

# Hardware

For miniature switches

- Standard hardware is automatically supplied with the switches
- Non standard hardware is to be ordered separately



## Hardware supplied with sealing options :

- K version : 2 hex nuts + sealing washer
- X408 option : 1 hex nut + 1 O-ring

### STANDARD HARDWARE FOR SWITCHES Ø 6 (.236) - 5000 SERIES

| HEX NUT                                        | LOCKING RING                                                                                                            | LOCKWASHER                                                   |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| <p>Ø6.00 x 0.75 SI<br/>(.236 DIA x 0.75SI)</p> | <p>Ø11.80 (.464 DIA)<br/>Ø6.10 (.240 DIA)<br/>5.50 (.216)<br/>Ø9.50 (.374 DIA)<br/>Ø6.50 (.255 DIA)<br/>0.80 (.031)</p> | <p>Ø9.50 (.374 DIA)<br/>Ø6.50 (.255 DIA)<br/>0.80 (.031)</p> |
| Nickel plated<br>Matt black                    | Nickel plated<br>Matt black                                                                                             | Stainless steel                                              |
| <b>U208</b><br><b>U726</b>                     | <b>U198</b><br><b>U728</b>                                                                                              | <b>U215</b>                                                  |

### NON STANDARD HARDWARE FOR SWITCHES Ø 6 (.236) - 5000 SERIES

| KNURLED NUT                                                                         | SPECIAL NUT 12 (.472) ACROSS FLATS                                              | KNURLED CAP NUTS                                                                                                                                                    |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Ø9.00 (.354 DIA)<br/>2.20 (.086)<br/>Ø6.00 x 0.75 SI<br/>(.236 DIA x 0.75SI)</p> | <p>12.00 (.472)<br/>2.00 (.086)<br/>Ø6.00 x 0.75 SI<br/>(.236 DIA x 0.75SI)</p> | <p>Ø9.00 (.354 DIA)<br/>Ø5.20 (.204 DIA)<br/>2.70 (.106)<br/>Ø12.00 (.472 DIA)<br/>Ø4.80 (.188 DIA)<br/>2.60 (.102)<br/>Ø6.00 x 0.75 SI<br/>(.236 DIA x 0.75SI)</p> |
| Chrome plated                                                                       | Chrome plated                                                                   | Chrome plated<br>Matt black                                                                                                                                         |
| <b>U826</b>                                                                         | <b>U1916</b>                                                                    | <b>U461</b><br><b>U502</b>                                                                                                                                          |
|                                                                                     |                                                                                 | Chrome plated <b>U232</b>                                                                                                                                           |

### STANDARD HARDWARE FOR SWITCHES Ø 6,35 (1/4) - ALL SERIES

| HEX NUT                                                            | LOCKING RING                                                 | LOCKWASHER                                                   |
|--------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| <p>8.00 (.314)<br/>1.60 (.062)<br/>Ø6.35-40UNS<br/>(1/4-40UNS)</p> | <p>Ø9.60 (.377 DIA)<br/>5.20 (.204)<br/>Ø6.50 (.255 DIA)</p> | <p>Ø9.50 (.374 DIA)<br/>Ø6.50 (.255 DIA)<br/>0.80 (.031)</p> |
| Nickel plated<br>Matt black                                        | Nickel plated<br>Matt black                                  | Stainless steel                                              |
| <b>U76</b><br><b>U94</b>                                           | <b>U78</b><br><b>U93</b>                                     | <b>U215</b>                                                  |

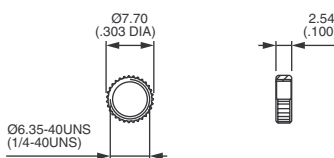
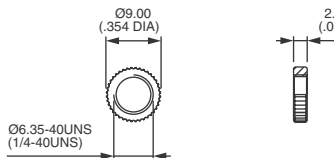
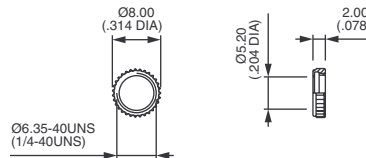
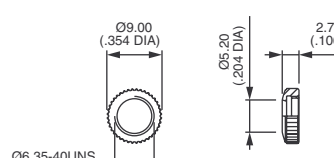
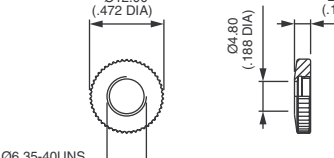
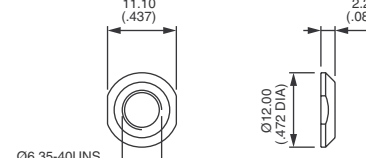
#### HARDWARE SUPPLIED (unsealed types)

| SERIES        | HEX NUT | LOCKING RING | LOCKWASHER |
|---------------|---------|--------------|------------|
| SF            | 2       | 1            | 1          |
| 11000         | 2       | 1            | 1          |
| 13000         | 2       | 1            | 1          |
| 18000-8000-SP | 2       | 1            | 1          |
| 21000N        | 2       | -            | -          |
| 5000          | 2       | 1            | 1          |
| 9400-9600     | 2       | -            | 1          |

# Hardware

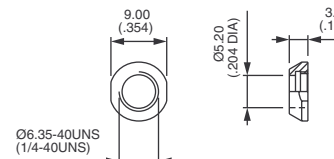
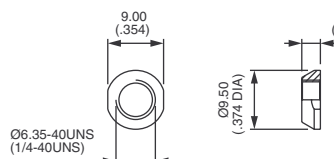
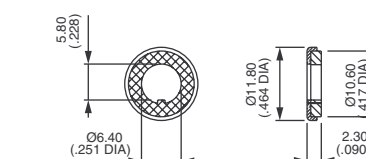
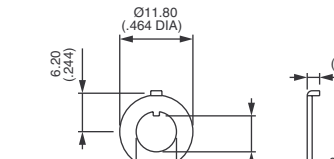
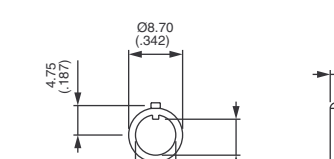
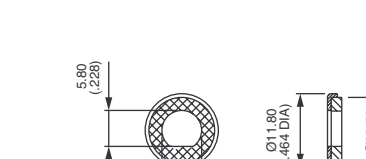
For miniature switches

## NON STANDARD HARDWARE FOR SWITCHES Ø 6,35 (1/4) - ALL SERIES

|                                                                                                                                                                             |                                                                                                                                                                             |                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>KNURLED NUT</b></p>  <p>Nickel plated <b>U369</b></p>                                | <p><b>KNURLED NUT</b></p>  <p>Nickel plated <b>U229</b><br/>Matt black <b>U230</b></p>     | <p><b>KNURLED NUT</b></p>  <p>Chrome plated <b>U501</b></p>                          |
| <p><b>KNURLED CAP NUT</b></p>  <p>Chrome plated <b>U216</b><br/>Matt black <b>U218</b></p> | <p><b>KNURLED CAP NUT</b></p>  <p>Chrome plated <b>U268</b><br/>Matt black <b>U725</b></p> | <p><b>DRESS NUT</b></p>  <p>Nickel plated <b>U443</b><br/>Matt black <b>U848</b></p> |

\* U216 and U268 : consult factory for mounting on 11000 three and four pole, and 5000 locking lever models.

## OTHER HARDWARE FOR SWITCHES Ø 6,35 (1/4) - ALL SERIES

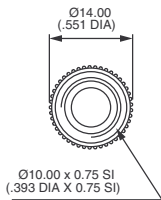
|                                                                                                                                                                                   |                                                                                                                                                                                    |                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>CONIC CAP NUT</b></p>  <p>Nickel plated <b>U500</b></p>                                  | <p><b>CONIC NUT</b></p>  <p>Chrome plated <b>U542</b><br/>Nickel plated <b>U561</b></p>         | <p><b>SEALING WASHER</b><br/>for keyway bushing</p>  <p><b>U360</b></p>   |
| <p><b>SPECIAL LOCKING RING</b><br/>Spacing 6,2 mm (.244)</p>  <p>Nickel plated <b>U368</b></p> | <p><b>SPECIAL LOCKING RING</b><br/>Spacing 4,75 mm (.187)</p>  <p>Nickel plated <b>U409</b></p> | <p><b>SEALING WASHER</b><br/>for flatted bushing</p>  <p><b>U5141</b></p> |

# Hardware

For miniature switches

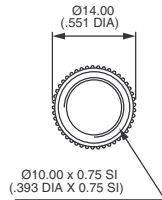
## STANDARD HARDWARE FOR SWITCHES Ø 10 (.393) - 10400 AND 10600 SERIES

**KNURLED CAP NUT  
(std for 10600)**



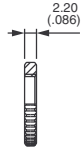
Chrome plated  
**U2220**

**KNURLED NUT  
(std for 10400)**



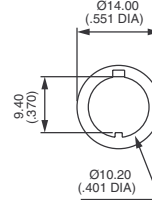
Chrome plated  
**U2311**

**HEX NUT**



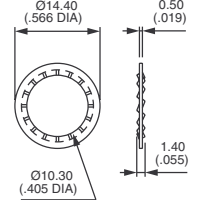
Nickel plated  
**U842**

**LOCKING RING**



Nickel plated  
**U844**

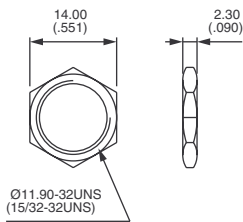
**LOCKWASHER**



Stainless steel  
**U843**

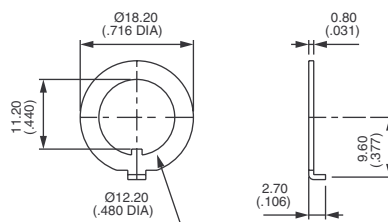
## STANDARD HARDWARE FOR SWITCHES Ø 11,9 (15/32) - 12000, 13000X768 AND 5600M SERIES

**HEX NUT**



Nickel plated  
Matt black  
**U162**  
**U41**

**LOCKING RING**

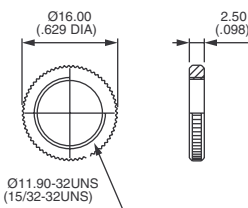


Nickel plated  
Matt black  
**U121**  
**U12**

| SERIES    | HARDWARE SUPPLIED |              |
|-----------|-------------------|--------------|
|           | HEX NUT           | LOCKING RING |
| 12000     | 2                 | 1            |
| 13000X768 | 1                 | -            |
| 5600M     | 2                 | 1            |
| 8000X718  | 2                 | 1            |

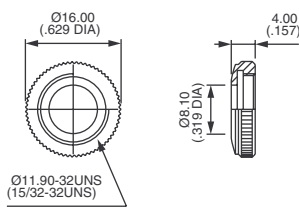
## NON STANDARD HARDWARE FOR SWITCHES Ø 11,9 (15/32) - 12000, 13000X768 AND 5600M SERIES

**KNURLED NUT**

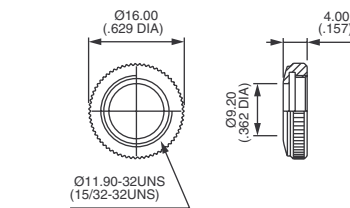


Nickel plated  
Matt black  
**U53**  
**U1634**

**KNURLED CAP NUTS**

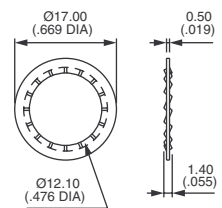


Chrome plated  
**U124**



Chrome plated  
**U123**

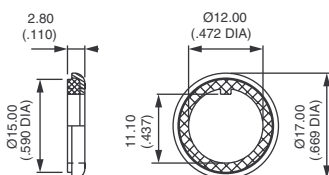
**LOCKWASHER**



Zinc plated  
**U13**

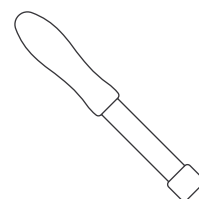
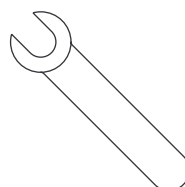
## OTHER HARDWARE

**SEALING WASHER**



**U60**

## WRENCHES



Wrenches are available for some accessories. Consult factory.

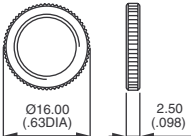
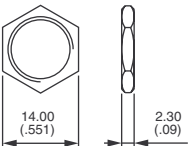
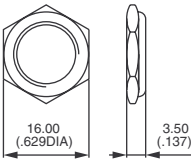
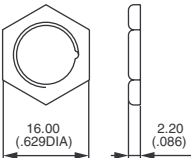
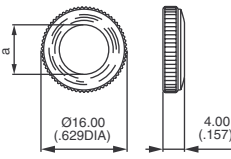
# Hardware

## For industrial switches

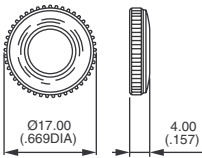
- Standard hardware is indicated by darkened boxes.  
For details of hardware supplied, please refer to beginning of each series.
- Special hardware is to be ordered separately.



Hardware supplied with K sealing option : 2 hex nuts.

| NUTS                                                                                                | Bushing Ø 11,9 (15/32) thread 0,794-32UNS<br>Series 3500 - 6000 |                     |                  | Bushing Ø 12 (.472) thread 0,75<br>Series IB/IS - IP - 660 - 600H - 600NH<br>1000 - 1200 - 1500 - 1600 - 1700 - 3600 - 4000 |                                    |                                                                 |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------|
|                                                                                                     | Chrome plated brass                                             | Nickel plated brass | Matt black brass | Chrome plated brass                                                                                                         | Nickel plated brass                | Matt black brass                                                |
|                    |                                                                 | U53                 |                  | U412                                                                                                                        | U411                               | U413                                                            |
|                    | U92                                                             | U162                | U41              | U212                                                                                                                        | U166                               | U183                                                            |
|  Hex cap nut     |                                                                 |                     |                  | U35                                                                                                                         |                                    |                                                                 |
|  PAL nut         |                                                                 |                     |                  |                                                                                                                             | U42<br>(passive zinc plated steel) |                                                                 |
|  Knurled cap nut | U123                                                            |                     |                  | U117<br>$\alpha = 8,5 (.334)$<br>U118<br>$\alpha = 10,3 (.405)$                                                             |                                    | U129<br>$\alpha = 8,5 (.334)$<br>U130<br>$\alpha = 10,3 (.405)$ |

### INSULATED NUT U520

| <br>ABS or polyamide with glass fibre | For threaded bushing Ø 12 (.472) x 0,75 IS<br>Series 1500 - 4000 - 600NH - 6-600NH |       |       |      |        |      |        |               |        |
|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------|-------|------|--------|------|--------|---------------|--------|
|                                                                                                                          | Blue                                                                               | Black | Green | Grey | Yellow | Red  | White  | Chrome plated | Orange |
|                                                                                                                          | U521                                                                               | U522  | U523  | U524 | U525   | U526 | U527/1 | U528          | U529   |

The locking ring U121 (nickel plated) or U12 (matt black) is only provided with tropicalized switches version T or G and with series 3500 - 6000.

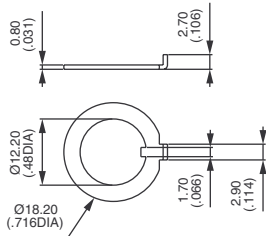
The lockwasher U13 must be ordered separately, except for series 660, 3500 and 6000.

# Hardware

For industrial switches

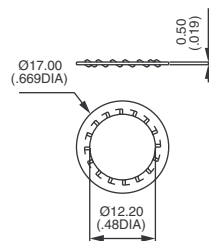
## HARDWARE FOR SWITCHES Ø 12 (.472) AND 11,9 (15/32)

### LOCKING RING



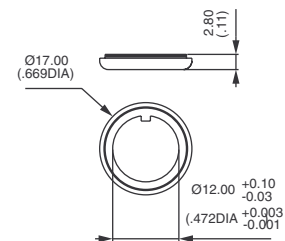
Nickel plated **U121**  
Matt black **U12**

### LOCKWASHER



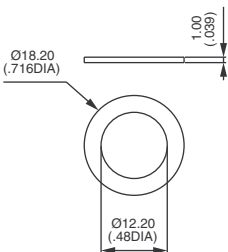
Zinc plated **U13**

### SEALING WASHER



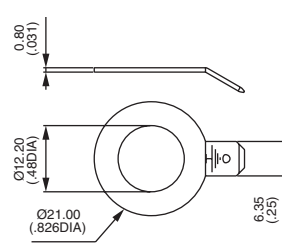
Stainless steel and neoprene **U60**

### SEALING WASHER FOR BOOTS



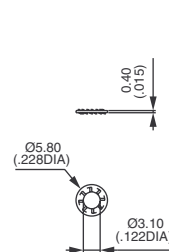
Nylon **U21**

### GROUND CONNECTOR



Nickel plated **U187**

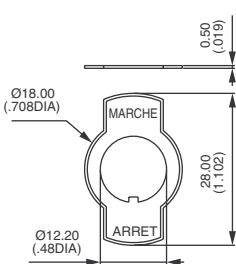
### LOCKWASHER



**U14**

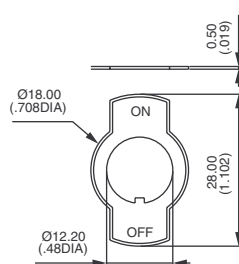
## PLATES FOR SWITCHES Ø 12 (.472) AND 11,9 (15/32)

### Marche - arrêt



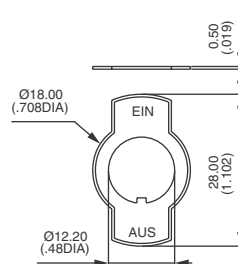
**U17**

### ON - OFF



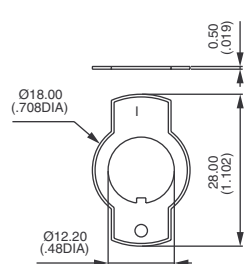
**U19**

### EIN - AUS



**U99**

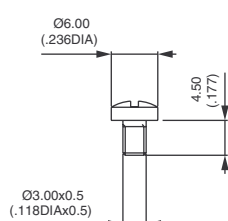
### I - 0



**U1050**

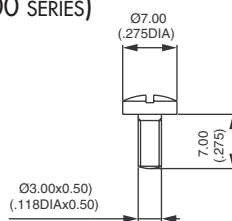
## SCREWS (supplied with the switches)

### CONNECTING SCREW



**U03**

### MOUNTING SCREW Ø 3 (.118) (6000 SERIES)



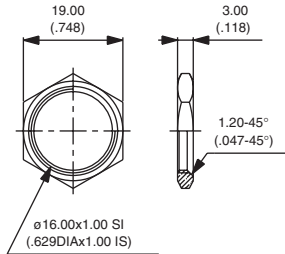
Nickel plated **U164**  
Chrome plated **U165**  
Matt black **U45**

# Hardware

For industrial switches

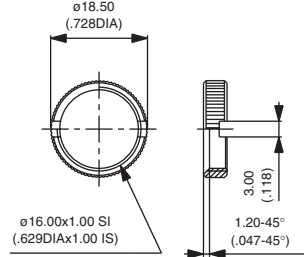
## HARDWARE FOR AV SERIES (ANTI-VANDAL AND SECURITY PUSHBUTTON SWITCHES)

### HEX NUT FOR MODELS Ø 16 (.629)



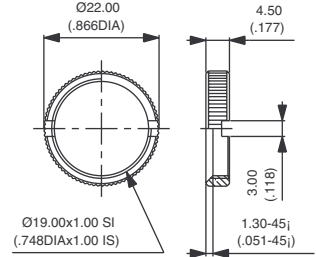
10-621 (sealed or unsealed models)

### KNURLED NUT FOR MODELS Ø 16 (.629)



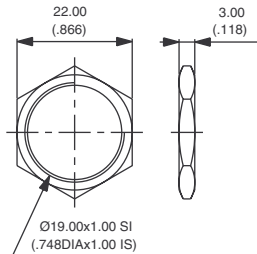
10-960-5 (sealed or unsealed models)

### KNURLED NUT FOR MODELS Ø 19 (.748)

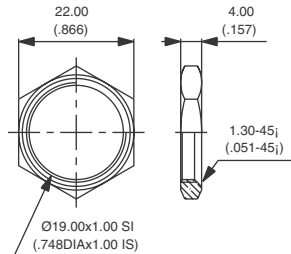


U1977-5 (sealed or unsealed models)

### HEX NUTS FOR MODELS Ø 19 (.748)



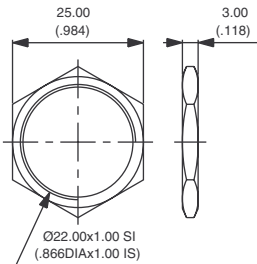
U1950-5 (unsealed models)



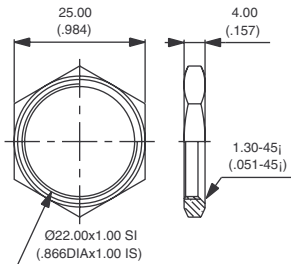
10-855-5 (sealed models)

Wrench for nut U1977-5 available under part number U1929.

### HEX NUTS FOR MODELS Ø 22 (.866)

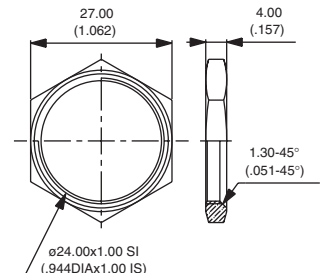


U1951-5 (unsealed models)



10-856-5 (sealed models)

### HEX NUT FOR MODELS Ø 24 (.944)



U2059-5 (sealed or unsealed models)

All above nuts are made of nickel plated brass.  
For switches with front panel sealing (option K), a neoprene O-ring is supplied with each nut.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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