### The NSS Series

The NSS Series are self-contained rotation monitoring systems that are ideal for detecting the unwanted slowdown of process equipment. These systems bring efficiency and safety to your operations by preventing machine damage, product waste and costly downtime.

Each switch is used with a shaft-end mounted pulsar DISC, which generates an alternating magnetic field that is picked up by the speed switch. The switch decodes this frequency signal to determine shaft speed and compares this to the pre-adjusted set point, easily calibrated via a single-turn potentiometer. In the event of rotational failure, such as a broken drive, belt slippage, product overloads or clugs, the relay can be used to provide an alarm or equipment shutdown, assuring machine protection and process integrity. The miniature speed switch series is fail-safe; any malfunction during operation will de-energize the control circuit.

### SPECIFICATIONS

- **Temperature Limits:** Operating -40 to 140°F (-40 to 60°C).
- **Enclosure:** NSSP: Polyvinylchloride (PVC). NSSM: Cast aluminum.
- **Switch Type:** SPDT.
- **Electrical Rating:** 5A @ 115 VAC.
- **Electrical Connections:** 18 AWG, 12˝ (30.48 cm) long.
- **Conduit Connections:** 1˝ female NPT.
- **Power Requirements:** 115 VAC, 60 Hz standard.
- **Input Signal Type:** NPN open collector.
- **Set Point Adjustment:** Single turn (270°) potentiometer.
- **Gap Distance:** 3/8˝ ± 1/8˝.
- **Weight:** NSSP-A1W: 0.54 lb (0.82 lb with disc); NSSP-B1W: 0.54 lb (0.64 lb with disc); NSSM-A1W: 1.58 lb (1.88 lb with disc); NSSM-B1W: 1.60 lb (1.70 lb with disc).
- **Agency Approvals:** UL pending, CE.

### DISC SPECIFICATIONS

- **Materials:** Pulsar discs: Nylon 12, PVC; Disc guards: SS; Easy mount bracket: Aluminum with SS shaft.
- **Maximum Speed:** 10,000 RPM at ambient temperature.

### Model Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Set Point Range</th>
<th>Supply Voltage</th>
<th>Enclosure</th>
<th>Disc Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSSP-A1W</td>
<td>10-100 RPM</td>
<td>115 VAC</td>
<td>Plastic</td>
<td>NONE</td>
</tr>
<tr>
<td>NSSP-B1W</td>
<td>100-5000 RPM</td>
<td>115 VAC</td>
<td>Plastic</td>
<td>NONE</td>
</tr>
<tr>
<td>NSSM-A1W</td>
<td>10-100 RPM</td>
<td>115 VAC</td>
<td>Metal</td>
<td>NONE</td>
</tr>
<tr>
<td>NSSM-AKIT</td>
<td>10-100 RPM</td>
<td>115 VAC</td>
<td>Metal</td>
<td>4&quot; A DISC</td>
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<tr>
<td>NSSM-B1W</td>
<td>100-5000 RPM</td>
<td>115 VAC</td>
<td>Metal</td>
<td>NONE</td>
</tr>
<tr>
<td>NSSM-BKIT</td>
<td>100-5000 RPM</td>
<td>115 VAC</td>
<td>Metal</td>
<td>2-1/2&quot; B DISC</td>
</tr>
</tbody>
</table>

### Model Descriptions

- **DISCA:** a4” Pulsar disc, 16 magnetic poles for 10-100 RPM units
- **DISCB:** a2-1/2” Pulse disc, 8 magnetic poles for 100-5000 RPM units
- **A-290:** Easy Mount Bracket assembly for NSSM includes 4” disc
- **A-291:** Disc Guard for easy mount bracket, A-290
- **A-292:** Disc Guard for NSS-AM/MBM