

The Model 3311 control is a product of Bourns proven expertise in conductive plastic technology. It delivers excellent linearity, contact resistance variation and rotational life in low cost un-cased configuration.

The 3311 control is designed expressly for integrated radio-control servo applications. It is delivered un-cased for installation inside customer manufactured servo-control modules.

The superior performance of the 3311 contributes significantly to the overall smoothness and accuracy of the servo-control system.

## FEATURES

- Independent Linearity  $\pm 5\%$
- Conductive Plastic for improved contact resistance variation 3% max. throughout specified rotational life
- Rotational Life 1,000,000 cycles

## STANDARD RESISTANCES

Resistance (Ohms)	Part Numbers
1500	3311P-1-152
5000	3311P-1-502

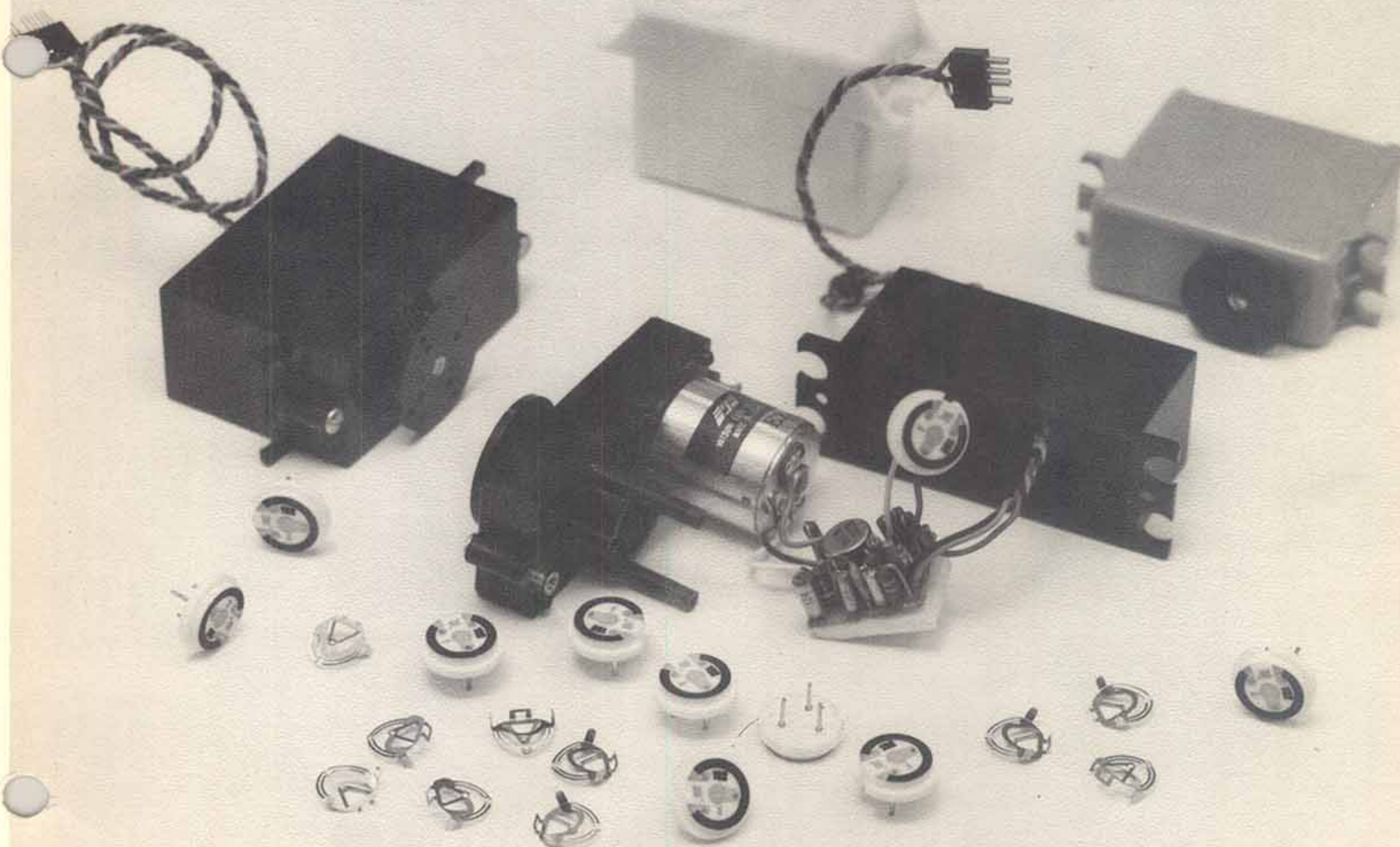
Bourns does not manufacture servo mechanisms pictured.



## MODEL 3311

POTENTIOMETER AND WIPER  
FOR SERVO ASSEMBLIES

OBSOLETE 1976





# POTENTIOMETER AND WIPER FOR SERVO ASSEMBLIES

# MODEL 3311

## ELECTRICAL CHARACTERISTICS

Standard Resistance Range	1500 ohms thru 5000 ohms (other resistances available thru 100,000 ohms)
Resistance Tolerance	±15%
Independent Linearity†	±5%
Absolute Min. Resistance	2 ohms
Theoretical Electrical Travel	265° ±5°
Contact Resistance Variation	3% maximum
Resolution	Essentially infinite
Power Rating (300 volts max.)	
50°C	0.25W

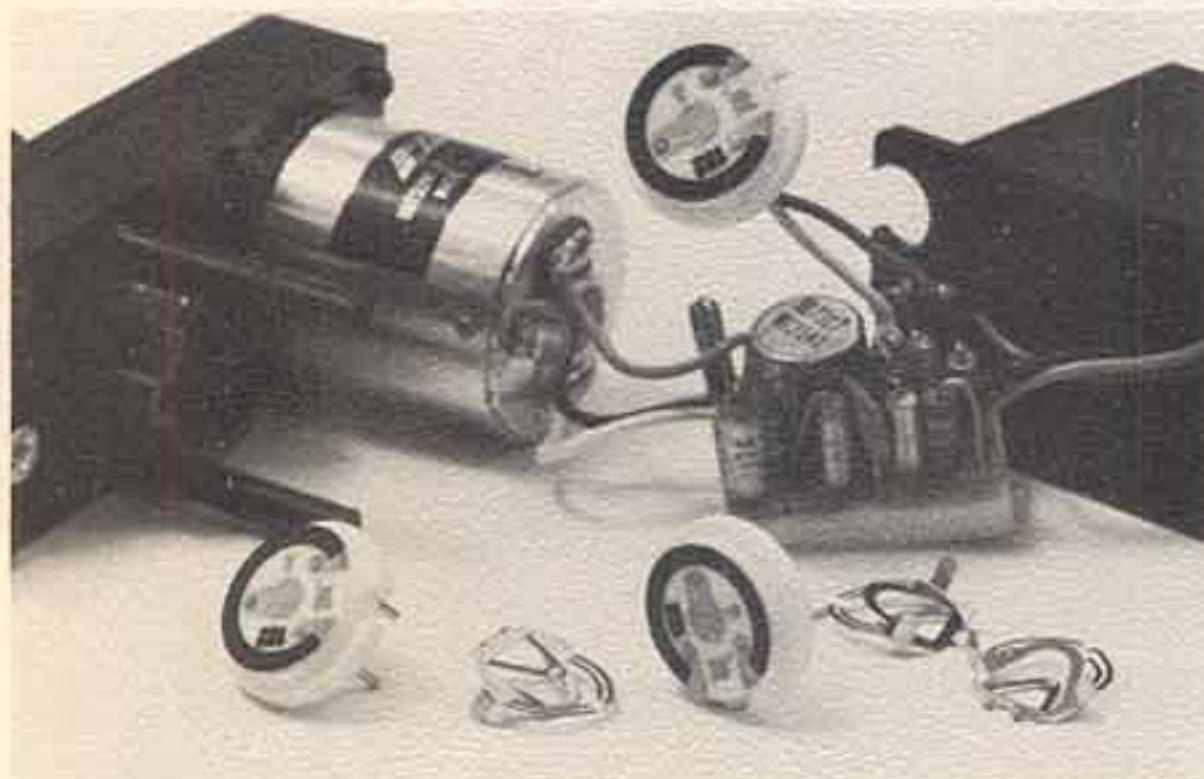
## ENVIRONMENTAL CHARACTERISTICS

Operating Temperature Range	-55°C to +125°C
Vibration, 20G's	5 to 2000 Hz
Contact Bounce, Millisec	0.1%
Shock 50G's	
Contact Bounce, Millisec	0.1%
Load Life	1,000 hours
Maximum Total Resistance Shift	±10%
Rotational Life	1,000,000 cycles
Maximum Contact Resistance Variation	3%
Humidity	Less than ±10% change in total resistance after 24 hours at 95% Relative humidity, 40°C

†Centerline of rotor to be within .010" of centerline of element retaining cavity.

Note: Customer to apply a thin coat of Bourns lubricant to element and collector during final assembly.

Bourns H-01 lubricant provided at no charge



## BASIC PRICES\*

500-999 — \$1.00    1000-1999 — \$.85

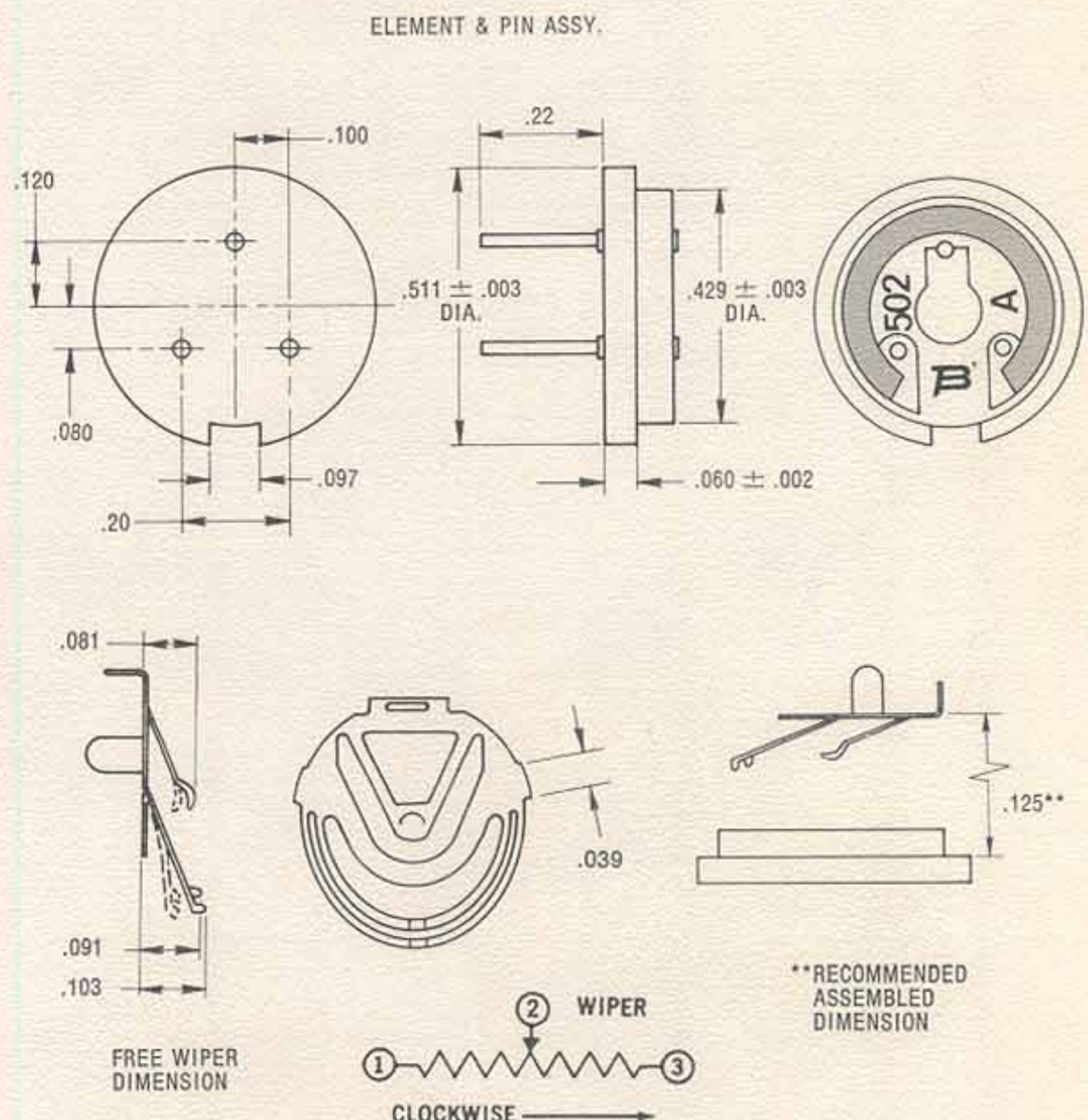
Samples available on request.

Consult factory for volume pricing.

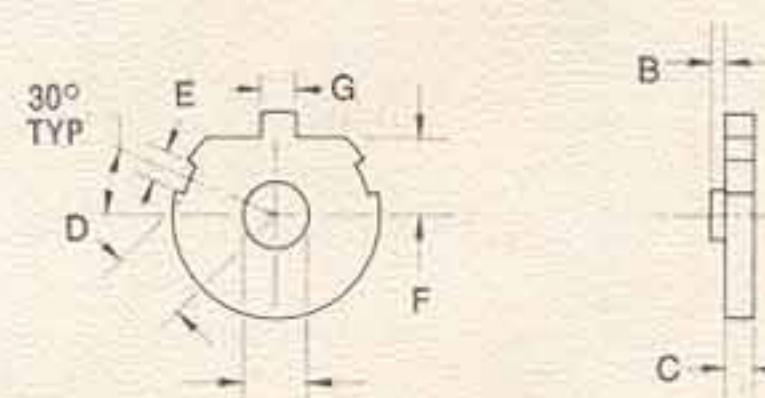
For pricing or information about Bourns many other potentiometer models, contact your local Bourns representative or distributor... or contact the factory direct.



TRIMPOT PRODUCTS DIVISION  
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RIVERSIDE, CALIFORNIA 92507  
PHONE 714 684-1700



## RECOMMENDED CUSTOMER ROTOR DIMENSIONS TO OBTAIN OPTIMUM PERFORMANCE



A)	.145	E)	.060
B)	.025/.010	F)	.165
C)	.037	G)	.060
D)	.185		

TOLERANCES: EXCEPT WHERE NOTED  
DECIMALS: .XX ± .010, XXX ± .005

## METRIC CONVERSION

IN.	MM
.002	.051
.003	.076
.060	1,524
.080	2,032
.081	2,057
.091	2,311
.097	2,464
.100	2,540
.103	2,616
.120	3,048
.20	5,080
.22	5,588
.429	10,897
.511	12,979

\*Bourns reserves the right to change specifications and prices without notice. Prices are stated in U.S. dollars, F.O.B. Riverside, California.