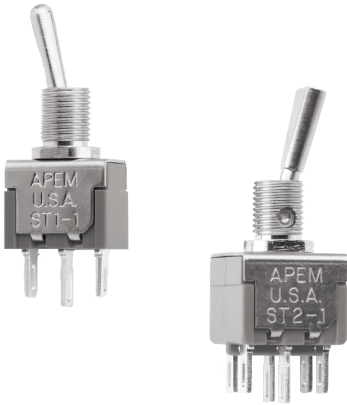


ST series

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

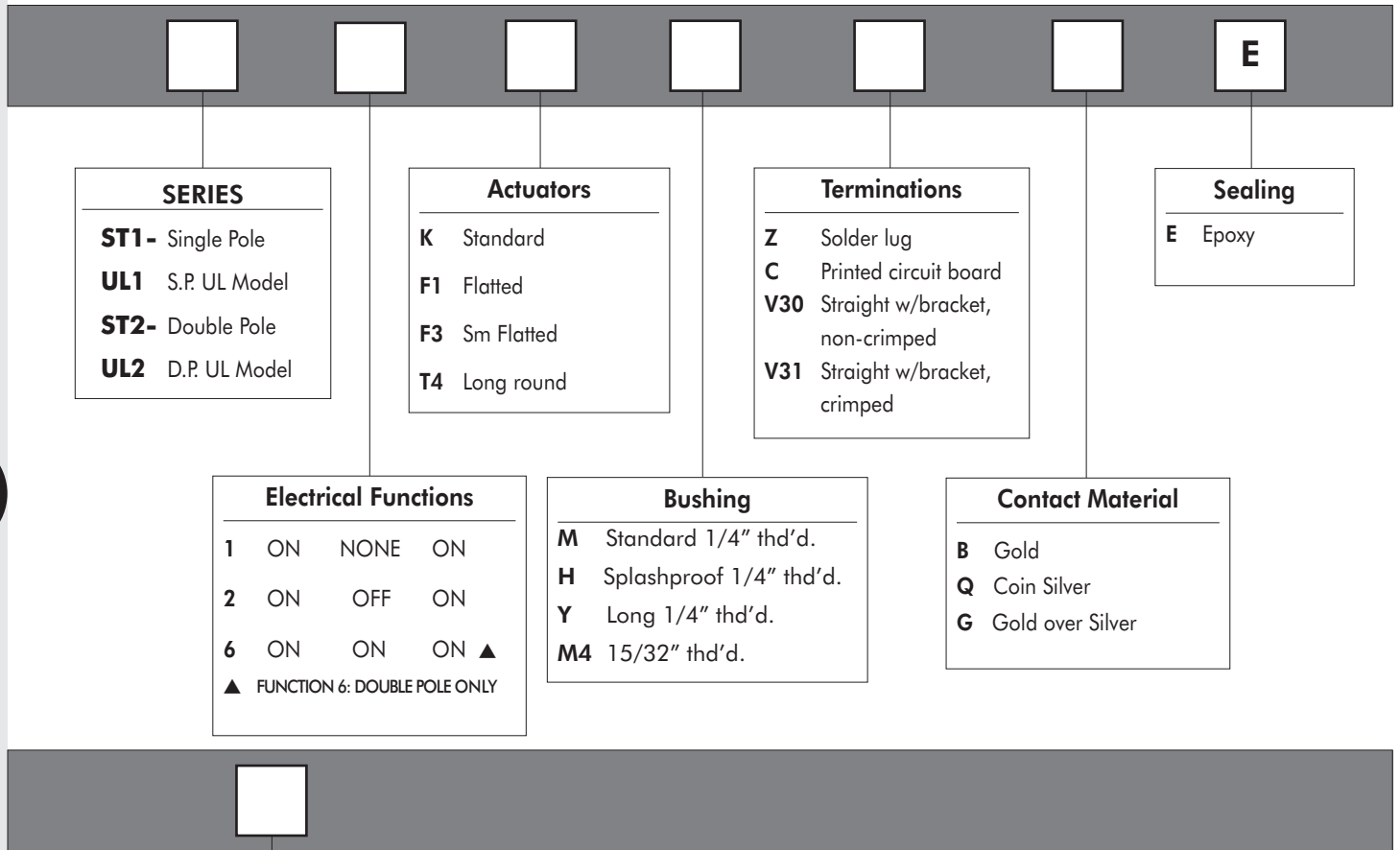


Availability: All models with coin silver contacts (Q) only.

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



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



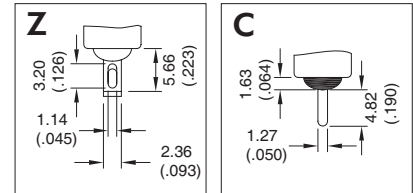
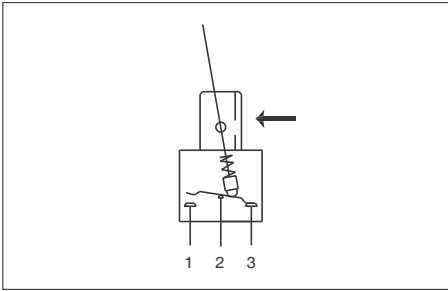
NOTICE : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

ST series

Miniature toggle switches

Terminations:

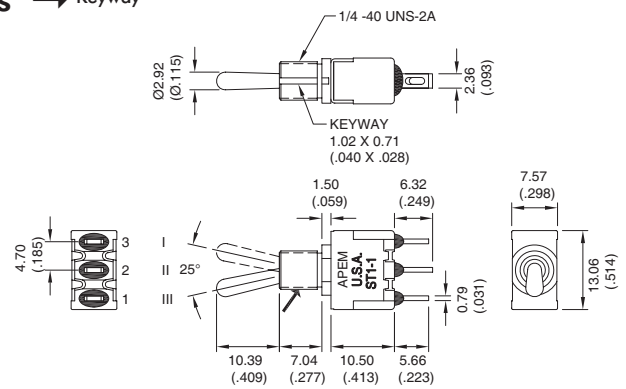
- Solder lug or straight PC terminals
- Epoxy sealed terminals standard



Single pole panel mount with solder lug terminals → Keyway



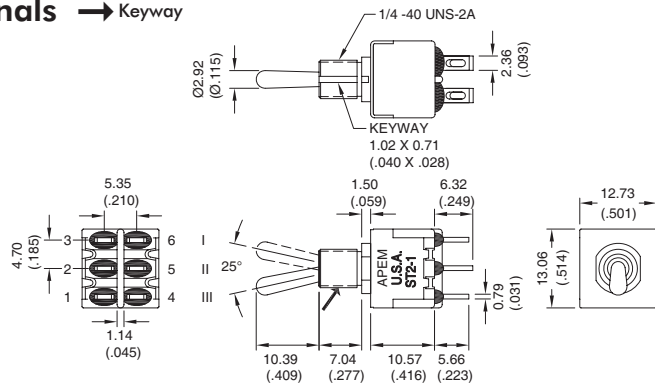
MODEL NO.	UL NO.	I	II	III
		1-2		2-3
ST1-1KMZQE	UL11KMZQE	ON	-	ON
ST1-2KMZQE	UL12KMZQE	ON	OFF	ON



Double pole panel mount with solder lug terminals → Keyway



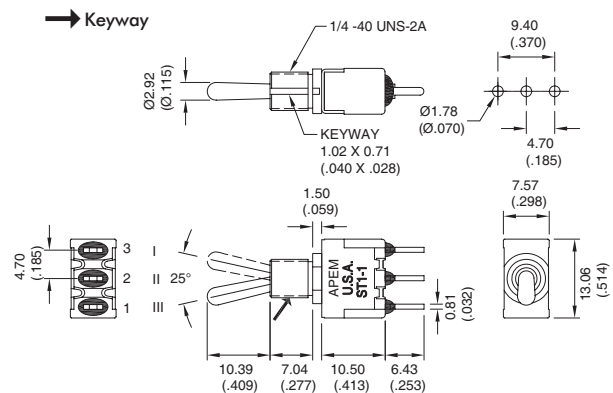
MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
ST2-1KMZQE	UL21KMZQE	ON	-	ON
ST2-2KMZQE	UL22KMZQE	ON	OFF	ON
ST2-6KMZQE	UL26KMZQE	ON	ON	ON



Single pole straight PC terminals



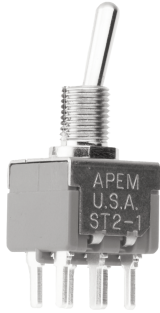
MODEL NO.	UL NO.	I	II	III
		1-2		2-3
ST1-1KMCBE	UL11KMCQE	ON	-	ON
ST1-2KMCBE	UL12KMCQE	ON	OFF	ON



ST series

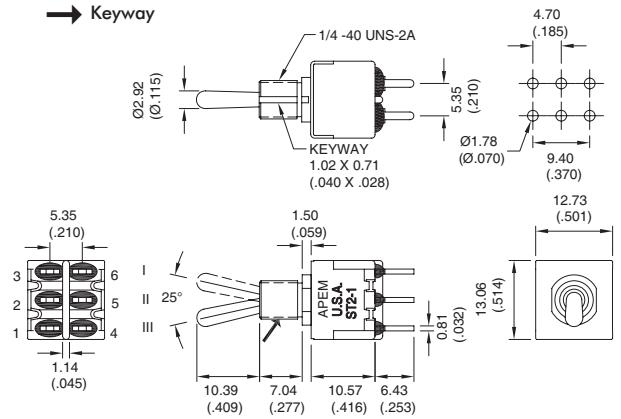
Miniature toggle switches

Double pole straight PC terminals



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

→ Keyway

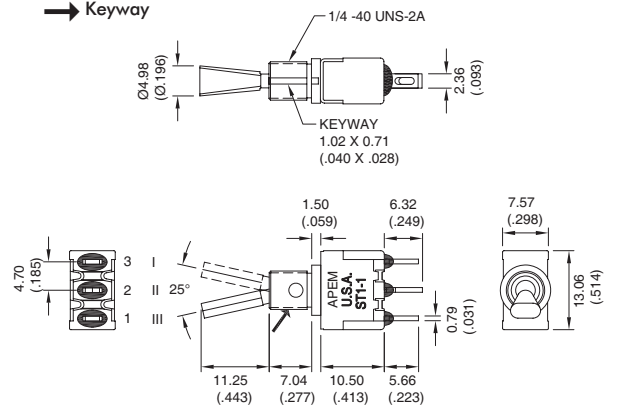


Single pole panel mount flatted actuator

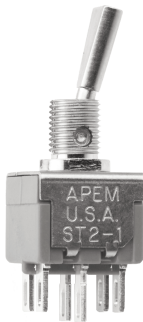


MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
ST1-1F1MZQE	UL11F1MZQE	ON	-	ON
ST1-2F1MZQE	UL12F1MZQE	ON	OFF	ON

→ Keyway

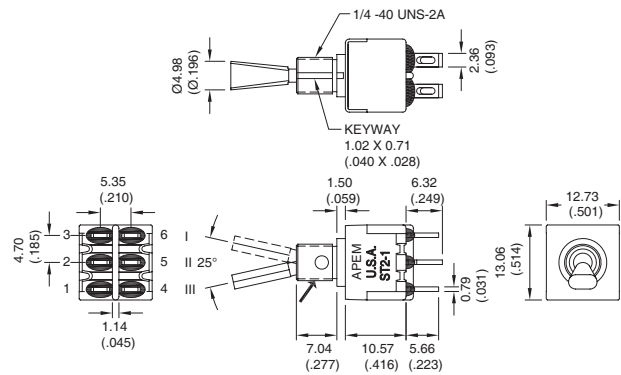


Double pole panel mount flatted actuator



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

→ Keyway

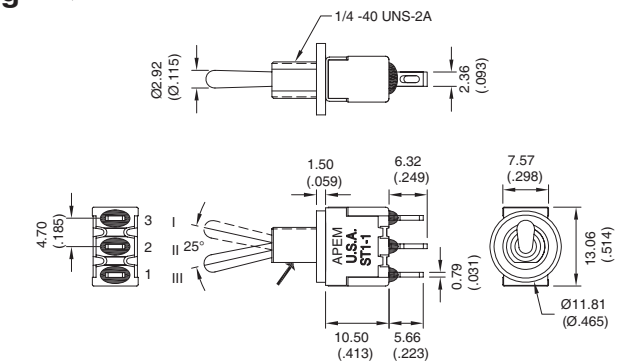


Single pole panel mount with splashproof bushing → "D" flat



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

→ "D" flat



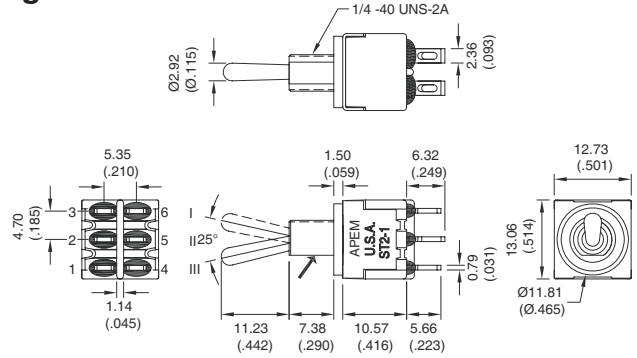
ST series

Miniature toggle switches

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

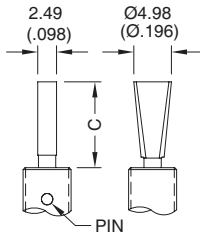


MODEL NO.	UL NO.	I	II	III
		1-2	1-2	2-3
		4-5	5-6	5-6
ST2-1KHZQE	UL21KHZQE	ON	-	ON
ST2-2KHZQE	UL22KHZQE	ON	OFF	ON
ST2-6KHZQE	UL26KHZQE	ON	ON	ON



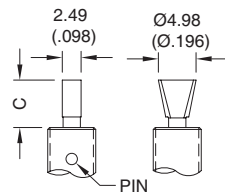
Actuator

F1



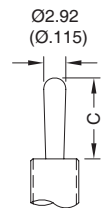
Flatted

F3



Short flatted

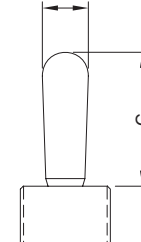
K



Round

T4

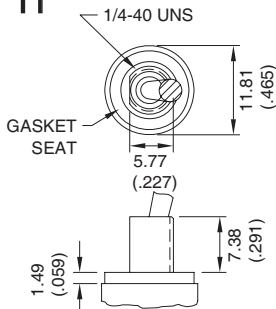
Ø6.09 (Ø.240)



Long round

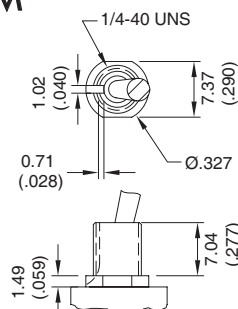
Bushing options

H



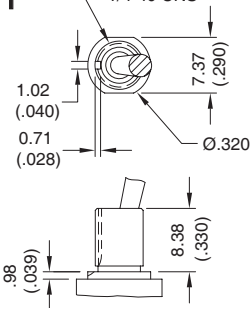
Splashproof

M



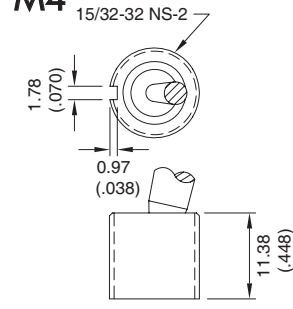
Threaded

Y

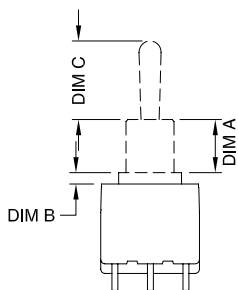


Long threaded

M4



15/32" threaded

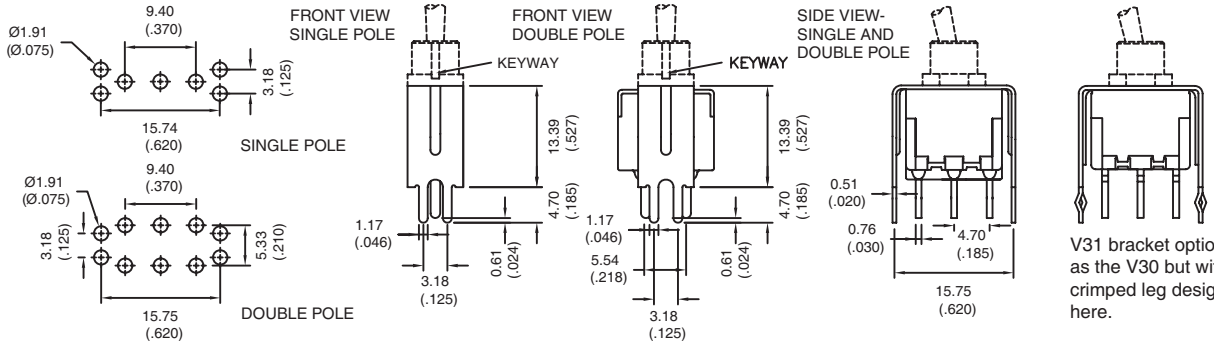


Bushing Option	Bushing Dims.		Actuator length Dim C			
	Dim A	Dim B	F1	F3	K	T4
H	7.37 (.290)	1.52 (.060)	N/A	N/A	10.41 (.410)	N/A
M	7.04 (.277)	1.52 (.060)	11.43 (.450)	6.35 (.250)	10.41 (.410)	N/A
Y	8.38 (.330)	1.02 (.040)	N/A	N/A	10.41 (.410)	N/A
M4	11.38 (.448)	-	N/A	N/A	N/A	17.45 (.687)

ST series

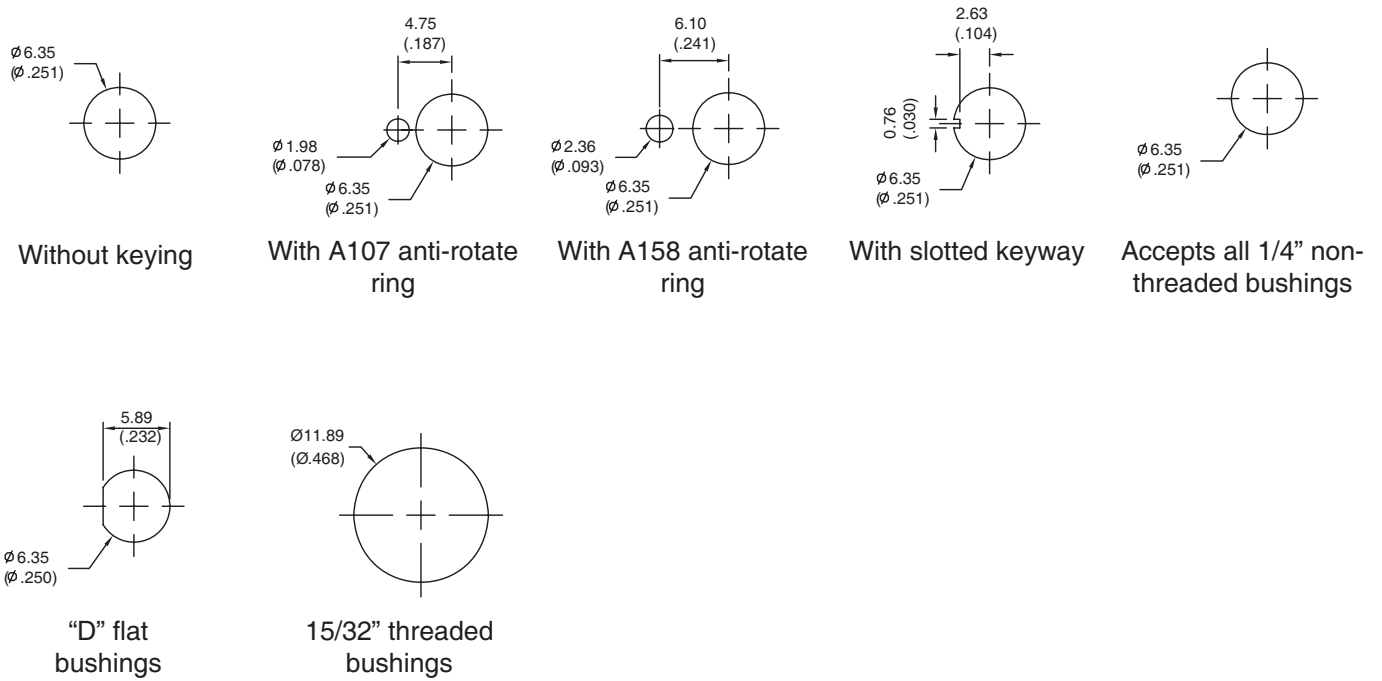
Miniature toggle switches

V30 bracket option



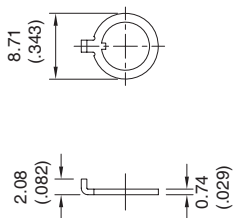
V31 bracket option is the same as the V30 but with the crimped leg design shown here.

Panel cut-outs

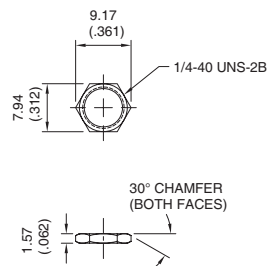


Hardware

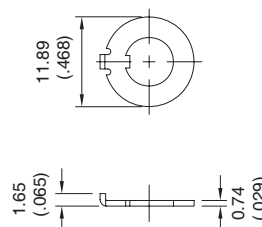
Anti-rotate ring A107
Nickel plated brass



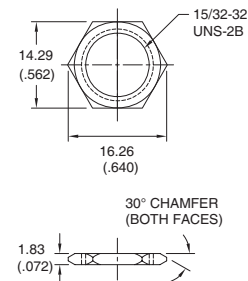
5/16" Hex nut A112
Nickel plated brass 1/4-40



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 Ω 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

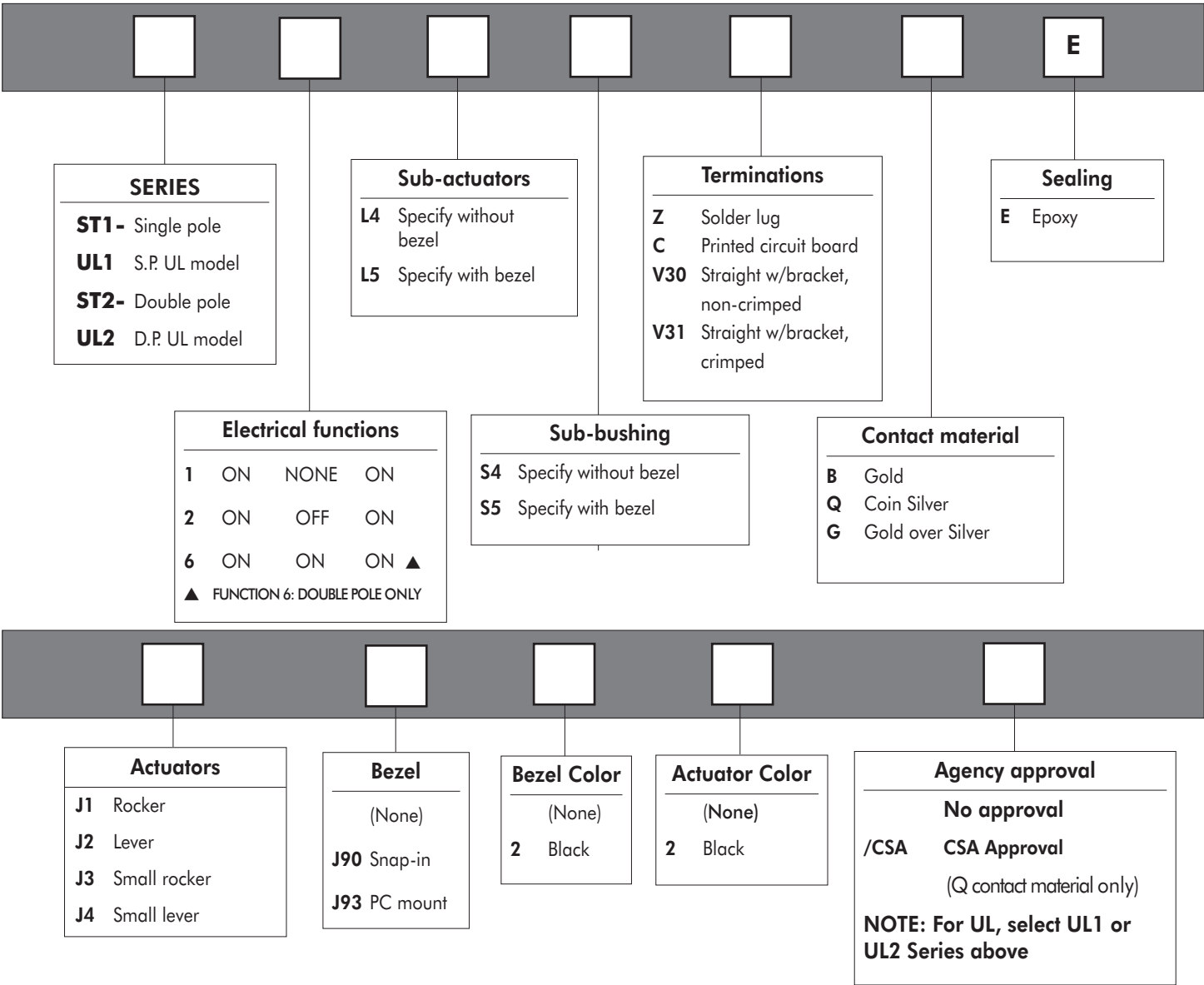


Availability: All models with coin silver contacts (Q) only.

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.



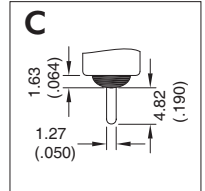
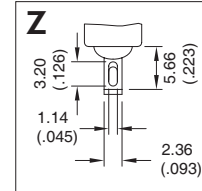
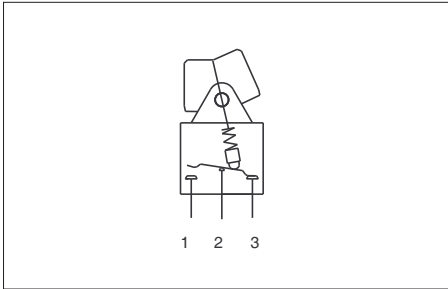
NOTICE : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

ST series

Miniature rocker switches

Terminations

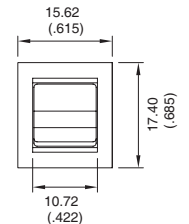
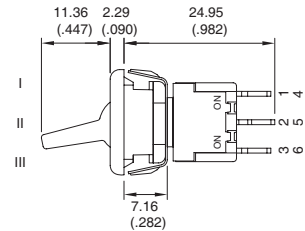
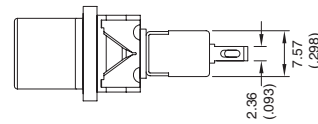
- Solder lug or straight PC terminals
- Epoxy sealed terminals standard



Solder lug terminals with snap-in bezel



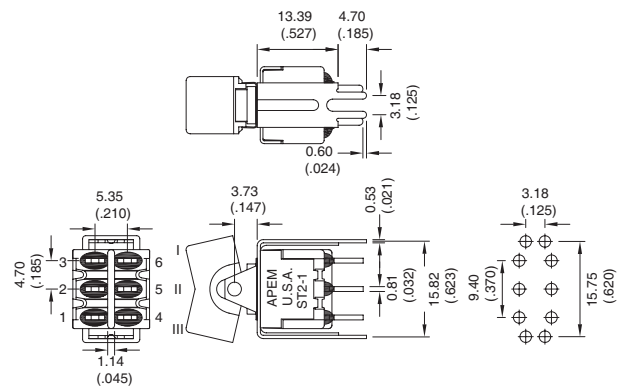
MODEL NO.	I	II	III
SINGLE POLE	1-2		2-3
ST1-1L5S5ZQJ4J9022	ON	-	ON
ST1-2L5S5ZQJ4J9022	ON	OFF	ON
DOUBLE POLE	1-2 4-5	1-2 5-6	2-3 5-6
ST2-1L5S5ZQJ4J9022	ON	-	ON
ST2-2L5S5ZQJ4J9022	ON	OFF	ON
ST1-6L5S5ZQJ4J9022	ON	ON	ON



Double pole straight PC terminals with bracket



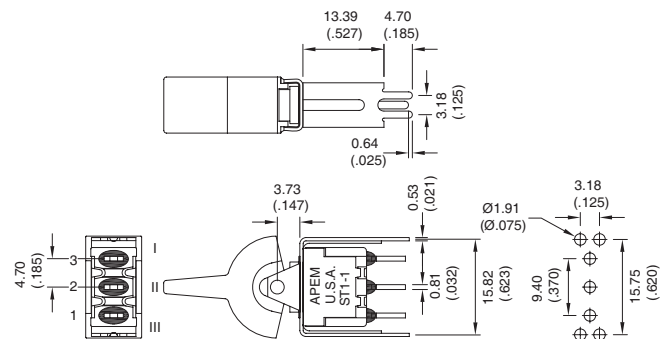
MODEL NO.	I	II	III
	1-2	1-2	2-3
	4-5	5-6	5-6
ST2-1L4S4V30BJ12	ON	-	ON
ST2-2L4S4V30BJ12	ON	OFF	ON
ST2-6L4S4V30BJ12	ON	ON	ON



Single pole straight PC terminals with bracket



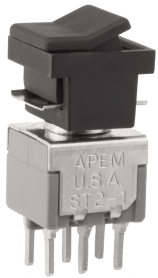
MODEL NO.	I	II	III
	1-2		2-3
ST1-1L4S4V30BJ12	ON	-	ON
ST1-2L4S4V30BJ12	ON	OFF	ON



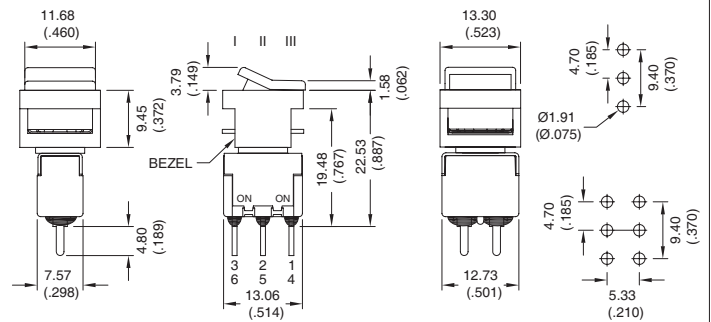
ST series

Miniature rocker switches

Straight PC terminals with PC mounting bezel



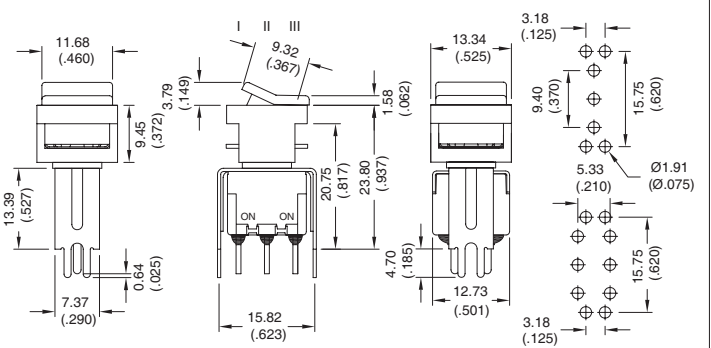
MODEL NO.	I	II	III
SINGLE POLE	1-2		2-3
ST1-1L5S5CBJ3J9322	ON	-	ON
ST1-2L5S5CBJ3J9322	ON	OFF	ON
DOUBLE POLE	1-2	1-2	2-3
ST2-1L5S5CBJ3J9322	ON	-	ON
ST2-2L5S5CBJ3J9322	ON	OFF	ON
ST2-6L5S5CBJ3J9322	ON	ON	ON



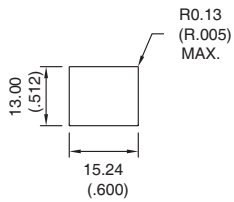
Straight PC terminals with bracket & PC mounting bezel



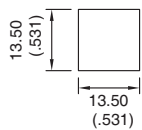
MODEL NO.	I	II	III
SINGLE POLE	1-2		2-3
ST1-1L5S5CV30J3J9322	ON	-	ON
ST1-2L5S5CV30J3J9322	ON	OFF	ON
DOUBLE POLE	1-2	1-2	2-3
	4-5	5-6	5-6
ST2-1L5S5CV30J3J9322	ON	-	ON
ST2-2L5S5CV30J3J9322	ON	OFF	ON
ST2-6L5S5CV30J3J9322	ON	ON	ON



Panel cut-out



With bezel J90

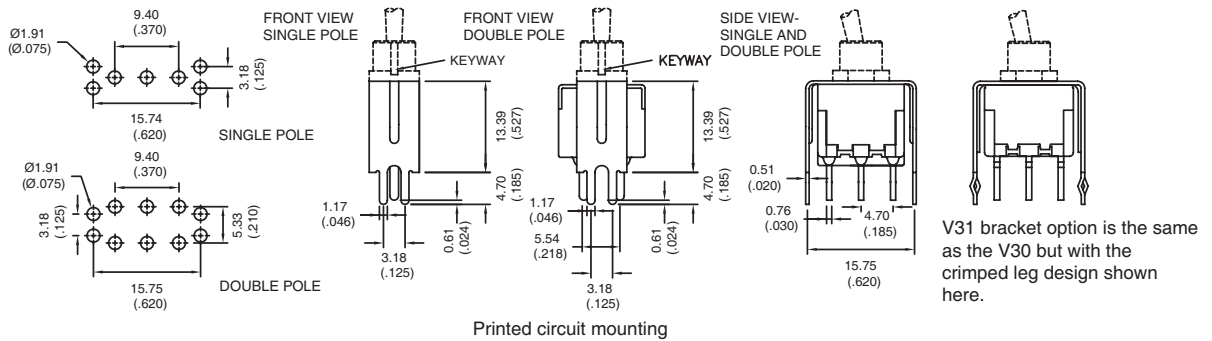


With bezel J93

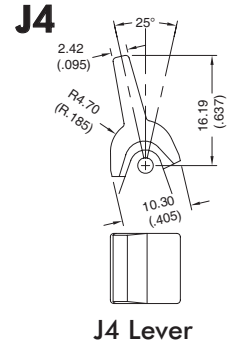
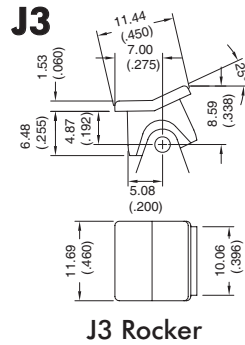
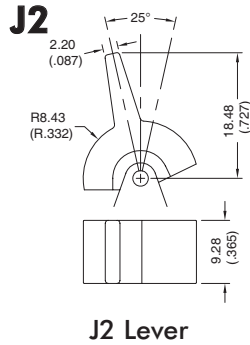
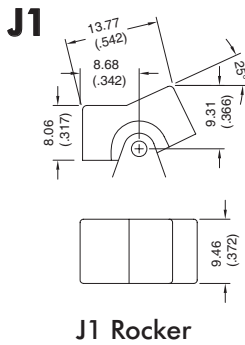
ST series

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

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

GENERAL SPECIFICATIONS

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

AGENCY APPROVAL

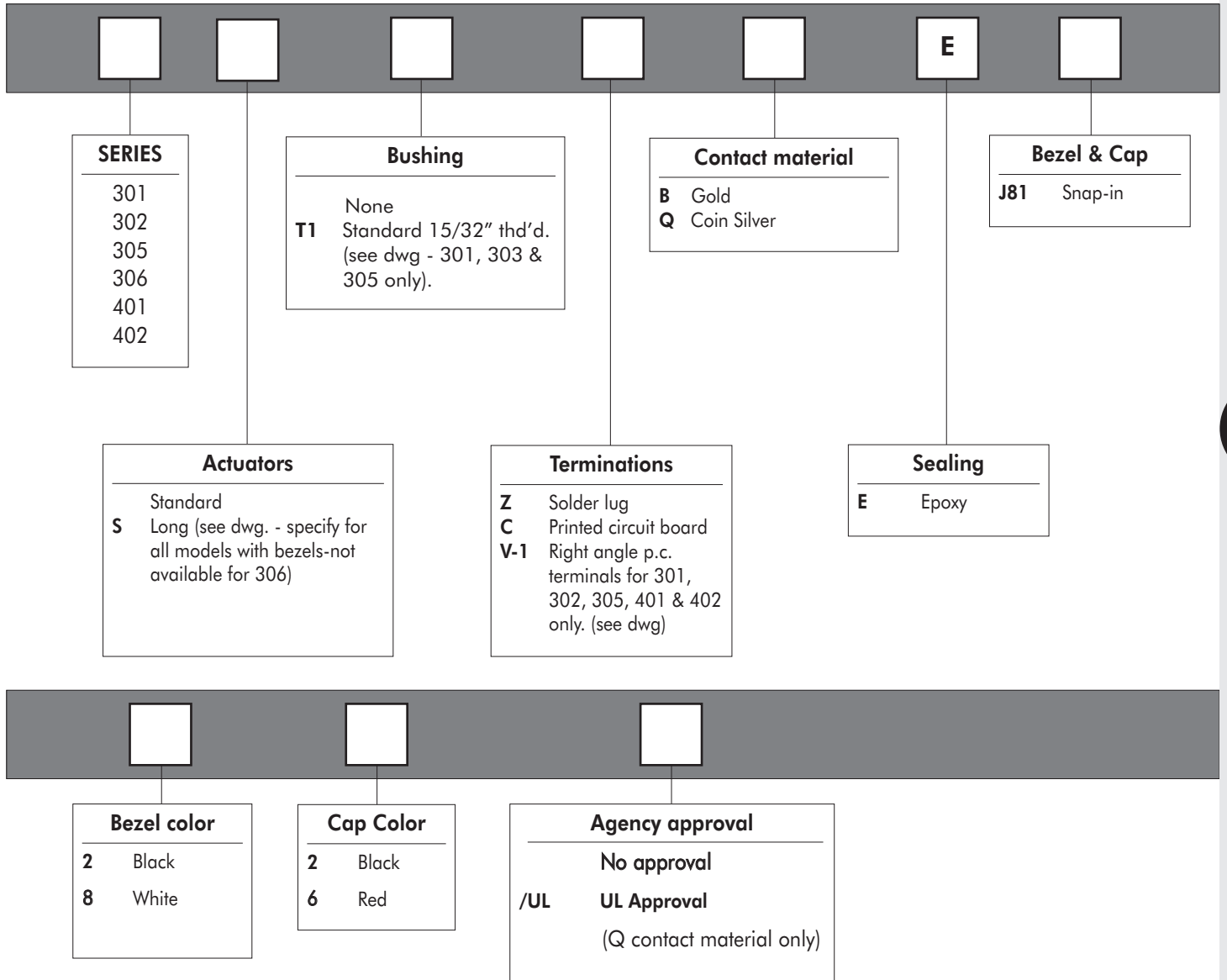


Availability: All models with coin silver contacts (Q) only.

Marking: To order switches marked UL, 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

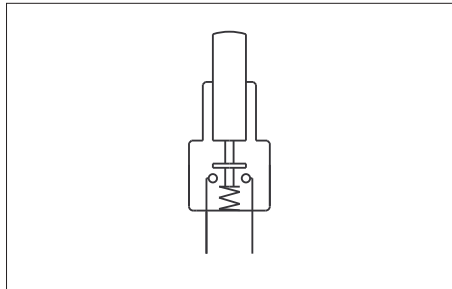
Dimensions : first dimensions are in mm while inches are shown as bracketed numbers.



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

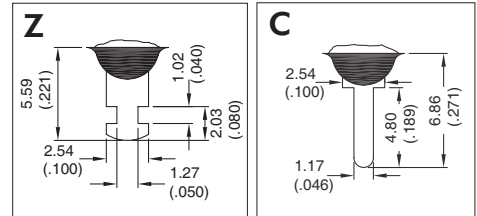
300 & 400 series

Miniature pushbutton switches



Terminations

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



Normally open with overtravel: 301



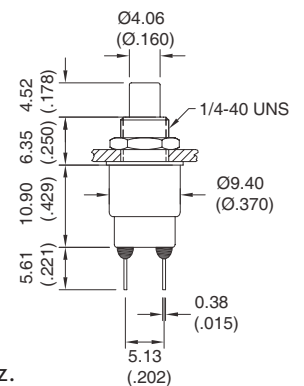
Solder lug terminals

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



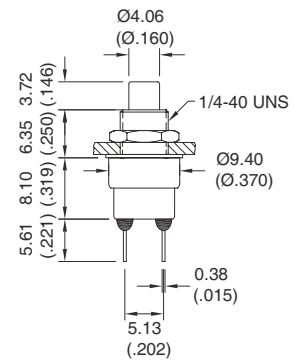
Solder lug terminals

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



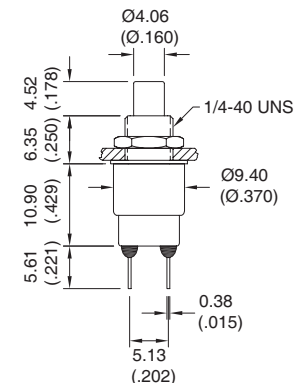
Solder lug terminals

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

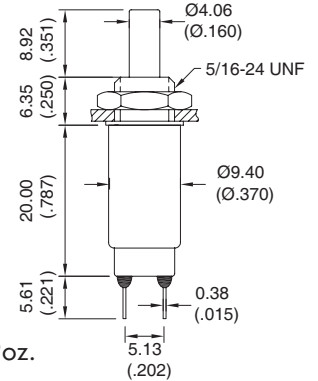
306ZBE  Normally Open

PC terminals

306CQE  Normally Open


306CBE  Normally Open


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

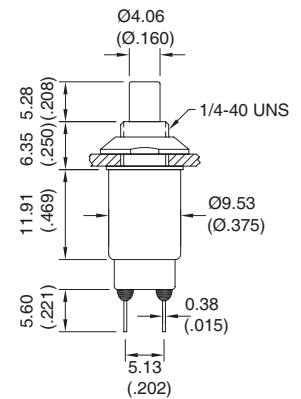


Normally open snap-action mechanism:400



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.

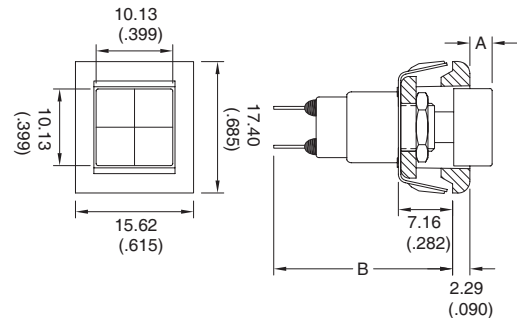


▲ For complete part number, and full list of options see part number breakdown at the beginning of this section

Snap-in bezel



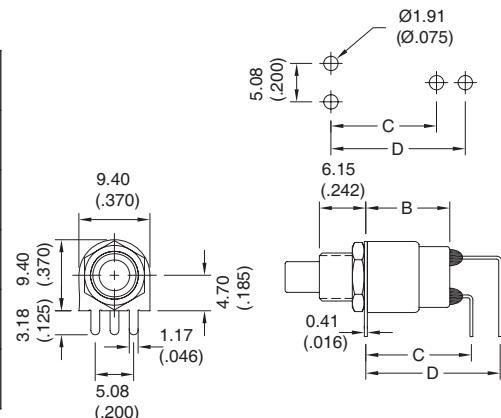
Model no.	Dim A	Dim B
301	2.74 (.108)	23.60 (.929)
302	2.16 (.085)	20.75 (.817)
305	2.74 (.108)	23.60 (.929)
401	3.68 (.145)	29.00 (1.142)
402	3.68 (.145)	29.00 (1.142)



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)



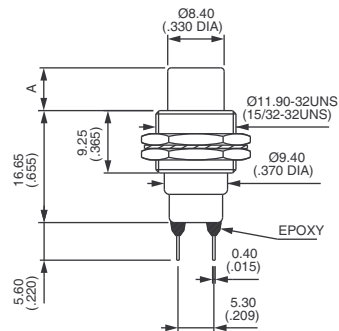
300 & 400 series

Miniature pushbutton switches

T1 option with 15/32 bushing



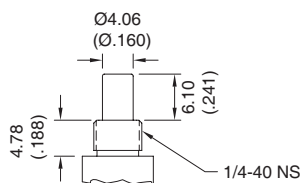
Model no.	Dim A
301	6.35 (.250)
305	6.35 (.250)



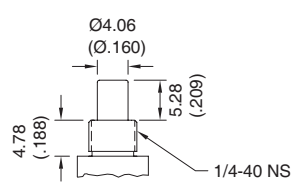
T1 option available only for 301 and 305 models

C

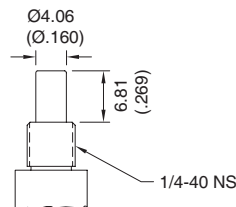
Option S long actuator



301 & 305

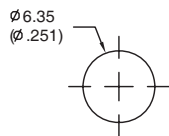


302

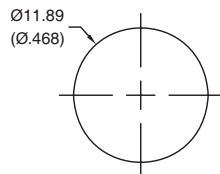


401 & 402

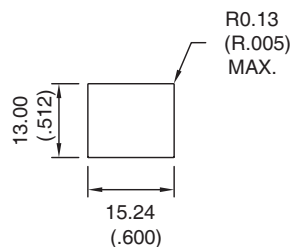
Panel cut-outs



1/4" threaded bushings



15/32" threaded bushings



Snap-in bezel

UL option

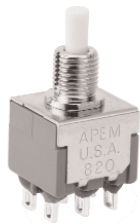


UL For power circuits - coin silver
RATING: 0.5 Amps at 125 VAC (75% power factor).
 Underwriter Laboratories file no. E66367. Note - applicable only to terminations with coin silver contacts (Q option).

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

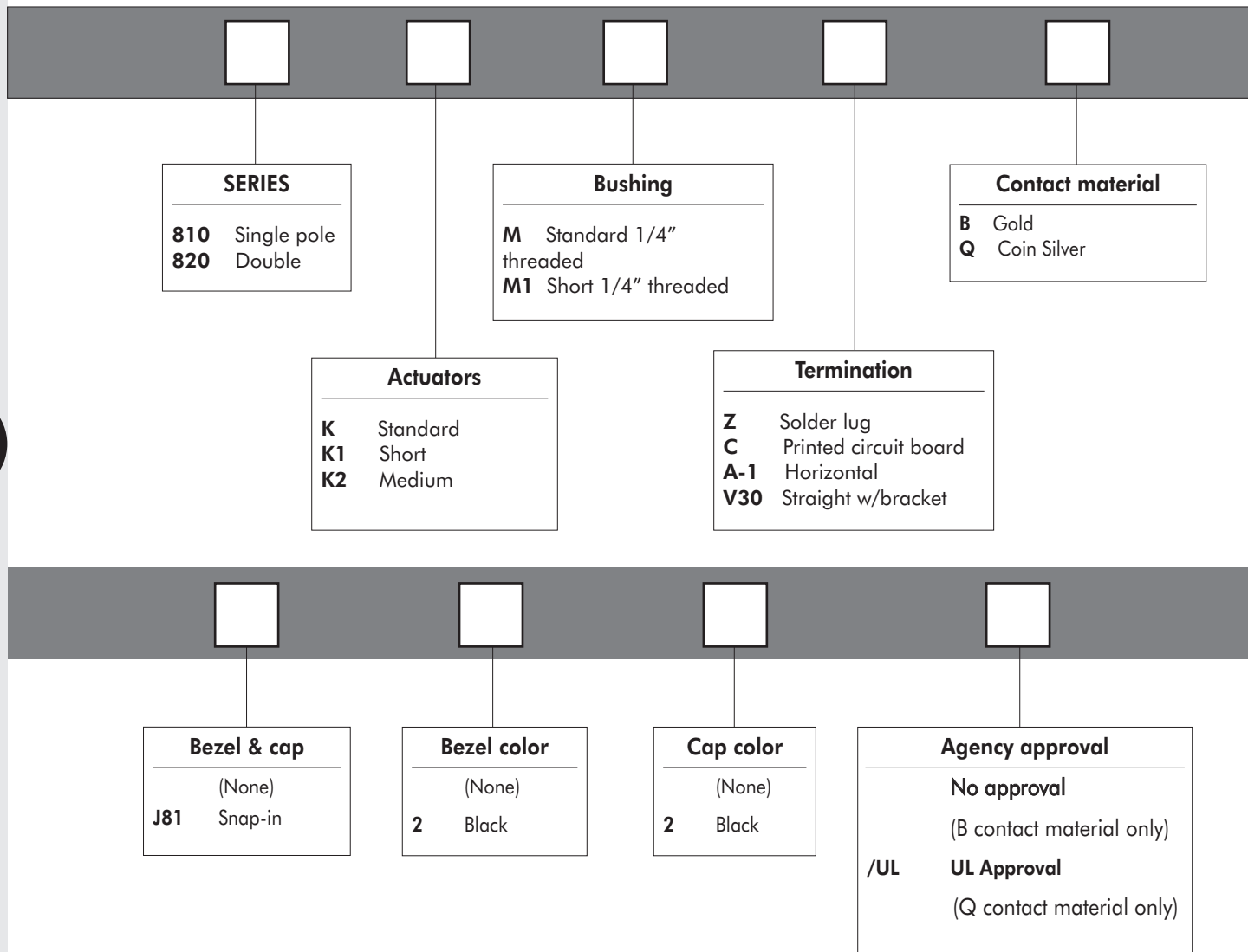


Availability: All models with coin silver contacts (Q) only.

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 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.



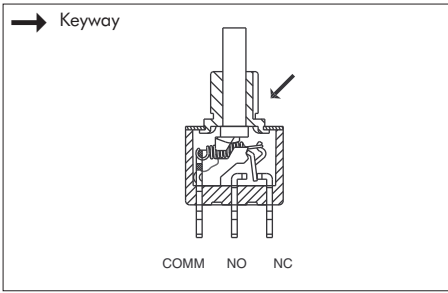
Packaging unit: 25 pieces for double pole
50 pieces for single pole



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

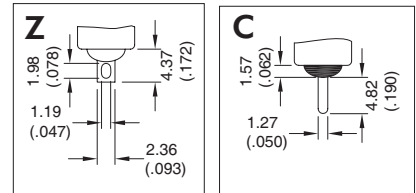
800 series

Snap-action momentary pushbutton switches



Terminations

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

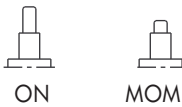


Shown with standard plunger (K)

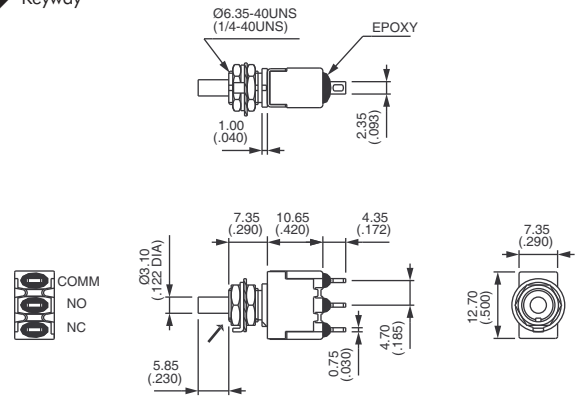
Solder lug terminals



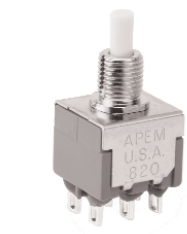
810KMZ



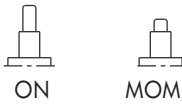
→ Keyway



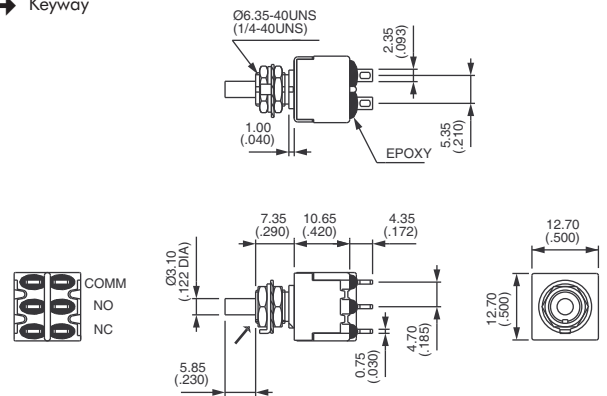
Solder lug terminals



820KMZ



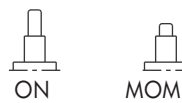
→ Keyway



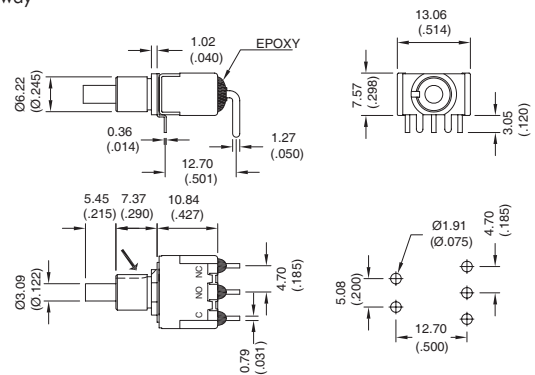
Horizontal right angle



810KSA-1



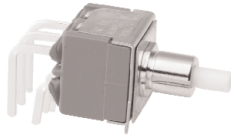
→ Keyway



800 series

Snap-action momentary pushbutton switches

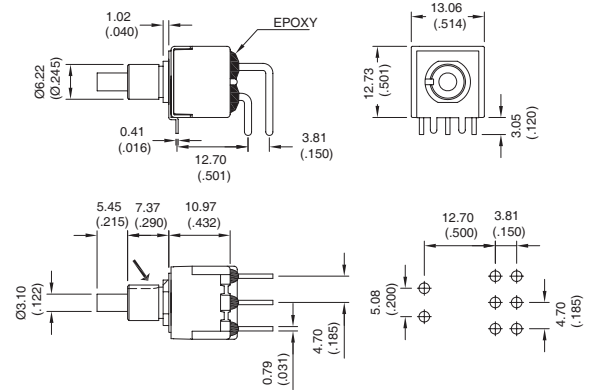
Horizontal angle



820KSA-1



→ Keyway



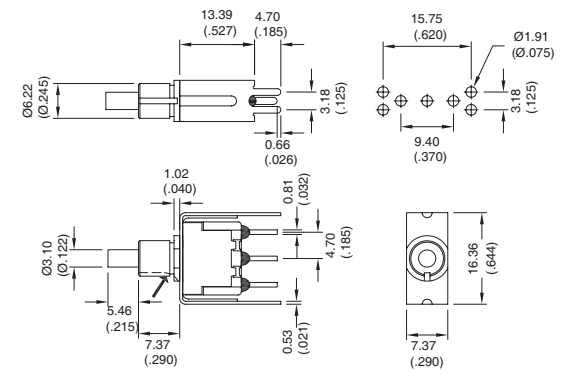
Straight PC terminals with bracket



810KSV30



→ Keyway



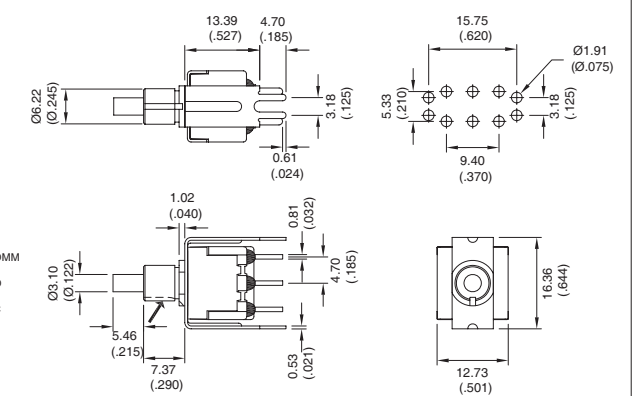
Straight PC terminals with bracket



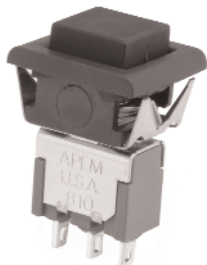
820KSV30



→ Keyway



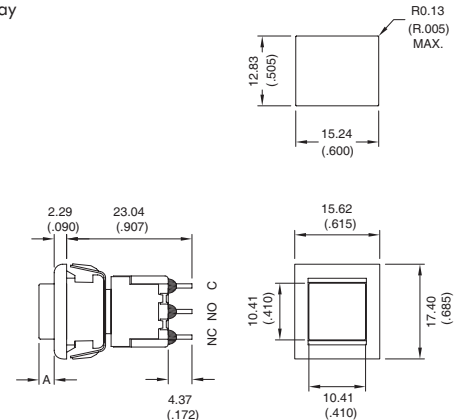
Solder lug terminals with snap-in bezel



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



→ Keyway

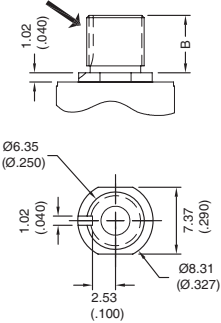


800 series

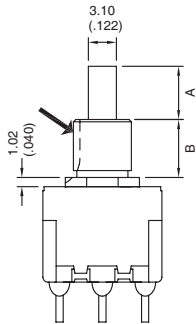
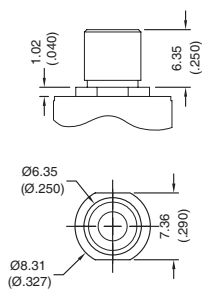
Snap-action momentary pushbutton switches

Actuator & bushing options

M & M1

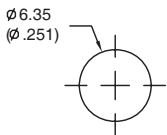


S

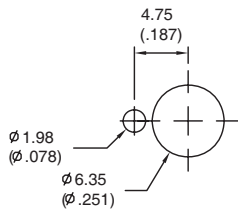


BUSHING OPTION	DIM. B	DIMENSION A ACTUATOR OPTION		
		K	K1	K2
M	6.35 (.250)	5.84 (.230)	.069 (1.75)	4.27 (.168)
S	6.35 (.250)	5.84 (.230)	.069 (1.75)	4.27 (.168)
M1	3.91 (.154)	8.18 (.322)	4.91 (.165)	6.70 (.264)

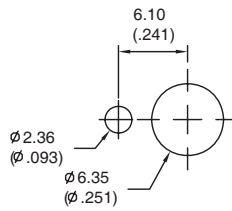
Panel cut-outs



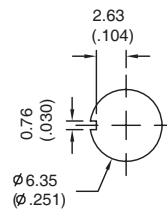
Without keying



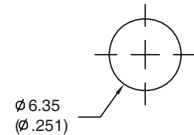
With A107 anti-rotate ring



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



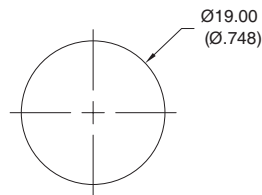
- 19mm bushing
- Single pole ON-OFF, Alternate Action, & Momentary functions
- Standard sealing IP54, IP65 models available
- Extremely rugged and durable

Specifications

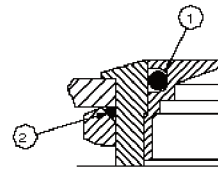
For all 400 series models, see section "C".

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

	IP54
K	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

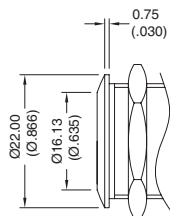
Z	Solder lug
----------	------------

Terminal sealing

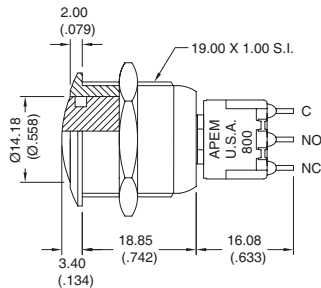
E	Epoxy ▲
▲ For 400 series models only, all 800 series models built with sealed terminals standard.	

Agency approval

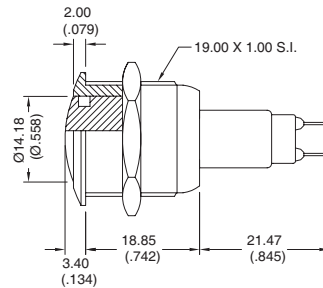
	(None)
/UL	UL approved



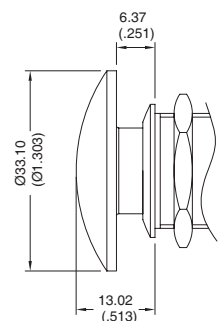
09 flat actuator & curved bushing



19 800 series w/curved actuator & bushing



19 400 series w/ curved actuator & bushing



49 Thd. actuator with mushroom cap & curved bushing