



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

### MECHANICAL

- Mechanical Angle of Movement:  $\pm 45^\circ$
- Expected Life: 3 million cycles
- Mass / weight:  $18.25\text{g} \pm 5.0\text{g}$  ( $0.64\text{oz} \pm 0.18\text{oz}$ )
- Lever Action (Centering): Spring centering

### ENVIRONMENTAL

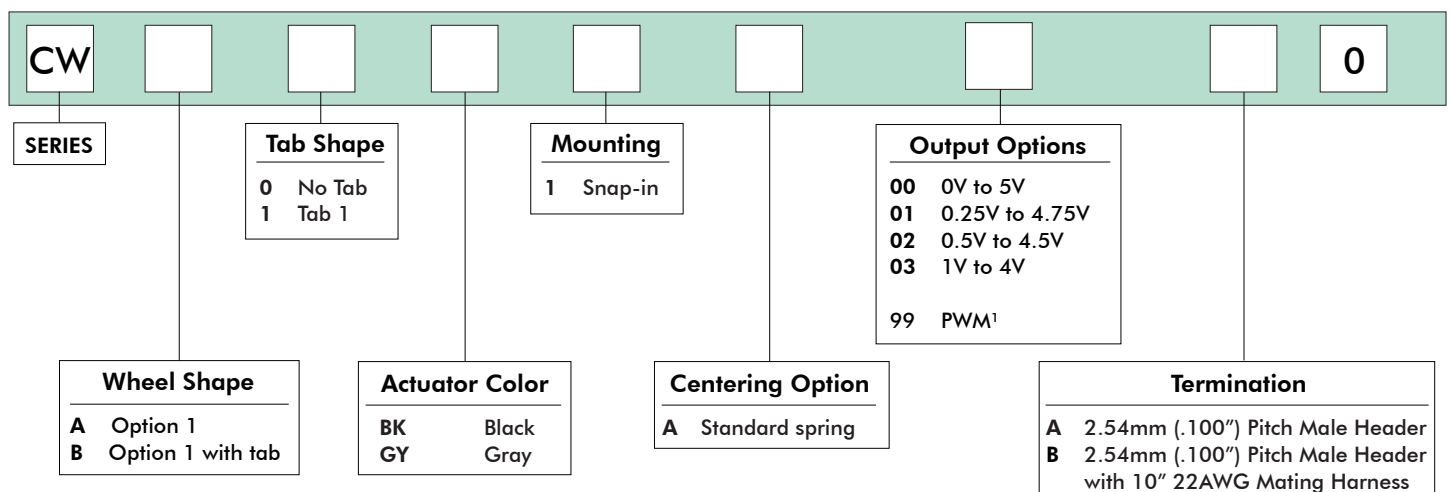
- Operating Temperature:  $-40^\circ\text{C}$  to  $+85^\circ\text{C}$  ( $-40^\circ\text{F}$  to  $+185^\circ\text{F}$ )
- Storage Temperature:  $-40^\circ\text{C}$  to  $+85^\circ\text{C}$  ( $-40^\circ\text{F}$  to  $+185^\circ\text{F}$ )
- EMC Immunity Level: EN61000-4-3
- EMC Emissions Level: EN61000-6-3:2001
- ESD: EN61000-4-2

### ELECTRICAL

- Resolution: 1.22mV
- Supply Voltage Range:  $5.00\text{V} \pm 0.01\text{V}$
- Reverse Polarity Max: -10V
- Overvoltage Max: 20V
- Output Impedance: 2 $\Omega$
- Return to Center Voltage Tolerance:  $\pm 200\text{mV}$  initial

#### NOTES:

Exact specifications are subject to configuration.  
All values are nominal.



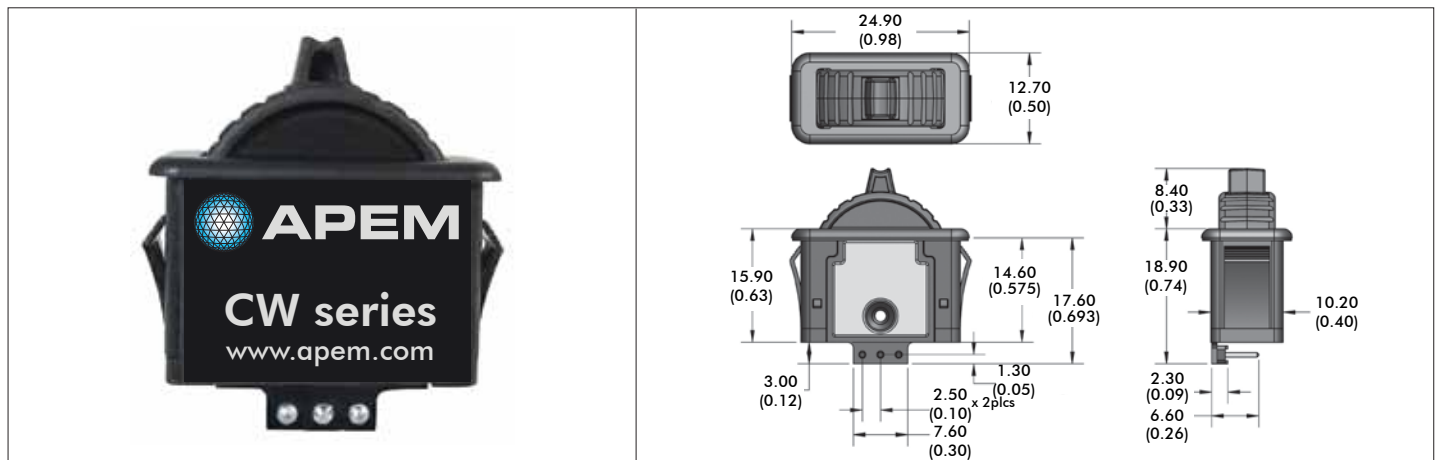
#### NOTE:

1 - Contact factory for PWM configuration.

# CW series

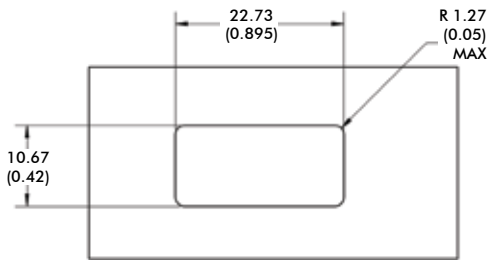
## Proportional miniature control wheel

### Overview

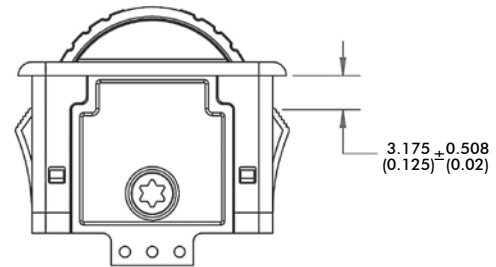


### MOUNTING OPTIONS

#### PANEL CUTOUT

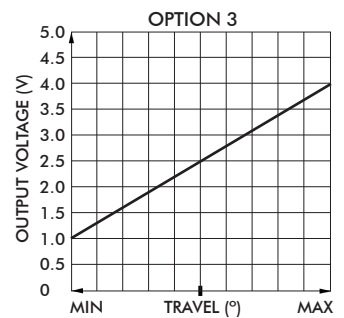
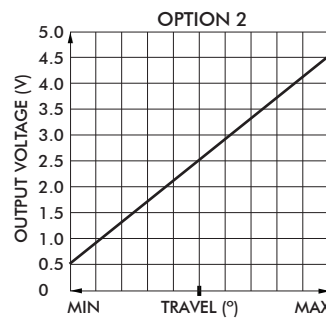
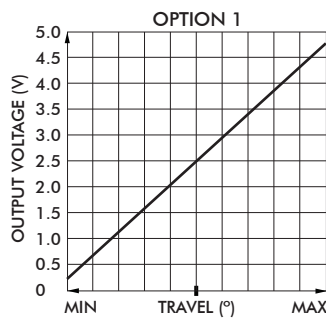
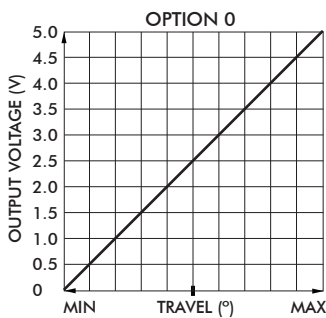


#### PANEL THICKNESS

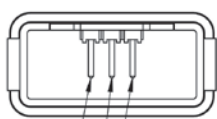


NOTE: Dimensions are in mm/(inch).

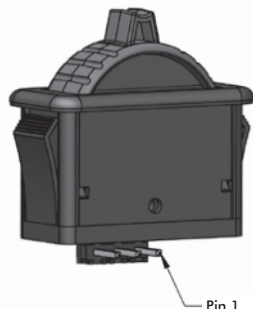
### VOLTAGE OUTPUT OPTIONS



### 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.

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

APEM

Distribución de componentes eléctricos y electrónicos