

# APL Series

## Latch Pushbutton Switches



### Description

APL latch pushbutton switches can be applied to a variety of different industries, from medical to industrial to transportation, especially for safety and reliability requirements. With a long lifecycle and IP67 protection from the toughest environmental conditions, the APL switches can simplify the control design while ensuring safety through mechanical locking. It can also help reduce power consumption.

### Features & Benefits

- IP67 sealed
- 1,000,000 life cycle
- Illumination / Non-illumination
- Threaded or snap-in mounting
- RoHS compliant

### Applications

- Harsh environments
- Off-Road
- Industrial
- Medical
- Transportation

### Specifications

|                            |                                                                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Function</b>            | SPST                                                                                                                                                                  |
| <b>Contact Arrangement</b> | N.O.                                                                                                                                                                  |
| <b>Mounting Type</b>       | Snap-in (no panel seal) Threaded body (hex nut, lock washer, and panel seal gasket provided)<br>Torque spec for threaded body: Do not exceed 8-9 in-lbs (0.9-1.0 N.m) |

### Mechanical Specifications

|                                                                |                                          |
|----------------------------------------------------------------|------------------------------------------|
| <b>Operating Life</b>                                          | 1,000,000 cycles                         |
| <b>Total Travel</b>                                            | 2.5 ± 0.25 mm                            |
| <b>Operating Travel/<br/>Latching Travel/<br/>Reset Travel</b> | Min 1.3 mm / Nominal 1.7 mm / Max 2.1 mm |
| <b>Operating Force</b>                                         | Min 2N / Max 8N                          |

### Electrical Specifications

|                                   |                                            |
|-----------------------------------|--------------------------------------------|
| <b>Contact Rating</b>             | 100mA @ 24 V DC resistive (200,000 cycles) |
| <b>Dielectric Strength</b>        | 1,000 V AC min.                            |
| <b>Insulation Resistance</b>      | 1000 MΩ min                                |
| <b>Initial Contact Resistance</b> | 50 mΩ max                                  |
| <b>Bounce Time</b>                | Max 10 ms during activation                |
| <b>Operating Temperature</b>      | -30°C to 85°C                              |
| <b>Sealing</b>                    | IP67                                       |

### Materials

|                        |                                 |
|------------------------|---------------------------------|
| <b>Housing</b>         |                                 |
| <b>Base</b>            | PA66                            |
| <b>Cap</b>             |                                 |
| <b>Spring</b>          | Steel                           |
| <b>Terminals</b>       |                                 |
| <b>Movable Contact</b> | Brass, gold over silver plating |
| <b>Terminal Seal</b>   | Epoxy                           |

#### Notes:

Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, please contact Customer Service.

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### Ordering Number

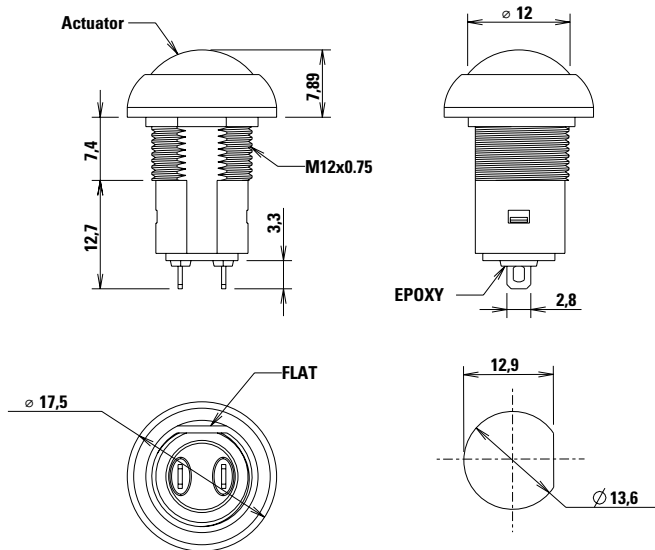
To order, simply select desired option from each category and place in the appropriate box.

**APL - 35 - x - x - xx - T - x - G - E**

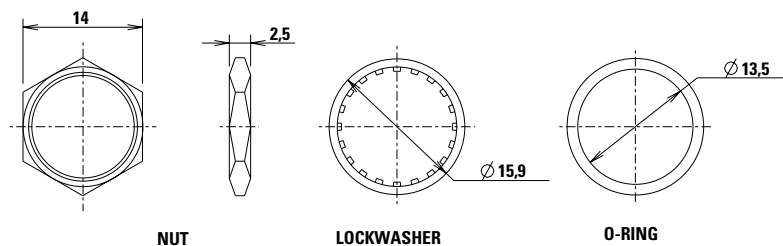
|                                                                                                                    |                                                                    |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Designation</b><br>APL: APL Series                                                                              | <b>Terminal Seal</b><br>E: Epoxy (All models are epoxy sealed)     |
| <b>Operating Force</b><br>35: 3.5N+/-1.5N                                                                          | <b>Plating</b><br>G: Gold over silver                              |
| <b>Actuator Style</b><br>S: Standard (Flat)<br>R: Round<br>E: Extended                                             | <b>Termination</b><br>Z: Solder Lug<br>W1: 500mm wire leads 20 AWG |
| <b>Actuator Color</b><br>2: Black<br>3: Red<br>4: Orange<br>5: Yellow<br>6: Green<br>7: Blue                       | <b>Bushing Style</b><br>T: Round threaded                          |
| <b>Illumination</b><br>00: No LED<br>01: White<br>03: Red<br>05: Yellow<br>06: Green<br>07: Blue<br>RG: Red+ Green |                                                                    |

### APL Drawings & Dimensions (mm)

#### WITHOUT LED TYPE



#### Panel Mounting

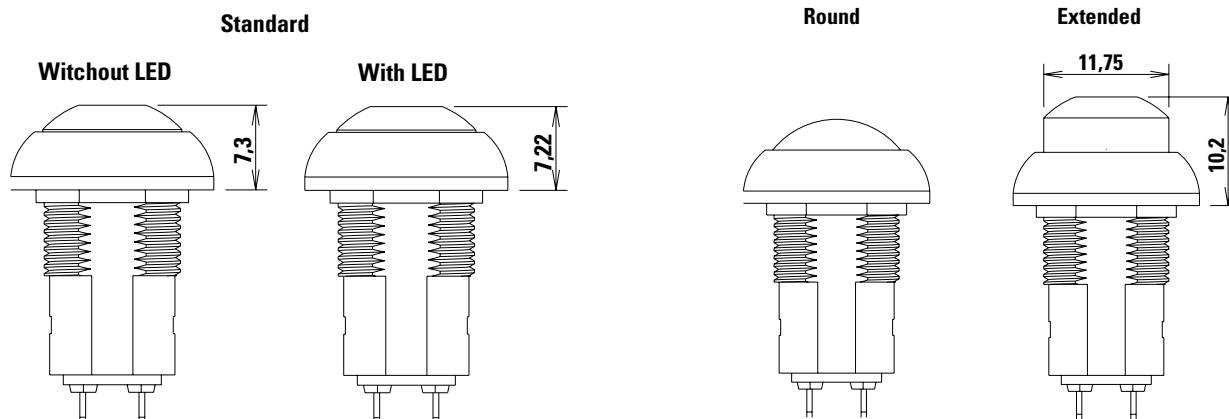


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### Actuator Style View (mm)

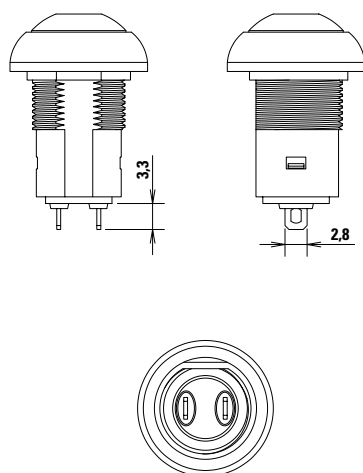


#### Notes:

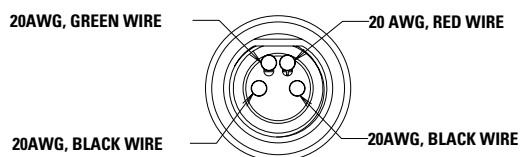
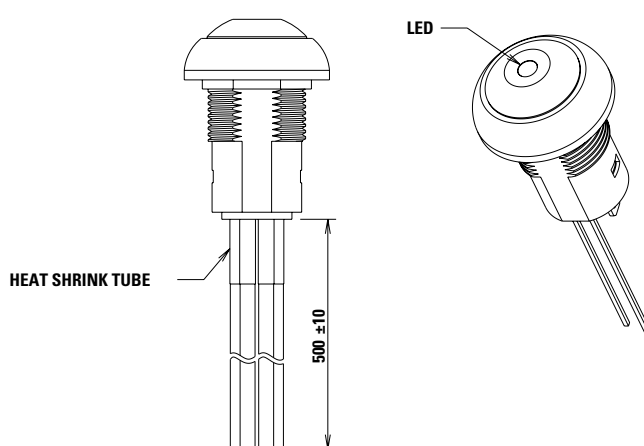
Panel thickness: 1.5mm to 4mm  
Only the standard actuator has LED

### Termination

#### WITH SOLDER LUG TYPE



#### WITH WIRE TYPE



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