

MODEL 82

1/4" Diameter

Single Turn

Cermet Trimming

Potentiometer



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ELECTRICAL

Standard Resistance Range, Ohms	10 to 1Meg
Standard Resistance Tolerance	$\pm 10\%$ (<100 Ohms = $\pm 20\%$)
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	0.5 at 70°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Nominal	220°
Dielectric Strength	600 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	$\pm 100\text{ppm}/^\circ\text{C}$
Operating Temperature Range	-55°C to +125°C
Thermal Shock	5 cycles, -55°C to +125°C (1% Δ RT, 1% Δ Vr)
Moisture Resistance	Ten 24 hour cycles (1% Δ RT, IR 100 Megohms Min.)
Shock, 6ms Sawtooth	100G's (1% Δ RT, 1% Δ Vr)
Vibration	20G's, 10 to 2,000 Hz (1% Δ RT, 1% Δ Vr)
High Temperature Exposure	250 hours at 125°C (2% Δ RT, 2% Δ Vr)
Rotational Life	200 cycles (3% Δ RT)
Load Life at 0.5 Watts	1,000 hours at 70°C (2% Δ RT)
Resistance to Solder Heat	260°C for 10 sec. (1% Δ RT)

MECHANICAL

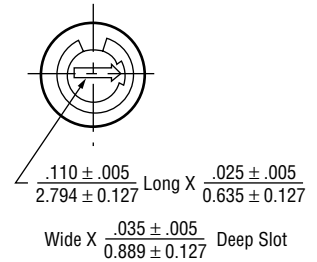
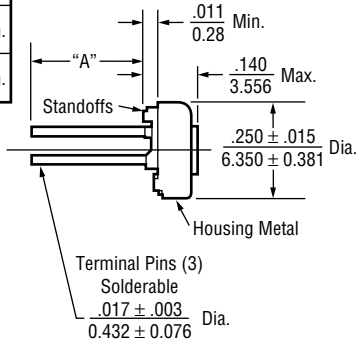
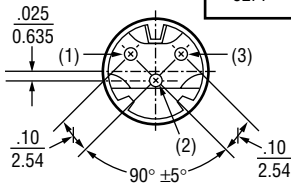
Mechanical Stops	Solid
Torque, Starting Maximum	3 oz.-in. (0.021 N-m)
Weight, Nominal	.02 oz. (0.60 grams)

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

TOP ADJUSTMENT (Inch/mm)

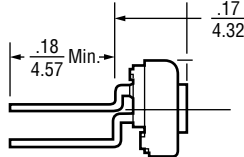
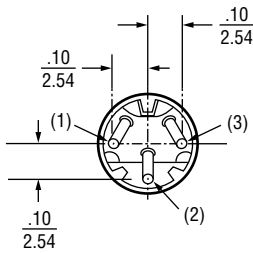
Model 82P, 82PF

Model No.	"A" Dim.
82P	$\frac{.25}{6.35}$ Min.
82PF	$\frac{.625}{15.875}$ Min.

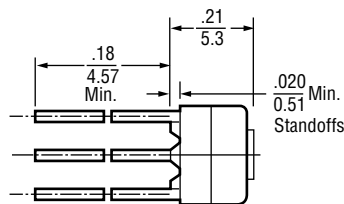
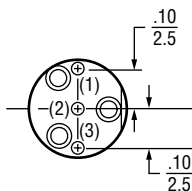


Note: Model 82P dimensions applicable to all models except as noted

Model 82M

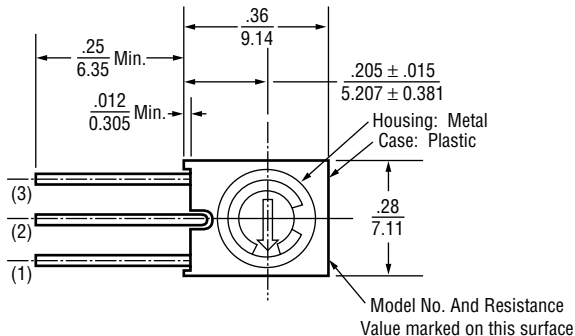
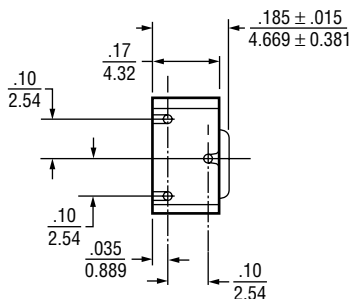


Model 82W



SIDE ADJUSTMENT (Inch/mm)

Model 82PA



STANDARD RESISTANCE VALUES, OHMS

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

PACKAGING

Standard: Boxes

Capacity	=	50 Units (82PA, 82PF)
	=	100 Units (All other styles)

Option: Tubes

All units oriented with #1 pin to same side.

	Pin Style		PA	P,M,W
Magazine	Width	=	0.28"	0.34"
	Height	=	0.94"	0.65"
	Length	=	15.6"	27.5"
	Capacity	=	50 Units	100 Units

Option: Tape & Reel, Ammo Pack (Available for 82W Only)

All units oriented with #1 pin to the right of the direction of feed.

	Seat Plane to Centerline of Sprocket Hole	=	.71" (18.03 mm)
Tape	Width	=	18 mm
	Sprocket	=	Single Hole .50" spacing
	Capacity	=	1,000 Units
Reel	Diameter	=	14" (356 mm)
Ammo	Tape Fold	=	12" (305 mm)
	Box	=	1.5" x 13" x 10"

ORDERING INFORMATION

Standard:

Model Series ——— **82** **P** **R** **10K** ——— Resistance Value
 Pin Style ——— Resistance Prefix

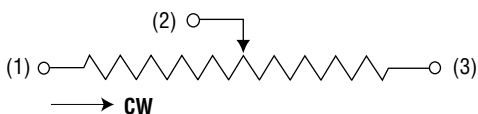
Option:

Pin Style ——— **82** **W** **R** **10K** **TB** ——— Packaging Option:
 TB = Tubes
 (Pin styles P, PA, M, W)

Option:

Pin Style ——— **82** **W** **F** **R** **10K** **TR** ——— Packaging Option:
 AP = Ammo pack
 TR = Tape & Reel
 (Pin styles W, X only)
 Pin Style Suffix: ———
 (Used with AP and TR packaging options.
 Applicable to pin styles W only.
 "F" designates 0.60" lead length.)

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 = $\pm .01$ inches (.25mm)
 Angular = ± 2 degrees

