B2 Single Break, Subminiature

Available in two widths, the B2 series can be specified to fit your application exactly. While the B2 series conforms to and is qualified to military specifications, the same switch can be specified for commercial use at a cost savings.

In addition to being available with integral actuating levers as in the B2-5 series, the B2 series is available with the A1 and A2 series auxiliary lever actuators.

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.

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)*, MIL-PRF-8805/109 and MIL-PRF-8805/117. 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:

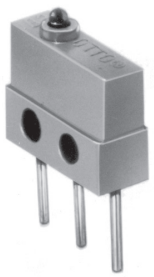
- Choice of 0.156" and 0.200" wide models
- Up to 7 amps switching
- Sensitive movement differentials
- Low operating forces
- Choice of eight terminal styles or wire leads
- Long operating life
- Qualified under MIL-PRF-8805/4, MIL-PRF-8805/106, MIL-PRF-8805/109 and MIL-PRF-8805/117
- Momentary action
- RoHS compliant



Solder Turret



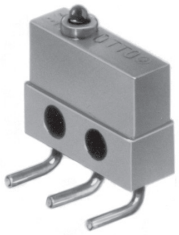
Double Turret



PC Terminals



Quick Connect



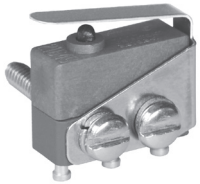
Right Angle

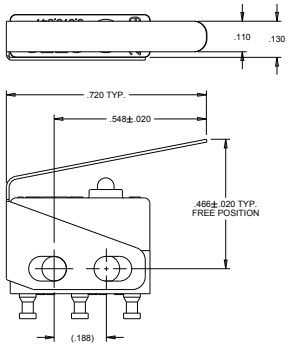
B2 Auxiliary Lever Actuators

Catalog Number	Number of Poles
A1-115-01	1
A2-109	2

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

Refer to the B2 and B3 Auxiliary Levers chart to see additional models.





A1-115-01 Shown

Standard Characteristics/Ratings:

ELECTRICAL RATINGS:		
High Level Switch Ratings		
Load	**Rating – Sea Level**	**Rating – 50,000 feet**
115VAC, 60Hz silver contacts with gold plate		
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		
Load	**Rating – Sea Level**	**Rating – 50,000 feet**
Primary rating: .030 VDC max @ .10 A max **Alternative ratings: 28VDC, gold plate contacts** **28VDC, gold plate contacts**		
Resistive	1A	1A
Inductive	0.5A	0.5A
Lamp	N/A	N/A
DWV:	1000Vrms	400Vrms
Electrical Life:	Up to 25,000 to 100,000 cycles *(dependent on part number)*	
Mechanical Life:	Up to 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 with gold	
Terminal Hardware:	None provided	
Optional Wires:	24 AWG blue, red, yellow	
Mounting Hardware:	None provided	

B2 Basic Switch
Part Number Code

B2 - X X X X X X

Model *(Width/Constr.)*
1. 0.156" *(MIL Grade)*
2. 0.200" *(MIL Grade)*
3. 0.156" *(Com'l Grade)*
4. 0.200" *(Com'l Grade)*

Actuator Style
1. Button

Terminal Style
1. Single Turret
2. Double Turret
3. Q.C. Tab ①
4. PC Pin 0.150" lg.
5. PC Pin 0.270" lg.
6. PC Pin 0.090" lg.
7. Right Angle PC
9. Right Angle, Opposite of 7
A. With 24 AWG Wires 06.0" lg.
B. With 24 AWG Wires 12.0" lg.
C. With 24 AWG Wires 18.0" lg.
D. With 24 AWG Wires 24.0" lg.
E. With 24 AWG Wires 30.0" lg.

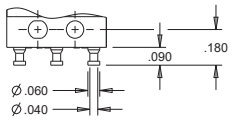
Operating Force
3. 5 oz max
4. 6 oz max

Movement Differential
2. 0.002" max
3. 0.003" max
4. 0.004" max
5. 0.005" max
6. 0.006" max

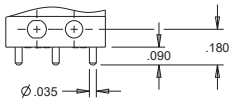
Contact Material
1. Silver/Gold – High Current
3. Silver/Gold – Low Current

① Mates with AMP 0.058" receptacles.

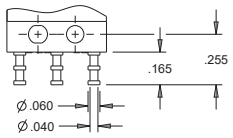
TERMINAL STYLE 1
SINGLE SOLDER TURRET



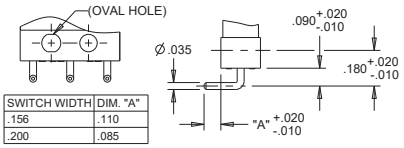
TERMINAL STYLE 6
PRINTED CIRCUIT PIN 0.090" LONG



TERMINAL STYLE 2
DOUBLE SOLDER TURRET

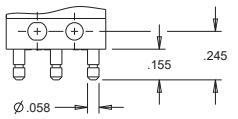


TERMINAL STYLE 7
RIGHT ANGLE PRINTED CIRCUIT PIN

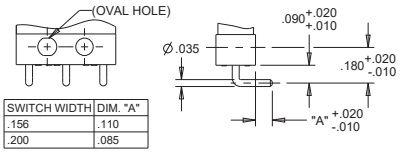


SWITCH WIDTH	DIM. "A"
.156	.110
.200	.085

TERMINAL STYLE 3
QUICK CONNECT
MATES WITH AMP
.058" RECEPTACLES

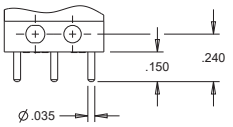


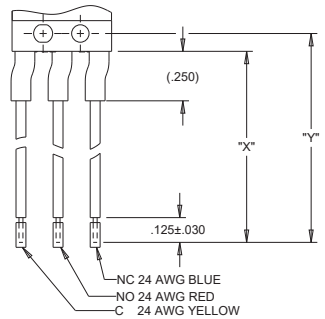
TERMINAL STYLE 9
RIGHT ANGLE, OPPOSITE OF 7



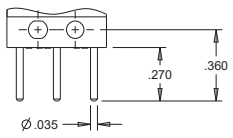
SWITCH WIDTH	DIM. "A"
.156	.110
.200	.085

TERMINAL STYLE 4
PRINTED CIRCUIT PIN
0.150" LONG





TERMINAL STYLE 5
PRINTED CIRCUIT PIN
0.270" LONG



WIRE LENGTH CODE	DIM. "X"	DIM. "Y"
A	06.00± .38	06.09± .38
B	12.00± .50	12.09± .50
C	18.00± .50	18.09± .50
D	24.00± .50	24.09± .50
E	30.00± .75	30.09± .75

MILITARY APPROVALS

(MIL-PRF-8805/4, MIL-PRF-8805/106, MIL-PRF-8805/109 and MIL-PRF-8805/117)

Certain OTTO B2 models have been qualified to the military specification. Contact the factory for more information or refer to the Military Part Numbers listed on www.otto-controls.com.

Your official representative

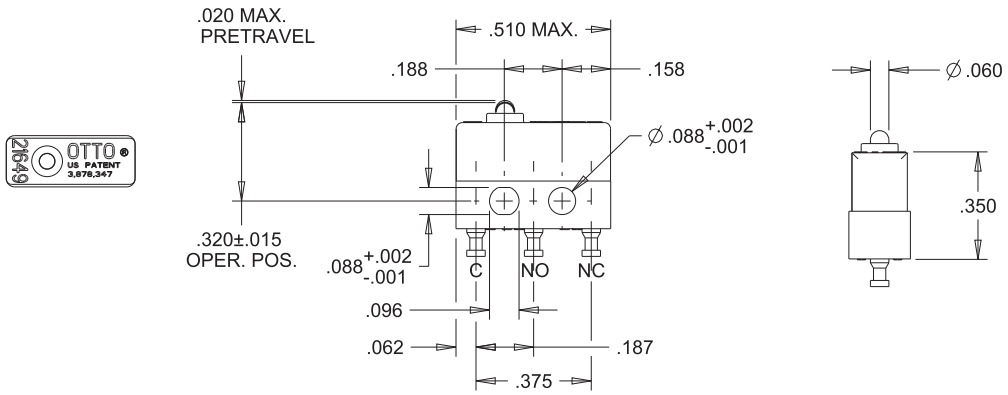
ALDERS®
Indicate. Control. Connect.

ALDERS electronic GmbH
Arnoldstraße 19
47906 Kempen - Germany

+49 2152 8955-0
sales@alders.de

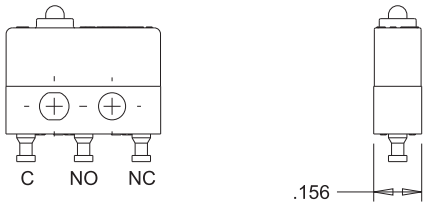
BASIC SWITCH

(Applies to All Switches on This Page)

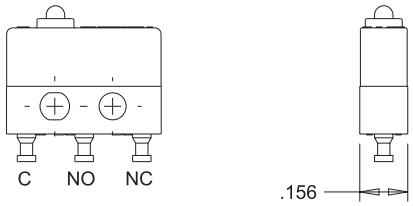


MODEL *(WIDTH/CONSTRUCTION)* 1
0.156" *(MILITARY GRADE)*

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

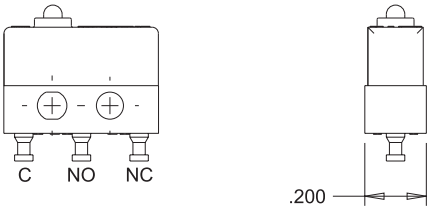


MODEL *(WIDTH/CONSTRUCTION)* 3
0.156" *(COMMERCIAL GRADE)*

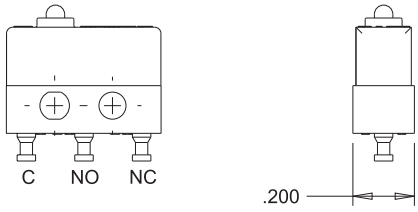


MODEL *(WIDTH/CONSTRUCTION)* 2
0.200" *(MILITARY GRADE)*

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

