

# ALCOSWITCH ANTI-VANDAL SWITCH SERIES

TE Connectivity's (TE) new ALCOSWITCH Anti-Vandal switch series is designed for security and reliability in a variety of panel mount industrial and building applications. The large pushbutton and available LED indicators illuminate the switch and allow for an easy user interface. The Anti-Vandal series is available in panel sizes of 16, 19, 22 and 25 mm, and with various pushbutton symbols including Spot, Ring, and Power Logo. Switches are sealed to IP67 and available in single and double pole configurations.



## Applications

- Industrial equipment
- Elevators/Escalators
- Instrumentation
- Communication equipment
- Control equipment

## Electrical

- RoHS Directive 2002/95/E compliant
- REACH Compliant and Pb Free
- UL (E46765) for AV19, AV22 series

## Mechanical

- Operating temperature: -20-+55° C

## Materials

- Contacts: Copper with silver or gold plating
- Actuator: Stainless Steel
- Terminals: Copper, silver plated
- Terminal seal: Silicon
- Case: PBT
- Bushing: Stainless steel

## Key Benefits

- Allow for an easy user interface with a large pushbutton and available LED indicators illuminate the switch
- Enable flexibility with various pushbutton symbols including Spot, Ring, and Power logo
- Achieve a vandal proof solution with a jam nut accessible for rear of the panel
- Ease of installation with available flying lead terminations.

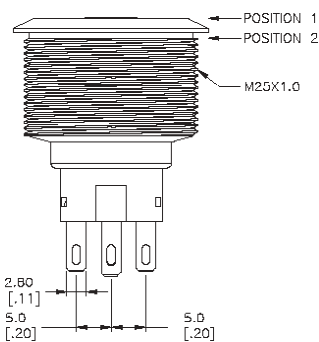
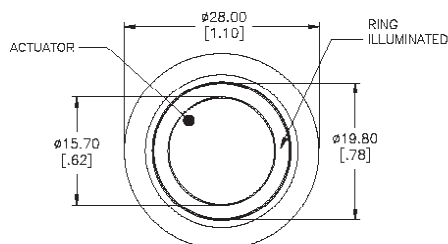
## Typical Performance Characteristics

- **Number of poles:** 1 to 2
- **Switch Functions:** OFF-ON, OFF-(ON)
- **Contact Rating:** 2A @ 36VDC (16mm)  
3A @ 250VAC (19, 22, 25mm)
- **Gold Contact:** 0.4 VA @ 20V max
- **Electrical life (pushbutton only):** 16mm: 200,000 cycles  
19/22/25mm: 50,000 cycles
- **Contact resistance:** 50mOhms max. @ 1A, 12VDC (initial value)
- **Insulation resistance:** 1,000 MOhms min. @500VDC
- **Dielectric strength:** 2,000V for 1 minute
- **Actuator force:** 16mm: 4.5 +/- 1.5 N  
19/22/25mm, Single Pole: 2.5 +/- 1.0 N  
19/22/25mm, Double Pole: 3.5 +/- 1.0 N
- **Actuator travel:** 16mm: 2.0 mm  
19/22/25mm: 3.2 mm
- **Life Expectancy:** Momentary: 1,000,000 actuations  
Push On/Off: 500,000 actuation

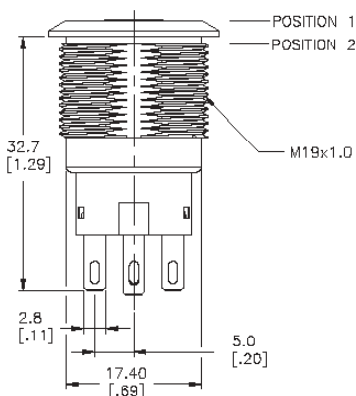
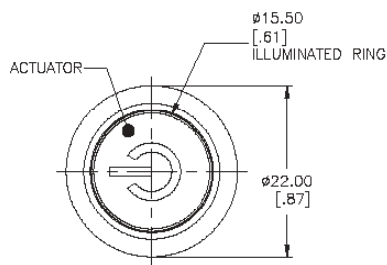


## Dimensions

Part Number 2316365-1



Part Number 2316366-1



## Product Key

|            |                               | AV19                               | 10 | R | 1 | 12 | J      | Q  | 04       |                  |                      |
|------------|-------------------------------|------------------------------------|----|---|---|----|--------|----|----------|------------------|----------------------|
| Series     |                               | AV16 Anti-Vandal Series, 16mm size |    |   |   |    |        |    |          | Environmental    |                      |
| AV19       | Anti-Vandal Series, 19mm size |                                    |    |   |   |    |        |    |          | 04               | RoHs Compliant       |
| AV22       | Anti-Vandal Series, 22mm size |                                    |    |   |   |    |        |    |          | Plating          |                      |
| AV25       | Anti-Vandal Series, 25mm size |                                    |    |   |   | Q  | Silver | R  | Gold     | Terminal Plating |                      |
| Body Style |                               |                                    |    |   |   |    |        |    |          | J                | Solder Terminal      |
| 10         | Single Pole - Momentary       |                                    |    |   |   |    |        |    |          | T5               | Flying Leads (500mm) |
| 11         | Single Pole - ON/OFF          |                                    |    |   |   |    |        |    |          | LED Voltage      |                      |
| 20         | Double Pole - Momentary       |                                    |    |   |   | 0  | No LED | 12 | 12 Volts | 24               | 24 Volts             |
| 21         | Double Pole - ON/OFF          |                                    |    |   |   |    |        |    |          | LED Color        |                      |
| LED Type   |                               |                                    |    |   |   |    |        |    |          | 0                | No LED               |
| O          | No LED                        |                                    |    |   |   |    |        |    |          | 1                | White                |
| R          | Fixed Ring                    |                                    |    |   |   |    |        |    |          | 3                | Red                  |
| D          | Spot                          |                                    |    |   |   |    |        |    |          | 5                | Yellow               |
| P          | Power Logo                    |                                    |    |   |   |    |        |    |          | 6                | Green                |
| E          | Moving Ring                   |                                    |    |   |   |    |        |    |          | 7                | Blue                 |
| E1         | Moving Ring w/Power Logo      |                                    |    |   |   |    |        |    |          | A                | Red & Green          |
|            |                               |                                    |    |   |   |    |        |    |          | B                | Red & Blue           |
|            |                               |                                    |    |   |   |    |        |    |          | C                | Red & Yellow         |

## Product Selection Information

| Product Key     | Series | Body Style              | LED color    | LED voltage | Terminal Plating | TE PN                       |
|-----------------|--------|-------------------------|--------------|-------------|------------------|-----------------------------|
| AV1610R112R04   | 16 mm  | Single Pole - Momentary | White        | 12 Volts    | Gold             | <a href="#">2213774-1</a>   |
| AV1910D512Q04   | 19 mm  | Single Pole - Momentary | Yellow       | 12 Volts    | Silver           | <a href="#">2213765-9</a>   |
| AV1910RAZ4Q04   | 19 mm  | Single Pole - Momentary | Red / Green  | 24 Volts    | Silver           | <a href="#">2317404-2</a>   |
| AV1910EG24T5Q04 | 19 mm  | Single Pole - Momentary | Red / Yellow | 24 Volts    | Silver           | <a href="#">3-2316531-5</a> |
| AV2210E324R04   | 22 mm  | Single Pole - Momentary | Red          | 24 Volts    | Gold             | <a href="#">2213772-8</a>   |
| AV2211EB12Q04   | 22 mm  | Single Pole - Locking   | Red / Blue   | 12 Volts    | Silver           | <a href="#">2317570-9</a>   |
| AV2220EB12T5Q04 | 22 mm  | Double Pole - Momentary | Red / Blue   | 12 Volts    | Silver           | <a href="#">4-2317570-4</a> |
| AV2510E312Q04   | 25 mm  | Single Pole - Momentary | Red          | 12 Volts    | Silver           | <a href="#">2317656-3</a>   |
| AV2521M124Q04   | 25 mm  | Double Pole - Locking   | White        | 24 Volts    | Silver           | <a href="#">2-2317658-6</a> |
| AV2511MB12T5Q04 | 25 mm  | Single Pole - Locking   | Red / Blue   | 12 Volts    | Silver           | <a href="#">2317659-7</a>   |

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