

SFA Saniflo Inc.  
105 Newfield Avenue, Suite B  
Edison, New Jersey 08837  
Toll Free 800-571-8191  
Phone 732-225-6070  
Fax 732-225-6072  
Website www.saniflo.com  
Email sfasales@saniflo.com

August 2019

## Guide Specification

Specifier Notes: This guide specification is written in Construction Specifications Institute (CSI) 3-Part Format in accordance with *The CSI Construction Specifications Practice Guide, MasterFormat, SectionFormat, and PageFormat.*

This Section must be carefully reviewed and edited by the Architect to meet the requirements of the Project and local building code. Coordinate this Section with Conditions of the Contract, Division 01, other specification sections, and the Drawings. Delete all Specifier Notes after editing this Section.

Section numbers and titles are based on *MasterFormat 2018 Edition.*

## SECTION 22 13 29

### SANITARY SEWERAGE PUMPS

Specifier Notes: This Section covers SFA Saniflo Inc. "Sanicom 1" heavy-duty drain pumps for use in pumping gray water away from a variety of fixtures. Consult SFA Saniflo Inc. for assistance in editing this Section as required for the Project.

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Drain pumps.

##### 1.2 RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as required for the Project. Limit the list to sections with specific information that the reader might expect to find in this Section, but is specified elsewhere.

- A. Section 22 05 00 – Common Work Results for Plumbing.

- B. Section 26 05 00 – Common Work Results for Electrical.

### 1.3 REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this Section, complete with designations and titles. Delete reference standards from the following list not used in the edited Section.

- A. ASME A112.3.4/CSA B45.9 – Plumbing Fixtures with Pumped Waste and Macerating Toilet Systems.
- B. CAN/CSA C22.2 No. 77 – Motors with inherent overheating protection.
- C. CAN/CSA C22.2 No. 108 – Liquid pumps.
- D. IAPMO PS 52 – Pump/Dose, Sumps and Sewage Ejector Tanks With or Without a Pump.
- E. ISO 9001 – Quality management systems – Requirements.
- F. UL 778 – Standard for Motor-Operated Water Pumps.
- G. UL 1004-3 – Standard for Thermally Protected Motors.

### 1.4 PREINSTALLATION MEETINGS

Specifier Notes: Edit the Preinstallation Meetings article as required for the Project. Delete this article if not required.

- A. Convene preinstallation meeting [1 week] [2 weeks] before start of installation of drain pumps.
- B. Require attendance of parties directly affecting Work of this Section, including Contractor, Architect, installer, and manufacturer's representative.
- C. Review the Following:
  - 1. Materials.
  - 2. Installation.
  - 3. Adjusting.
  - 4. Protection.
  - 5. Coordination with other Work.

### 1.5 SUBMITTALS

Specifier Notes: Edit the Submittals article as required for the Project. Delete submittals not required.

- A. Submittals: Comply with Division 01.
- B. Product Data: Submit manufacturer's product data, including installation instructions.

- C. Shop Drawings: Submit manufacturer's shop drawings, indicating dimensions, components, piping, hardware, plumbing connections, and electrical connections.
- D. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- E. Operation and Maintenance Data:
  - 1. Submit manufacturer's operation and maintenance manual, including the following:
    - a. Operation, maintenance, and adjustment instructions.
    - b. Safety information.
    - c. Troubleshooting guide.
    - d. Parts list.
  - 2. Provide detailed information required for Owner to properly operate and maintain equipment.
- F. Warranty Documentation: Submit manufacturer's standard warranty.

## **1.6 QUALITY ASSURANCE**

- A. Manufacturer's Qualifications:
  - 1. Manufacturer regularly engaged in the manufacturing of drain pumps of similar type to that specified for a minimum of 10 years.
  - 2. ISO 9001 certified company.
- B. Installer's Qualifications:
  - 1. Installer regularly engaged in installation of plumbing equipment for a minimum of 5 years.
  - 2. Use persons trained for installation of plumbing equipment.

## **1.7 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
  - 1. Store and handle materials in accordance with manufacturer's instructions.
  - 2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
  - 3. Store materials in clean, dry area indoors.
  - 4. Do not store materials directly on floor.
  - 5. Store materials out of direct sunlight.
  - 6. Keep materials from freezing.
  - 7. Protect materials during storage, handling, and installation to prevent damage.

## **1.8 AMBIENT CONDITIONS**

- A. Do not install drain pumps under ambient conditions outside manufacturer's limits.

## **1.9 WARRANTY**

- A. Warranty Period: 2 years.

1. Additional 1 year warranty period once product registered through manufacturer's website.

## **PART 2 PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Manufacturer: SFA Saniflo Inc., 105 Newfield Avenue, Suite B, Edison, New Jersey 08837. Toll Free 800-571-8191. Phone 732-225-6070. Fax 732-225-6072. www.saniflo.com. sfasales@saniflo.com.

|  |
|--|
| Specifier Notes: Specify if substitutions will be permitted. |
|--|

- B. Substitutions: [Not permitted] [Comply with Division 01].
- C. Single Source: Provide materials from single manufacturer.

### **2.2 DRAIN PUMPS**

- A. Drain Pumps: "Sanicom 1" heavy-duty drain pumps.
  1. Pumps gray water away from a variety of fixtures.
  2. Capable of handling maximum of 194 degrees F (90 degrees C) from multiple fixtures simultaneously.
- B. Compliance:
  1. ASME A112.3.4/CSA B45.9.
  2. CAN/CSA C22.2 No. 77.
  3. CAN/CSA C22.2 No. 108.
  4. IAPMO PS 52.
  5. UL 778.
  6. UL 1004-3.
- C. Certifications:
  1. Certificate of Compliance: CSA, US and Canada.
  2. Certificate of Listing: IAPMO Research and Testing, Inc.
- D. Markings: Permanently mark drain pumps in accordance with ASME A112.3.4.
- E. Description:
  1. Pump Type: Drain pump.
  2. Electrical Ratings: 120 V, 60 Hz, 10 Amps maximum.
  3. Motor: 1 HP, oil-filled, thermally protected aluminum motor.
  4. Capacitor Rating: 45 microfarad.
  5. Maximum Operating Temperature: 194 degrees F (90 degrees C).
  6. Power Cord Length: 50 inches.
  7. Noise Level: Less than or equal to 68 dBA (Lp), measured at 3 feet.
  8. Discharge Pipe Diameter: 1 inch.
  9. Discharge Elbow:
    - a. Rubber.

- b. Adapts to discharge pipe.
- c. Rotates 360 degrees, depending on discharge installation.
- 10. Non-return valve.
- 11. Discharge Rate:
  - a. At 25 feet: 17 gpm.
  - b. At 3 feet: 33 gpm.
- 12. Discharge:
  - a. Maximum Vertical: 25 feet.
  - b. Maximum Horizontal: 250 feet.
- 13. Shut-Off Head: 53 feet.
- 14. Normal Running Time: 4 to 6 seconds, short bursts.
- 15. Capacity: 2.75 gallons.
- 16. Inlet Diameter:
  - a. Two Sides: 2 inches, 1 each side.
  - b. Top Vent Connection: 1-1/4 inches.
- 17. Method of Activation: Pressure switch, circuit board.
- 18. Minimum Shower/Bathtub Base Height: 10 inches.
- 19. System Housing: PE, minimum 5 mm thickness.
  - a. Seal Between Tank and Cover: EPDM 40SH.
- 20. Overall Dimensions:
  - a. Length: 24 inches.
  - b. Width: 9 inches.
  - c. Height: 13 inches.
- 21. Weight: 22 lbs.

### 2.3 ACCESSORIES

Specifier Notes: Delete accessories not required.

- A. Descaler: Saniflo liquid descaler/cleanser.

### 2.4 SOURCE QUALITY CONTROL

- A. Factory Tests:
  - 1. Dielectric Voltage Withstand Test: Each unit, at conclusion of final assembly shall withstand, without electrical breakdown, application of following test potential at a frequency within range of 40 to 70 Hz, between primary wiring (supply pins of attachment plug) and grounded dead metal (grounding pin of attachment plug):
    - a. 1,240 V for 60 seconds or
    - b. 1,488 V for 1 second.
  - 2. Grounding Continuity Test: The equipment, during manufacture and before shipment, shall be tested, as a routine production-line test, to determine grounding continuity between grounding pin of attachment plug and accessible grounded metal.
- B. Repair or replace drain pumps that do not pass factory tests.

## PART 3 EXECUTION

### **3.1 EXAMINATION**

- A. Examine areas to receive drain pumps.
- B. Verify surfaces to support drain pumps are clean, dry, flat, level, stable, rigid, and capable of supporting the weight.
- C. Notify Architect of conditions that would adversely affect installation or subsequent use.
- D. Do not begin installation until unacceptable conditions are corrected.

### **3.2 INSTALLATION**

- A. Install drain pumps in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Install drain pumps plumb, level, and to correct elevation.
- C. Install drain pumps using manufacturer's supplied hardware.
- D. Electrical: Install electrical power as specified in Section 26 05 00.

### **3.3 ADJUSTING**

- A. Adjust drain pumps for proper operation in accordance with manufacturer's instructions.
- B. Remove and replace with new material, damaged components that cannot be successfully repaired.

### **3.4 PROTECTION**

- A. Protect installed drain pumps from damage until Substantial Completion.

**END OF SECTION**