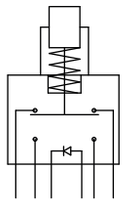
# AV series

## Security pushbutton switches Ø19mm (.748)
## With illuminated ring - momentary (NC/NO) - Black Chrome Finish



NC/NO

### ORDER FORMAT

Options : see next page.

| AV | 9 | | | 2 | |
|---|---|---|---|---|---|
| SERIES | Bushing dia. 19 mm | LED colour | LED resistor | Contacts | Terminals |

**LED colour**
**0** : no LED - **1** : blue - **V** : green
**5** : yellow - **6** : red - **7** : white - **9** : amber

**LED resistor**
**0** No resistor supplied
**1** 12VDC resistor
**2** 24VDC resistor
**4** 48VDC resistor

**Contacts**
**2** Silver

**Terminals**
**2** Solder / quick-connect
**F** Flying leads
**C** Cable

### SPECIFICATIONS

- Travel : 2 mm ± 0,3 mm (.003)
- Max. current/voltage rating with resistive load : 1A 30VDC
- LED voltage : 12VDC, 24VDC or 48VDC
  (If not supplied by APEM, a resistor must be series-connected by the user)**
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 10 MΩ min. at 500VDC
- Dielectric strength : 500 Vrms 50 Hz min. between terminals
  1.000 Vrms 50 Hz min. between terminals and frame
- Electrical life : 250.000 cycles at full load
- Operating force : 5N ± 2N
- Torque : 5 Nm min.- 14 Nm max. applied to nut
- Panel thickness : 1 (.039) to 6 mm (.236) max.
- Low level or mechanical life : 1.000.000 cycles
- Operating temperature : -30°C to +85°C
- Hand soldering : 350°C, 5 seconds max.
- Packaging unit : flying lead/cable models : 1 piece - other models : 40 pieces

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

### MATERIALS

- Case : polyamide, glass filled
- Contacts : silver
- Bushing : see next page
- Actuator : see next page
- Elastomeric membrane : silicone
- LED

### CUT-OUT

- Panel cut-out : Ø 19,2 mm (.755)
- Min. pitch for matrix mounting :
  30 mm x 30 mm (1.181x1.181)

To order a product, select a basic model below and add the desired LED colour and voltage. Then select the desired options on next page.

## Flat actuator - solder lug terminals

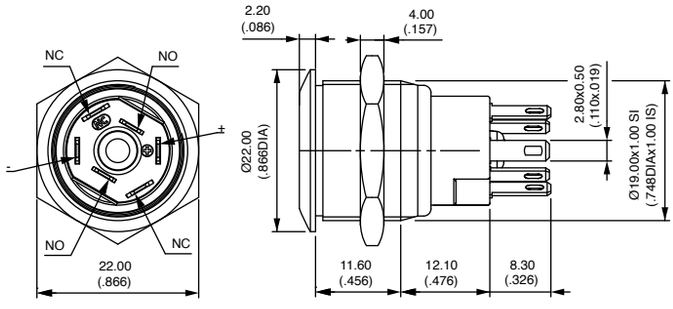
Hex nut 22 (.866) across flats



Illuminated (select LED colour above) *
**AV9•022** ON - MOM

Non-illuminated
**AV90022** ON - MOM

*** No LED resistor supplied on this model.**



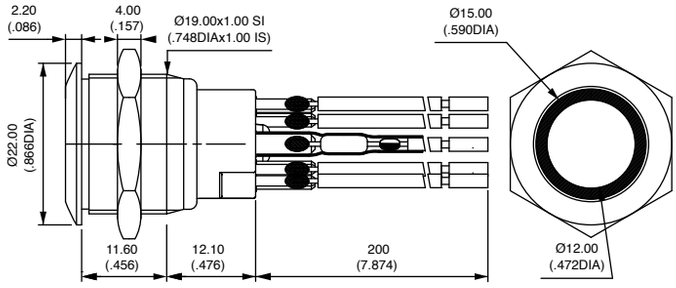

## Flat actuator - flying lead terminals

Hex nut 22 (.866) across flats



Illuminated (select LED colour & resistor above)
**AV9••2F** ON - MOM

Non-illuminated
**AV9002F** ON - MOM




Wire colours : black: NC, orange: NO, red: LED anode (+), blue : LED cathode (-)

# AV series

## Security pushbutton switches Ø19mm (.748)

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OPTIONS

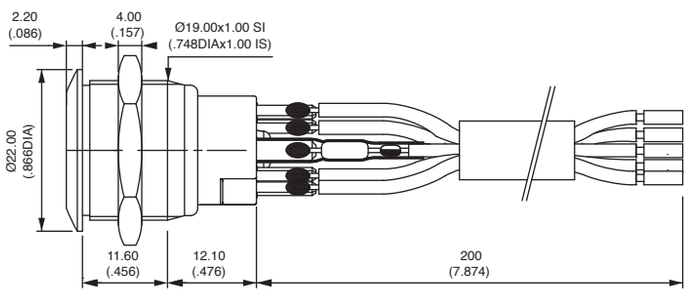
### Flat actuator - cable terminals

Hex nut 22 (.866) across flats



Illuminated (select colour & resistor)
**AV9••2C** ON - MOM

Non-illuminated
**AV9002C** ON - MOM




After selecting basic model No., fill in last 5 boxes with desired options.

| BASIC MODEL | Flying lead protection | Flying lead/ cable length | Ring colour | Bushing / plunger mat. | Sealing |
|---|---|---|---|---|---|
| | | | | | |

### FLYING LEAD PROTECTION

| | |
|---|---|
| **0** | No protection and/or no flying leads |
| **1** | Heat-shrink sleeves |
| **2** | Tube + epoxy |

### FLYING LEAD/CABLE LENGTH

| | |
|---|---|
| **000** | No flying leads / no cable |
| **020** | Length 20 cm (standard) |
| **XXX** | Length in centimeters |

### RING COLOURS

| CODE | COLOUR | CODE | COLOUR |
|---|---|---|---|
| **1** | Blue | **6** | Red |
| **2** | Black * | **7** | Opal white (std) |
| **3** | Green | **8** | Translucent |
| **4** | Grey * | **9** | Orange |
| **5** | Yellow | | |

* non-illuminated only

### BUSHING/PLUNGER MATERIALS

| CODE | BUSHING | ACTUATOR |
|---|---|---|
| **70** | Chrome pl. brass, black | Chrome pl. brass, black |

Other : on request.

### SEALING

**Blank** No sealing




**K** Front panel sealing (IP67)

① internal membrane
② external gasket