

MODEL 89

3/4" Rectangular

Multiturn

Cermet Trimming

Potentiometer

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ELECTRICAL

| | |
|--|--|
| Standard Resistance Range, Ohms | 10 to 2Meg |
| Standard Resistance Tolerance | ±10% (<100 Ohms = ±20%) |
| Input Voltage, Maximum | 200 Vdc or rms not to exceed power rating |
| Slider Current, Maximum | 100mA or within rated power, whichever is less |
| Power Rating, Watts | 0.75 at 85°C derating to 0 at 125°C |
| End Resistance, Maximum | 2 Ohms |
| Actual Electrical Travel, Turns, Nominal | 20 |
| Dielectric Strength | 1,000 Vrms |
| Insulation Resistance, Minimum | 1,000 Megohms |
| Resolution | Essentially infinite |
| Contact Resistance Variation, Maximum | 1% or 1 Ohm, whichever is greater |

ENVIRONMENTAL

| | |
|----------------------------------|--|
| Seal | 85°C Fluorinert® (No Leaks) |
| Temperature Coefficient, Maximum | ±100ppm/°C |
| Operating Temperature Range | -55°C to +125°C |
| Thermal Shock | 5 cycles, -55°C to +125°C (1% ΔRT, 1% ΔVR) |
| Moisture Resistance | Ten 24 hour cycles (1% ΔRT, IR 100 Megohms Min.) |
| Shock, 6ms Sawtooth | 100G's (1% ΔRT, 1% ΔVR) |
| Vibration | 20G's, 10 to 2,000 Hz (1% ΔRT, 1% ΔVR) |
| High Temperature Exposure | 250 hours at 125°C (2% ΔRT, 2% ΔVR) |
| Rotational Life | 200 cycles (3% ΔRT) |
| Load Life at 0.75 Watts | 1,000 hours at 70°C (2% ΔRT) |
| Resistance to Solder Heat | 260°C for 10 sec. (1% ΔRT) |

MECHANICAL

| | |
|--------------------------|--------------------------|
| Mechanical Stops | Clutch Action, both ends |
| Torque, Starting Maximum | 5 oz.-in. (0.035 N-m) |
| Weight, Nominal | .05 oz. (1.4 grams) |

Fluorinert® is a registered trademark of 3M Company.
Specifications subject to change without notice.

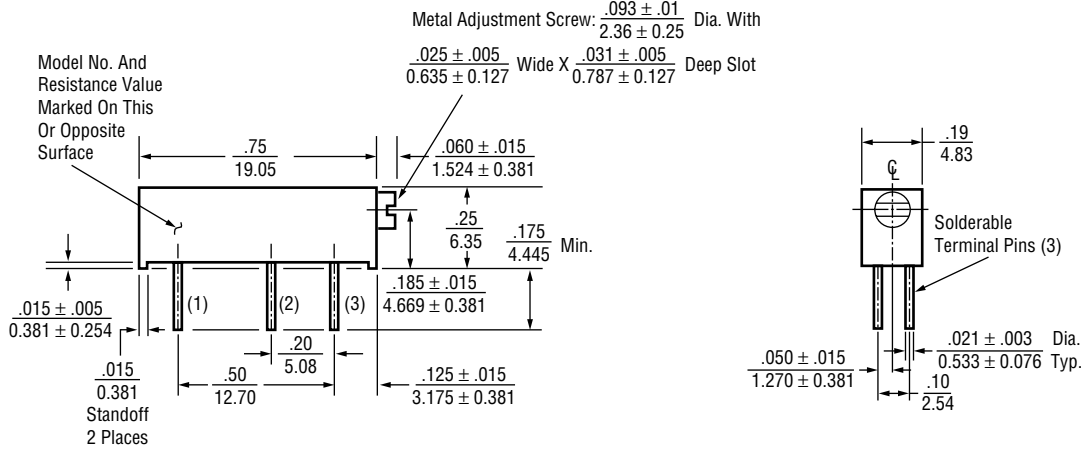


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Model 89

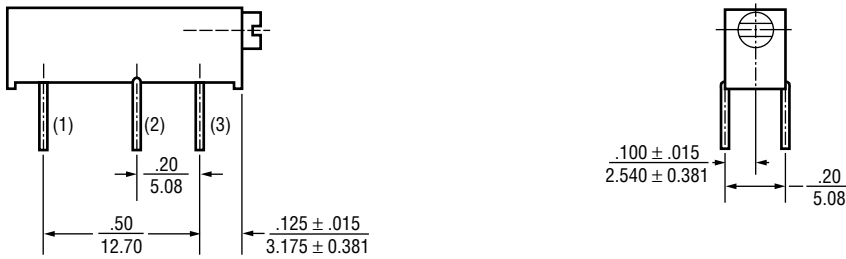
LOW PROFILE (Inch/mm)

Model 89P and 90P



Model 89P dimensions applicable to all other models except as noted.

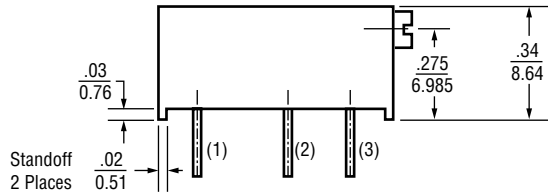
Model 89W



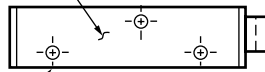
Model 89X



Model 89PH



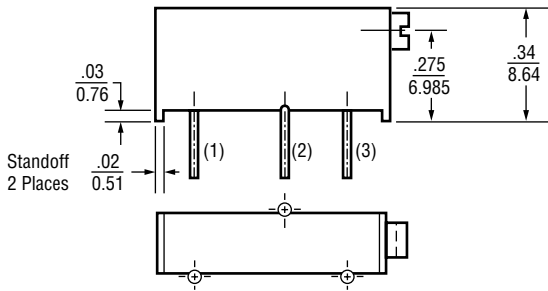
Circuit Diagram Marked
On This Surface



Housing:
Molded Plastic
(All Models)

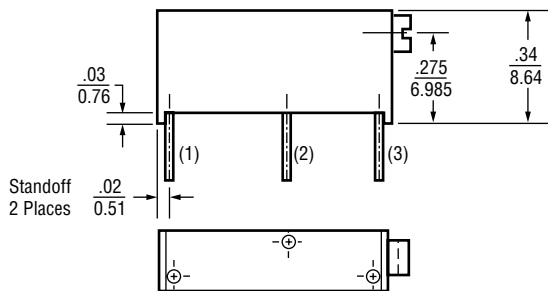
Pin Dimensions Same For 89P And 89PH

Model 89WH



Pin Dimensions Same For 89W And 89WH

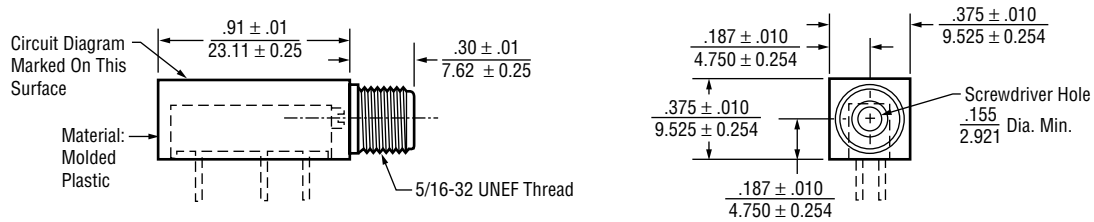
Model 89XH



Pin Dimensions Same For 89X And 89XH

PANEL MOUNT ADAPTER (Inch/mm)

Model 89B



STANDARD RESISTANCE VALUES, OHMS

| | | | | |
|-----|-----|-----|------|------|
| 10 | 200 | 5K | 50K | 500K |
| 20 | 500 | 10K | 100K | 1Meg |
| 50 | 1K | 20K | 200K | 2Meg |
| 100 | 2K | 25K | 250K | |

PACKAGING

Standard: Boxes

Capacity = 100 Units (89P)
50 Units (All other styles)

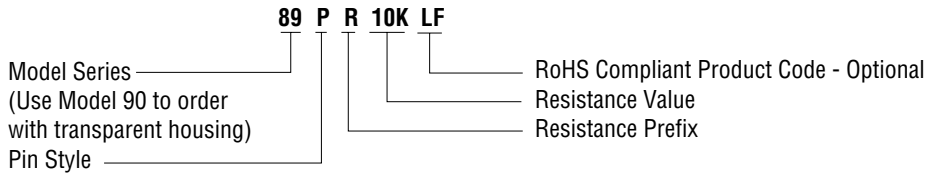
Option: Tubes (Models 89P, 89PH, 89X, 89XH and 90P only.)
All units oriented with #1 pin to same side.

| | | | |
|----------|----------|---|----------|
| Magazine | Width | = | 0.28" |
| | Height | = | 0.65" |
| | Length | = | 21.5" |
| | Capacity | = | 25 Units |

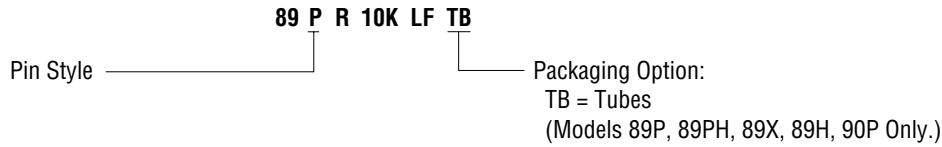
ORDERING INFORMATION

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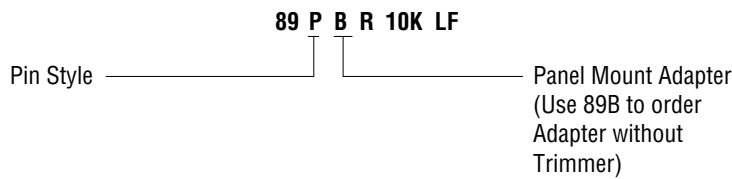
Standard:



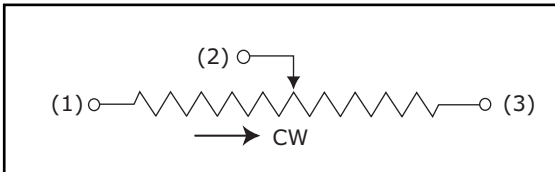
Option:



Option:



CIRCUIT DIAGRAM



NOTES

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:
Linear = ± .01 inches (.25mm)
Angular = ± 2 degrees

