## AV series

Tactile security pushbutton switches with overmolded actuator • $\varnothing 19$ or 22 mm

## (®) <br> DISTINCTIVE FEATURES

## Tactile feedback

Illuminated or non-illuminated
Momentary (NO)
Overmolded marking available

## ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing : IP67 or IP69K according to IEC 60529
- Operating temperature : $-30^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}\left(-22^{\circ} \mathrm{F}\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$


## (4) 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 |  |  |
| :---: | :---: | :---: | :---: |
| 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 | $1.85 \mathrm{~V} / 2.2 \mathrm{~V}$ | 2.5 V |

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## 筑 <br> GENERAL SPECIFICATIONS

- Travel : $0.7 \mathrm{~mm}(.027) \pm 0.1 \mathrm{~mm}(.003)$
- Operating force : $7 \mathrm{~N} \pm 2 \mathrm{~N}$ - Sealing option K will increase the operating force.
- Torque : 5 Nm min.- 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to $6 \mathrm{~mm}(.236)$ max.
- Hand soldering : $270^{\circ} \mathrm{C}\left(518{ }^{\circ} \mathrm{F}\right), 3$ sec. max.


## MATERIALS

- Case : PA46 UL94-V0
- Terminals : brass, gold plated
- Contacts : gold plated dome
- Bushing : see following pages
- Actuator : stainless steel, with thermoplastic overmolding
- 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), or $\varnothing 22.2 \mathrm{~mm}$ (.874)
- Min. pitch for matrix mounting
$30 \mathrm{~mm} \times 30 \mathrm{~mm}$ (1.181x1.181)


## (5) BUILD YOUR PART NUMBER

## BASIC PART NUMBER

AV


SERIES

## BUSHING DIAMETERS

ILLUMINATION
CONTACTS

$$
\begin{array}{l|l}
\text { SO } & \text { No } \\
\text { SL } & \text { Illuminated }
\end{array}
$$

D Gold plated
dome

TERMINALS

| 2 | Solder |
| :--- | :--- |
| $\mathbf{9}$ | Screw |
| $\mathbf{4}$ | Quick-connect |
| F | Overmolded <br> flying leads, |

IP65

OPTIONS

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| $\square$ | - | $\vdots$ | - |
| $\vdots$ | - | $\vdots$ |  |

BUSHING MATERIALS

| 0 <br> $(s t d)$ | Nickel plated <br> brass |
| :---: | :--- |
| $\mathbf{2}$ | Chrome plated <br> brass |
| $\mathbf{4}$ | Stainless steel |
| $\mathbf{5}$ | Gold plated brass |
| 6 | Chrome plated <br> brass, satin |
| 7 | Chrome plated <br> brass, black |

OVERMOLDING COLORS

| 1 | Blue |
| :---: | :--- |
| 2 | Black* |
| 3 | Green |
| 4 | Grey* |
| 5 | Yellow |
| 6 | Red |
| 7 | White |
| 8 | Translucent |
| 9 | Orange |
| * non-illuminated only |  |

LED COLORS

| 1 | Blue | 6 | Red |
| :---: | :--- | :---: | :--- |
| $\mathbf{2}$ | Red/green | $\mathbf{7}$ | White |
| 3** | Green | $\mathbf{9}$ | Amber |
| V** | Green, high <br> intensity | $\mathbf{2}$ | Red/green |
| $\mathbf{5}$ | Yellow |  |  |

** To order a green LED for actuator style 002, always use code V. Other actuator styles can be ordered ACTUATOR STYLES with LED code 3 or V.

SEALING
Blank No sealing K

Sealed to IP67 or IP69K

## 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.
(d) Mounting accessories: standard hardware supplied : 1 hex nut. Standard and special hardware is presented in the "Hardware" section of website.

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BUSHING Ø 19 (.748) - FLAT ACTUATOR SOLDER LUG TERMINALS


BUSHING Ø 19 (.748) - FLAT ACTUATOR SCREW TERMINALS


$$
\begin{array}{ll}
\text { Illuminated } & \frac{1}{0} 0 \\
& +0-\sqrt{4} 0
\end{array}
$$

Non-illuminated
AV3S0D2 $\frac{4}{\circ}$

BUSHING Ø 22 (.866) - FLAT ACTUATOR SCREW TERMINALS



Hex nut 25 (.984) across flats


## BUSHING MATERIALS

BASIC P/N


[^0]

The ring and symbols are obtained by photochemical engraving of a stainless steel insert.
The insert is then overmolded in the desired color.
The following actuator styles are available. For other types, consult factory.


001
Illuminated ring and disc


002
Illuminated ring

004
Loudspeaker OFF


003
Arrow


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## SEALING

## BASIC P/N

$\square$

Blank No sealing
K Front panel sealing to IP67 or IP69K


OPTION K - FRONT PANEL SEALING IP67

(1) - internal membrane
(2) - external gasket

OPTION K - FRONT PANEL SEALING IP69K


## X-ON Electronics

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Click to view similar products for Pushbutton Switches category:
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Other Similar products are found below :
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MDPSSGLFS 810KSV30B MML21KA3ABK MML23KA3AC05K-001 MML23KW3AA01W 8418K2 8646AB6X718UL 8646ABUL
FSDWH 9001KXRK 9001T8BK 9533CD4+U574+U4922 1203MRA A22EM01S A595 1202A6 12037A2ULCSA 1203A2UL ABD122N-
B $\underline{1211390004}$ ABN111-Y ABN400-R $1211500044 \underline{1211580012}$ 1212MRA 1232A6NF RA3CSH6A 1241.1183.7047 $\underline{1241.2511}$
$\underline{1241.3428} \underline{\text { 1223A2ULCSA }} \underline{\text { 1223MRA }} \underline{1232 \mathrm{AX} 2119} \underline{1241.1183 .8000} \underline{1241.1183 .8029} \underline{1241.2506} \underline{1241.2606} \underline{12 \mathrm{MA}} \underline{1301940184}$
RELBARF6X10(PLASTIC) 13435AG


[^0]:    0 (std) Nickel plated brass
    2 Chrome plated brass
    $4 \quad$ Stainless steel
    5 Gold plated brass
    $6 \quad$ Chrome plated brass, satin
    7 Chrome plated brass, black

