

# MODEL 89

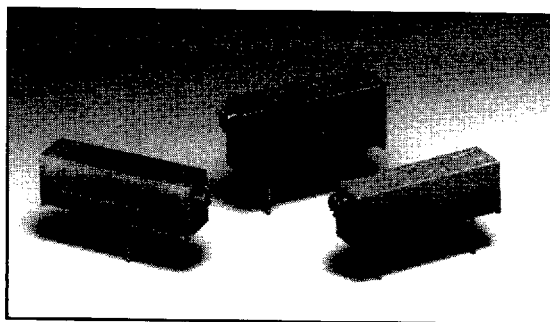
## 3/4" Rectangular

## Multi-Turn

## Cermet Trimming

## Potentiometer

Distributor Item



### 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 0.5 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)

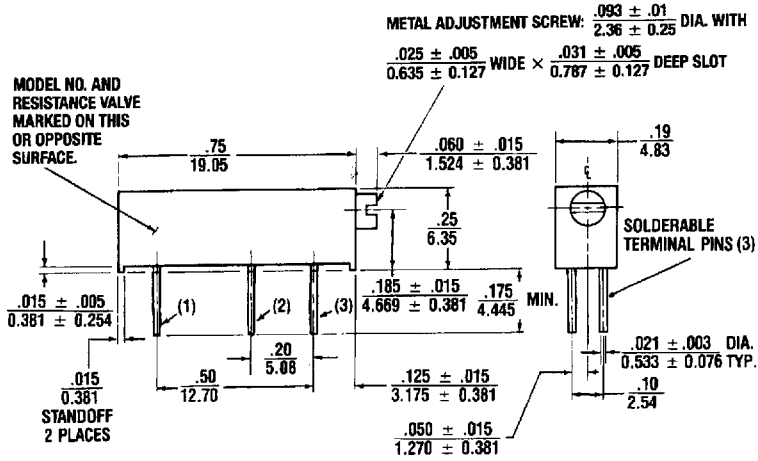
Fluorinert® is a registered trademark of 3M Company.  
Specifications subject to change without notice.

### STANDARD RESISTANCE VALUES, OHMS

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

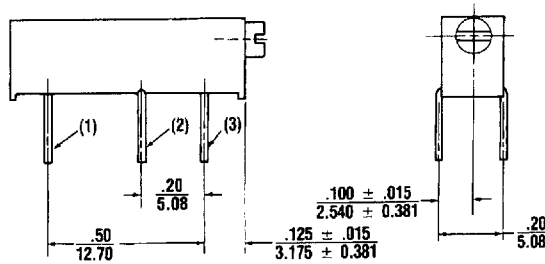
**LOW PROFILE**

**Model 89P and 90P**

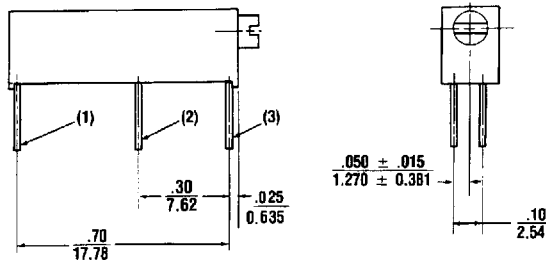


Note: Model 89P dimensions applicable to all other models except as noted

**Model 89W**



**Model 89X**

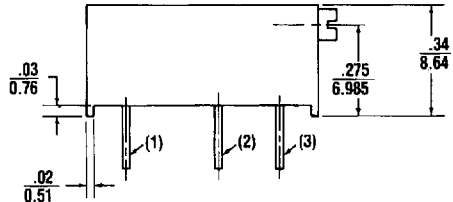


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**HIGH PROFILE**

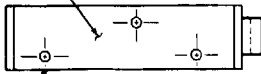
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**Model 89PH**



STANDOFF  
2 PLACES

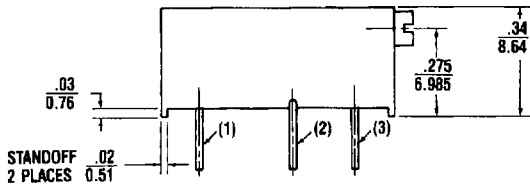
CIRCUIT DIAGRAM MARKED  
ON THIS SURFACE



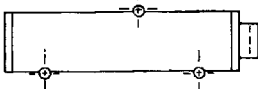
HOUSING:  
MOLDED PLASTIC  
(ALL MODELS)

Pin dimensions same for 89P and 89PH

**Model 89WH**

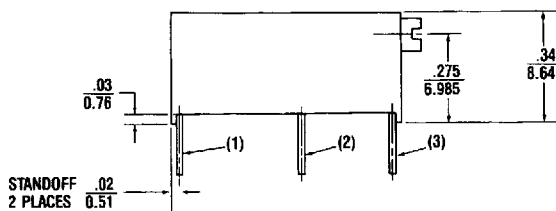


STANDOFF  
2 PLACES

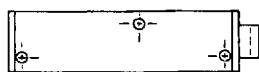


Pin dimensions same for 89W and 89WH

**Model 89XH**



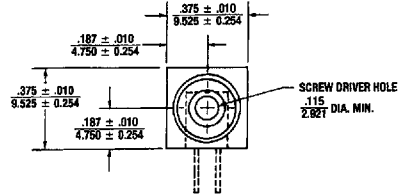
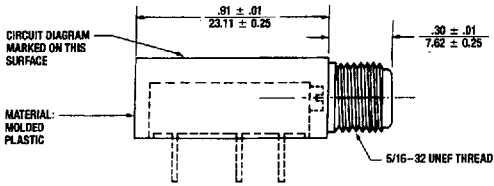
STANDOFF  
2 PLACES



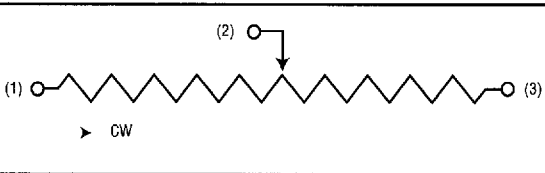
Pin dimensions same for 89X and 89XH

# PANEL MOUNT ADAPTER

Model 89B



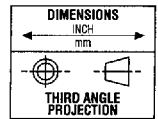
## CIRCUIT DIAGRAM



## 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



## PACKAGING

### Standard: Plastic Bags

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

### Option: Tubes

All Units oriented with #1 pin to same side

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

## ORDERING INFORMATION

### Standard:

Model Series \_\_\_\_\_ **89** **P** **R** **10K**  
(Use Model 90 to order with transparent housing)  
Pin Style \_\_\_\_\_ Resistance Value  
Resistance Prefix

### Option:

Pin Style \_\_\_\_\_ **89** **P** **R** **10K** **TB**  
Packaging Option  
TB = Tubes

### Option:

Model Series \_\_\_\_\_ **89** **P** **B** **R** **10K**  
Panel Mount Adapter  
(Use 89B to order Adapter without Trimmer)

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