

Pneumatic Door Assist System for Armored Vehicles

Economical Design for Maximum Safety & Performance
Bulletin 0600-B85



Customer Value Proposition:

Parker Hannifin's Pneumatic Door Assist System (DAS) incorporates a passive locking hydraulic solution and an emergency air system. Pneumatic DAS uses a smart design, drawing energy created by the compressor that operates automatically within the vehicle. It has functionality for remote actuation, enabling a high level of precision movement control. This fail safe solution allows occupants to quickly and safely exit the vehicle with two simple motions.

All systems are environmentally tested for military applications.



About Parker:

Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies, providing systematic, precision-engineered solutions for a wide variety of defence, commercial, mobile, industrial and aerospace markets.

Product Features:

- Lightweight
- Smooth door movement
- Compact design
- Remote actuation
- Silent operation
- Movement at any incremental position
- Obstruction detection and interlock
- Reliability even in low temperatures
- Low air consumption
- Affordable cost
- Easily configured
- Fail-safe design
- 15,000 units fielded



ENGINEERING YOUR SUCCESS.

Designed for Performance & Safety

Technology advances have changed how the armed forces strategize and execute in the theatre. The nature of warfare means there is a



constant threat of assault. Roadside attacks, bombings and improvised explosive devices (IEDs) have created a need to improve military trucks and vehicles to reduce casualties and better protect soldiers.

Is Pneumatics a viable option? Parker Pneumatic DAS offers high value and performance at a cost-effective price. Pneumatic systems are generally known for being less expensive than comparable hydraulic or electromechanical solutions. But the simplicity of the pneumatic system eliminates the need for backup pumps and bulky components so it also saves on space. The system is easily integrated into the vehicle doors using minimal connection with fasteners for installation. There are no sensor wires or controllers and no electrical system training required. Installation, maintenance and repair consume nominal time.

Parker has made the pneumatic system configurable and flexible for size and application requirements. Cylinder sizes can be interchanged without having to redesign the entire application.

Parker can adjust bore, stroke and force options as needed. This allows OEMs to meet different vehicle requirements with one flexible solution. The efficient use of stored energy taken from the existing compressor and tanks on the vehicle contribute to the economical design.

A pneumatic solution for MRAP vehicle doors is a high performing, cost-effective option for OEMs. The features and benefits of the Pneumatic DAS, particularly its light weight, reliability even in low temperatures, and fail-safe design, make this solution an ideal fit for armored vehicle manufacturers. With affordable cost and the ability to configure this solution easily to accommodate various applications, Parker has engineered a solution for safety, precision control, and value.

Additional System Solutions

Being a solutions provider means helping our customers achieve higher levels of success by engineering the best systems for their requirements. It means looking at the customer applications from many angles to find new ways to create value. Parker Pneumatic is also a leader in designing pneumatic components, systems and OEM products for the truck, bus and agriculture markets.

Truck



- Axle Lift Control System
- Tailgate Hitch
- Cement Trucks
- Street Sweepers

Bus



- Access Ramp Control
- Automated Luggage Doors
- Door Control
- Kneeling System

Agriculture



- Brake Control
- Suspension
- Tire Management / Inflation
- Implement Actuator Control