

## Features

- Multiturn / Cermet / Sealed
- Machine insertable SIP design provides extra cost savings
- .080 inch width allows side-by-side spacing on standard 0.100 inch grid
- PC board profile - only 0.185 inches high



Model 20 is obsolete and not recommended for new designs.

## 20 - 20 mm Rectangular Trimpot® Trimming Potentiometer

### Electrical Characteristics

Standard Resistance Range  
 ..... 10 ohms to 2 megohms  
 (see standard resistance table)

Resistance Tolerance .....  $\pm 10\%$  std.

Absolute Minimum Resistance  
 ..... 5.0 % or 3 ohms max.  
 (whichever is greater)

Contact Resistance Variation  
 ..... 1.0 % or 1 ohm max.  
 (whichever is greater)

Adjustability  
 Voltage .....  $\pm 0.01\%$   
 Resistance .....  $\pm 0.05\%$

Resolution ..... Infinite

Insulation Resistance ..... 500 vdc.  
 100 megohms min.

Dielectric Strength  
 Sea Level ..... 1000 vac  
 70,000 Feet ..... 350 vac  
 Effective Travel ..... 15 turns nom.

### Environmental Characteristics

Power Rating (250 volts max.)  
 70 °C ..... 0.25 watt  
 150 °C ..... 0 watt

Temperature Range ..... -55 °C to +125 °C

Temperature Coefficient  
 50 Ohms and Above .....  $\pm 100$  ppm/°C  
 Below 50 Ohms .....  $\pm 150$  ppm/°C

Seal Test ..... 85 °C Fluorinert

Humidity ..... MIL-STD-202 Method 103  
 96 hours  
 (3 %  $\Delta$ TR, 20 megohms IR)

Vibration ..... 20 G (1 %  $\Delta$ TR; 1 %  $\Delta$ VR)

Shock ..... 50 G (1 %  $\Delta$ TR; 1 %  $\Delta$ VR)

Load Life  
 ..... 1,000 hours, 0.25 watt @ 70 °C  
 (3 %  $\Delta$ TR, 3 % or 3 ohms  
 whichever is greater, CRV)

Rotational Life ..... 200 cycles  
 (3 %  $\Delta$ TR, 3 % or 3 ohms  
 whichever is greater, CRV)

### Physical Characteristics

Torque ..... 5.0 oz-in. max.

Mechanical Angle ..... Wiper idles

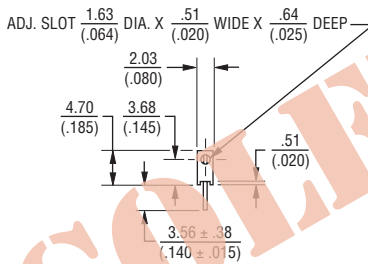
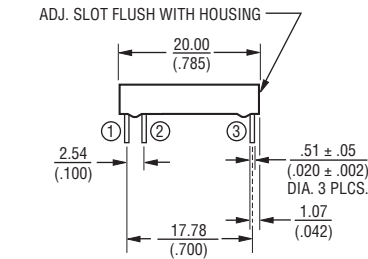
Terminals ..... Solderable pins

Weight ..... 0.015 oz.

Marking ..... Manufacturer's  
 trademark, resistance code,  
 terminal numbers, date code,  
 manufacturer's model number  
 and style

Standard Packaging ..... 25 pcs. per tube

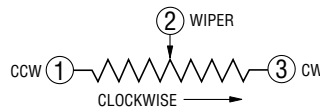
### Product Dimensions



BOURNS ADJUSTMENT TOOL H-91  
 AVAILABLE FOR THIS MODEL.

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

TOLERANCES:  $\frac{0.25}{(.010)}$  EXCEPT WHERE NOTED



### Standard Resistance Table

Resistance (Ohms)	Resistance Code
10	100
20	200
50	500
100	101
200	201
500	501
1,000	102
2,000	202
5,000	502
10,000	103
20,000	203
50,000	503
100,000	104
200,000	204
500,000	504
1,000,000	105
2,000,000	205

### How To Order

**20 P - 1 - 103 LF**

Model \_\_\_\_\_

Style \_\_\_\_\_

Standard or Modified  
 Product Indicator \_\_\_\_\_  
 -1 = Standard Product

Resistance Code \_\_\_\_\_

Terminations \_\_\_\_\_  
 LF = 100 % Tin-plated (RoHS compliant)  
 Blank = 90 % Tin / 10 % Lead-plated  
 (Standard)

Consult factory for other available options.

REV. 07/10

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

"Trimpot" is a registered trademark of Bourns, Inc.

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications.