

Overview



Milltronics RBSS is a high resolution, wheel-driven return belt speed sensor.

Benefits

- Rugged design
- IP67 rated
- Easy, low cost installation
- Accurate belt speed detection

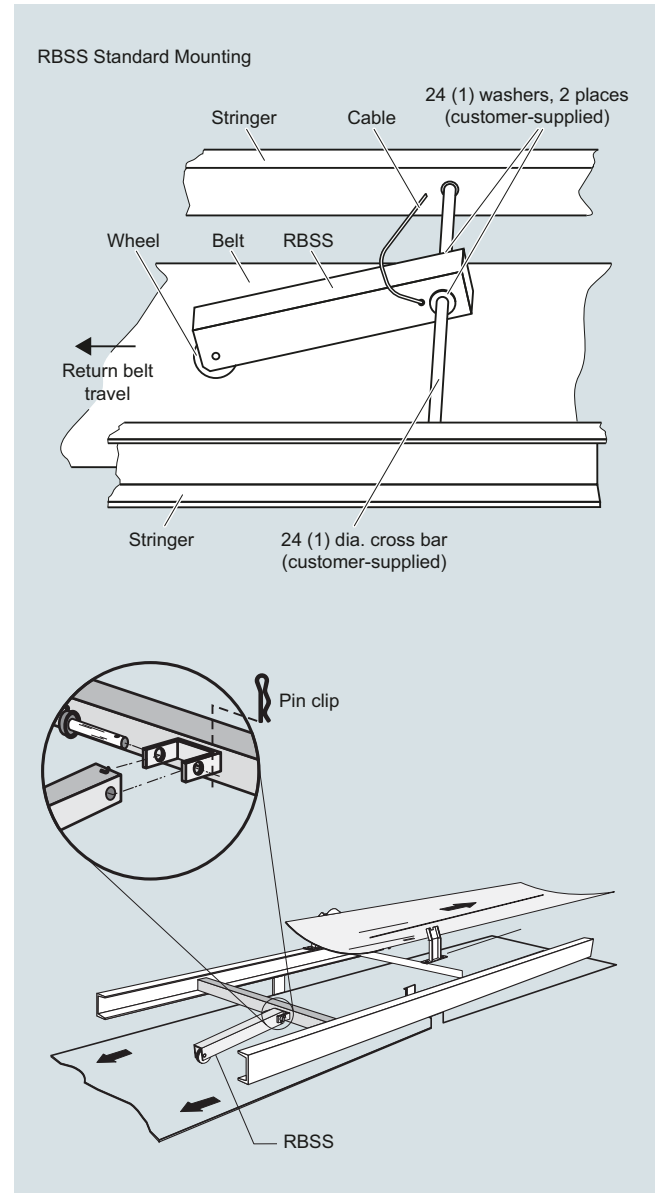
Application

Milltronics RBSS monitors conveyor belt speed, with the output signal transmitted by cable connection to the integrator (Milltronics BW500, or SIWAREX FTC).

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 belt scale integrator.

Design



RBSS installation, dimensions in mm (inch)

Belt Weighing

Speed sensors

Milltronics RBSS

Technical specifications

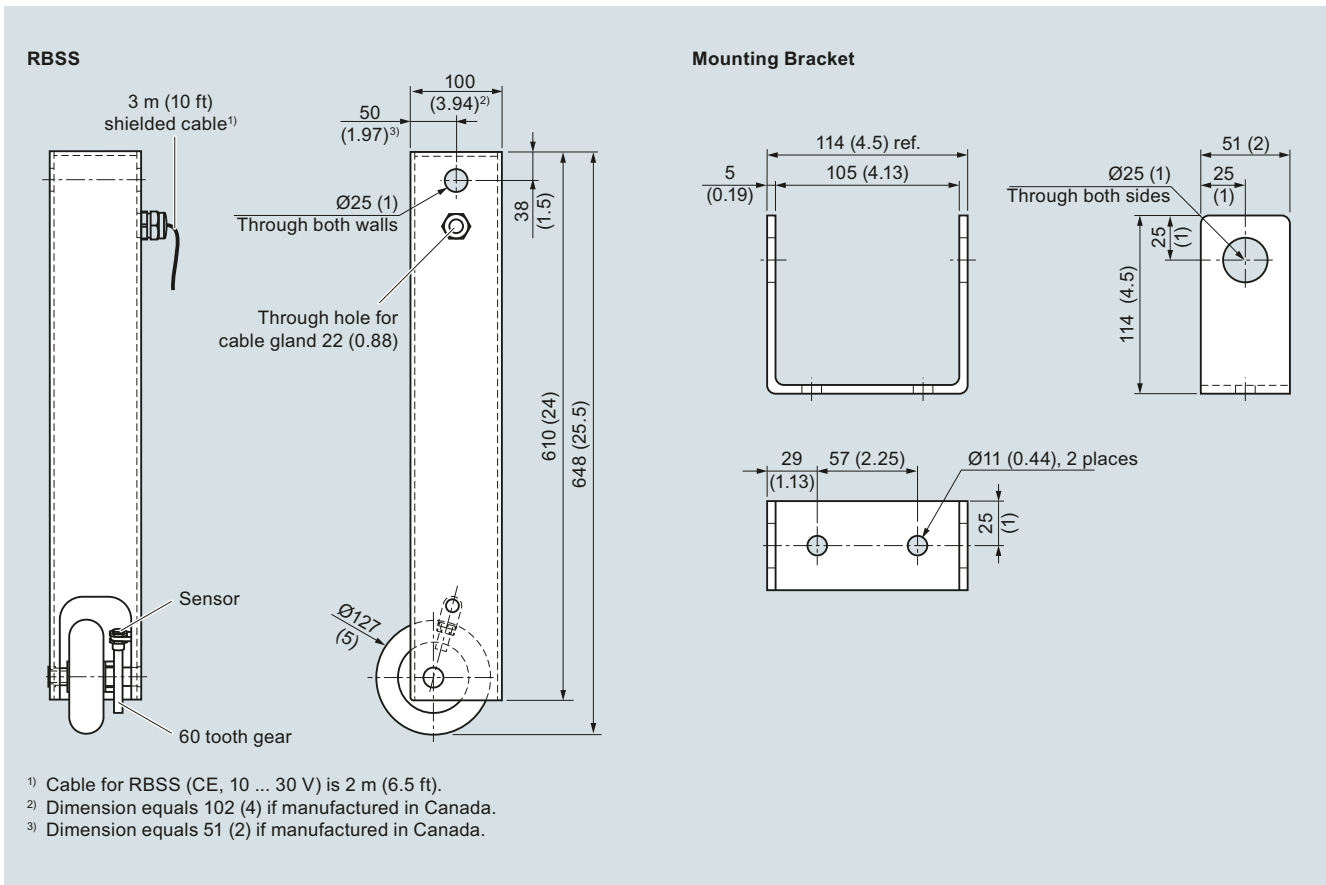
Milltronics RBSS	
Mode of operation	
Measuring principle	Magnetic proximity sensor provides pulse to integrator
Typical application	Aggregate belt conveyors
Input	Wheel rotation 2 ... 450 rpm, bi-directional
Output	<ul style="list-style-type: none"> 60 pulses per revolution, 2 ... 450 Hz, 150.4 pulses/m (4.58 pulses/ft) RBSS: open collector, NPN sinking output, max. 17 mA
Rated operating conditions	
Ambient temperature	RBSS: -40 ... +105 °C (-40 ... +220 °F)
Max. belt speed	3 m/s (590 fpm)
Degree of protection	IP67
Design	
Trailing arm	Painted mild steel
Sensor wheel	127 mm (5 inch) diameter, polyurethane tread
Power supply	RBSS: 4.5 ... 28 V DC, 16 mA
Interconnection wiring (to integrator)	<ul style="list-style-type: none"> RBSS: 3 m, 3 conductor 22 AWG shielded cable - 300 m (1 000 ft) maximum cable run
Approvals	
RBSS	CE, UKCA, RCM, EAC, KC ¹⁾

¹⁾ EMC performance available upon request.

Selection and ordering data

Milltronics RBSS Speed sensor		Article No.
Return belt mounted, 2 ... 450 rpm, with 150.4 pulses/m (4.58 pulses/ft).		7MH7134-
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.		0
Model	60 pulses per revolution	2
Fabrication	Standard, C5-M rated polyester painted mild steel	A
Mounting options	With mounting kit	B
Approvals	CE, UKCA, RCM, EAC, KC	3
Further designs	Please add "-Z" to article no. and specify order code(s).	Order Code
	Stainless steel tag [69 x 38 mm (2.7 x 1.5 inch)]. Measuring-point number/identification (max 27 characters), specify in plain text.	Y15
	Manufacturer's test certificate: According to EN 10204-2.2	C11
Operating instructions	All literature is available to download for free, in a range of languages, at: http://www.siemens.com/weighing/documentation	
Spare parts	Wheel, 127 diapolyurethane, sealed bearing	Article No.
	Magnetic proximity switch	7MH7723-1FX
	Wheel and shaft, 152 mm dia. ²⁾	7MH7723-1GA
	60 tooth gear ²⁾	7MH7723-1EN
	Bearing (two required) ²⁾	7MH7723-1EQ
Accessories	Conduit kit	7MH7723-1ER
		7MH7723-1NA

²⁾ For use with old style RBSS PBD-51033452.

Dimensional drawings


RBSS, dimensions in mm (inch)