

PRODUCT DESCRIPTION

The EM32-1B-LED is a 3 ½ digit LED voltmeter which is designed to be panel mounted in most low and medium volume applications. The meter features 8mm digit height, 3 decimal points, auto-polarity, auto-zero, 200mV full scale reading and a low current consumption. This product is designed so no soldering is required. Connection is via screw terminals, and options are selected via jumper links. The module features a round metal bezel, requiring a 32.5mm (1.28") diameter cut-out. It is secured with the nut provided. Protection from the front to IP 67 /NEMA 4X standards is achieved by placing the rubber seal between the module and panel during assembly.

FEATURES

- 8mm (0.31") Digit Height
- 200mV d.c. Full Scale Reading
- 50mA @ 5Vd.c. Operation
- Auto-zero and Auto-polarity
- Selectable Decimal Points
- Requires 32.5mm (1.28") Diameter Cut-out
- IP67 / NEMA 4X Protected



TYPICAL APPLICATIONS

- Panel Mount Instrumentation
- Process & Control
- Automotive

ORDERING INFORMATION

Standard Meter

Stock Number
EM32-1B-LED

ELECTRICAL SPECIFICATIONS

| Specification | Min. | Typ. | Max. | Unit |
|--|------|------|---------|-------------------------|
| Accuracy (overall error) * | | 0.1 | | % (± 1 count) |
| Linearity | | | ± 1 | count |
| Sample rate | | 2.5 | | samples/sec |
| Operating temperature range | 0 | | 50 | $^{\circ}\text{C}$ |
| Temperature stability | | 150 | | ppm/ $^{\circ}\text{C}$ |
| Warm-up time | | 10 | | minutes |
| Supply voltage (V+ to V-) | 4.75 | 5 | 5.25 | V d.c. |
| Supply current | | 50 | 100 | mA |
| Input leakage current (V _{in} = 0V) | | 1 | 10 | pA |

* To ensure maximum accuracy, re-calibrate periodically.

** Operation of the meter beyond the maximum supply voltage rating may cause permanent damage to the meter.

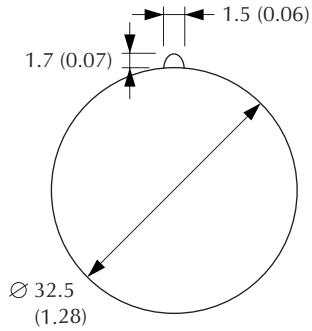
Unless otherwise noted, specifications apply at $T_A = 25^{\circ}\text{C}$, $V_{\text{supply}} = 5\text{Vd.c.}$ and are tested with the module configured for floating input mode.

SAFETY

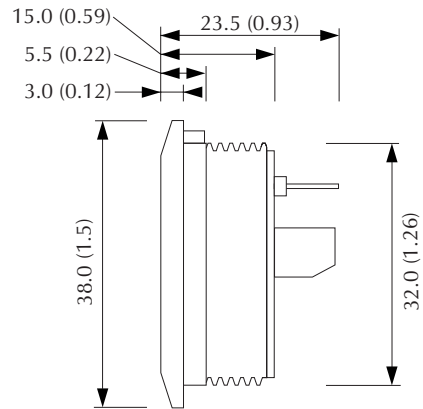
To comply with the Low Voltage Directive (LVD 93/68/EEC), input voltages to the module's pins must not exceed 60Vdc. The user must ensure that the incorporation of the panel meter into the user's equipment conforms to the relevant sections of BS EN 61010 (Safety Requirements for Electrical Equipment for Measuring, Control and Laboratory Use).

DIMENSIONS

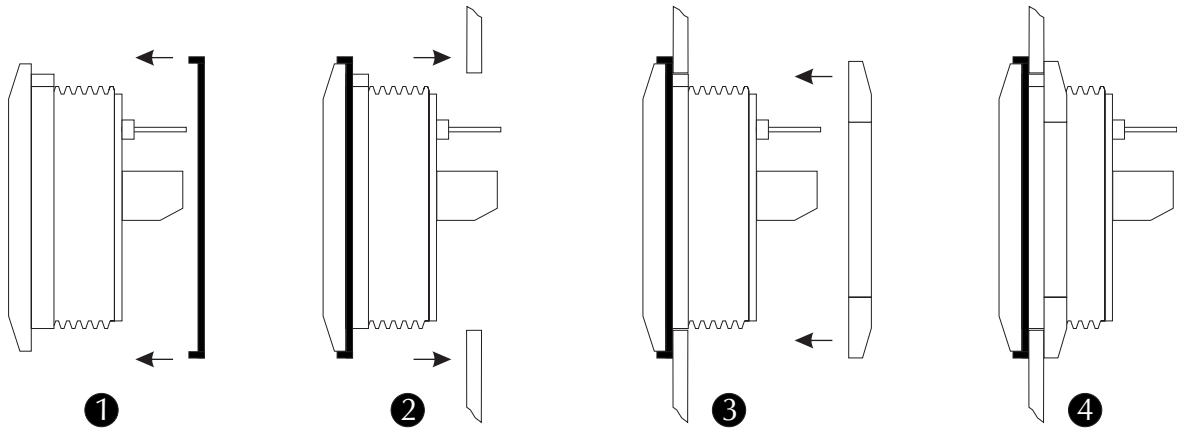
All dimensions in mm (inches)



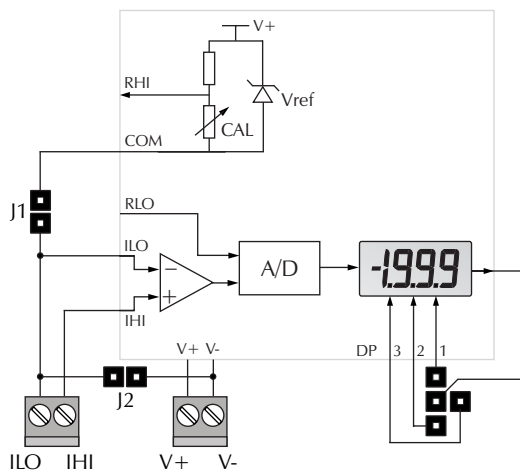
Panel cut-out



PANEL MOUNTING



FUNCTIONAL BLOCK DIAGRAM



CONNECTIONS (rear view)

