Wheel Slide Protection System

APPLICATIONS
High-Speed Trains | Light Rail Vehicles | Locomotives | Metros | Passenger Coaches | Regional and Commuter Trains
OPTIMIZED WSP CONTROL FOR SHORTER STOPPING DISTANCES EVEN IN EXTREME WEATHER CONDITIONS.
Decades of experience and ongoing technical improvement enable Knorr-Bremse to offer state-of-the-art wheel slide protection.

CUSTOMER BENEFITS

STANDARD MGS2
- Short braking distance
- Dramatic reduction in maintenance costs by avoiding wheel flats
- Optimized control algorithms reduce air consumption
- Wear-free rotation speed measurement
- Additional option of detection of non rotating axles and skid protection

- Meets all relevant standards such as EN50155 and safety requirements of EN50126
- UIC-approved (leaflet 541-05) for maximum speeds of 405 km/h
- Modular design – servicing limited to maintenance and replacement of individual modules
- Standardized components mean low warehousing costs and rapid spare parts delivery
- Energy-saving standby mode extends vehicle battery life

MODERN INTEGRATED SERVICE TOOL
- Provides web-based access to extended service functionality (optionally via train Wi-Fi).
ADDITIONAL FEATURES
HIGH PERFORMANCE MGS3

- Multi-mode switch over WSP control between low and extremely low adhesion for shorter stopping distances
- Higher pneumatic performance for shorter ventilation times
- One system for all markets: easier homologation of trains
- eNozzle functionality: electronic adaptation to different brake cylinder volumes for less commissioning efforts
- Improved system control and diagnostic by pressure sensor integration

MGS3: Multi-mode switch over WSP control for different track conditions

- Interface to typical train network systems such as MVB, CANopen, RS485, HDLC, Ethernet protocol variants etc.
- Service and maintenance interface (Ethernet)
- Data Log function with large storage volume
- Temperature range: – 40 °C ≤ T ≤ + 70 °C (optionally extended to cover low temperature requirements)
- Additional integrated functions such as:
  - Control for electromagnetic track brake and sanding
  - Speed signal output
  - Distance counter

Application example: MGS3 integrated in ESRA Evolution Control Unit