

# Sealing boots

- Prevent dust, sand and water from getting into switches.
- On toggle versions, also prevent ice from blocking lever action
- Compatible with frontal sealing options (K and X408).
- Available in a wide range of colours.
- When necessary, a sealing ring or washer is supplied with the boot.



## MATERIALS AND SPECIFICATIONS

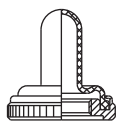
- Boot material : neoprene or silicone (see comparative advantages below)
  - Nut material : brass, nickel plated or matt black
  - Operating temperature :
    - neoprene boots : -20°C to +50°C
    - silicone boots : -40°C to + 85°C
- ++ : excellent, + : good, - : poor

| COMPARATIVE ADVANTAGES | TEMPERATURE RANGE |      | ELASTICITY | MECHANICAL RESISTANCE |
|------------------------|-------------------|------|------------|-----------------------|
|                        | LOW               | HIGH |            |                       |
| Silicone               | ++                | ++   | ++         | -                     |
| Neoprene               | -                 | +    | -          | ++                    |

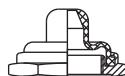
## DIFFERENT TYPES OF BOOTS

\* Colour options available

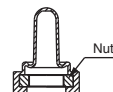
Full-toggle (standard) \*



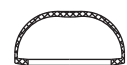
Half-toggle \*



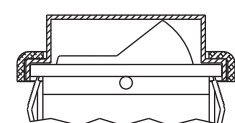
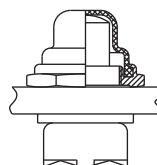
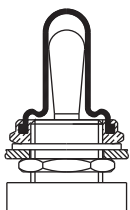
Two-part (no metal parts accessible) \*



For double sealing



## EXAMPLES OF MOUNTING



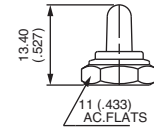
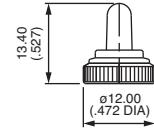
# Sealing boots

For toggle switches

## For bushing $\varnothing 6 \times 0.75$ (.236 x 0.75) - 5500 series



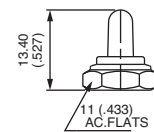
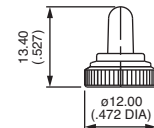
| NUT                   | FULL-TOGGLE SILICONE BOOTS  |                               |                               |                               |
|-----------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|                       | Black                       | Red                           | Green                         | White                         |
| Knurled Nickel plated | <b>N32161005</b><br>(U1341) | <b>N32162005</b><br>(U1341-6) | <b>N3216V005</b><br>(U1341-3) | <b>N3216B005</b><br>(U1341-7) |
| Knurled Matt black    | <b>N32161002</b><br>(U1343) | <b>N32162002</b><br>(U1343-6) | <b>N3216V002</b><br>(U1343-3) | <b>N3216B002</b><br>(U1343-7) |
| Hex Nickel plated     | <b>N32121005</b><br>(U1302) | <b>N32122005</b><br>(U1302-6) | <b>N3212V005</b><br>(U1302-3) | <b>N3212B005</b><br>(U1302-7) |
| Hex Matt black        | <b>N32121002</b><br>(U1304) | <b>N32122002</b><br>(U1304-6) | <b>N3212V002</b><br>(U1304-3) | <b>N3212B002</b><br>(U1304-7) |



## For bushing $\varnothing 6,35-40NS$ (1/4-40UNS) - 5000 and 11000 series



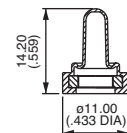
| NUT                   | FULL-TOGGLE SILICONE BOOTS  |                               |                               |                               |
|-----------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|                       | Black                       | Red                           | Green                         | White                         |
| Knurled Nickel plated | <b>N33161005</b><br>(U1331) | <b>N33162005</b><br>(U1331-6) | <b>N3316V005</b><br>(U1331-3) | <b>N3316B005</b><br>(U1331-7) |
| Knurled Matt black    | <b>N33161002</b><br>(U1333) | <b>N33162002</b><br>(U1333-6) | <b>N3316V002</b><br>(U1333-3) | <b>N3316B002</b><br>(U1333-7) |
| Hex Nickel plated     | <b>N33121005</b><br>(U1229) | <b>N33122005</b><br>(U1229-6) | <b>N3312V005</b><br>(U1229-3) | <b>N3312B005</b><br>(U1229-7) |
| Hex Matt black        | <b>N33121002</b><br>(U1231) | <b>N33122002</b><br>(U1231-6) | <b>N3312V002</b><br>(U1231-3) | <b>N3312B002</b><br>(U1231-7) |



## For bushing $\varnothing 6,35-40NS$ (1/4-40UNS) - 5000 and 11000 series



| BOOTS SUPPLIED AS 2 SEPARATE PARTS |                               |                               |                               |
|------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| NEOPRENE                           | SILICONE                      |                               |                               |
| Black                              | Red                           | Green                         | White                         |
| <b>N33136119</b><br>(U5149)        | <b>N33137119</b><br>(U5149-6) | <b>N3313V119</b><br>(U5149-3) | <b>N3313B119</b><br>(U5149-7) |

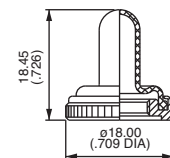


Once the boot is mounted onto the panel, no switch metal part is accessible any more.

## For bushing $\varnothing 10 \times 0.75$ (.393 x 0.75) - 10600 series



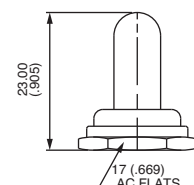
| KNURLED NUT   | FULL-TOGGLE SILICONE BOOTS  |                               |                               |                               |
|---------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|               | Black                       | Red                           | Green                         | White                         |
| Nickel plated | <b>N34151005</b><br>(U1612) | <b>N34152005</b><br>(U1612-6) | <b>N3415V005</b><br>(U1612-3) | <b>N3415B005</b><br>(U1612-7) |
| Matt black    | <b>N34151002</b><br>(U1614) | <b>N34152002</b><br>(U1614-6) | <b>N3415V002</b><br>(U1614-3) | <b>N3415B002</b><br>(U1614-7) |



## For bushing $\varnothing 11,9-32 NS$ (15/32-32NS) - 12000, 5000M, 3500 and 6000 series



| HEX NUT       | FULL-TOGGLE SILICONE BOOTS  |                               |                               |                               |
|---------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|               | Black                       | Red                           | Green                         | White                         |
| Nickel plated | <b>N35111005</b><br>(U1031) | <b>N35112005</b><br>(U1031-6) | <b>N3511V005</b><br>(U1031-3) | <b>N3511B005</b><br>(U1031-7) |
| Matt black    | <b>N35111002</b><br>(U1024) | <b>N35112002</b><br>(U1024-6) | <b>N3511V002</b><br>(U1024-3) | -                             |



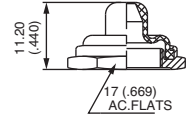
# Sealing boots

For toggle switches

For bushing Ø 11,9-32 NS (15/32-32NS) - 12000, 3500 and 6000 series



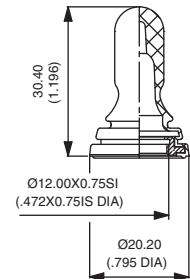
| HEX NUT       | HALF-TOGGLE SILICONE BOOTS  |                               |                               |                               |
|---------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|               | Black                       | Red                           | Green                         | White                         |
| Nickel plated | <b>N35111015</b><br>(U1600) | <b>N35112015</b><br>(U1600-6) | <b>N3511V015</b><br>(U1600-3) | <b>N3511B015</b><br>(U1600-7) |
| Matt black    | <b>N35111012</b><br>(U1602) | <b>N35112012</b><br>(U1602-6) | <b>N3511V012</b><br>(U1602-3) | -                             |



For bushing Ø12 x 0.75 SI (.472x.075 IS) - 12000, 3500, 3600 and 600 series



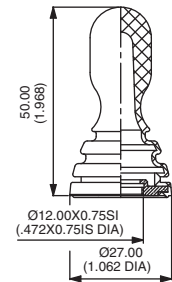
| FULL-TOGGLE BLACK NEOPRENE BOOT |         |
|---------------------------------|---------|
| <b>N36346009</b>                | (U2252) |



For bushing Ø12 x 0.75 SI (.472x.075 IS) - 600 series with -5 long lever



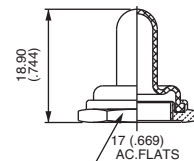
| FULL-TOGGLE BLACK NEOPRENE BOOT |         |
|---------------------------------|---------|
| <b>N36346209</b>                | (U2197) |



For bushing Ø12 x 0.75 SI (.472x.075 IS) - 4450, 4650 and 1600 series



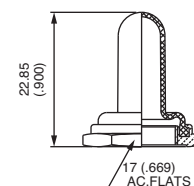
| HEX NUT       | FULL-TOGGLE BLACK NEOPRENE BOOTS |        |
|---------------|----------------------------------|--------|
| Nickel plated | <b>N36116045</b>                 | (U09)  |
| Matt black    | <b>N36116042</b>                 | (U223) |



For bushing Ø 12 x 0.75 SI (.472x.075 IS) - 600H, 660, 1000, 1500 and 3600



| HEX NUT                          | FULL-TOGGLE SILICONE BOOTS  |                               |                               |                               |
|----------------------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|                                  | Black                       | Red                           | Green                         | White                         |
| Nickel plated                    | <b>N36111005</b><br>(U1565) | <b>N36112005</b><br>(U1565-6) | <b>N3611V005</b><br>(U1565-3) | <b>N3611B005</b><br>(U1565-7) |
| Matt black                       | <b>N36111002</b><br>(U1567) | <b>N36112002</b><br>(U1567-6) | <b>N3611V002</b><br>(U1567-3) | -                             |
| FULL-TOGGLE BLACK NEOPRENE BOOTS |                             |                               |                               |                               |
| Nickel plated                    | <b>N36116005</b>            |                               | (U851)                        |                               |
| Matt black                       | <b>N36116002</b>            |                               | (U853)                        |                               |



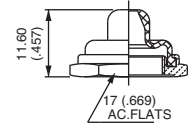
# Sealing boots

For toggle switches or pushbutton switches

## For bushing Ø 12 x 0.75 SI (.472x.075 IS) - 600H, 660, 1000 and 3600 series



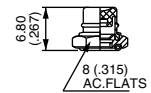
| HEX NUT                          | HALF-TOGGLE SILICONE BOOTS  |                               |                               |                               |
|----------------------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|                                  | Black                       | Red                           | Green                         | White                         |
| Nickel plated                    | <b>N36111015</b><br>(U1151) | <b>N36112015</b><br>(U1151-6) | <b>N3611V015</b><br>(U1151-3) | <b>N3611B015</b><br>(U1151-7) |
| Matt black                       | <b>N36111012</b><br>(U1153) | <b>N36112012</b><br>(U1153-6) | <b>N3611V012</b><br>(U1153-3) | -                             |
| HALF-TOGGLE BLACK NEOPRENE BOOTS |                             |                               |                               |                               |
| Nickel plated                    | <b>N36116015</b> (U598)     |                               |                               |                               |
| Matt black                       | <b>N36116012</b> (U600)     |                               |                               |                               |



## For bushing Ø 4 x 0.70 (.157 x 0.70) - 9500 series



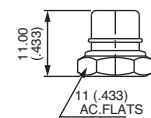
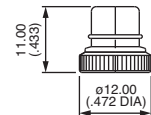
| HEX NUT       | PUSHBUTTON SILICONE BOOTS   |                               |                               |                               |
|---------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|               | Black                       | Red                           | Green                         | White                         |
| Nickel plated | <b>N31221005</b><br>(U1829) | <b>N31222005</b><br>(U1829-6) | <b>N3122V005</b><br>(U1829-3) | <b>N3122B005</b><br>(U1829-7) |
| Matt black    | <b>N31221002</b><br>(U1831) | <b>N31222002</b><br>(U1831-6) | <b>N3122V002</b><br>(U1831-3) | <b>N3122B002</b><br>(U1831-7) |



## For bushing Ø 6,35-40NS (1/4-40UNS) - 18000, 9000 and 13000 series



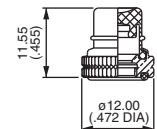
| NUT                   | PUSHBUTTON SILICONE BOOTS   |                               |                               |                               |
|-----------------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|                       | Black                       | Red                           | Green                         | White                         |
| Knurled Nickel plated | <b>N33261005</b><br>(U1401) | <b>N33262005</b><br>(U1401-6) | <b>N3326V005</b><br>(U1401-3) | <b>N3326B005</b><br>(U1401-7) |
| Knurled Matt black    | <b>N33261002</b><br>(U1403) | <b>N33262002</b><br>(U1403-6) | <b>N3326V002</b><br>(U1403-3) | <b>N3326B002</b><br>(U1403-7) |
| Hex Nickel plated     | <b>N33221005</b><br>(U1318) | <b>N33222005</b><br>(U1318-6) | <b>N3322V005</b><br>(U1318-3) | <b>N3322B005</b><br>(U1318-7) |
| Hex Matt black        | <b>N33221002</b><br>(U1320) | <b>N33222002</b><br>(U1320-6) | <b>N3322V002</b><br>(U1320-3) | <b>N3322B002</b><br>(U1320-7) |



## For bushing Ø 6,35-40NS (1/4-40 UNS) - 8000 series



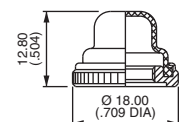
| KNURLED NUT   | PUSHBUTTON SILICONE BOOTS   |                               |                               |                               |
|---------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|               | Black                       | Red                           | Green                         | White                         |
| Nickel plated | <b>N33261125</b><br>(U4301) | <b>N33262125</b><br>(U4301-6) | <b>N3326V125</b><br>(U4301-3) | <b>N3326B125</b><br>(U4301-7) |



## For bushing Ø 10 x 0.75 (.393 x 0.75) - 10400 series



| KNURLED NUT   | PUSHBUTTON SILICONE BOOTS   |                               |                               |                               |
|---------------|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
|               | Black                       | Red                           | Green                         | White                         |
| Nickel plated | <b>N34251005</b><br>(U1624) | <b>N34252005</b><br>(U1624-6) | <b>N3425V005</b><br>(U1624-3) | <b>N3425B005</b><br>(U1624-7) |
| Matt black    | <b>N34251002</b><br>(U1626) | <b>N34252002</b><br>(U1626-6) | <b>N3425V002</b><br>(U1626-3) | <b>N3425B002</b><br>(U1626-7) |



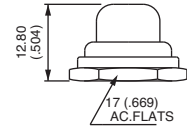
# Sealing boots

For pushbutton switches

For bushing  $\varnothing$  11,9-32 NS (15/32-32UNS) - 13000X778, 13000X768 and 8000-6X934 series



| HEX NUT       | PUSHBUTTON SILICONE BOOTS  |                              |                              |                              |
|---------------|----------------------------|------------------------------|------------------------------|------------------------------|
|               | Black                      | Red                          | Green                        | White                        |
| Nickel plated | <b>N35211005</b><br>(U589) | <b>N35212005</b><br>(U589-6) | <b>N3521V005</b><br>(U589-3) | <b>N3521B005</b><br>(U589-7) |
| Matt black    | <b>N35211002</b><br>(U590) | <b>N35212002</b><br>(U590-6) | <b>N3521V002</b><br>(U590-3) | -                            |

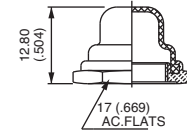


For long plunger (-9) care should be taken over the panel thickness.

For bushing  $\varnothing$  12 x 0.75 SI (.472x.075 IS) - 1200, 4700 and 4800 series



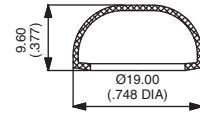
| HEX NUT       | PUSHBUTTON SILICONE BOOTS       |                               |                               |                               |
|---------------|---------------------------------|-------------------------------|-------------------------------|-------------------------------|
|               | Black                           | Red                           | Green                         | White                         |
| Nickel plated | <b>N36211005</b><br>(U1654)     | <b>N36212005</b><br>(U1654-6) | <b>N3621V005</b><br>(U1654-3) | <b>N3621B005</b><br>(U1654-7) |
| Matt black    | <b>N36211002</b><br>(U1656)     | <b>N36212002</b><br>(U1656-6) | <b>N3621V002</b><br>(U1656-3) | -                             |
|               | PUSHBUTTON BLACK NEOPRENE BOOTS |                               |                               |                               |
| Nickel plated | <b>N36216005</b>                |                               | (U31)                         |                               |
| Matt black    | <b>N36216002</b>                |                               | (U225)                        |                               |
| Chrome plated | <b>N36216001</b>                |                               | (U224)                        |                               |



For double sealing on IP and IB-IS series



| SILICONE BOOT |                |
|---------------|----------------|
| Transparent   | <b>U5125</b>   |
| Blue          | <b>U5125-1</b> |
| Black         | <b>U5125-2</b> |
| Red           | <b>U5125-6</b> |

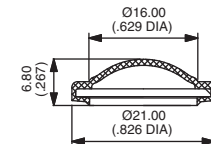


Operating temperature : -40°C to +85°C  
The flat seal or O-Ring supplied with the switch should not be used with this boot.

For double sealing on IA seriesa



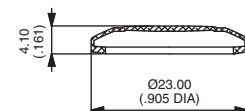
| SILICONE BOOT |              |
|---------------|--------------|
| Black         | <b>U6602</b> |
| Yellow        | <b>U6605</b> |
| Red           | <b>U6606</b> |



For AV series (models with  $\varnothing$  19 mm bushing)



| SILICONE BOOT |                |
|---------------|----------------|
| Black         | <b>U2187-2</b> |
| Green         | <b>U2187-3</b> |
| Grey          | <b>U2187-4</b> |
| Yellow        | <b>U2187-5</b> |
| Red           | <b>U2187-6</b> |
| White         | <b>U2187-7</b> |
| Transparent   | <b>U2187-8</b> |



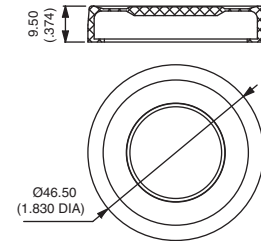
# Sealing boots

For pushbutton switches or rocker switches

## For LPI series



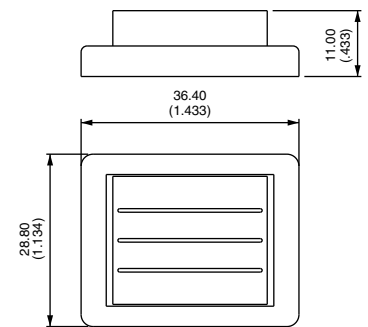
| SILICONE BOOT |              |
|---------------|--------------|
| Black         | <b>U3082</b> |
| Transparent   | <b>U3088</b> |



## For 2600 series



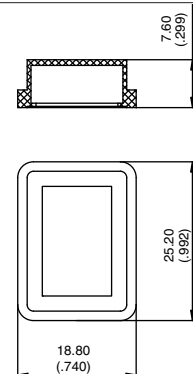
| TRANSPARENT SILICONE BOOT |  |
|---------------------------|--|
| <b>U2150</b>              |  |



## For FM series



| TRANSPARENT PVC BOOT |  |
|----------------------|--|
| <b>U5720</b>         |  |



## For KG series



| BLACK SILICONE BOOT |  |
|---------------------|--|
| <b>U3084</b>        |  |

Also available with pad-printed symbols : on request.

