

Liquid Level Switches

CONTENTS

- 1.1 Overview
- 1.2 Installation & Service
- 2.1 Wiring Diagram & Specification Table
- 3.1 Contact & Notices

1.1 OVERVIEW

Introduction

The “LS” series liquid level switch is a highly reliable method of detecting fluid levels. Solid-state construction ensures many years of trouble-free operation. The hermetically sealed sight glass provides high working pressures without leakage. The liquid level is optically detected through a sight glass. Fluids can be as clear as water or as dirty as crude oil.

The switch must be installed horizontally with at least 2” of distance between it and the vessel wall or pipe. Line voltage is wired directly to the switch, removing the need for step-down transformers. A 1/2” conduit boss is provided for the mounting of a junction box. Two thread models are available for various applications.

Features

- Body made of 1-1/8” hex nickel plated steel
- Solid-state switching
- Serviceable without loss of fluid
- 1000 PSIG max. working pressure
- UL listed, file #E141577
- Switch rated at over 1 million cycles
- Non-invasive liquid sensing
- Suitable for refrigerants and other industrial fluids non-corrosive to steel and glass
- Optional junction box
All switches can be ordered with an optional clip style junction box attached to the switch. When ordering, add the letter “J” to the end of the part number.

Specifications

- Inductive rating: 36VA pilot duty rated
- Minimum load: 2mA w/o bleed resistor
- Power consumption: 3.5mA AC
5.5mA DC
- Contact power off: Normally-Open
- Mounting: Horizontal only

1.2 INSTALLATION & SERVICE

Installation

1. Install the liquid level switch into the female coupling using an approved thread sealant
2. Using a deep well socket for installation, ensuring adequate torque is applied and glass is not damaged, tighten 1-2 turns past hand-tight
3. Leak-check thread joint to ensure an adequate seal was accomplished
4. Wire the switch in accordance with the accompanying diagram

Note the lead wire color associated with L1, L2, and the switch wires. Always connect the load being controlled to the L1 and switch wires

Notes

- The contacts are always read with fluid present. Normally-closed contacts are closed in the presence of fluid. Normally-open contacts are open in the presence of fluid
- Care must be taken to ensure no visible light is allowed into the vessel or column that the switch is installed on. This light can cause false readings.

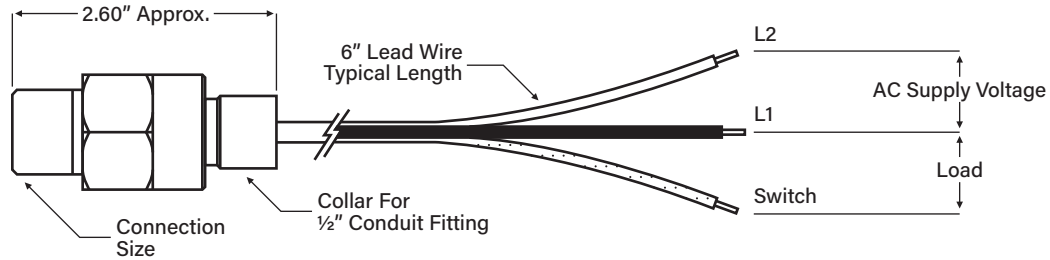
If the vessel or column does not have additional sight glasses, it is best to cover these if they are within 3” of the switch.

The switch may not work on columns with an internal diameter of 2” or less. Infrared light may bounce off the column and cause false readings.

Service

- Removal of the module may be necessary depending on the service technician. If this is required, the module can be removed by first removing the snap ring and then removing the collar and module.
- Ensure that all parts are reassembled in the manner they were removed.

2.1 WIRING DIAGRAM & SPECIFICATION TABLE



MODEL NUMBER	CONN. SIZE	VOLTAGE (60/80HZ)	RESIST. RATING (AMP)	CONTACTS W/LIQUID	WIRE COLOR			FLUID TEMP.	
					L1	L2	SWITCH	MIN	MAX
LS-120	1/2" NPT	120V	0.5	Closed	Black	White	Yellow	0°F	200°F
LS-120A	1/2" NPT	120V	0.5	Open	Black	White w/ Black Stripe	Yellow	0°F	200°F
LS-120-W	3/4"-16 UNJF-3A	120V	0.5	Closed	Black	White	Yellow	0°F	200°F
LS-120A-W	3/4"-16 UNJF-3A	120V	0.5	Open	Black	White w/ Black Stripe	Yellow	0°F	200°F
LS-240	1/2" NPT	208/240V	0.25	Closed	Black	White	Red	0°F	200°F
LS-240A	1/2" NPT	208/240V	0.25	Open	Black	White w/ Black Stripe	Red	0°F	200°F
LS-240-W	3/4"-16 UNJF-3A	208/240V	0.25	Closed	Black	White	Red	0°F	200°F
LS-240A-W	3/4"-16 UNJF-3A	208/240V	0.25	Open	Black	White w/ Black Stripe	Red	0°F	200°F
LS-24	1/2" NPT	24V AC/DC	0.5	Closed	Black	White	Orange	0°F	200°F
LS-24A	1/2" NPT	24V AC/DC	0.5	Open	Black	White w/ Black Stripe	Orange	0°F	200°F
LS-24-W	3/4"-16 UNJF-3A	24V AC/DC	0.5	Closed	Black	White	Orange	0°F	200°F
LS-24A-W	3/4"-16 UNJF-3A	24V AC/DC	0.5	Open	Black	White w/ Black Stripe	Orange	0°F	200°F
LS-120A-LT	1/2" NPT	120V	0.5	Open	Black	Green	Red	-40°F	200°F
LS-240A-LT	1/2" NPT	208/240V	0.25	Open	Black	Green	Red	-40°F	200°F

3.1 CONTACT INFORMATION

Offices & Plant

Mail Westermeyer Industries
1441 State Route 100
Bluffs, IL 62621

Phone (217) 754-3277
Fax (217) 754-3288

Office Hours M-F
8:00am—4:30pm



Support & Sales

Customer Service customercare@westermeyerind.com

Sales sales@westermeyerind.com

Engineering engineering@westermeyerind.com

Human Resources HR@westermeyerind.com

NOTICES

For standard terms and conditions, please visit our website at www.westermeyerind.com

The information contained in this document is correct at the time of issue but may be subject to change without prior notice. Contact Westermeyer Industries for the most current documentation.