



## 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



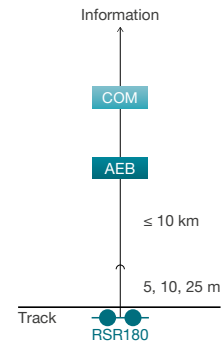
### Benefits

- 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 rail brakes and can also be used in grooved rails.

The AEB evaluation board in combination with 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 °C to +85 °C

-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: 300 mm to 2 100 mm  
 Speed: 0 km/h (static) to 450 km/h

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

#### Dimensions

Height: 60 mm  
 Width: 230 mm  
 Depth: 77 mm

Format: 19" housing for 100 mm x 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

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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