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

<table>
<thead>
<tr>
<th>LED color</th>
<th>Forward current</th>
<th>Typ. forward voltage</th>
<th>Max. forward voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>20 mA</td>
<td>3.3 V</td>
<td>3.8 V</td>
</tr>
<tr>
<td>Green</td>
<td>20 mA</td>
<td>4 V</td>
<td>4.5 V</td>
</tr>
<tr>
<td>Yellow</td>
<td>20 mA</td>
<td>2 V</td>
<td>2.5 V</td>
</tr>
<tr>
<td>Red</td>
<td>20 mA</td>
<td>1.95 V</td>
<td>2.5 V</td>
</tr>
<tr>
<td>White</td>
<td>20 mA</td>
<td>3.3 V</td>
<td>4 V</td>
</tr>
<tr>
<td>Amber</td>
<td>20 mA</td>
<td>2.3 V</td>
<td>2.8 V</td>
</tr>
<tr>
<td>Red / green</td>
<td>20 mA</td>
<td>1.85 V / 2.2 V</td>
<td>2.5 V</td>
</tr>
</tbody>
</table>

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

The company reserves the right to change specifications without notice.
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GENERAL SPECIFICATIONS

- **Travel**: 0.7 mm (0.027) ± 0.1 mm (0.003)
- **Operating force**: 7 N ± 2N
- **Torque**: 1.5 Nm min. - 4 Nm max. applied to nut
- **Panel thickness**: 1 (0.039) to 6 mm (0.236) 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)](image)

MOUNTING

- **Panel cut-out**: Ø 19.2 mm (0.755)
- **Min. pitch for matrix mounting**: 30 mm x 30 mm (1.181x1.181)
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

**FLAT ACTUATOR - ILLUMINATED**

- Solder lug terminals
  - AV09C7L3D2
- Screw terminals
  - AV09C7L3D9

**BUSHING/AKTUATOR MATERIALS**

<table>
<thead>
<tr>
<th>NON-ILLUMINATED MODELS</th>
<th>CODE</th>
<th>BUSHING</th>
<th>ACTUATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 (std)</td>
<td>Nickel plated brass</td>
<td>Nickel plated brass</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Nickel plated brass</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Chrome plated brass</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Stainless steel</td>
<td>Stainless steel</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Black chrome plated brass</td>
<td>Black chrome plated brass</td>
<td></td>
</tr>
</tbody>
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<td></td>
</tr>
<tr>
<td>50</td>
<td>Stainless steel</td>
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<td></td>
</tr>
<tr>
<td>70</td>
<td>Black chrome plated brass</td>
<td>Black chrome plated brass</td>
<td></td>
</tr>
</tbody>
</table>

**LED COLORS**

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

Hex nut 22 (.866) across flats
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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).

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)

Blank No sealing
K Front panel sealing to IP65

Option K
- internal gasket
- external gasket