SURE GRIP CONTROLS INC.
1949 Keating Cross Road, Saanichtion BC, Canada V8M 2A4
Ph: 250-544-2207 Fax: 250-544-2279 www.suregripcontrols.com

"JSM" Series Joystick

JSM Joysticks Description

Sure Grip Controls "JSM" Series electronic joystick is our second generation joystick that is a direct replacement to the previous "JM" series. The JSM joysticks have a smaller compact body while still using the same internal components and electronic as the larger JSL series.

Building on the high-reliability of the previous version, the "JSM" joystick now incorporates the newest 3D Hall sensor technology and advanced internal wire configuration. With all the electronics now relocated in the cap, it improves serviceability and allows us to offer switched, proportional, USB and CAN output options in both single and dual axis spring-return-to-center or friction hold configurations

The joystick comes standard with a basic "J" Series grip but it can be configured with a knob "S", "C" or "L" Series control grips.

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"JSM" Series Joystick

Features

+ Non-contact, programmable Hall sensors
+ Compact body, small footprint
+ Long life - lab tested to 20 million cycles
+ Rugged design - die-cast aluminum housing
+ Spring return to Center or Friction Hold
+ Single and dual axis gates
+ Latching option, end of travel
+ Switched and/or Proportional outputs
+ Simple construction: only 3 moving parts
+ EMI/RFI protected
+ Factory calibrated output range
+ Low power consumption

Specifications

Mechanical:
Maximum handle travel:
20 +/- 1 degrees (on axis)
28 +/- 1 degrees (at 45 degrees)
Force measured at bottom of faceplate (typical) to come out of center:
600 grams (on axis)
750 grams (at 45 degrees)
Force measured at bottom of faceplate (typical) at end of stroke:
750 grams (on axis)
900 grams (at 45 degrees)

Proportional Voltage Output (Typical):
Supply voltage: 5.0 VDC (+/- 0.1 VDC)
Supply current: 15 mA maximum
Typical Output: 0.5 - 2.5 - 4.5VDC, (+/- 0.2 VDC)

Switched Output Option:
Momentary Switched:
12/24 VDC: 2.5 amps max

Electronics

The JSM Series joysticks incorporates non-contact 3D Hall sensor technology to detect and transmit handle position. Single or dual redundant programmable, temperature-compensated Hall sensors are installed in the cap and detect the location of a magnet located on the end of the shaft.

The output of the Hall sensor changes in proportion to changes in the magnetic field caused by handle movement. This electronic design yields a linear relationship between handle position and signal output, with no hysteresis and a stable null over the entire range of handle displacement.

Output Options:
* Analog .5 - 2.5 - 4.5 vdc output, single or dual redundant sensors

* Switched 2.5 amp Solid State Switched outputs c/w with redundant Analog outputs

* PWM High Current Valve driver outputs, four 2.5 amp PWM outputs plus one off axis switched output *(call factory for details)*

* USB 2 interface *(call factory for details)*

* J1939 CAN output *(call factory for details)*

Environmental

Mechanical:
Cycle tested -30C to +25C
IP67 above panel (with Knob installed)

Electronics:
Fully sealed and encapsulated electronics