

FEATURES

- ▶ Low-cost, high-performance replacement for many OEM DPMs
- ▶ Optional RED, GREEN or AMBER backlighting
- ▶ Snap-in bezel mount eliminates mounting hardware
- ▶ Resistant to RF and EMI
- ▶ 4½ digits with high-contrast LCD
- ▶ 4-20 mA loop powered input
- ▶ User-selectable, displayed engineering units



SPECIFICATIONS

DISPLAY

Digits: 4 ½ digits (± 19999 counts)
 Type: 0.45" (11.4 mm) 7 segment LCD
 Backlighting: Optional Red Negative (red numbers/black background)
 Optional Green Negative (green numbers/black background)
 Optional Amber Negative (amber numbers/black background)
 Optional Green Positive (black numbers/green background)
 Polarity: automatic, "-" displayed
 Annunciators: °F, °C, PSI, % user-selectable or V, A, KW, PF
 Decimal Points: 4 position, user-selectable
 Overrange: four lower order digits blank for inputs >19999 & < -19999

INPUTS

Ranges: 4-20 mA DC
 Configuration: bipolar differential
 Impedance: 300Ω nominal @ 20 mA

PERFORMANCE

Accuracy: $\pm(0.1\% \text{ fs} + 2 \text{ count})$
 Conversion Rate: 3 per second
 Normal Mode Rejection: >30 dB @ 60 Hz
 Adjustments: span (gain) and zero (offset) with course setting
 Warmup: 10 minutes typical
 Temperature Coeff.: $\pm 100 \text{ ppm per } ^\circ\text{C}$ typical

ENVIRONMENT

Operating Range: 0 to 50 °C
 Storage Range: -10 to 70 °C

POWER SUPPLY

Optional Backlight: powered by the milliamp control loop
 24 VDC at 35 mA typical

MOUNTING

snap-in bezel mount

CONNECTION

2 screw terminal (4 with backlight)

ORDERING INFO

PART NUMBER	BACKLIGHT COLOR	BACKLIGHT POWER
DK790*	NO BACKLIGHT	NONE
DK791*	NEG AMBER	24VDC
DK793*	NEG GREEN	24VDC
DK794*	NEG RED	24VDC
DK795*	POS GREEN	24VDC

*Add (P) for Power Engineering Units V, A, KW, PF

ACCESSORIES

PW2-24 Regulated 120V AC to 24V DC Power Supply
 CVC Calibrator



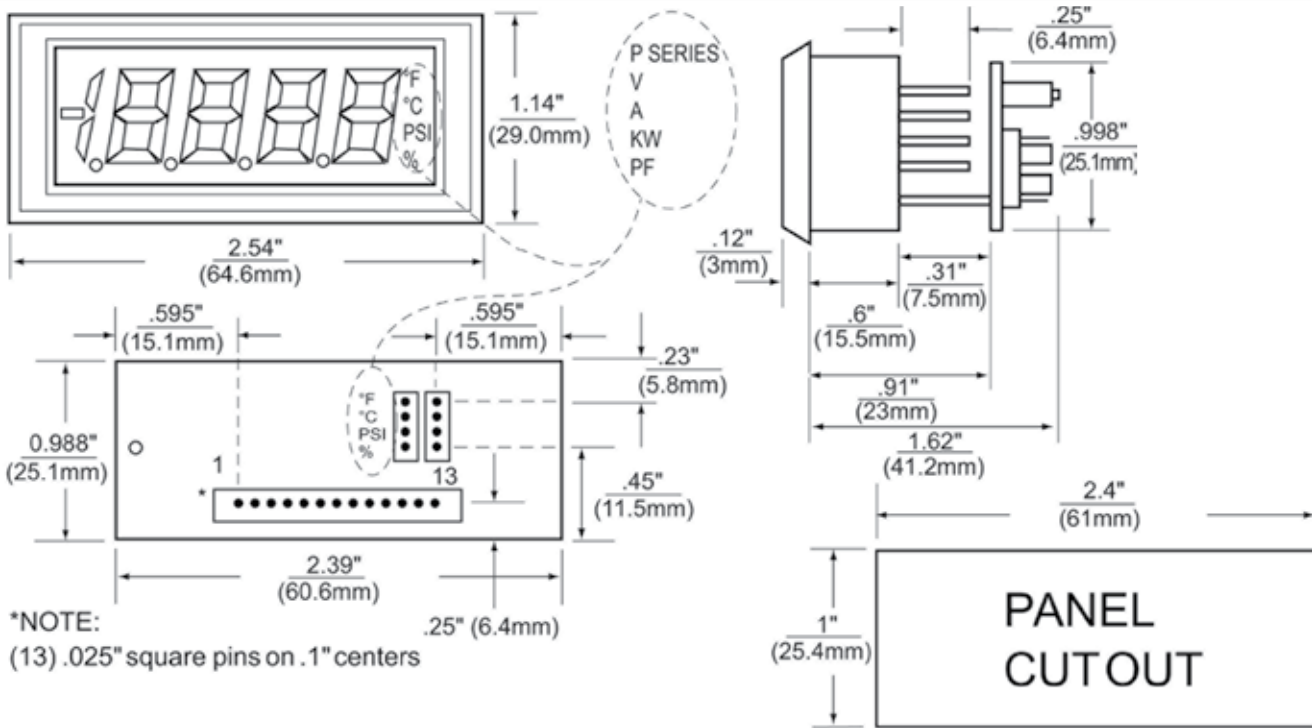
Specifications Installation and Operating Instructions LCD Digital Panel Meters

Epic Series - 4½ Digit LCD with Loop Powered Board

DK790

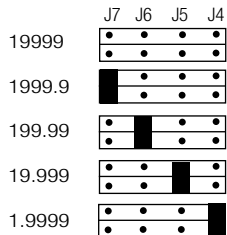


DIMENSIONS



JUMPER SELECTION & WIRING

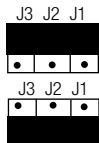
1. DECIMAL SELECTION:



2. J1, J2, J3 SELECTION:

IF: MIN DISPLAY IS = 0 **or**
MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY ≥ 5

IF: MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY < 5



3. SPAN JUMPER SECTION:

SPAN FACTOR	SET JUMPERS
0-12	L
10-22	M
22-32	H

IF: MIN DISPLAY IS ≤ 0 **or**
MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY > 5

THEN: SPAN FACTOR = $\frac{2.5 (\text{MAX DISPLAY} - \text{MIN DISPLAY})}{4000 + 0.02 (\text{MIN DISPLAY}) - 0.004 (\text{MAX DISPLAY})}$

IF: MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY ≤ 5

THEN: SPAN FACTOR = $\frac{\text{MAX DISPLAY} - \text{MIN DISPLAY}}{1600}$

4. ZERO (OFFSET) JUMPER SELECTION:

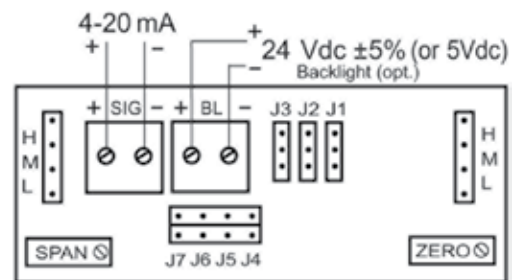
ZERO FACTOR	SET JUMPERS
0-3994	H
3320-7314	M
6640-10634	L

IF: MIN DISPLAY IS ≤ 0 **or**
MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY > 5

THEN: ZERO FACTOR = $\frac{(250000 + \text{MIN DISPLAY})}{(250000 + 400 (\text{SPAN FACTOR}))} \times (83834) - 73200$

IF: MIN DISPLAY IS > 0 **and** MAX DISPLAY ÷ MIN DISPLAY ≤ 5

THEN: ZERO FACTOR = $10634 - \frac{(\text{MIN DISPLAY} - 400 (\text{SPAN FACTOR})) \times 83834}{250000}$



WIRING