

MKF-JS09-V2

Industrial Thumb Joystick, Hall effect, 1 or 2 axis, Panel Mounted



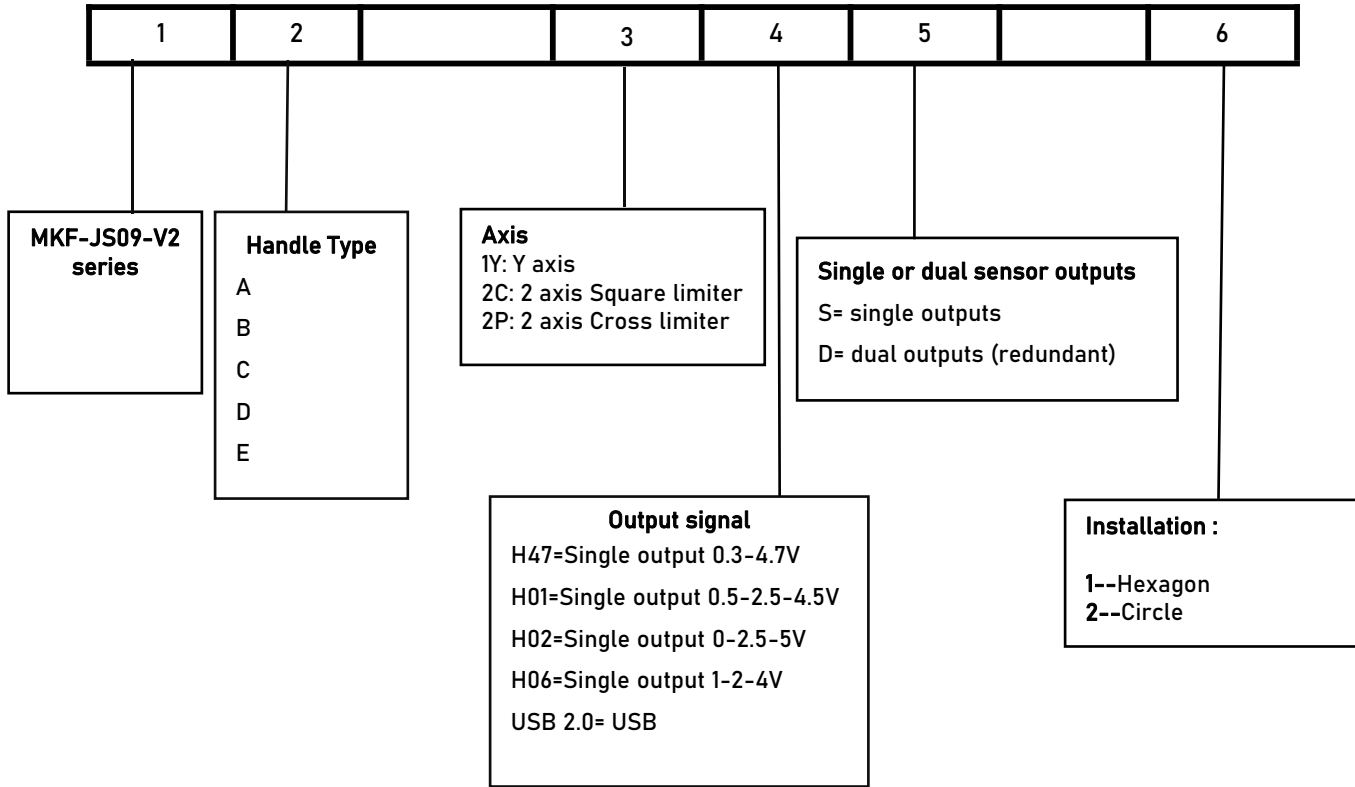
DESCRIPTION

MKF-JS09-V2 thumbstick is a proportional one or two axes joystick in a miniature package. Featuring non-contacting Hall effect technology for long life performance, this series thumbstick is available with multiple linear output options including single and dual (redundant) outputs. It is similar in size and operation to “gamepad” controls, but in a rugged industrial package. Typical applications include pendant and remote controls as well as joystick handle and armrest integration.

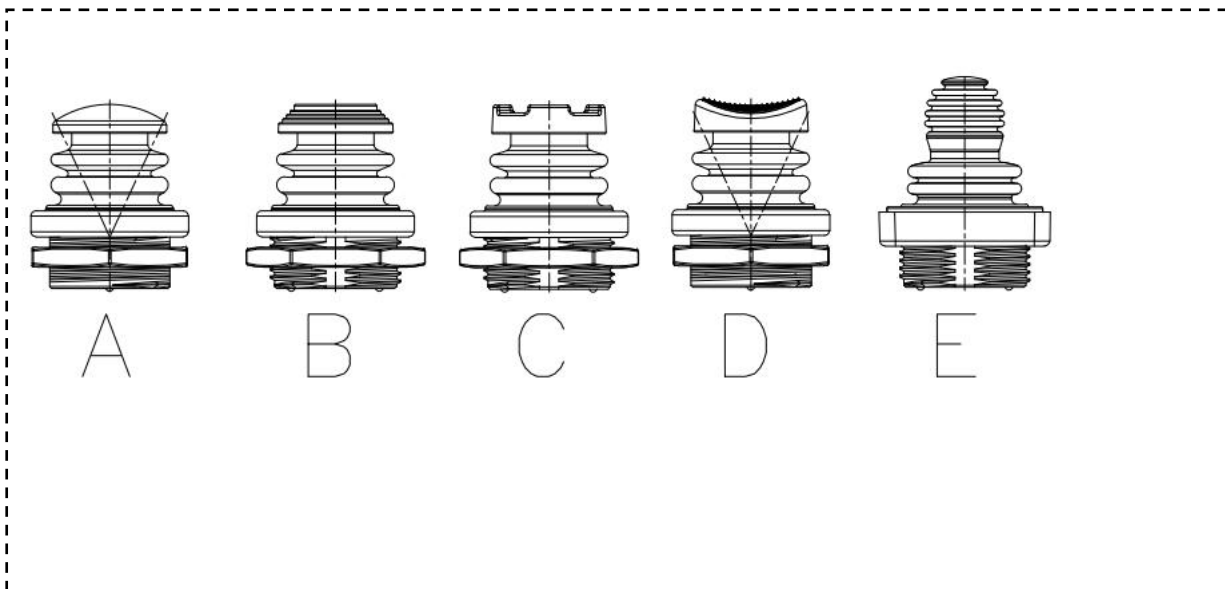
SPECIFICATION

Button	0
Operation Range	Circle, Straight, Cross
Operation Angle	XY axis $\pm 25^\circ$
Power Supply	DC5V
Outputs	Analogue voltage 0.5V-2.5V-4.5V
Life Span	5 million operating cycles
Material	engineering plastics
Degree of protection	IP67
Operation Temperature	-40°C to +70°C

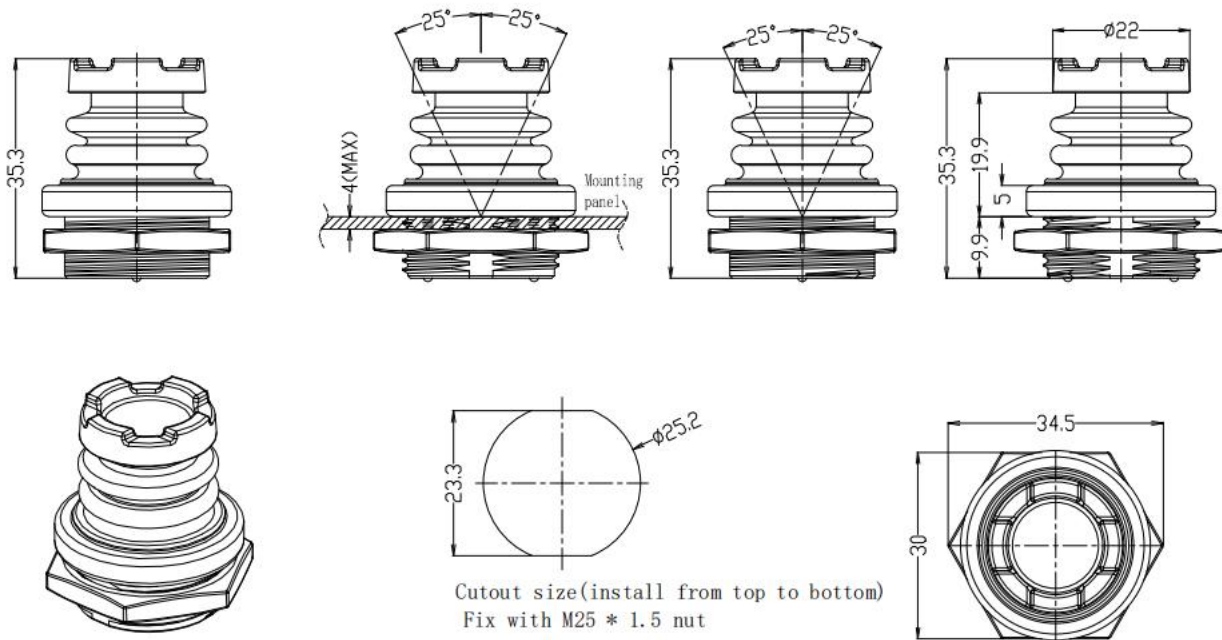
PRODUCT CONFIGURATION



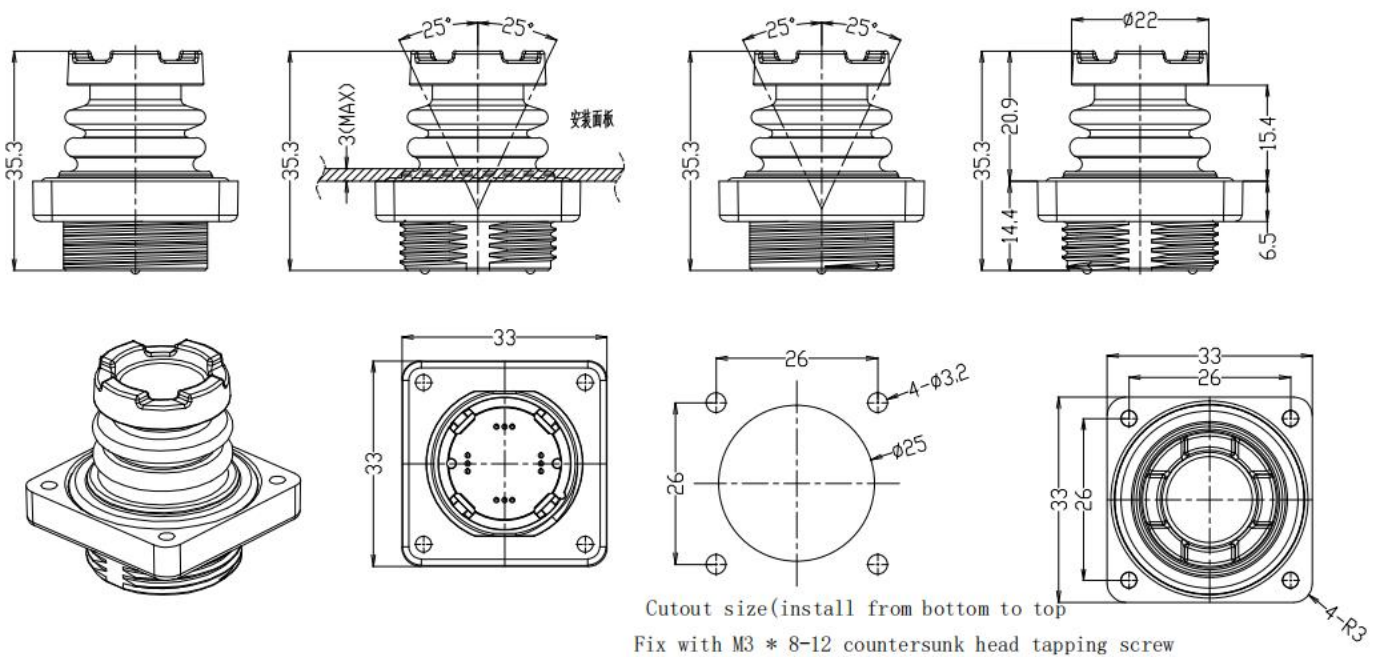
HANDLE TYPE



MECHANICAL DRAWING---INSTALLATION 1 Hexagon



MECHANICAL DRAWING---INSTALLATION 2 CIRCLE



MECHANICAL (FOR X, Y AXES)

Operating Force	3.1N±0.5N (0.70lbf±0.11lbf)
Maximum Vertical Load	200N (45lbf)
Maximum Horizontal Load	150N (33.7lbf)*
Mechanical Angle of Movement	±25° (50° total)
Life Cycles	>1 million
Mass/weight	18.25g ± 3.0g (0.64oz±0.11oz)
Lever Action (Centering)	Spring Centering

ENVIRONMENTAL

Operating Temperature	-40°C to +85°C (-40°F to +185°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Sealing	IP68, IP69K**
EMC Immunity Level	EN61000-4-3 sink cup decorative ring
EMC Emissions Level	EN61000-6-3:
ESD	EN61000-4-2

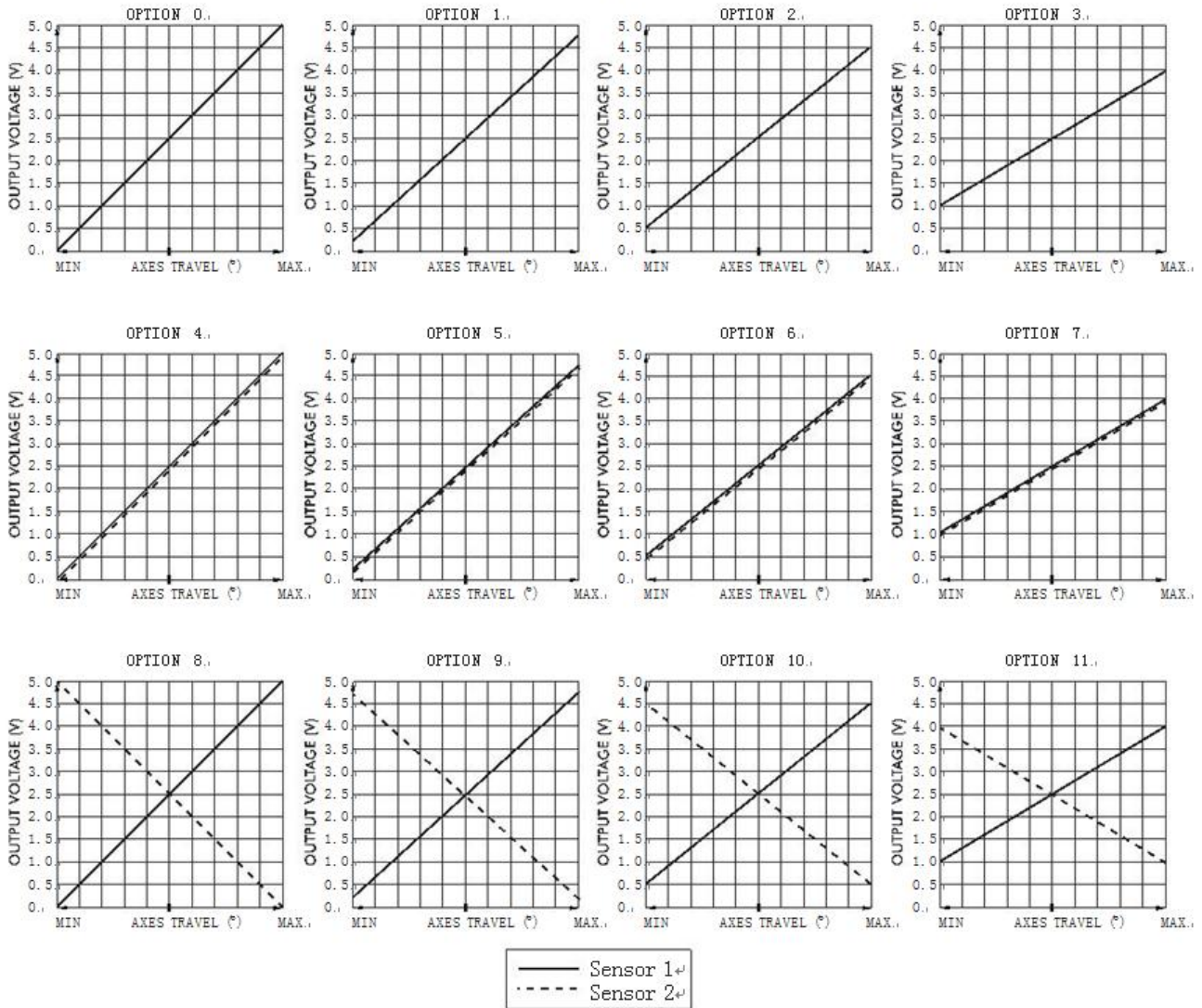
ELECTRICAL SENSOR

Resolution	1.22mV
Supply Voltage Range	5.00V±0.01V
Reverse Polarity Max	-10V
Over voltage Max	20V
Output Impedance	2Ω
Return to Center Voltage Tolerance	±250mV
Error Signal	1.0%

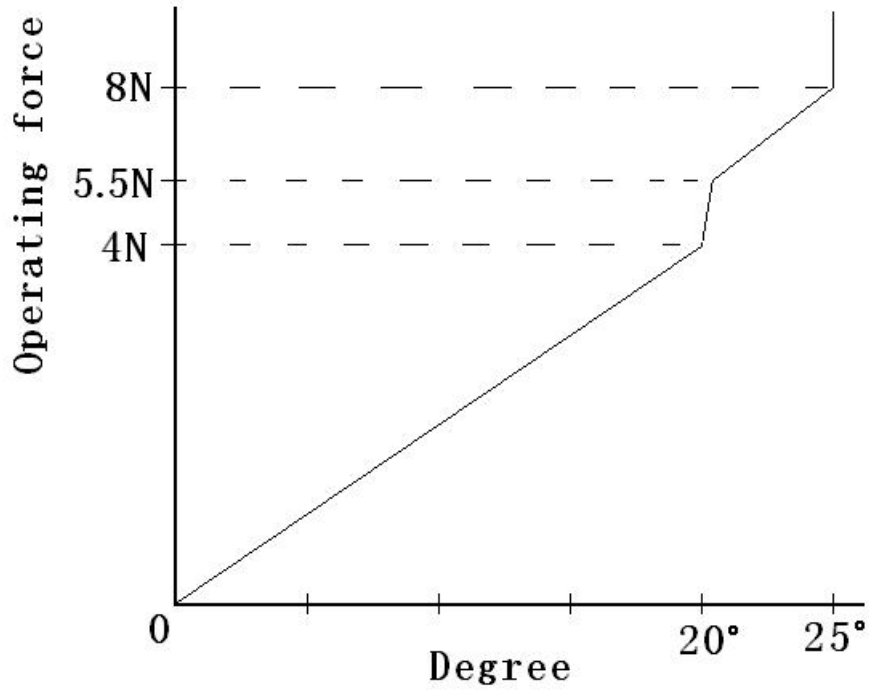
- ✧ Force applied to the top of the cap at full displacement.
 - ✧ All options are IP68 and IP69K rated, however Drop-in mounting does not prevent panel ingress.
- Note: The company reserves the right to change specifications without notice.

Analog signal output:

LINEAR OUTPUT OPTIONS⁺

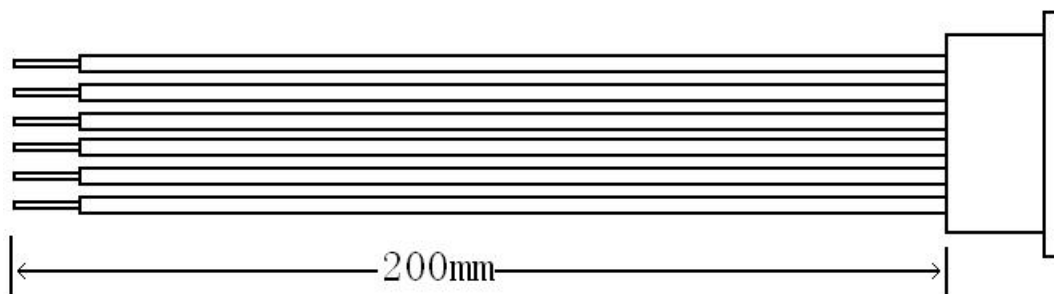


Operating force and angle drawing



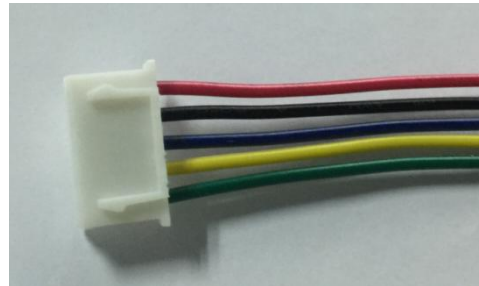
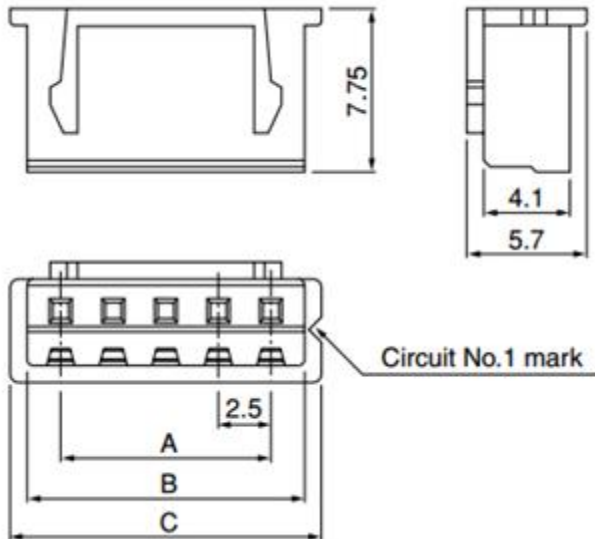
Connector-- Dual (redundant) output :Analog Voltage

- | | |
|-----------|------------|
| 1. Red | +5V |
| 2. Black | GND |
| 3. Yellow | X Signal 1 |
| 4. Green | Y Signal 1 |
| 5. Blue | X Signal 2 |
| 6. Brown | Y Signal 2 |



Connector: Single output

Model No:XHP-5



A=10.0 B=13.2 C=14.8 Q'ty/bag=1000

Analog Voltage

- | | | |
|----|---------|----------|
| 1. | Red | +5V |
| 2. | Black B | GND |
| 3. | Blue | NC |
| 4. | Yellow | X Signal |
| 5. | Green | Y Signal |