

SPECIFICATIONS

SUGGESTED SPECIFICATIONS

Furnish and install where shown on plans, Fed-Flush Type VSAF- _____, duplex, vertical, submerged strainer basket type sewage ejector unit as manufactured by Federal Pump Corporation. Each pump to be rated at _____ G.P.M. against a total dynamic head of _____ feet. Pumps to have _____ inch discharge and be constructed for basin _____ feet deep.

The unit shall be so designed that sewage entering the pit shall be carried to the strainer baskets installed in pump discharge lines. Solids will be retained in the baskets and liquids will continue thru the casing into the basin. The strainer shall have a cast iron housing and a stainless steel basket, removable from the top of the housing. Solids shall be flushed into the discharge line during the discharge cycle. A control valve shall prevent back-up into the house line during discharge cycles and permit cut-off of either pump. Overflow fitting shall allow liquid to flow directly into basin during discharge cycles.

Pump shaft shall be large diameter carbon steel; impeller to be cast iron, non-clog type; thrust bearing enclosed in moisture-proof housing, mounted above the suspension plate. Suspension plate shall be cast iron; suspension column shall be constructed of cast iron sections, with integral rabbetted end flanges. Bronze intermediate guide bearings shall be furnished for every four feet of shaft length. Cast iron pump casing shall have pressed-fit bronze bearing. Lubrication of guide bearings shall be by means of alemite grease fittings on suspension plate and flexible grease lines. Casing shall have bolt-on discharge elbow forming lower expansion joint housing. Discharge pipe to terminate above the suspension plate in a cast iron 45 degree elbow and top expansion joint housing, with 125# ASA integral flange.

Motors to be _____ H.P., _____ R.P.M., _____ ph., _____ cy., _____ volts, vertical, open, drip proof, ball bearing.

Furnish a pedestal mounted alternating float switch, with brass rod and copper float, to provide alternate cycles of operation, plus simultaneous operation when required. Furnish a pedestal mounted auxiliary float switch with brass rod and copper float, for emergency 2-pump operation. Float control equal to Federal Type FS-4.

Furnish a compression tube type high water alarm actuating switch with adjustable sensing tube and integral alarm horn, equal to Federal Type FS-5.

Furnish each motor with a magnetic line voltage starter providing overload and low voltage protection, in NEMA-1 wall mounting enclosure, having "Hand-Off-Automatic" selector switch and reset button.

Furnish a cast iron (or steel) sewage basin, _____ diameter by _____ deep, having internal rust resistant coating. Inlet connection shall be as required by job conditions. Cover shall be steel with all required openings, including those for pumps, controls, alarm actuator, vent connection, and manhole. Manhole opening provided with cast iron cover.

ALTERNATE FOR CONCRETE PIT: (substitute the following paragraph for the above cast iron basin paragraph)

Furnish a Federal PF-1 type angle iron pit frame for a concrete pit _____ x _____ x _____ deep. Pit to be constructed by general contractor. Plumbing contractor shall furnish the pit frame together with a heavy steel pit cover having all required openings, including those for pumps, controls, alarm actuator, vent connection and manhole. Manhole opening provided with cast iron cover. Cover and frame to be treated with a corrosion resistant coating and to be of casttight bolted construction.

Note: Inlet adaptor for mounting FED-FLUSH fittings must be installed when concrete pit is poured. (Advise inlet size and pit wall thickness when ordering adaptor.)



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Furnish and install as shown on plans a duplex VSP-____, vertical submerged sump pump unit as manufactured by Federal Pump Corporation. Each pump shall be rated ____ G.P.M. at ____ feet Total Dynamic Head, shall have a ____ inch discharge and be built for a pit or basin ____ deep.

Shafts to be carbon steel, turned and ground; impellers to be bronze (or cast iron), hydraulically and dynamically balanced. Thrust ball bearing shall be fully enclosed in a dust and moisture-proof housing mounted above the suspension plate. Pump casing shall include a renewable sleeve bearing with required means of lubrication. Renewable intermediate guide bearings shall be furnished where pit depth requires.

Impellers shall be sized for the exact capacity and head specified and shall be fully non-overloading at the H.P. specified throughout the entire range of operation.

Motors shall be ____ H.P., ____ phase, ____ cycle, ____ volts, ____ R.P.M. open, drip-proof ball bearing type, flexibly coupled to pumps. Furnish a pedestal mounted alternating float switch to alternate the operation of the pumps and provide simultaneous operation when required.

Furnish a pedestal mounted auxiliary float switch to turn on both pumps if the alternating float switch is inoperative. The float switches shall have copper floats, brass rods, adjustable stops, galvanized rod guides and shall be equal to Federal Type FS-4.

Furnish a compression tube type high water alarm with integral horn, equal to Federal Type FS-5.

Furnish for each motor a magnetic line voltage starter in wall-mounting general purpose enclosure providing overload and low voltage protection and with a Hand-Off-Automatic selector switch in the cover.

Furnish a welded angle iron pit frame and heavy steel cover equal to Federal Type PF-1 for a concrete pit ____ x ____ x ____ deep. The cover and frame are to be treated with a corrosion resistant coating. Cover shall have required openings for pumps, controls, manhole and vent connection.

ALTERNATE FOR BASIN:

Furnish a fiberglass (or steel) sump basin ____ diameter x ____ deep with an inlet connection as determined by job conditions. The basin shall have a steel cover with required openings for pumps, controls, manhole and vent connection and shall be treated with a corrosion resistant coating.



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