

The Dynatime DC Series: Subminiature Elapsed Time Indicators

FEATURES

- Rugged Design
- Hermetically Sealed
- Qualified to MIL-M-7793*
- Low Voltage Models Available

The Electrodynamic Dynatime DC meter was developed to meet the difficult requirements of most military and aerospace applications. They provide a wide range of supply voltage options and are packaged in a hermetically sealed miniature enclosure. This rugged design meets or exceeds an array of tough environmental specifications including shock, vibration, and temperature. In addition, it has been approved to MIL-M-7793. A variety of mounting configurations are available as shown on pages 58 and 59. We also welcome inquiries for special requirements.

* See the Military Cross Reference for more military qualified models.

Mechanical Specifications

Case: Copper Nickel or Brass, with flat black finish. E and F mounts are nickel-plated case with flat black face.

Max. case length: Short version: 1.094 in.; long version: 2.082 in.

Flange: Steel or Brass with flat black face.

Terminals: Solder Hook

Weight: 0.4 ounces without mount. 0.6 ounces maximum with C flange

Numerals: .035" wide, .078" high.

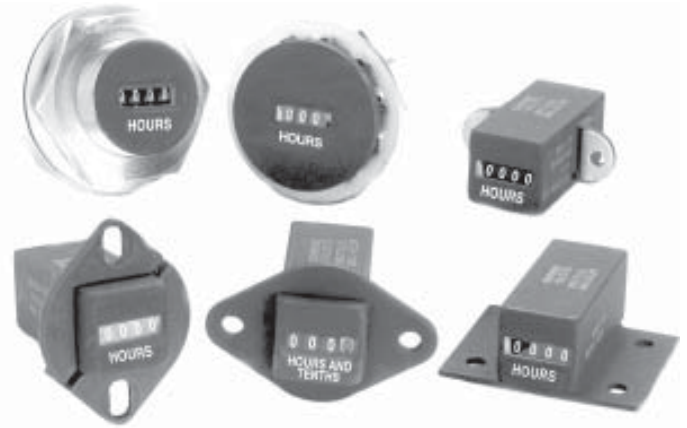
Hour digits are white on black. Tenths are red on white.

Environmental Specifications

Operating Temperature Range: -65 to +125° C

Shock: MIL-STD-202, Method 213, Condition I

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



Electrical Specifications

Meters meet or exceed applicable requirements of MIL-M-7793 M7793/1,2,5 and MS21341 A & B.

Special ratings and configurations are also available.

Transient Protection: MIL-STD-704A, 80 & 600 V (Models 16 & D16)

Ripple Protection: MIL-STD-704A, para. 5.2.2, 5.2.21 & Fig. 7 (models 16, D16)

Dielectric: 500 VRMS @ 80,000 ft., 600 VRMS @ sea level

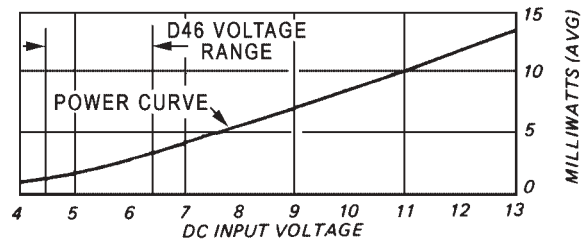
Insulation Resistance: MIL-STD-202, Method 302, Condition B

Accuracy: 0.1% over temperature/voltage range

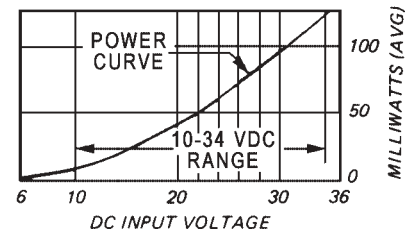
Nominal Current: 85mw

VOLTAGE/POWER CURVES @ 25°C

Model D46



Models D16 & 16



ORDERING INFORMATION

When ordering, show model number first (D), then nominal voltage, case type, maximum hours (4 or 5 digit), mount type and mount setback desired. If this is a special part, customer's modification number will be added at the end of the ordering number. This order chart lists standard features. Other ratings and configuration are also available. Example: D16-C-8-C-E-136

D - 16 - C - 8 - C - E - 136

| Case Length | Nominal Voltage | Case Type | Maximum Hours 4 Digit/5 digit | Mount Type | Mount Setback | Popular Factory Codes | Description |
|-----------------------|-------------------------------|-----------------------------|----------------------------------|-------------------|--|-----------------------|--|
| D Short | 16 = 10 & 34 VDC | B = 4 Digit Rnd | 3 = 999.9/N/A | A = no mount | A = Flush | 1 | Rotated 90° Type C, C7, V, W Mount |
| () [ⓐ] Long | 46 = 5 VDC [ⓑ] | C = 4 Digit Sqr | 8 = 9999/9999.9 | Others available, | B to Z = See Table A | 14 | 4-40 Clinch Nuts, For Type C Mount |
| | Other voltages also available | D = 4 Digit Sqr (Side-Read) | 9 = N/A/99999 | see page 58 | Page 60 for "X" Dimension Code desired | 16 | Tin-plate frnt Mt. & Type C Mount |
| | | G = 5 Digit Rect. | | | | 136 | Tin plate front mount Type C (M7793/1 & /2), C7, V & W |

[ⓐ] Omit "D" for long case
[ⓑ] 5 VDC not MIL Qualified



The Dynatime®

Elapsed Time Indicators and Event Counters Standard Cases & Mounts

Elapsed Time Indicators & Event Counters

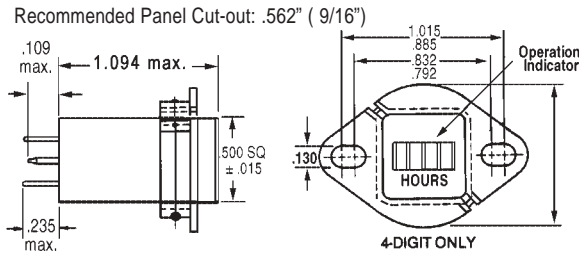


Figure 1. C2 ADJUSTABLE MOUNT

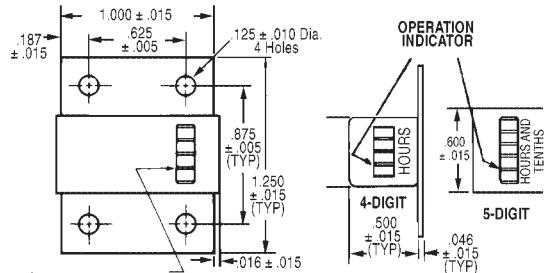


Figure 4. H MOUNT

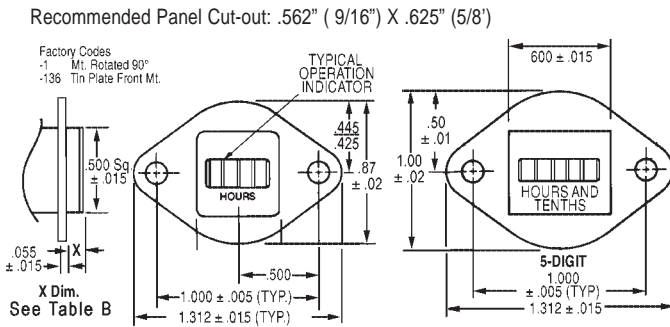


Figure 2 C & C7 MOUNTS

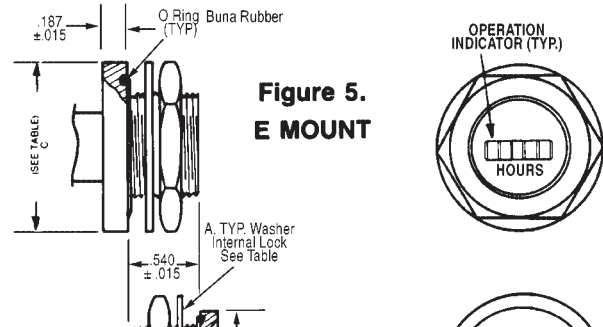


Figure 5. E MOUNT

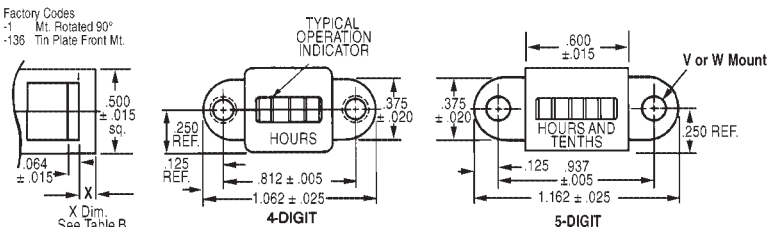


Figure 3. V & W MOUNTS

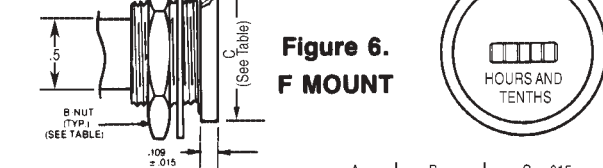


Figure 6. F MOUNT

| | A | B | C ± .015 |
|---------|-----------|------------|-----------------|
| | Max. Dia. | (Nut) | 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 |

Round Cases & Mounts (for ETI only)

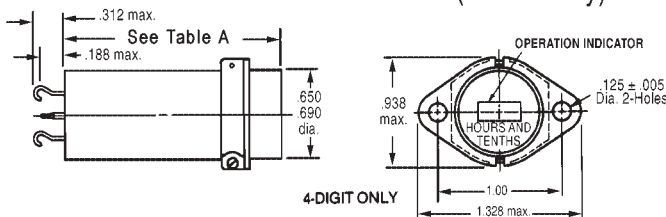


Figure 7. C2 ADJUSTABLE MOUNT

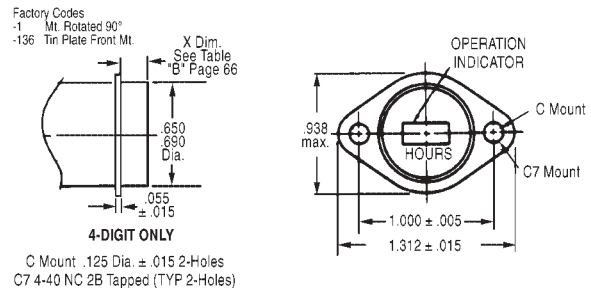
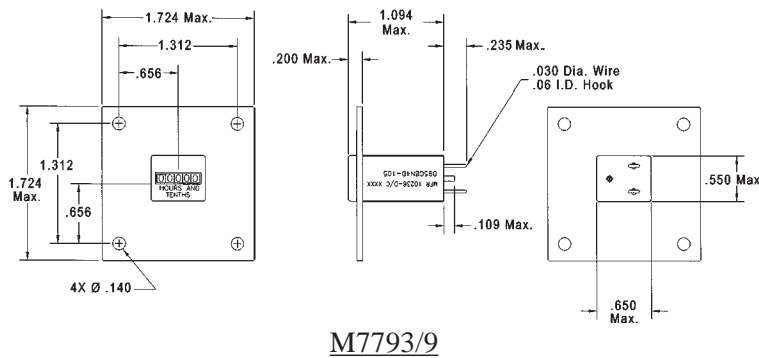
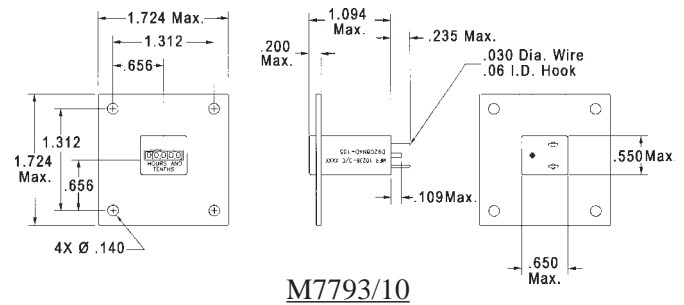
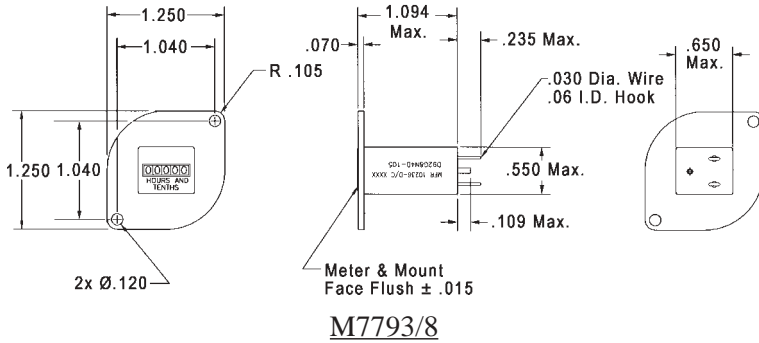


Figure 8. C & C7 MOUNTS

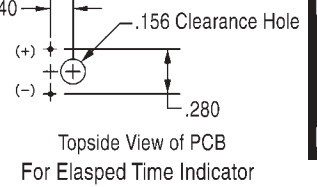
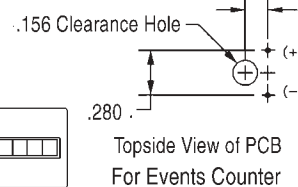
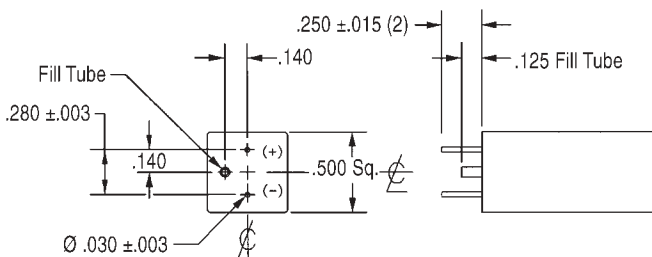
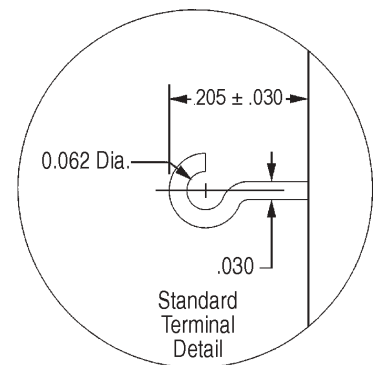
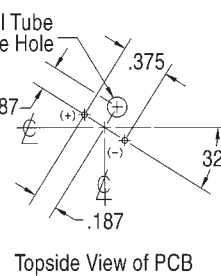
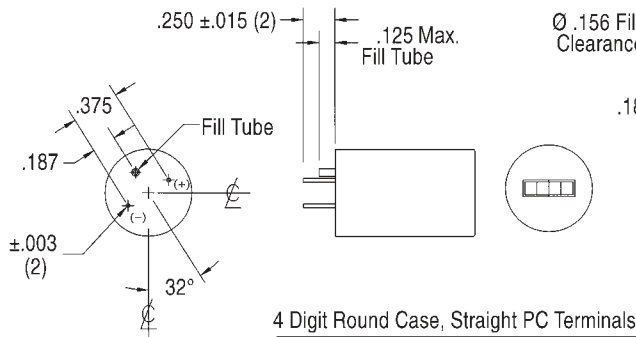
The Dynatime®

Elapsed Time Indicators and Event Counters

Standard Cases & Mounts



Standard and Straight Pin Headers





Military Elapsed Time Indicator Guide

**Table A
Specifications**

| Nominal Voltage | Case Length Max. Inches | Electrodynamics Model Number | Fig. No. | Military Number | | |
|-----------------|-------------------------|------------------------------|--|-----------------|-----------------------------------|--|
| | | D16C8C*-16 | 2 | M7793/1-XXX | | |
| 12 & 28 VDC | 1.094 Short | D16C8C2 | 1 | M7793/1-001 | | |
| | | D16C8A | — | M7793/1-002 | | |
| | | D16C8C*-136 | 2 | M7793/1-XXX | | |
| | | D16B8C2 | 7 | M7793/2-001 | | |
| | | D16B8A | — | M7793/2-002 | | |
| | | D16B8C*-136 | 8 | M7793/2-XXX | | |
| | 2.082 | 16B8C2 | 7 | M7793/5-001 | | |
| | 2.082 | 16C8C-16 | 1 | M7793/5-002 | | |
| | | 16C8B-16 | 2 | M7793/1-XXX | | |
| | 115 VAC 60 Hz | 1.094 Short | D92C8C2 | 1 | M7793/3-001 | |
| D92C8A | | | — | M7793/3-002 | | |
| D92C8C*-136 | | | 2 | M7793/3-XXX | | |
| D92B8C2 | | | 7 | M7793/4-001 | | |
| D92B8A | | | — | M7793/4-002 | | |
| D92B8C*-136 | | | 8 | M7793/4-XXX | | |
| .765 | | | D95B8C2 | 7 | M7793/6-001 | |
| 1.094 | | | D95C8C2 | 1 | M7793/6-002 | |
| 115 VAC 400 Hz | 1.094 Short | C7*-16 | 2 | MS27651-XXA | | |
| | | C7*-1-16 | 2 | MS27651-XXB | | |
| | | D95C8 C*-16 | 2 | MS27651-XXC | | |
| | | C*1-16 | 2 | MS27651-XXD | | |
| | | W*-16 | 3 | MS27651-XXE | | |
| | | W*-1-16 | 3 | MS27651-XXF | | |
| | | V*-16 | 3 | MS27651-XXG | | |
| | | V*-1-16 | 3 | MS27651-XXH | | |
| | | 26 VAC 400 Hz MS27650 | Replace D95 above with D25 | | Replace MS27651 above with | |

Example: **D25C8CE-16 = MS27650-05C**

**Table B
Mount Setback Data**

| M7793/1 to /4 Dash No. | MS21341, 27650, 27651 Dash No. | Setback ± .015 In. | "X" Dim. Code |
|------------------------|--------------------------------|--------------------|---------------|
| -003 | -01 | Flush | A |
| -004 | -02 | .031 | B |
| -005 | -03 | .062 | C |
| -006 | -04 | .094 | D |
| -007 | -05 | .125 | E |
| -008 | -06 | .156 | F |
| -009 | -07 | .188 | G |
| -010 | -08 | .219 | H |
| -011 | -09 | .250 | I |
| -012 | -10 | .281 | J |
| -013 | -11 | .321 | K |
| -014 | -12 | .344 | L |
| -015 | -13 | .375 | M |
| -016 | -14 | .406 | N |
| -017 | -15 | .438 | O |
| -018 | -16 | .469 | P |
| -019 | -17 | .500 | R |
| -020 | -18 | .531 | S |
| -021 | -19 | .562 | T |
| -022 | -20 | .594 | T-8 |
| -023 | -21 | .625 | U |
| -024 | -22 | .656 | U-8 |
| -025 | -23 | .688 | V |
| -026 | -24 | .719 | V-8 |
| -027 | -25 | .750 | W |
| -028 | -26 | .781 | W-8 |
| | | .813 | X |
| | | .875 | Y |
| | | .938 | Z |

- Notes: 1. All meter readouts are to 9999 Hours, maximum.
 2. See Table B to select desired "X" Dim. (* in model no.) and corresponding military dash no. (xx & xxx).
 3. "-136" in model no. denotes tin-plated mount face; "-16" is same plus USAF testing; "-1" is mount rotated 90°.