

Application

HV hydraulic axle-suspension



HV hydraulic axle-suspension

The TRIDEC HV axle-suspension is an hydraulic-pneumatic suspension, that can be fitted with both rigid and kingpin steered axles. The system is used when large suspension travel and superior vehicle stability are required, such as e.g. on rough soil or poor road-conditions. The HV suspension also offers solutions for vehicles with increased axle-load (12t) or in need of swift deck raising and lowering. Often it is installed on trailers with a larger number of axles and in heavy-duty applications.



Obviously the suspension can be combined with a TRIDEC steering system, both kingpin- (HF-E) and turntable steerings (TR, HS) are possible. Optionally a Compact control with semi-automatic ride height control is possible. Control by a Tritronic system can offer automatic ride-height control, lift-axle and traction assistance.

Noticeable savings

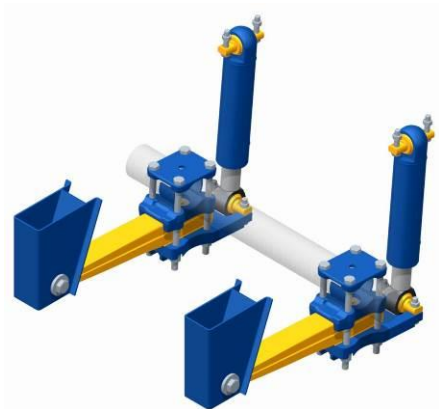
- Improved vehicle stability
- Increased load capacity
- Large suspension travel
- Swift deck raising and lowering
- Maintenance poor
- Excellent driving characteristics, also at high speeds
- Heavy-duty design



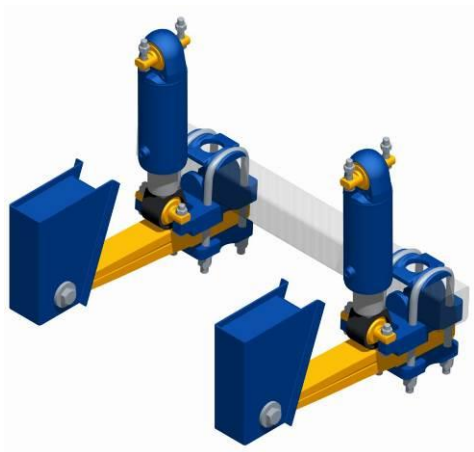
Technical specifications

HV hydraulic axle-suspension

HV-A:



HV-V:



General

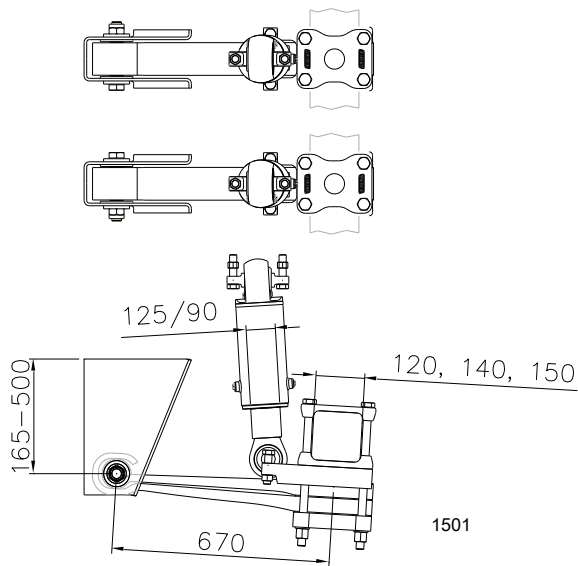
- Versions with suspension-cylinders in front and behind the axle (HV-V / HV-A)
- Versions with spring-leaves on top and below the axle
- Suitable for most common axle types and makes
- Excellent axle compensation, due to large suspension travel: e.g. 100mm in / 200mm out
- Standard 12t axle-load, optionally 16t
- Double acting cylinders, offering lift-axle and traction assistance possibilities
- Customer-specific dimensions and stiffness
- Low-maintenance rubber bearings
- Automatic ride height control by TRITRONIC
- Ideal to combine with TRIDEC steering system
- Components:
 - hanger-brackets, with alignment mechanism
 - spring-leaves
 - axle-seats
 - suspension-cylinders
 - Mountings
 - Accumulator set

TRIDEC kindly advises in the optimal configuration for your application

Technical specification

Feature	Value
Axle-load	12t, optionally 16t
Cylinders HV-A	100/70mm, travel customer-specific
Cylinders HV-V	125/90mm, travel customer-specific
Suspension travel	Customer-specific e.g. 300mm
Spring track	600-1200mm
Hanger-bracket height	165-500mm
Weight per axle-line	312kg
Possible axle-bodies	□120, 140 & 150mm, Ø127, 133 & 146mm

Components



Hanger-bracket

- Several heights available
- Integrated alignment mechanism
- KTL treatment

Spring-leaves

- Double leaves from state-of-the-art spring-steel
- Extra-long leaves, enabling large suspension travel
- Maintenance-poor rubber bearings
- Double machined for robust axle-fixation
- KTL treatment

Axle-seat

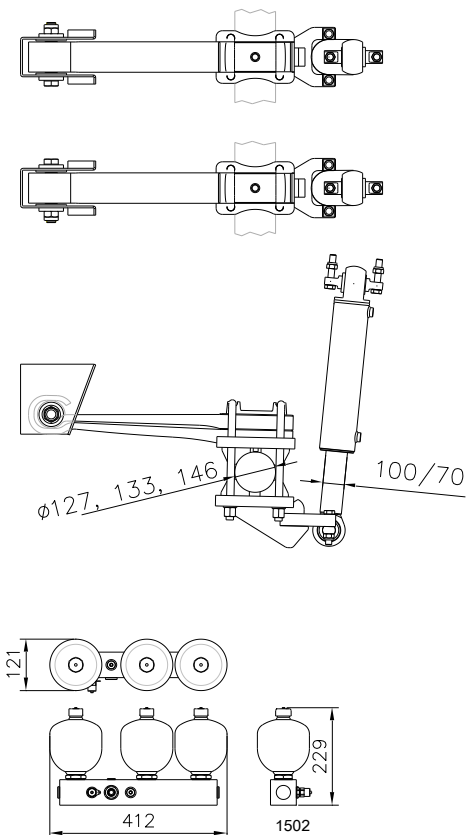
- Several seats and fixations available
 - leaves on top and below axle-body
 - Square axle-bodies □ 120, 140 & 150mm
 - Round axle-bodies Ø127, 133 & 146mm
- KTL treatment

Suspension-cylinder

- Several dimensions and strokes available
- Double acting cylinders, offering lift-axle and traction assistance possibilities
- Maintenance-poor rubber bearings
- Nikrom piston-rods
- KTL treatment

Accumulator set

- State-of-the-art accumulators, KTL treatment
- Customer-specific pre-pressure
- Accumulators positioned at aluminium block with multiple (extra) connectors and mounting



HV Options

Code	Description
1511	Semi-automatic height control hydraulic suspension



Compact semi-automatic ride-height control

- On demand ride-height control
- Left and Right suspension control separately
- 24V system

Remote

- Remote with 5m cable
- Large robust buttons
- LED ride-height indication

Control box

Stainless steel box with plastic lid, where the following functions and components are combined:

- over-pressure valves
- electric valves
- flow control valves

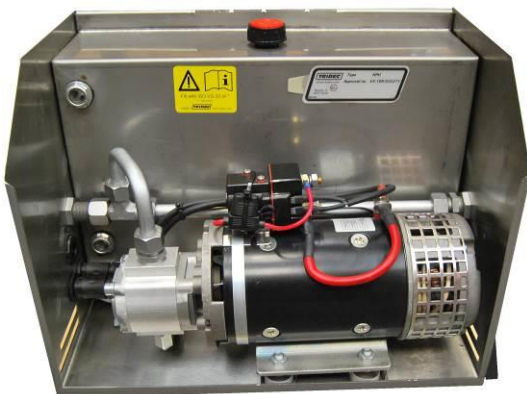
TRIDEC also supplies the required hydraulic pipes and oil.

Power pack

- Stainless steel box with plastic lid
- 3kW electric hydraulic power pack, 10l/min flow
- 15l hydraulic oil tank with gauge-glass optionally 30l
- State-of-the-art relay

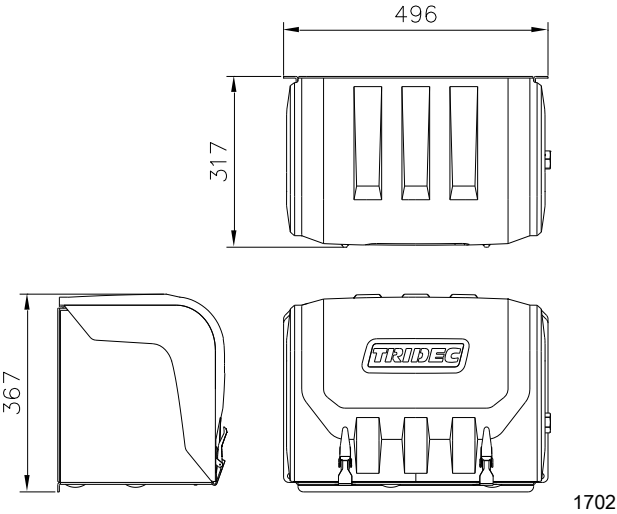
Sensor sets

- Two ride-height sensor sets for Left and Right suspension
- Both with twin approximation switches with LED indication
- Required cables, available in several lengths

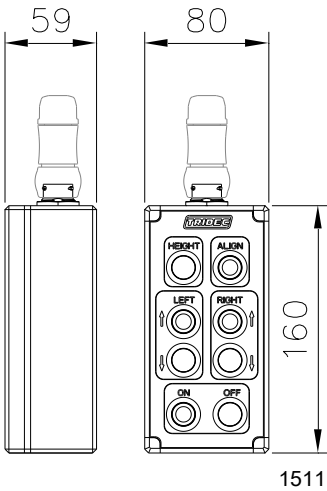




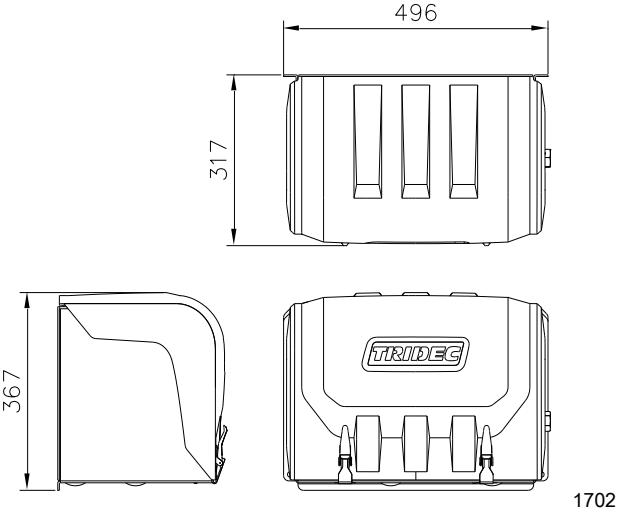
Control box



Remote



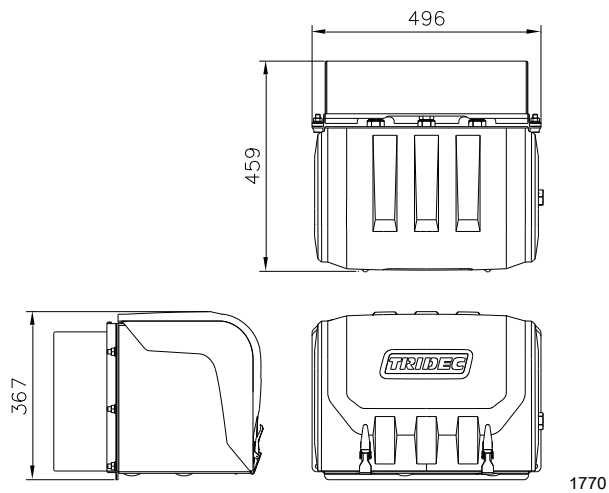
Power pack 15l tank





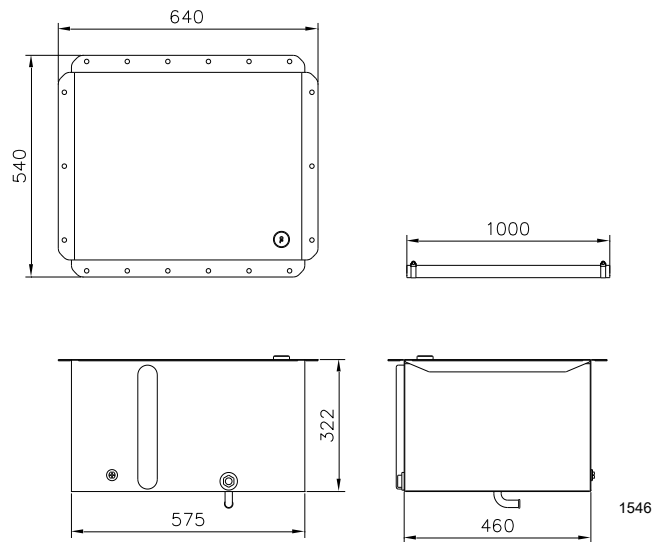
Code	Description
1513	30 litre oil tank instead of standard 14 litre oil tank in power pack

Power pack 30l tank

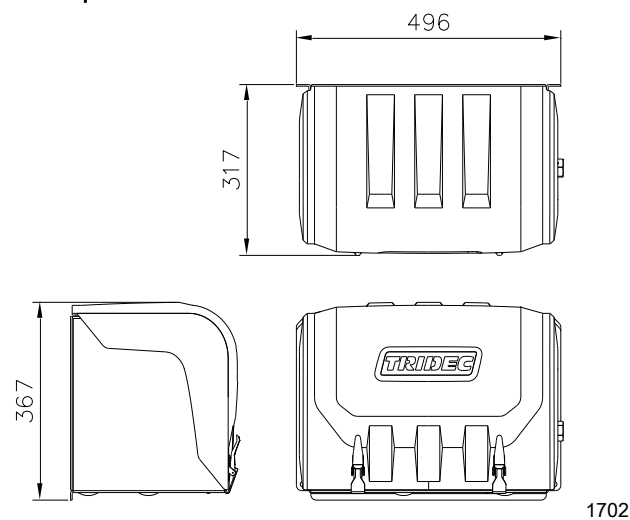


Code	Description
1546	Oil tank 60L including 1 meter inlet tube
1548	4kW power-pack 24V instead of 3kW

Oil tank 60L



Power pack 4kW



Order references

HV-A hydraulic axle-suspension

Code	Description
1501	1 axle line HV-A 12T including accumulator-kit
1502	2 axle lines HV-A 12T including accumulator-kit
1503	3 axle lines HV-A 12T including accumulator-kit
1504	4 axle lines HV-A 12T including accumulator-kit
1505	5 axle lines HV-A 12T including accumulator-kit
1506	6 axle lines HV-A 12T including accumulator-kit
1507	7 axle lines HV-A 12T including accumulator-kit
1508	8 axle lines HV-A 12T including accumulator-kit

HV-V hydraulic axle-suspension

Code	Description
1520	1 axle line HV-V 12T including accumulator-kit
1521	2 axle lines HV-V 12T including accumulator-kit
1522	3 axle lines HV-V 12T including accumulator-kit
1523	4 axle lines HV-V 12T including accumulator-kit
1524	5 axle lines HV-V 12T including accumulator-kit
1525	6 axle lines HV-V 12T including accumulator-kit
1526	7 axle lines HV-V 12T including accumulator-kit
1527	8 axle lines HV-V 12T including accumulator-kit

HV options

Code	Description
1511	Semi-automatic height control hydraulic suspension
1512	Less price power pack is used from steering system
1513	30 litre oil tank instead of standard 14 litre oil tank in power pack
1517	Pressure sensor for EBS control
1546	Additional oil tank 60L including 1 meter inlet tube
1548	4kW power pack instead of 3kW power pack

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

TRIDEC Transport Industry Development Centre B.V.
Ekkersrijt 6030, 5692 GA SON – the Netherlands
Phone: +31 499 49 10 52
Fax: +31 499 46 00 58
E-mail: sales@tridec.com