

LVM Series Level/Temperature Sensors

M-4212/0605

**INSTRUCTION
SHEET**

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General Information

1. Switches should be installed rigidly so the float or floats are free to move as the liquid level changes.
2. Switches should be mounted in a tank area free of severe turbulence or protected from such turbulence by appropriate and adequate slosh shields.
3. Vertical switch stems should be vertical for best results, but satisfactory operation is possible in most liquids with the stem at up to a 30° angle from vertical.
4. Care should be taken that switches are always operated within electrical ratings.
5. Orientation for standard Vertical switches can be changed from normally open to normally closed dry or vice versa by removing the float and reversing it in the stem, except with the LVM-41J, LVM-41K, and LVM-43R.

Wire Table for Reed Switch		
Model	GA	Color
LVM-41(x)	22	Brown
LVM-43(x)	22	Brown
LVM-50(x)	22	Black
LVM-140(x)	22	White

Maintenance

Maintenance should consist of inspection to see that the float is free to move and not coated with any substance, which would change its weight or volume significantly. If this occurs, the float should be cleaned. This is easily accomplished without disturbing the installation. In addition, the stem may be wiped down to remove any build-up.

The only repair possible in the field is replacement of either the float or stem. Dents or nicks on the float are usually of no consequence to operation.

Cautions

1. The pressure, temperature and electrical limitations shown for the specified level switches must not be exceeded.
2. The pressures and temperatures must take into consideration possible surges in the temperature and pressure of the system.
3. The liquids used must be compatible with the materials of construction. Specifications of materials will be given upon request.
4. Life expectancy of the switch varies with applications.
5. Ambient temperature changes can affect switch set points, since specific gravities of liquids vary with temperature. Consult factory for assistance.
6. Level switches have been designed to be shock and vibration resistant. For maximum life, both shock and vibration should be minimized. Consult factory for assistance.
7. Excessive contaminants in fluid may inhibit float operation, and occasional wipe down may be necessary.
8. Level switches must not be field repaired
9. Physical damage to product may render product unserviceable.
10. Installation in a vessel made from magnetic materials may affect operation.

Installation

Operation is stated in the tank dry position.

Vertical Switches:

NC Operation: SS Floats: Witness mark (round circle) down.

Plastic Floats: Magnets up.

NO Operation: SS Floats: Witness mark (round circle) up.

Plastic Floats: Magnets down.

Typical Current and Voltage Ratings

* Note: The ratings at right are for resistive loads only. For inductive loads, maximum switch life will be achieved if appropriate arc suppression is used.

Watts	Voltage	Current Amps
15	220 AC	0.07
	110 AC	0.15
	120 DC	0.03
	24 DC	0.14
30	220 AC	0.14
	110 AC	0.28
	120 DC	0.07
	24 DC	0.28
60	220 AC	0.4
	110 AC	0.5
	120 DC	0.2
	24 DC	0.5

Omega Model Number	Materials (stem, float)	Mounting	Max Pressure (PSIG)	Electrical Rating (Watts)	Temp. Type
LVM-41J	Polypro.	3/8-16 BH	50	15	J
LVM-41K	Polypro.	3/8-16 BH	50	15	K
LVM-43R	Polypro.	3/8-16 BH	50	15	RTD
LVM-50J	316 SS	1/4 NPT	200	60	J
LVM-50R	316 SS	1/4 NPT	200	60	RTD
LVM-50J-SPDT	316 SS	1/4 NPT	200	25	J
LVM-50K-SPDT	316 SS	1/4 NPT	200	25	K
LVM-140K	Polypro.	1/8 NPT	100	30	K
LVM-140R	Polypro.	1/8 NPT	100	30	RTD

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



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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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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.

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