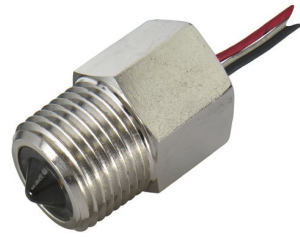




# LVE 115/116 Series Electro-Optic Level Switch



**M-5175/1112**

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### Installation:

- 1b 1/2" NPT Switch: Apply a curing type thread sealant (such as Loctite #565 with primer "N"), which is compatible with the liquid media. We do not recommend pipe tape. For Carbon Steel units torque one to two turns (maximum) past the hand-tight engagement. For Stainless Steel units torque one turn (maximum) past the hand-tight engagement. Over Torque of sensor can permanently damage sensor.
2. Sensor may be installed horizontally or up to 45° from horizontal, only. (See Figure 1)
3. Do not install sensor close to infrared sources.
4. Prism surface must be at least 2" from any reflective surfaces.
5. Connect appropriate voltage supply to red lead. For 12 VDC units, connect to 12 VDC ±5%.
6. Inductive loads must be diode-suppressed.
- 7.

### Maintenance:

Sensor may require a periodic cleaning of prism surface. A mild detergent may be used to clean prism surface.

This product complies with EN61326 Electrical Equipment for Measurement, Control and Laboratory use - EMC Requirements for Minimum Requirements and Industrial Locations. Special caution should be taken to meet EN61000-4-5 Surge Immunity if any of the following conditions apply to the installation: The product is installed outside; the cable is greater than 30 meters in length. In order to meet the Surge Immunity requirements, the following conditions must be followed during installation:

1. Shielded cable must be used, and the shield must be tied to earth ground (not power supply ground) on at least one end of the cable shield/drain wire. The shield must be maintained all the way from sensor to the power supply.
2. If unshielded cable is used, an earth grounded metal conduit can be used to replace the shielded cable.
3. For the sensor with metal body or enclosure the body/enclosure must be grounded to earth. If a protective metal housing is used, the metal housing should be grounded to earth.
4. If a protective plastic housing is used, the housing must be able to withstand at least 2 kV from the housing to earth ground.



### Important Points:

- Omega products must be maintained and installed in strict accordance with the National Electrical Code and the applicable Omega Product Instruction Bulletin that covers installation, operation and proper maintenance. Failure to observe this information may result in serious injury or damages.
- For hazardous area applications involving such things as, but not limited to, ignitable mixtures, combustible dust and flammable materials, use an appropriate explosion-proof enclosure or intrinsically safe interface device.
- Please adhere to the pressure and temperature limitations shown throughout this catalog for our level and flow sensors. These limitations must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures, temperatures and their frequencies.
- Selection of materials for compatibility with the media is critical to the life and operation of Omega products. Take care in the proper selection of materials of construction, testing is required.
- Our sensors have been designed to resist shock and vibration. However, shock and vibration should be minimized.
- Filter liquid media containing particulate and/or debris to ensure the proper operation of our products.
- Electrical entries and mounting points in an enclosed tank may require liquid/vaporsealing.
- Our sensors must not be field-repaired.
- Physical damage sustained by product may render it unserviceable.

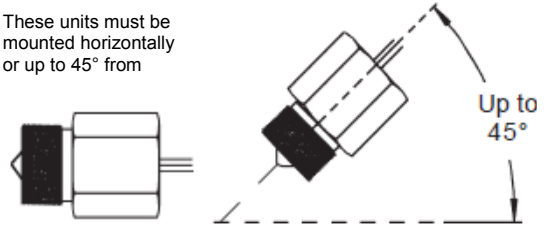
### Specifications

Materials:	
Housing	Nickel-Plated Carbon Steel
Prism	Fused Glass
Operating Pressure	0 to 2500 psig, Max
Operating Temperature	-40°F to 212°F (-40°C to 100°C)
Current Consumption	12V ~34mA No Load
Output	Open Collector Output, 18 mA Sink Max.
Electrical Termination	22 AWG, Polymeric, 12" to 14" Extended Lead Wires
Repeatability	±1 mm
Approvals	Units Labeled C.E. EN 61326

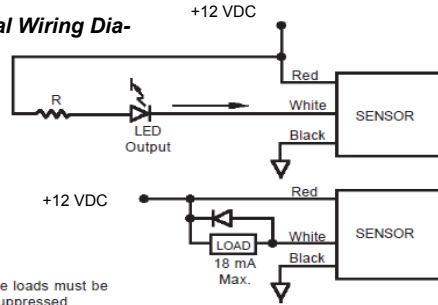
Note: Not for use in freezing liquids.

### Mounting Attitude

These units must be mounted horizontally or up to 45° from

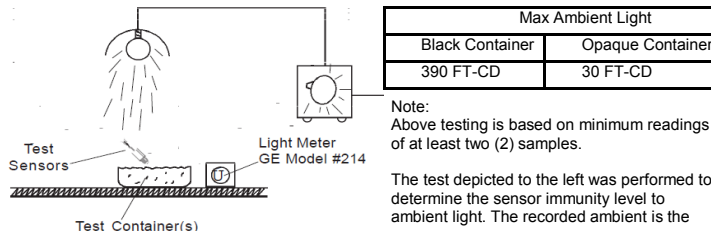
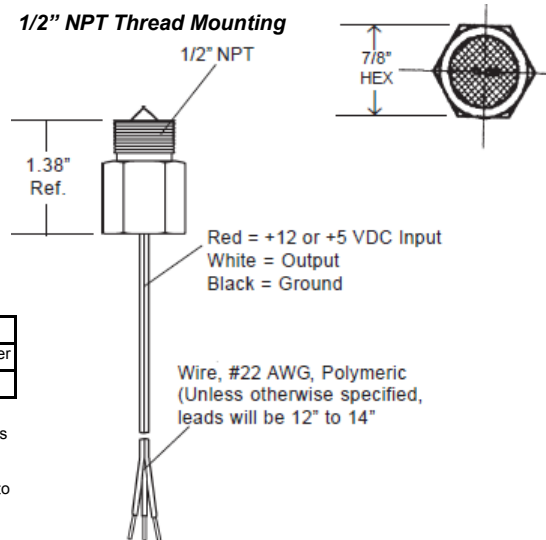


### Typical Wiring Dia-



Note: Inductive loads must be diode-suppressed.

### 1/2" NPT Thread Mounting



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**Servicing North America:**

**U.S.A.:** Omega Engineering, Inc., One Omega Drive, P.O. Box 4047  
ISO 9001 Certified Stamford, CT 06907-0047  
Toll-Free: 1-800-826-6342 Tel: (203) 359-1660  
FAX: (203) 359-7700 e-mail: info@omega.com

**Canada:** 976 Bergar  
Laval (Quebec), Canada H7L 5A1  
Toll-Free: 1-800-826-6342 TEL: (514) 856-6928  
FAX: (514) 856-6886 e-mail: info@omega.ca

**Servicing Europe:**

**Benelux:** Managed by the United Kingdom Office  
Toll-Free: 0800 099 3344 TEL: +31 20 347 21 21  
FAX: +31 20 643 46 43 e-mail: sales@omega.nl

**Czech Republic:** Frystatska 184  
733 01 Karviná, Czech Republic  
Toll-Free: 0800-1-66342 TEL: +420-59-6311899  
FAX: +420-59-6311114 e-mail: info@omegashop.cz

**France:** Managed by the United Kingdom Office  
Toll-Free: 0800 466 342 TEL: +33 (0) 161 37 29 00  
FAX: +33 (0) 130 57 54 27 e-mail: sales@omega.fr

**Germany/Austria:** Daimlerstrasse 26, D-75392 Deckenfronn, Germany  
Toll-Free: 0 800 6397678 TEL: +49 (0) 7059 9398-0  
FAX: +49 (0) 7056 9398-29 e-mail: info@omega.de

**United Kingdom:** OMEGA Engineering Ltd.  
One Omega Drive, River Bend Technology Centre, Northbank  
Irlam, Manchester M44 5BD England  
ISO 9001 Certified Toll-Free: 0800-488-488 TEL: +44 (0)161 777-6611  
FAX: +44 (0)161 777-6622 e-mail: sales@omega.co.uk

**For immediate technical or application assistance:**

**U.S.A. and Canada:** Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA®  
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info@omega.com.mx e-mail: espanol@omega.com

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**WARNING:** These products are not designed for use in, and should not be used for, human applications.

**WARRANTY/DISCLAIMER**

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. **BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS).** The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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