



CS3 JOYSTICK

The CS3 is an extremely rugged joystick in an ultra-compact and versatile design. The durable housing and center pivot design make this device resistant to abuse and ideally suited for high duty cycle applications.

1, 2 and 3 axis control is available as well as a variety of standard and custom handles and grips with push buttons and levers. Both separate and simultaneous operation of each is achieved with standard gate patterns.



SPECIFICATIONS

GENERAL DATA

| | |
|--------------------------|--|
| # of Axis | Single, Dual or Three* *Third axis is achieved via a twist handle function or thumbwheel. |
| Output Options | Hall-Effect, CANOpen, Basic CAN, J1939 & 4-20mA |
| Joystick Action | Spring Return |
| Handle Travel | +/- 20 degrees each axis |
| Gate | Open or Cross |
| Handle Compatibility | Round Ball, BH, RH, RHS, FG-3, FG-4, FG-5, G58, MG1, MG13, MG27 & TH30 |
| Life | 20 million plus cycles |
| Materials | High strength, glass filled nylon housing. |
| Est. Shipping Weight | 2 lbs. |
| Est. Shipping Dimensions | 8 in. x 8 in. x 8 in. |

MOUNTING DATA

| | |
|--------------------|--|
| Mounting Style | Drop-in or Panel (From Below) |
| Mounting Footprint | 2.76" x 2.76 Panel mount 3.54" x 3.54" Drop-in mount See literature for additional mounting specifications |

ENVIRONMENTAL DATA

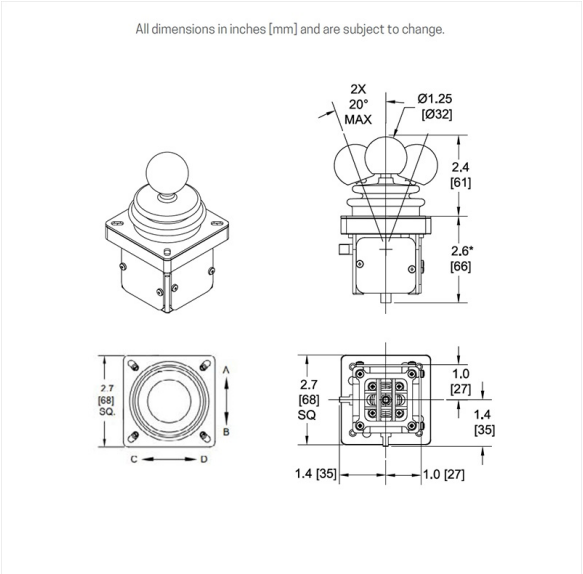
| | |
|-----------------------|--|
| IP Rating | IP54 |
| Operating Temperature | -13 to +158 degrees F [-25 to +70 degrees C] |
| Storage Temperature | -40 to +158 degrees F [-40 to +70 degrees C] |

ELECTRICAL DATA

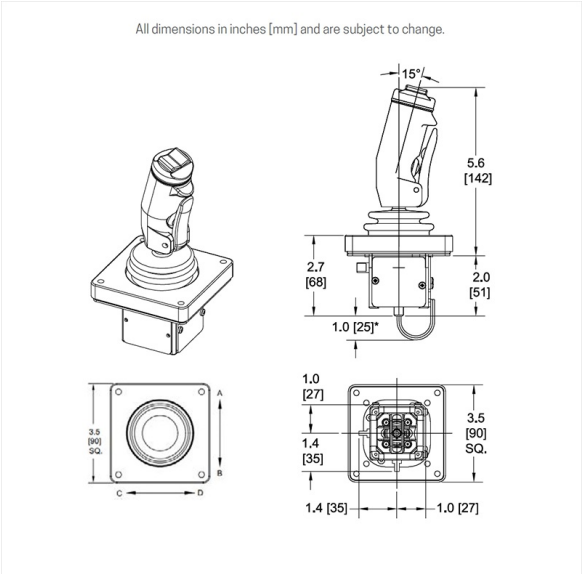
| | |
|----------------------------|---|
| | Supply Voltage: 4.5 to 5.5 VDC |
| | Output Voltage: Ratiometric 0.5 - 2.5 - 4.5 +/- 0.15V @ 5.0V supply Additional supply and output options available |
| | Output Current: 10mA |
| Hall-Effect Specifications | Power Consumption: 20 mA @ full load |
| | Termination: 20 AWG wire 6" leads with mini-fit connector |
| | EMC Emissions: Complies with EN61000-6-4:2007 Class A Group 1, 80-1000 MHz |
| | EMC Immunity: Complies with or exceeds EN61000-6-2:2005, expanded to include: RFI Immunity of 100 V/M @ 80-1000 MHz ESD Immunity of 15Kv air, 8Kv contact |
| | CANOpen, J1939 or basic CAN protocols |
| Can Specifications | 4 analog inputs 8 digital inputs 2 digital outputs |
| | See a complete listing of CANbus technical data in ESS408 CAN Based Interface Module Board literature |
| Additional Specifications | Reference product literature for additional specifications |

Technical Drawings

Dimensional

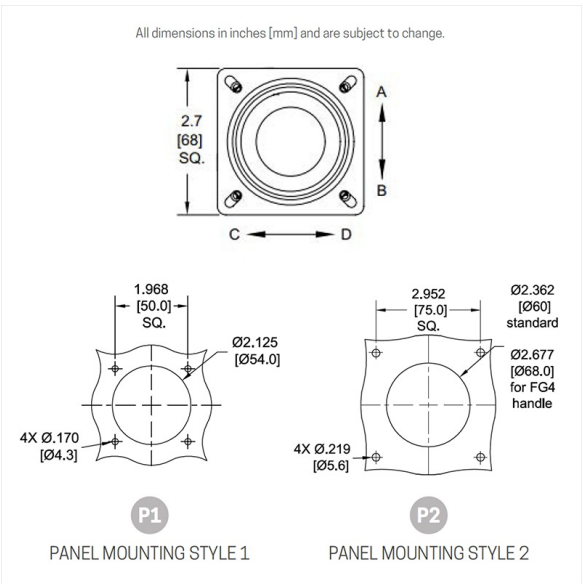
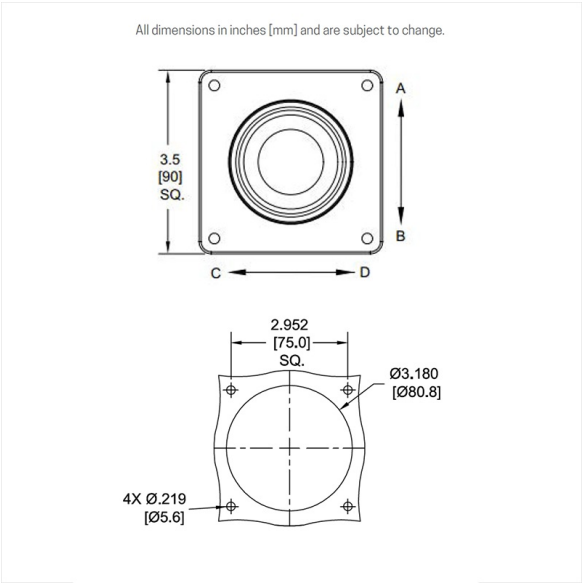


Panel mounting style 1 (P1). Shown will round ball handle.



Drop-in mounting & panel mounting style 2 (P2). Shown with BH handle.

Mounting



Wiring

Wiring

Bang/Bang

The **CS3B/B** uses a V series snap-action switch with 0.187" quick connect tab or can be directly soldered to. The recommended maximum wire size is 18 AWG.

Hall-effect

4.5 to 5.5 VDC Supply:

CS3E - 1 Axis Single Sensor

| PIN | COLOR | FUNCTION |
|-----|--------|------------------|
| 7 | WH/RED | +5.00 VDC Supply |
| 8 | WH/BLK | Ground |
| 9 | BROWN | A-B Output |

Connections:

9-position AMP MATE-N-LOCK with female contacts - mates with connector 1-480706-0 and male contacts 350690-1 (24-18 AWG).

CS3V - 2 Axis Single Sensor

| PIN | COLOR | FUNCTION |
|-----|-------|------------------|
| 1 | ORN | +5.00 VDC Supply |
| 2 | GRN | Ground |
| 3 | BLU | A-B Output |
| 4 | GRY | C-D Output |

Connections:

10-position MOLEX Minifit with female contacts - mates with connector 39-01-2101 and male contacts 39-00-0041 (24-18 AWG).

Wiring & connecting details