



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<sup>™</sup>
  - 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.

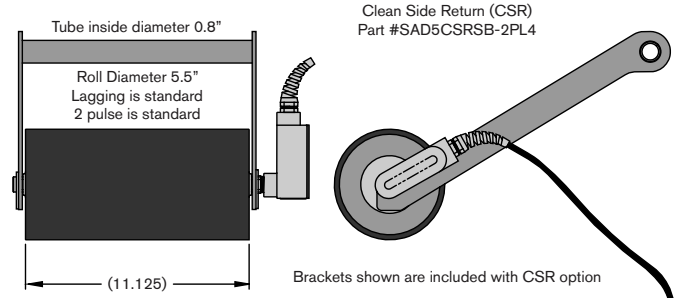
# Pulses	SPEED FEET PER MINUTE		Range	Applications
	MIN	MAX		
6	5	260	Low	Feeders/ Metering
2	10	780	Normal	Normal
1	20	1560	High	High Speed

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

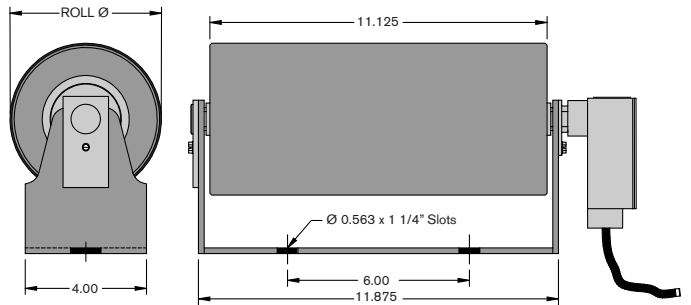


**MOUNTING OPTIONS**

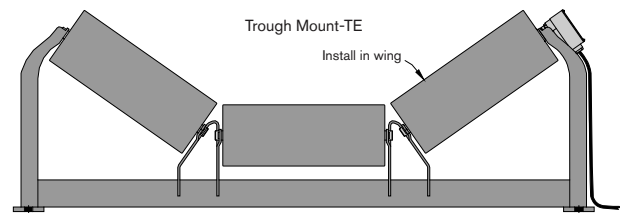
**CLEAN SIDE RETURN**



**UNIVERSAL MOUNT**



**TROUGHING IDLER ROLL**



**RETURN IDLER ROLL**

