

Commercial 12mm Diameter Composition Variable Resistors

- Miniature 12mm size
- Low cost
- P.C. board mounting
- 500 ohms through 1 megohms
- Detent available



Electrical and Mechanical Specifications

Resistance Range

Standard: 500 ohms through 1 megohms.
Special: For non-standard resistance values, please contact CTS.

Resistance Tolerance

Standard: $\pm 20\%$
Special: Tighter tolerances available in most resistance values.

Power Rating, Watts

0.15 watts @ 50°C derated to no load @ 85°C for linear curve.
0.1 watts @ 50°C derated to no load @ 85°C for regular non-linear curve.

Voltage Rating

Across end terminals:
Standard 250 VDC; Special: 350 VDC load not to exceed wattage ratings at given ambient temperature.

Angle of Rotation

Total Rotation: $300^\circ \pm 5^\circ$
Effective Electrical Rotation: 280° (approximate)

Rotational Torque

20 – 216 gcm

Stop Strength

5" lbs (5.76 kg-cm) minimum stop strength.

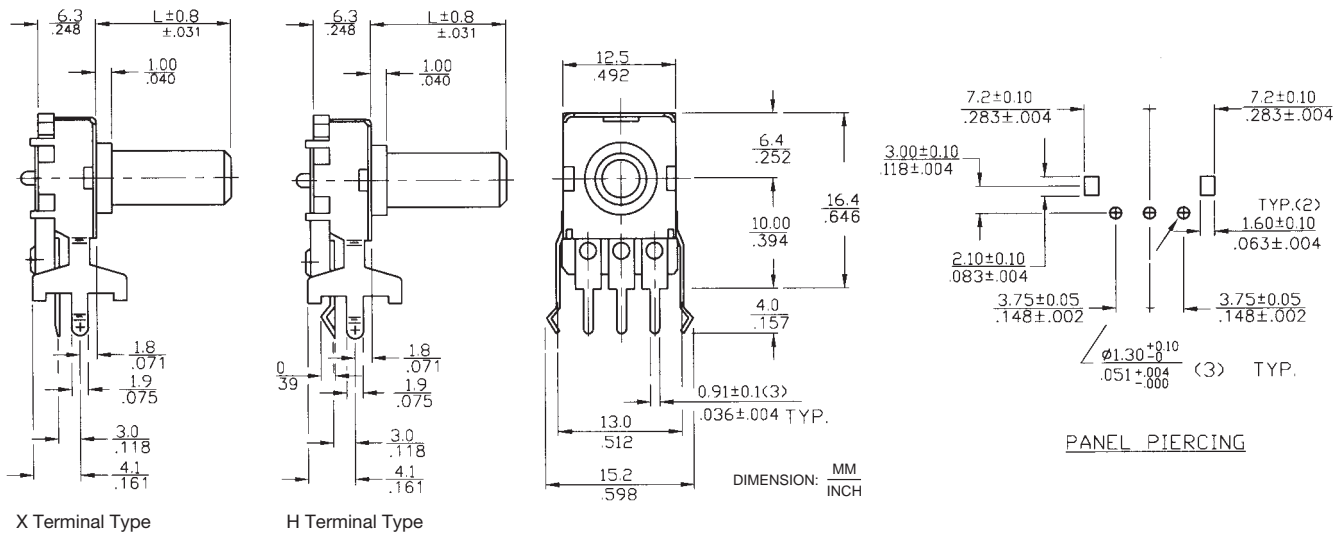
Mounting Information

P.C. board mounting
Type "X": Control shaft parallel to P.C. board.
Type "U": Control shaft vertical to P.C. board.

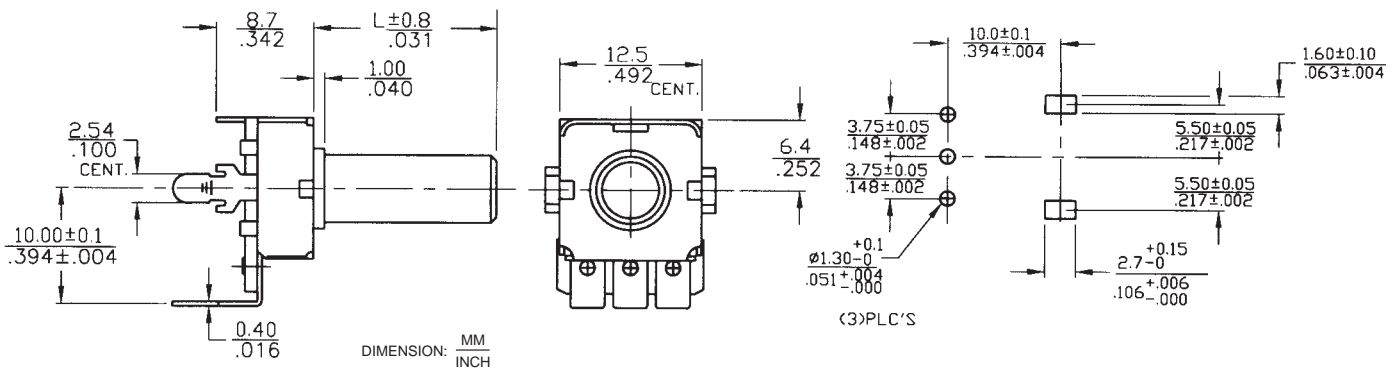
Detent

50% detent available.

XM 296RE Molded Shaft, Control Shaft Parallel to P.C. Board



UM 296RE Molded Shaft, Control Shaft Vertical to P.C. Board



Ordering Information

296 **X** **B** **252** **B** **2** **N**

| TERMINAL STYLE | |
|----------------|-------------------|
| X | PC |
| U | PC FORMED TO REAR |
| H | HOOK |

| RESISTANCE CODE EXAMPLES | |
|--------------------------|------------|
| CODE | RESISTANCE |
| 501 | 500 OHMS |
| 102 | 1K |
| 252 | 2.5K |
| 103 | 10K |
| 253 | 25K |
| 503 | 50K |
| 104 | 100K |

| RESIST TOL | |
|------------|------------|
| A | $\pm 10\%$ |
| B | $\pm 20\%$ |
| C | $\pm 30\%$ |

| DETENT | |
|--------|---------------|
| N | NO DETENT |
| C | CENTER DETENT |

| SHAFTS AVAILABLE (ALL SHAFTS .236" [6MM] DIAMETER/EXCEPT E - DIAMETER IS .240" [6.1MM]) | | | |
|--|------------------------------|-------|---------------------------|
| LENGTH BEYOND | | | |
| COVER | INCH | COVER | MM |
| | TRIM | | TRIM |
| A | .640" FLATTED .472" x .177" | A | 16.3MM FLATTED 12x4.5MM |
| B | .840" FLATTED .472" x .177" | B | 21.3MM FLATTED 12x4.5MM |
| C | 1.031" FLATTED .472" x .177" | C | 26.2MM FLATTED 12x4.5MM |
| D | .540" KNURLED .287" x .236" | D | 13.7MM KNURLED 7.3MMx18T |
| E | .265" FLATTED .218" x .204" | E | 6.7MM FLATTED 5.5 x 5.2MM |

| TAPER | |
|-------|-------------|
| 1 | LINEAR |
| 2 | 10% AUD |
| 3 | 10% CCW AUD |

Order From:

CTS CORPORATION, ELECTROCOMPONENTS / 1601 Mishawaka Street / Elkhart, Indiana 46514
 North America Toll Free (888) 287-4690 / (219) 296-6700 / FAX: (219) 293-1240 <http://www.ctscorp.com>

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