

THIS DOCUMENT CONTAINS PROPRIETARY DATA  
OF POLARIS INDUSTRIAL ENTERPRISES, INC. NO  
DISCLOSURE, REPRODUCTION, OR USE OF ANY  
PART THERE OF MAY BE MADE EXCEPT BY  
WRITTEN PERMISSION.

| REV. | BY | DATE    | APPRVL. | P/N   |
|------|----|---------|---------|-------|
| E    | BT | 9/23/96 | BT      | SP22E |

SPECIFICATIONS

ELECTRICAL

RESISTANCE VALUES \_\_\_\_\_ 500, 1K, 2K, 5K, 10K, 20K, 50K, 100K  
RESISTANCE TOLERANCE \_\_\_\_\_  $\pm 10\%$   
LINEARITY (INDEPENDENT) \_\_\_\_\_  $\pm 1\%$   
ELECTRICAL ANGLE \_\_\_\_\_  $320^\circ \pm 5^\circ$   
END RESISTANCE \_\_\_\_\_  $0.2\%$  MAX.  
RESOLUTION \_\_\_\_\_ ESSENTIALLY INFINITE  
INSULATION RESISTANCE \_\_\_\_\_ 1000 MEGOHMS @ 500 VDC  
DIELECTRIC STRENGTH \_\_\_\_\_ 500 VAC  
POWER RATING \_\_\_\_\_ 1 WATT  
CONTACT RESIS. VARIATION \_\_\_\_\_ BELOW  $2\%$  C.R.V.  
OUTPUT SMOOTHNESS \_\_\_\_\_ LESS THAN  $0.1\%$

MECHANICAL

NO. OF TURNS \_\_\_\_\_ 1  
MECHANICAL ROTATION \_\_\_\_\_  $320 \pm 5^\circ$   
ROTATIONAL LIFE \_\_\_\_\_ 10,000,000 TURNS  
STOP STRENGTH \_\_\_\_\_ 84 OZ.IN.MIN.  
TORQUE \_\_\_\_\_ BELOW 0.8 OZ.IN.  
WEIGHT \_\_\_\_\_ APPROX 0.7 OZ.

ENVIRONMENTAL

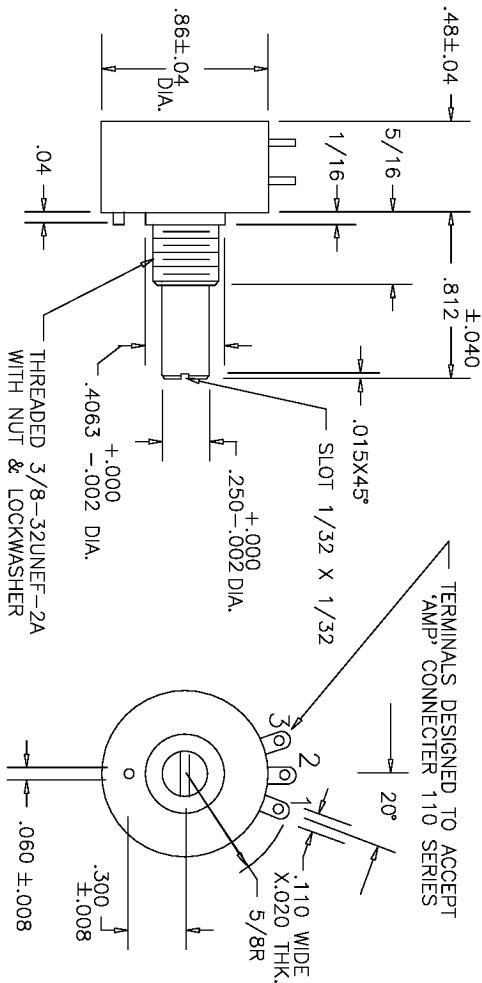
OPERATING TEMPERATURE \_\_\_\_\_  $-55^\circ\text{C}$  TO  $+105^\circ\text{C}$   
TEMPERATURE COEFFICIENT \_\_\_\_\_  $\pm 400$  PPM/ $^\circ\text{C}$   
VIBRATION \_\_\_\_\_ 10HZ TO 2000HZ 15G  
SHOCK \_\_\_\_\_ 50G 11ms  
MOISTURE RESISTANCE \_\_\_\_\_ 40°C 95%RH 120 HOURS

MATERIALS

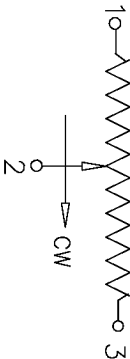
HOUSING----- HIGH TEMP. THERMO PLASTIC  
TERMINALS----- GOLD PLATED BRASS  
BUSHING----- BRASS  
SHAFT----- STAINLESS STEEL  
ELEMENT----- CONDUCTIVE PLASTIC

OPTIONAL FEATURES

SHAFT MODIFICATIONS  
REAR SHAFT  
CENTER TAP  
MULTI-GANGED UP TO 6 SECTIONS  
O'RING SHAFT SEAL  
SPECIAL ANGLES



SCHEMATIC

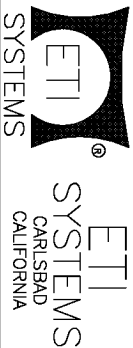


TOLERANCES

XX = +/- .010" FRACT. = +/- 1/64"  
XXX = +/- .005" ANGLES = +/- 1/2°

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

| SCALE | DATE:  | 8-4-86 |
|-------|--------|--------|
| NONE  | BY     |        |
|       | APPR'D | BT     |
| CODE  | IDENT: | 19477  |



TITLE  
SINGLE TURN  
POTENTIOMETER

PART NO.  
SP22E