TRAILING ARM BELT SPEED SENSOR

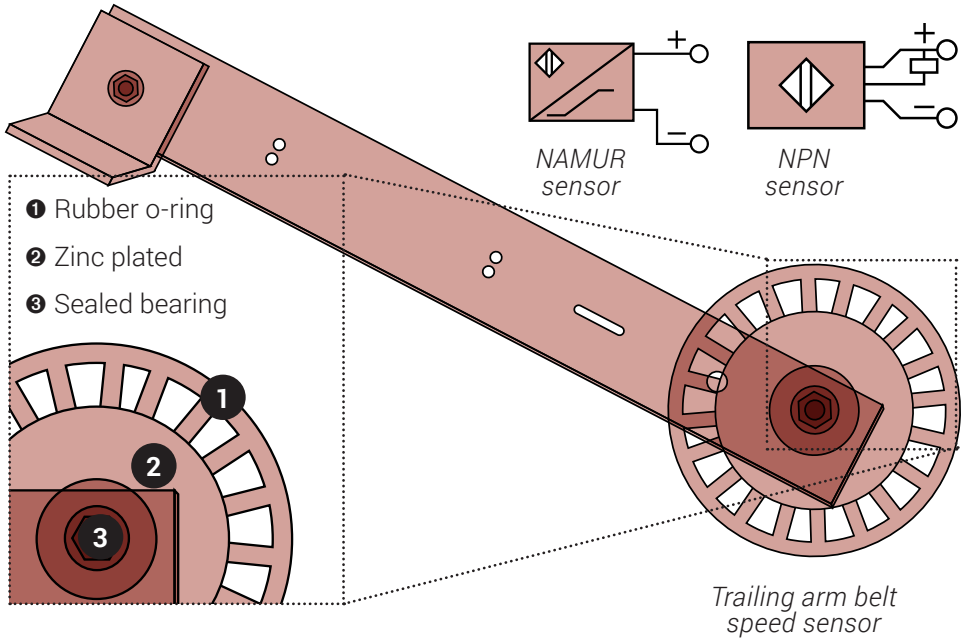
OVERVIEW

The SRO Technology trailing arm speed sensor monitors conveyor belt speed. The output signal is transmitted to a nearby integrator.

The trailing arm type speed sensor uses its own weight to sit on the return side of the conveyor belt to rotate a trailing wheel.

Holes in the trailing wheel allow a proximity switch to pick up a pulse from the wheel as it rotates.

The unit is designed to mount off a cross beam near to the belt scale using the pivoting bolting bracket mounted off the trailing arm unit.



APPLICATIONS

Ideal for mining, grain, and processing plants that use:

- Belt weighers
- Tramp metal detectors
- Continuous conveyor belt speed monitoring
- Under-speed monitoring

FEATURES

Easy-to-fit and durable sensor featuring:

- Zinc passivated finish with sealed bearing for long life and minimal maintenance
- Damp-proof and dust-proof making it suitable for harsh environments
- Skidding on the return belt prevented with o-ring on the wheel
- Options for under speed sensor and intrinsically safe

SPECIFICATIONS

Operation voltage: +10 to +30 V DC
Operating current: ≤ 20 mA
Specification: 33.33 pulse/metre
Speed range: 0.1 to 3.5 m/s
Output signal: Open collector output
Operating temperature: -30˚C to +50˚C
Relative humidity: ≤ 90% no condensation
IP Grade: IP67
Overall length: 600mm
Wheel diameter: 190mm

WIRING

NPN proximity sensor (three-wire)

- Positive - Pin 1 (Brown)
- Common - Pin 2 (Blue)
- Signal - Pin 3 (Black)

NAMUR output intrinsically safe sensor (two-wire)

- Positive - Pin 1 (Brown)
- Negative - Pin 2 (Blue)

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