

300 & 400 series

Miniature pushbutton switches

Distinctive features and specifications



- ☐ Dry circuit through power ratings .
- ☐ Compact size.
- ☐ 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 : 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: brass or tin plated steel
- Bezel and cap: nylon

GENERAL SPECIFICATIONS

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

AGENCY APPROVAL



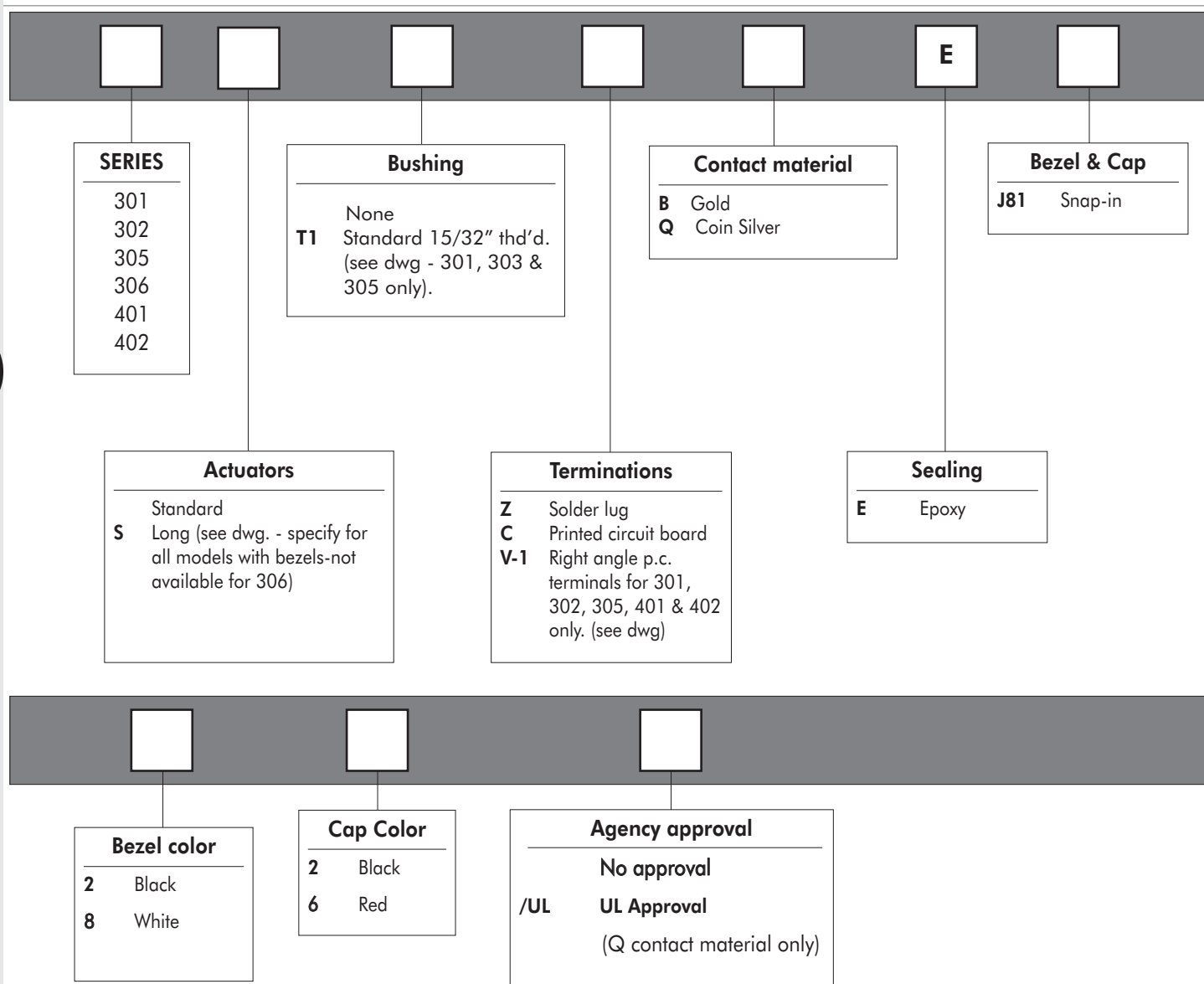
Availability: All models with coin silver contacts (Q) only.

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

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Overview



ABOUT THIS SERIES

On the following pages, you will find successively :

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

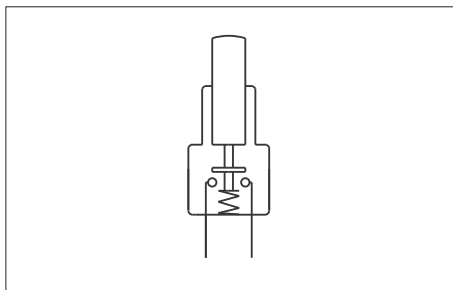
Dimensions : first dimensions are in mm while inches are shown as bracketed numbers.



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

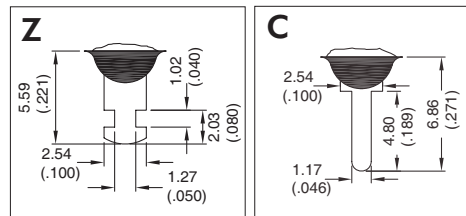
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Terminations

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



Normally open with overtravel: 301



Solder lug terminals

301ZQE  Normally Open

301ZBE  Normally Open

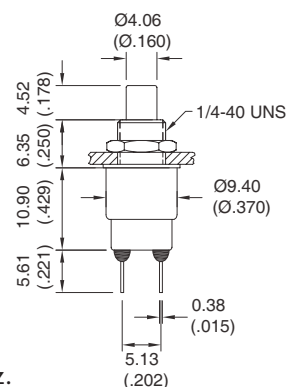
PC terminals

301CQE  Normally Open

301CBE  Normally Open

Total travel: 2.7 (.110)
Over travel: 0.51 (.020)

Actuation force: 8.5oz. $\pm$ 4oz.



Normally open no overtravel: 302



Solder lug terminals

302ZQE  Normally Open

302ZBE  Normally Open

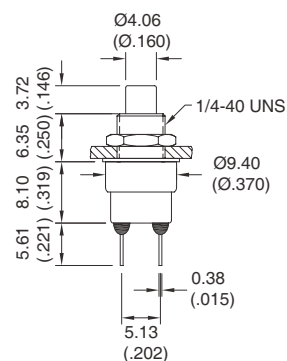
PC terminals

302CQE  Normally Open

302CBE  Normally Open

Total travel: 1.52 (.060)

Actuation force: 10oz. $\pm$ 4oz.



Normally open with greater overtravel: 305



Solder lug terminals

305ZQE  Normally Open

305ZBE  Normally Open

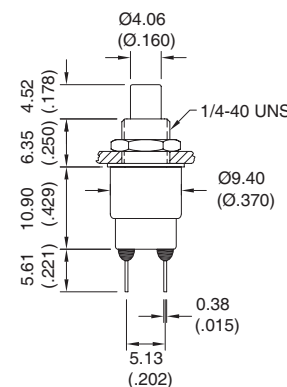
PC terminals

305CQE  Normally Open

305CBE  Normally Open

Total travel: 2.7 (.110)
Over travel: 1.20 (.075)

Actuation force: 8oz. $\pm$ 4oz.



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Normally open with sealed contact area: 306



Solder lug terminals

306ZQE  Normally Open

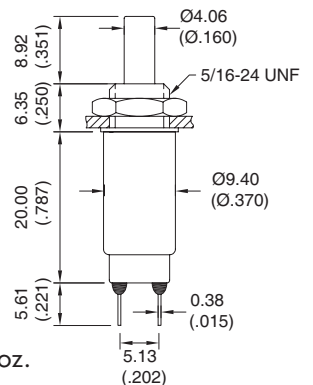
306ZBE  Normally Open

PC terminals

306CQE  Normally Open

306CBE  Normally Open

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



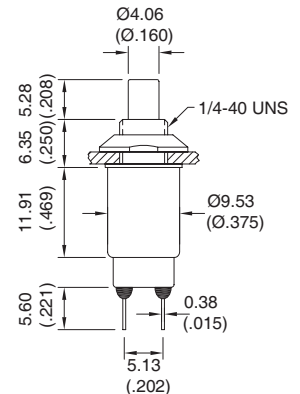
Normally open snap-action mechanism:400



401  ON - OFF

402  MOM - OFF

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

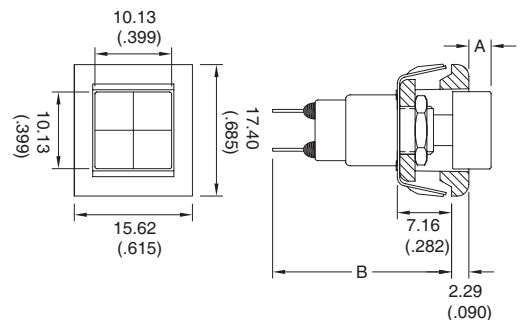


▲ For complete part number, and full list of options see part number breakdown at the beginning of this section

Snap-in bezel



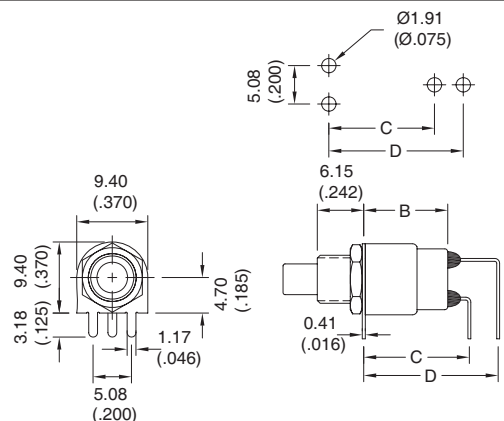
Model no.	Dim A	Dim B
301	2.74 (.108)	23.60 (.929)
302	2.16 (.085)	20.75 (.817)
305	2.74 (.108)	23.60 (.929)
401	3.68 (.145)	29.00 (1.142)
402	3.68 (.145)	29.00 (1.142)



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)



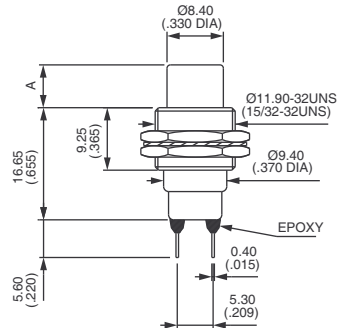
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T1 option with 15/32 bushing

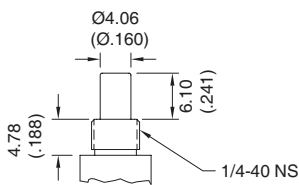


Model no.	Dim A
301	6.35 (.250)
305	6.35 (.250)

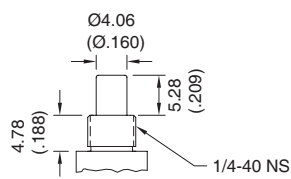


T1 option available only for 301 and 305 models

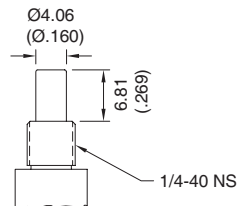
Option S long actuator



301 & 305

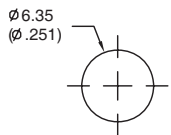


302

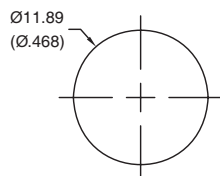


401 & 402

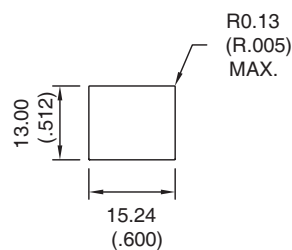
Panel cut-outs



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).