

SIEMENS



Operating instructions

Milltronics

Speed Sensors

Milltronics TASS

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Speed sensors Milltronics TASS

Operating Instructions

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Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

 DANGER
indicates that death or severe personal injury will result if proper precautions are not taken.
 WARNING
indicates that death or severe personal injury may result if proper precautions are not taken.
 CAUTION
indicates that minor personal injury can result if proper precautions are not taken.
NOTICE
indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

 WARNING
Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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Introduction

1.1 Operating instructions scope

This instruction manual covers the installation, operation and maintenance of the TASS Speed Sensor.

1.2 Industrial use note

Note

- The TASS is to be used only in the manner outlined in this instruction manual.
 - This product is intended for use in industrial areas. Operation of this equipment in a residential area may cause interference to several frequency based communications.
-

Description

2.1 Milltronics TASS overview

The TASS trailing arm speed sensor is a compact, low-profile, wheel-driven return belt speed sensor. The TASS has a sensor wheel and trailing arm assembly that rides along the return belt. The sensor wheel rotates on a shaft fixed to the trailing arm. The internal proximity switch detects rotation of the wheel, generating a signal proportional to belt speed. The output signal is transmitted via cable connection to the integrator to determine the rate of conveyed material.

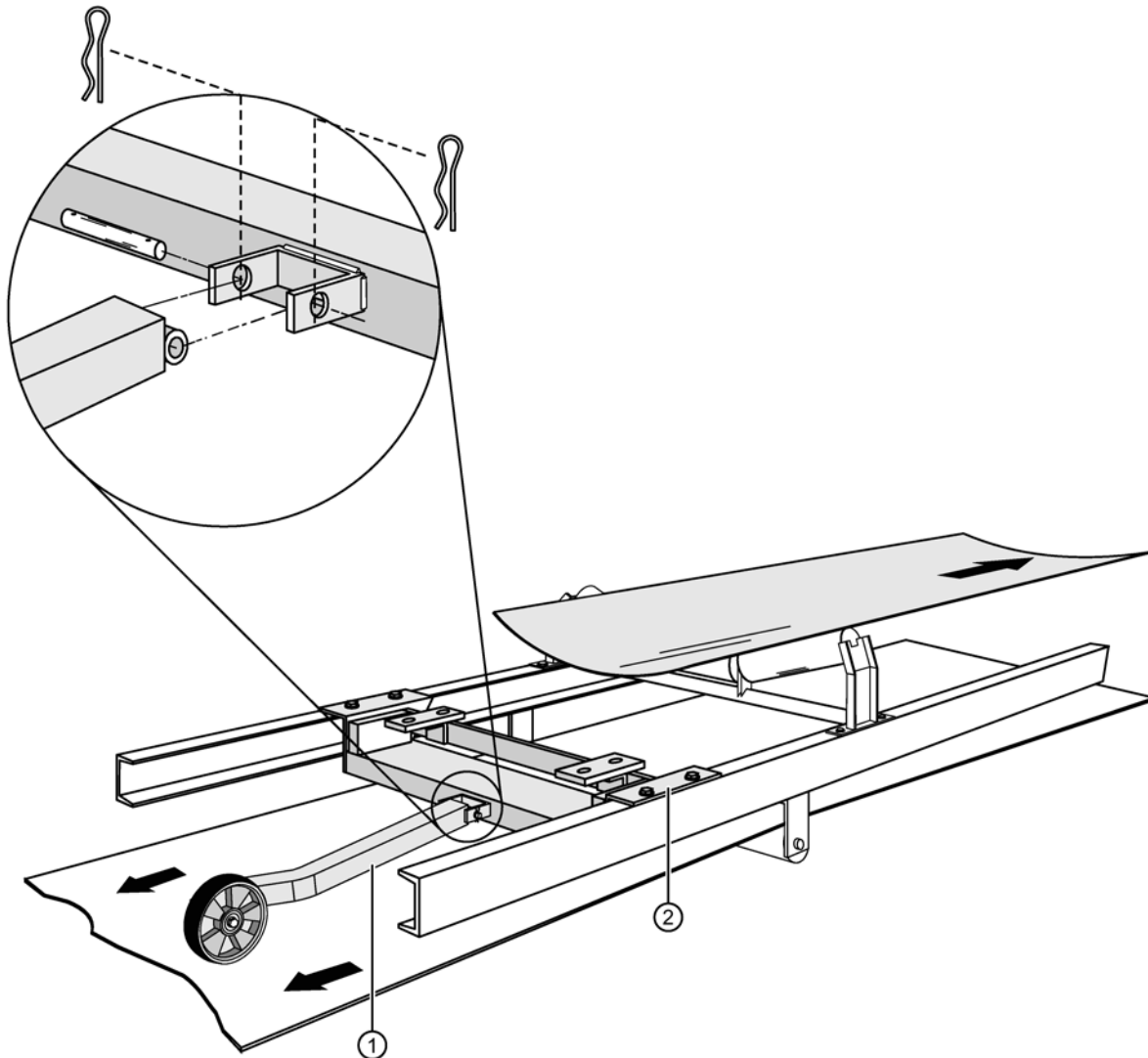
Description

2.1 Milltronics TASS overview

Mounting

The TASS speed sensor attaches to the static beam of the associated belt scale, or to a structural cross member via a pivot and bracket assembly.

Do not allow the slope of the TASS arm to exceed 45° below the belt stringer line.



① TASS

② Milltronics belt scale

Note

Ensure that the wheel is in contact with the belt at all times.

3.1 Mounting location

Locate the TASS near the scale assembly to simplify wiring. The wheel should ride on the return belt, either just before or just after a return belt idler.

Connection

Note

All wiring must be done in conjunction with approved conduit, boxes, and fittings and to procedures in accordance with all governing regulations.

Ensure that there is sufficient slack in the cabling to allow the TASS arm to pivot freely so the wheel rides on the belt. Restriction of the arm can cause slippage or excessive contact between the belt and the wheel.

TASS	Integrator
Brown	Excitation (+15 V DC)
Black	Signal
Blue	Common

Technical data

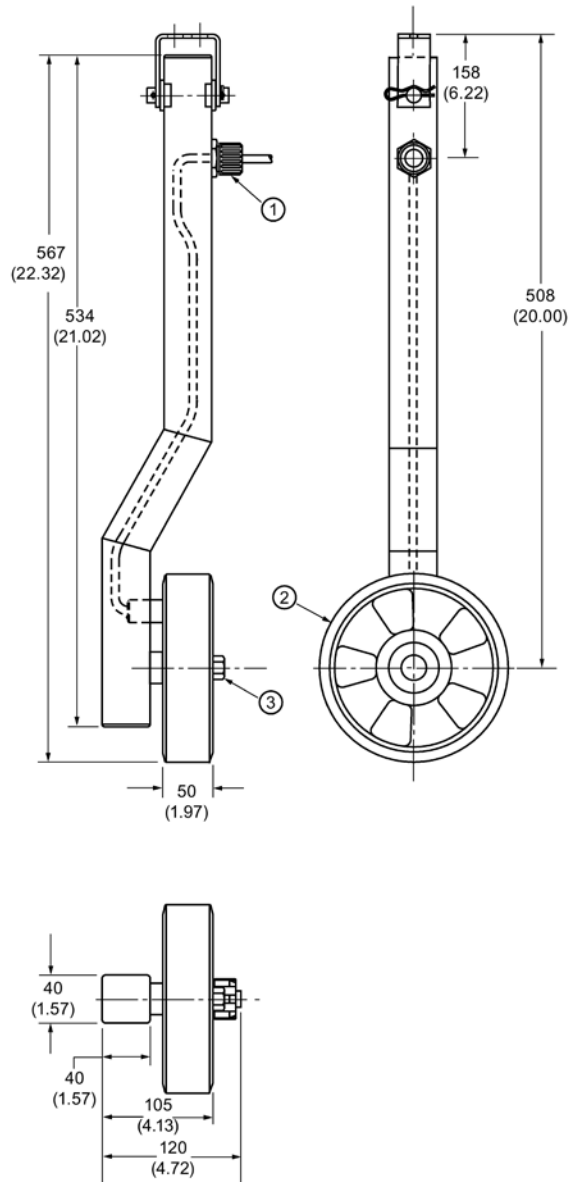
Power	• 10 ... 35 V DC • 15 mA at 24 V DC max.
Operating temperature	-25 ... 70 °C (-13 ... 158 °F)
Input	• Bi-directional shaft rotation • 25 ... 350 rpm
Output	• Magnetic proximity sensor • Open collector, NPN, sinking output, max. 200 mA • 5 pulses per revolution • 9.947 pulses/meter, 3.03 pulses/foot
Construction	
Trailing arm assembly	Painted mild steel
Sensor wheel	• 160 mm (6.3 inch) diameter • Cast aluminum • Polyurethane tread
Cable	• 2 m, 3 conductor shielded PVC-cable, 3 x 0.25 mm² (23 AWG), protected with 1 000 mm of flexible conduit • 300 m (1 000 ft) maximum cable run
Approvals	CE

Note

The TASS is to be used only in the manner outlined in this instruction manual or protection provided by the equipment may be impaired.

Dimension drawings

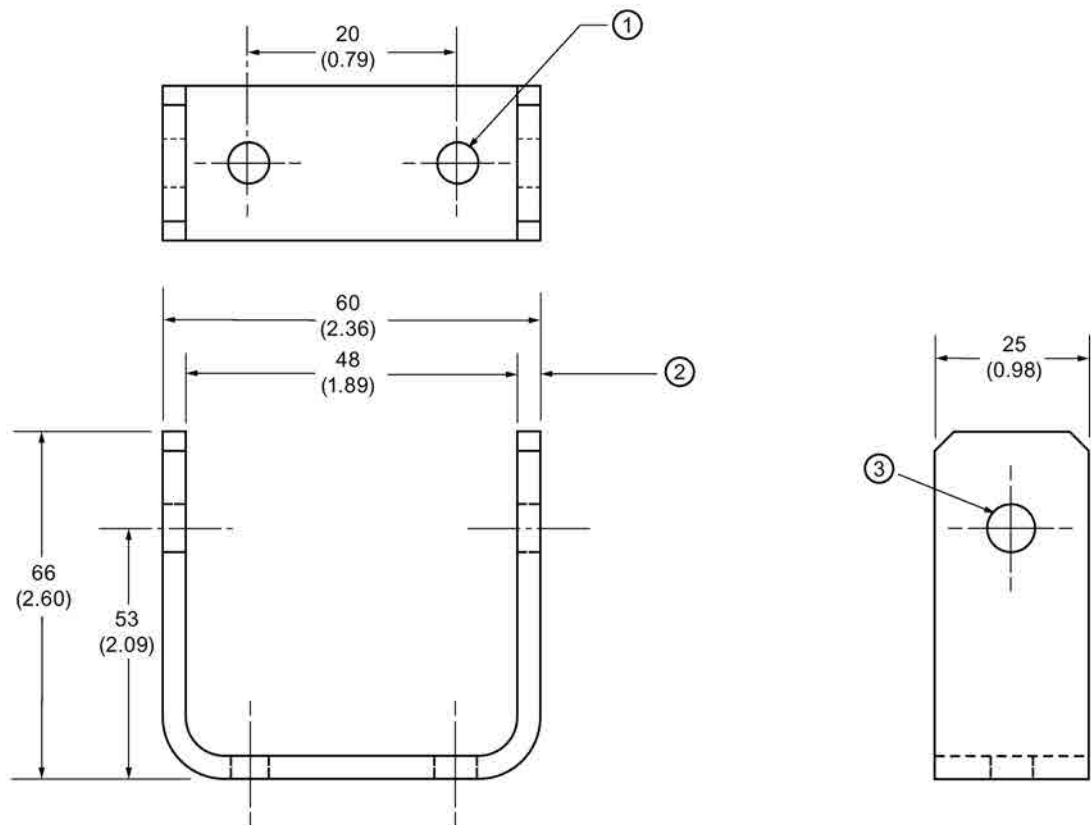
6.1 TASS



Dimensions in mm (inch)

- ① Conduit fitting M16
- ② 160 mm (6.3 inch) dia.
- ③ Bolt M12 X 30

6.2 Mounting bracket



Dimensions in mm (inch)

- ① 9 mm (0.35 inch), 2 places
- ② 6 mm (0.24 inch), 2 places
- ③ 12 mm (0.48 inch), 2 places

Certificates and support

A.1 Certificates

You can find certificates on the Internet at certificates (<http://www.siemens.com/processinstrumentation/certificates>) or on an included DVD.

A.2 Technical support

Technical Support

If this documentation does not provide complete answers to any technical questions you may have, contact Technical Support at:

- Support request (<http://www.siemens.com/automation/support-request>)
- More information about our Technical Support is available at Technical support (<http://www.siemens.com/automation/csi/service>)

Internet Service & Support

In addition to our documentation, Siemens provides a comprehensive support solution at:

- Service & support (<http://www.siemens.com/automation/service&support>)

Personal contact

If you have additional questions about the device, please contact your Siemens personal contact at:

- Partner (<http://www.automation.siemens.com/partner>)

To find the personal contact for your product, go to "All Products and Branches" and select "Products & Services > Industrial Automation > Process Instrumentation".

Documentation

You can find documentation on various products and systems at:

- Instructions and manuals (<http://www.siemens.com/processinstrumentation/documentation>)

For more information

Level measurement:

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