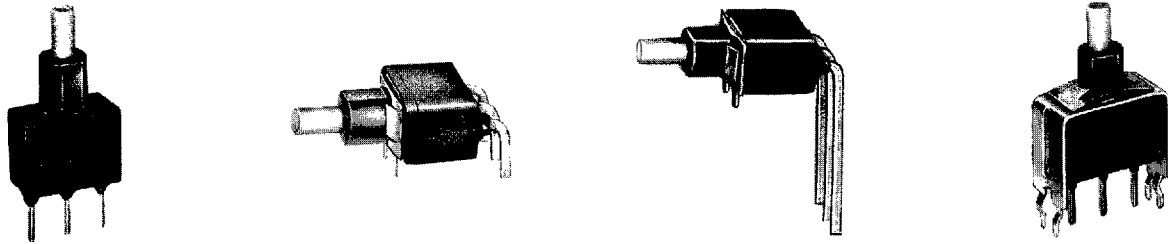


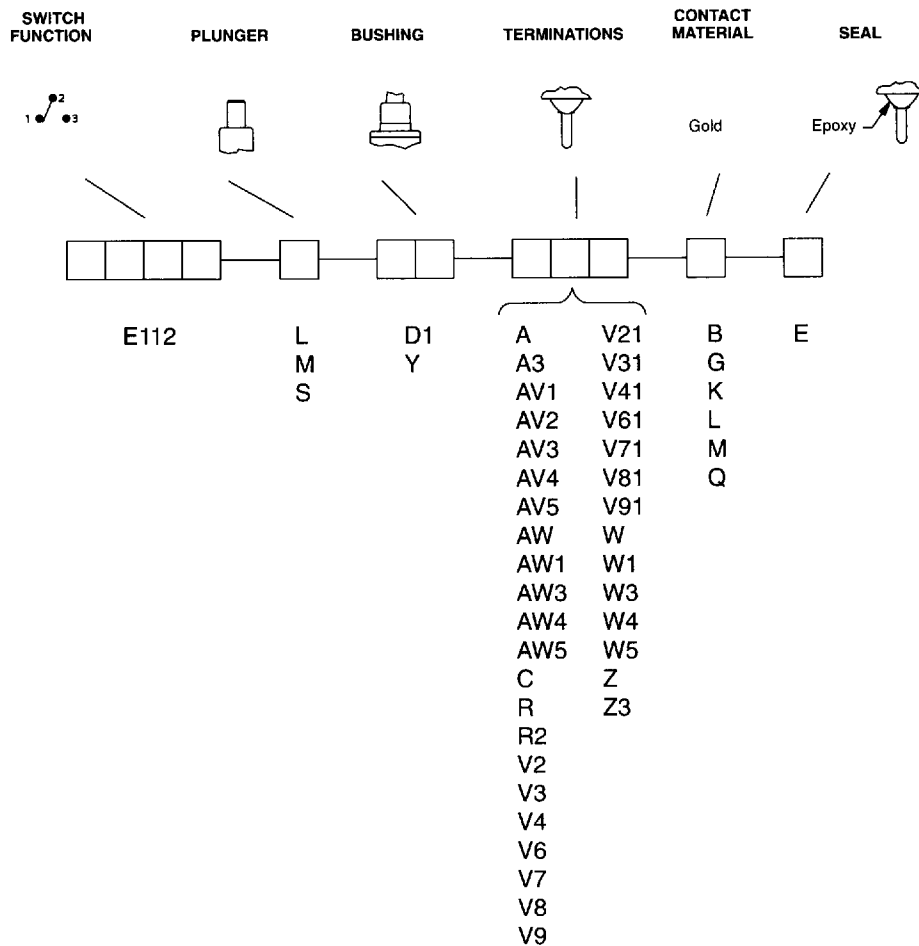
\*Process sealed—withstands soldering and cleaning processes.



models available, see page D-18.

## Easy Build-A-Switch:

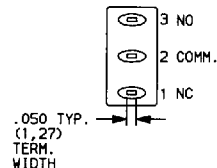
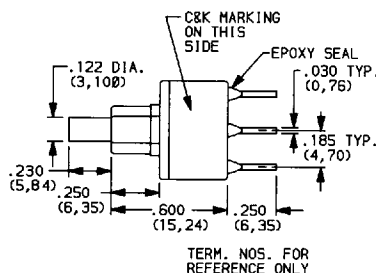
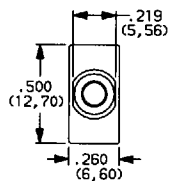
Below is a complete listing of available options for E010 SERIES SEALED MOMENTARY PUSHBUTTON SWITCHES. Build-A-Switch allows you to mix and match options to create the switch you need—simply select desired option from each category. Switch with standard options is shown on page D-18; all available options are shown and described on pages D-18 thru D-22. When building a part number, some ordering format boxes may not be filled. Dashes, hyphens or spaces in the part number are not significant, and are shown for clarity only. Complete HOW TO ORDER information is at the end of this section, page D-22. Actuator caps, hardware and accessories are available separately, see catalog section H. All models are process sealed to withstand machine soldering temperatures and pressure wash cleaning methods.





\*Process sealed—withstands soldering and cleaning processes.

## SWITCH WITH STANDARD OPTIONS



SPDT

Part No. Shown: E112SD1CQE

## SWITCH FUNCTION

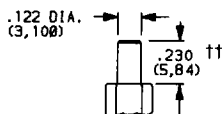
NO. POLES	MODEL† NO.	SWITCH FUNCTION		CONNECTED TERMINALS		SCHEMATIC
		POS. 1	POS. 2	POS. 1	POS. 2	
SP	E112	ON	MOM.	2-1	2-3	SPDT NC 1 ● 2 (COMM) ● 3 NO

MOM. = MOMENTARY

† All models with all options when ordered with G, L, M or Q contact material. See AGENCY APPROVALS, page VIII.

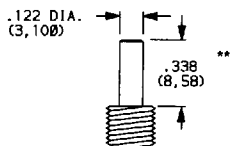
## PLUNGER

S (STD.)



Standard with D1 bushing (as shown).  
†† Subtract .100 (2,54) from plunger length when ordered with Y bushing.

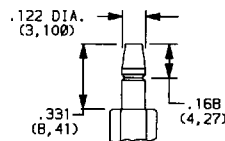
L



\*\* Standard with Y bushing (as shown).  
\*\* Add .100 (2,54) to plunger length when ordered with D1 bushing.

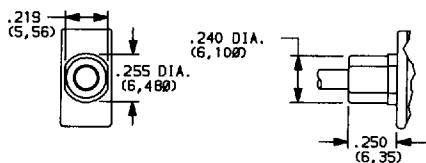
Caps available for all actuator options, see catalog section H.

M SNAP-FITTING



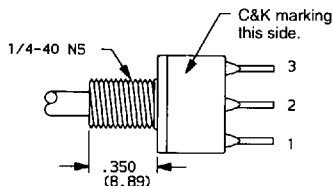
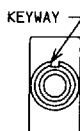
## BUSHING

D1 (STD.)



S plunger standard with D1 bushing.

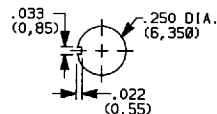
Y



L plunger standard with Y bushing.  
Available only with Z, C, Z3, W-W5 terminations.

Hardware: One dress nut P/N 780701201, one hex nut and lockwasher supplied standard.

PANEL MOUNTING



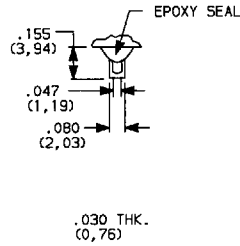
Internal o-ring actuator seal standard for all bushing options.



\*Process sealed—withstands soldering and cleaning processes.

## TERMINATIONS

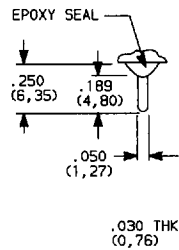
Z



Q contact material std.  
Not available with K, L, or M contact materials.

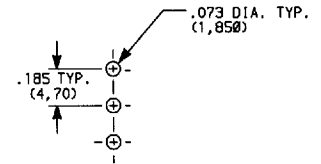
SPDT

C (STD.)



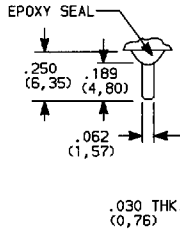
SPDT

PC MOUNTING



Q contact material std.

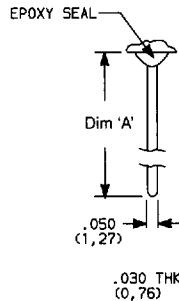
Z3 QUICK CONNECT



Q contact material std.  
Not available with K, L, or M contact materials.  
Mating quick connect available; order P/N 530100000.

SPDT

W-W1-W3-W4-W5 WIRE WRAP

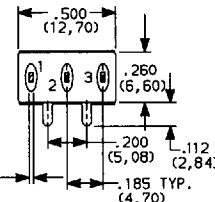
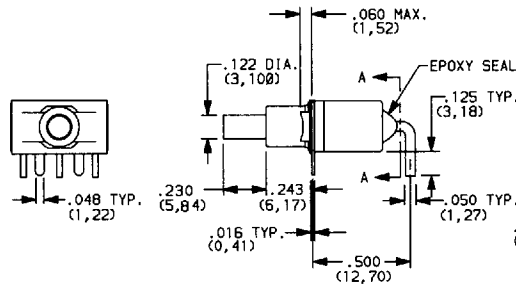


SPDT

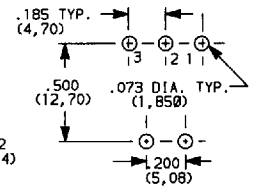
Option	Dim 'A'
W	.750 (19,05)
W1	.964 (24,49)
W3	.425 (10,80)
W4	1.062 (26,97)
W5	1.305 (33,15)

B contact material std.

A

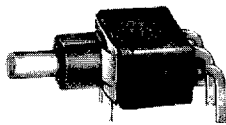


PC MOUNTING



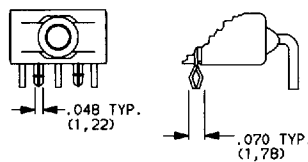
TERM. NOS. FOR REFERENCE ONLY

Part No. Shown: E112SD1ABE



A

A3 SNAP-IN

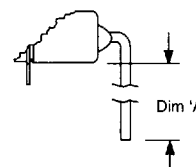


SNAP-IN DESIGN RETAINS SWITCH.

SPDT

Term. bend radii and lead-in mfg. option.  
B contact material std.  
Available with D1 bushing only.

AW-AW1-AW3-AW4-AW5 EXTENDED

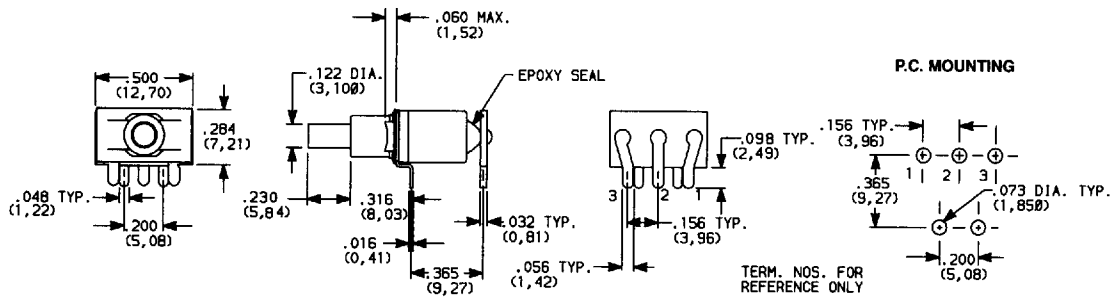
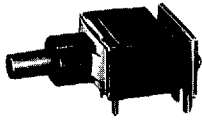


Option	Dim 'A'
AW	.50 (12,7)
AW1	.72 (18,3)
AW3	.20 (5,1)
AW4	.83 (21,1)
AW5	1.08 (27,4)

\*Process sealed—withstands soldering and cleaning processes.

## TERMINATIONS

R

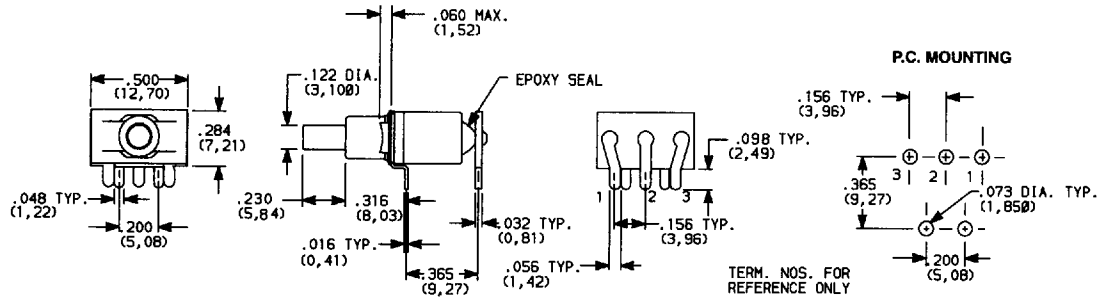
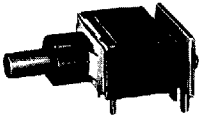


SPDT

Available with D1 bushing and B contact mat'l only.

Part No. Shown: E112SD1RBE

R2

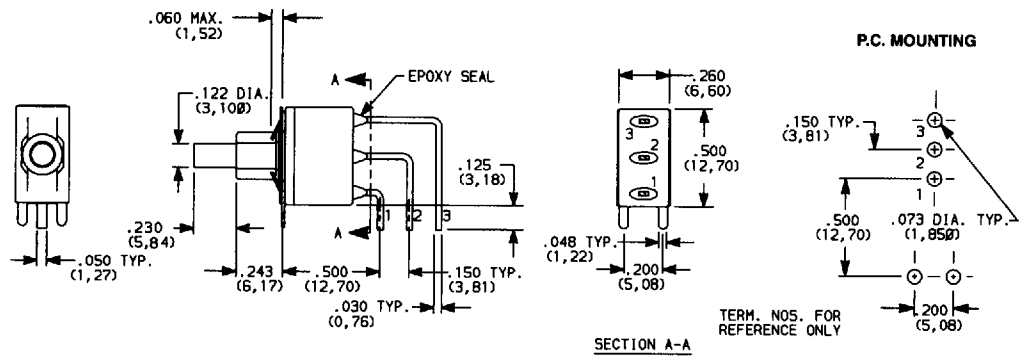


SPDT

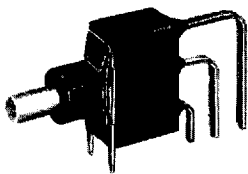
Available with D1 bushing and B contact mat'l only.

Part No. Shown: E112SD1R2BE

AV2



Part No. Shown: E112SD1AV2BE

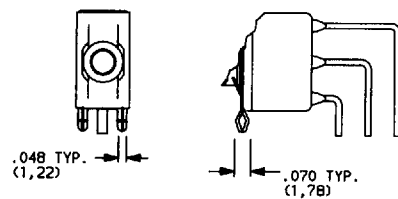


AV2

SPDT

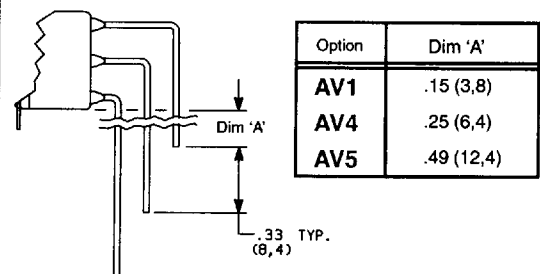
Term. bend radii and lead-in mfg. option.  
B contact material std.  
Available with D1 bushing only.

AV3 SNAP-IN



SNAP-IN DESIGN RETAINS SWITCH.

AV1-AV4-AV5 EXTENDED



Option	Dim 'A'
AV1	.15 (3,8)
AV4	.25 (6,4)
AV5	.49 (12,4)

\*Process sealed—withstands soldering and cleaning processes.

## TERMINATIONS

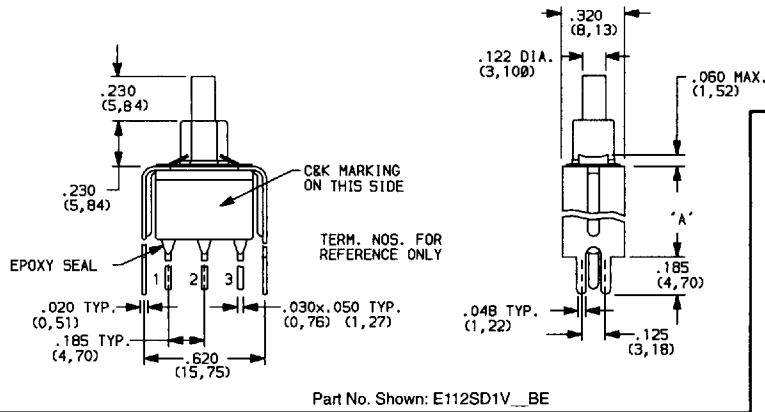


V3

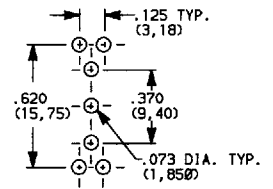
SPDT

B contact material std.  
Available with D1 bushing only.

### V3-V4-V9 REPLACES V30-V40-V90

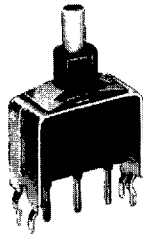


#### P.C. MOUNTING

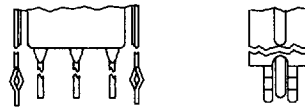


Option	Dim 'A'
V3, V31	.460 (11,68)
V4, V41	.630 (16,00)
V9, V91	1.150 (29,21)

### V31-V41-V91 SNAP-IN

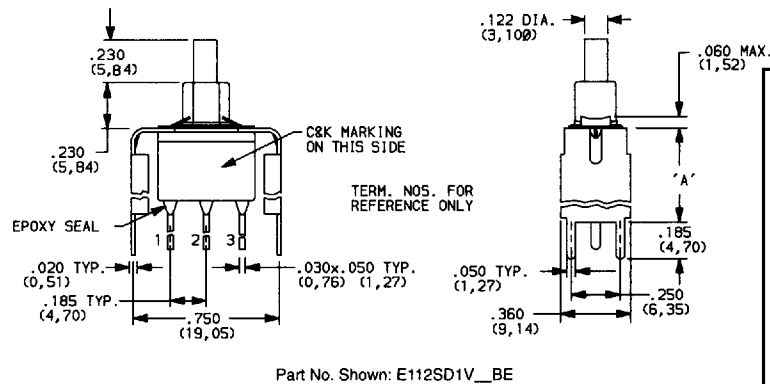


V31

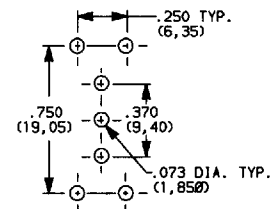


SNAP-IN DESIGN RETAINS SWITCH.

### V2-V6-V7-V8 REPLACES V20-V60-V70-V80

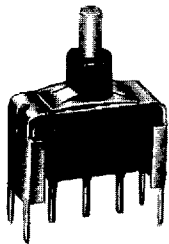


#### P.C. MOUNTING

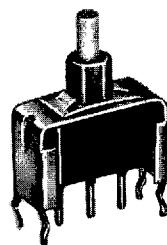


Option	Dim 'A'
V2, V21	.555 (14,10)
V6, V61	.460 (11,68)
V7, V71	.630 (16,00)
V8, V81	.953 (24,21)

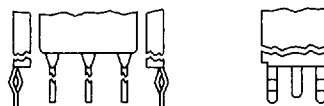
### V21-V61-V71-V81 SNAP-IN



V6



V61



SNAP-IN DESIGN RETAINS SWITCH.

SPDT

B contact material std.  
Available with D1 bushing only.

\*Process sealed—withstands soldering and cleaning processes.


## CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
B	GOLD <sup>1</sup>	GOLD <sup>1</sup>	LOW LEVEL / DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
K		TIN-LEAD <sup>6</sup>		
Q	SILVER <sup>4,5</sup>	SILVER <sup>5</sup>	POWER	4 AMPS @ 125 V AC OR 28 V DC.
M		TIN-LEAD <sup>6</sup>		
G	GOLD OVER SILVER <sup>2,3</sup>	GOLD <sup>3</sup>	LOW LEVEL / DRY CIRCUIT OR POWER	0.4 VA MAX @ 20 V AC OR DC MAX. OR 4 AMPS @ 125 V AC OR 28 V DC.
L		TIN-LEAD <sup>6</sup>		

CONTACT MATERIAL / APPLICATION RECOMMENDATIONS—SEE CHART, PAGE X.

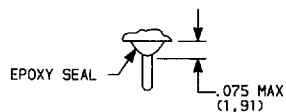
- <sup>1</sup> CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
- <sup>2</sup> END CONTACTS: Coin silver, with gold plate over nickel plate.
- <sup>3</sup> CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
- <sup>4</sup> END CONTACTS: Coin silver, silver plated.
- <sup>5</sup> CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.
- <sup>6</sup> TERMINALS: Copper alloy, with tin-lead alloy over nickel plate.

- B contact material standard with all terminations except Z, C, Z3.
- B contact material must be ordered with R, R2 terminations.
- Q contact materials standard with Z, C, Z3 terminations.
- K, L, M contact materials not available with Z, Z3 terminations.

All models  with all options when ordered with G, L, M or Q contact material. See pages D-18 and VIII.


## SEAL

E (STD.)



## HOW TO ORDER

All available E010 SERIES SEALED MOMENTARY PUSHBUTTON SWITCH options are listed on page D-17, and are described on pages D-18 thru D-22. Switch with standard options is shown on page D-18. When selecting options and building a part number, some ordering format boxes may not be filled. Dashes, hyphens or spaces in the part number are not significant, and are shown for clarity only.

All models are process sealed to withstand machine soldering temperatures and pressure wash cleaning methods.  models available, see page D-18. Actuator caps, hardware and accessories are available separately, see catalog section H.

## SPECIFICATIONS

CONTACT RATING: 4 AMPS @ 125 V AC or 28 V DC (Q contact material).  
 ELECTRICAL LIFE: 40,000 make-and-break cycles at full load.  
 CONTACT RESISTANCE: Below 20 milliohms typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.  
 INSULATION RESISTANCE: 10<sup>9</sup> ohms min.  
 DIELECTRIC STRENGTH: 1000 V RMS min. @ sea level.  
 OPERATING TEMPERATURE: -30°C to 75°C.  
 CAP INSTALLATION FORCE: 10 lbs. max. permissible.  
 SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

## MATERIALS

CASE & BUSHING: Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0).  
 PLUNGER: Glass filled nylon or glass filled polyester (UL 94V-0), with internal o-ring seal standard.  
 SWITCH SUPPORT: Brass or steel, tin plated.  
 SWITCH SUPPORT RETAINER: Stainless steel.  
 END CONTACTS: Coin silver, silver plated (Q contact material).  
 CENTER CONTACTS & ALL TERMINALS: Copper alloy, silver plated (Q contact material).  
 TERMINAL SEAL: Epoxy.  
 HARDWARE: Nut & locking ring — Brass, nickel plated.  
 Lockwasher — Steel, nickel plated.

NOTE: Specifications and materials listed above are general specifications. Specifications available for specific and custom switches, consult factory.