

# Sealing boots

UG1410-A-R1

- 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 black
- Operating temperature :
  - neoprene boots : -20°C to +50°C
  - silicone boots : -40°C to + 85°C

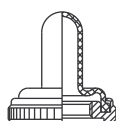
++ : excellent, + : good, - : poor

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

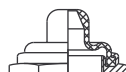
## DIFFERENT TYPES OF BOOTS

\* Colour options available

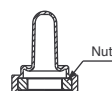
Full-toggle (standard) \*



Half-toggle \*



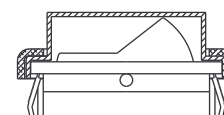
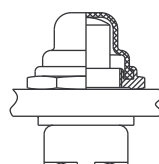
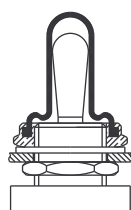
Two-part (no metal parts accessible) \*



For double sealing



## EXAMPLES OF MOUNTING



The company reserves the right to change specifications without notice.

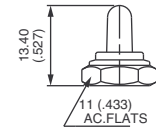
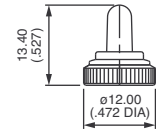
# Sealing boots

For toggle switches

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



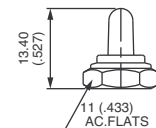
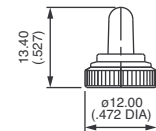
NUT	FULL-TOGGLE SILICONE BOOTS			
	Black	Red	Green	White
Knurled Nickel plated	N32161005 (U1341)	N32162005 (U1341-6)	N3216V005 (U1341-3)	N3216B005 (U1341-7)
Knurled Black	N32161002 (U1343)	N32162002 (U1343-6)	N3216V002 (U1343-3)	N3216B002 (U1343-7)
Hex Nickel plated	N32121005 (U1302)	N32122005 (U1302-6)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



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



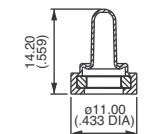
NUT	FULL-TOGGLE SILICONE BOOTS			
	Black	Red	Green	White
Knurled Nickel plated	N33161005 (U1331)	N33162005 (U1331-6)	N3316V005 (U1331-3)	N3316B005 (U1331-7)
Knurled Black	N33161002 (U1333)	N33162002 (U1333-6)	N3316V002 (U1333-3)	N3316B002 (U1333-7)
Hex Nickel plated	N33121005 (U1229)	N33122005 (U1229-6)	N3312V005 (U1229-3)	N3312B005 (U1229-7)
Hex Black	N33121002 (U1231)	N33122002 (U1231-6)	N3312V002 (U1231-3)	N3312B002 (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	
N33136119 (U5149)	N33137119 (U5149-6)	N3313V119 (U5149-3)	N3313B119 (U5149-7)	

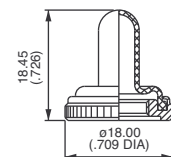


Once the boot is mounted onto the panel, no switch metal part is accessible any more.

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



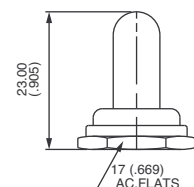
KNURLED NUT	FULL-TOGGLE SILICONE BOOTS			
	Black	Red	Green	White
Nickel plated	N34151005 (U1612)	N34152005 (U1612-6)	N3415V005 (U1612-3)	N3415B005 (U1612-7)
Black	N34151002 (U1614)	N34152002 (U1614-6)	N3415V002 (U1614-3)	N3415B002 (U1614-7)



## 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	N35111005 (U1031)	N35112005 (U1031-6)	N3511V005 (U1031-3)	N3511B005 (U1031-7)
Black	N35111002 (U1024)	N35112002 (U1024-6)	N3511V002 (U1024-3)	-



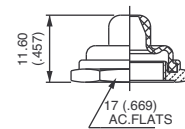
# Sealing boots

For toggle switches

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



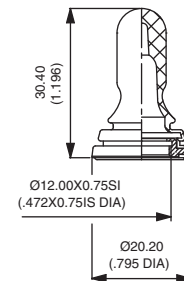
HEX NUT	HALF-TOGGLE SILICONE BOOTS			
	Black	Red	Green	White
Nickel plated	<b>N35111015</b> (U1600)	<b>N35112015</b> (U1600-6)	<b>N3511V015</b> (U1600-3)	<b>N3511B015</b> (U1600-7)
Black	<b>N35111012</b> (U1602)	<b>N35112012</b> (U1602-6)	<b>N3511V012</b> (U1602-3)	-



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



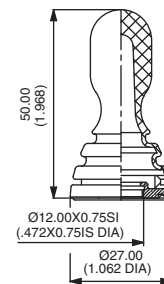
FULL-TOGGLE BLACK NEOPRENE BOOT	
<b>N36346009</b>	(U2252)



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



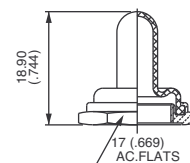
FULL-TOGGLE BLACK NEOPRENE BOOT	
<b>N36346209</b>	(U2197)



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



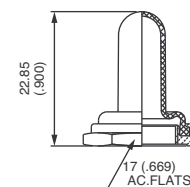
HEX NUT	FULL-TOGGLE BLACK NEOPRENE BOOTS	
	Nickel plated	<b>N36116045</b>
Black	<b>N36116042</b>	(U223)



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> (U1565)	<b>N36112005</b> (U1565-6)	<b>N3611V005</b> (U1565-3)	<b>N3611B005</b> (U1565-7)
Black	<b>N36111002</b> (U1567)	<b>N36112002</b> (U1567-6)	<b>N3611V002</b> (U1567-3)	-
FULL-TOGGLE BLACK NEOPRENE BOOTS				
Nickel plated	<b>N36116005</b>		(U851)	
Black	<b>N36116002</b>		(U853)	



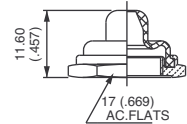
# Sealing boots

For toggle switches or pushbutton switches

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



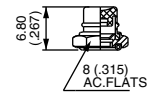
HEX NUT	HALF-TOGGLE SILICONE BOOTS			
	Black	Red	Green	White
Nickel plated	<b>N36111015</b> (U1151)	<b>N36112015</b> (U1151-6)	<b>N3611V015</b> (U1151-3)	<b>N3611B015</b> (U1151-7)
Black	<b>N36111012</b> (U1153)	<b>N36112012</b> (U1153-6)	<b>N3611V012</b> (U1153-3)	-
HALF-TOGGLE BLACK NEOPRENE BOOTS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



## For bushing $\varnothing 4 \times 0.70$ (.157 x 0.70) - 9500 series



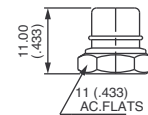
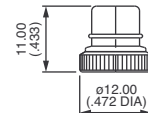
HEX NUT	PUSHBUTTON SILICONE BOOTS			
	Black	Red	Green	White
Nickel plated	<b>N31221005</b> (U1829)	<b>N31222005</b> (U1829-6)	<b>N3122V005</b> (U1829-3)	<b>N3122B005</b> (U1829-7)
Black	<b>N31221002</b> (U1831)	<b>N31222002</b> (U1831-6)	<b>N3122V002</b> (U1831-3)	<b>N3122B002</b> (U1831-7)



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



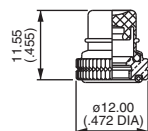
NUT	PUSHBUTTON SILICONE BOOTS			
	Black	Red	Green	White
Knurled Nickel plated	<b>N33261005</b> (U1401)	<b>N33262005</b> (U1401-6)	<b>N3326V005</b> (U1401-3)	<b>N3326B005</b> (U1401-7)
Knurled Black	<b>N33261002</b> (U1403)	<b>N33262002</b> (U1403-6)	<b>N3326V002</b> (U1403-3)	<b>N3326B002</b> (U1403-7)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



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



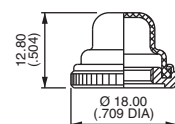
KNURLED NUT	PUSHBUTTON SILICONE BOOTS			
	Black	Red	Green	White
Nickel plated	<b>N33261125</b> (U4301)	<b>N33262125</b> (U4301-6)	<b>N3326V125</b> (U4301-3)	<b>N3326B125</b> (U4301-7)



## For bushing $\varnothing 10 \times 0.75$ (.393 x 0.75) - 10400 series



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



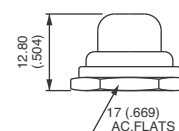
# Sealing boots

For pushbutton switches

For bushing Ø 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> (U589)	<b>N35212005</b> (U589-6)	<b>N3521V005</b> (U589-3)	<b>N3521B005</b> (U589-7)
Black	<b>N35211002</b> (U590)	<b>N35212002</b> (U590-6)	<b>N3521V002</b> (U590-3)	-

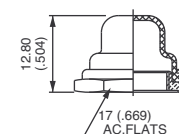


For long plunger (-9) care should be taken over the panel thickness.

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



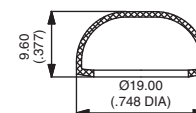
HEX NUT	PUSHBUTTON SILICONE BOOTS			
	Black	Red	Green	White
Nickel plated	<b>N36211005</b> (U1654)	<b>N36212005</b> (U1654-6)	<b>N3621V005</b> (U1654-3)	<b>N3621B005</b> (U1654-7)
Black	<b>N36211002</b> (U1656)	<b>N36212002</b> (U1656-6)	<b>N3621V002</b> (U1656-3)	-
	PUSHBUTTON BLACK NEOPRENE BOOTS	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



For double sealing on IC, IH, IL, IM, 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>

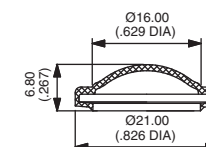


Operating temperature : -40°C to +85°C  
The flat seal or O-Ring supplied with the switch should not be used with this boot.

For double sealing on IA series



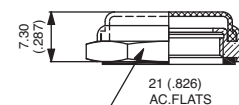
SILICONE BOOT	
Black	<b>U6602</b>
Green	<b>U6603</b>
Yellow	<b>U6605</b>
Red	<b>U6606</b>



For IZ series



HEX NUT	TRANSPARENT SILICONE BOOT
Nickel plated	<b>N3822D005</b>
Black	<b>N3822D002</b>



Panel thickness :  
For models IZP and IZN, panel thickness should be 4 mm (.157).  
No restriction for IZM models.

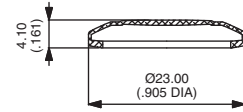
# Sealing boots

For pushbutton switches or rocker switches

## For AV series (models with Ø 19 mm bushing)

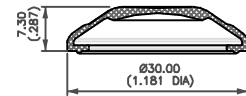


SILICONE BOOT	
Black	U2187-2
Green	U2187-3
Grey	U2187-4
Yellow	U2187-5
Red	U2187-6
White	U2187-7
Transparent	U2187-8



## For FP 24mm series

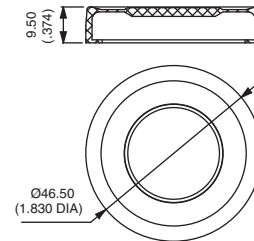
SILICONE BOOT	
Black	FP0292
Red	FP0296
Transparent	FP0298



## For LPI series



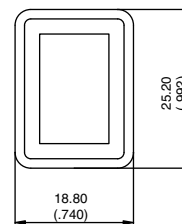
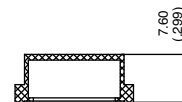
SILICONE BOOT	
Black	U3082
Transparent	U3088



## For FM series



TRANSPARENT PVC BOOT	
U5720	

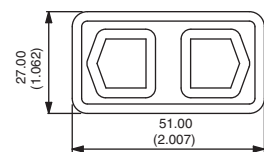
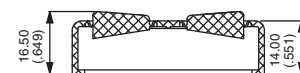


## For KG series



BLACK SILICONE BOOT	
U3084	

Also available with pad-printed symbols : on request.



# Sealing boots

For pushbutton switches or rocker switches

---

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Apem:

[U1231-3](#) [U2150](#) [U31](#) [U1024-6](#) [U853](#) [U1231-6](#) [U481](#) [U485](#) [U1567](#) [U5125](#) [U5149](#) [U1231](#) [U901](#) [U5125-2](#)  
[U1024](#) [U1403](#) [U1831](#) [U5149-6](#) [U1302](#) [U4301](#) [U5720](#) [U277/1](#) [U1318](#) [U09](#) [U1031](#) [U1151](#) [U1153](#) [U1229](#) [U1320](#)  
[U1331](#) [U1333](#) [U1341](#) [U1401](#) [U1565](#) [U1600](#) [U1602](#) [U1612](#) [U1614](#) [U1624](#) [U1626](#) [U1656](#) [U1829](#) [U223](#) [U589](#)  
[U590](#) [U598](#) [U600](#) [U851](#) [U19](#) [U2602](#) [U93](#) [U10243](#) [U11517](#) [U15676](#) [U16006](#) [U16023](#) [U16543](#) [U16546](#)  
[U454650MM](#) [U5896](#) [U5897](#) [U5905](#) [U5906](#) [U21872](#) [U21876](#) [U21878](#) [U51251](#) [U2402](#) [U1654](#) [U572](#) [U851+U21](#)  
[U1207](#) [U1639](#)