

WHEEL SLIDE PROTECTION SENSORS

Tested by the UIC for use with
wheel slide protection devices

Wheel slide protection systems prevent wheels from sliding on the rail by regulating the brake slip of each axle. To do so, the system analyses the rotational speeds of the individual wheel sets. Based on specified characteristics, the system detects sudden reductions in rotational speeds caused by water or dirt on the rails.

To reduce slip, modern wheel slide protection systems adjust the brake force to the current conditions. This requires the components to work together perfectly. Our speed sensors with brake system-related output signals have been approved by the UIC for use with a variety of wheel slide protection devices. With a frequency range of 0 to 8 kHz, they reliably detect any standstill of the wheel set, offering you more safety when it comes to selecting your wheel slide protection components.



UIC approved for use with the following wheel slide protection devices

- › MGS 1
- › MGS 2
- › WGMC 19,
- › MRP-GMC 29,

According to UIC leaflet 541-5

WHEEL SLIDE PROTECTION SENSORS

Reliable acquisition of the standstill of an axle

Wheel slide protection sensors scan a ferromagnetic target wheel contactlessly and acquire rotational speeds from 0 Hz. They generate 1-channel or 2-channel square-wave signals with current or voltage levels. The channels of the 2-channel sensors are electrically isolated and phase offset 90° in the factory.

The current output delivers a low level of 6 mA when the axle is at a standstill. A sensor with a voltage output delivers a fixed voltage of 7 V at frequencies below 1 Hz. The current level or standstill voltage indicates whether the sensor is working properly or, for instance, a cable is broken. This can be monitored by the control system.

Our speed sensors are encapsulated to protect them from extreme weather conditions, humidity, shock and vibration and meet the requirements of the IP 68 degree of protection. They operate reliably at temperatures of -40 °C to +85 °C and are tested according to DIN EN 50155 standard.

We would be happy to give you the benefit of our know-how when it comes to configuring your wheel slide protection sensor!



GEL 2475 and GEL 2476 housing variants

- › Acquisition of rotational speed without loss of pulses
- › Frequency range from 0 to 8 kHz
- › Monitoring of functionality and cable break detection possible
- › Wear-free, maintenance-free operation
- › Easy installation due to typical railway flange dimensions with index pin if required
- › Current output signals insensitive to interfering electromagnetic fields

Lenord, Bauer & Co. GmbH
 Dohlenstraße 32, 46145 Oberhausen, Germany
 Tel. +49 (0)208 9963-0 Fax +49 (0)208 676292

info@lenord.de www.lenord.com