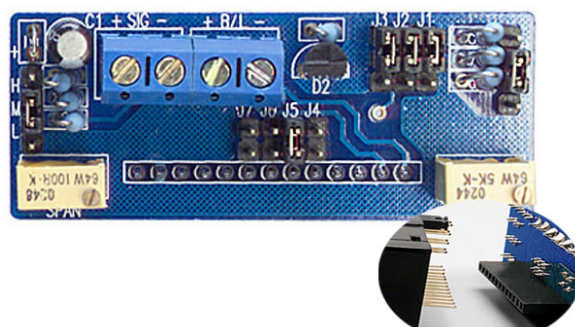




## Features:

- ◇ 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, %, 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:                | ±(0.1% fs + 2 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 Coefficient: | ± 100 ppm per °C typical                                   |
| Environment:  | Operating Range:         | 0 to 50 °C                                                 |
|               | Storage Range:           | -20 to 70 °C                                               |
| Power Supply: |                          | powered by the milliamp control loop                       |
|               | Optional Backlight:      | 24 VDC at 35 mA typical                                    |
| Mounting:     |                          | snap-in bezel mount                                        |
| Connection:   |                          | 2 screw terminal (4 with backlight)                        |

## Ordering Information:

| 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

|        |                                          |
|--------|------------------------------------------|
| PW2-24 | Regulated 120V AC to 24V DC Power Supply |
| PW1.0  | 24V AC to adjustable DC output           |
| CPW1.5 | 24V AC to adjustable DC output           |
| CVC    | Calibrator                               |

# Loop Powered LCD Digital Panel Meters

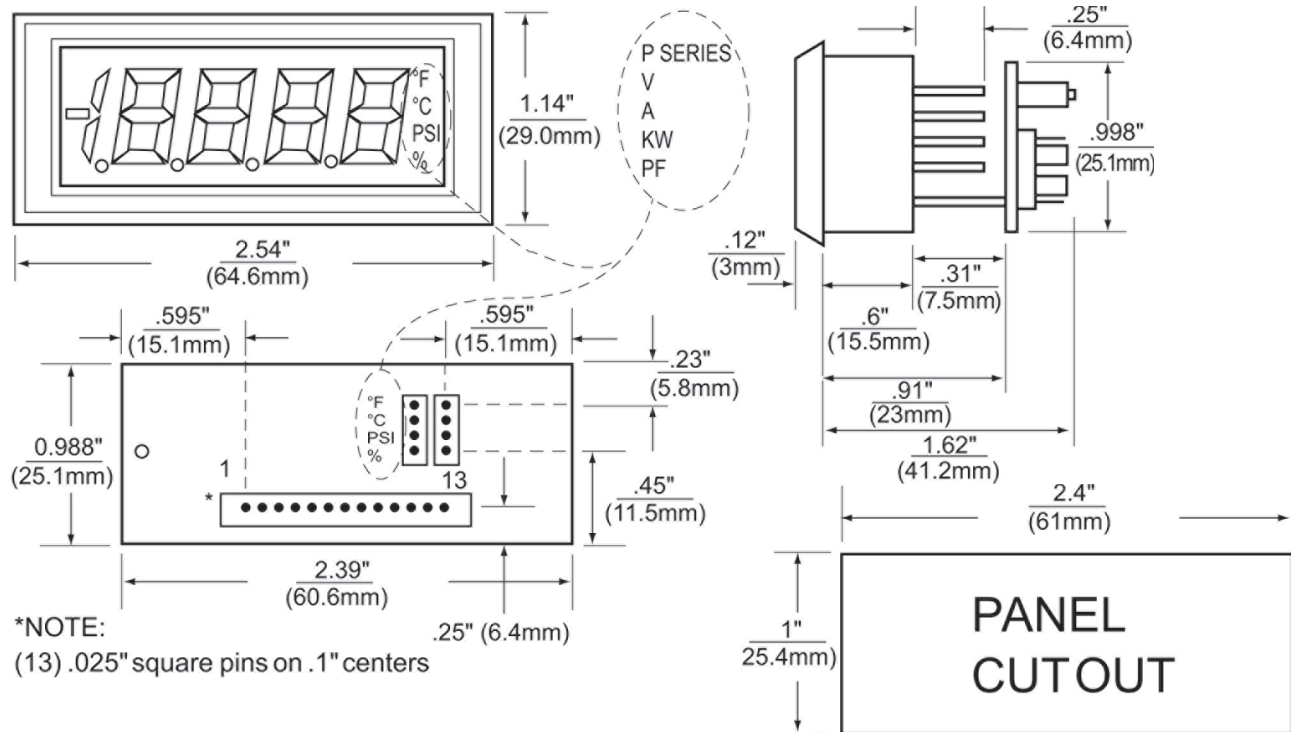
4½ Digit LCD with Loop Power Board



## DK790 Series

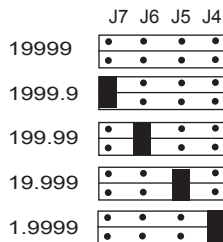
### EPIC SERIES

#### Dimensions



#### Jumper Selection & Wiring

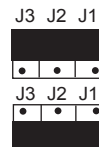
##### 1. DECIMAL SELECTION:



##### 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:

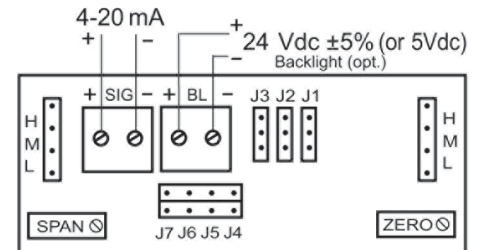
| ZERO FACTOR | SET JUMPERS |
|-------------|-------------|
| 0-3994      | H           |
| 3320-7314   | M           |
| 6640-10634  | L           |

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

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

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

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



WIRING