

# ULTRA SMALL SUBMINIATURE BASICS

**B1**  
BASIC  
SWITCHES

SINGLE BREAK, SNAP-ACTION, COMMERCIAL & MILITARY GRADES, ULTRA SMALL SUBMINIATURE

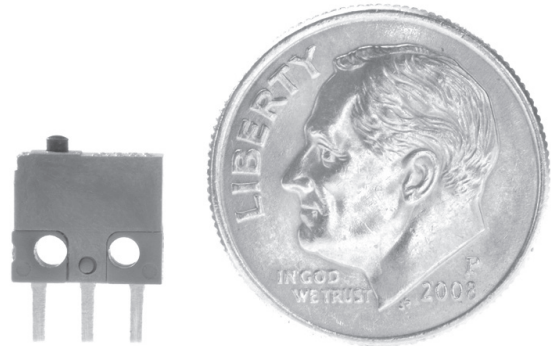
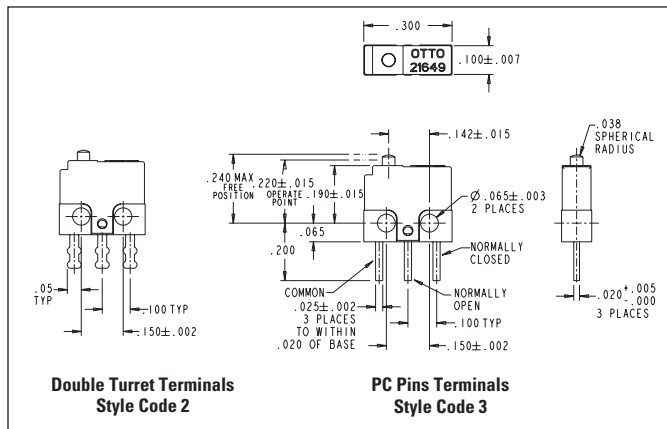
The B1 series basic switches are ultra-subminiature in size, designed to reliably switch low level signals as well as up to 2 amps switching capacity for a minimum of 25,000 cycles. Mechanical life expectancy is in excess of one million cycles.

The molded housing is rugged and structurally stable. The terminals are molded-in and sealed against solder flux entering the switch. The terminals are available in a choice of double turret solder style and 0.020" x 0.025" PC pins.

The B1 series is also available with integral lever actuators as B1-5 series.

## Features:

- **Ultra-compact: only 0.300" w x 0.255" h x 0.100" thick**
- **1 million cycle life, B1-5 Series**
- **Low level or logic level switching capability**
- **Designed in accordance with MIL-PRF-8805/94**
- **Available in Commercial & Military grades**
- **Choice of solder or PC molded-in terminals**
- **Precision operating points**
- **RoHS/WEEE/Reach compliant**



## Standard Characteristics/Ratings:

### ELECTRICAL RATINGS:

Load	Sea Level @ 28VDC or 115VAC, 60Hz	50,000 feet @ 28VDC
Resistive	2A	2A
Inductive*	0.5A	0.2A
DWV	1000Vrms	400Vrms
Low Level	30mVDC max and 10mA max	30mVDC and 10mA max

\*L/R = 0.026

<b>Electrical Life:</b>	25,000 cycles
<b>Mechanical Life:</b>	B1 Series is 100,000 cycles (B1-5 Series is 1,000,000 cycles)
<b>Seal:</b>	Unsealed
<b>Operating Temp Range:</b>	-55°C to +125°C
<b>Operating Force:</b>	6 oz max
<b>Release Force:</b>	0.7 oz min
<b>Operate Point:</b>	0.220 +/- 0.015 inches from mounting holes
<b>Overtravel:</b>	0.003 inches min
<b>Movement Differential:</b>	0.002 inches nominal, 0.005 inches max
<b>Pretravel:</b>	0.015 inches max

### MATERIALS:

<b>Case:</b>	Thermoset, blue
<b>Cover:</b>	Thermoplastic, blue
<b>Button:</b>	Thermoplastic, black
<b>Terminals:</b>	Brass, gold over nickel
<b>Contacts:</b>	Stationary: Silver with gold Moveable: Silver with gold
<b>Terminal Hardware:</b>	None provided
<b>Mounting Hardware:</b>	None provided

## ORDERING INFORMATION:

### B1 Basic

Select the OTTO B1 basic switch to match your specific circuit and mechanical requirements. To order, specify your requirement using the OTTO Part Number Code shown below.

**Example:** B1-12111 specifies Military grade construction, double turret terminals, 6 oz max operating force and silver/gold high current contacts.

## B1 PART NUMBER CODE

Construction Grade	Terminal Style*	Operating Force	Movement Differential	Contact Material
1. Military 2. Commercial	2. Double Turret 3. PC Pins	1. 6 oz max	1. 0.005" max	1. Silver/Gold – High Current 3. Silver/Gold – Low Current

\* Wire leads available, contact factory.