



FÜS II Hot Wheel/Dragging Brake and Hot Bearing Detector

Hot bearings and dragging brakes are costly, time consuming challenges facing passenger and transit operators around the world. Fortunately, the FÜS II from Progress Rail offers precision wayside-based detection of hot bearings (including inboard bearings), hot wheels, and dragging brakes.

The FÜS II delivers superior reliability and beneficial life-cycle costs for today's passenger systems with its high availability, extremely low false alarm rates, easy installation and maintenance, and operational efficiency.

This stationary system, housed in a hollow metal tie, uses multi-element infrared technology to differentiate between true hot bearings and/or wheels and unrelated heat sources. It provides exact absolute, relative, and differential temperature measurements in real time.

With more than 700 systems installed in the demanding passenger operations in Europe and North America, FÜS II operates over the wide speed range of 1.86 mph (3 km/h) to 310 mph (500 km/h) and is fully compatible with a variety of train, truck-wheel, bearing, and brake types. FÜS II may be "tuned" to meet your specific rolling stock configurations.





Specifications

Defects Detected

Hot bearings (inboard and outboard)
Hot wheels/dragging brakes

Scanner

Multi-element HgCdTe infrared detector
4 elements plus self-checking reference element
Up to 120 samples per element for each bearing, 240 for each wheel

Detection Temperature

Hot bearing: up to 356°F (180°C)
Hot wheel: up to 1,112°F (600°C)

Calibration & Maintenance

Self-calibration
System notifies user of malfunction
Automatic optical alignment

Installation

Battery: +24VDC for system electronics
AC Power: 100-127 VAC, 50-60 Hz or
220-240, VAC 50-60 Hz for snow/ice heaters
Maximum wiring from measuring tie to wayside house: 328 ft (100 m)

Train Speed

1.86 mph (3 km/h) up to
310 mph (500 km/h)



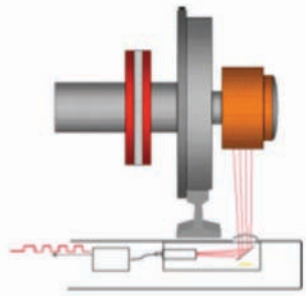


Options

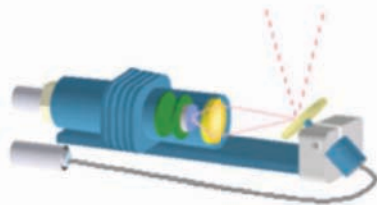
- Voice Radio Annunciation
- Automatic Equipment Identification (AEI)
- RAD (Remote Announcement Display) office monitoring/reporting system
- Customized office communications
- Multiple track configurations
- Heated tie elements and shutter covers

FÜS II Selection Guide

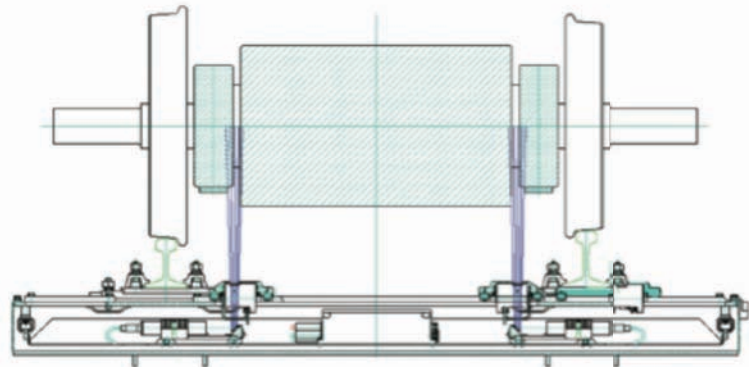
Global Hot Bearing/Wheel Detection



- Four (4) infrared scanning elements per detector



- Innovative sensor ensures precise temperature readings



- Two (2) multi-beam inner-bearing infrared scanners (Configuration "F")

