



Anti-collision Beam Volkswagen Electric Vehicle Bull Bar Bumper

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: Dongfeng
- Certification: IATF 16949:2016
- Model Number: Volkswagen
- Minimum Order Quantity: 100 piece
- Packaging Details: Metal mesh box packaging
- Delivery Time: Spot goods
- Payment Terms: T/T
- Supply Ability: Annual production of 50000 pieces



Product Specification

- Luminous Flux: 5000lm
- Color: Silver
- Material: Aluminum Alloy
- Size: 1200mm X 200mm X 100mm
- Weight: 5kg
- Operating Temperature: -20°C To 60°C
- Power Source: 12V DC
- Compatibility: Universal
- Installation Method: Bolt-On
- Waterproof Rating: IP67
- Beam Angle: 180°
- Certifications: CE, RoHS
- Highlight: Volkswagen electric vehicle bull bar,
Bumper electric vehicle bull bar

Product Description

As an important component of the passive safety system of new energy vehicles, the design and material selection of the anti-collision beam directly affect the vehicle's ability to protect passengers in collision accidents. The following is a detailed introduction to the anti-collision beam of new energy vehicles:

1, The role and importance of anti-collision beams

Anti collision beams, especially the front and rear anti-collision beams, are key components in the body structure of new energy vehicles. Their main function is to absorb and disperse impact energy in the event of a vehicle collision, reduce the impact on the body structure, thereby protecting the integrity of the passenger compartment and reducing the risk of injury to passengers. In addition, the collision beam can also protect important front or rear components of the vehicle to a certain extent, such as battery packs, motors, etc., to avoid serious damage in collisions.

2, Material selection for anti-collision beams

There are various material options for the anti-collision beam of new energy vehicles, including low carbon steel, aluminum alloy, carbon fiber composite materials, etc. Low carbon steel is widely used due to its low cost and good processing performance, but its relatively large weight is not conducive to the lightweighting of vehicles. Aluminum alloy has become an ideal material for collision beams in new energy vehicles due to its low density, high strength, and good corrosion resistance. Although carbon fiber composite materials have extremely high strength and stiffness, they are expensive and difficult to process. Currently, they are mainly used in high-end car models.

3, Structural Design of Anti collision Beam

The structural design of anti-collision beams for new energy vehicles usually considers the following aspects:

Section shape: The section shape of the anti-collision beam has a significant impact on its anti-collision performance. Common cross-sectional shapes include "mouth" shape, "day" shape, "eye" shape, etc. Among them, the cross sections of the "day" and "eye" shapes are more stable in structure and can more effectively absorb and disperse impact energy.

Thickness and width: The thickness and width of the anti-collision beam directly affect its anti-collision ability. Generally speaking, the thicker and wider the thickness, the better the anti-collision performance of the beam. But this will also increase the weight of the vehicle, which is not conducive to lightweight design. Therefore, it is necessary to reasonably control the thickness and width of the anti-collision beam while ensuring its anti-collision performance.

Connection and fixation: The connection method between the anti-collision beam and the vehicle body is usually bolted or welded. Bolt connections are easy to disassemble and replace, but there may be a certain risk of loosening. Welding connections are more stable, but once damaged, the cost of replacement is higher.

Energy absorption design: Anti collision beams are usually equipped with energy absorbing structures such as energy absorbing boxes to absorb more energy during collisions and reduce the impact on the vehicle structure.

4, Technological innovation and development trend of anti-collision beams

With the continuous development of new energy vehicle technology, the design of anti-collision beams is also constantly innovating. For example, some car models have begun to adopt active collision beam technology, which monitors obstacles around the vehicle in real time through sensors and control systems, and automatically adjusts the position or shape of the collision beam when necessary to improve collision safety. In addition, lightweight design is also one of the important trends in the development of anti-collision beams. By adopting new materials, new processes and other means, the weight of the collision beam is continuously reduced to improve the fuel economy or endurance of the vehicle.

5, Summary

As an important component of the passive safety system of new energy vehicles, the design and material selection of the anti-collision beam directly affect the vehicle's ability to protect passengers in collision accidents. Through reasonable material selection, optimized structural design, and continuous technological innovation, the anti-collision performance and lightweight level of the anti-collision beam can be significantly improved, providing strong guarantees for the safety and economy of new energy vehicles.



Dongfeng (Shiyan) Torsional Damper Company Limited



gjh.8266@163.com



dongfengtorsionaldamper.com

10th Floor, Building B, Donghe Center, Dongfeng 3rd Road, Wuhan Economic and Technological Development Zone, China