

AV series

Security pushbutton switches • Ø 22 or 24 mm •
with large actuator • momentary NC+NO



DISTINCTIVE FEATURES

Large actuator

Low profile option

Momentary (combined NC+NO)

Anodized actuators

Sealed to IP65



ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing : IP65 according to IEC 60529
- Operating temperature : -20°C to +55°C (-4 °F to +131 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load (microswitch) : 5 A 250 VAC
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength : 2,000 Vrms 50 Hz min. between terminals and frame
- Electrical life : 1,000,000 cycles at 1 A 250 VAC
100,000 cycles at full load



GENERAL SPECIFICATIONS

- Torque : 5 Nm min. - 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to 6 mm (.236) max.
- Low level or mechanical life : 3,000,000 cycles
- Hand soldering : 300 °C (572 °F), 5 sec. max.



MATERIALS

- Case : polyester, glass filled
- Contacts : silver/nickel alloy
- Bushing and actuator : see next page.

The company reserves the right to change specifications without notice.

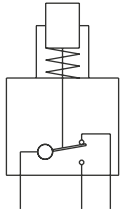


AV series

Security pushbutton switches •
Ø 22 or 24 mm • with large actuator • momentary NC+NO



ELECTRICAL FUNCTIONS



Combined NC+NO



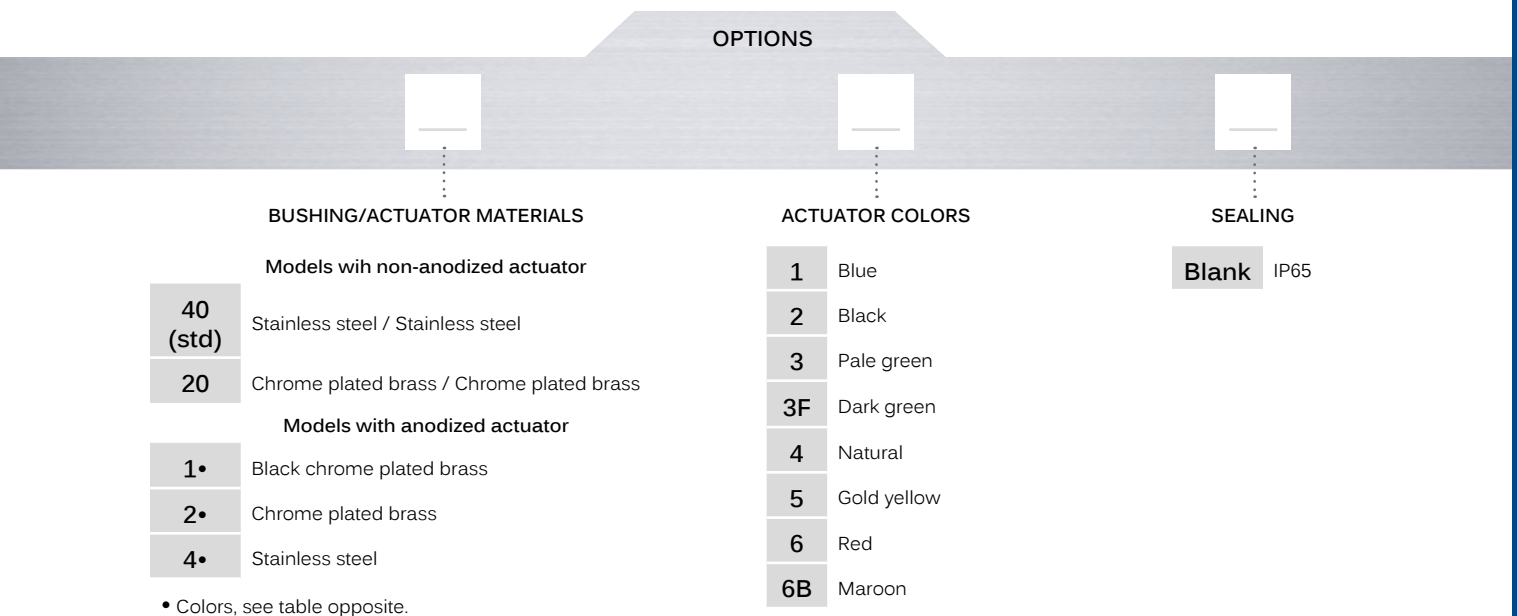
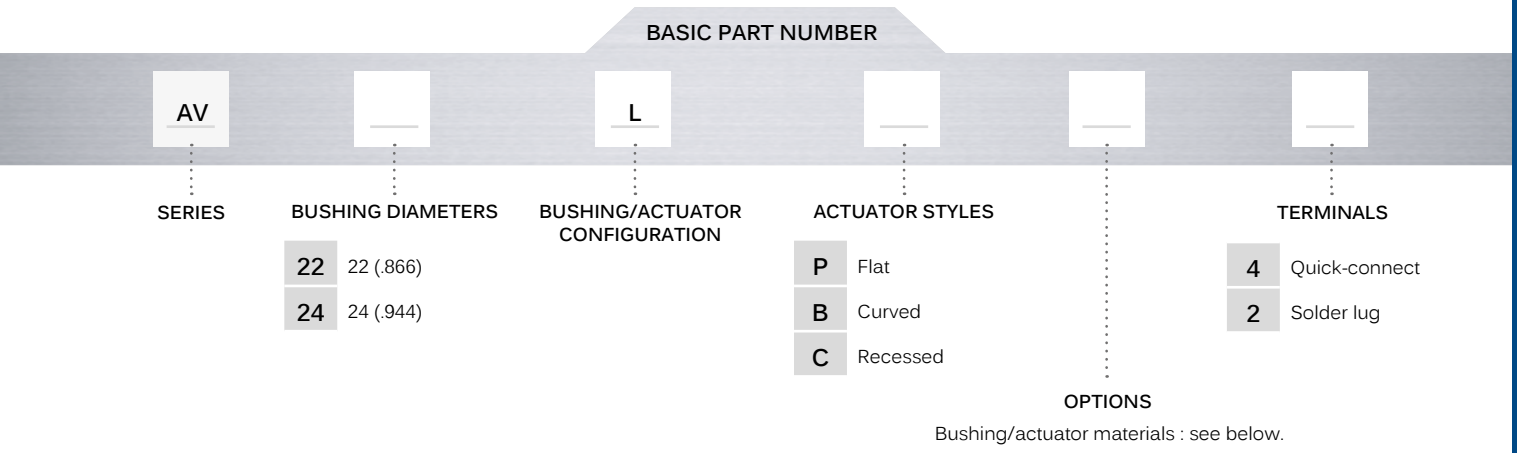
MOUNTING

- Panel cut-out : Ø 22.2 mm (.874) or Ø 24.2 mm (.952)
- Min. pitch for matrix mounting :
30 mm x 30 mm (1.181x1.181)
or 33 mm x 33 mm (1.299x1.299)

AV series


Security pushbutton switches •
 Ø 22 or 24 mm • with large actuator • momentary NC+NO


BUILD YOUR PART NUMBER



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

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

 **Mounting accessories:** standard hardware supplied : 1 hex nut and 1 O-ring. Standard and special hardware is presented in the "Hardware" section of website.

AV series

Security pushbutton switches •
 Ø 22 or 24 mm • with large actuator • momentary NC+NO

BUSHING Ø 22 (.866) - FLAT ACTUATOR



Quick-connect terminals

AV22LP••4



Solder lug terminals

AV22LP••2



BUSHING Ø 22 (.866) - CURVED OR RECESSED ACTUATOR



CURVED ACTUATOR
 Quick-connect terminals

AV22LB••4



Solder lug terminals

AV22LB••2



RECESSED ACTUATOR
 Quick-connect terminals

AV22LC••4



Solder lug terminals

AV22LC••2



BUSHING Ø 24 (.944) - FLAT ACTUATOR LOW PROFILE



Quick-connect terminals

AV24LP••4



Solder lug terminals

AV24LP••2



BUSHING Ø 24 (.944) - CURVED OR RECESSED ACTUATOR - LOW PROFILE



CURVED ACTUATOR
 Quick-connect terminals

AV24LB••4



Solder lug terminals

AV24LB••2



RECESSED ACTUATOR
 Quick-connect terminals

AV24LC••4



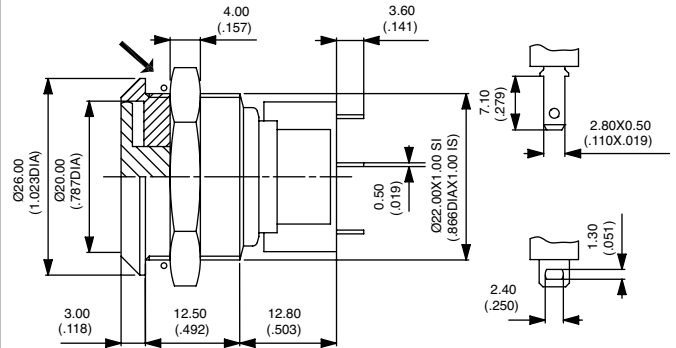
Solder lug terminals

AV24LC••2



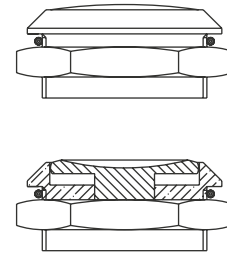
→ O-RING

Hex nut 25 (.984) across flats



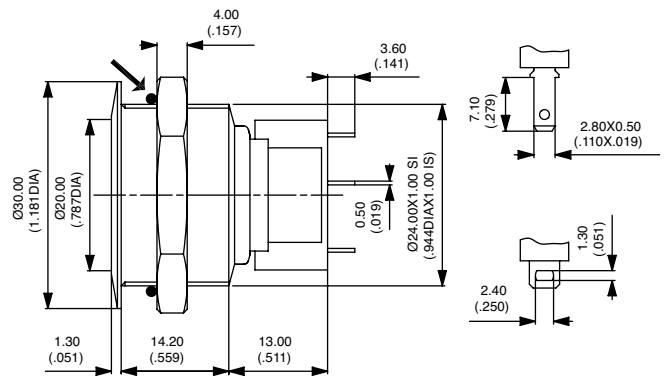
→ O-RING

Hex nut 25 (.984) across flats



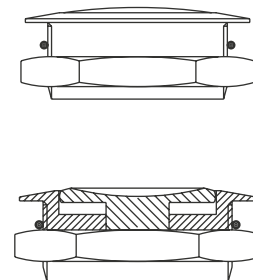
→ O-RING

Hex nut 27 (1.062) across flats



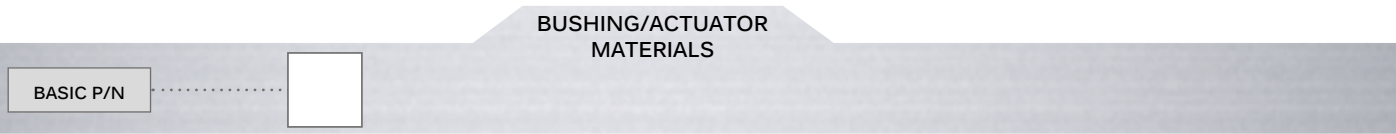
→ O-RING

Hex nut 27 (1.062) across flats



AV series

Security pushbutton switches •
Ø 22 or 24 mm • with large actuator • momentary NC+NO



MODELS WITH NON-ANODIZED ACTUATOR		
CODE	BUSHING	ACTUATOR
40 (std)	Stainless steel	Stainless steel
20	Chrome plated brass	Chrome plated brass

MODELS WITH ANODIZED ACTUATOR		
CODE	BUSHING	ACTUATOR
1•	Black chrome plated brass	Replace • with one of the following codes : 1 : blue - 2 : black - 3 : pale green - 3F : dark green - 4 : natural - 5 : gold yellow - 6 : red - 6B : marron
2•	Chrome plated brass	
4•	Stainless steel	

AV series

Security pushbutton switches •
Ø 16 mm • latching



DISTINCTIVE FEATURES

- Latching action
- 3 terminal types
- Panel sealing option



ENVIRONMENTAL SPECIFICATIONS

- Optional front panel sealing : IP65 according to IEC 60529
- Operating temperature : -30 °C to +70 °C (-22 °F to +158 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : 1 A 24 VDC
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1 GΩ min. at 500 VDC
- Dielectric strength :
1,500 Vrms 50 Hz min. between terminals
1,000 Vrms 50 Hz between terminals and frame
- Electrical life : 40,000 cycles



GENERAL SPECIFICATIONS

- Torque : 5 Nm min. - 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to 6 mm (.236) max.
- Low level or mechanical life : 200,000 cycles
- Hand soldering : 300 °C (572 °F), 5 sec. max.



MATERIALS

- Case : PA-6T, UL94-V0
- Contacts : silver (A), gold plated silver (AD) on request
- Bushing and actuator : see next page

The company reserves the right to change specifications without notice.

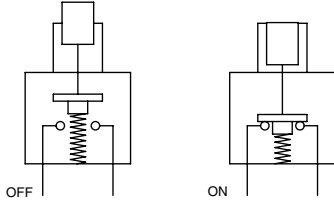


AV series

Security pushbutton switches •
Ø 16 mm • latching



ELECTRICAL FUNCTIONS



MOUNTING

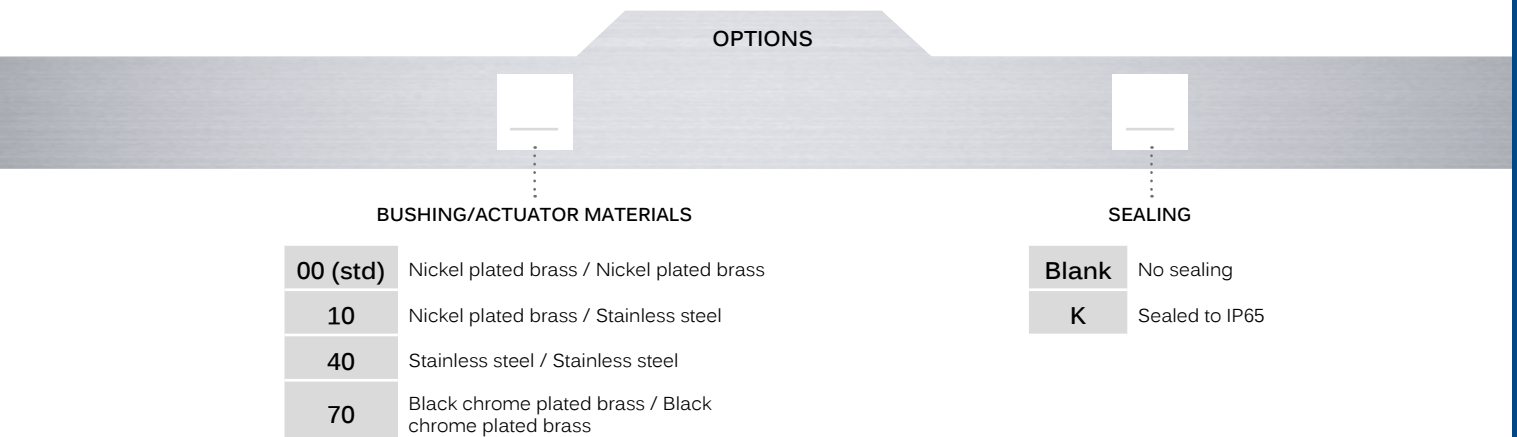
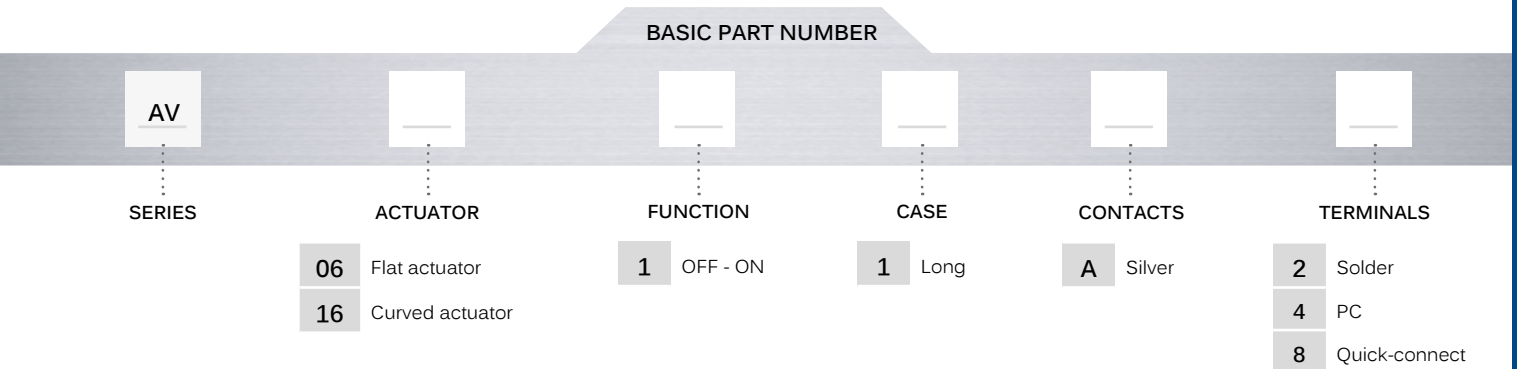
- Panel cut-out : Ø 16.2 mm (.637)
- Min. pitch for matrix mounting :
24 mm x 24 mm (.944 x .944)

AV series

Security pushbutton switches •
Ø 16 mm • latching



BUILD YOUR PART NUMBER



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

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

Mounting accessories: standard hardware supplied : 1 hex nut. Standard and special hardware is presented in the "Hardware" section of website.

AV series

Security pushbutton switches • Ø 16 mm • latching

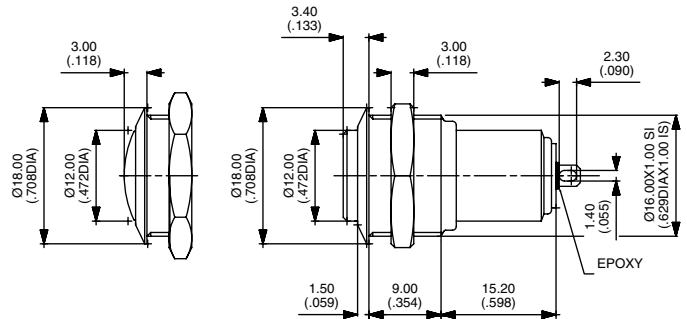
FLAT OR CURVED ACTUATOR SOLDER LUG TERMINALS



Flat actuator
AV0611A2 OFF ON

Curved actuator
AV1611A2 OFF ON

Hex nut 19 (.748) across flats



FLAT OR CURVED ACTUATOR - STRAIGHT PC OR QUICK-CONNECT TERMINALS



STRAIGHT PC TERMINALS

Flat actuator
AV0611A4 OFF ON

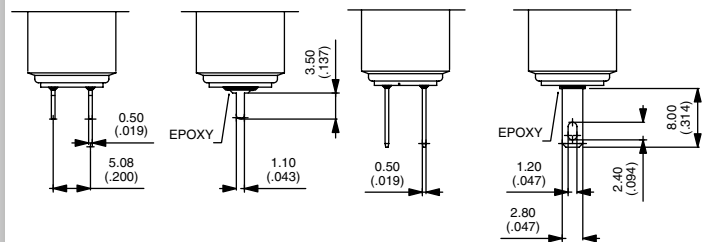
Curved actuator
AV1611A4 OFF ON

QUIK-CONNECT TERMINALS

Flat actuator
AV0611A8 OFF ON

Curved actuator
AV1611A8 OFF ON

Hex nut 19 (.748) across flats



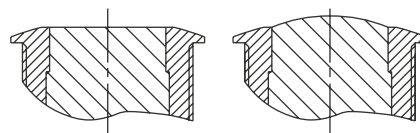
BUSHING/ACTUATOR MATERIALS

BASIC P/N



FLAT OR CURVED METAL ACTUATOR

CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
40	Stainless steel	Stainless steel
70	Black chrome plated brass	Black chrome plated brass



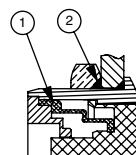
SEALING

BASIC P/N



Blank No sealing
 K Front panel sealing to IP65

OPTION K



① - elastomeric membrane
 ② - external gasket

AV series

Snap action security pushbutton switches •
 Ø 16 mm • momentary (NO)



DISTINCTIVE FEATURES

- Momentary (NO)
- Compact
- Long life
- Marking available



ENVIRONMENTAL SPECIFICATIONS

- Optional front panel sealing : IP65 according to IEC 60529
- Operating temperature : -30 °C to +70 °C (-22 °F to +158 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
200 mA 48 VDC - 100 mA 48 VDC
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength : 2,000 Vrms 50 Hz min.
between terminals and frame
- Electrical life : 50,000 cycles at 200 mA 48 VDC
100,000 cycles at 100 mA 48 VDC



GENERAL SPECIFICATIONS

- **Travel** : 1.60 mm (.063) ± 0.3 mm (.011)
- **Torque** : 5 Nm min. - 14 Nm max. applied to nut
- **Panel thickness** : 1 (.039) to 6 mm (.236) max.
- **Low level or mechanical life** : 1,000,000 cycles



MATERIALS

- Case : PBT
- Contacts : brass, silver plated (C)
- Bushing and actuator : see next page

The company reserves the right to change specifications without notice.

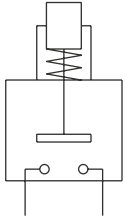


AV series

Snap action security pushbutton switches •
Ø 16 mm • momentary (NO)



ELECTRICAL FUNCTIONS



Function 3 (NO)



MOUNTING

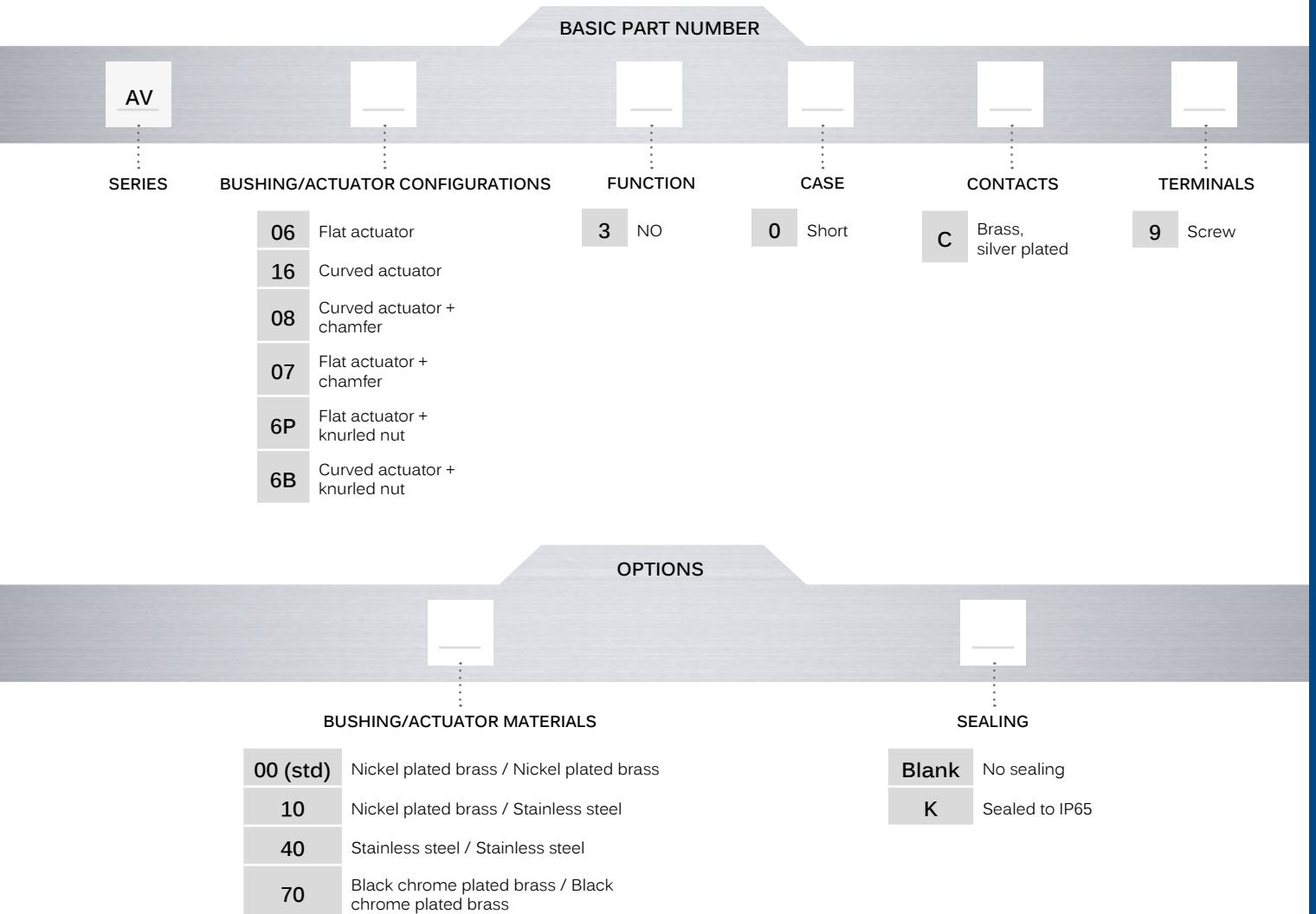
- Panel cut-out : Ø 16.2 mm (.637)
- Min. pitch for matrix mounting :
24 mm x 24 mm (.944 x .944)
(AV6P & AV6B : 20 mm x 20 mm)

AV series

Snap action security pushbutton switches •
 Ø 16 mm • momentary (NO)



BUILD YOUR PART NUMBER



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart

- ⚠ **Notice:** please note that not all combinations of above numbers are available. Refer to the following pages for further information.
- 🔧 **Mounting accessories:** standard hardware supplied : 1 hex nut. Standard and special hardware is presented in the "Hardware" section of website.

AV series

Snap action security pushbutton switches • Ø 16 mm • momentary (NO)

FLAT OR CURVED ACTUATOR SCREW TERMINALS



Flat actuator
AV0630C9

Curved actuator
AV1630C9

FLAT OR CURVED ACTUATOR WITH CHAMFER



Flat actuator
AV0830C9

Curved actuator
AV0730C9

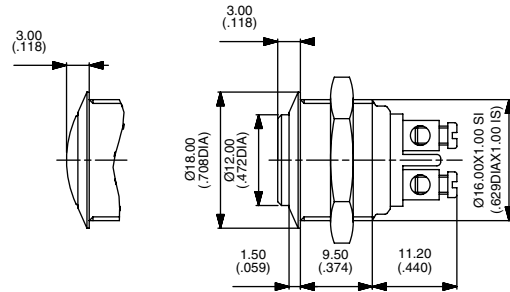
WITH KNURLED NUT FOR MATRIX MOUNTING 20 X 20 (.787X.787)



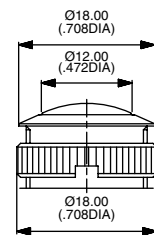
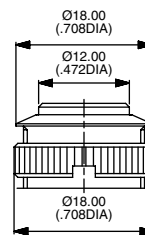
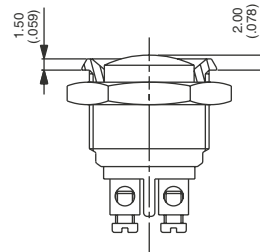
Flat actuator
AV6P30C9

Curved actuator
AV6B30C9

Hex nut 19 (.748) across flats



Hex nut 19 (.748) across flats

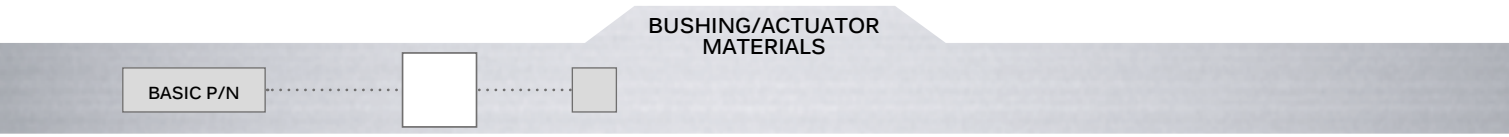


Wrench available under P/N U1990.

Screw terminals for wires 1,5 mm² max.

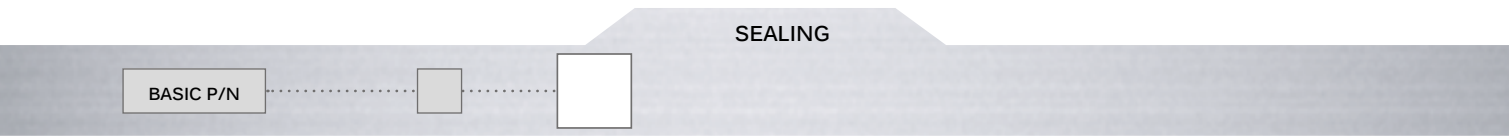
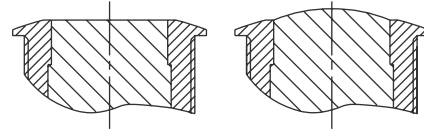
AV series

Snap action security pushbutton switches •
 Ø 16 mm • momentary (NO)



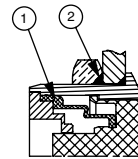
CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
40	Stainless steel	Stainless steel
70	Black chrome plated brass	Black chrome plated brass

FLAT OR CURVED METAL ACTUATOR



- Blank No sealing
- K Front panel sealing to IP65

OPTION K



- ① - elastomeric membrane
- ② - external gasket

AV series

Security pushbutton switches •
 Ø 19 or 22 mm • latching



DISTINCTIVE FEATURES

Latching

Illuminated or non-illuminated

Three terminal types



ENVIRONMENTAL SPECIFICATIONS

- Optional front panel sealing : IP65
- Operating temperature : -30 °C to +70 °C (-22 °F to +158 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : 2 A 48 VDC
- LED voltage and consumption : blue 3.5 V 10 mA, green : 2 V 10 mA, yellow & red : 2 V 20 mA (a resistor must be series-connected by the user)**
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength : 1,000 Vrms 50 Hz min. between terminals
 500 Vrms 50 Hz min. between terminals and frame
- Electrical life : 500,000 cycles at 2 A 48 VDC

**Resistor value = $\frac{\text{supply voltage} - \text{LED forward voltage}}{\text{LED forward current}}$



GENERAL SPECIFICATIONS

- Torque : 5 Nm min. - 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to 9 mm (.354) max.
- Low level or mechanical life : 1,000,000 cycles
- Hand soldering : 300 °C (572 °F), 4 seconds max.

The company reserves the right to change specifications without notice.



AV series

Security pushbutton switches •
Ø 19 or 22 mm • latching

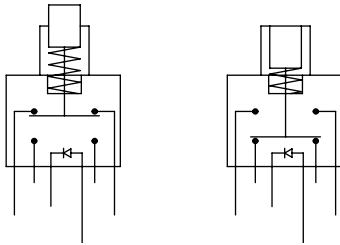


MATERIALS

- Case : PA6T UL94-V0
- Contacts : silver
- Bushing and actuator : see following pages
- LED



ELECTRICAL FUNCTIONS



MOUNTING

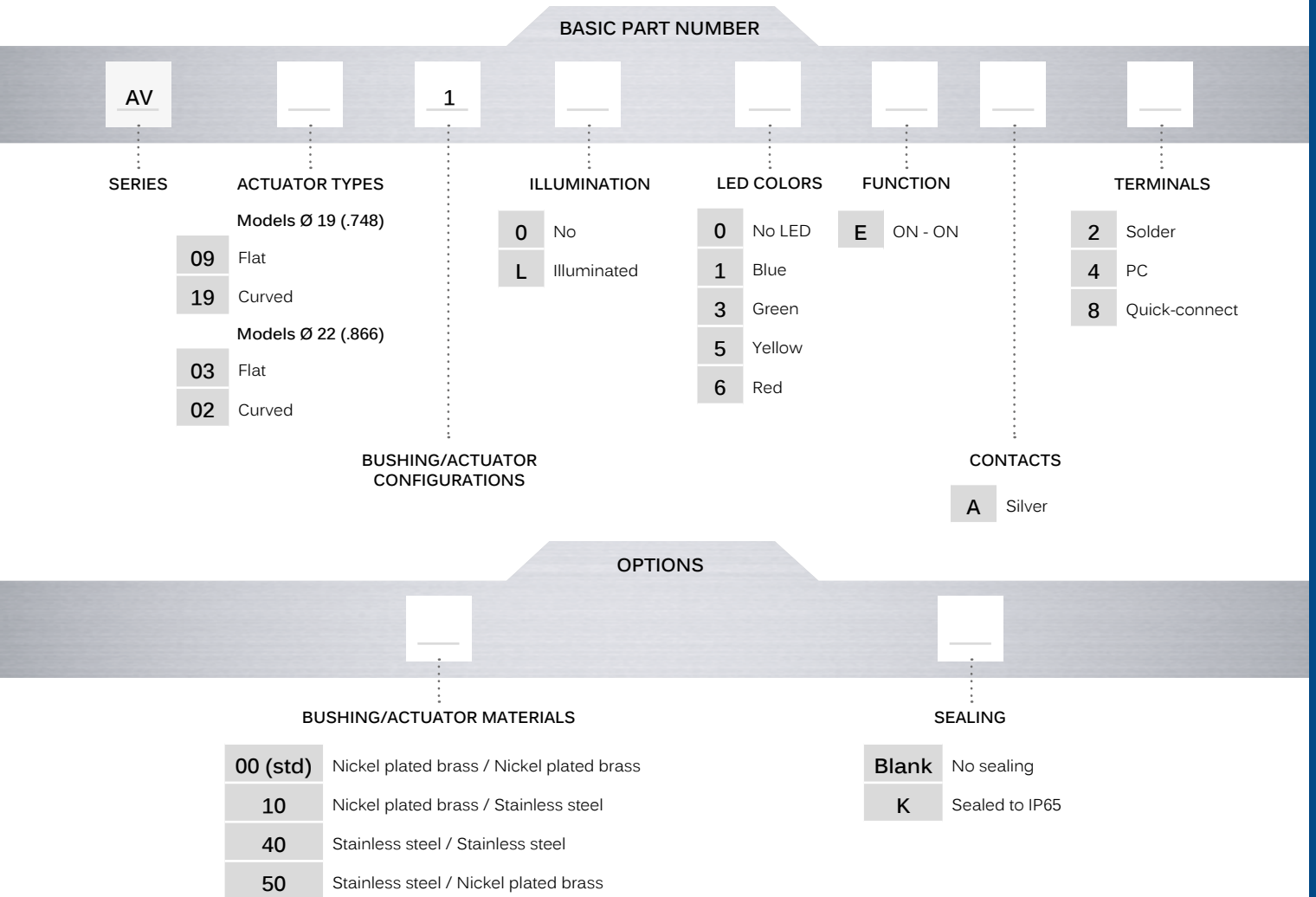
- Panel cut-out : Ø 19.2 mm (.755) or Ø 22.2 mm (.874)
- Min. pitch for matrix mounting : 30 mm x 30 mm (1.181 x 1.181)

AV series

Security pushbutton switches •
 Ø 19 or 22 mm • latching



BUILD YOUR PART NUMBER



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart

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

Mounting accessories: standard hardware supplied : 1 hex nut. Standard and special hardware is presented in the "Hardware" section of website.

AV series

Security pushbutton switches •
 Ø 19 or 22 mm • latching

BUSHING Ø 19 (.748) - NON-ILLUMINATED SOLDER LUG TERMINALS



Flat actuator*			
AV09100EA2	ON	ON	
Curved actuator			
AV19100EA2	ON	ON	

* Also available with prominent actuator in the non-latched position.

BUSHING Ø 19 (.748) - ILLUMINATED SOLDER LUG TERMINALS



Flat actuator			
AV0911L•EA2	ON	ON	

Replace • with desired LED color.

BUSHING Ø 22 (.866) - NON-ILLUMINATED SOLDER LUG TERMINALS



Flat actuator*			
AV03100EA2	ON	ON	
Curved actuator			
AV02100EA2	ON	ON	

* Also available with prominent actuator in the non-latched position.

BUSHING Ø 22 (.866) - ILLUMINATED SOLDER LUG TERMINALS

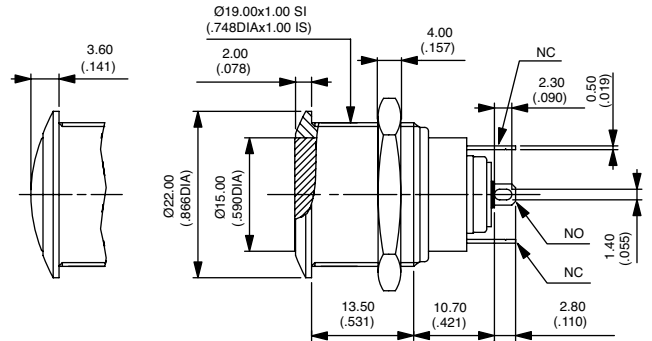


Flat actuator			
AV0311L•EA2	ON	ON	

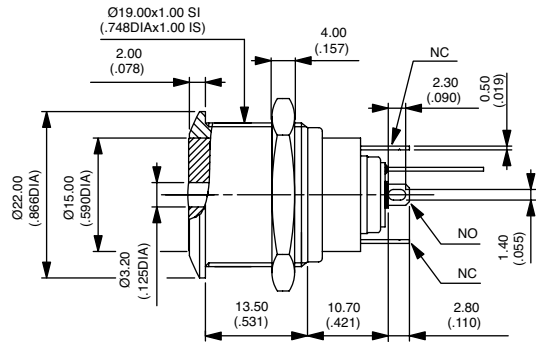
Replace • with desired LED color.

Standard actuator position : the actuator is flush in the non-latched position and recessed in the latched position.

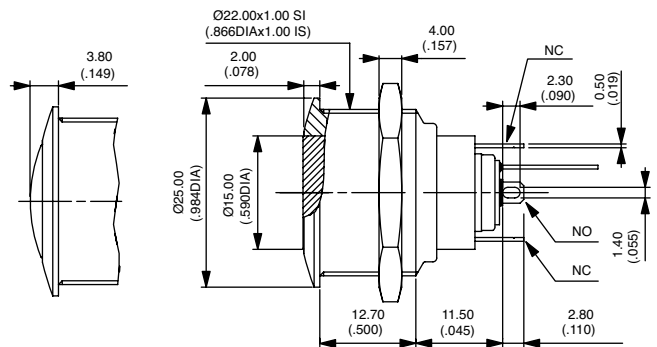
Hex nut 22 (.866) across flats



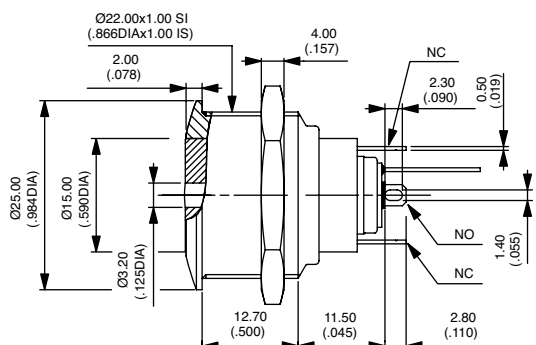
Hex nut 22 (.866) across flats



Hex nut 25 (.984) across flats



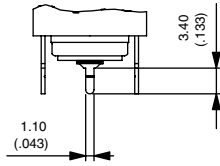
Hex nut 25 (.984) across flats



AV series

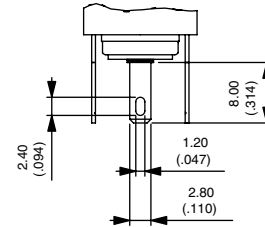
Security pushbutton switches •
 Ø 19 or 22 mm • latching

STRAIGHT PC TERMINALS



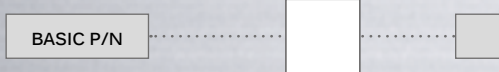
Replace 2 with 4 at the end of the model numbers shown on previous page.

QUICK-CONNECT TERMINALS



Replace 2 with 8 at the end of the model numbers shown on previous page.

BUSHING/ACTUATOR MATERIALS



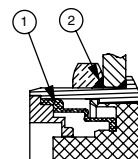
CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
40	Stainless steel	Stainless steel
50	Stainless steel	Nickel plated brass

SEALING



Blank No sealing
 K Front panel sealing to IP65

OPTION K



- ① - elastomeric membrane
- ② - external gasket

AV series

Security pushbutton switches •
 Ø 19 mm • momentary NC/NO



DISTINCTIVE FEATURES

Momentary NC/NO

Long life

Sealed to IP65 and IP69K



ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing : IP65 and IP69K according to IEC 60529
- Operating temperature : -20 °C to +85 °C (-4 °F to +185 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
 5 A 250 VAC - 5 A 125 VAC - 6,000 cycles
 5 A 15 VDC - 3 A 30 VDC - 50,000 cycles
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1,000 mΩ min. at 500 VDC
- Dielectric strength : 2,000 Vrms 50 Hz min. between terminals and frame



GENERAL SPECIFICATIONS

- Torque : 5 Nm min. - 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to 9 mm (.354) max.
- Low level or mechanical life : 1,000,000 cycles



MATERIALS

- Case : PA 6/6
- Contacts : silver
- Bushing : stainless steel (std)
- Actuator : stainless steel (std)

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.



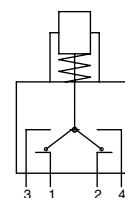
MOUNTING

- Panel cut-out : Ø 19.2 mm (.755)
- Min. pitch for matrix mounting : 30 mm x 30 mm (1.181x1.181)

The company reserves the right to change specifications without notice.



ELECTRICAL FUNCTIONS

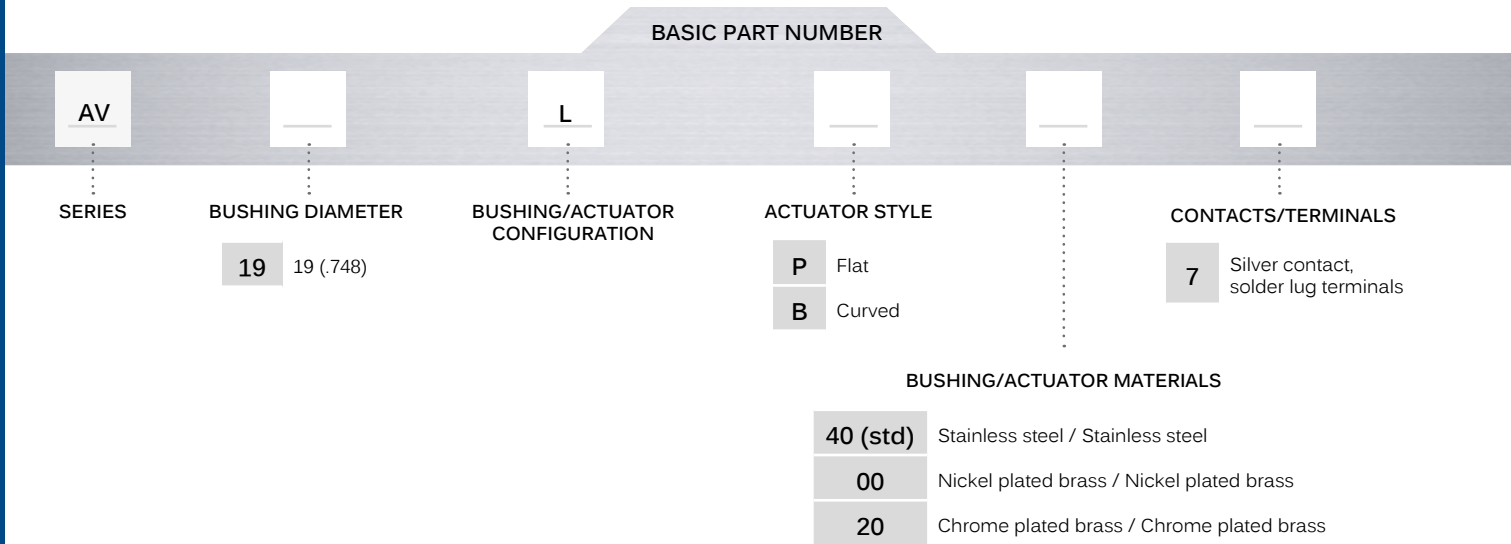


Combined NC/NO


AV series

Security pushbutton switches • Ø 19 mm • momentary NC/NO

BUILD YOUR PART NUMBER





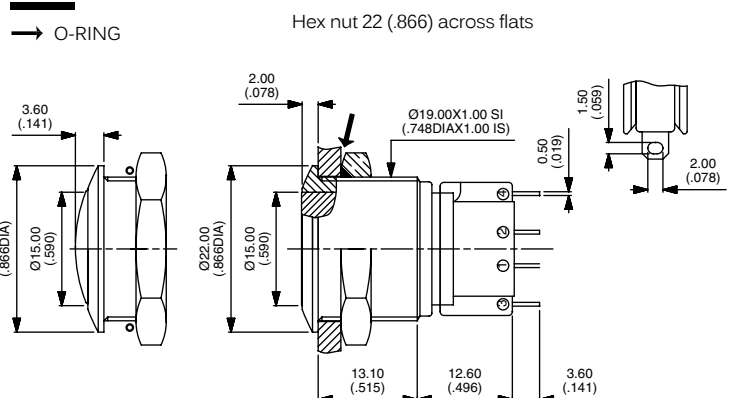
ABOUT THIS SERIES

 **Mounting accessories:** standard hardware supplied : 1 hex nut and 1 O-ring. Standard and special hardware is presented in the "Hardware" section of website.

SOLDER LUG TERMINALS



- Flat actuator
AV19LP407 
- Curved actuator
AV19LB407 



AV series

Tactile security pushbutton switches •
 Ø 19 mm • momentary (NO)



DISTINCTIVE FEATURES

Tactile feedback

Illuminated or non-illuminated

Momentary (NO)

Marking available



ENVIRONMENTAL SPECIFICATIONS

- Optional front panel sealing : IP65 according to IEC 60529
- Operating temperature : -30 °C to +70 °C (-22 °F to +158 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : 50 mA 24 VDC
- LED voltage and consumption : 2-color LED : 2 V (3 V max.) 20 mA
 Other colors : 2 V (3 V max.) 10 mA
 A resistor must be series-connected by the user**
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength : 500 Vrms 50 Hz min. between terminals
 2,000 Vrms 50 Hz min. between terminals and frame
- Electrical life : 1,000,000 cycles at full load

**Resistor value = $\frac{\text{supply voltage} - \text{LED forward voltage}}{\text{LED forward current}}$



GENERAL SPECIFICATIONS

- Travel : 0.7 mm (.027) ± 0.1 mm (.003)
- Operating force : 7 N ± 2N
- Torque : 5 Nm min. - 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to 6 mm (.236) max.
- Hand soldering : 270 °C, 3 seconds max.

The company reserves the right to change specifications without notice.



AV series

Tactile security pushbutton switches •
Ø 19 mm • momentary (NO)

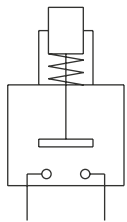


MATERIALS

- Case : PBT UL94-V0
- Terminals : brass, gold plated
- Contacts : gold plated dome
- Bushing and actuator : see following pages
- LED



ELECTRICAL FUNCTIONS



Function 3 (NO)



MOUNTING

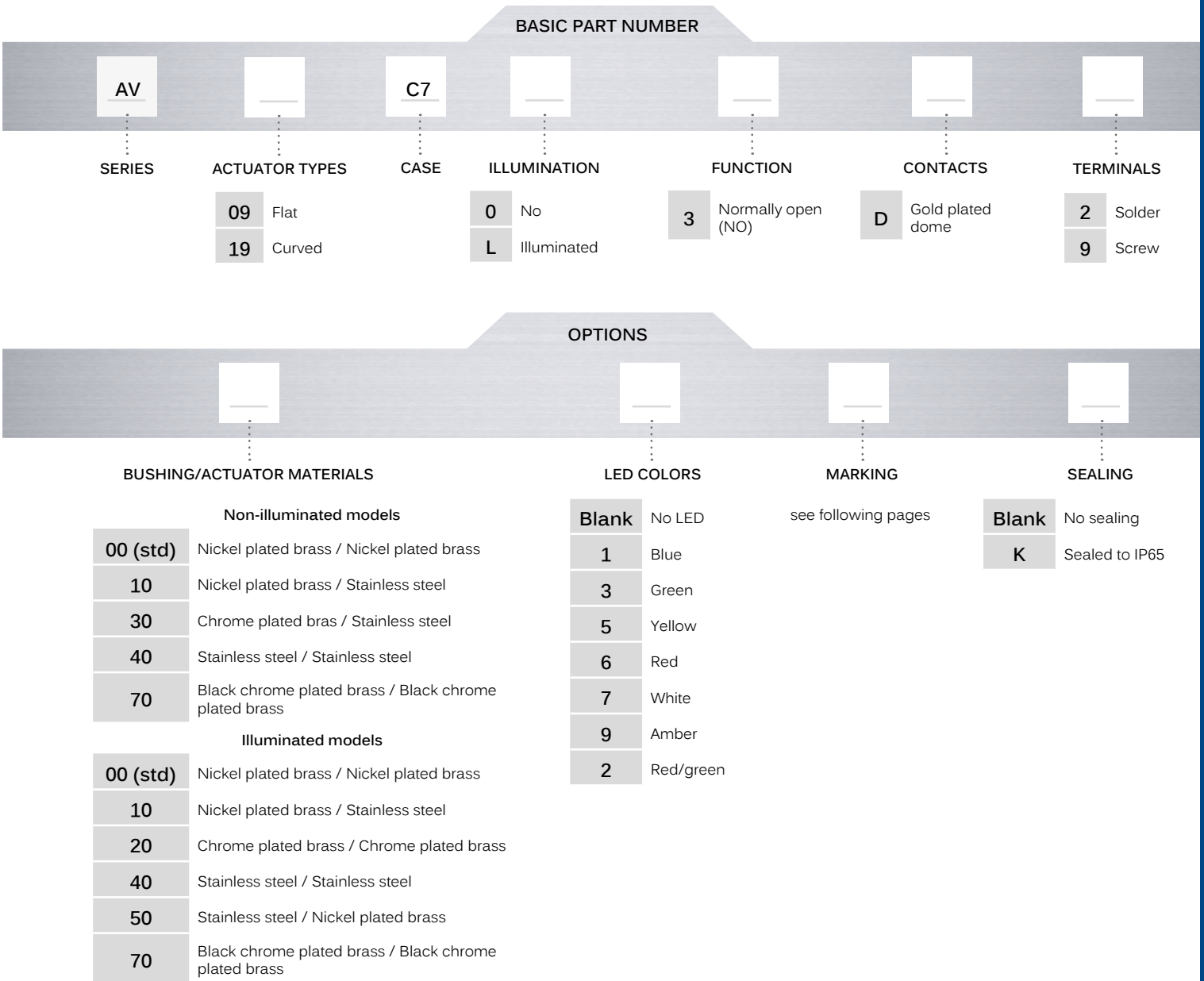
- Panel cut-out : Ø 19.2 mm (.755)
- Min. pitch for matrix mounting :
30 mm x 30 mm (1.181x1.181)

AV series

Tactile security pushbutton switches •
 Ø 19 mm • momentary (NO)



BUILD YOUR PART NUMBER



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- ⚠ **Notice:** please note that not all combinations of above numbers are available. Refer to the following pages for further information.
- 🔧 **Mounting accessories:** standard hardware supplied : 1 hex nut. Standard and special hardware is presented in the "Hardware" section of website.

AV series

Tactile security pushbutton switches • Ø 19 mm • momentary (NO)

FLAT ACTUATOR - NON ILLUMINATED



Solder lug terminals

AV09C703D2

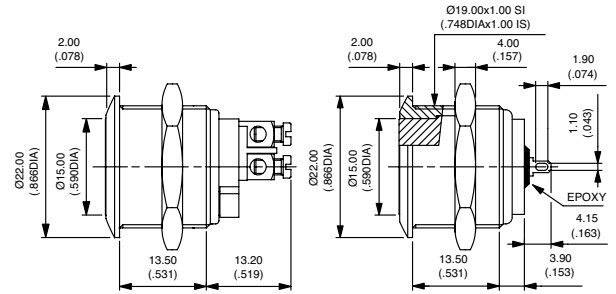


Screw terminals

AV09C703D9



Hex nut 22 (.866) across flats



FLAT ACTUATOR - ILLUMINATED



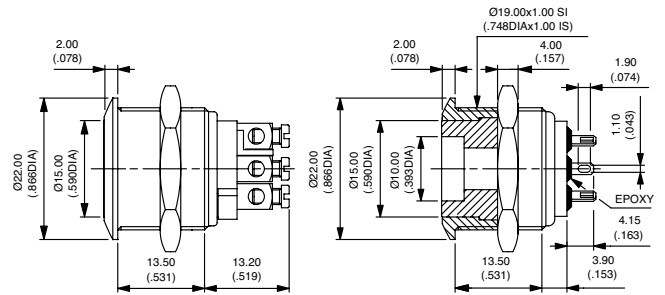
Solder lug terminals

AV09C7L3D2



Screw terminals

AV09C7L3D9



BUSHING/ACTUATOR MATERIALS

BASIC P/N



NON-ILLUMINATED MODELS

CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
30	Chrome plated brass	Stainless steel
40	Stainless steel	Stainless steel
70	Black chrome plated brass	Black chrome plated brass

ILLUMINATED MODELS

CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
20	Chrome plated brass	Chrome plated brass
40	Stainless steel	Stainless steel
50	Stainless steel	Nickel plated brass
70	Black chrome plated brass	Black chrome plated brass

LED COLORS

BASIC P/N

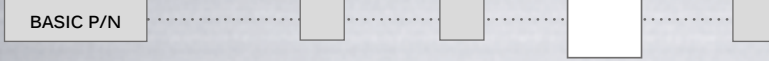


Blank	No LED	6	Red
1	Blue	7	White
3	Green	9	Amber
5	Yellow	2	Red/green

AV series

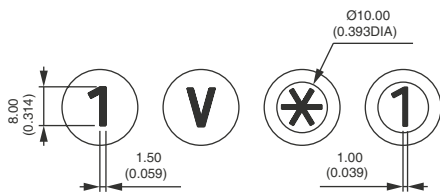
Tactile security pushbutton switches •
 Ø 19 mm • momentary (NO)

MARKING



For flat or curved actuator.

- by laser etching on non-illuminated brass or stainless steel actuator.
- by hot stamping on thermoplastic insert (illuminated actuators)



Select an option from each of the two paragraphs opposite (Type /Color).

TYPE OF MARKING

- 0 to 9** Numbers 0 to 9
- X** Symbol *
- Y** Symbol #
- A to N** Letters A to N
- P to W** Letters P to W
- 0** Letter O

Letter O : same code and same design as number 0.
 For special symbols, consult factory.
 Minimum order : 500 pieces

COLOR OF MARKING

Non-illuminated actuators :

- 0 (std)** Same as finish
- 2** Black

Note : a finished product supplied in version "0" cannot be modified to version «2».

Illuminated actuators

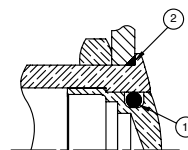
- 2** Black (on white)

SEALING



- Blank** No sealing
- K** Front panel sealing to IP65

OPTION K



- ① - internal gasket
- ② - external gasket

AV series

Security pushbutton switches •
 Ø 19 or 22 mm • momentary NO



DISTINCTIVE FEATURES

Momentary (NO)

Momentary (NC) and alternate action also available

Long life

UL-CSA approved (long case only)

Marking available



ENVIRONMENTAL SPECIFICATIONS

- Optional front panel sealing : IP65 according to IEC 60529
- Operating temperature : -30 °C to +70 °C (-22 °F to +158 °F)



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
 - A contacts : 4 A 12 VDC, 500,000 cycles
 - C contacts : 2 A 48 VDC, 10,000 cycles
- Approved ratings of models with long case and A contacts (AV..000) :
 - UL-CSA : 4 A 250 VAC - 8 A 125 VAC - 6,000 cycles
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1,000 MΩ min. at 500 VDC
- Dielectric strength :
 - 2,000 Vrms 50 Hz min. between terminals and frame
 - 2,000 Vrms 50 Hz min. between terminals



GENERAL SPECIFICATIONS

- Torque : 5 Nm min.- 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to 11 mm (.433) max.
- Low level or mechanical life : 1,000,000 cycles
- Hand soldering : 300 °C (572 °F), 3 sec. max.



MATERIALS

- Case : PBT
- Contacts : silver (A) or brass, silver plated (C)
- Bushing and actuator : see following pages

The company reserves the right to change specifications without notice.



AV series

Security pushbutton switches •
Ø 19 or 22 mm • momentary NO

AGENCY APPROVAL

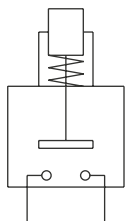


4 A 250 VAC / 8 A 125 VAC
(long case only)

To order switches marked UL-CSA,
add "UU" at the end of model number.



ELECTRICAL FUNCTIONS



Function 3 (NO)



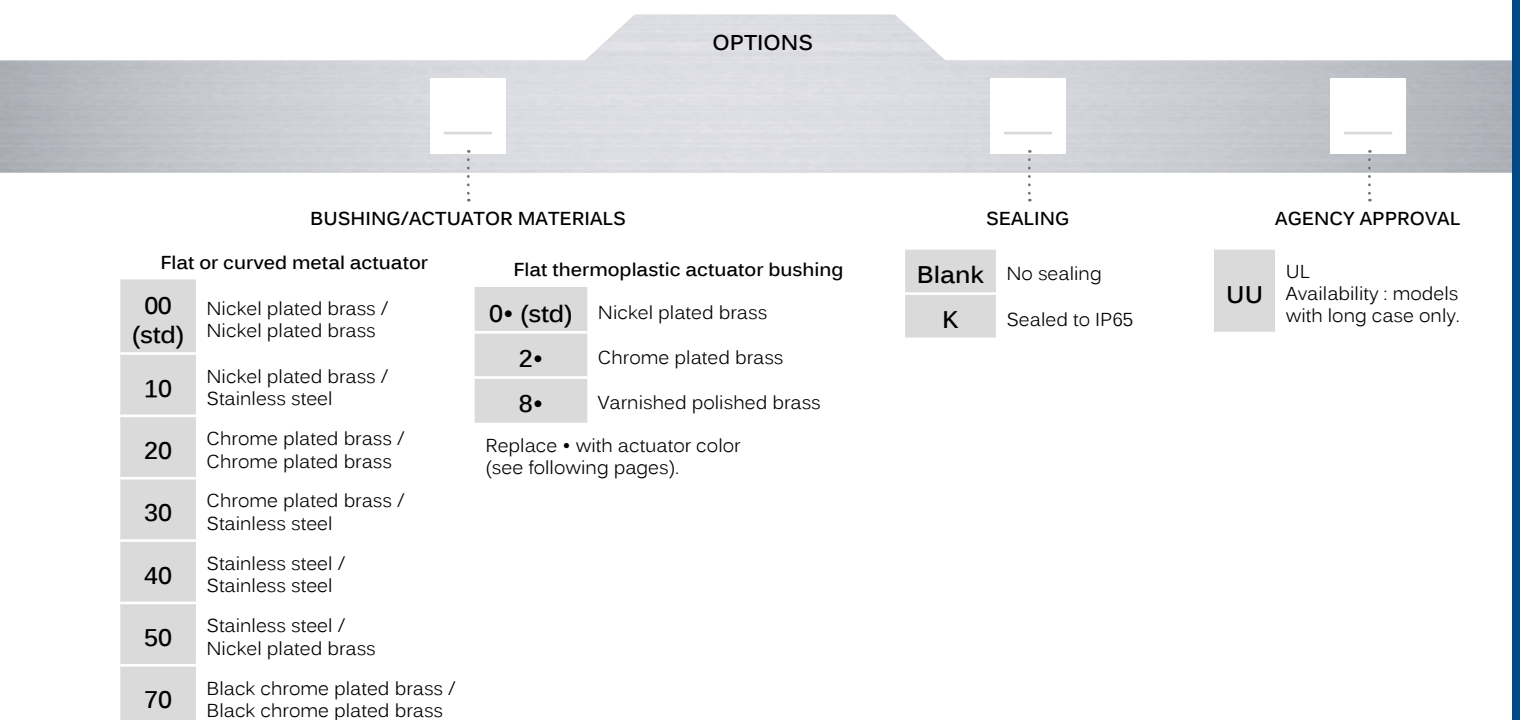
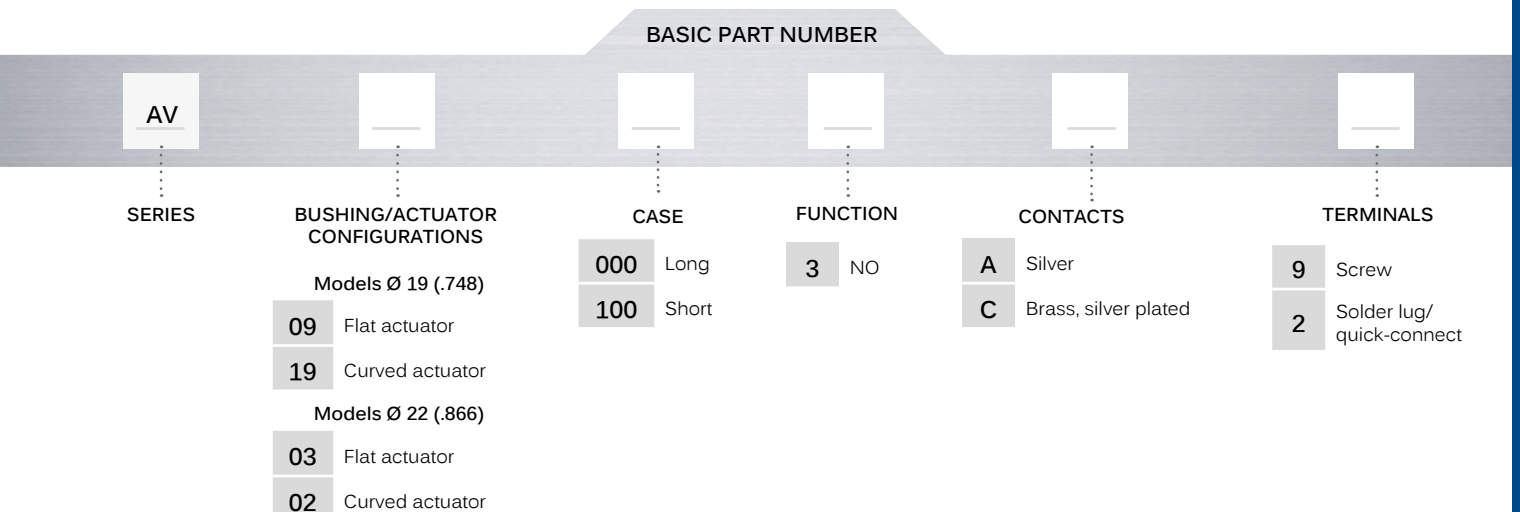
PANEL MOUNTING

- Panel cut-out : Ø 19,2 mm (.755) or Ø 22.2 mm (.874)
- Min. pitch for matrix mounting :
30 mm x 30 mm (1.181x1.181)

AV series


Security pushbutton switches •
 Ø 19 or 22 mm • momentary NO


BUILD YOUR PART NUMBER



ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

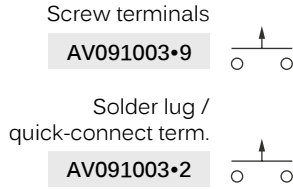
 **Notice:** please note that not all combinations of above numbers are available. Refer to the following pages for further information.

 **Mounting accessories:** standard hardware supplied : 1 hex nut. Standard and special hardware is presented in the "Hardware" section of website.

AV series

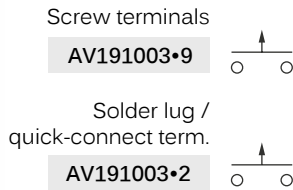
Security pushbutton switches • Ø 19 or 22 mm • momentary NO

BUSHING Ø 19 (.748) - FLAT ACTUATOR SHORT CASE - 48 VDC



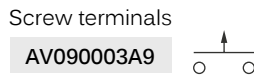
• Contacts. Replace with A or C.

BUSHING Ø 19 (.748) - CURVED ACTUATOR SHORT CASE - 48 VDC



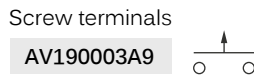
• Contacts. Replace with A or C.

BUSHING Ø 19 (.748) - FLAT ACTUATOR LONG CASE- 4 A 250 VAC/8 A 125 VAC - UL/CSA



To order switches marked UL-CSA, add "UU" at the end of model number.

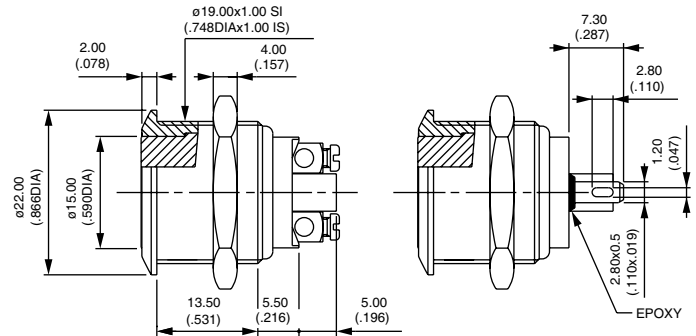
BUSHING Ø 19 (.748) - CURVED ACTUATOR LONG CASE - 4 A 250 VAC/8 A 125 VAC - UL/CSA



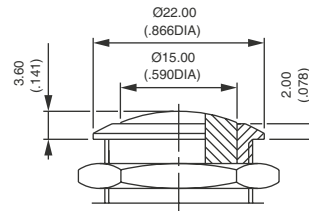
To order switches marked UL-CSA, add "UU" at the end of model number.

Screw terminals for wires 1.5 mm² max.

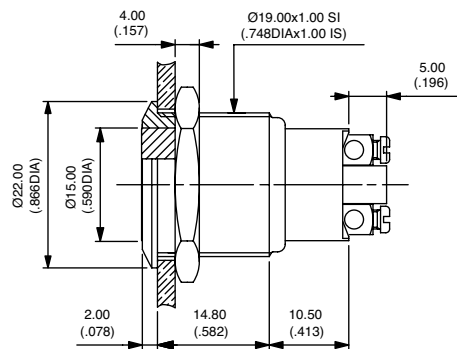
Hex nut 22 (.866) across flats



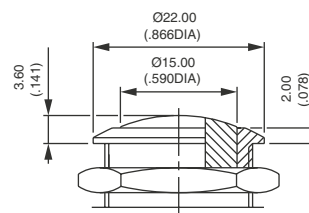
Hex nut 22 (.866) across flats



Hex nut 22 (.866) across flats



Hex nut 22 (.866) across flats



BUSHING Ø 22 (.866) - FLAT ACTUATOR SHORT CASE - 48 VDC



Screw terminals

AV031003•9



Solder lug /
quick-connect term.

AV031003•2



• Contacts. Replace with A or C.

BUSHING Ø 22 (.866) - CURVED ACTUATOR SHORT CASE - 48 VDC



Screw terminals

AV021003•9



Solder lug /
quick-connect term.

AV021003•2



• Contacts. Replace with A or C.

BUSHING Ø 22 (.866) - FLAT ACTUATOR LONG CASE - 4 A 250 VAC/8 A 125 VAC - UL/CSA



Screw terminals

AV030003A9



To order switches marked UL-CSA, add "UU" at the end of model number.

BUSHING Ø 22 (.866) - CURVED ACTUATOR LONG CASE - 4 A 250 VAC/8 A 125 VAC - UL/CSA



Screw terminals

AV020003A9

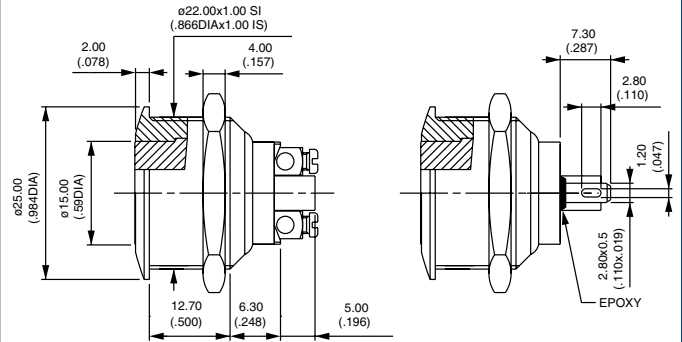


To order switches marked UL-CSA, add "UU" at the end of model number.

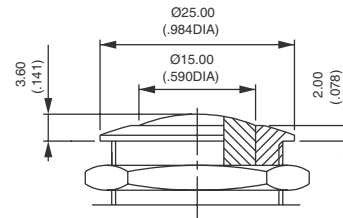
Screw terminals for wires 1.5 mm² max.

Security pushbutton switches • Ø 19 or 22 mm • momentary NO

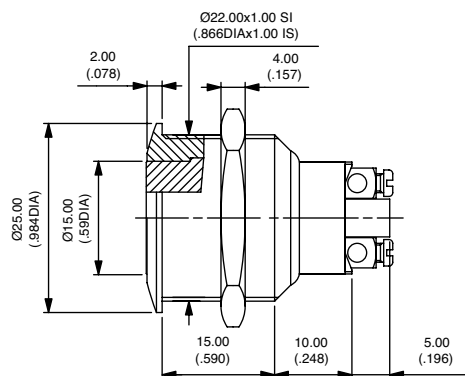
Hex nut 25 (.984) across flats



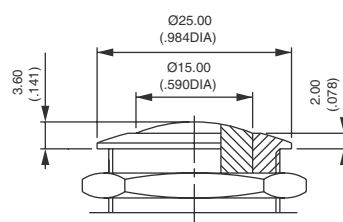
Hex nut 25 (.984) across flats



Hex nut 25 (.984) across flats



Hex nut 25 (.984) across flats



AV series

Security pushbutton switches • Ø 19 or 22 mm • momentary NO

BUSHING Ø 22 (.866) - MOMENTARY, NORMALLY CLOSED

- Single pole, screw terminals, without marking
- Silver plated copper contacts (C)
- Max. current/voltage rating with resistive load :
2 A 250 VAC - 3 A 125 VAC - 2.5 A 24 VDC
- Dielectric strength :
2,000 Vrms 50 Hz min. betw. terminal and frame
2,000 Vrms. 50 Hz min. between terminals
- Electrical life : 100,000 cycles at 0.3 A 24 VAC or DC
10,000 cycles at full load

Flat actuator

AV031202C9



Curved actuator

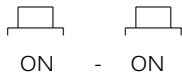
AV021202C9



BUSHING Ø 22 (.866) - ALTERNATE ACTION

- Double pole, solder lug/quick-connect terminal, curved actuator
- Silver contacts
- Max. current/voltage rating with resistive load :
3 (1.5) A 250 VAC - 6 A 125 VAC - 3 A 24 VAC or DC
- Dielectric strength : 3,000 Vrms min. between terminals and frame
- Electrical life : 10,000 cycles at full load
50,000 cycles at 1 A 24 VAC or DC
- Mechanical life : 100,000 cycles

AV044746A2

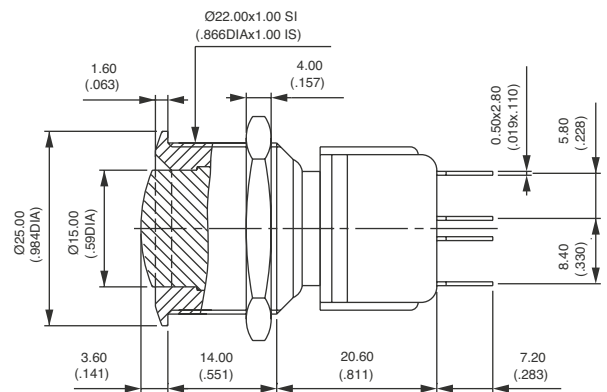
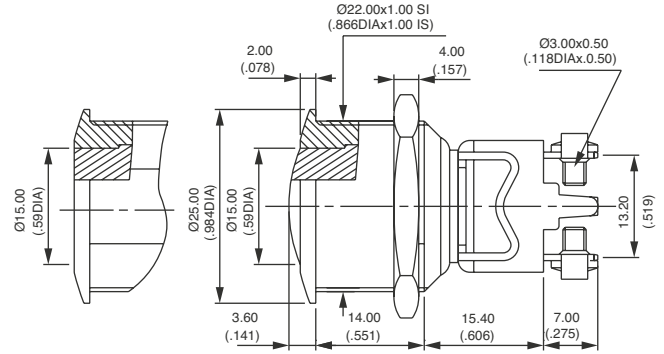


ON

- ON

For further specifications, see previous pages

Hex nut 25 (.984) across flats



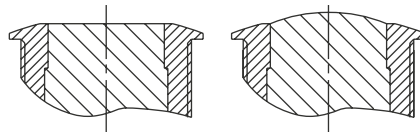
BUSHING/ACTUATOR MATERIALS

BASIC P/N



FLAT OR CURVED METAL ACTUATOR

CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
20	Chrome plated brass	Chrome plated brass
30	Chrome plated brass	Stainless steel
40	Stainless steel	Stainless steel
50	Stainless steel	Nickel plated brass
70	Black chrome plated brass	Black chrome plated brass



AV series

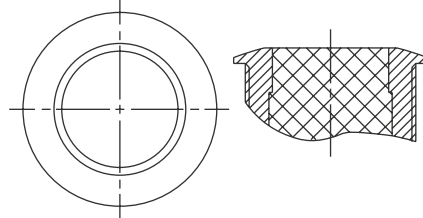
Security pushbutton switches • Ø 19 or 22 mm • momentary NO

BUSHING/ACTUATOR MATERIALS (CONTINUED)

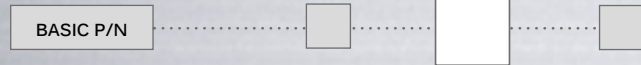


FLAT THERMOPLASTIC ACTUATOR

CODE	BUSHING	ACTUATOR
0• (std)	Nickel plated brass	Replace • with one of the following codes : 1 : blue - 1/4 : dark blue - 2 : black - 3 : green - 4 : grey - 5 : yellow - 6 : red - 7/1 : white - 9 : orange
2•	Chrome plated brass	
8•	Varnished polished brass	

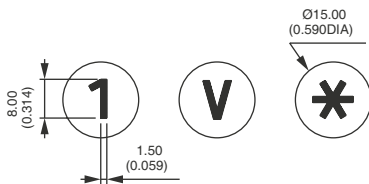


MARKING



For **flat or curved actuator**: by laser etching on non-illuminated brass or stainless steel actuator.

For **flat actuator**: by hot stamping on thermoplastic insert (illuminated actuators). Not available for AV031202C9 and AV044746A2.



Select an option from each of the two paragraphs opposite (Type /Color).

TYPE OF MARKING

- 0 to 9 Numbers 0 to 9
- X Symbol *
- Y Symbol #
- A to N Letters A to N
- P to W Letters P to W
- 0 Letter O

Letter O : same code and same design as number 0.
For special symbols, consult factory.
Minimum order : 500 pieces

COLOR OF MARKING

Brass actuator

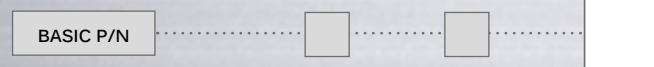
- 0 (std) Same as finish
- 2 Black

Note : a finished product supplied in version "0" cannot be modified to version "2".

Thermoplastic actuator

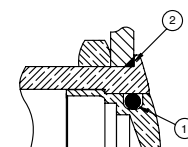
- 2 Black
- 7 White

SEALING



- Blank No sealing
- K Front panel sealing to IP65

OPTION K



- ① - internal gasket
- ② - external gasket