

# SJ70 Series Multi Axis Joystick

## Product Features

- Spring return, single-axis or dual-axis operated.
- Cross direction or arbitrary direction operated optional.
- Hall effect angle detection long life.
- Various output option.

## Application

Typical application on Cranes, loaders, Forklifts, excavators, access platform, tractors, harvesters, and so on.

## Technical Information

### Electrical data

Hall	
Power supply	$5 \pm 0.5\text{Vdc}$
Supply current (nominal power supply):	< 11 mA (Single axis), <22mA (Dual-axis)
Maximum allowable overload voltage	20Vdc
Reverse maximum allowable voltage	-10Vdc
Output linearity tolerance	$< \pm 0.2\text{V}$

### Mechanical features

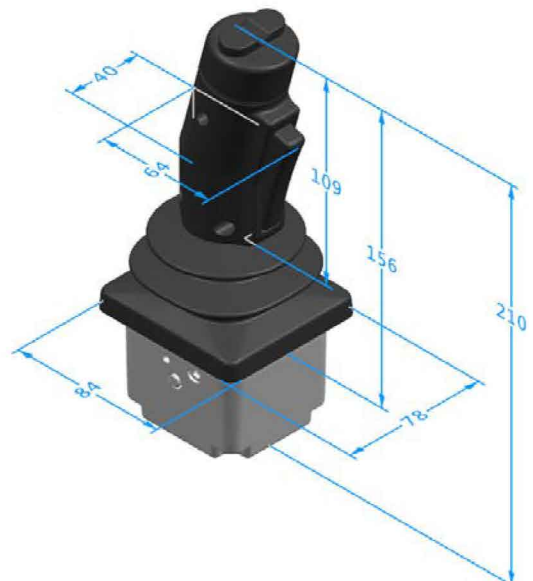
Travel angle	$\pm 20^\circ$
Operating type	Spring return
Breakout force	9N
Operating force(max)	20N
Maximum allowable force	>300N
Expecting life	>1million cycles (Hall effect)
Weight	450g (Without handle )

### Environmental data

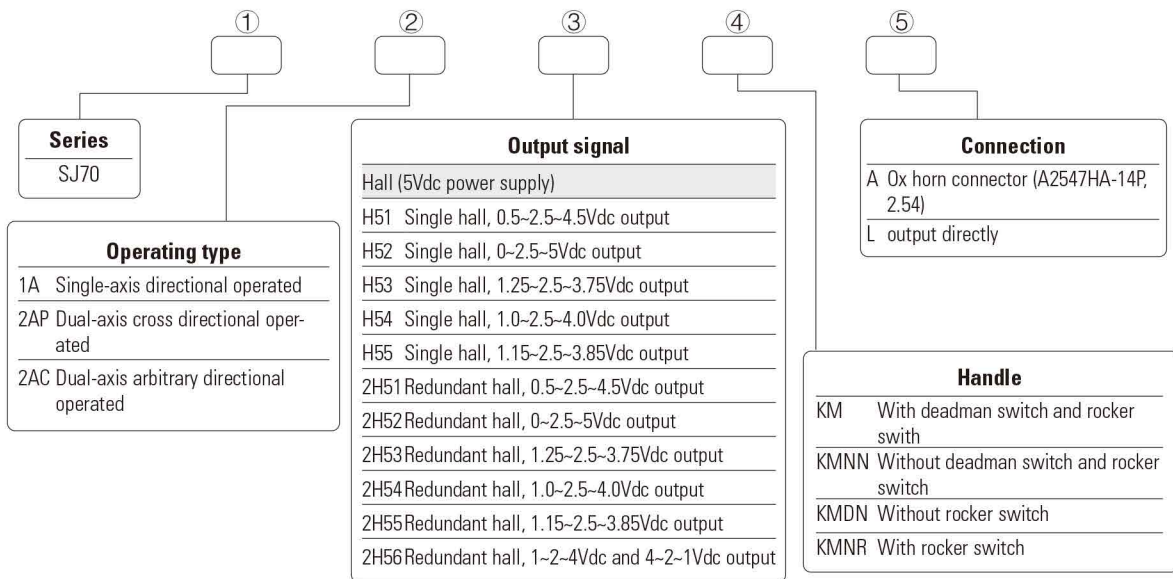
Operating temperature	$-30^\circ\text{C} \sim +70^\circ\text{C}$
Storage temperature	$-40^\circ\text{C} \sim +85^\circ\text{C}$
Protection level	IP65 (Above the flange )



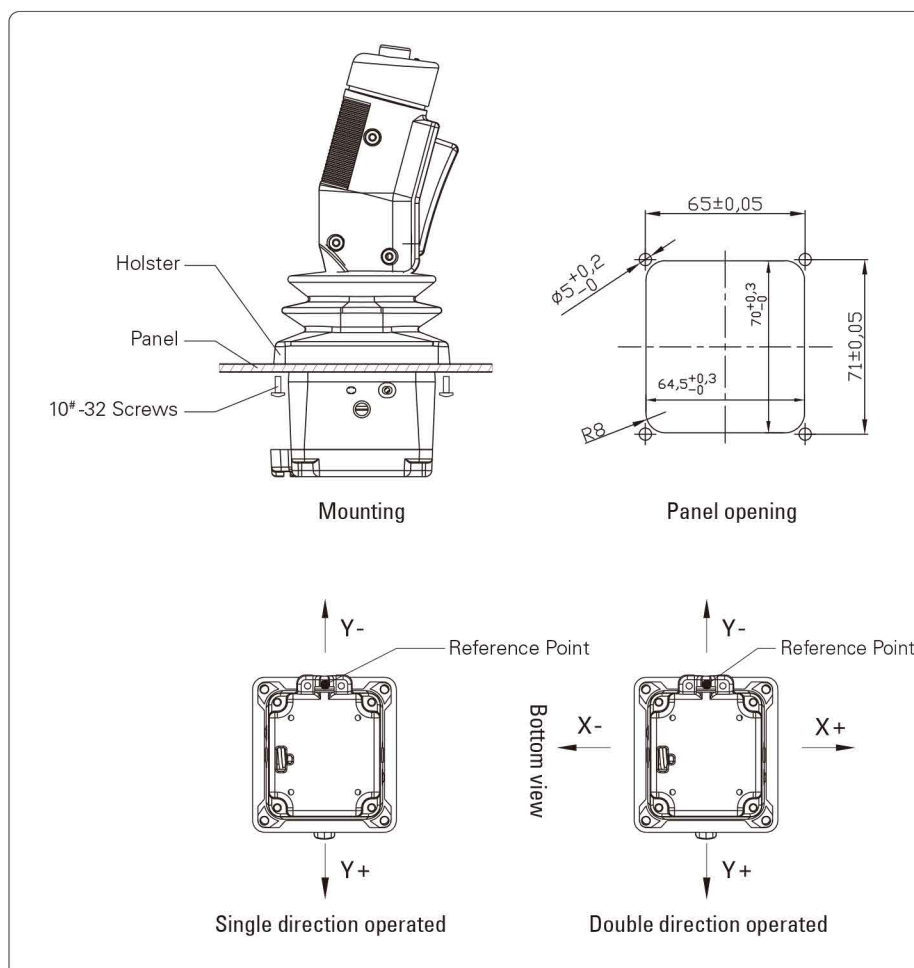
## Dimensions



## Product Configuration



## Product Installation



## Electrical Connections

### Redundant hall

Color	Function
Grey	Y-axis (forward and backward)
Yellow	Y-axis Redundant output (forward and backward)
Blue	Common terminal of Rocker switch
Purple	Deadman switch
Orange	Deadman switch
Black	Rocker switch (left)
Red	Rocker switch (right)
Green	X-axis (left and right)
Green&Black	X-axis Redundant output (left and right)
White	Power supply
Brown	0V

### Hall effect

Color	Function
Grey	Y-axis (left and right)
Yellow	X-axis (left and right)
Blue	Common terminal of Rocker switch
Purple	Deadman switch
Orange	Deadman switch
Black	Rocker switch (left)
Red	Rocker switch (right)
White	Power supply
Brown	0V

