

## 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

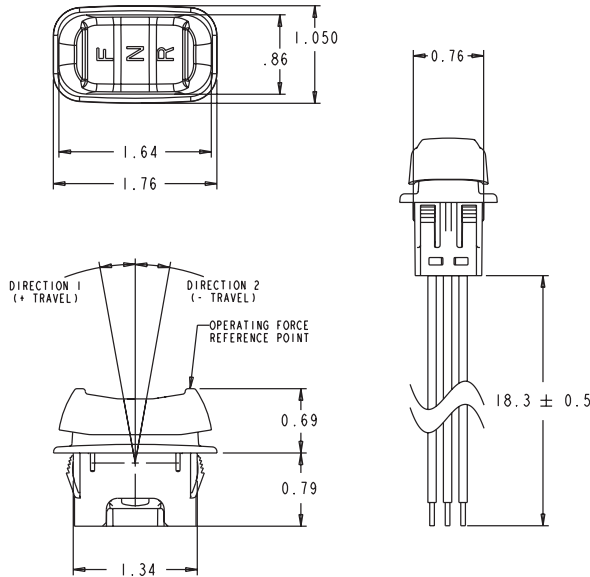
**Bezel:** Thermoplastic

**Mounting Hardware:** None provided

# HALL EFFECT FORWARD/NEUTRAL/REVERSE ROCKER

**HFNR**  
HALL EFFECT  
ROCKER

## 3-POSITION ANALOG OUTPUT SNAP-IN ROCKER WITH BACKLIGHTING

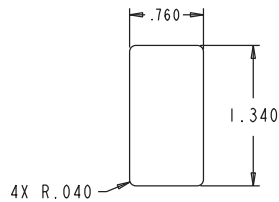


### MOUNTING :

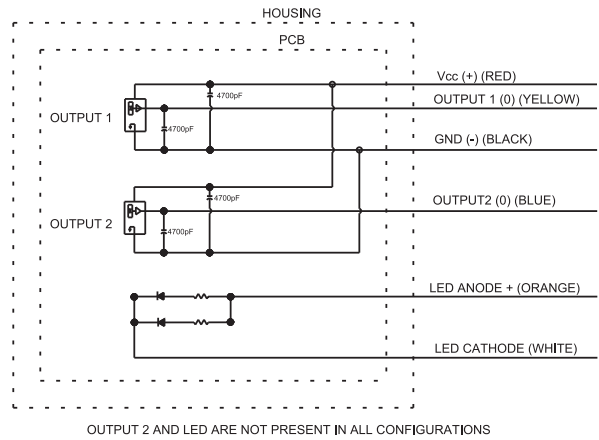
RECOMMENDED PANEL THICKNESS: 0.112 OPTIMUM THICKNESS  
(0.040 MIN. - 0.205 MAX.)

RECOMMENDED PANEL OPENING: 0.760 X 1.340 OPTIMUM  
(0.760/0.770 X 1.335/1.345)

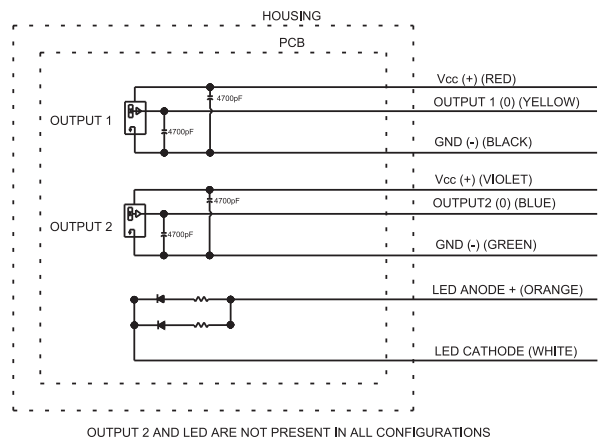
RECOMMENDED PANEL RADIUS: 0.040 OPTIMUM  
(0.070 MAX.)



### WIRING OPTION 1 COMMON POWER AND GROUND



### WIRING OPTION 2 SEPARATE POWER AND GROUND



## HFNR PART NUMBER CODE

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	FNRL 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 2. Black 4. Yellow 6. Blue 8. Gray	1. Red 2. Black ① 3. Orange 4. Yellow 5. Green 6. Blue 7. Violet 8. Gray 9. White	A. NONE B. FNRL/White ①
B. 2V Green LED	B. 4.5/2.5/0.5VDC	4.5/2.5/0.5VDC	2. Separate Power and Ground						
C. 2V Amber LED	C. 4.5/2.5/0.5VDC	0.5/2.5/4.5VDC							
D. 5V Green LED	D. 4.0/2.5/1.0VDC	NONE ④							
E. 5V Amber LED	E. 4.0/2.5/1.0VDC	4.0/2.5/1.0VDC							
F. 12V Green LED	F. 4.0/2.5/1.0VDC	1.0/2.5/4.0VDC							
G. 12V Amber LED	G. 1.0/2.5/4.0VDC	4.0/2.5/1.0VDC							
H. 24V Green LED	H. 1.0/1.0/4.0VDC	4.0/1.0/1.0VDC							
J. 24V Amber LED									

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.