



**TRIMPOT® Potentiometer**  
**Model 3070**  
**High Resolution, Humidity Proof**  
**Wirewound Element**

*P.C.D. MFR. in  
SCOTLAND!*

Actual Size

## FEATURES

- Exceptional resolution (8 times better than standard adjustment potentiometers).
- 6.5" element in a 1" body length.
- 1.5 watt power rating at 70°C.
- Maximum operating temperature, 175°C.
- SILVERWELD® termination.
- Cycling humidity, per MIL-R-27208.
- Slip clutch action.
- Improved reliability (through twofold increase in resistance wire cross-section for a given resistance value.)
- Versatile configurations — 3 mounting styles and 4 terminal types.



3070 (Panel Mount)



3070 (Printed Circuit Mount)



3070 (Eyelet Mount)

## STANDARD RESISTANCES

Resistance (Ohms)	PART NUMBERS*						Nominal Resolution (Percent)
	Panel Mount (Solder Lugs)	Panel Mount (Flexible Leads)	Printed Circuit Pins		Eyelet Mounting (Flexible Leads)	Eyelet Mounting (Solder Lugs)	
			(See Outline Dimensions on Reverse side for Pin Configuration)				
100	3070S-1-101M	3070L-1-101M	3070H-1-101	3070P-1-101	3070L-1-101	3070S-1-101	.117
200	3070S-1-201M	3070L-1-201M	3070H-1-201	3070P-1-201	3070L-1-201	3070S-1-201	.095
500	3070S-1-501M	3070L-1-501M	3070H-1-501	3070P-1-501	3070L-1-501	3070S-1-501	.072
1,000	3070S-1-102M	3070L-1-102M	3070H-1-102	3070P-1-102	3070L-1-102	3070S-1-102	.064
2,000	3070S-1-202M	3070L-1-202M	3070H-1-202	3070P-1-202	3070L-1-202	3070S-1-202	.043
5,000	3070S-1-502M	3070L-1-502M	3070H-1-502	3070P-1-502	3070L-1-502	3070S-1-502	.046
10,000	3070S-1-103M	3070L-1-103M	3070H-1-103	3070P-1-103	3070L-1-103	3070S-1-103	.037
20,000	3070S-1-203M	3070L-1-203M	3070H-1-203	3070P-1-203	3070L-1-203	3070S-1-203	.030
50,000	3070S-1-503M	3070L-1-503M	3070H-1-503	3070P-1-503	3070L-1-503	3070S-1-503	.022

SPECIAL RESISTANCES AVAILABLE FROM 75 TO 50,000 OHMS

\* The last three numerals in part number represent the resistance in standard code.

**OBSOLETE** 1995

# Model 3070 TRIMPOT® Potentiometer

## SPECIFICATIONS

### ELECTRICAL CHARACTERISTICS

Standard Resistance Range (See chart on front)	100 to 50,000 ohms
Resistance Tolerance*	±5%
Absolute Minimum Resistance*	0.1% or 1 ohm, whichever is greater
Noise During Adjustment*	100 ohms maximum
Insulation Resistance*	1,000 megohms minimum
Resolution (See chart on front)	.117 to .022%

### ENVIRONMENTAL CHARACTERISTICS

Power Rating:	
70°C Ambient	1.5 watts
175°C Ambient	0 watt
Operating Temperature Range	-65° t o +175°C
Temperature Coefficient (per MIL-R-27208)	50 ppm/°C maximum
Moisture Resistance, MIL-R-27208	100 megohms minimum after removal from chamber
Vibration MIL-R-27208, 30Gs	
Contact Bounce	0.1 milliseconds, maximum
Wiper Shift	0.2% maximum
Shock MIL-R-27208, 100Gs	
Contact Bounce and Wiper Shift	Same as vibration
Sand and Dust	Materials meet MIL-E-5272, Procedure 1
Salt Spray	Materials meet MIL-R-27208
Fungus	Materials meet MIL-E-5272
Load Life	1,000 hours per MIL-R-27208
Resistance Shift	2% maximum

Mechanical Life	500 cycles without discontinuity
Dielectric Strength	MIL-R-27208
Room Conditions	1,000 volts AC
80,000 Feet (0.8" Hg)	400 volts AC

### PHYSICAL CHARACTERISTICS

Immersion Leak Test*	No leaks
Shaft Torque*	5.0 oz.-in. maximum
Markings*	Manufacturer's name, wiring diagram, date code, resistance, and manufacturer's part number (customer's part number optional)
Appearance*	Legible marking, no physical defects
Mechanical Adjustment	10 turns nominal
Mechanical Stops*	Wiper assembly idles
Weight	Approximately 0.2 oz.

### Terminals:

L	Teflon insulated leads
S	Gold plated solder lugs
P, H	Gold plated, grade A nickel, printed circuit pins

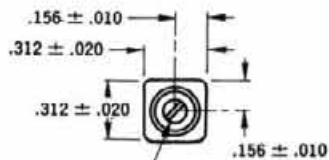
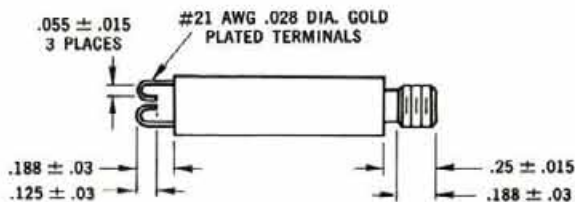
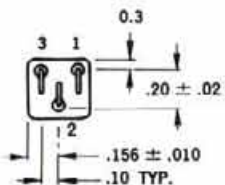
### Mounting Styles

(See outline drawings below)  
Panel Mount, Eyelet Mount and Printed Circuit Pins

\*Inspection Note: Applicable 100% or statistical sampling inspection performed to insure highest quality.

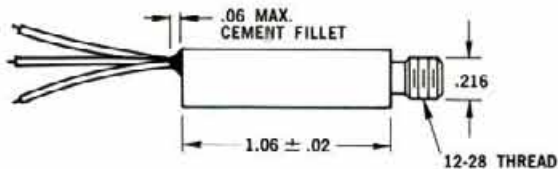
Specification Note: Closer performance tolerances can be supplied upon request.  
Specifications are subject to change without notice.

## 3070 Panel mount L-S



.125 DIA. ELECTRICAL ADJUSTMENT WITH .025 WIDE X .031 DEEP SLOT

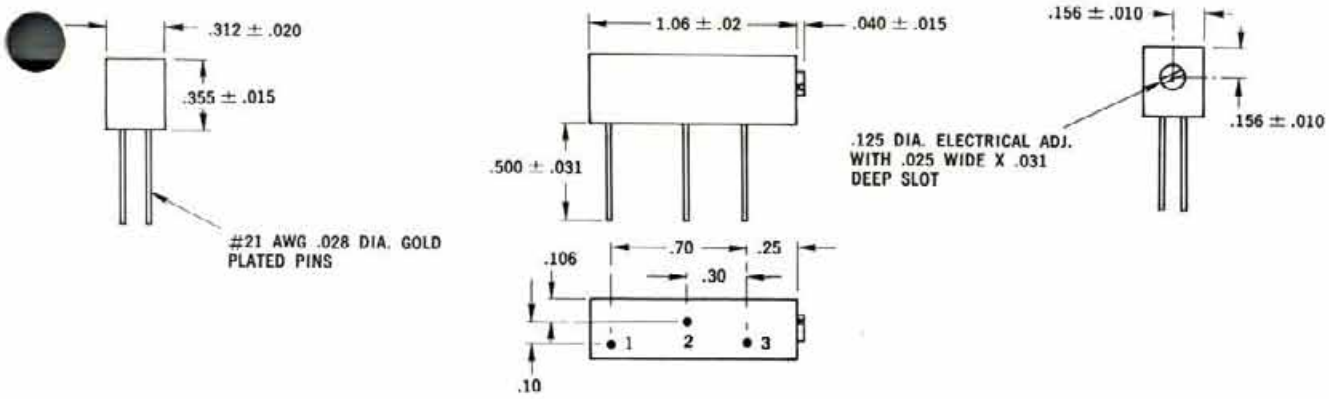
3 ELECTRICAL LEADS 11.5" MINIMUM LENGTH INSULATED STRANDED WIRE .034 DIA. OVER INSULATION



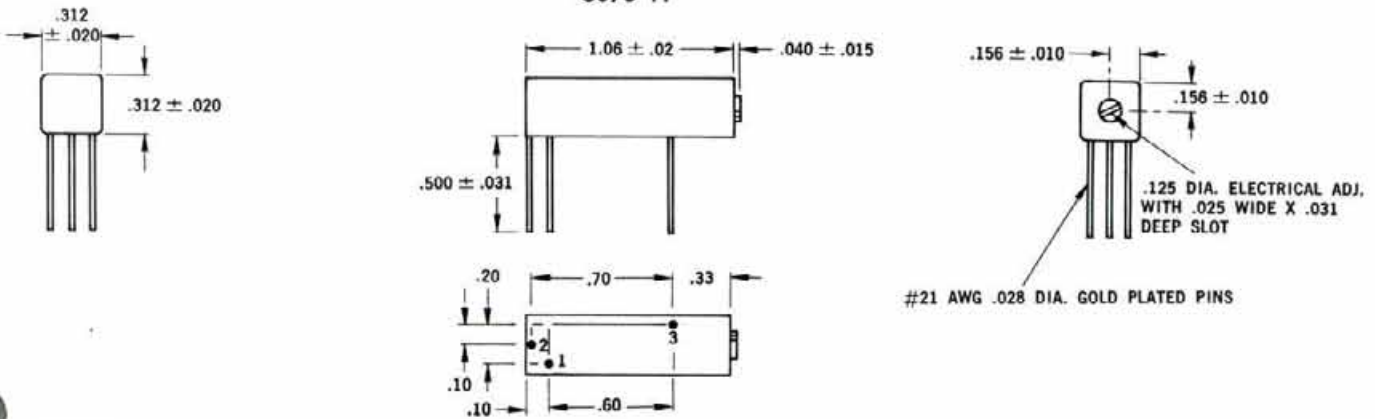
NOTE:  
PANEL MOUNT SUPPLIED WITH .030 THICK SPRING LOCKWASHER AND #12-28 HEX NUT .073 THICK .28" ± .015" ACROSS FLATS

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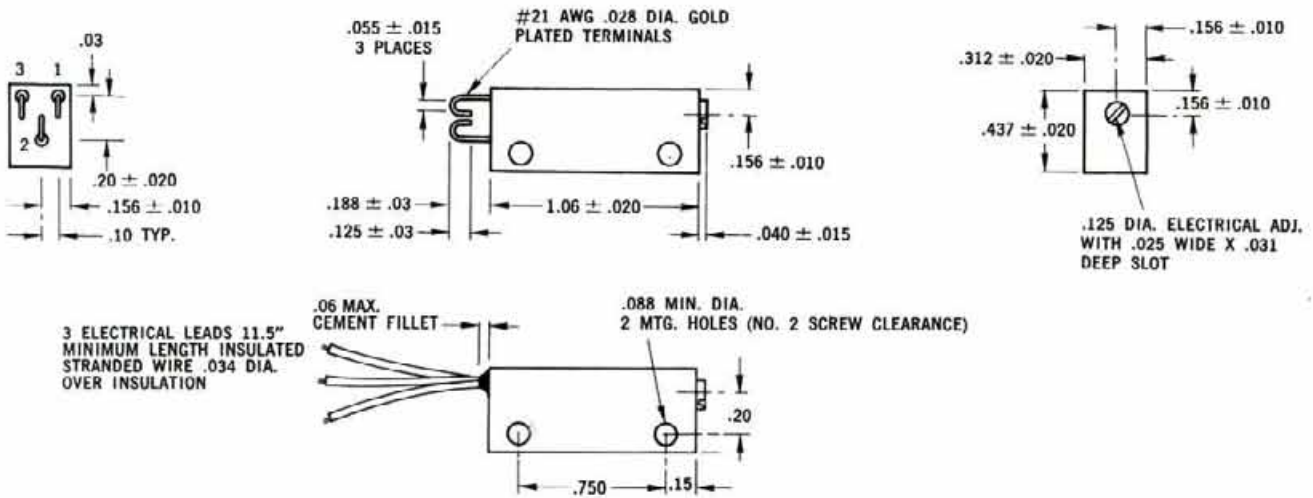
### 3070 P



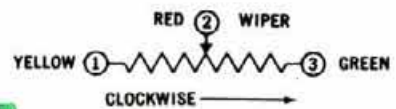
### 3070 H



### 3070 L-S



TOLERANCES: EXCEPT WHERE NOTED  
DECIMALS. .XX ± .010, XXX ± .005



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