A gripping read: how we made E-Transit Custom All-Wheel Drive

Sint-Agatha-Berchem, 03 December 2025 – From early 2026, a new all-wheel drive (AWD) system for our E-Transit Custom [1] will bring another level of capability to our electric one-tonne van.

The optional AWD technology adds a high-power electric drive unit for the front wheels – in addition to the existing one for the rear wheels – and precisely controls the torque sent to all four wheels depending on the driving conditions.

That means better traction for businesses operating in more challenging driving scenarios, such as icy Nordic and Alpine roads, gravel trails in the Highlands, or muddy building sites across Europe.

But the system has other advantages too. Read on to find out more.

Q: What is new about the E-Transit Custom AWD model?

A: E-Transit Custom's new AWD system builds on the existing rear-wheel drive (RWD) layout by adding an independent, high-power electric drive unit for the front wheels.

Each drive unit is capable of delivering the van's full power output independently for maximum flexibility and control.

Customers can choose from two output levels depending on the series: 100 kW or 160 kW.

Q: How does the AWD system improve traction in demanding situations?

A: The system's intelligence is key. It's constantly monitoring available grip by assessing wheel slip up to 50 times every second and making real-time adjustments by varying the torque delivered to both the front and rear wheels.

Unlike conventional mechanical AWD systems that share a linkage, the two electric drive units are fully independent. This means that, for example, if the rear wheels lose grip, the front drive unit can send its full torque to the front wheels to compensate. Of course, the two drive units can also work in tandem to ease towing the maximum capacity of 2,300 kg for instance[2].

Q: What are the benefits for vehicle stability and driver confidence?

A: The two electric drive units work hand-in-hand with E-Transit Custom's advanced traction control and electronic stability control systems [4] to not only split power between the front and rear wheels, but also to apply braking to individual wheels.

This helps optimise grip even when the slipperiness of the road surface varies left-to-right and not just front-to-rear. The system continuously monitors the driver's steering input and can use "fuzzy logic" to apply torque and braking to help prevent the van from wandering off course whether on a rain-soaked highway or loose surface trail.

The ability to split torque fully between the front and rear wheels also helps E-Transit Custom AWD corner with improved stability, because it's a very effective way to mitigate oversteer or understeer.

And did you know that there can be energy efficiency benefits to using two electric drive units rather than one? When driving at lower speeds, such as urban delivery routes, the AWD system is tuned to optimise its energy efficiency by applying up to 50 per cent more regenerative braking force than the RWD model by using the regenerative braking capability of both drive units.

Q: How did Ford engineers ensure the system could handle a wide variety of conditions?

A: The new system was tested in the challenging conditions at Ford's Lommel Proving Grounds in Belgium, on surfaces from smooth tarmac to loose gravel; subjected to extreme temperatures at Ford's Environmental Test Chamber in Cologne, Germany; and real-world testing in Finland, Sweden and the Italian Alps.

This included tests to fine-tune the performance of E-Transit Custom AWD drive modes including Slippery mode and Trail mode. [4]

Slippery mode uses the AWD system to limit wheel slip to a minimum on wet, icy and muddy surfaces, maintaining momentum and boosting driver confidence.

Trail mode is designed for tackling the most challenging loose surfaces – such as gravel or sand-covered asphalt – by allowing more wheel slip. That might seem counterintuitive, but this "controlled slip" helps make more predictable and stable progress on very loose surfaces – something Ford engineers have learned through decades of experience with off-road-capable vehicles like Ranger and Bronco.

Q: Will the all-wheel drive system be available across a wide choice of E-Transit Custom models?

A: Yes, customers will have several options. The AWD system can be specified with a full choice of E-Transit Custom body styles, including Van, Kombi and Double-cab-in-van.

It will also be available in combination with a selection of E-Transit Custom series, the functional Trend and the distinctive Trail.

Q: And what about the E-Tourneo Custom multi-activity vehicle?

A: The E-Tourneo Custom multi-activity vehicle [5] will also offer the AWD option. E-Tourneo Custom AWD will be available with the 160 kW drive in Titanium X equipment level.

Q: What types of customers will find the E-Transit Custom AWD most appealing?

A: E-Transit Custom AWD is ideal for businesses that frequently operate in more challenging driving conditions, whether because of their region – such as Nordic or Alpine areas, or because of their trade – such as operating in construction sites or rural environments.

The electric version of Europe's best-selling van delivers up to one-tonne payload [6] and 2,300 kg towing, and from early 2026 features a new battery pack for faster charging and improved driving range. [1]

Like the rest of the comprehensive Transit Custom line-up, the new E-Transit Custom AWD is designed to boost productivity for businesses from sole traders to corporate fleets and couriers to ultra-specialised technical service providers, supported by a full ecosystem of Ford Pro software and services.

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[1] Up to 373 km driving range based on full charge of E-Transit Custom rear-wheel drive 2026 model year. Up to 342 km driving range based on full charge of E-Transit Custom all-wheel drive 2026 model year. Estimated range using Worldwide Harmonised Light Vehicle Test Procedure (WLTP). Figures shown are for comparability purposes and should only be compared with other vehicles tested to the same technical procedures. Actual range varies due to factors such as temperature, driving behaviour, route profile, vehicle maintenance, lithium-ion battery age and condition.

[2] When properly equipped. Max towing varies based on cargo, vehicle configuration, accessories and number of passengers.

[3] Horsepower, torque and towing are independent attributes and may not be achieved simultaneously.

[4] Driver-assist features are supplemental and do not replace the driver's attention, judgment and need to control the vehicle. It does not replace safe driving. See Owner's Manual for details and limitations.

[5] Up to 341 km driving range based on full charge of E-Tourneo Custom rear-wheel drive 2026 model year. Up to 315 km driving range based on full charge of E-Tourneo Custom all-wheel drive 2026 model year.

Estimated range using Worldwide Harmonised Light Vehicle Test Procedure (WLTP). Figures shown are for comparability purposes and should only be compared with other vehicles tested to the same technical procedures. Actual range varies due to factors such as temperature, driving behaviour, route profile, vehicle maintenance, lithium-ion battery age and condition.

[6] Max payload varies and is based on accessories and vehicle configuration. See label on doorjamb for carrying capacity of a specific vehicle. Always properly secure cargo.

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