

POSITROL

Low Cost, Pulse Input Position Monitor

Features

- 2 Control Set Points with Selectable Start Point
- 5 Digit Floating Point Decimal Scaling Factor
- Display From -99999 to 999999
- Pulse Input - 30 kHz Maximum
- Separate Up and Down Inputs
- Quadrature & Pulse Input with Up/down Control
- NEMA 4X / IP65 Sealed Front Panel



PRESET COUNTERS

Application:

Any position monitoring application where 2 alarm set-points and a 6 digit LED display is needed, such as blade positioning, box making and many other machine shop and industrial applications.

Description:

Featuring 6 digits of bright, 7-segment LED displays, the Positrol is a position monitor which accepts signal inputs up to 30 kHz. A 5 digit floating decimal scale factor allows a readout in true engineering units. The unit has two, programmable alarm set points from -99999 to 999999 and a selectable start point. These setpoints control two 5 Amp relays. A two stage panel lock prohibits menu changes from unauthorized personnel.

Specifications:

Display: 6 digit, .55" high, 7 segment, red orange, LED.

Input Power:

110 VAC \pm 15% or 12 to 15VDC.

220 VAC \pm 15% or 12 to 15VDC.

Current: 300 mA DC max or 8.0 VA at rated AC voltage.

Output Power: (AC powered units only)

+ 12VDC @ 50mA **unregulated** -10 +50%

Temperature:

Operating: +32°F (0°C) to +130°F (+54°C).

Storage: -40°F (-40°C) to +200°F (93°C).

Memory: EEPROM stores data for ten years if power is lost.

Inputs: DC pulse input open or 0-1 VDC (low), 4-30 VDC (high), 30 kHz speed max.

Reset:

Front Panel: resets display to view (start) value.

Remote: 4-30VDC positive edge, Resets display to view (start) value.

Lockout: Unauthorized front panel changes can be prevented by entering a user selected, 5 digit code. The lockout feature can be programmed to lock the entire front panel or lock the menu items and leave the presets and reset accessible. In either mode the locked items can be viewed but not changed.

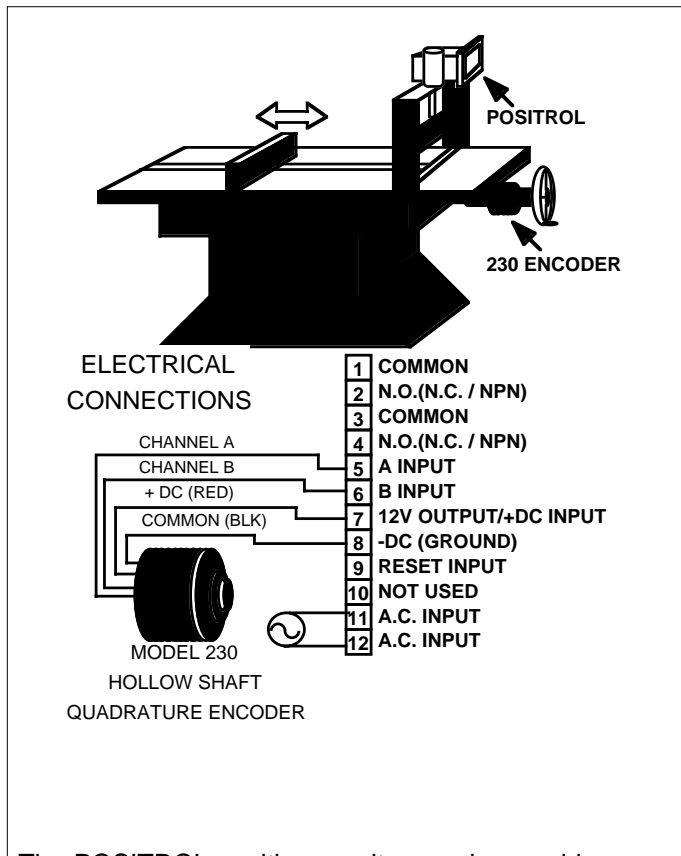
Control Outputs: 2 each N.O. Relays - 5 Amp @ 120/240 VAC or 28 VDC. (N.C. Relay contacts or NPN sink from 10 VDC to .5 VDC @ 100 mA available with solder jumpers). The output will remain active when the display is equal to or greater than the set point. If the display falls below the set point, the output becomes inactive.

Set Points: Two control set points are provided. The set points can be programmed for any number from minus 99999 to plus 999999. The Positrol will recognize new set point values without the need to reset the unit. The unit also has a starting point which can be viewed or changed by pressing the "view" button. When the reset is activated, the display will reset to the view (start) value.

Shipping Weight: 2 pounds.

Approvals: CE Approved

Typical Application:



The POSITROL position monitor can be used in many position applications. When two units are used, both X and Y axes positions can be monitored. The application below involves monitoring of the X axis only.

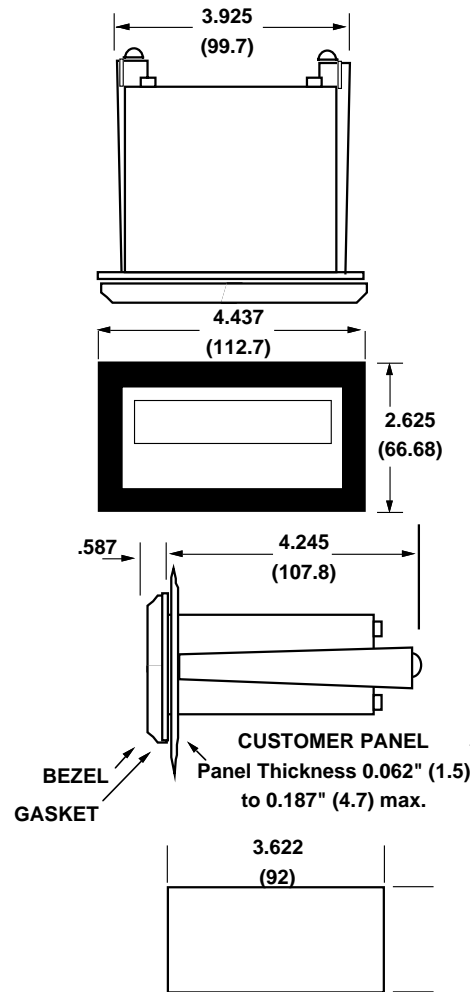
In this application the STOP position on a sheet metal shear must be monitored. A KEP model 230 quadrature encoder was placed on the screw drive shaft. The Encoder outputs 100 pulses per revolution. Each revolution of the screw drive equals a .15 inch movement of the STOP. To calculate the scale factor simply divide 100 by .15 ($100 \div .15$) = 666.66 pulses per inch. This would be the scale factor if the display was to be read in inches.

In this application, the STOP movement must be accurate to .01 inches. Therefore the factor 666.66 must be divided by 100 ($666.66 \div 100$) = 6.6666 pulses per .01 inch. Enter 6.6666 for the scaling factor.

The unit has two alarm set points which activate two relays. The unit also has a programmable preset starting point. At any time the preset start point can be viewed or changed by pressing the view button. The two relay outputs can be used to signal alarms when the desired position has been reached.

The POSITROL is the perfect solution for position monitoring applications where a low cost, scalable monitor is needed.

Dimensions:



How To Order:

SAMPLE: PM2 A 3

Series _____

PM2 Position Monitor

Operating Voltage

A= 110 VAC \pm 15% or 12 to 15 VDC

B= 220 VAC \pm 15% or 12 to 15 VDC

Inputs

3 = Separate Up / Down Inputs

5 = One Count Input, One Up / Down Control

9 = Quadrature

Accessories

Separate non keyboard panel order #34235

Separate keyboard panel - order #34237