

# EVENT COUNTERS SUBMINIATURE



## Models B16 & L16 Ruggedized

### MIL-I-8974 Equivalent Part Numbers

Mil Spec	L-3 EDI Commercial
M8974/2-003*	B16C8A-232
M8974/2-004*	B16C8CE-232

\*MIL Spec numbers are no longer available

The ElectroDynamics subminiature event counters were designed to meet the most difficult requirements of many military and aerospace applications. These rugged counters meet or exceed an array of tough environmental specifications including shock, vibration, temperature and are packaged in a hermetically sealed miniature enclosure. A variety of mounting configurations are available as shown on pages 78 and 79. We also welcome inquires for special requirements.

The ruggedized event counters are assembled and filled with a dielectric lubricant that dampens the effects of extreme vibration and thermal shock.

### FEATURES

- Rugged design
- Hermetically sealed

### MECHANICAL SPECIFICATIONS

**Case:** Copper-nickel or brass, with black face. E and F mounts are nickel-plated case with black face.

**Max. case length:** 1.094 in.

**Flange:** Brass

**Terminals:** Solder hook

**Weight:** Standard: Will not exceed 1.2 ounces with C flange  
Ruggedized: Will not exceed 1.8 ounces with C flange

**Numerals:** .035" wide, .078" high. All digits are white on black.

### ORDERING INFORMATION

When ordering, show model number first (B), then operating voltage, case type, maximum counts (4 or 5 digit), mount type, and mount setback desired. If this is a special part, a factory modification number will be added at the end of the ordering number. This order chart lists standard features. Other ratings and configurations are also available. Example: B16C8CE-1

Model Number	Operating Voltage	Case Type	Maximum Hours Maximum Event 4,5,&6 Digit	Mount Type	Mount Setback	Standard Factory Option Examples Code* Description
B = Standard	23-29 VDC	C = 4 Digit Square	8 = 9999	A = No Mount	A = Flush	1 Rotated 90° type C, C7, V, W mount
L = Ruggedized	18-32 Others available	G = 5 Digit Rect	9 = 99999	Others available, see page 78	B to Z See "Table A" on page 81 for "X" Dimensional Code desired	14 4-40 Clinch Nuts, for type C mount 136 Tin-plate front of mount, type C, C7, V & W
		F = 6 Digit Rect.	6 = 999999			*See "Table C Standard Options" on page 81 for all codes



### ELECTRICAL SPECIFICATIONS

**Polarity:** Not polarity sensitive

**Dielectric:** 500 VRMS @ 80,000 feet

**Insulation Resistance:** MIL-STD-202, Method 302, Condition B

### ENVIRONMENTAL SPECIFICATIONS

**Operating Temperature Range:** Standard: -65 to +125°C  
Ruggedized: -55 to +125°C

### STANDARD RATINGS

**Count Rate:** 5 Counts/Second

**Minimum Impulse Time:** 50ms / 150ms off

**Thermal Shock:** MIL-STD-202, Method 107, Condition B

**Shock:** MIL-STD-202, Method 213, Condition A

**Vibration:** MIL-STD-202, Method 204, Condition D except at 10 Gs max.

**Life:** One million counts @ 25°C

### RUGGEDIZED RATINGS

**Count Rate:** 5 Counts/Second

**Minimum Impulse Time:** 50ms / 150ms off

**Thermal Shock:** MIL-STD-202, Method 107, Condition B, except temperature -55 °C to +125 C

**Shock:** MIL-STD-202, Method 213, Condition A

**Vibration:** MIL-STD-202, Method 204, Condition D

**Life:** 5 million counts @ 25°C

### POWER CONSUMPTION (for Standard & Ruggedized):

4 digit oil filled: 3.4 Watts max. @ 28VDC

4 digit dry: 1.5 Watts max. @ 28VDC

5 digit oil filled: 3.4 Watts max. @ 28VDC

5 digit dry: 2.5 Watts max. @ 28VDC

6 digit dry: 2.5 Watts max. @ 28VDC

This page consists of basic marketing information that is not defined as technical data under EAR Part 772.

# ELAPSED TIME INDICATORS AND EVENT COUNTERS

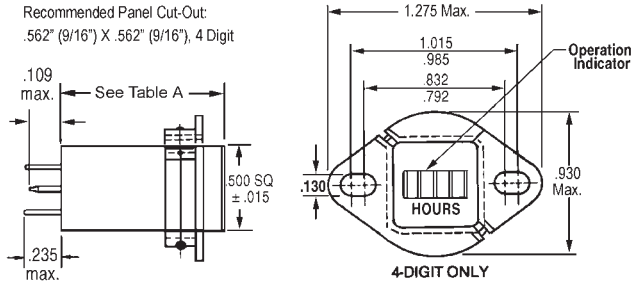


ELAPSED TIME INDICATORS & EVENT COUNTERS

## Standard Cases & Mounts

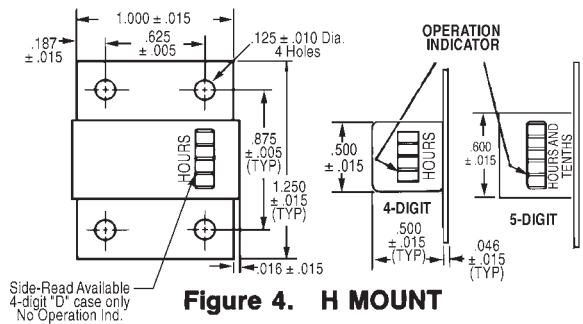
Recommended mounting torque: 2 in. lbs.\*

Recommended Panel Cut-Out:  
.562" (9/16") X .562" (9/16"), 4 Digit



**Figure 1. C2 ADJUSTABLE MOUNT**

Recommended mounting torque: 3 to 5 in. lbs.\*

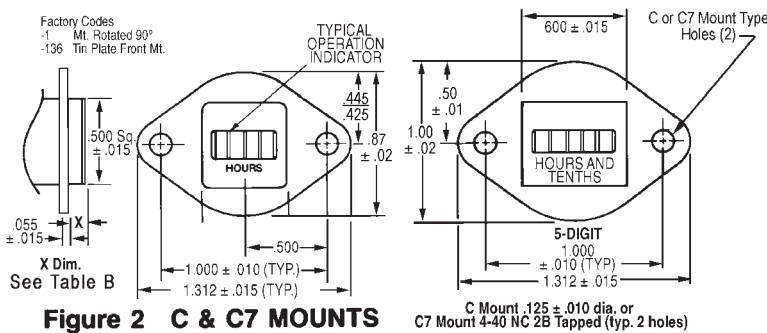


**Figure 4. H MOUNT**

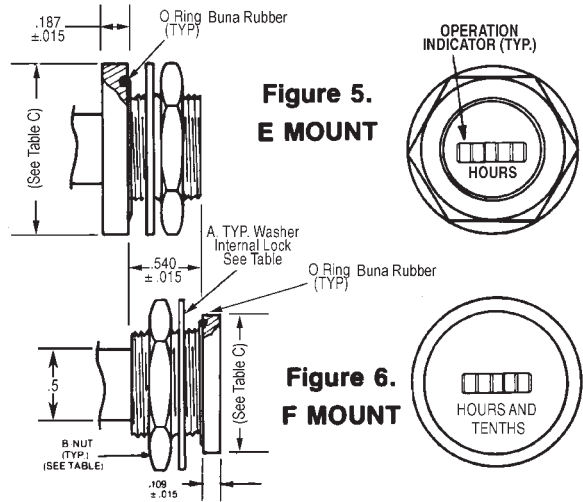
Recommended mounting torque: 3 to 5 in. lbs.\*

Recommended Panel Cut-Out: .562" (9/16") X .625" (5/8"), 5 Digit

Factory Codes  
-1 Mt. Rotated 90°  
-136 Tin Plate Front Mt.



**Figure 2 C & C7 MOUNTS**

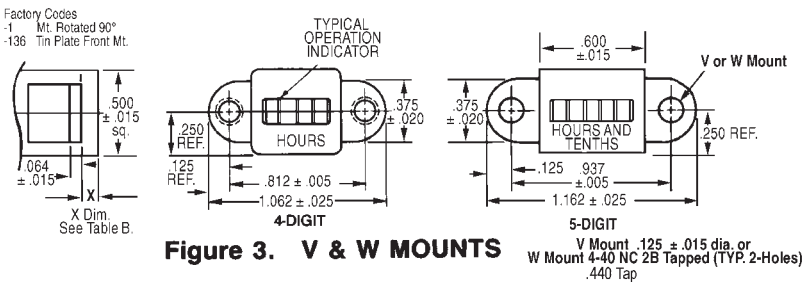


**Figure 5. E MOUNT**

**Figure 6. F MOUNT**

Recommended mounting torque: 3 to 5 in. lbs.\*

Factory Codes  
-1 Mt. Rotated 90°  
-136 Tin Plate Front Mt.



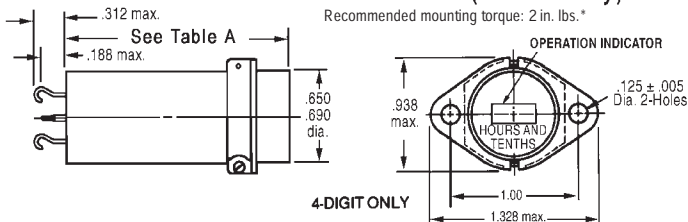
**Figure 3. V & W MOUNTS**

V Mount .125 ± .010 dia. or  
W Mount 4-40 NC 2B Tapped (TYP. 2-Holes)  
.440 Tap

	A Max. Dia.	B (Nut)	C ± .015 E Mount	F Mount
4 Digit	1.250	3/4"-32 UN	1.250	1.000
5 Digit	1.410	7/8"-20 UN		1.375

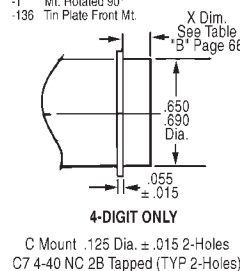
Recommended mounting torque, E & F mount  
4 digit..... 20 to 30 in. lbs.  
5 digit..... 60 to 70 in. lbs.  
6 digit..... 70 to 80 in. lbs.

## Round Cases & Mounts (for ETI only)



**Figure 7. C2 ADJUSTABLE MOUNT**

Factory Codes  
-1 Mt. Rotated 90°  
-136 Tin Plate Front Mt.



**Figure 8. C & C7 MOUNTS**

Recommended mounting torque: 3 to 5 in. lbs.\*

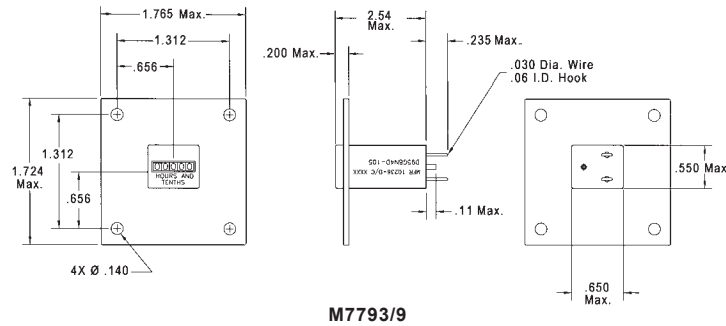
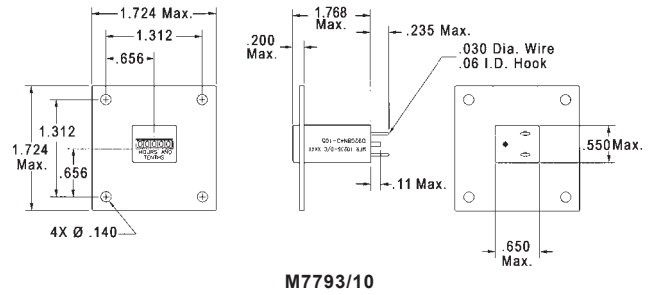
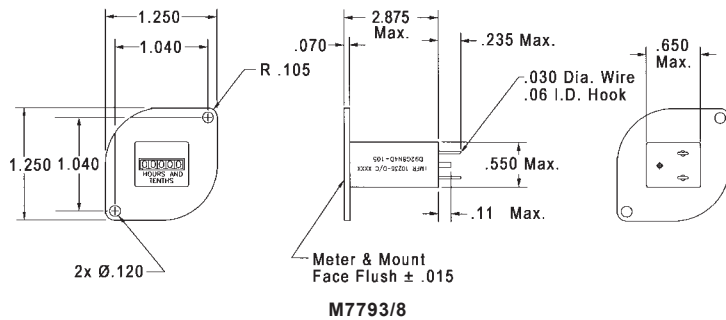
\*When mounting flanged units, it is recommended to distribute the mounting torque evenly across the mounting surface. Each mounting screw should be alternately tightened about one quarter to one half turn until the recommended torque is attained on each screw. The mounting surface should be flat to avoid exerting stress on the body of the unit.

This page consists of basic marketing information that is not defined as technical data under FAR Part 772.

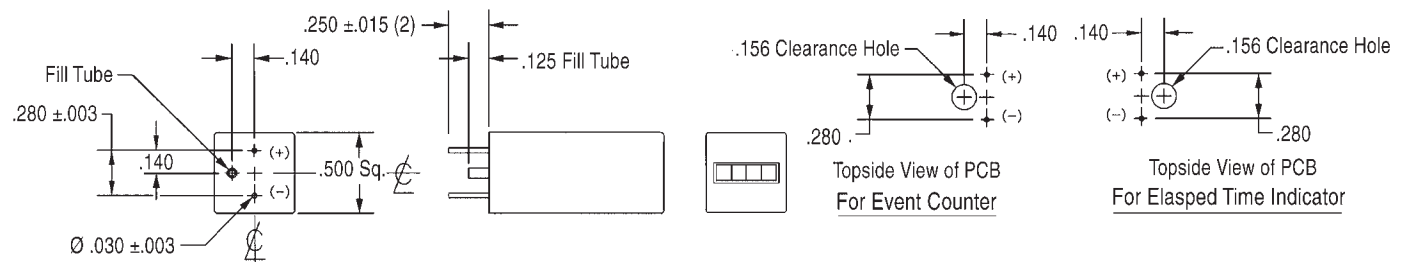
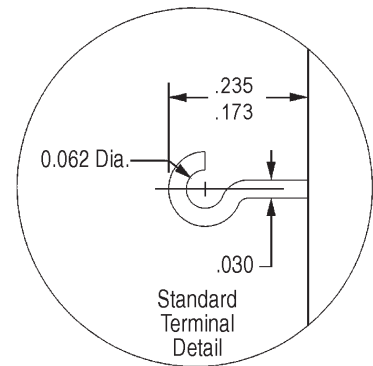
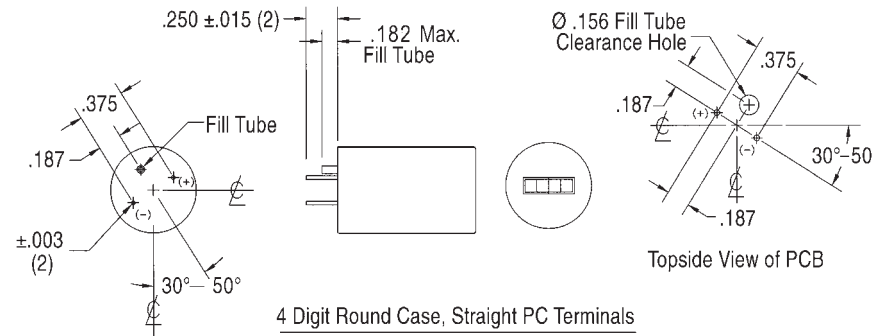
# ELAPSED TIME INDICATORS AND EVENT COUNTERS



## Standard Cases & Mounts



## Standard and Straight Pin Headers



This page consists of basic marketing information that is not defined as technical data under EAR Part 772.