Digital Output Hall Effect Sensors
Wiring Instructions

Description

The Phares Electric Digital Output Hall Effect Sensor switches logic low ("0") when the magnetic field strength at the sensor face exceeds the hall effect operate point threshold, and switches logic high ("1") when the magnetic field strength falls below release point threshold. The difference in the magnetic operate and release points is the hysteresis of the Hall Effect Sensor. This built-in hysteresis allows clean, fast switching of the output, even in the presence of external mechanical vibration and electrical noise. The omnipolar operation allows activation with either a north or a south polarity field of sufficient strength. In the absence of a magnetic field, the output is off.

Installation

The Phares Electric Digital Output Hall Effect Sensor can be secured via ½" conduit fitting, bracket, or both depending on sensor housing length. Various sensor housing lengths allow greater flexibility regarding mounting and bracket location. Use our Terminal Strip Assembly (TSA) Box for quick mounting and termination, and applications that require long cable runs. When using a bracket do not over tighten jam nuts. If vibration is an issue, use removable thread lock to keep jam nuts secure.

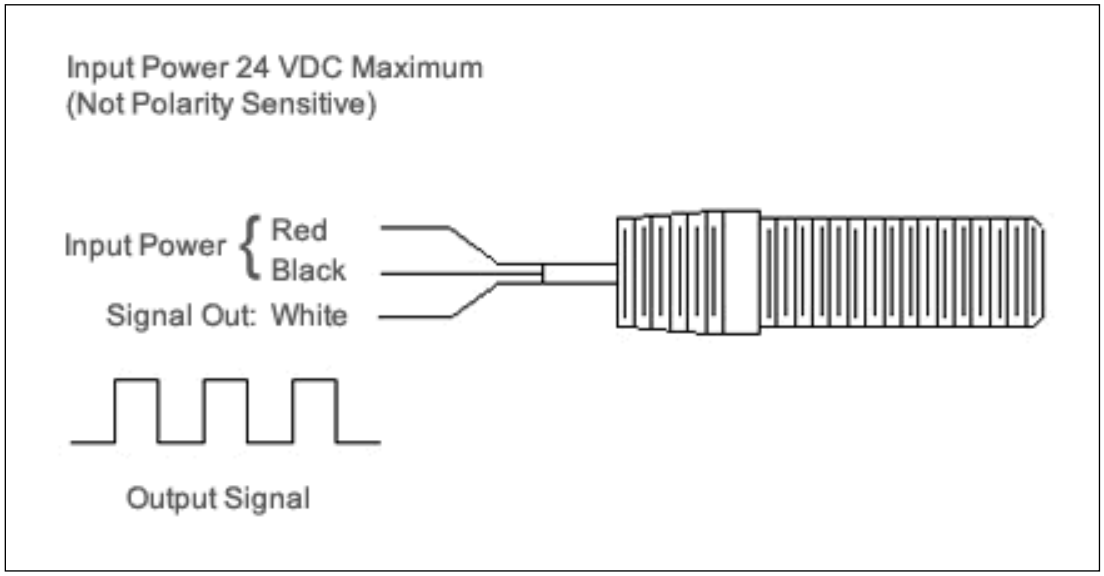

Figure 1. Digital Output Hall Effect Sensor Wiring

Disclaimer

The Hall Effect Sensors are not intended for safety critical applications. Users of this Phares Electric product in such applications assume all risks of such use and shall indemnify Phares Electric against all damages, including attorneys fees and costs, resulting from such use.

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Specifications

Digital Output Hall Effect Sensor Type
3 wire, sinking signal (NPN)

Supply Voltage Range
6-24 VDC

Supply Current
3.5 mA

Output Voltage
6-24 VDC (Corresponds with Supply Voltage used)

Output Current
Output capable of sinking 25 mA

Magnetic Pole Detect
North and South
(Positive and Negative field)

Gap
1/16" to 1/2" (determined by magnetic field strength on target)

Frequency
25 kHz Maximum

Sensor Housing Material
Aluminum
Delrin for corrosive environments

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Warranty

All products are thoroughly tested before shipping. If a product is found to be defective within 30 days from the date of purchase, *not the date of installation*, we will repair or replace the unit. The defective unit must be received and tested at Phares Electric before a replacement is shipped. If a replacement is needed before the defective unit arrives at Phares Electric, the replacement will be charged to your credit card, or invoiced to your Net30 Account. A credit will be issued once the unit is received at Phares Electric and deemed defective upon inspection and testing. Please call us for return shipping instructions.

The warranty is void if the unit is physically damaged from abuse or misuse, or if the unit shows evidence of excessive current, heat, moisture, vibration, or operating conditions outside of design limits or unauthorized modification.

The above constitutes the sole and exclusive warranty provided by Phares Electric. In no event shall Phares Electric, or its agents, be liable for any damages, whether direct, indirect, consequential, punitive or otherwise, arising out of any product or service provided or arranged by Phares Electric.

Returns

Returns are accepted within 30 days from date of sale. Please call us for return shipping instructions. Returned items must be in resalable condition. A credit will be issued after the item is received by Phares Electric and deemed resalable after inspection and testing.

Contact

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