



Wheel Detection

Wheel Detection System RSR180-AEB

The Wheel Detection System RSR180-AEB can be used for a variety of different applications. A special feature is the flexible software interface, which can be extended by a hardware interface.



Information

- Wheel detection (SIL 4)
- Direction (SIL 4)
- Number of axles
- Diagnostic data



Applications

- Track vacancy detection
- Level crossing protection
- Switching tasks



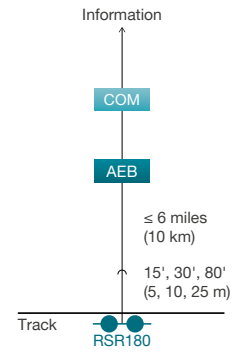
Benefits

- Universally applicable
- No need to adjust the wheel sensor
- Software interface, optocoupler or relay
- Suitable for grooved rail

RSR180-AEB

Proven technology distinguishes the universal Wheel Sensor RSR180. It is not necessary to adjust the sensor. The Wheel Detection System RSR180-AEB is resistant to disturbances caused by magnetic track brakes and eddy currents, and can also be used in grooved rails.

The AEB evaluation board, in combination with a COM communication board, has a flexible software interface. This can be adapted to customer specific systems and can be extended by a hardware interface.



COM Communication board
AEB Evaluation board
RSR Wheel sensor

Technical Data

RSR180



AEB



Interfaces

Flexible software interface (COM)
 Optocoupler or relay via IO board

Safety level

SIL 4

Temperature

-40 F to +185 F (-40 C to +85 C)

-40 F to +158 F (-40 C to +70 C)

Humidity

Up to 100%

Up to 100% (without condensation or ice formation for the entire temperature range)

Electromagnetic compatibility

EN 50121-4

EN 50121-4

Further conditions

UV resistance: yes
 Protection class: IP65 / IP68 to 8 kPa/60 min.
 Wheel diameter: 1' (300 mm) to 7' (2100 mm)
 Speed: 0 mph (static) to 280 mph (0 km/h (static) to 450 km/h)

Mechanical stress: 3M2 in accordance with EN 60721-3-3

Dimensions

Height: 2.4" (60 mm)
 Width: 9" (230 mm)
 Depth: 3" (77 mm)

Format: 19" housing for 4" (100 mm) to 7" (160 mm) boards
 Width: 4 width units
 Height: 3 height units

Optocoupler

Relay

Signal limits

Max. C-E voltage: 72 V DC
 Max. switching current: 17 mA
 Insulation voltage : 2,500 V AC

Max. voltage: 110 V DC or 120 V AC
 Max. switching current: 50 mA (inductive at 110 V DC) depending on the max. switching voltage

Power supply

Voltage: +19 V DC to +72 V DC
 Power: approx. 3 W per counting head
 Insulation voltage: 3,100 V

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 Power: approx. 3 W per counting head
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