3-POSITION ANALOG OUTPUT SNAP-IN ROCKER WITH BACKLIGHTING

The HFNR is compact, robust and reliable, ideal for grip or panel mount applications. This 3-position switch provides operator comfort by reducing the movement required to change direction or switch gears. Backlighting provides enhanced visibility; making them easy to see in poor lighting or nighttime operation. The electronics are sealed to IP68S, the switch has excellent EMI/RFI immunity, and a mechanical life of three million cycles.

Features:

- **3 million cycle life, full forward to full backward**
- **Hall effect contactless sensing technology**
- **Choice of bezel and button colors**
- **2V to 24V LED backlighting options**
- **Electronics sealed to IP68S**
- **Outstanding EMI/RFI immunity**
- **Snap-in panel mounting—accepts multiple panel thicknesses**
- **RoHS compliant**

Standard Characteristics/Ratings:

MECHANICAL:

Mechanical Life: 3,000,000 full forward to full back	
Angle of Throw Between Adjacent Positions: 10 degrees typical	
Max Allowable Radial Load: 30.0 lbs.	

ELECTRICAL RATINGS:

Electrical	Units	Min	Typ	Max
Supply Voltage	VDC	4.5	5	5.5
Output Voltage, Tolerance at Center	VDC @ 5V Vcc	-0.35	N/A	+0.35
Output Voltage, Tolerance at Full Travel	VDC @ 5V Vcc	-0.35	N/A	+0.35
Supply Current Per Sensor	mA	N/A	N/A	10

ELECTRONICS:

Seal:	Electronics sealed to IP68S

ENVIRONMENTAL:

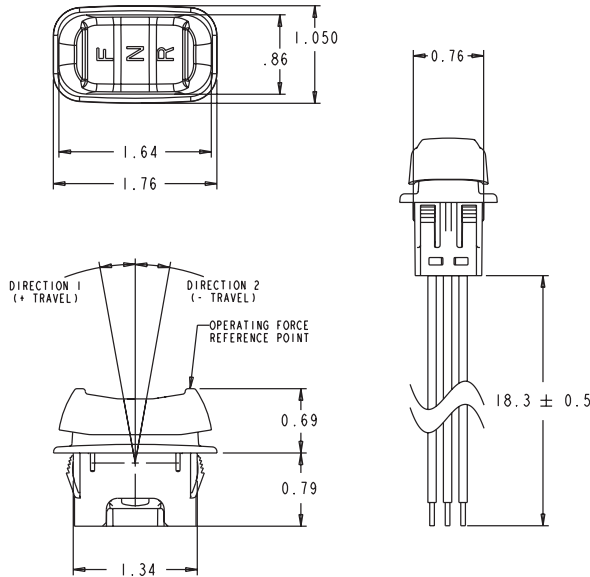|	
Operating Temp Range:	-40°C to +85°C
Humidity:	96% RH, 70°C, 96 hours
Vibration:	Per MIL-810F minimum integrity
EMI:	Withstand per SAE J1113 (contact factory for details)
RFI:	Withstand per SAE J1113 (contact factory for details)

MATERIALS:

Button:	Thermoplastic
Bezel:	Thermoplastic
Mounting Hardware:	None provided

HALL EFFECT FORWARD/NEUTRAL/REVERSE ROCKER

3-POSITION ANALOG OUTPUT SNAP-IN ROCKER WITH BACKLIGHTING
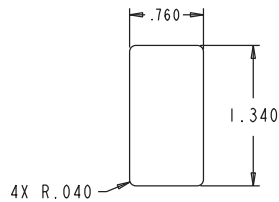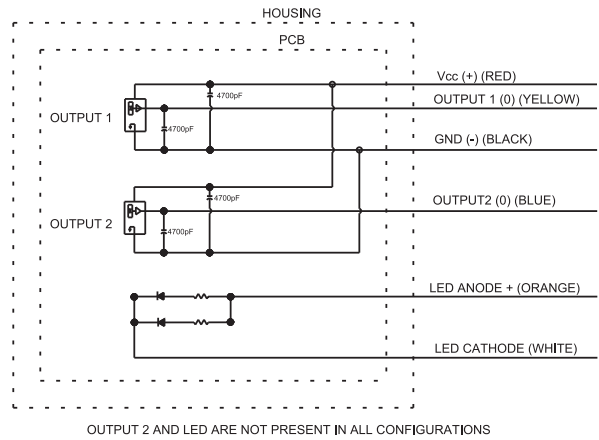

MOUNTING:

RECOMMENDED PANEL THICKNESS: 0.112 OPTIMUM THICKNESS
(0.040 MIN. - 0.205 MAX.)

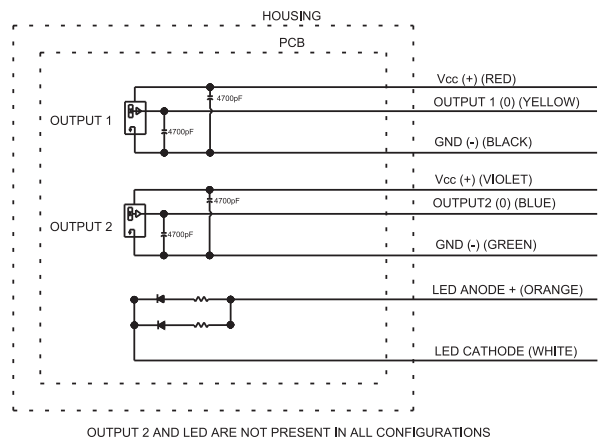RECOMMENDED PANEL OPENING: 0.760 X 1.340 OPTIMUM
(0.760/.770 X 1.335/1.345)

RECOMMENDED PANEL RADII: 0.040 OPTIMUM
(0.070 MAX.)

WIRING OPTION 1
COMMON POWER AND GROUND

OUTPUT 2 AND LED ARE NOT PRESENT IN ALL CONFIGURATIONS

WIRING OPTION 2
SEPARATE POWER AND GROUND

OUTPUT 2 AND LED ARE NOT PRESENT IN ALL CONFIGURATIONS

HFNR PART NUMBER CODE

HFNR – X X X X X X X X X

Light Source ①	Output 1 ②	Output 2	Wiring Option	Operating Force Direction 1 & 2 to Center/ Center to Direction 1 & 2	Button Style	Termination	Bezel Color ③	Button Color ③	FNR Legend
A. NONE	A. 4.5/2.5/0.5VDC	NONE ④	1. Common Power and Ground ④	1. 2.6/3.6 lbs.	1. Rocker	A. 20 AWG Wires 18.3" Long, Stripped and Tinned Ends	1. Red	1. Red	A. NONE
B. 2V Green LED	B. 4.5/2.5/0.5VDC	4.5/2.5/0.5VDC	2. Separate Power and Ground				2. Black	2. Black ①	B. FNR/White ①
C. 2V Amber LED	C. 4.5/2.5/0.5VDC	0.5/2.5/4.5VDC					4. Yellow	3. Orange	
D. 5V Green LED	D. 4.0/2.5/1.0VDC	NONE ④					6. Blue	4. Yellow	
E. 5V Amber LED	E. 4.0/2.5/1.0VDC	4.0/2.5/1.0VDC					8. Gray	5. Green	
F. 12V Green LED	F. 4.0/2.5/1.0VDC	1.0/2.5/4.0VDC						6. Blue	
G. 12V Amber LED	G. 1.0/2.5/4.0VDC	4.0/2.5/1.0VDC						7. Violet	
H. 24V Green LED	H. 1.0/1.0/4.0VDC	4.0/1.0/1.0VDC						8. Gray	
J. 24V Amber LED								9. White	

① Only button color black is available on backlit version; only legend color translucent white is available on backlit version.
② Outputs are when switch is in detented position.
③ Minimum lot charges may apply for certain color options.
④ For single output switches, wiring option 1 should be selected.

HALL EFFECT CONTROLS