



**Wheel Detection** 

# Wheel Detection System RSR123-EIB

The Wheel Detection System RSR123-EIB is commonly used in the area of level crossings. Simple commissioning significantly simplifies integration.



#### **Information**

Wheel detection (SIL 4)



### **Applications**

Track vacancy detection Level crossing protection Switching tasks



#### **Benefits**

Highly resistant to electromagnetic interferences

Convenient plug-in connection and rail claw

Interface via optocoupler or relay

No need of adjustments of the evaluation boards

# RSR123-EIB

Based on the patented V.Mix Technology, the RSR123 combines different inductive sensing methods making it highly resistant to electromagnetic interferences caused by eddy current brakes or rail currents.

In the EIB evaluation board, the customer interface can be implemented via optocoupler or relay contacts.



**EIB** Evaluation board **RSR** Wheel sensor

## **Technical Data**





RSR123	EIB
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Interfaces		Optocoupler or relay
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
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: 270 mm Depth: 77 mm	Format: 19" housing for 100 mm x 160 mm boards Width: 4 width units Height: 3 height units

	Optocoupler	Relay
Dimensions	Max. C-E voltage: 70 V DC Max. switching current: 10 mA Insulation voltage: 1500 V AC to the sensor, 1000 V AC for the supply, 500 V AC between the outputs	Max. voltage: 380 V AC or 125 V DC Max. switching current: 5 A Insulation voltage: up to 3 000 V AC, depending on the relay type
Power supply	Voltage: +19 V DC to +72 V DC Power: approx. 4.5 W per counting head Insulation voltage: 1 500 V AC	Voltage: +19 V DC to +72 V DC / +9,5 V DC to +36 V DC Power: approx. 4.5 W per counting head Insulation voltage: 1 500 V AC