The Model RMS non-contact motion control will provide accurate and reliable speed sensing of rotating shafts and machinery. Choose a NEMA 4 polycarbonate enclosed controller, then choose a sensor, and a matching mounting bracket and target disk. Each sensor comes with 6 feet of cable, will need to field splice for longer lengths. It will produce an output signal at a predetermined speed which may be either underspeed or overspeed. Solid state electronics and analog technology make this one of the most advanced and versatile motion detectors available. The Model RMS protects all valuable rotating equipment including belt conveyors, bucket elevators, rotary feeders, or screw conveyors.

**HOW IT WORKS**

The Model RMS uses a remote mounted inductive sensor to monitor speed. Motion is sensed by means of induced measurable pulses produced by a ferrous metal target rotating past the sensor. If a distinctive metal target is not available an optional metal disk can be purchased. The produced pulses are converted to a digital electronic signal. Solid state circuitry within the DIN rail mount box then analyzes the digital signal and activates or deactivates the output relay at the pre-set speed point.

**SPECIFICATIONS**

**MECHANICAL SPECIFICATIONS:**
- **ENCLOSURE:** Polycarbonate
- **MEETS:** NEMA 4 & 4X
- **WEIGHT:** .75 lbs.
- **SIZE:** 3" x 2¼" x 4¼"

**ELECTRICAL SPECIFICATIONS:**
- **INPUT VOLTAGE:**
  - RMS-1G; 105-135 volts A.C., 50-60Hz.
  - RMS-2G; 210-250 volts A.C., 50/60 Hz.
  - RMS-3G; 24V AC/DC
- **OUTPUT:**
  - DP/DT relay 5 Amp. Resistive at 120 volts A.C.
  - DP/DT relay 5 Amp. Resistive at 240 volts A.C.
  - DP/DT relay 5 Amp. Resistive at 30 volts D.C.
  - 1/10 horse power at 120 volts A.C.
  - 1/10 horse power at 240 volts A.C.
- **AMBIENT TEMP:** -10°F to 104°F (-23°C to 40°C) Controller only
- **REPEATABILITY:** +2% maximum at constant voltage and temperature
- **POWER CONSUMPTION:** 3 watts maximum
- **SPEED RANGES:**
  - LOW: 2 to 120 PPM
  - MEDIUM: 20 to 1200 PPM
  - HIGH: 200 to 12,000 PPM
- **SIGNAL POINT:** Speed at which relay will de-energize for Underspeed, or energize for Overspeed. Recommended to be 15-20% lower or higher than running speed. This will eliminate nuisance shutdowns.
- **START UP DELAY:** Adjustable up to 45 seconds

**SENSOR SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>RMS-8S</th>
<th>RMS-12S</th>
<th>RMS-18S</th>
<th>RMS-30S</th>
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</thead>
<tbody>
<tr>
<td>Sensor Type</td>
<td>2 wire DC</td>
<td>2 wire DC</td>
<td>2 wire DC</td>
<td>2 wire DC</td>
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<tr>
<td>Body Diameter</td>
<td>8mm (0.31)</td>
<td>12mm (0.47)</td>
<td>18mm (0.71)</td>
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<tr>
<td>Body Length</td>
<td>50mm (1.97)</td>
<td>71mm (2.79)</td>
<td>80mm (3.15)</td>
<td>81mm (3.19)</td>
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<tr>
<td>Thread Size</td>
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<td>M12</td>
<td>M18</td>
<td>M30</td>
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<tr>
<td>Cable Length</td>
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<td>2m (6.5)</td>
<td>2m (6.5)</td>
<td>2m (6.5)</td>
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<tr>
<td>Sensing Range</td>
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<td>2.0mm (0.08)</td>
<td>5.0mm (0.20)</td>
<td>10mm (0.30)</td>
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<tr>
<td>Maximum Pulse Rate</td>
<td>2 kHZ</td>
<td>1.5 kHZ</td>
<td>1.0 kHZ</td>
<td>0.6 kHZ</td>
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<tr>
<td>Maximum Voltage</td>
<td>30 VDC</td>
<td>30 VDC</td>
<td>30 VDC</td>
<td>30 VDC</td>
</tr>
<tr>
<td>Maximum Current</td>
<td>100 MA</td>
<td>100 MA</td>
<td>100 MA</td>
<td>100 MA</td>
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</table>