

# AV SERIES SECURITY PUSHBUTTON SWITCHES

## .748" (19mm) bushing diameter

### SPECIFICATIONS

**Contact ratings:** Max. resistive loads: **Q** - 6 A 125 VAC, 3 A 250 VAC or 7 A 30 VDC.  
**B** - 0.4 Volt-Amps max at 20 V max.  
**Initial contact resistance:** 20 mΩ max. at 3 VDC, 0.1 A  
**Insulation resistance:** 200,000 megohms minimum between terminals & case ground.  
**Dielectric strength:** 1500 VAC min. between terminals and case ground.  
**Electrical life:** 60,000 cycles min.  
**Operating temperature range:** -30°C to +85°C  
**For additional specifications:** See 800 Series switches

### FEATURES

- .755" (19 mm) dia. models.
- SPDT and DPDT with NO & NC momentary action.
- Standard - sealing protection per IP54.
- Optional - sealing protection per IP65.
- Extremely rugged and durable.

### MATERIALS

**Contacts:** **Q** - Coin silver for power & UL models. **B** - Gold over nickel over brass for dry circuit models.  
**Bushing & Actuator:** Nickel plated brass (std'd)  
**Case:** Diallyl Phthalate **Hex. Mounting Nut:** Nickel plated brass

### ORDER FORMAT:

For complete model no., fill in boxes with selected options shown below.  
 Example of complete model no. -  
**AV19810KMZQKUL**

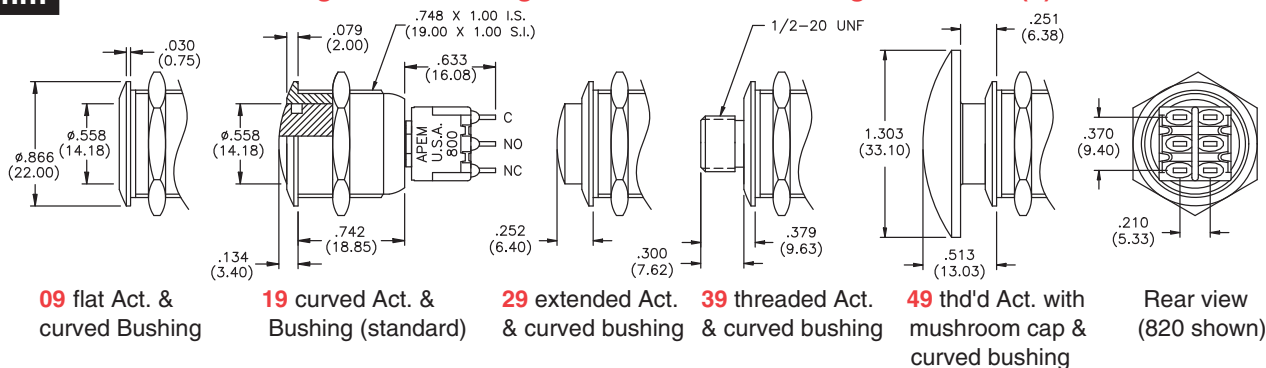
| Series | Bush./Act. Config.         | Body Style     | Term. Type | Cont. Matl. | Sealing     | Agency Recognition |
|--------|----------------------------|----------------|------------|-------------|-------------|--------------------|
| AV     | 09<br>19<br>29<br>39<br>49 | 810KM<br>820KM | Z          | B<br>Q      | (NONE)<br>K | (NONE)<br>U L      |

For mushroom cap (49) only: Add color code at end of above model number - 0 for natural or 6 for red (consult factory for other colors).

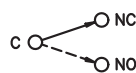
### 19mm

### Bushing/Actuator configuration

### Solder lug terminals - (Z)

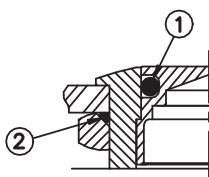


**AV19820KMZQUL**  
 (Model shown)



**Schematic**

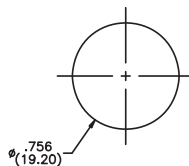
**Blank** - no sealing - meets IP54 (std'd)



**K** ① Internal seal & ② front panel seals meet IP65

**Sealing**

Min. dimensions for matrix mounting: .984" (25mm) x .984" (25mm).



**Mounting Hole**

Notes to Order Format:

810KM is SPDT

820KM is DPDT

**UL** option available only with Q option. UL rating: 6 A 125 VAC or 3 A 250 VAC (75% power factor). UL file E66367.

Epoxy terminal seal is standard on all models.

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## .748" (19mm) bushing diameter

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

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### SPECIFICATIONS

**Contact ratings:** Max. resistive loads: **Q** - 6 A 125 VAC, 3 A 250 VAC or 7 A 30 VDC.

**B** - 0.4 Volt-Amps max at 20 V max.

**Initial contact resistance:** 5 mΩ max. at 3 VDC, 0.1 A

**Insulation resistance:** 200,000 megohms minimum between terminals & case ground.

**Dielectric strength:** 2000 VAC min. between terminals and case ground.

**Electrical life:** 100,000 cycles min.

**Operating temperature range:** -30°C to +85°C

**For additional specifications:** See PB Series switches

### FEATURES

- .755" (19 mm) dia. models.
- Single pole double throw NO & NC momentary action.
- Standard - sealing protection per IP54.
- Optional - sealing protection per IP65.
- Extremely rugged and durable.

### MATERIALS

**Contacts:** **Q** - Coin silver for power & UL models. **B** - Gold over nickel over brass for dry circuit models.

**Bushing & Actuator:** Nickel plated brass (std'd)

**Case:** Diallyl Phthalate **Hex. Mounting Nut:** Nickel plated brass

### ORDER FORMAT:

For complete model no., fill in boxes with selected options shown below.

Example of complete model no. -

**AV19PB1-3P2Y1ZQEKUL**

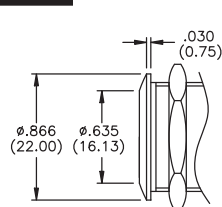
| Series | Bush./Act. Config.         | Body Style | Term. Type | Cont. Matl. | Term. Seal | Sealing     | Agency Recognition |
|--------|----------------------------|------------|------------|-------------|------------|-------------|--------------------|
| AV     |                            | PB13P2Y1   | Z          |             | E          | (NONE)<br>K | (NONE)<br>UL       |
|        | 09<br>19<br>29<br>39<br>49 |            |            | B<br>Q      |            |             |                    |

For mushroom cap (49) only: Add color code at end of above model number - 0 for natural or 6 for red (consult factory for other colors).

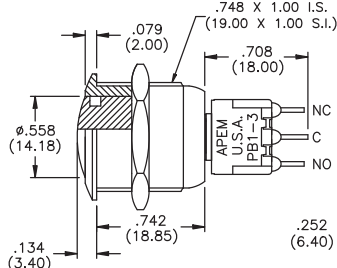
### 19mm

### Bushing/Actuator configuration

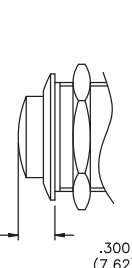
### Solder lug terminals - (Z)



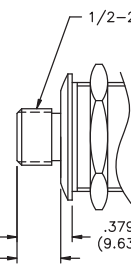
**09** flat Act. & curved Bushing



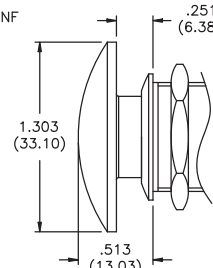
**19** curved Act. & Bushing (standard)



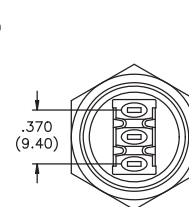
**29** extended Act. & curved bushing



**39** threaded Act. & curved bushing



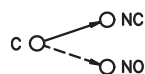
**49** thd'd Act. with mushroom cap & curved bushing



Rear view all models

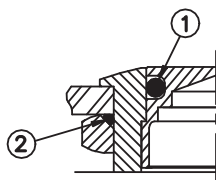


**AV19PB1-3P2Y1ZQE**  
(Model shown)



**Schematic**

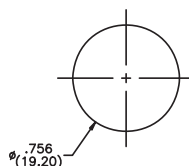
**Blank** - no sealing (std'd)



**K** ① Internal seal & ② front panel seals meet IP65

**Sealing**

Min. dimensions for matrix mounting: .984" (25mm) x .984" (25mm).



**Mounting Hole**

Notes to Order Format:

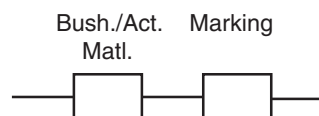
**UL** option available only with Q option. UL rating: 6 A 125 VAC or 3 A 250 VAC (75% power factor). UL file E66367.

**E** option is epoxy terminal seal - standard.

# AV SERIES SECURITY PUSHBUTTON SWITCHES

## New! Options - Bushing/Actuator materials and marking

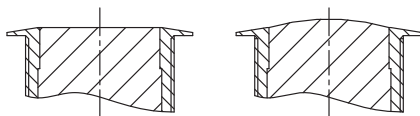
After selecting basic model number from previous pages of AV Series Security Pushbutton switches, fill in indicated boxes with desired options below.



### BUSHING/ACTUATOR MATERIAL

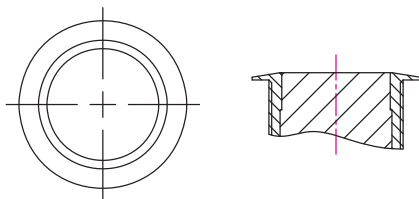
Replace **00** with one of the following codes.

models with flat or curved metal actuator



| Code       | Bushing                  | Actuator                 |
|------------|--------------------------|--------------------------|
| 00 (std'd) | Nickel plated brass      | Nickel plated brass      |
| 10         | Nickel plated brass      | Stainless steel          |
| 12         | Nickel plated brass      | Chrome plated brass      |
| 20         | Chrome plated brass      | Chrome plated brass      |
| 30         | Chrome plated brass      | Stainless steel          |
| 80         | Varnished polished brass | Varnished polished brass |

models with flat thermoplastic actuator



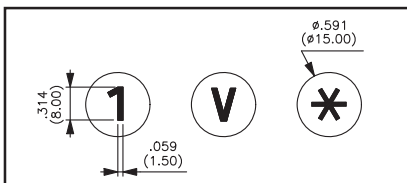
| Code       | Bushing             | Actuator            |
|------------|---------------------|---------------------|
| 0X (std'd) | Nickel plated brass | Nickel plated brass |
| 2X         | Nickel plated brass | Stainless steel     |
| 8X         | Nickel plated brass | Chrome plated brass |

Replace X above with color: 1 blue, 2 black, 3 green, 4 gray, 5 yellow, 6 red, 7/1 white, 9 orange

### MARKING

Select an option from each of the two tables. Consult factory for special symbols.

For models with flat actuator only.  
Not available on model AV031202C0.  
Marking method: by engraving on metal actuators, (brass only)  
by hot stamping on thermoplastic actuators



#### MARKING

| Code  | Mark           |
|---|----------------|
| 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 |
| 0   | Letter O       |
| Letter O: same code and design as number 0. |                |

#### MARKING COLOR

| Code  | Color          |
|---|----------------|
| Brass actuator  |                |
| 0 (std'd)   | Same as finish |
| 2   | Black          |
| Note: Code '0' finish cannot be modified to code '2'. |                |
| Thermoplastic actuator                                |                |
| 2   | Black          |
| 7   | White          |

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