

# SUBMINIATURE BASIC SWITCHES

**B2**  
BASIC  
SWITCHES

SINGLE BREAK, SNAP-ACTION, COMMERCIAL & MILITARY GRADES, SUBMINIATURE, TWO WIDTHS

Available in two widths, the B2 series can be specified to fit your application exactly.

In addition to being available with integral actuating levers as in the B2-5 series, the B2 series is also available with the A1 series auxiliary lever actuators as shown in the B3 section.

While the B2 series conforms to and is qualified to various military specifications, the same switch can be specified for commercial use at a cost savings.

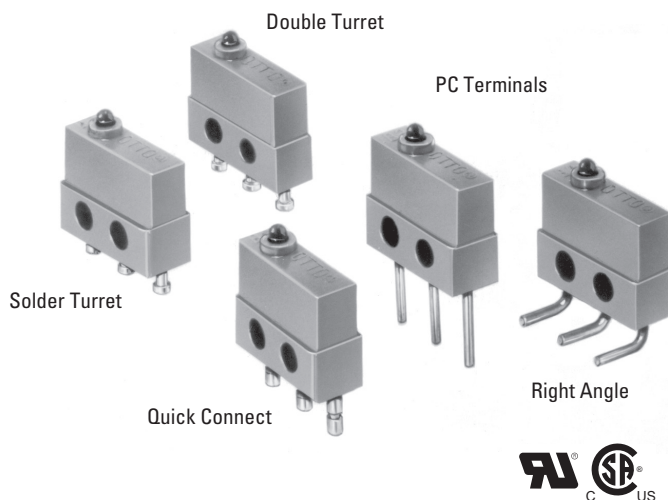
A choice of turret, quick connect and three lengths of printed circuit board style terminals are available for both the 0.156" and 0.200" wide models.

Whether it be military or commercial applications, OTTO can provide features you select for your application. You can specify the features you require without paying for ones you don't need.

The OTTO B2 subminiature switches conform to and are qualified under MIL-PRF-8805/4, MIL-PRF-8805/106 (high temp -55°C to +205°C) and MIL-PRF-8805/109. Basic switches are designed for miniature spaces where cam or other limit actuators are used on the button. In addition, a full range of toggle, pushbutton and lever actuators are available.

## Features:

- Choice of 0.156" & 0.200" wide models
- Up to 7 amps switching
- Sensitive movement differentials
- Low operating forces
- Choice of 8 terminal styles or wire leads
- Long operating life
- Qualified under MIL-PRF-8805/4, MIL-PRF-8805/106 & MIL-PRF-8805/109
- UL recognized & CSA certified
- RoHS/WEEE/Reach compliant



### Standard Characteristics/Ratings:

#### ELECTRICAL RATINGS:

##### High Level Switch Ratings

| Load                                                | Rating – Sea Level | Rating – 50,000 feet |
|-----------------------------------------------------|--------------------|----------------------|
| <b>115VAC, 60Hz silver contacts with gold plate</b> |                    |                      |
| Resistive                                           | 7A                 | N/A                  |
| Inductive                                           | 7A                 | N/A                  |
| Lamp                                                | 2A                 | N/A                  |

##### 28VDC, silver contacts with gold plate

|           |      |      |
|-----------|------|------|
| Resistive | 7A   | 4A   |
| Inductive | 4A   | 2.5A |
| Lamp      | 2.5A | 2.5A |

##### Low Level Switch Ratings

##### 28VDC, gold plate contacts

|           |      |      |
|-----------|------|------|
| Resistive | 1A   | 1A   |
| Inductive | 0.5A | 0.5A |
| Lamp      | N/A  | N/A  |

**DWV:** 1000Vrms 400Vrms

**Electrical Life:** 25,000 to 100,000 cycles (dependent on part number)

**Mechanical Life:** 50,000 to 250,000 cycles (dependent on part number)

**Seal:** Unsealed

**Operating Temp Range:** -55°C to +85°C, high temp rating -55°C to +205°C

**Operating Force:** 5 oz or 6 oz

**Release Force:** 1 oz min

**Operate Point:** 0.320 +/- 0.015 inches from mounting holes

**Overtravel:** 0.004 inches min

**Movement Differential:** 0.006 inches max

**Pretravel:** 0.020 inches max

#### MATERIALS:

**Case:** Thermoset, blue

**Cover:** Thermoplastic, blue

**Button:** Thermoplastic, black

**Terminals:** Brass, gold over nickel

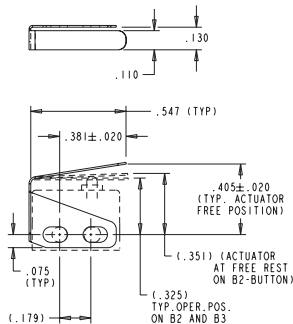
**Contacts:** Stationary: Silver with gold  
Moveable: Silver or gold

**Terminal Hardware:** None provided

**Optional Wires:** 24 AWG blue, red, yellow

**Mounting Hardware:** None provided

### Auxiliary Lever Actuators for B2



A1-101-02 Shown

| Catalog Number | Number of Poles |
|----------------|-----------------|
|----------------|-----------------|

|           |   |
|-----------|---|
| A1-115-01 | 1 |
| A2-109    | 2 |

Supplied with two 2-56 panhead screws, hex nuts and lockwashers.

For additional options, contact factory.

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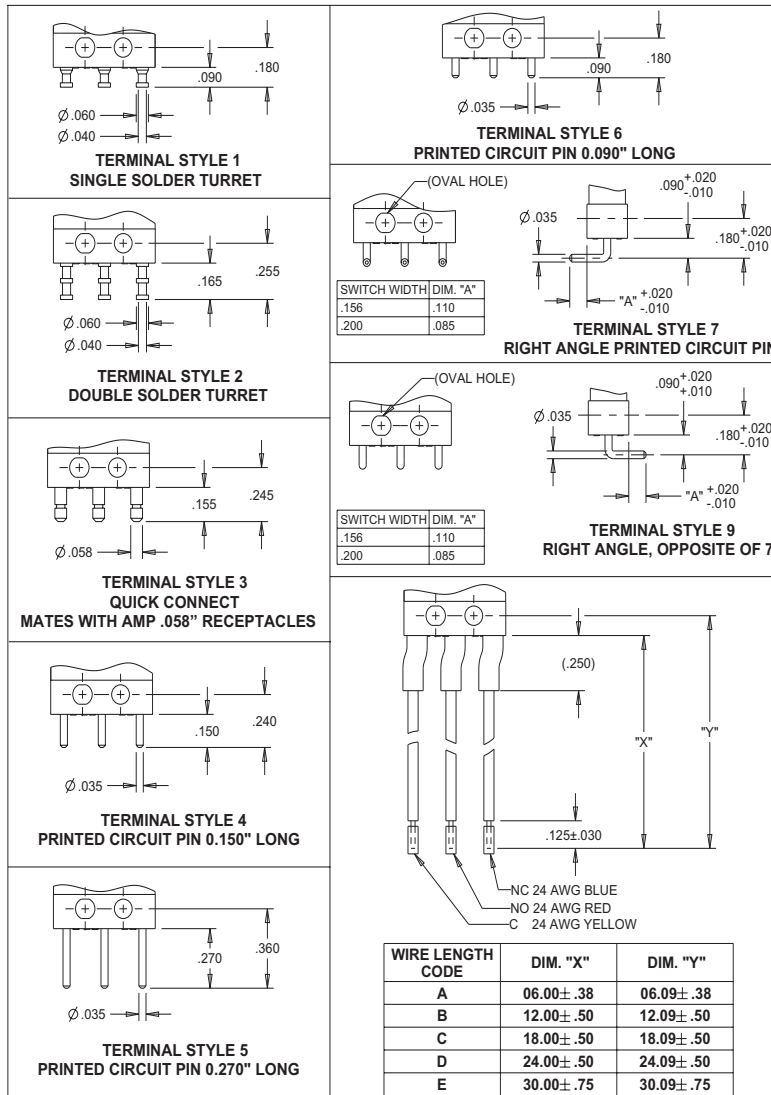
## MILITARY APPROVALS

(MIL-PRF-8805/4, MIL-PRF-8805/106 & MIL-PRF-8805/109)

Certain OTTO B2 models have been qualified to the military specification for these parts. The following is the latest listing.

**MILITARY NO.**                      **OTTO P/N**

|                     |           |
|---------------------|-----------|
| M8805/106-01        | B2-200031 |
| M8805/106-02        | B2-200032 |
| M8805/109-01        | B2-111351 |
| M8805/109-02        | B2-112351 |
| M8805/109-03        | B2-111353 |
| M8805/109-04        | B2-112353 |
| MS24547-1 (M8805/4) | B2-211351 |
| MS24547-2 (M8805/4) | B2-211353 |
| MS24547-4 (M8805/4) | B2-212351 |
| MS24547-5 (M8805/4) | B2-212353 |
| MS24547-6 (M8805/4) | B2-200029 |
| MS24547-7 (M8805/4) | B2-200030 |



## ORDERING INFORMATION:

Select the OTTO B2 basic switch to match your specific circuit and mechanical requirements. To order, specify your requirement using the OTTO Part Number Code shown to the right.

**Example:** B2-112351 specifies Military grade construction on a 0.156" wide base, double turret terminals, 5 oz operating force, 0.005" movement differential and silver/gold high current contacts.

## B2 PART NUMBER CODE

**Bold Code** numbers signify standard features with best availability.

| B2                                                                                                   | - | X                 | X                                                                                                                                                                                                                                                                                                                                                                | X                          | X                                                             | X                                                                   |
|------------------------------------------------------------------------------------------------------|---|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------------------------------------|---------------------------------------------------------------------|
| Model<br>(Width/Constr.)                                                                             |   | Actuator<br>Style | Terminal<br>Style                                                                                                                                                                                                                                                                                                                                                | Operating<br>Force         | Movement<br>Differential                                      | Contact<br>Material                                                 |
| 1. 0.156" (MIL Grade)<br>2. 0.200" (MIL Grade)<br>3. 0.156" (Com'l Grade)<br>4. 0.200" (Com'l Grade) |   | 1. Button         | 1. Single Turret<br>2. Double Turret<br>3. Q.C. Tab ①<br>4. PC Pin 0.150" lg.<br>5. PC Pin 0.270" lg.<br>6. PC Pin 0.090" lg.<br>7. Right Angle PC<br>9. Right Angle,<br>Opposite of 7<br>A. With 24 AWG Wires 06.0" lg.<br>B. With 24 AWG Wires 12.0" lg.<br>C. With 24 AWG Wires 18.0" lg.<br>D. With 24 AWG Wires 24.0" lg.<br>E. With 24 AWG Wires 30.0" lg. | 3. 5 oz max<br>4. 6 oz max | 2. 0.002"<br>3. 0.003"<br>4. 0.004"<br>5. 0.005"<br>6. 0.006" | 1. Silver/Gold –<br>High Current<br>3. Silver/Gold –<br>Low Current |

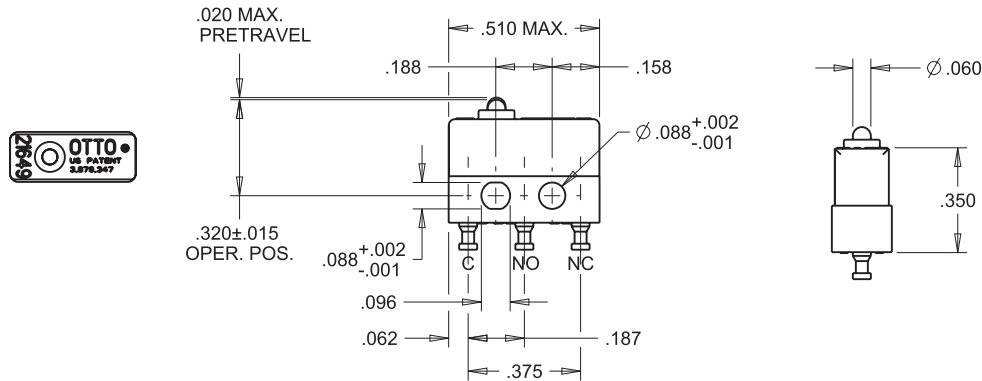
① Mates with AMP 0.058" receptacles.

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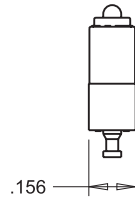
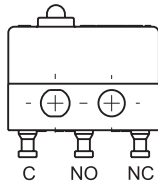
BASIC SWITCH  
APPLIES TO ALL SWITCHES ON THIS PAGE



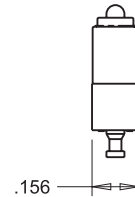
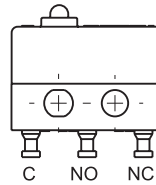
MODEL (WIDTH/CONSTRUCTION) 1  
0.156" (MILITARY GRADE)



| MILITARY NO. | OTTO P/N  |
|--------------|-----------|
| M8805/109-01 | B2-111351 |
| M8805/109-02 | B2-112351 |
| M8805/109-03 | B2-111353 |
| M8805/109-04 | B2-112353 |



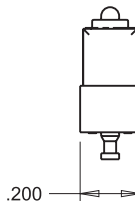
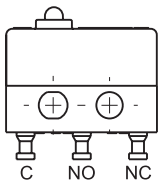
MODEL (WIDTH/CONSTRUCTION) 3  
0.156" (COMMERCIAL GRADE)



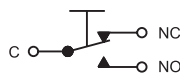
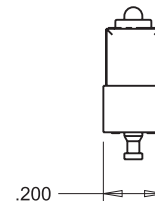
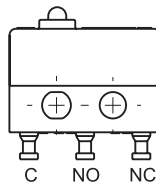
MODEL (WIDTH/CONSTRUCTION) 2  
0.200" (MILITARY GRADE)



| MILITARY NO.        | OTTO P/N  |
|---------------------|-----------|
| MS24547-1 (M8805/4) | B2-211351 |
| MS24547-4 (M8805/4) | B2-212351 |
| MS24547-2 (M8805/4) | B2-211353 |
| MS24547-5 (M8805/4) | B2-212353 |



MODEL (WIDTH/CONSTRUCTION) 4  
0.200" (COMMERCIAL GRADE)



SPDT-FORM C  
SCHEMATIC

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9