

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

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Mechanical Characteristics¹

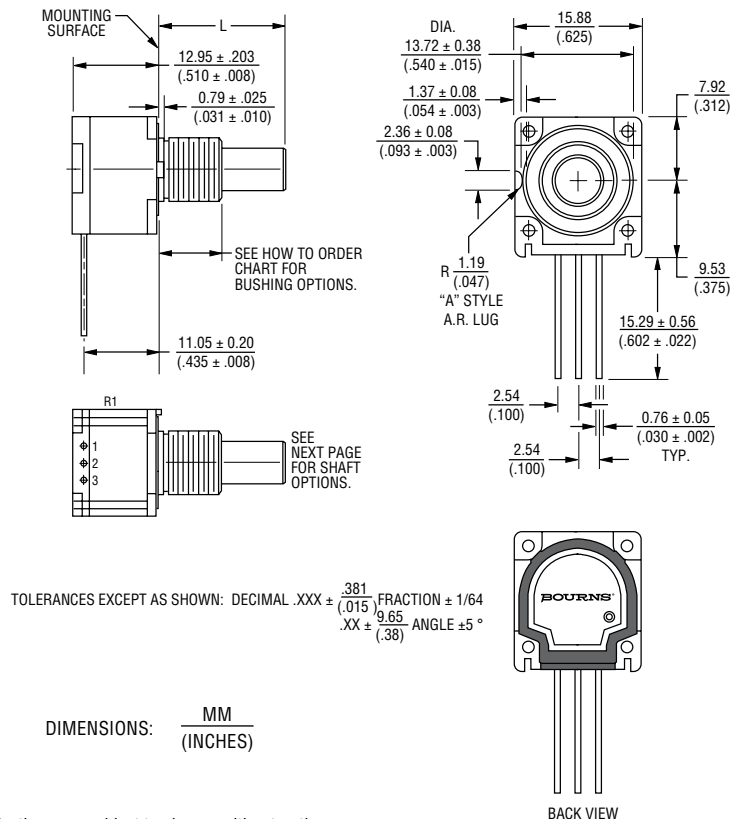
Stop Strength (1/4 " D shaft)	45.19 N-cm (4 lb.-in.)
(1/8 " D shaft)	33.89 N-cm (3 lb.-in.)
Mechanical Angle	300 ° ±5 °
Torque	
Starting	0.3 max. above average running torque
Running Torque	
Single or Dual Section (A & R Bushings)	0.21 to 1.06 N-cm (0.3 to 1.5 oz.-in.)
Single or Dual Section (C & U Bushings)	0.14 to 1.06 N-cm (0.2 to 1.5 oz.-in.)
Mounting	1.7-2.0 N-m (15-18 lb.-in.) maximum
Variation	0.35 N-cm (0.5 oz.-in.) maximum in 45 ° shaft travel
Weight (Single Section, Metal Bushing)	12.7 grams nominal
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
Hardware	One lockwasher 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.

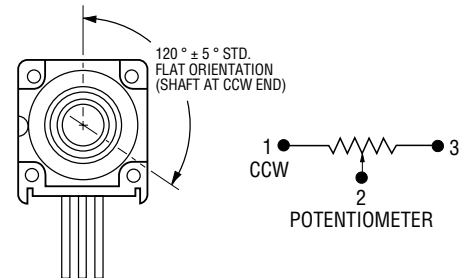
¹ Electrical specifications tested at 200 RPM, at room ambient: +25 °C nominal.

Product Dimensions

Model 96 PC Pin Terminals, In-Line



Shaft Flat Orientation



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Users should verify actual device performance in their specific applications.

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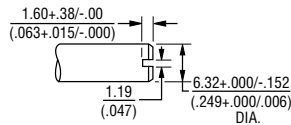
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Product Dimensions

Plastic Shaft Styles

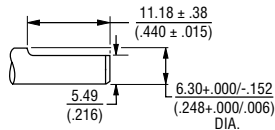
SHAFT TYPE "B" (USES BUSHING A)



STD. LENGTHS:

12.70 (.500)	15.88 (.625)	19.05 (.750)	22.23 (.875)
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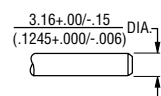
SHAFT TYPE "C" (USES BUSHING A)



STD. LENGTHS:

19.05 (.750)	22.23 (.875)
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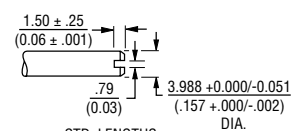
SHAFT TYPE "D" (USES BUSHING C)



STD. LENGTHS:

12.70 (.500)	15.88 (.625)	19.05 (.750)
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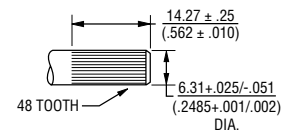
SHAFT TYPE "T" (USES BUSHING U)



STD. LENGTHS:

16.0 (.630)	22.0 (.866)
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SHAFT TYPE "W" (USES BUSHING A)

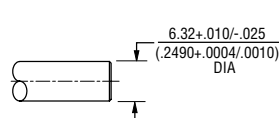


STD. LENGTHS:

25.40 (1.00)

Metal Shaft Styles

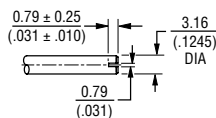
SHAFT TYPE "A" (USES BUSHING A)



STD. LENGTHS:

12.70 (.500)	15.88 (.625)	19.05 (.750)	22.23 (.875)	25.4 (1.000)
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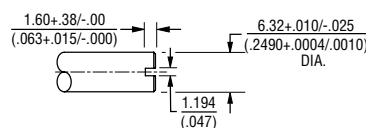
SHAFT TYPE "E" (USES BUSHING C)



STD. LENGTHS:

12.0 (.500)	16.0 (.625)	19.0 (.750)
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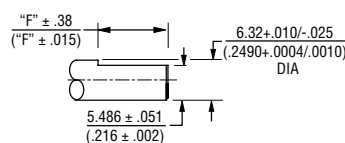
SHAFT TYPE "G" (USES BUSHING A)



STD. LENGTHS:

12.70 (.500)	15.88 (.625)	19.05 (.750)	22.23 (.875)
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SHAFT TYPE "H" (USES BUSHING A)



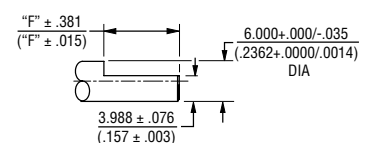
STD. LENGTHS:

19.05 (.750)	22.23 (.875)
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FLAT LENGTH "F":

7.95 (.313)	11.13 (.438)
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SHAFT TYPE "S" (USES BUSHING R)



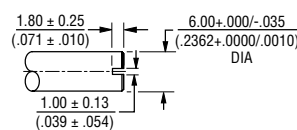
STD. LENGTHS:

16.0 (.630)	22.0 (.866)
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FLAT LENGTH "F":

6.99 (.275)	12.98 (.511)
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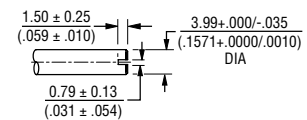
SHAFT TYPE "J" (USES BUSHING R)



STD. LENGTHS:

16.0 (.630)	22.0 (.866)
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SHAFT TYPE "V" (USES BUSHING U)



STD. LENGTHS:

16.0 (.630)	22.0 (.866)
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TOLERANCES EXCEPT AS SHOWN: .XX = ± .02
XXX = ± .005
XXXX = ± .0005
XXXXX = ± .0127

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

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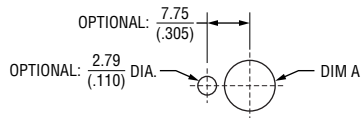
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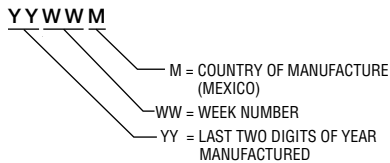
Suggested Panel Layout



BUSHING	DIM A
A	$\frac{9.91}{(.39)}$
C	$\frac{6.73}{(.265)}$
R	$\frac{10.5}{(.413)}$
U	$\frac{7.5}{(.295)}$

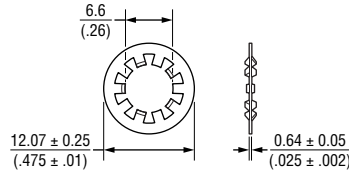
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Date Code Description

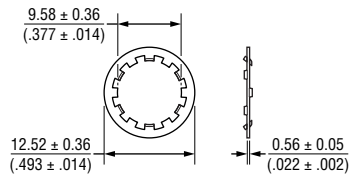


Hardware

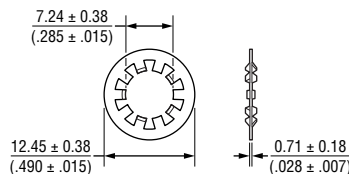
LOCKWASHER H-37-1



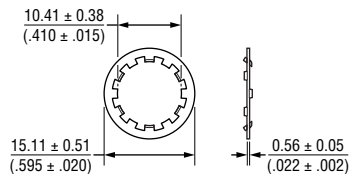
LOCKWASHER H-37-2



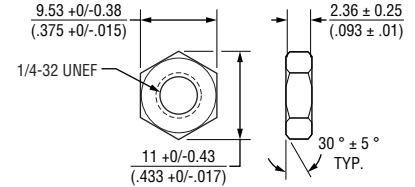
LOCKWASHER H-37-3



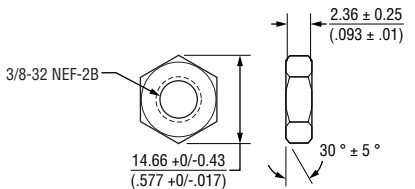
LOCKWASHER H-37-4



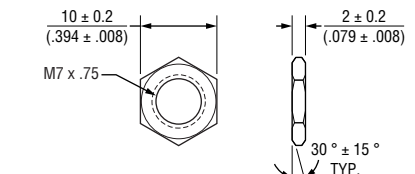
NUT H-38-1



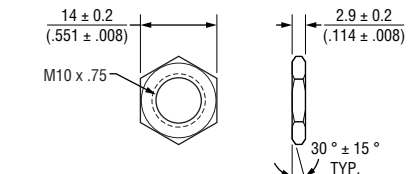
NUT H-38-2



NUT H-38-8



NUT H-38-9



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

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How to Order Model 96 Panel Controls

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96	A	1	A	-	A	28	-	A	15	L
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ANTI-ROTATION LUG	
A	Single .305 " (7.8 mm) R, 90 °CW
D	No Lug

SECTIONS
1 Single

BUSHING	
A	Metal Plain 3/8 " (9.53 mm) D x 3/8 " (9.53 mm) L
C	Metal Plain 1/4 " (6.35 mm) D x 1/4 " (6.35 mm) L
R	Metal Plain 10 mm D x 9 mm L
U	Metal Plain 7 mm D x 9 mm L

MODEL	
96	Single-Turn, In-Line PC Pins, Sealed

SHAFT LENGTH (FMS)		AVAILABLE ONLY IN BUSHING
Code	Description	Code
16	1/2 "L	A, C
20	5/8 "L	A, C
24	3/4 "L	A, C
28	7/8 "L	A
32	1 "L	A
METRIC		
16	16 mmL	R, U
22	22 mmL	R, U

AVAILABLE ONLY IN		
SHAFT TYPE	LENGTHS (CODE)	BUSHINGS (CODE)
B Plastic Single Slotted 1/4 " (6.35 mm) D	16, 20, 24, 28	A
C Plastic Single Flatted 1/4" (6.35 mm) D	24, 28	A
D Plastic Single Plain 1/8" (3.18 mm) D	16, 20, 24	C
R Plastic Single Slotted 6 mm D	Metric 16, 22	R
T Plastic Single Slotted 4 mm D	Metric 16, 22	U
W Plastic Single Knurled 1/4" (6.35 mm) D	32	A
A Metal Single Plain 1/4" (6.35 mm) D	16, 20, 24	A
E Metal Single Slotted 1/8" (3.18 mm) D	16, 20, 24	C
G Metal Single Slotted 1/4" (6.35 mm) D	16, 20, 24, 28	A
H Metal Single Flatted 1/4" (6.35 mm) D	24, 28	A
J Metal Single Slotted 6 mm D	Metric 16, 22	R
S Metal Single Flatted 6 mm D	Metric 16, 22	R
V Metal Single Slotted 4 mm D	Metric 16, 22	U

RoHS IDENTIFIER	
L	Compliant

ELEMENT TAPER TYPE/TOLERANCE		RESISTANCE CODE VALUE IN OHMS	
(A) (H)	Linear Cermet ±10 % Linear Cermet ±5 %	(05) - 100	(30) - 15 K
		(28) - 150	(16) - 20 K
		(06) - 200	(17) - 25 K
		(07) - 250	(18) - 50 K
		(08) - 500	(20) - 100 K
(B) (E)	Linear C-P ±20 % Linear C-P ±10 %	(10) - 1 K	(21) - 200 K
		(12) - 2.5 K	(22) - 250 K
		(13) - 5 K	(23) - 500 K
		(15) - 10 K	(25) - 1 M
		(16) - 20 K	
(C) (D) (F) (G) (S) (T)	CW Audio Cermet ±10 % CW Audio C-P ±20 % CCW Audio Cermet ±10 % CCW Audio C-P ±20 % CW Audio C-P ±10 % CCW Audio C-P ± 10 %	(10) - 1 K	(18) - 50 K
		(12) - 2.5 K	(20) - 100 K
		(13) - 5 K	(22) - 250 K
		(15) - 10 K	(23) - 500 K
		(17) - 25 K	(25) - 1 M

*Boldface features are Bourns standard options.
All others are available with higher minimum order quantities.*

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REV. 10/20

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