

# SEALED BASIC SWITCH WITH LEVERS

**B3S-5**  
SEALED BASIC  
SWITCHES

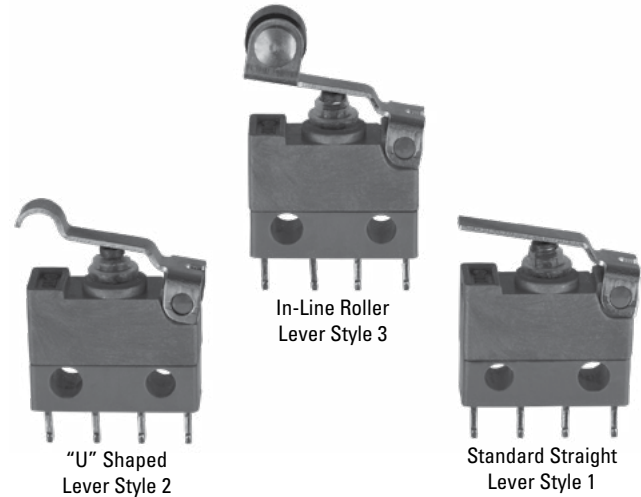
SEALED, DOUBLE BREAK, SNAP-ACTION, SUBMINIATURE, INTEGRAL LEVERS

The B3S-5 sealed, subminiature basic switch is made with an integral actuating lever, combining the switch and actuator into one assembly. Sealed to IP68S, the snap-action switch is tested to 1 million cycles at logic level, offering reliable operation in demanding applications and precision in terms of accuracy and repeatability.

The B3S-5 subminiature switch is designed for use in places where space is limited, including internally within toggle, pushbutton and limit switches. It works well in the aerospace, industrial and material handling markets for applications such as conveyor belts, forklifts, ON/OFF switches, door latching mechanisms, fire suppression systems, and timing devices.

## Features:

- **Integral Lever Actuators**
- **Sealed to IP68S**
- **Double break circuit**
- **Logic level switching option tested to 1 million electrical cycles**
- **0.200" switch width**
- **Choice of 11 standard terminal styles or wire leads**
- **Momentary action**
- **RoHS compliant**



| B3S-5 Standard Characteristics/Ratings: |                    |         |             |
|-----------------------------------------|--------------------|---------|-------------|
| ELECTRICAL RATINGS: Sea Level @ 28VDC   |                    |         |             |
| Rating                                  | Load               | Current | Life Cycles |
| High Level N.C. or N.O.<br>Form X or Y  | Resistive          | 8A      | 50,000      |
| High Level<br>SPDT Form C or Z          | Resistive          | 5A      | 50,000      |
| Logic Level @ 5VDC                      | Resistive          | 10mA    | 1,000,000   |
| DWV                                     | 1000Vrms           |         |             |
| Mechanical Life: 1,000,000 cycles       |                    |         |             |
| Seal: IP68S                             |                    |         |             |
| Operating Temp Range: -40°C to +85°C    |                    |         |             |
| Operating Force: See Part Number        |                    |         |             |
| MATERIALS:                              |                    |         |             |
| Cover:                                  | Blue Thermoplastic |         |             |
| Case:                                   | Blue Thermoset     |         |             |
| Boot:                                   | Silicone Rubber    |         |             |

Ihr offizieller Vertriebspartner



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Indicate. Control. Connect.

ALDERS electronic GmbH  
Arnoldstraße 19  
47906 Kempen

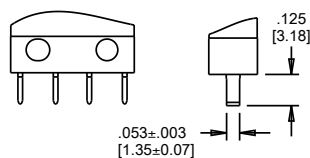
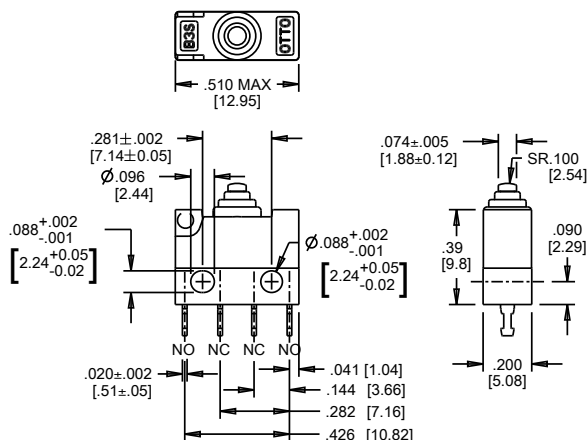
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## B3S- 5 PART NUMBER CODE

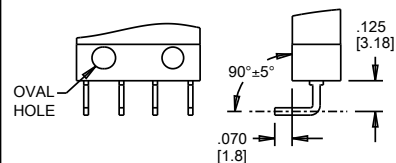
| B3S                               | — | X                                            | X                                                  | X                  | X                      |
|-----------------------------------|---|----------------------------------------------|----------------------------------------------------|--------------------|------------------------|
| Switch Width/<br>Actuator         |   | Terminal Style                               | Lever Type<br>and Force                            | Circuitry          | Contact Rating         |
| 5. 0.200" Wide,<br>Lever Actuator |   | 0. Special - See Separate<br>Product Drawing | 1. Standard Straight<br>5.5 oz. Max Oper. Force    | 1. SPNO-DB, Form X | 1. High Level Ratings  |
|                                   |   | 1. PC Pins                                   | 2. "U" Shaped<br>5.5 oz. Max Oper. Force           | 2. SPNC-DB, Form Y | 2. Logic Level Ratings |
|                                   |   | 2. Turret, 1/8" Long                         | 3. In-Line Roller<br>6.4 oz. Max Oper. Force       | 3. SPDT, Form C    |                        |
|                                   |   | 3. Turret, 3/16" Long                        | 4. Perpendicular Roller<br>6.5 oz. Max Oper. Force | 4. SPDT-DB, Form Z |                        |
|                                   |   | 4. Wire Wrap                                 |                                                    |                    |                        |
|                                   |   | 5. Right Angle PC Pins                       |                                                    |                    |                        |
|                                   |   | 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                     |                                                    |                    |                        |

SEALED, DOUBLE BREAK, SNAP-ACTION, SUBMINIATURE, INTEGRAL LEVERS

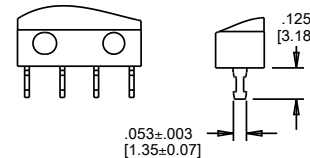
## BASIC SWITCH DIMENSIONS (APPLIES TO ALL SWITCHES IN THIS DRAWING)



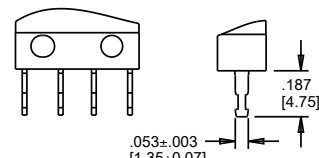
TERMINAL STYLE 1  
PC PINS



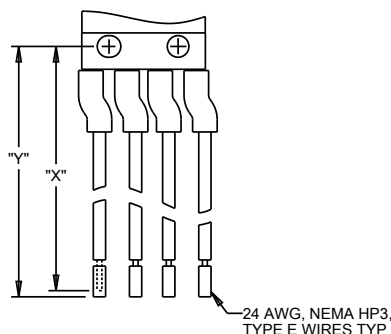
TERMINAL STYLE 5  
RIGHT ANGLE PC PINS



TERMINAL STYLE 2  
TURRET, 1/8" LONG



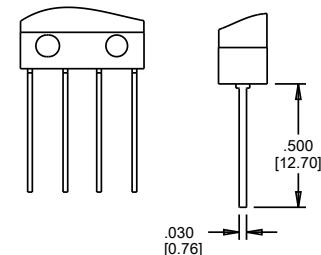
TERMINAL STYLE 3  
TURRET, 3/16" LONG



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

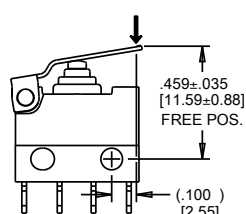
| WIRE LENGTH CODE | DIM. "X"                | DIM. "Y"                |
|------------------|-------------------------|-------------------------|
| A                | 6.00±.38 [152.4±9.7]    | 6.09±.38 [154.7±9.7]    |
| B                | 12.00±.50 [304.8±12.7]  | 12.09±.50 [307.1±12.7]  |
| C                | 18.00±.50 [457.2±12.7]  | 18.09±.50 [459.5±12.7]  |
| D                | 24.00±.50 [609.6±12.7]  | 24.09±.50 [611.9±12.7]  |
| E                | 30.00±.75 [762.0±19.05] | 30.09±.75 [764.3±19.05] |

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



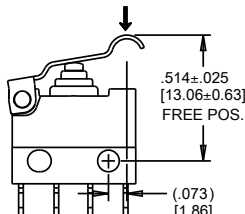
TERMINAL STYLE 4  
WIRE WRAP

OPER. POINT: .378±.029  
OVERTRAVEL: .010 MIN.  
MOVE. DIFF.: .038±.019



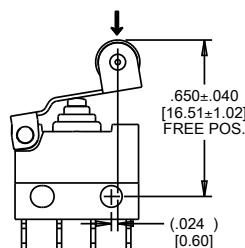
STANDARD STRAIGHT LEVER  
(LEVER TYPE OPTION 1)

OPER. POINT: .448±.025  
OVERTRAVEL: .010 MIN.  
MOVE. DIFF.: .033±.017



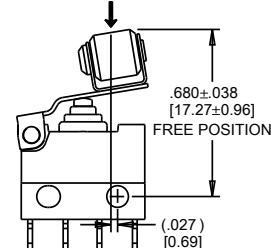
"U" SHAPED LEVER  
(LEVER TYPE OPTION 2)

OPER. POINT: .585±.030  
OVERTRAVEL: .010 MIN.  
MOVE. DIFF.: .036±.020

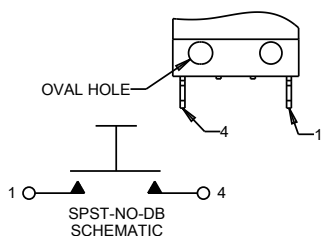


IN-LINE ROLLER LEVER  
(LEVER TYPE OPTION 3)

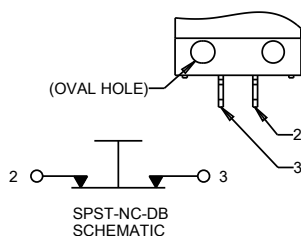
OPER. POINT: .609±.029  
OVERTRAVEL: .010 MIN.  
MOVE. DIFF.: .034±.019



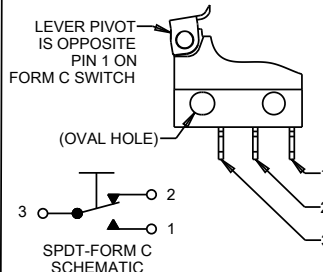
PERPENDICULAR ROLLER LEVER  
(LEVER TYPE OPTION 4)



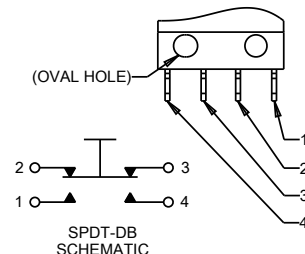
CIRCUIT STYLE 1  
SPNO-DB, FORM X



CIRCUIT STYLE 2  
SPNC-DB, FORM Y



CIRCUIT STYLE 3  
SPDT, FORM C



CIRCUIT STYLE 4  
SPDT-DB, FORM Z