

HALIFAX AREA WATER AND SEWER AUTHORITY

PO Box 443, Halifax, PA 17032

Phone: 717-896-3886 Fax: 717-896-3780

GENERAL MAINTENANCE & USE RECOMMENDATIONS FOR MUNICIPAL GRINDER PUMP SEWER SYSTEMS

A grinder pump system generally processes and pumps household sewage to the public sewer system and is used when connecting to a low-pressure sewer main or in the event that the existing homeowner sewer system and/or existing topography does not allow a gravity lateral connection to a gravity sewer main.

These systems are effective and reliable but, like any piece of equipment, following certain rules and maintenance guidelines can prolong the life of the system and prevent possible damage to your property.

DO

- DO notify the Authority as soon as possible in the event of the grinder pump alarm sounding. If the alarm is sustained, restrict water usage as a back up into the home may occur.
- DO minimize water usage. Reducing the volume of water going into the system reduces pump run-time, extending the working life and reducing power consumption.
- DO call PA One Call (811 OR 1-800-242-1776) prior to any digging on the property to prevent the unintentional damage of sewer or power lines to/from the grinder pump system.
- DO check with a qualified electrician for proper use if you choose to use a generator during a power outage. Any costs resulting from damage to the equipment caused by the generator may be charged to the homeowner.
- DO reduce/discontinue water use during a power outage. Even if water service is available the grinder pump will not operate and may cause a back-up into the home.

DO NOT

- DO NOT connect stormwater runoff drains into the wastewater system. An increased load may result in the early failure of the system and may cause a back-up into the home.
- DO NOT bury the grinder pump basin lid or obstruct with plants or other structures. Easy access must be maintained to allow a fast and effective response in the event of a failure or emergency.
- DO NOT flush flammables, toxics, cloths, cigarettes, sanitary napkins (even those labeled "flushable"), tampons and applicators, or other solids. This can lead to early failure of the system and may cause a back-up into the home.
- DO NOT flush or drain grease into the system. Grease can clog sewer lines and pumps and cause a back-up into the home.

PENNVEST Homeowner Septic Loan Program

Background

The Pennsylvania Infrastructure Investment Authority (PENNVEST) has teamed with the Pennsylvania Housing Finance Agency (PHFA) and the Pennsylvania Department of Environmental Protection (DEP) to offer this special funding program. Loans are available to eligible homeowners who need to

- Repair or replace their existing lateral to a public sewer system
- Connect an existing home to the public sewer system for the first time.
- Repair or replace their individual on-lot septic system.

Loan Terms

- Fixed interest rate for life of loan, currently as low as 1.75 percent
- Up to 20 years to repay the loan balance (up to 15 years for manufactured homes)
- Maximum loan amount is \$25,000
- Affordable payments: A \$15,000 loan at 1.75 percent (2.55 percent APR) for 20 years, would have a monthly payment of only \$75. At the maximum loan amount of \$25,000 at 1.75 percent (2.22 percent APR) for 20 years, the monthly payment is \$124. ¹
- No household income limits.

¹ Subject to credit approval and eligibility restrictions including loan use and owner occupancy. Interest rate quoted as of 1/1/2020. The APR is fixed for the term of the loan. Borrower pays origination and closing charges. Sample payments based on \$15,000 and \$25,000 loan examples have twenty year term and 240 payments. Total finance charge for a \$15,000 loans is \$3,869 and for a \$25,000 loan is \$5,727.

General Requirements²

- Applicants must reside in the home that needs the sewer or septic work. They may not borrow to pay for work at a rental property, business or a family member's home.
- Applicants must own at least 50% of the property.
 - This requirement addresses the number of people who are owners of the home that needs sewage management work. For example, a husband and wife both on the home's deed are typically each considered 50% owners of their home. If three sisters are on the deed, then they each own a third. One sister would need to sell her ownership interest to her other siblings so that they could apply.

- The home itself and the septic system and sewer lateral may not be located in an A or V flood zone, even if the homeowner has NFIP (government) flood insurance. If any part of the property (i.e., the yard) or an outbuilding or deck is in one of these zones the homeowner must maintain NFIP flood insurance for the term of the loan.
- Applicants' debt to income ratios may not exceed 45%, typically, and 47% with strong compensating factors as identified by PHFA. While there is no minimum credit score, applicants' credit payment history is reviewed.
- Loans must be in first or second lien position for the borrower to be considered for financing up to \$25,000. Third lien position loans are up to \$7,500. No 4th or lower lien positions will be considered.
 - Some homeowners, otherwise qualifying for a loan up to \$25,000, will need to pay off and close their home equity loans or lines of credit to be eligible for the Pennvest Homeowner Septic Loan in the amount they need.
- These loans are secured financing, and are "sized" around your preferred contractor's estimate. Making loan application while reaching out to contractors for work proposals and costs is recommended.
- A lien will be placed against the applicants' property.
- Loans may take 45 days or more to originate and close. Borrowers who are very responsive to lender information requests may be able to reduce this timeframe to 30 days and those needing more time may need more than 60 days. Applicants are responsible for ensuring that they meet sewer authority or sewage enforcement officer deadlines.

² This is not a complete list of requirements, just those that generally concern most applicants. Please call PHFA for clarifications to these requirements or to discuss your particular situation, if needed.

For more information

Contact PHFA at 1-855-827-3466 or septic@phfa.org for loan-related questions. You may also read more about the program at PHFA's website www.phfa.org, under the "Homeowners" "Start Here" resources. To understand the requirements of your community, please contact your local Sewage Enforcement Officer, township or borough official.

Single Family Housing Repair Loans and Grants

What does this program do?

Also known as the Section 504 Home Repair program, it provides loans to very-low-income homeowners to repair, improve, or modernize their homes, or provides grants to elderly, very-low-income homeowners to remove health and safety hazards.

Who can apply for this program?

To qualify, you must:

- **Be the homeowner and occupy the house**
- **Be unable to obtain affordable credit elsewhere**
- **Have a family income within the very-low-income limit**
- **For grants, be age 62 or older and not be able to repay a repair loan**

What is an eligible area?

Properties must be located in an eligible rural area. You can visit the USDA Income and Property Eligibility website (available at this link: <https://go.usa.gov/xzcdM>) for complete details.

How can funds be used?

- Loans can be used to repair, improve, or modernize homes, or to remove health and safety hazards.
- Grants must be used to remove health and safety hazards.

How much money can I get?

- Maximum loan is \$40,000.
- Maximum grant is \$10,000.
- Loans and grants can be combined for up to \$50,000 in assistance.

What are the terms of the loan or grant?

- Loans are repaid over 20 years.
- Loan interest rate is fixed at 1 percent.
- Full title service is required for loans greater than \$25,000.
- Grants have a lifetime limit of \$10,000.
- Grants must be repaid if the property is sold in less than three years.

- If applicants can repay part - but not all - of the costs, they may be offered a loan and grant combination.

Is there a deadline to apply?

Applications are available year-round as long as funding is available, and are processed in the order they are received.

How long does an application take?

Approval times depend on funding availability in your area. Talk to a state or area office-based USDA home loan specialist (a map is available at this link: <https://www.rd.usda.gov/browse-state>) for help with your application.

How do I get started?

Contact a USDA home loan specialist (information is available at this link: <https://www.rd.usda.gov/browse-state>) in your area.

What governs this program?

- The Housing Act of 1949 as amended; 7 CFR, Part 3550 (available at this link: <https://go.usa.gov/xzcvG>)
- HB-1-3550 - Direct Single Family Housing Program Field Office Handbook (available at this link: <https://go.usa.gov/xzcvM> - PDF)

NOTE: Because citations and other information is subject to change, always consult the program instructions listed in the section above titled “What Governs This Program?” You can also contact your local office for assistance (a list is available at this link: <https://go.usa.gov/xzjP7>). You will find additional forms, resources, and program information at rd.usda.gov. *USDA is an equal opportunity provider, employer, and lender.*

MYERS[®] V2 GRINDER SERIES

SHREDDING WASTEWATER CHALLENGES



**PATENTED AXIAL
CUTTER TECHNOLOGY**



ADVANCED HYDRAULICS



**LEGENDARY SEAL
LEAK DETECTION**

MYERS® V2 SERIES SUBMERSIBLE GRINDER PUMPS

The Myers V2 series grinder is engineered from the ground up, in order to overcome the increased debris and higher pressure required in today's wastewater environment. It features a patented axial cutter design and semi-open impeller to effectively macerate challenging sewage solids into a fine slurry.

Watch the video at www.femyers.com



POLY ROPE



SHOP RAG



SWIFFERS®



MOP HEAD



PATENTED AXIAL CUTTER TECHNOLOGY

Easily slices through solids and trash found in domestic wastewater without roping or clogging.



ADVANCED HYDRAULICS

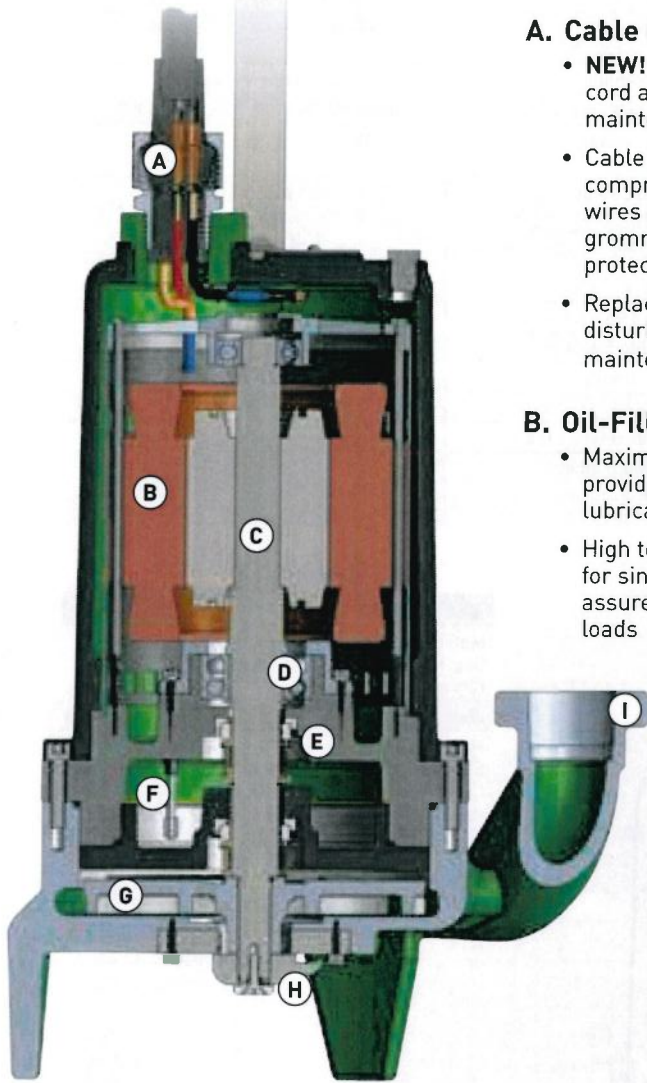
The only single stage 2 HP grinder that can deliver up to 185' of lift for superior performance and reliability.



LEGENDARY SEAL LEAK DETECTION

True early warning system for reduced downtime and maintenance costs.

FEATURES



A. Cable Entry System

- **NEW!** Optional quick disconnect cord available for ease of maintenance
- Cable jacket sealed by compression fitting; individual wires sealed by compression grommet for double seal protection against water ingress
- Replace power cord without disturbing motor for ease of maintenance

B. Oil-Filled Motor

- Maximizes heat dissipation; provides constant bearing lubrication for long life
- High torque start/run capacitor for single or three-phase motors, assured starting under heavy loads

C. Heavy 416 SST Shaft

- Corrosion resistant, reduces shaft deflection for long life

D. Lower Double Row Ball Bearings

- Absorb both axial and radial loads for increased durability

E. Double Mechanical Shaft Seals

- In oil-filled seal chamber for continuous lubrication, superior motor protection

F. Seal Leak Probe

- Located in seal chamber instead of motor area for true early warning of water leaks. Allows corrective action before costly motor or bearing failure occurs.
- Activates warning light in control panel

G. SST Semi-Open Impeller

- Provides improved performance, resists clogging
- Pump-out vanes help keep trash from seal, reduces pressure at seal face for longer life

H. Axial Cutter System

- Constructed of 440 SST hardened to 57-60Rc for long life
- Easily replaceable without dismantling pump

I. Volute Case

- Cast iron 1-1/4" NPT vertical flanged discharge

Electrical Data

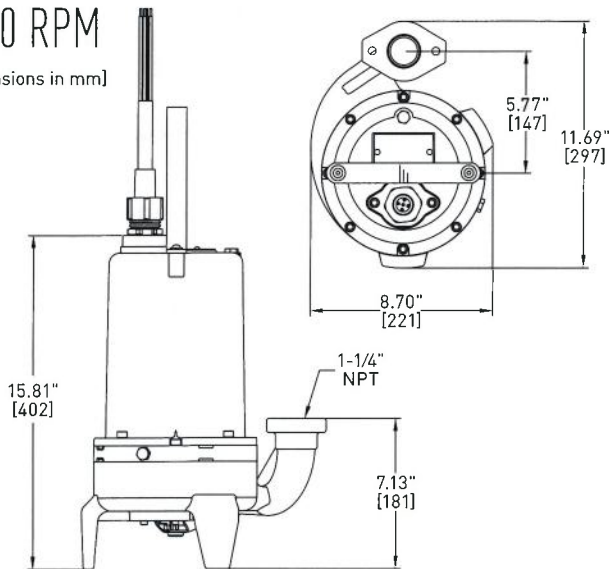
	V/Ph/Hz	HP	Start Amps	FL Amps	Full Load kW	Start KVA	FL KVA	NEC Code Letter	Service Factor	Model	Standard Cord		Quick Disconnect	
											20'	35'	20'	35'
High Head	230/1/60	2	49	18.5	4.2	11.27	4.26	G	1	Catalog Eng	VH20-21-20 28148D000	VH20-21-35 28148D004	VH20-21-20QD 28148D008	VH20-21-35QD 28148D009
	200/3/60	2	53	12.5	3.9	18.3	4.33	L	1	Catalog Eng	VH20-03-20 28148D001	VH20-03-35 28148D005	VH20-03-20QD 28148D011	VH20-03-35QD 28148D012
	230/3/60	2	46	12	3.9	18.3	4.77	L	1	Catalog Eng	VH20-23-20 28148D002	VH20-23-35 28148D006	VH20-23-20Q 28148D014	VH20-23-35QD 28148D015
	460/3/60	2	23	6	3.9	18.3	4.77	L	1	Catalog Eng	VH20-43-20 28148D003	VH20-43-35 28148D007	VH20-43-20QD 28148D017	VH20-43-35QD 28148D018
	575/3/60	2	25	5	3.9	24.9	4.98	L	1	Catalog Eng	VH20-53-20 28148D020	VH20-53-35 28148D021	VH20-53-20QD 28148D022	VH20-53-35QD 28148D023
Standard Flow	200/1/60	2	66	16	3.2	13.2	3.2	G	1	Catalog Eng	VS20-01-20 28151D020	VS20-01-35 28151D021	VS20-01-20QD 28151D024	VS20-01-35QD 28151D026
	230/1/60	2	49	13.5	3.2	11.27	3.12	G	1	Catalog Eng	VS20-21-20 28151D000	VS20-21-35 28151D004	VS20-21-20QD 28151D008	VS20-21-35QD 28151D009
	200/3/60	2	53	10	3.2	18.3	3.46	L	1	Catalog Eng	VS20-03-20 28151D001	VS20-03-35 28151D005	VS20-03-20QD 28151D011	VS20-03-35QD 28151D012
	230/3/60	2	46	9	3.2	18.3	3.58	L	1	Catalog Eng	VS20-23-20 28151D002	VS20-23-35 28151D006	VS20-23-20QD 28151D014	VS20-23-35QD 28151D015
	460/3/60	2	23	4.2	3.2	18.3	3.35	L	1	Catalog Eng	VS20-43-20 28151D003	VS20-43-35 28151D007	VS20-43-20QD 28151D017	VS20-43-35QD 28151D018
	575/3/60	2	25	5	3.9	24.9	4.98	L	1	Catalog Eng	VS20-53-20 28151D022	VS20-53-35 28151D023	VS20-53-20QD 28151D025	VS20-53-35QD 28151D027



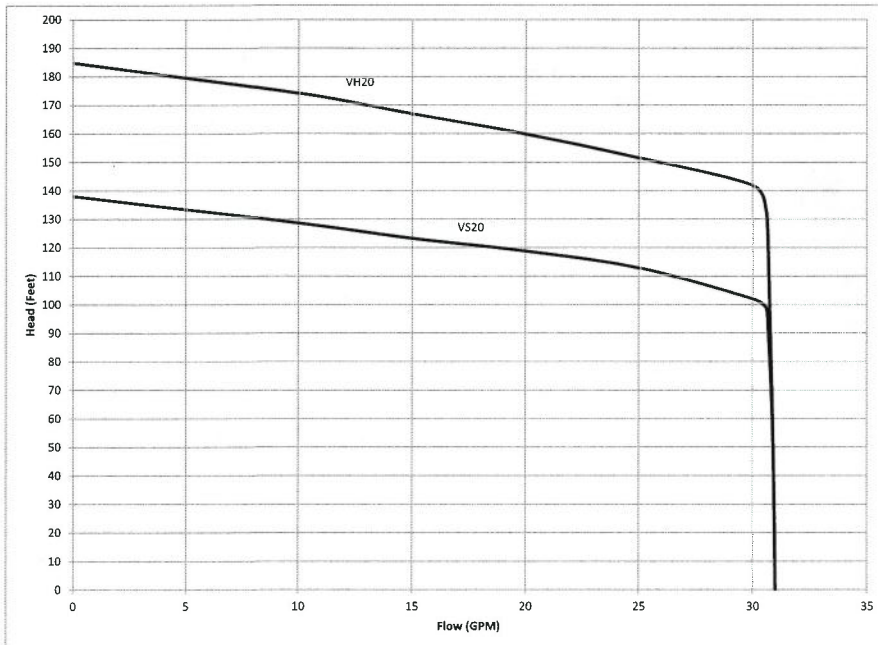
PERFORMANCE DATA AND DIMENSIONS

3450 RPM

[Dimensions in mm]



Product Capabilities		
Capacities To	31 gpm	117.3 lpm
Heads To	185 ft.	56.34 m
Liquids Handling	domestic raw sewage	
Intermittent Liquid Temp.	up to 140°F	up to 60°C
Winding Insulation Temp. (Class F)	311°F	155°C
Motor Electrical Data <small>(Single phase motors are capacitor start type. Myers control panels or capacitor kits are recommended for proper operation and warranty.)</small>	2 hp, 3450 rpm 1 ph - capacitor start/run. 230 volts; 60 Hz 3 ph - induction run 200, 230, 460 volts, 60 Hz	
Std. Third Party Approvals	CSA	
Acceptable pH Range	6 - 9	
Specific Gravity	.9 - 1.1	
Viscosity	28 - 35 SSU	
Discharge (Flange Dia.)	1-1/4 in.	31.75 mm
Min. Sump Diameter		
Simplex	24 in.	61.0 cm
Duplex	36 in.	91.4 cm



Construction Materials	
Motor Housing, Seal Housing, Cord Cap and Volute Case	Cast Iron, Class 30, ASTM A48
Impeller	Semi-Open, Stainless Steel
Mechanical Seals: Standard	Double Tandem Carbon and Ceramic
Optional	Lower Tungsten Carbide
Pump, Motor Shaft	416 SST
Fasteners	300 Series SST
Rotating Cutter, Stationary Cutter	440 SST 57-60 Rockwell



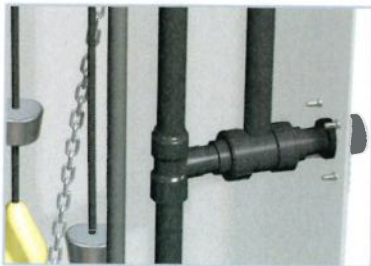
1101 MYERS PARKWAY, ASHLAND, OH 44805 WWW.FEMYERS.COM
PH: 855-274-8948

Because we are continuously improving our products and services, Pentair reserves the right to change specifications without prior notice.

MYERS® SRA-125 SERIES

The SRA-125 Rail System is tailored to your specific hydraulic needs for low pressurized sewer system requirements. Engineered with heavy duty cast iron lift-out elbow with built-in check valve. Stainless steel hardware and anti-siphon protection, the SRA-125 Rail System is the preferred choice. Offered in simplex or duplex design with centrifugal submersible grinder pumps coupled with a range of quality controls and accessories.

- Built-in check valve
- Fast and easy pump removal
- No need for personnel to enter basin
- Heavy-duty cast iron construction
- Corrosion resistant with anti-flotation ring
- Multiple basin diameters and basin depths are available
- Positive machine fit with O-ring seal
- Available with float controls



PVC Shut-Off Valve and Traditional Float Controls

Easy to operate with extended handle.



Lift-Out

Includes heavy-duty cast iron construction with stainless steel brackets and integral ball check valve.



Brackets and Rails

Stainless steel brackets and rails ensures parts will not corrode.

COMPLETE GRINDER PACKAGE

Myers[®]

Pentair Water

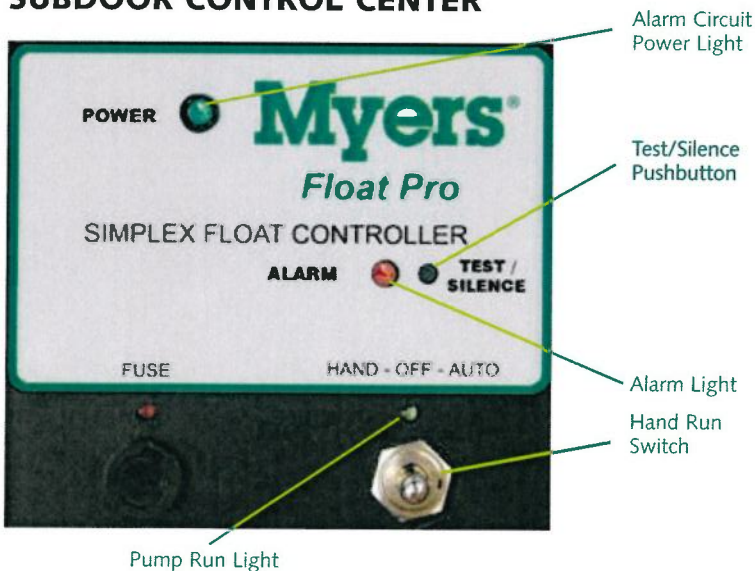


Control Panel

The Float Pro is an innovative approach to today's pump control system requirements with standard features unmatched by most competitors. Through the use of a standard subdoor and raised backpanel, the Float Plus Series offers a revolutionary design for housing common control panel features such as circuit breakers, start components, contactors and a terminal strip. While others ask you for more dollars to cover options, the Float Plus Series provides many of the most requested items as standard equipment. Some of these standard features include lockable latches, a flashing red alarm light with an electronic horn, the innovative touch to silence pad, and a control circuit board, all in a NEMA 4X enclosure. In addition to unsurpassed standard features, Float Plus offers an exclusive

control circuit board. Conveniently located on the Subdoor, the float indication lights allow the user to see the status of each float and flashes should a float fail. Available in simplex for single phase and three phase, these innovative controllers are certain to revolutionize the industry.

SUBDOOR CONTROL CENTER



SPECIFICATIONS

Available in Simplex	
Enclosure Dimensions	12.5" x 12" x 7.5"
Overall Dimensions	14.5" x 12" x 7.5"
Enclosure	Nema 4X with molded mounting feet
Alarm Piezo	95 db with "Touch to Silence" circuitry
Flashing Red Alarm Beacon	Provides 360° Visual Display
Weight	10.8 lbs.
25 amp "DP" Heavy Duty Definite Purpose Contactors	
Nonconductive Injection Molded Subdoor	
Blown Fuse Status Lights	
cULus 508 Listed	
Requires three float switches for simplex.	



TYPICAL INSTALLATION

24" SIMPLEX GRINDER PUMP PACKAGE WITH REMOTE MOUNTED CONTROL PANEL

PUMP MODEL: V2H20, V2S20

