

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 immunity. 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 compliant

Standard Characteristics/Ratings:				
MECHANICAL:				
Mechanical Life: 1,000,000 full forward to full back				
Max Allowable Radial Load: 30.0 lbs.				
ELECTRICAL RATINGS: Rated at 5V @ 25°C Load = 1mA (4.7KΩ)				
Electrical	Units	Min	Typ	Max
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
ELECTRONICS:				
Seal Integrity:	Electronics IP68S			
ENVIRONMENTAL:				
Operating Temp Range:	-40°C to +85°C			
Humidity:	96% RH, 70°C, 96 hours			
Vibration:	Per MIL-810F minimum integrity			
EMI:	Withstand per SAE J1113			
RFI:	Withstand per SAE J1113			
MATERIALS:				
Button:	Thermoplastic			
Bezel:	Thermoplastic			
Snap Arms:	Thermoplastic			
Wires:	18 AWG			

HTWME RETURN TO END MINIATURE THUMBWHEEL PART NUMBER CODE

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 B. 0.5 - 4.5VDC C. 0.5 - 4.5VDC D. 1.0 - 4.0VDC E. 1.0 - 4.0VDC F. 1.0 - 4.0VDC	NONE 0.5 - 4.5VDC 4.5 - 0.5VDC NONE 1.0 - 4.0VDC 4.0 - 1.0VDC	1. 10 oz. typ.	1. Knurled Wheel 2. Paddle Wheel	A. 18 AWG Wire, 18.3" Long, Stripped and Tinned Ends B. 0.025" SQ. Pins	1. Red 2. Black 3. Orange 4. Yellow 5. Green 6. Blue 7. Violet 8. Gray 9. White	1. Red 2. Black 3. Orange 4. Yellow 5. Green 6. Blue 7. Violet 8. Gray 9. White	

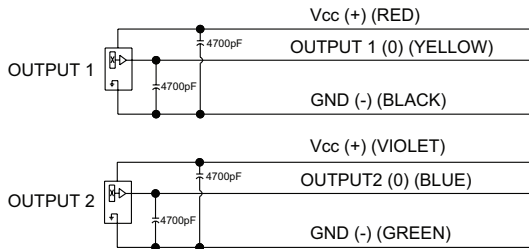
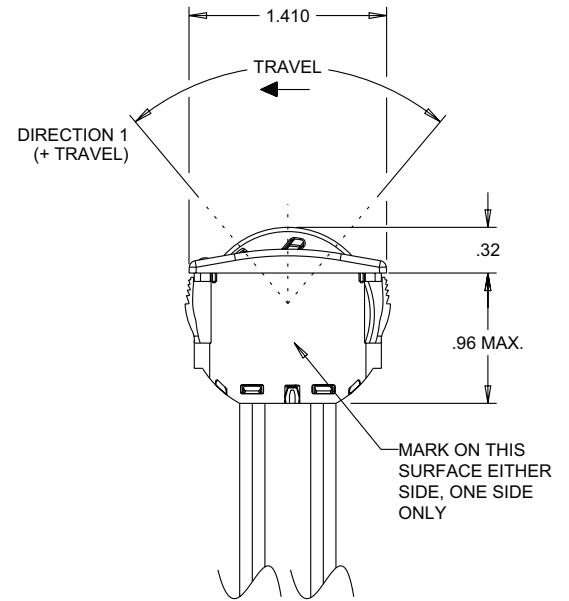
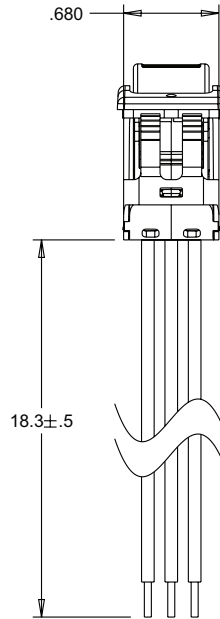
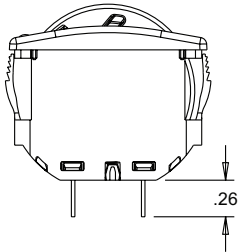
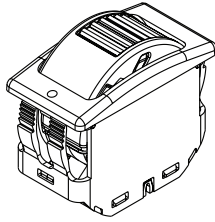
* Output options B and E provide redundant output 2 which duplicates output 1. Output options C and F provide redundant output 2 which is inverse output 1.

RETURN TO END MINI THUMBWHEEL

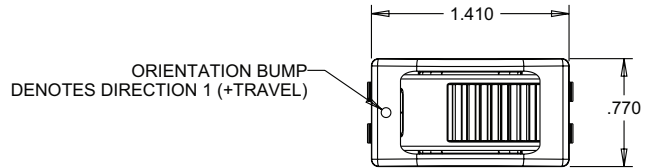
HTWME
MINIATURE
THUMBWHEEL

SHORTER BEHIND PANEL DEPTH

HTWM Knurled Wheel Style Thumbwheel Shown



OUTPUT 2 IS NOT PRESENT IN ALL CONFIGURATIONS

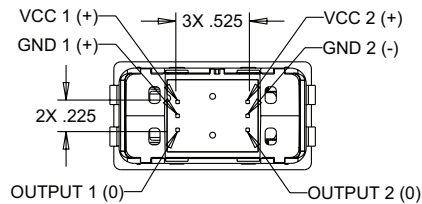
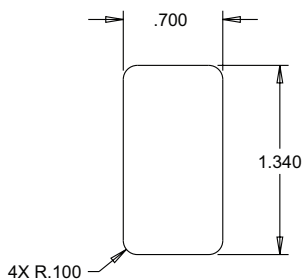


MOUNTING:

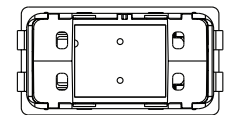
RECOMMENDED PANEL THICKNESS: 0.150 OPTIMUM THICKNESS
(0.040 MIN. - 0.200 MAX.)

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.)



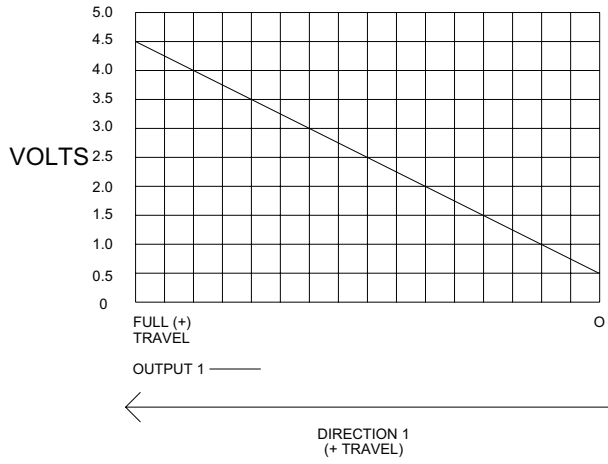
**PINNED
TERMINATION**
NOT ALL PINS ARE PRESENT
IN ALL OUTPUT CONFIGURATIONS



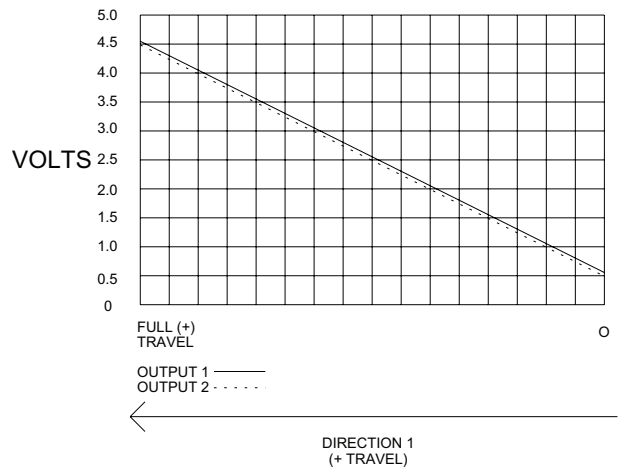
NOT ALL WIRES ARE PRESENT
IN ALL OUTPUT CONFIGURATIONS

SHORTER BEHIND PANEL DEPTH

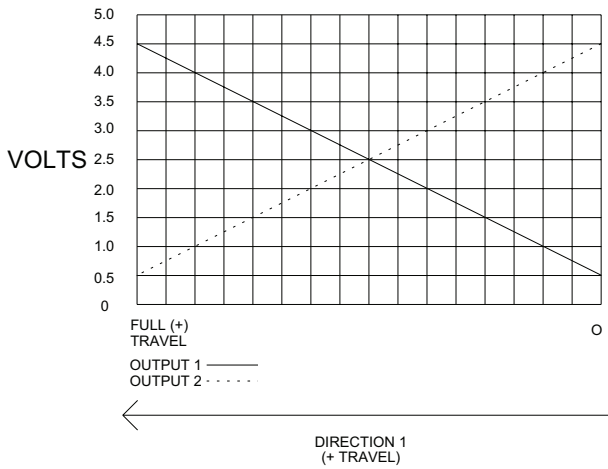
OPTION A



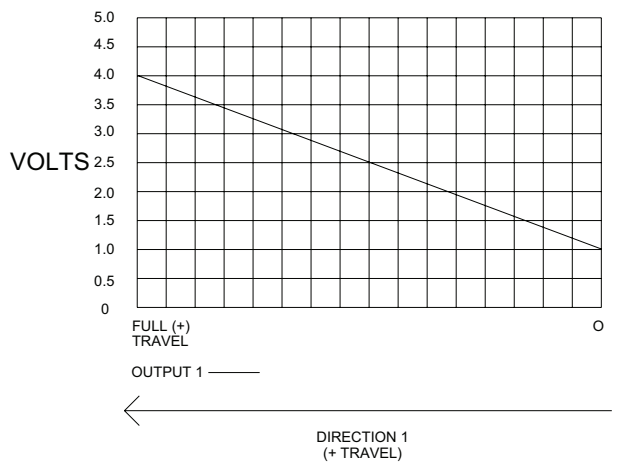
OPTION B



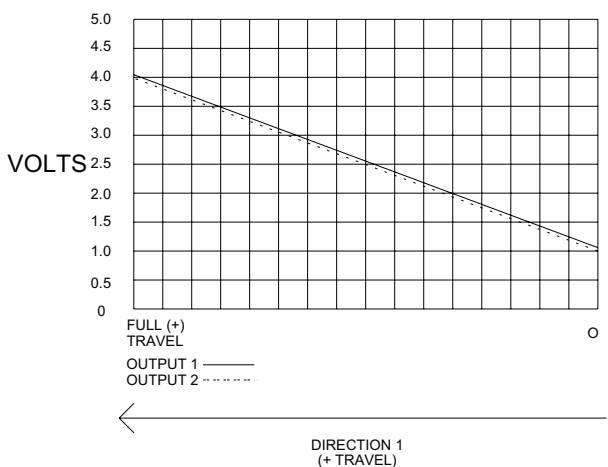
OPTION C



OPTION D



OPTION E



OPTION F

