

# TJ11 Series Dual Axis joystick

## Product Features

- Dual-axis finger operated, spring return.
- Spring return
- With center tap potentiometer angle detection.
- Proportional amplifier to direct drive hydraulic proportional valve optional.
- Maximum current 2mA directional switch.
- Potentiometer type sensor.

## Application

Typical application on remote control box, off-highway vehicle.



## Technical Information

### Electrical data

Power supply	<36Vdc
Total resistance	5K $\Omega$
Electrical angle	$\pm 30^\circ$
Center tap voltage	48%~52%Vdc
Center tap angle	$\pm 2.5^\circ$
On-load voltage (max)	32Vdc
Allowance maximum power dissipation	0.25W (25°C)
Load capacity:	2mA@30Vdc (Resistance load)
Breakout angle	$\pm 3^\circ \sim \pm 5^\circ$
Contact resistance	<200 $\Omega$

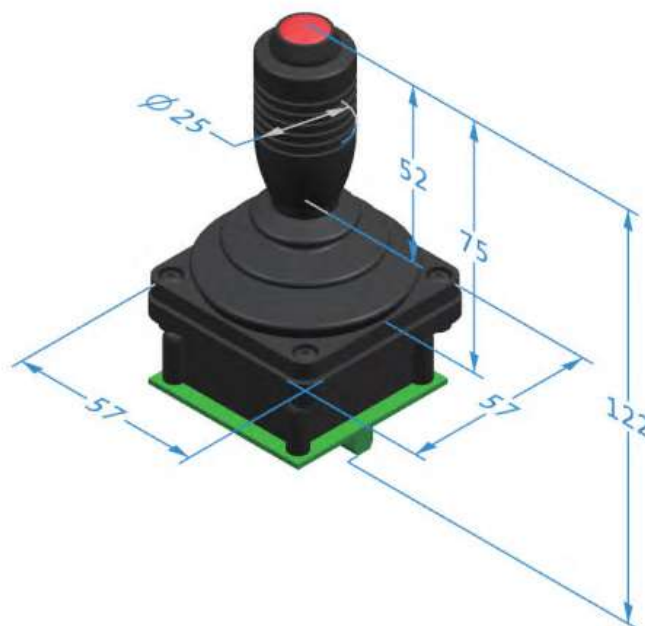
### Mechanical features

Travel angle	$\pm 32^\circ$
Operating type	Spring return
Breakout force	3.3N
Operating force(max)	10.8N
Maximum allowable force	300N (handle H greater than 160N)
Expecting life	>2 million cycles
Weight	125g

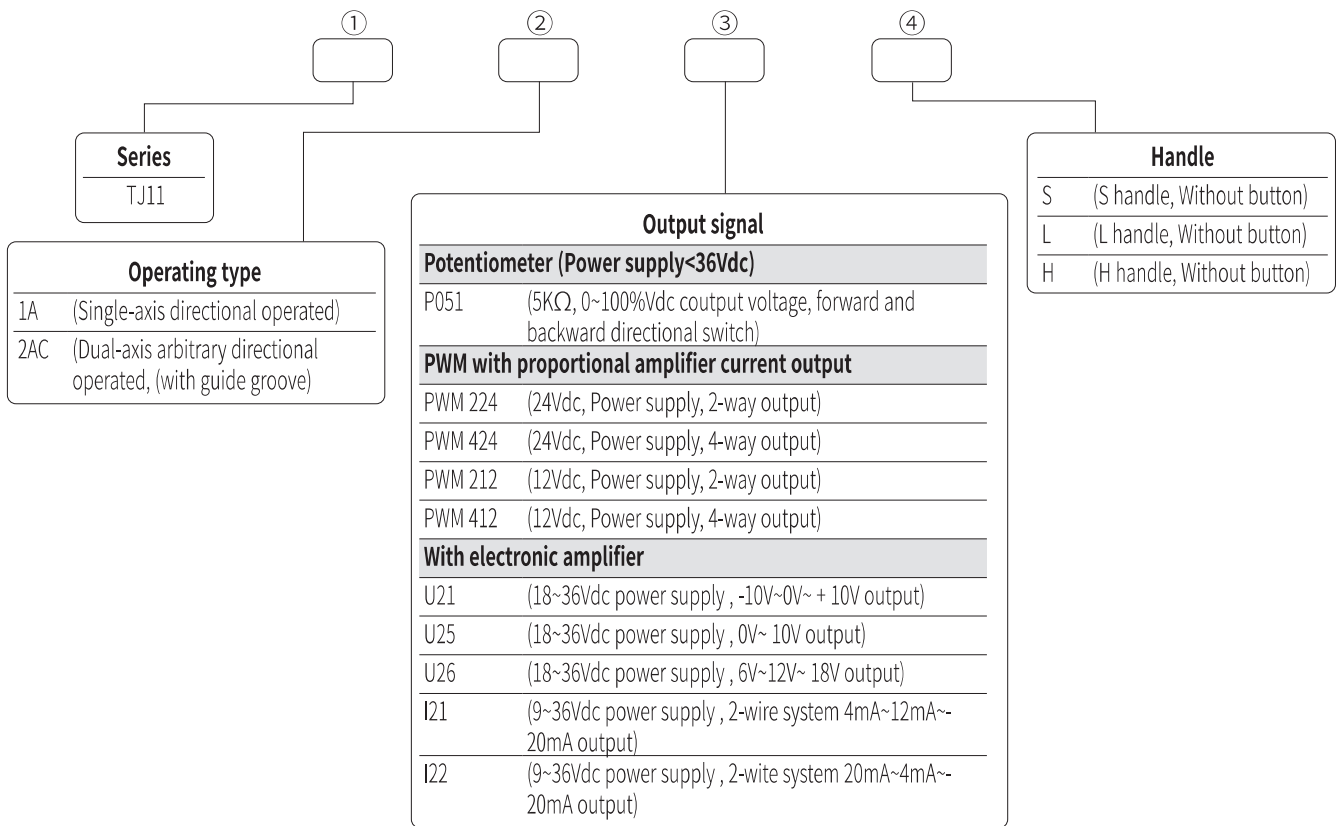
### Environmental data

Operating temperature	-30°C~+70°C
Storage temperature	-40°C~+85°C
Protection level	IP65 (above the flange)

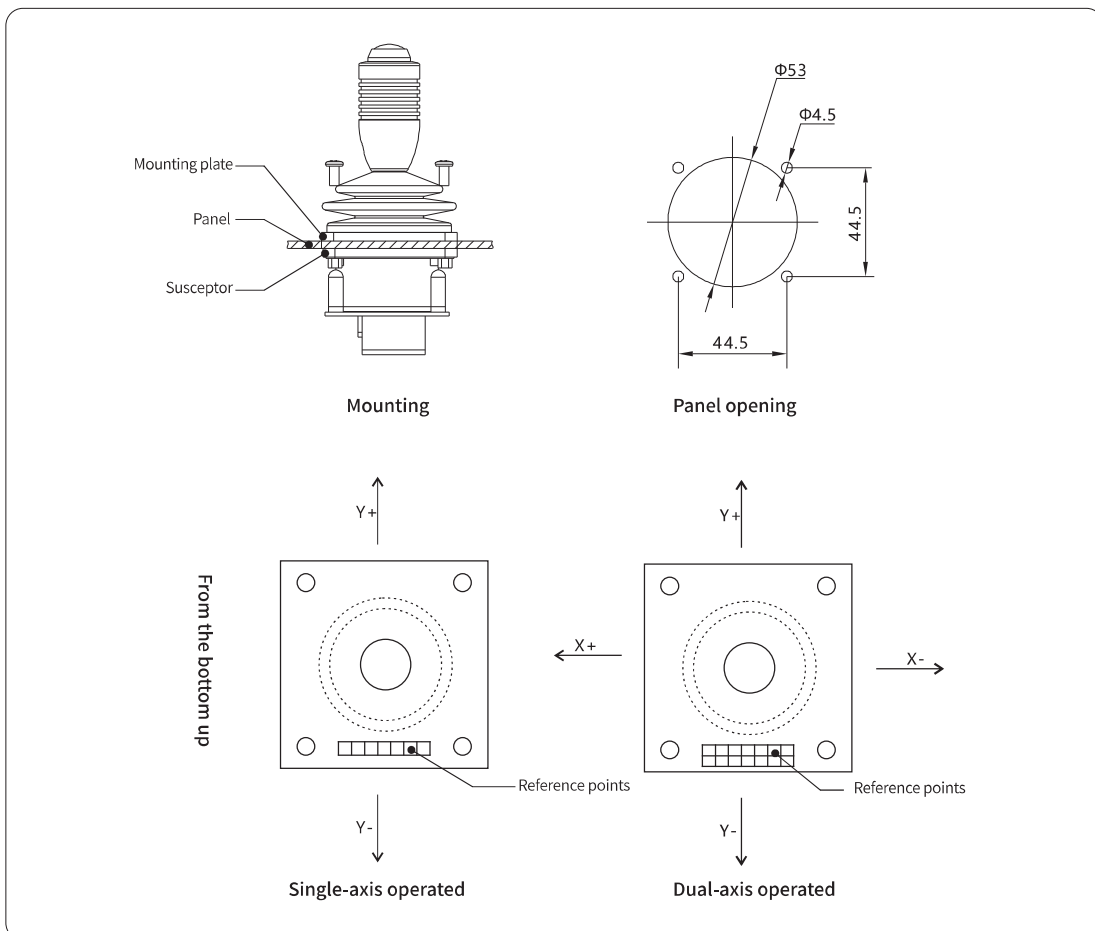
## Dimensions



## Product Configuration



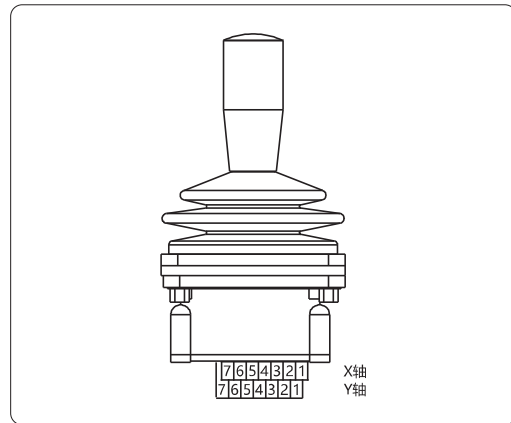
## Product Installation



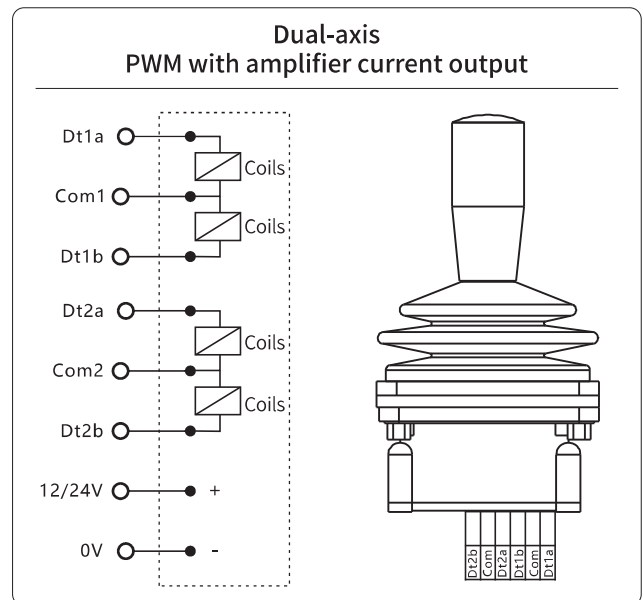
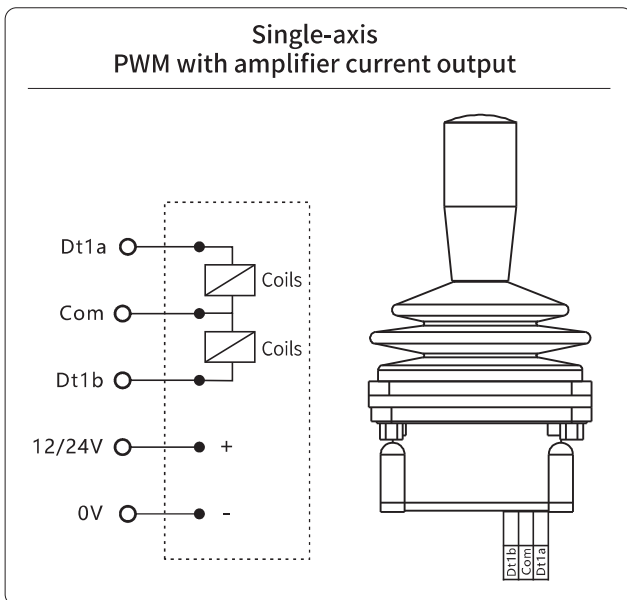
## Electrical Connections

### connector

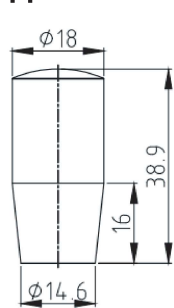
connector	Potentiometer
1	Com
2	Backward switch
3	Potentiometer sliding end
4	Potentiometer terminal A
5	Center tap
6	Potentiometer terminal B
7	Button switch
8	Button switch
9	Button switch



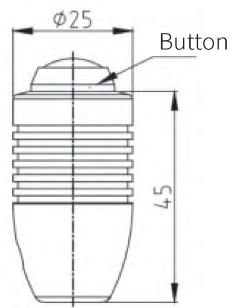
### With proportional amplifier



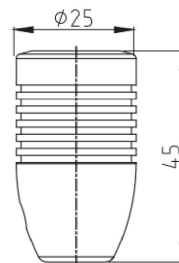
### See Appendix



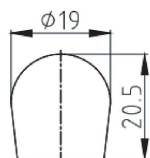
handle L



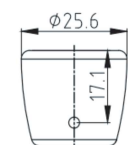
handle H



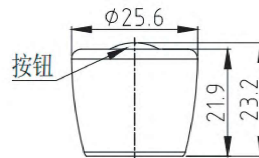
handle H0



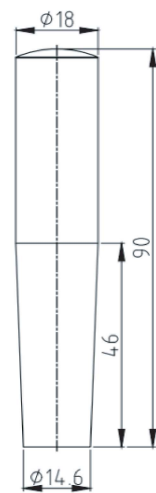
handle S



handle K50



handle K5



handle L9