

DIGITAL VANE SENSOR

VN Series



Magnetically activated digital vane sensor in a rugged, overmolded plastic housing with three pins or wire leads

Features

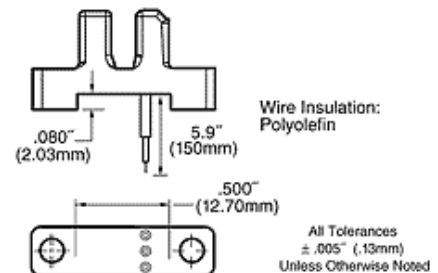
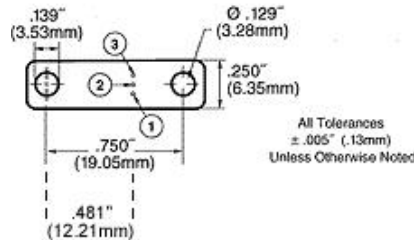
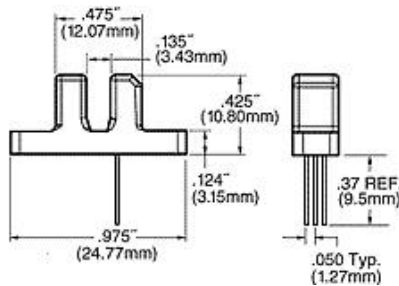
- Available in two operating temperature ranges.
- Immune to moisture and dust
- Reliable and repeatable
- No mechanical contacts to wear out
- Reverse battery protection to -24VDC
- Sensor body material: Glass filled polyester
- Open collector (sinking or NPN) output can be used with bipolar or CMOS logic circuits with suitable pull-up resistor.
- Recommended vane parameters: low carbon cold-rolled steel at least 0.040" thick and 0.250" wide should penetrate to a depth <0.120" from bottom of sensor slot.

Specifications

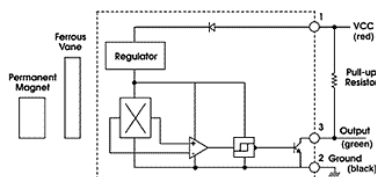
| Part Number | Operating Voltage Range (VDC) | Supply Current (mA max) | Output | Output Saturation Voltage (mV max) | Output Current (mA max) | Operating Temperature Range (°C) | Storage Temperature Range (°C) | Termination |
|-------------|-------------------------------|-------------------------|-------------|------------------------------------|-------------------------|----------------------------------|--------------------------------|----------------------|
| VN101501 | 3.8 - 24 | 7.5 | 3-pin sink | 400 | 25 | -40 to 85 | -40 to 85 | pins |
| VN101502 | 3.8 - 24 | 7.5 | 3-pin sink | 400 | 25 | -40 to 150 | -40 to 150 | pins |
| VN101503 | 3.8 - 24 | 7.5 | 3-wire sink | 400 | 25 | -40 to 85 | -40 to 85 | 24 awg x 150mm leads |
| VN101504 | 3.8 - 24 | 7.5 | 3-wire sink | 400 | 25 | -40 to 150 | -40 to 150 | 24 awg x 150mm leads |

Notes: These sensors require the use of an external pull-up resistor, the value of which is dependent on the supply voltage
Pull-up resistor should be connected between output (Green) and Vcc (Red).

Dimensions mm



Open Collector Sinking Block Diagram



Recommended pull-up resistor values

| | | | | | |
|-----------|----|------|------|----|----|
| Volts DC: | 5 | 9 | 12 | 15 | 24 |
| Ohms: | 1K | 1.8K | 2.4K | 3K | 3K |

Specifications subject to change without notice.

Last Updated 083011