# WaterPro<sup>™</sup> VFD Moisture Sensor

Digital Input Sensor | Rated 12VDC or 24VDC INDOOR USE ONLY

**DESCRIPTION OF OPERATION** 

The WaterPro<sup>™</sup> VFD Moisture Sensor connects directly to a well or booster pump variable frequency drive (VFD) digital input. The VFD must have a digital input that can be programmed to "fault" or stop the drive and require a manual reset of the VFD to resume normal operation. Available in 12VDC or 24VDC models.

ALDERO Industries

Leading Edge Control Products

**TECHNICAL DATA SHEET** 

After the sensor has been field installed and powered, the green LED will illuminate on the sensor to indicate a normal operating condition.

An alarm condition occurs when water touches the two probes on the sensor, during which the red alarm (pump stop) LED will illuminate and the sensor activates the digital input of the VFD which will stop the pump and prevent flooding.

Reset the system by clearing the VFD "fault" feature which restores normal operation. Refer to the instructions for the VFD manufacturer for programming the digital input and clearing the "fault" condition.

Perform regular maintenance of the probes keeping them free of debris, calcium, or iron deposits for normal system operation.

### **STANDARD FEATURES**



(1) Sensor Housing - Enclosure and electronics are encapsulated in epoxy, making it a completely waterproof sensor.

(2) Normal LED - A green LED illuminates on the top of the sensor to indicate a normal operating condition and the power is on.

(3) Alarm (Pump Stop) LED - During an alarm condition, the red alarm (pump stop) LED will illuminate on the top of the sensor.

(4) **Probes** - Two stainless steel probes on the bottom of the sensor detect water and sends a signal to activate the digital input of the VFD which stops the pump to prevent flooding.

(5) Stability Feet - Four feet are part of the enclosure to create the water detection level of the sensor and a base with maximum stability.

(6) Water Break Bar - Divides the probes on the bottom of the sensor for a fast reset.

(7) Sensor Power Cable (not shown) - PVC, 22 gauge, 4-conductor cable connects the sensor directly to the digital input of the VFD. Available in 12VDC and 24VDC.

### **SPECIFICATIONS**

### WaterPro<sup>™</sup> VFD Moisture Sensor

Electrical

12VDC or 24VDC (voltage depends on model/part number)

Normal Operating Current 3mA or 6mA

Alarm Operating Current 27 - 30mA (typical VFD digital input)

Switching Current 100mA or 500mA

Probes Stainless Steel

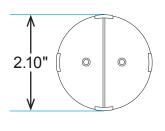
**Detection Level** 1/16-inch of water

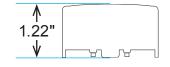
**Cable Type** PVC, 22 gauge, 4-conductor, 15-feet (custom lengths available)

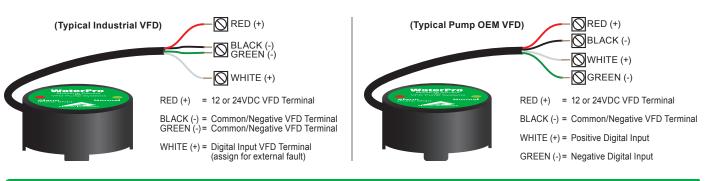
#### **Three-Year Limited Warranty**

# WIRING DIAGRAMS

### **MECHANICAL DRAWING**







## **APPLICATION EXAMPLE**

#### Detect Water

A WaterPro<sup>™</sup> VFD Moisture Sensor will detect a water leak at 1/16-inch level in the designated monitoring area and sends a signal to the variable frequency drive (VFD) digital input.

#### Activate VFD Digital Fault Input

The WaterPro™ VFD Moisture Sensor connects directly to a variable frequency drive (VFD) with a digital input that can be programmed to "fault" or stop the drive and require a manual reset of the VFD to resume normal operation.

#### Water Supply Shutoff

During an alarm condition, the red alarm (pump stop) LED will illuminate on the WaterPro<sup>™</sup> VFD Moisture Sensor and the sensor activates the digital input of variable frequency drive (VFD) which will stop the pump and prevent flooding.



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

Deep or Shallow

Well Pump

Pressure Tank

Pressure Gauge

Pressure Relief

Valve

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WaterPro<sup>™</sup>

VFD Moisture Sensor

To House

VFD

n Transducer

隧 Gate Valve

	PART NUMBER	DESCRIPTION
	8074	WaterPro™ VFD Moisture Sensor, 24VDC, 15' Cable
	2000905	WaterPro™ VFD Moisture Sensor, 12VDC, 15' Cable
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#### 1/16-inch signal to th

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