

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.
 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.



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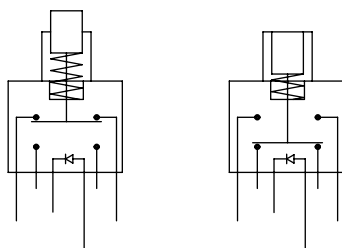
MATERIALS

- 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

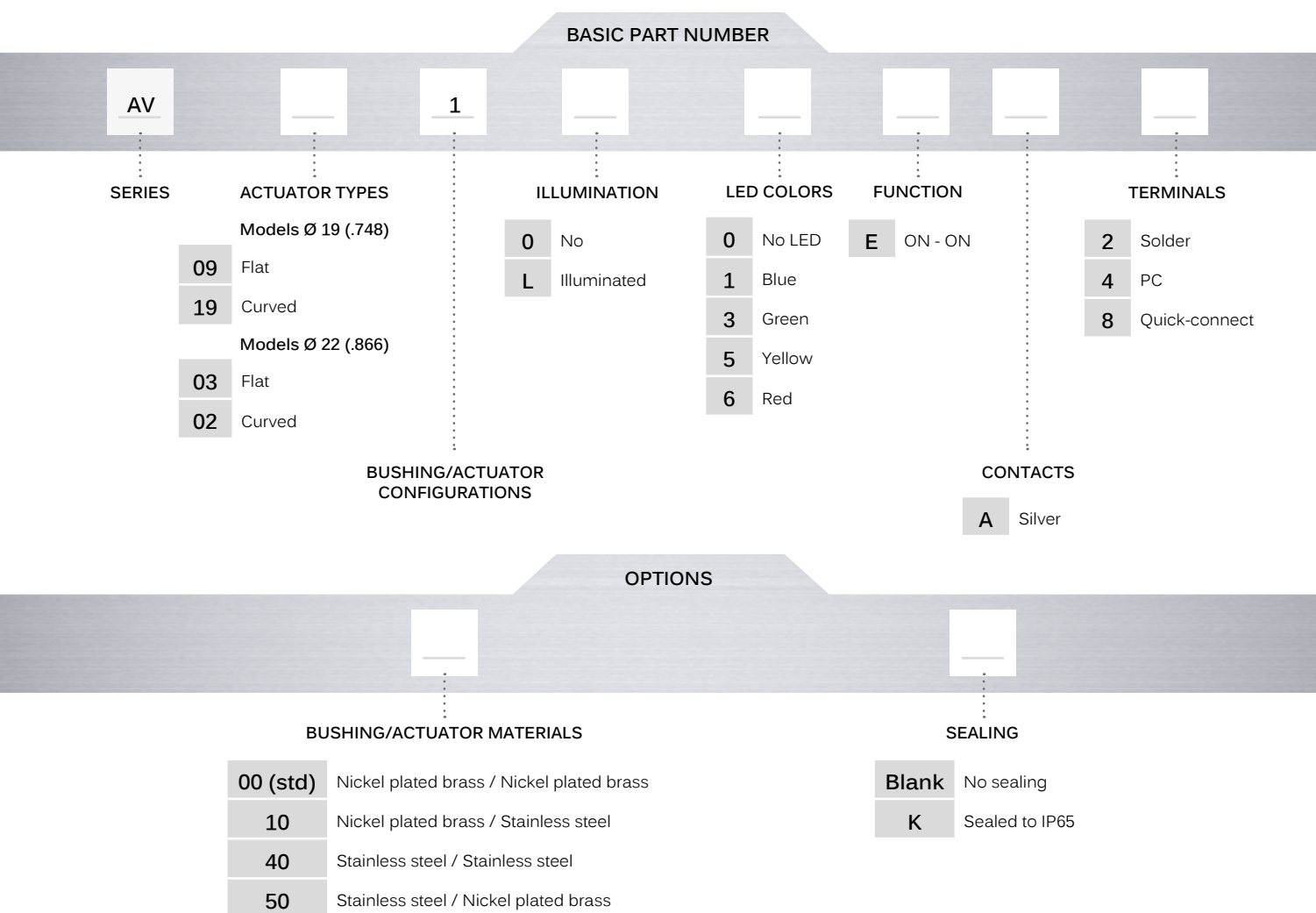
- Panel cut-out : Ø 19.2 mm (.755) or Ø 22.2 mm (.874)
- Min. pitch for matrix mounting : 30 mm x 30 mm (1.181 x 1.181)

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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.

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AV19100EA2	ON	ON
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AV02100EA2	ON	ON
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Technical drawing of a 1/2" NPT female connector. The drawing includes a side view on the left and a front view on the right. Dimensions are provided in inches and millimeters.

Dimensions:

- Overall length: 3.60 (.141)
- Thread length: 2.00 (.078)
- Thread outer diameter: $\varnothing 19.00 \times 1.00$ SI ($\varnothing 19.00 \times 1.00$ IS)
- Thread pitch: 4.00 (.157)
- Overall outer diameter: $\varnothing 22.00$ (.866 D/A)
- Inner diameter: $\varnothing 15.00$ (.590 D/A)
- Thread pitch (bottom): 13.50 (.531)
- Thread pitch (bottom): 10.70 (.421)
- Thread pitch (bottom): 2.80 (.110)
- Thread pitch (bottom): 1.40 (.055)
- Thread pitch (bottom): 2.30 (.090)
- Thread pitch (bottom): 0.50 (.019)

Labels:

- NC (Not Connected)
- NO (Normally Open)
- NC (Not Connected)

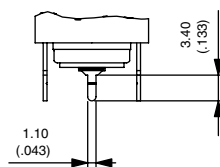
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AV series

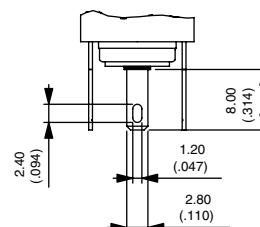
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STRAIGHT PC TERMINALS



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



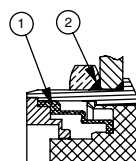
CODE	BUSHING	ACTUATOR
00 (std)	Nickel plated brass	Nickel plated brass
10	Nickel plated brass	Stainless steel
40	Stainless steel	Stainless steel
50	Stainless steel	Nickel plated brass

SEALING



Blank No sealing
K Front panel sealing to IP65

OPTION K



- ① - elastomeric membrane
- ② - external gasket