MICRO-C DISPLAY

Micro-C Displays—Compatible with UniMeasure Digital Transducers!

The **Micro-C Digital Panel Meter** may be used with UniMeasure digital position transducers for the measurement of linear position or velocity. The microprocessor based Micro C features easy front panel programming, terminal strip detachable connectors on the rear face and a wide range of options to allow an exact configuration for the application. With the Quadrature Signal Conditioner, the Micro C is capable of receiving quadrature inputs from UniMeasure transducers with either standard 5 VDC TTL output or optional 5 VDC differential output. Transducer electrical power is received from the meter. With simple jumper connections, counting mode may be set at X1, X2 or X4 to increase resolution accordingly. The meter may be scaled by using an offset and scale factor derived from the calibration constant supplied with UniMeasure transducers or scaling may be done using the two point method to give an output directly in engineering units. With the extended version, MCRE, the Micro C can be configured to read rate from the pulse signal of UniMeasure digital transducers. Rate counting is possible in X1, X2 or X4 counting mode. The rate may be programmed to read in engineering units. The Micro-C display has two alarm indicators with setpoints that may be programmed from the front panel pushbuttons. Optional open collector transistors or dual 10 amp relays allow outputs to be set above or below the setpoint in a latched or non-latching mode. Time delays of the outputs are digitally selectable. 0 to 10 V or 0 to 20 mA (4 to 20 mA) analog outputs are available to drive chart recorders or for transmission to a central control unit. Adding RS-232 or RS-485 enables the displays to communicate with PLC's or computers. Software provided with these options allow programming the meter from a host computer.

SPECIFICATIONS

DISPLAY
- Type ..... 6 LED, 7-segment, 14.2 mm (.56") high digits and 3 LED indicators
- Color ..... Red
- Range ..... -999,999 to +999,999

CONVERSION PERIOD
- Gate Time ..... 0 TO 199.99 sec.
- Technique (frequency) ..... 1/Period time
- Rate ..... Gate time + 10 ms + 2 periods of the input signal

ACCURACY AT 25°C
- Time Base (crystal) ..... Calibrated to ±1 Count
- V to F Converter ..... 0.015%FS ± 1 Count
- Span Tempco ..... ±1PPM/°C
- Long Term Drift ..... ±5PPM/year
- CMV (DC to 60Hz) ..... Safety rated to 250 Vac

ENVIRONMENTAL
- Operating Temperature ..... 0°C to +55°C
- Storage Temperature ..... -40°C to +85°C
- Operating Humidity ..... 95% at 40°C, non-condensing

SIGNAL INPUT SPECIFICATIONS, CHANNELS A & B
- High Level Input Max ..... 250 VAC
- High Level Input Min ..... 0.25 VAC
- Low Level Input Max ..... 50 VAC
- Low Level Input Min ..... 0.01 VAC
- Input Coupling ..... AC or DC
- Frequency Response ..... 200 kHz max

EXCITATION POWER SUPPLIES
- Outputs ..... 5 VDC, 5%, 100 mA max
  10 VDC, 5%, 120 mA max
  24 VDC, 5%, 50 mA max
- Isolation (power ground) ..... Safety rated to 250 VAC

OPERATING POWER
- Voltage (std) ..... 85 to 264 VAC, 90 to 370 VDC
- Voltage (opt) ..... 8 to 28 VAC, 9 to 37 VDC
- Frequency ..... DC and 47 to 440 Hz

MODEL NUMBER CONFIGURATION

0 I - 2 3 4 - 5

Basic Configuration

MCR0-HHH-Q

0 DISPLAY
- **MCR** ..... Red LED (for Position)
- **MCRE** ..... Red LED (for Position or Rate)

I METER POWER
- **0** ..... 85 to 264 VAC, 90 to 370 VDC
- **1** ..... 8 to 28 VAC, 9 to 37 VDC

2 ANALOG OUTPUT
- **H** ..... None
- **J** ..... 0 to 10 VDC
- **K** ..... 0 to 20 (4-20) mA DC

3 SETPOINT OUTPUT
- **H** ..... None
- **R** ..... Dual 8 A Relay
- **C** ..... Form A 130mA Solid State Relay

4 DIGITAL INTERFACE
- **H** ..... None
- **2** RS-232
- **4** RS-485
- **B** ..... Parallel BCD

5 SIGNAL CONDITIONERS
- **Q** ..... Quadrature

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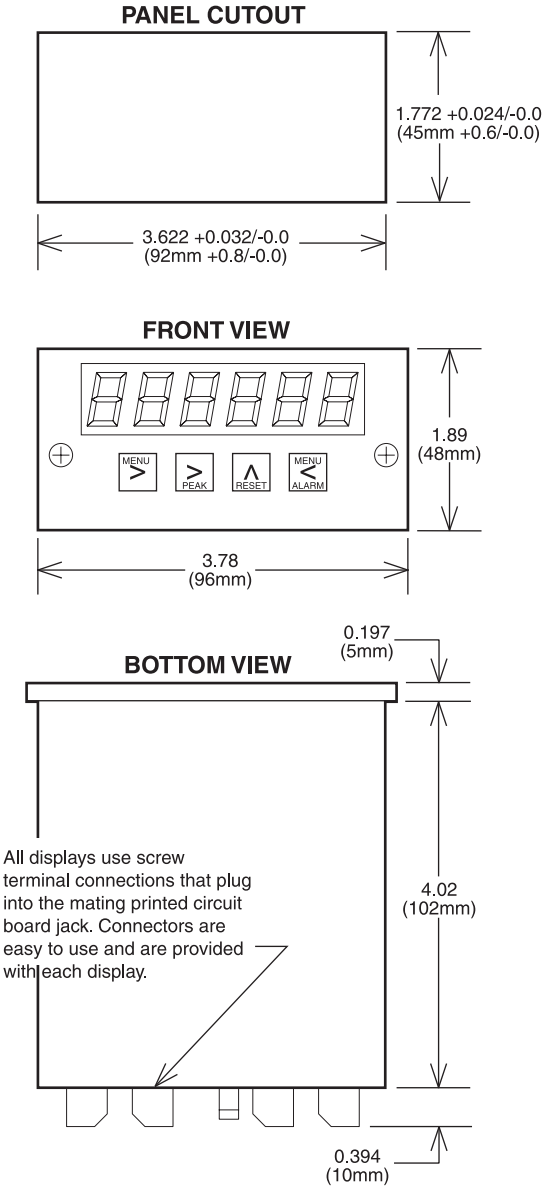
DIMENSIONAL INFORMATION

MICRO-C Series



Dimensions in brackets are millimeters