

Features

- Virtually infinite electrical circuit isolation
- Sealed for board wash
- Metal or plastic shaft options
- RoHS compliant*

Model 96 – 5/8 "Square Sealed Single-Turn Panel Control

Additional Information

Click these links for more information:











Initial Electrical Characteristics ¹	Conductive Plastic Element	Cermet Element
Standard Resistance Range		
Linear Tapers (A, B, E, & H)	(B & E) 1 K ohms to 1 megohm	(A & H) 100 ohms to 1 megohm
Audio Tapers (C, D, F, G, S, & T)	(D,G,S, & T) 1 K ohms to 1 megohm	(C & F) 1 K ohms to 1 megohm
Total Resistance Tolerance	10 % or 20 %	5% or 10%
Independent Linearity	±5 %	±5 %
Absolute Minimum Resistance	2 ohms maximum	2 ohms maximum
Effective Electrical Angle	(Linear tapers) 240 ° ± 5 °	(Linear tapers) 240 $^{\circ}$ ± 6 $^{\circ}$
	(Audio tapers) 225 ° ± 5 °	
	±1 %	±1 % or 3 ohms (whichever is greater)
Dielectric Withstanding Voltage (MIL-STD-20	2, Method 301)	
	1,500 VAC minimum	
70,000 Feet	500 VAC minimum	500 VAC minimum
Insulation Resistance (500 VDC)	1,000 megohms minimum	1,000 megohms minimum
Power Rating (Voltage Limited By Power Dis		
+70 °C Single Section Assembly	(Linear tapers) 1 watt	(Linear tapers) 2 watts
	(Audio tapers) 0.5 watt	
	0 watt	
Theoretical Resolution	Essentially infinite	Essentially infinite

Environmental Characteristics¹

Operating Temperature Range	40 °C to +125 °C	40 °C to +125 °C
Storage Temperature Range	55 °C to +125 °C	55 °C to +125 °C
Temperature Coefficient Over Storage		
Temperature Range	±1,000 ppm/°C	±150 ppm/°C
Vibration (Single Section)	15 G	15 G
	±2 % maximum	
	±5 % maximum	
	30 G	
	±2 % maximum	
Voltage Ratio Shift	±5 % maximum	±5 % maximum
Load Life	1,000 hours	1,000 hours
Total Resistance Shift	±10 % maximum	±5 % maximum
Rotational Life (No Load)	100,000 cycles	100,000 cycles
Total Resistance Shift	(Linear tapers) 10 ohms or ±15 % TRS max	(All tapers) ±5 % TRS max.
	(whichever is greater)	
	(Audio tapers) ±20 % maximum	
Contact Resistance Variation	, ,	
@ 50,000 cycles	(Linear tapers) ±2 %	±2 %
•	(Audio tapers) ±3 %	
Moisture Resistance (MIL-STD-202, Method		
Total Resistance Shift	(Linear tapers) ±10 % TRS maximum	(All tapers) ±5 % TRS maximum
	(Audio tapers) ±20 % TRS maximum	
Insulation Resistance (500 VDC)	100 megohms minimum	100 megohms minimum
IP Rating	IP 65	IP 65

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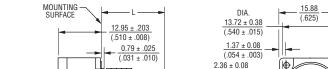
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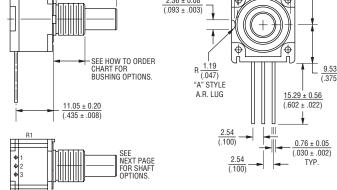
Mechanical Characteristics ¹	
Stop Strength (1/4 " D shaft)	
(1/8 " D shaft)	
Mechanical Angle	300 ° ±5 °
Torque	
Starting	
Running Torque	
Single or Dual Section (A & R Bushings)	
Single or Dual Section (C & U Bushings)	
Mounting	
Variation	
Weight (Single Section, Metal Bushing)	
Terminals	Printed circuit terminals, J-Hooks or solder lugs
Soldering Condition	Recommended hand soldering using Sn95/Ag5 no clean solder, 0.025 " wire diameter.
_	Maximum temperature 399 °C (750 °F) for 3 seconds. Immersion wash is not recommended.
Marking	Manufacturer's trademark, date code, resistance, manufacturer's part number
HardwareOne lockw	vasher and one mounting nut is shipped with each potentiometer (Bushing A: H-37-2 & H-38-2; Bushing C: H-37-1 & H-38-1; Bushing R: H-37-4 & H-38-9; Bushing U: H-37-3 & H-38-8)

NOTE: Performance specifications do not apply to units subjected to printed circuit board immersion cleaning processes.

Product Dimensions

Model 96 PC Pin Terminals, In-Line



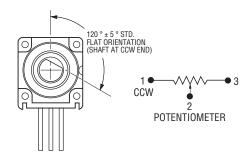




DIMENSIONS: $\frac{MM}{(INCHES)}$



Shaft Flat Orientation



Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

¹ Electrical specifications tested at 200 RPM, at room ambient: +25 °C nominal.

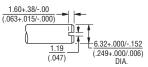
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Product Dimensions

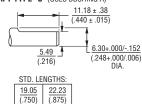
Plastic Shaft Styles

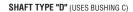




STD. LENGTHS:			
12.70	15.88	19.05	22.23
(.500)	(.625)	(.750)	(.875)

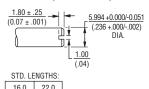
SHAFT TYPE "C" (USES BUSHING A)



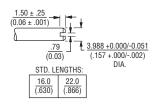


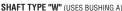


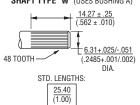
SHAFT TYPE "R" (USES BUSHING R)



SHAFT TYPE "T" (USES BUSHING U)

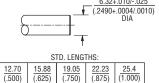




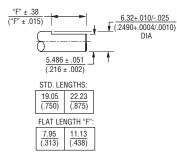


Metal Shaft Styles

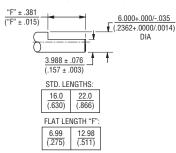
SHAFT TYPE "A" (USES BUSHING A)



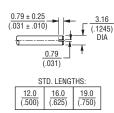
SHAFT TYPE "H" (USES BUSHING A)



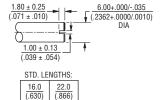
SHAFT TYPE "S" (USES BUSHING R)



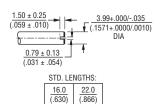
SHAFT TYPE "E" (USES BUSHING C)



SHAFT TYPE "J" (USES BUSHING R)



SHAFT TYPE "V" (USES BUSHING U)

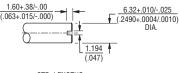


TOLERANCES EXCEPT AS SHOWN:
$$.XX = \pm \frac{.02}{(.050)}$$

$$.XXX = \pm \frac{.005}{(.127)}$$

$$.XXXX = \pm \frac{.0005}{(.0127)}$$
DIMENSIONS: $\frac{MM}{(INCHES)}$

SHAFT TYPE "G" (USES BUSHING A)



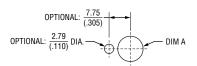
STD. LENGTHS:			
12.70	15.88	19.05	22.23
(.500)	(.625)	(.750)	(.875)

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30 $^{\circ}$ ± 15 $^{\circ}$

Suggested Panel Layout

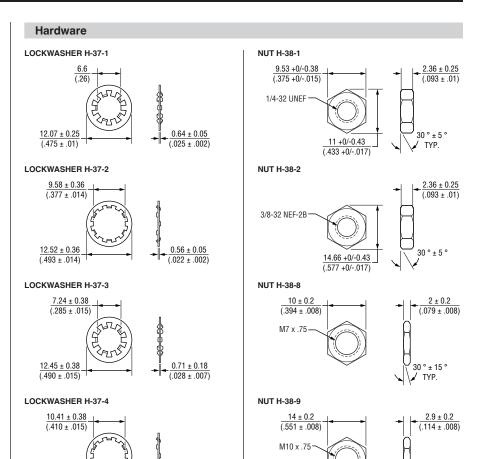


BUSHING	DIM A
А	9.91 (.39)
С	6.73 (.265)
R	10.5 (.413)
U	7.5 (.295)

DIMENSIONS: $\frac{MM}{(INCHES)}$

Date Code Description





DIMENSIONS: $\frac{MM}{(INCHES)}$

 0.56 ± 0.05

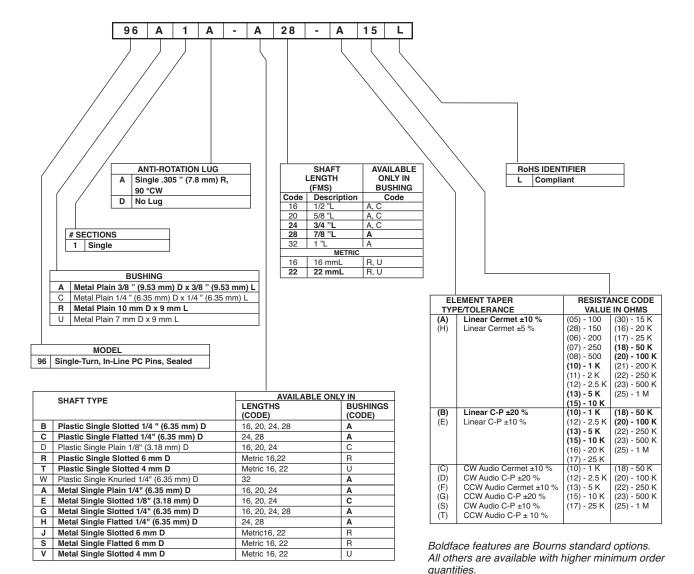
 $(.022 \pm .002)$

15.11 ± 0.51

 $(.595 \pm .020)$

How to Order Model 96 Panel Controls

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REV. 10/22

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