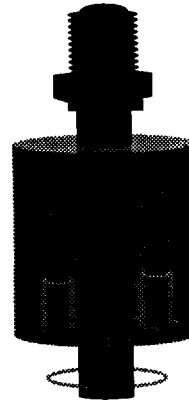




**LV-60, LV-61, and LV-80  
Liquid Level Switches**  
Operator's Manual: M0476/0895



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#### **GENERAL DESCRIPTION**

Offering high reliability at low cost, the LV-60 Series Level Switch is recommended for many OEM applications. The all polysulfone (PSF) construction provides excellent chemical resistance and is rated to a maximum 225°F. Extremely compact, the switch is ideal for restricted or limited space. The reed switch design allows the user to select as either normally open (N.O.) or normally closed (N.C.) by simply removing the retaining clip and inverting the position of the float.

The LV-80 Series' all CPVC construction offers resistance to many acids, bases and aqueous solutions, making them well suited for chemical and plating applications. The sensor mounts vertically at either the top or bottom of the tank and is extremely easy to install. A magnetically actuated SPST reed switch will provide precise repeatability for long trouble-free service.

For pump-up/pump-down application, use OMEGA SSRL series pump-up/pump-down module.

**SPECIFICATIONS**

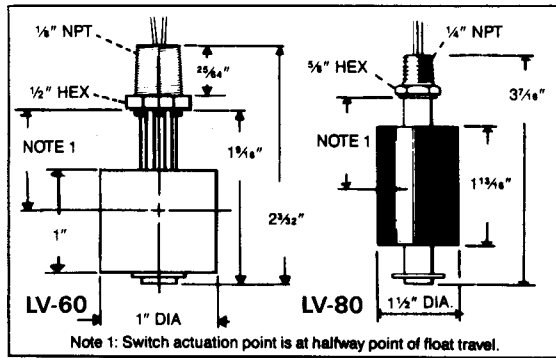
**STEM/FLOAT MATERIAL:** LV-60 Series, Polysulfone; LV-80, CPVC  
**OTHER WETTED MATERIAL:** 316SS for LV-60 (retaining clip)  
**OPERATING TEMPERATURE:** LV-60 Series, -40 to 225°F; LV-80, 0 to 180°F  
**MAX. OPERATING PRESSURE:** LV-60 Series, 50 psi; LV-80, 15 psi  
**SWITCH:** SPST  
**SWITCH ACTUATION:** Approx. ½ the distance from end of stem to mounting, or at halfway point of float travel.  
**SWITCH RATING\*:** LV-60: 10VA; LV-61: 50VA; LV-80: 20VA  
**LEAD WIRES:** 22 awg. 24" PVC for LV-60 Series; 18 awg. 24" PVC for LV-80  
**SPECIFIC GRAVITY OF FLOAT:** LV-60 Series, 0.5; LV-80, 0.68

**NOTE**

To determine fluid specific gravity, add 0.1 to float specific gravity in clean liquids and 0.3 to float specific gravity in dirty water or viscous liquids.

\* For higher rating, the level switches can be used with the OMEGA SSR240AC Series Solid State relays for switching up to 45 Amps of AC power.

**DIMENSIONS**

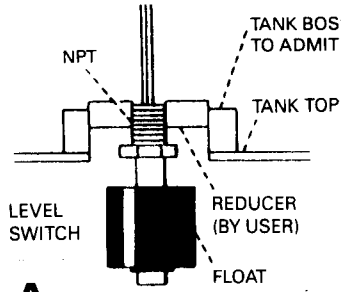


**Switch Ratings Max. Resistive Load**

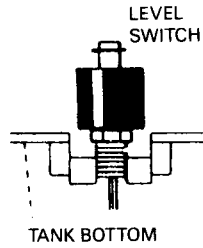
VA	Volts	Amps ac	Amps dc
10	0-50	.2	.13
	120	.08	.05
	240	.04	.02
20	0-30	.4	.3
	120	.17	.13
	240	.08	.06
50	0-50	0.5	0.5
	120	.4	.4
	240	.2	.2
100	120	.8	N.A.
	240	.4	N.A.

## INSTALLATION

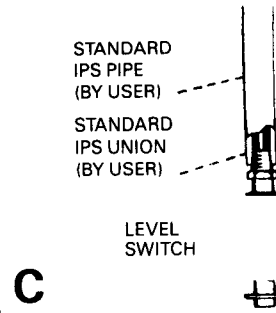
Install units vertically in tank top or bottom using Methods A, B, C or D (below).  
 Note: Units will operate normally inclined up to 30°.



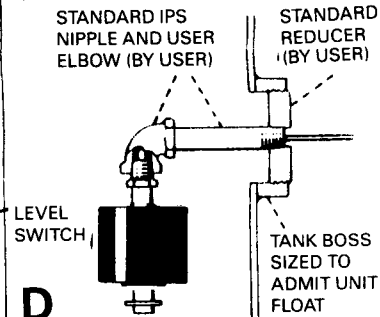
**A**  
 Unit installed from outside of tank



**B**  
 Unit installed from inside of tank.  
 This method may be used if access to inside of tank is possible.



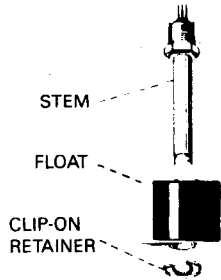
**C**  
 Extending level switch unit to intermediate level



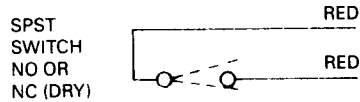
**D**  
 Side-mounting of unit at intermediate level

## REVERSING SWITCH OPERATION (SERIES LV-60 ONLY)

The switch is user selectable as normally open or normally closed (dry). Simply remove the retaining clip and invert the position of the float. It is not necessary to disturb the installation.



## WIRING DIAGRAM





**Servicing USA and Canada: Call OMEGA Toll Free**

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FAX: (203) 359-7700

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Laval (Quebec) H7L 5A1  
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FAX: (514) 856-6886

Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA™  
Customer Service: 1-800-622-2378 / 1-800-622-BEST™  
Engineering Service: 1-800-872-9436 / 1-800-USA-WHEN™  
TELEX: 996404 EASYLINK: 62968934 CABLE: OMEGA

**Servicing Europe: United Kingdom Sales and Distribution Center**

25 Swannington Road, Broughton Astley, Leicestershire  
LE9 6TU, England  
Telephone: 44 (1455) 285520 FAX: 44 (1455) 283912



**WARRANTY**

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of **13 months** from date of purchase. OMEGA 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 should malfunction, 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. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being 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 which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

**OMEGA is glad to offer suggestions on the use of its various products. Nevertheless, OMEGA only warrants that the parts manufactured by it will be as specified and free of defects.**

**OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.**

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**SPECIAL CONDITION:** Should this equipment be used in or with any nuclear installation or activity, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the equipment in such a manner.

**RETURN REQUESTS / INQUIRIES**

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING 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.

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

1. P.O. 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 OR **CALIBRATION**, consult OMEGA for current repair/calibration charges. Have the following information available BEFORE contacting OMEGA:

1. P.O. number to cover the COST of the repair/calibration,
2. Model and serial number of 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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