

## IP68 Sub-Miniature Pushbutton Switches

### Key Features

- IP68 Rated (1Meter, 60 Minutes)
- Normally Open and Normally Closed Versions
- Various Cap Options
- LED illuminated flat cap versions
- Various cap and color illuminations
- Leaded options for ease of installation
- LED illumination technology for long-term reliability



TE Connectivity’s Sub-Miniature Pushbutton range is a portfolio of high quality, IP68 rated switches that comprises various cap styles and LED illumination options.

These Pushbutton Switches are offered in High Cap, Round Cap, Flat Cap, and LED Flat Cap actuators. For ease of installation without the need of soldering, they are also available with 500mm leaded options.

As they are available in 5 different cap colors, including black, Red, Yellow, Green, and Blue as well as multi-color LED options for the flat cap, these switches can be used in a wide variety of applications.









### Applications

- Industrial Equipment
- Instrumentation
- Communication Equipment
- Control Equipment

### Benefits

- Ease of installation with available solderable or 500mm leaded terminations
- Various colored caps for easy visibility

### Switch Function / Schematic

NO. POLES	MODEL NO.	SWITCH FUNCTION		SCHEMATIC	
		POS. 1	POS. 2	POS. 1	POS. 2
					
SP	PB6	OFF	MOM(ON)	OPEN 	CLOSE 
SP	PB7	ON	MOM(OFF)	CLOSE 	OPEN 

MOM = MOMENTARY

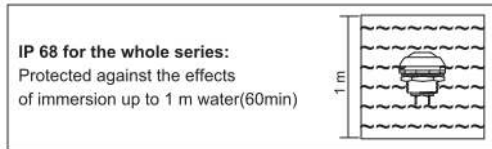
**Specifications**



<b>MAX. CURRENT/VOLTAGE RATING WITH RESISTIVE LOAD:</b>	400 mA 32 VAC – 200 mA 50 VDC – 125 mA 125 VAC
<b>INITIAL CONTACT RESISTANCE:</b>	Without leads: 50mΩmax. Leaded: 100mΩmax. * Resistance of the wire not included
<b>INSULATION RESISTANCE:</b>	1GΩmin.at 500 VDC
<b>DIELECTRIC STRENGTH:</b>	1,500 VAC RMS
<b>ELECTRICAL LIFE AT FULL LOAD:</b>	500,000 cycles
<b>OPERATING TEMPERATURE:</b>	-30°C to 85°C
<b>PANEL THICKNESS:</b>	1.5 (.059) to 4 (.157)
<b>TOTAL TRAVEL:</b>	1.5 (.059)
<b>OPERATING FORCE:</b>	3 to 6N
<b>CONTACT BOUNCE:</b>	10 ms.
<b>MECHANICAL LIFE:</b>	1,000,000 cycles
<b>TORQUE:</b>	0.5 Nm max. applied to nut
<b>DEGREE OF PROTECTION:</b>	IP68
<b>MANUAL SOLDERING:</b>	Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder
<b>WAVE SOLDERING:</b>	Recommended Soldering Temperature:260 + 5°C *Ambient temperature of the soldered surface of PC board. 110°C Max. Duration of solder Immersion: Max 5 sec (PCB is 1.6mm)

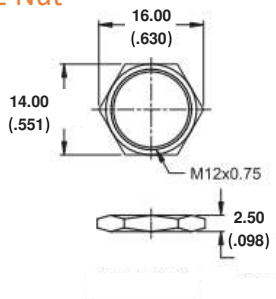
**Materials**

- CAP:** Polyamide 6/6
- PLUNGER:** PB6:PC / PB7: Polyamide 6/6
- RUBBER:** Silicone
- BUSHING:** POLYAMIDE 6/6
- CASE:** Diallyl phthalate (DAP)(UL94V-0)
- TERMINAL/CONTACT:** Copper Alloy, Gold over Silver plated

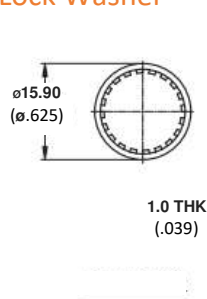


**Hardware**

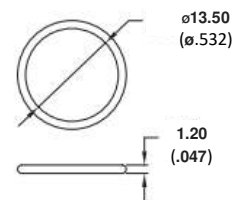
**M12 Nut**



**Lock Washer**

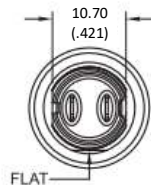
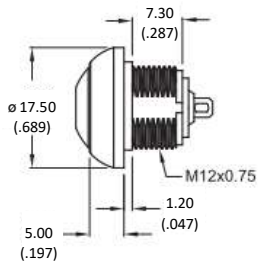


**O-Ring**



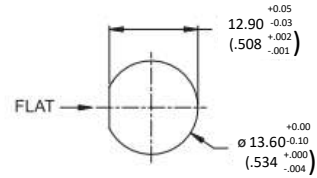
**Bushing Type**

**B2**



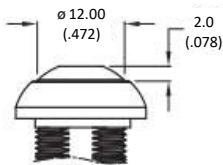
**Panel Cut-Out**

THICKNESS 1.5 to 4.0mm

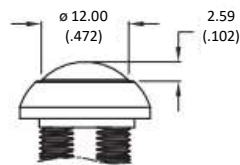


**Cap Options**

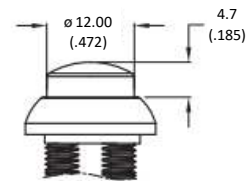
**Flat**



**Round without LED**



**High without LED**



**Termination Options**

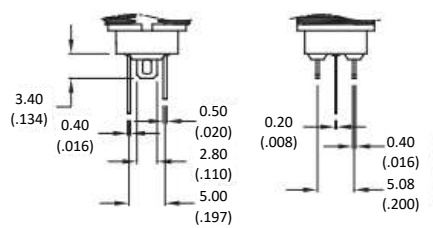
**M1 Solder Lug (PB6)**



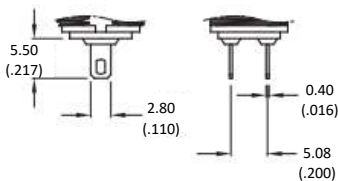
**M1 Solder Lug (PB7)**



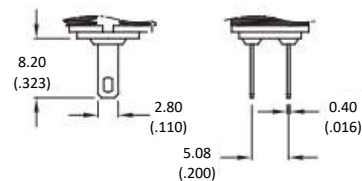
**M1 Solder Lug (PB6, with LED)**



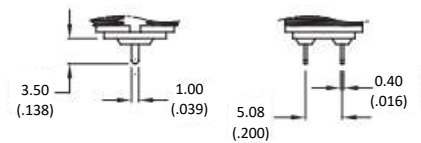
**M2 Solder Lug (PB6)**



**M3 Solder Lug (PB6)**

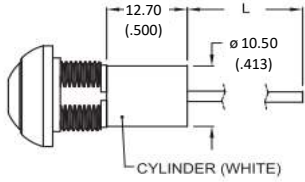


**M4 PC Thru-hole (PB6)**

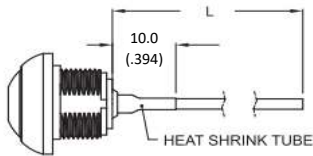


**Wire Option**

**S500** 500mm Lead



**Y500** 500mm Lead with Heat Shrink



WIRE LENGTH	
Code	DIM "L"
S500	500+10 (19.7+ .394)
Y500	500+10 (19.7+ .394)

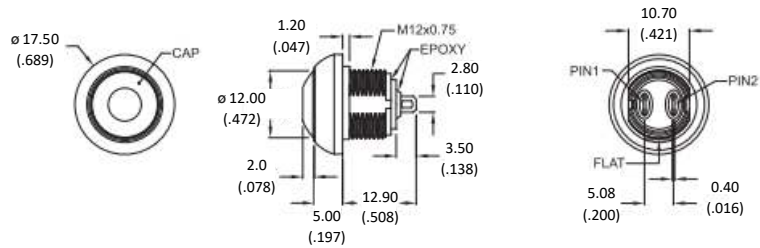
NON - LED	
DESCRIPTION	WIRE COLOR
TERMINAL 1	BLACK
TERMINAL 2	BLACK

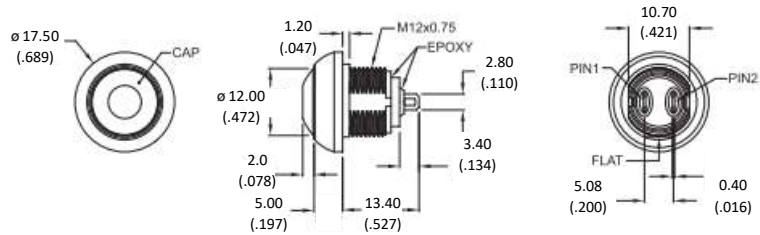
WITH LED	
DESCRIPTION	WIRE COLOR
TERMINAL 1	BLACK
TERMINAL 2	BLACK
LED+	RED
LED-	GREEN

\*Multi-wire lead AWG20, section 0.6mm , UL approved

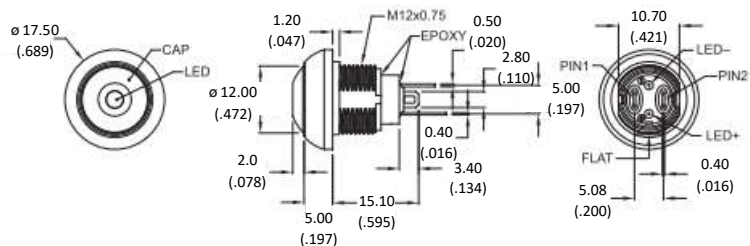
**PB6 M1**



**PB7 M1**



**PB6 M1 with LED**



## How To Order

