

100 Series LCD Digital Indicators

D.C. Current and Voltage



Features

- » Surface or Flush Mounting
- » 3 1/2 digits (reads 1999 full scale)
- » 12.7mm high digits on high-contrast liquid crystal display
- » User programmable decimal points
- » Low power consumption
- » Choice of 9V D.C., +5V D.C., or +5V D.C. power
- » Auto-polarity (-) displayed "LO-BAT" indication on 9V D.C. powered units
- » Choice of terminal connections

Applications

- Interfacing with printed circuit boards
- Digital displays in portable equipment
- Liquid flow measuring equipment
- Hand held equipment displays
- Panel mounting
- Remote display

Specification

Display:

Digits: 3 1/2 (1999)
 Type : 7 segment reflective LCD
 Height: 12.7mm
 Polarity: Automatic (-) displayed
 Decimal Point: 3 positions, external selection
 Overload: Three lower order digit blank for >1999 counts
 Low Battery: "Low Bat" annunciator for <7.2V (9V power only)

Accuracy: ± (0.1% rdg + 2 count) with +5 and + 5V power
 ± (0.1% rdg + 1 count) with 9V power
 Conversion Rate: 2.5 per second

Common Mode Voltage Range: + 1V maximum

Common Mode Rejection: >86 dB

Zero Adjustment: Automatic

Temperature

Co-efficient: 100ppm/°C typical

Standard Auxiliary Power Options:

9V Battery: 9V floating, 7.2-12V at 150µA
 +5V and -5V D.C.: +5V +5% at 200µA
 +5V D.C.: +5V +5% at 3mA
 +10 to +30V D.C.: +10 to +30V + 5% at 5mA

Environment:

Operating: 0 to 50°C
 Storage: -20°C to +70°C
 Extended operating ranges available. Contact the Sales Centre.

Standard Analogue Inputs:

Input: ± 200µA, + 2mA, ± 20mA, + 200mA, + 200mV, + 2V, + 20V or 200V D.C.
 Special ranges and engineering units available
 Configuration: True differential input and reference
 Ratiometric Operation: Available on model 100
 Protection: 250V D.C. or 150V RMS continuous, 300V maximum intermittent
 Bias Current: 1 pA typical, 10 pA maximum

Performance:

Product Code Details

Terminals:

1st • 0 = 13 Pins
 1 = Terminal Block
 2 = Solder Pads

Auxiliary Supply (not isolated):

2nd • 1 = 9V D.C. Battery (floating)
 2 = +5V and -5V D.C.
 3 = +5V
 6 = 10 to 30V D.C.

Product Code

D.C. Voltage - 200mV
 D.C. Voltage - 2V
 D.C. Voltage - 20V
 D.C. Voltage - 200V

BL10••01
 BL10••02
 BL10••03
 BL10••04

D.C. Current - 200µA
 D.C. Current - 2mA
 D.C. Current - 20mA
 D.C. Current - 200mA

BL10••10
 BL10••11
 BL10••12
 BL10••13

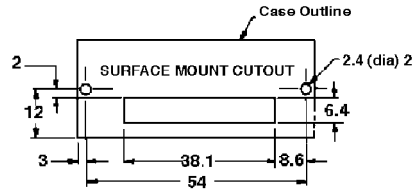
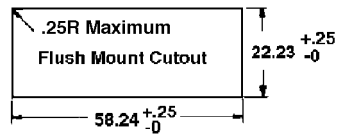
Accessories and Options

For special OEM requirement, other input ranges, wider operating temperature, or other features - contact Sales Centre.

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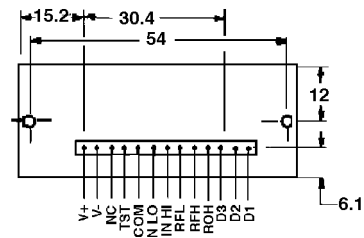
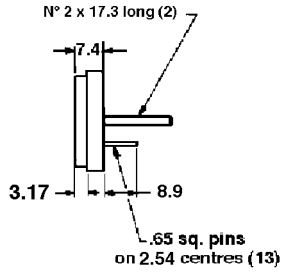
Connections and Dimensions

Panel Cut Out



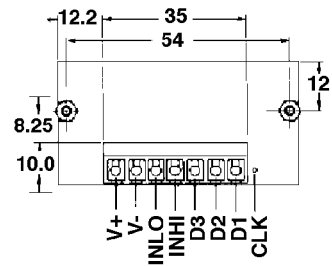
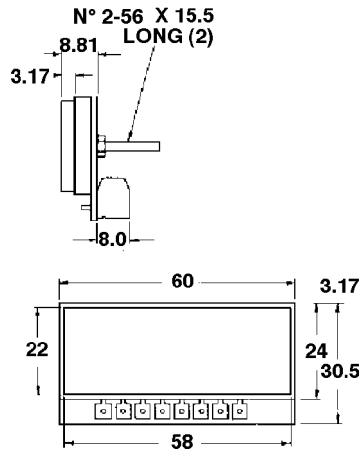
100

13 connector pins, 0.64 mm (0.025") square.



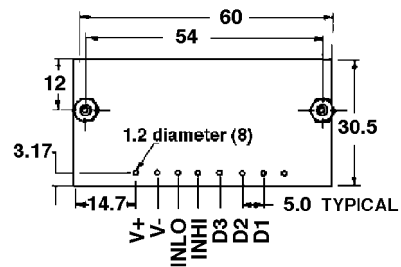
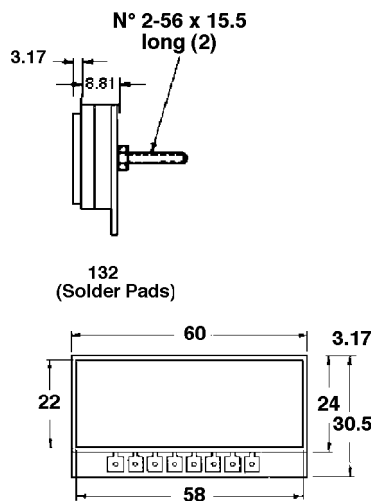
101

7 terminal connector block



102

7 solder pins



Connector Pinout Designations

- V+, V-:** Positive and negative connections for power supply
- NC:** Not connected
- TST:** Return for +5V power**
- COM:** Internal reference voltage return
Input common for 9V units**
- IN HI, IN LO:** Signal Inputs
- RFL, RFH:** Differential reference inputs
- ROH:** On board reference terminals**
- D1, D2, D3:** Decimal point selection
Connect to V+ as follows:
D1 = X.XXX
D2 = XX.XX
D3 = XXX.X

** Model 100 only