DIGITAL VANE SENSOR

VN1015 Series

Magnetically activated digital vane sensor in a rugged, overmolded plastic housing with three pins or 3-wire flying leads.

**Features**
- Available in two operating temperature ranges
- Immune to moisture and dust
- Reliable and repeatable
- No mechanical contacts to wear out
- Operates from 4.5 to 24VDC
- Reverse battery protection to -24VDC
- Open collector (sinking or NPN) output can be used with bipolar or cmos logic circuits with suitable pull up resistor
- Sensor body material: glass-filled polyester
- Recommended vane parameters: low carbon material at least 0.040” thick, should penetrate to a depth <0.120” from bottom of sensor slot.

**Specifications**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Operating Voltage Range (VDC)</th>
<th>Supply Current (mA max.)</th>
<th>Output</th>
<th>Output Saturation Voltage (mV max.)</th>
<th>Output Current (mA max.)</th>
<th>Operating Temp Range (°C)</th>
<th>Storage Temp Range (°C)</th>
<th>Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>VN101501</td>
<td>4.5 – 24</td>
<td>6</td>
<td>3-pin sink</td>
<td>400</td>
<td>25</td>
<td>-40 to 85</td>
<td>-40 to 85</td>
<td>pins</td>
</tr>
<tr>
<td>VN101502</td>
<td>5.0 – 24</td>
<td>6</td>
<td>3-pin sink</td>
<td>400</td>
<td>25</td>
<td>-40 to 125</td>
<td>-40 to 125</td>
<td>pins</td>
</tr>
<tr>
<td>VN101503</td>
<td>4.5 – 24</td>
<td>6</td>
<td>3-wire sink</td>
<td>400</td>
<td>25</td>
<td>-40 to 85</td>
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<td>24 AWG x 150mm leads</td>
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<td>VN101504</td>
<td>5.0 – 24</td>
<td>6</td>
<td>3-wire sink</td>
<td>400</td>
<td>25</td>
<td>-40 to 125</td>
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</tr>
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</table>

Notes: These sensors require the use of an external pull-up resistor, the value of which is dependent on the supply voltage. See page 18 for recommendations. Pull-up resistor should be connected between output (Green) and Vcc (Red).

**Dimensions** inches (mm)

All tolerances ±0.005 (0.13) unless otherwise noted.

**Open Collector Sinking Block Diagram**