



CUSTOM PUMP DOWN WITH HIGH ALARM PANEL

NEW MORE RELIABLE TECHNOLOGY by Waterline Controls **FOR SPECIFYING ENGINEERS WITH A TESTED & PROVEN TRACK RECORD** in MRO APPLICATIONS for 10+ years.

Our controls can **REPLACE ALL SENSOR & CONTROL TYPES** in ALL water based applications.

We **ARE NOT** similar to float switches, capacitive, conductive, ultrasonic, or pressure transducers. We **ARE** more reliable, easy to operate, & last longer.

Features:

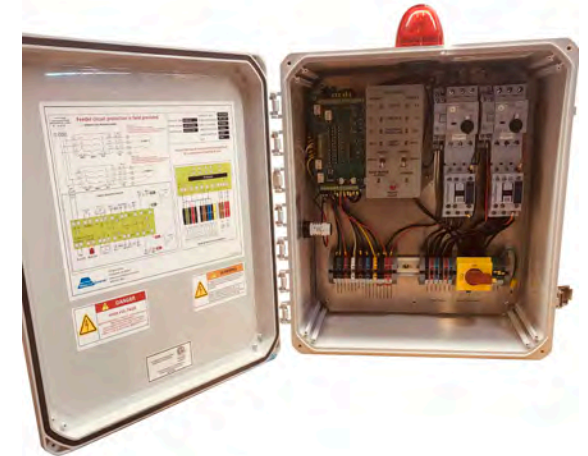
- 5 Year Limited Warranty
- NEMA 12x control enclosure
- Intuitive LED indicators
- Fully automated by microprocessor
- Color coded sensor rods & wires for intuitive installation
- IEC Contactors, Manual Motor Protector, Internal Thermal Overload Relay
- Controls can be mounted in equipment room w/ sensor wired remotely
- Modular construction
- Extendable sensor probes

Technology:

A microprocessor controlled frequency state change detection method uses a low amplitude signal generated on multiple sensor probes of differing lengths. Each probe has a frequency separate from all other probes in the array and independently changes state when touched by water. The state change of the frequency on each probe is monitored by a microprocessor which can perform multiple water level control functions.

A strength of state dependent frequency monitoring is long term stability of the sensing probes. The signal strength is not sufficient to cause fouling, degradation, or deterioration of the sensors due to electrolysis in contaminated water. Sensor cleaning requirements are minimal or eliminated. Use of multiple sensing rods of different length allows the user to intuitively set up control switches at various water heights.

The microprocessor in a state dependent frequency monitor can actuate valves and/or large pumps with very low power consumption. Multiple switch controls can be built in to small package while providing complex, application specific functionality using the microprocessor. Low power consumption of the controls is consistent across large and small field applications. This universal technology is used in applications with wide-ranging liquid quality.



Benefits:

- Less than 1% failure rate in the field
- Intrinsically safe - no high voltage in water
- Never needs recalibration
- Fully Commercialized
- Sensor will not plate, foul, or deteriorate
- Water quality does not matter
- Flexibility in design to meet any scenario
- Minimal maintenance
- Stand-alone controls
- Only moving parts are replaceable relays



CUSTOM PUMP DOWN WITH HIGH ALARM PANEL

OPTIONAL ACCESSORIES

☐ CLEAR PANEL DOOR

☐ HOA SWITCH(ES)

☐ AUDIBLE ALARM W/ SILENCER SWITCH



☐ FLASHING BEACON

☐ STEADY BEACON

☐ ROD STYLE SENSOR

☐ RING STYLE SENSOR

How to Order

Pump Control Panel

Number of Pumps

S = Simplex D=Duplex T=Triplex

Pump Sequence*

N=None (Simplex) S=Single Pump Alternating**

A= Alternating Lead and Lag L= Sequence Lead and Lag

Voltage Requirement

115V/1P 208V/1P 230V/1P 208V/3P 230V/3P 460V/3P

Full Load Amps Requirements

Use range to determine part (Based on FLA of Pump(s))

3-4=4 5-6=6 7-10=10 11-16=16

17-20=20 21-25=25 26-32=32

Pump Safety Requirements

Thermal Overload protection=T Both=TS

Seal Fail Alarm=S None=N

D A 208/3-16 TS

← Model Number Illustrated:

DA208/3-16TS

Duplex Pump Down (Alternation pumps, All Off) With High Alarm, Thermal Overload Protection, and Seal Fail Alarms. Rated for 208V/3 Phase @ 8-13FLA Pumps.

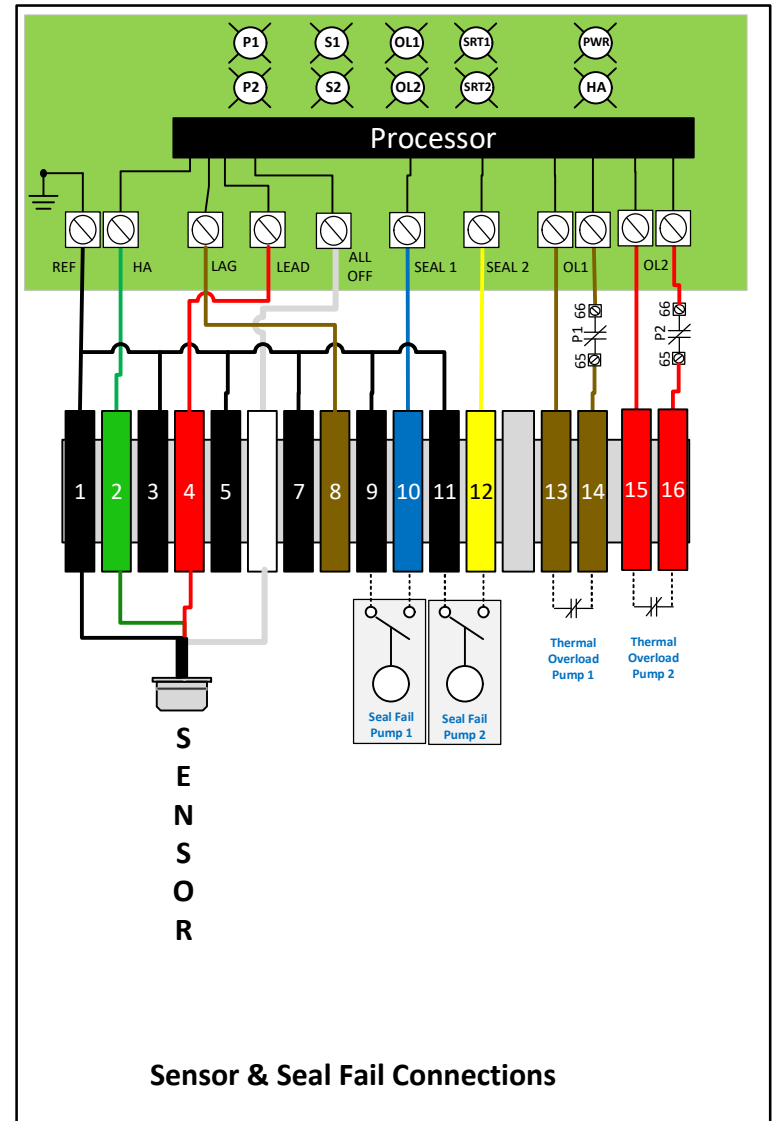
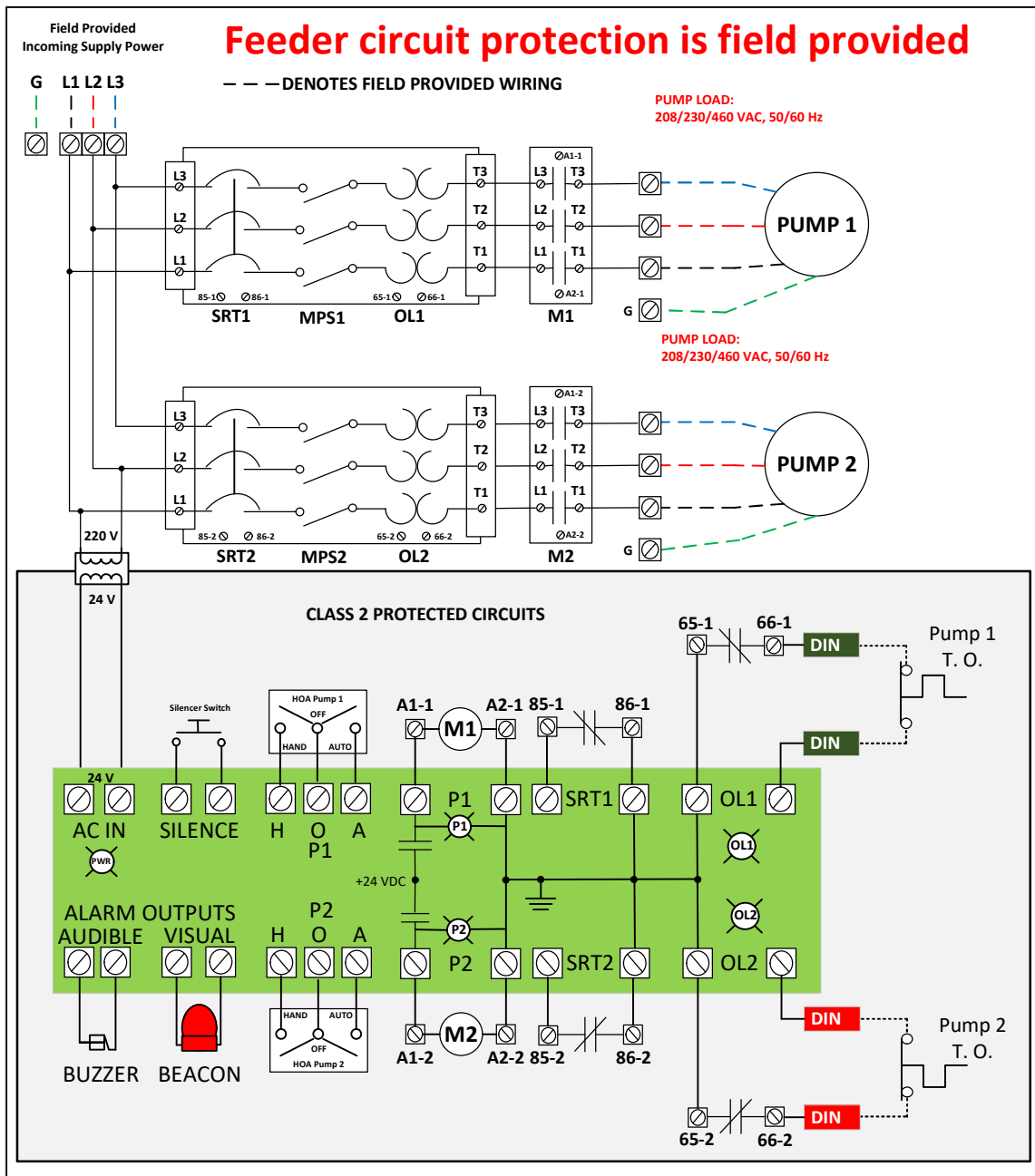
Pump Down Control Panel w/ High Alarm

*All Pump sequences will have All Pumps Off.

**Single Pump Alternating is when two pumps are used but only one pump will ever be on. The pumps alternate each cycle.

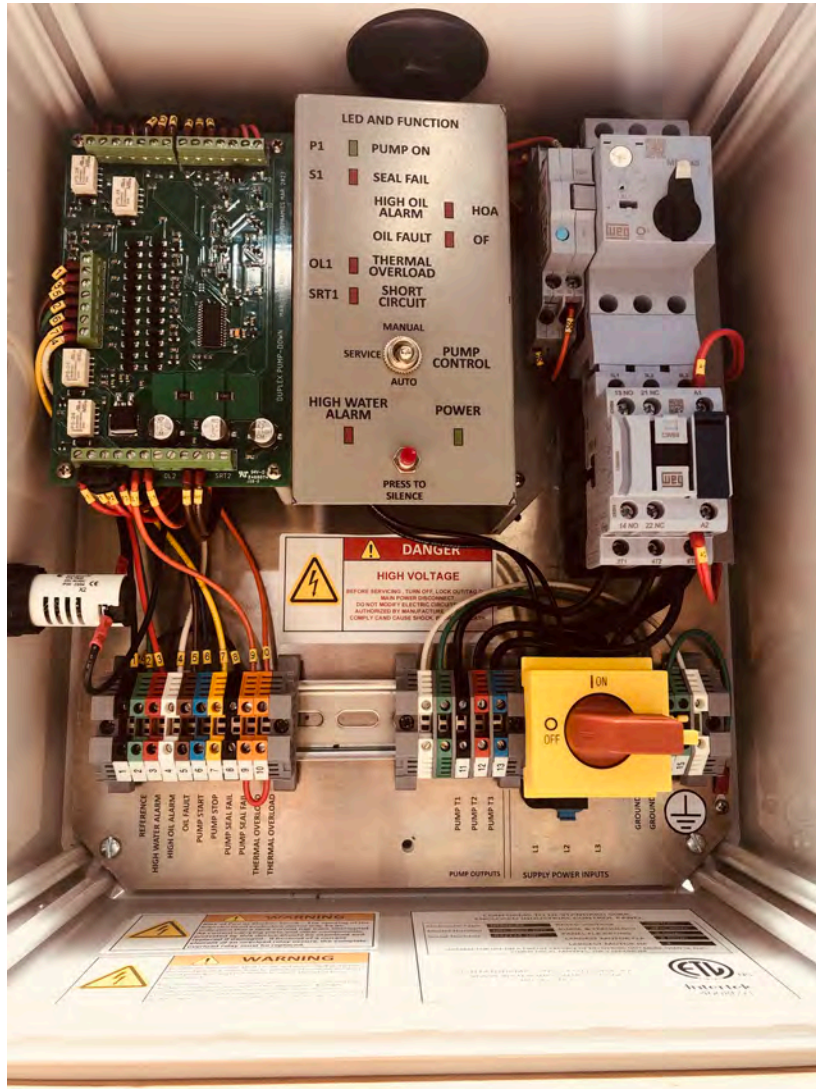
CUSTOM PUMP DOWN WITH HIGH ALARM PANEL

ELECTRICAL DRAWING



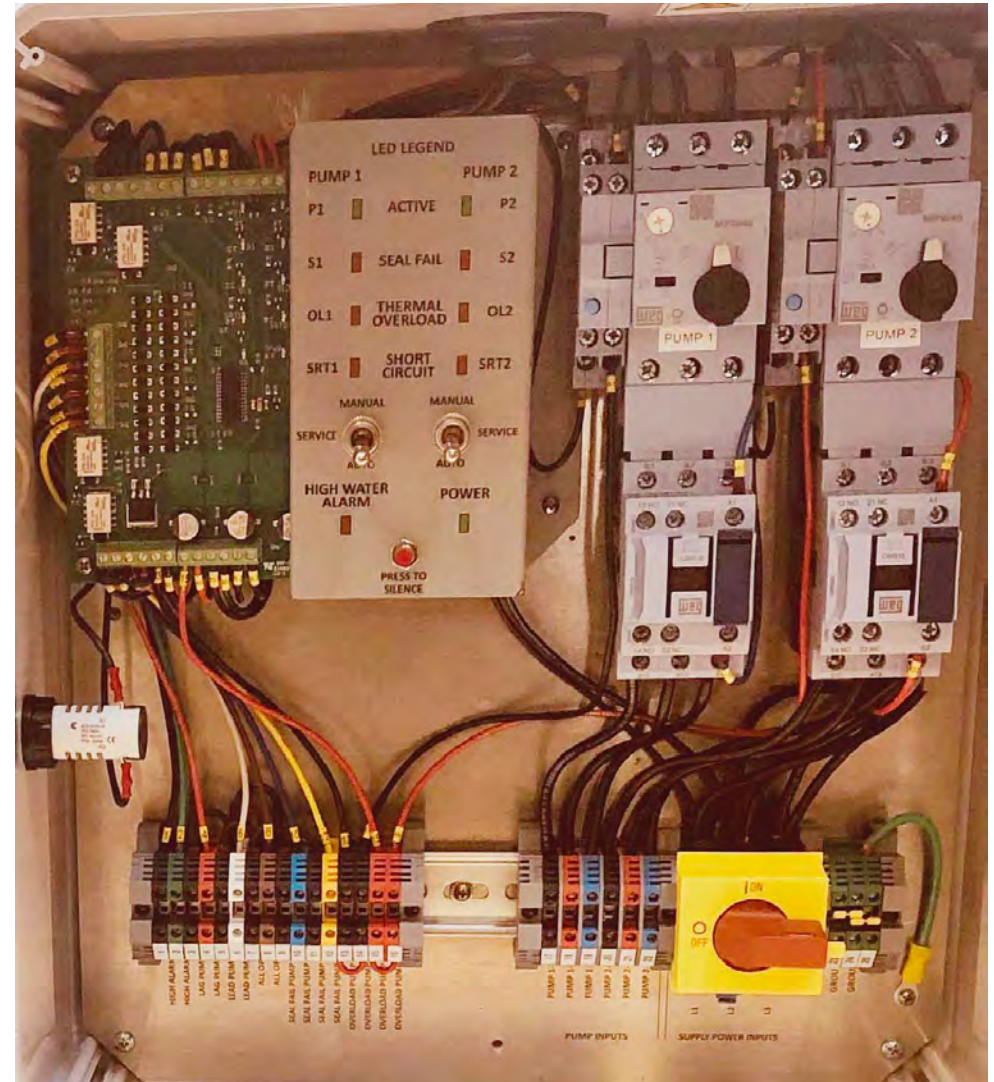
CUSTOM PUMP DOWN WITH HIGH ALARM PANEL

Physical Layout



SN208/3-16TS

Examples

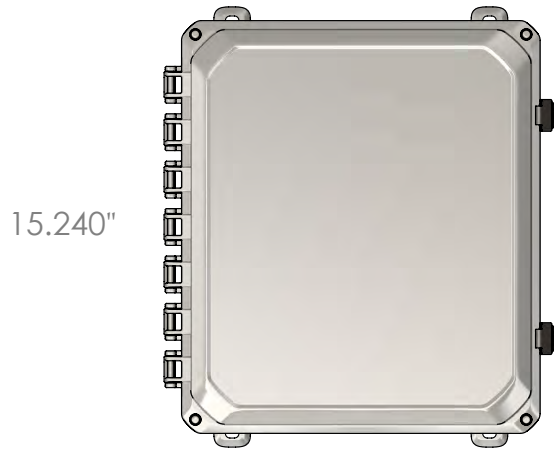


DS208/3-16TS

CUSTOM PUMP DOWN WITH HIGH ALARM PANEL

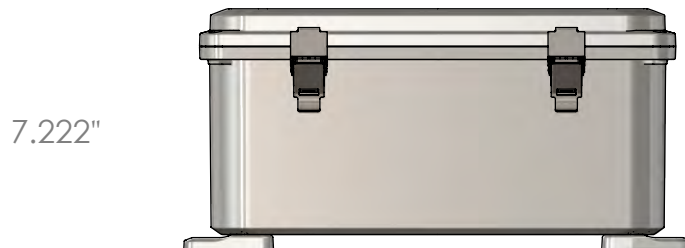
Enclosure Dimensions

Simplex Enclosure



15.240"

13.240"



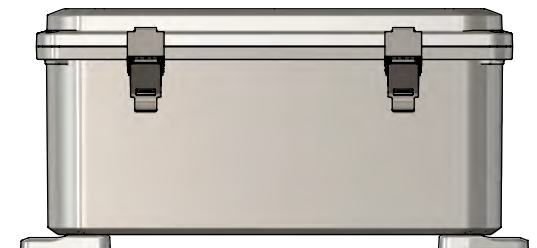
7.222"

Duplex Enclosure



17.240"

15.240"



8.253"



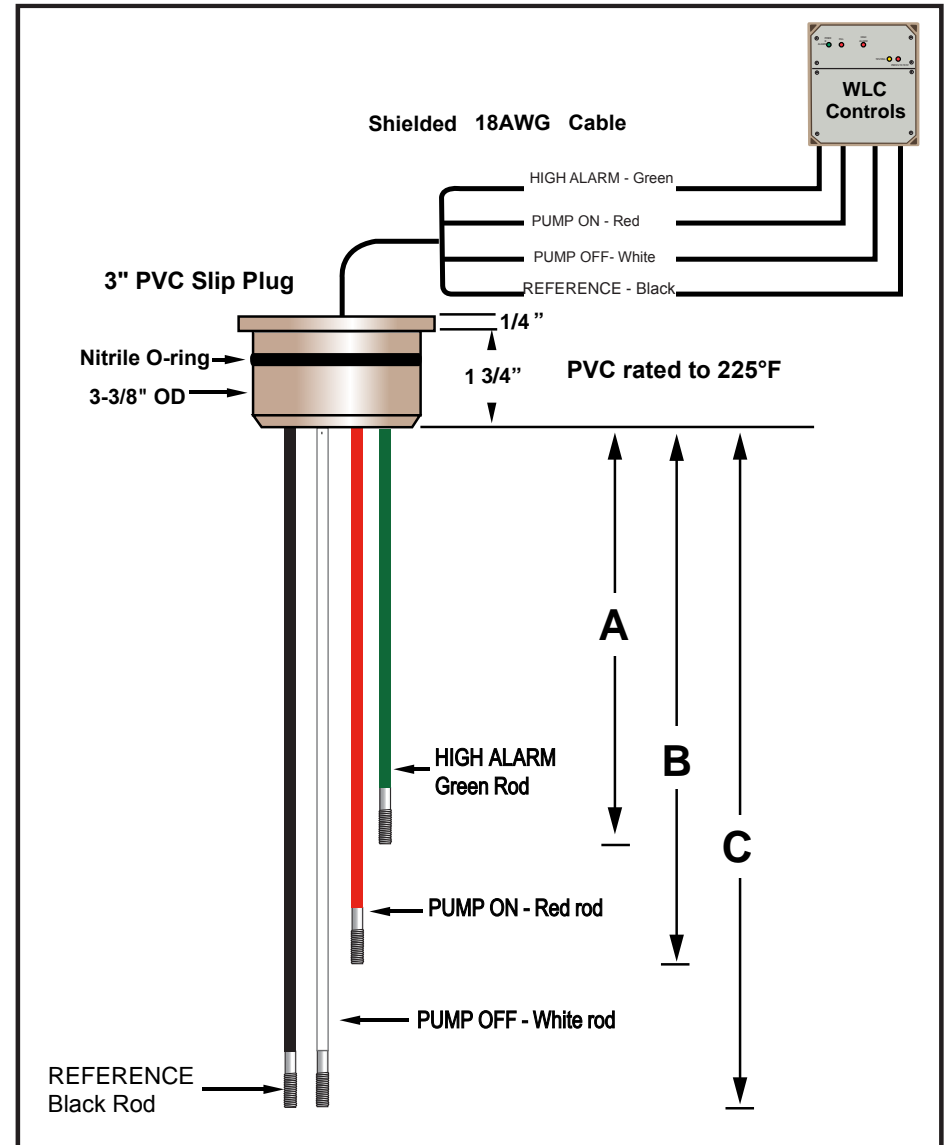
CUSTOM PUMP DOWN WITH HIGH ALARM PANEL

Simplex Pump Down Sensor w/ High Alarm (Rods)

Standard Cable length is 50 ft.
Available in 50ft increments up to 350 ft.
Over 350 ft. please call
All rods are 304 stainless steel with 1/4-20 threaded ends.
Sensor rods can be extended using an Extension Rod kit accessory.
Sensor rods & wires are Intrinsically safe with circuit limited signals.

LENGTHS			
SENSOR		Standard	
Green	HIGH ALARM	A	10 3/8"
Red	PUMP OFF	B	15 1/2"
White	PUMP ON	C	17"
Black	Same length as longest rod		

Optional Extension rod kit to extend rods by 45.5" Extension rods threaded at each end to allow for any depths.
SENSOR-EXT4-45.5in



Toll Free: 480-905-1892
www.waterlinecontrols.com
Email: info@waterlinecontrols.com



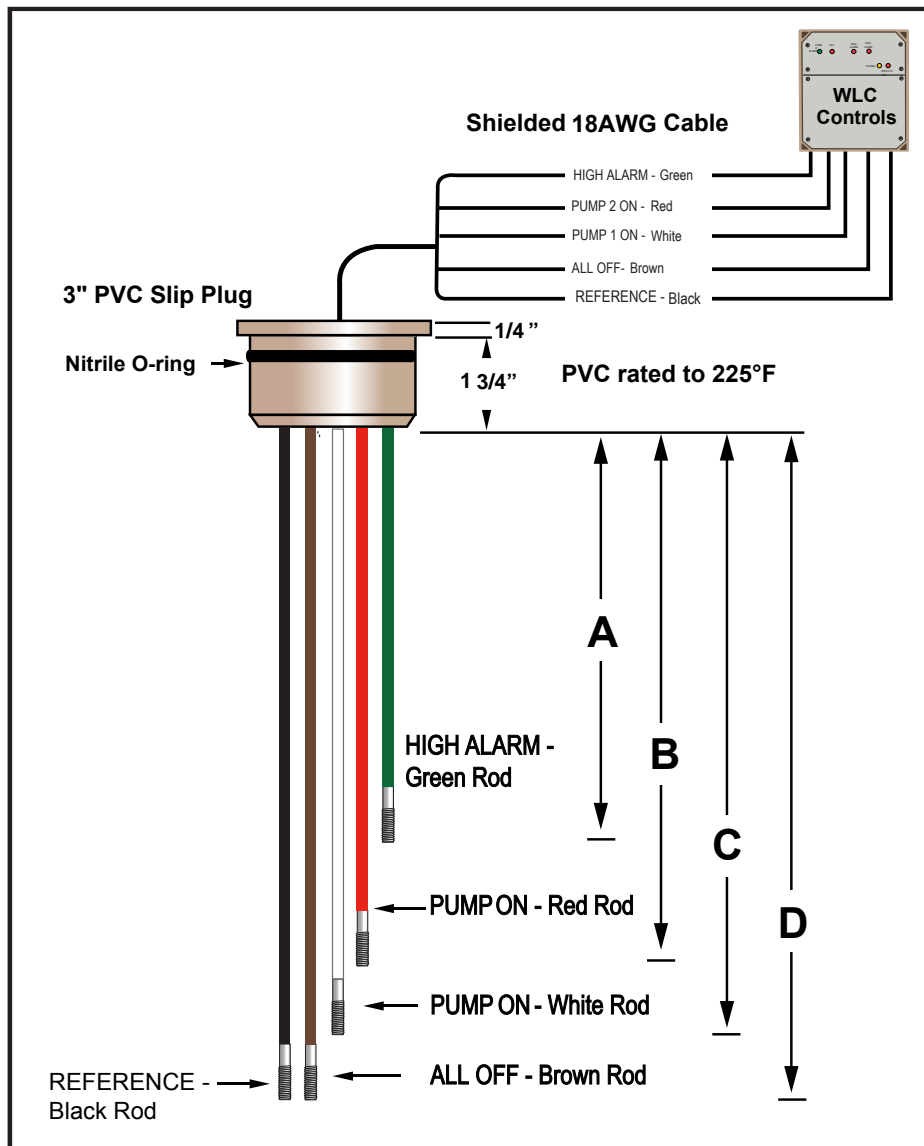
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LENGTHS			
SENSOR		Standard	
Green	HIGH ALARM	A	10 3/8"
Red	PUMP ON	B	14 7/8"
White	PUMP ON	C	16 3/8"
Brown	ALL OFF	D	17"
Black	Same length as longest rod		

Optional Extension rod kit to extend rods by 45.5" Extension rods threaded at each end to allow for any depths.
 SENSOR-EXT5-45.5in



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CUSTOM PUMP DOWN WITH HIGH ALARM PANEL

Simplex Pump Down Sensor w/ High Alarm (Rings)

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Function		Required Length
Over All Length	OAL	A + E
High Alarm	A	
Pump On	B	
Pump Off	C	
Reference	D	Min. 3-1/2"
Headspace	E	Min. 3"

Overview

2" or 3" PVC Sensor cup.
1" Schedule 40 PVC Pipe

All Rings are Passivated 304 Stainless Steel

1-3/8" diameter x 3/4" wide.

Measurements

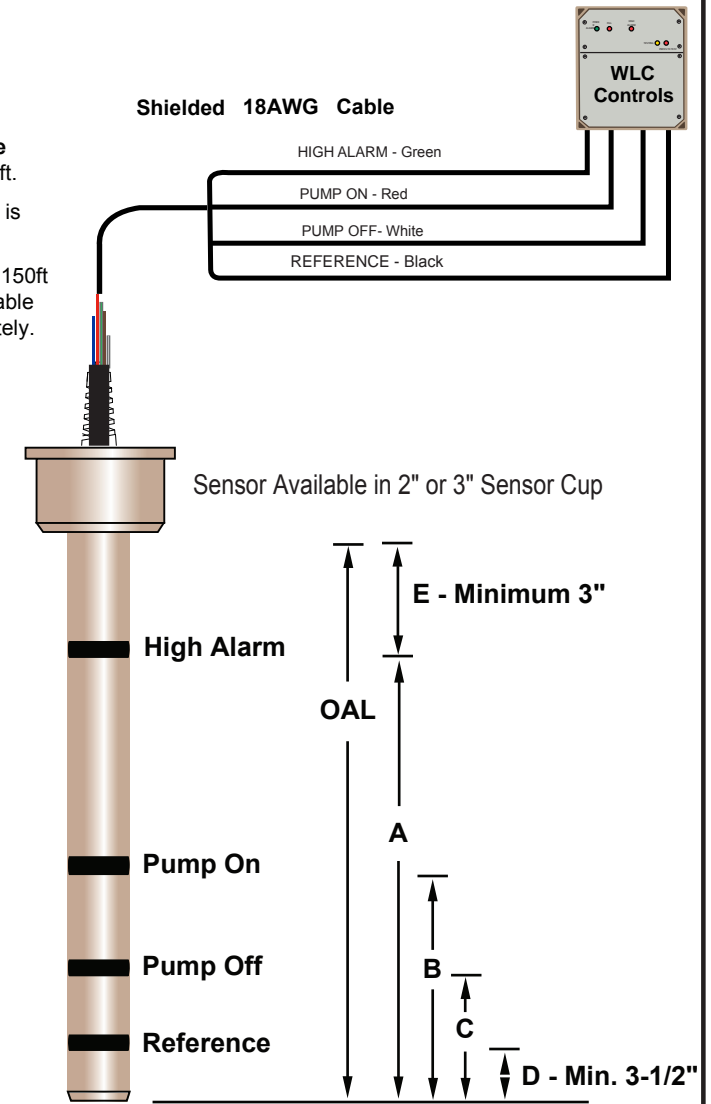
Measurements A-D are from the bottom of the ring to the bottom of the sensor stick. 2-1/2" minimum between rings.

Measurement E is from the bottom of the cup to the bottom of the top ring.

NOTE: Sensor Cable
Standard length is 50ft.

Maximum wire length is 150ft.

Lengths greater than 150ft will need a Sensor Cable splice kit sold separately.



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Pump On	B	
Pump On	C	
All Pumps Off	D	
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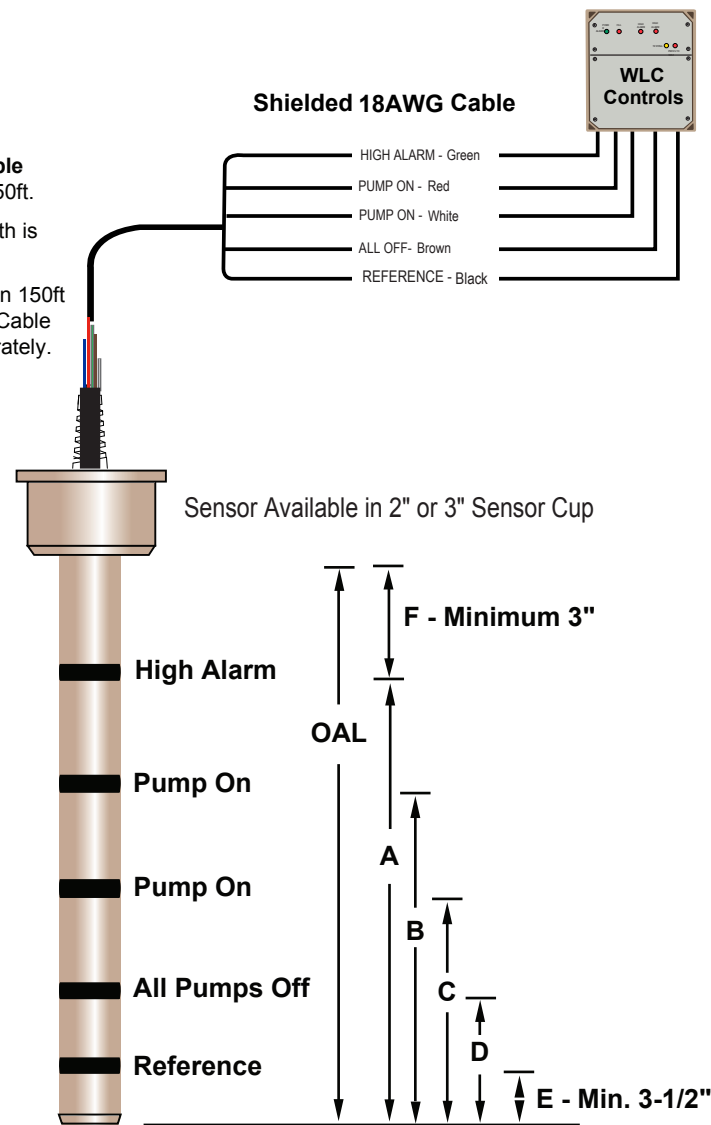
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Electronic Water Level Management Systems

5 Year Limited Warranty - WaterLine Controls®

The 5 Year Limited Warranty is extended to the original consumer purchaser of this WaterLine Controls manufactured by WaterLine Controls, Scottsdale, Arizona. WaterLine Controls warrants the unit, including the parts and components thereof, to be free of defects in material and workmanship under normal use and service conditions. This warranty does not cover plumbing or normal replacement items and parts, including gaskets and O-rings. WaterLine Controls does not cover improper installation of the unit or its parts. If you have any questions regarding the installation of your WaterLine Controls unit, please feel free to contact us. Be sure to include the serial number of your unit.

The 5 Year Limited Warranty commences on the date of installation. Parts discovered to have manufacturing defects within 1 Year of installation shall be replaced at no charge to the original consumer. Defects discovered after one year and up to the fifth year following the installation, shall be replaced at a fee of \$275.00 per item. WaterLine Controls will repair or replace, at its option, a unit or part proved to be defective within the warranty period and under the conditions of this 5 Year Limited Warranty.

This 5 Year Limited Warranty does not apply if the failure is caused or contributed by any of the following: power failure or reduction of power supplied to the unit, unusual atmospheric conditions, improper handling, improper storage, winter freezing, abuse, improper installation, unsuitable application, lack of reasonable and necessary maintenance, natural disasters, or repairs/alterations made or attempted by other than WaterLine Controls or an Authorized Technician approved by WaterLine Controls.

The consumer must deliver or ship the unit or warranty parts freight prepaid to WaterLine Controls. Authorization to return an item to WaterLine Controls must be obtained from WaterLine Controls Customer Service Department at 888-905-1892. For further assistance with this process please contact the Customer Service Department. Be sure you insure your shipment against loss or damage in transit.

WaterLine Controls is not responsible for the cost of removal of the unit or parts of the unit, damages due to removal, or any other expenses incurred in shipping the unit or parts to or from WaterLine Controls or its closest Authorized Service Center or the installation of the repaired or replaced unit. The consumer must bear these expenses.

THIS 5 YEAR LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL SUCH OTHER WARRANTIES ARE DISCLAIMED EXCEPT TO THE EXTENT ANY IMPLIED WARRANTY MAY BE IMPOSED BY STATE CONSUMER LAW. ANY SUCH IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW IS LIMITED IN DURATION TO ONE (1) YEAR FROM THE DATE OF INSTALLATION. IN NO EVENT SHALL WATERLINE CONTROLS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR ANY NATURE OR KIND OR FOR DAMAGES TO PERSONS OR PROPERTY, INCLUDING ANY DAMAGE RESULTING FROM THE USE OF THE UNIT WITH A SUBSTANDARD WATER CIRCULATION OR SUPPLY SYSTEM.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

This limited warranty is valid only in the United States of America and Canada.

WaterLine Controls • PO Box 12544 Scottsdale • Arizona 85260

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