

Application

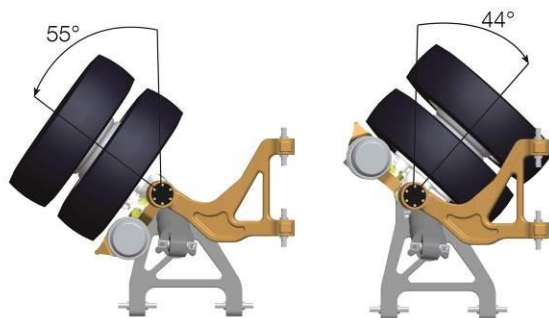
DL-S independent suspension for semi-trailers and low loaders



DL-S Dual Lever Suspension

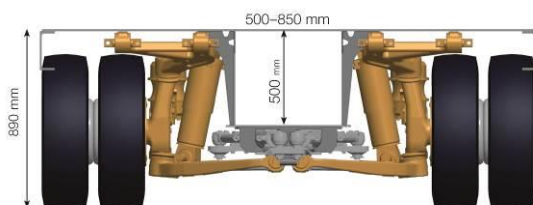
With the DL-S independent suspension from TRIDEC, semi-trailers and low loaders can now be approved with an axle load of 12 tons (certificate of exemption in accordance with §70 StVZO). This allows the workload of the vehicle to be increased considerably. The combination of the DL-S independent suspension and hydraulic steering makes the trailer very agile (up to 55° steering angle), using the smallest possible installation space for the DL-S independent suspension.

The higher permissible axle load also enables the construction of vehicles with fewer axles – this results in advantages for low loaders and extendible vehicles.



Noticeable savings

- Higher load capacity
- Lower fuel consumption
- Covered hydraulic cylinder piston rod
- Less tyre wear
- Low maintenance
- Very low loading height possible
- Covered hydraulic cylinder piston rod
- Very good driving characteristics, even at higher speeds
- High driving and roll stability



Higher load capacity

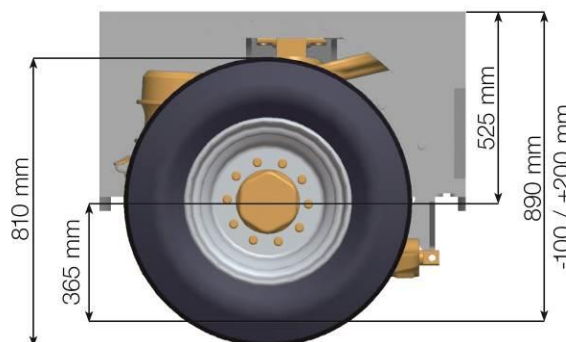
- The compact construction of the DL-S independent suspension creates additional room for the central frame and enables a lighter construction. The loading capacity per axle is furthermore considerably increased (payload).
- Depending on the desired steering angle, the resulting available width for the central frame lies between 520 mm and a maximum of 640mm at a vehicle width of 2550mm. The maximum height for the central frame is 500mm.

Technical Specification

DL-S independent suspension for semi-trailers and low loaders

General

- The principle is based on a 2 separate wheel supports, each supported by two suspension arms
- The construction is unique because the lower suspension arm is mounted in cross direction and the upper one longitudinal
- The wheel bearing and brake are based on standard components
- The rubber bearings of the hydraulic cylinder and suspension arms are low maintenance
- Good compensating characteristics due to large spring travel: 100mm in, 200mm out
- The dual-effect hydraulic cylinder offers the option of a lift axle
- Automatic height control with TRITRONIC
- Ideally compatible with TRIDEC steering system
- Chassis mounting parts for DL-S independent suspension and TRIDEC steering system available



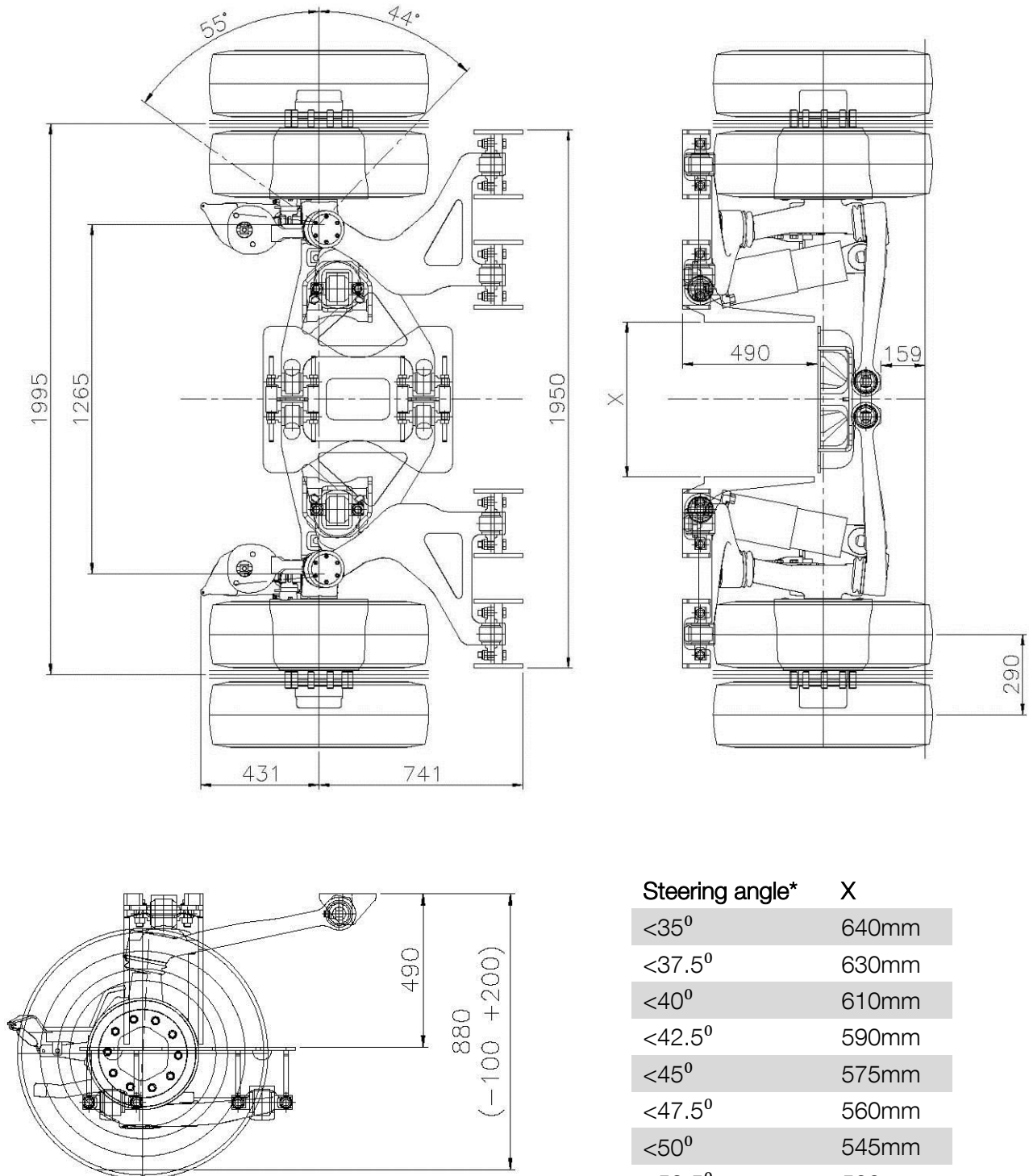
Assembly and maintenance

- Hydraulic cylinder with protective cap against stone chips
- Low maintenance due to lubricant-free axle pivots
- Camber and castor can be adjusted from axle
- Type 30/30 brake cylinders are possible on all axles
- Parts are delivered pre-assembled
- Axle with compact bearing and drum brake 300x200mm (GIGANT)
- Rubber-mounted delta connecting rods and cylinders. No noise or tipping

Technical Specification

Feature	Value
Axle load	12 t
Spring travel	300mm, standard 100mm in, 200mm out
Deck height	890mm (at 100mm inbound spring travel)
Axle spread	1310 /1360mm
Weight per axle line	675kg
Steering angle	Up to 55°
Brake cylinder	Type 30/30 possible on all axles
Brake drum	300 x 200mm
Tyres	235/75 or 245/70 R17,5
Rims	17,5x6,75

Specification DL-S axle line



Steering angle*	X
<35°	640mm
<37.5°	630mm
<40°	610mm
<42.5°	590mm
<45°	575mm
<47.5°	560mm
<50°	545mm
<52.5°	530mm
<55°	520mm

* exact steering angles and chassis width to be discussed with TRIDEC.

Order references

DL-S Suspension

Code	Description
2201	1 axle line, 12 tons per axle line
2202	2 axle lines, 12 tons per axle line
2203	3 axle lines, 12 tons per axle line
2204	4 axle lines, 12 tons per axle line
2205	5 axle lines, 12 tons per axle line
2206	6 axle lines, 12 tons per axle line
2207	7 axle lines, 12 tons per axle line
2208	8 axle lines, 12 tons per axle line

DL-S Options

Code	Description
2221	Accumulator kit (1x left, 1x right)
2222	Pressure sensor for EBS control
2223	Mounting brackets (per axle line)
2224	Additional charge axle line DL-S counter steered
2226	Additional charge axle line DL-S not steered

The information contained in this document gives an indication of the possibilities. Not all exceptional models are included in this document. Please contact our sales department to determine whether a particular configuration of the system can be used in your trailer or that special solutions are possible.

Sales contact

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