The CS3 B/B is an extremely rugged switch joystick designed specifically for bang / bang (on / off) operation. The durable housing and center pivot design make this device resistant to abuse and ideally suited for high duty cycle applications.

**STANDARD FEATURES**
- Compact and rugged construction design
- Proprietary blend, ultra-tough boot
- V series snap action switches
- Environmentally sealed mounting and corrosion resistant components

### JOYSTICK OPERATION
- AXIS OPTIONS
- HANDLE TRAVEL OPTIONS
- SHAFT DIAMETER OPTIONS

### MOUNTING
- MOUNTING STYLE OPTIONS
- MOUNTING FOOTPRINT / DIMENSIONS

### SPECIFICATIONS
- DIMENSIONS
- MECHANICAL SPECIFICATIONS
- ENVIRONMENTAL SPECIFICATIONS

### OUTPUT / COMMUNICATIONS
- SWITCH SPECIFICATIONS

### HANDLES
- HANDLE OPTIONS & COMPATABILITY
JOYSTICK OPERATION

**AXIS OPTIONS**

- **SINGLE AXIS**
  - PART #: CS3EBB

- **DUAL AXIS**
  - PART #: CS3VBB

**JOYSTICK ACTION**

- **SPRING RETURN**
  - Returns to center

**HANDLE TRAVEL OPTIONS**

- **OPEN GATE**
  - +/- 15° handle deflection

- **CROSS GATE**
  - +/-15° handle deflection in each axis

**SHAFT DIAMETER OPTIONS**

- **STANDARD**
  - Standard shaft that allows up to 8 wires.

- **HEAVY DUTY (CS3HD)**
  - Heavy duty shaft that allows up to 16 wires
### SPDT(FORM C) V SERIES MICROSWITCHES

<table>
<thead>
<tr>
<th>2 PER AXIS</th>
<th>4 PER AXIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT RATING (AC)</strong></td>
<td><strong>CURRENT RATING (DC)</strong></td>
</tr>
<tr>
<td>11A</td>
<td>6A</td>
</tr>
<tr>
<td><strong>VOLTAGE RATING (AC)</strong></td>
<td><strong>VOLTAGE RATING (DC)</strong></td>
</tr>
<tr>
<td>250</td>
<td>12 - 24</td>
</tr>
<tr>
<td><strong>TERMINATION</strong></td>
<td><strong>MAX. WIRE SIZE</strong></td>
</tr>
<tr>
<td>.187” x 0.20” male quick connect</td>
<td>18 AWG</td>
</tr>
</tbody>
</table>

*NOTE: If your controller configuration includes a wired handle option add 1” [25.4mm] to the depth to insure the wire service loop has panel clearance at base of shaft and that the wire service loop can operate unobstructed in all directions.*
# MOUNTING STYLE OPTIONS

## DROP-IN MOUNTING
Mounts from above.

![DROP-IN MOUNTING STYLE](image)

## PANEL MOUNTING
Mounts from below.

![PANEL MOUNTING STYLE 1](image)

![PANEL MOUNTING STYLE 2](image)

All dimensions in inches [mm] and are subject to change.
HANDLE OPTIONS

**BH**
Lever handle with optional:
- (Top) Rocker Switch
- (Top) Momentary Push Button
- (Side) Lever Actuated Momentary Push Button

**FG -3**
Fighter grip handle with optional:
- Rocker Switches
- Thumbwheels
- Push Buttons
- Trigger

**FG -4**
Fighter grip handle with optional:
- Rocker Switches & Thumbwheels
- Push Buttons
- Trigger
- Hand Rest
- Twist Function

**MG1**
T Handle with optional:
- Side Push Button

**MG13**
Twist handle with optional:
- Side Push Button

**MG27**
Options: Extended or Recessed Push Button

**ROUND BALL**
Standard handle

**RH**
Rocker handle with handrest and optional:
- (Top) Rocker Switch
- (Top) Momentary Push Button
- (Top) Maintained Push Button
- (Side) Momentary Push Button

**RHS**
Rocker handle with optional:
- (Top) Rocker Switch
- (Top) Momentary Push Button
- (Top) Maintained Push Button

**TH25**
Twist handle

**CUSTOM HANDLES**
Contact us today to learn more about our engineering & design services.

HEIGHT:
- BH: 4.9”
- FG -3: 7.5”
- FG -4: 8”
- MG1: 2.9”
- MG13: 3.2”
- MG27: 3.9”
- ROUND BALL: 2.4”
- RH: 5.7”
- RHS: 4.7”
- TH25: 3.9”

*MOUNTING STYLE COMPATIBILITY: D1 DROP-IN MOUNTING
P1 PANEL MOUNTING STYLE 1
P2 PANEL MOUNTING STYLE 2

*Handle heights shown are for panel mounting styles. Add 0.7” for drop-in mounting.*
**SPECIFICATIONS**

### MECHANICAL DATA

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Life</td>
<td>20 million life cycles</td>
</tr>
<tr>
<td>Handle Travel</td>
<td>±15 degrees</td>
</tr>
<tr>
<td>Standard (CS3) Shaft</td>
<td>2.4&quot; [61mm] shaft length 0.32&quot; [8mm] shaft diameter</td>
</tr>
<tr>
<td>Heavy Duty (CS3HD) Shaft</td>
<td>2.4&quot; [61mm] shaft length 0.40&quot; [10mm] shaft diameter</td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL DATA

<table>
<thead>
<tr>
<th>Condition</th>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>-13°F to +158°F [-25°C to +70°C]</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°F to +158°F [-40°C to +70°C]</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP54</td>
</tr>
</tbody>
</table>

“Wired handles require additional 1" [25.4 mm] of clearance at the base of the shaft to ensure that the wire service loop can operate unobstructed in all directions.

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**DIMENSIONS**

**DROP-IN MOUNTING & PANEL MOUNTING STYLE 2**

Shown with BH handle.

**PANEL MOUNTING STYLE 1**

Shown with round ball handle.

All dimensions in inches [mm] and are subject to change.