

APB Series Backlit Pushbutton Switch



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: $4N \pm 1N$ standard configuration; other force
option $2N \pm 0.5N$
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 Ω 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.

Designation APB APB Series	Operating Force 2 2 Newtons 4 4 Newtons	Cap E Extended Dome (600E)	Illumination 01 Super White 07 Super Blue	Bushing Style S Snap-in plastic T Threaded plastic	Termination Z Solder Lug W 12" Wire Leads 22 AWG	Contact Material B Gold	Terminal Seal E Epoxy	Cap Symbol 000 Painted black over white without 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
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* cap painted black over white to allow customer laser etching

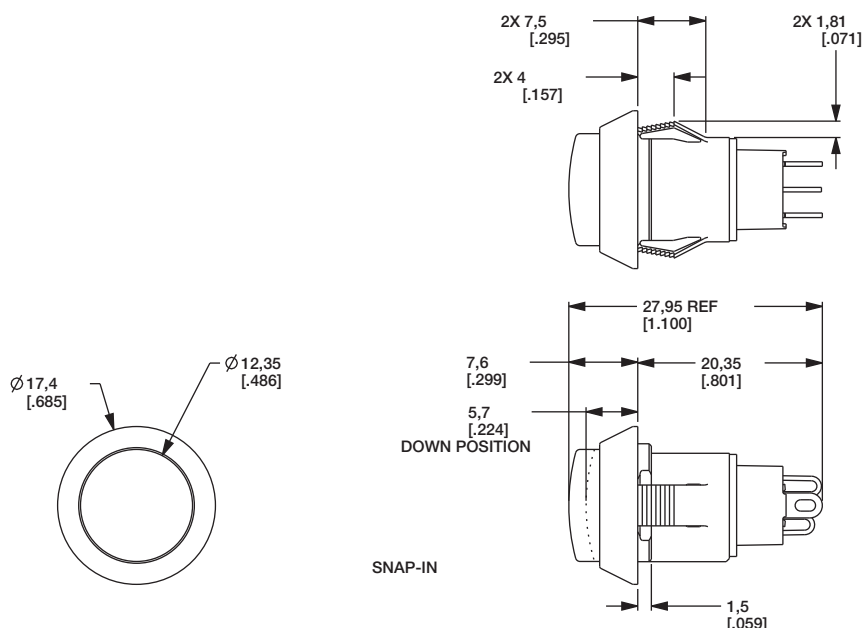




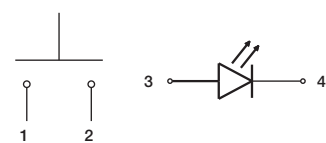
A

Pushbutton

APB Series Backlit Pushbutton Switch

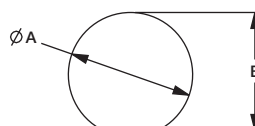


ELECTRICAL SCHEMATIC



SPST-NO-DB

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.

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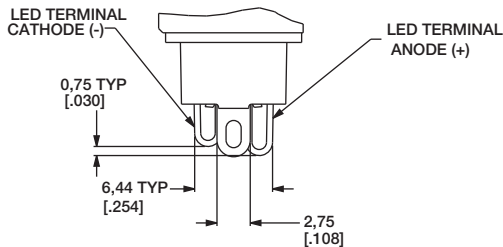
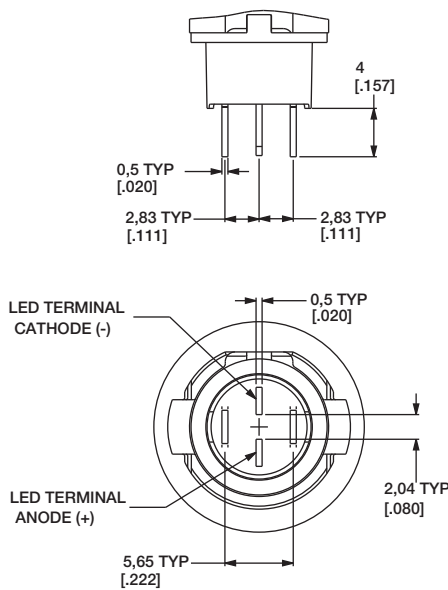
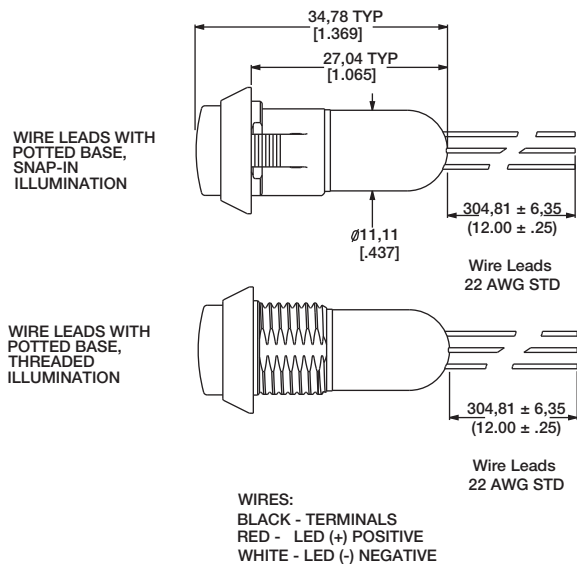
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Pushbutton

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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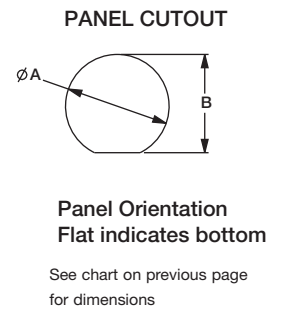
A

Pushbutton

CAP SYMBOLS

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

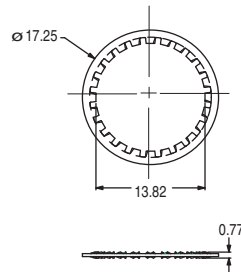
	-006		FAST
	-007		SLOW
	-008		UNLOCKED
	-009		ROCK SHAFT LOWER
	-010		MINUS



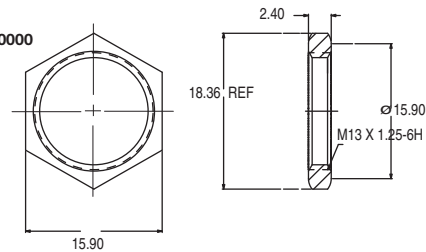
NOTES:
1. ALL GRAPHICS MUST BE POSITIONED AS SHOWN, PERPENDICULAR TO ALIGNMENT FEATURE ON UNDERSIDE OF CAP.
2. GRAPHIC MARKING MUST BE ALIGNED WITH THE FLAT FEATURE ON THE UNDERSIDE OF THE CAP AS SHOWN, TOLERANCE $\pm 3^\circ$

HARDWARE

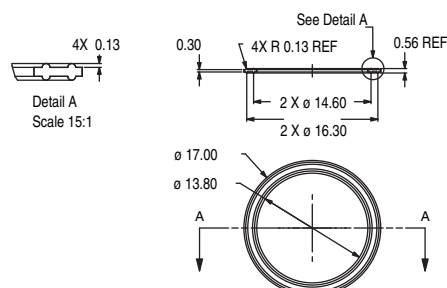
LOCK WASHER
Part Number 647D00000



HEX NUT
Part number 515D00000



PANEL SEAL
Part Number 655D00000



C&K

12 Oct 16

A-160

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

www.ck-components.com