

# S-AOE Selection Guide

## FEATURES:

- Designed for Deep Burial Tanks
- Accurate and Reliable Level Control
- Custom Sensor Configuration for Unique Applications
- Fitting, Stem and Float available in Stainless Steel
- Rugged Cast Iron NEMA 4 Fitting Housing
- 50 Watt Switch Contacts at 120/240 VAC
- Field Adjustable Burial Depth
- Easy Installation Even When Elevations Change in the Field.

## APPLICATIONS:

S-AOE's are designed to be installed in 2" Riser Pipe. They can be ordered with standard floats with a specific gravity of 0.6 and Interface floats with a specific gravity of 0.95. The standard float will float on most all liquids, The Interface float, however, with a specific gravity of 0.95 will float on water but sink in oil.

When used in a potentially explosive application, the S-AOE must be interfaced with an intrinsically safe level control. The float stem and 2" NPT fitting can be ordered in a brass or stainless steel. The floats on the S-AOE are stainless steel as standard.

## OPERATION:

The Float switch contains small magnets, as the float rises and falls in the liquid, the magnets cause SPST dry reed switch potted in the stem assembly to open or close depending on the orientation of the float switch. Float activation can be ordered in a normally open or a normally closed configuration.

## INSTALLATION INSTRUCTIONS:

The S-AOE conduit head has a 3/4" NPT connection with a 1/2" NPT conduit adapter, for ease of electrical connection. When wiring to the Float switch wires, AWG 14 -16 Type MTW or THHN wire. Intrinsically safe wire must be used in "Hazardous Locations" applications and connected to intrinsically safe level controls. Consult NEC article 500 through 516 for additional guidance on Hazardous Locations. All splices, conduit and wiring conduit runs to the S-AOE, should be connected in such a way as to prevent moisture from entering the S-AOE conduit head. Water inside the conduit head could result in system failure. Liquid tight conduit is recommended.



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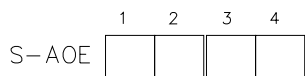


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Klerwater Form  
S-AOE-Selection  
8/2004

# Klerwater



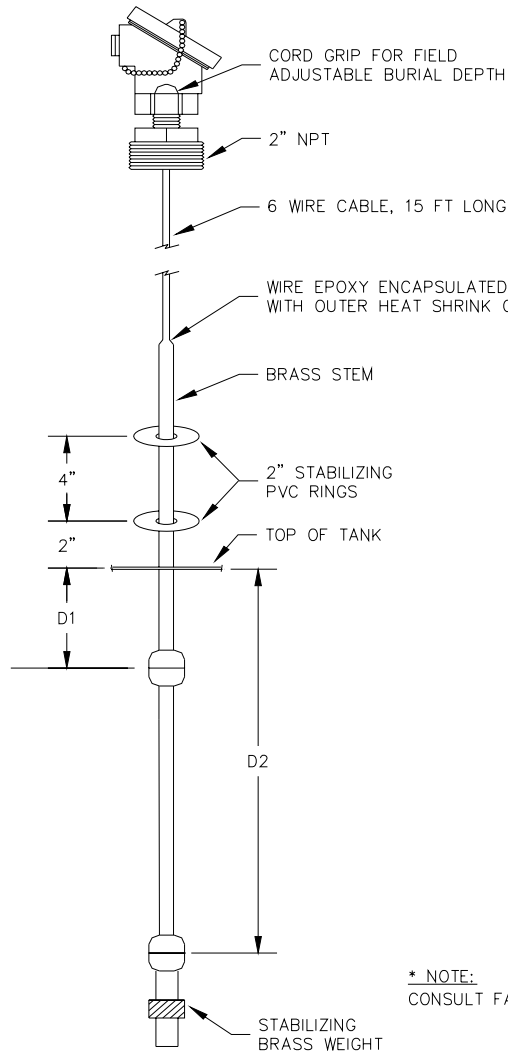
MODERN WELDING COMPANY  
KLEERWATER S-AOE STANDARD PROBE

OVERALL LENGTH OF PROBE STEM  
D2 DIMENSION ROUNDED TO NEXT HIGHEST FOOT

D2 DIMENSION (INCHES)

D1 DIMENSION (INCHES)...ONLY REQUIRED FOR DUAL SENSOR PROBES

NUMBER OF SENSORS (NORMALLY CLOSED INTERFACE)



PROBE AND JUNCTION HEAD  
WILL BE BRASS WITH STAINLESS  
STEEL INTERFACE FLOATS UNLESS  
OTHERWISE SPECIFIED.

SPECIFICATIONS:

HOUSING: ..... CAST IRON NEMA 4

FITTING: ..... BRASS OR STAINLESS STEEL

THREAD SIZE\*: .... 2" - 1 1/2 NPT

FLOAT SIZE: ..... 1" WIDE, 1/2" HIGH

CONTACT RATING: 50 WATT 120/240 VAC

STEM SIZE: ..... 1/2"

SPECIFIC GRAVITY: 0.60 STANDARD  
0.93 INTERFACE

WIRE COLOR CODE FOR 1 OR 2 FLOATS:  
TOP LEVEL = GREEN & WHITE  
BOTTOM LEVEL = BLACK & RED

WIRE COLOR CODE FOR 3 OR MORE FLOATS:  
COMMON = WHITE  
L1 = RED  
L2 = GREEN  
L3 = BLUE  
L4 = BROWN  
L5 = BLACK

\* NOTE:  
CONSULT FACTORY FOR OPTIONAL MOUNTING APPLICATIONS

NOTES:  
1) CONTACT FACTORY FOR SHIPPING AND CRATE ADDER.  
2) ACTIVATION LEVEL TOLERANCE +/- .125"  
3) OVERALL LENGTH OF STEM IS L1 ACTIVATION POINT + 3"

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