



The ZF Modular Construction System for Hybrid Transmissions offers maximum flexibility

- **New generation of hybrid transmissions for the premium segment starts production in 2022**
- **Intelligent modular construction system allows for flexible adaptation to shifting market demands**

Friedrichshafen / Klettwitz (Germany). When it comes to hybridization, automotive manufacturers are primarily concerned with being able to flexibly adapt hybrid versions to the shifting sands of market requirements. And while electromobility is gaining traction, ZF estimates that at least 70 percent of all new passenger cars in 2030 will still have an internal combustion engine. To comply with stringent CO₂ thresholds in the future, a substantial number of these vehicles will likely have an electric motor alongside the internal combustion engine. By the end of the next decade, the hybrid drive is predicted to be a fixture in modern cityscapes, either as a modest electrically driven model with 48 volts or as a high-volt model with electric ranges of up to 100 kilometers.

To support this important transition, ZF designed the new generation of its 8-speed automatic transmission as a modular construction system for hybrid transmissions. The basic transmission, which is mechanically identical, can be used with a maximum power between 24 and 160 kilowatts by swapping various electric motors and the corresponding power electronics for hybrid drives – or, depending on market demands, entirely without electric components. With the exception of the accumulator, all electric and electronic components are fully integrated into the transmission housing in order to keep the installation effort in the automotive manufacturer's assembly factory to an absolute minimum.

"Nobody can predict the exact market share of hybrid electric vehicles in 2025," explains Stephan von Schuckmann, Head of the Car



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Powertrain Technology division at ZF. “The modular construction system of the new 8-speed automatic transmission helps afford our customers a kind of insurance against market fluctuations.”

Worldwide Application Underway

The new hybrid transmissions from ZF are slated to come to market in 2022 as part of the first volume production vehicles from BMW, followed by other automotive manufacturers. European production at the Saarbrücken, Germany, location will start gradually. In China and the United States, ZF also plans to quickly gear up for production of the new generation 8HP. “The CO₂ thresholds will become stricter in all large markets over the next decade,” predicts von Schuckmann. “The newest generation of the 8-speed automatic transmission can significantly contribute to reducing vehicle emissions that have an impact on the climate.”

ZF relies on a high Real Net Output Ratio for manufacturing hybrid versions of the new transmission system. Accordingly, the electric motors for the 48-volt and high-volt transmission models are both manufactured at ZF plants. The power electronics, which constitute a high share of the total costs, especially for plug-in hybrid transmissions, were also developed entirely in-house. “We aligned ourselves early on with the scenario of a world with more electric drives,” says von Schuckmann. “This has allowed us to help secure jobs for our employees as shifts in the market occur.”

Press photos can be downloaded at <https://www.zf.com/gtd>

Images: ZF

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#MobilityLifeBalance

For most of us, mobility originally meant personal, self-determined freedom. More recently, due to congestion, emissions, accidents, and a lack of availability, it can now be an ever more present cause of stress. It is becoming more and more challenging to determine the best solution for each individual among the range of mobility solutions currently available. ZF is highlighting this challenge with its **#MobilityLifeBalance** campaign and featuring its range of solutions that contribute to a better and more sustainable mobility offering. The objective is to enable clean, safe mobility that is automated, comfortable, and affordable. For virtually everyone, everywhere.

Find out more about the topic through the **#MobilityLifeBalance** hashtag in social media, or online at <http://www.mobilitylifebalance.com>.

ZF Friedrichshafen AG

ZF is a global technology company and supplies systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. With its comprehensive technology portfolio, the company offers integrated solutions for established vehicle manufacturers, mobility providers and start-up companies in the fields of transportation and mobility. ZF continually enhances its systems in the areas of digital connectivity and automation in order to allow vehicles to see, think and act.

In 2018, ZF achieved sales of €36.9 billion. The company has a global workforce of 149,000 with approximately 230 locations in 40 countries. ZF invests over six percent of its sales in research and development annually.

For further press information and photos please visit: www.zf.com