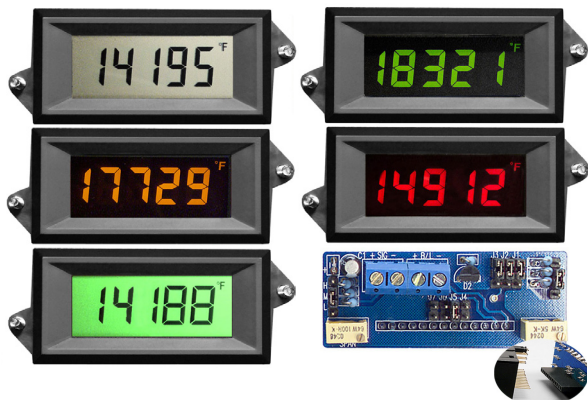




FEATURES

- ▶ Low-cost, high-performance replacement for many OEM DPMs
- ▶ Optional RED, GREEN, AMBER or POS GREEN backlit LCD
- ▶ 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
- ▶ Clamp and gasket for NEMA applications

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)
 automatic, "-" displayed
 Annunciators: °F, °C, PSI, % , user selectable
 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

PERFORMANCE

Accuracy: $\pm(0.1\% \text{ fs} + 2 \text{ count})$
 Conversion Rate: 3 per second
 Normal Mode Rejection: $>30 \text{ dB @ } 60 \text{ Hz}$
 Common Mode Range: $\pm 1 \text{ VDC max}$
 Common Mode Rej.: $>86 \text{ dB}$
 Adjustments: span (gain) and zero (offset)
 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

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

MOUNTING

snap-in bezel mount or clamp and gasket

CONNECTION

2 screw terminal (4 with backlight)

ORDERING INFO

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

ACCESSORIES

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

Specifications Installation and Operating Instructions

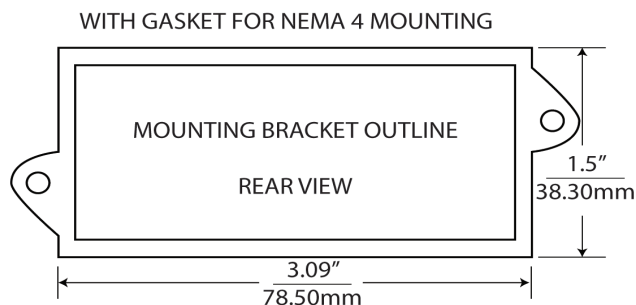
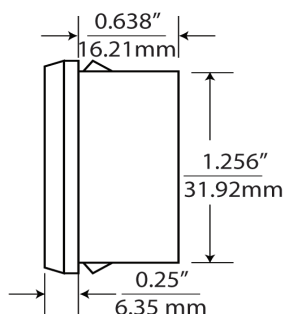
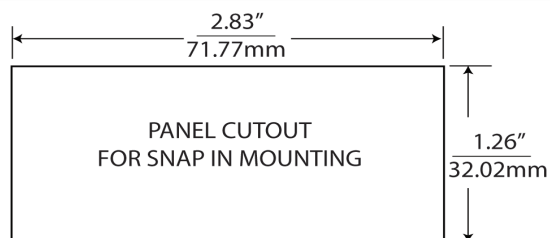
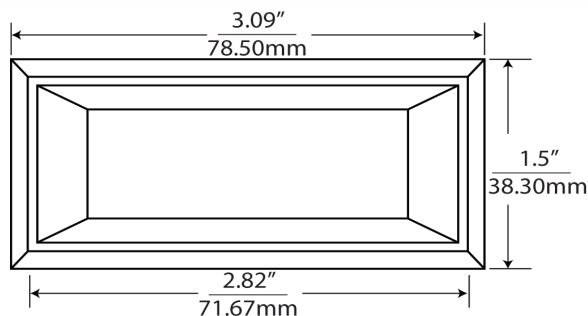
LCD Digital Panel Meters

4½ Digit LCD with Loop Powered Board

DK790-XEC

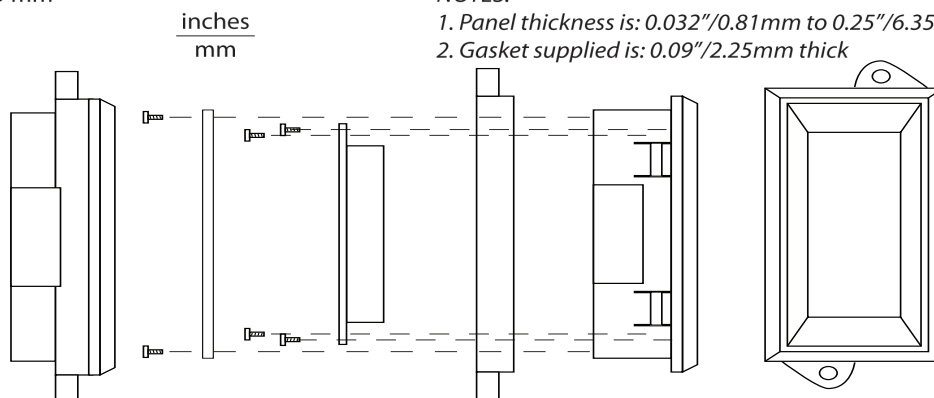


DIMENSIONS



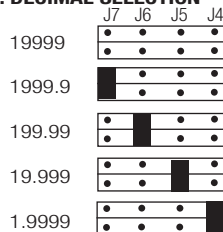
NOTES:

1. Panel thickness is: 0.032"/0.81mm to 0.25"/6.35mm
2. Gasket supplied is: 0.09"/2.25mm thick



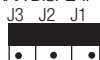
JUMPER SELECTION & WIRING

1. DECIMAL SELECTION

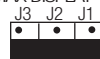


2. J1, J2, J3 SELECTION

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:

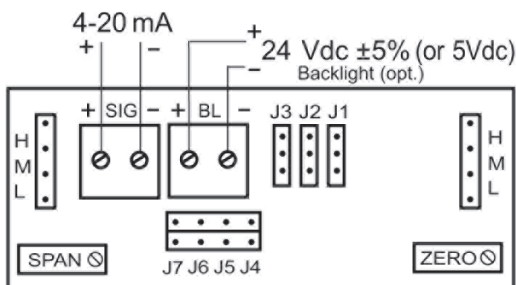
ZERO FACTOR	SET JUMPERS
0-3994	H
3320-7314	M
6640-10634	L

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

