## 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 : $-30^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$


## ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : 50 mA 24 VDC
- Initial contact resistance : $100 \mathrm{~m} \Omega$ max.
- Insulation resistance : $1,000 \mathrm{M} \Omega \mathrm{min}$. 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 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 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 | $1.85 \mathrm{~V} / 2.2 \mathrm{~V}$ | 2.5 V |

A resistor must be series-connected by the user
Resistor value = supply voltage - LED forward voltage

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GENERAL SPECIFICATIONS

- Travel : $0.7 \mathrm{~mm}(.027) \pm 0.1 \mathrm{~mm}(.003)$
- Operating force : $7 \mathrm{~N} \pm 2 \mathrm{~N}$
- Torque : 1.5 Nm min. - 4 Nm max. applied to nut
- Panel thickness : 1 (.039) to $6 \mathrm{~mm}(.236)$ max.
- Hand soldering : $270{ }^{\circ} \mathrm{C}, 3$ 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
$30 \mathrm{~mm} \times 30 \mathrm{~mm}$ (1.181×1.181)


## § BUILD YOUR PART NUMBER

BASIC PART NUMBER


## OPTIONS

|  | Non-illuminated models | Blank | No LED | see following pages | Blank | No sealing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00 (std) | Nickel plated brass / Nickel plated brass | 1 | Blue |  | K | Sealed to IP65 |
| 10 | Nickel plated brass / Stainless steel | 3 | Green |  |  |  |
| 30 | Chrome plated bras / Stainless steel | 5 | Yellow |  |  |  |
| 40 | Stainless steel / Stainless steel | 6 | Red |  |  |  |
| 70 | Black chrome plated brass / Black chrome plated brass | 7 | White |  |  |  |
|  | Illuminated models | 9 | Amber |  |  |  |
| 00 (std) | Nickel plated brass / Nickel plated brass | 2 | Red / green |  |  |  |
| 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 |  |  |  |  |  |

## (4) 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.
(1) 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 $\frac{4}{\circ}$

Screw terminals

$$
\text { AV09C703D9 } \frac{A}{\circ}
$$

FLAT ACTUATOR - ILLUMINATED


Solder lug terminals
AV09C7L3D2

Screw terminals $+0-\widetilde{\sim}^{0} 0$.
AV09C7L3D9

Hex nut 22 (.866) across flats


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 |


| Blank | No LED |
| :--- | :--- |
| $\mathbf{1}$ | Blue |
| $\mathbf{3}$ | Green |
| 5 | Yellow |


| 6 | Red |
| :--- | :--- |
| 7 | White |
| 9 | Amber |
| 2 | Red/green |

## 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
$X \quad$ Symbol *
Y Symbol \#
A to $\mathrm{N} \quad$ 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
$2 \quad$ Black (on white)

## SEALING



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 7190K101 7199K101 810K12910 810KSV30B MML21EA2ADK MML21KA3ABK MML23KA3AC05K-001 MML23KW3AA01W 8418K2 8442K3 8450K1 860K11911T01A 861901 861K11911T01A07 861K13810T00A14 861K13911 8646AB6X718UL 8646ABUL 9001KXRK 907AYY100 PMHD155A1 95-313.000 $\underline{9533 \mathrm{CD} 4+\mathrm{U} 574+\mathrm{U} 4922} \underline{95-414.000}$ 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

