

Features and Benefits

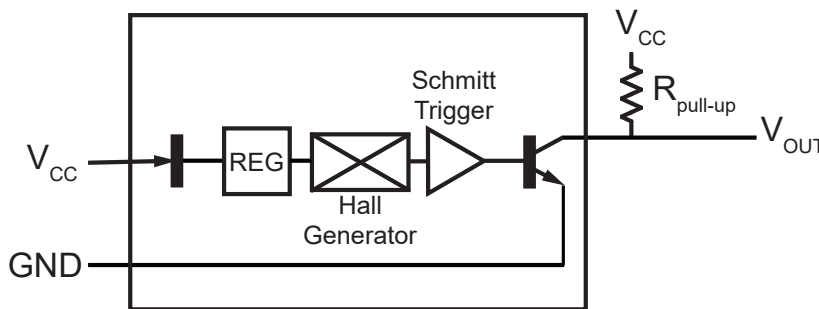
- Non-contact, solid state device
- Unipolar switchpoint: a south pole of sufficient strength turns output on (Logic Low). Removal of magnetic field turns output off.
- On board regulator allows operation with supply voltages of 3 to 24 VDC
- Current sinking output
- 20 mA continuous operation
- Reverse polarity protection
- Temperature compensated
- Operates from -40°C to 125°C
- Rugged thermoplastic housing



Sensor

Wire color order varies with part configuration

Electrical Circuit



Output channels require customer supplied pull-up resistors. See Table 1.1 for recommended resistor values.

Note: A pull-up resistor is required on the open collector output to establish a quiescent voltage level. The pull-up resistor also provides faster rise times and improves noise immunity.

Pull-Up Resistance Chart for Selected Sink Currents

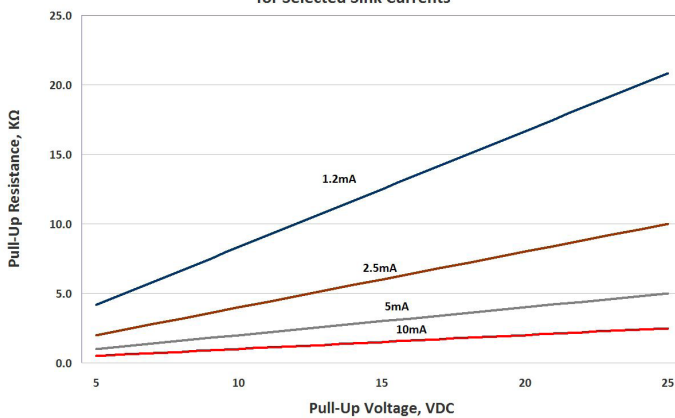


Table 1.1

Recommended Pull-Up Resistor Values			
Current, I _{sink}	Supply Voltage		
	5	12	24
1.2 mA	4.3K	10.0K	20.0K
2.5 mA	2.0K	4.7K	10.0K
5 mA	1.0K	2.4K	4.7K
10 mA	510Ω	1.2K	2.4K

I_{sink} is application dependent. It is recommended to use the lowest possible sink current when selecting a pull-up resistor.

Theoretical Pull-Up Resistor Calculation: $R_{pullup} = \frac{V_{supply}}{I_{sink}}$

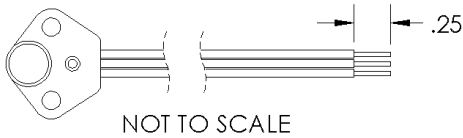
Resistance values based on closest standard 5% resistor values

Absolute Maximum I_{sink} = 20mA

4.7 K pull-up is available as a standard option. If an alternative pull-up value is preferred, contact sales@phoenixamerica.com.

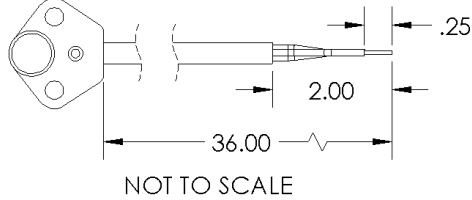
Wiring

FLYING LEADS



- 24 AWG
- PVC Insulation

CABLE



- 24 AWG
- PVC Insulation

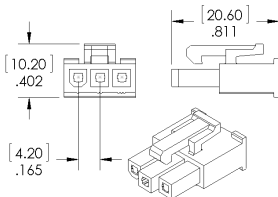
Table 3.1

Standard Wiring Color Code		
	Flying Leads	Cable
Vcc	Yellow	Yellow
Gnd	Red	Red
Output	Blue	Blue

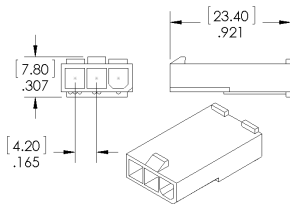
Custom lengths and insulation materials available. Contact sales@phoenixamerica.com.

Connector Options

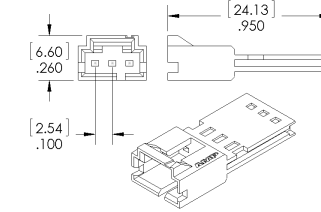
Molex Mini-Fit Jr. (Male)



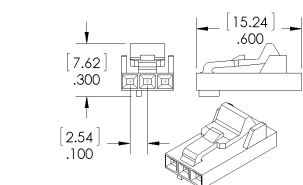
Molex Mini-Fit Jr. (Female)



TE AmpModu MTE (Male)



TE AmpModu MTE (Female)



Need a different connector? Contact sales@phoenixamerica.com.

Part Number Description

PF	C	F	B	X
Series	Output Type	Wiring	Length (Meters)	Connector
PF	C Open Collector (default)	F Flying Leads (Default) C Cable	A .5 (19.685") B 0.914 (36") (default) C 1 (39.370") D 2 (78.740")	X None (default) A1 TE AmpModu MTE (Male) A2 TE AmpModu MTE (Female) M1 Molex Mini-Fit Jr. (Male) M2 Molex Mini-Fit Jr. (Female)

Example: PF-C-F-B-X