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
- 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

LED COMPONENT SPECIFICATIONS			
LED color	Forward current	Typ. forward voltage	Max. forward voltage
Blue	20 mA	3.3 V	3.8 V
Green	20 mA	4 V	4.5 V
Yellow	20 mA	2 V	2.5 V
Red	20 mA	1.95 V	2.5 V
White	20 mA	3.3 V	4 V
Amber	20 mA	2.3 V	2.8 V
Red / green	20 mA	1.85 V / 2.2 V	2.5 V

A resistor must be series-connected by the user

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

The company reserves the right to change specifications without notice.

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GENERAL SPECIFICATIONS

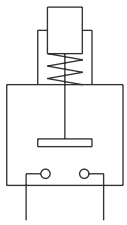
- **Travel : 0.7 mm** (.027) ± 0.1 mm (.003)
- Operating force : 7 N ± 2N
- Torque : 1.5 Nm min. - 4 Nm max. applied to nut
- Panel thickness : 1 (.039) to 6 mm (.236) max.
- Hand soldering : 270 °C, 3 seconds max.

MATERIALS

- Case : PBT UL94-V0
- Terminals : brass, gold plated
- Contacts : gold plated dome
- 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



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)

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BUILD YOUR PART NUMBER

BASIC PART NUMBER

AV _ C7 _ _ _ _

SERIES

AV

ACTUATOR TYPES

09	Flat
19	Curved

CASE

C7

ILLUMINATION

0	No
L	Illuminated

FUNCTION

3	Normally open (NO)

CONTACTS

D	Gold plated dome

TERMINALS

2	Solder
9	Screw

OPTIONS

_ _ _ _

BUSHING/ACTUATOR MATERIALS

Non-illuminated models

00 (std)	Nickel plated brass / Nickel plated brass
10	Nickel plated brass / Stainless steel
30	Chrome plated bras / Stainless steel
40	Stainless steel / Stainless steel
70	Black chrome plated brass / Black chrome plated brass

Illuminated models

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

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

MARKING

see following pages

SEALING

Blank	No sealing
K	Sealed to IP65

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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FLAT ACTUATOR - NON ILLUMINATED



Solder lug terminals

AV09C703D2

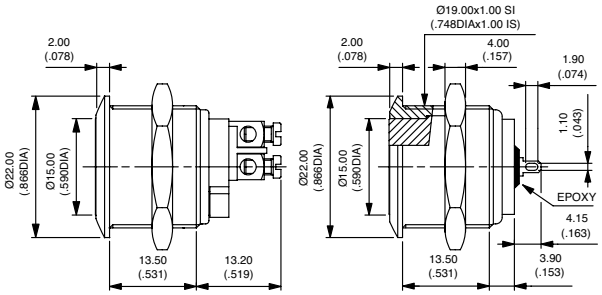


Screw terminals

AV09C703D9



Hex nut 22 (.866) across flats



FLAT ACTUATOR - ILLUMINATED



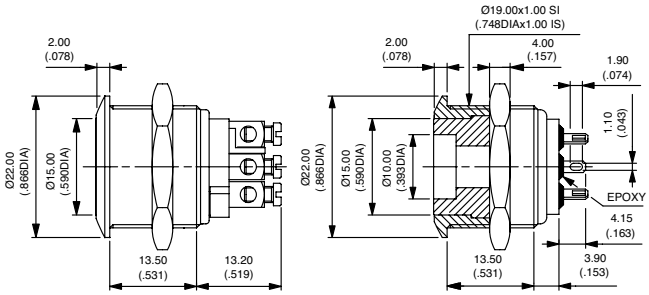
Solder lug terminals

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

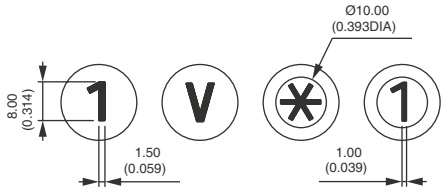
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MARKING

BASIC P/N

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

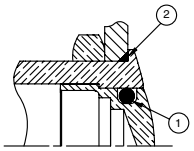
2	Black (on white)

SEALING

BASIC P/N

Blank	No sealing
K	Front panel sealing to IP65

OPTION K



① - internal gasket

② - external gasket