

DATASHEET

PROTECTOR® IV Gauge Face

Trackside gauge face friction management system

PROTECTOR® IV Gauge Face

Trackside gauge face friction management system

The **PROTECTOR IV Trackside Gauge Face Friction Management System** was developed by L.B. Foster to provide effective lubrication at the wheel flange / rail gauge face interface.

L.B. Foster Friction Management is recognized globally as the leading expert in managing friction at the wheel / rail interface. After 40 years of continuous technological innovation, the **PROTECTOR IV system** remains the industry standard in electronic gauge face lubrication systems.

The **PROTECTOR IV system** automatically applies a precise amount of grease to the wheel flange / gauge face interface and adjusts the amount applied based on train length. Our innovative control system uses proprietary compensation algorithms to seamlessly adapt to changing operating conditions and consistently outputs the correct amount of lubricant.



Key Benefits of Propelly Implemented Gauge Face Lubrication Program:

- ☑ Extends wheel and rail life
- ☑ Reduces fuel consumption
- ☑ Reduces wheel squeal and flanging noise
- ☑ Reduces derailment potential

PROTECTOR IV Gauge Face System Benefits

- > An efficient, compact design that allows for easy installation and maintenance.
- > The lubricant storage and electronic controls compartments are separate, with individual sealed, weatherproof, and lockable access doors.
- > Available as either a 12 Volt DC solar-powered, battery-operated system or optional 110 Volt / 220 Volt AC powered systems with or without battery back-up power.
- > Available in three grease capacities - 200 lb (90 kg), 800 lb (360 kg), and 1250lb (560 kg).
- > The 800 lb (360 kg) and 1250lb (560kg) versions are available as a dual unit which can service 2 tracks from the same system.

Key Components of the PROTECTOR IV Gauge Face System

- > **PROTECTOR IV trackside unit** is partitioned into two compartments with separate access doors:
 - > The 'Clean Hands' compartment: Contains all electronic controls and the pump / motor assembly.
 - > Grease compartment: For lubricant storage.
- > **Grease distribution bars** are available in two sizes. The **MC-4XL™** bar is the industry-leading grease applicator bar for freight railway operations. The shorter **MC-5** applicator bar is best suited for short line, industrial, and transit applications. Both bars are available with **GreaseGuide™** foam trough inserts to improve lubricant pick-up and reduce site wastage. All applicator bars are easy to adjust and maintain.
- > Our innovative **Digital Control Box 2 (DCB2)** uses proprietary compensation algorithms to consistently output the correct amount of product regardless of changing operating conditions. This includes automatic output adjustments for the following conditions to ensure the desired amount of product is always dispensed to the rail:
 - > Ambient temperature variations
 - > Battery voltage variations
 - > System configuration changes (e.g. product type, hose lengths)
- > **Smart Wheel Sensor:** a non-contact wheel detection sensor.
- > The optional **Remote Performance Monitoring (RPM)** system is a remote asset management feature developed by L.B. Foster which allows users to monitor and manage their wayside systems throughout the complete equipment life cycle. RPM provides:
 - > Insight into current equipment performance
 - > Alerts to problem conditions
 - > A comprehensive range of data inputs supporting effective work task prioritization / optimized maintenance resource efficiencies
- > The RPM system enables PROTECTOR IV gauge face equipment owners to maximize the operating uptime of their units and ensure expected benefits of incorporated friction management programs are consistently, effectively achieved.

lbfooster.com

North America

+1-866-523-7245

TotalFrictionManagement@lbfooster.com

UK, Europe, Middle East, Africa

+44 (0)114 256 2225 (English)

+49 (0) 232 3176 1921 (German)

reply@lbfooster.com

Asia Pacific

+1-866-523-7245

APACSales@lbfooster.com

China

+86 10-6462-0986

lbfbj@lbfooster.com

Latin America

+1-832-317-5072

Latam@lbfooster.com

Brazil

+55 32 3215-1034

info.br@lbfooster.com

L.B. Foster's Friction Management products are backed by market-leading experience in wheel / rail interface issues. Our team of professionals can provide the service and technical expertise necessary to achieve the optimum performance of your equipment throughout its life cycle.

For customer service, contact the appropriate office listed above.

Data provided in this bulletin is to be considered as representative of current production generally and not as specifications. While all the data presented in this bulletin is believed to be reliable and because conditions of use are beyond our control, L.B. Foster makes no representations, guarantees or warranties, expressed or implied, including but not limited to any implied warranty or fitness for a particular purpose or as to the correctness or sufficiency of data herein presented. Each user should conduct a sufficient investigation to establish the fitness of any product for its intended purpose. No agent, representative or employee of this company is authorized to vary any of the terms of this notice.

L.B. Foster®, PROTECTOR®, GreaseGuide™, MC-4™, and MC-4XL™ are trademarks of the L.B. Foster Company