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

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

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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.

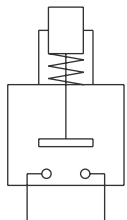• Hand soldering : 270 °C, 3 seconds max.

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.
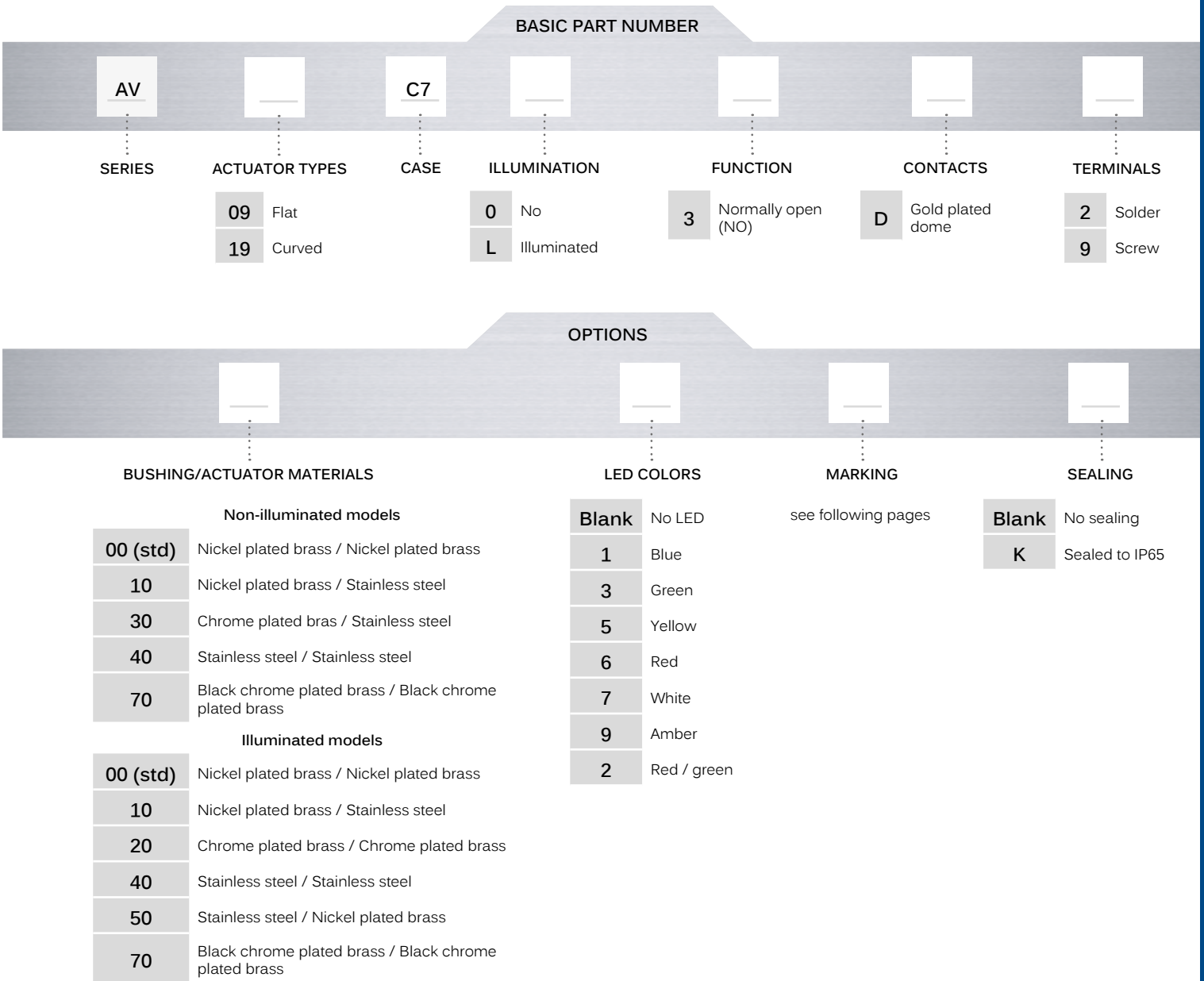
ELECTRICAL FUNCTIONS

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	ACTUATOR TYPES	CASE	ILLUMINATION	FUNCTION	CONTACTS	TERMINALS

ACTUATOR TYPES
09	Flat
19	Curved

ILLUMINATION
0	No
L	Illuminated

FUNCTION
3	Normally open (NO)

CONTACTS
D	Gold plated dome

TERMINALS
2	Solder
9	Screw

OPTIONS

___	___	___	___
BUSHING/ACTUATOR MATERIALS	LED COLORS	MARKING	SEALING

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

+ −
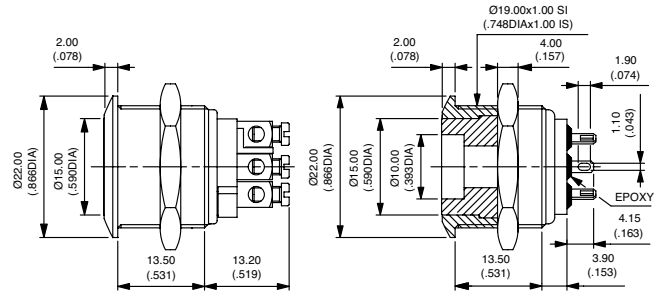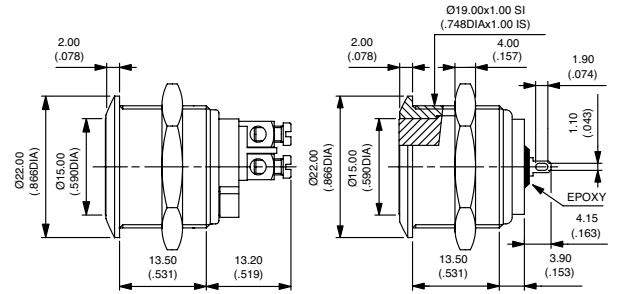
BUSHING/ACTUATOR MATERIALS

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

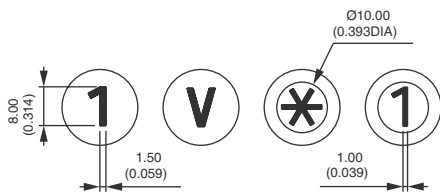| **Blank**	No LED	**6**	Red
1	Blue	7	White
3	Green	9	Amber
5	Yellow	2	Red/green

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MARKING

BASIC P/N
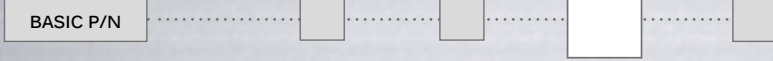
For **flat or curved actuator.**
- by laser etching on non-illuminated brass or stainless steel actuator.
- by hot stamping on thermoplastic insert (illuminated actuators)

Ø10.00
(0.393DIA)

8.00
(0.314)

1   V   ✱   1

1.50
(0.059)

1.00
(0.039)

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
O	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».
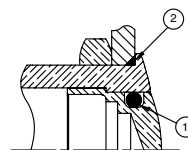
Illuminated actuators
2	Black (on white)

SEALING

BASIC P/N

Blank	No sealing
K	Front panel sealing to IP65

OPTION K

① - internal gasket

② - external gasket

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Pushbutton Switches *category:*

Click to view products by Apem *manufacturer:*

Other Similar products are found below :

8940K2012 LW1L-M1C10V-A LW1L-M1C70-A LW2L-A1C20M-GD LW2L-M1C20M-A 60324L M22-D-R-GB0/K11 M7E-HRN2 67021K512 67081K512X 701PB580 7199K101 810K12910 810KSV30B MML21EA2ADK MML21KA3ABK MML23KA3AC05K-001 MML23KW3AA01W 8418K2 8442K3 8450K1 860K11911T01A 861901 861K11911T01A07 861K13810T00A14 861K13911 8646AB6X718UL 8646ABUL 9001KXRK 907AYY100 PMHD155A1 9533CD4+U574+U4922 95-414.000 99-450.837 99-453.837 PV3H2B0NN-341 1203MRA A22NZBGANGA A22NZBMMNGA A22NZBNANGA A22NZMPATRA A2PMA1X03EC56 A3A-5123-02 A3A-7140 A3A-7310 A3A-7340 A3U-TMW-A2C-5M A595 12037A2ULCSA ABD122N-B