



## 5320 SERIES | PANEL POT

Rotary Precision Position Sensor Single Turn, Compact, Sealed, Extended Life

### Introduction

The 5320 Series offers a highly reliable rotary potentiometer sensor that can be easily integrated or re-packaged into a wide variety of existing and new applications. The 5320 Series is ideally suited for tight packaging constraints while providing superior durability, long service life and repeatable accuracy.

The sensor is fully sealed and impervious to contamination and moisture. A wide variety of standard and non-standard options are available including detent functions, electrical/mechanical angles, shaft/bushing sizes, lengths and configurations, resistance values, etc.

The 5320 Series standard termination offers gold plated through holes for direct soldering. Options are also available for custom termination methods. The 5320 series sensors offer all of the advantages of a cost effective, traditional potentiometer while providing a rugged, compact, low-profile design to survive the harshest conditions.



### Features

- **Extended Operating Life**  
1 million plus operational cycles
- **Fully Sealed Construction**  
Meets or exceeds IP66/IP67 standards
- **Extended Temperature Range**  
Operating: -40° to +125°C  
Storage: -55° to +150°C
- **High Quality, Rugged Construction**  
Stainless Steel Shaft, Nickel Plated Brass Bushing
- **Wide Range of Configurations (see ordering info)**  
Shaft and Bushing Lengths  
Linearity (accuracy) Tolerance Limits  
With or Without Detent Function  
Total Resistance  
Custom Options Available

## SPECIFICATIONS

### Mechanical

<b>Total Travel (stop to stop)</b>	250 degrees
<b>Stop Strength</b>	1350 Nmm (190 in-oz)
<b>Shaft Pull Out Strength</b>	200N (45lbs)
<b>Shaft Operating Torque</b>	5-25 Nmm (0.7-3.5 in-oz)
<b>Shaft Starting Torque</b>	35 Nmm (5 in-oz) Max.
<b>Cycle Life</b>	1 Million cycles
<b>Detent Life</b>	10,000 cycles
<b>Detent Torque</b>	35-120 Nmm (5-17 in-oz)
<b>Detent Release Position</b>	20 degrees Max.

## Electrical

<b>Electrical Travel</b>	240 degrees
<b>Active Electrical Travel</b>	216 degrees (5%-95%)
<b>PowerRating at 70C</b>	0.25W (derating to 0 at 125C)
<b>Resistance Tolerance</b>	±20%
<b>Linearity, Independent</b>	±2% (Active)
<b>RGV</b>	100% Max.
<b>(Output Smoothness)</b>	(0.2%) Max.

## Environmental

<b>Moisure &amp; Dust Resistant</b>	Sealed, IP66/IP67
<b>Vibration</b>	15g, 10 to 2000 Hz
<b>Temperature</b>	-40°C to +125°C operating, -55° to +150°C storage
<b>Shock</b>	30g
<b>Salt Spray</b>	96 hours
<b>Resistance to Solder Heat</b>	350°C (660°F) for 5 sec. (at termination points)

## Materials

<b>Shaft</b>	Stainless Steel
<b>Bushing</b>	Nickel Plated Brass
<b>Housing (Package)</b>	Nylon 6 (Akulon)
<b>PCB</b>	4101/21 (FR-4)

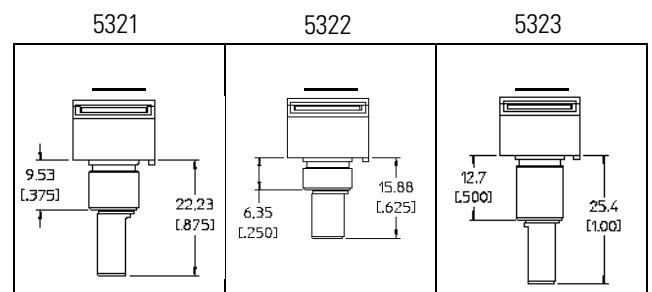
## ORDERING OPTIONS

Example : 5321 R5K L2.0

No Detent Function, Standard +/-2.0% Linearity, 5K Total Resistance

<b>Family</b>	532X: 5321 5322 5323
<b>Total Resistance</b>	Standard: 1K 5K 10K
<b>Independent Linearity</b>	LX.X: +/-2.0%
<b>Detent</b>	Blank: None D: Included

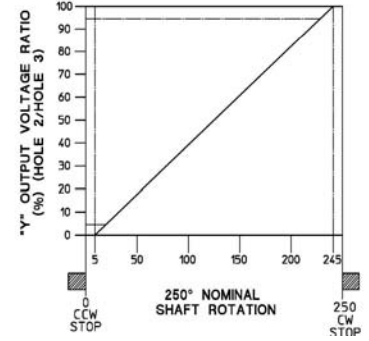
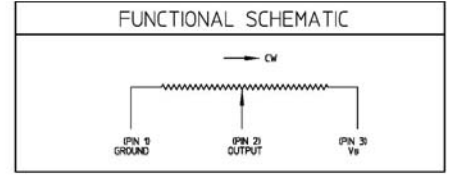
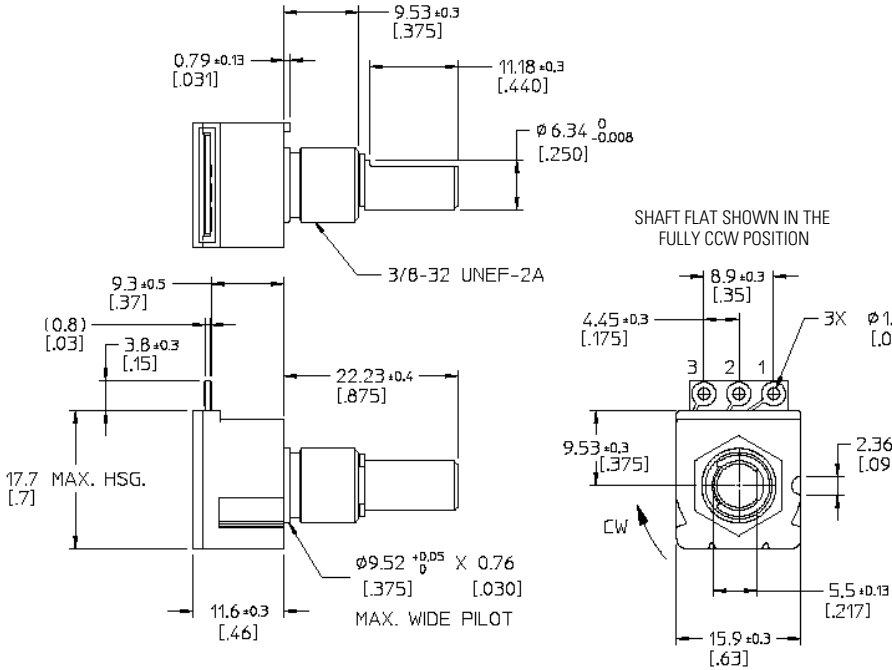
## Basic Configurations: Shaft & Bushing Lengths





# DIMENSIONS

Dimensions are shown in millimeters (in)



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