# **Encoders**

# 510 Series, Mechanical



The 510 Series controls are manually operated, rotary, mechanical encoders that provide a two-bit gray code for relative reference applications and a four-bit gray code for absolute electrical reference applications. The "L" channel leads the "R" channel by 90° electrically in the CW position. It features continuous electrical travel and has a rotational life of more than 100,000 shaft revolutions with a positive detent feel.

This series is small-sized, 21,08 mm $^2$  by 8,71 mm deep (0.83 in $^2$  x 0.343 in) long and commonly used in limited-space, panel-mounted applications where the need for costly, front-panel displays can be completely eliminated. Digital gray-code outputs eliminate the need for A/D converters.

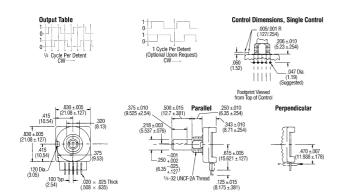
 Bushing:
 9,52 mm (0.375 in) Ø x 6,35 mm (0.25 in) L

 Shaft:
 Flatted, 6,35 mm (0.25 in) Ø x 19,05 mm (0.75 in) L

 Body:
 21,08 mm (0.830 in) square

 Operating temperature:
 -40 °C to 105 °C (-40 °F to 221 °F)

 Rotational cycles:
 100,000



### **OPTIONS**

# Vertical Mount, PC Terminals/bent back

GREY CODE OPTIONS	REFERENCE
2 bit/4 cycles	510E1A48F204PC
2 bit/6 cycles	510E1A48F206PC
2 bit/9 cycles	510E1A48F209PC
4 bit/16 cycles	510E1A48F416PC

# Horizontal Mount, PC Terminals/straight

GREY CODE OPTIONS	REFERENCE
2 bit/4 cycles	510E1A48F204PB
2 bit/6 cycles	510E1A48F206PB
2 bit/9 cycles	510E1A48F209PB
4 bit/16 cycles	510E1A48F416PB

### **Brackets**

MOUNTING DIRECTION	REFERENCE
Vertical	510VBKT
Horizontal	510HBKT

# 600 Series, Optical



The 600 Series controls are manually operated, rotary, optical encoders that output two square waves in quadrature at a rate of 128 pulse per channel per revolution as a standard with other resolutions down to 60 pulses available. The outputs are TTL compatible. PC terminals or cable leads are available.

 Pulses per revolution:
 128

 Supply voltage:
 5.0 V

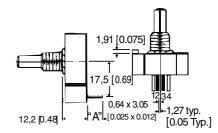
 Body:
 34,93 mm (1.375 in) Ø

 Shaft:
 6.35 mm [0.25 in] dia by 22.23 mm [0.875] long

 Bushing:
 9,52 mm [0.375 in] dia by 9,52 mm [0.375 in] long

 Operating temperature:
 -40 °C to 65 °C (-40 °F to 149 °F)

 Revolutions:
 10 million



## **OPTIONS**

## Series 600

TERMINATION	REFERENCE
177,8 mm (7.0 in) long cable	600EN-128-CBL
PC terminals exiting side	600EN-128-B66
PC terminals exiting rear	600EN-128-C24
177,8 mm (7.0 in) long cable with connector	600EN-128-CN1