B3S Sealed Subminiature

OTTO's sealed, double break subminiature B3S basic switch is designed for demanding applications that require a reliable seal. Sealed to IP6K8S, the B3S basic switch has been tested up to 1 million cycles at logic level. The switch is also capable of handling up to an 8 amp resistive load.

Great double break circuit versatility is available with your choice of normally open *(Form X)*, normally closed *(Form Y)*, 3 terminal SPDT *(Form C)* or 4 terminal SPDT *(Form Z)*.

The B3S is designed for use in places where space is limited, with or without lever actuators. In addition, the switch can be used as part of pushbutton, trigger and toggle switches that require sealing. Multiple terminal styles and wire lead options are available.





FEATURES:

- Sealed to IP6K8S
- Double break circuit
- Logic level switching option tested up to 1 million electrical cycles
- 0.200" switch width
- Choice of 10 standard terminal styles or wire leads
- Lever actuators are also available
- Momentary action
- RoHS compliant

Standard Characteristics/Ratings			
ELECTRICAL RATINGS:	Sea Level @28VDC		
Rating	**Load**	**Current**	**Life Cycles**
High Level N.C. or N.O. Form C	Resistive	8A	50,000
High Level N.C. or N.O Form Z	Resistive	8A	50,000
High Level SPDT Form C	Resistive	5A	50,000
High Level SPDT Form Z	Resistive	5A	50,000
Logic Level @ 5VDC	Resistive	10mA	1,000,000
DWV	1000Vrms		
Mechanical Life:	Up to 1,000,000 cycles		
Seal:	IP6K8S		
Operating Temp Range:	-40°C to +85°C		
Operating Force	6 ± 2 oz.		
Overtravel	.004 min.		
Release Force	1 oz. min.		
Movement Differential	.018 +/- .008		
MATERIALS:			
Cover:	Blue Thermoplastic		
Case:	Blue Thermoset		
Boot:	Silicone Rubber		

B3S Basic Switch
Part Number Code

B3S - X X X X X

Switch Width/ Actuator

1. 0.200" Wide, Straight Plunger

Terminal Style or Wire Length

1. PC Pins
2. Turret, 1/8" lg.
3. Turret, 3/16" lg.
4. Wire Wrap
5. Right Angle PC Pins
6. Not Used
A. With Wires 6.0" Long
B. With Wires 12.0" Long
C. With Wires 18.0" Long
D. With Wires 24.0" Long
E. With Wires 30.0" Long

Operating Force

1. 6 +/- 2 oz

Circuitry

1. SPNO-DB, Form X
2. SPNC-DB, Form Y
3. SPDT, Form C
4. SPDT-DB, Form Z

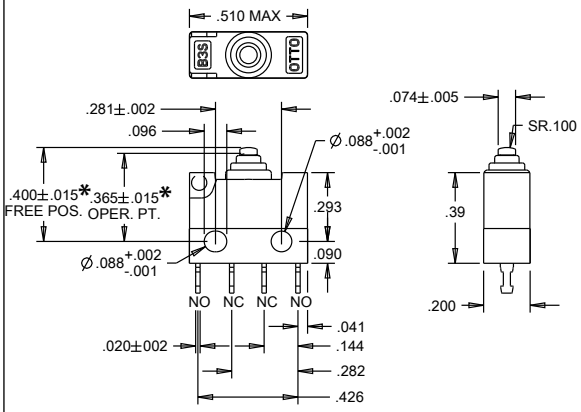
Contact Rating

1. High Level Ratings
2. Logic Level Ratings

Specifications Subject To Change Without Notice

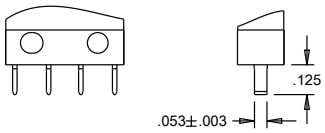
B3S Drawings

BASIC SWITCH
(APPLIES TO ALL SWITCHES IN THIS DRAWING)

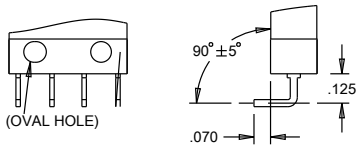


* Please note: The free position and operate point are not the same as the B3.

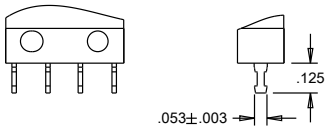
TERMINAL STYLE 1
PC PINS



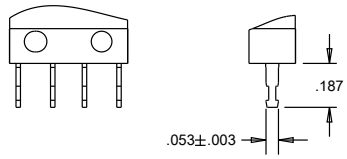
TERMINAL STYLE 5
RIGHT ANGLE PC PINS



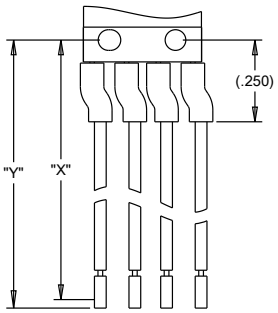
TERMINAL STYLE 2
TURRET, 1/8" LONG



TERMINAL STYLE 3
TURRET, 3/16" LONG



WIRE TERMINAL STYLES



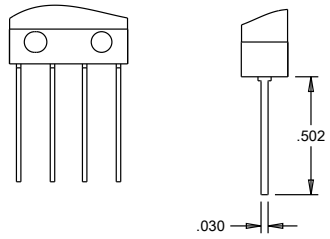
24 AWG

TERMINAL NO.	WIRE COLOR
1	BROWN
2	YELLOW
3	RED
4	BLUE

WIRE LENGTH FOR A, B, C, D & E

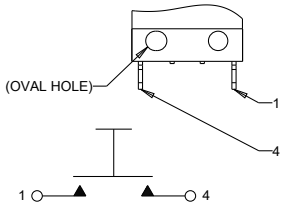
WIRE LENGTH CODE	DIM. "X"	DIM. "Y"
A	06.00± .38	06.09± .38
B	12.00± .50	12.09± .50
C	18.00± .50	18.09± .50
D	24.00± .50	24.09± .50
E	30.00± .75	30.09± .75

TERMINAL STYLE 4
WIRE WRAP



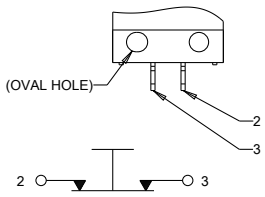
B3S Schematics

CIRCUIT STYLE 1
SPNO -DB, FORM X



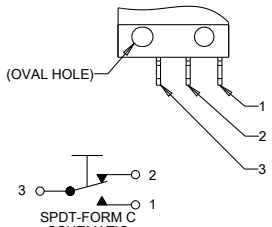
SPST-NO-DB
SCHEMATIC

CIRCUIT STYLE 2
SPNC-DB, FORM Y



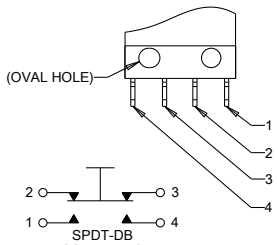
SPST-NC-DB
SCHEMATIC

CIRCUIT STYLE 3
SPDT, FORM C



SPDT-FORM C
SCHEMATIC

CIRCUIT STYLE 4
SPDT-DB, FORM Z



SPDT-DB
SCHEMATIC