

BI 68 Potentiometer Datasheet

<http://www.manuallib.com/bi/68-potentiometer-datasheet.html>

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, Turns, Nominal 20

Dielectric Strength 900 Vrms

Insulation Resistance, Minimum 1,000 Megohms

Resolution Essentially infinite

Contact Resistance Variation, Maximum 1% or 1 Ohm, whichever is greater

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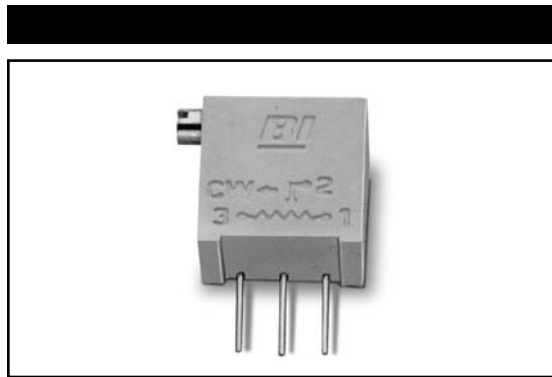
MODEL 68

3/8" Square

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	0.5 at 85°C derating to 0 at 125°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Turns, Nominal	20
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	±100ppm/°C
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 1,000 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

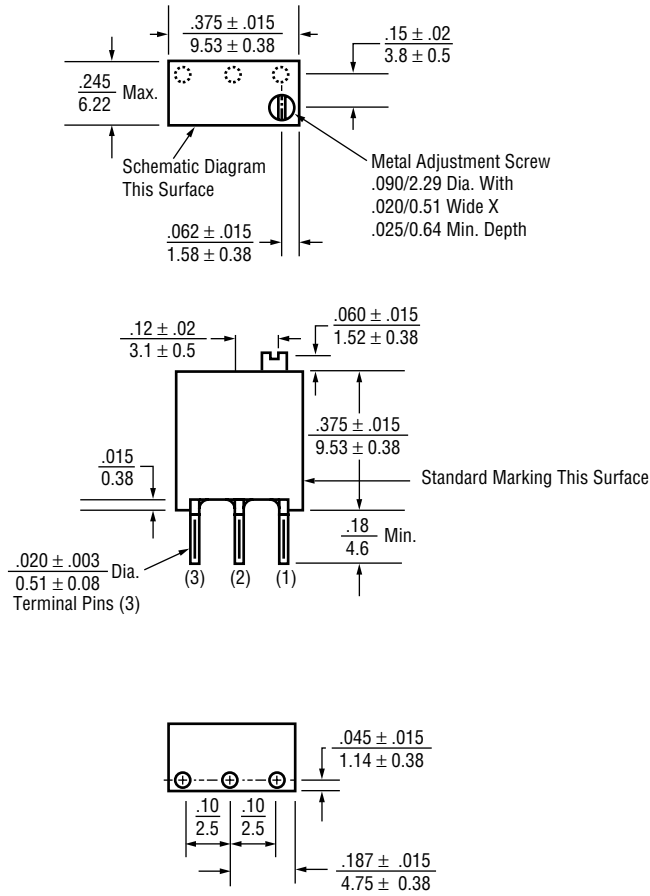
Mechanical Stops	Clutch Action, both ends
Torque, Starting Maximum	5 oz.-in. (0.035 N-m)
Weight, Nominal	.04 oz. (1.13 grams)

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



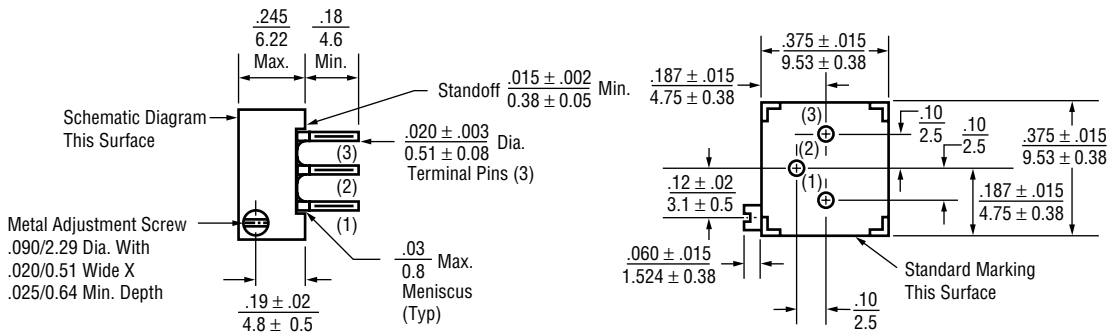
TOP ADJUSTMENT (Inch/mm)

Model 68W



SIDE ADJUSTMENT (Inch/mm)

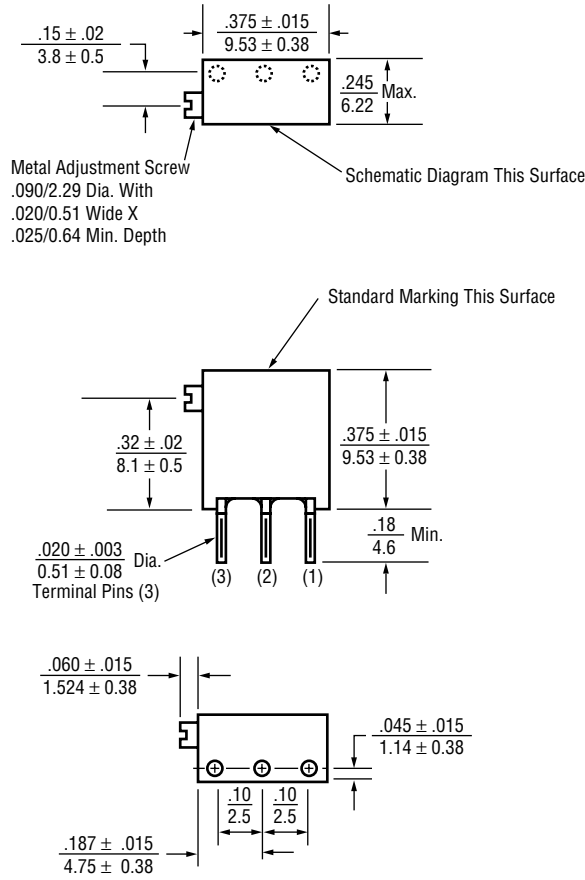
Model 68P



SIDE ADJUSTMENT (Inch/mm)

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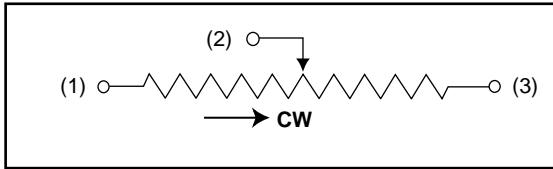
Model 68X



STANDARD RESISTANCE VALUES, OHMS

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

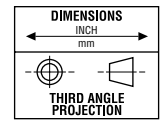
CIRCUIT DIAGRAM



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



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Model 68

PACKAGING

Standard: Boxes
 Capacity = 100 Units (68W)
 = 50 Units (All other styles)

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

	Pin Style		P	W	X
Magazine	Width	=	0.57"	0.33"	0.33"
	Height	=	0.66"	0.90"	0.90"
	Length	=	20.9"	20.4"	24.4"
	Capacity	=	50 Units	50 Units	50 Units

Option: Tape & Reel, Ammo Pack (Available only for 68W and 68X)
 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	=	1.8" x 13" x 10" (46mm x 330mm x 254mm)

ORDERING INFORMATION

Standard:

Model Series ———— **68 P R 10K LF** ————
 Pin Style ————
 RoHS Compliant Product Code - Optional
 Resistance Value
 Resistance Prefix

Option:

Pin Style ———— **68 W R 10K LF TB** ————
 Packaging Option:
 TB = Tubes
 (Pin styles P, W, X)

Option:

Pin Style ———— **68 W F R 10K LF TR** ————
 Pin Style Suffix: ————
 (Used with AP and TR packaging options.
 Applicable to pin styles W & X only.
 "F" designates 0.70" lead length.)
 Packaging Option:
 AP = Ammo pack
 TR = Tape & Reel
 (Pin styles W, X only)



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Model 68