

# B5 Miniature



B5 series basic switches are miniature, double break, snap-action switches available in commercial and military grade. These switches feature up to 10 amps switching capability of up to 100,000 cycles. Mechanical life is up to 1 million cycles.

The molded housing is rugged and structurally stable. The terminals are sealed against solder flux entering the switch and are bright acid tin plated for excellent solderability.

**FEATURES:**

- Up to 10 amps switching capability
- High contact pressure
- Precision operating points
- Button accepts actuation directly from cam
- Constructed in accordance with MIL-PRF-8805/7 and MIL-PRF-119
- Available in commercial and military grades
- Four standard terminal styles or wire leads
- Momentary action
- RoHS compliant

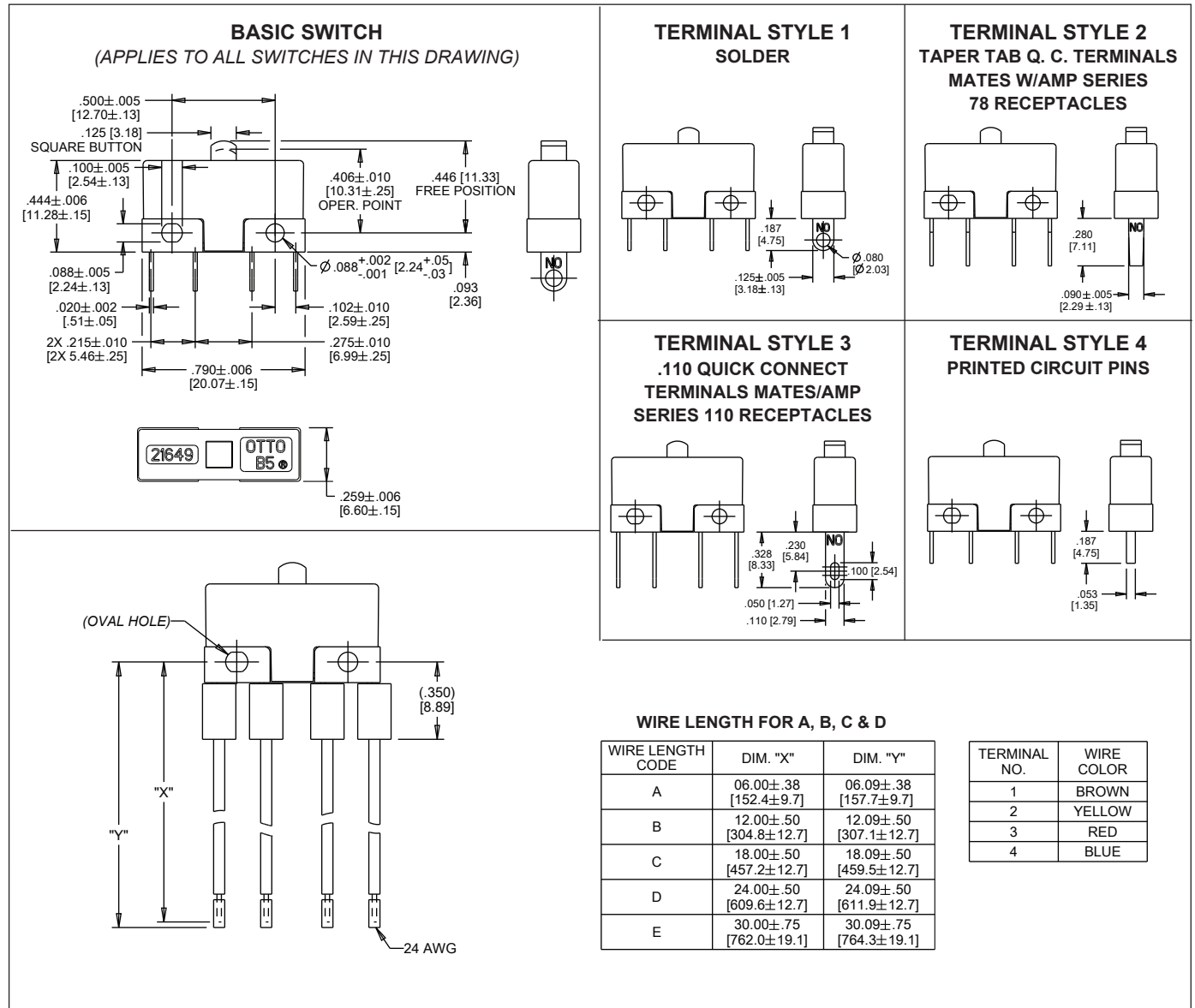


Solder Terminal Style

| Standard Characteristics/Ratings: |                                                            |                   |                     |                          |
|-----------------------------------|------------------------------------------------------------|-------------------|---------------------|--------------------------|
| ELECTRICAL RATINGS:               |                                                            |                   |                     |                          |
| Circuitry                         | Load                                                       | Sea Level @ 28VDC | 70,000 feet @ 28VDC | Sea Level @ 115VAC, 60Hz |
| SPNO-DB and SPNC-DB               | Resistive                                                  | 10A               | 10A                 | 7.5A                     |
|                                   | Inductive*                                                 | 7.5A              | 3.5A                | 5A                       |
|                                   | Lamp                                                       | 1A                | N/A                 | 3A                       |
| SPDT-DB 2 Circuit                 | Resistive                                                  | 10A               | 10A                 | 5A                       |
|                                   | Inductive*                                                 | 5A                | 2A                  | 5A                       |
|                                   | Lamp                                                       | 3A                | N/A                 | 1.5A                     |
| SPDT                              | Resistive                                                  | 10A               | 10A                 | 5A                       |
|                                   | Inductive*                                                 | 3A                | 1.5A                | N/A                      |
|                                   | Lamp                                                       | 3A                | N/A                 | N/A                      |
| *L/R = 0.026                      |                                                            |                   |                     |                          |
| DWV                               |                                                            | 1000Vrms          | 400Vrms             |                          |
| Electrical Life:                  | Up to 100,000 cycles                                       |                   |                     |                          |
| Mechanical Life:                  | Up to 1,000,000 cycles                                     |                   |                     |                          |
| Seal:                             | Unsealed                                                   |                   |                     |                          |
| Operating Temp Range:             | -65°C to +125°C                                            |                   |                     |                          |
| Operating Force:                  | 5 oz, +3/-2 oz or 6 oz max or 5 oz min                     |                   |                     |                          |
| Release Force:                    | 2 oz min                                                   |                   |                     |                          |
| Operate Point:                    | 0.406 +/- 0.010 inches from mounting holes                 |                   |                     |                          |
| Overtravel:                       | 0.012 inches min                                           |                   |                     |                          |
| Movement Differential:            | 0.020 +/- 0.005 inches                                     |                   |                     |                          |
| Pretravel:                        | 0.050 inches max                                           |                   |                     |                          |
| MATERIALS:                        |                                                            |                   |                     |                          |
| Case:                             | Thermoset, blue                                            |                   |                     |                          |
| Cover:                            | Thermoset, blue                                            |                   |                     |                          |
| Button:                           | Thermoplastic, black                                       |                   |                     |                          |
| Terminals:                        | Brass with bright acid tin plating                         |                   |                     |                          |
| Contacts:                         | Stationary: Silver with gold<br>Moveable: Silver with gold |                   |                     |                          |
| Terminal Hardware:                | None provided, optional wires                              |                   |                     |                          |
| Mounting Hardware:                | None provided                                              |                   |                     |                          |

## B5 Basic Switch Part Number Code

| B5 -                                     | X                                                                                                                                                                                                                       | X                                          | X                                                                                 | X                                                             | X |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------|---|
| Model                                    | Terminal Style or Wire Length                                                                                                                                                                                           | Operating Force                            | Circuitry                                                                         | Contact Material                                              |   |
| 1. Commercial<br>2. Military             | 1. Solder<br>2. Taper Tab Quick Connect<br>3. 0.110 Quick Connect ①<br>4. PC Pin<br>A. With Wires 06.0" Ig.<br>B. With Wires 12.0" Ig.<br>C. With Wires 18.0" Ig.<br>D. With Wires 24.0" Ig.<br>E. With Wires 30.0" Ig. | 1. 5 +3-2 oz<br>2. 6 oz max<br>3. 5 oz min | 1. SPNO-DB, Form X<br>2. SPNC-DB, Form Y<br>3. SPDT, Form C<br>4. SPDT-DB, Form Z | 1. Silver/Gold - High Current<br>2. Silver/Gold - Low Current |   |
| ① Mates with AMP Series 110 receptacles. |                                                                                                                                                                                                                         |                                            |                                                                                   |                                                               |   |



## B5 Schematics

