

MODEL 72

3/8" Square

Single Turn

Cermet Trimming

Potentiometer



1

ELECTRICAL

Standard Resistance Range, Ohms	10 to 2Meg
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 85°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Nominal	244°
Dielectric Strength	900 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% 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	Solid
Torque, Starting Maximum	3 oz.-in. (0.021 N-m)
Weight, Nominal	.025 oz. (0.70 grams)

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

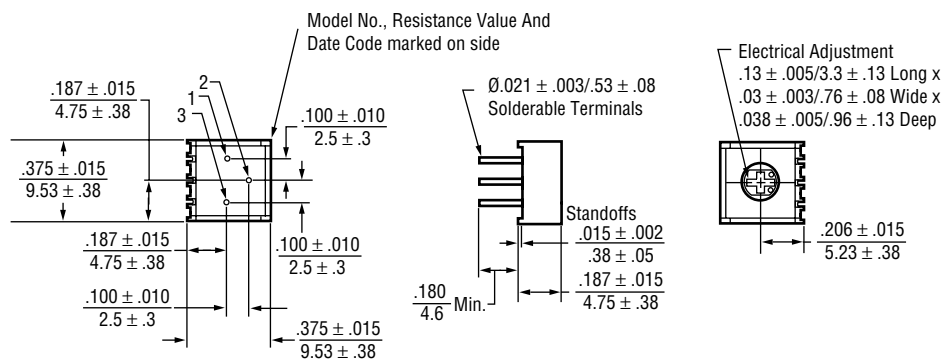


1-55

Model 72

TOP ADJUSTMENT (Inch/mm)

Model 72P

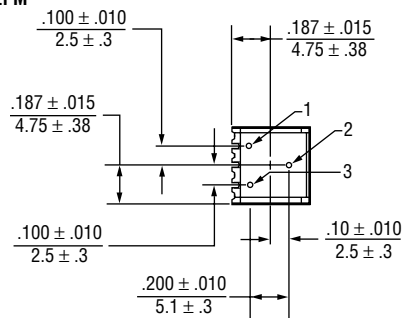


Note: Model 72P dimensions applicable to all other models except as noted.

Model 72PL



Model 72PM



Model 72PX, 72RPX

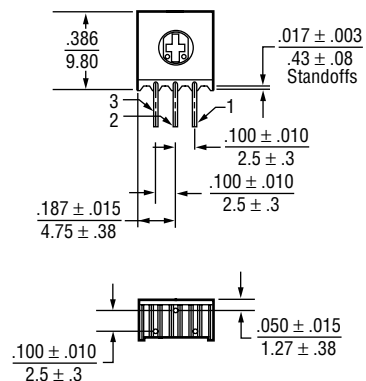


Model 72RPX - Terminals 1 and 3 are reversed

Model 72RP

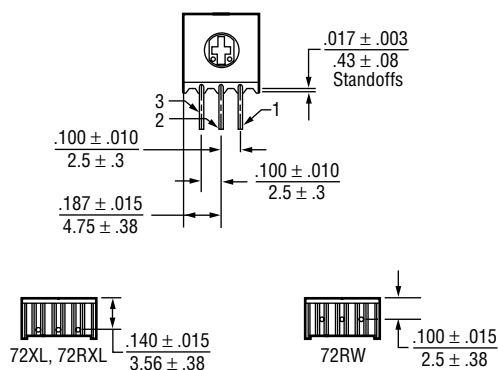


Model 72X, 72RX



Model 72RX - Terminals 1 and 3 are reversed

Model 72XL, 72RXL, 72RW



Model 72RXL And 72RW - Terminals 1 and 3 are reversed

Model 72XW, 72RXW

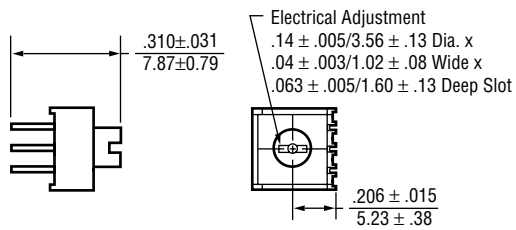


Model 72RXW - Terminals 1 and 3 are reversed

EXTENDED ROTOR OPTION (Inch/mm)

Available for all Model 72 pin styles:

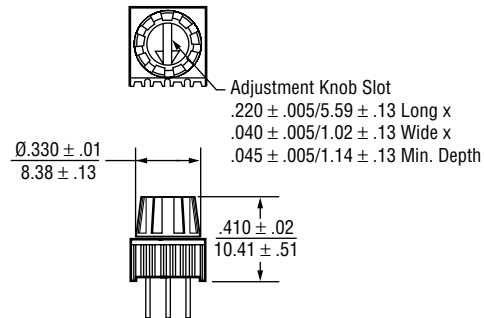
72PE, 72PLE, 72PME, 72PXE, 72RPXE, 72XE, 72RXE,
72XLE, 72RXLE, 72RWE, 72XWE, 72RXWE

**ADJUSTMENT KNOB OPTION (Inch/mm)**

Available options:

72XT- Side Adjustment (See 72X for Pin Configuration)

72PT- Top Adjustment (See 72P for Pin Configuration)



72PT Shown - Dimensions applicable to 72XT

STANDARD RESISTANCE VALUES, OHMS

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

Standard: Boxes
Capacity = 100 Units

Option: Tubes
All units oriented with #1 pin to same side.

	Pin Style	P, PM	X, XL, XW, RW
Magazine	Width	= 0.47"	0.29"
	Height	= 0.54"	0.76"
	Length	= 20.5"	20.1"
	Capacity	= 50 Units	50 Units

Option: Tape & Reel, Ammo Pack (Available only for 72RW 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" (356mm)
Ammo	Tape Fold	= 12" (305mm)
	Box	= 1.8" x 13" x 10" (46mm x 330mm x 254mm)

ORDERING INFORMATION

Standard:

Model Series — 72 P R 10K LF
 Pin Style — — — — —
 — Resistance Value
 — Resistance Prefix
 — RoHS Compliant Product Code - Optional

Option:

Pin Style — 72 W R 10K LF TB
 — Packaging Option:
 TB = Tubes
 (Pin styles P, PM, X, XL, XW, RW)
 — RoHS Compliant Product Code - Optional

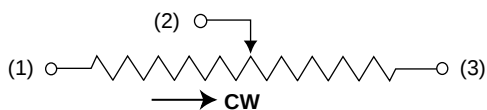
Option:

Pin Style — 72 RW F R 10K LF TR
 Pin Style Suffix: —
 (Used with AP and TR packaging options.
 Applicable to pin style RW only.
 "F" designates 0.70" lead length.)
 — Packaging Option:
 AP = Ammo pack
 TR = Tape & Reel
 (Pin style RW only)
 — RoHS Compliant Product Code - Optional

Option:

Pin Style — 72 X T R 10K LF
 Adjustment Options: —
 T = Knob Option
 Applicable to pin style X & P only.
 E = Extended Rotor Option
 Applicable to all pin styles.
 — RoHS Compliant Product Code - Optional

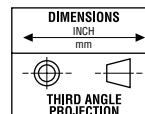
CIRCUIT DIAGRAM



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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

BI Technologies:

[72XWR50](#) [72XWR100KLF](#) [72XWR10KLF](#) [72XWR1KLF](#) [72XWR20LF](#) [72XWR200LF](#) [72XWR200KLF](#)
[72XWR20KLF](#) [72XWR20LFTB](#) [72XWR50LF](#) [72XWR500KLF](#) [72XWR50KLF](#) [72XWR5KLF](#) [72RXLER100KLF](#)

TT electronics:

[72XLR50LF](#)

TT Electronics:

[72PXR1KLF](#) [72RXWR25KLF](#) [72XWR2KLF](#) [72PLR100KLF](#) [72PLR1MEGLF](#) [72PLR20KLF](#) [72PR100KLFTB](#)
[72PR1KLFTB](#) [72PR1MEGLF](#) [72PR200KLFTB](#) [72PR20KLFTB](#) [72PR500LFTB](#) [72PR50KLFTB](#) [72PTR10KLF](#)
[72PTR1MEGLF](#) [72PTR250KLF](#) [72PTR2KLF](#) [72PTR500LF](#) [72RPR1KLF](#) [72RPR1MEGLF](#) [72RPXR1MEGLF](#)
[72RPXR20KLF](#) [72RPXR50KLF](#) [72RWR10KLF](#) [72RWR5KLF](#) [72RXLR20KLF](#) [72RXLR5KLF](#) [72RXR100LF](#)
[72RXR10KLF](#) [72RXR1MEGLF](#) [72RXR2KLF](#) [72RXR5KLF](#) [72XLR100LF](#) [72XLR10KLF](#) [72XLR1KLF](#)
[72XLR200KLFTB](#) [72XLR20KLF](#) [72XLR500LF](#) [72XLR5KLF](#) [72XTR1MEGLF](#) [72XTR20KLF](#) [72XWR100LF](#)
[72XWR25KLF](#) [72XWR500LF](#) [7221R1KL.25](#) [72PR20KLF](#) [72PMR10KLF](#) [72XR250KLF](#) [72PR250KLF](#) [72XR50KLF](#)
[72PMR2MLF](#) [72PMR2KLF](#) [72PMR200KLF](#) [72PMR20KLF](#) [72PMR100LF](#) [72PMR20LF](#) [72PMR50LF](#) [72XR500LF](#)
[72PR200LF](#) [72PMR200LF](#) [72PR50KLF](#) [72PR1MLF](#) [72XR200KLF](#) [72PR200KLF](#) [72PMR25KLF](#) [72PR100LF](#)
[72PR25KLF](#) [72PR1KLF](#) [72XR200LF](#) [72PR10LF](#) [72PMR250KLF](#) [72PR10KLF](#) [72PMR500KLF](#) [72XR20KLF](#)
[72PR500LF](#) [72PMR100KLF](#) [72XR500KLF](#) [72PR500KLF](#) [72PR50LF](#) [72XR50LF](#) [72XR100KLF](#) [72PR100KLF](#)
[72XR1KLF](#) [72XR2MLF](#) [72PR2KLF](#) [72XR1MLF](#) [72PMR10LF](#) [72XR10KLF](#) [72PMR50KLF](#) [72XR2KLF](#) [72PR2MLF](#)
[72XR20LF](#) [72PMR1MLF](#) [72XR100LF](#) [72XR25KLF](#) [72PMR1KLF](#) [72XR10LF](#) [72PR20LF](#) [72PMR500LF](#) [72PR5KLF](#)