

FB-B50

50 segments 4-20mA Loop Powered Bargraph

in a 3/32 DIN (1.42"x 5.69") case
fits 6" Edgewise Pointer Meter Cutout

Specifications

- Full Scale Ranges:** 4 to 20mA to read 0 to full scale
- Input Impedance:**..... Burden Voltage (Loop drop):
Red display < 4V; Green display <4.6V, and <4.8V for Blue display at 4 to 20mA input
- Accuracy:** Exceeds precision of display
- Over-range Indication:**..... All bars flash
- Temperature Coefficient:**..... 200ppm/°C (typical)
- Warm Up Time:** Instantly reads to specified accuracy
- Conversion Rate:**..... Display updates 9 times /sec based on average of measurements taken 54 times per second.
- Display:**..... Fifty 0.20" X 0.06" (5.08mm X 1.52mm) bar segments
- Power Supply:** Powered from 4 to 20mA signal
- Operating Temperature:** -10°C to 60°C
- Storage Temperature:**..... -20°C to +70°C
- Relative Humidity:** 95% (non condensing)
- Case Dimensions:** 3/32 DIN, Bezel: 36x144mm (1.42"x5.69")
Depth behind bezel: (4.64") 117.5 mm
Plus 10 mm (0.39") for right-angled connector.
- Weight:** 226.8 gms (8 oz)
408.2 gms (14.4 oz) when packed

General Features

- Elegant 4 to 20mA loop powered bargraph.
- Low loop drop of only <4V (red), <4.6V (green) or 4.7V (blue).
- Needs no external power supply.
- Easy to calibrate with ZERO and SPAN potentiometers.
- Customized faceplates available
- Choice of red or optional green or blue LEDs
- Can be stacked for multiple meter mounting.



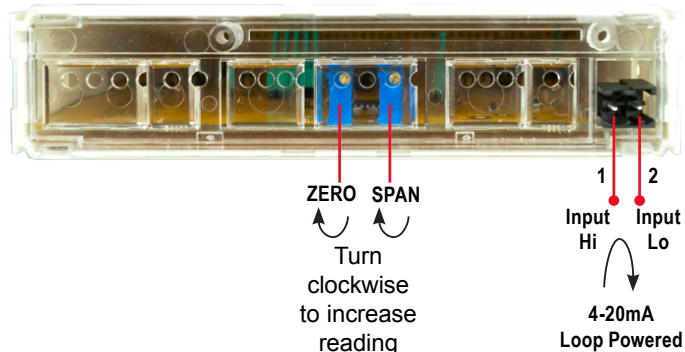
Fits 6" Edgewise Pointer Meter Cut-Outs

Texmate's panel adapter enable modern DIN meters 36x144 mm (1.42"x5.69") to fit in existing 6" edgewise pointer meter cut-out.

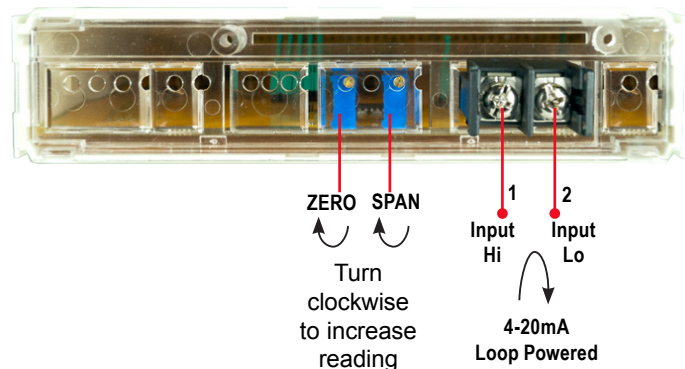
Connector Pinouts

REAR VIEW OF BARGRAPH

Standard Screw Terminal Connector



Optional Terminal Block Connector



Calibration Procedure

Pin 1 - Current Loop High Input: The 4-20mA current loop is applied to Pin (1) and returned from Pin (2). If reverse polarity is applied no damage will occur; However the meter will not operate (this condition should not be maintained for extended periods).The maximum loop drop is 4V for red LEDs and 4.7V for the blue LEDs..

Pin 2 - Current Loop Low Return: The 4-20mA current loop is returned from Pin (2). At 4mA the bargraph has no segment will be on, except the power indicator LED will be on. .At 20mA the bargraph has all segments ON.The maximum loop drop is 4V for red LED and 4.7V for the blue LEDs.

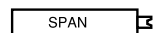
Signal Conditioning Components



ZERO Potentiometer (Pot)

To the Left Front
Turn Clockwise to Increase Reading

The ZERO pot is to the left of the SPAN pots (as viewed from the back of the meter). Typically it enables the bars to be displayed for 4mA = 0.



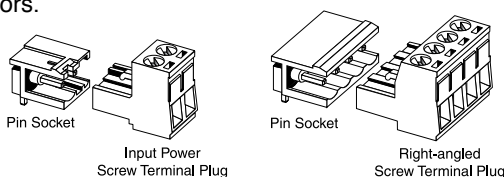
SPAN Potentiometer (Pot)

To the Right Front
Turn Clockwise to Increase Reading

The SPAN pot is on the left side of the signal input. Typical adjustment is 100% of the input signal range of 20mA.

Connectors

This meter uses plug-in type screw terminal connectors for all input and output connections. The power supply connections have a unique plug and socket outline to prevent cross connection. The main board uses standard right-angled connectors.



WARNING: AC and DC input signals and power supply voltages can be hazardous. Do Not connect live wires to screw terminal plugs, and do not insert, remove or handle screw terminal plugs with live wires connected.



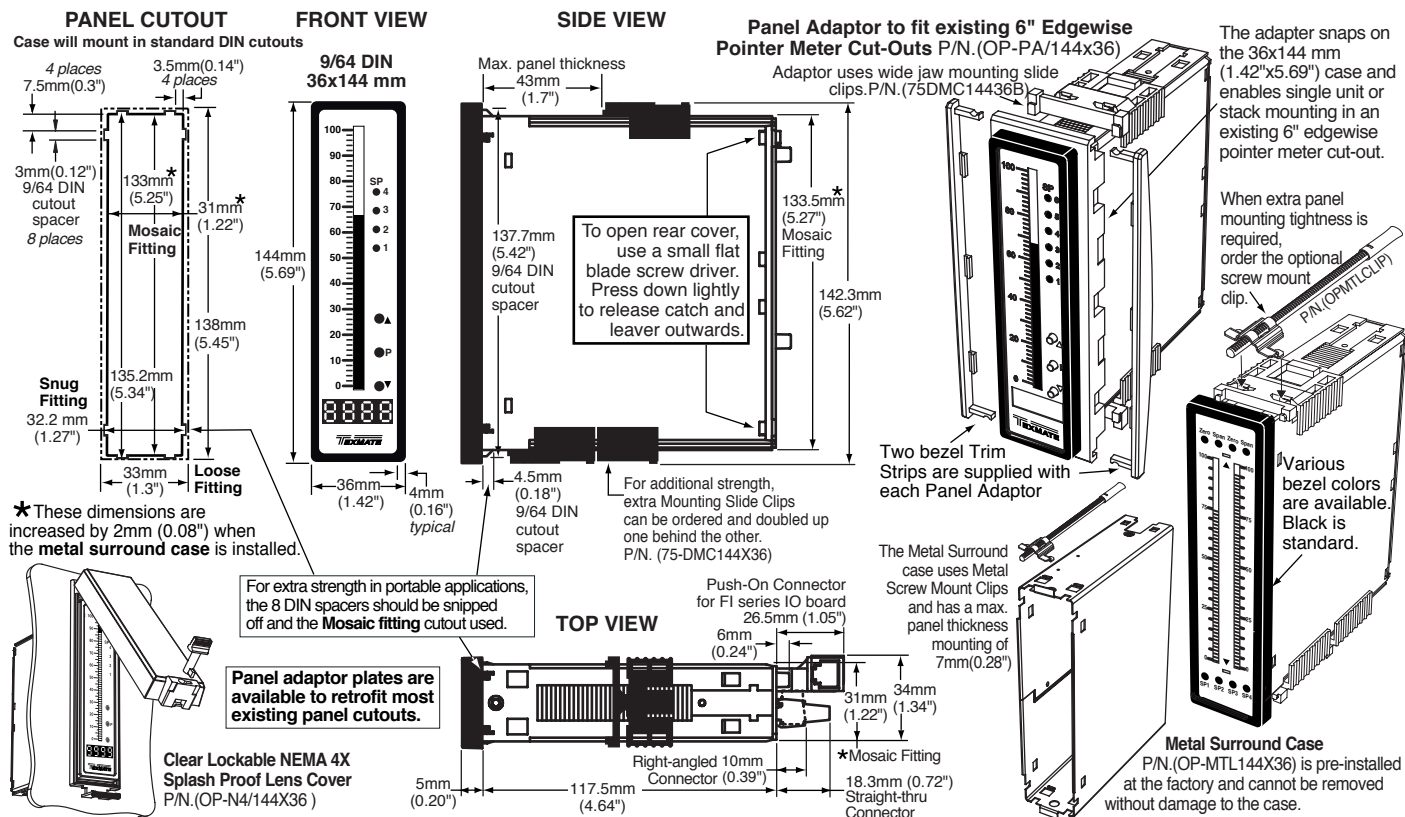
CAUTION - ELECTRICAL SHOCK HAZARD All internal parts of the meter may be at the same electrical potential as the input signal and power supply. Do not reposition the signal conditioning components when input voltages are applied. When measuring dangerously high input voltages, extreme care must be taken to insulate the connector pins as well as all metal parts of the meter. A suitable high voltage warning notice should be affixed to those meters where there is any possibility that the meter could be removed from its case, or the internal components accessed, concurrent with the existence of a high voltage input signal.

Other Loop Powered Meters

SB-B31.....31 segment Loop Powered Bargraph Meter
MINI-CL4-20.....37x15mm (1.46"x0.59") Case, Loop Powered

SPM-083CL48x21mm (1.89"x0.83") Case, Loop Powered
CM-35XTL0.48" (12mm) LCD 3.5 digit, 70x30mm (2.76"x1.17") case, Loop Powered

144x36mm Case Dimensions and Panel Cutouts



Ordering Information

| Part Number | Description |
|-------------|-------------|
|-------------|-------------|

► **BASIC MODEL NUMBER** Includes plug in type screw terminals, standard display and standard power supply unless optional versions are ordered.

FB-B50 50 segments 4-20mA Loop Powered Bargraph Meter

► DISPLAY

STANDARD Red LED Bar, 0.1" x 50 segment

| | |
|----|--|
| VG | Green LED bars, 0.1" x 50 segments, Vertical |
| VB | Blue LED bars, 0.1" x 50 segments, Vertical |
| HR | Red LED bars, 0.1" x 50 segments, Horizontal |
| HG | Green LED bars, 0.1" x 50 segments, Horizontal |
| HB | Blue LED bars, 0.1" x 50 segments, Horizontal |

| Part Number | Description |
|-------------|-------------|
|-------------|-------------|

► **SPECIAL OPTIONS (Specify Inputs & Req. Reading)**

TB-02 Two Pin Terminal Block Signal Input Connector

Z-DESCRIPTOR. Produce Custom Meter Descriptor

ART-FS1 Produce and install custom faceplate per meter

ART-NRC-DEC. One time charge for custom faceplate design with an assigned serial number. (per serial number)

► **ACCESSORIES**

75-DBZ144X36. Black bezel for 144x36mm Case

75-DMC14436B Side Slide Brackets-Wide opening (2 pc)

75-DMC144X36 Side Slide Brackets-stand. (2 pc) - extra set

93-PLUG2P-DR Extra Screw Terminal Conn., 2 Pin Plug

DN.CAS144X36 Complete 144x36mm Case with bezel

OP-MTL144X36 Metal Surround Case, includes screw mounting clips

OP-MTLCLIP . . . Screw Mounting Clips (2 pc) - to screw tighten slide brackets

OP-N4/144X36 . 144x36mm clear lockable front cover-NEMA 4X, splash proof

OP-PA/144X36 . Panel Adapter for 144x36mm from 6 inch cutout

75-DTP144X36. Panel Cut-Out Trim Plate Set (2 pieces)

WARRANTY

Texmate warrants that its products are free from defects in material and workmanship under normal use and service for a period of one year from date of shipment. Texmate's obligations under this warranty are limited to replacement or repair, at its option, at its factory, of any of the products which shall, within the applicable period after shipment, be returned to Texmate's facility, transportation charges pre-paid, and which are, after examination, disclosed to the satisfaction of Texmate to be thus defective. The warranty shall not apply to any equipment which shall have been repaired or altered, except by Texmate, or which shall have been subjected to misuse, negligence, or accident. In no case shall Texmate's liability exceed the original purchase price. The aforementioned provisions do not extend the original warranty period of any product which has been either repaired or replaced by Texmate.

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