

BPW also offers an easy to install double-sided axle lift for the bolt-on air suspension hanger bracket.

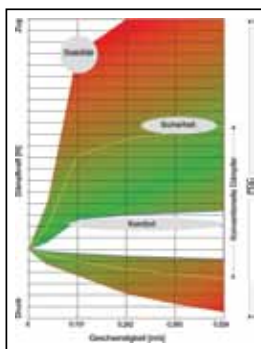
Locating the **axle lift at the side** is recommended for lifting the first axle and in vehicles with limited ground clearance, high axle loads or long suspension travel. The **double-sided lift** (for air-sprung axles up to 12 tonnes) does not need any space in front of the air suspension hanger brackets or in the middle of the vehicle. It can be fitted at any time to any axle position offering the convincing benefits of low weight and good ground clearance. Both the **central axle lift device** using a lifting bag and the **BPW central lift** with bellows fitted in the middle of the vehicle can lift one or more suspension axles and are integrated within the space of the axle unit. Their Compact Design means they are preferred for use in vehicles with limited ground clearance and small tyres (e.g. pallet box trailers with single tyres).

**! BPW axle lifts – Features and benefits**

- ▶ Reduced tyre wear
- ▶ Low inherent weight
- ▶ Moving-off aid for increased traction on the driven axle
- ▶ Compatible with Auto-Drop system (automatic lifting and lowering)
- ▶ Double-sided axle lift:
  - robust design with proven brake cylinders
  - installation without welding work (also for retrofitting)
- ▶ Metal surfaces with cataphoretic dip-coating and zinc-phosphating KTL<sub>Zn</sub>

More information:

- ▶ Overview of axle lift devices (page 103) ▶ KTL<sub>Zn</sub> coating (page 9)



Cross section through a PDC damper    Vehicle with and without PDC damping

**BPW PDC shock absorber.** Intelligent damping that automatically detects the loading condition.

The best damping, better road safety, lower maintenance costs: The BPW PDC shock absorber (PDC = Pneumatic Damping Control) improves driving properties and driving comfort because it adjusts continuously to the particular loading condition. An intelligent solution that can be OEM-fitted or retrofitted to BPW air suspension systems.

**! PDC – Features and benefits**

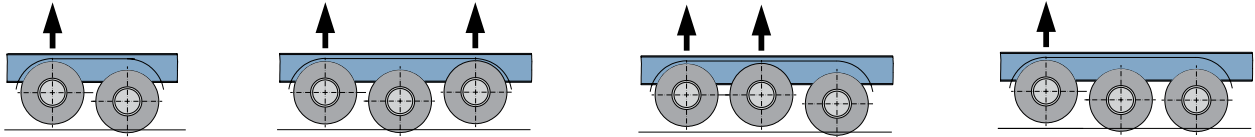
- ▶ Damping of trailers and semitrailers is optimally adapted to the load
- ▶ Better cushioning of shocks in unladen, partly laden and fully laden trailers
- ▶ Less wear (e.g. on tyres, suspension, add-ons)
- ▶ Trailer components are subject to less wear when unladen
- ▶ Vibration of add-on components is reduced when unladen or partly laden
- ▶ Increased driving safety, particular for trailers
- ▶ Fits into almost all BPW air suspension systems as initial equipment or for retrofitting
- ▶ No electronic control unit is required
- ▶ Less wear and tear on the carriageway due to load dependency

More information:

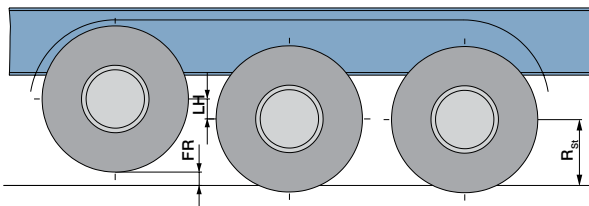
- ▶ BPW NEWS (BPW-IA-01/6) ▶ KTL<sub>Zn</sub> coating (page 9)

# To lift axles and reduce costs. With BPW axle lift devices.

Axle-lifting devices protect the tyres when the trailer is unladen or only bearing a light load; reduced rolling resistance will lead to fuel savings, amounting over long distances to extra money in your pocket. BPW air suspension axle can be fitted with axle lift device. At tandem axle suspensions one axle can be lifted, at tri-axle suspension maximal two axles can be lifted.



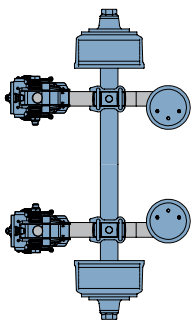
## Lift stroke



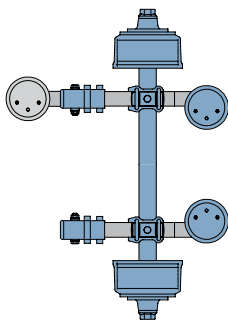
FR = Clearance  
LH = Lift stroke  
R<sub>St</sub> = Tyre radius, static load  
R = Tyre radius, unladen

Ground clearance under the tyre  
 $FR = LH - (R - R_{St})$   
LH min. 100 mm

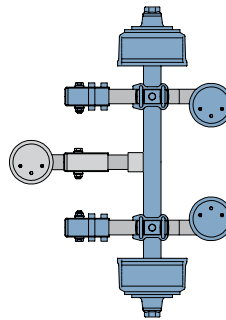
Two-sided lift



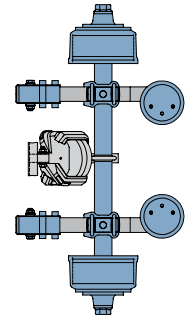
Lateral arrangement



Central arrangement



Central lift



More information:

► BPW axle lifts (page 51) ► BPW NEWS Luft 05/08 ► BPW installation instructions for air suspension systems (BPW-EA-Luft...)