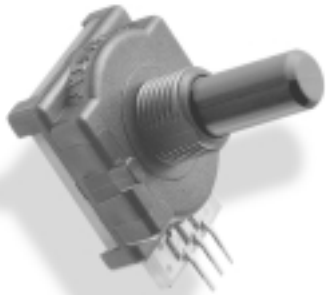


Model 510

NEW



FEATURES:

Cost Effective

- Eliminates A/D converters

High Resolution

- Up to 36 positions

Stability

- Operating range of -40C to +105C

Variability

- Horizontal and vertical mounting

Electrical

OUTPUT:

2-bit grey code, channel L leads channel R by 90 deg electrically in the CW direction. 4-bit grey code, absolute electrical position output.

CLOSED CIRCUIT RESISTANCE:

5 ohms maximum

OPEN CIRCUIT RESISTANCE:

100K ohm minimum

CONTACT RATING:

Resistance load 250mA @ 28Vdc maximum

SWITCHING LOADS:

1.5mA @ 115 Vac
150mA @ 14Vdc

BOUNCE (Jitter):

5 ms/cycle @ 15 RPM

DIELECTRIC WITHSTANDING VOLTAGE:

1000 Vac @ sea level

ELECTRICAL TRAVEL:

Continuous

OPERATING SPEED:

50 RPM maximum

Mechanical

ROTATIONAL TORQUE:

3-5 oz. in. (2.16 - 3.60 Ncm)

MECHANICAL TRAVEL:

Continuous

PANEL MOUNTING TORQUE:

7 lbs. in. (1.13Nm) maximum

SHAFT LOAD FORCE:

10 lbs. in. (1.13Nm) maximum

SHAFT PULL FORCE:

10 lbs. maximum

TERMINALS:

Standard PC style, 3 terminals on 0.100" (2.54mm) grid-in-line perpendicular or parallel to shaft. Solder hook available on 0.200" grid.

MOLDED CONSTRUCTION:

Molding compound used for housing/bushing and shaft has a UL94V-2 rating

ROTATIONAL LIFE:

100,000 detented cycles at rated load typical.
(1 cycle = 720 degrees)

Operational

TEMPERATURE RANGE:

Operating temperature: -40 degrees C to +105 degrees C
Storage temperature: -55 degrees C to +120 degrees C

HUMIDITY:

Per MIL-STD. 202, Method 106C:
Insulation resistance shall be 1 Megohm maximum of a relative humidity 90% @ 25 degrees C

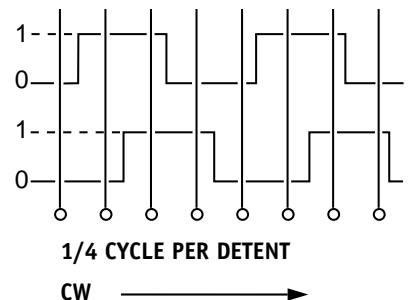
SHOCK:

Per MIL-STD. 202, Method 213, Test Condition G, consisting of 18 impacts shock at 50 G's for duration of 11ms

VIBRATION:

Per MIL-STD. 202, Method 214, Test Procedure A

Output Table



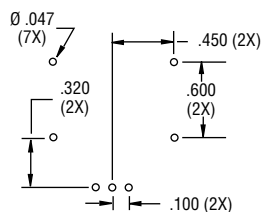
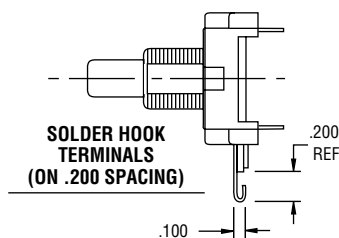
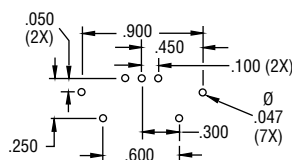
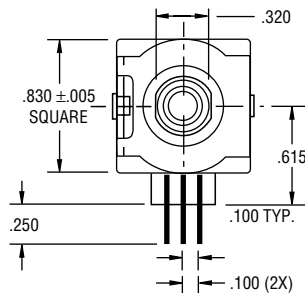
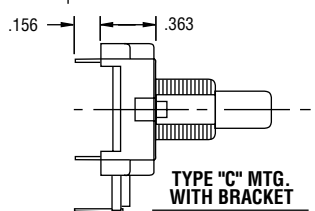
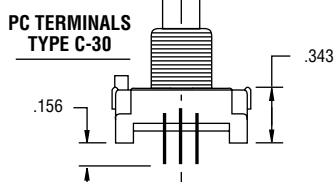
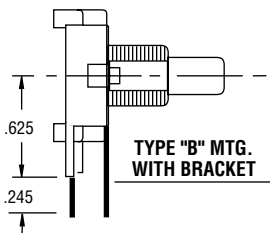
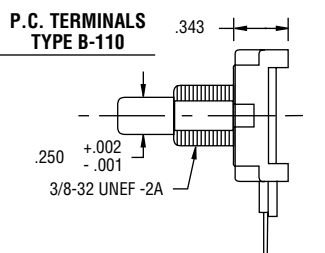
ISO 9001
CERTIFIED

DIMENSIONS for Series 510

2-Bit, 36-Position Incremental Output

Step	1	G	2
1			
2			
3			
4			
5			
5			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			

2-bit, 16 pos. (Steps 16-22)
2-bit, 24 os. (Steps 23-30)
2-bit, 36 pos. (Steps 31-36)

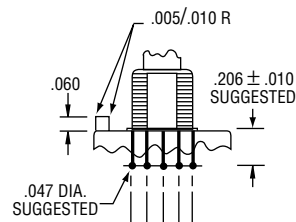
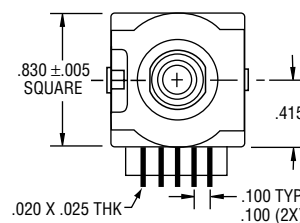


4-bit, 6-Position Incremental Output

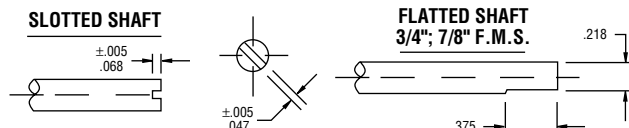
Step	1	4	2	G	8
1					
2					
3					
4					
5					
5					
7					
8					
9					
#					
#					
#					
#					
#					
#					
#					
#					

4-bit, 16 pos.

■ Closed □ Open

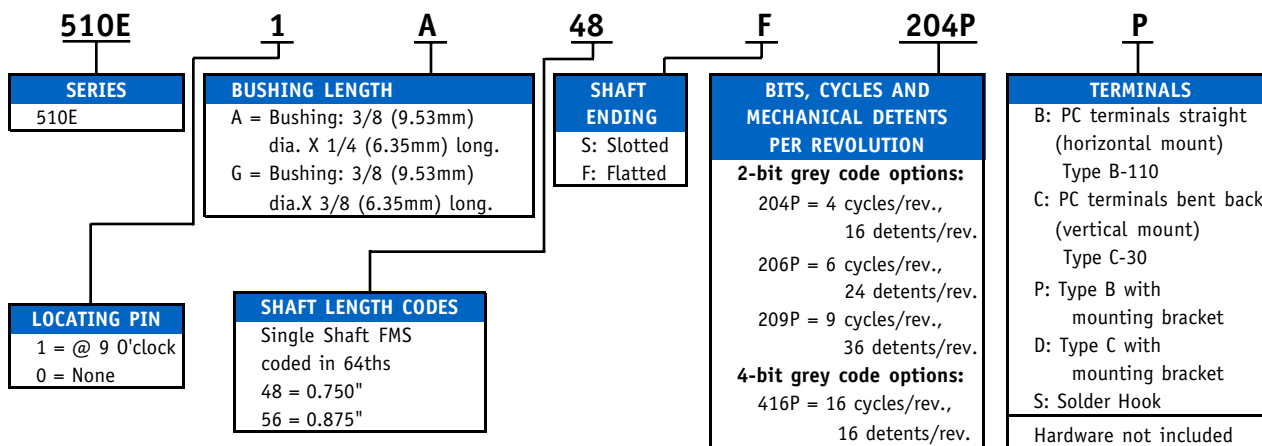


SHAFT DIMENSIONS



ORDERING INFORMATION

When ordering, indicate the desired options as shown in this example:



To order or for custom applications, call 800-874-1874

800 874 1874 · Clarostat, a division of Invensys Group Company · El Paso, Texas 79936

