EXCEL FLUID GROUP, LLC

Self-Priming Pump Station: EX-ALSP

Factory Assembled Self-Priming Pump Station

Technical Specifications:

Enclosure

Internal Structure is Fabricated of 6061-T6 Aluminum Tubing and the Exterior Sheet is Fabricated to a Mill Finish ASTM 3003 with 6061-T6 Aluminum, Minimum Sheet Thickness of 0.80. Station Baseplate is ASTM 6061-T6 Aluminum Plate.

Enclosure Access Doors

Aluminum Lockable Gull Wing Access Doors with Locking Gas Shocks and Stainless Steel Hinges; includes Bug-Free Ventilation Covers.

Enclosure Hardware

Two (2) Heavy Duty 300 Series Stainless Steel Keyed Handle that operates 2 FMV#SS206 Approved Latches

Enclosure Lighting

EX6 Six (6) High Power LED Waterproof Light Fixtures, Rigid Aluminum Housing, 12VDC Power Supply.

Enclosure Insulation

Dow Super Tuff-R Poly Coated Closed Cell Foam, Sidewall has a Minimum Rating of R6.5 and the Roof has a Minimum Rating of R12.5

Enclosure Liner

Black "Rhino-Tuff" Spray Coating, Two-Component, 100% Solids Elastomeric Polyurethane/Polyurea Hybrid Lining.

Enclosure Ventilation

Wall Mount Electric Cooling Fan, 120 VAC, Aluminum Frame, Thermostatically Controlled.

Enclosure Heating
Wall Mount Electric Heater, 120VAC, 5,110 BTU Heat Output Per Hour, Thermostatically Controlled.

Suction and Discharge Piping

3", 4" or 6" Flanged Pipe and Fittings, Available in Ductile Iron, **HDPE or PVC**

Discharge Piping

- Two (2) Lever & Weight Swing Check Valves, Flanged, AWWA C508, Ductile Iron ASTM A536 Body, NSF-61 Epoxy Coated.
- Two (2) Eccentric Plug Valves, Flanged, AWWA C504, Cast Iron A126 Class B Body, Rubber Coated Ductile Iron Plug, Manufacturer Standard Coating.
- One (1) Manual Air Release Valve

ArcSentry™ Controls

Duplex Control Panel, NEMA 12, UL Listed Enclosure, Contains High Voltage Compartment with Electrically Interlocked Door and a Low Voltage Compartment with all Operator 120VAC Controls. Multiple Control Options Available Including VFDs, Across The Line Starters, PumpVision PLC Control with HMI Screen or Standard Lights, Pushbuttons and Switches. Controls Primarily Designed to Reduce Arc-Flash Hazards for Operators.

Self-Priming Pump Station



Wet Self-Priming or Dry-Prime Vacuum Setup



Enclosure 6 ft. x 6 ft.



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Pump System



Cold-Weather Insulation and Heater



PumpVision™ Controls

Dry-Prime Vacuum Design Example



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Level Controls
Standard Float Switch Level Controls or Primary Level Transducer with Back-Up Float Switch Level Controls. Optional Bubbler Level Control Available.

Self-Priming Pumps 3", 4" or 6" Suction and Discharge, Range from 5 HP – 50 HP, 208-230/460 V, 1 Phase or 3 Phase

Wet Well Structure Options

- Pre-Cast Concrete Wet Well and Flat Top, 72" Minimum Diameter, Depth Sized per Application.
- High Density Polyethylene (HDPE) Wet Well and Flat Top, 72" Minimum Diameter, Depth Sized per Application

Suction Pressure Switch

- Aluminum Channel Frame Access Cover with Lockable Dual Hatch Doors, 300# PSF Load Rated, Stainless Steel Hinges and Hardware.
- Includes Safety Grate, Aluminum "I" Bar Construction, Safety Orange Powder-Coated Finish, 316SS Hardware, Tamper Proof SS Hinge Bolts, 300# PSF Load Rated, With Locking Capability.

Two (2) Years from Date of Shipment; Designed to Resist UV Damage Covers Corrosion from Moisture, Soil, Septic Fluid and Gas, or Structural Failures Occurring in Normal Service, When Station is Installed in Accordance with Manufacturer's Recommendations

Options:

Flow Meter

Electromagnetic Flow Sensor, Carbon Steel Flanges, Ebonite Hard Rubber Liner, Hastelloy Electrode, Remote Transmitter with Display.

Air Release Valve

Cast Iron Body, Stainless Steel Internals, 3/8" – 2" NPT Connections, Designed For 10 PSI To 200 PSI

Emergency Bypass Connection

Aluminum Quick Disconnect Fitting with Aluminum Dust Cap includes Plug Valve and Pipe Fittings.

Inlet Drop Bowl

Reliner Inside Drop System, Polyester Resin Drop Bowl with SCH80 PVC Drop Pipe, Includes Flexible External Sleeve.

Aluminum Construction, Perforated Screening Style, With Aluminum Guide Rail System and Stainless Steel Chain.

Meter Base

Single Position Sockets.

Automatic or Manual Transfer Switch

Interlocked Main Double Circuit Breaker, Outdoor General Purpose, NEMA 4X, Stainless Steel Enclosure, UL98 Listed.

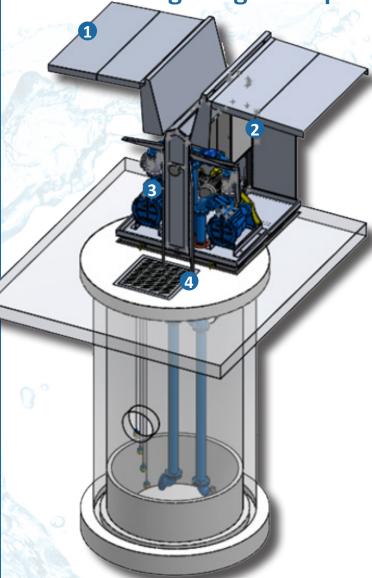
Generator Receptacle
Outdoor General Purpose, Load Rated.

SCADA Compatibility

Ethernet Module for Control and Status to External System.

Vinyl Exterior Finish with Red Brick Look, Tan Brick Look, Tan Rustic Stone Look or Green Pine Tree Look; Resistant to Mild Alkalis, Mild Acids and Temperatures from -65° to 225° F.

Wet Self-Priming Design Example



- 1) 6 ft. x 6 ft. Enclosure
- 2) Electrical Control Enclosure
- 3) Self Priming Pump Pipe Tree Assembly
- 4) Hatch with Safety Grates

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