

## Type 5930 Series



This precision 10 turn potentiometer has been developed to satisfy a wide range of applications where high resolution and low temperature coefficient and fine linearity are of particular importance. Tyco invite opportunities for custom design of this product where the quantities are suitable. With a power rating of 2W at 70°C and <0.25% linearity this multiturn potentiometer is an important addition to the wide range of professional approved spindle operated potentiometer products on offer from Tyco.

### **Key Features**

- Less Than 3/4" Required Behind Panel
- High Performance at Low Cost
- Rugged Mechanical Construction
- Sealed Option for Board Washing
- Metal or Plastic Shaft/Bushing
- 3 & 5 Turn Options Available
- 6mm Metric Shaft Version Available

## **Panel Potentiometers**



#### Type 5930 Series

#### Characteristics - Electrical

Resistance Range:	200R - 100K
Resistance Tolerance:	± 5%
Linearity (Independent):	± 0.25%
Effective Electrical Angle:	3600° + 10° - 0°
Absolute Minimum Resistance:	± 1%
Noise:	100 ohms ENR maximum
Power Rating @ 40°C:	2.0 Watts derating to 0 at +125°C
Dielectric Strength:	2000V AC
Insulation Resistance 500V:	1000M minimum

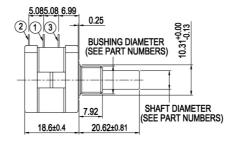
### Characteristics -Mechanical

Operating Temperature Range:	-55°C to +125°C	
Temperature Coefficient:	50ppm/°C maximum	
Vibration:	15G	
Wiper Bounce:	0.1 milliseconds maximum	
Shock:	50G 0.1ms maximum	
Load Life MIL - R - 12534:	1000 hours ∆R 2% maximum	

#### Characteristics -Environmental

Mechanical Angle:	3600° +15° -0° 0.003" TIR 0.008" TIR		
Shaft Runout:			
Lateral Runout:			
Pilot Diameter Runout:	0.003" TIR		
Shaft End Play:	0.010" TIR		
Shaft Radial Play:	0.005" TIR		
Rotational Life:	1,000,000 revolutions		
Stop Strength:	42.0 Ncm minimum		
Torque (Starting and Running):	0.56 Ncm maximum unsealed/1.0 Ncm sealed		
Weight:	21 grams approximately		
Terminals:	Solder Lugs		
Mounting Torque:	17 - 20 mNm		

# **Dimensions**





How to Order 5930	<b>S</b>	A	104	J	<b>S</b>
<b>Common Part</b>	No. of Sections	Identifier Ref.	Resistance Value	Tolerance	<b>Shaft Options</b>
5930 - 10 Turn	S - Single Section D - Dual Section	A - Standard F - Sealed X - See Customer Drawing	The first two digits are signifigant figures of resistance value and the third denotes the number of zeros following.  e.g. 500R: 501 1K: 102 10K: 103 100K: 104	J - 5%	(Dim B x A) R - 1/8" shaft x 17.5mm FMF M - 6mm shaft x 20.6mm FMF S - 1/4" shaft x 20.6mm FMF