



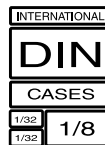
## DX-35-SG Pressure or Load Cell Meter 3 1/2 Digit with 0.56" or 0.8" LEDs in a 1/8 DIN Case

Cost-effective meter to measure 4 wire pressure transducers, strain gauges and load cells.

Dust and Splash proof  
Membrane Face Plate

### Compatibility

The DX-Series have a matching DIN case style that is complementary to the Leopard and Tiger family of meters. DX-Meters are the OEM's choice for switchboard and process indication. Each model is dedicated to a specific application and designed for quick and easy installation.

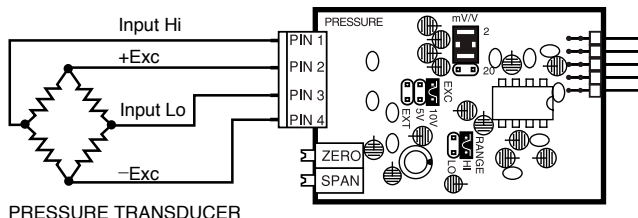


### General Features

The DX-35-SG has two header selectable transducer output ranges of 2mV/V and 20mV/V. These ranges can provide a full scale display of 2000 counts from the precision ratiometrically compensated 5V or 10V DC excitation provided by the meter. The meter accepts 4 Wire transducers, and like all DX-Series meters, is easily scaled to display in engineering units such as psi, bar, kbar, kpa, feet, lbs, and tons.

### Typical Application Connections

IS05 : Pressure/Load Cell 2/20mV/V, 5/10V Exc 4-wire



Low Range Adjustment : 0-1000 counts  
Hi Range Adjustment : 1001-1999 counts

### Specifications

- Input Configuration:**... Differential
- Full Scale Ranges:** ..... Accepts inputs from 2mV/V or 20mV/V transducers
- Excitation:** ..... 5V or 10V DC. Ratiometrically compensated to operate with all transducer output ranges.
- A/D Converter:** ..... 12 bit dual slope
- Accuracy:** ..... ±(0.05% of reading + 3 counts)
- Temp. Coeff.:** ..... 100 ppm/°C (Typical)
- Warm up time:** ..... 1 minute to specified accuracy.
- Conversion Rate:** ..... 3 reading per second
- Display:** ..... **3 1/2 digit 0.56" Red LED display (std)**, 0.56" GREEN, 0.8" RED/GREEN or 0.56" Super Bright RED are optional.
- Decimal Selection:** ..... Header under face plate, X·X·X·X
- Positive Overage:**... The MSD digit 1 is displayed with all other digits blank.
- Power Supply:** ..... AC/DC Auto sensing wide range supply  
**PS1 (std)** ..... 85-265 VAC, 50-400Hz / 95-300 VDC @1.5W  
**PS2** ..... 15-48 VAC, 50-400Hz / 10-72 VDC @4.0W
- Operating Temp.:** ..... -10 to 50 °C
- Storage Temp.:** ..... -20 °C to 70 °C.
- Relative Humidity:** ..... 95% (non condensing)
- Case Dimensions:** ..... 1/8 DIN, Bezel: 96x48 mm (3.78"x1.89")  
 Depth behind bezel: 117 mm (4.61")  
 Plus 11.8 mm (0.47") for Right-angled connector or plus 20 mm (0.79") for Straight-thru connector.
- Weight:** ..... 8 oz., 11 oz when packed.
- Certification:** ..... UL Listed.

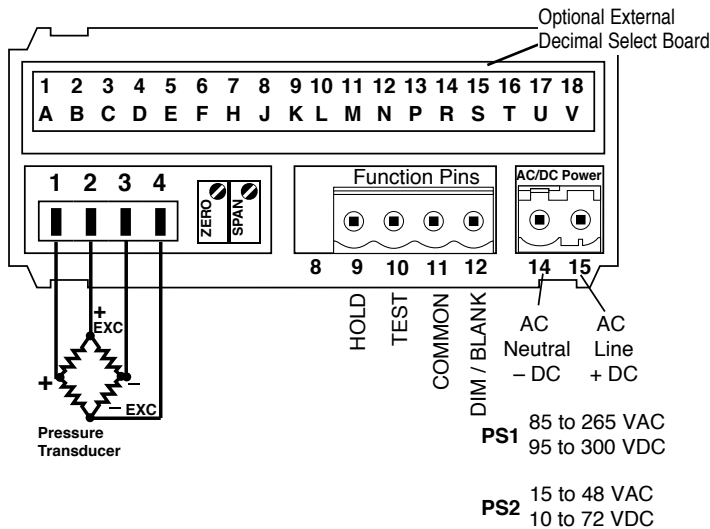
### DX-Series, the OEMs choice for switchboard and process indication

- DX-35-DCV** ..... DC volts ±2V/±20V/±200V Header Selectable Ranges, 3.5 digit
- DX-35-DCA** ..... DC mV ±50mV, ±100mV, ±200mV Header Selectable Ranges, 3.5 digit
- DX-35-ACV** ..... AC volts, Scaled RMS (True RMS Opt.). 199.9/300V AC Header Selectable Ranges, 3.5 digit
- DX-35-ACA** ..... AC amps, Scales RMS (True RMS Opt.). (5 Amp Internal Shunt), 3.5 digit
- DX-35-CL** ..... Process 4 to 20mA (100.0), easily user scalable, 3.5 digit w/Exc. opt
- DX-35-HZ** ..... AC Line Frequency 15.0Hz to 199.9Hz. Up to 300V AC input, 3.5 digit

- DX-35-TC-KF** ..... K Thermocouple with °F, optional °C, 3.5 digit
- DX-35-TC-JF** ..... J Thermocouple with °F, optional °C, 3.5 digit
- DX-35-RTD-F** ..... 100Ω platinum RTD, 3 or 4 wire, °F in 1° resolution, optional °C, 3.5 digit
- DX-40-ACV** ..... AC volts, Scaled RMS (True RMS Opt.). 300.0V AC full scale, 4 digit
- DX-45-ACA** ..... AC amps, Scaled RMS (True RMS Opt.). (5 Amp Internal shunt), 4.5 digit
- DX-45-DCV** ..... DC volts ±2V/±20V/±200V Header Selectable Ranges, 4.5 digit
- DX-45-DCA** ..... DC mV ±50mV/±100mV/±200mV Header Selectable Ranges, 4.5 digit
- DX-45-CL** ..... Process 4 to 20mA (100.00), easily user scalable, 4.5 digit w.Exc opt.

## Connector Pinouts

This meter uses plug-in type screw terminal connectors for all connections.



## Pin Descriptions

- Pin 1** - Signal Input High  
**Pin 2** - Positive Excitation: +5V/10VDC excitation for pressure transducer  
**Pin 3** - Signal Input Low  
**Pin 4** - Negative Excitation: Negative end of 5V/10VDC excitation for pressure transducer  
**Pin 9** - Hold: If this pin is left unconnected the meter will operate in a free running mode. When this pin is connected to the Common Pin 11, the meter display will be latched. A/D conversions will continue, but the display will not be updated until Pin 9 is disconnected from Pin 11.  
**Pin 10** - Display Test: When this pin is connected to the Common Pin 11, all segments of the display light up and 1888 is displayed. This is used to detect any missing segments in the display.  
**Pin 11** - Common: To Hold, Test or Dim the display, the respective pins have to be connected to this Common Pin.  
**Pin 12** - Dim/Blank: When this pin is connected to the Common Pin 11 the display is blanked out. If it is connected through an external 1KΩ pot, the display may be dimmed.  
**Pin 14 & 15** - AC/DC Power Input: These pins are the power pins of the meter and they only accept a special polarized screw terminal plug that can not be inserted into any other input socket. The standard meter has a auto sensing AC/DC power supply that operates from 85-265 VAC/95-300 VDC (PS1 Std). An optional isolated low voltage power supply that operates from 15-48 VAC/10-72 VDC (PS2) is also available.

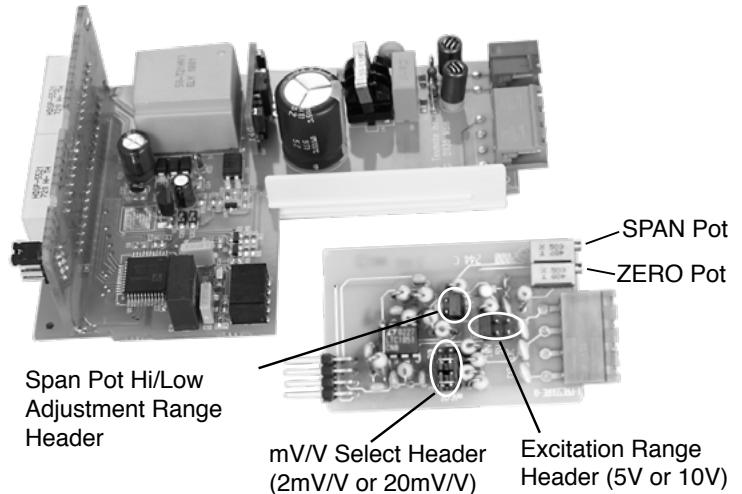
## OPTIONAL EXTERNAL DECIMAL POINT SELECTION BOARD

- Pins 6, F - Decimal Common:** Connect to these pins to activate decimals.  
**Pins 7, H - Decimal XXXX.:** Connect to pin 6 or pin F to activate decimal XXXX..  
**Pins 8, J - Decimal XXX.X:** Connect to pin 6 or pin F to activate decimal XXX.X.  
**Pins 9, K - Decimal XX.XX:** Connect to pin 6 or pin F to activate decimal XX.XX.  
**Pins 10, L - Decimal X.XXX:** Connect to pin 6 or pin F to activate decimal X.XXX.

## Calibration Procedure

1. Select the appropriate position on the INPUT RANGE SELECT Header, to correspond with the mV/V output of the transducer being used.
  2. Connect the transducer to the DX-35-SG as shown in the connection diagram.
  3. With no pressure or load being applied to the transducer, adjust the ZERO pot so that the display reads 000.
  4. Apply a known input, and adjust the SPAN pot until the meter displays the required reading for the pressure or load being applied.
- The DX-35-SG meter is now calibrated and ready for use.

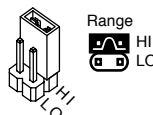
## Component Layout



## Signal Conditioning Components

**SPAN** **SPAN Potentiometer (Pot)**  
 To the Right Front   
 Turn Clockwise to Increase Reading  
 The 15 turn SPAN pot is always on the right side (as viewed from the back of the meter). Typical adjustment is 100% of the input signal range.

**ZERO** **ZERO Potentiometer (Pot)**  
 To the Left Front   
 Turn Clockwise to Increase Reading  
 The ZERO pot when installed is always to the left of the SPAN pot (as viewed from the back of the meter). Typically it enables the input signal to be offset ±100% of full scale.



### Span Pot Adjustment Range Header

Low : 0-1000 Counts  
 Hi : 1001-1999 Counts

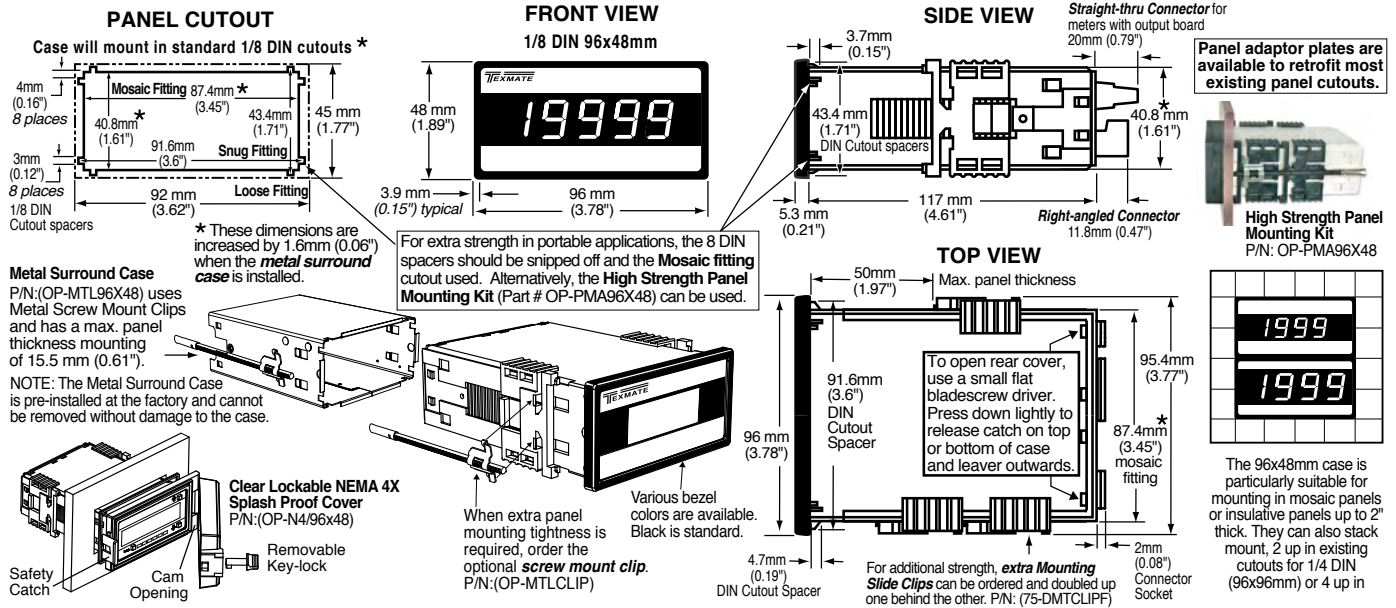
## Opening Back Panel



To open back panel, insert a flat screwdriver or similar instrument in both slots on the top of the case and pry open. The DX-Series meters slide out from the rear of the case as a complete assembly.



# DX Case Dimensions and Panel Cutouts



## Ordering Information

### Standard Options for this Model Number

Part Number	Description	List
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► **BASIC MODEL NUMBER** Includes plug in type screw terminals, standard display and standard power supply unless optional versions are ordered.  
**DX-35-SG**..... Pressure/Load Cell 2mV/20mV/V 5/10V Exc 4-wire  
 Input Module : IS05

### ► DISPLAY

DR . . . Red LED, 0.56 inch high . . . . .
DB . . . Super-bright Red LED, 0.56 inch high . . . . .
DG . . . Green LED, 0.56 inch high . . . . .
LG . . . Large Green LED, 0.8 inch high . . . . .
LR . . . Large Red LED, 0.8 inch high . . . . .

### ► POWER SUPPLY

PS1 . . 85-265VAC/95-300VDC . . . . .
PS2 . . 15-48VAC/10-72VDC . . . . .

### Special Options and Accessories

Part Number	Description	List
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### ► SPECIAL OPTIONS (Specify Inputs or Outputs & Req. Reading)

ZR . . . . . Range Change from Standard Range shown in **BOLD** type  
 ZS . . . . . Custom display scaling within standard ranges  
 OP-DXEXTDP . . . External Decimal Point Selection Board. Factory Installed  
 Connector may be purchased (P/N: CN-L18)

### ► ACCESSORIES (Specify Serial # for Custom Artwork Installation)

75-DBBZ9648F . . Extra Black Bezel for 96x48mm Case . . . . .  
 75-DMTCLIPF . . Side Slide Brackets (2 pc) - extra set, extra strength . . . . .  
 76-D35G-N4 . . . NEMA 4 Green LED Faceplate, Factory Installed . . . . .  
 76-D35LG-N4 . . NEMA 4 Large Green LED Faceplate, Factory Installed . . . . .  
 76-D35LR-N4 . . NEMA 4 Large Red LED Faceplate, Factory Installed . . . . .  
 76-D35R-N4 . . . NEMA 4 Red LED Faceplate, Factory Installed . . . . .  
 CN-L18 . . . . . Dual Row 18 Pin Edge Connector, Solder Type for . . . . .  
 . . . . . External Decimal Point Board (P/N: OP-DXEXTDP)  
 DN.CAS96X48B . Complete 96 X 48 mm Case with bezel . . . . .  
 OP-MTLCLIP . . . Screw Mount Clips (2 pc) - to screw tighten slide brackets . . . . .  
 OP-MTL96X48 . . Metal Surround Case, includes screw mounting clips . . . . .  
 OP-N4X/96X48 . . .96x48mm clear lockable front cover-NEMA 4X, splash proof . . . . .  
 OP-PSA/96X48 . . Panel to Case Seal Adapter with O-Ring and Foam Gasket . . . . .  
 DU-CASEDES . . . Clear adhesive descriptors label for face plate . . . . .

### 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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