VertiMAC™ Sump Advisor™ System

VM-Series - 13 Amp | 120/240VAC

OPERATED BY FLOAT (INCLUDES: PUMP SWITCH, SUMP SENSOR, and ALARM PANEL)

ALDERON Industries™

Leading Edge Control Products

TECHNICAL DATA SHEET

DESCRIPTION OF OPERATION

Alderon Industries™ | Pat. No. 10,794,379

(120VAC piggyback plug model shown)

The VertiMAC™ Sump Advisor™ System VM-Series is a float operated pump switch system, typically used in sump pump applications or situations where a regular pump switch cannot operate due to limited space. A Sump Advisor™ sensor is attached to the top of the VertiMAC™ pump switch which eliminates the need to mount a separate alarm float switch. The innovative Sump Advisor™ sensor integrates high level alarm and pump run switches that are connected to the Sump Advisor™ alarm panel. The alarm panel has a 9-volt battery backup (customer supplied) and auxiliary dry contacts for high level alarm and pump run status that can be connected to a building automation system (BAS) or auto dialers. Available in 120/240VAC bare lead (no plug), 120VAC piggyback plug, and 240VAC piggyback plug, 13 Amp models.

When the water level rises, the float pushes the actuator rod upward which activates the mechanism inside the pump switch housing and turns the pump on. The Sump Advisor™ sensor will send a signal to the Sump Advisor™ alarm panel, activating the green pump run LED indicator and the pump run auxiliary dry contacts (which can monitor pump run counts and run time by BAS systems). If the water level rises activating the high level alarm float on the Sump Advisor™ sensor, the red high sump LED indicator, buzzer, and alarm auxiliary dry contacts on the alarm panel will activate. Pressing the alarm silence pushbutton will silence the buzzer. When the water level recedes, the float lowers the actuator rod downward which deactivates the mechanism inside the pump switch housing and turns the pump off. When the alarm condition is cleared, the system will automatically reset itself for the next alarm cycle. To adjust the pump differential, slide the rubber grommet up or down the actuator rod for the desired pumping range.

STANDARD FEATURES

(1) Sump Advisor™ Sensor - Pre-installed, attaches on top of the VertiMAC™ pump switch and connects to the Sump Advisor™ alarm panel. The sump sensor integrates the high level alarm and pump run switches.

(2) VertiMAC™ Pump Switch Housing - Magnetically activated switching mechanism encapsulated in epoxy to ensure a waterproof switch.

(3) Actuator Pin - Connects the actuator rod to the pump switch housing.

(4) Actuator Rod - Activates or deactivates the mechanism inside the pump switch housing as the float rises or lowers on the rod.

(5) Float - Slides up and down the actuator rod to turn the pump on and off.

(6) Rubber Grommet - Placed on the actuator rod at the determined location for desired pump differential.

(7) Pipe Clamp Bracket - Pre-installed, attaches to the pump switch housing and used to mount the VertiMAC™ Sump Advisor™ to a pipe.

(8) Stainless Steel Pipe Clamp (not shown) - Attaches to pipe clamp bracket and secures the VertiMAC™ Sump Advisor™ to a pipe at the desired mounting location.

(9) Pump Switch Power Cable - SJTOW (UL/CSA), 16 gauge, 2-conductor. Available in 120VAC or 240VAC, bare lead (no plug) or piggyback plug, 13 Amp models.

(10) QR Code - Scan code which directs you to alderonind.com where additional information can be found for the VertiMAC™ Sump Advisor™ system.

(11) Alarm Buzzer - Annunciates in addition to the visual indication provided by the red high sump LED on the Sump Advisor™ alarm panel during an alarm condition.

(12) Panel Compartment - Wire connector for 9VDC battery (backup power), auxiliary dry contacts, and access cover with optional break away tabs for routing wire.

(13) LED Indicators - The green power LED illuminates when the alarm panel is powered on, red high sump LED illuminates during an alarm condition, and green pump run LED illuminates when the pump switch activates the pump.

(14) Alarm Pushbuttons - The alarm test pushbutton to perform routine testing and alarm silence pushbutton to silence the buzzer during an alarm condition.

(15) Terminal Block - Used to connect the Sump Advisor™ sensor to the Sump Advisor™ alarm panel for local high level alarm and pump run indication.

SPECIFICATIONS

VertiMAC™ Pump Switch (CSA)

Primary Voltage
120VAC or 240VAC, 60 Hz
(voltage depends on model/part number)

Electrical
13 Amps, 120VAC 0.5HP or 240VAC 1.0HP

Cable Type
SJTOW *(UL/CSA)*, thermoplastic, 16 gauge, 2-conductor, flexible, and water/oil resistant

Connection Types
Bare Lead *(no plug; 120/240VAC)*
Piggyback Plug (120VAC or 240VAC)

Pumping Range
1.5 - 6.0 inches

Operating Temperature
0 - 140° F

Certifications
CSA *(US and Canada)*

Three-Year Limited Warranty

NOTE: The VertiMAC™ pump switch must be used with pumps that provide integral thermal overload protection.

Sump Advisor™ Sensor

Electrical
24VDC

Switching Current
100mA maximum

Switching Contacts
3-wire; common, high, and pump run
(normally open)

Alarm Activation
Approximately 4-inches above the pump activation level

Cable Type
PVC, 22 gauge, 3-conductor

Three-Year Limited Warranty

Sump Advisor™ Alarm Panel (CSA)

Primary Power
120VAC, 60 Hz, 5-foot power cord

Secondary Power
Class 2, 9-11.1VDC, 500mA

Auxiliary Contacts
Normally Open, Class 2, 24VDC / 24VAC
50/60 Hz, 100mA maximum
Terminals 1A and 1B = High Sump
Terminals 2A and 2B = Pump Run

Sump Advisor™ Sensor Connection
9VDC, 200mA minimum *(signaling device)*

Battery
Standard 9VDC *(not included)*

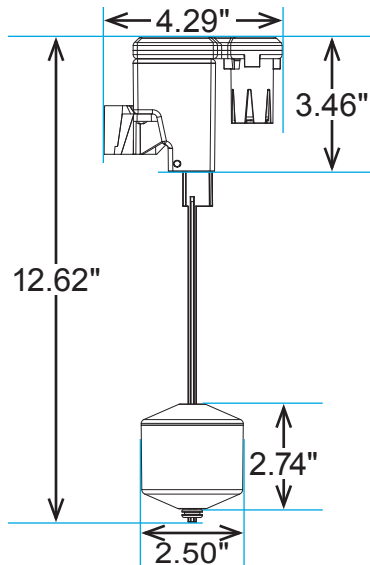**Buzzer**
95 dB @ 2-feet

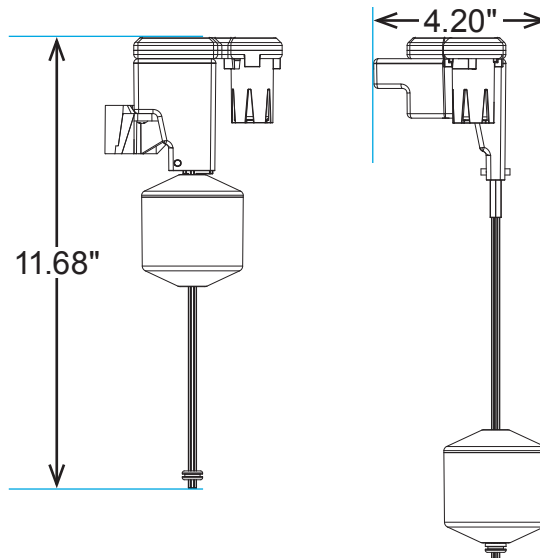**Enclosure**
Type 1, Indoor

Certifications
CSA *(US and Canada)*
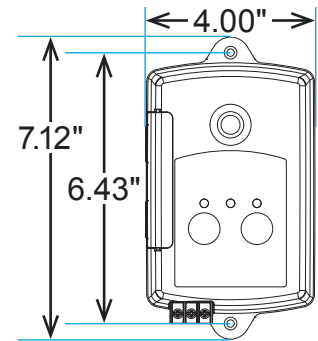
Three-Year Limited Warranty

MECHANICAL DRAWING

VertiMAC™ Pump Switch and Sensor

Sump Advisor™ Alarm Panel

ORDERING INFORMATION

For a complete list of standard products with pricing, refer to the current year price sheet or visit alderonind.com for more information.

PART NUMBER	DESCRIPTION (VM-Series Pump Switch: 120/240VAC, Bare Lead or Piggyback Plug, 13 Amp | Includes: Sump Advisor™ Sensor and Sump Advisor™ Alarm Panel)
2000544	10' VertiMAC™ Sump Advisor™ System, VM-Series, 120VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000547	15' VertiMAC™ Sump Advisor™ System, VM-Series, 120VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000550	20' VertiMAC™ Sump Advisor™ System, VM-Series, 120VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000511	25' VertiMAC™ Sump Advisor™ System, VM-Series, 120VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000553	30' VertiMAC™ Sump Advisor™ System, VM-Series, 120VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000545	10' VertiMAC™ Sump Advisor™ System, VM-Series, 240VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000548	15' VertiMAC™ Sump Advisor™ System, VM-Series, 240VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000551	20' VertiMAC™ Sump Advisor™ System, VM-Series, 240VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000512	25' VertiMAC™ Sump Advisor™ System, VM-Series, 240VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000554	30' VertiMAC™ Sump Advisor™ System, VM-Series, 240VAC Piggyback Plug, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000546	10' VertiMAC™ Sump Advisor™ System, VM-Series, 120/240VAC Bare Leads, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000549	15' VertiMAC™ Sump Advisor™ System, VM-Series, 120/240VAC Bare Leads, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000552	20' VertiMAC™ Sump Advisor™ System, VM-Series, 120/240VAC Bare Leads, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000513	25' VertiMAC™ Sump Advisor™ System, VM-Series, 120/240VAC Bare Leads, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed
2000555	30' VertiMAC™ Sump Advisor™ System, VM-Series, 120/240VAC Bare Leads, 13A, Pump Down, Stainless Steel Pipe Clamp, Boxed