

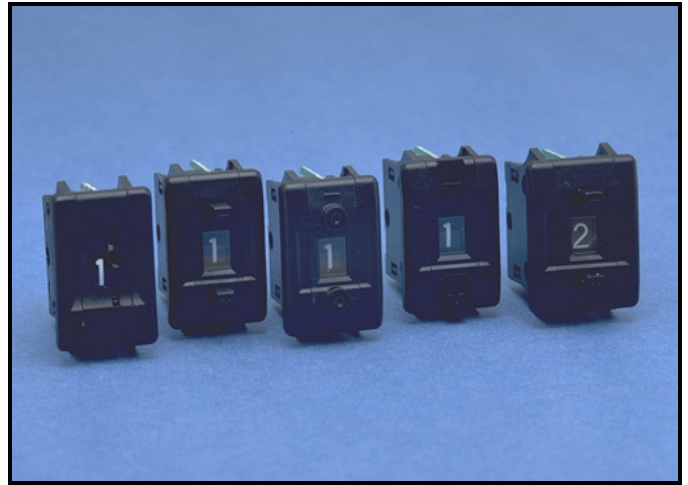
# EECO®

## 1100 SERIES

### THUMBWHEEL SWITCHES

*EECO's 1100 Series switches offer four different actuator styles in a compact, snap-in design.*

The **1100 Series** snaps in from the front of the panel, making installation fast and easy. The **1100 Series** is offered in four different actuator styles, allowing the engineer the greatest design flexibility. Actuator styles include standard thumbwheel, push-set, pen-set and lock-set models. The pen-set and lock-set models eliminate accidental setting changes and are an ideal choice for critical "set and forget" applications. The **1100 Series** is offered in either binary or decimal code versions, and optional features include stop pins, and provision for diode installation. The **1100 Series** is backed by EECO's one-year warranty.



## SPECIFICATIONS

### MECHANICAL

|                            |                         |
|----------------------------|-------------------------|
| No. of Switching Positions | 10                      |
| Life                       | Minimum 300,000 Detents |
| Actuation Force            | 10.5 Oz.                |
| Weight                     | 0.11 Oz.                |

### ELECTRICAL

|                                   |                            |
|-----------------------------------|----------------------------|
| Maximum Rated Load, Non-Switching | 500 mA Per Common Terminal |
| Maximum Rated Load, Switching     | 100 mA At 50 VAC or 28 VDC |
| Contact Resistance (Initial)      | 200 mΩ Maximum             |
| Insulation Resistance             | 10 MΩ Minimum              |
| Dielectric Withstanding Voltage   | 500 VAC For 1 Minute       |

### ENVIRONMENTAL

|                       |                                |
|-----------------------|--------------------------------|
| Operating Temperature | -20°C To +60°C                 |
| Storage Temperature   | -40°C To +80°C                 |
| Vibration             | 50 m/Sec <sup>2</sup> (5-55Hz) |
| Shock                 | 100 m/Sec <sup>2</sup> (10G)   |
| Seal                  | Dust Resistant                 |

### MATERIALS

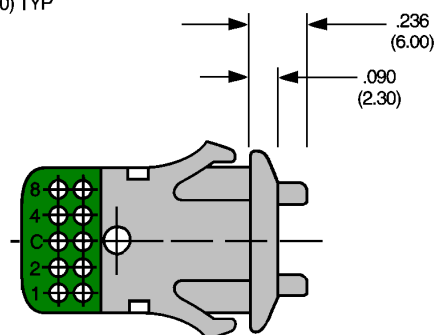
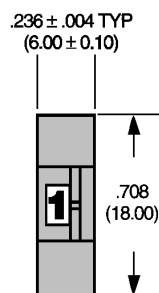
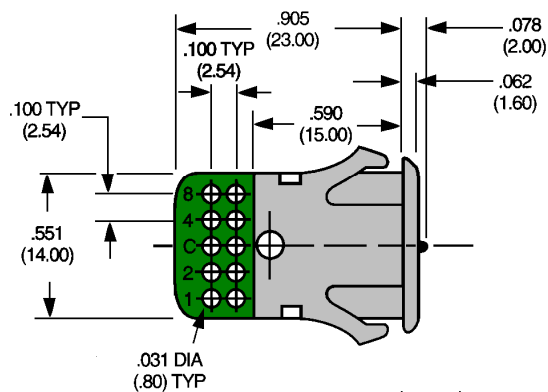
|               |                                        |
|---------------|----------------------------------------|
| Plastic       | Polyacetal Resin                       |
| Circuit Board |                                        |
| Base Material | Glass Epoxy                            |
| Plating       | Gold Over Nickel Plating               |
| Termination   | Plated Through Holes                   |
| Contacts      | Copper Alloy, Gold Over Nickel Plating |

## RoHS COMPLIANCE

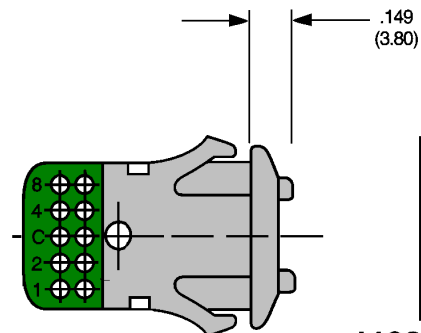
EECO Switch is fully committed to complying with the European Lead-Free and RoHS directives. The 1100 Series is Lead Free and RoHS compliant.

## OUTLINE DIMENSIONS

### FRONT MOUNT

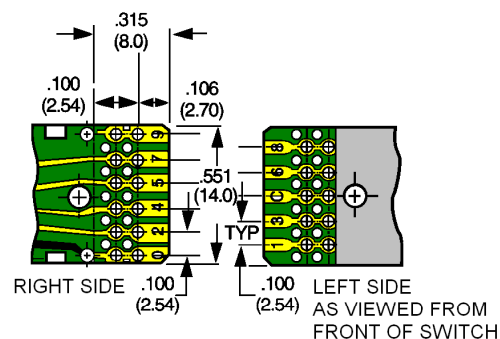


**1101  
PUSH-SET**



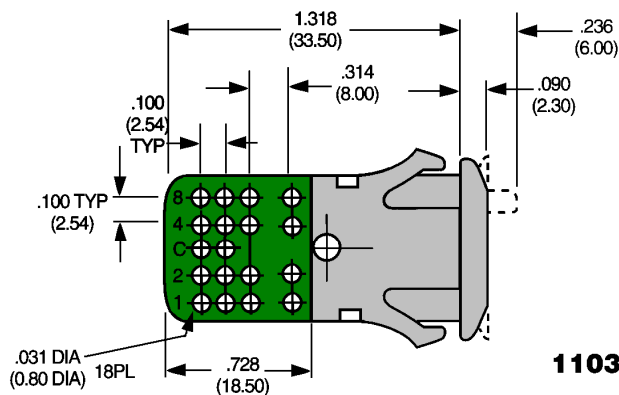
**1102 PEN-SET**

### DECIMAL CODE MODELS



### NOTES

1. Character height is .126 (3.2)
2. ( ) dimensions in mm.
3. Tolerance on all dimensions 0.010 unless otherwise specified
4. Dimensions typical for all versions.

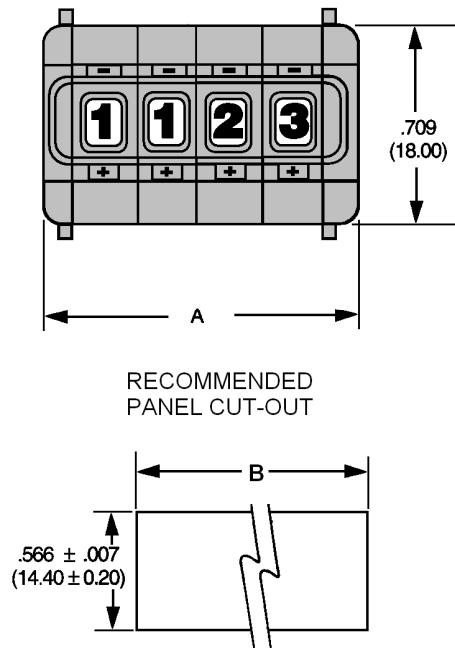


**1103 LOCK-SET**

### PCB WITH DIODE PROVISION

# MOUNTING DIMENSIONS

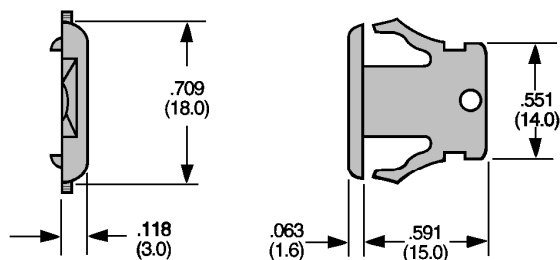
## 1100 FRONT MOUNT SERIES



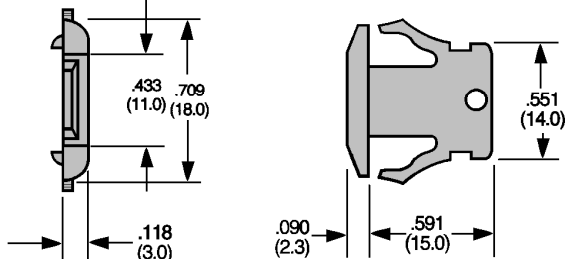
| No. Of Switches | A              | B              |
|-----------------|----------------|----------------|
| 1               | 0.47<br>(12.0) | 0.32<br>(8.2)  |
| 2               | 0.71<br>(18.0) | 0.56<br>(14.2) |
| 3               | 0.94<br>(24.0) | 0.80<br>(20.2) |
| 4               | 1.18<br>(30.0) | 1.03<br>(26.2) |
| 5               | 1.42<br>(36.0) | 1.27<br>(32.2) |
| 6               | 1.65<br>(42.0) | 1.50<br>(38.2) |
| 7               | 1.89<br>(48.0) | 1.74<br>(44.2) |
| 8               | 2.13<br>(54.0) | .98<br>(50.2)  |
| 9               | 2.36<br>(60.0) | 2.21<br>(56.2) |
| 10              | 2.60<br>(66.0) | 2.45<br>(62.2) |

# OUTLINE DIMENSIONS - Spacers And Endpieces

## ENDPIECES

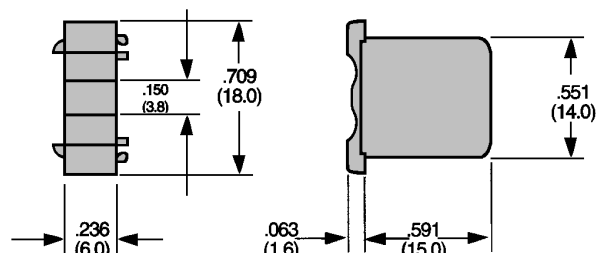


## E11SJ (THUMBWHEEL)

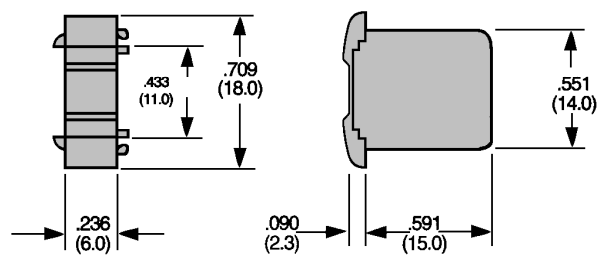


## E21SJ (1101, 1102, 1103 PUSHWHEEL)

## SPACERS



## S11SJ (1100 THUMBWHEEL)



## S21SJ (1101, 1102, 1103 PUSHWHEEL)

## 1100 SERIES STANDARD SWITCHES

| THUMBWHEEL | PUSH-SET | PEN-SET | LOCK-SET | CODE DESCRIPTION             | NO. OF POSITIONS | TRUTH TABLE |
|------------|----------|---------|----------|------------------------------|------------------|-------------|
| 110001J    | 110101J  | 110201J | 110301J  | 1 Pole Decimal               | 10               | A02         |
| 110002J    | 110102J  | 110202J | 110302J  | 1 Pole BCD                   | 10               | B02         |
| 110052J    | 110152J  | 110252J | 110352J  | 1 Pole BCD w/Diode Provision | 10               | B02         |

**A02**

DECIMAL 1 Pole 10 Position

| DIAL | Common (C) Connected To ● |   |   |   |   |   |   |   |   |   |
|------|---------------------------|---|---|---|---|---|---|---|---|---|
| L    | 0                         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0    | ●                         |   |   |   |   |   |   |   |   |   |
| 1    |                           | ● |   |   |   |   |   |   |   |   |
| 2    |                           |   | ● |   |   |   |   |   |   |   |
| 3    |                           |   |   | ● |   |   |   |   |   |   |
| 4    |                           |   |   |   | ● |   |   |   |   |   |
| 5    |                           |   |   |   |   | ● |   |   |   |   |
| 6    |                           |   |   |   |   |   | ● |   |   |   |
| 7    |                           |   |   |   |   |   |   | ● |   |   |
| 8    |                           |   |   |   |   |   |   |   | ● |   |
| 9    |                           |   |   |   |   |   |   |   |   | ● |

**B02**

BCD 1 Pole 10 Position

| DIAL | Common (C) Connected To ● |   |   |   |
|------|---------------------------|---|---|---|
| L    | 1                         | 2 | 4 | 8 |
| 0    |                           |   |   |   |
| 1    | ●                         |   |   |   |
| 2    |                           | ● |   |   |
| 3    | ●                         | ● |   |   |
| 4    |                           |   | ● |   |
| 5    | ●                         |   | ● |   |
| 6    |                           | ● | ● |   |
| 7    | ●                         | ● | ● |   |
| 8    |                           |   |   | ● |
| 9    | ●                         |   |   | ● |

### AVAILABLE OPTIONS

**D** Decimal Point  
Stop Pins (Factory Installed Only)

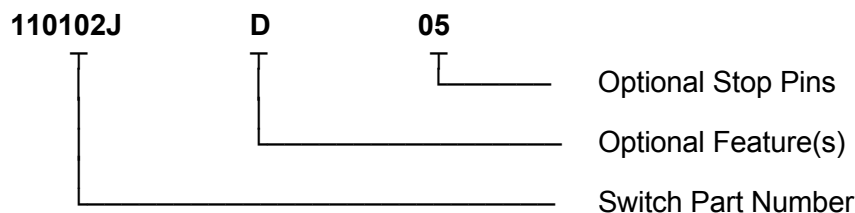
### HARDWARE KITS AND ACCESSORIES

**E11SJ** Endpieces (Thumbwheel, Pairs)  
**E21SJ** Endpieces (Push Button, Pairs)

**S11SJ** Spacer (Thumbwheel)  
**S21SJ** Spacer (Push Button)

**Note: Replace "X" With Number of Stations Required When Ordering Hardware Kits**

### ORDERING EXAMPLE



**NOTE:** 1100 Series Switches And Endpieces Sold Unassembled

#### EECO SWITCH

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Fax: (714) 482-9429  
E-Mail: sales@eecoswitch.com



8/7/08

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