

Case Study

Solenoid valve control block for the prevention of water and ice sheet formation on tarpaulin roofs (RoofSafetyAirBag - RSAB)

We have developed the appropriate solenoid valve control block for a customer in the commercial vehicle industry who offers a tested system to prevent water and ice sheet formation on trucks, trailers and semi-trailer tarpaulins.



Problem definition

- Customer needed a suitable solenoid valve block for his system to prevent ice and water formation, which was not available on the market.
- One solenoid valve is to fill the hose under the tarpaulin roof with air up to a certain pressure in order to raise the tarpaulin roof and thus drain the water from the roof.
- A second solenoid valve is to suck the air out of the hose again when the truck starts moving so that the total height is not exceeded.
- Since there is only compressed air and no vacuum in the truck, the necessary vacuum must be generated in the valve block.



Solution

- An aluminum valve block that combines all functions;
- Small footprint, optimal cost efficiency;
- One solenoid valve with large nominal diameter for fast filling of the hose on the truck roof.
- A second solenoid valve in combination with a Venturi nozzle for vacuum generation and emptying of the hose
- Pressure regulator, ready adjusted



Testimonial

The development of the solenoid valve block by SFS fluid systems makes our system for the prevention of water and ice plate formation only complete and perfect. SFS has developed and optimized a great product, exactly according to our ideas and with the highest quality in a short time.



Highlights

- All functions integrated in one block
- Optimal price/performance ratio
- 2 solenoid valves, pressure regulator and Venturi nozzle integrated
- Use in the most difficult conditions

