

TJ9 Series Three Axis Joystick

Product Features

- Based on ergonomic principles, modeling small and operation comfortable.
- Fingertip operation, Spring return.
- Three-axis large operating angle in any direction.
- Handle top with dual button at most.
- RS232 or USB connector output available.

Application

Typical application on CCTV, Video control equipment, electric wheelchairs and medical equipment.



Technical Information

Electrical data

Power supply	5 ± 0.5Vdc (standard voltage) 9~36Vdc (wide voltage)
Maximum supply current	22mA (XY axis) 33mA (Z axis)
Maximum allowable overload voltage	20Vdc
Reverse maximum allowable voltage load	-10Vdc
Resistance	10KΩ
Center output voltage	2.5 ± 0.1Vdc
Output linearity tolerance	< ± 4%

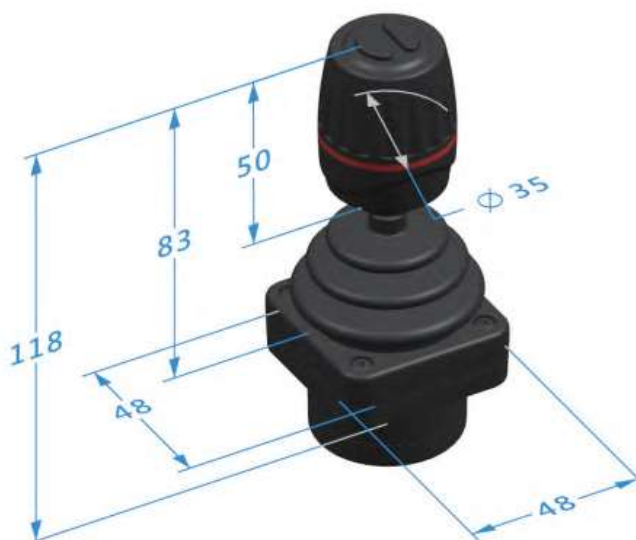
Mechanical features

Travel angle	± 28° (XY axis); ± 42° (Z axis)
Operating type	Spring return
Breakout force	3N
Operating force(max)	8N
Maximum allowable force	>300N
Expecting life	>3Million (XY axis) >2Million (Z axis)
Weight	143.5g

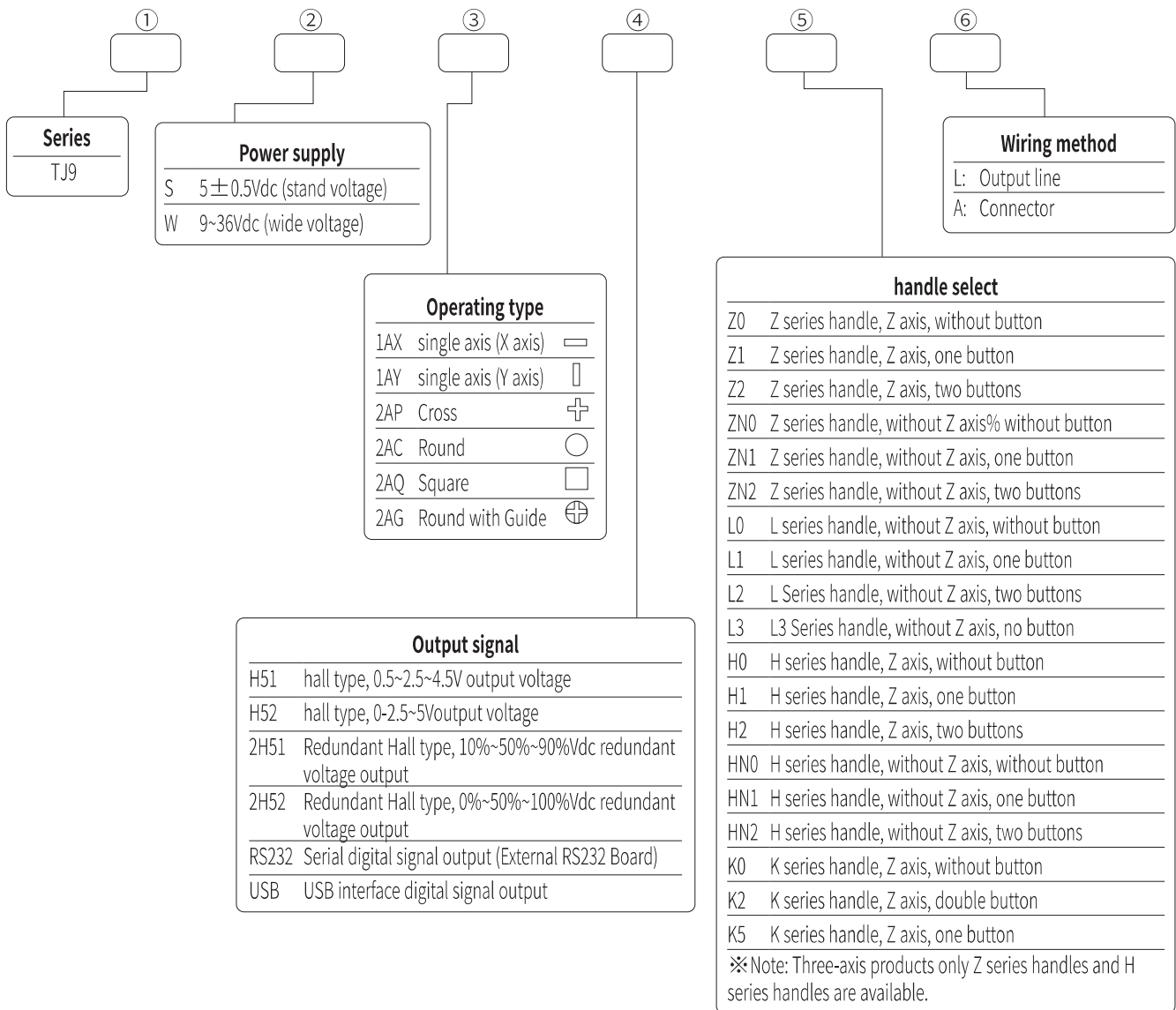
Environmental data

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

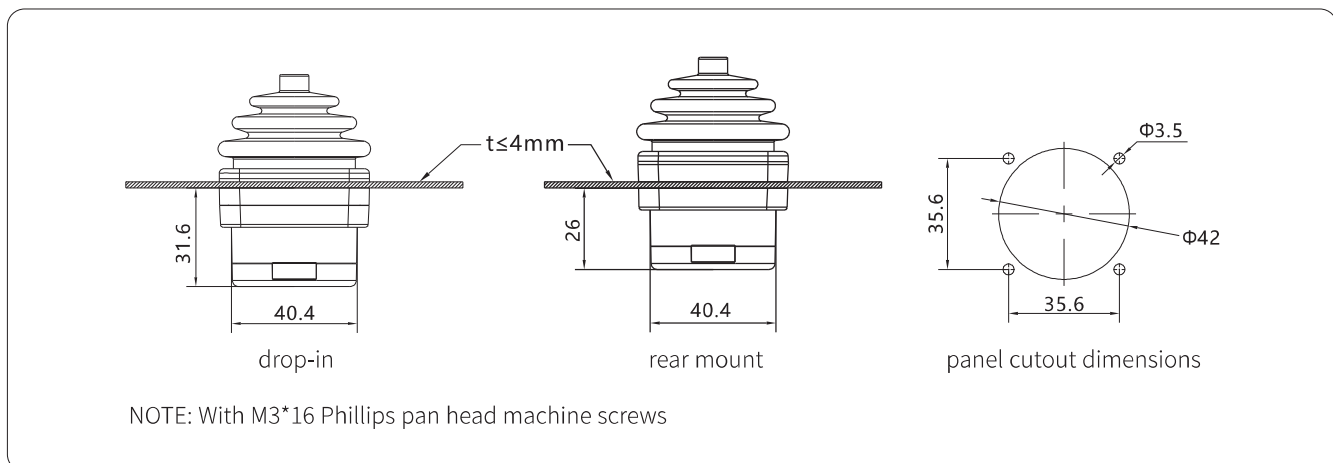
Dimensions



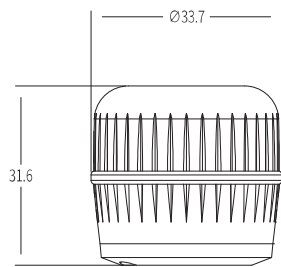
Product Configuration



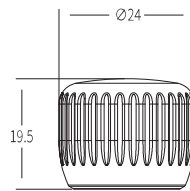
Product Installation



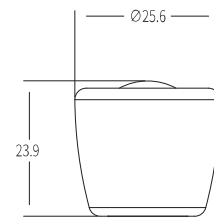
Handle



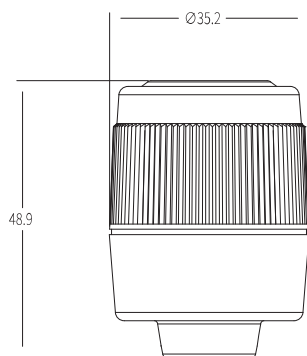
K0S handle (Z axis)



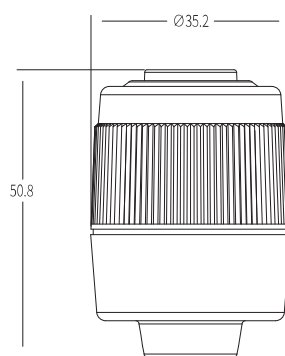
K2 handle (without Z axis)



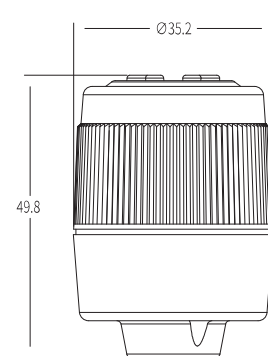
K5 handle (without Z axis)



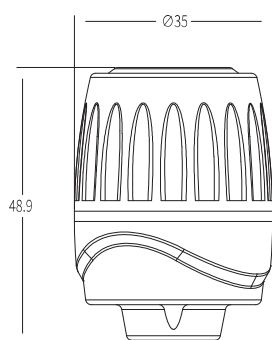
H0 handle (Z axis)



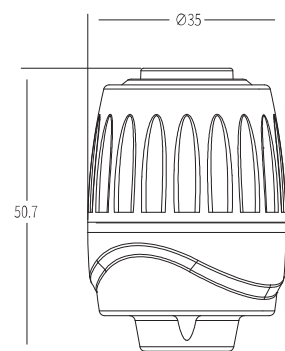
H1 handle (Z axis)



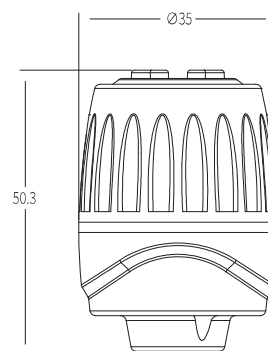
H2 handle (Z axis)



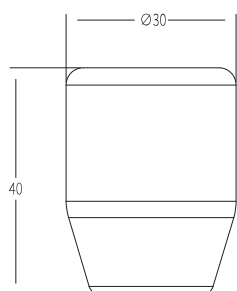
Z0 handle (Z axis)



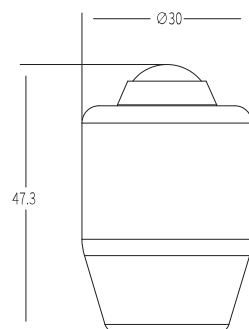
Z1 handle (Z axis)



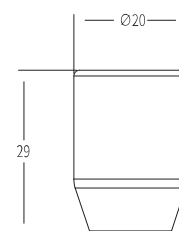
Z2 handle (Z axis)



L0 handle (without Z axis)

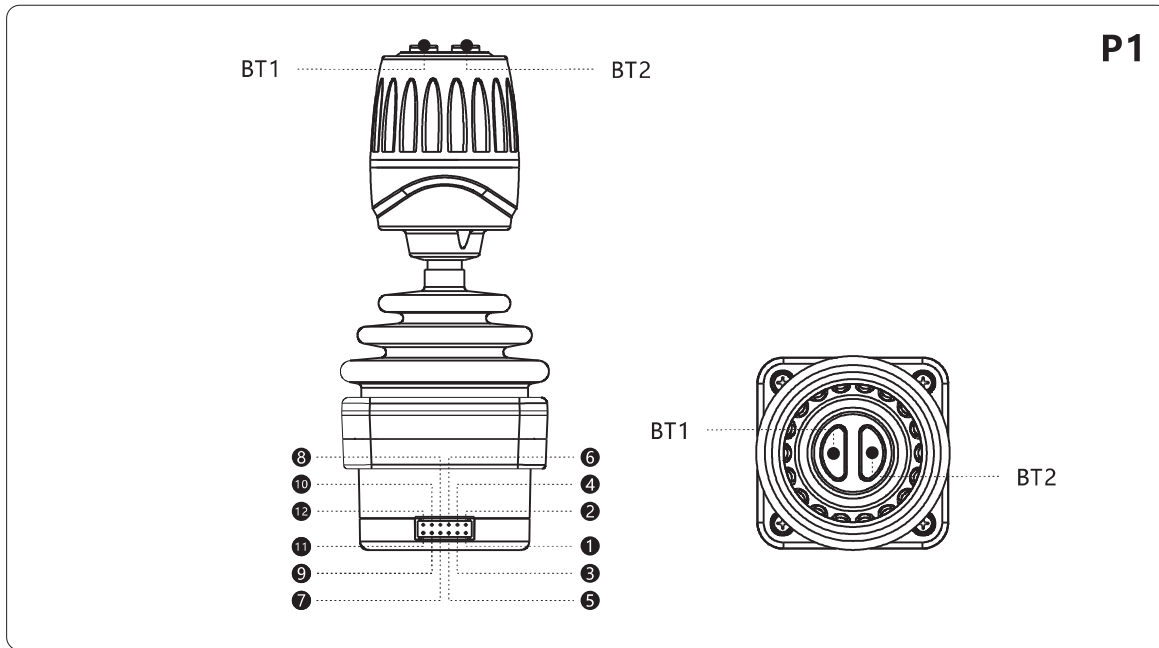


L1 handle (without Z axis)



L3 handle (without Z axis)

Electrical connections



Hall output

8-Pin Connector

Pin	Hall	Colour
1	CND	Black
2	VCC	Red
3	X out	Yellow
4	/	/
5	Y out	Green
6	/	/
7	Z out	Blue
8	/	/
9	BT1	Brown
10	BTcom	White
11	BT2	Purple
12	/	/

Each axis of redundant hall

12-pin connector

Pin	Hall	Colour
1	CND	Black
2	/	/
3	AX out	Yellow
4	BX out	Yellow/White
5	AY out	Green
6	BY out	Green/White
7	AZ out	Blue
8	BZ out	Blue/White
9	BT1	Brown
10	BTcom	White
11	BT2	Purple
12	VCC	Red

USB

USB

USB Male Connector



P2

RS232

RS232

RS232 output PCB



P3