tyco Electronics

Spindle Operated Potentiometers

Type 12P, 12C Series

Type 12P, 12C Series

These small versatile potentiometers meet a wide range of instrument applications. They are ideally suited to the need of professional broadcast and industrial control systems where a high performance specification, long operational life and low noise are of prime importance. They are offered with printed circuit and eyelet terminals as alternatives.

Key Features

- Polymer Film or Cermet Element
- Low Noise
- Long Life
- High Performance
- 12.5mm Square
- Robust Construction
- Linear and Non Linear Laws
- Board Washable
- Eyelet PC Terminations

Characteristics - Electrical

	Conductive Plastic	Cermet 12P, 12C
Resistance Laws & Range:	1K Ohm to 1M Ohm Linear (Non Linear Laws available to order)	150 Ohm to 100K Ohm (Linear)
Standard Values:	1K, 5K, 10K, 50K, 100K, 500K, 1M	150R, 200R, 250R, 500R, 750R, 1K, 5K, 10K, 50K, 100K
Selection Tolerance:	± 20% (± 10% by selection)	± 10% (± 5% by selection)
Rated Dissipation:	0.25W Lin, 0.125W Non Lin	1.0W
Limiting Element Voltage:	200V dc or ac RMS	350V dc or ac peak
Isolation Voltage:	500V dc or ac peak	500V dc or ac peak
Electrical Rotation:	270° ± 5°	270° ± 5°
Terminal Resistance:	2 Ohm max.	2 Ohm max.
Noise:	2 % max.	2 % max.
Insulation Resistance:	1000M Ohm min.	1000 M Ohm min.

Characteristics - Mechanical

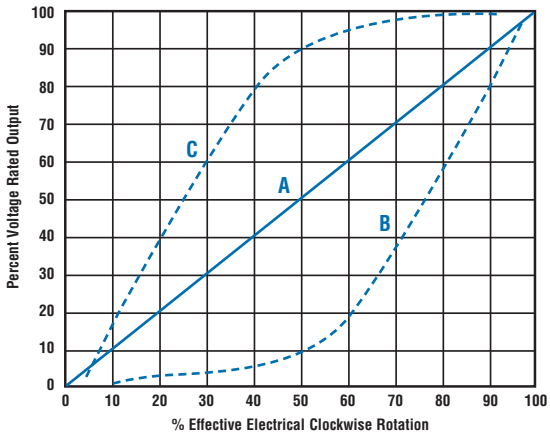
	Conductive Plastic	Cermet 12P, 12C
Starting Torque:	2 to 15 mNm	2 to 15 mNm
Mechanical Torque:	295° ± 5°	295° ± 5°
End Stop Torque:	560 mNm	560 mNm
Spindles (standard)	7/8" Long with slot x 1/8" diameter	7/8" Long with slot x 1/8" diameter
	1" Long with slot x 1/4" diameter	1" Long with slot x 1/4" diameter
	Other spindle, bushing and Terminal styles are available on request	Other spindle, bushing and Terminal styles are available on request

Characteristics - Environmental

	Conductive Plastic	Cermet 12P, 12C
Limits of Resistance Change:	± 5% (after 1000 hrs endurance)	± 10% (after 1000 hrs endurance)
Temperature characteristics of resistance (-55°C to 125°C):	± 1000 ppm/°C	± 150 ppm/°C
Bump Severity:	15G ΔR<± 2%	15G ΔR<± 2%
Mechanical Endurance:	50,000 operations min.	25,000 operations min.

Resistance Laws

A - Linear
B - Log
C - Inverse Log



Cermet Elements

This series has been enhanced by the development of a Cermet version.

Cermet elements are available in a wide range of resistive values. They offer essentially infinite resolution and excellent stability in most severe environmental conditions. Static and Dynamic noise (CRV) performance is good but does not match that of conductive plastic.

The temperature coefficient of cermet elements, though not as low as for wirewound elements, is better than conductive plastic type elements. Frequency response of cermet materials is very good and the practical application range extends well beyond 100MHZ.

Literature No. 1773174
Issued: 07-05

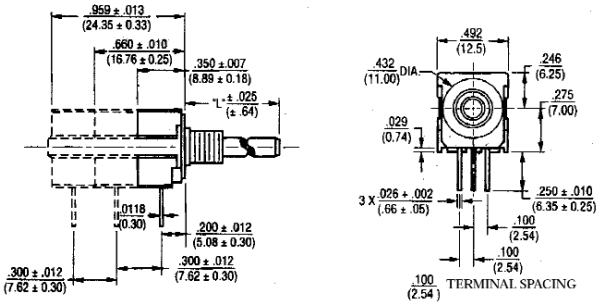
Dimensions are shown for reference purposes only.

Dimensions are in millimetres unless otherwise specified.

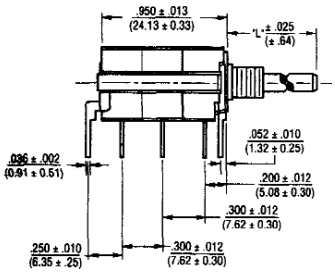
Specifications subject to change.

Type 12P, 12C Series

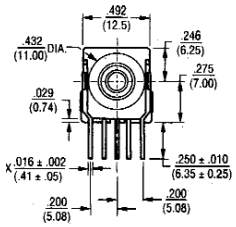
Dimensions



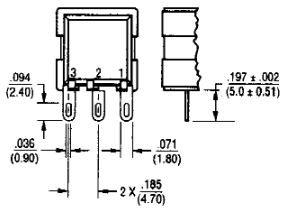
PCB Mounting Bracket



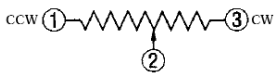
AVAILABLE 1 THROUGH 6 VERSIONS



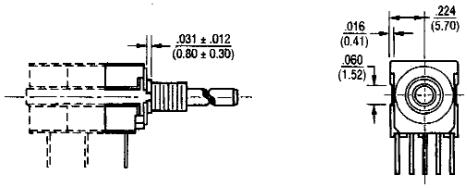
Solder Lug Terminals



Electrical Schematic

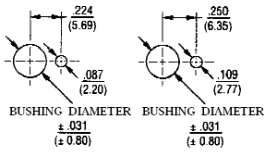


Anti-Rotation Lug



Suggested Panel Layouts

The 12P can be used with either of the two Panel Layouts shown below

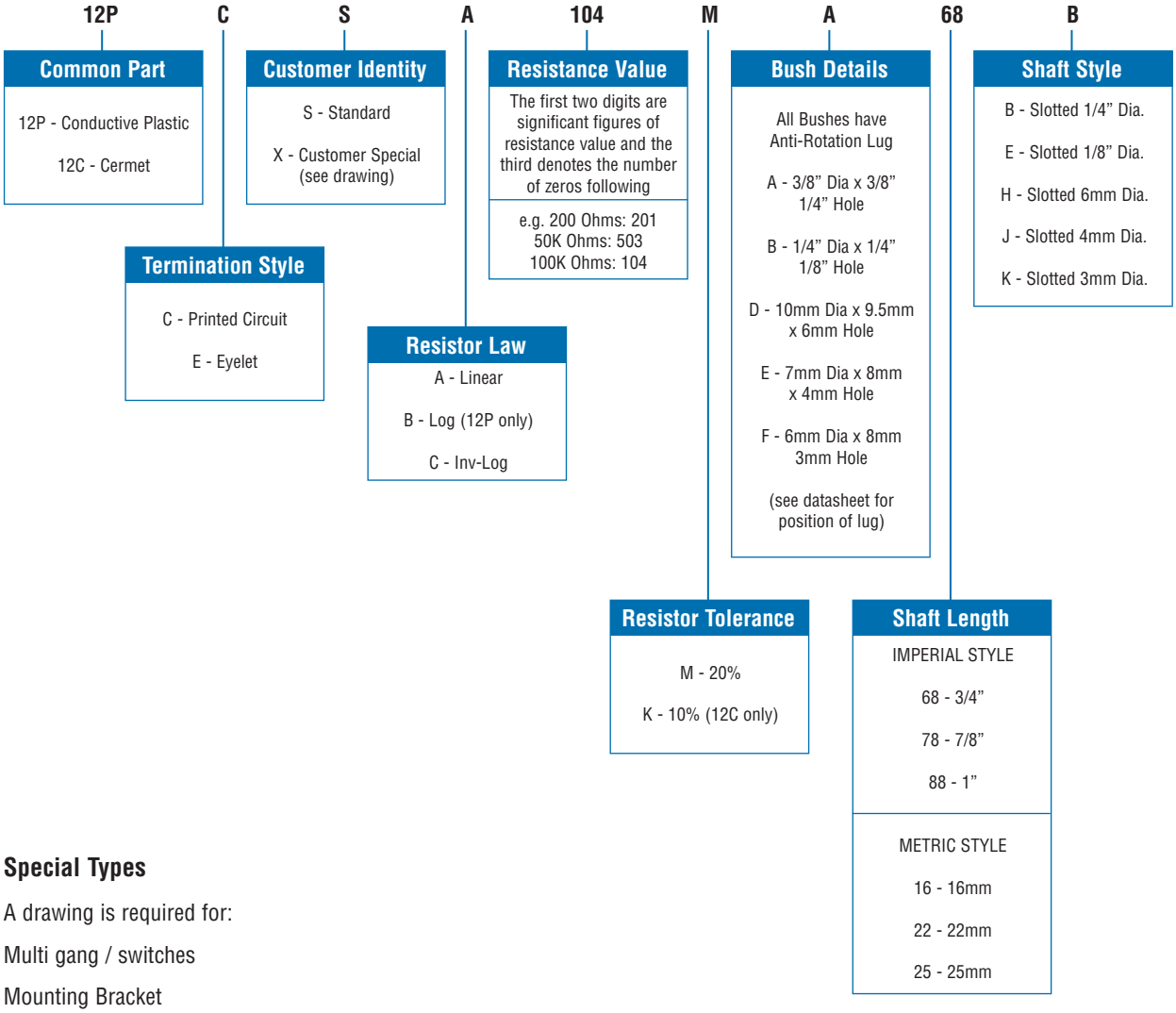


FOR TOLERANCES SHOWN: .XX= ± .010 (0.25)

.XXX=± .005 (0.13)

SHAFT DIMENSIONS ± 1/32 (0.80)

How to Order



* Special Types

A drawing is required for:

Multi gang / switches

Mounting Bracket

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Automotive Connectors ***category:***

Click to view products by TE Connectivity ***manufacturer:***

Other Similar products are found below :

003-018-000 60403001 60993906-B M902-2131 M902-2161 M902-2344 72.330.1035.1 73.353.4028.0 F119300-B F166900 F258300-B F358300-B F407400 F444110 F487000 F509500B-B 827153-1 8N1515-32-24P 9-1326729-8 925474-1 928905-1 964562-4 968782-1 GT17SA-8DS-HU 98891-1012 98947-1016 12004147 12004475-L 12010290 12010309-B 12015454 12020219-B 12041318-B 12052225-L 12052466 12064869 12004327-B 12015308 12015384 12015909 1-21030-1 12041254 12041318 12047946-B 12047957 12047957-L 12059473 12066261 12110546 12110546-B