PPI developed and patented the unique Smart Roll which monitors conveyor belt speed. Designed with a proximity sensor protected inside our rugged idler roll, it creates an electronic pulse stream that must be interpreted by either a PLC or our Smart Monitor. When those interpreting devices are incorporated into the conveyor system, they can control shutdowns and warning alert systems.

FEATURES AND BENEFITS

• Sensor protection
  – Mounted inside PPI CEMA D idler roll for protection from the environment by our LXT sealing system
• Overload protection
  – Protects the sensor from short circuits and wiring problems
• Multifunction
  – The same sensor works with AC/DC/NPN/PNP
• Available with 1, 2, or 6 pulses per revolution
• Maintenance free

• Other mounting options
  – Troughing wing roll
  – Return roll
  – Universal mount
• Smart Monitor™
  – All Smart Rolls requires Smart Monitor or PLC
  – Acts as a low speed indicator
  – Incorporate 0 into light, alarm, or cut off switch
  – 120 VAC standard
  – Options include: 120 VAC 4-20 mA, 9-36 VDC, or 220 VAC 4-20 mA
  – Required if your controller circuit does not have a PLC

MOUNTING

• Clean Side Return (CSR) is preferred
  – Versatile - belt width independent
  – Longer life due to no load
  – Flexible mounting
SMART MONITOR™
Actual speed limitations may exceed these limits, depending upon roll diameter and electronics.

<table>
<thead>
<tr>
<th># Pulses</th>
<th>SPEED FEET PER MINUTE</th>
<th>Range</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>5</td>
<td>Low</td>
<td>Feeder/Metering</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>High</td>
<td>High Speed</td>
</tr>
</tbody>
</table>

For more details, refer to the Smart Roll™ and Smart Monitor™ operation and maintenance manuals located at www.ppi-global.com under RESOURCES. For wiring and integration into your system, a qualified electrician is recommended.