Developed for use in those applications where size and weight are paramount, the JCP2 is a compact, low profile joystick that provides proportional finger tip control in up to two axes.

Designed for use with an electronic controller, the conductive plastic tracks in the JCP2 generate analogue reference signals proportional to the distance over which the handle is moved. A center tap provides an accurate voltage reference for the center position or a zero point for a bipolar supply voltage.

Standing only 54mm high, the JCP2 is less susceptible to unintentional operation. Its minimal operating force makes the JCP2 an ideal unit for the local or remote control of CCTV cameras, robots and cranes.

### Mechanical

- **Breakout Force**: 0.8N 50mm above flange
- **Operating Force**: 2.5N Full deflection, 50mm above flange
- **Maximum Applied Force**: 19.6N Full deflection, 50mm above flange
- **Mechanical Angle of Movement**: ±20°
- **Electrical Angle of Movement**: ±18°
- **Expected Life (operations)**: >2 million
- **Mass**: 100g

### Environmental

- **Operating Temperature Range**: -20°C to +70°C
- **Storage Temperature Range**: -25°C to +80°C
- **Environmental Sealing Above the Flange**: IP65 BSEN60529

### Electrical General

- **Maximum Load Current**: See Design Note in rear of Data Sheet
- **Maximum Power Dissipation**: 0.5W at 25°C
- **Connector**: Flying Leads 300mm long (7 x 0.125 PTFE)

### Analogue Track

- **Total Track Resistance**: 5kΩ Tolerance ±20%
- **Output Voltage Range**: 0 to 100%Vs Tolerance ±1%
- **Center Tap Voltage (1MΩ Load)**: 50%Vs Tolerance ±2%
- **Center Tap Angle**: 1.6° either side of center Maximum

### Order Code

- **D240449**: JCP2Y (Single axis)
- **D240448**: JCP2XY (Dual axis)

### Termination Details

<table>
<thead>
<tr>
<th>Description</th>
<th>Wire Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>X axis positive voltage supply</td>
<td>Orange</td>
</tr>
<tr>
<td>X axis center tap</td>
<td>Gray</td>
</tr>
<tr>
<td>X axis negative or zero voltage supply</td>
<td>Red</td>
</tr>
<tr>
<td>X axis output voltage signal</td>
<td>Yellow</td>
</tr>
<tr>
<td>Y axis positive voltage supply</td>
<td>White</td>
</tr>
<tr>
<td>Y axis negative or zero voltage supply</td>
<td>Green</td>
</tr>
<tr>
<td>Y axis center tap</td>
<td>Brown</td>
</tr>
<tr>
<td>Y axis output voltage signal</td>
<td>Black</td>
</tr>
</tbody>
</table>