

# QM 100V

## Single Hole Mounting 2-Wire Meter

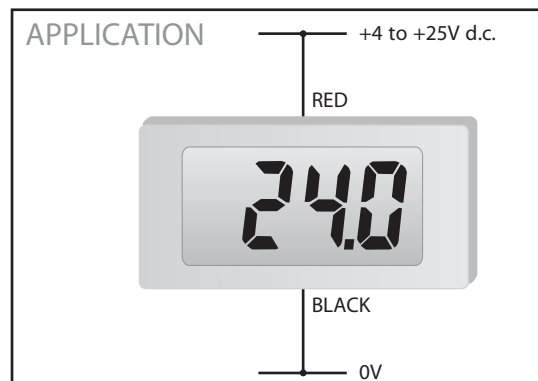
QM 100V is an easy to mount LCD digital panel meter. The module features a 4 to 25V measurement range with 100mV resolution and is powered from the signal it is measuring. Only valid readings are displayed; the module indicates "LO" at voltages below 4V and "HI" at voltages above 25V. To install the meter, the user need only drill a single 5.5mm /  $\frac{7}{32}$ " hole in the panel. The module is fitted to the panel by locating its threaded stud through the hole, fitting the washer and tightening the nut provided. The module's connecting wires pass through the hollow stud into the target application for connection. A rubber seal is included, providing splashproof protection for the unit when fitted to the meter during installation.

- Single Hole Mounting
- 2-Wire Operation
- 4 to 25V d.c. Full Scale Reading
- 12.5mm / 0.5" LCD Digit Height
- Reverse Polarity Protection
- Splashproof



| Easy Mounting Voltmeter     |      |      |      | Stock Number<br>QM 100V |
|-----------------------------|------|------|------|-------------------------|
| Specification               | Min. | Typ. | Max. | Unit                    |
| Accuracy (overall error)    |      | 0.2  |      | V (± 1 count)           |
| Linearity                   |      |      | ± 1  | count                   |
| Valid displayed reading*    | 4.0  |      | 25.0 | V d.c.                  |
| Resolution                  |      | 100  |      | mV d.c.                 |
| Sample rate                 |      | 3    |      | sample/sec              |
| Operating temperature range | 0    |      | 50   | °C                      |
| Supply voltage              | 3    |      | 50   | V d.c.                  |
| Supply current              |      |      | 3    | mA                      |

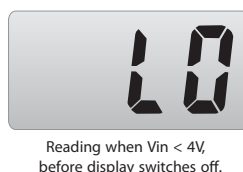
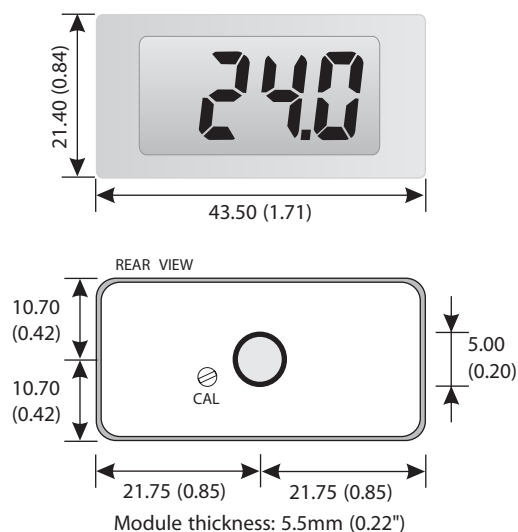
\* At voltages below 4.0V d.c., the LCD will display LO and will ultimately go blank.  
At Voltages in excess of 25.0V d.c., the LCD will display HI  
Do NOT exceed 50V d.c., as this may damage the meter.  
The module includes reverse polarity protection up to 30V for up to 30 seconds.  
Operation and accuracy at voltages above 25.0V or below 4.0V are not specified.



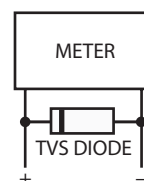
### SAFETY

To comply with the Low Voltage Directive (LVD 93/68/EEC), input voltages to the module's wires must not exceed 60V d.c. The user must ensure that the incorporation of the 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).

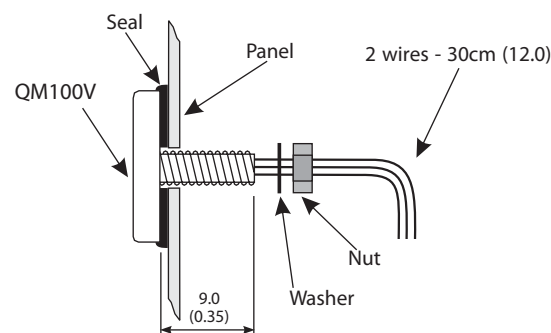
### DIMENSIONS All dimensions in mm (inches)



WARNING! In automotive applications or where an alternator is present and there is the possibility of a transient voltage spike it is recommended to use some type of transient voltage suppressor (TVS) to protect the meter.



TVS ZENER DIODE  
Martel Part Number: 80311  
Digikey ([www.digikey.com](http://www.digikey.com))  
Part Number: 1N6287AGOS-ND



### FITTING THE QM100V

Drill a 5.5mm /  $\frac{7}{32}$ " hole in the panel. Fit seal to the rear of the module. Fit the module to the panel by passing its screw threaded stud and the wires through the hole, fitting the washer and tightening the nut provided. Take care not to trap either of the connecting wires. Do not overtighten the nut as this may damage the meter.