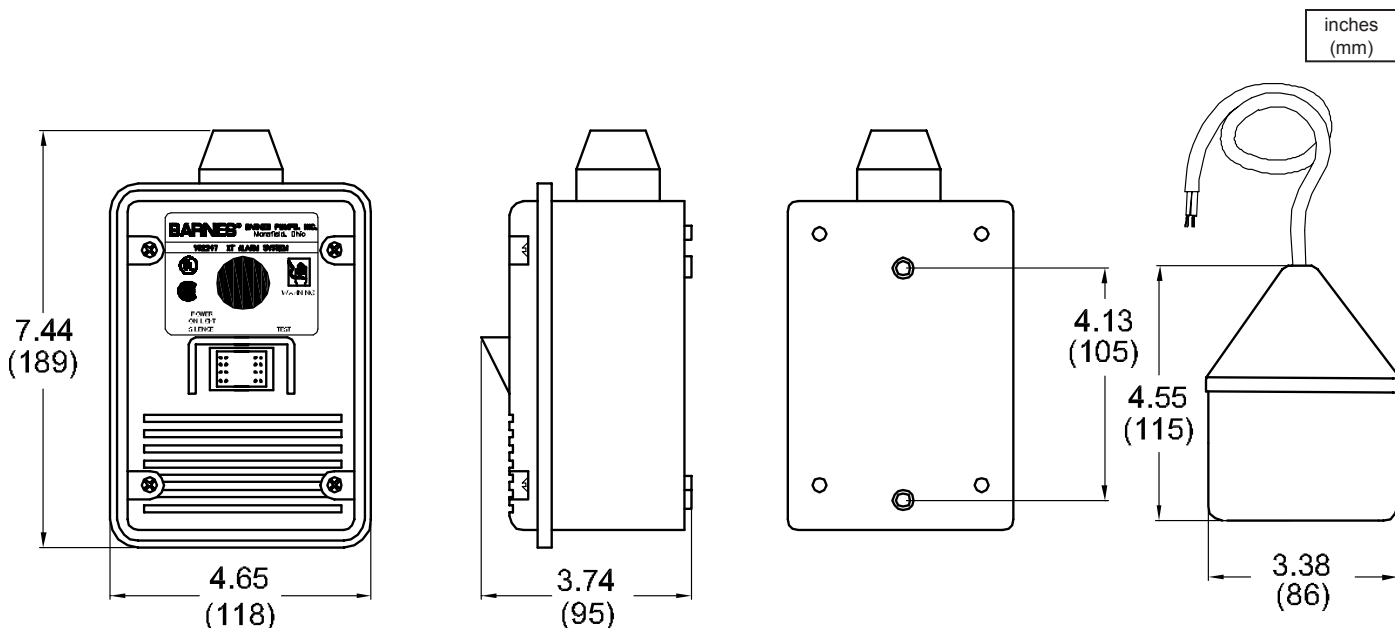
TEMPERATURE RATING:
140°F (60°C)

This Alarm System includes a water-tight panel with a top mounted Alarm light, a test/silence switch, a power on light and a 85db (A) alarm horn with a mercury float.

The liquid level alarm system is designed specifically for lift pump chambers and sump pump basins. The float switch is lowered into the tank and secured at the desired alarm level. When the liquid rises (high level alarm) or lowers (low level alarm), the float tips and activates the horn and light on the alarm panel.

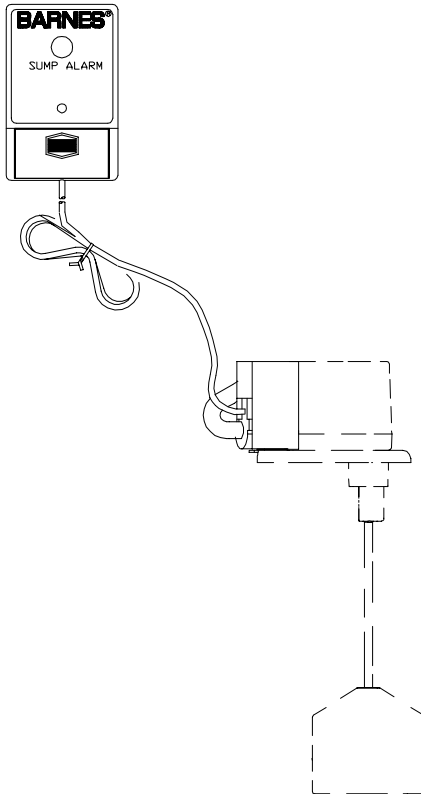


P/N: 102247



Battery Operated, 9 Volt For Indoor Sump Basin

Panels & Controls



VOLTAGE.....9 Volt Alkaline Battery (Not ncluded)

ENCLOSURE..... NEMA 1 , ABS, 4.5" x 2.5" x 1.5"
(114mm x 163mm x 97mm)

ALARM HORN..... 82db (A) at 10ft.(3M)

ALARM FLOAT..... Polypropylene

SENSOR HOUSING..... 2" x 1.4" x 1.5" (51mm x 36mm x 38mm)
High Impact, PVC Housing

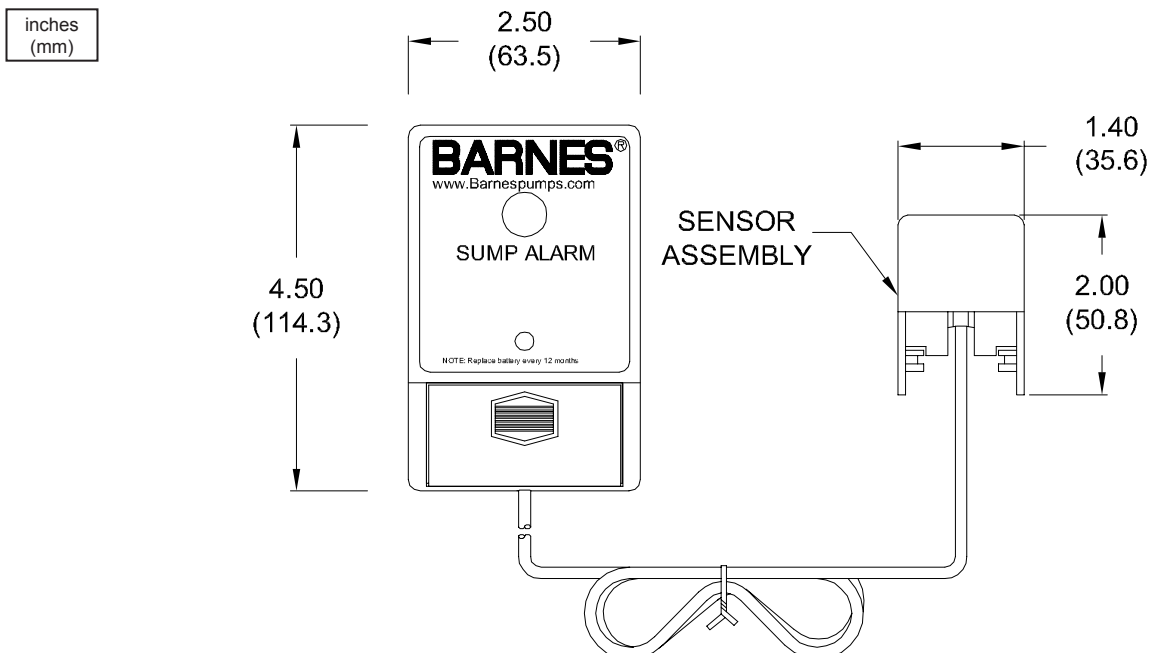
CORD 8 Ft. (2.4m) 2 Conductor, PVC Jacketed

TEMPERATURE RATING: 125°F (52°C)

This basin sump alarm is a battery operated audio alarm that is designed to be used in sump basins. It uses a float actuated sensor that mounts to the pump discharge pipe or clamps on a standard vertical float (shown, but not supplied with alarm).

If a potentially threatening liquid level condition occurs, the alarm horn will sound warning of the high water condition. The alarm will remain on until the condition is remedied or the battery is disconnected. The expected life of a fresh alkaline battery during a continuous alarm condition is approximately 72 hours.

P/N: 112915B



Panels & Controls

CORD: Material 18-2 SJOW, 41 Strand x #34, 90°C
Size29 (7.4mm) Dia.

HOUSING: Material Polypropylene
Color..... Normally Open - Blue
Normally Closed - Red

CLAMP Adjustable 1" (25mm) -3" (76mm)
Stainless Steel with Polypropylene Saddle
(Models 073613, 073615 and 073617)

TEMPERATURE RATING 140°F (60°C)

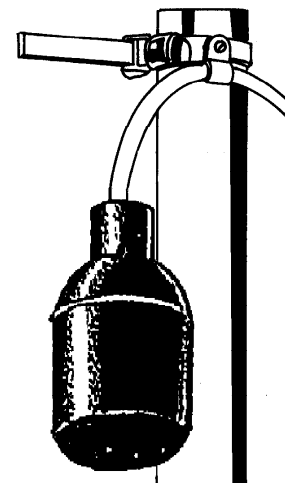
SWITCH Mercury, Narrow Angle , Horizontal

SWITCH RATING 4.5A @ 115VAC RES
2.25A @ 230VAC RES

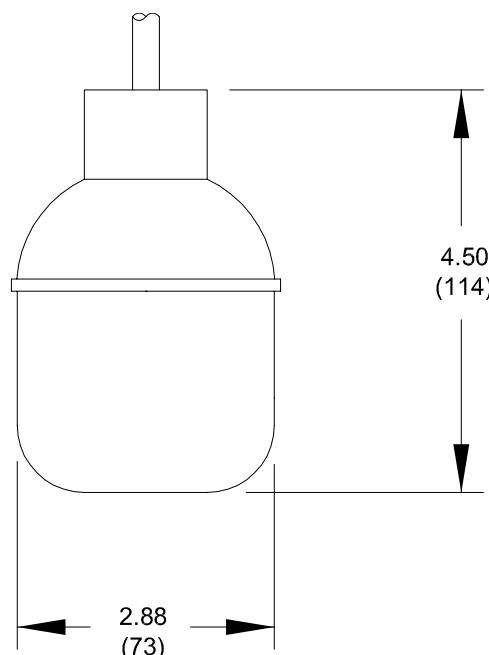
The Mercury Level Controls are available in pipe mounted configuration with 25 (8m) to 200 feet (61m) of cord on P/N's 073613 & 073615; P/N 073617 with 15 (5m) & 20 feet (6m). **STATE CORD LENGTH AT TIME OF ORDERING.**

They are pilot duty devices which control the function of motor load devices, such as contactors, motor starters, and power relays, to automatically cycle a pump or pumps. They can also be used for alarm signaling devices. Two Mercury Level Controls for a one pump operation; three for a two pump operation. If an alarm device is used, add another Level Control.

CONTROL NUMBER	CORD LENGHT	TYPE INSTALLATION	CONTACTS
073613	25 ft. (8m) to 200 ft. (61m)	Pipe Mounted	Open
073615	25 ft. (8m) to 200 ft. (61m)	Pipe Mounted	Closed
073617	15 ft. (5m) to 20 ft. (6m)	Pipe Mounted	Open



**P/N's: 073613
073615
073617**



inches
(mm)

LEVEL CONTROLS

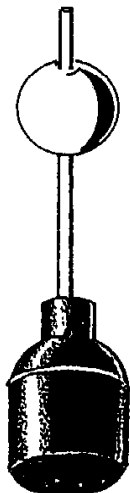
Suspended, Mercury
Pilot Duty

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Panels & Controls



CORD: Material 18-2 SJOW, 41 Strand x #34, 90°C
Size29 (7.4mm) Dia.

HOUSING: Material Polypropylene
Color..... Normally Open - Blue
Normally Closed - Red

WEIGHT Suspended, 2.25" (57mm) Sph. lead weight with adjustable stainless steel fittings (Models 073612, 073614 & 073616)

TEMPERATURE RATING 140°F (60°C)

SWITCH Mercury, Narrow Angle , Horizontal

SWITCH RATING 4.5A @ 115VAC RES
2.25A @ 230VAC RES

The Mercury Level Controls are available in suspended configuration with 25 (8m) to 200 feet (61m) of cord on P/N's 073612 & 073614; P/N 073616* with 15 (5m). ***(use 073612 for lengths longer than 15 feet).**

STATE CORD LENGTH AT TIME OF ORDERING.

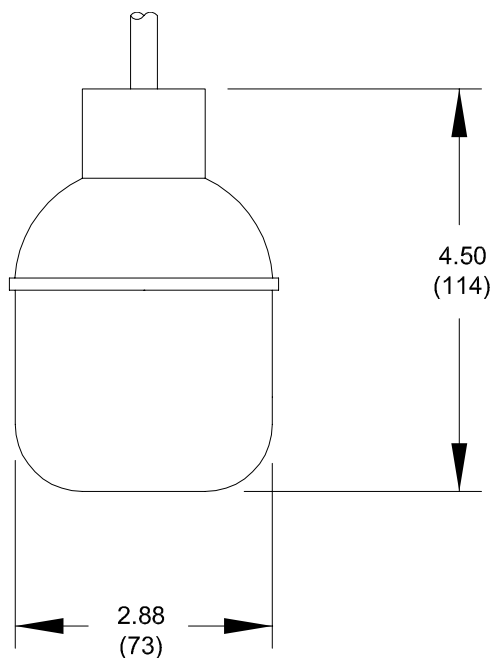
They are pilot duty devices which control the function of motor load devices, such as contactors, motor starters, and power relays, to automatically cycle a pump or pumps. They can also be used for alarm signaling devices. Two Mercury Level Controls for a one pump operation; three for a two pump operation. If an alarm device is used, add another Level Control.

**P/N's: 073612
073614
073616**



CONTROL NUMBER	CORD LENGHT	TYPE INSTALLATION	CONTACTS
073612	25 ft. (8m) to 200 ft. (61m)	Suspended	Open
073614	25 ft. (8m) to 200 ft. (61m)	Suspended	Closed
073616	*15 ft. (5m)	Suspended	Open

inches
(mm)



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Panels & Controls

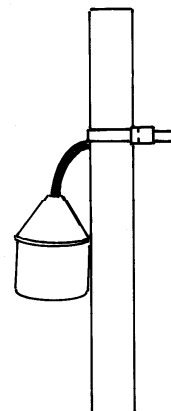
CORD 15ft. (5m) 18/2 SJOW water resistant neoprene (CPE) cord
FLOAT High impact resistant PVC Housing, Mercury tilt switch hermetically sealed.
TEMPERATURE RATING:
 140°F (60°C)
ELECTRICAL 5 amp 120 VAC or 230 VAC

The float switch is available for normally open (high level) applications. The float includes a pipe clamp to be attached to discharge piping.

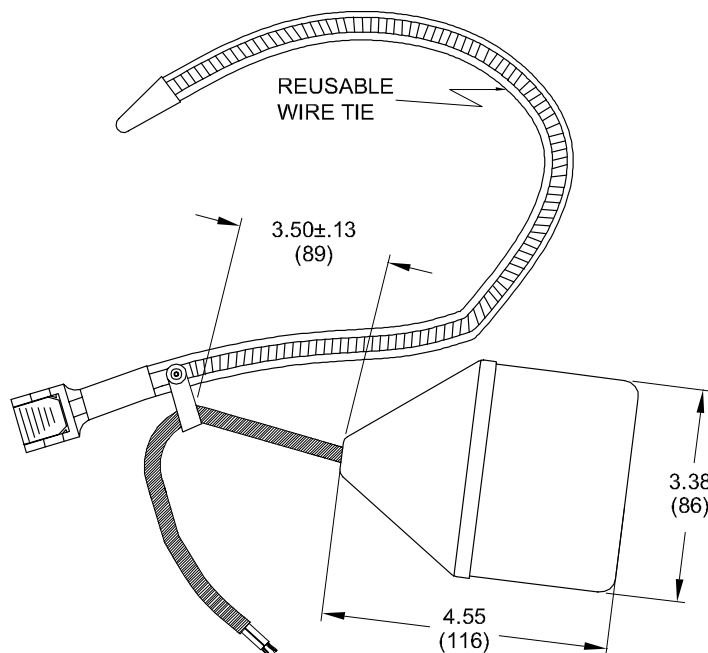
The float switch is designed to be used as a pilot duty, narrow angle sensing device to monitor liquid levels in sewage and water systems, also to active pump control panels, alarms solenoids, and relays. This switch is not sensitive to rotation and is suitable for use with intrinsically safe circuits.

Normally Open - The float switch turns on (closes) when the float tips slightly above the horizontal position signaling a high level, and turns off (opens) when the float drops slightly below the horizontal position.

PART NO.	CORD LENGTH	INSTALLATION	CONTACTS
102697	15 ft. (4.6)	Pipe Mounted	Open



P/N: 102697

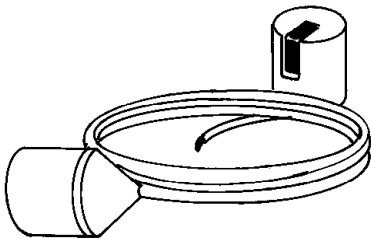


inches
(mm)

LEVEL CONTROLS

Suspended, Mercury
Pilot Duty

Panels & Controls



P/N: 100958
100959



- CORD** 15ft. (5M) 18/2 SJOW water resistant neoprene (CPE) cord
- FLOAT** High impact resistant PVC Housing, Mercury tilt switch hermetically sealed.
- CABLE WEIGHT** 1lb., 12oz., 2.8" (71.1) Dia x 3.3" (83.8) Long high impact resistant, PVC housing.
- TEMPERATURE RATING:**
140°F (60°C)
- ELECTRICAL** 5 amp 120 VAC or 230 VAC

The float switch design is available for normally open (high level) applications or normally closed (low level) applications. The float includes an internal weight or a cable weight for suspended application.

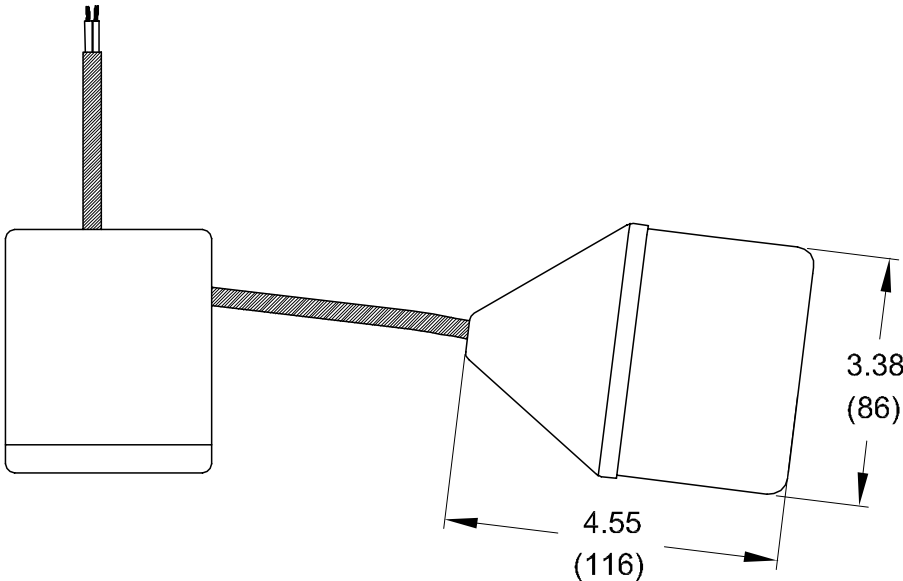
The float switch is designed to be used as a pilot duty, narrow angle sensing device to monitor liquid levels in sewage and water systems, also to active pump control panels, alarms solenoids, and relays. This switch is not sensitive to rotation and is suitable for use with intrinsically safe circuits.

Normally Open - The float switch turns on (closes) when the float tips slightly above the horizontal position signaling a high level, and turns off (opens) when the float drops slightly below the horizontal position.

Normally Closed - The float switch turns on (closes) when the float drops slightly below the horizontal position signaling a low level, and turns off (opens) when the float tips slightly above the horizontal position.

PART NO.	CORD LENGTH	INSTALLATION	CONTACTS
100958	15 ft. (4.6)	Suspended	Open
100959	15 ft. (4.6)	Suspended	Closed

inches
(mm)



CORD 16/2 SJOW water resistant neoprene (CPE) cord with Piggy-Back plug.

FLOAT High impact resistant PVC Housing, Mercury tilt switch hermetically sealed.

TEMPERATURE RATING:
140°F (60°C)

ELECTRICAL: 120VAC.. 13 amps running, 40 amps starting, up to 1/2HP

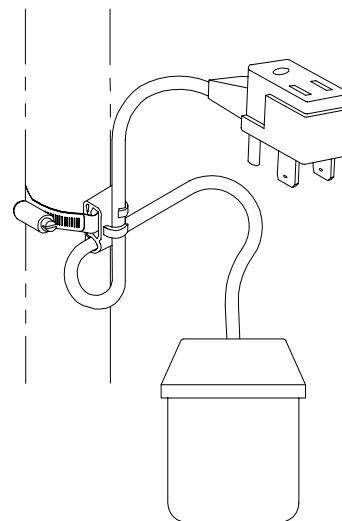
230VAC.. 8 amps running, 20 amps starting, up to 1HP.

The float switch design is available for normally open (high level) applications or normally closed (low level) applications. The float includes a pipe clamp to be attached to discharge piping. The float switch provides automatic pump operation when directly controlling smaller pumps in water and sewage applications. Although this switch is not sensitive to rotation, it is affected by turbulence and should be mounted in a non-turbulent location.

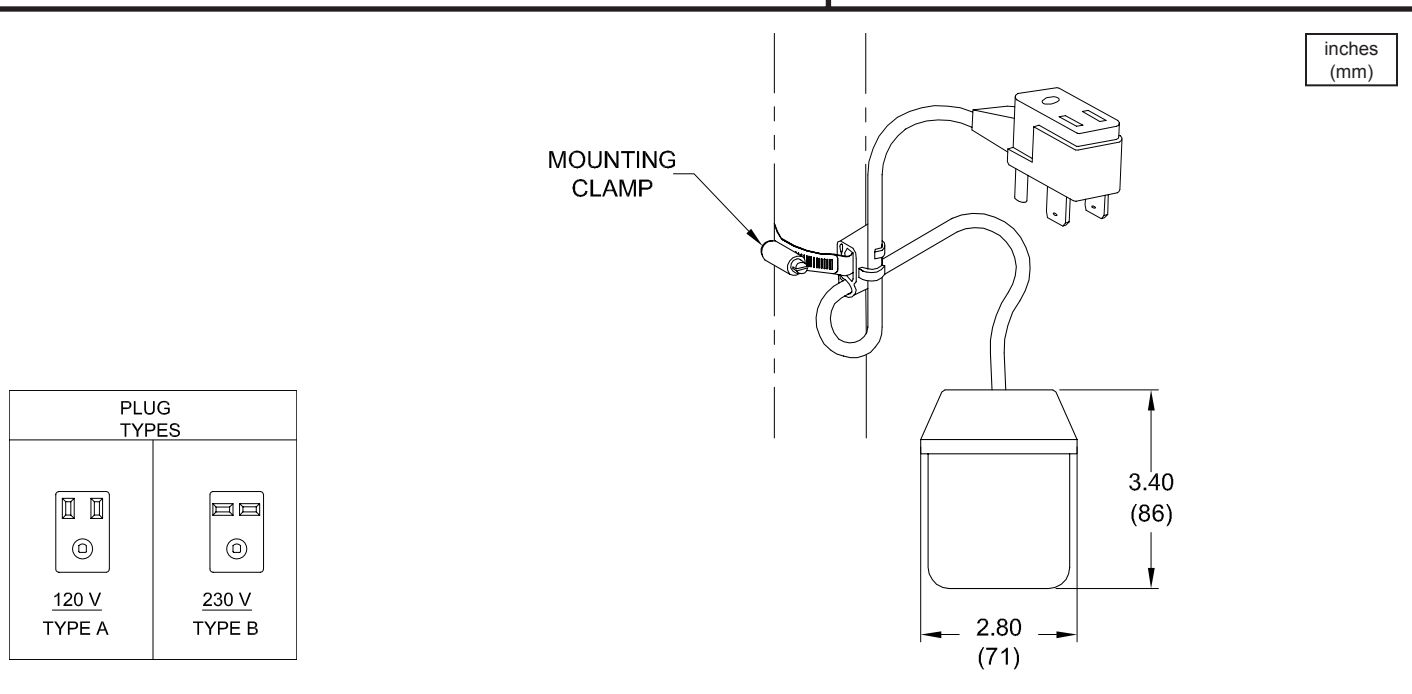
PART NO.	CORD LENGTH	INSTALLATION	CONTACTS
100950	15 ft. (5m)	Pipe Mounted/120V	Open
100951	15 ft. (5m)	Pipe Mounted/230V	Open
100952	10 ft. (3m)	Pipe Mounted/120V	Closed

IMPORTANT!

1. Not recommended for use with motor contactors or relays
2. Not recommended for use in intrinsically safe applications
3. This switch **MUST** be used with pumps that provide integral thermal overload protection



P/N's: **100950**
100951
100952



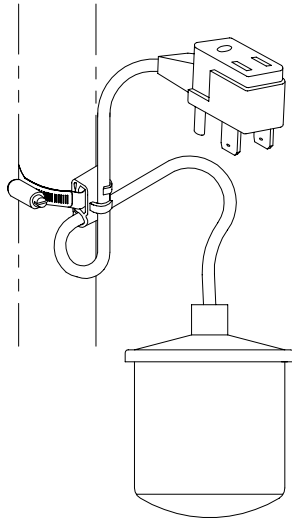
PLUG TYPES	
120 V TYPE A	230 V TYPE B

LEVEL CONTROLS

Pipe Mounted, Mercury,
Wide Angle

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Panels & Controls



P/N's:
100953
100954
100955*
101231*



CORD 14/2 SJOW water resistant neoprene (CPE) cord with Piggy-Back plug on 100953 & 100954.
FLOAT High impact resistant PVC Housing, Mercury.
TEMPERATURE RATING 140°F (60°C)
ELECTRICAL:
120VAC 15 amps running, 55 amps starting, up to 1HP
230VAC: 12 amps running, 35 amps starting, up to 2HP.

The float switch design is available for normally open (high level) applications or normally closed (low level) applications. The float includes a pipe clamp to be attached to discharge piping. The float switch provides automatic pump operation when controlling lift pumps, solenoids, relays and liquid level alarms. It can also be used with battery (DC) powered applications.

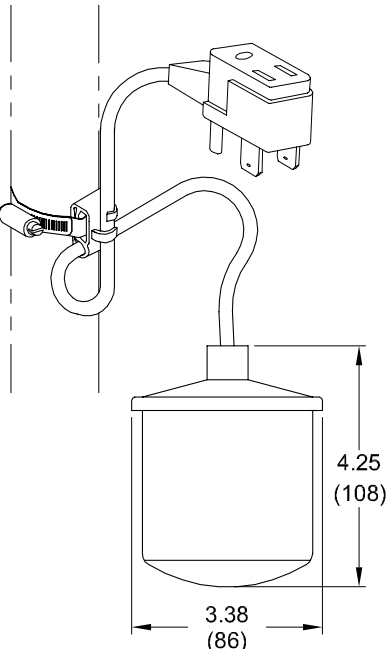
PART NO.	CORD LENGTH	INSTALLATION	CONTACTS
100953	15 ft. (5m)	Pipe Mounted - 120V	Open
100954	15 ft. (5m)	Pipe Mounted - 230V	Open
100955*	15 ft. (5m)	Pipe Mounted - 120/230V	Open
101231*	15 ft. (5m)	Pipe Mounted - 120/230V	Closed



IMPORTANT!

1. This switch **MUST** be used with pumps that provide integral thermal overload protection
 2. Units **WITHOUT** plugs may be used in either 120V or 230V applications when within amp ratings.
- (*) Less Plug

inches
(mm)

MOUNTING
CLAMP



PLUG TYPES	
	
120 V TYPE A	230 V TYPE B

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Panels & Controls

CORD: Material 16-2 SJOW, 65 Strand x #34, 60°C
Size32 (8mm) Dia. x (See Chart for Length)

HOUSING: Material Polypropylene
Color Normally Open - Blue

PLUG: 115V Molded Male & Female
(Piggy-Back) w/Ground (*Lengths
over 50ft. (15m) DO NOT Include Plug).

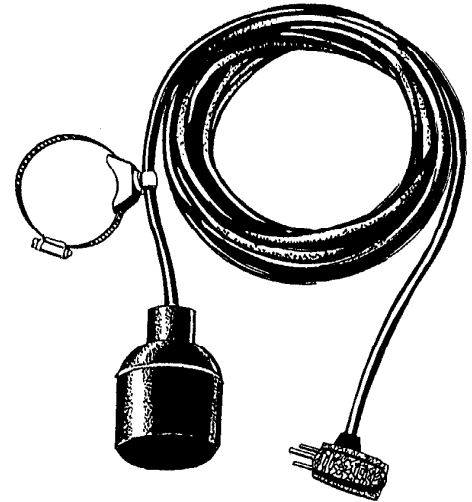
CLAMP Stainless Steel with Polypropylene
Saddle, Adjustable, 1" (25) to 3" (76).

TEMPERATURE RATING 200°F (93°C)

SWITCH Mercury, Wide Angle, 120°

SWITCH RATINGS 13A. @ 115VAC. Continuous
Current Inrush NOT to Exceed 22A.

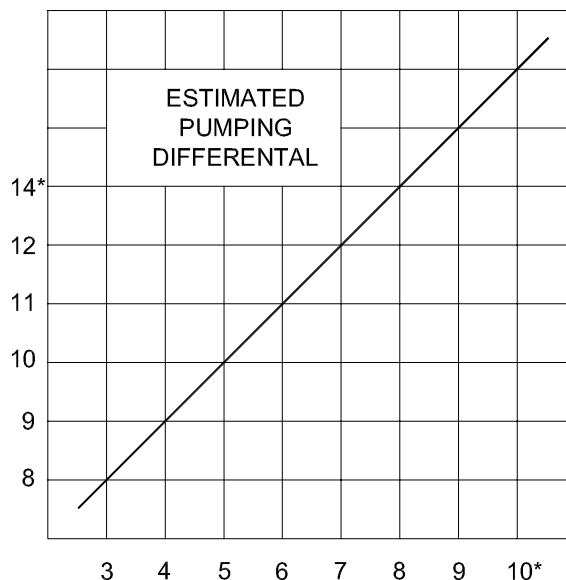
The High Temperature Wide Angle Mercury Level Control is a direct acting, in-line control system for automatically controlling 1/2 HP and smaller pump motors. The unit has a piggy-back plug attached to the cord, allowing the user to plug the pump plug directly into it, and then plug the entire unit into a standard grounded outlet. The Wide Angle Mercury Level Control is furnished with an adjustable strap for mounting to the pump discharge pipe. Standard units are preset at the factory for a nine inch pump down range, but can easily be adjusted to various pump down cycles by shortening or lengthening the cord length at the pivot point. The Level Control is also omni-directional; the pumping differential is maintained in any horizontal plane. **STATE CORD LENGTH AT TIME OF ORDERING.**



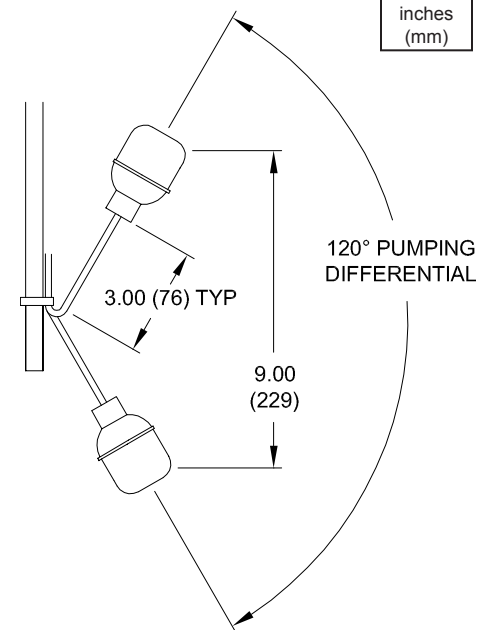
P/N: 085713

CONTROL NUMBER	CORD LENGHT	TYPE INSTALLATION	CONTACTS
085713	15 ft. (5m) to 100 ft. (31m)	Pipe Mounted	Open

TABLE 1



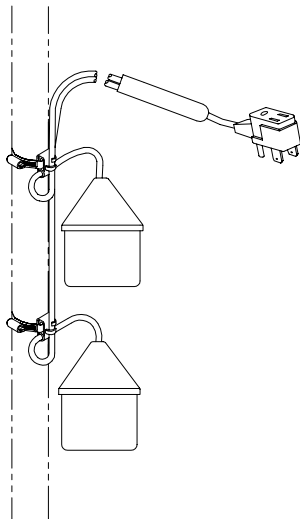
(*) Maximum drawdown differential will vary from 13" (330mm) to 15" (381mm) at this point depending on temperature of liquid being pumped.



LEVEL CONTROLS

Double Float, Pipe Mounted,
Mercury, w/Piggy-Back Plug

Panels & Controls



P/N's: **100956**
100957

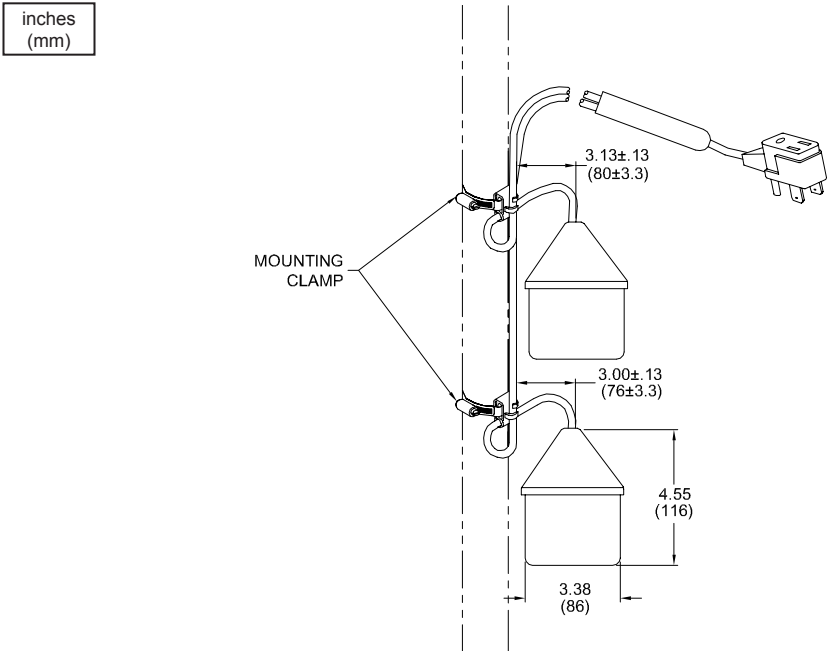


- CORD** 14/2 and 14/3 SJOW, water resistant neoprene (CPE) cable with Piggy-Back plug
- FLOAT** High impact resistant PVC Housing, Mercury.
- TEMPERATURE RATING:** 140°F (60°C)
- ELECTRICAL:**
- 120VAC** 15 amps running, 55 amps starting, up to 1HP
 - 230VAC** 12 amps running, 35 amps starting, up to 2HP.

The two floats and two cords are molded into one piggy-back plug. The floats includes two pipe clamps to be attached to discharge piping. The float switch provides direct automatic pump operation in sewage and water systems. It lends itself well in applications that require a very accurate pumping range from 1 inch (25mm) to 48 inches (1219mm). This float assembly also works well in turbulent applications because of the patented holding relay circuitry. This float assembly can replace the need for a small control panel by directly switching pumps up to 2HP, 230Volt.

PART NO.	CORD LENGTH	INSTALLATION	CONTACTS
100956	15 ft. (5m)	Pipe Mounted - 120 V	Open
100957	15 ft. (5m)	Pipe Mounted - 230 V	Open

IMPORTANT!
1. This switch **MUST** be used with pumps that provide integral thermal overload protection



PLUG TYPES	
120 V TYPE A	230 V TYPE B

Panels & Controls

CORD: Material 16-2 SJOW, 65 Strand x #34, 90°C
Size32 (8mm) Dia. x (See Chart for Length)
HOUSING: Material Polypropylene
Color..... Normally Open - Blue
WEIGHT Suspended, 2.25" (57mm) Sph. lead
weight with Adjustable stainless steel fittings
TEMPERATURE RATING 140°F (60°C)
SWITCH Snap Action
SWITCH RATING..... 13 Amps @ 115 Volts AC
13 Amps @ 230 Volts AC

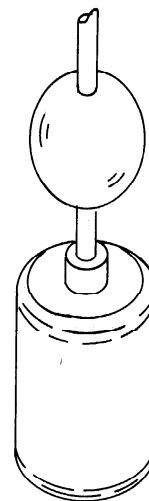
The Level Controls are available in suspended configuration with 15 (5M) to 200 feet (61M) of cable.

STATE CORD LENGTH AT TIME OF ORDERING.

They are pilot duty devices which control the function of motor load devices, such as contactors, motor starters, and power relays, to automatically cycle a pump or pumps. They can also be used for alarm signaling devices. Two Level Controls for a one pump operation; three for a two pump operation. If an alarm device is used, add another Level Control.

The Mechanical level control is a direct acting switch, it uses a metal cylinder sliding back and forth in a tube to actuate a snap-action switch.

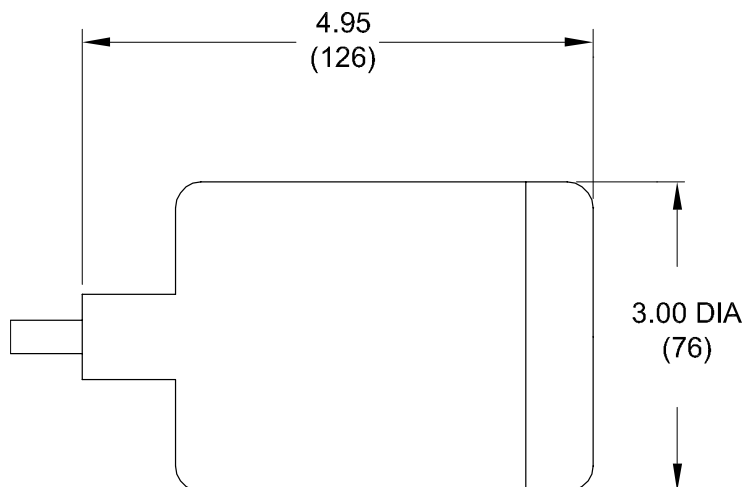
PART NUMBER	CORD LENGTH	TYPE INSTALLATION	CONTACTS
085806	15 ft. (5m) to 200 ft. (61m)	Suspended	Open



P/N: 085806



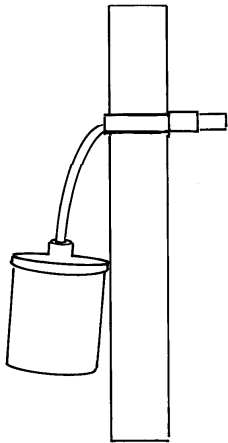
inches
(mm)



LEVEL CONTROLS

Pipe Mounted, Mechanical
Wide Angle

Panels & Controls



P/N: 101637
108876



CORD 14/2 SJOW, water resistant neoprene (CPE) cord
FLOAT High impact resistant PVC Housing, Mechanical
TEMPERATURE RATING:
140°F (60°C)

ELECTRICAL:
120VAC 15 amps, Locked rotor amps 85,
up to 3/4HP
230VAC 15 amps, Locked rotor amps 85,
up to 2HP.

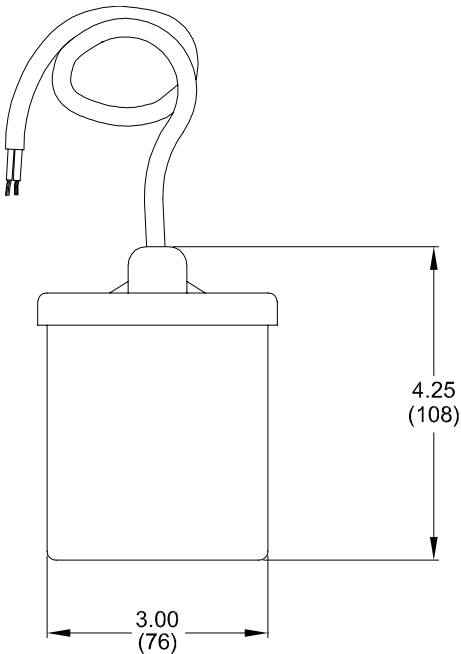
This float switch is available for normally closed (high level) applications. The float includes a mounting strap to be attached to discharge piping. The float switch provides automatic control of pumps in water or sewage applications, and is capable of directly controlling pumps of up to 3/4 HP 120 volts and 2 HP 230 volts. This heavy duty switch can be used in both calm and turbulent conditions.

PART NUMBER	CORD LENGTH	INSTALLATION	CONTACTS
101637	15 ft. (5m)	Pipe Mounted - 120/230 V	Closed
108876	15 ft. (5m)	Pipe Mounted - 120/230 V	Open

IMPORTANT!
1. This switch **MUST** be used with pumps that provide integral thermal overload protection

Tested per UL 508 Industrial Control Equipment.

inches
(mm)



Panels & Controls

CORD..... 16/2 SJOW, water resistant neoprene (CPE) cord
FLOAT..... High impact resistant PVC Housing, Mechanical
TEMPERATURE RATING..... 140°F (60°C)

ELECTRICAL:

120VAC..... 13 amps, Locked rotor amps 85, 1/2 HP or less.

230VAC..... 13 amps, Locked rotor amps 85, 1HP or less.

This float switch is available for normally open applications. The float includes a mounting strap to be attached to discharge piping. The float switch provides automatic control of pumps in water or sewage applications, and is capable of directly controlling pumps of up to 1/2 HP at 120 volts and up to 1HP at 230 volts. This heavy duty switch can be used in both calm and turbulent conditions.

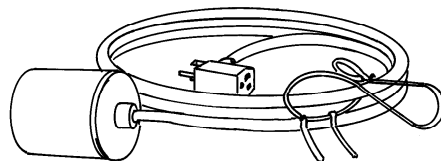
PART NUMBER	CORD LENGTH	INSTALLATION	CONTACTS
101758	15 ft. (5m)	Pipe Mounted - 120V	Open
101758XA	20 ft. (6m)	Pipe Mounted - 120V	Open
101758XC	30 ft. (9m)	Pipe Mounted - 120V	Open
101758XF	50 ft. (15m)	Pipe Mounted - 120V	Open
102262	15 ft. (5m)	Pipe Mounted - 230V	Open
102262XA	20 ft. (6m)	Pipe Mounted - 230V	Open
102262XC	30 ft. (9m)	Pipe Mounted - 230V	Open
102262XF	50 ft. (15m)	Pipe Mounted - 230V	Open
105634*	10 ft. (3m)	Pipe Mounted - 115/230V	Open
106929	10 ft. (3m)	Pipe Mounted - 115/230V	Open

IMPORTANT!

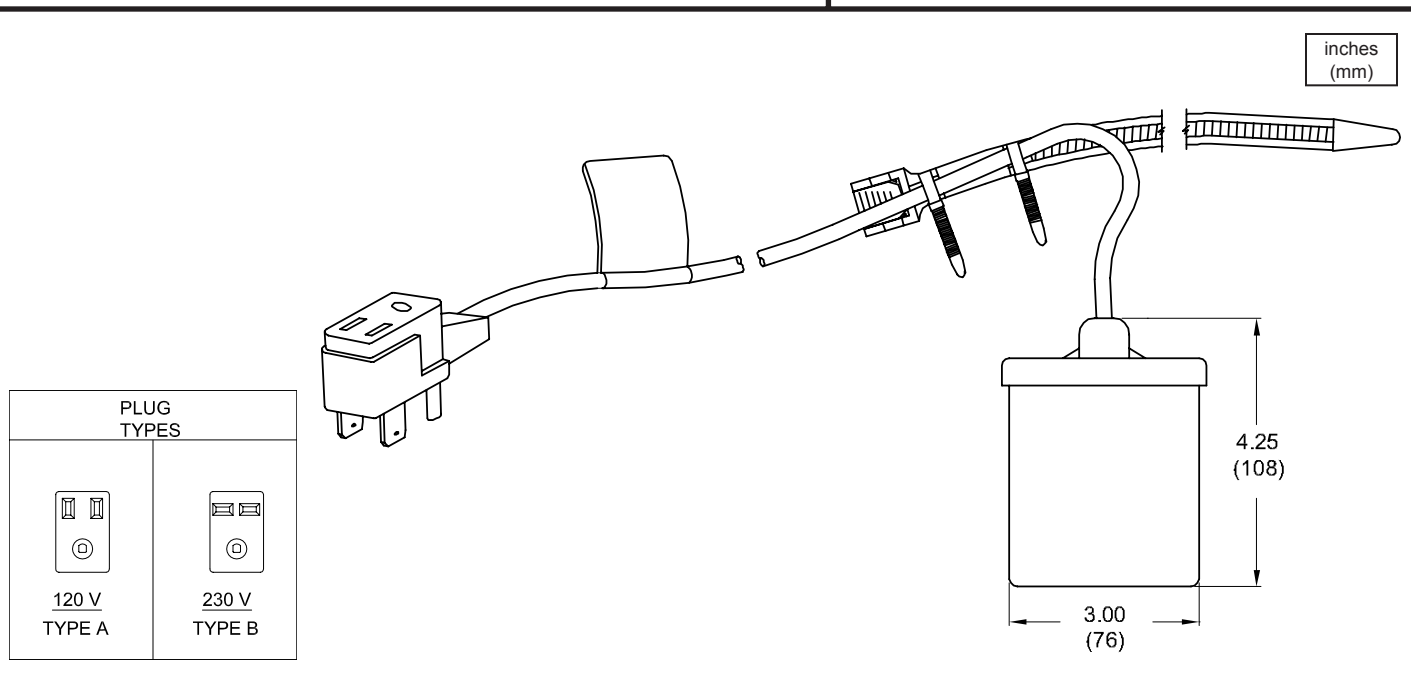
1. This switch **MUST** be used with pumps that provide integral thermal overload protection

Tested per UL 508 Industrial Control Equipment

(*) **DOES NOT HAVE A PLUG.**



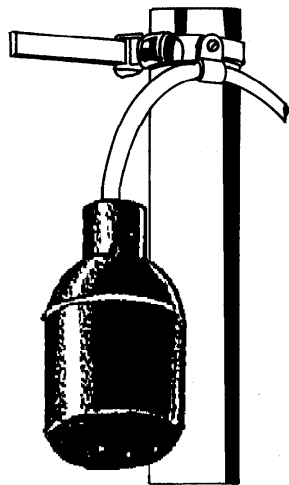
P/N's:
101758
102262
105634*
106929



LEVEL CONTROLS

Pipe Mounted, Mechanical,
Pilot Duty

Panels & Controls



P/N: 102228



- CORD** 18/2 SJOW water resistant polyethylene
(CPE) cord, with pipe clamp (min. 3" tether).
- FLOAT** High impact resistant polypropylene Housing,
Mechanically-activated, snap action contacts.
- TEMPERATURE RATING:**
140°F (60°C)
- ELECTRICAL** 5 amp, 125/250 VAC
- WATER DEPTH** 30 feet (9M) Max., 13 psi.

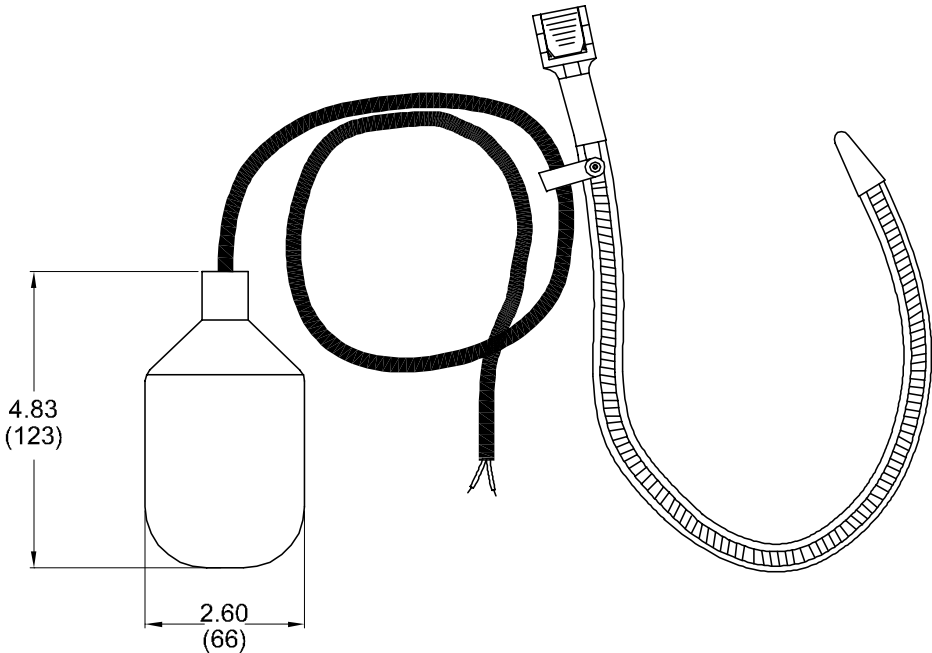
This float switch is a pilot duty, narrow angle sensing device used to activate pump control panels, alarms, solenoids, and relays in sewage and non-potable water applications. It is not sensitive to rotation.

The float switch turns on (closes) when the float tips slightly above horizontal signaling a high level, and turns off (opens) when the float drops slightly below horizontal. Control differential of 1.5" (38mm) above or below horizontal.

PART NUMBER	CORD LENGTH	INSTALLATION	CONTACTS
102228	15 ft. (5m)	Pipe Mounted - 120/230 V	Open

- IMPORTANT!**
1. This switch is not recommended for controlling, electrical loads less than 100 milliamps, 12 VAC and/or non-arcing electric loads.
 2. UL listed for use in non-potable water and sewage.

inches
(mm)



CORD: Material 16-2 SJOW Water-resistant.
Size32 Dia. (8mm) x 15ft. (5M) Long. with Piggy-Back Plug

SWITCH & HOUSING Impact resistant, PVC

FLOAT STOP Neoprene

LIFT ROD Injection Molded Acetal Plastic.

MOUNTING BRACKET PVC

CLAMP Plastic

TEMPERATURE RATING: 125°F (52°C)

SWITCH Snap Acon

SWITCH RATING 120 Volt, 13 AMPS Max. Running Current
230 Volt, 12 AMPS Max. Running Current
60 AMPS Max. Starting Current
1/2HP @ 115 Volts AC, 1HP @ 230 Volts AC

PUMPING RANGE: Adjustable, 3/4 (19mm) to 6-1/2 (165mm).

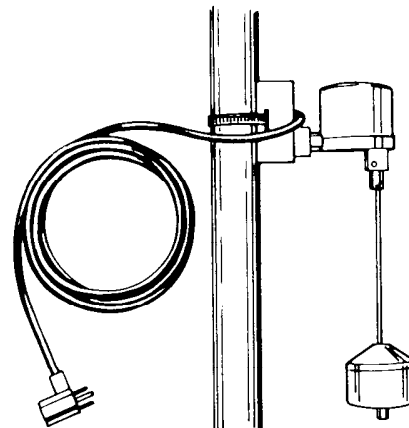
The Vertical Level Control is designed to operate in applications with limited space and is available in pump down model only. The Vertical Level Control is not sensitive to turbulence. The plug may be removed for direct wiring and may be used in either 120V or 230V applications within specified amp range.

PART NUMBER	VOLTS	CORD LENGTH	INSTALLATION
093474	120	15 ft. (5m)	Pipe Mounted
093475	230	15 ft. (5m)	Pipe Mounted
113647*	120	10 ft. (3m)	SP Pump Bracket Mount
113647A*	120	20 ft. (6m)	SP Pump Bracket Mount

IMPORTANT!

1. This Level Control must be used only with pumps equipped with integral thermal overload protection.

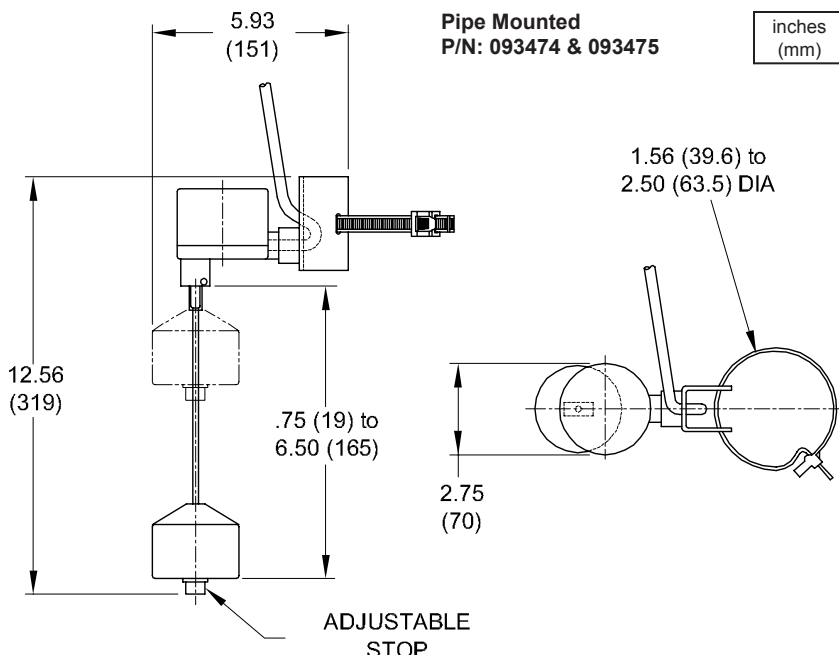
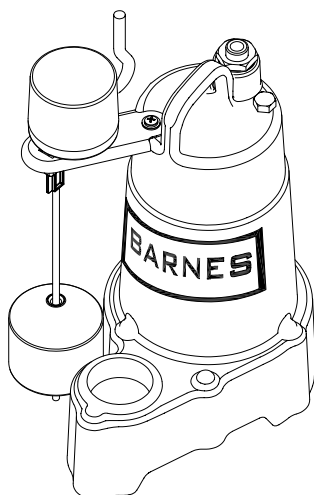
(*) Includes SP Pump mounting bracket.



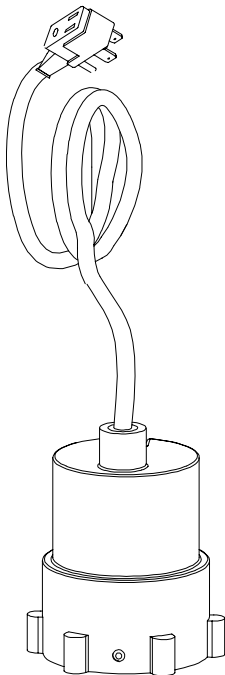
**P/N's: 093474
093475
113647**



With Pump Bracket Mount
P/N: 113647 & 113647A



Panels & Controls



P/N: 116670
115360A



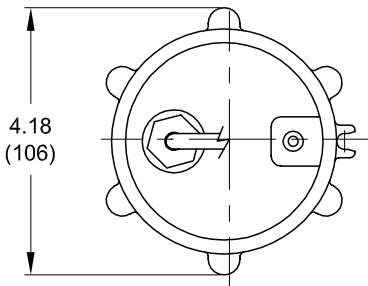
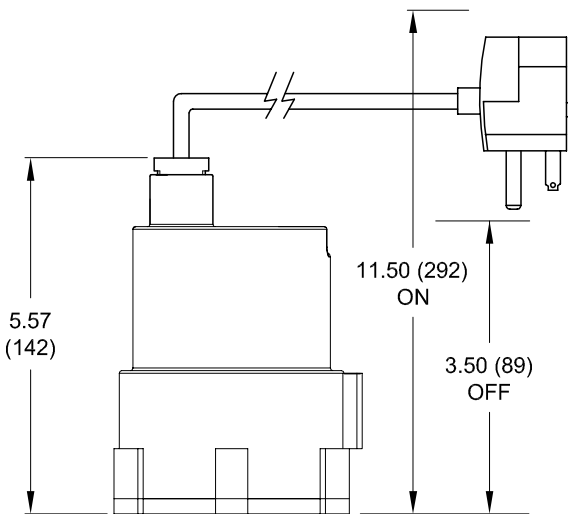
- CORD:** Material..... 16-2 SJTW, Nylon with .12 Dia. Vent
Size..... .38 Dia.(9.7mm)
- PLUG.....** Male & Female (Piggy-Back), with Vent and Ground.
- HOUSING.....** Black, Molded Polypropylene
- SWITCH RETAINER** Polypropylene
- CLAMP** 1. Clip, Stainless Steel (Pump Mtg.)
2. Bracket, Stainless Steel (Pump Mtg.)
3. Adjustable Clamp, 1-3/4 (45mm) to 5" (127mm)(Pipe Mtg.)
- HARDWARE** Stainless Steel
- SWITCH DIAPHRAGM** Oil Resistant Buna-N
- SWITCH** Snap Action, Normally Open
- SWITCH RATING.....** 10.5 Amp @ 120 Volt AC

Diaphragm Switches are Pressure operated that turn on at 11.50" (292.1mm) head (from bottom of housing) and off at 3.50" (88.9mm) head. For mounting on pumps with and without mounting ears and pipe mounted.

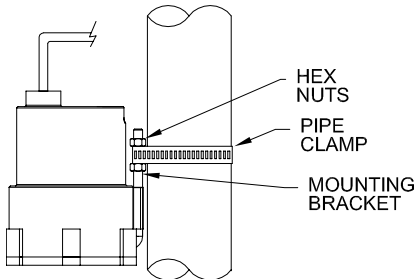
FOR USE ON:
Discharge pipe or pump mounted on units
with FLA less than 10.5 @ 120 Volts AC

PART NUMBER	CORD LENGTH	WHERE USED
116670	15 FT. (4.6m)	BP314, SEV412, EHV412*
115360A	10 Ft. (3m)	SP Pump Series

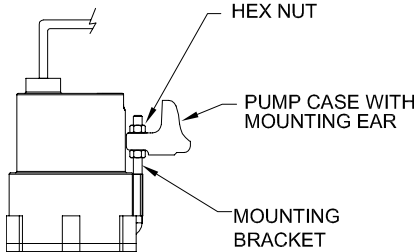
inches
(mm)



PIPE MOUNTED



PUMP MOUNTED



Panels & Controls

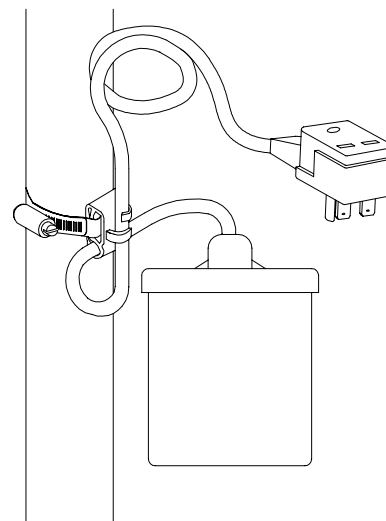
CORD 14/2 SJOW, water resistant neoprene (CPE) cable.
FLOAT High impact resistant PVC Housing, Mechanical
TEMPERATURE RATING 120°F (50°C)
ELECTRICAL:
230VAC 15 amps, Locked rotor amps 85, up to 2HP.

This float switch is available for normally open applications. The float includes a mounting strap to be attached to discharge piping. The float switch provides automatic control of pumps in water or sewage applications, and is capable of directly controlling pumps of up to 2HP at 230 volts. This heavy duty switch can be used in both calm and turbulent conditions.

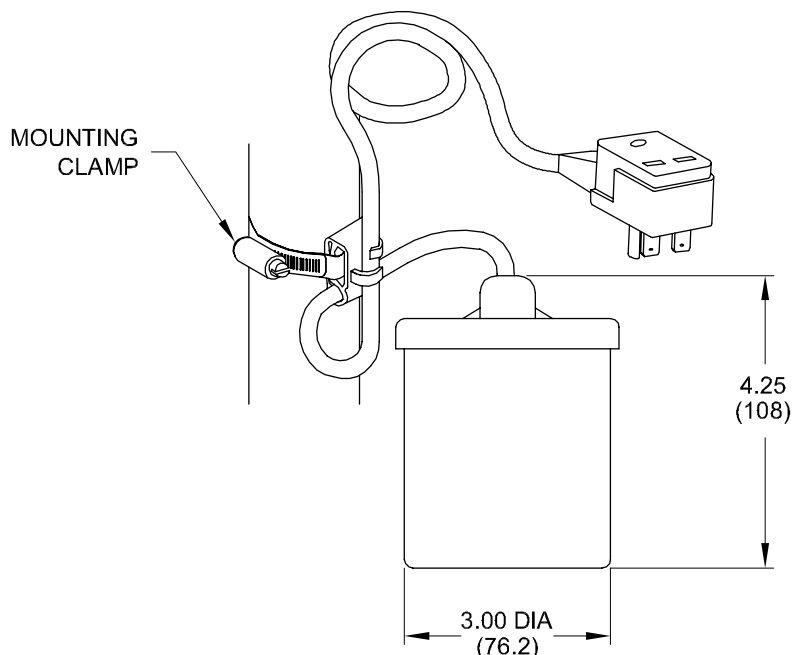
PART NO.	CORD LENGTH	INSTALLATION	CONTACTS
111144A	8 ft. 2.4m)	Pipe Mounted -230 V	Open
111144XA	20 ft. (6m)	Pipe Mounted -230 V	Open
111144XC	30 ft. (9m)	Pipe Mounted -230 V	Open
111144XF	50 ft. (15m)	Pipe Mounted -230 V	Open

IMPORTANT!

1. This switch **MUST** be used with pumps that provide integral thermal overload protection
 Tested per UL 508 Industrial Control Equipment



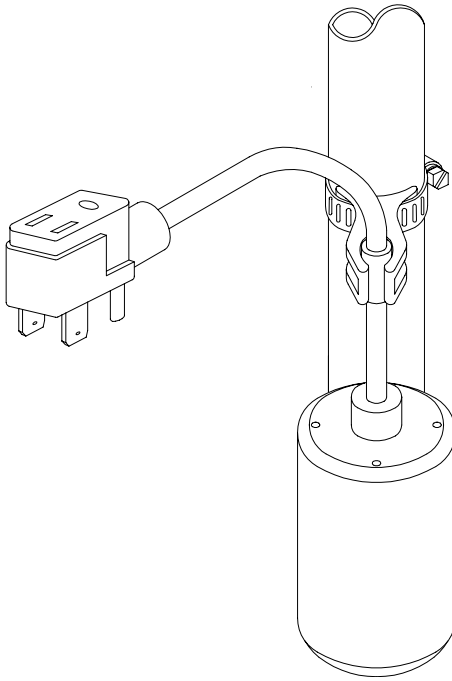
P/N: 111144



inches
(mm)

Mechanical, High Temperature, Wide Angle
Pipe Mounted, 115 Volt with Piggy-Back Plug

Panels & Controls



CORD: *Material* 14-2 SJOW, 41 Strand x #30, 90°C Dry,
60°C Wet
Size37 (8mm) Dia. x (See Chart for Length)

HOUSING: *Material* Polypropylene
Color..... Normally Open - Black

CLAMP Pipe Mounted, Stainless Steel with
Polypropylene Saddle, 1" (25) to 3" (76)

TEMPERATURE RATING 200°F (93°C)

SWITCH Mechanical, Snap Action

SWITCH RATING 15 Amps @ 115 Volts AC, 1 Phase

Level Control is available in Pipe Mounted Configuration with a 115 volt molded on Male and Female Piggy-Back Plug w/Ground on the 090269. Cable lengths are of 15 (5M), 25 (8M), 30 (9M) and 50 feet (15M).

The unit has a piggy-back plug attached to the cord, allowing the user to plug the pump plug directly into it, and then plug the entire unit into a 115 volt grounded outlet. The Wide Angle Level Control is furnished with an adjustable strap for mounting to the pump discharge pipe. Standard units are preset at the factory, but can easily be adjusted to various pump down cycles by shortening or lengthening the cord length at the pivot point.

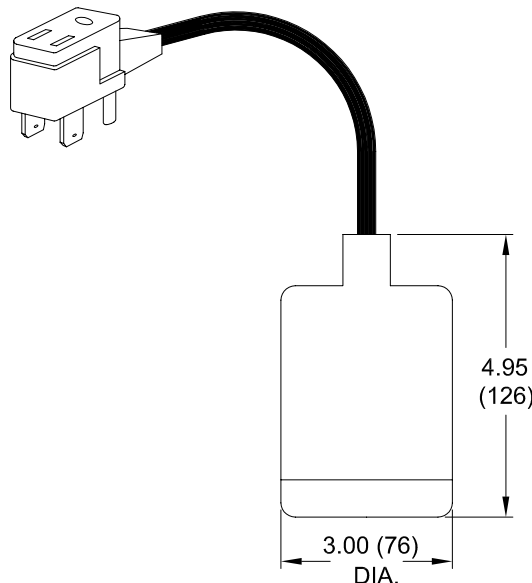
The Mechanical level control is a direct acting switch, it uses a metal cylinder sliding back and forth in a tube to actuate a snap-action switch.

P/N: 090269



PART NUMBER	CORD LENGHT	TYPE INSTALLATION	CONTACTS
090269	15 ft. (5m), 25 (8m), 30 (9m) & 50 ft. (15m)	Pipe Mounted 115 Volt	Open

STATE CORD LENGTH AT TIME OF ORDERING.

inches
(mm)

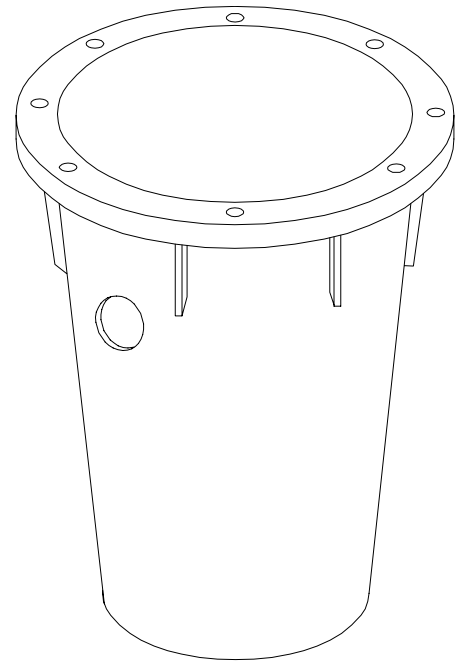
Basins & Accessories

Designed for retrofit and new construction applications. Manufactured with high quality polyethylene structural foam and tested to industry standard.

FEATURES:

- Basin constructed of durable, corrosion-resistant polyethylene structural foam.
- Polyethylene encapsulated threaded inserts for cover bolts.
- 5.00" Dia. hole for 4" sch. 40 Inlet pipe grommet (included).
- Basin capacity, 30 US Gallons
- Wall Thickness 1/4".
- Basin Weight: 16 lbs.

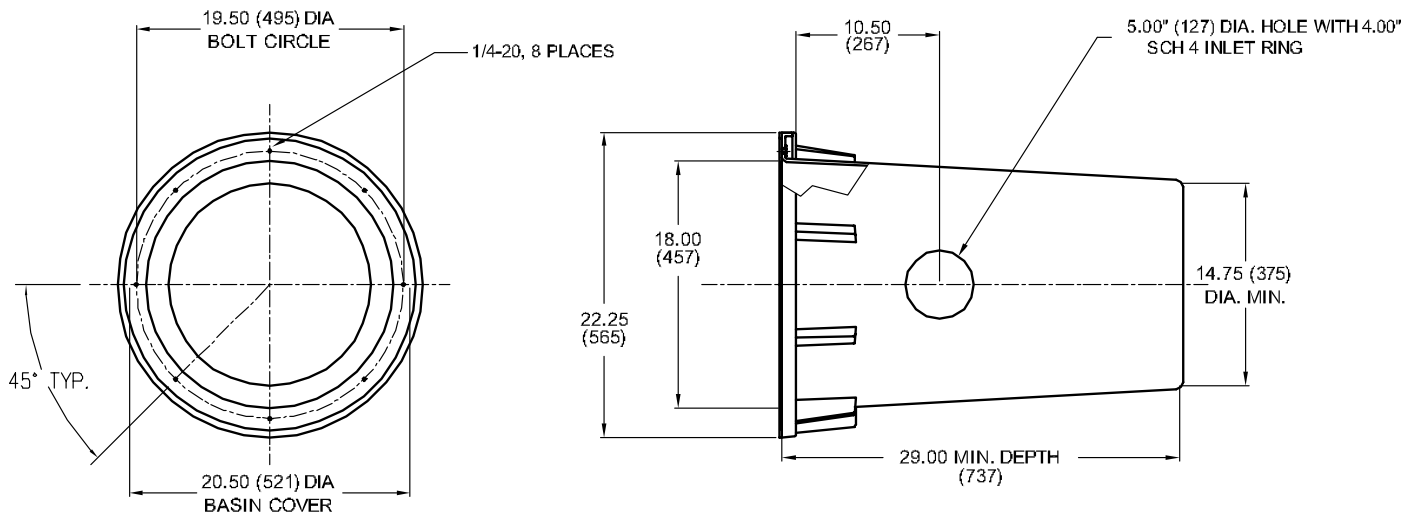
Cover P/N: 102227 supplied separately see pages 5 and 6.



Series: 1830SF
P/N: 110699

Cover Model: 1830SF
P/N: 110699

inches
(mm)



Basins & Accessories

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Basins & Accessories

This basin is designed for retrofit and new construction applications. Manufactured with high quality polyethylene resins and tested to industry standard. This basin is IAPMO approved.

FEATURES:

- Basin constructed of durable, corrosion-resistant polyethylene.
- Polyethylene encapsulated threaded inserts for cover bolts.
- Basin capacity, 26 US Gallons
- 5.00" Dia. hole for 4" Sch. 40 Inlet pipe grommet (incuded).
- Basin weight: 10 lbs.

Cover P/N: 102221 supplied separately see pages 5 and 6.

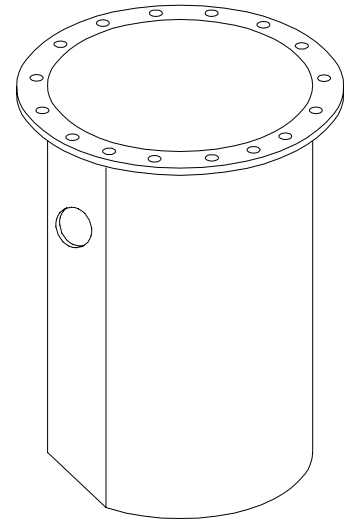
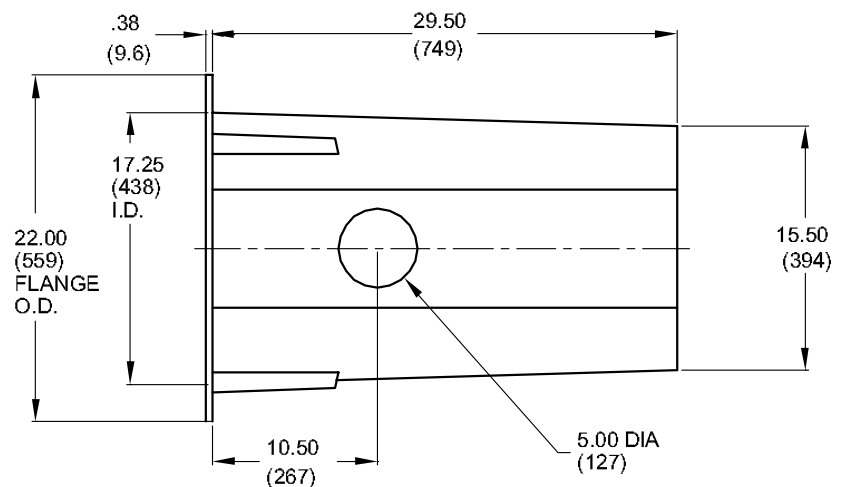
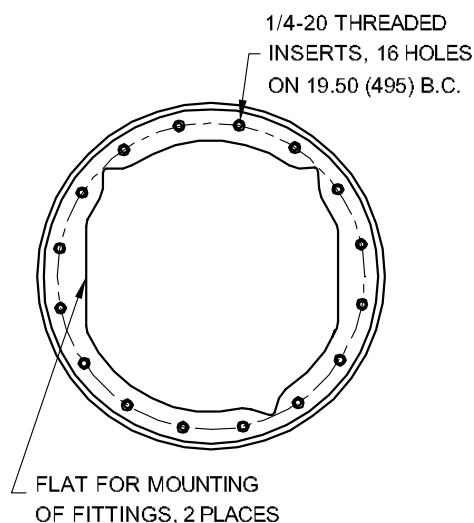


Illustration shown may NOT represent true product.

Series: 1830IAPMO
P/N: 102167

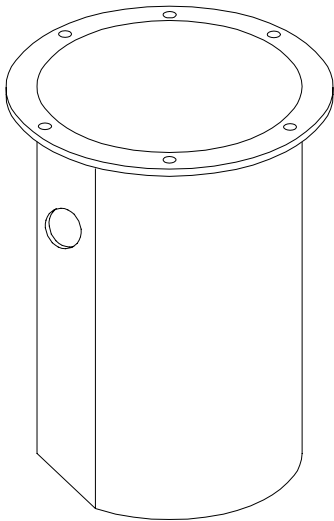


inches
(mm)

POLYETHYLENE BASIN

Various Sizes

Basins & Accessories



Series: **1830**
 2436
 3036
 3636

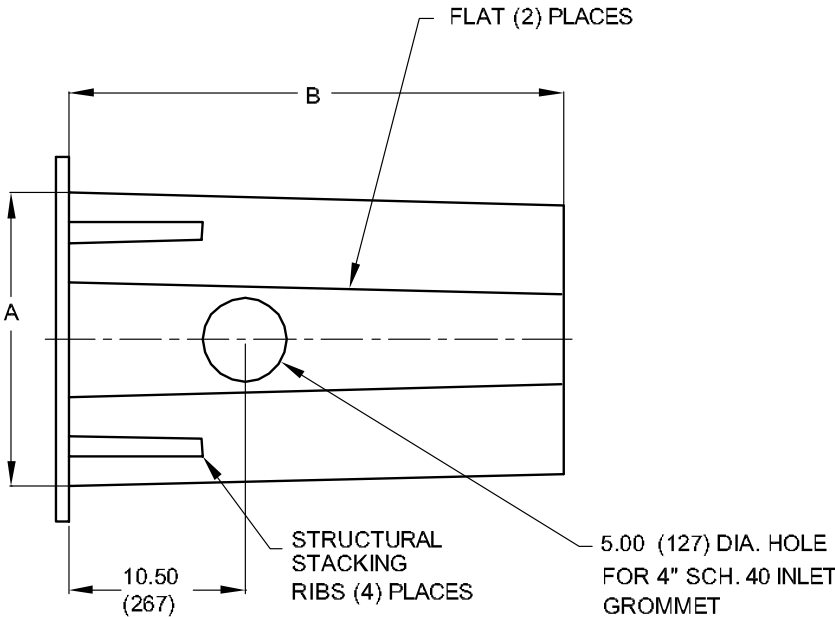
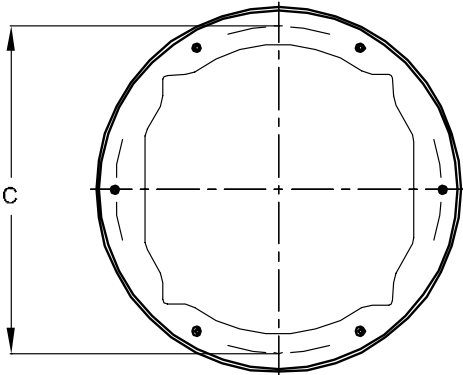
These basins are designed for retrofit and new construction applications. Manufactured with high quality polyethylene resins and tested to industry standards.

FEATURES:

- Basin constructed of durable, corrosion-resistant polyethylene
- Polyethylene encapsulated threaded inserts for cover bolts
- 5.00" Dia. hole for 4" Sch. 40 Inlet pipe grommet (incuded)
- Wall Thickness 3/16"

PART NO.	MODEL NO.	A x B	C B.C.	No. of BOLT HOLES	CAPACITY US GALLONS	WEIGHT L.B.S.
076119	1830	18 x 30	19.5	4	26	10
100534	2436	24 x 36	20.5	6	65	26
102169	3036	30 x 36	32.5	6	103	45
102170	3636	36 x 36	38.5	6	154	55

inches
(mm)



Basins & Accessories

These covers are designed to be used with the 18", 24", 30" and 36" diameter basins. The 18SS, 18SSSV, 18SSIAPMO, 24SS, 30SS and 36SS covers are steel constructed while the 18PS is of polyethylene construction.

Each cover includes; gasket, hardware, cord seal, and grommets for 2" discharge and 2" vent, except for 18SSSV which has only 1 grommet for 2" discharge and 1 cord seal.

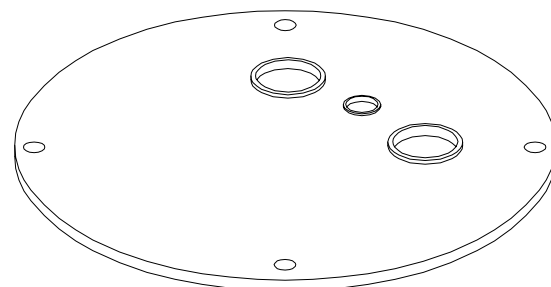


Illustration shown may NOT represent true product.

**Series: 18SS
18SSIAPMO
24SS**

MODEL	PART NO.	MATERIAL	A BASIN DIA	B RADIUS	C B.C.	D QTY. HOLES	E COVER O.D.	F	G	H	WEIGHT
18ASSIAPMO	102221	STEEL	18 (457)	6.00 (152)	19.50 (495)	16	20.50 (521)	N/A	N/A	N/A	8 lbs
18SS	076120	STEEL	18 (457)	6.00 (152)	19.50 (495)	4	20.50 (521)	N/A	N/A	N/A	8 lbs
18PS	102227	POLY	18 (457)	6.00 (152)	19.63 (499)	4	21.13 (537)	N/A	N/A	N/A	5 lbs
24SS	100535	STEEL	24 (610)	8.00 (203)	24.50 (622)	6	24.50 (648)	N/A	N/A	N/A	16 lbs

BASIN COVERS

Simplex
Various Sizes and Material

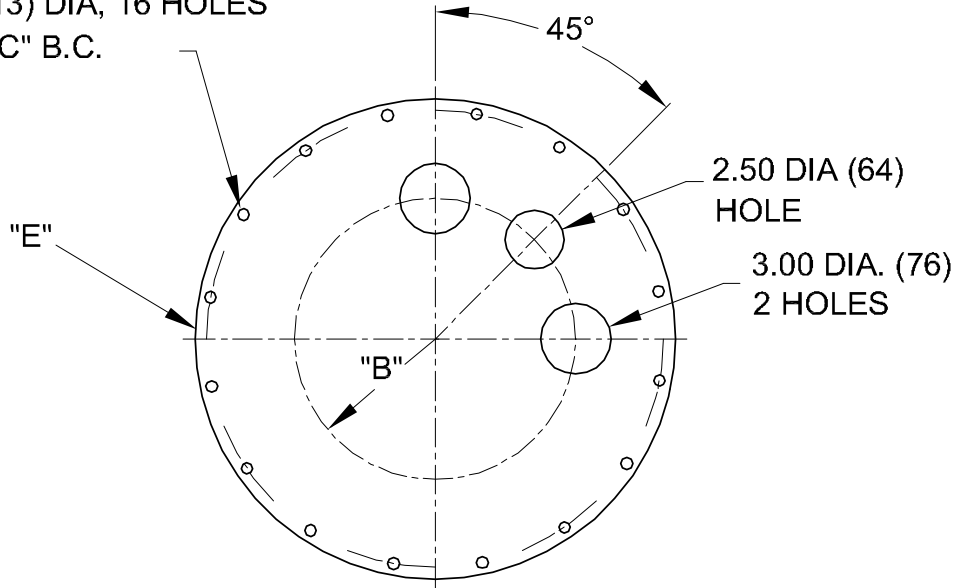
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Basins & Accessories

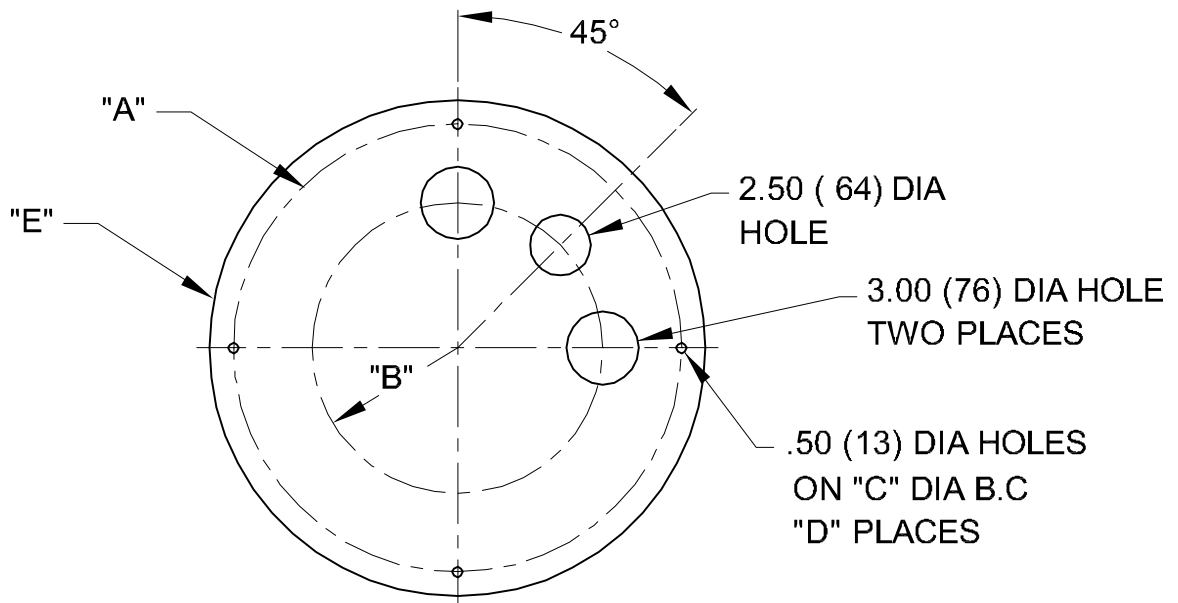
**Cover Model: 18SSIAPMO
(Used with Basin 1830IAPMO)**

inches
(mm)

.50 (13) DIA, 16 HOLES
ON "C" B.C.



Cover Model: 18SS, 10PS, 24SS



SECTION E
PAGE 6
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CRANE®

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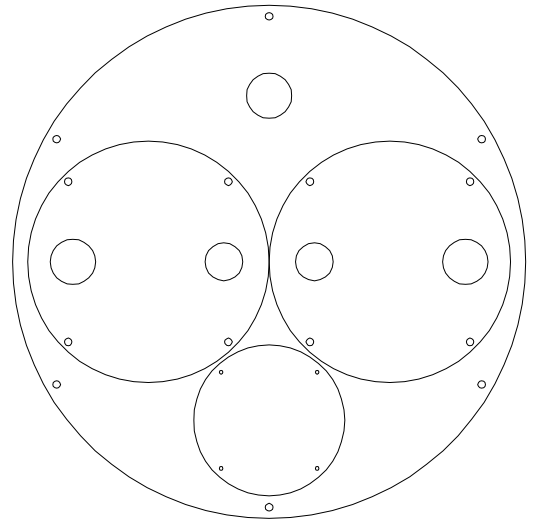
PUMPS & SYSTEMS

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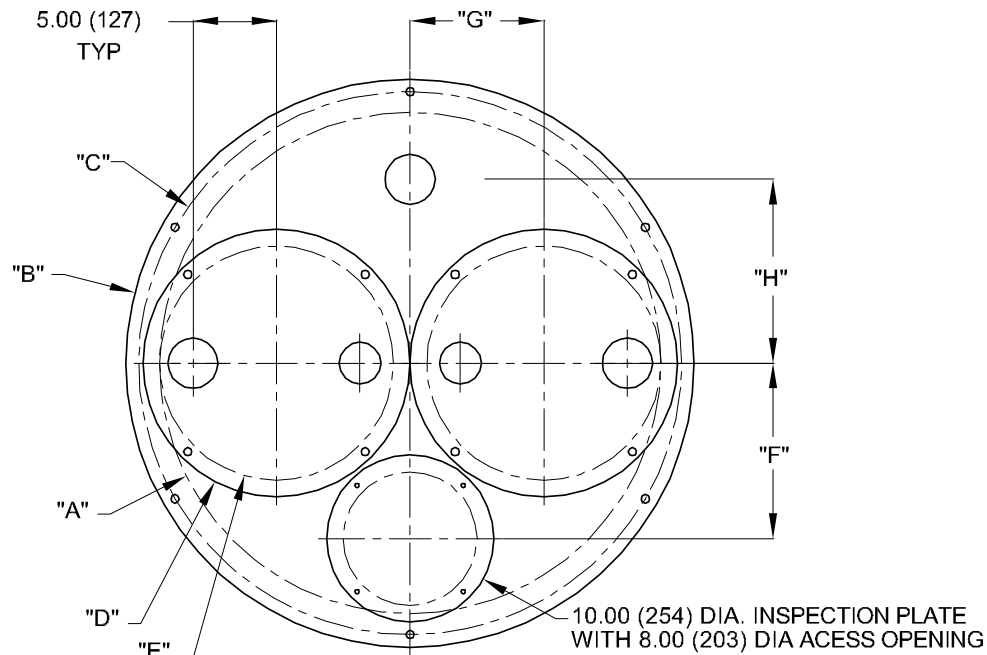
Basins & Accessories

These covers are designed to be used with the 30" and 36" diameter basins. The covers are steel constructed and include 3 pipe grommets for two 2" discharge, one 2" vent and 2 cord seals.

PART NO.	MODEL NO.	A BASIN DIA	B COVER O.D.	C B.C.	D ACCESS O.D.
102224	30SD	30.00 (762)	34.00 (864)	32.50 (826)	16.00 (406)
102226	36SD	36.00 (914)	40.00 (1016)	38.50 (978)	18.00 (457)
E ACCESS OPENING		F	G	H	WEIGHT
14.00 (356)		10.50 (267)	8.00 (203)	11.00 (279)	95 lbs
16.00 (406)		13.00 (330)	10.00 (254)	14.00 (356)	100 lbs



**Series: 30SD
36SD**



inches
(mm)

SPECIALTY BASIN

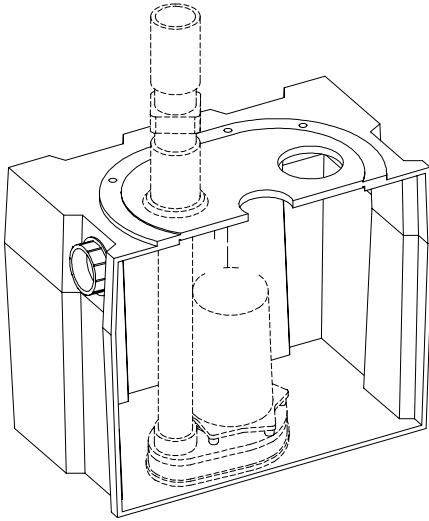
Laundry Tray Basin with Cover

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Basins & Accessories



The Laundry Tray system is designed for above the floor “grey water” sump applications. Typical uses include laundry trays, wet bars, dehumidifiers, water softeners and air conditioner condensation. Manufactured with high quality polyethylene resins and tested to industry standards. The basin comes complete with grommets for 1-1/2” discharge pipe and 1-1/2” vent, cord seal, stainless steel hardware and 1/8” gasket..

FEATURES:

- All components are durable, corrosion-resistant polyethylene.
- Box and cover have a matching textured finish.
- 1-1/2” threaded “spin weld” insert for the inlet.
- Grommet discharge, vent and cord seals.
- Accommodates 1-1/2” discharge piping.
- Stainless steel bolts and encapsulated aluminum inserts
- Large 11 gallon capacity.
- 1/8” thick black closed cell foam gasket.
- Size: 12” x 16” x 14”
- Wall thickness 3/16”
- Weight; Basin - 6 lbs, Cover - 1 lbs.

For Pump and Basin See Section A page 21.

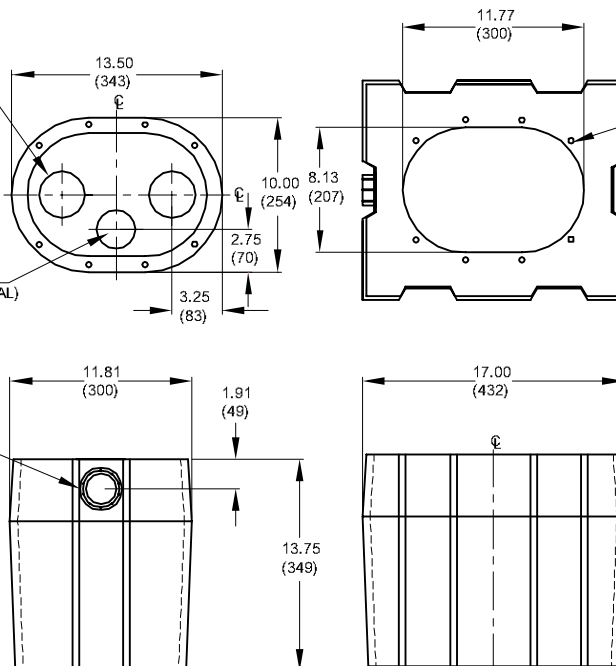
inches
(mm)

GROMMETS FOR 1-1/2 (38) PIPE
1 DISCHARGE, 1 VENT

2.50 DIA
(FOR CORD SEAL)

1.50 (38) THREADED
SPIN WELD FITTING

1/4-20, QTY 8
ALUMINUM INSERTS



SECTION E
PAGE 8
DATE 4/04

CRANE®

A Crane Co. Company

PUMPS & SYSTEMS

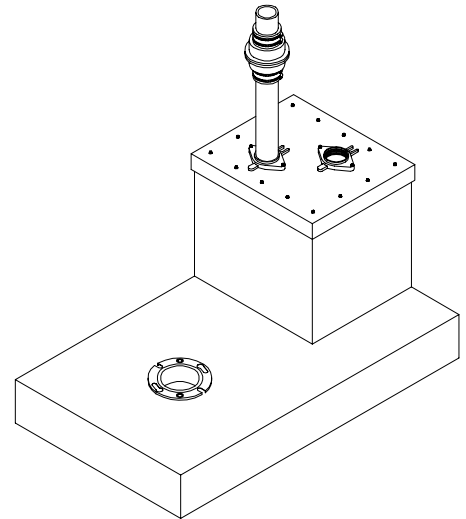
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Basins & Accessories

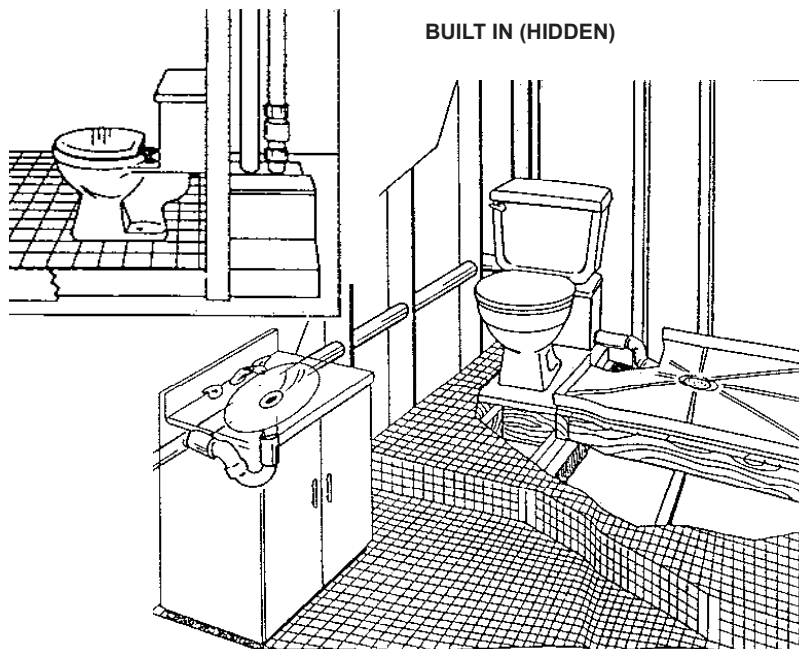
The Basement Genie Basin can be installed almost anywhere. It can accommodate a toilet, vanity, humidifier or shower. It is perfect for basements, family rooms, warehouses, factories and room additions. Fits almost anywhere and can be used with many toilet styles. The Basement Genie Basin can be installed free standing on any level surface (no need to destroy concrete floors) or the tank and all piping can be hidden behind a wall and under the floor.

Comes complete with basin, 2" PVC discharge pipe, 2" NPT vent flange, 2" straight discharge flange, 2" rubber gasket, cast iron closet flange, rubber cord grommet, 3/8" foam lid gasket, 2" check valve and hardware.

STANDARD COLOR..... White
MATERIAL Polyethylene
WEIGHT 47 lbs.

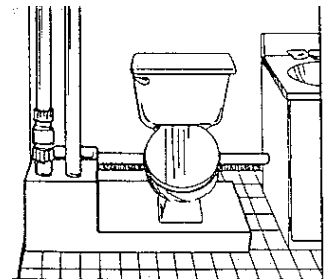


Series: BGB (Basin Only)
P/N: 102146

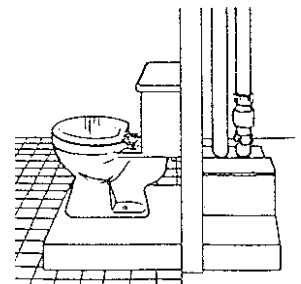


BUILT IN (HIDDEN)

EXPOSED CORNER LOCATION



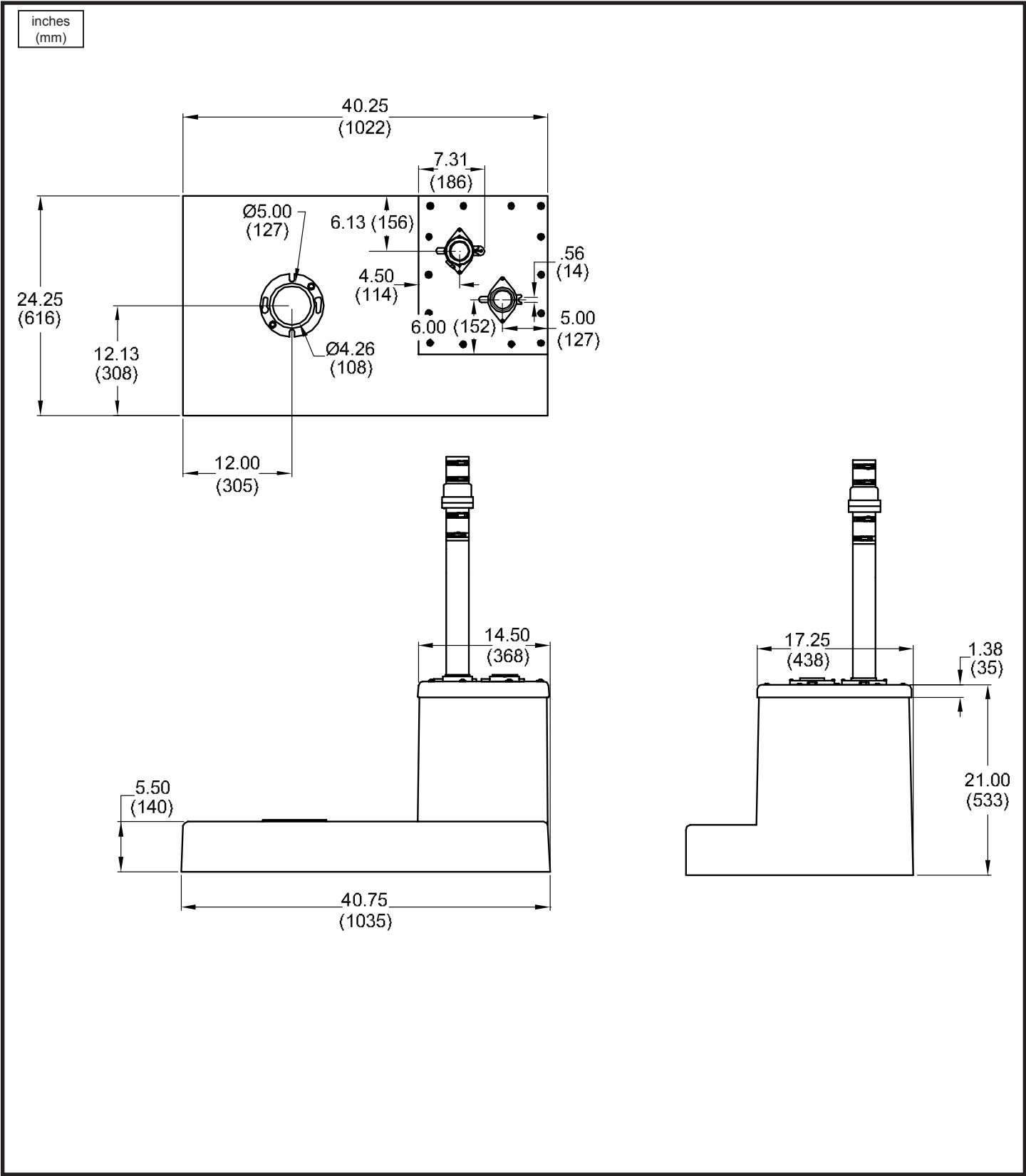
PARTIALLY EXPOSED ON TILE



SPECIALTY BASIN

Basement Genie Basin
(Basin Only)

Basins & Accessories



Basins & Accessories

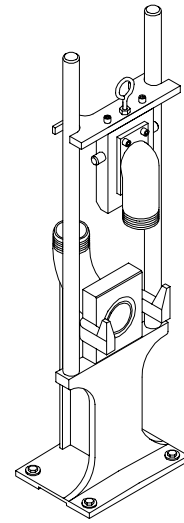
Each BAFEZCV break away fitting consists of a cast iron base elbow which is bolted to the floor of the wet well, lower guide rail supports, cast iron movable ball check valve and clean-out cap which is free to ride up and down the guide rails, A sealing plate with o-ring seat and galvanized guide plate and a stainless steel upper rail support. The guide rails (supplied separately) are attached to the base elbow at one end and to a stainless steel Upper Rail support, which is attached to the underside of the wet well cover at the other end. The guide rails serve only to guide, they carry none of the pump weight. 3/4" (19mm) schedule 40 pipe should be used for guide rails.

An optional intermediate guide pipe bracket should be used for depths of 13 feet (4M) or more. See page 16. The BAFEZCV's (with Check Valve), 1.25", and 2" are recommended for a velocity of 3 Ft. to 5 Ft. per sec. max. They can basically be used on any pump with the appropriate discharge size that does not exceed 200 lbs (91kg) in weight or operate above 150 ft. TDH (45 Meters).

Quantity of One (1) each for Simplex and Two (2) for Duplex.

Assemblies DO NOT include Pump, Discharge piping, Guide Rails, Lifting Chain, nor Gate Valve with Handle.

See page 16 for OPTIONAL Intermediate Supports.



**Series: BAFEZCV-1.25x2
BAFEZCV-2x2**

DESCRIPTION:

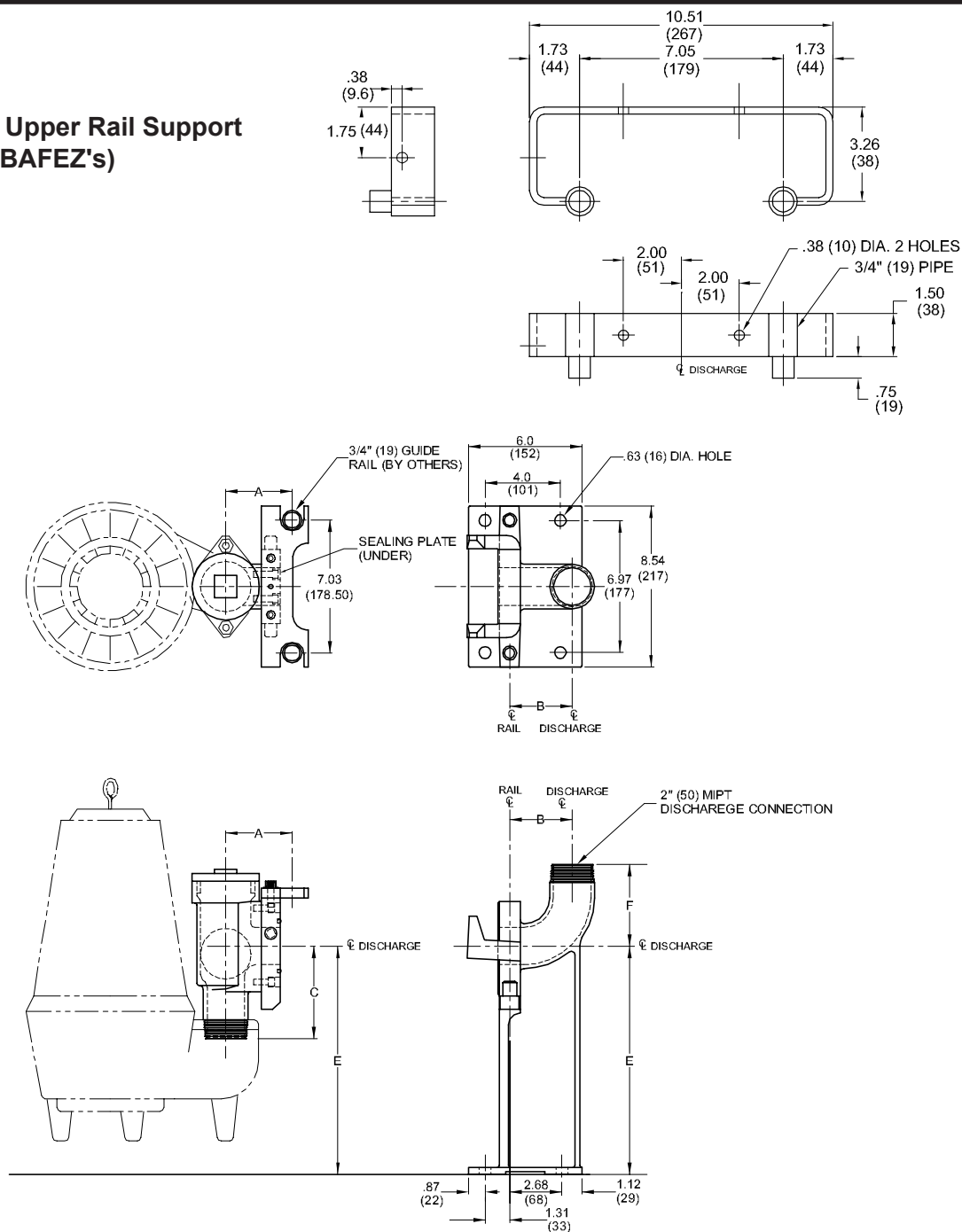
THE BREAK AWAY FITTING IS DESIGNED TO ALLOW THE SUBMERSIBLE PUMP TO BE INSTALLED OR REMOVED WITHOUT REQUIRING PERSONNEL TO ENTER THE WET WELL.

1.25" & 2" with Check Valve
Recommend 3 ft to 5 ft per sec. max.

Basins & Accessories

inches
(mm)

Stainless Steel Upper Rail Support (Supplied with BAFEZ's)



MODEL NO.	PART NO.	PUMP x BAF Disch. x Disch.	A	B	C	D	E	F
BAFEZCV-1.25x2	114035	1.25" X 2"	3.27 (83)	3.31 (84)	4.69 (119)	7.40 (188)	12.07 (307)	4.33 (110)
BAFEZCV-2x2	114036	2" X 2"	3.50 (89)	3.31 (84)	4.87 (124)	7.20 (183)	12.07 (307)	4.33 (110)

Basins & Accessories

Each BAFEZ break away fitting consists of a cast iron base elbow which is bolted to the floor of the wet well, lower guide rail supports, cast iron movable elbow which is free to ride up and down the guide rails, A sealing plate with o-ring seat, galvanized guide plate and a stainless steel upper rail support. The guide rails (supplied separately) are attached to the base elbow at one end and to a stainless steel Upper Rail support, which is attached to the underside of the wet well cover at the other end. The guide rails serve only to guide, they carry none of the pump weight. 3/4" (19mm) schedule 40 pipe should be used for guide rails.

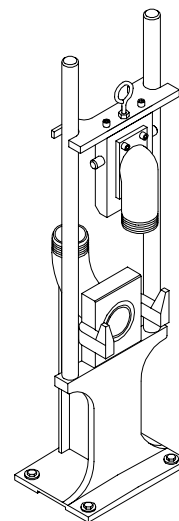
An optional intermediate guide pipe bracket should be used for depths of 13 feet (4M) or more. See page 16. The BAFEZ's 1.25", and 2" can basically be used on any pump with the appropriate discharge size that does not exceed 200 lbs (91kg) in weight, which do not generate in excess of 150 ft. Head (45 Meters).

The BAFEZ 3" is for pumps up to 200lbs, which do not generate in excess of 150 ft. of head.

Quantity of One (1) each for Simplex and Two (2) for Duplex.

Assemblies DO NOT include Pump, Discharge piping, Guide Rails, Lifting Chain, nor Gate Valve with Handle.

(*)The 1.25 x 2 is supplied with an ultra close adapter.



Series: BAFEZ-1.25x2*
BAFEZ-2x2
BAFEZ-2x3
BAFEZ-3x3

DESCRIPTION:

THE BREAK AWAY FITTING IS DESIGNED TO ALLOW THE SUBMERSIBLE PUMP TO BE INSTALLED OR REMOVED WITHOUT REQUIRING PERSONNEL TO ENTER THE WET WELL.

BREAK AWAY FITTING

1.25" thru 3" without Check Valve

BARNES®

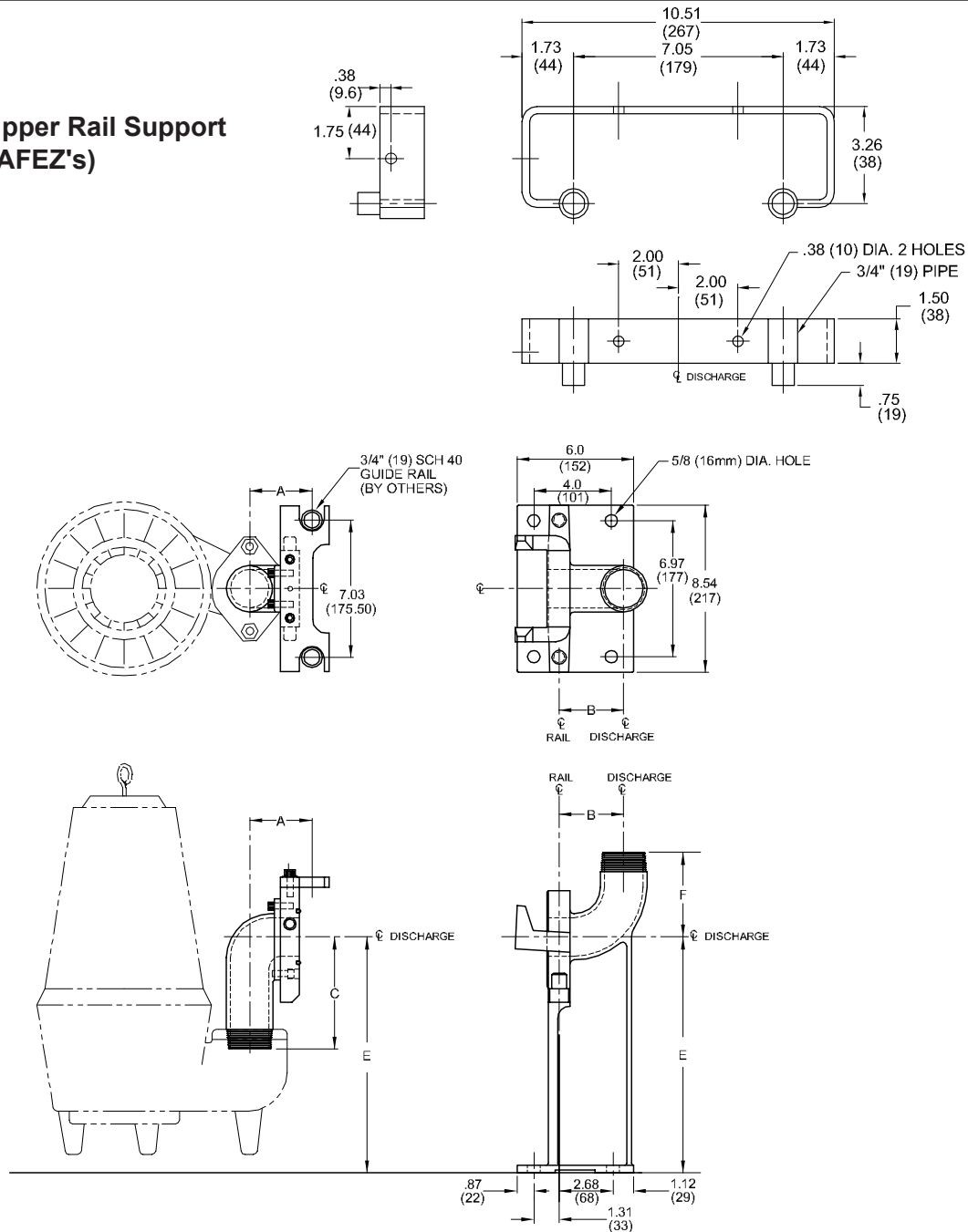
Professional Plumbing

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Basins & Accessories

inches
(mm)

Stainless Steel Upper Rail Support (Supplied with BAFEZ's)



MODEL NO.	PART NO.	PUMP x BAF Disch. x Disch.	A	B	C	D	E	F
BAFEZ-1.25x2*	114030	1.25" x 2"	2.87 (73)	3.31 (84)	4.75 (121)	7.52 (191)	12.07 (307)	4.33 (110)
BAFEZ-2x2	114031	2" x 2"	3.20 (81)	3.31 (84)	5.32 (135)	6.75 (171)	12.07 (307)	4.33 (110)
BAFEZ-2x3	114032	2" x 3"	3.20 (81)	4.68 (119)	5.32 (135)	10.27 (261)	15.59 (396)	6.50 (165)
BAFEZ-3x3	114033	3" x 3"	3.97 (101)	4.68 (119)	5.64 (143)	9.95 (253)	15.59 (396)	6.50 (165)

SECTION E
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DATE 4/04

CRANE®

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PUMPS & SYSTEMS

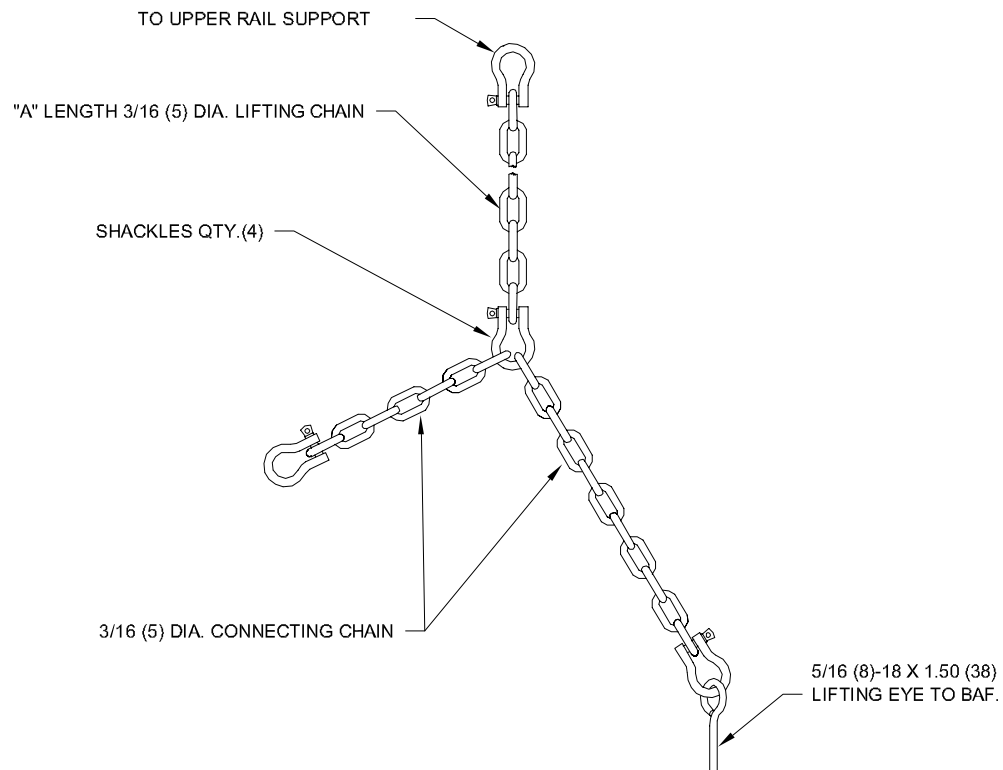
USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

inches
(mm)

Lifting Chain Assembly:

Galvanized Steel P/N: 100564

300 Series Stainless Steel P/N: 100563

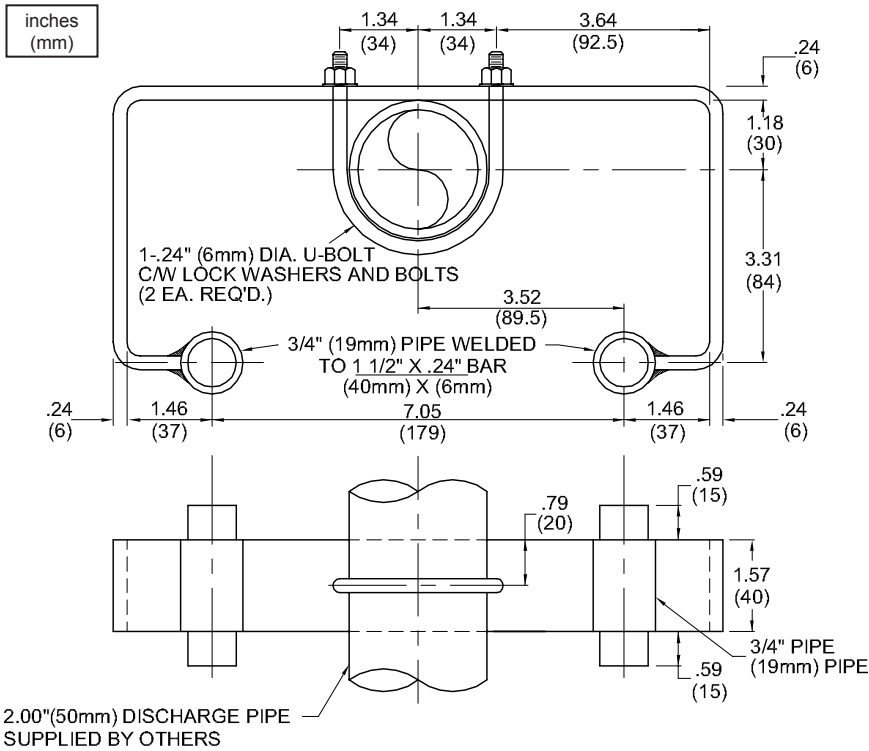


INTERMEDIATE RAIL SUPPORTS

2" & 3" Vertical Discharge Pumps
and BAFEZ Break Away Fittings

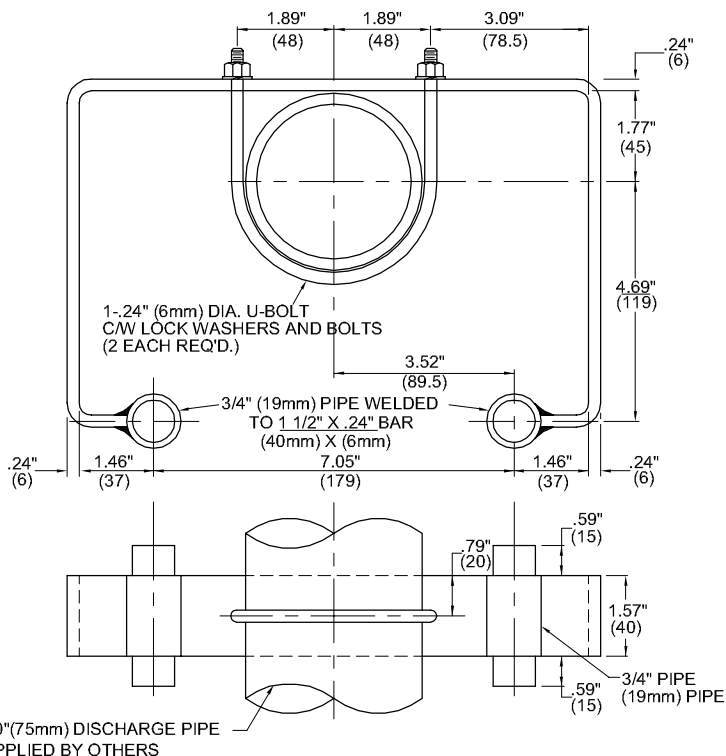
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Basins & Accessories



2" Stainless P/N: 100568

Used with:
BAFEZ's P/N's: 114030 & 114031
BAFEZCV's P/N's: 114035 & 114036



3" Stainless P/N: 100569

Used with:
BAFEZ's P/N's: 114032 & 114033

SECTION E
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DATE 4/04

CRANE

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PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Basins & Accessories

The swing check valves are used for preventing backflow of materials in waste water lines, sump pump disposal lines, sewage lift stations or ejector systems. Also used where minimum head loss or flow resistance is required, or in swimming pools, hot tubs, or spa applications.

FEATURES:

- No metallic parts, corrosion resistant.
- Full flow design.
- Angle seat and weighted flapper design for low pressure seal.
- PVC weighted and shielded flapper will retain backpressure up to 125 PSI.
- Ideal for close working areas, easy pipe alignment.
- Compression ends can be used as union connections.
- Designed for both horizontal or vertical usage.
- Pressure rated 125 PSI @ 72°F.

PART NO.	MODEL NO.	TYPE	SIZE	B	C
102163	BCV150C	Compression	1.50 (38)	8.50 (216)	3.15 (80)
102164	BCV200C	Compression	2 (51)	9.63 (245)	4.23 (107)
073271	BCV150S	Solvent Weld	1.50 (38)	5.38 (137)	3.15 (80)
102166	BCV200S	Solvent Weld	2 (51)	6.00 (152)	4.23 (107)

Dimensions may vary.

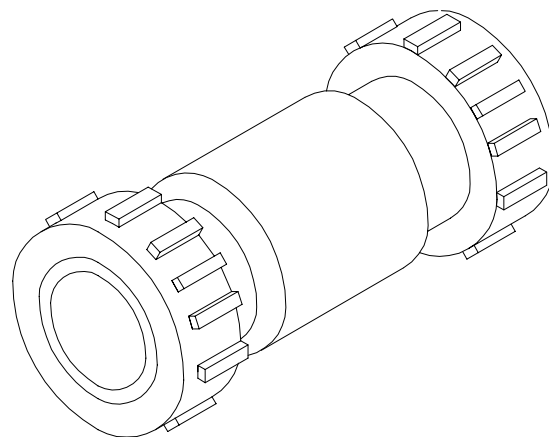


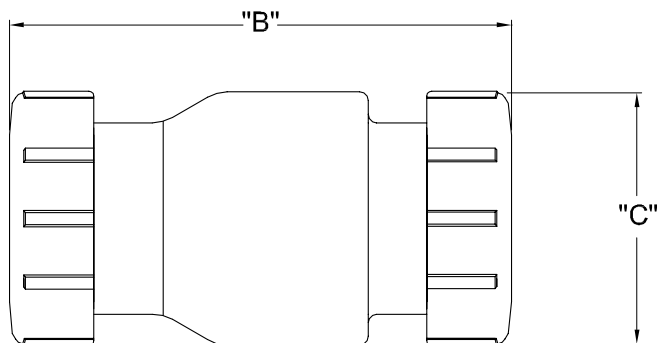
Illustration shown may NOT represent true product.

Models:

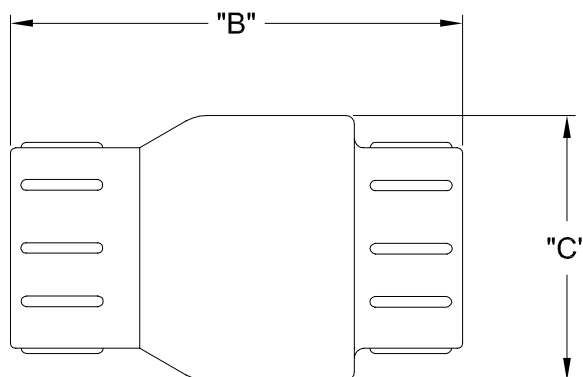
**Compression: BCV150C
BCV200C**

**Solvent Weld: BCV150S
BCV200S**

COMPRESSION



SOLVENT WELD

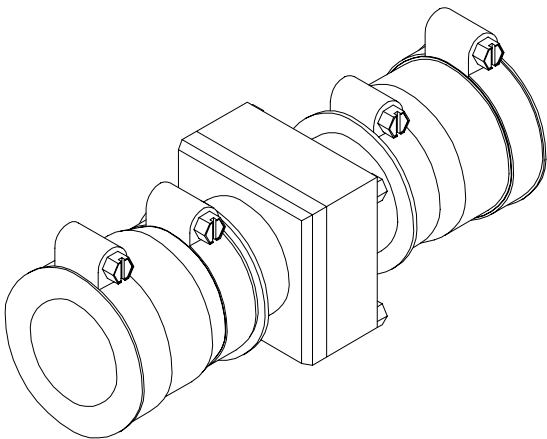


inches
(mm)

FLAPPER CHECK VALVE

1-1/4" & 1-1/2"

Basins & Accessories



P/N: 1067

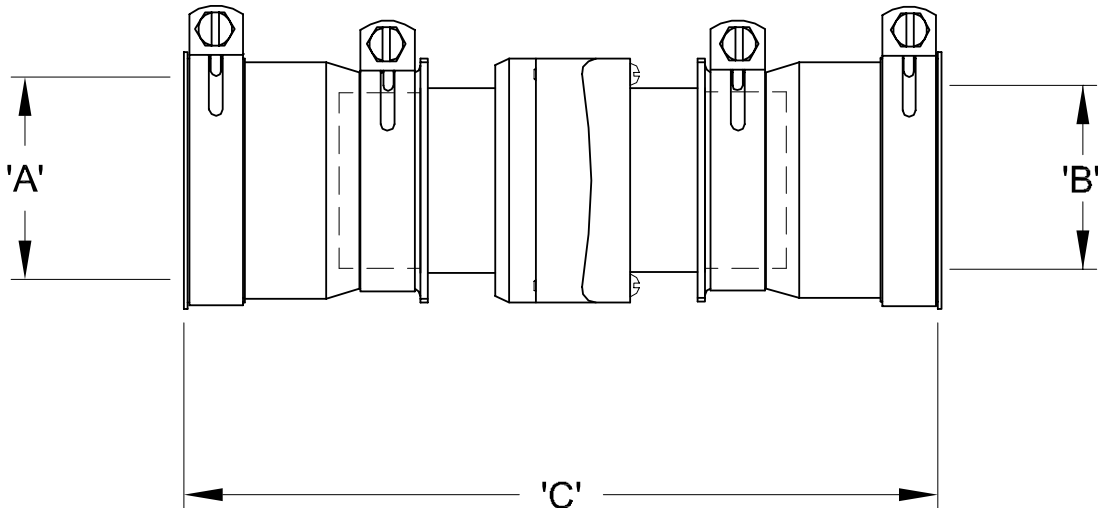
The flapper check valve is used for preventing backflow of materials in waste water lines, sump pump disposal lines, sewage lift stations or ejector systems. Also used where minimum head loss or flow resistance is required, or in swimming pools, hot tubs, or spa applications.

FEATURES:

- Full flow port design.
- Angle seat for hinge flapper to eliminate chatter.
- Strong ABS body construction.
- Solid lifetime self cleaning flapper with ball type hinge.
- Encased gasket between bodies eliminates all chances of leakage.
- 4 Stainless steel clamps.
- Adjustable Hose Fits 1-1/4" IPS, 1-1/2" copper or 1-1/2" IPS.

PART NO.	SIZE "A"	SIZE "B"	C
1067	1-1/4" & 1-1/2" (32 & 38)	1-1/4" & 1-1/2" (32 & 38)	7.30 (185)

inches
(mm)



1-1/4" & 2", Cast Iron

HOUSINGASTM Class 30 Cast Iron

BALLNatural Rubber

PLUG.....Schedule 40 PVC

TEMPERATURE80°C and a potential peak of 100°C.

PRESSURE TEST.....150 Lbs./Sq. In.(10.6 kgs/sq. meter).

P/N: 1-1/4"077881 Weight: 4.4 lbs (2kg)

P/N: 2"077882 Weight: 9.0 lbs. (4.1kg)

1-1/4", 1-1/2" & 2", PVC

HOUSINGPVC

BALLNitrile or Buna-N

PLUG.....PVC

TEMPERATURE80°C and a potential peak of 100°C.

PRESSURE TEST.....150 Lbs./Sq. In.(10.6 kgs/sq. meter).

P/N: 1-1/4"085448 Weight: 1.0 lbs. (.46kg)

P/N: 1-1/2"099727 Weight: 1.5 lbs. (.68kg)

P/N: 2"089874 Weight: 1.5 lbs. (.68kg)

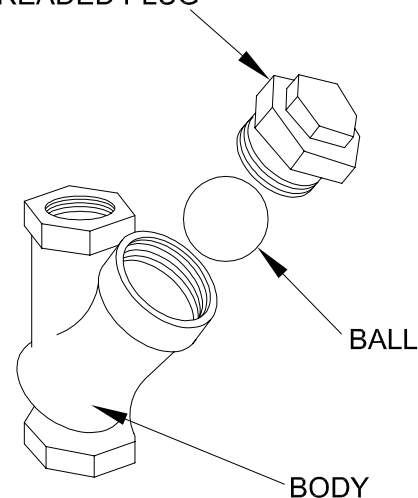
FEATURES:

- Works both vertically and horizontally (in the latter case, place the "bulge" above the axe of flow- the ball can thus return to its seat by the pull of gravity).
- Ball has sufficient weight to seat tightly and moves freely to open.
- Low headlosses as the ball is set completely to one side at a maximum rate of flow
- Works in silence.
- No maintenance.
- Easy dismantling.
- Supplied with clean out port and plug.

APPLICATIONS:

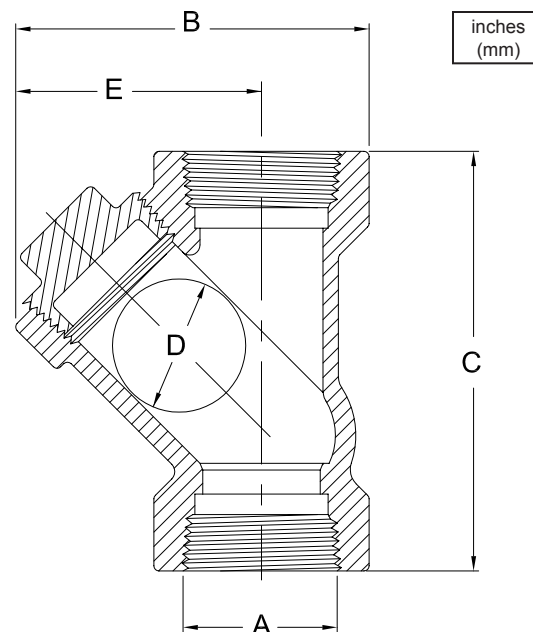
Waste water or fluids of varying viscosity, liquid manure, etc.

THREADED PLUG



Series: 1-1/4" thru 2"
Cast Iron & PVC

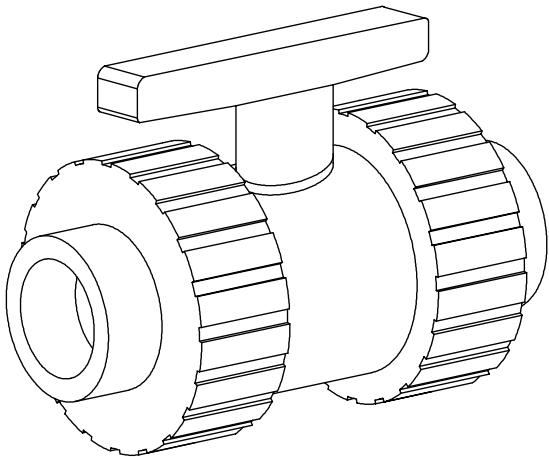
PART NO.	SIZE A	WIDTH B	LENGTH C	BALL DIA. D	E
077881	1-1/4 (32)	4.50 (114)	5.00 (127)	1.62 (41)	3.00 (76)
085448	1-1/4 (32)	4.50 (114)	5.63 (143)	1.50 (38)	3.00 (76)
099727	1-1/2 (38)	6.50 (165)	7.56 (192)	2.50 (64)	4.19 (106)
077882	2 (51)	6.00 (152)	6.87 (175)	2.50 (64)	4.25 (107)
089874	2 (51)	6.50 (165)	7.06 (179)	2.50 (64)	4.25 (107)



TRUE UNION BALL VALVES

1-1/4" & 2"

Basins & Accessories

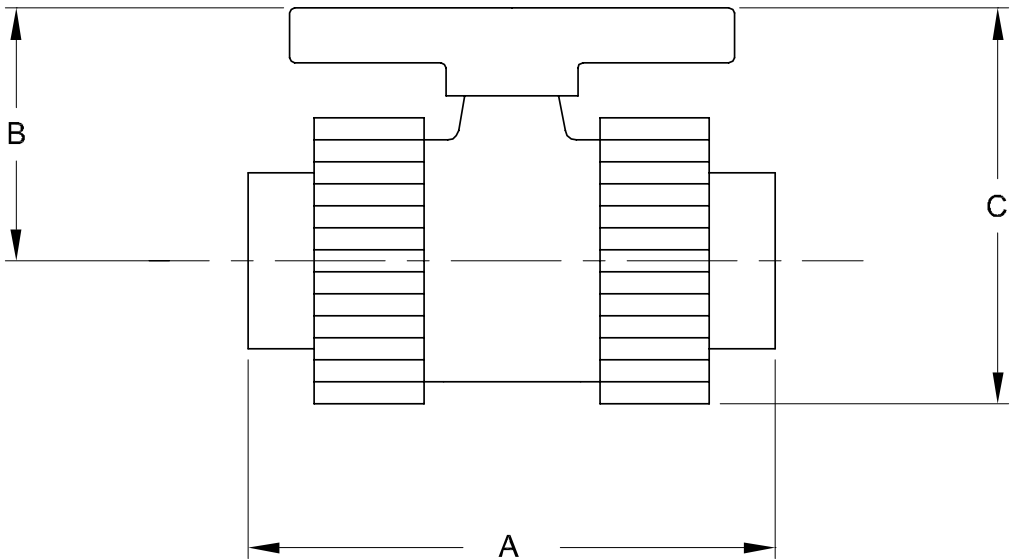


P/N'S:
1-1/4" 085115
2" 089873

The True Union Ball Valves are manufactured of Type I Schedule 80 PVC, (Cell Classification 12454-B) with EPDM O-rings for superior chemical and corrosion resistance. These valves are rated at 150 PSI, non-shock, with a maximum operating pressure at 73°F (23°C). The valves are of quick disconnect design for maintenance and can be repairable to the component level, have a full flow bore, 1/4 turn, leak tight shut-off and are listed by NSF for use in portable water service.

PART NO.	NOMINAL SIZE	A	B	C	WEIGHT LBS. (kg)
085115	1-1/4	7.00 (178)	3.03 (77)	3.97 (101)	2.0 (1)
089873	2	7.38 (188)	4.25 (108)	5.25 (133)	5.5 (2.5)

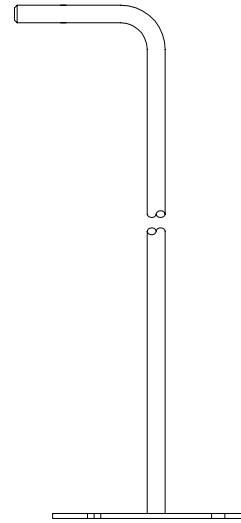
inches
(mm)



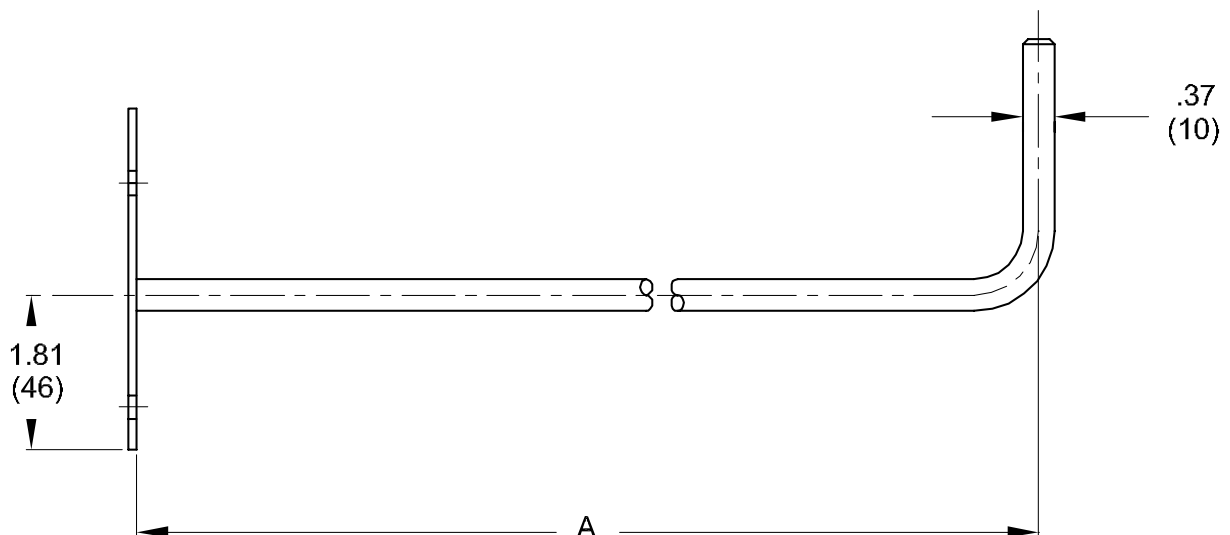
Basins & Accessories

Made From 3/8" (10mm) diameter stainless steel and can be used with 1-1/4" (32mm) and 2" (51mm) true union ball valves.

PART NO.	BASIN DEPTH	LENGTH "A"
094780	42 (1219)	12 (305)
094781	60 (1524)	24 (610)
094782	72 (1829)	26 (914)
094783	78 (1981)	42 (1067)
094784	84 (2134)	48 (1219)
094785	90 (2286)	54 (1372)
094786	96 (2438)	60 (1524)
094787	108 (2743)	72 (1829)
094788	120 (3048)	84 (2134)
097868	132 (3353)	96 (2438)
097003	144 (3658)	108 (2743)
095287	156 (3962)	120 (3048)
097327	168 (4267)	132 (3353)
098090	180 (4572)	144 (3658)
098091	192 (4877)	156 (3962)
099191	204 (5182)	168 (4267)



P/N's: 094780 thru 094788



FOOT VALVE

4 for 1
3/4" to 1-1/2"

Basins & Accessories



LENGTH.....7 Inches (178mm)
WIDTH.....1-15/16 (49mm)
WEIGHT6 oz. (170 grams) each Carton of 12, 5lbs. (2.3kg)
SIZE.....Fits four pipe sizes, 3/4 (19mm), 1 (25mm), 1-1/4 (32mm) & 1-1/2 (38mm), In 2" (51mm) or Larger Casings.
BODYAcetal Celcon
SCREEN.....Acetal Celcon
HARDWAREStainless Steel

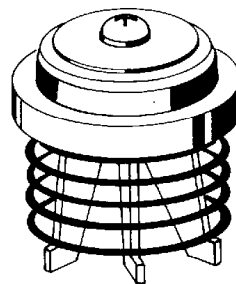
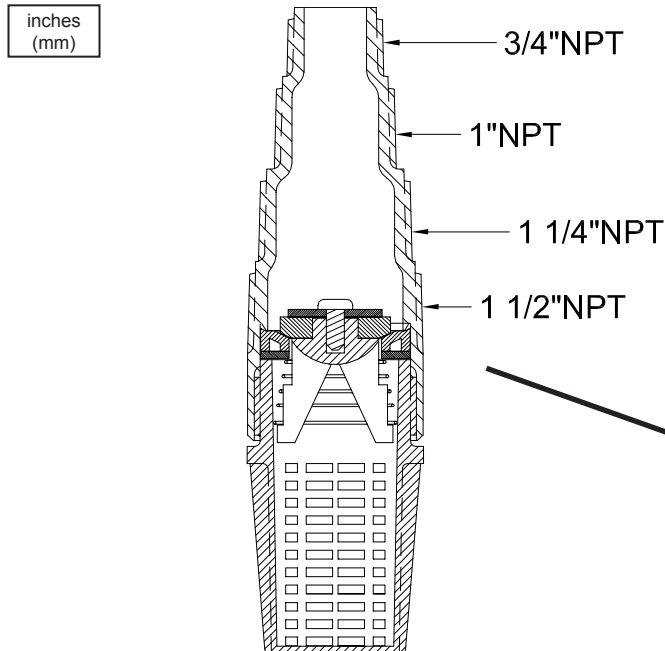
Here's the ideal foot valve, complete with all the features you'd want if you designed it yourself ! Nothing like the BARNES 4 for 1, for performance, durability, easy installation.

- Positive Sealing: Made possible by a spring-loaded valve poppet closing against a smooth tapered seat.
- Corrosion-proof: Made entirely of new molded materials and stainless steel, won't corrode regardless of water conditions.
- Strong: Withstands working pressures up to 200 psi.
- Self-Cleaning: Special design prevents sand scale from settling on the seating surface and fouling the valve.
- Full Flow: Large screen area resist clogging, assures ample water passage, eliminates suction drag.
- Tapered ribs on screen provide guide to eliminate pipe joint hange-up during installation.

EASY INSTALLATION:

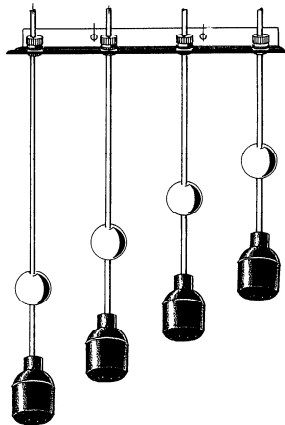
Simply remove the threaded sections which are smaller than required. Grip the 3/4" threaded section in a vise and cut off un-needed threads with a hacksaw. The self-lubricating, precision-molded threads require only a small amount of pipe dope. Yet, if too much is applied, it is squeezed outside, protecting the valve seat from fouling.

P/N: 021339



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Basins & Accessories

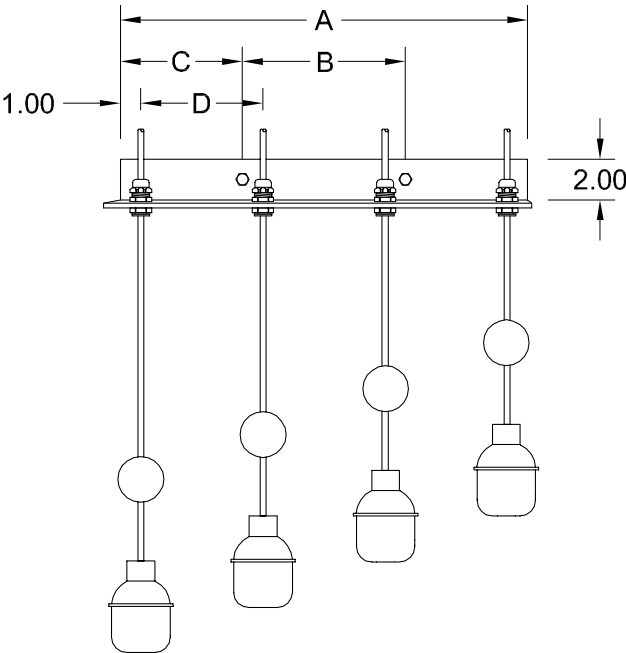


Series P/N: 059720

Cable rack to include, Cord Grips, Conduit Lock Nuts 1/2-14, and Qty. 2 Corrosion Resistant Cap Screws 5/16-18 x 1" (25mm) Long. Steel Cable rack has an Asphalt Bituminous Coating.

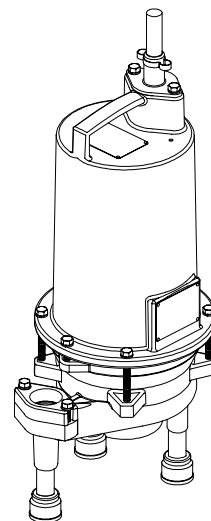
PART NO	MATERIAL	THK.	QTY FLOATS	A DIM	B DIM
059720	STEEL	.25 (6)	4	20 (508)	6 (152)
059720G	STEEL	.25 (6)	5	26 (660)	9 (229)
059720E	STAINLESS	.25 (6)	4	20 (508)	6 (152)

inches
(mm)



Submersible Grinder Pumps

DISCHARGE	1½" NPT, Female, Vertical, Bolt-On Flange
LIQUID TEMPERATURE	160°F (71°C) Intermittent
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
LEGS	Removable and Adjustable
IMPELLERS: Design	12 Vane, Vortex, With Pump Out Vanes On Back Side. Dynamically Balanced, ISO G6.3.
Material	Cast Iron ASTM A-48, Class 30
SHREDDING RING	Hardened 440C Stainless Steel, Rockwell® C-55.
CUTTER	Hardened 440C Stainless Steel, Rockwell® C-55.
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel.
SEAL: Design	Single Mechanical
Material	Silicon-Carbide/Silicon-Carbide/Buna-N
CORD ENTRY	20 ft. (6m) Cord with plug Custom Molded Quick Connect, for Sealing and Strain Relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
Load	Radial
LOWER BEARING	Single Row, Ball, Oil Lubricated
Load	Radial & Thrust
MOTOR: Design	NEMA L-Single Phase Torque Curve, Oil-Filled, Squirrel Cage Induction
Insulation	Class B
SINGLE PHASE	Capacitor Start/Capacitor Run.
LEVEL CONTROL:	
A Series	Pipe Mounted, Piggy-Back, Mechanical with 240 Plug
OPTIONAL EQUIPMENT	Impeller Trims, Cord Length

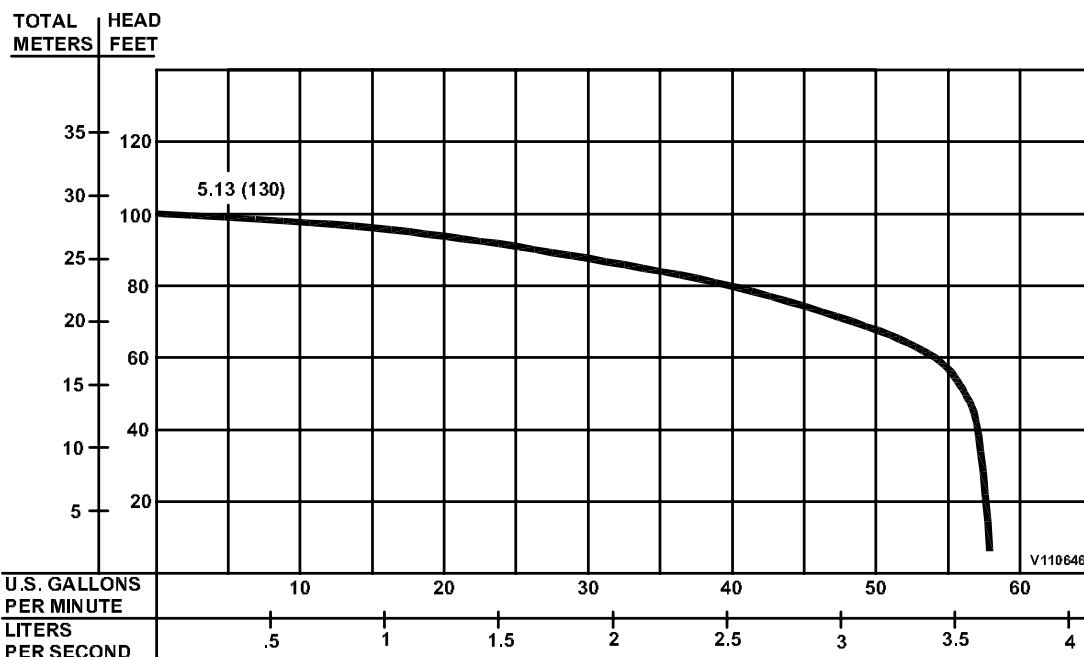


Series: PGPP, ProGrind 2HP, 3450RPM, 60Hz



DESCRIPTION:

THE GRINDER PUMP IS DESIGNED TO REDUCE DOMESTIC, COMMERCIAL, INSTITUTIONAL AND LIGHT INDUSTRIAL SEWAGE TO A FINELY GROUND SLURRY

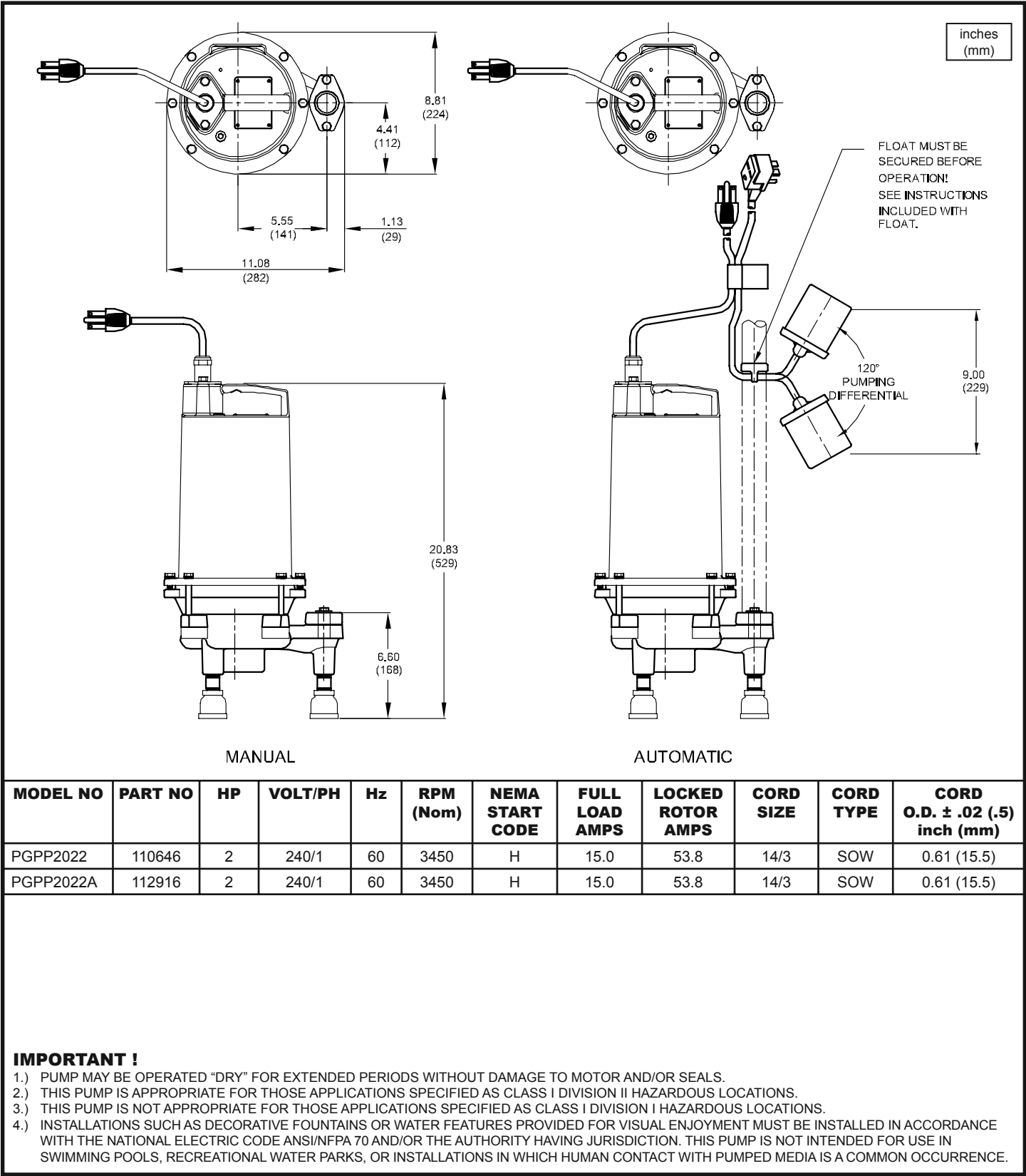


Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series PGPP

ProGrind, Vortex

Submersible Grinder Pumps



Submersible Fountain Pumps

DISCHARGE 1 3/4" (45mm) Hose Connection,
90° Rotation

LIQUID TEMPERATURE 145°F (63°C) Continuous

VOLUTE Brass ASTM A4, 85-5-5-5

INTERMEDIATE Brass ASTM A4, 85-5-5-5

HOUSING TUBE Brass, 260 Soft

HOUSING END PIECE Brass ASTM A4, 85-5-5-5

SCREEN: *Design* Area, 264 sq. in. wrap around,
5/32" Dia. mesh
Material 304 Stainless Steel

PUMP SUPPORTS Brass

DIAPHRAGM Buna-N, Pressure Equalized

IMPELLER:
Design: 1/3 & 1/2HP Four Vane Open
3/4 & 1HP Six Vane Open
Material Brass ASTM A4, 85-5-5-5

SHAFT 416 Stainless Steel

O-RINGS Buna-N

HARDWARE 300 Series Stainless Steel

SEAL Single Mechanical, Carbon/Ceramic/Buna-N

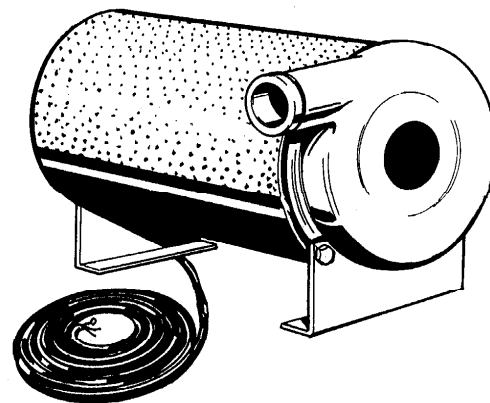
CABLE ENTRY 12 ft. (4m) Cord. Pressure grommet
for sealing and strain relief

MOTOR END BEARING Single Row, Ball, Oil Lubricated

PUMP END BEARING Sleeve, Oil Lubricated

MOTOR: *Design* NEMA L, Oil Filled, Squirrel Cage Induction
Insulation Class A

SINGLE PHASE Permanent Split Capacitor (PSC)
Includes Overload Protection in Motor



Series: SFU

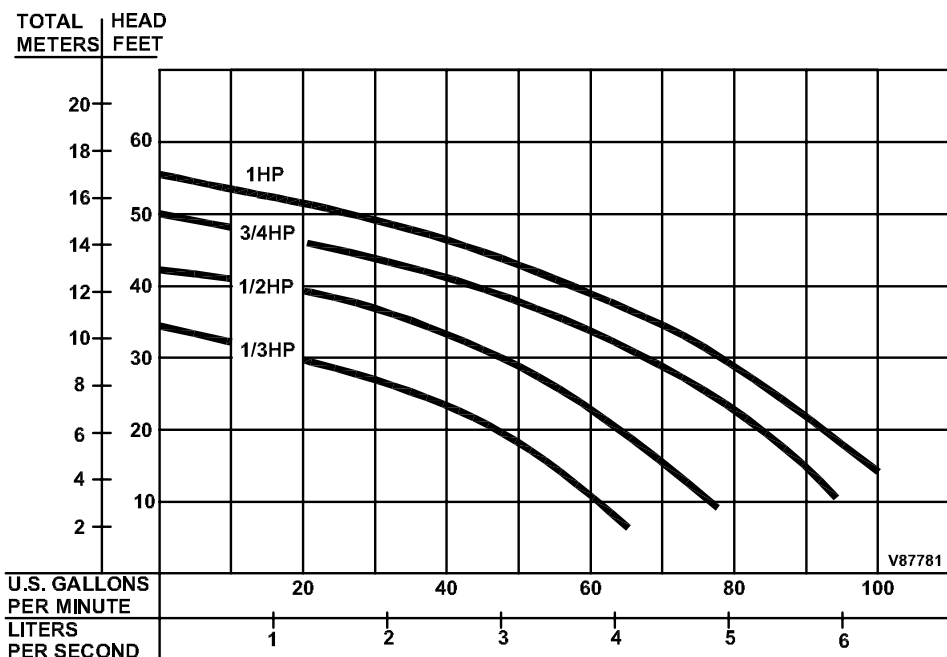
1/3 - 1HP, 3450RPM, 60Hz



Underwriters Laboratories Inc.
File No. E142177

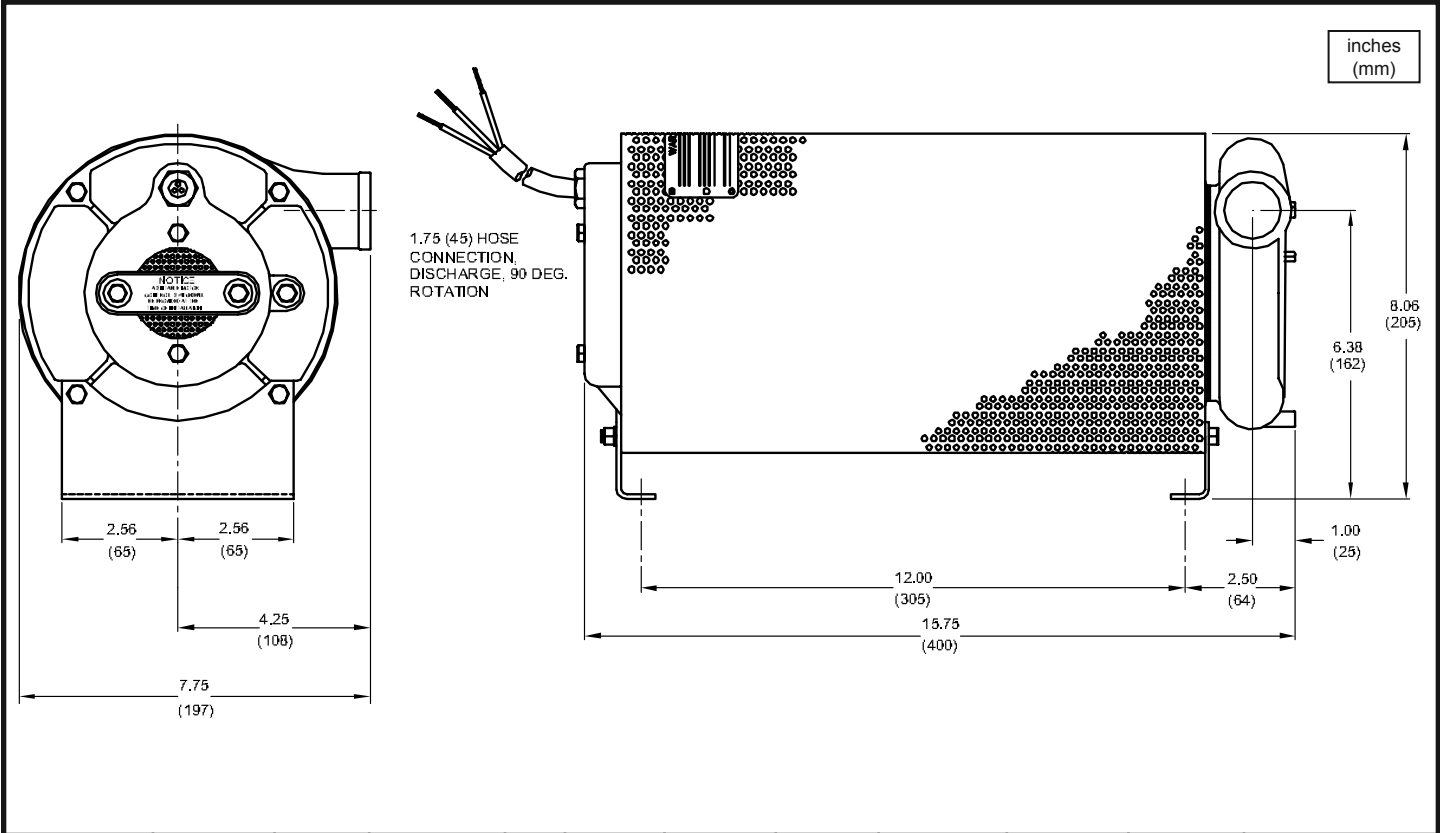
DESCRIPTION:

THESE PUMP ARE SPECIALLY DESIGNED FOR USE IN
DRAMATIC, DECORATIVE WATER DISPLAYS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Submersible Fountain Pumps



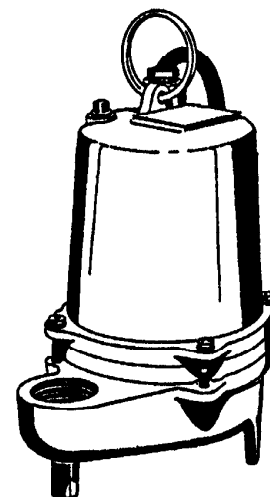
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
SFU31	087781	1/3	115/1	60	3450	J	8.0	21.0	16/3	SOW	0.395 (10)
SFU51	087782	1/2	115/1	60	3450	E	9.5	21.0	16/3	SOW	0.395 (10)
SFU71	087783	3/4	115/1	60	3450	D	12.0	28.0	16/3	SOW	0.395 (10)
SFU72	087784	3/4	230/1	60	3450	D	6.0	14.0	16/3	SOW	0.395 (10)
SFU102	087785	1	230/1	60	3450	E	7.0	21.0	16/3	SOW	0.395 (10)

IMPORTANT !

- 1.) THESE PUMPS ARE UL LISTED FOR PUMPING WATER. **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.**
- 2.) SPECIAL SUCTION CHAMBER KEEPS MOTOR 2/3 SUBMERGED AT ALL TIMES FOR COOL OPERATION.
- 3.) MODIFICATIONS MAY AFFECT "UL" LISTING.
- 4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Fountain Pumps

DISCHARGE 2" NPT, Female, Vertical
LIQUID TEMPERATURE 77°F (25°C) Continuous
VOLUTE Cast Iron ASTM A-48, Class 30
MOTOR HOUSING Cast Iron ASTM A-48, Class 30
SEAL PLATE Cast Iron ASTM A-48, Class 30
IMPELLER: *Design* 2 Vane open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
 Material: Cast Iron ASTM A-48, Class 30
SHAFT 416 Stainless Steel
SQUARE RINGS Buna-N
HARDWARE 300 Series Stainless Steel
PAINT Air Dry Enamel
SEAL: *Design* Single Mechanical, Oil Filled reservoir
 Secondary Exclusion Seal
 Material Carbon/Ceramic/Buna-N
 Hardware -300 Series Stainless
CORD ENTRY 15 ft. (5m) Quick Disconnect Cord with plug
 On 115 Volt, Pressure Grommet for sealing and strain relief
UPPER BEARING Single Row, Ball, Oil Lubricated
LOWER BEARING Single Row, Ball, Oil Lubricated
MOTOR: *Design* NEMA L Torque curve, Oil Filled, Squirrel cage Induction
 Insulation Class B
SINGLE PHASE Permanent Split Capacitor (PSC).
 Includes thermal overload protection in motor
OPTIONAL EQUIPMENT Seal Material, Additional cord and Cast Iron Impeller



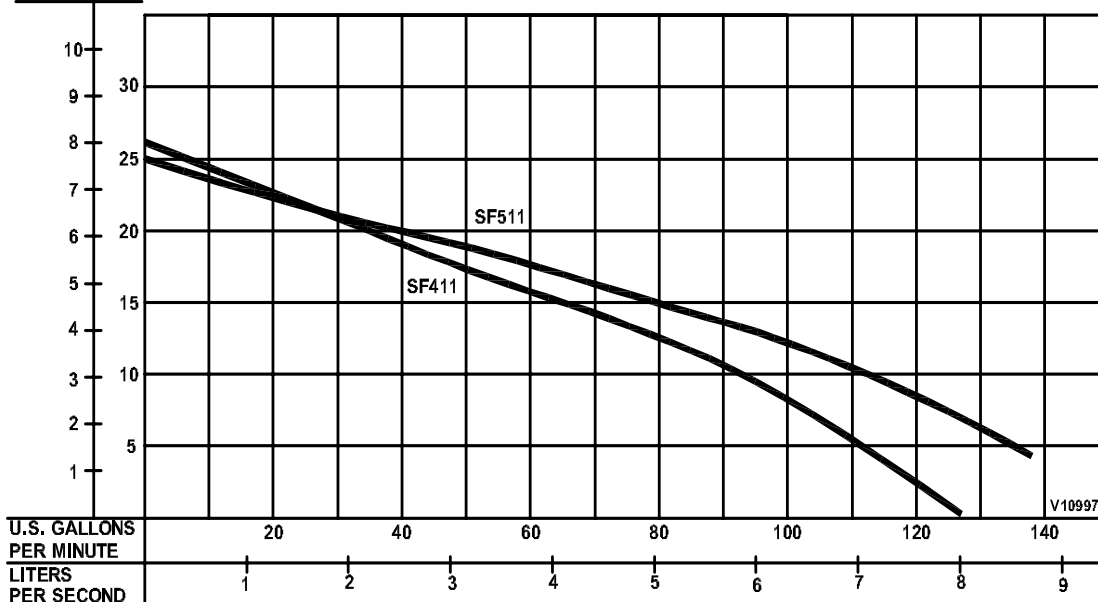
Series: SF
.4HP, 1750RPM, 60Hz
.5HP, 1750RPM, 60Hz



DESCRIPTION:

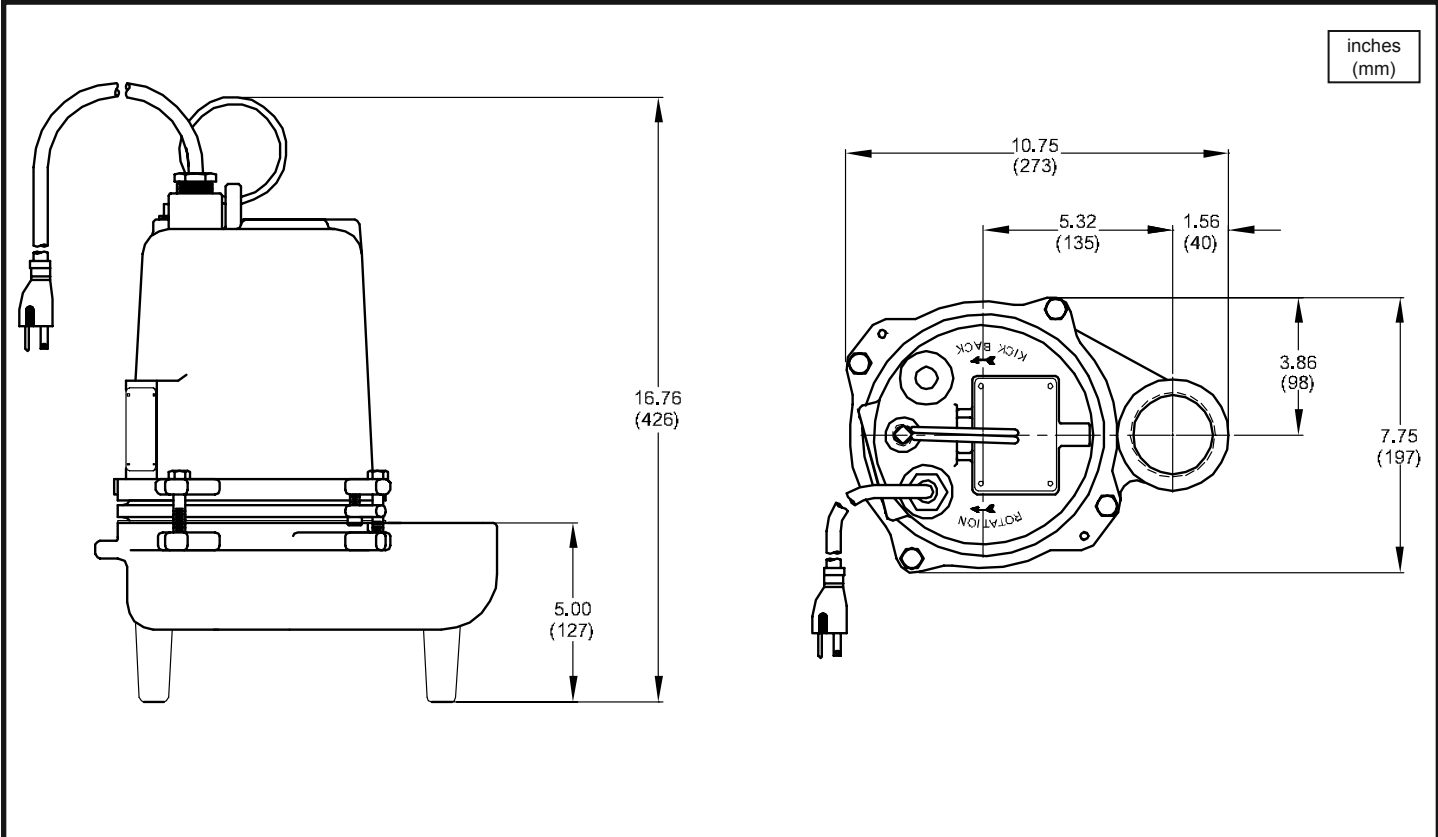
THESE PUMP ARE SPECIALLY DESIGNED FOR USE IN
DRAMATIC, DECORATIVE WATER DISPLAYS

TOTAL HEAD
METERS FEET



Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Submersible Fountain Pumps



MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D inch (mm)
SF411	109972	0.4	115/1	60	1750	C	12.0	19.0	14/3	SJTOW	0.375 (9.5)
SF511	109973	0.5	115/1	60	1750	A	12.0	26.0	14/3	SJTOW	0.375 (9.5)

IMPORTANT !

- 1.) DO NOT USE TO PUMP FLAMMABLE LIQUIDS.
- 2.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Fountain Pumps

DISCHARGE:

SF Series2" NPT, Female, Vertical, Bolt-on Flange
3SF Series3" NPT, Female, Vertical, Bolt-on Flange

LIQUID TEMPERATURE 104°F (40°C) Continuous

VOLUTE Cast Iron ASTM A-48, Class 30

MOTOR HOUSING Cast Iron ASTM A-48, Class 30

SEAL PLATE Cast Iron ASTM A-48, Class 30

IMPELLER: Design 2 Vane open, with pump out vanes on back side. Dynamically balanced, ISO G6.3

Material Cast Iron ASTM A-48, Class 30

SHAFT 416 Stainless Steel

SQUARE RINGS Buna-N

HARDWARE 300 Series Stainless Steel

PAINT Air Dry Enamel

SEAL: Design Single Mechanical

Material Silicon/Silicon/Buna-N
Hardware -300 Series Stainless

CORD ENTRY 15 ft. (5m) Cord with plug on 120 Volt Quick Connect, Custom Molded for sealing and strain relief

UPPER BEARING Single Row, Ball, Oil Lubricated

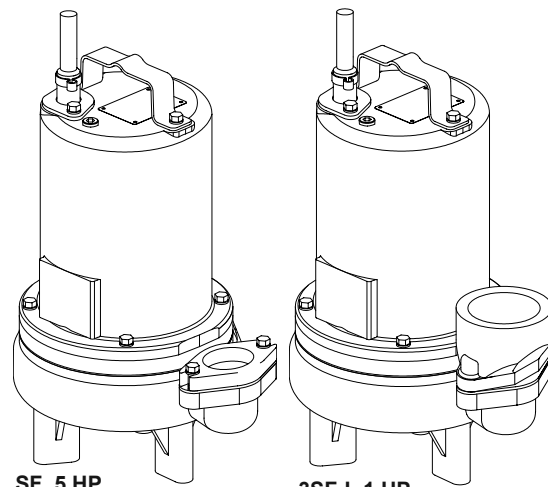
LOWER BEARING Single Row, Ball, Oil Lubricated

MOTOR: Design NEMA L Torque curve, Oil Filled, Squirrel cage Induction

Insulation Class B

SINGLE PHASE Permanent Split Capacitor (PSC). Includes thermal overload protection in motor

OPTIONAL EQUIPMENT Seal Material, Additional cord and Impeller trims



SF .5 HP

3SF-L 1 HP

Series:

SF - .5HP, 1750RPM, 60Hz

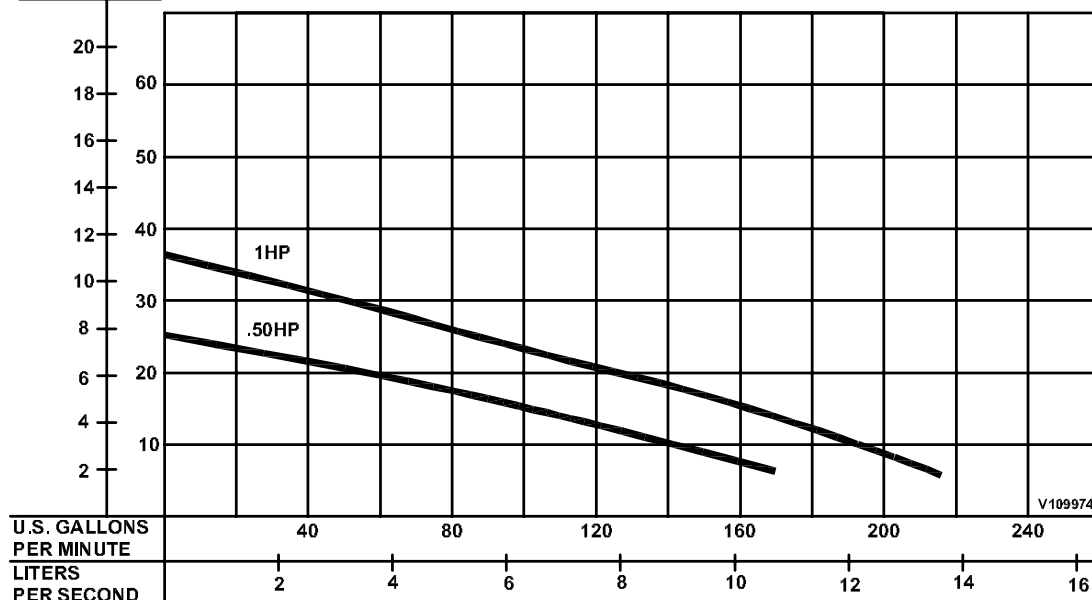
3SF-L - 1HP, 1750RPM, 60Hz



DESCRIPTION:

THESE PUMP ARE SPECIALLY DESIGNED FOR USE IN DRAMATIC, DECORATIVE WATER DISPLAYS

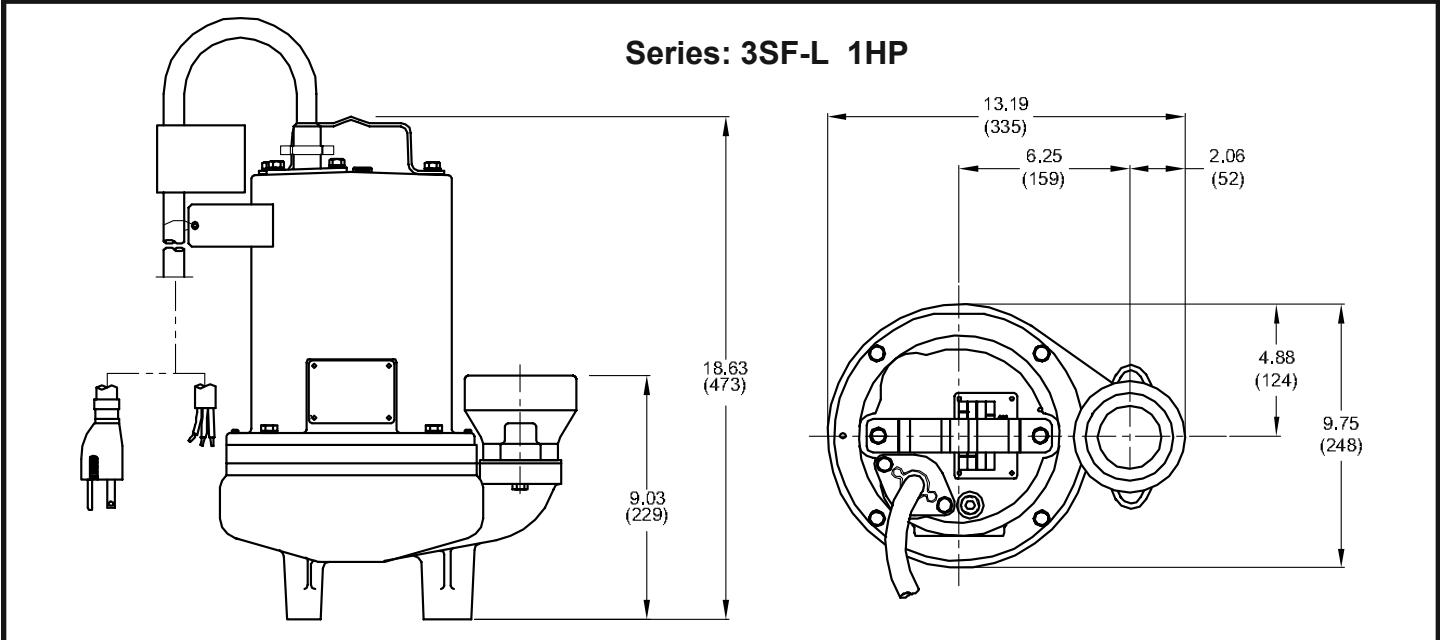
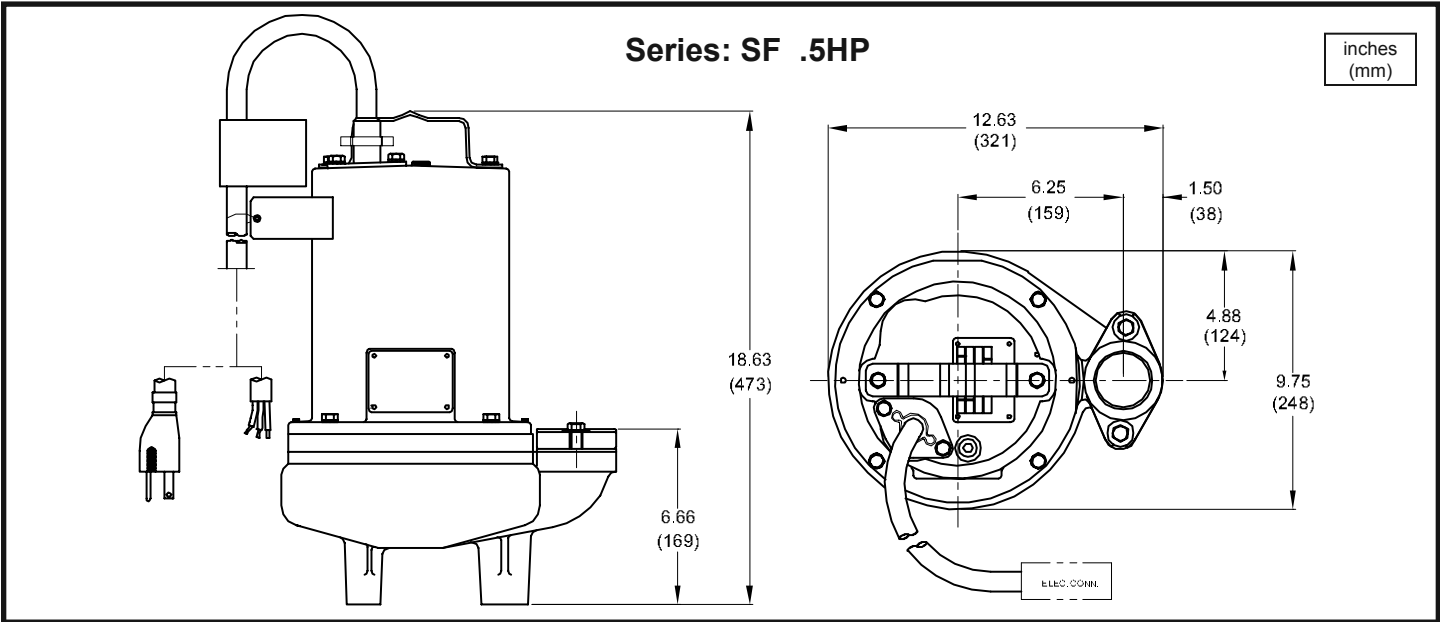
TOTAL HEAD
METERS FEET



V109974

Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Submersible Fountain Pumps



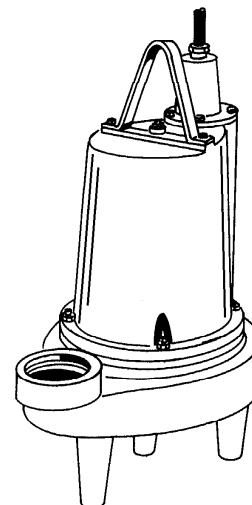
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
SF51	109974	0.5	120/1	60	1750	F	11.6	21.3	14/3	SJTOW	0.375 (9.5)
3SF1074L	109975	1.0	200-240/1	60	1750	D/G	8.8/8.3	21.5/25.8	14/3	SOW	0.530 (13.5)

IMPORTANT !

- 1.) **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.**
- 2.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Fountain Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	2 Vane open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: <i>Design</i>	Single Mechanical
<i>Material</i>	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	25 ft. (7.6m) Cord Pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: <i>Design</i>	NEMA L Torque curve, Oil Filled, Squirrel cage Induction
<i>Insulation</i>	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
OPTIONAL EQUIPMENT	Seal Material, Additional cord and Impeller trims

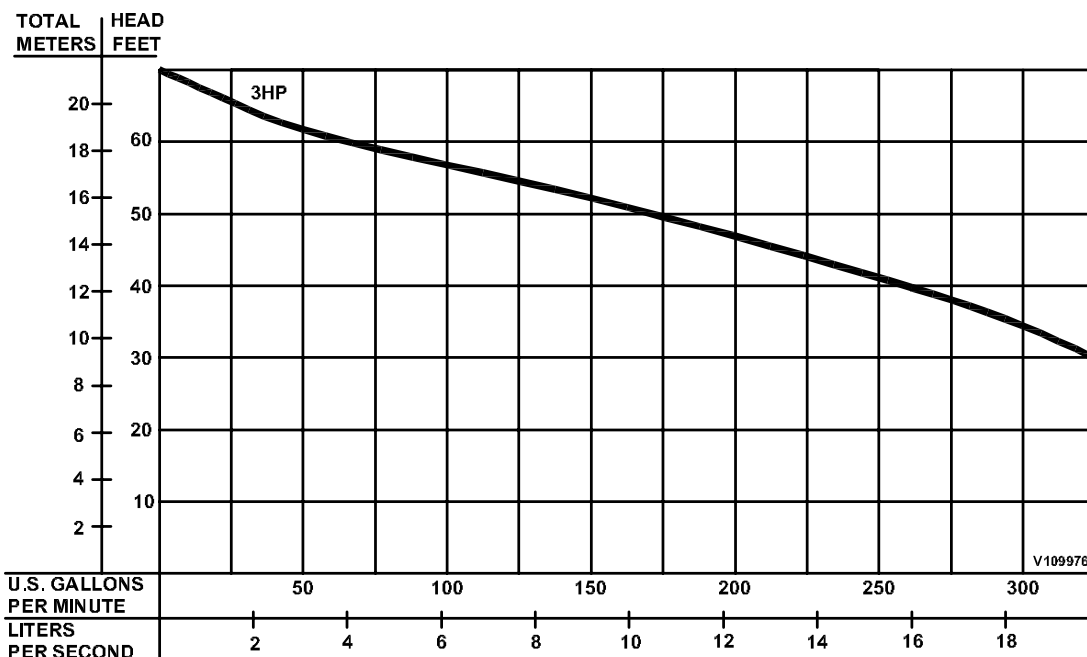


Series: 3SF-L
3.0HP, 1750RPM, 60Hz



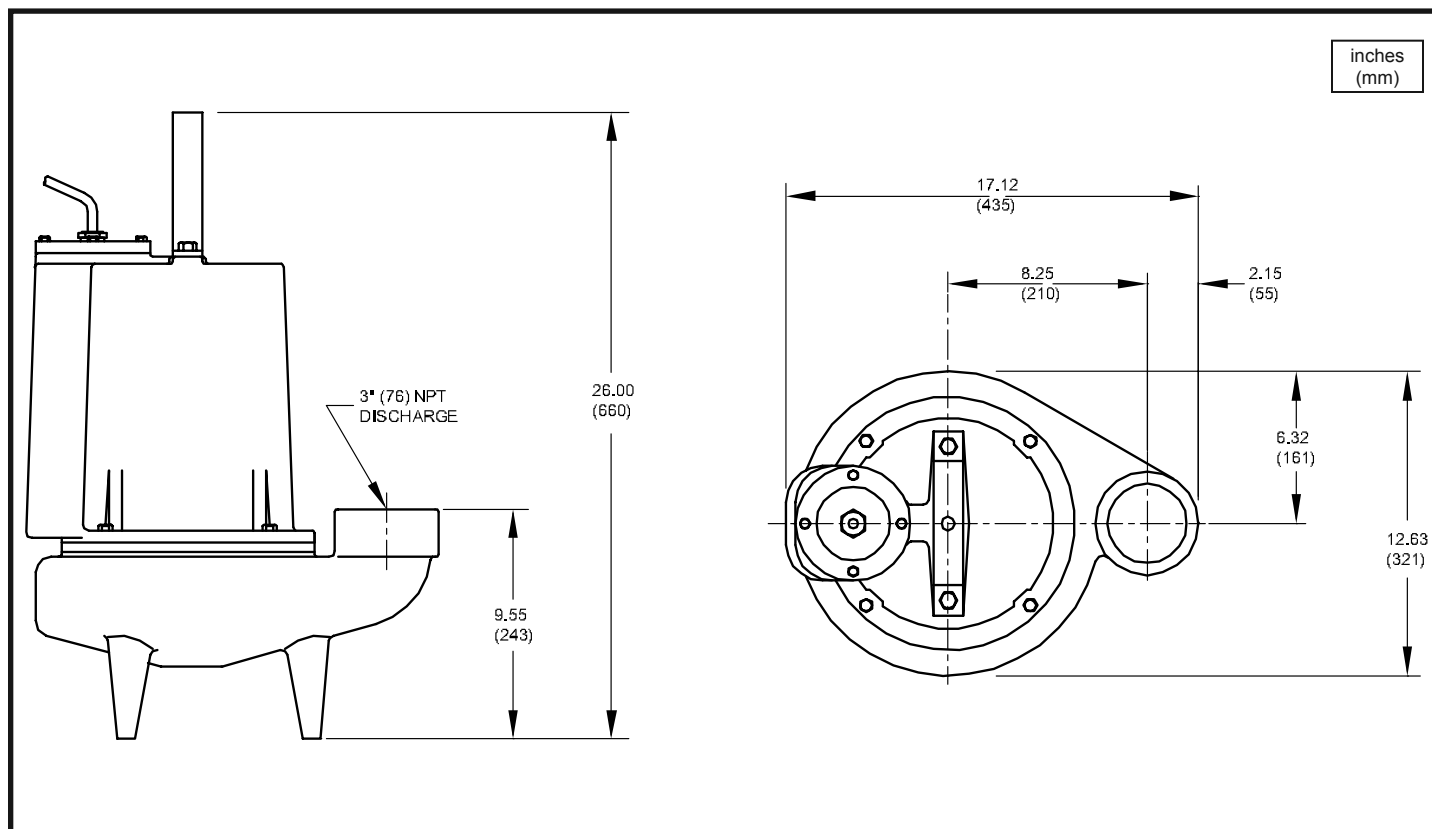
DESCRIPTION:

THESE PUMP ARE SPECIALLY DESIGNED FOR USE IN
DRAMATIC, DECORATIVE WATER DISPLAYS



Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Submersible Fountain Pumps



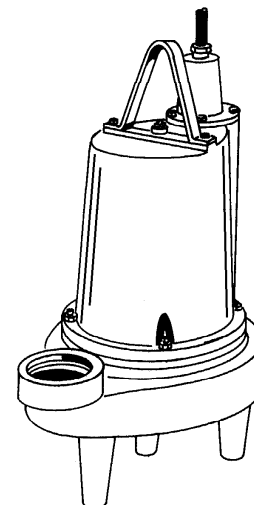
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
3SF3024L	109977	3.0	230/1	60	1750	A	28.0	59.0	10/3	SO	0.690 (17.5)

IMPORTANT !

- 1.) **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.**
- 2.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Submersible Fountain Pumps

DISCHARGE	3" NPT, Female, Vertical
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: Design	2 Vane open, with pump out vanes on back side. Dynamically balanced, ISO G6.3
Material	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Air Dry Enamel
SEAL: Design	Inboard Single Mechanical, Oil Filled reservoir
Material	Carbon/Ceramic/Buna-N
	Hardware -300 Series Stainless
CORD ENTRY	25 ft. (7.6m) Cord Pressure Grommet for sealing and strain relief
UPPER BEARING	Single Row, Ball, Oil Lubricated
LOWER BEARING	Single Row, Ball, Oil Lubricated
MOTOR: Design	NEMA L Torque curve, Oil Filled, Squirrel cage Induction
Insulation	Class B
SINGLE PHASE	Permanent Split Capacitor (PSC). Includes thermal overload protection in motor
OPTIONAL EQUIPMENT	Seal Material, Additional cord and Impeller trims

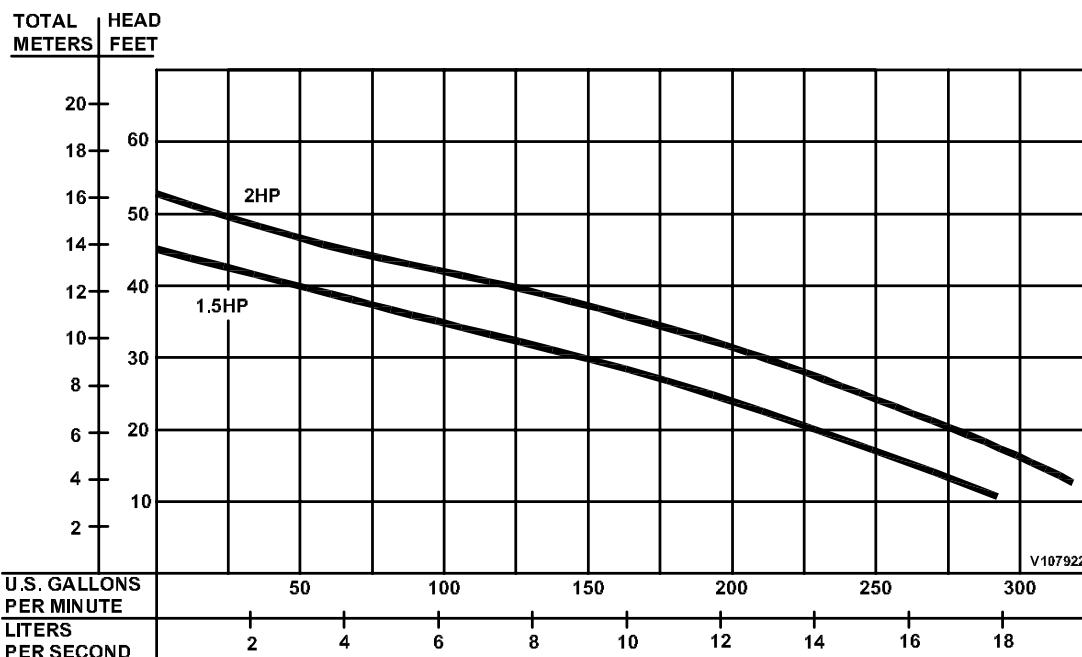


Series: 3SF-HD (Heavy Duty)
1.5 & 2HP, 1750RPM, 60Hz



DESCRIPTION:

THESE PUMP ARE SPECIALLY DESIGNED FOR USE IN
DRAMATIC, DECORATIVE WATER DISPLAYS

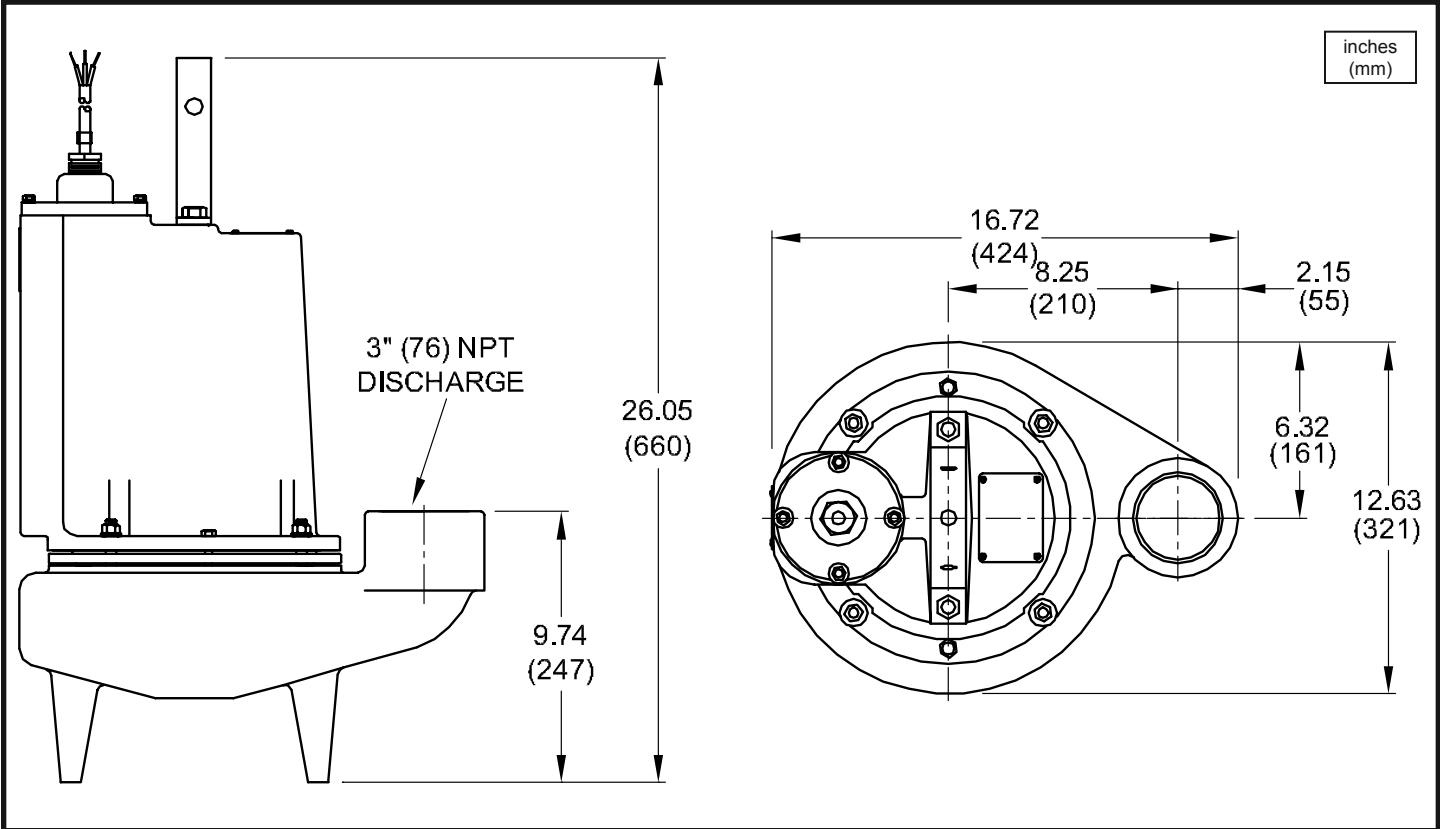


Testing is performed with
water specific gravity of 1.0
@ 68°F (20°C), other fluids
may vary performance

Series 3SF-HD

Heavy Duty

Submersible Fountain Pumps



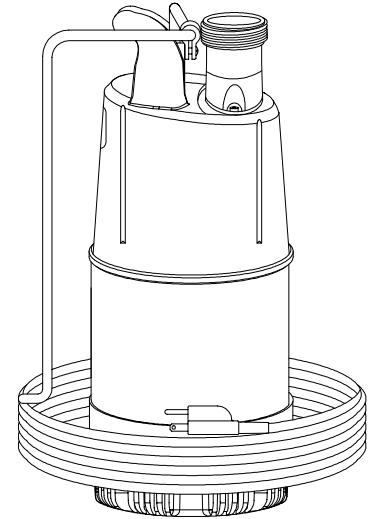
MODEL NO	PART NO	HP	VOLT/PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. inch (mm)
3SF1524HD	110952	1.5	230/1	60	1750	B	12.6	23.0	10/3	SO	0.690 (17.5)
3SF2024HD	110953	2.0	230/1	60	1750	B	14.5	29.0	10/3	SO	0.690 (17.5)

IMPORTANT !

- 1.) **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.**
2.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Portable Submersible Pumps

DISCHARGE	2" NPT, Male, Vertical	
MOTOR SHELL	Stainless Steel	
VOLUTE	Non-Metallic	
IMPELLER	Non-Metallic	
SHAFT	420 Stainless Steel	
HARDWARE	300 Series Stainless Steel	
SEAL: <i>Design</i>	Double Mechanical, Oil Filled Reservoir	
<i>Material:</i> <i>Rotating Face</i>	Silicon/Carbide, Pump End	
	Carbon, Motor End	
	<i>Stationary Face</i> Silicon/Carbide	
	<i>Elastomer</i>	Buna-N
	<i>Hardware</i>	300 Series Stainless
CORD ENTRY	50 ft. (15m) Cord with plug on 120 Volt Models. Molded for strain relief and compression seal	
MOTOR: <i>Design</i>	NEMA Design L - Single Phase. Completely Air-Filled, Squirrel Cage Induction	
SINGLE PHASE	Capacitor Start and Run. Includes Overload Protection in Motor	
STRAINER25" (6mm) Openings, Non-Metallic, Rubberized	
LIFTING HANDLE	Non-Metallic	
LIFTING ROPE	3/8" (9.7mm) Polypropylene, 25 ft. (7.6m)	

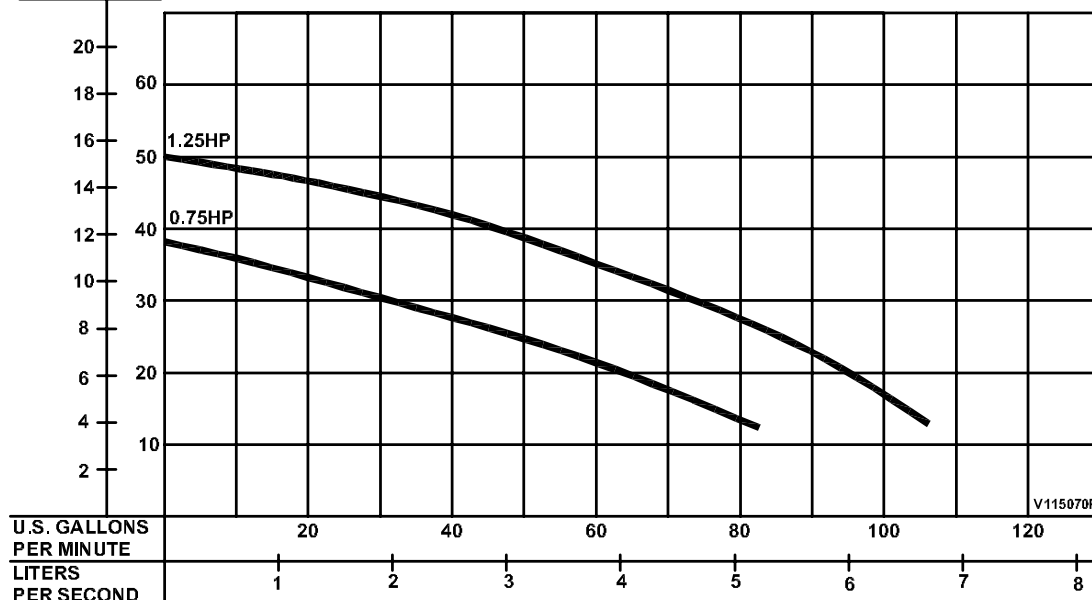


Series: 70, 71, 125, 126 .7 & 1.25HP, 3450RPM, 60Hz

DESCRIPTION:

The pumps are compact, lightweight units and highly portable. Designed specifically for use by contractors and utility service personnel. These pumps can operate in up to 104°F (40°C) temperature water. Before pumping fluids other than water consult the factory, giving fluid, fluid temperature, specific gravity, viscosity, capacity in USGPM and total head and/or pressure requirements, including friction loss through discharge line, fittings, valves, etc.

TOTAL HEAD
METERS FEET



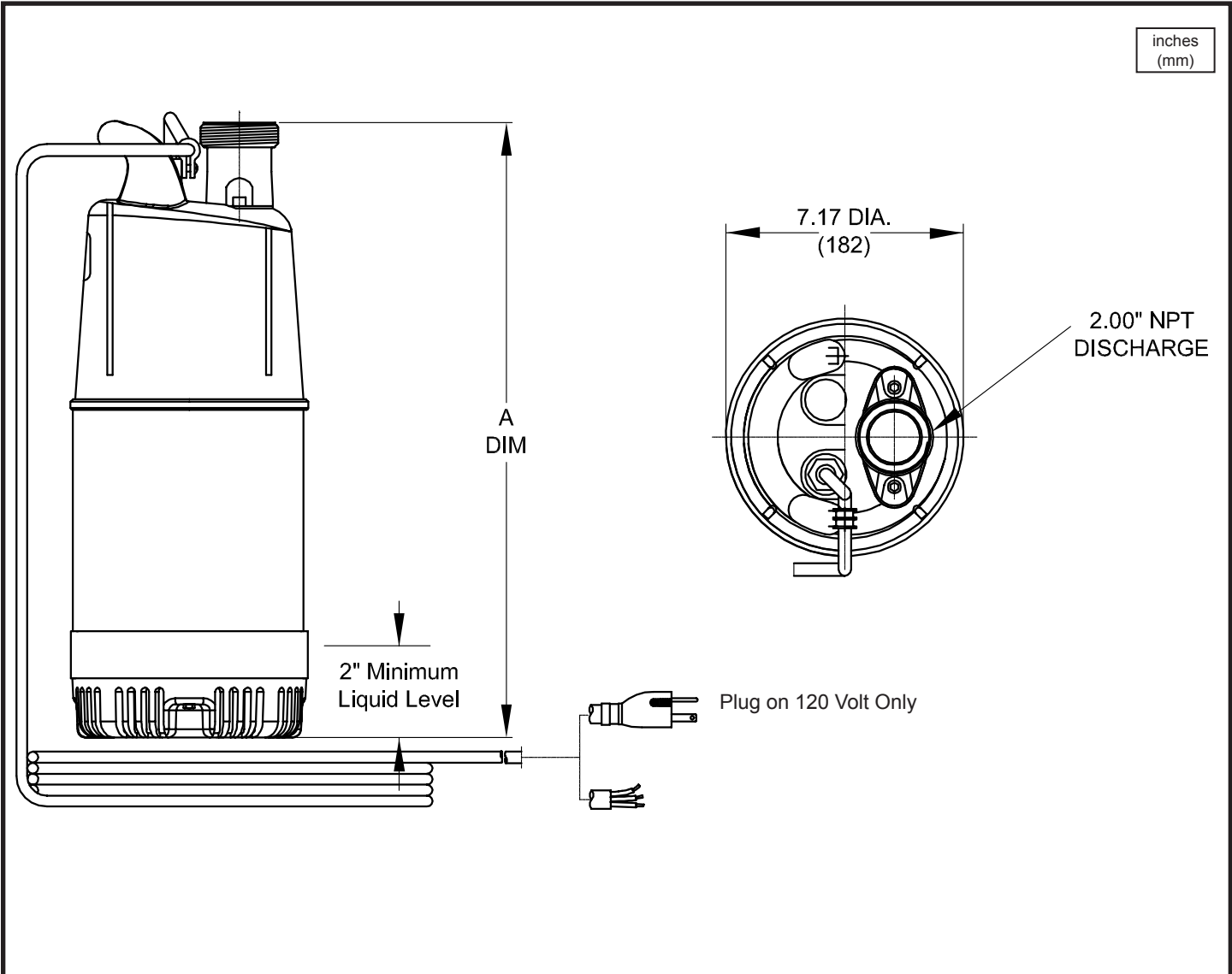
CSA
C US
CSA 108
UL 778
LR16567

Testing is performed with water specific gravity of 1.0 @ 68°F (20°C), other fluids may vary performance

Series 70, 71, 125, 126

2" NPT Male Discharge

Portable Submersible Pumps



MODEL NO	PART NO	A DIM inch (mm)	HP	VOLT/PH	Hz	RPM (Nom)	FULL LOAD AMPS	PUMP WEIGHT
70	115070	17.76 (451)	0.7	120/1	60	3450	8.0	30 lbs (13.6kg)
71	115071	17.76 (451)	0.7	240/1	60	3450	4.0	30 lbs (13.6kg)
125	115125	18.54 (471)	1.25	120/1	60	3450	15.0	35 lbs (15.9kg)
126	115126	18.54 (471)	1.25	240/1	60	3450	7.6	35 lbs (15.9kg)

Pump rated for operation at ± 10% voltage at motor.

IMPORTANT !

- 1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.

2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.

3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.

4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.