

Micro Joystick

Technical Information

#4-1413 McGill Road
Kamloops B.C. Canada V2C 6K7
Ph: (250) 374-2278

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www.suregripcontrols.com

SURE GRIP
CONTROLS INC.

Features:

- Compact Dual axis joystick with analog proportional outputs
- Non-Redundant and Redundant options available
- IP-67 (above panel)
- Long operating life, > 1,000,000 cycles
- Utilizes non-contact Hall Effect technology



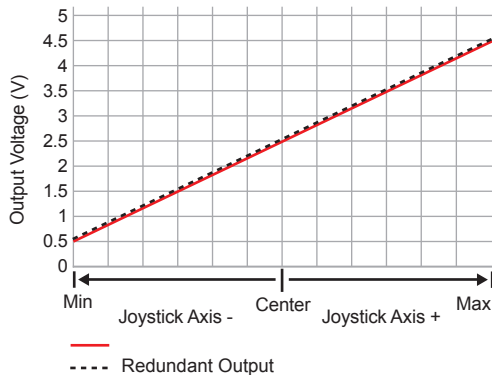
Description:

The Micro Joystick is a miniature dual axis Proportional Hall Effect Joystick with limited moving parts. The micro joystick is suitable for exposed installations and can provide an additional set of proportional outputs when installed within a control grip faceplate.

Optional Feature:

A dual redundant version of the Micro Joystick is available for required applications.

Typical Proportional Output Voltage Range



Micro Joystick installed in 'J' Series Control Handle



General Specifications

| Parameter | Min | Typ | Max | Units |
|--------------------------------------|----------------|-------------------|----------------|--------------|
| Input Power Supply: | | | | |
| Supply Voltage | | 5 +/-1% | | V |
| Supply Current (max) | | 16 | | mA |
| Control Outputs: | | | | |
| | $V_{out(min)}$ | $V_{out(center)}$ | $V_{out(max)}$ | |
| Output Voltage Range, X and Y axis | 0.5 +/-5% | 2.5 +/-5% | 4.5 +/-5% | V |
| Output Load Per Axis | 1 | 10 | | K Ω |
| Mechanical Specifications: | | | | |
| Joystick Travel on Axis | | 19 +/- 1 | | Degrees |
| Joystick Travel on 45 degree | | 26 +/- 1 | | Degrees |
| Cycle life | | 4,000,000+ Cycles | | |
| Environmental Specifications: | | | | |
| Operating Temperature Range | | -40 to +70 | | $^{\circ}$ C |
| Ingress Protection | | IP67* | | |

(*) With appropriate mounting in panel

Micro Joystick

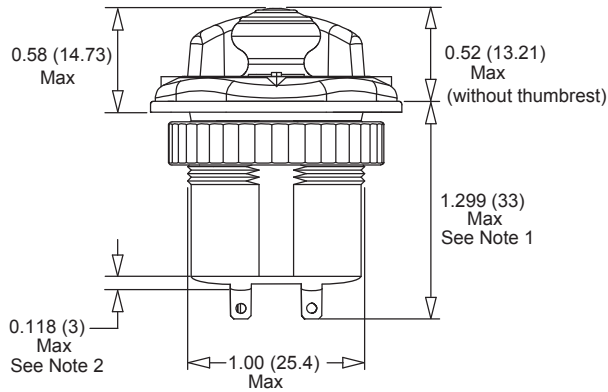
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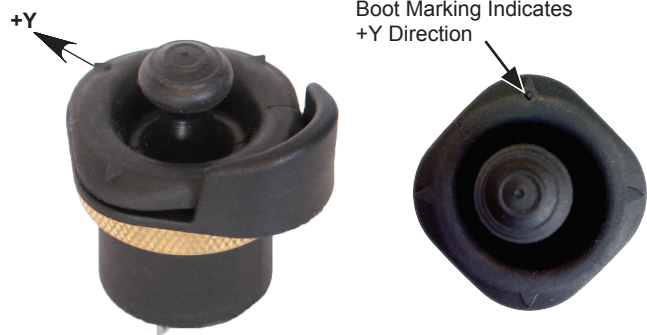
Dimensions Inches (mm):



Notes:

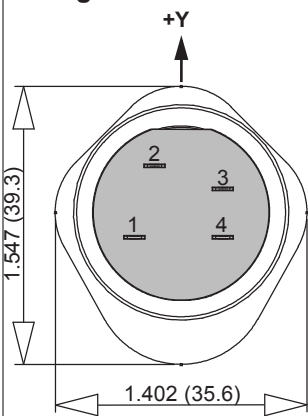
1. Maximum mounting depth (no thumbrest installed).
2. Maximum extension of potting material below bottom of housing.

Joystick Axis Orientation:



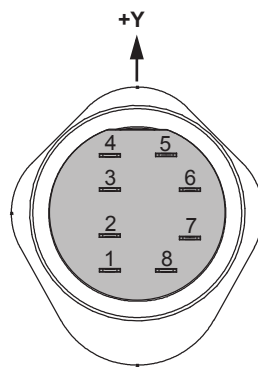
Shown with Optional Thumbrest

Wiring Connections:



Bottom View Pinout:

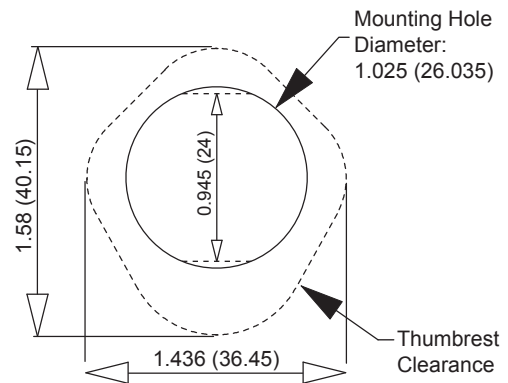
1. +5VDC
2. Ground
3. X Axis Output
4. Y Axis Output



Bottom View Pinout Dual-Redundant Option:

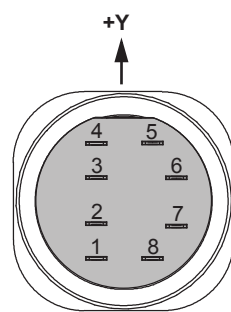
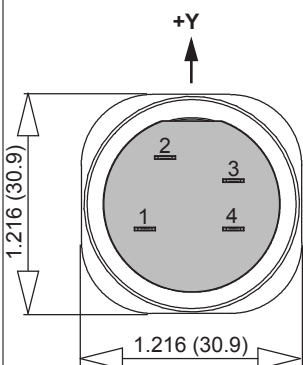
- | | |
|--------------------|--------------------|
| 1. +5VDC 1 | 5. +5VDC 2 |
| 2. Ground 1 | 6. Ground 2 |
| 3. X Axis Output 1 | 7. X Axis Output 2 |
| 4. Y Axis Output 1 | 8. Y Axis Output 2 |

Recommended Mounting:

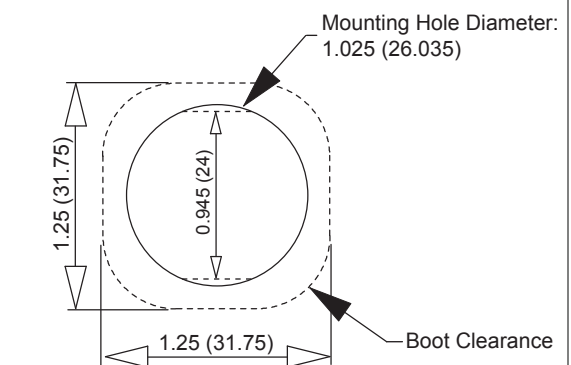


Maximum Panel Thickness: 0.236 (6)

Alternate Square Orientation (Thumbrest N/A):



Recommended Mounting:



Maximum Panel Thickness: 0.236 (6)