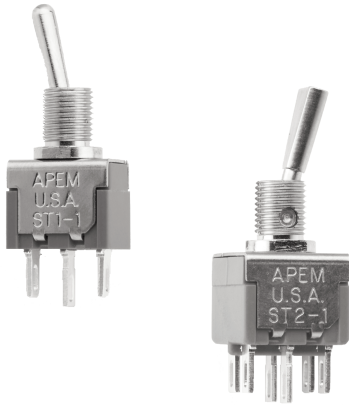


# ST series

## Miniature toggle switches

*Distinctive features and specifications*



- Dry circuit through power ratings.
- Ultra-rugged construction SPDT & DPDT models with numerous options.
- PC and panel mount models.

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - gold over nickel plated brass contacts : 0.4VA - 20V Max.
  - coin silver contacts: 6A 125VAC, 3A 250VAC, 7A 30VDC
- Initial contact resistance: 3 milliohms max. at 3VDC, 0.1 Amp.
- Insulation resistance: 2,000 MΩ min. between terminals & case ground.
- Dielectric strength: 2,000 VAC for 1 minute between terminals & case ground.
- Electrical life: 100,000 cycles at full load for ST1-1 and ST2-1, all other models 40,000 cycles

### MATERIALS

- Case : Diallylphthalate (DAP), color blue
- Actuator : Brass, bright nickel or chrome plated.
- Bushing: nickel plated brass
- Strap: stainless steel
- Contacts
  - B: Gold
  - Q: Coin silver
  - G: Gold over silver
- Terminal seal: epoxy

### GENERAL SPECIFICATIONS

- Operating temperature : -30°C to +85°C

### AGENCY APPROVAL

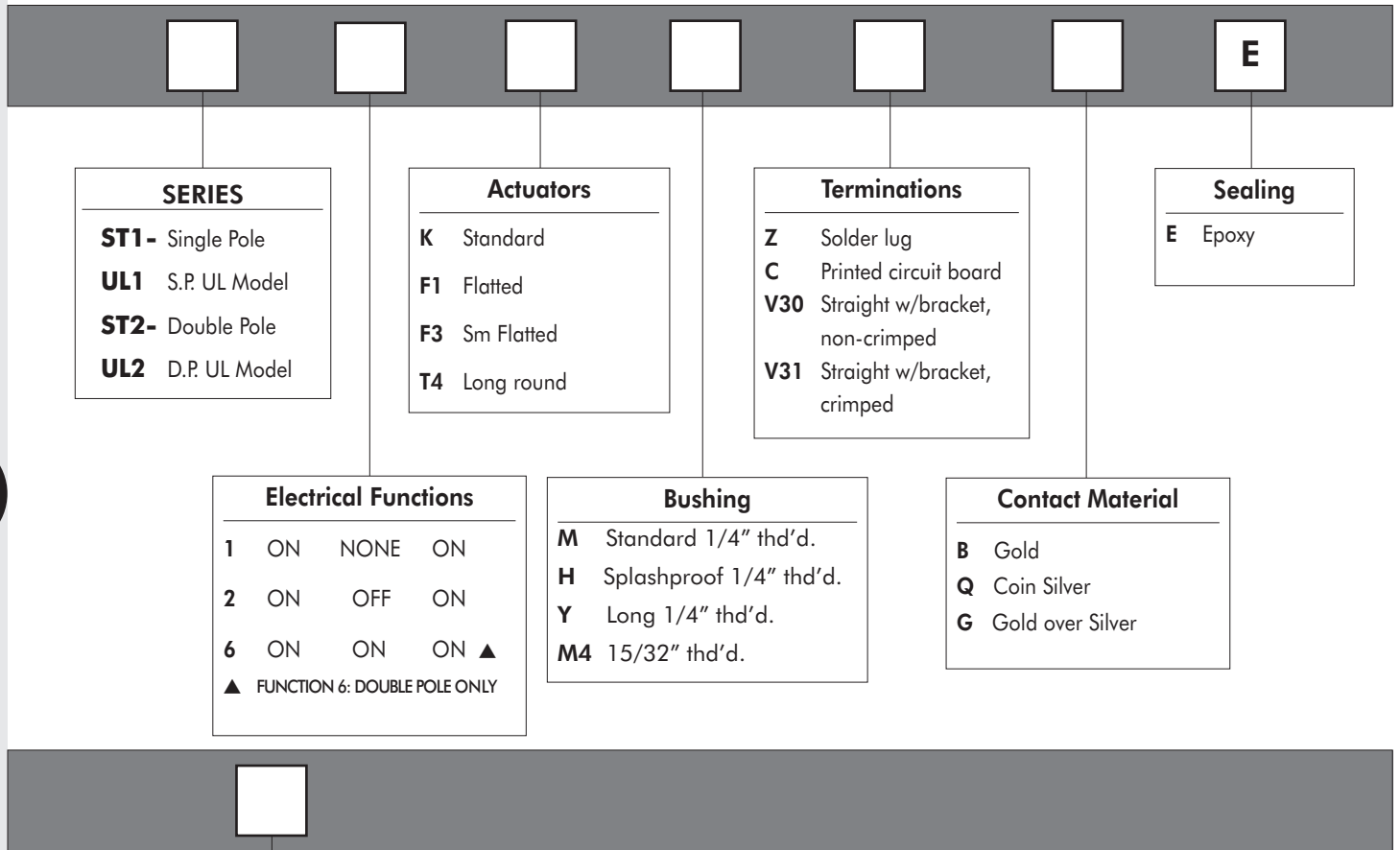


**Availability:** All models with coin silver contacts (Q) only.

**Marking:** To order switches marked UL use "UL" prefix for series designation. For CSA marking, complete appropriate box on ordering format.

# ST series

Miniature toggle switches



A

**Agency approval**

---

**No approval**  
/CSA    **CSA Approval**  
(Q contact material only)

**Note: for UL, Select UL1 or UL2 series above**

## ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches
- options in the same order as in above chart

**Dimensions** : first dimensions are in mm while inches are shown as bracketed numbers.



**Sealing boots** are available to protect the switches against dust and water. They are presented in section H



**Mounting accessories** : standard hardware supplied with all models with Ø 6,35 (1/4) threaded bushing : 2 - 5/16" hex nuts , 1 locking ring and 1 lockwasher.  
Standard and special hardware available are presented in section I.



**Packaging unit** : 25 pieces for double pole  
50 pieces for single pole



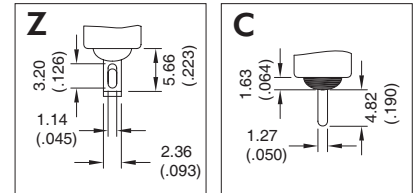
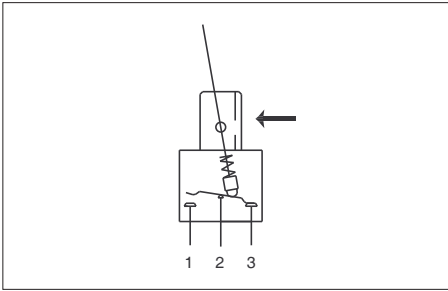
**NOTICE** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

# ST series

## Miniature toggle switches

### Terminations:

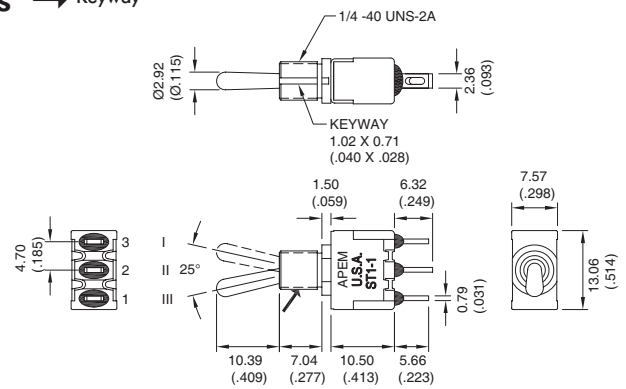
- Solder lug or straight PC terminals
- Epoxy sealed terminals standard



### Single pole panel mount with solder lug terminals → Keyway



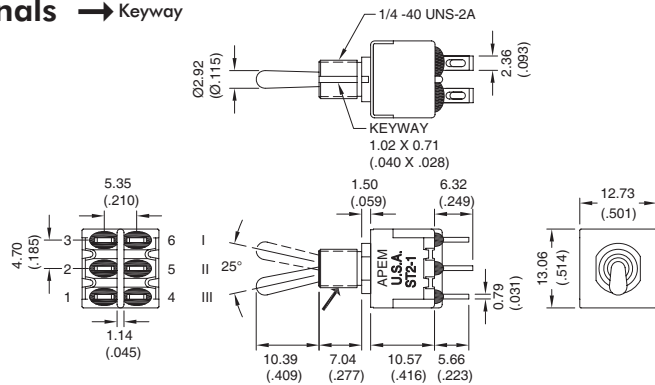
MODEL NO.	UL NO.	I	II	III
		1-2		2-3
<b>ST1-1KMZQE</b>	<b>UL11KMZQE</b>	ON	-	ON
<b>ST1-2KMZQE</b>	<b>UL12KMZQE</b>	ON	OFF	ON



### Double pole panel mount with solder lug terminals → Keyway



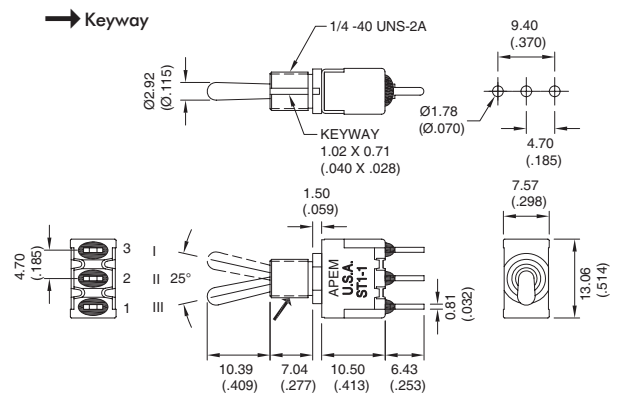
MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
<b>ST2-1KMZQE</b>	<b>UL21KMZQE</b>	ON	-	ON
<b>ST2-2KMZQE</b>	<b>UL22KMZQE</b>	ON	OFF	ON
<b>ST2-6KMZQE</b>	<b>UL26KMZQE</b>	ON	ON	ON



### Single pole straight PC terminals



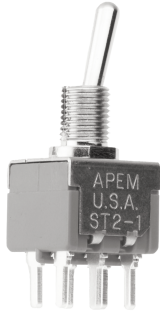
MODEL NO.	UL NO.	I	II	III
		1-2		2-3
<b>ST1-1KMCBE</b>	<b>UL11KMCQE</b>	ON	-	ON
<b>ST1-2KMCBE</b>	<b>UL12KMCQE</b>	ON	OFF	ON



# ST series

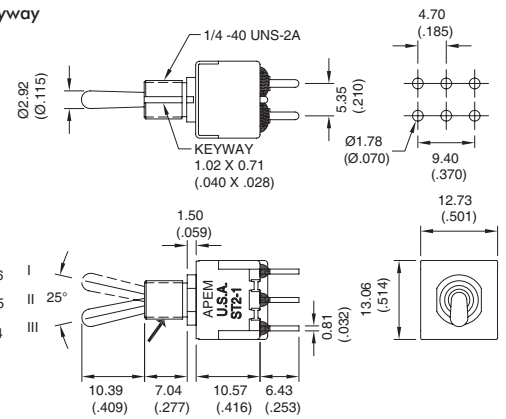
Miniature toggle switches

## Double pole straight PC terminals



MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
<b>ST2-1KMCBE</b>	<b>UL21KMCQE</b>	ON	-	ON
<b>ST2-2KMCBE</b>	<b>UL22KMCQE</b>	ON	OFF	ON
<b>ST2-6KMCBE</b>	<b>UL26KMCQE</b>	ON	ON	ON

→ Keyway

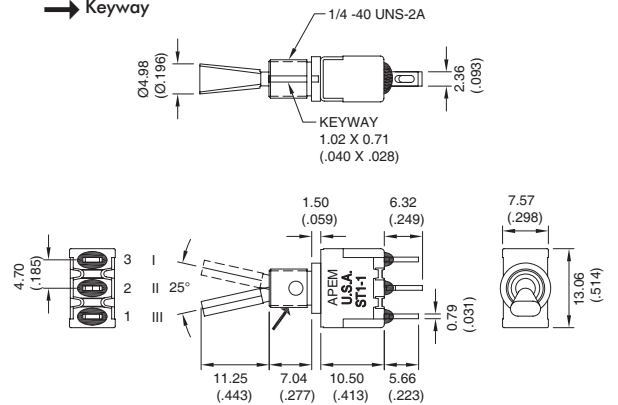


## Single pole panel mount flatted actuator



MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
<b>ST1-1F1MZQE</b>	<b>UL11F1MZQE</b>	ON	-	ON
<b>ST1-2F1MZQE</b>	<b>UL12F1MZQE</b>	ON	OFF	ON

→ Keyway

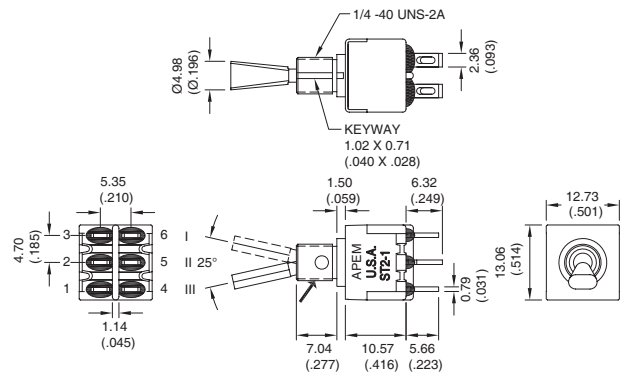


## Double pole panel mount flatted actuator



MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
<b>ST2-1F1MZQE</b>	<b>UL21F1MZQE</b>	ON	-	ON
<b>ST2-2F1MZQE</b>	<b>UL22F1MZQE</b>	ON	OFF	ON
<b>ST2-6F1MZQE</b>	<b>UL26F1MZQE</b>	ON	ON	ON

→ Keyway

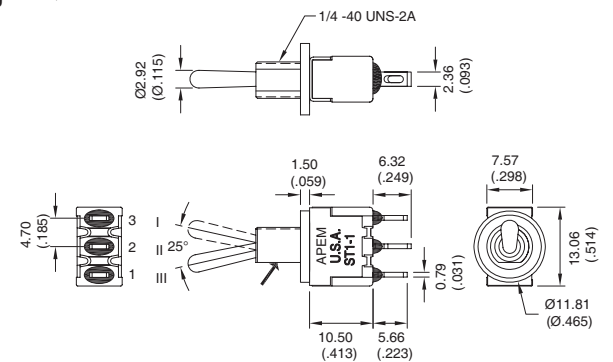


## Single pole panel mount with splashproof bushing → "D" flat



MODEL NO.	UL NO.	I	II	III
		1-2		2-3
<b>ST1-1KHZQE</b>	<b>UL11KHZQE</b>	ON	-	ON
<b>ST1-2KHZQE</b>	<b>UL12KHZQE</b>	ON	OFF	ON

→ "D" flat



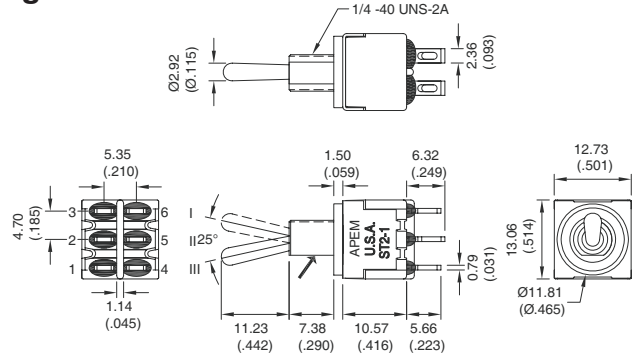
# ST series

## Miniature toggle switches

### Double pole panel mount with splashproof bushing → "D" flat

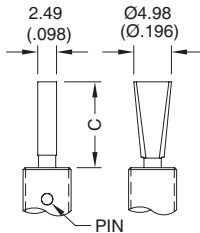


MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
<b>ST2-1KHZQE</b>	<b>UL21KHZQE</b>	ON	-	ON
<b>ST2-2KHZQE</b>	<b>UL22KHZQE</b>	ON	OFF	ON
<b>ST2-6KHZQE</b>	<b>UL26KHZQE</b>	ON	ON	ON



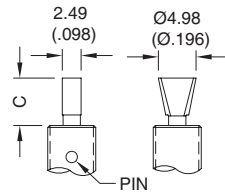
### Actuator

F1



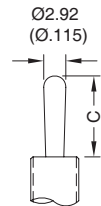
Flatted

F3



Short flatted

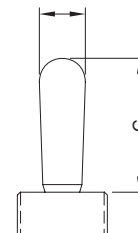
K



Round

T4

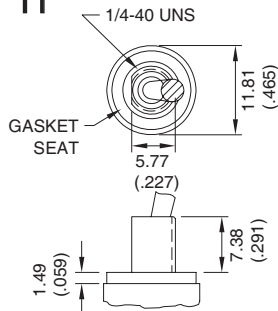
Ø6.09 (Ø.240)



Long round

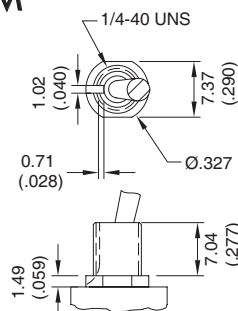
### Bushing options

H



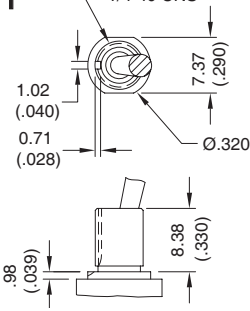
Splashproof

M



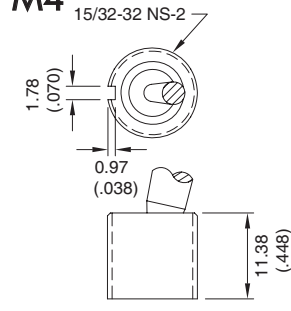
Threaded

Y

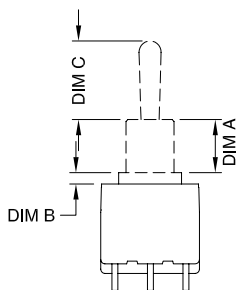


Long threaded

M4



15/32" threaded

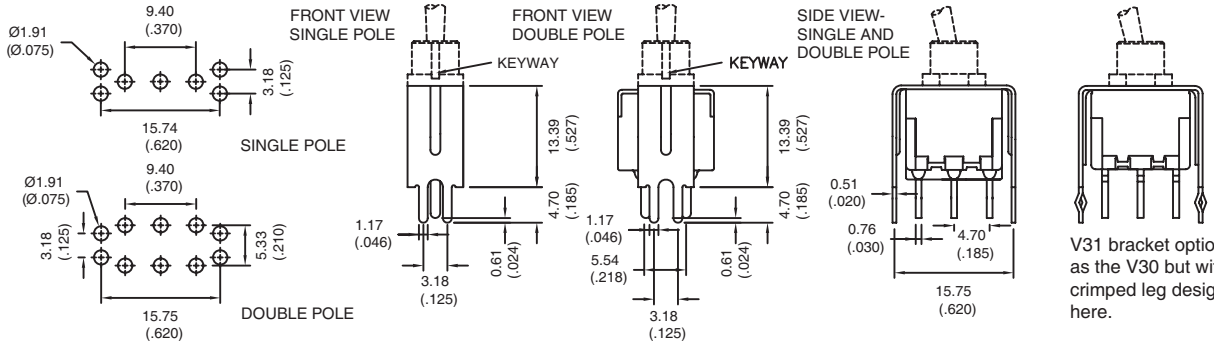


Bushing Option	Bushing Dims.		Actuator length Dim C			
	Dim A	Dim B	F1	F3	K	T4
H	7.37 (.290)	1.52 (.060)	N/A	N/A	10.41 (.410)	N/A
M	7.04 (.277)	1.52 (.060)	11.43 (.450)	6.35 (.250)	10.41 (.410)	N/A
Y	8.38 (.330)	1.02 (.040)	N/A	N/A	10.41 (.410)	N/A
M4	11.38 (.448)	-	N/A	N/A	N/A	17.45 (.687)

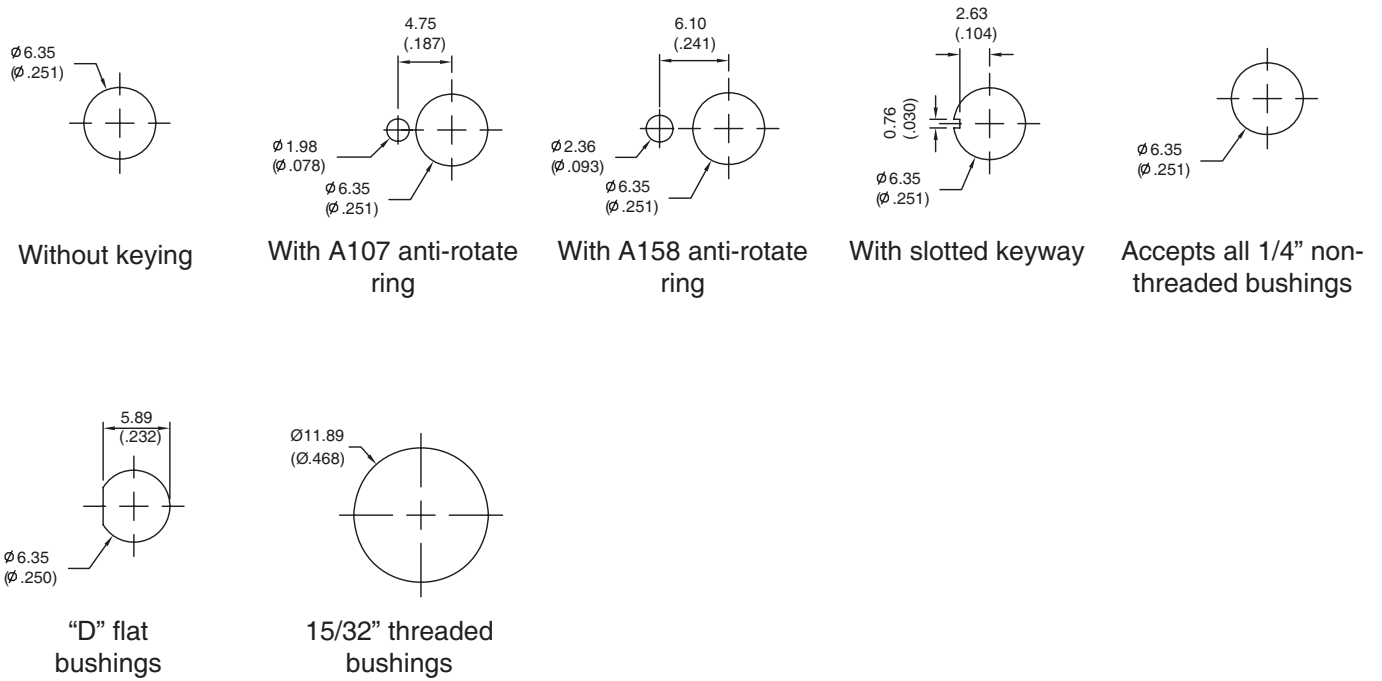
# ST series

## Miniature toggle switches

### V30 bracket option

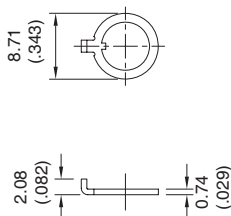


### Panel cut-outs

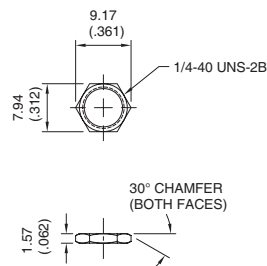


### Hardware

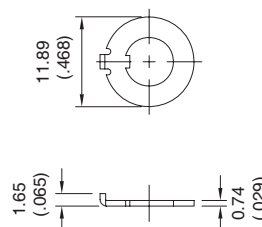
Anti-rotate ring A107  
Nickel plated brass



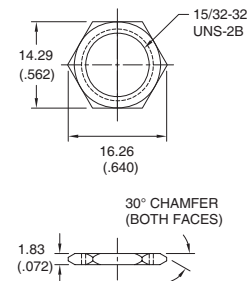
5/16" Hex nut A112  
Nickel plated brass 1/4-40



Anti-rotate ring A158  
Nickel plated brass



9/16" Hex nut A465  
Nickel plated brass 15/32-32



# ST series

## Miniature toggle switches

### Contact material specs.

- B** Dry circuit - gold over nickel over brass.  
RATING: 0.4 Volt-Amps (VA) max. at 20 V max.  
ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)
- Q** Power circuit - coin silver.  
RATING: 6 Amps at 125 VAC, 3 Amps at 250 VAC or 7 Amps at 30 VDC (resistive loads).  
ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)
- G** Dry circuit or power circuit - gold over nickel over coin silver.  
RATINGS & ELECTRIC LIFE: Same as B & Q above - i.e. - can be used in either dry circuit or power circuit, however once used in power circuit, switch cannot be re-used in dry circuit. This option satisfies those customers who have both dry circuit and power circuit requirements, but prefer to inventory only one switch for both.

### UL & CSA options



- UL** For power circuits - coin silver  
RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor).  
Underwriter Laboratories file no. E66367. Note - applicable only to terminations with coin silver contacts (Q option).
- CSA** For power circuits - coin silver  
RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor). Canadian Standards Association file no. LR54592-1. Note - applicable only to terminations with coin silver contacts (Q option) as CSA recognizes switches for power applications only.  
Note- Double pole switches with solder lug terminals are not CSA recognized .

# ST series

## Miniature rocker switches

*Distinctive features and specifications*



- Dry circuit through power ratings.
- Ultra-rugged construction SPDT & DPDT models with numerous options.
- Panel, panel & PC and PC mounting models.

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - gold over nickel plated brass contacts : 0.4VA - 20V Max.
  - coin silver contacts : 6A 125VAC, 3A 250VAC, 7A 30VDC
- Initial contact resistance : 3 milliohms max. at 3VDC, 0.1 Amp.
- Insulation resistance : 2,000 M $\Omega$  min. between terminals & case ground.
- Dielectric strength : 2,000 VAC for 1 minute between terminals & case ground.
- Electrical life : 40,000 cycles for function 6, all other models are 100,000 cycles at full load

### MATERIALS

- Case : Melamine Phenolic, color, blue
- Actuator :
  - J1 & J2: Glass filled polyester
  - J3 & J4: Nylon or acetal
- Bushing: nickel plated brass
- Strap: stainless steel
- Contacts
  - B: Gold
  - Q: Coin silver
  - G: Gold over silver
- Terminal seal: epoxy
- Spring Bracket: Stainless steel
- Bezel: Nylon

### GENERAL SPECIFICATIONS

- Operating temperature : -30°C to +85°C

### AGENCY APPROVAL



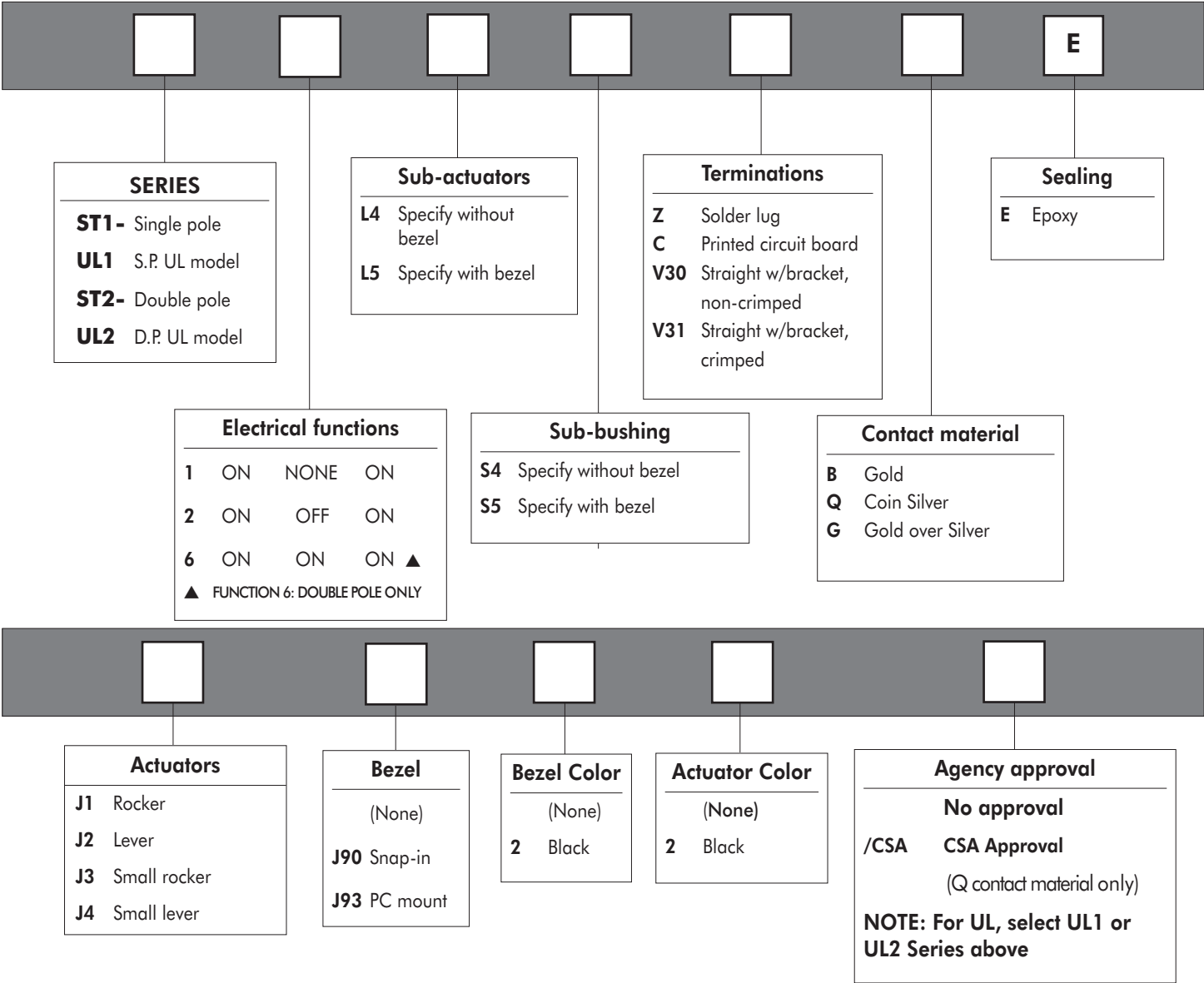
**Availability:** All models with coin silver contacts (Q) only.

**Marking:** To order switches marked UL use "UL" prefix for series designation. For CSA marking, complete appropriate box on ordering format.



# ST series

## Miniature rocker switches



### ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches
- options in the same order as in above chart

**Dimensions** : first dimensions are in mm while inches are shown as bracketed numbers.



**Sealing boots** are available to protect the switches against dust and water. They are presented in section H.



**Mounting accessories** : standard hardware supplied with all models with Ø 6,35 (1/4) threaded bushing : 2 - 5/16" hex nuts , 1 locking ring and 1 lockwasher. Standard and special hardware available are presented in section I.



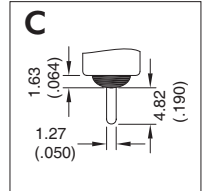
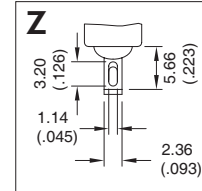
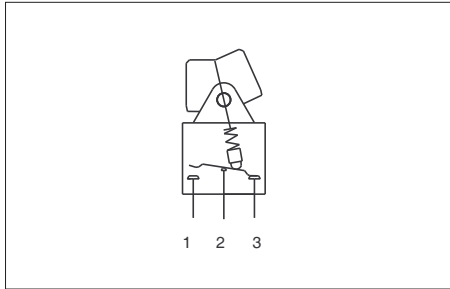
**NOTICE** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

# ST series

## Miniature rocker switches

### Terminations

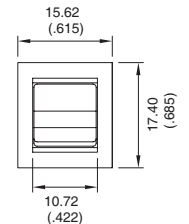
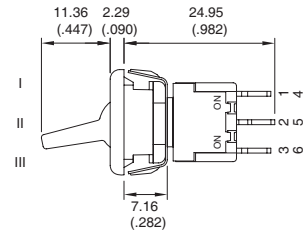
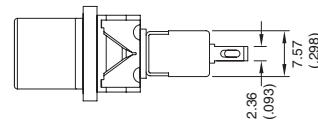
- Solder lug or straight PC terminals
- Epoxy sealed terminals standard



### Solder lug terminals with snap-in bezel



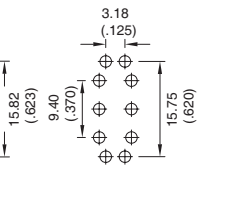
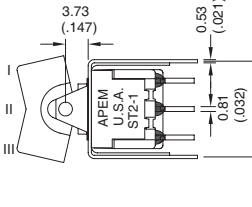
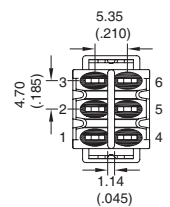
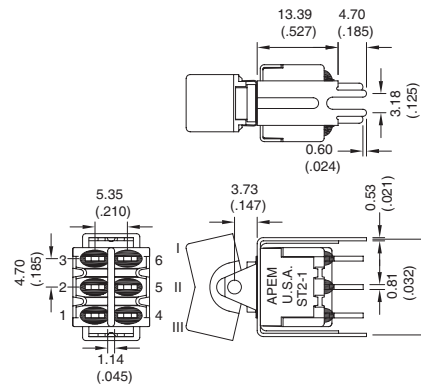
MODEL NO.	I	II	III
<b>SINGLE POLE</b>			
ST1-1L5S5ZQJ4J9022	ON	-	ON
ST1-2L5S5ZQJ4J9022	ON	OFF	ON
<b>DOUBLE POLE</b>			
ST2-1L5S5ZQJ4J9022	1-2	1-2	2-3
	4-5	5-6	5-6
ST2-2L5S5ZQJ4J9022	ON	-	ON
ST2-2L5S5ZQJ4J9022	ON	OFF	ON
ST1-6L5S5ZQJ4J9022	ON	ON	ON



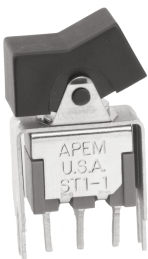
### Double pole straight PC terminals with bracket



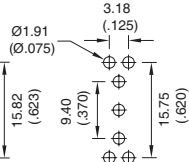
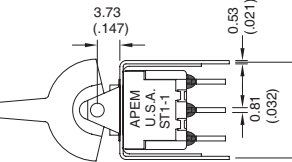
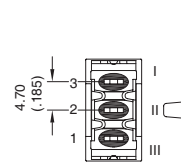
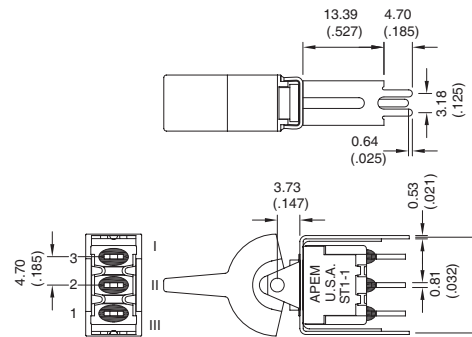
MODEL NO.	I	II	III
<b>SINGLE POLE</b>			
ST1-1L5S5ZQJ4J9022	ON	-	ON
ST1-2L5S5ZQJ4J9022	ON	OFF	ON
<b>DOUBLE POLE</b>			
ST2-1L4S4V30BJ12	1-2	1-2	2-3
	4-5	5-6	5-6
ST2-2L4S4V30BJ12	ON	-	ON
ST2-2L4S4V30BJ12	ON	OFF	ON
ST1-6L4S4V30BJ12	ON	ON	ON



### Single pole straight PC terminals with bracket



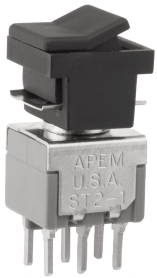
MODEL NO.	I	II	III
<b>SINGLE POLE</b>			
ST1-1L4S4V30BJ12	ON	-	ON
ST1-2L4S4V30BJ12	ON	OFF	ON



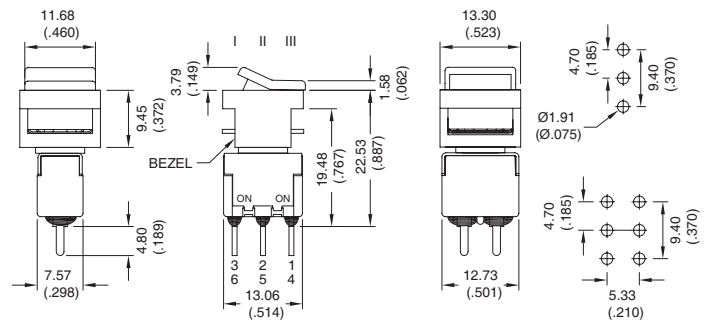
# ST series

## Miniature rocker switches

### Straight PC terminals with PC mounting bezel



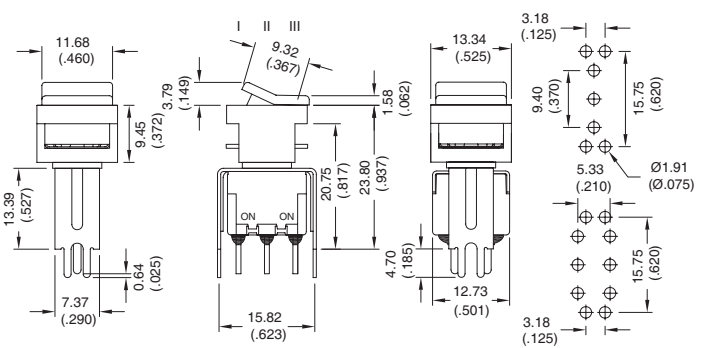
MODEL NO.	I	II	III
SINGLE POLE	1-2		2-3
ST1-1L5S5CBJ3J9322	ON	-	ON
ST1-2L5S5CBJ3J9322	ON	OFF	ON
DOUBLE POLE	1-2	1-2	2-3
ST2-1L5S5CBJ3J9322	ON	-	ON
ST2-2L5S5CBJ3J9322	ON	OFF	ON
ST2-6L5S5CBJ3J9322	ON	ON	ON



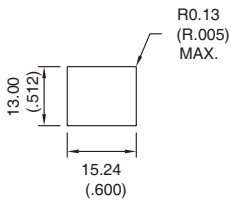
### Straight PC terminals with bracket & PC mounting bezel



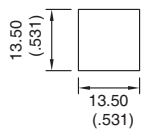
MODEL NO.	I	II	III
SINGLE POLE	1-2		2-3
ST1-1L5S5CV30J3J9322	ON	-	ON
ST1-2L5S5CV30J3J9322	ON	OFF	ON
DOUBLE POLE	1-2	1-2	2-3
	4-5	5-6	5-6
ST2-1L5S5CV30J3J9322	ON	-	ON
ST2-2L5S5CV30J3J9322	ON	OFF	ON
ST2-6L5S5CV30J3J9322	ON	ON	ON



### Panel cut-out



With bezel J90

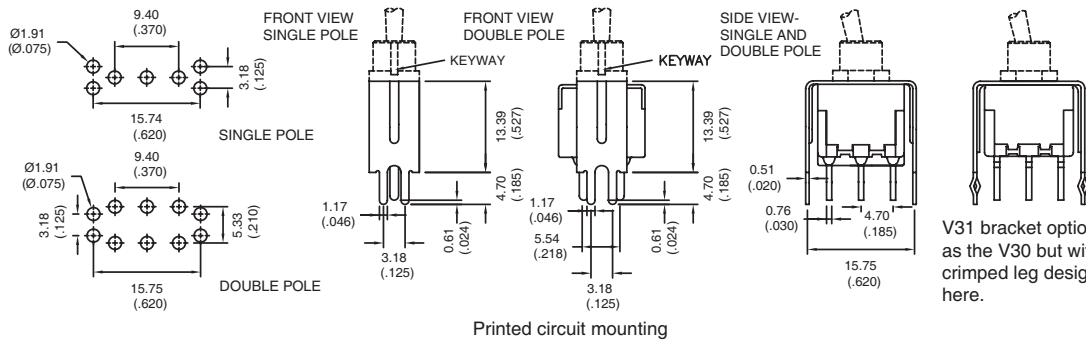


With bezel J93

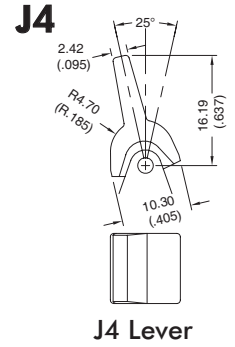
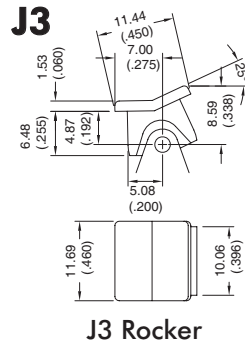
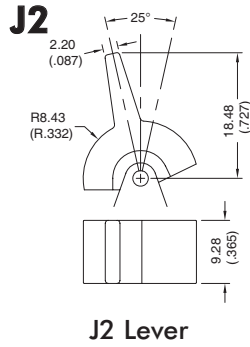
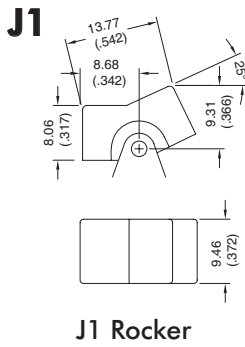
# ST series

## Miniature rocker switches

### V30 & V31 bracket options



### Actuators



# ST series

## Miniature rocker switches

### Contact material specs.

---

- B** Dry circuit - gold over nickel over brass.  
RATING: 0.4 Volt-Amps (VA) max. at 20 V max.  
ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)
- Q** Power circuit - coin silver.  
RATING: 6 Amps at 125 VAC, 3 Amps at 250 VAC or 7 Amps at 30 VDC (resistive loads).  
ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)
- G** Dry circuit or power circuit - gold over nickel over coin silver.  
RATINGS & ELECTRIC LIFE: Same as B & Q above - i.e. - can be used in either dry circuit or power circuit, however once used in power circuit, switch cannot be re-used in dry circuit. This option satisfies those customers who have both dry circuit and power circuit requirements, but prefer to inventory only one switch for both.

---

### UL & CSA options

---



- UL** For power circuits - coin silver  
RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor).  
Underwriter Laboratories file no. E66367. Note - applicable only to terminations with coin silver contacts (Q option).
- CSA** For power circuits - coin silver  
RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor). Canadian Standards Association file no. LR54592-1. Note - applicable only to terminations with coin silver contacts (Q option) as CSA recognizes switches for power applications only.  
Note- Double pole switches with solder lug terminals are not CSA recognized .

# 300 & 400 series

## Miniature pushbutton switches

*Distinctive features and specifications*



- Dry circuit through power ratings .
- Compact size.
- Panel, panel & PC and PC mounting models.

C

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - gold over nickel plated brass contacts : 0.4VA - 20V Max.
  - coin silver contacts : 1A 125VAC or 28VDC, 0.5A 250VAC, 3A 125VAC or 28VDC,
- Initial contact resistance : 10 milliohms max. at 3VDC, 0.1 Amp.
- Insulation resistance : 10,000 MΩ min.
- Dielectric strength : 1,000 Vrms min at sea level.
- Electrical life :

Model	Contacts	Rating	Number of cycles
300	(Q) coin silver	1A 125VAC or 28 VDC	250,000
300	(Q) coin silver	3A 125VAC or 28VDC	10,000
300	(B) gold	0.4VA max. at 20V	250,000
400	(Q) coin silver	1A 125VAC or 28 VDC	40,000
400	(Q) coin silver	3A 125VAC or 28VDC	10,000
400	(B) gold	0.4VA max. at 20V	40,000

### GENERAL SPECIFICATIONS

- Operating temperature : -30°C to +85°C

### MATERIALS

- Base: diallyphthalate (DAP)
- Actuator: nylon
- Bushing: nickel plated brass
- Contacts
  - B:** Gold
  - Q:** Coin silver
- Terminal seal: epoxy
- Spring bracket: stainless steel
- Support bracket: tin plated brass or steel
- Bezel and cap: nylon

### AGENCY APPROVAL

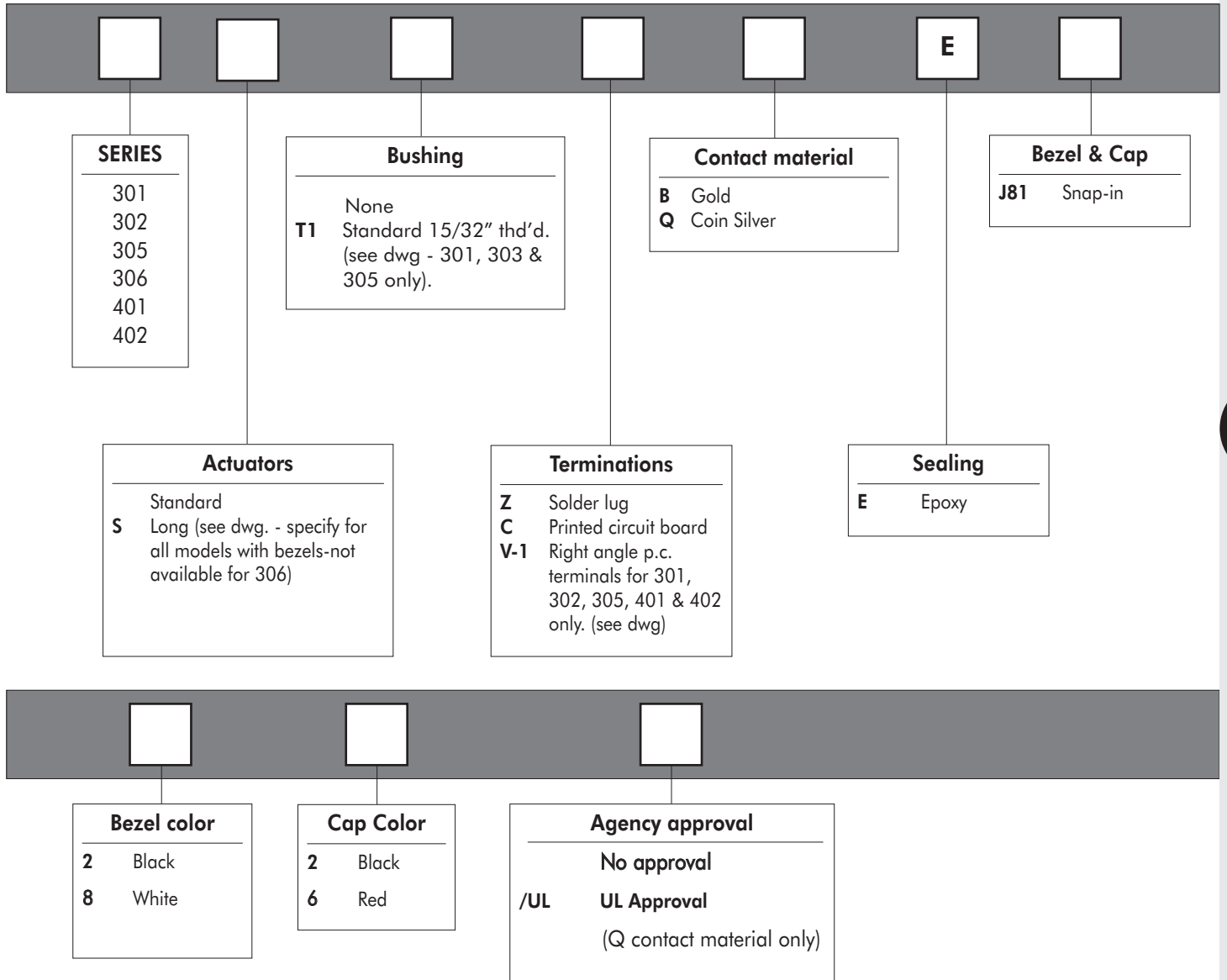


**Availability:** All models with coin silver contacts (Q) only.

**Marking:** To order switches marked UL, complete appropriate box on ordering format.

# 300 & 400 series

Miniature pushbutton switches



## ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches
- options in the same order as in above chart

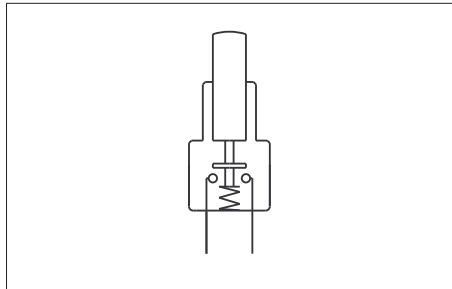
**Dimensions** : first dimensions are in mm while inches are shown as bracketed numbers.



**NOTICE** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

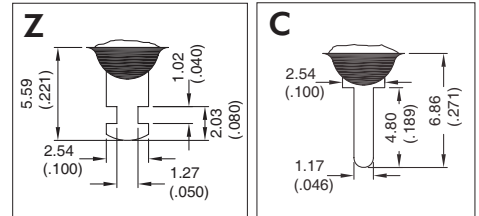
# 300 & 400 series

Miniature pushbutton switches



## Terminations

- Solder lug or straight PC terminals
- Epoxy sealed terminals standard



## Normally open with overtravel: 301



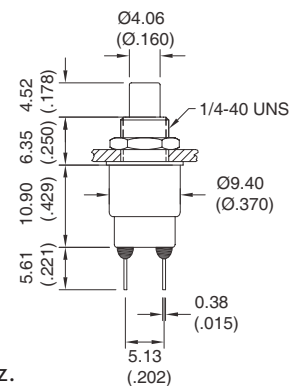
### Solder lug terminals

301ZQE		Normally Open
301ZBE		Normally Open

### PC terminals

301CQE		Normally Open
301CBE		Normally Open

Total travel: 2.7 (.110)  
Over travel: 0.51 (.020)  
Actuation force: 8.5oz. ± 4oz.



## Normally open no overtravel: 302



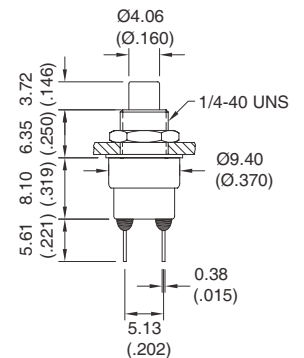
### Solder lug terminals

302ZQE		Normally Open
302ZBE		Normally Open

### PC terminals

302CQE		Normally Open
302CBE		Normally Open

Total travel: 1.52 (.060)  
Actuation force: 10oz. ± 4oz.



## Normally open with greater overtravel: 305



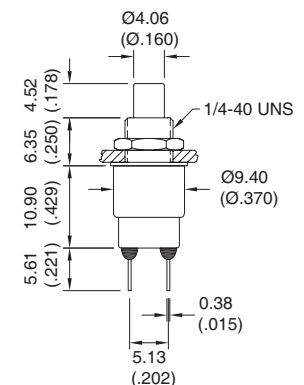
### Solder lug terminals

305ZQE		Normally Open
305ZBE		Normally Open

### PC terminals

305CQE		Normally Open
305CBE		Normally Open

Total travel: 2.7 (.110)  
Over travel: 1.20 (.075)  
Actuation force: 8oz. ± 4oz.






# 300 & 400 series


Miniature pushbutton switches

## Normally open with sealed contact area: 306





### Solder lug terminals

306ZQE  Normally Open

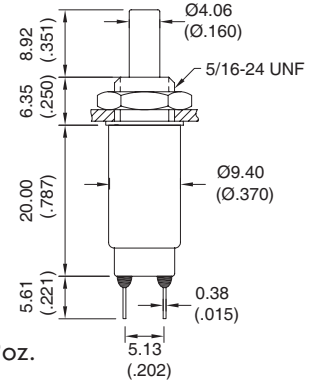
306ZBE  Normally Open

### PC terminals

306CQE  Normally Open


306CBE  Normally Open


Total travel: 8.74 (.310)  
Over travel: 6.35 (.250)  
Actuation force at full travel: 9oz.

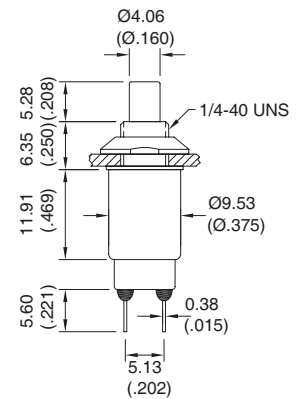


## Normally open snap-action mechanism:400



401  Alternate Action

402  Normally Open  
Pretravel: 0.66 (.026)  
Actuation travel: 2.60 (.106)  
Total travel: 3.48 (.137)  
Over travel: 0.79 (.031)  
Actuation force: 22oz.

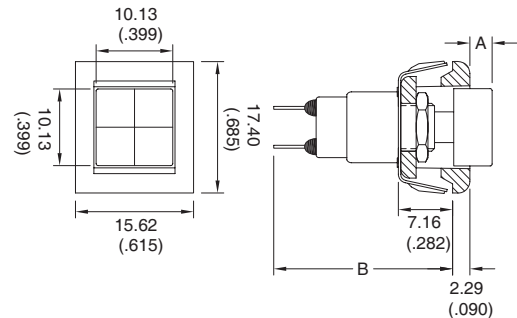


▲ For complete part number, and full list of options see part number breakdown at the beginning of this section

## Snap-in bezel



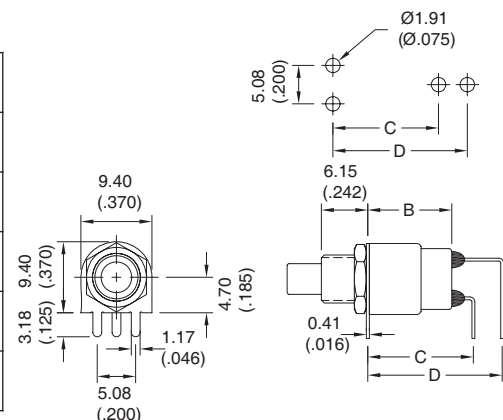
Model no.	Dim A	Dim B
301	2.74 (.108)	23.60 (.929)
302	2.16 (.085)	20.75 (.817)
305	2.74 (.108)	23.60 (.929)
401	3.68 (.145)	29.00 (1.142)
402	3.68 (.145)	29.00 (1.142)



## Right angle terminal with bracket



Model no.	Dim B	Dim C	Dim D
301	11.15 (.439)	13.97(.550)	16.51 (.650)
302	8.30 (.327)	11.43 (.450)	13.97(.550)
305	11.15 (.439)	13.97(.550)	16.51 (.650)
401	16.59 (.653)	19.05 (.750)	21.59 (.850)
402	16.59 (.653)	19.05 (.750)	21.59 (.850)



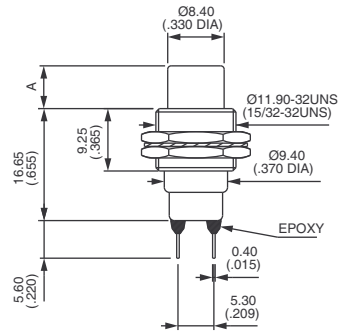
# 300 & 400 series

Miniature pushbutton switches

## T1 option with 15/32 bushing



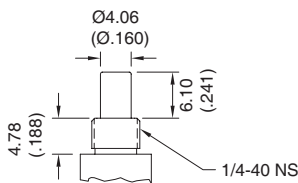
Model no.	Dim A
301	6.35 (.250)
305	6.35 (.250)



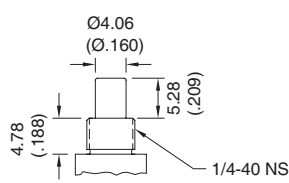
T1 option available only for 301 and 305 models

C

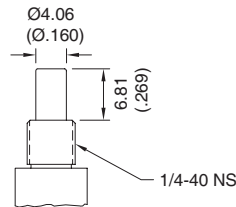
## Option S long actuator



301 & 305

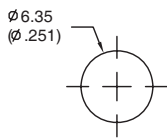


302

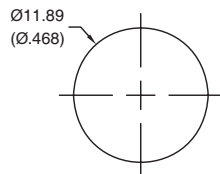


401 & 402

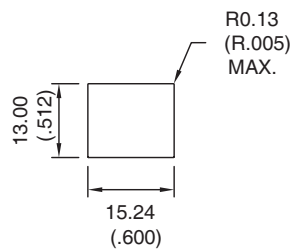
## Panel cut-outs



1/4" threaded bushings



15/32" threaded bushings



Snap-in bezel

## UL option



**UL** For power circuits - coin silver  
**RATING:** 0.5 Amps at 125 VAC (75% power factor).  
 Underwriter Laboratories file no. E66367. Note - applicable only to terminations with coin silver contacts (Q option).

# 800 series

## Snap-action momentary pushbutton switches

*Distinctive features and specifications*



- Panel and PC mount models
- Snap-in panel mounting version
- Tactile feedback

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - gold over nickel plated brass contacts : 0.4VA - 20V max.
  - coin silver contacts : 6A 125VAC, 3A 250VAC, 7A 30VDC
- Initial contact resistance : 20 mΩ max.
- Insulation resistance : 2,000 MΩ min. between terminals & case ground.
- Dielectric strength : 1,500 VAC for 1 minute between terminals & case ground.
- Electrical life : 60.000 cycles at full load

### MATERIALS

- Case : DAP
- Actuator : polyamide, glass filled
- Bushing : brass, nickel plated
- Strap : stainless steel
- Bracket : tin plated steel or brass
- Contacts
  - B: Gold
  - Q: Coin Silver
- Terminal seal : epoxy

### GENERAL SPECIFICATIONS

- Total travel : 0.9mm (.035)
- Actuation force:
  - Single pole: 290+/- 75g
  - Double pole: 550+/- 75g
- Operating temperature : -30°C to +85°C
- Soldering : 300°C, 3 sec. max.

### AGENCY APPROVAL

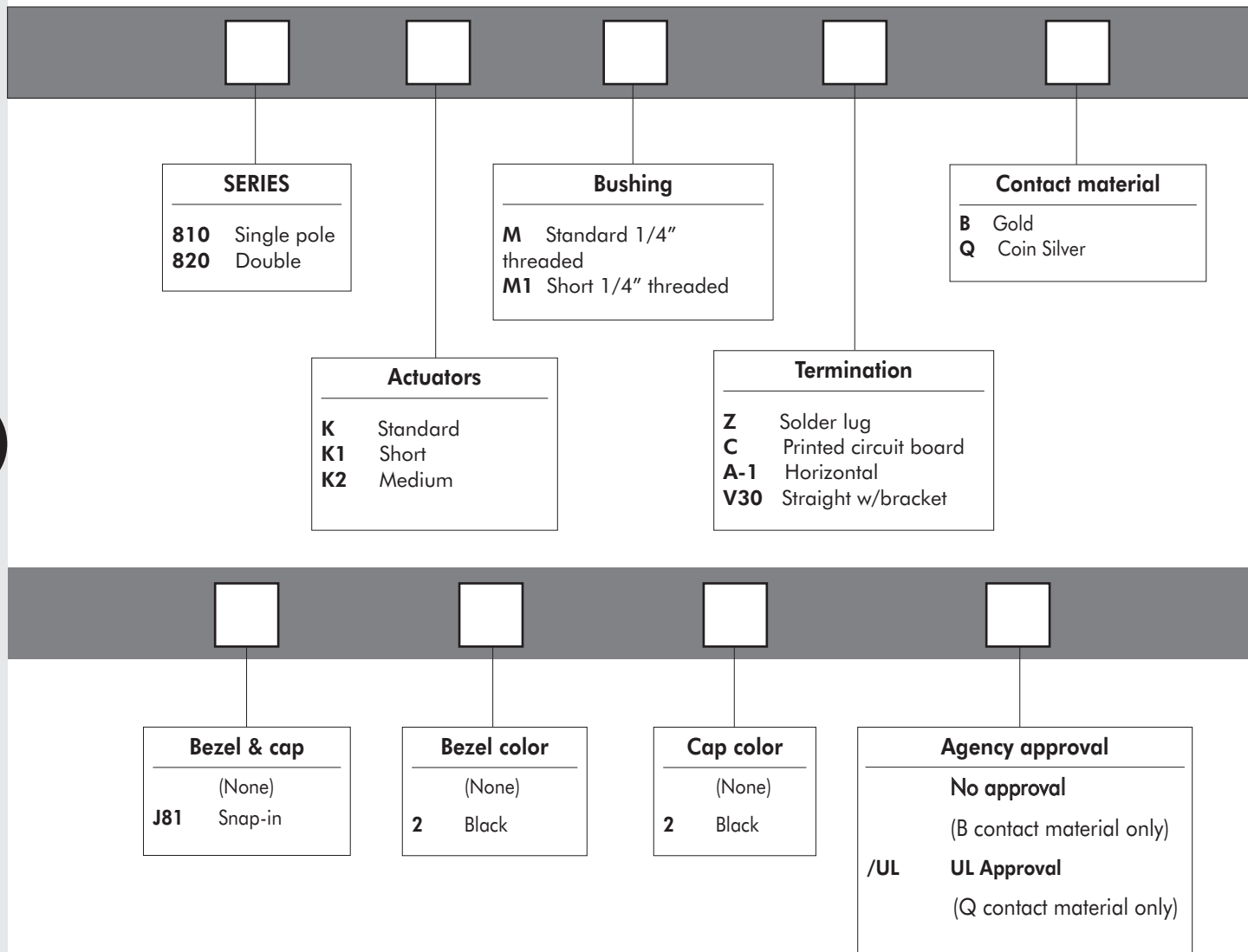


**Availability:** All models with coin silver contacts (Q) only.

**Marking:** To order switches marked UL, complete appropriate box on ordering format.

# 800 series

## Snap-action momentary pushbutton switches



### ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches
- options in the same order as in above chart

**Dimensions:** first dimensions are in mm while inches are shown as bracketed numbers.



Sealing boots are available to protect the switches against dust and water. They are presented in section H.



**Mounting accessories:** standard hardware supplied with all models with  $\varnothing$  6,35 (1/4) threaded bushing : 2 - 5/16" hex nuts , 1 locking ring and 1 lockwasher.  
Standard and special hardware available are presented in section I.



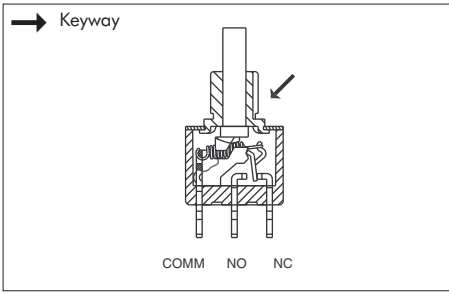
**Packaging unit:** 25 pieces for double pole  
50 pieces for single pole



**NOTICE:** please note that not all combinations of above numbers are available. Refer to the following pages for further information.

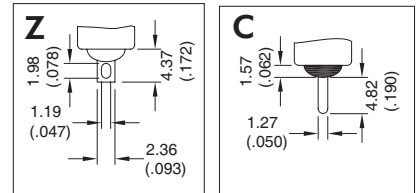
# 800 series

## Snap-action momentary pushbutton switches



### Terminations

- Solder lug or straight PC terminals
- Epoxy sealed terminals standard

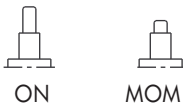


Shown with standard plunger (K)

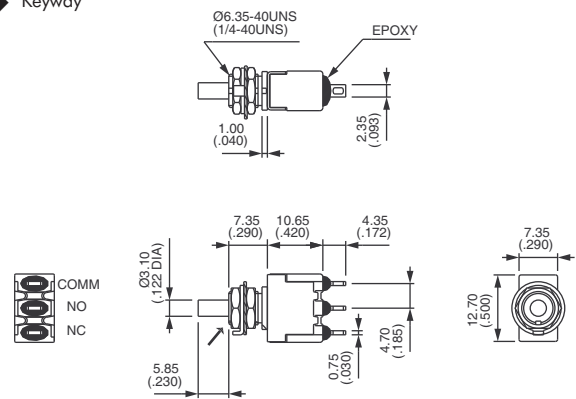
### Solder lug terminals



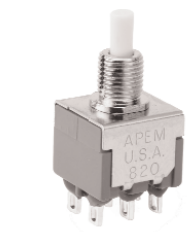
810KMZ



→ Keyway



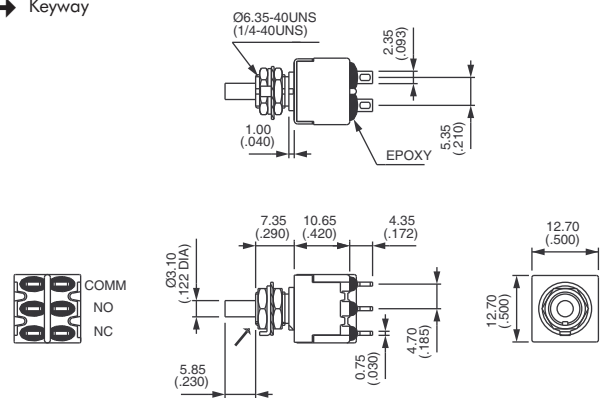
### Solder lug terminals



820KMZ



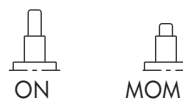
→ Keyway



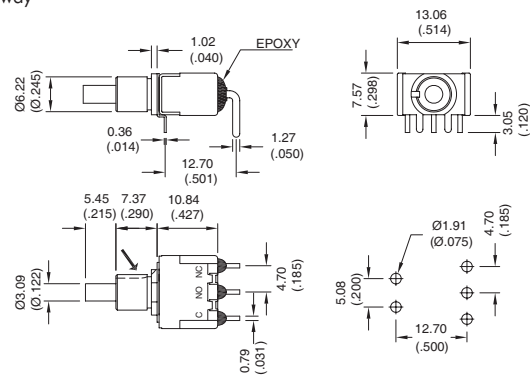
### Horizontal right angle



810KSA-1



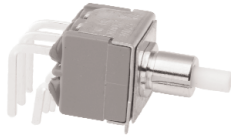
→ Keyway



# 800 series

Snap-action momentary pushbutton switches

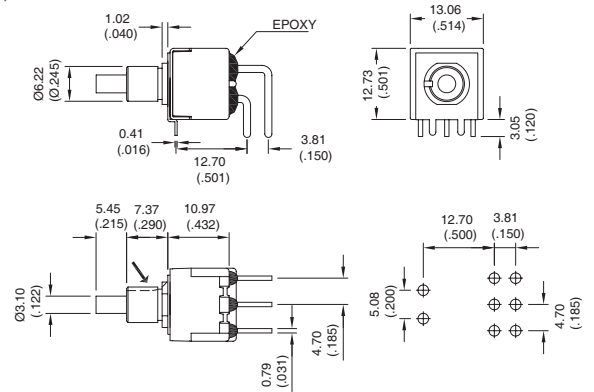
## Horizontal angle



820KSA-1



→ Keyway



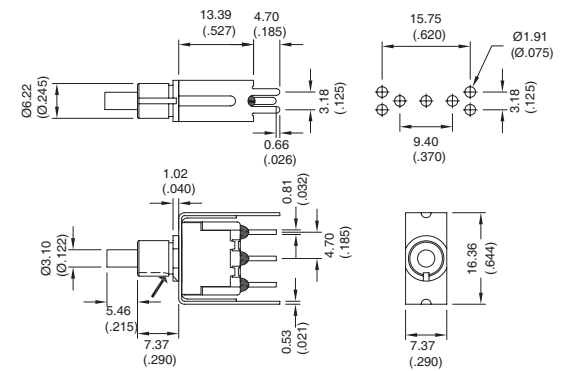
## Straight PC terminals with bracket



810KSV30



→ Keyway



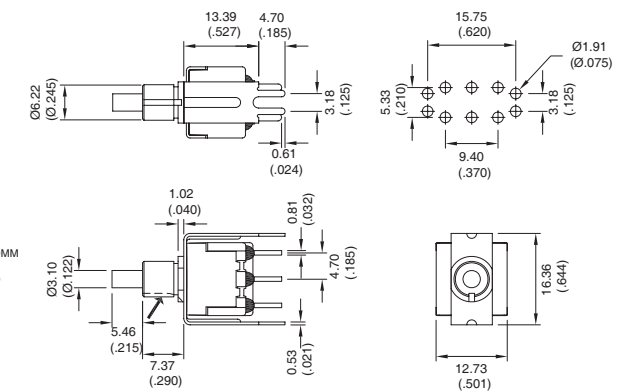
## Straight PC terminals with bracket



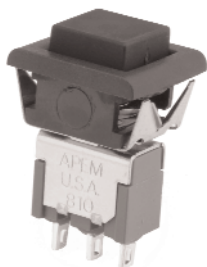
820KSV30



→ Keyway



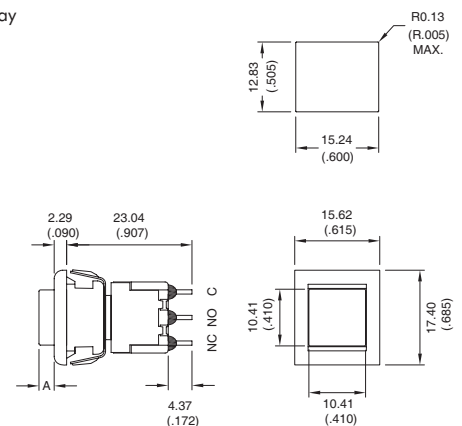
## Solder lug terminals with snap-in bezel



MODEL NUMBER	DIM. A
810K2M1ZQJ8122	2.54 (.100)
810K1M1ZQJ8122	0.25 (.010)



→ Keyway

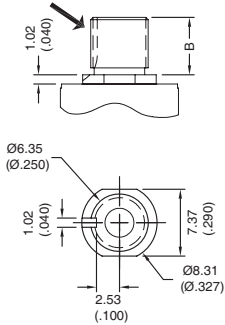


# 800 series

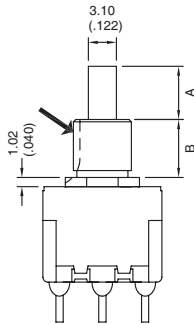
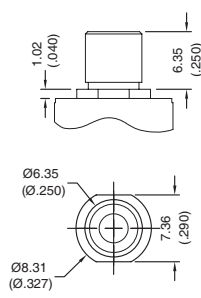
## Snap-action momentary pushbutton switches

### Actuator & bushing options

#### M & M1

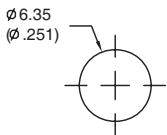


#### S

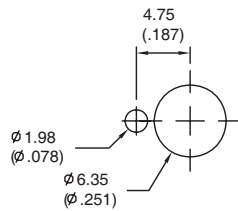


BUSHING OPTION	DIM. B	DIMENSION A ACTUATOR OPTION		
		K	K1	K2
M	6.35 (.250)	5.84 (.230)	.069 (1.75)	4.27 (.168)
S	6.35 (.250)	5.84 (.230)	.069 (1.75)	4.27 (.168)
M1	3.91 (.154)	8.18 (.322)	4.91 (.165)	6.70 (.264)

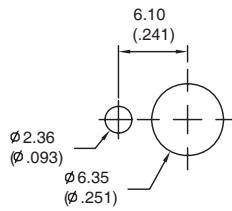
### Panel cut-outs



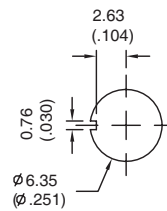
Without keying



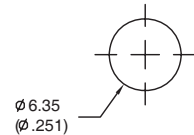
With A107 anti-rotate ring



With A158 anti-rotate ring



With slotted keyway



Accepts all 1/4" non-threaded bushings

### Contact materials

**B** Dry circuit - gold over nickel over brass.  
 RATING: 0.4 Volt-Amps (VA) max. at 20 V max.  
 ELECTRIC LIFE: 60,000 cycles minimum. MECHANICAL LIFE: 500,000 cycles minimum.

**Q** Power circuit - coin silver.  
 RATING: 6 Amps at 125 VAC, 3 Amps at 250 VAC or 7 Amps at 30 VDC (resistive loads).  
 ELECTRIC LIFE: 60,000 cycles minimum at full load.

### Approvals

**/UL** For power circuits - coin silver  
 RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor).  
 Underwriter Laboratories file no. E66367. Note - applicable only to terminations with coin silver contacts (Q option).

# AV series

Anti-vandal and security pushbutton switches

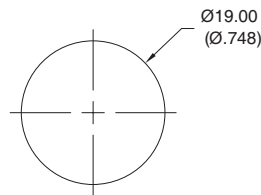


- 19mm bushing
- Single pole ON-OFF, Alternate Action, & Momentary functions
- Standard sealing IP54, IP65 models available
- Extremely rugged and durable

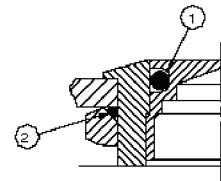
### Specifications

For all 400 series models, see section "C".  
For all 800 series models, see section "D"

### Panel cut-out



### SEALING ( OPTION K )



Front panel sealing (IP65)

① internal gasket ② external gasket

AV

Z

### SERIES

### Switch Model

**401** Alternate Action  
**402** Momentary  
**810KM** Momentary (SPDT)  
**820KM** Momentary (DPDT)

### Contact material

**B** Gold  
**Q** Coin Silver

### Sealing

**K** IP54  
IP65

### Mushroom cap color

**0** Natural  
**6** Red  
**6P** Powder coated red

### Actuators/Bushing Configurations

**09** 19mm w/flat actuator  
**19** 19mm w/curved actuator  
**49** 19mm w/mushroom cap

### Terminations

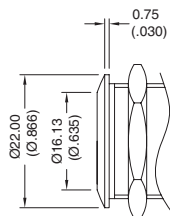
**Z** Solder lug

### Terminal sealing

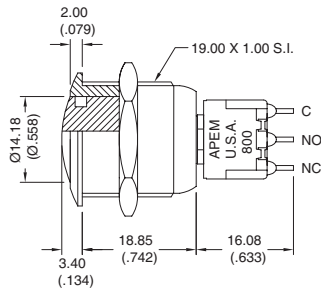
**E** Epoxy ▲  
▲ For 400 series models only, all 800 series models built with sealed terminals standard.

### Agency approval

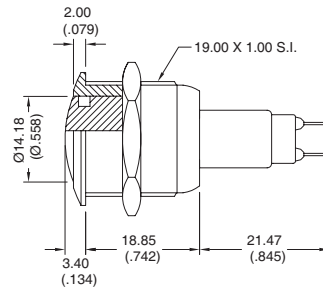
(None)  
/UL UL approved



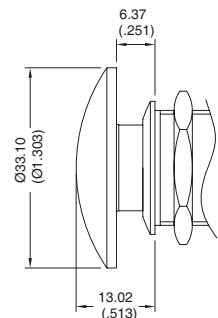
**09** flat actuator & curved bushing



**19** 800 series w/curved actuator & bushing



**19** 400 series w/ curved actuator & bushing



**49** Thd. actuator with mushroom cap & curved bushing