

# ZF LIFETEC introduces innovative airbag for automated driving vehicles

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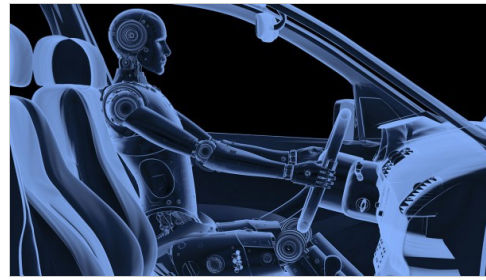
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**The new dual-contour airbag technology developed in Germany enhances safety for occupants in automated vehicles, adjusting to seating positions**

ZF LIFETEC has developed an advanced airbag for automated driving vehicles, the company said in a press release on June 19. The new airbag is a dual-contour airbag for the passenger side, which can be inflated in two different sizes, depending on the seating position of the occupant. The German supplier is also developing dual-contour airbags for the driver's side for use in such vehicles.



*Source: Getty/PhonlamaiPhoto*

Level 3 and Level 4 autonomy will allow drivers to hand over driving control to the vehicle's automated driving system (ADS). When not driving, drivers in such vehicles can relax by reclining their seats. Currently, occupant protection for both the driver and front seat passenger is ensured when they are seated in an upright seating position.

However, the traditional airbag and seatbelt systems may not offer optimum protection in more relaxed seating configurations in automated driving vehicles due to the increased distance between the airbag and the occupant. The dual-contour airbag addresses this gap by offering an adaptable solution that provides optimal cushioning and restraint in both standard and comfort positions.

The dual-contour airbag is capable of inflating to two different sizes to match the passenger's seating position. It features a two-stage gas generator and a control system that adjusts the airbag inflation based on the occupant's seating position detected through the vehicle's electronic systems and potentially augmented by interior cameras and sensors.

Moreover, the dual-contour airbag system introduces the possibility of adjusting the airbag's inflation pressure to accommodate the occupant's size, weight and stature. This adaptability ensures optimized restraint for individuals of different dimensions, marking a significant step toward personalized vehicle safety systems.

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