Model C90 Full Size Heavy Duty Joystick

For more information about this product, visit our website at: www.potentiometers.com

C90 Series Full Size Heavy Duty Joystick
Heavy Duty Joystick Series

Features
- One, Two, or Three Axis Joystick (X,Y,Z)
- 6.49” handle height
- 45° deflection angle (±22.5°)
- Hand-grip style knob standard
- Spring return to center
- Circular deflection pattern standard
- 10K ohm precision potentiometer
- Protective rubber boot
- IP65 rating above panel
- Panel mounting bracket

Options
- Single Axis (X) - Knob Q
- Three Axis (X,Y,Z) - Knob T
- Square or Cross (+) limiter plate
- Friction clutch (holds position, replaces spring return)
- Non-standard resistance
- Center detent pots
- Center-tapped pots
- Dual gang pots
- Inductive (non contacting) pots
- Sealed pots
- Dual direction switches
- Single direction switch; Center detect switch
- Push button handle; Tapered handle
- Cannister style base enclosure
- Without Mounting Plate

Electrical Specifications
- Resistance: 10K Ohms Conductive Plastic
- Resistance Tolerance: ±15%
- Independent Linearity: ±3.0%
- Power Rating: (X, Y) 0.2 watt
- Lever Electrical Angle: (X,Y) - 44°
- Resolution: Essentially infinite
- Output Smoothness: Below 0.2% against input voltage
- Contact Resistance Variation: Below 5%
- Insulation Resistance: 1000 Meg@500VDC
- Dielectric Strength: 1 minute @ 500 VAC
- Max. Wiper Output: 5mA, 1ma rec.

Mechanical Specifications
- Lever Deflection (X,Y): ±22° to ±26°
- Operating Force (X, Y): 7.2 to 43.2 oz-F
- Housing: Aluminum
- Knob Material: Hard plastic
- Weight: Approx 23 oz
- Service Life: 5,000,000 operations

Environmental Specifications
- Operating Temperature: -20°C to +60°C
- Rating: IP 65 Above Panel

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973-887-2550 • Toll Free 1-800-631-8083 • Fax 973-887-1940
http://www.potentiometers.com
Model C90 Full Size Heavy Duty Joystick

Schematic

For X Axis Direction
For Y Axis Direction

1

2

3

COBRA-SHAPED KNOB
Auto Return to Center Position

Side Operation

Z AXIS POT
Z2 POT
SEE-SAW POT

Side Operation

8.346
6.417

Leadwires for Z Axis Pot and each switch Equivalent to AWG27 About 11.8" Long

Z AXIS POT
Z2 POT
SEE-SAW POT

1.771
1.377
3.54
0.078

PUSH BUTTON SWITCHES

ILLUMINATION, PUSH ON/PUSH OFF

(Z) (RED)
L-
L+

SW4 LED

(G) (GREEN)
CON
NO

SW5 LED

(RED)
L-
L+

PUSH BUTTON SWITCH CONTACT

SW1 (ORANGE) (ORANGE)
SW2 (WHITE) (WHITE)
SW6 (GRAY) (GRAY)

ILLUMINATED PUSH BUTTON SWITCH
PUSH ON – PUSH OFF

PUSH BUTTON SWITCHES
ILLUMINATION, PUSH ON/PUSH OFF

SW4 SW5

Z AXIS POT, Z1 SEE-SAW POT

Y AXIS POT

0.866

PUSH BUTTON SWITCH
SW1 (MOMENTARY)
PUSH BUTTON SWITCH
SW6 (MOMENTARY)

PUSH BUTTON SWITCH
SW2 (MOMENTARY)

0.204 DIA.
4 PLACES
## Model C90 Full Size Heavy Duty Joystick

### Ordering Information

Example Part Number: **C90-2-Dual-CD-FR-TS**

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<th>Dual</th>
<th>CD FR</th>
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