

APB Series

Backlit Pushbutton Switches



Specifications

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

Mechanical Specifications

| | |
|------------------------|--|
| Operating Life | 1,000,000 cycles |
| Total Travel | 2.1 ± 0.2 mm |
| Operating Point | 1.55 ± 0.25 mm |
| Over Travel | 0.6 min. |
| Operating Force | 4N ± 1N standard configuration; other force option 2N ± 0.5N |
| Vibration | 10-500 Hz 10g Max. |
| Shock | 60g 11ms sawtooth wave |

Electrical Specifications

| | |
|-----------------------------------|---|
| Contact Rating | 200mA @ 24 V DC resistive (500,000 cycles) 100mA @ 50 V DC resistive (500,000 cycles) 400mA @ 32 V AC resistive (500,000 cycles) 125mA @ 125 V AC resistive (1,000,000 cycles) |
| Dielectric Strength | 1,000 V AC min. |
| Insulation Resistance | 1 G Ω @ 500 V DC |
| Initial Contact Resistance | 50 mΩ max (without wire leads) |
| Bounce Time | < 5 ms |
| Operating Temperature | -40°C to 85°C |
| ESD Protection | 20 KV min. |
| Sealing | IP67 for threaded body IP65 for snap-in version (no panel seal) |

Description

APB backlit pushbutton switches can be applied to a variety of different industries, from medical to industrial to transportation. With a long lifecycle and IP67 protection from the toughest environmental conditions, the APB series are available in threaded or snap-in mounting versions.

Features & Benefits

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

Applications

- Harsh environments
- Off-Road
- Industrial
- Medical
- Transportation
- Joystick control modules
- Gaming
- Military

Materials

| | |
|------------------------|--|
| Housing | PBT |
| Base | PBT |
| Cap | Painted polycarbonate |
| Actuator | Illuminated: Clear polycarbonate |
| Internal Seal | Silicone rubber |
| Terminals | Copper alloy, gold over silver plating |
| Movable Contact | Copper alloy, gold over silver plating |
| Terminal Seal | Epoxy |
| Wire Leads | UL1569 Black 22 AWG |

Notes:

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

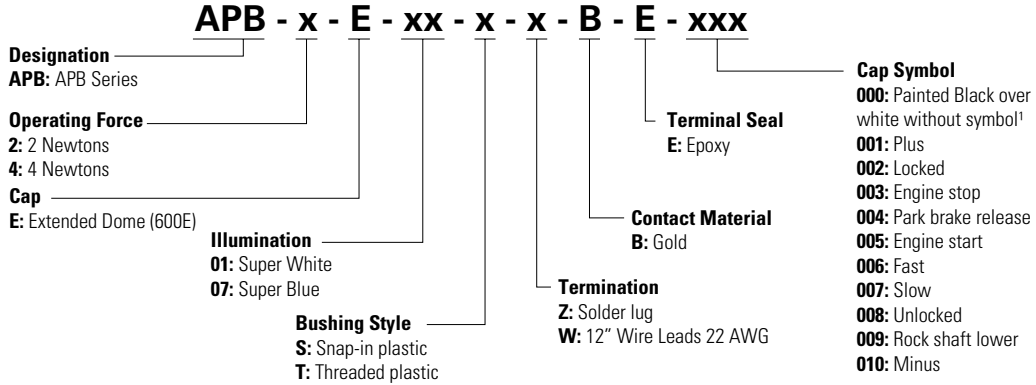
APB Series

Backlit Pushbutton Switches



Ordering Number

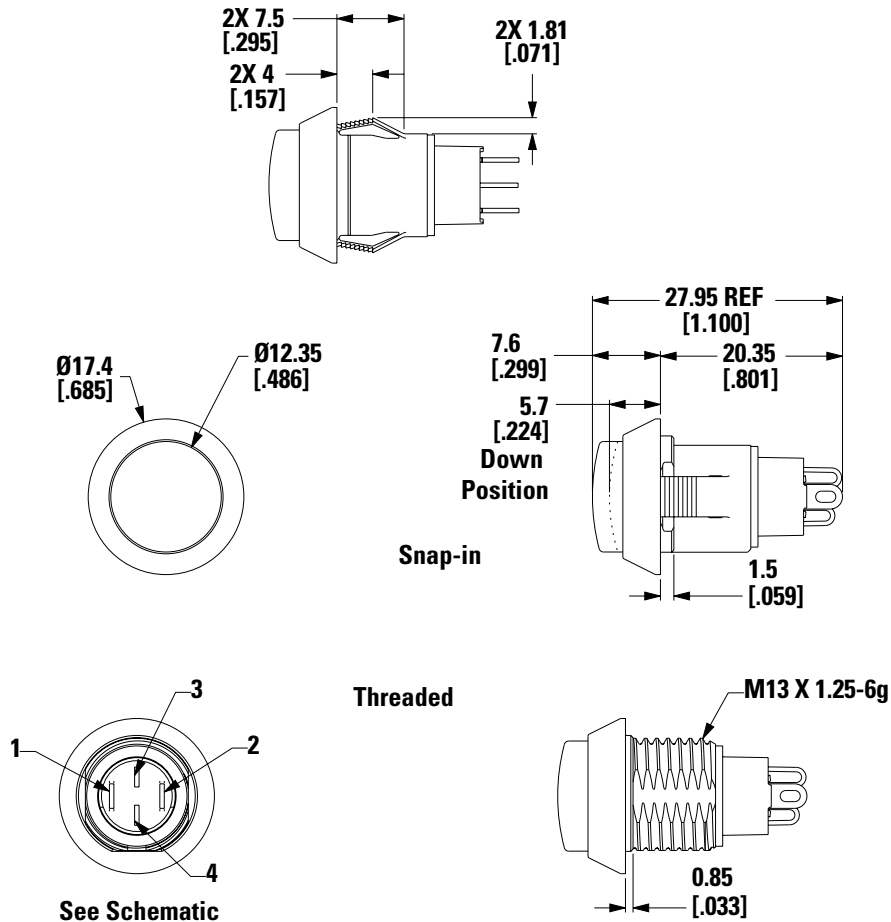
To order, simply select desired option from each category and place in the appropriate box.



Notes:

1. Cap painted black over white to allow customer laser etching

APB Drawings & Dimensions inches (mm)



APB Series

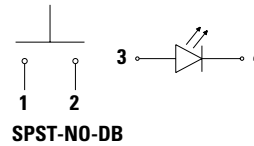
Backlit Pushbutton Switches



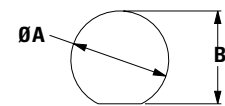
| Panel Thickness | DIM A (±0.05mm) | DIM B (±0.05mm) |
|---|------------------|------------------|
| 1 mm [0.039] | 13.70 mm [0.539] | 13.00 mm [0.512] |
| 2 mm [0.079] | 13.80 mm [0.539] | |
| 3 mm [0.118] | 13.90 mm [0.547] | 13.10 [0.516] |
| Threaded Body Min. Panel Thickness 1 mm | 13.70 mm [0.539] | 13.00 [0.512] |

Notes: A 0.1mm min. chamfer on the leading edge of the mounting hole is recommended for snap-in version.

Electrical Schematic

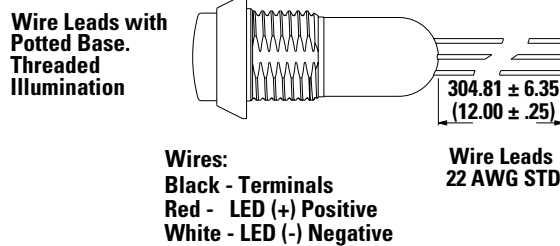
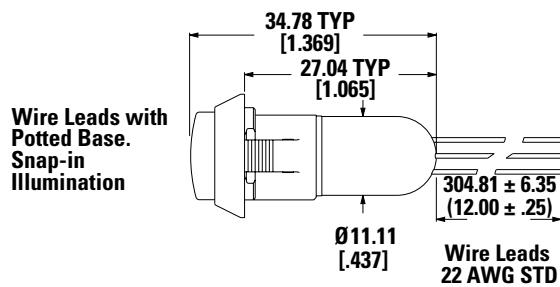


Panel Cutout

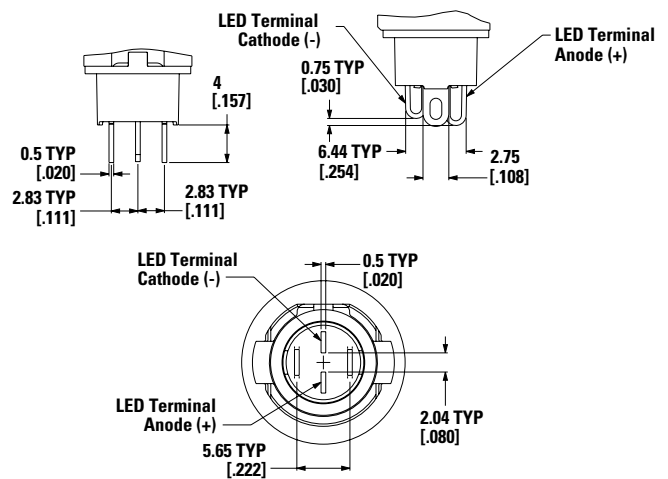


Termination

W 12" Wire Leads



Z Solder Lug



Contact Material

B Gold

| Option Code | Contact Material |
|-------------|------------------|
| B | Gold |

Terminal Seal

E Epoxy
 All models are epoxy sealed

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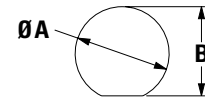


Cap Symbols

| | | | |
|--|------|--|--------------------|
| | -000 | | No Symbol |
| | -001 | | Plus |
| | -002 | | Locked |
| | -003 | | Engine Stop |
| | -004 | | Park Brake Release |
| | -005 | | Engine Start |

| | | | |
|--|------|--|------------------|
| | -006 | | Fast |
| | -007 | | Slow |
| | -008 | | Unlocked |
| | -009 | | Rock Shaft Lower |
| | -010 | | Minus |

Panel Cutout



Panel Orientation
Flat indicates bottom

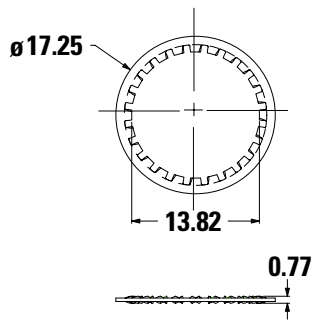
See chart on previous page for dimensions

Notes:

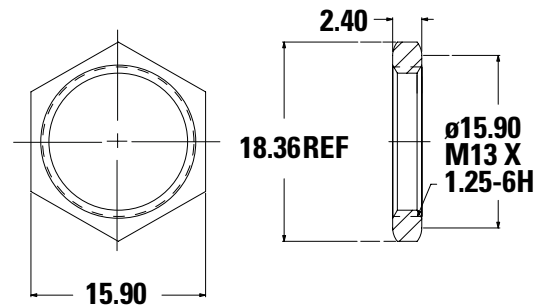
1. All graphics must be positioned as shown, perpendicular to alignment feature on underside of cap.
2. Graphic marking must be aligned with the flat feature on the underside of the cap as shown, tolerance $\pm 3^\circ$

Hardware

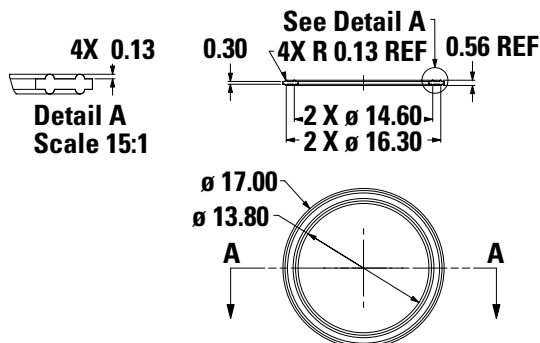
Lock Washer
Part Number 647D00A47



Hex Nut
Part number 515D00000



Panel Seal
Part Number 655D00000



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