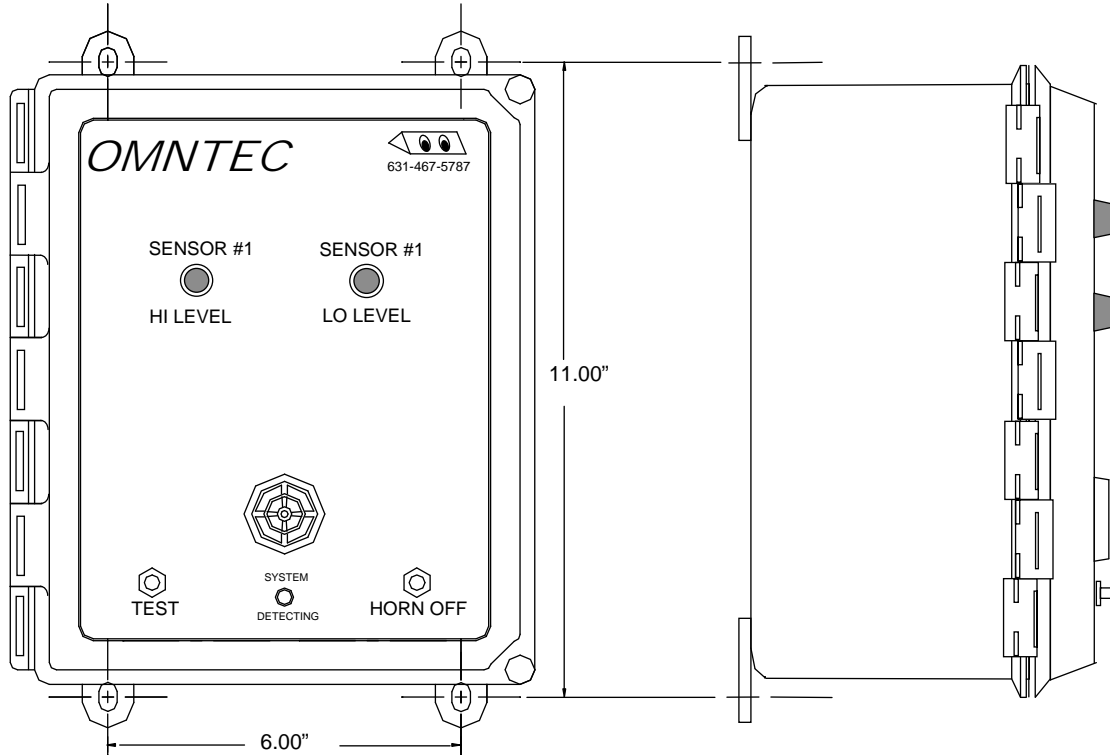


TWO CHANNEL



LU2-SP1 Specifications

POWER INPUT

85-125 VAC, 47-440 Hz
16 Watts maximum

POWER TO SENSORS

2 VDC @ 13 ma

RELAY OUTPUT

SPST normally open dry contacts 1.25 AMPS, 120 AC/DC switches when an alarm condition occurs

WEIGHT **DIMENSIONS**
6 LBS. (W) 9" x (H) 10.5"

SENSOR CABLE

Shielded 22 AWG UL-E118830 CM
Maximum length 2000 feet

ENCLOSURE

NEMA 4X

OPERATING TEMPERATURE

-40° to 140° F

AUDIO/VISUAL CONSOLE

AUDIBLE ALARM - 95 dB pulsing horn with 30 second timeout

RED LIGHT -Indicates liquid alarm for L-series sensors

TEST BUTTON- When pressed will actually test entire system electronics from control panel to sensors

GREEN LIGHT- indicates the power is on

HORN OFF BUTTON - Silences the audible alarm when pressed

SENSORS

L-2 Two point liquid level optic sensor for hi / low
L-R-1 Reservoir sensor

ACCESSORIES

RA-1 audio/visual remote annunciator

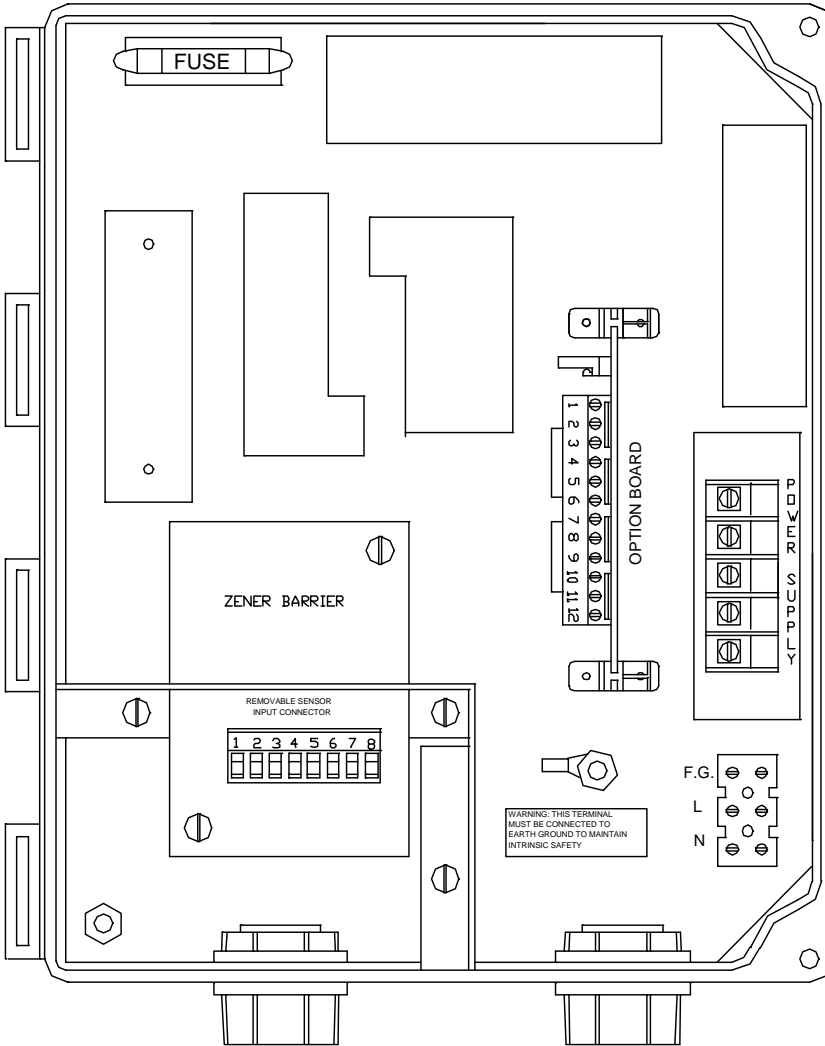
RLY-RA Relay (consult factory)

RA-1-NYS Remote annunciator with strobe (consult factory)

LABELS

Provided with controller

LU2-SP1 CONTROLLER CONNECTION DIAGRAM



COLOR CODE

CABLES FROM SENSORS TO REMOVABLE SENSOR INPUT CONNECTORS

1	RED	SENSOR #1
2	WHITE	
3	UNUSED	
4	GREEN	
5	UNUSED	
6	UNUSED	
7	BLACK	GROUND FROM SENSOR #1
8	SHIELD DRAIN	

WIRES TO OPTION BOARD

WIRES FROM RA-SERIES REMOTE

1	GREEN	-HORN
2	RED	+HORN
3	BLACK	GROUND
4	WHITE	SENSOR #1 HI LEVEL
5	ORANGE	SENSOR #1 LO LEVEL
6	UNUSED	

WIRES FROM RELAY OUTPUTS

7	UNUSED	
8	UNUSED	
9	COMMON	SENSOR #1
10	NORMALLY OPEN	LO LEVEL
11	COMMON	SENSOR #1
12	NORMALLY OPEN	HI LEVEL

120VAC

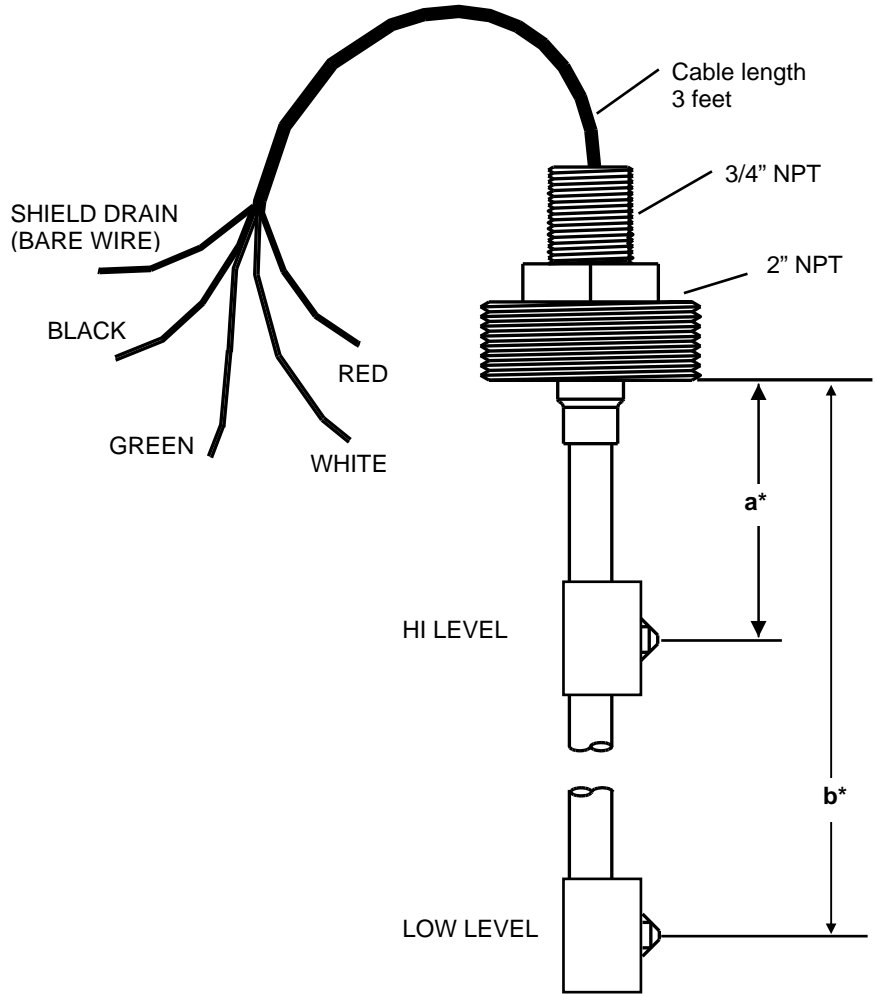
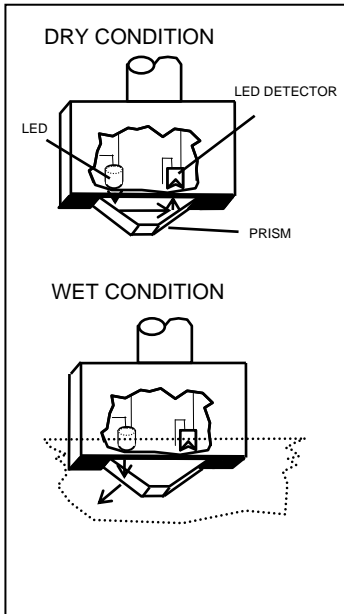
WIRES TO POWER SUPPLY

F.G.	FIELD GROUND
L	LINE
N	NEUTRAL

NOTE: To maintain proper shielding, BLACK sensor wires and SHIELD DRAINS **should not be connected together** at sensors.

Dual Level Liquid Optic Sensor for High and Low Level

Principles of Operation



L-2 SPECIFICATIONS

U.L. LISTED 5L04

Intrinsically safe Class I, Group D Hazardous Locations when connected in accordance with Control Drawing nos. L1, L2, L3, L4, L6, L9

OPERATING TEMPERATURE

-40 TO +140 F

POWER

2 VDC @ 13 mA

WEIGHT

2 pounds

PRINCIPLES OF OPERATION

LIQUIDS (ex: fuel, water) – Photo Optic

DRY CONDITION –

High level: Normally closed light beam

Low Level: Normally open light beam

ALARM CONDITION –

Hi level: Opens (refracts) normally closed light beam

Low level: Closes normally open light beam

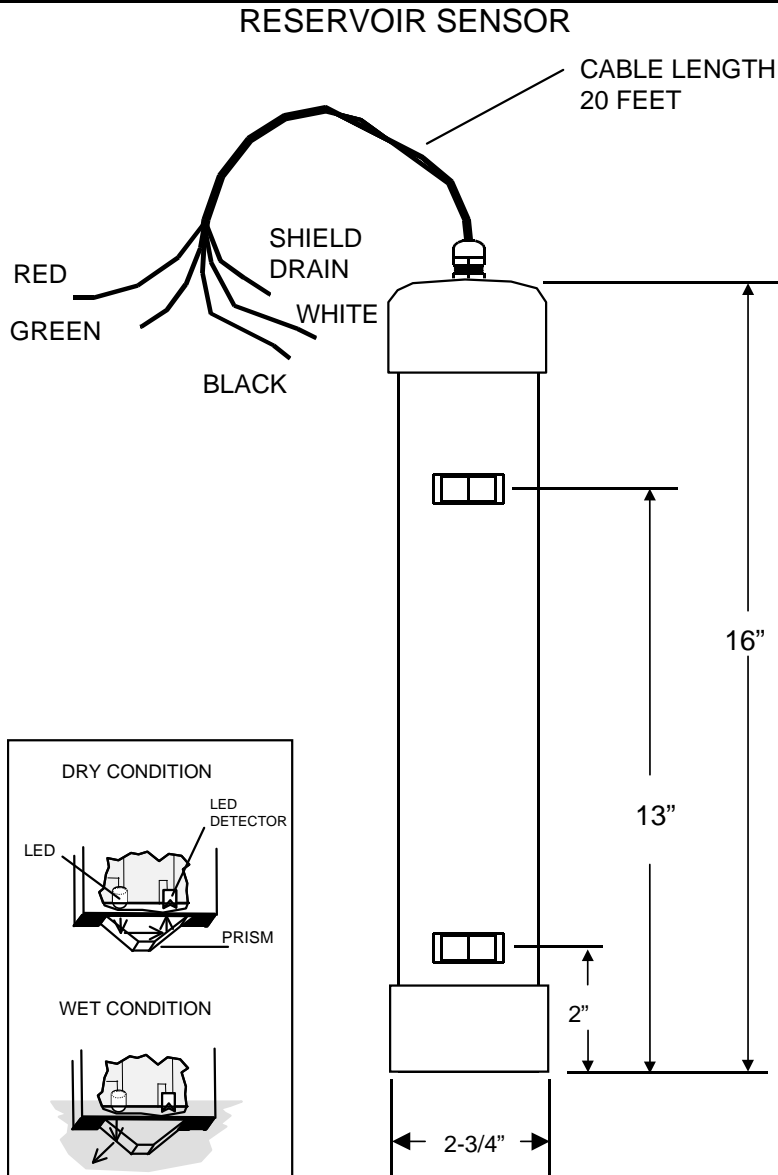
SENSOR CABLE

Shielded 22 AWG UL-E118830 CM

Maximum length 2000 feet

RESPONSE TIME

Immediate



L-R-1 SPECIFICATIONS
SOLID STATE (NO MOVING PARTS)

OPERATING TEMPERATURE

-40 TO +140 F

POWER

2 VDC @ 13 mA

WEIGHT

2 pounds

RESPONSE TIME

Immediate

PRINCIPLES OF OPERATION

LIQUIDS (ex: fuel, water) – Photo Optic

DRY CONDITION –

High level: Normally closed light beam

Low Level: Normally open light beam

ALARM CONDITION –

Hi level: Opens (refracts) normally closed light beam

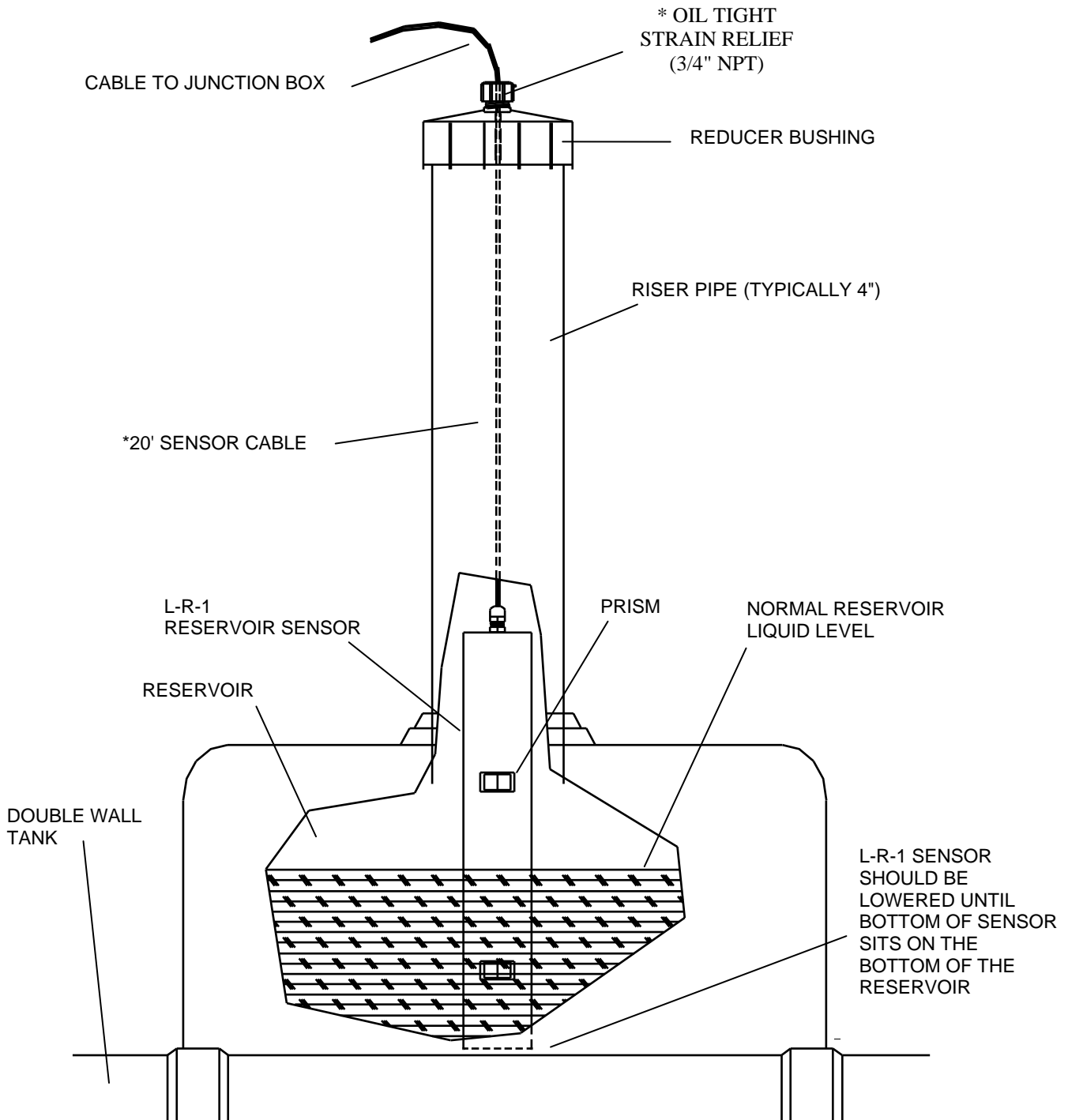
Low level: Closes normally open light beam

SENSOR CABLE

Shielded 22 AWG UL-E118830 CM

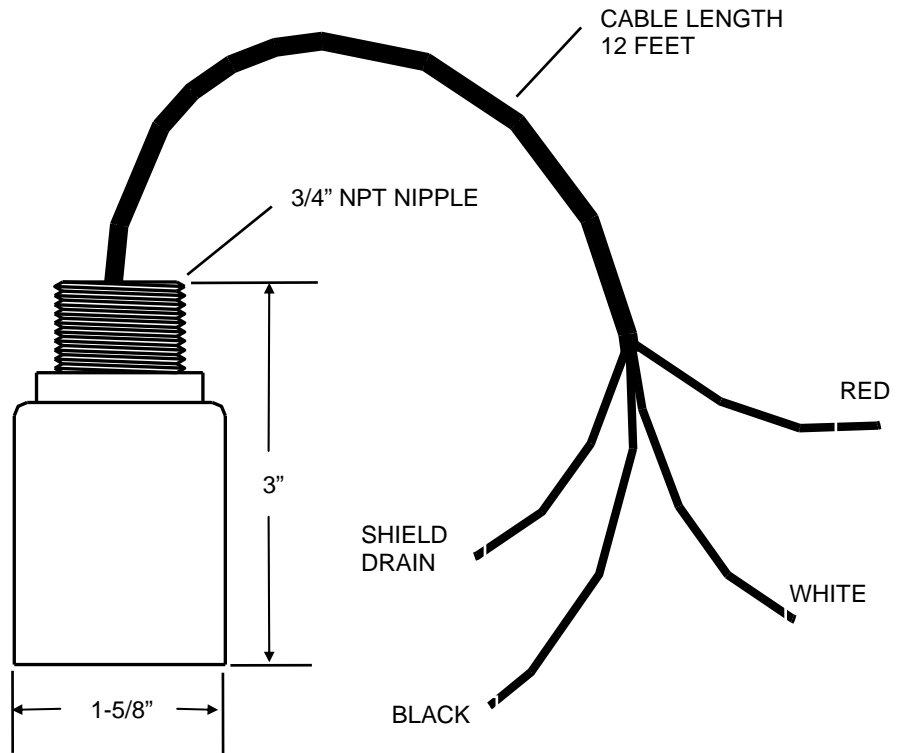
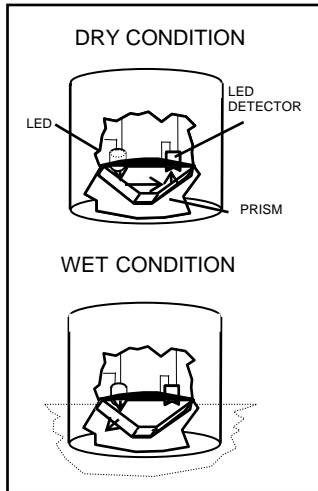
Maximum length 2000 feet

TYPICAL RESERVOIR SENSOR INSTALLATION



*SUPPLIED BY OMNTEC MFG., INC.

Non-product distinguishing Optic Sensor



LS-ASC SPECIFICATIONS

U.L. LISTED 5L04

Intrinsically safe Class I, Group D Hazardous Locations when connected in accordance with control drawing nos. L1, L2, L3, L4, L6, L9

OPERATING TEMPERATURE

-40 TO +140 F

POWER

2 VDC @ 13 mA

WEIGHT

1/2 pound

PRINCIPLES OF OPERATION

LIQUIDS (ex: fuel, water) – photo Optic
 DRY CONDITION – Normally closed light beam
 ALARM CONDITION – Opens (refracts) normally closed light beam

SENSOR CABLE

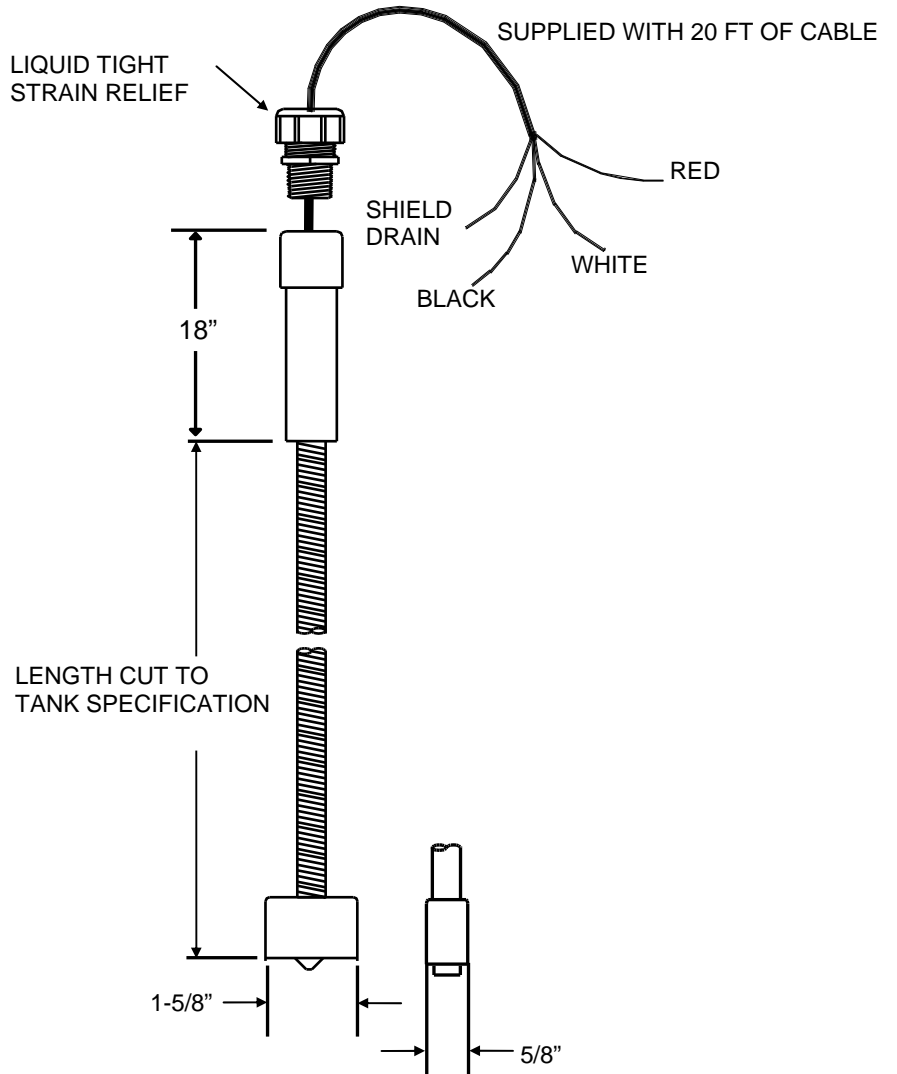
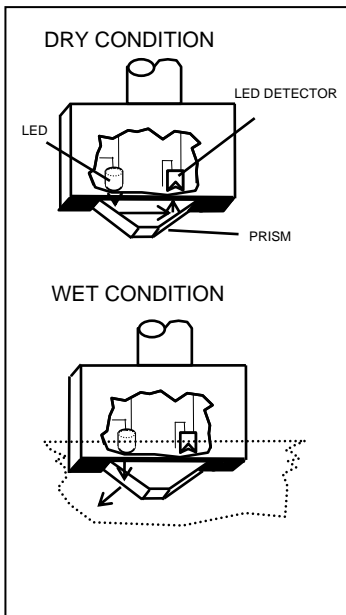
Shielded 22 AWG UL-E118830 CM
 Maximum length 2000 feet

RESPONSE TIME

Immediate

Non-product distinguishing Fiberglass tank dry interstitial sensor

Principles of Operation



LWF SPECIFICATIONS

OPERATING TEMPERATURE

-40 TO +140 F

POWER

2 VDC @ 13 mA

WEIGHT

2 pounds

PRINCIPLES OF OPERATION

LIQUIDS (ex: fuel, water) – Photo Optic
 DRY CONDITION – Normally closed light beam
 ALARM CONDITION – Opens (refracts) normally closed light beam

SENSOR CABLE

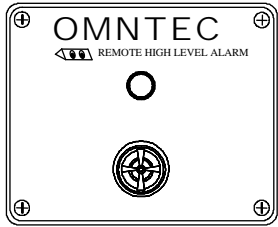
Shielded 22 AWG UL-E118830 CM
 Maximum length 2000 feet

RESPONSE TIME

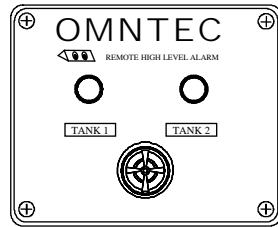
Immediate

RA-Series Remote High Level Alarm

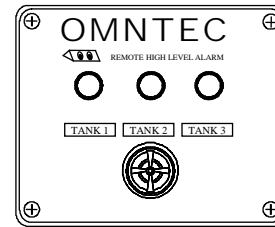
RA-1



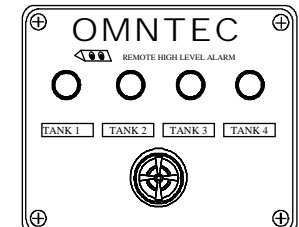
RA-2



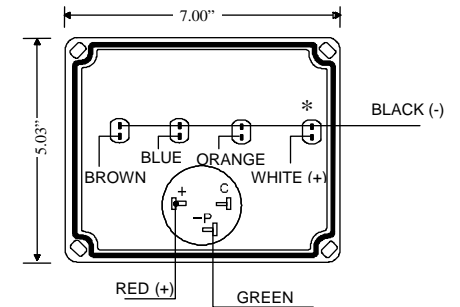
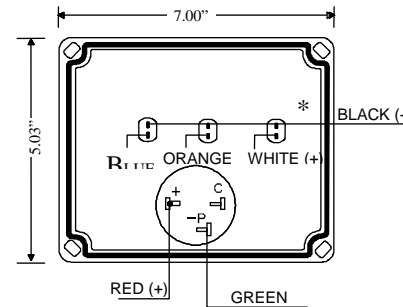
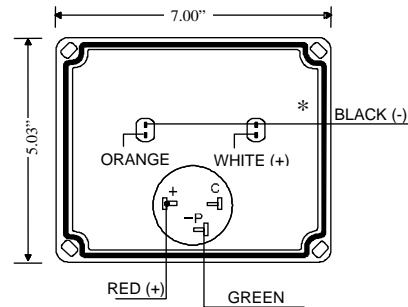
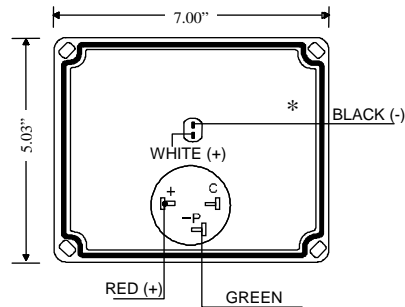
RA-3



RA-4



Internal Wiring Color Code

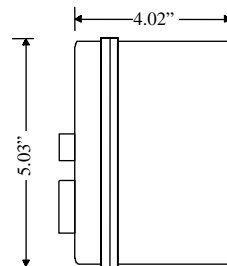


* **WARNING LABEL PLACED HERE:** Warning: Low voltage inputs only

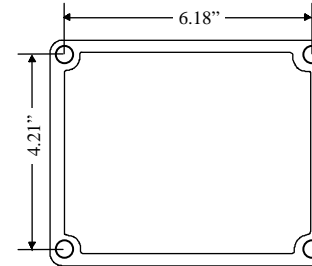
SPECIFICATIONS

Audible Alarm	95 dB pulsing horn
Red Light	Liquid-high-level alarm
Response Time	Immediate
Power Input	12VDC @200mA maximum from controller
Wire	22 AWG minimum
Weight	1 lb.

SIDE VIEW



MOUNTING DIMENSIONS



Note: It is recommended that knockouts be placed in the bottom of the enclosure

WARRANTY

The seller OMNTEC Mfg., Inc. warrants to buyer defects when properly installed, and maintained by user. The sellers sole obligation is to repair or replace parts found to be defective, or non-conforming for one year and only after evaluation by factory. The liability of the seller shall not exceed the price paid for the components found to be defective. The above warranty is exclusive of all other warrantees whether implied or expressed. Seller assumes no obligation for special or, indirect damages incurred by user.

All standard tank gauging systems are free of defects when properly installed and maintained by user. Warranty on tank gauging systems will only be effective after proper documentation has been submitted by the buyer to OMNTEC Mfg., Inc. The sellers sole obligation is to repair or replace parts found to be defective, or non-conforming for one year and only after evaluation by factory. The liability of the seller shall not exceed the price paid for the components found to be defective. The above warranty is exclusive of all other warrantees whether implied or expressed. Seller assumes no obligation for special or indirect damages incurred by user.

All standard replacement parts, "add-ons", or spare parts are free of defects when properly installed and maintained by user. The sellers sole obligation is to repair or replace parts found to be defective or non-conforming for 90 days and only after evaluation by factory. The liability of the seller shall not exceed the price paid for the components found to be defective. The above warranty is exclusive of all other warrantees whether implied or expressed. Seller assumes no obligation for special or indirect damages incurred by user.

Equipment not covered by this warranty includes, but is not limited to: custom equipment, pressure transducers, and control systems.