FEDERAL PUMP CORP
1144 Utica Ave, Brooklyn, NY 11203

Type POS Oil Shield™

Provides protection for the environment by preventing oil products from entering sewer systems, environmentally Sensitive River and waterways, while protecting equipment and areas from flooding

Applications

- Elevator Pit
- Basement Sumps
- Electromechanical equipment rooms and vaults
- Manufacturing and processing facilities

Optional Equipment:

- Duplex arrangements
- Check and shut off valves
- Fiberglass and steel basins
- Basin Covers
- Packaged Systems

Standard Features:

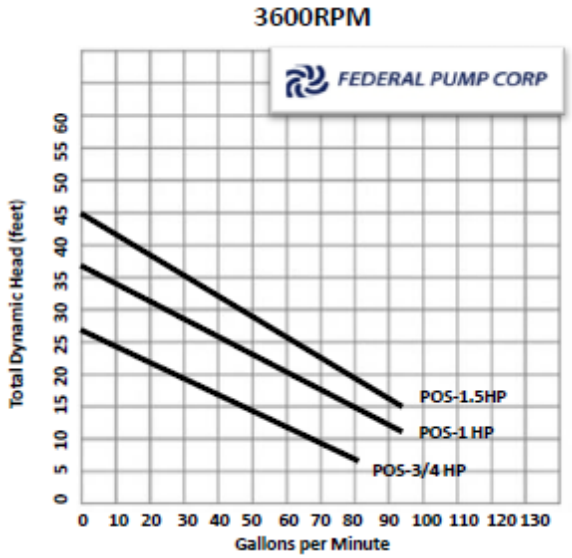
- 1.5” Stainless steel submersible pump in ½ or ¾ HP motor with 10 feet of submersible motor power cable.
- 115/208-230V (1 Phase) or 208-230/460V (3 Phase)
- Submersible float switch for pump on/off operation.
- Submersible float switch for high water alarm
- Stainless Steel Electrode Sensor
- NEMA 4 weather tight corrosion resistant enclosure with magnetic contactor (3 Phase), alarm, indicating lights for oil detection, high liquid level and power on and contacts for remote indication.
- Plug in receptacle for easy and economical installation
- Maximum solid size: 1.5”

Note: Not intended for explosion-proof environment!

FEDERAL PUMP CORPORATION

ADDRESS: 1144 Utica Avenue, Brooklyn, NY 11203 **TEL**: (718) 451-2000 **URL**: Federalpumps.com

Pump Performance Data



Model	HP	115V AMPS	208V AMPS	230V AMPS	460V AMPS
POS-3/4	3/4	7.9	4.4	4.0	2.0
POS-1	1	10.0	5.5	5.0	2.5
POS-1.5	1.5	12	6.7	6.0	3.0

AMPS: Estimates-may vary based upon site conditions

Maximum Temperature: 104 degree F. Contact factory for higher temperature requirements!

Selection Table (1)

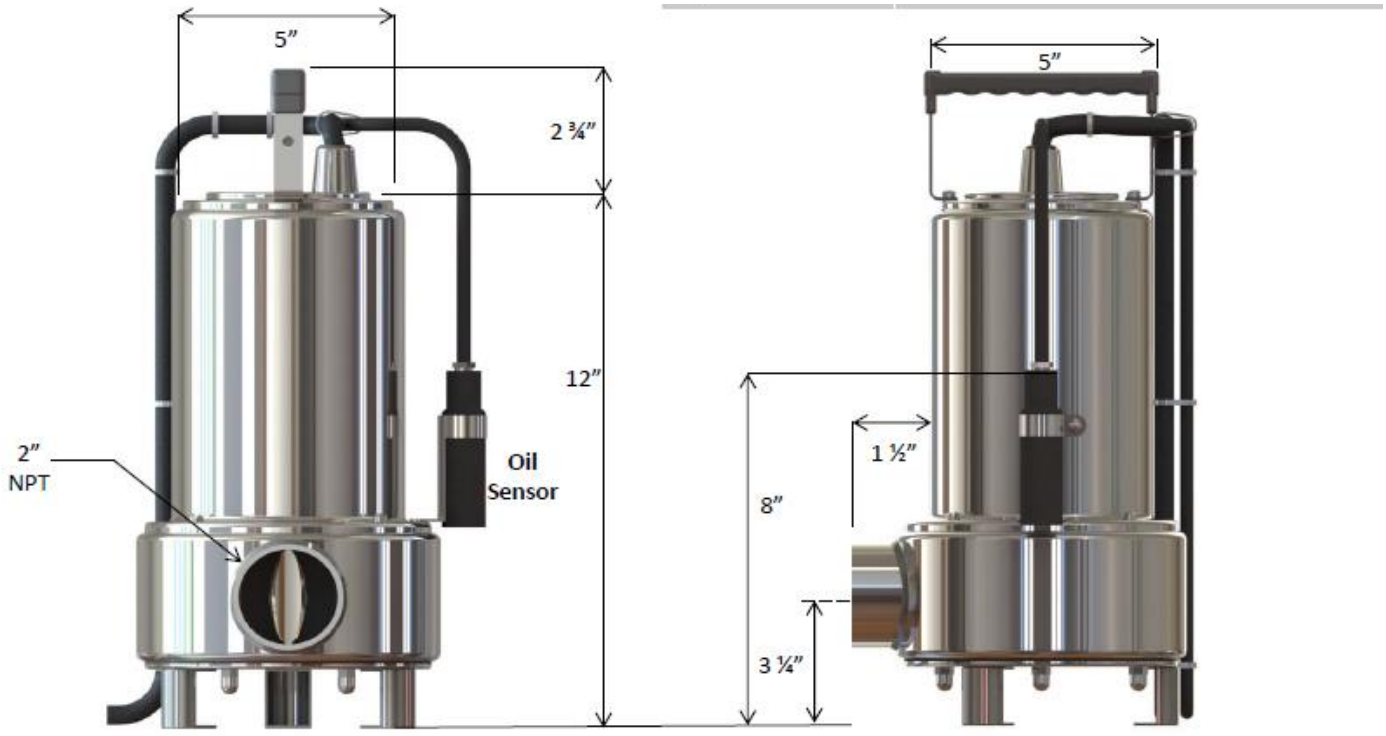
	Gallons per Minute						
TDH	10	20	30	40	50	60	70
10			POS-3/4	POS-3/4	POS-3/4	POS-3/4	POS-3/4
15		POS-3/4	POS-3/4	POS-3/4	POS-3/4	POS-1	POS-1
20	POS-3/4	POS-1	POS-3/4	POS-1	POS-1	POS-1	POS-1.5
25	POS-3/4	POS-1	POS-1	POS-1	POS-1	POS-1.5	
30	POS-3/4	POS-1	POS-1	POS-1.5	POS-1.5		
35	POS-1	POS-1.5	POS-1.5				
40	POS-1.5	POS-1.5					

- Selection table is provided as a general guideline for expected performance. Refer to performance curve for a more accurate assessment of pump performance. When calculating TDH (total dynamic head) ensure friction losses include pressure loss through pump isolation valves, check valves and piping. Select pipe diameter (if possible) for 7 feet per second velocity to reduce friction losses.

- Pump is constructed of stainless steel and designed for sump water service. Ensure temperature of fluid does not exceed 104 degree F. If application requires higher temperature fluid, contact the factory for additional assistance.
- Performance data is based upon water at 1.0 specific gravity. HP may vary if used in salt water or other environments. Contact the factory or authorized sales representative for additional assistance.

Dimensional Data

Item	
Project Name	
Item Type	
Tag No	



In the interest of product development, dimensional data may change. Please consult factory for most updated information.

Type POS-Oil Shield

- ❑ Stainless Steel submersible Pump-10 feet of power cable
- ❑ Submersible On/Off Switch-10 feet of cable
- ❑ High Water Alarm Switch-10 feet of cable
- ❑ Pump mounted stainless steel oil sensor
- ❑ Oil detection alarm light
- ❑ High Level Alarm light
- ❑ Power on light
- ❑ Contacts for remote indication-3 Contacts (ADVISE BMS SYSTEM TYPE!!)
- ❑ NEMA 4X weather resistant and corrosion resistant enclosure.

Note: Contractor to attach float switches to discharge pipe for High Water Alarm and (depending on pump size and voltage) pump on/off service.

Note: Wiring to/from control panel for 115V service provided by installing contractor.

Note: Piping and associated gate and check valves from pump discharge provided by installing contractor.

Note: Contractor to advice at time of submission if additional cable (10 feet length is standard) is required.

Item	
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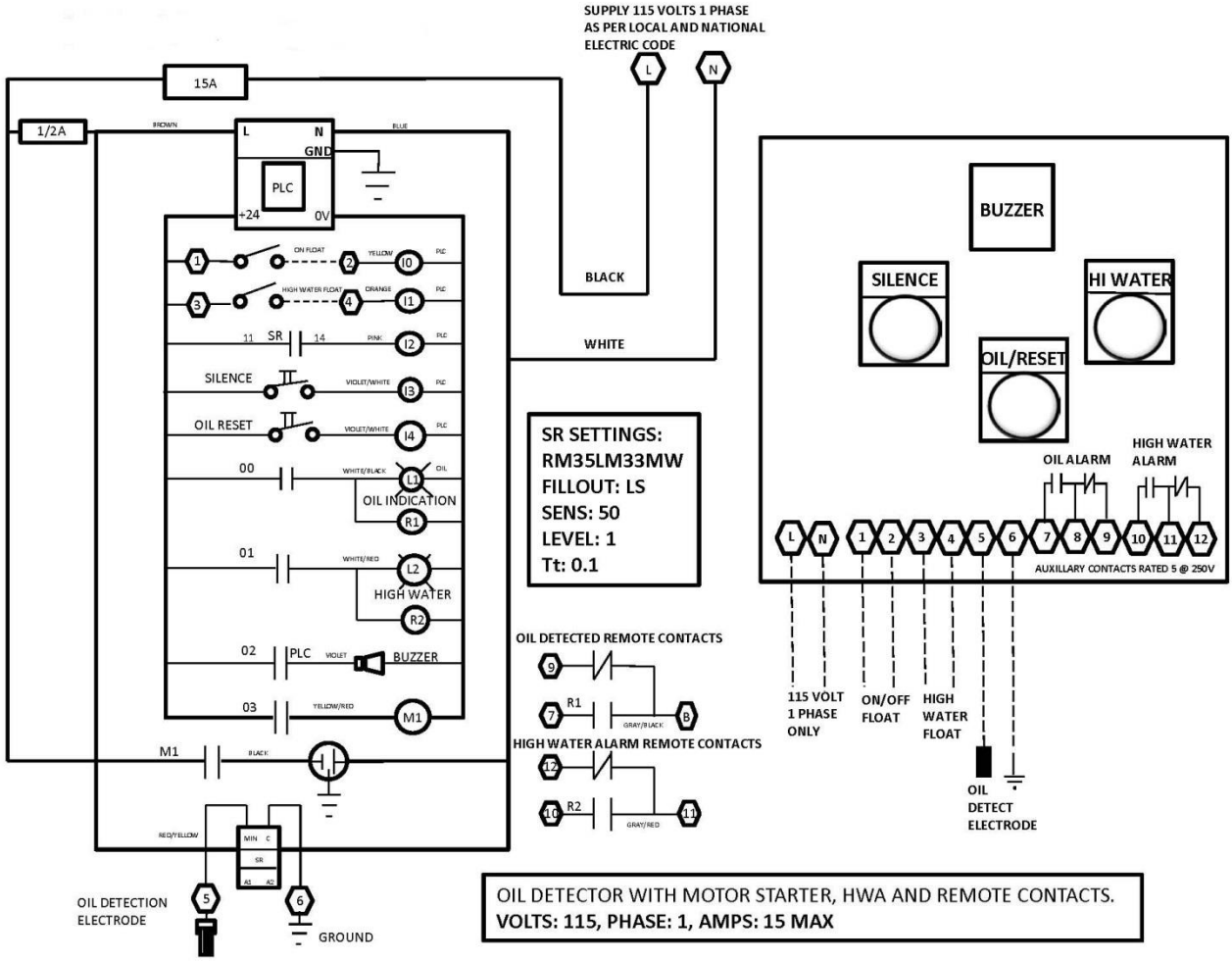
POS-Oil Shield Wiring Diagram



Suggested Specifications

Furnish and install as shown in the plans a simplex POS Oil Shield submersible pump as manufactured by Federal Pump Corporation with design flow and discharge head as outlined in the plans. The submersible oil shield sump pump will automatically pump sump water while preventing any oil substances from being discharged into the sewer systems and environmentally sensitive waters. Pump will be constructed of stainless steel and provided with stainless steel shaft and mechanical sealed motor. The pump shall be capable of passing a 1.5" diameter small solid and be provided with 10 feet of submersible motor power cord. Motor shall be rated as shown in the plans.
The system will be provided with (2) float switches for mounting on the discharge pipe (by others) and connected to the Oil detection relay panel as described herein.

Sequence of operation

Upon increase in sump liquid level, the pump on/off float switch will initiate pump operation at the present level and continue pumping operation until it reaches the low level set point. In the event of a high water level condition the high water float switch will activate the high water alarm horn and signal the alarm horn and light. The alarm horn will remain in operation until the silence push button has been activated. In the event of presence of oil, the oil sensing element will terminate pump operation and sound the alarm horn and light alerting the presence of oil in the sump.

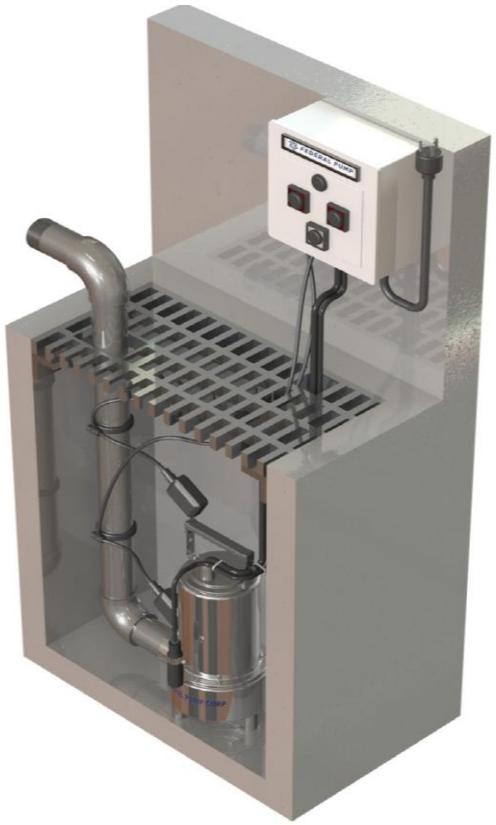
Control

Provide for wall mounting a NEMA 4 oil detection relay panel including a magnetic contactor with thermal overload, oil detection relays with adjustable sensitivity settings, alarm section with alarm horn, silence push button and indication lights for high water level, power on and oil detection as well as contacts for remote indication of alarm functions, thermal strip and plug receptacle.

Sump Steel Graded Cover Option

Cover Size: Standard Offering (2’ X 2’)

- 2’-0” X 2’-0” X 1.5” Thick-Machine Blue Epoxy Paint
- 1” Cover Supporting Metal Frame
- Frame installed and set in concrete
- Cover rests on frame
- Controls ship loose for wall mounting
- Check valves and isolation vale not included
- Non-Traffic Bearing



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