



1400 SERIES

THUMBWHEEL SWITCHES

EECO's 1400 Series switches feature snap-in front mounting in a large, easy to use package size.

The **1400 Series** snaps in from the front of the panel, allowing the user to create multi-switch assemblies quickly without the need for additional mounting hardware. The **1400 Series** is offered in a choice of thumbwheel, push-set and lock-set actuator styles. The lock-set model features hinged actuators which fold flush with the front of the switch, eliminating accidental setting changes, and are an ideal choice for critical "set and forget" applications. The **1400 Series** is available as either a 10 position decimal code switch or as a 10 or 16 position binary coded version. Optional features include stop pins, and provision for diode installation. The **1400 Series** is backed by EECO's one-year warranty.



SPECIFICATIONS

MECHANICAL

No. of Switching Positions	10 and 16
Life	Minimum 1,000,000 Detents
Actuation Force	14 Oz.
Weight	0.16 Oz.

ELECTRICAL

Maximum Rated Load, Non-Switching	1.0 A Per Common Terminal
Maximum Rated Load, Switching	100 mA At 50 VAC or 28 VDC
Contact Resistance (Initial)	200 m Ω Maximum
Insulation Resistance	10 M Ω 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 ² (5-55Hz)
Shock	100 m/Sec ² (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

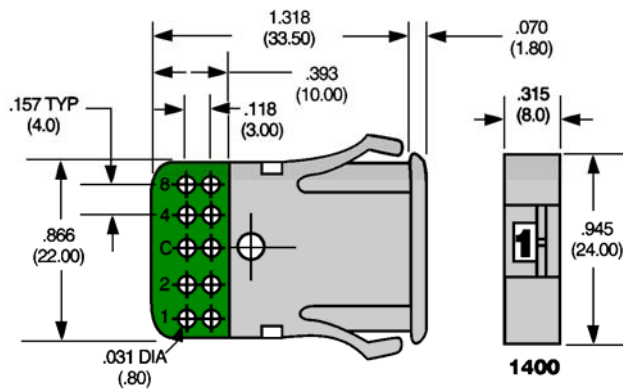
RoHS COMPLIANCE

EECO Switch is fully committed to complying with the European Lead-Free and RoHS directives. The 1400 Series is Lead Free and RoHS compliant.

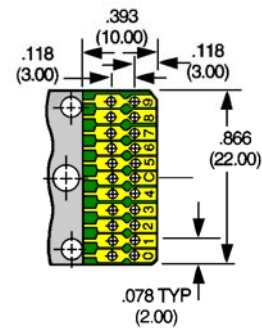
OUTLINE DIMENSIONS

FRONT MOUNT

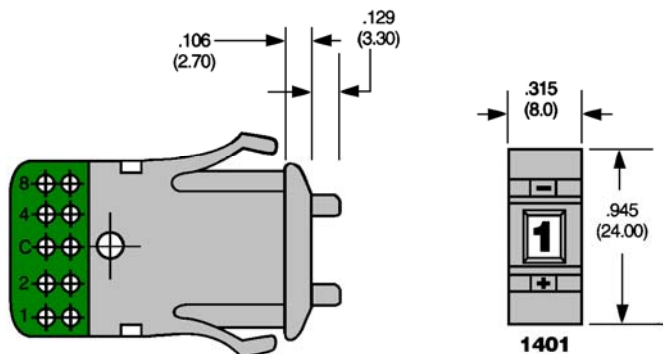
THUMBWHEEL



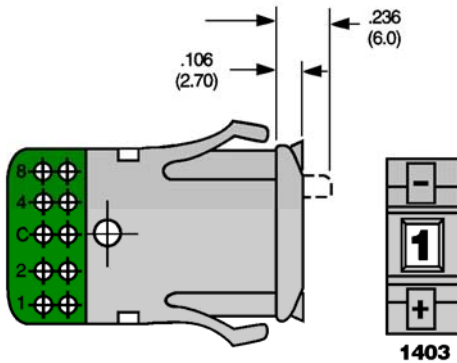
DECIMAL CODE MODELS



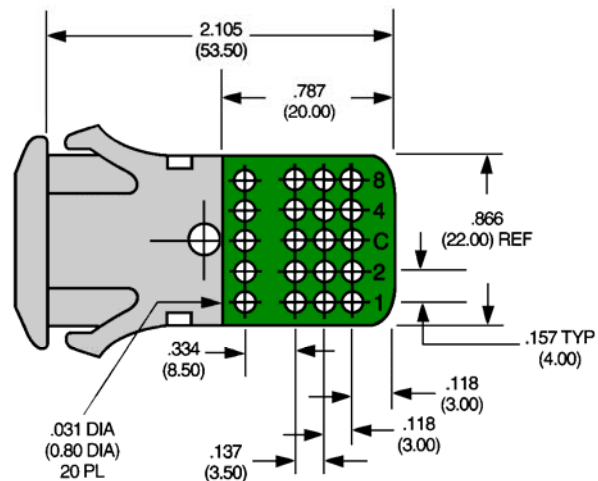
PUSH-SET



LOCK-SET



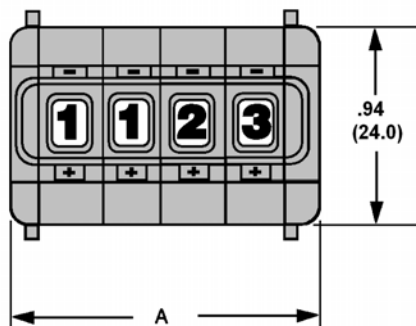
PCB WITH DIODE PROVISION



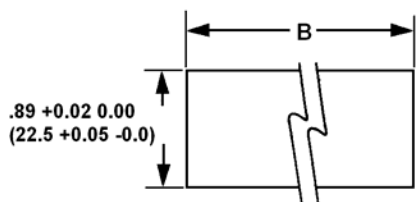
NOTES:

1. Character Height is .190 (4.8)
2. () dimensions in mm.
3. Tolerance on all dimensions .010 unless otherwise specified
4. Dimensions typical all series.

MOUNTING DIMENSIONS



RECOMMENDED PANEL CUT OUT

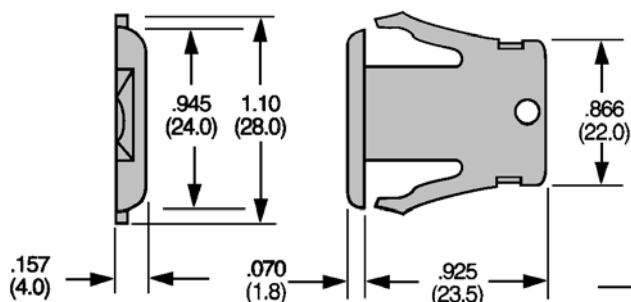


PANEL THICKNESS 0.031 TO 0.118 (0.08 TO 3.0)

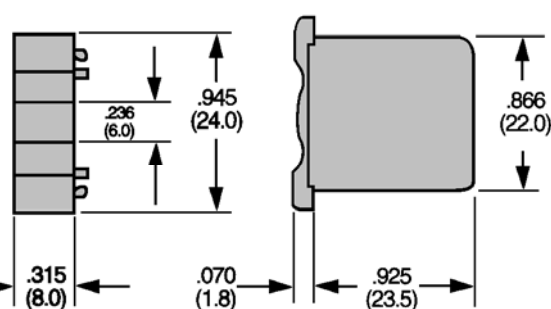
No. Of Switches	A	B
1	0.63 (16.0)	0.45 (11.5)
2	0.94 (24.0)	0.77 (19.5)
3	1.26 (32.0)	1.08 (27.5)
4	1.57 (40.0)	1.40 (35.5)
5	1.89 (48.0)	1.71 (43.5)
6	2.20 (56.0)	2.03 (51.5)
7	2.52 (64.0)	2.34 (59.5)
8	2.83 (72.0)	2.66 (67.5)
9	3.15 (80.0)	2.97 (75.5)
10	3.46 (88.0)	3.29 (83.5)

OUTLINE DIMENSIONS - Spacers And Endpieces

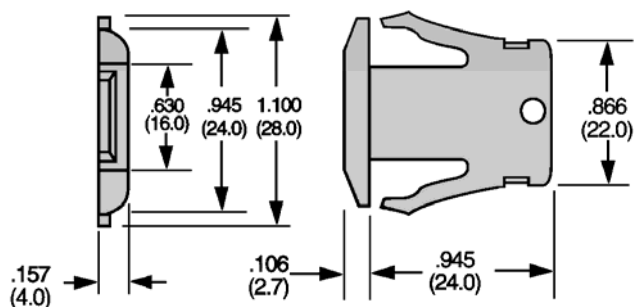
END PIECES (PREFIX "E")
E14SJ (1400 THUMBWHEEL)



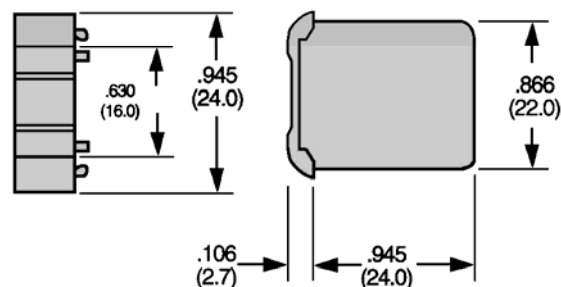
SPACERS (PREFIX "S")
S14SJ (1400 THUMBWHEEL)



E13 SJ (1401, 1403 PUSHWHEEL)



S24SJ (1401, 1403 PUSHWHEEL)



1400 STANDARD MODELS

THUMBWHEEL	PUSH-SET	LOCK-SET	CODE DESCRIPTION	NO. OF POSITIONS	TRUTH TABLE
140001J	140101J	140301J	1 Pole Decimal	10	A02
140002J	140102J	140302J	1 Pole BCD	10	B02
140012J	140012J	140312J	1 Pole BCD Complement	10	C12
140052J	140152J	140352J	1 Pole BCD w/Diode Provision	10	B02
	140134J	140334J	1 Pole Hexadecimal	16	B07
	140184J	140384J	1 Pole Hexadecimal w/Diode Provision	16	B07

TRUTH TABLES

A02

[illegible]

B02

BCD 1 Pole 10 Position				
D I A L	Common (C) Connected To ●			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●

B07

HEXADECIMAL				
1 Pole 16 Position				
D I A L	Common (C) Connected To ●			
	1	2	4	8
0				
1	●			
2		●		
3	●	●		
4			●	
5	●		●	
6		●	●	
7	●	●	●	
8				●
9	●			●
A		●		●
B	●	●		●
C			●	●
D	●		●	●
E		●	●	●
F	●	●	●	●

C12

BCD Complement 1 Pole 10 Position				
D I A L	Common (C) Connected To ●			
	1	2	4	8
0	●	●	●	●
1		●	●	●
2	●		●	●
3			●	●
4	●	●		●
5		●		●
6	●			●
7				●
8	●	●	●	
9		●	●	

AVAILABLE OPTIONS

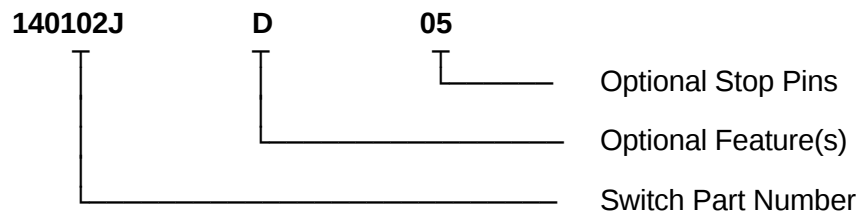
D Decimal Point
Stop Pins (Factory Installed Only)

NOTE: 1400 Series Switches Sold Unassembled

HARDWARE KITS AND ACCESSORIES

E13SJ	Endpieces (1400 Push Button, Pairs)
E14SJ	Endpieces (1400 Thumbwheel, Pairs)
S14SJ	Spacer (1400 Thumbwheel)
S24SJ	Spacer (1400 Push Button)

ORDERING EXAMPLE



EECO SWITCH

ELECO SWITCH
880 Columbia St.
Brea, CA 92821-2916
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E-Mail: sales@eecoswitch.com



10/17/07

EECO EUROPE

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