

# 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
- 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

### LED COMPONENT SPECIFICATIONS

LED color	Forward current	Typ. forward voltage	Max. forward voltage
Red	20 mA	1.95 V	1.95 V
Yellow	20 mA	2 V	2.05 V
Green	20 mA	2.1 V	2.5 V
Blue	20 mA	3.2 V	4 V

A resistor must be series-connected by the user.

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



## GENERAL SPECIFICATIONS

- Torque : 1.5 Nm min. - 4 Nm max. applied to nut
- 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.



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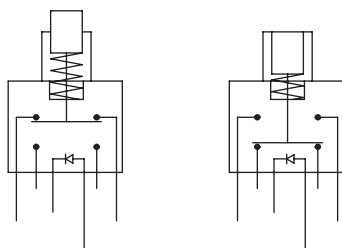
## MATERIALS

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

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



## ELECTRICAL FUNCTIONS



## MOUNTING

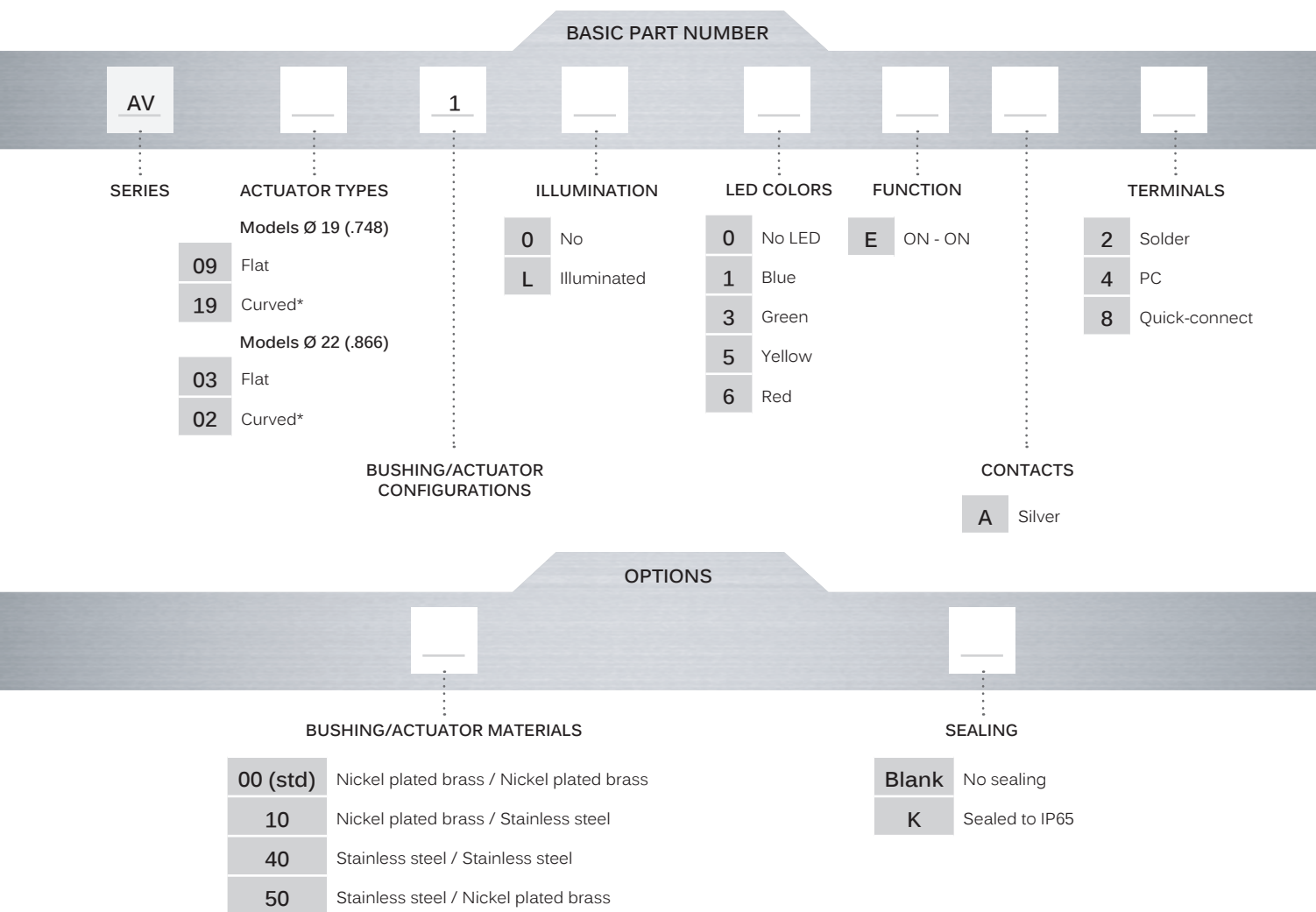
- Panel cut-out : Ø 19.2 mm (.755) or Ø 22.2 mm (.874)
- Min. pitch for matrix mounting : 30 mm x 30 mm (1.181 x 1.181)
- Panel thickness :
  - diam 19: 1 (.039) to 9 mm (.354) max.
  - diam 22: 1 (.039) to 8 mm (.315) max.

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## 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.

\* Curved actuation types are not available for illumination.

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## 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			
AV091L•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.

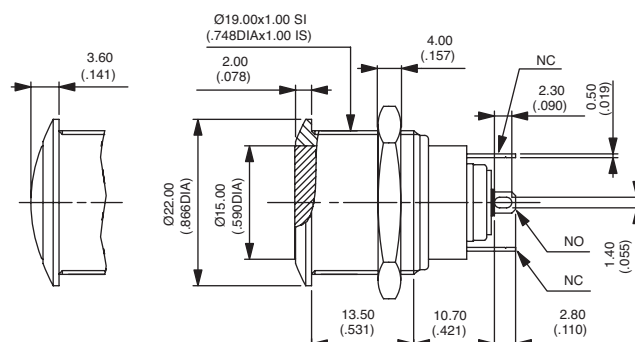
## BUSHING Ø 22 (.866) - ILLUMINATED SOLDER LUG TERMINALS



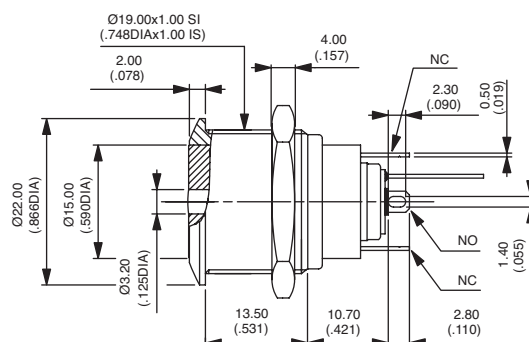
Flat actuator			
AV031L•EA2	ON	ON	

Replace • with desired LED color.

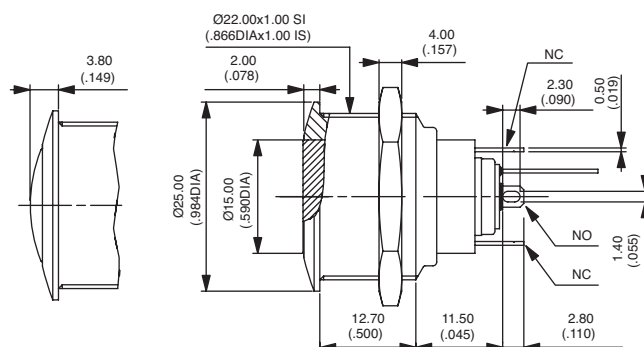
Hex nut 22 (.866) across flats



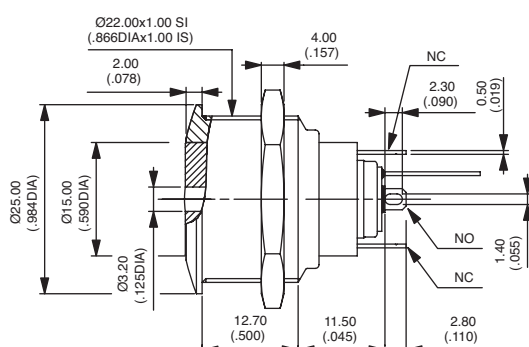
Hex nut 22 (.866) across flats



Hex nut 25 (.984) across flats



Hex nut 25 (.984) across flats

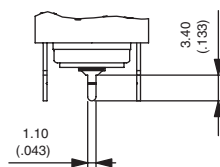


Standard actuator position : the actuator is flush in the non-latched position and recessed in the latched position.

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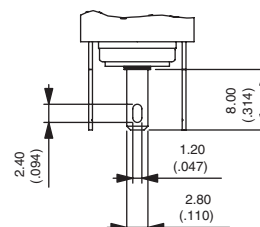
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## STRAIGHT PC TERMINALS



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



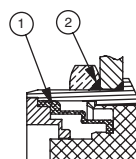
CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
40	Stainless steel	Stainless steel
50	Stainless steel	Nickel plated brass

### SEALING



Blank No sealing  
K Front panel sealing to IP65

### OPTION K



- ① - elastomeric membrane
- ② - external gasket