# ULTRA SMALL SUBMINIATURE BASICS

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

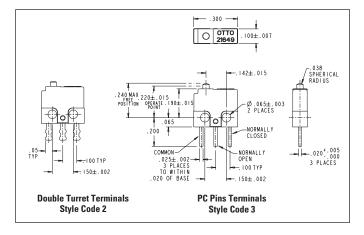
The B1 series basic switches are ultra-subminiature in size, designed to reliably switch logic level signals as well as up to 2 amps switching capacity for a minimum of 25,000 cycles. Mechanical life expectancy is in excess of one million cycles.

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  $0.020'' \times 0.025''$  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
- 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
- Momentary action
- RoHS compliant



## **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.



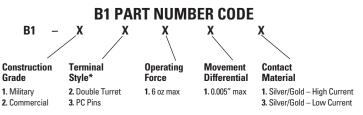
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### Standard Characteristics/Ratings:

#### ELECTRICAL RATINGS:

ELEGIRICAL RATINGS:							
Load	Sea L	evel @ 28VDC or 115VAC, 60Hz	50,000 feet @ 28VDC				
Resistive	2A		2A				
Inductive*	0.5A		0.2A				
DWV	1000\	/rms	400Vrms				
Logic Level	10mA	@ 5VDC	10mA @ 5VDC				
*L/R = 0.026							
Electrical Life:		25,000 cycles					
Mechanical Life:		B1 Series is 100,000 cycles (B1-5 Series is 1,000,000 cycles)					
Seal:		Unsealed					
Operating Temp Range:		-55°C to +125°C					
<b>Operating Force:</b>		6 oz max					
<b>Release Force:</b>		0.7 oz min					
Operate Point:		0.220 +/- 0.015 inches from mounting holes					
Overtravel:		0.003 inches min					
Movement Differen	tial:	0.002 inches nominal, 0.005 inches n	nax				
Pretravel:		0.015 inches max					
MATERIALS:							
Case:		Thermoset, blue					
Cover:		Thermoplastic, blue					
Button:		Thermoplastic, black					
Terminals:		Silver with gold					
Contacts:		Stationary: Silver with gold					
		Moveable: Silver with gold					
Terminal Hardware	e:	None provided					
Mounting Hardwar	e:	None provided					



\* Wire leads available, contact factory.

**BASIC SWITCHES** 

## **B1 BASICS WITH INTEGRAL LEVERS**

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



Short Straight Lever Style





Long Straight Lever Style

### **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.

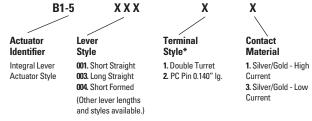
Making the lever actuator an integral part of the basic switch case makes sense and saves money, too. Better precision, no parts to assemble and more variety add up to a cost saving proposition.

	STANDARD OPERATIONAL CHARACTERISTICS								
Lever Style	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 Long Straight Lever Short Formed Lever	B1-500111 B1-500311 B1-500411	1.8 1.0 2.0	0.11 0.09 0.15	0.054 0.185 0.030	0.015 0.023 0.015	0.016 0.032 0.020	0.250 +/- 0.025 0.293 +/- 0.070 0.293 +/- 0.025		

(Other lever lengths and styles available.)

\* Wire leads available, contact factory.

### **B1-5 PART NUMBER CODE**



### **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.

