

An aerial photograph of a road scene. A red truck is driving on a road with white dashed lines. To its right, a white semi-trailer is also on the road. The road surface is decorated with several curved lines in blue, red, and yellow. In the background, there are green trees and a circular landscaped area with green plants and yellow flowers. The text 'EB' is visible on the side of the white semi-trailer.

WOULD YOU LIKE A LITTLE MORE?

Strong customer benefits: New products from Haldex range from the amazingly simple dirt blocker for palm couplings to intelligent axle load management solutions. The products debut at Solutrans in Lyon.



New products

SMALL CAUSE, LARGE EFFECT: The pneumatic palm couplings of an uncoupled trailer are usually left open, even though they can be capped. This allows dust to enter the coupling. Insects, too, cannot resist such a seemingly secure space.

This is what happens: Pneumatic functioning may be hindered by such impurities, which have no place in the pneumatic system. The patented Protect-O palm coupling by Haldex solves this problem. As simple as it is effective, the system automatically closes the opening to the palm coupling as soon as the air hose is disconnected.

This is made possible by a sophisticated rubber diaphragm. When the connection between tractor and trailer is broken and pressure is released, the diaphragm automatically seals the opening. It retracts just as quickly when the system is repressurised.

Soft Docking ramp approach assistance has now been on the market for almost half a decade. Is it any wonder that it's already time to celebrate the premiere of its next generation? Extended functionality, greater precision and a wide range of variants are the hallmarks of EB+ Soft Docking. The system is designed to eliminate

blind spots at the rear of a vehicle. The new Electronic Control Unit (ECU), which is CAN-Bus compatible, can communicate directly with EB+. It is more compact than ever and completely enclosed in new, high-quality plastic.

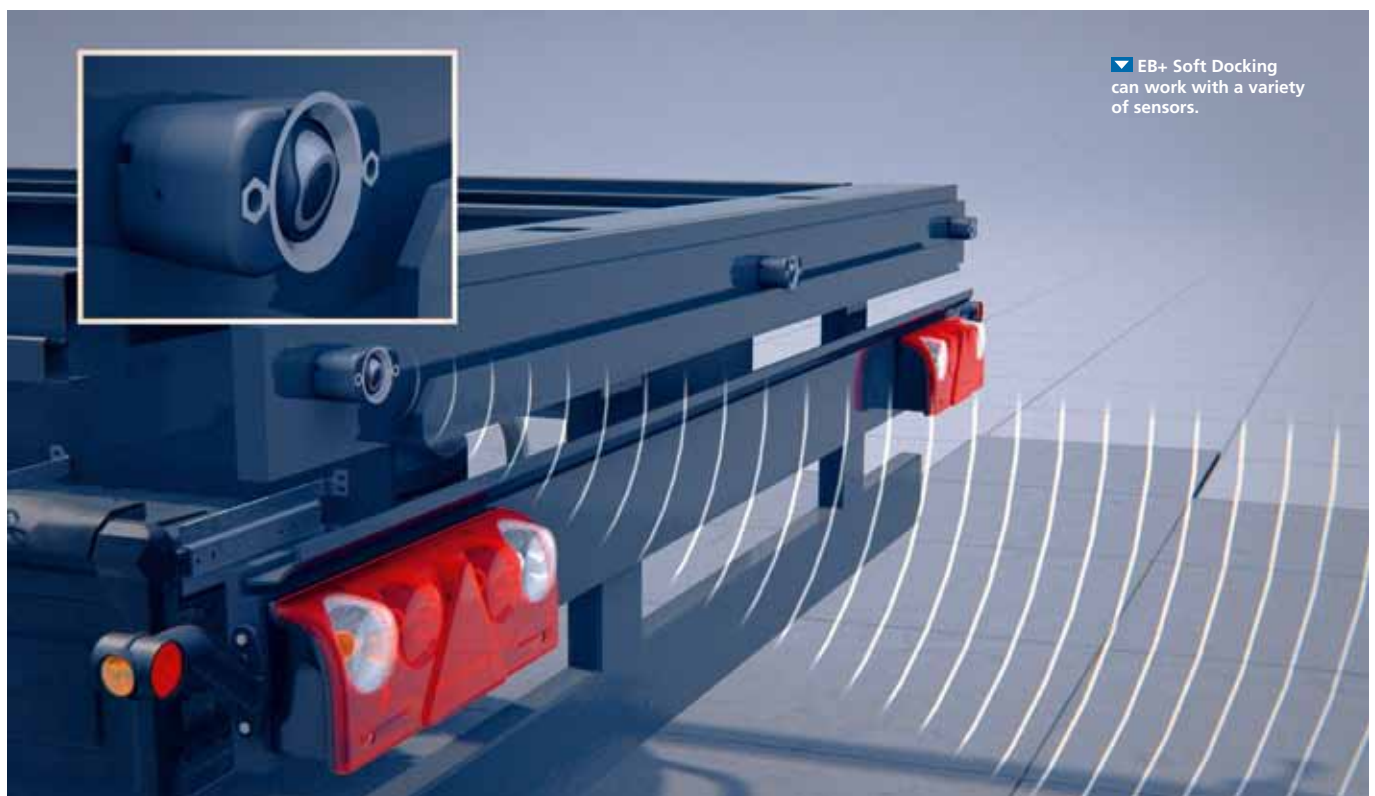
Because temperature affects ultrasonic sensors, the new generation of Soft Docking also records outdoor temperatures. The first advantage: Optimum functionality is ensured. The second advantage: Soft Docking and CAN-Bus compatibility means all trailer electronics, such as the Haldex TPMS tyre pressure monitoring



▣ Protect-O closes the bulkhead as soon as the air hose is disconnected.



system, can utilise recorded temperature data. EB+ Soft Docking also offers more latitude when installing sensors, such as placement of sensors in recessed positions to prevent damage from truck cargo. The



▣ EB+ Soft Docking can work with a variety of sensors.



▲ Intelligent axle load management: EB+ Load Transfer ensures optimum axle loads.

sensors can be calibrated for their exact location. This is especially beneficial for vehicles carrying bulk cargo.

Faster and more accurate: This is what the new ILAS[®]-E+ lift axle valve is all about. Larger cross sections, which optimise flow conditions, are the lynchpin of this much faster response. Product housing: die-casting has replaced aluminium block. The housing design requires only one screw for installation, even when two lift axles are used.

The fit prevents the valves from twisting. ILAS[®]-E+ gives customers maximum flexibility. A total of seven ports are available. Additional valves can be connected directly to the ILAS[®]-E+ lift axle valve instead of through complicated end ports or T-connectors.

Haldex also uses the lift axle for intelligent axle load management. The problem: Axle load distribution often shifts when the trailer is partially unloaded, to the detriment of the drive axle – especially if the remaining load is concentrated at the front of the semi-trailer. Permissible axle load is quickly exceeded. The solution: EB+ Load Transfer

by Haldex. With EB+ Load Transfer, the EB+ electronic brake system, air suspension and lift axle valve interact to balance the vehicle's axle loads for maximum effectiveness.

As soon as the ignition is started and EB+ supplied with power, the following happens: EB+ analyses the axle weights. It then calculates the height of axle load reserves for the first and second trailer axles. Finally, EB+ Load Transfer automatically relieves pressure on the last trailer axle by redistributing the pressure to the first two trailer axles within permitted limits. Unlike traditional lift axles whose thresholds are defined, EB+ Load Transfer can adjust axle loads for given conditions.

When EB+ Load Transfer is engaged, the centre of gravity is moved forward slightly. This shortens the theoretical wheelbase, which reduces pressure on the semi-trailer tractor's drive axle.

But it is not just the drive axle that benefits. Reduced pressure on the last trailer axle improves tractor-trailer cornering as a whole, which also reduces tyre wear, especially on the third trailer axle. The vehicle's overall rolling resistance is also better. ■

▼ COLAS[®] raise/lower valves: market leader in Western Europe.



CREATING VALUE

Intelligent solutions that create added value: This is the competitive edge that Haldex was quick to identify and put into practice. 'Creating Value' is the theme of the Haldex stand at Solutrans in Lyon. ModulT air disc brakes are available in 22.5 and 19.5-inch versions. Customers benefit from a lightweight brake that is extremely maintenance-friendly. The Haldex electronic brake system EB+ Gen3 allows many connections. This is exactly what is needed to accommodate an ever-increasing number of electronically controlled trailer systems. Other features include extensive additional functions and new, extremely sturdy ECU housing.

The raise/lower COLAS[®]+ valve has a number of noteworthy features. In addition to the deadman function, the COLAS[®]+ valve offers RoRo positioning and automatic Reset to Ride if the driver forgets to switch the valve back to the drive position. Reset to Ride, which is controlled by the EB+ system, prevents damage to the vehicle body and wheel suspension. TEM[®] Safe Parking Single makes handling of uncoupled trailers almost foolproof. The park and shunt valve prohibits deactivation of the parking brake and thereby prevents all associated risks.

The Haldex TPMS tyre pressure monitoring system offers considerable potential savings and increased traffic safety. The system monitors not only tyre pressure but also tyre temperature.