

The Milltronics RBSS speed sensor is a high-resolution wheel driven return belt speed sensor. The RBSS monitors conveyor belt speed, with the output signal transmitted by cable connection to the integrator.

Easily installed close to the belt scale assembly, the RBSS provides a signal generated as the wheel on the sensor rotates on the return belt. To secure this cost-effective unit in place, position a cross bar between stringers - either just before or after a return belt idler, or use the optional mounting bracket. The weight of the RBSS ensures positive rotation of the wheel in the middle of the return belt, and pulses from the magnetic sensor are generated by the rotation of the 60 toothed speed sprocket driven by the wheel.

The RBSS output can be applied to any Milltronics belt scale integrator..



Product Features

- Rugged design
- IP65 rated
- Easy, low cost installation
- Accurate belt speed detection

Technical Specifications

Power

- RBSS: 5 to 18 Vdc, 10 mA
- RBSS IS: 5 to 25 Vdc from IS Switch Isolator

Temperature

- RBSS: -40 to 105 °C (-40 to 220 °F)
- RBSS IS: -25 to 100 °C (-14 to 212 °F)

Input

- wheel rotation 2 to 450 rpm, bidirectional

Output

- 60 pulses per revolution, 20 to 450 Hz, 150.4 pulses/m (4.58 pulses/ft)
- RBSS: open collector sinking output, max. 17 mA
- RBSS IS: load current, 0 to 15 mA

Construction

- trailing arm: painted mild steel
- sensor wheel: 125 mm (5") diameter, polyurethane tread

Cable (optional)

- RBSS: 3 m, 3 conductor 22 AWG shielded cable
 - 300 m (1000 ft.) max. cable run
- RBSS IS: 2 m, 2 conductor 26 AWG PVC covered cable
 - 300 m (1000 ft.) maximum cable run to IS switch isolator
 - 300 m (1000 ft.) maximum cable run from IS switch isolator and integrator

Approvals

- RBSS:
 - CE*
- RBSS IS (with suitable IS switch isolator or Switch Amplifier)¹:
 - ATEX: II 2 G EEx ia IIC T6
 - CSA/FM: Class I, Div. 1, Groups A, B, C, and D, Class II, Div. 1, Groups E, F, and G (system approval)
 - CE*

Proximity Switch Approval Ratings (with suitable IS switch isolator or Switch Amplifier)¹

- Pepperl+Fuchs #NJ0.8-5GM-N)
 - ATEX: II (2) G, [EEx ia] IIC T6
 - CSA/FM: Class 1, Div. 1, Groups A, B, C, and D, Class II, Div. 1, Groups E, F, and G (system approval)

Optional Switch Isolator (required for RBSS IS)²

- Pepperl+Fuchs #KFA5-SOT2-Ex2 and #KFA6-SOT2-Ex2
 - ATEX: II (1) G, [EEx ia] IIC
 - CSA/FM: Class 1, Div. 1, Groups A, B, C, and D, Class II, Div. 1, Groups E, F, and G (system approval)

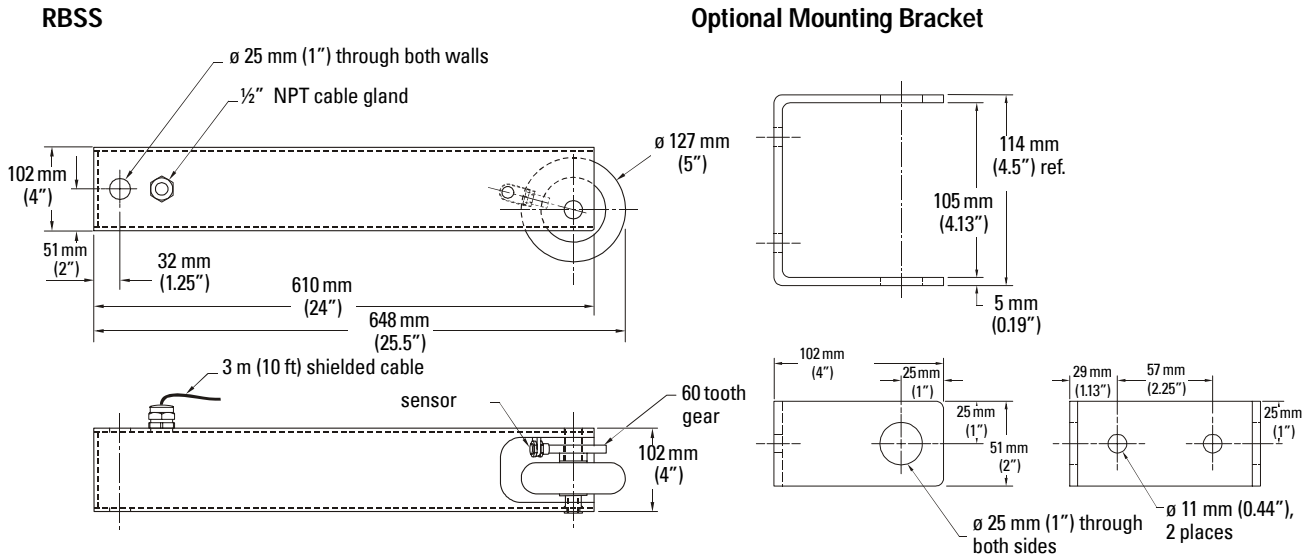
* EMC performance available upon request.

¹Based on the ATEX rating of the NAMUR slotted sensor and CSA/FM approvals.

²The approval ratings for the Proximity Switch and the IS Switch Isolator are the property of Pepperl+Fuchs. Copies of these approval certificates may be obtained at www.siemens-milltronics.com.

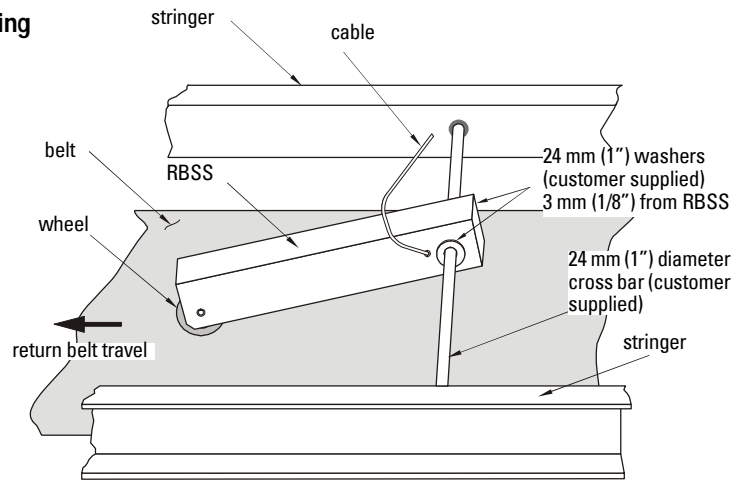
Specifications are subject to change without notice.

Dimensions



Installation

RBSS Standard Mounting



RBSS with Optional Mounting Bracket

