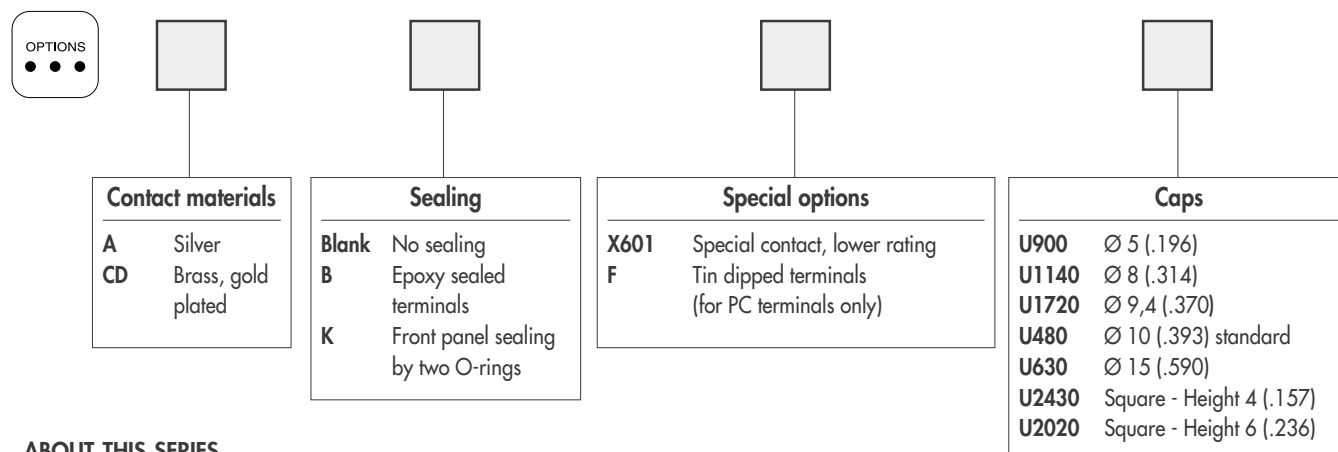
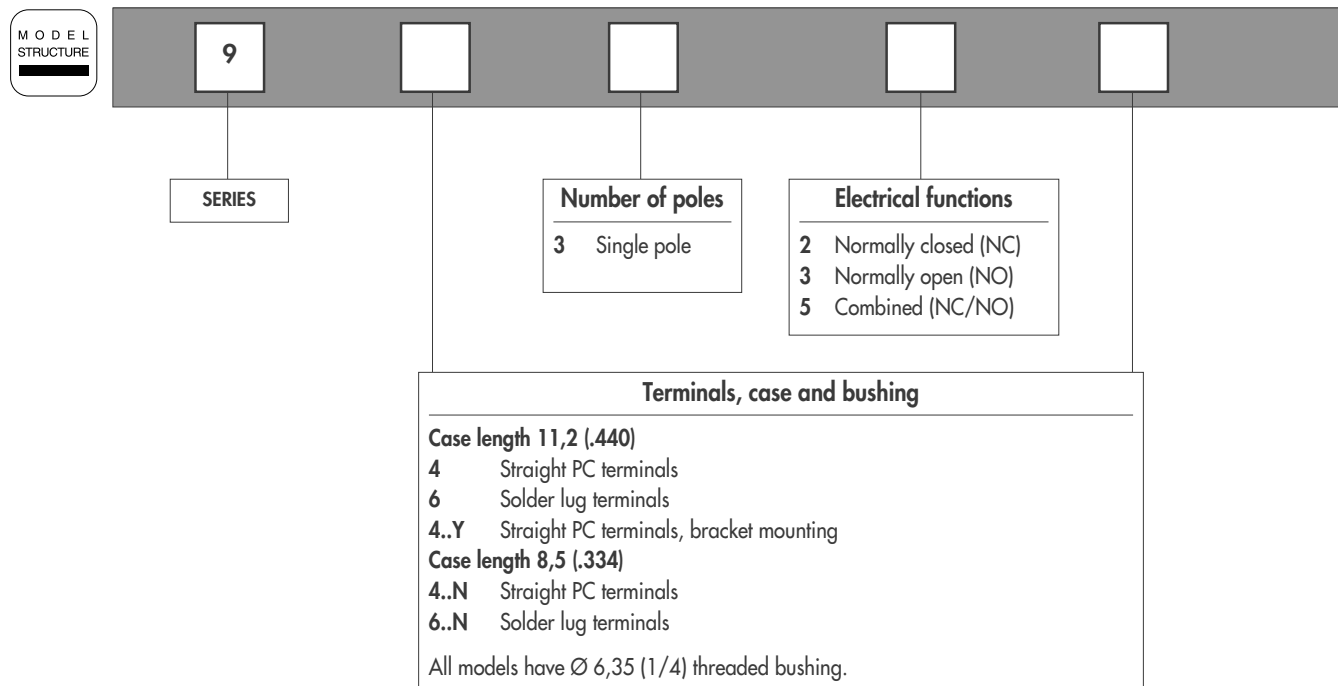


# 9000 SERIES

## MOMENTARY PUSHBUTTON SWITCHES

### Overview



#### ABOUT THIS SERIES

On the following pages, you will find successively :

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

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



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



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



**Mounting accessories :** standard hardware supplied with all switches : 2 hex nuts 8 mm (.314) across flats and 1 lockwasher. Standard and special hardware available are presented in section N.



**Packaging unit :** 50 pieces, except for 9400Y (25 pieces)

# 9000 SERIES

## MOMENTARY PUSHBUTTON SWITCHES

### Specifications

#### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - silver contact (A) : 0,3A 250VAC - 0,6A 125VAC - 1A 30VDC
  - gold plated contacts (CD) : 100mA 30VDC
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1.000 MΩ min. at 500VDC
- Dielectric strength :
  - 1.000 Vrms 50 Hz min. between terminals
  - 1.500 Vrms 50 Hz min. between terminals and frame
- Electrical life : 250.000 cycles

D

#### MATERIALS

- Case : thermoplastique UL 94-V0
- Actuator : polyamide, glass filled
- Bushing : brass, nickel plated
- Contacts :
  - A** : silver
  - CD** : brass, gold plated
- Terminal seal : epoxy

#### GENERAL SPECIFICATIONS

- Total travel :

9600-9400-9400Y		9600N-9400N	
Functions 3 and 5	Function 2	Function 3	
1,3 mm	2 mm	0,9 mm	

- Torque : 1,25 Nm (.922 Ft.lb) max. applied to nut
- Operating temperature : -30°C to +65°C

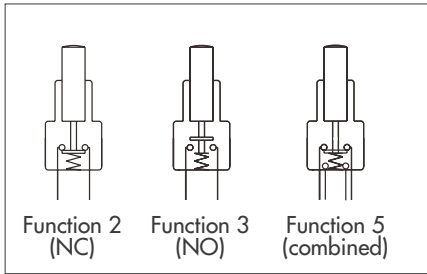
# 9000 SERIES

## MOMENTARY PUSHBUTTON SWITCHES

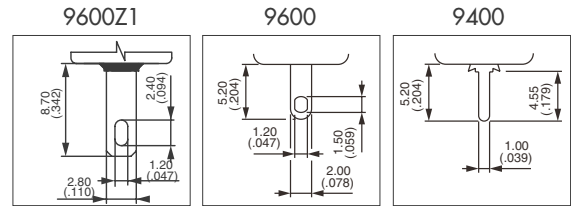
### Threaded bushing $\varnothing 6,35$ (1/4)

MODEL  
STRUCTURE

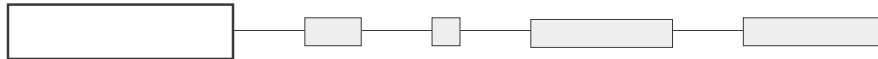
D



- Single pole
- Solder lug or straight PC terminals



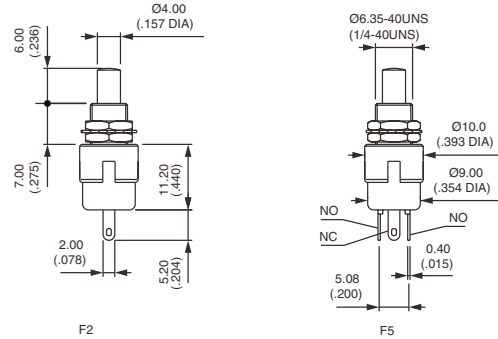
MODEL  
STRUCTURE



### Solder lug terminals - case length 11,2 (.440) : 9600



- |      |  |                   |
|------|--|-------------------|
| 9632 |  | Normally Closed   |
| 9635 |  | Combined function |

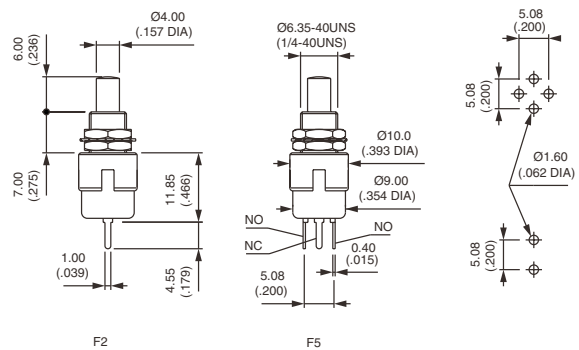


For Normally Open (function 3), see next page  
Also available with quick-connect terminals : 9632Z1 or 9635Z1

### Straight PC terminals - case length 11,2 (.440) : 9400



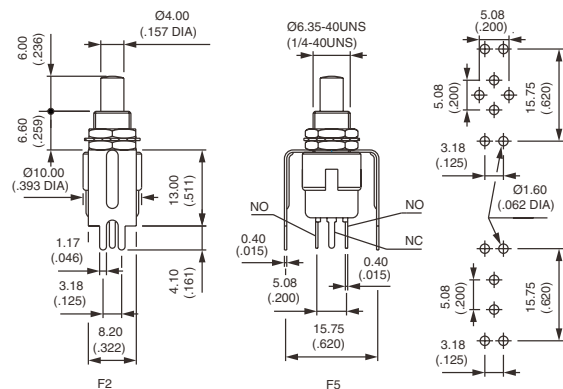
- |      |  |                   |
|------|--|-------------------|
| 9432 |  | Normally Closed   |
| 9433 |  | Normally Open     |
| 9435 |  | Combined function |



### Bracket mounting - case length 11,2 (.440) : 9400Y



- |       |  |                   |
|-------|--|-------------------|
| 9432Y |  | Normally Closed   |
| 9433Y |  | Normally Open     |
| 9435Y |  | Combined function |



The bracket is not fastened to the switch.

# 9000 SERIES

## MOMENTARY PUSHBUTTON SWITCHES

### Threaded bushing $\varnothing 6,35$ (1/4)

MODEL  
STRUCTURE

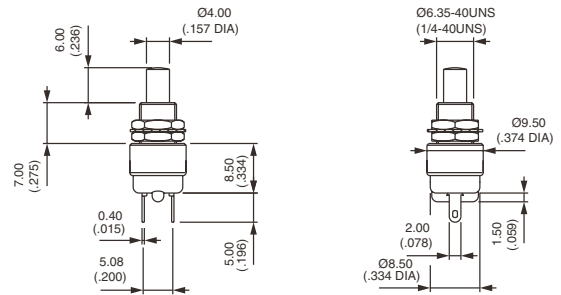
#### Solder lug terminals - case length 8,5 (.334) : 9600N



9633N



Normally Open



Also available with quick-connect terminals 2,8 x 0,5 mm : 9633NZ1

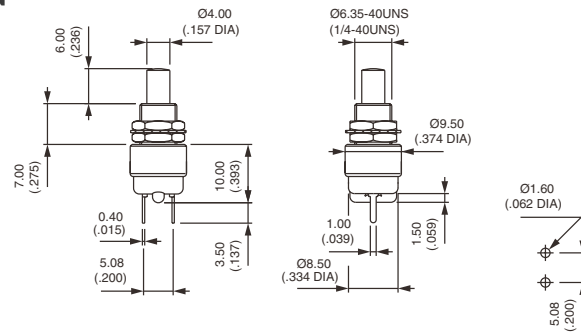
#### Straight PC terminals - case length 8,5 (.334) : 9400N



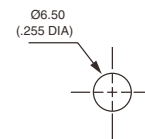
9433N



Normally Open



#### PANEL CUT-OUT



#### Bushing $\varnothing 16$ (.630) - metal button : 9633•X1146



Silver contacts  
9633AX1146

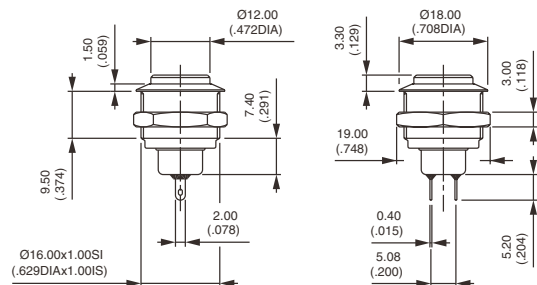


Normally open

Gold plated silver contacts  
9633ADX1146



Normally open



Hex nut 19 (.748) across flats

Panel cut-out :  $\varnothing 16,2$  (.637)

Max. current/voltage rating. : 0,3A 250VAC - 1A 30VDC

Epoxy sealed terminals. Options of the following pages not applicable.

A P E M

D-35

D

# 9000 SERIES

## MOMENTARY PUSHBUTTON SWITCHES



### CONTACT MATERIALS



- A Silver
- CD Brass, gold plated

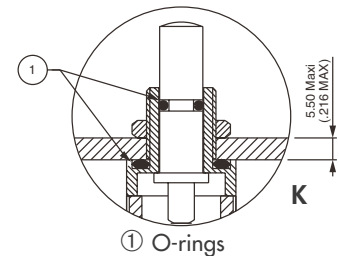
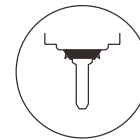
Special contact, lower rating : see X601 under "Special options".

**D**

### SEALING



- Blank No sealing
- B Epoxy sealed terminals
- K Front panel sealing by two O-rings. Protects the switch against water and dust. Panel seal withstands 0,1 bar pressure and remains tight even when switch is operated.
- KB Combined sealings



Sealing boots : see section N.

### SPECIAL OPTIONS



- X601 Silver plated brass contacts**  
Current/voltage rating for an electrical life of 20.000 cycles :  
0,2A 250VAC - 0,4A 125VAC - 0,5A 30VDC.  
Minimum quantity : 5.000 pieces per model and shipment.

- F Tin dipped terminals**  
For PC terminal models with gold plated contacts only.  
Order with option B (epoxy sealing).

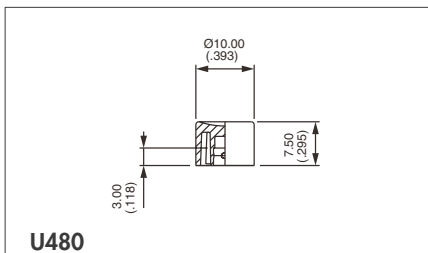
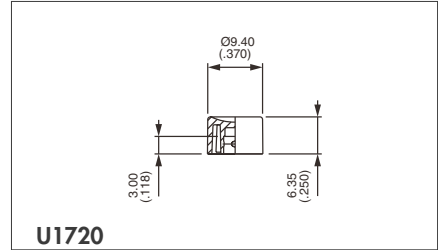
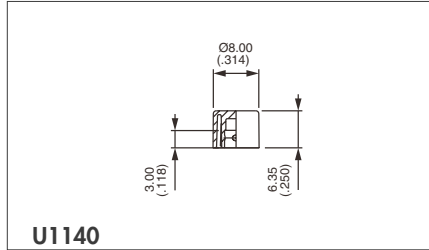
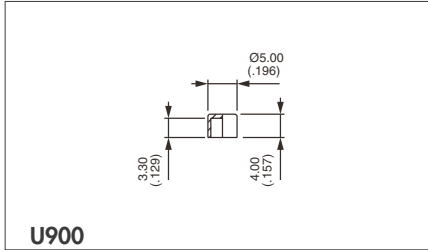
# 9000 SERIES

## MOMENTARY PUSHBUTTON SWITCHES

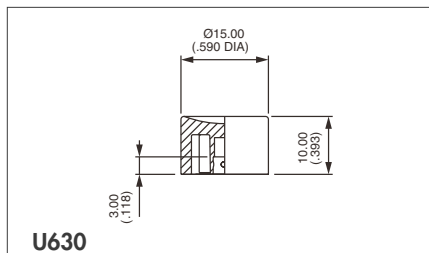


**D**

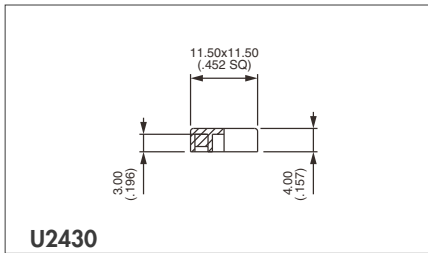
### CAPS



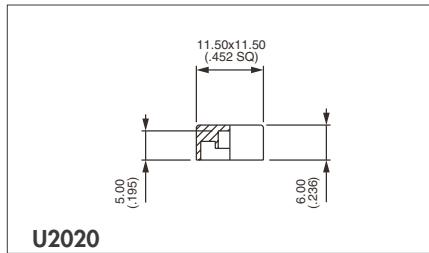
Standard



Cap colours	
Replace last "0" by number	
1	blue
2	black
3	green
4	grey
5	yellow
6	red
7	ivory
7/1	white
9	orange



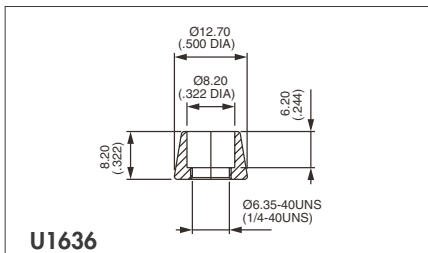
Square



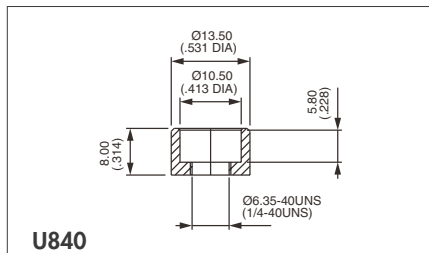
Square

### DRESS NUTS

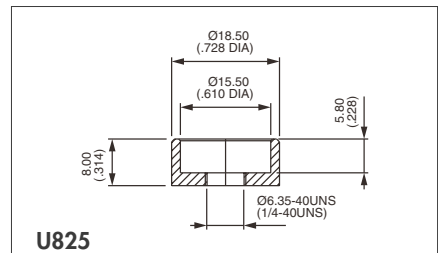
Chrome plated



For cap U1140



For cap U480



For cap U630

Dress nuts are to be ordered separately.

# 9000 SERIES

## ALTERNATE ACTION OR MOMENTARY PUSHBUTTON SWITCHES

### Specifications

#### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load and electrical life :
  - silver contacts (A) : 0,5A 250VAC - 1A 28VDC - 250.000 cycles
  - 1,5A 250VAC - 3A 28VDC - 10.000 cycles
  - gold plated contacts (CD) : 0,4VA 20V max. AC or DC
- Initial contact resistance : 10 mΩ max. at 0,1A 3VDC
- Insulation resistance : 10.000 MΩ min.
- Dielectric strength :
  - 1.000 Vrms 50 Hz min.

**D**

#### MATERIALS

- Case : diallylphthalate
- Actuator : nylon  
black for series 9630M  
white for series 9631
- Bushing : brass, nickel plated
- Contacts :
  - A** : silver
  - CD** : brass, gold plated
- Terminal seal : epoxy

#### GENERAL SPECIFICATIONS

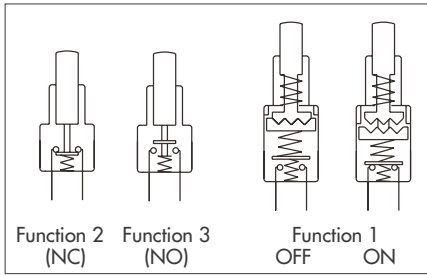
- Operating temperature : -30°C to +85°C
- Travels : see table below.

MODELS	9631	9633M	9632M
Total travel	3,48 (.137)	2,79 (.110)	1,40 (.055)
Pre-travel	0,66 (.026)	-	0,51 (.020)
Over travel	2,69 (.106)	0,51 (.020)	-

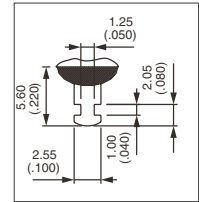
# 9000 SERIES

## ALTERNATE ACTION OR MOMENTARY PUSHBUTTON SWITCHES

### Threaded bushing



- Single pole
- Solder lug terminals
- Epoxy sealed terminals



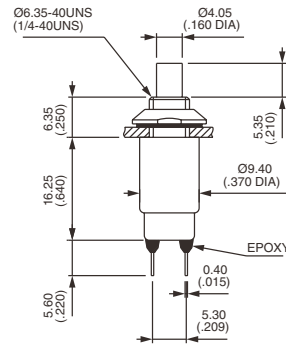
D

### Alternate action - tactile feedback



Gold plated contacts  
**9631CDB**      ON - OFF

Silver contacts  
**9631AB**      ON - OFF



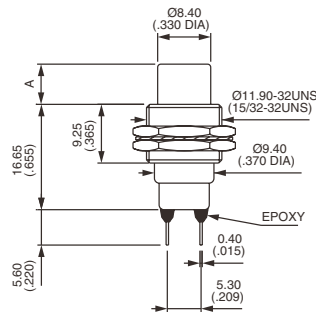
Standard hardware : 1 conic nut and 1 lockwasher

### Bushing Ø 11,9 (15/32) - front or rear mounting - NO or NC



**9633MCDB**           Normally open

**9632MCDB**           Normally closed



MODEL	A
9633M	6.35 (.250)
9632M	5.70 (.225)

Standard hardware : 2 hex nuts 14 mm (.551) across flats and 1 lockwasher

Caps available on request.