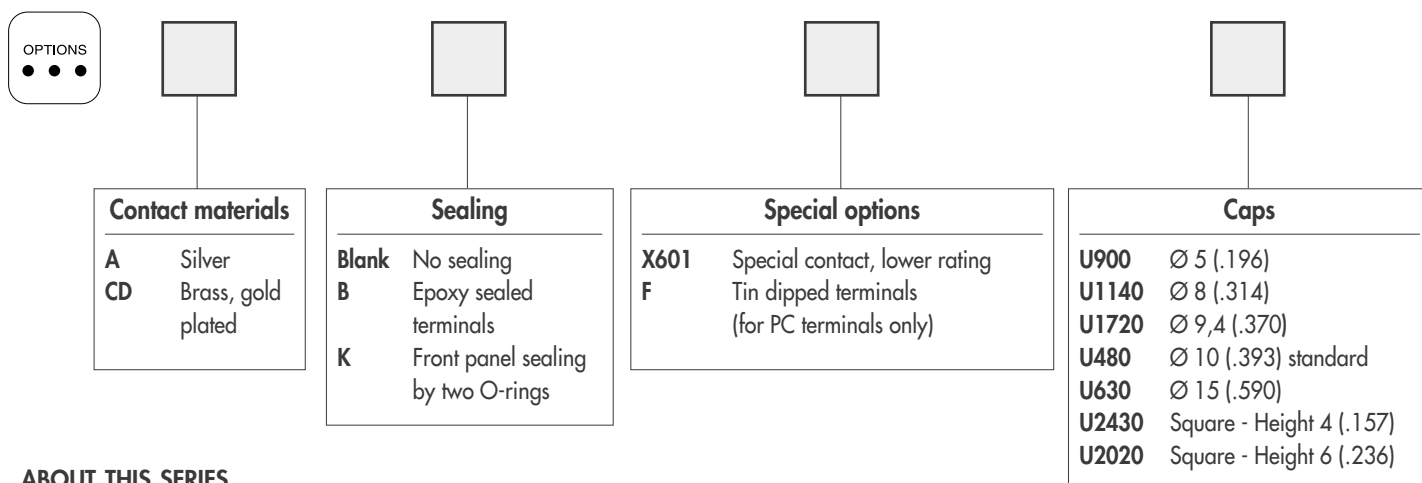
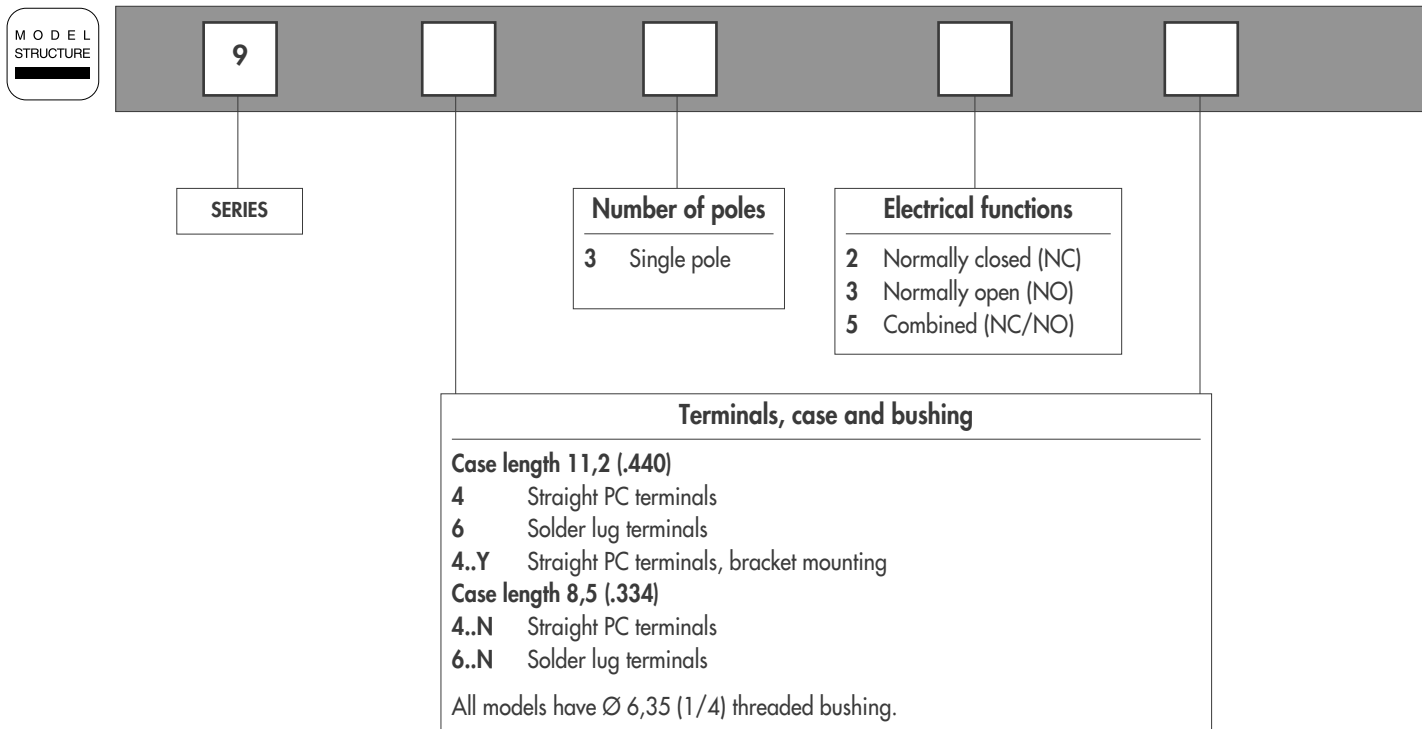


# 9000 SERIES

## 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

#### 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 :

| <b>9600-9400-9400Y</b> |            | <b>9600N-9400N</b> |
|------------------------|------------|--------------------|
| 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

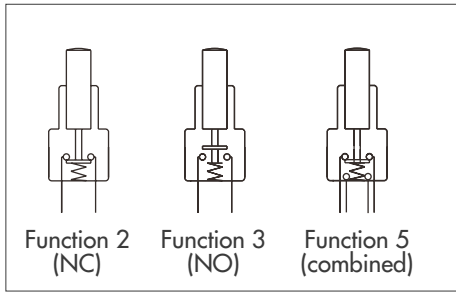
D

# 9000 SERIES

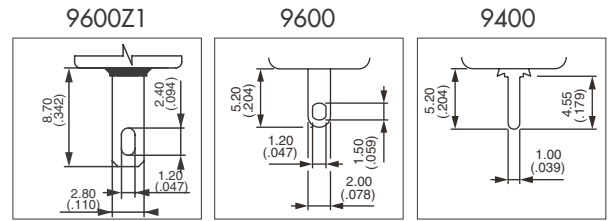
## MOMENTARY PUSHBUTTON SWITCHES

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

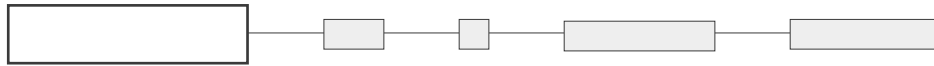
MODEL  
STRUCTURE



- Single pole
- Solder lug or straight PC terminals



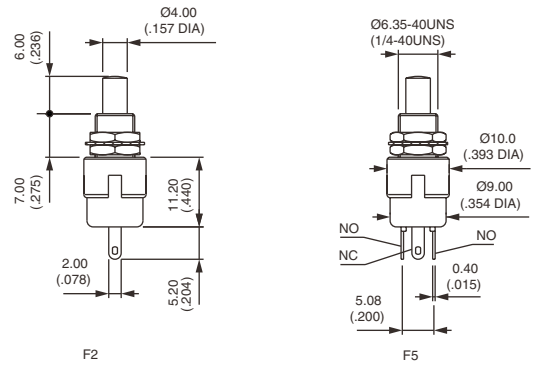
MODEL  
STRUCTURE



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



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

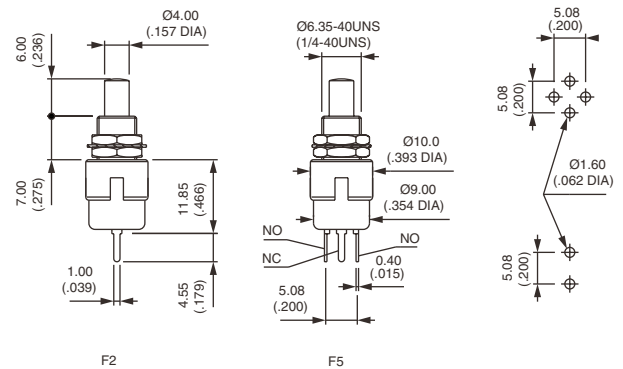


For Normally Open (function 3), see next page  
Also available with quick-connect terminals : 9632Z1 or 9635Z1

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



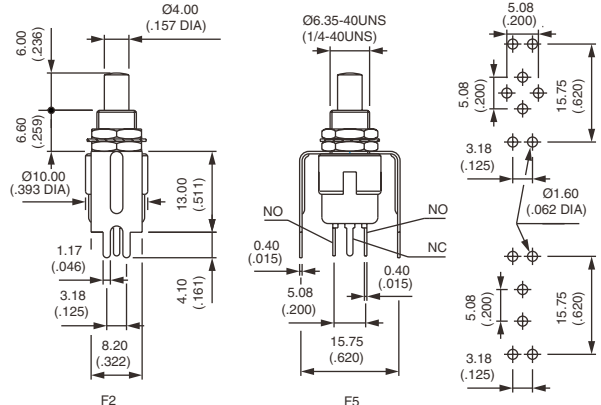
|      |  |                   |
|------|--|-------------------|
| 9432 |  | Normally Closed   |
| 9433 |  | Normally Open     |
| 9435 |  | Combined function |



### 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 Ø 6,35 (1/4)

M O D E L  
STRUCTURE

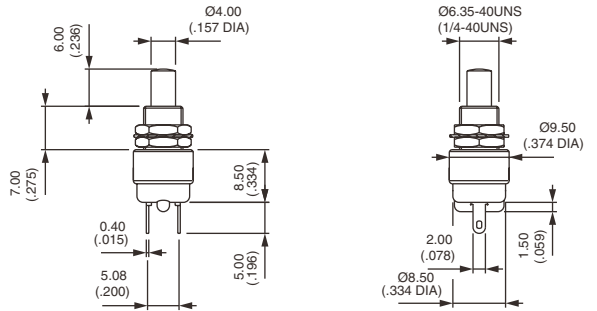
#### Solder lug terminals - case length 8,5 (.334) : 9600N



**9633N**



Normally Open



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

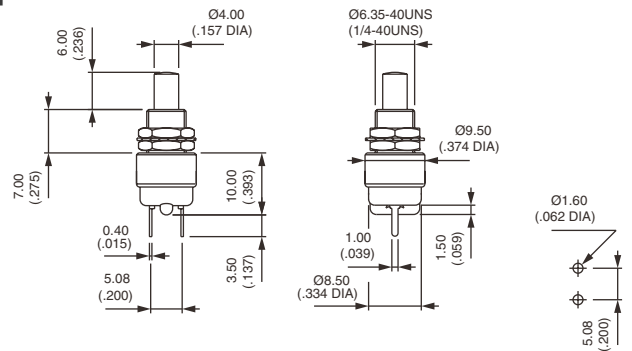
#### Straight PC terminals - case length 8,5 (.334) : 9400N



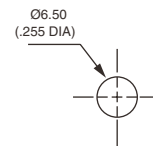
**9433N**



Normally Open



#### PANEL CUT-OUT



#### Bushing Ø 16 (.630) - metal button : 9633•X1146



Silver contacts  
**9633AX1146**

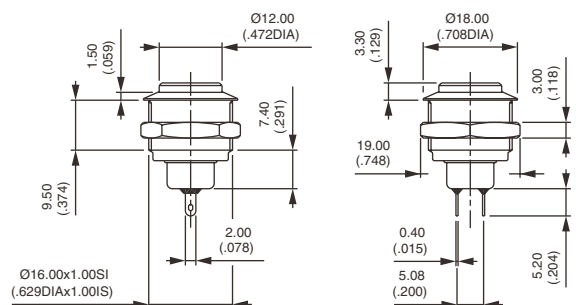


Normally open

Gold plated silver contacts  
**9633ADX1146**



Normally open



Hex nut 19 (.748) across flats

Panel cut-out : Ø 16,2 (.637)

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

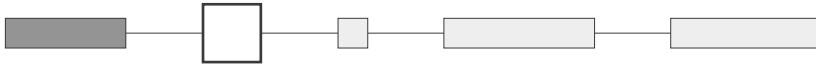
Epoxy sealed terminals. Options of the following pages not applicable.

# 9000 SERIES

## MOMENTARY PUSHBUTTON SWITCHES



### CONTACT MATERIALS



- A** Silver
- CD** Brass, gold plated

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

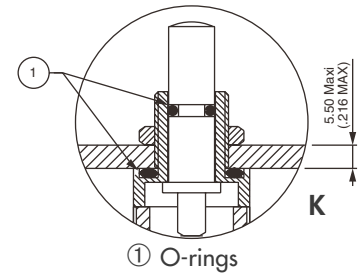
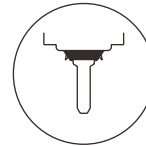
**D**

### 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.

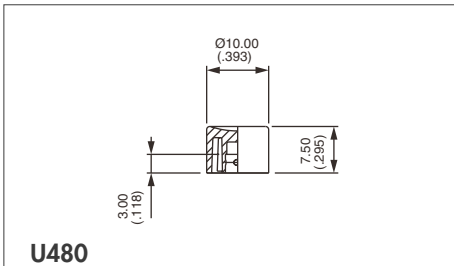
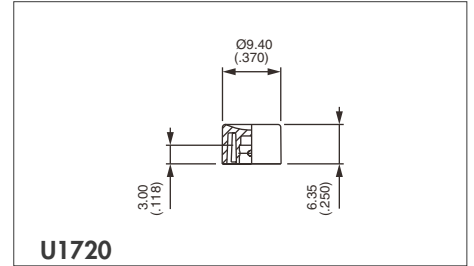
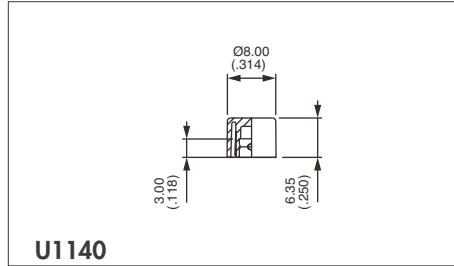
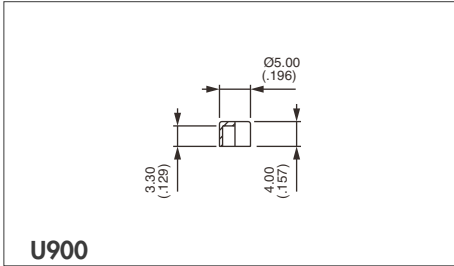
- F** **Tin dipped terminals**  
For PC terminal models with gold plated contacts only.  
Order with option B (epoxy sealing).

# 9000 SERIES

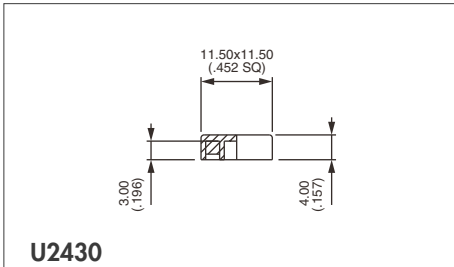
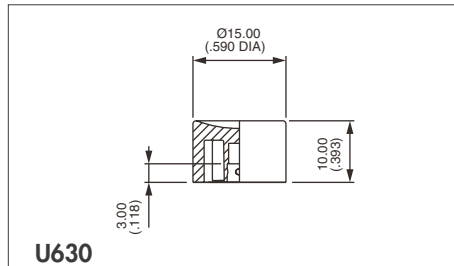
## MOMENTARY PUSHBUTTON SWITCHES



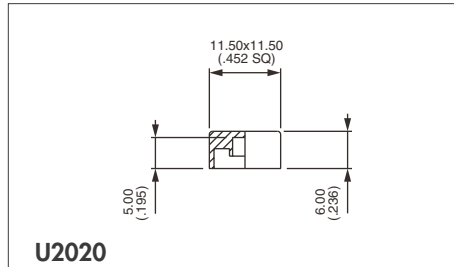
### CAPS



Standard



Square

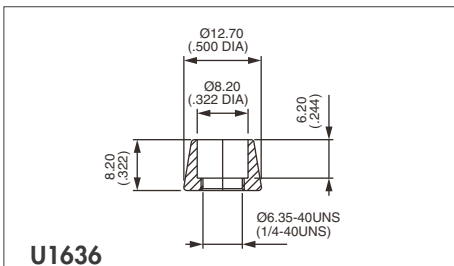


Square

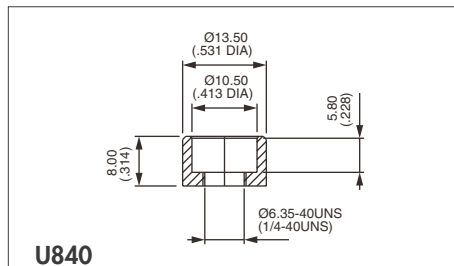
| Cap colours                |        |
|----------------------------|--------|
| Replace last "0" by number |        |
| 1                          | blue   |
| 2                          | black  |
| 3                          | green  |
| 4                          | grey   |
| 5                 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

### DRESS NUTS

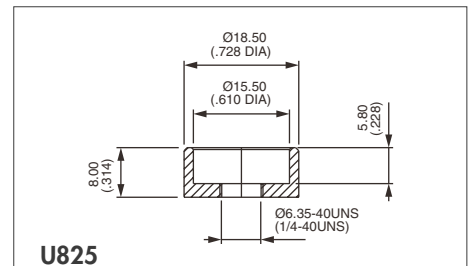
Chrome plated



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.

#### MATERIALS

- Case : diallyphthalate
- 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

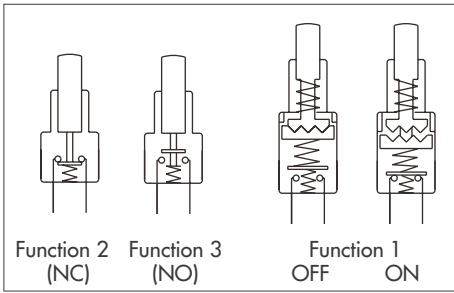
- Operating temperature : -30°C to +85°C
- Travels : see table below.

| 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) | -           |

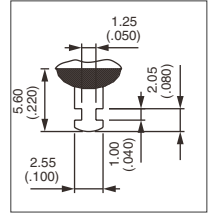
# 9000 SERIES

## ALTERNATE ACTION OR MOMENTARY PUSHBUTTON SWITCHES

### Threaded bushing



- Single pole
- Solder lug terminals
- Epoxy sealed terminals

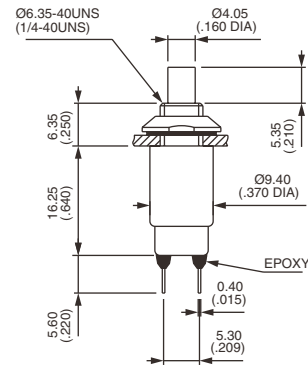


### Alternate action - tactile feedback



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

Silver contacts  
**9631AB**      ON - OFF



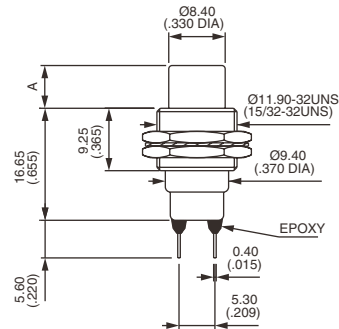
Standard hardware : 1 conic nut and 1 lockwasher

### 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.