ALL NEW Series 578

Precision Potentiometer/ Position Sensor



The ALL NEW Series 578 conductive plastic precision potentiometer puts CLAROSTAT proven variable resistor technology to work in a high performance, cost effective device. With its compact size, rugged construction and advanced versatility, the 578 provides superior control for applications such as joy stick controllers and position sensing devices where frequent manual adjustment is required. This control offers linearity of 1%, rotational life of 5MM shaft revolutions for demanding applications, and comes with several options of terminal configurations. A wide variety of electrical output options and mechanical packages are available to suit specific applications with details available from CLAROSTAT applications engineering.

FEATURES

Conductive Plastic

Element

Smooth Feel

5MM Shaft Revolutions

Quiet Electrical Output

Robust Construction

Center Tap

Optional Terminal Configurations



Precision Potentiometer/Position Sensor

SPECIFICATIONS

ELECTRICAL

Resistance Range: 100 to 2.5 megohm,

linear

500 to 1 megohm, non-linear

Tolerance: ±10% std. Working Voltage: 400 Vdc

Insulation

Resistance (min.): 1000 megohm

Dynamic Noise: 2% max. crv

Independent

1% Linearity:

Power Rating: .5w at 70°C

Dielectric

750 Vrms Strength: 310° +0 -3° Electrical Rot.:

Temperature

Coefficient: 800 ppm/°C Effective Rotation: 292° ±2°

Electrical Tap: Tap Width: 5° to 45° Tap Resistance:

1% of Tot. R

MECHANICAL

Mechanical

Rotation: 320° ±5°

(resistance decreases w CW rot from CCW end)

Stop Torque: 40 oz. in. min. Operating Torque: 1 oz. in. max.

Mounting Torque: 25 in. lb. max.

OPERATIONAL

Operating

Static -55° to +120° C Temperature:

Dynamic -40° to

+100°C

Temperature

Cycling:

5 cycles, -40° to

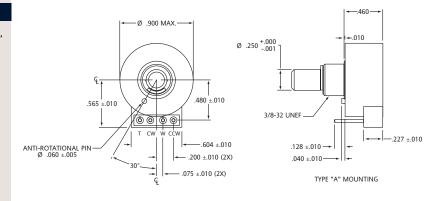
+100°C

Rotational Life: 5MM shaft revs.

Shock: 100g

Vibration: 10g, 10 to 500Hz

PHYSICAL DIMENSIONS



CONSTRUCTION

Shaft: Stainless steel

Bushing: Brass, Nickel plated Housing: Molded plastic

Contact Spring: Monel

PC pins: Brass, Tin plated Terminals:

Wire leads

PC board extension Ink stamp on rear Marking: Hardware: Hex mtg nut

Internal tooth lockwasher

ORDERING INFORMATION

STANDARD PRODUCT (identified by significant part number designated by matrix of options below)

Configured OEM selection matrix* 578 X 1 G 48 S 103 S P

X = Mechanical X = standard

F = center tap

1 = Locating Pin 1 = pin at 7:00

0 = no locating pin

G = Bushing/Shaft

 $G = 3/8D \times 3/8 L$; 1/4 d shaft $B = 3/8D \times 3/8L$; 1/8 d shaft

48 = Shaft Length Increments of 64th in.

32 min; 64 max. S = Shaft End Style

S = slot

F = flatP = plain round 103 = Resistance Value EIA code, first two significant digits, third is number of zeros

S = Resistance Taper

S = linear Z = CW audio R = CCW audio

A = Terminals

A = PC pin type AW= wire lead

* consult factory for custom OEM configurations



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