

Series WW63C

4 Watt Wirewound Potentiometers



Description

Series WW63C

1 11/16 in. dia., 4 watt, industrial grade wirewound potentiometer

Features

- *Nickel plated brass shaft and bushings*

Options

- *Stainless steel shaft*
- *Shaft & mounting seals*
- *High torque*
- *Multiple gangs*
- *Concentric shafts*
- *Locking bushings*
- *Flatted Shaft*
- *Single tap*

Also Available...

Series A63

Pick-A-Shaft version of the 63 series

Series 15

4 watt control for applications requiring higher resistance

RA30

Military version of the 63 series meeting strict military standard MIL-R-19. 4 watt power rating.

Series WW63C Electrical Specifications

Resistance Range

1 Ω to 75K Ω . Linear taper standard - log, reverse log available

Resistance Tolerance

+/- 5% standard; +/- 1% available

Power Rating

Single section: 4 Watts @ 40°C; 0 @ 105°C

Additional sections: 3 Watts @40°C; 0 @ 105°C

Watts/Degree

.014 W per degree of effective rotation max.

Effective Rotation

280° +/- 5° standard

240° +/- 5° with switch

Electrical Rotation

300° +/- 5° with or without switch

Tapers

260 ohms per degree maximum

Independent Linearity

+/- 5% standard; +/- 1% available

End Resistance

1 to 50 Ω - 0.3%; 51 to 100 Ω - 0.5%.

Over 100 Ω - 0.2% of total or 1 Ω , whichever is greater.

Dielectric Withstanding Voltage

1000 Vac for 60 seconds @ ATM.

450 Vac for 60 seconds @ 3.4 in. Hg.

Working Voltage (Max.)

350 Volts maximum

Switches

S.P.S.T., S.P.D.T., D.P.S.T. rotary

Location of tap and Tolerance

Three available; location as specified.

Tap tolerance +/- 10% of total resistance.

Specify electrical or angular position and limits.

Insulation Resistance

100 Megohms minimum

Operating Temperature Range

-55 °C to 105 °C

Humidity

85% RH @ 40°C, 240 hours

Mechanical Specifications on next page

Series WW63C Mechanical Specifications

Mechanical Rotation

300° +/- 5° with or without switch standard.
360° available (effective rotation 280° max.)

Stop Torque

8 lbs. in. maximum

Torque Range

0.5 to 6 oz in. each section;
15 oz. in. increase for switch actuation.
Locking type bushing: 25 oz. in. minimum with jam nut
tightened to 10 lb. in.

Maximum Number of Sections

Four

Weight

Single .118 lb. without switch.
Additional section 0.075 lb.; 0.128 lb with switch.

Hardware

- (a) Hex mounting nut, 3/8 in. (9.53mm) x 32 thread
1/2 in (12.7mm) across flats, 3/32 in (2.38mm) thick.
- (b) Internal tooth lockwasher 11/16 in. (17.46mm) O.D.
x 0.22 in (0.56mm) thick.
- (c) Jam hex nut 1/2 in. (12.7mm) across flats, 7/32 in.
(5.56mm) thick, supplied on locking type bushing.

Marking

Will appear on rear surface without switch. On periphery
when switch is used. Unless otherwise specified, marking
will consist of

- (a) Customer part number or State Electronics part number
- (b) EIA source and date code

Switch Options

Switch Type	Switch	Variations	Term Position	Torque Oz. In.
B-10	SPST	1A, 250V; 3A125V (ac or dc)	1-2	12
B-13	SPST	15A. 10Vdc	1-4	16
B-20	DPST	1A, 250V, 3A125V (ac or dc)	1-2-3-4	16
B-21	DP	1 pole on, 1 pole off 1A, 250V, 3A125V	1-2-3-4	16
B-23	DPST	15A. 10V (dc only)	1-2-3-4	16
B-30	SPDT	1A, 250V; 3A125V (ac or dc)	2-3-4	16

Figure 1. Power Derating Graph for Series WW63

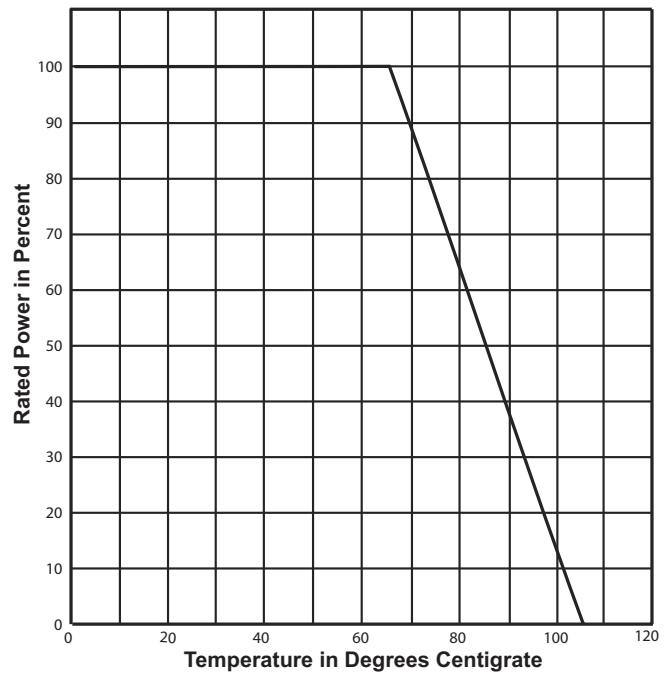
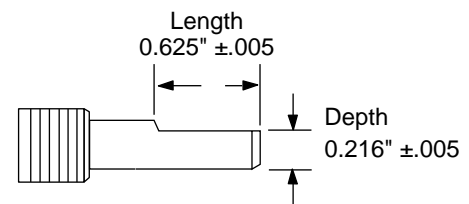


Figure 2. Resolution Graph

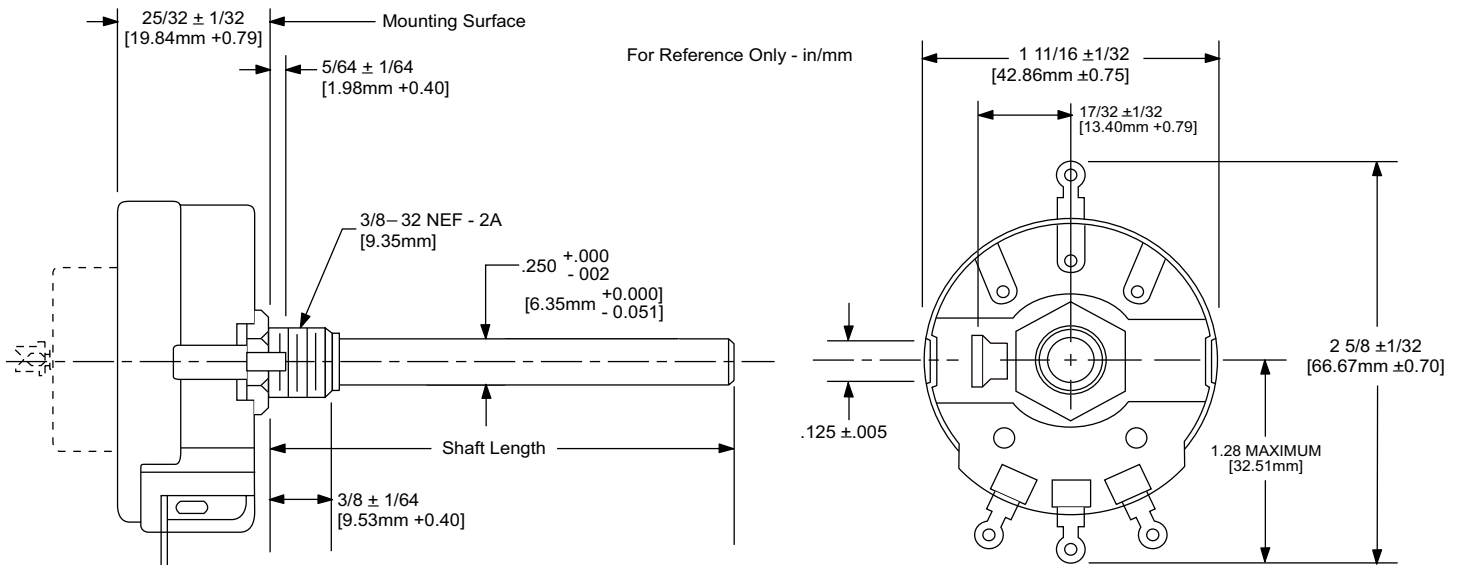


Figure 3. Flatted Shaft Option



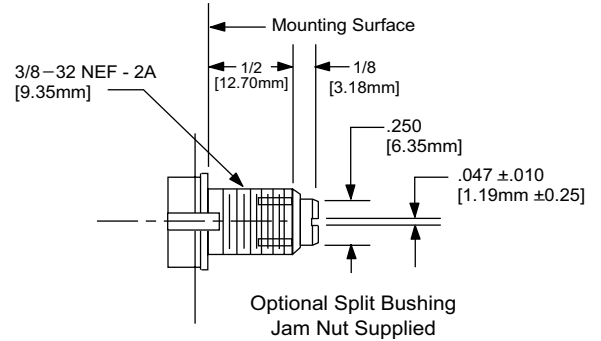
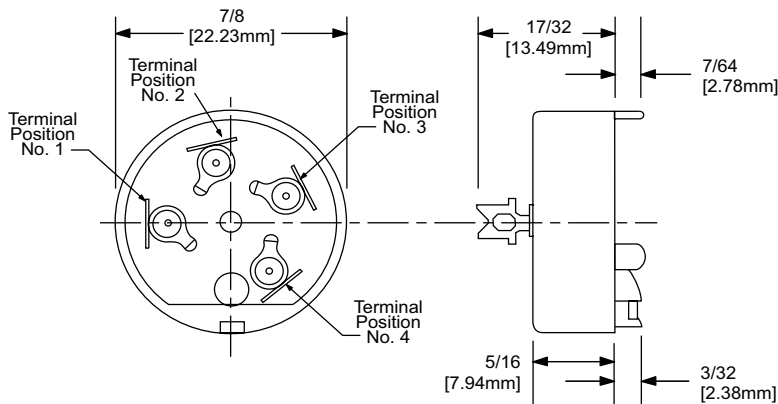
Notes:

1. Flatted Shaft is not available with Locking or Shaft Seal Options
2. Flat will extend to within 0.031 (0.79) of mounting bushing where shaft length will not permit standard flat.



Switch Option

Locking Bushing Option



Series WW63C - How to Order

Part Number Example: **WW63C-1-N-B10-S040-503A**

WW63C	2	N	B10	S	XXX	XXX	A
Series	Sections		Switch	Shaft Style	Shaft Length	Resistance	Linearity
	1 = Single 2 = Dual 3 = Triple 4 = Quad		A = None B10 = SPST 1A, 250V B13 = SPST 15A, 10V B20 = DPST 1A, 250V B21 = DP B23 = DPST 15A, 10V B30 = SPDT 1A, 250V	N = Standard S = Slotted F = Flatted X = Custom	032 = 1/2" 040 = 5/8" 056 = 7/8" 100 = 1" 108 = 1 1/8" 132 = 1 1/2" 148 = 1 3/4" 200 = 2"	1-75KΩ	A = Linear C = Log F = Rev. Log
	Shaft & Bushing						
	N = Standard L = Locking S = Panel and shaft seal (Standard) T = Panel and shaft seal (Locking)						



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