

# RETURN TO END MINI THUMBWHEEL

**HTWME**  
MINIATURE  
THUMBWHEEL

## PROPORTIONAL OUTPUT HALL EFFECT MINI THUMBWHEEL



Knurled Wheel



Paddle Wheel

The HTWME offers the same performance as the standard HTWE single axis, proportional output thumbwheel, but has a much shorter behind panel depth. With a panel depth of 0.96" max., the HTWME is ideal for panel or armrest mountings, or can be incorporated into one of OTTO's joysticks. The HTWME provides snap-in style mounting, and also utilizes non-contact Hall effect technology, which accounts for a one million cycle life. It also has excellent EMI/RFI shielding per MIL-STD-461D/SAE J1113-22 and RFI to withstand 100 V/M, 14Hz to 1GHz. Configuration options include a choice of six linear voltage outputs.

### Features:

- Return to end single axis actuator
- Shorter behind panel depth: 0.96"
- Knurled & Paddle style actuators
- Wire or pinned termination options
- Variety of button & bezel colors
- 6 output options
- Easy snap-in mounting
- 1 million cycle rotational life
- Electronics sealed to IP68S
- Excellent EMI/RFI immunity
- RoHS/WEEE/Reach compliant

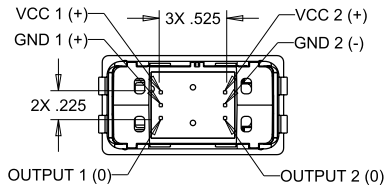
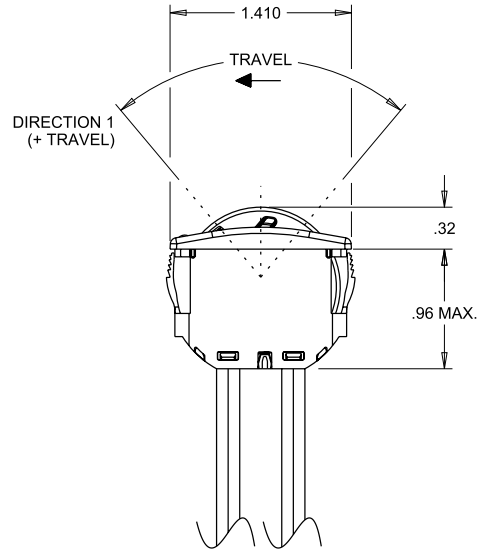
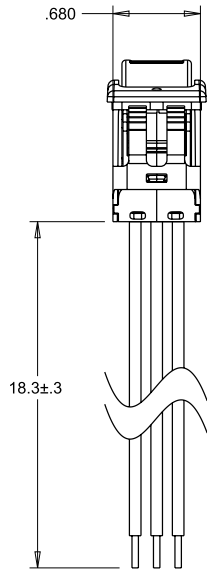
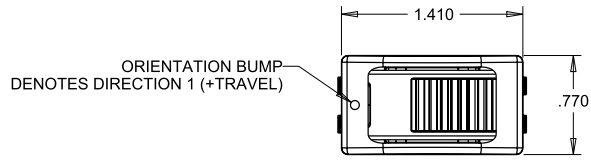
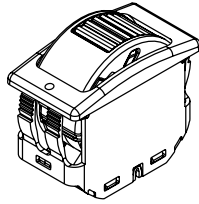
Standard Characteristics/Ratings:				
<b>MECHANICAL:</b>				
<b>Mechanical Life:</b> 1,000,000 full forward to full back				
<b>Max Allowable Radial Load:</b> 30.0 lbs.				
<b>ELECTRICAL RATINGS:</b> Rated at 5V @ 25°C Load = 1mA (4.7KΩ)				
<b>Electrical</b>	<b>Units</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>
Supply Voltage	VDC	4.5	5.0	5.5
Output at Rest	VDC @ 5V Vcc	-25	N/A	+25
Output at Full Travel	VDC @ 5V Vcc	-25	N/A	+25
Supply Current Per Sensor	mA	N/A	N/A	10
<b>ELECTRONICS:</b>				
<b>Seal Integrity:</b>	Electronics IP68S			
<b>ENVIRONMENTAL:</b>				
<b>Operating Temp Range:</b>	-40°C to +85°C			
<b>Humidity:</b>	96% RH, 70°C, 96 hours			
<b>Vibration:</b>	Per MIL-810F minimum integrity			
<b>Sand/Dust:</b>	Per SAE J1455			
<b>EMI:</b>	Withstand per MIL-STD-461D/SAE J1113-22			
<b>RFI:</b>	Withstand 100V/M 14Hz to 1GHz			
<b>MATERIALS:</b>				
<b>Button:</b>	Thermoplastic			
<b>Bezel:</b>	Thermoplastic			
<b>Snap Arms:</b>	Thermoplastic			
<b>Wires:</b>	18 AWG			

### HTWME RETURN TO END THUMBWHEEL MINIATURE CASE

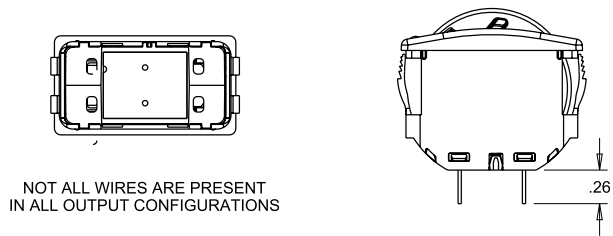
HTWME	X	X*	X	X	X	X	X
Travel	Output 1	Output 2	Operating Force	Button Style	Termination	Bezel Color	Button Color
1. 80°	A. 0.5 - 4.5VDC	NONE	1. 10 oz typ	1. Knurled Wheel	A. 18 AWG Wire, 18.3" Long, Stripped and Tinned Ends	1. Red	1. Red
	B. 0.5 - 4.5VDC	0.5 - 4.5VDC		2. Paddle Wheel	B. 0.025" SQ. Pins	2. Black	2. Black
	C. 0.5 - 4.5VDC	4.5 - 0.5VDC				3. Orange	3. Orange
	D. 1.0 - 4.0VDC	NONE				4. Yellow	4. Yellow
	E. 1.0 - 4.0VDC	1.0 - 4.0VDC				5. Green	5. Green
	F. 1.0 - 4.0VDC	4.0 - 1.0VDC				6. Blue	6. Blue
						7. Violet	7. Violet
						8. Gray	8. Gray
						9. White	9. White

\* Output options B and E provide redundant output 2 which duplicates output 1. Output options C and F provide redundant output 2 which is inverse output 1.

SHORTER BEHIND PANEL DEPTH



**PINNED  
TERMINATION**  
NOT ALL PINS ARE PRESENT  
IN ALL OUTPUT CONFIGURATIONS

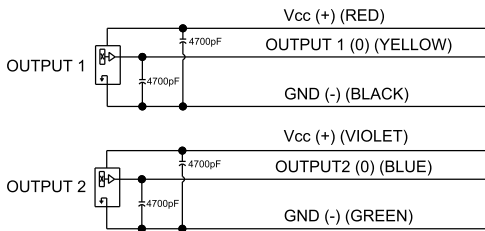


**MOUNTING:**

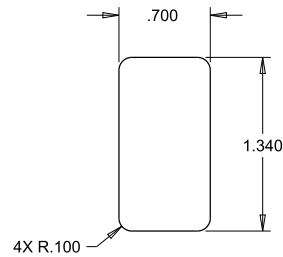
RECOMMENDED PANEL THICKNESS: 0.150 OPTIMUM THICKNESS  
(0.040 MIN. - 0.200 MAX.)

RECOMMENDED PANEL OPENING: 0.700 X 1.340 OPTIMUM  
(0.695/0.705 X 1.335/1.345)

RECOMMENDED PANEL RADII: 0.100 OPTIMUM  
(0.090 - 0.110 MAX.)



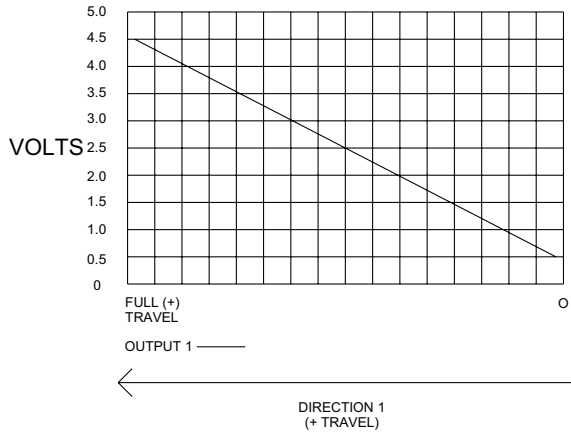
OUTPUT 2 IS NOT PRESENT IN ALL CONFIGURATIONS



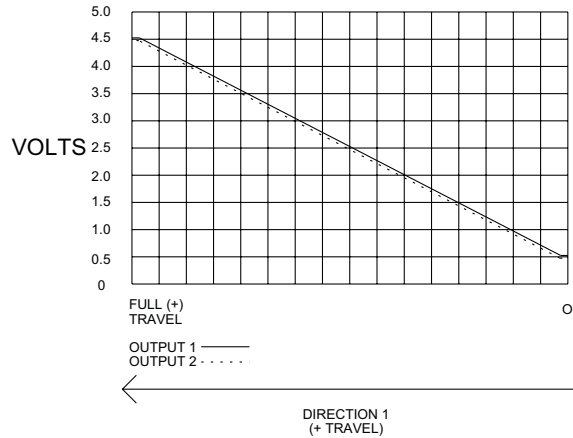
# RETURN TO END MINI THUMBWHEEL

SHORTER BEHIND PANEL DEPTH

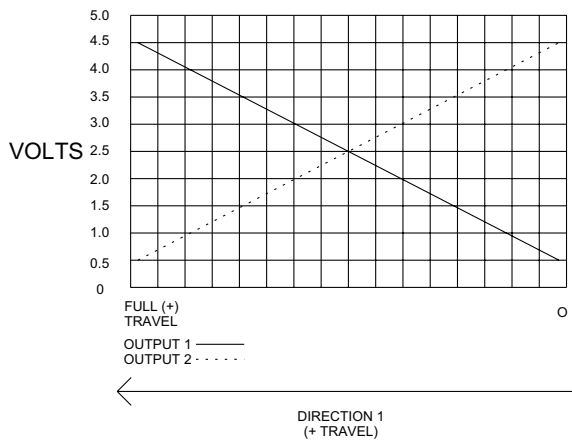
**OPTION A**



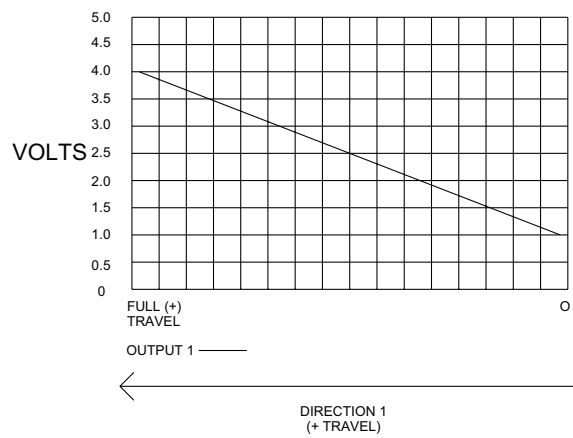
**OPTION B**



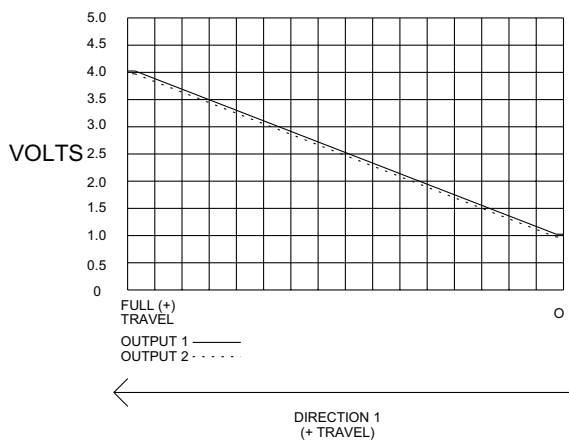
**OPTION C**



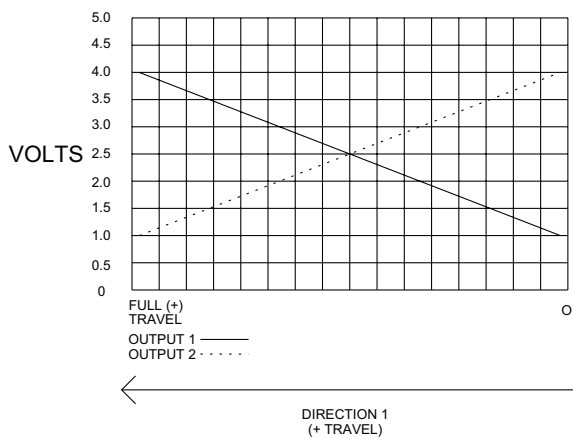
**OPTION D**



**OPTION E**



**OPTION F**



HALL EFFECT

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[OTTO:](#)

[HTWME-1A12B22](#) [HTWME-1A12A22](#) [HTWME-1A11A22](#)