SP series

Washable snap-action pushbutton switches

Distinctive features and specifications



Process sealed

- Secure assembly of the two case parts
- Internally sealed bushing
- Epoxy sealed terminals

□ Process compatible (plain bushing models)

- Wave solderable
- Washable

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : gold plated brass contacts: 100mA 30VDC silver or gold plated silver contacts: 1A 30VDC
- Initial contact resistance : $50 \text{ m}\Omega$ max. • Insulation resistance : $1.000 \text{ M}\Omega$ min. • Dielectric strength : 1.000 Vrms 50 Hz min.• Electrical life : 60.000 cycles

MATERIALS

- Case and cover: UL94-V0, polyamide, glass filled or PES
 • Actuator : polyamide, glass filled
- - 0: brass, gold plated
 - 1 : silver
 - 2 : silver, gold plated
- Terminal seal : epoxy

GENERAL SPECIFICATIONS

- Torque: 0,25 Nm (.18 Ft.lb) applied to nut (threaded bushing)
- Total travel : 0,50 mm (.019) Mechanical strength:
- Terminals are strengthened by a bracket or a ground plate ensuring the rigidity of the switch on the board. Actuator strength is 10N max.
- Operating temperature : -20°C to +85°C
- Storage temperature : -40°C to +85°C
- Moisture :
 - The insulating materials employed and the complete seal permit the switches to withstand a 56 days moisture test (IEC 68-2-3).
- Soldering thermal shock (plain bushing models only): The switches are especially designed for flow soldering at 260°C during 5 seconds owing to high temperature polymer parts.
- Iron soldering (threaded bushing models): 300°C max., 5 seconds max.
- Solderability: The switches are tested at 235°C according to IEC 68-2-20 after accelerated aging.

AGENCY APPROVAL



1A 120VAC

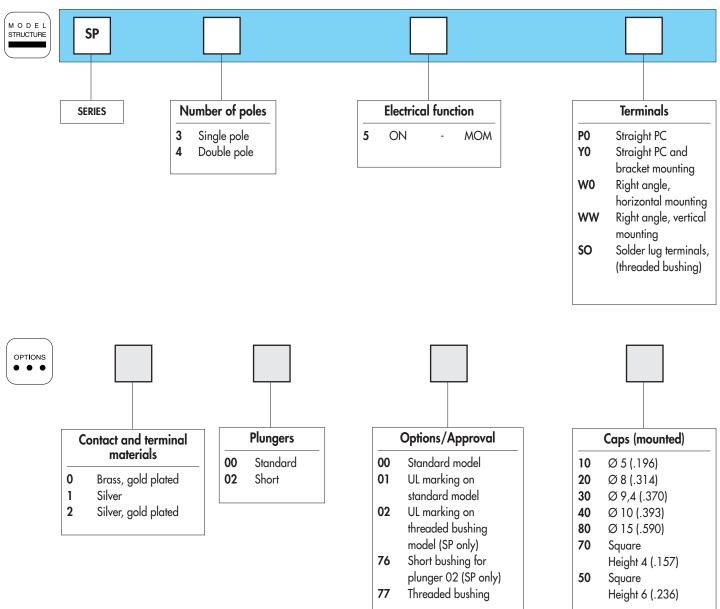
Availability: all models with silver or gold plated silver contacts.

Marking: to order switches marked UL, complete appropriate box of ordering format.



Washable snap-action pushbutton switches

Overview



ABOUT THIS SERIES

On the following pages, you will find successively:

- model structure of switches
- options in the same order as above Specifications are on previous page.

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



Mounting accessories : standard hardware supplied with all models with \emptyset 6,35 (1/4) threaded bushing : 2 hex nuts 8 mm (.314) across flats, 1 locking ring and 1 lockwasher. Standard and special hardware available are presented in section I.

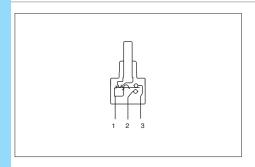


Packaging unit: 25 or 50 pieces depending on model.

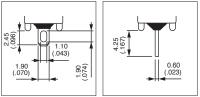
Washable snap-action pushbutton switches

M O D E L STRUCTURE

Plain or threaded bushing



- Solder lug, straight PC or right angle terminals
- Features of threaded bushing models :
 - max. torque: 0,25 Nm (.18 Ft.lb)
 - iron soldering: 300°C max., 5 seconds max.
- 1 and 2 pole configurations





B2



Shown with standard plunger

Plain bushing - straight PC terminals



Single pole

SP35P0... 00

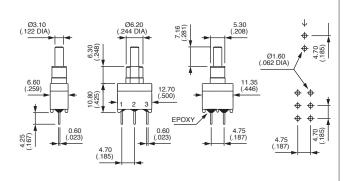
Double pole

SP45P0... 00

1-3 1-2

ON - MOM

ON - MOM



Plain bushing - bracket mounting



Single pole

SP35Y0... 00

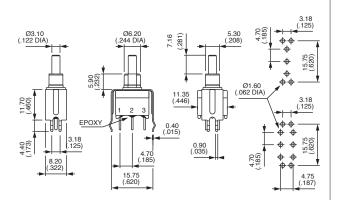
Double pole

SP45Y0... 00

1-3 1-2

ON - MOM

ON - MOM



Plain bushing - right angle terminals - horizontal



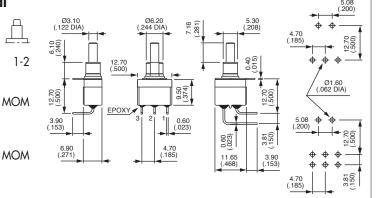
Single pole

SP35W0... 00

Double pole

SP45W0... 00

1-3 1-2 ON - MOM



B2-24

ON

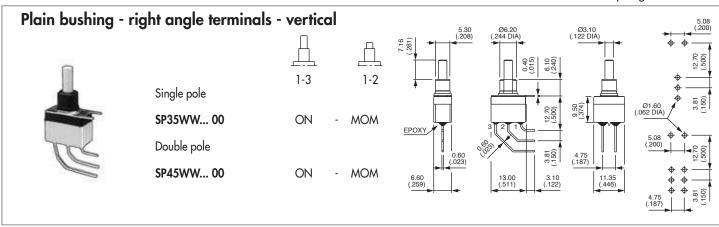


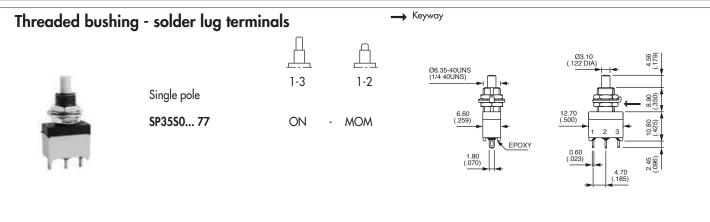
SP series

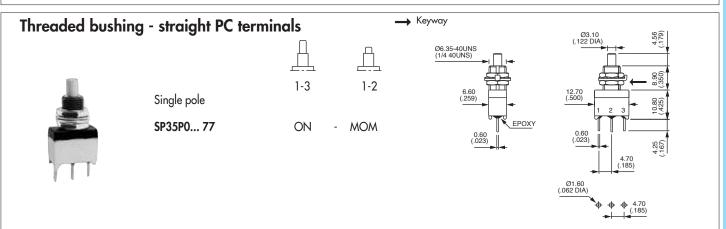
Washable snap-action pushbutton switches

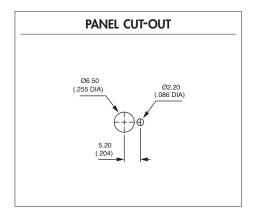
Plain or threaded bushing











Washable snap-action pushbutton switches

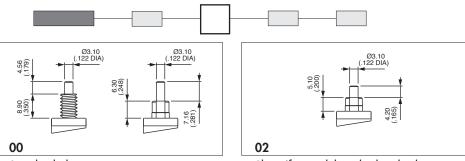


CONTACT AND TERMINAL MATERIALS



- O Brass, gold plated
- 1 Silver
- 2 Silver, gold plated

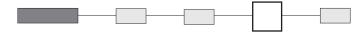
PLUNGERS



Standard plunger

Short (for models with plain bushing, single pole only)
Order with option 76 below.

OPTIONS / AGENCY APPROVAL



- 00 Standard model
- 01 UL marking for standard model
- **02** UL marking for threaded bushing model (single pole models only)
- 76 Short plain bushing for 02 plunger (single pole models only)
- 77 Threaded bushing

(included in model numbers on previous page)



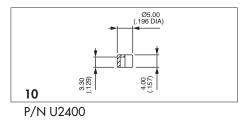
P series

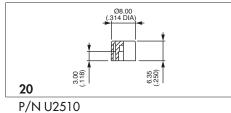
Washable snap-action pushbutton switches

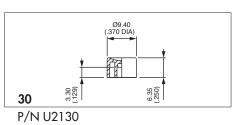




Blank Without cap







Cap colours Replace last "0" by number

blue 1/4 dark blue

black

green

yellow red

ivory

white orange

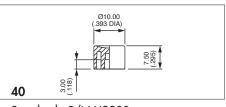
grey

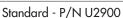
3

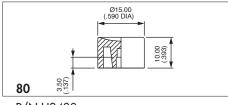
4

5

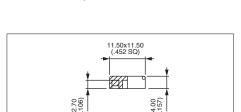
7/1





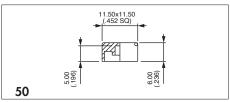


P/N U3400 Not available with plunger 02



Square - P/N U910

70



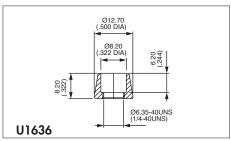
Square - P/N U2340 Not available with plunger 02

To order caps separately, use their P/N (U...) (for threaded bushing order only separately).

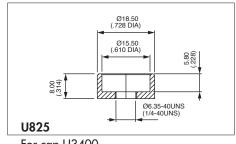
DRESS NUTS

Chrome plated

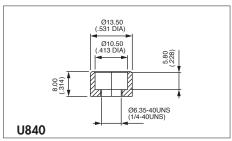
For threaded bushing models only.



For cap U2510



For cap U3400



For cap U2900

Dress nuts are to be ordered separately.