FG4 FIGHTER GRIP HANDLE

With its narrow and wide body variations, the FG4 fighter grip handle offers countless combination possibilities including the ability to create left and right hand configurations. Designed around comfort and reliability, the FG4 is built to withstand the most demanding applications.
FG4
Suitable left hand or right hand operation

**DEVICE LOCATIONS**

**TOP**

1 Position Devices

- 8
- 9
- 1
- 2
- 3
- 4

2 Position Devices

**LEFT**

- 7Lo
- 7Lu

**FRONT**

- 6Ro
- 6Lo
- 6Ru
- 6Lu
- 5

**RIGHT**

- 7Ro
- 7Ru

**BUTTONS**

1 Position Device
- Flush Push Button
- Extended Push Button

***Optional sealing boot available

**ROCKER SWITCHES**

2 Position Device
- Maintained (0-1) Rocker Switch
- Maintained (1-0-1) Rocker Switch
- Momentary (0-1) Rocker Switch
- Momentary (1-0-1) Rocker Switch

**THUMBWHEELS**

2 Position Device
- Potentiometer Thumbwheel
- Hall-Effect Thumbwheel

**TRIGGER**

Position 5 Only
- Operator Presence Switch (1 NO)

**TWIST**

- Twist w/ Potentiometer & Contacts
- Twist w/ 1-0-1, Each Direction 1 NC, 1 NO

**HANDREST**

- Right-Hand Side Handrest
- Left-Hand Side Handrest

*Due to space restrictions not all variations of options are available in all positions.

Total number of devices is dictated by how many wires will fit down the joystick shaft. See device specification page for more details.

**2 position devices cannot span across horizontally in positions 6Ro - 6Lo and 6Ru - 7Lu due to handle curvature.**
**DEVICE LOCATIONS**

**TOP**

1 Position Devices

2 Position Devices

**LEFT**

**FRONT**

**RIGHT**

**BUTTONS**

1 Position Device
- Flush Push Button
- Extended Push Button
  
  ***Optional sealing boot available

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- Maintained (0-1) Rocker Switch
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- Hall-Effect Thumbwheel

**TRIGGER**

Position 5 Only
- Operator Presence Switch (1 NO)

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- Twist w/ Potentiometer & Contacts
- Twist w/ 1-0-1, Each Direction 1 NC, 1 NO

**HANDREST**

- Right-Hand Side Handrest

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Total number of devices is dictated by how many wires will fit down the joystick shaft. See device specification page for more details.

**2 position devices cannot span across horizontally in positions 6Ro - 6Lo and 6Ru - 7Lu due to handle curvature.**
FG4-R
Ideal for left hand operation

DEVICE LOCATIONS*

TOP

1 Position Devices

2 Position Devices

LEFT

FRONT**

RIGHT

BUTTONS

1 Position Device
- Flush Push Button***
- Extended Push Button

***Optional sealing boot available

ROCKER SWITCHES

2 Position Device
- Maintained (0-1) Rocker Switch
- Maintained (1-0-1) Rocker Switch
- Momentary (0-1) Rocker Switch
- Momentary (1-0-1) Rocker Switch

THUMBWHEELS

2 Position Device
- Potentiometer Thumbwheel
- Hall-Effect Thumbwheel

TRIGGER

Position 5 Only
- Operator Presence Switch (1 NO)

TWIST

- Twist w/ Potentiometer & Contacts
- Twist w/ 1-0-1, Each Direction 1 NC, 1 NO

HANDREST

- Left-Hand Side Handrest

*Due to space restrictions not all variations of options are available in all positions.
Total number of devices is dictated by how many wires will fit down the joystick shaft. See device specification page for more details.

**2 position devices cannot span across horizontally in positions 6Ro - 6Lo and 6Ru - 7Lu due to handle curvature.
FG4-L/R
Suitable left hand or right hand operation

**DEVICE LOCATIONS**

**TOP**

1 Position Devices
- 10
- 8
- 9
- 11
- 12
- 1
- 2
- 13
- 14
- 3
- 4
- 15

2 Position Devices

**LEFT**

- 7Lo
- 7Lu

**FRONT**

- 16Ro
- 6Ro
- 6Lo
- 16Lo
- 16Ru
- 6Ru
- 6Lu
- 16Lu

**RIGHT**

- 7Ro
- 7Ru

**BUTTONS**

1 Position Device
- Flush Push Button***
- Extended Push Button

***Optional sealing boot available

**ROCKER SWITCHES**

2 Position Device
- Maintained (0-1) Rocker Switch
- Maintained (1-0-1) Rocker Switch
- Momentary (0-1) Rocker Switch
- Momentary (1-0-1) Rocker Switch

**THUMBWHEELS**

2 Position Device
- Potentiometer Thumbwheel
- Hall-Effect Thumbwheel

**TRIGGER**

Position 5 Only
- Operator Presence Switch (1 NO)

**TWIST**

- Twist w/ Potentiometer & Contacts
- Twist w/ 1-0-1, Each Direction 1 NC, 1 NO

**HANDREST**

- Right-Hand Side Handrest
- Left-Hand Side Handrest

*Due to space restrictions not all variations of options are available in all positions.
Total number of devices is dictated by how many wires will fit down the joystick shaft. See device specification page for more details.

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SPECIFICATIONS

DIMENSIONS

All dimensions in inches [mm] and are subject to change.
## SPECIFICATIONS

### DEVICE SPECIFICATIONS*

<table>
<thead>
<tr>
<th>TYPE</th>
<th>CONTACT</th>
<th>RATING**</th>
<th>OPERATING TEMPERATURE</th>
<th>IP RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push Buttons</td>
<td>1 NO</td>
<td>1 A 28 VDC</td>
<td>-40°F to 185°F (-40°C to 85 °C)</td>
<td>IP64 IP68S (w/ Sealing Boot)</td>
</tr>
<tr>
<td>Rocker Switches</td>
<td>1 NO (0-1) 1 NO, 1 NO (1-0-1)</td>
<td>6 A 125 VAC</td>
<td>-4°F to 221°F (-20°C to 105 °C)</td>
<td>IP40</td>
</tr>
<tr>
<td>Thumbwheel (Potentiometer)</td>
<td>Optional 1 NO in each direction</td>
<td>Supply: 30 VDC max</td>
<td>-22°F to 140°F (-30°C to 60°C)</td>
<td>IP43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Signal Current: 1 mA max</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Output: 25-50-75% supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thumbwheel (Hall-Effect)</td>
<td>N/A</td>
<td>Supply: 4.5V to 5.6V</td>
<td>-40°F to 185°F (-40°C to 85 °C)</td>
<td>IP68S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Output: 0.5V to 2.5V to 4.5V max</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trigger</td>
<td>1 NO</td>
<td>6 A 125 VAC</td>
<td>-13°F to 221°F (-25°C to 105°C)</td>
<td>IP54</td>
</tr>
<tr>
<td>Twist (10K Potentiometer)</td>
<td>N/A</td>
<td>0.5 Watt</td>
<td>-13°F to 185°F (-25°C to 85°C)</td>
<td>IP65</td>
</tr>
<tr>
<td>Twist (Contacts)</td>
<td>1 NC, 1 NO in each direction</td>
<td>5 A 125 VAC</td>
<td>-13°F to 185°F (-25°C to 85°C)</td>
<td>IP40</td>
</tr>
</tbody>
</table>

*Device specifications subject to change without notice.

**All handles wired with 24 AWG wire (rating is 3A max).

Wires run through a steel shaft, so should be limited to 30V AC/DC max.

***For configurations using a single common wire. If application requires individual common wires, device wire counts will increase for those devices.

### WIRES PER DEVICE***

<table>
<thead>
<tr>
<th>DEVICE</th>
<th># OF WIRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push Buttons</td>
<td>1</td>
</tr>
<tr>
<td>Rocker Switches (0-1)</td>
<td>1</td>
</tr>
<tr>
<td>Rocker Switches (1-0-1)</td>
<td>2</td>
</tr>
<tr>
<td>Thumbwheels (Hall or Potentiometer)</td>
<td>3</td>
</tr>
<tr>
<td>Thumbwheels w/ Directional Contacts</td>
<td>5</td>
</tr>
<tr>
<td>Trigger</td>
<td>1</td>
</tr>
<tr>
<td>Twist</td>
<td>2</td>
</tr>
</tbody>
</table>

### MAX WIRES PER SHAFT DIAMETER

<table>
<thead>
<tr>
<th>SHAFT DIAMETER</th>
<th>PRODUCTS</th>
<th>MAX. # OF WIRES</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 mm</td>
<td>All</td>
<td>8 wires</td>
</tr>
<tr>
<td>10 mm</td>
<td>CS3HD</td>
<td>16 wires</td>
</tr>
<tr>
<td>12 mm</td>
<td>VNS2, NNS0</td>
<td></td>
</tr>
</tbody>
</table>

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