

# CW series

## Proportional miniature control wheel

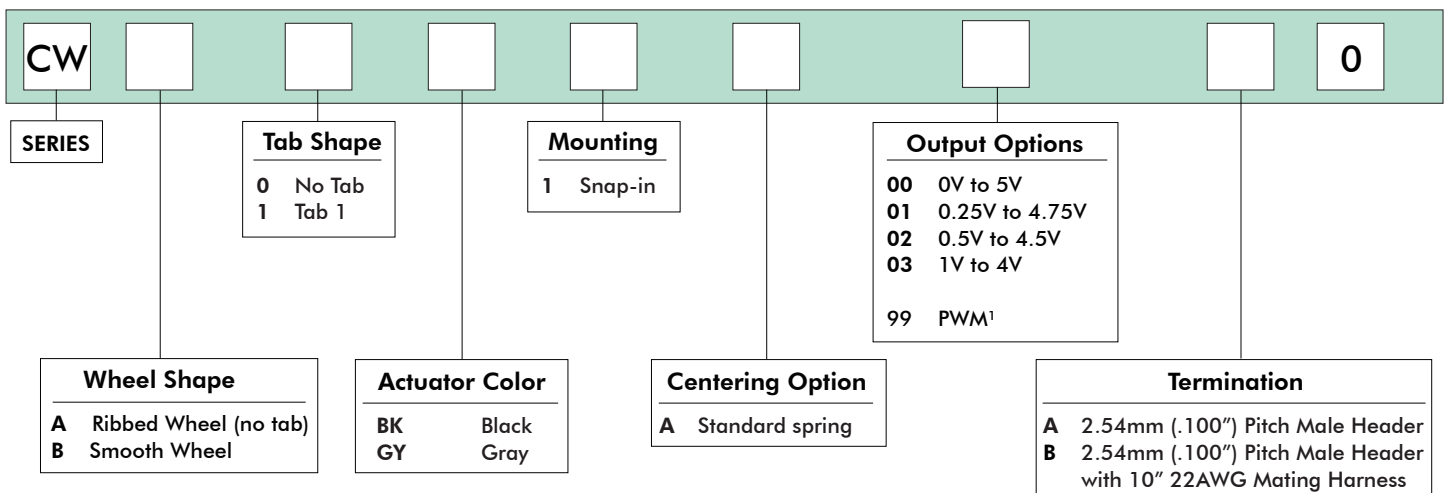
Distinctive features and specifications



- Miniature design
- Ideal for joystick, armrest and panel mounting
- Proportional output
- Self-centering, single axis actuator
- Snap-in mounting

MECHANICAL
<ul style="list-style-type: none"> <li>• Mechanical Angle of Movement: <math>\pm 45^\circ</math></li> <li>• Expected Life: 3 million cycles</li> <li>• Mass / weight: <math>18.25\text{g} \pm 5.0\text{g}</math> (<math>0.64\text{oz} \pm 0.18\text{oz}</math>)</li> <li>• Lever Action (Centering): Spring centering</li> </ul>
ENVIRONMENTAL
<ul style="list-style-type: none"> <li>• Operating Temperature: <math>-40^\circ\text{C}</math> to <math>+85^\circ\text{C}</math> (<math>-40^\circ\text{F}</math> to <math>+185^\circ\text{F}</math>)</li> <li>• Storage Temperature: <math>-40^\circ\text{C}</math> to <math>+85^\circ\text{C}</math> (<math>-40^\circ\text{F}</math> to <math>+185^\circ\text{F}</math>)</li> <li>• EMC Immunity Level: EN61000-4-3</li> <li>• EMC Emissions Level: EN61000-6-3:2001</li> <li>• ESD: EN61000-4-2</li> </ul>

ELECTRICAL
<ul style="list-style-type: none"> <li>• Resolution: 1.22mV</li> <li>• Supply Voltage Range: <math>5.00\text{V} \pm 0.250\text{VDC}</math></li> <li>• Reverse Polarity Max: -10V</li> <li>• Overvoltage Max: 20V</li> <li>• Output Impedance: 2<math>\Omega</math></li> <li>• Return to Center Voltage Tolerance: <math>\pm 200\text{mV}</math> initial</li> </ul>
<p>NOTES: Exact specifications are subject to configuration. All values are nominal.</p>



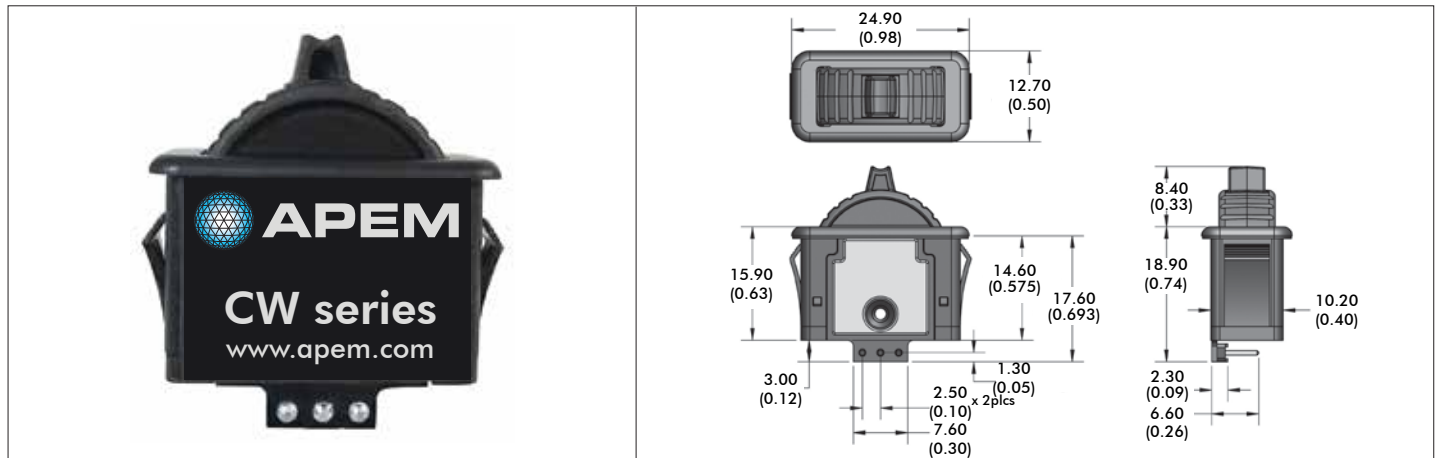
NOTE:

1 - Contact factory for PWM configuration.

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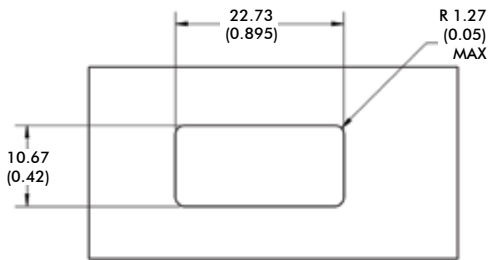
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### Overview

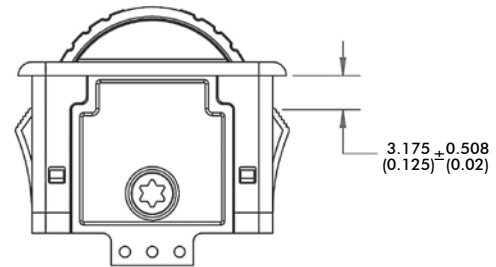


### MOUNTING OPTIONS

#### PANEL CUTOUT

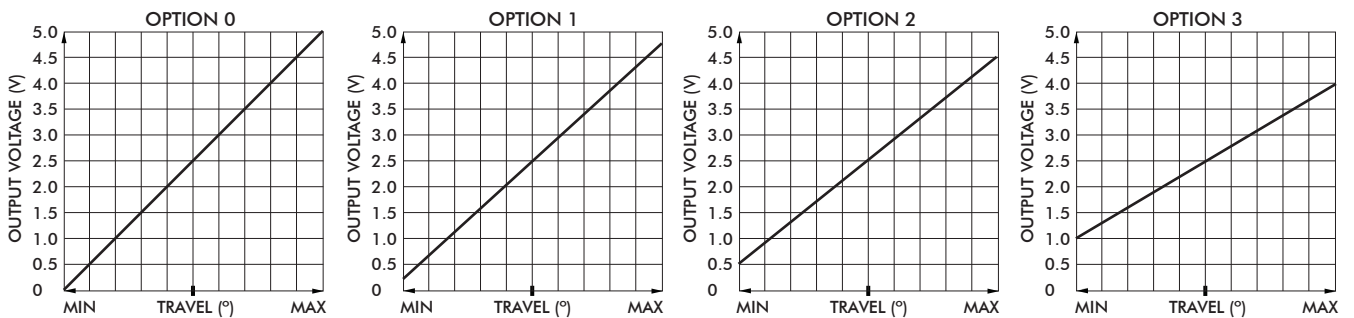


#### PANEL THICKNESS

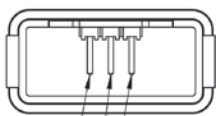


NOTE: Dimensions are in mm/(inch).

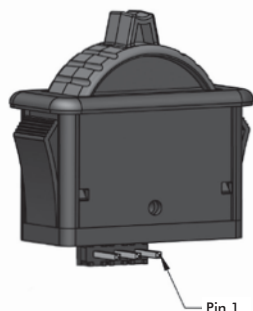
### VOLTAGE OUTPUT OPTIONS



### TERMINALS



Pin 1 - 5V power (RED)  
Pin 2 - Ground (BLACK)  
Pin 3 - Signal (BLUE)



### OPTIONAL MATING HARNESS<sup>1</sup>

- Wire type: 22AWG 25cm PTFE
- Connector: Molex 0050579503

### WIRING SPECIFICATION

- Red: Power (5V)
- Black: Ground
- Blue: Signal

### NOTES:

1. The CW Series is fitted with a three terminal SAMTEC (TLW-103-05-T-S) 2.54mm header. An optional 22AWG Mating Harness may be specified from the "Terminal" category of the Option Selection Guide.
- Images shown are for illustration purposes only.

Note: The company reserves the right to change specifications without notice.