



# Bendix® OE Extreme-Duty Friction for Specialty and Vocational Applications

**ES1100**  
**ES1160**  
**ES1180**



## **FMVSS 121 Conditions:**

See reverse side  
for details



Few suppliers can meet the challenge of delivering OE friction – that’s why only top tier suppliers like Bendix are chosen.

Since engineering requirements for friction superior enough to merit OE certification routinely exceed industry and legal standards, testing and development occur under the most rigorous conditions. Every performance characteristic must be superior... routinely excelling in only one or two performance categories simply won’t do.

Bendix® OE linings are the safest, highest performing option for maintaining your vehicle. And when our flexurally strong friction is coupled with ProteX™ OE, our premium coating, you’ve got the ultimate rust jacking protection for longer service life and lower cost per mile.

Bendix® Extreme-Duty linings are engineered to perform in high temperature, severe duty environments – both on and off the road. These frictions feature uniquely formulated organic compounds mated with metallics when required. Extreme-Duty linings are designed to handle a complete weight range, from empty to maximum loads with consistent brake performance.

All Bendix linings meet or exceed FMVSS 121.

## **Extreme-Duty Friction is part of the Bendix® OE Category of Friction. It’s part of our full portfolio of options. Learn More:**

Bendix® Basic Friction	Bendix® Advanced Friction	Bendix® OE Friction
<ul style="list-style-type: none"> <li>• Excellent value at an economical price</li> <li>• Good wear and consistent performance under normal operating conditions, in low- to mid-range temperatures</li> </ul>	<ul style="list-style-type: none"> <li>• Performs in higher temperatures with less fade</li> <li>• Improved wear characteristics in more demanding applications</li> <li>• Lower total cost of ownership</li> <li>• Includes RSD solutions</li> </ul>	<ul style="list-style-type: none"> <li>• The safest, highest performing option for maintaining your vehicle</li> <li>• Engineered to meet the demands of OE certification</li> <li>• Includes RSD solutions</li> </ul>

**ATTENTION:**

This Bendix friction is **not** a direct replacement for OEM friction designed to meet the Federal Mandate for Reduced Stopping Distance (RSD) on vehicles manufactured beginning 2011. This friction *is* FMVSS-121 compliant prior to the RSD mandate taking effect.

**WARNING:** Bendix strongly recommends the use of RSD certified friction on all vehicles originally manufactured with RSD brake friction. Failure to utilize RSD friction could negatively impact the safe operation of the vehicle.

**Bendix®**  
**ES1100**  
 Severe-Duty  
 Metallic-Block

A uniquely formulated high friction metallic compound, ES1100 will easily handle high temperature and severe-duty environments, while delivering great wear.

**GAWR** 26,000 lbs 29,000 lbs

**FMVSS 121 Conditions:**

Brake Size	16.5 x 7	16.5 x 7
AL Factor	180	216
Rolling Radius	21.5"	21.5"

**Applications:**

Logging, mining, construction, heavy vocational vehicles, fire trucks

**Environmental:**

All linings comply with 2025 Zero Copper requirement designated (Level "N")



**Bendix®**  
**ES1160**  
 Vocational-Duty  
 Combo-Block

A combination lining – combining Bendix ES1100 (Semi-metallic) and ES600 (Organic) OE frictions – to create a high performing friction to handle severe-duty environments while retaining great wear characteristics.

**GAWR** 23,000 lbs 26,000 lbs

**FMVSS 121 Conditions:**

Brake Size:	16.5 x 7	16.5 x 8.625
AL Factor:	165	180
Rolling Radius:	21"	18.8"

**Applications:**

Mining, logging, construction and heavy vocational vehicles

**Environmental:**

All linings comply with 2025 Zero Copper requirement designated (Level "B")



**Bendix®**  
**ES1180**  
 Vocational-Duty  
 Combo-Block

A combination lining – combining Bendix ES1100 (Semi-metallic) and ES800 (Organic) OE frictions – to create a high performing friction to handle severe-duty environments while retaining great wear characteristics.

**GAWR** 26,000 lbs

**FMVSS 121 Conditions:**

Brake Size:	16.5 x 7
AL Factor:	180
Rolling Radius:	21.5"

**Applications:**

Mining, logging, construction, fire trucks, heavy vocational vehicles

**Environmental:**

All linings comply with 2025 Zero Copper requirement designated (Level "N")



**Friction tested and certified by the brake experts at Bendix.**

Much more than a friction manufacturer or brake shoe reliner, we are a full brake system supplier with unparalleled expertise to support your fleet. We're uniquely qualified to develop brake products to exacting standards. That's why we maintain standard position at Kenworth®, Peterbilt®, Volvo® and Mack® and are an option at International® and Daimler Trucks North America.

We go beyond industry standard friction tests to conduct our own proprietary procedures on four in-house dynamometers. With the full range of Bendix® linings – from OE linings and high performance solutions to meet RSD requirements, to premium aftermarket and economy grade friction – you can be confident you're getting more. More performance. More service life. More value.

**For more information, call 1-800-AIR-BRAKE (1-800-247-2725) or visit [foundationbrakes.com](http://foundationbrakes.com) today.**

