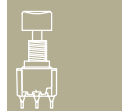


# APB Series Backlit Pushbutton Switch



A

Pushbutton



## Features/Benefits

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

## Typical Applications

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

## 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

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

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: 1000 V AC min.  
 INSULATION RESISTANCE: 1 G Ω @ 500 VDC  
 INITIAL CONTACT RESISTANCE 50 mΩ max (without wire leads)  
 BOUNCE TIME: <5 ms

## 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

## Operating Environment

OPERATING TEMPERATURE: -40°C to 85°C  
 ESD PROTECTION: 20 KV min.

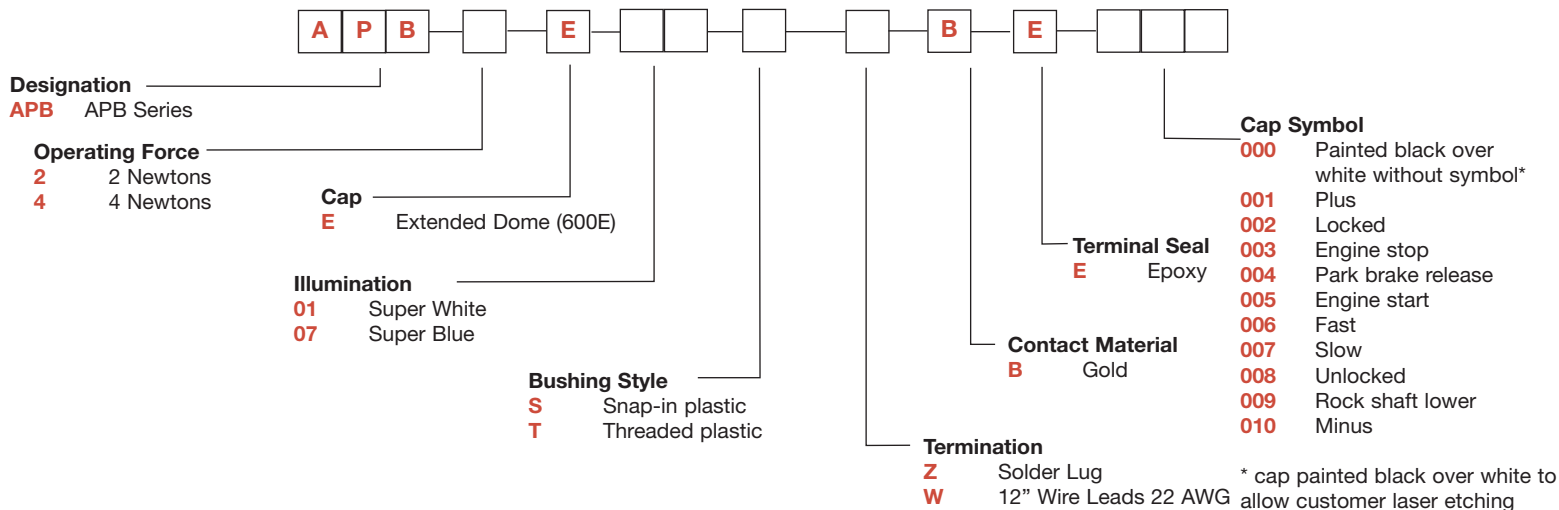
## Process Environment

SEALING: IP67 for threaded body  
 IP65 for snap-in version (no panel seal)

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

## Build-A-Switch

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

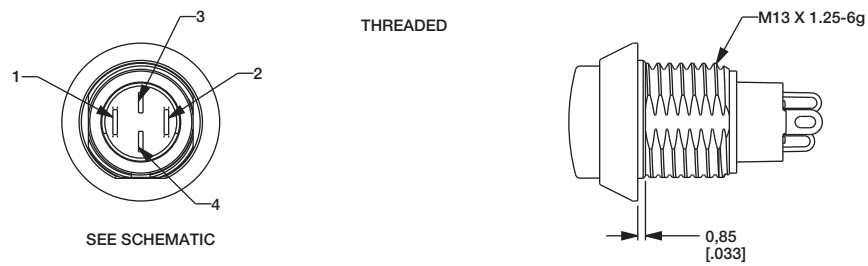
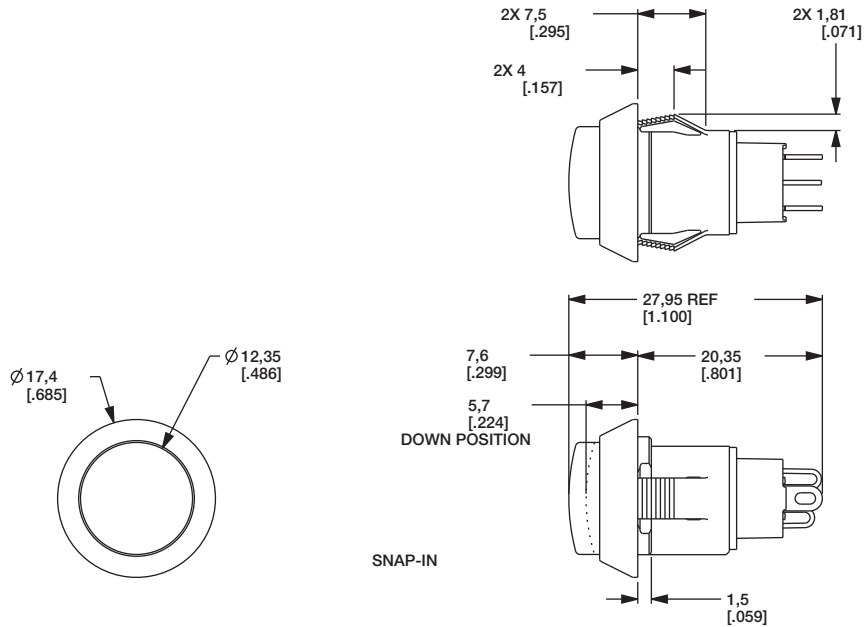




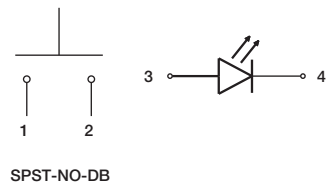
# APB Series Backlit Pushbutton Switch

A

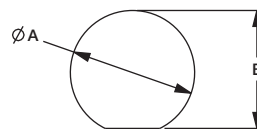
Pushbutton



## ELECTRICAL SCHEMATIC



## PANEL CUTOUT



PANEL THICKNESS	DIM A (±0.05 MM)	DIM B (±0.05 MM)
1 MM [0.039 IN]	13.70 MM [0.539 IN]	13.00 MM [0.512 IN]
2 MM [0.079 IN]	13.80 MM [0.539 IN]	13.00 MM [0.512 IN]
3 MM [0.118 IN]	13.90 MM [0.547 IN]	13.10 MM [0.516 IN]
THREADED BODY MIN PANEL THICKNESS 1 MM	13.70 MM [0.539 IN]	13.00 MM [0.512 IN]

A 0.1 MM MIN CHAMFER ON THE LEADING EDGE OF MOUNTING HOLE IS RECOMMENDED FOR SNAP-IN VERSION.





# APB Series Backlit Pushbutton Switch

A

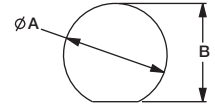
Pushbutton

## 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



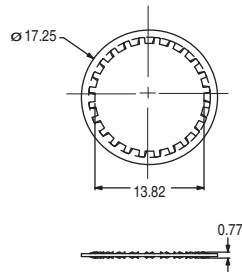
Panel Orientation  
Flat indicates bottom

See chart on previous page  
for dimensions

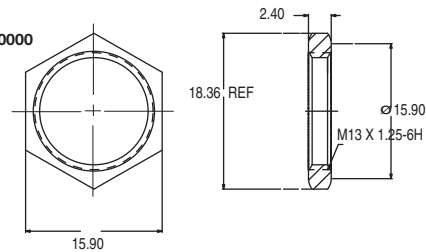
NOTES:  
1. ALL GRAPHICS MUST BE POSITIONED AS SHOWN, PERPENDICULAR TO ALIGNMENT FEATURE ON UNDERSIDE OF CAP.  
2. GRAPHIC MARKING MUST BE ALIGNED WITH THE FLAT FEATURE ON THE UNDERSIDE OF THE CAP AS SHOWN, TOLERANCE  $\pm 3^\circ$

## HARDWARE

**LOCK WASHER**  
Part Number 647D00000



**HEX NUT**  
Part number 515D00000



**PANEL SEAL**  
Part Number 655D00000

