

# ULTRA SMALL SUBMINIATURE BASICS

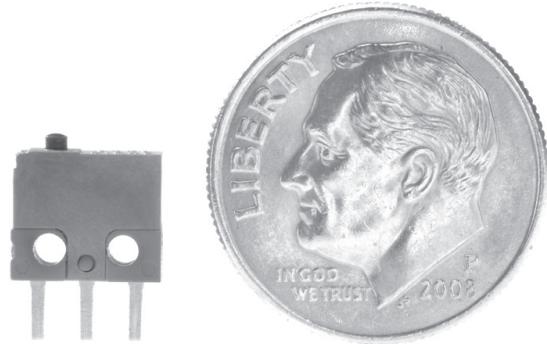
**B1**  
BASIC  
SWITCHES

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.

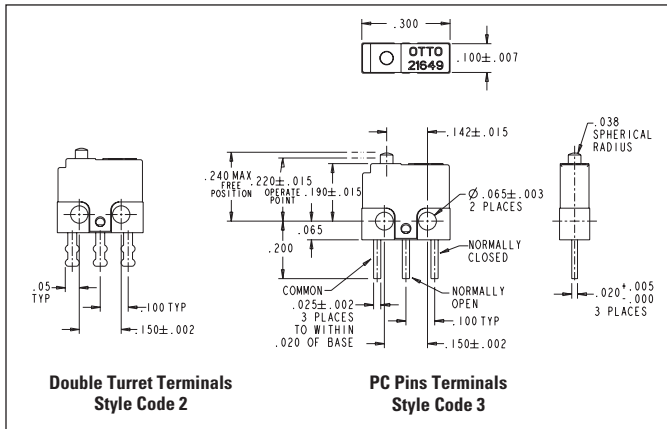
The molded housing is rugged and structurally stable. The terminals are molded-in and sealed against solder flux entering the switch. The terminals are available in a choice of double turret solder style and 0.020" x 0.025" PC pins.

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.

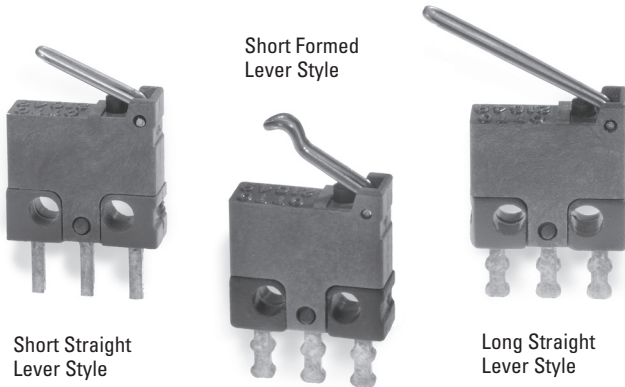
### B1 PART NUMBER CODE

<b>B1</b>	-	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Construction Grade</b>		<b>Terminal Style*</b>	<b>Operating Force</b>	<b>Movement Differential</b>	<b>Contact Material</b>	
1. Military		2. Double Turret	1. 6 oz max	1. 0.005" max	1. Silver/Gold – High Current	
2. Commercial		3. PC Pins		3. Silver/Gold – Low Current		

\* Wire leads available, contact factory.

# B1 BASICS WITH INTEGRAL LEVERS

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



## B1-5 Integral Lever Basic Switches

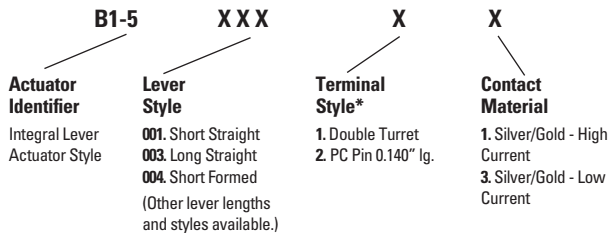
B1-5 series basic switches feature integral actuating levers. The lever is built-in so that the switch and actuator are one assembly.

Making the lever actuator an integral part of the basic switch case makes sense and saves money, too. Better precision, no parts to assemble and more variety add up to a cost saving proposition.

Lever Style	STANDARD OPERATIONAL CHARACTERISTICS						
	Catalog Number	Operating Force (max ounces)	Release Force (min ounces)	Pretravel (max inches)	Overtravel (min inches)	Movement Differential (max inches)	Operating Point (inches)
Short Straight Lever	B1-500111	1.8	0.11	0.054	0.015	0.016	0.250 +/- 0.025
Long Straight Lever	B1-500311	1.0	0.09	0.185	0.023	0.032	0.293 +/- 0.070
Short Formed Lever	B1-500411	2.0	0.15	0.030	0.015	0.020	0.293 +/- 0.025

(Other lever lengths and styles available.)

## B1-5 PART NUMBER CODE



\* Wire leads available, contact factory.

## ORDERING INFORMATION:

### B1-5 Series, Basic Switch with Integral Lever Actuator

Select the OTTO B1-5 basic switch to match your specific circuit and mechanical requirements. To order, specify your requirement using the OTTO Part Number Code shown at left.

**Example:** B1-500111 specifies short straight integral lever, double turret terminals and silver/gold high current contacts.

