## **APB Series Backlit Pushbutton Switch**

### Features/Benefits

- IP67 sealed
- 1,000,000 life cycle
- Illumination / non-illumination
- Multiple colored caps
- Threaded or snap-in mounting
- Caps available separately
- 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)

OPERATING LIFE: 1,000,000 cycles TOTAL TRAVEL:  $2.1 \pm 0.2 \text{ mm}$ 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  $\Omega$  @ 500 VDC

INITIAL CONTACT RESISTANCE 50 m $\Omega$  max (without wire leads)

BOUNCE TIME: <5 ms

### **Materials**

HOUSING: PBT BASE: PBT CAP: PBT **ACTUATOR:** 

Illuminated: Clear polycarbonate

Non-illuminated: PBT

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 (+105°C non-illuminated) ESD PROTECTION: 20 KV min.

### **Process Environment**

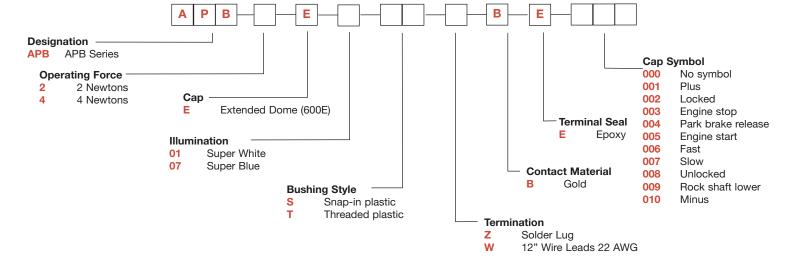
SEALING: IP67 for threaded body

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.



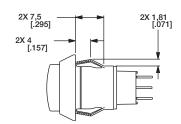


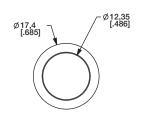
Dimensions are shown: mm (inches) Specifications and dimensions subject to change



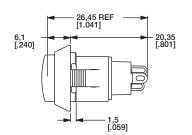
# Pushbutton >

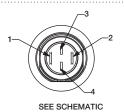
# **APB Series Backlit Pushbutton Switch**



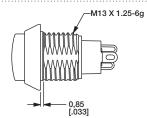


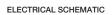


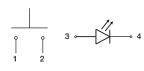




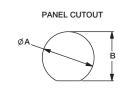








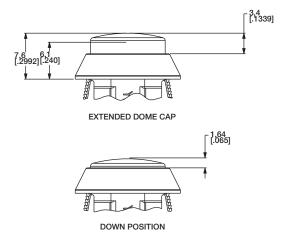
SPST-NO-DB



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

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

### **Extended Dome**



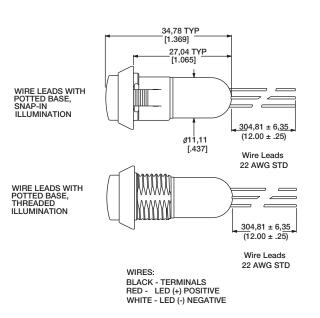


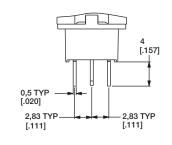
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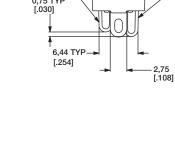
LED TERMINAL CATHODE (-)

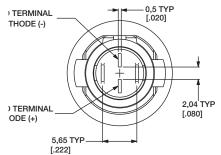
Z SOLDER LUG

LED TERM ANODE (









### **CAPS**









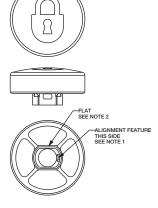
-000		NO SYMBOL
-001		PLUS
-002		LOCKED
-003	STOP	ENGINE STOP
-004		PARK BRAKE RELEASE
-005		ENGINE START







-006	FAST
-007	SLOW
-008	UNLOCKED
-009	ROCK SHAFT LOWER
-010	MINUS



INULES:

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 ±3.8



Dimensions are shown: mm (inches) Specifications and dimensions subject to change