

# ACTROS - Specifications



Please note: Changes may have been made to the product since the brochure went to press (01.02.2014). The manufacturer reserves the right to make changes to the design, form, colour and specification of any Mercedes-Benz vehicle during the lifecycle period, provided these changes, while taking into account the interests of the vendor, are communicated to the purchaser. The illustrations may show accessories and items of optional equipment which are not part of standard South African specification. Colours may differ slightly from those shown in the brochure, owing to the limitations of the electronic and printing process.  
[www.mercedes-benz.co.za/trucks](http://www.mercedes-benz.co.za/trucks)

Part Number: 0001 5558 02



**Mercedes-Benz**  
Trucks you can trust.

# Index

Actros Cabs .....	2
Cab Drawings .....	3
Actros Engines.....	4
Transmissions .....	5
Chassis Frame .....	6
Truck Tractor .....	8
Freight Carrier.....	10
Tipper and All Wheel Drive.....	11

# Actros Cabs



## Standard Day Cabs

The comfortable day cab with generous space concept is designed to meet the needs of the driver/passenger in local distribution and national long-distance operation. It is designed on the basis of state-of-the-art ergonomics and safety aspects and offers a great deal of space and storage facilities (side panels, roof, doors and rear panel).

### Features

- Air conditioner
- Radio/CD with Bluetooth
- Central locking
- Adjustable steering
- All-round tinted windows
- Lateral sun visor
- Electrical windows
- Electrical adjustable rear-view mirrors
- Front aerodynamic and ramp mirror
- A fold-up bunk fitted as standard equipment on selected models
- Seat covers made of hard-wearing woven fabric
- Storage compartments at left/right in front of the rear panel with cover
- Storage facilities above the windscreen, in the front section and the doors
- Comfortable four-point cab suspension

### Benefits

- Facilitates work for driver due to the highly functional, generous and attractive space concept.
- Very pleasant stopovers in the cab (waiting times and rest times etc.) due to the generous available space.
- Driver can spend night in cab if fold-up bunk is fitted (day cab).
- High rest and sleep comfort thanks to wide bed with foam mattress, integrated point-elastic mattress support, adjustable head section (long cab).
- Numerous storage facilities in the cab keep it tidy and provide convenience.
- Comfortable cab suspension with good suspension comfort relieves the strain on the driver on long journeys.
- Very high level of passive safety thanks to high-strength design in accordance with efficient safety facilities.
- Reduced fouling of the cab and the side windows thanks to enhanced aerodynamics.

## Long Cabs

The comfortable long cab is designed entirely to meet the needs of the driver/passenger and to provide comfort during vehicle operation. It is designed on the basis of state-of-the-art ergonomics and safety aspects. It offers extremely generous space and a great deal of storage area (side panels, doors, roof, rear wall).

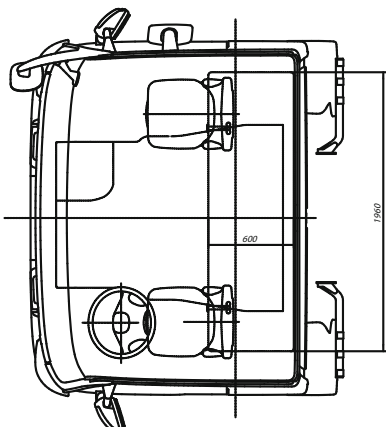
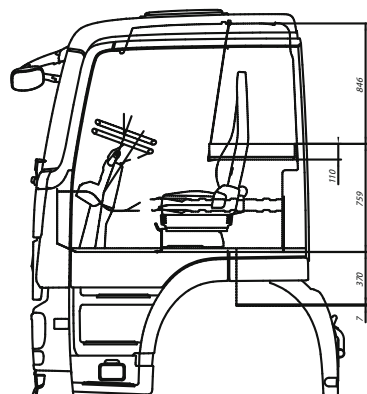
### Features (low roof sleeper cab)

- As per the day cab with additional features listed below
- Sunblind, side window (driver's door)
- Luxury bottom bed
- All-round curtain

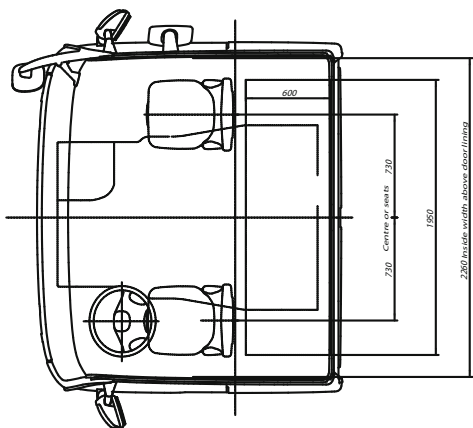
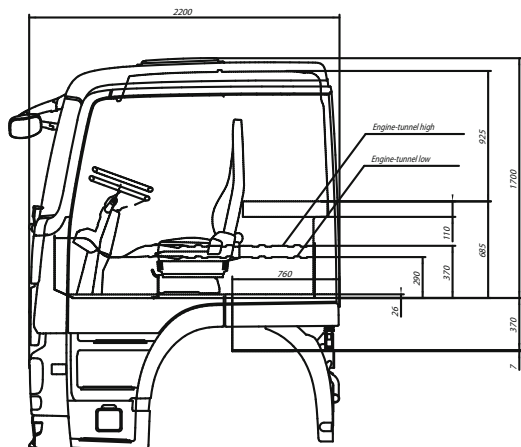
### Features (premium sleeper cab)

- As per the low roof sleeper cab with additional features listed below
- External sunvisor
- Electrical tilting/sliding roof hatch
- Stowage compartments above windscreen
- High roof
- Comfort top and bottom bed

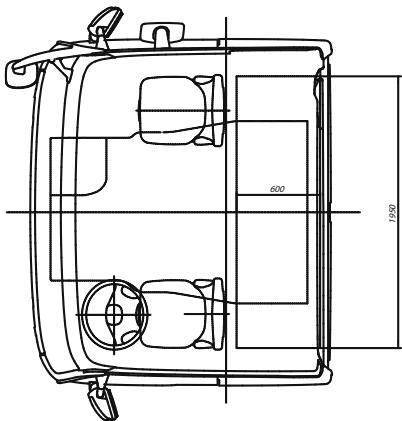
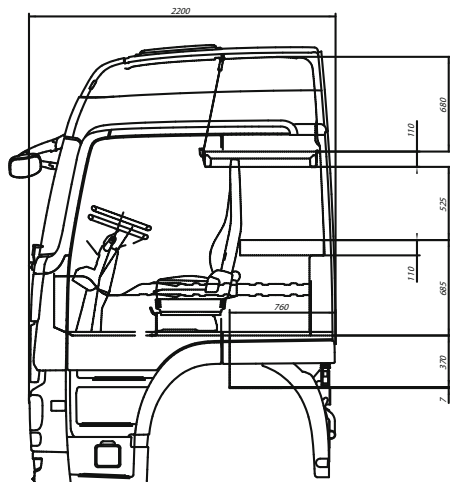
# Cab Drawings



Standard day cab



Low roof sleeper cab



Premium sleeper cab



# Actros Engines

## Features

- Reinforced cylinder head due to high-strength materials.
- Inductively hardened cylinder head lower face and enhanced cylinder-head gasket for reducing wear and for a higher thermal load rating.
- Enhanced injection system with modified injection nozzles for reduced thermal loading in engine-brake operation.
- Enhanced piston cooling, piston rings and piston-pin bearing assemblies for reduced, constant oil consumption throughout the entire engine service life and a higher mechanical load rating.
- Reduced gas-exchange losses by enhancement of the exhaust ports and the exhaust-gas stub to accommodate the engine-brake flap.
- New-generation turbochargers with high-strength impeller for maximum mechanical stability, increased air throughput and enhanced efficiency.
- Extended valve-adjustment intervals due to wear-resistant materials.
- Long-life alternator and enhanced countershaft starter.

## OM 501 LA

The OM 501 LA engine is a V6 engine with enhanced efficiency for individual adaptation of the engine output to the relevant transport task.

## Technical data

- V6 engine with one exhaust-gas turbocharger and charge-air intercooling.
- Displacement: 11 946 cm<sup>3</sup>.
- 4-valve technology.
- Unit pump system (UPS).
- Engine management by fully electronic Telligent engine management system.
- Injection pressure: up to 1 800 bar.
- Compression ratio: 1:17.75
- Ignition pressure: 170 bar.
- 6-hole injection nozzles.
- Euro 3 version.

Key Performance Data for OM 501 LA Series Engines – refer to model overview.

- Maximum output: 320 kW/435 hp at 1 800 rpm.
- Maximum torque: 2100 N.m at 1 080 rpm.

## Benefits

- Assists in achieving fuel-saving, economical operation as a function of transport task and driving style.
- Extended engine life.
- Reduction in lifecycle costs.

## OM 502 LA

The OM 502 LA engine is a V8 engine with enhanced efficiency for individual adaptation of the engine output to the relevant transport task.

## Technical data

- V8 engine with two exhaust-gas turbochargers and charge-air intercooling.
- Displacement: 15 928 cm<sup>3</sup>.
- 4-valve technology.
- Unit pump system (UPS).
- Engine management by fully electronic Telligent engine management system.
- Injection pressure: up to 1 800 bar.
- Compression ratio: 1:17.75.
- Ignition pressure: 170 bar.
- 6-hole injection nozzles.
- Euro 3 version.

Key Performance Data for OM 502 LA Series Engines – refer to model overview.

- Maximum output: 450 kW/ 612 hp at 1 800 rpm.
- Maximum torque: 2 700 N.m at 1 300 rpm.



# Mercedes-Benz PowerShift Transmissions

Mercedes PowerShift adapts the rotational speeds of the main shaft and gear wheel by means of the electronic engine or gearbox control. This dispenses with the need for servo-lock synchronisation. A propeller-shaft brake on the countershaft decelerates the rotating gearbox masses when upshifting. When downshifting, the engine speed is boosted to ensure synchronism of the corresponding gear wheel with the countershaft.

## G280-16

The Mercedes PowerShift G280-16 gearbox is a fully-automated overdrive gearbox with 16 forward gears and 4 reverse gears. It consists of a 4-speed basic gearbox with front-mounted unit (splitter) and rear-mounted unit (range).

### G280-16 Ratios

- 1<sup>st</sup> gear = 11.72
- 2<sup>nd</sup> gear = 9.75
- 3<sup>rd</sup> gear = 7.92
- 4<sup>th</sup> gear = 6.58
- 5<sup>th</sup> gear = 5.29
- 6<sup>th</sup> gear = 4.40
- 7<sup>th</sup> gear = 3.64
- 8<sup>th</sup> gear = 3.02
- 9<sup>th</sup> gear = 2.66
- 10<sup>th</sup> gear = 2.22
- 11<sup>th</sup> gear = 1.80
- 12<sup>th</sup> gear = 1.50
- 13<sup>th</sup> gear = 1.20
- 14<sup>th</sup> gear = 1.0
- 15<sup>th</sup> gear = 0.83
- 16<sup>th</sup> gear = 0.69
- 1<sup>st</sup> reverse gear = 16.39
- 2<sup>nd</sup> reverse gear = 12.74
- 3<sup>rd</sup> reverse gear = 2.42
- 4<sup>th</sup> reverse gear = 2.01

Weight including oil: approx. 309 kg

## G240-16 and G210-16

The G240-16 and G210-16 gearbox is an all-synchromesh overdrive gearbox with 16 forward gears and 2 reverse gears. It consists of a 4-speed basic gearbox with front-mounted unit (splitter) and rear-mounted unit (range). The gears can be shifted either with Telligent manual gearshift as standard or the optional Telligent automated gearshift.

### G240-16 Ratios

- 1<sup>st</sup> gear = 11.72
- 2<sup>nd</sup> gear = 9.747
- 3<sup>rd</sup> gear = 7.918
- 4<sup>th</sup> gear = 6.583
- 5<sup>th</sup> gear = 5.291
- 6<sup>th</sup> gear = 4.400
- 7<sup>th</sup> gear = 3.636
- 8<sup>th</sup> gear = 3.023
- 9<sup>th</sup> gear = 2.654
- 10<sup>th</sup> gear = 2.215
- 11<sup>th</sup> gear = 1.799
- 12<sup>th</sup> gear = 1.496
- 13<sup>th</sup> gear = 1.203
- 14<sup>th</sup> gear = 1.00
- 15<sup>th</sup> gear = 0.826
- 16<sup>th</sup> gear = 0.687
- 1<sup>st</sup> reverse gear = 10.656
- 2<sup>nd</sup> reverse gear = 8.861

Weight including oil: approx. 310 kg

### G210-16 Ratios

- 1<sup>st</sup> gear = 14.19
- 2<sup>nd</sup> gear = 11.72
- 3<sup>rd</sup> gear = 9.580
- 4<sup>th</sup> gear = 7.916
- 5<sup>th</sup> gear = 6.496
- 6<sup>th</sup> gear = 5.368
- 7<sup>th</sup> gear = 4.400
- 8<sup>th</sup> gear = 3.636
- 9<sup>th</sup> gear = 3.224
- 10<sup>th</sup> gear = 2.664
- 11<sup>th</sup> gear = 2.177
- 12<sup>th</sup> gear = 1.799
- 13<sup>th</sup> gear = 1.476
- 14<sup>th</sup> gear = 1.219
- 15<sup>th</sup> gear = 1.000
- 16<sup>th</sup> gear = 0.826
- 1<sup>st</sup> reverse gear = 12.897
- 2<sup>nd</sup> reverse gear = 10.656

Weight including oil: approx. 306 kg

## Additional functions of Mercedes PowerShift

- Power mode: permits short-term use of the full engine power.
- Eco-Roll mode: assists in achieving fuel-saving operation in overrun condition.
- Manoeuvring mode: offers precisely controllable power selection up to 1 000 rpm using the accelerator pedal when manoeuvring.
- Rock-free mode: simplifies driving off on difficult ground.
- Extension of cruise control function I (speed range): offers an individually adjustable vehicle speed range from 2 to 15 km/h between propulsion and brake cut-in.
- Extension of cruise control function II (separate vehicle speed memories): stores the settings for cruise control/proximity control and speed limiter separately, whereby the settings are preserved when switching between functions.
- High-speed reverse gears: allow higher speeds when reversing.
- Direct first-to-reverse shift: bypasses the intermediate step via neutral.

## G330-12 and G211-12

The Mercedes PowerShift G330-12 and G211-12 gearbox is a fully-automated drive gearbox with 12 forward gears and 4 reverse gears. It consists of a 3-speed basic gearbox with front-mounted unit (splitter) and rear-mounted unit (range).

### G330-12 Ratios

- 1<sup>st</sup> gear = 11.64
- 2<sup>nd</sup> gear = 9.02
- 3<sup>rd</sup> gear = 7.03
- 4<sup>th</sup> gear = 5.45
- 5<sup>th</sup> gear = 4.40
- 6<sup>th</sup> gear = 3.41
- 7<sup>th</sup> gear = 2.65
- 8<sup>th</sup> gear = 2.05
- 9<sup>th</sup> gear = 1.60
- 10<sup>th</sup> gear = 1.24
- 11<sup>th</sup> gear = 1.00
- 12<sup>th</sup> gear = 0.78
- 1<sup>st</sup> reverse gear = 12.77
- 2<sup>nd</sup> reverse gear = 9.90
- 3<sup>rd</sup> reverse gear = 2.90
- 4<sup>th</sup> reverse gear = 2.25

Weight including oil: approx.  
305 kg

### G211-12 Ratios

- 1<sup>st</sup> gear = 14.93
- 2<sup>nd</sup> gear = 11.67
- 3<sup>rd</sup> gear = 9.02
- 4<sup>th</sup> gear = 7.06
- 5<sup>th</sup> gear = 5.63
- 6<sup>th</sup> gear = 4.40
- 7<sup>th</sup> gear = 3.39
- 8<sup>th</sup> gear = 2.65
- 9<sup>th</sup> gear = 2.05
- 10<sup>th</sup> gear = 1.60
- 11<sup>th</sup> gear = 1.28
- 12<sup>th</sup> gear = 1.00
- 1<sup>st</sup> reverse gear = 14.93
- 2<sup>nd</sup> reverse gear = 11.67
- 3<sup>rd</sup> reverse gear = 3.39
- 4<sup>th</sup> reverse gear = 2.65

Weight including oil: approx.  
250 kg



# Chassis Frame



## Frame concept

The high-strength and yet elastic frame design of the Actros takes into account the requirements of day-to-day operation.

## Important features

- Three frame side rail thicknesses of 7 mm, 8 mm or 9,5 mm, depending on the vehicle model.
- Material: cold-worked, high-strength steel E 500 TM. Cross members and side rails are interconnected by means of riveted gusset plates.
- Easy to install with the same frame profile throughout and straight upper edge with no projecting components.
- Universal 50 mm hole spacing for easy mounting of attachments.
- Good corrosion protection due to coating of all surfaces.
- The frame taper is located 1,350 mm behind the centre of the first front axle.
- Bolted and repair-friendly frame front section.

## At a glance

The chassis equipment of the Actros offers time-proven and revised components which, overall, reflect a high level of compliance with practical and customer requirements:

- Exhaust systems with space-saving compact design.
- Reliable steel and aluminium fuel tanks for long-distance, distribution and construction operation.
- Safe trailer couplings.
- Reliable and convenient weight reduced fifth wheels.







# Mercedes-Benz Actros: Truck Tractor

## Model Specifications 2014:

MODEL	1844LS/36	2644LS/33 (HYP)	2654LS/33 (HYP)	2658LS/33 (HYP)
General info				
ENGINE				
No. of cylinders	V6	V6	V8	V8
Total displacement	11 946 cm <sup>3</sup>	11 946 cm <sup>3</sup>	15 928 cm <sup>3</sup>	15 928 cm <sup>3</sup>
Output	320 kW (435 hp) @ 1 800 r/min	320 kW (435 hp) @ 1 800 r/min	395 kW (537 hp) @ 1 800 r/min	425 kW (580 hp) @ 1 800 r/min
Torque	2 100 N.m @ 1 080 r/min	2 100 N.m @ 1 080 r/min	2 500 N.m @ 1 080 r/min	2 700 N.m @ 1 080 r/min
AIR CLEANER				
Type	Snorkel air intake with air filter under cab	Snorkel air intake with round air filter behind cab	Snorkel air intake with round air filter behind cab	Snorkel air intake with round air filter behind cab
CLUTCH				
Type	Single plate clutch, self-adjusting, diameter 430 mm	Single plate clutch, self-adjusting, diameter 430 mm	Single plate clutch, self-adjusting, diameter 430 mm	Single plate clutch, self-adjusting, diameter 430 mm
TRANSMISSION				
Type	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort
Ratios	1 <sup>st</sup> gear: 14,93 : 1 12 <sup>th</sup> gear: 1,00 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1
PTO	Optional	NA 131 – 2C	NA 131 – 2C	n/a
FRONT AXLE				
Load capacity	7,5 ton	7,5 ton	7,5 ton	8,0 ton
REAR AXLE				
Load capacity	13,0 ton	2 x 10,0 ton	2 x 10,0 ton	2 x 10,0 ton
Axle ratio	2,846 : 1	3,583 : 1	3,583 : 1	3,581 : 1
Steering				
Type	Power assisted, recirculating ball	Power assisted, recirculating ball	Power assisted, recirculating ball	Power assisted, recirculating ball
Suspension				
Front	Parabolic springs, soft	Parabolic springs	Parabolic springs	Parabolic springs
Rear	Air suspension, with axle load measuring device	Air suspension, with axle load measuring device	Air suspension, with axle load measuring device	Air suspension, with axle load measuring device
Shock absorbers	Front and rear	Front and rear	Front and rear	Front and rear
Stabilisers	Front and rear	Front and rear	Front and rear	Front and rear
BRAKES				
Service	Telligent brake system; dual circuit compressed-air with air drier; disc brakes all round	Telligent brake system; dual circuit compressed-air with air drier; disc brakes all round	Telligent brake system; dual circuit compressed-air with air drier; disc brakes all round	Telligent brake system; dual circuit compressed-air with air drier; disc brakes all round
Parking	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels
Auxiliary 1	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve
RETARDER				
Model	Voith R115 HV retarder	Voith R115 HV retarder	Voith R115 HV retarder	Voith R115 HV retarder
Type	Hydrodynamic	Hydrodynamic	Hydrodynamic	Hydrodynamic
Braking torque	3 500 N.m	3 500 N.m	3 500 N.m	3 500 N.m
CHASSIS				
Type	Ladder frame (side and cross members), riveted	Ladder frame (side and cross members), riveted	Ladder frame (side and cross members), riveted	Ladder frame (side and cross members), riveted
FUEL TANK				
Capacity	1 x approx. 650 l	1 x approx. 650 l + 1 x approx. 280 l	1 x approx. 650 l + 1 x approx. 280 l	1 x approx. 550 l + 1 x approx. 280 l
ELECTRICAL SYSTEMS/ ELECTRONICS				
System voltage	24V	24V	24V	24V
Batteries - No. x capacity	2 x 12V/160 Ah	2 x 12V/160 Ah	2 x 12V/160 Ah	2 x 12V/160 Ah
WHEELS				
Tyres, front	315/80 R22.5	315/80 R22.5	315/80 R22.5	385/80 R22.5
Tyres, rear	315/80 R22.5	315/80 R22.5	315/80 R22.5	315/80 R22.5

2036S/36	3344S/33	3350S/33	3550S/33
V6	V6	V8	V8
11 946 cm³	11 946 cm³	15 928 cm³	15 928 cm³
265 kW (360 hp) @ 1 800 r/min	320 kW (435 hp) @ 1 800 r/min	370 kW (503 hp) @ 1 800 r/min	370 kW (503 hp) @ 1 800 r/min
1 850 N.m @ 1 080 r/min	2 100 N.m @ 1 080 r/min	2 400 N.m @ 1 080 r/min	2 400 N.m @ 1 080 r/min
Snorkel air intake, paper element and cyclonic prefilter	Snorkel air intake, paper element and cyclonic prefilter	Snorkel air intake, paper element and cyclonic prefilter	Snorkel air intake, paper element and cyclonic prefilter
Double plate clutch, reinforced, diameter 400 mm	Double plate clutch, reinforced, diameter 400 mm	Double plate clutch, reinforced, diameter 400 mm	Double plate clutch, reinforced, diameter 400 mm
Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort
1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,72 : 1 12 <sup>th</sup> gear: 0,69 : 1
NA 131 – 2C	NA 131 – 2C	NA 131 – 2C	NA 131 – 2C
7,5 ton	7,5 ton	7,5 ton	9 ton
13,0 ton	2 x 13,0 ton	2 x 13,0 ton	2 x 13,0 ton
4,143 : 1	4,143 : 1	4,143 : 1	4,833 : 1
Power assisted, recirculating ball	Power assisted, recirculating ball	Power assisted, recirculating ball	Power assisted, recirculating ball
Parabolic springs	Parabolic springs	Parabolic springs	Parabolic springs
Parabolic springs	Parabolic springs	Parabolic springs	Parabolic springs
Front and rear	Front and rear	Front and rear	Front and rear
Front and rear	Front only	Front only	Front only
Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round
Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels
Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve
Optional	Voith R115 HV retarder	Voith R115 HV retarder	Voith R115 HV retarder
-	Hydrodynamic	Hydrodynamic	Hydrodynamic
-	3 500 N.m	3 500 N.m	3 500 N.m
Ladder frame (side and cross members), riveted	Ladder frame (side and cross members), riveted	Ladder frame (side and cross members), riveted	Ladder frame (side and cross members), riveted
1 x approx. 400 l	1 x approx. 550 + 280 l	1 x approx. 550 + 280 l	1 x approx. 550 l + 1 x approx. 280 l
24V	24V	24V	24V
2 x 12V/160 Ah	2 x 12V/160 Ah	2 x 12V/160 Ah	2 x 12V/160 Ah
315/80 R22.5	315/80 R22.5	315/80 R22.5	385/65 R22.5
315/80 R22.5	315/80 R22.5	315/80 R22.5	315/80 R22.5

# Mercedes-Benz Actros: Freight Carrier

## Model Specifications 2014:

MODEL	2654L/45 (HYP)	3332/45	3344/45	3350/45
General info				
Engine				
No. of cylinders	V8	V6	V6	V8
Total displacement	15 928 cm <sup>3</sup>	11 946 cm <sup>3</sup>	11 946 cm <sup>3</sup>	15 928 cm <sup>3</sup>
Output	395 kW (537 hp) @ 1 800 r/min	235 kW (320 hp) @ 1 800 r/min	320 kW (435 hp) @ 1 800 r/min	370 kW (503 hp) @ 1 800 r/min
Torque	2 500 N.m @ 1 080 r/min	1 650 N.m @ 1 080 r/min	2 100 N.m @ 1 080 r/min	2 400 N.m @ 1 080 r/min
Air cleaner				
Type	Snorkel air intake, with round air filter behind cab	Snorkel air intake, paper element and cyclonic prefilter	Snorkel air intake, paper element and cyclonic prefilter	Snorkel air intake, paper element and cyclonic prefilter
Clutch				
Type	Single plate clutch, self-adjusting, 430 mm diameter	Double plate clutch, reinforced, 400 mm diameter	Double plate clutch, reinforced, 400 mm diameter	Double plate clutch, reinforced, 400 mm diameter
Transmission				
Type	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort	Powershift constant mesh automated manual gearbox with integrated engine, gearbox and clutch control for short shifting times and high shift comfort
Ratios	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1	1 <sup>st</sup> gear: 11,64 : 1 12 <sup>th</sup> gear: 0,78 : 1
PTO	NA 131-2c	NA 131-2c	NA 131-2c	NA 131-2c
Front axle				
Load capacity	7,5 ton	7,5 ton	7,5 ton	7,5 ton
Rear axle				
Load capacity	2 x 10,0 ton	2 x 13 ton	2 x 13,0 ton	2 x 13,0 ton
Axle ratio	3,583 : 1	4,333 : 1	4,333 : 1	4,333 : 1
Steering				
Type	Power assisted, recirculating ball	Power assisted, recirculating ball	Power assisted, recirculating ball	Power assisted, recirculating ball
Suspension				
Front	Parabolic springs	Parabolic springs	Parabolic springs	Parabolic springs
Rear	Air suspension with axle load measuring device	Air suspension with axle load measuring device	Parabolic springs	Parabolic springs
Rear parabolic springs		2 x 16,0 ton	2 x 16,0 ton	2 x 16,0 ton
Shock absorbers	Front and rear	Front and rear	Front and rear	Front and rear
Stabilisers	Front and rear	Front and rear	Front and rear	Front and rear
Brakes				
Service	Telligent brake system; dual circuit compressed-air with air drier; disc brakes all round	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round
Parking	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels
Auxiliary 1	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve
Retarder				
Model	Voith R115 HV retarder	Voith R115 HV retarder	Voith R115 HV retarder	Voith R115 HV retarder
Type	Hydrodynamic	Hydrodynamic	Hydrodynamic	Hydrodynamic
Braking torque	3 500 N.m	3 500 N.m	3 500 N.m	3 500 N.m
Chassis				
Type	Ladder frame (side and cross-members), riveted	Ladder frame (side and cross-members), riveted	Ladder frame (side and cross-members), riveted	Ladder frame (side and cross-members), riveted
Fuel Tank				
Capacity	1 x approx. 400 l	1 x approx. 400 l	1 x approx. 400 l	1 x approx. 400 l
Electrical systems/Electronics				
System voltage	24V	24V	24V	24V
Batteries - No. x capacity	2 x 12V/160 Ah	2 x 12V/160 Ah	2 x 12V/160 Ah	2 x 12V/160 Ah
Wheels				
Tyres, front	315/80 R22.5	315/80 R22.5	315/80 R22.5	315/80 R22.5
Tyres, rear	315/80 R22.5	315/80 R22.5	315/80 R22.5	315/80 R22.5



# Mercedes-Benz Actros: Tipper and All-Wheel Drive

## Model Specifications 2014:

3344A/45		4144K/51
General info		
Engine		
No. of cylinders	V6	V6
Total displacement	11 946 cm <sup>3</sup>	11 946 cm <sup>3</sup>
Output	320 kW (435 hp) @ 1 800 r/min	320 kW (435 hp) @ 1 800 r/min
Torque	2 100 N.m @ 1 080 r/min	2 100 N.m @ 1 080 r/min
Air cleaner		
Type	Tandem air filter behind cab with cyclonic pre-filter	Tandem air filter behind cab with cyclonic pre-filter
Clutch		
Type	Double plate clutch, reinforced, 400 mm diameter	Double plate clutch, reinforced, 400 mm diameter
Transmission		
Type	Full synchromesh with integrated splitter unit and rear-mounted planetary gearset	Full synchromesh with integrated splitter unit and rear-mounted planetary gearset
Ratios	1 <sup>st</sup> gear: 11,72 : 1 16 <sup>th</sup> gear: 0,69 : 1	1 <sup>st</sup> gear: 11,72 : 1 16 <sup>th</sup> gear: 0,69 : 1
PTO	NA 131-2c	NA 131-2c
Front axle		
Load capacity	9,0 ton	2x 7,5 ton
Rear axle		
Load capacity	2 x 13,0 ton	2 x 16,0 ton
Axle ratio	5,333 : 1	5,333 : 1
Differential lock	Yes	Yes
Steering		
Type	Power assisted, recirculating ball	Power assisted, recirculating ball
Suspension		
Front	Parabolic springs (asymetric)	Parabolic springs
Rear	Parabolic springs	Parabolic springs
Shock absorbers	Front and rear	Front and rear
Stabilisers	Front and rear	Front and rear
Brakes		
Service	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round	Telligent brake system; dual circuit compressed-air with air drier; drum brakes all round
Parking	Spring-loaded brake cylinders on rear wheels	Spring-loaded brake cylinders on rear wheels
Auxiliary 1	Air actuated engine brake with decompression valve	Air actuated engine brake with decompression valve
Retarder	-	Optional
Model	-	-
Type	-	-
Braking torque	-	-
Chassis		
Type	Full-length mono-frame	Ladder frame (side and cross-members), riveted
Fuel tank		
No. x capacity	1 x approx. 400 l	1 x approx. 400 l
Electrical systems/Electronics		
System voltage	24V	24V
Batteries - No. x capacity	2 x 12V/165 Ah	2x 12V/165 Ah
Wheels		
Tyres, front	14.00 R20 with advanced rims	315/80 R22.5
Tyres, rear	14.00 R20 with advanced rims	315/80 R22.5

Vehicle masses														
1844LS/36	2644LS/33 (HYP)	2654LS/33 (HYP)	2658LS/33 (HYP)	2036S/36	3344S/33	3350S/33	3550S/33	2654L/45 (HYP)	3344/45	3350/45	3332/45	4144K/51	3344A/45	
*Front axle tare (with cab, tools and spare wheel)	4 885	4 879	5 085	4 770	4 980	5 187	5 350	4 865	4 685	4 926	4 800	6 730	5 510	
*Rear axle tare (with cab, tools and spare wheel)	1 745	3 442	3 540	2 070	3 795	3 808	3 860	3 645	4 240	4 183	4 074	3 470	4 380	
*Total tare (with cab, tools and spare wheel)	6 630	8 321	8 625	6 840	8 775	8 995	9 210	8 510	8 925	9 064	8 874	10 200	9 890	
Manufacturer's front axle mass (GA, front)	7 500	7 500	7 500	7 500	7 500	7 500	9 000	7 500	7 500	7 500	7 500	15 000	9 000	
Manufacturer's rear axle mass (GU)	11 500	20 000	20 000	13 000	26 000	26 000	26 000	20 000	26 000	26 000	26 000	26 000	18 000	
Manufacturer's gross vehicle mass (GYM)	18 000	27 500	27 500	20 000	33 000	33 000	35 000	27 500	33 000	33 000	33 000	41 000	27 000	
Manufacturer's gross combination mass (GCM)	44 000	65 000	65 000	44 000	75 000	75 000	128 000	65 000	65 000	65 000	65 000	65 000	65 000	
Permissible front axle mass (A, front)	7 500	7 500	7 500	7 500	7 500	7 500	7 700	7 500	7 500	7 500	7 500	15 000	7 700	
Permissible rear axle mass (AU)	9 000	18 000	18 000	9 000	18 000	18 000	18 000	18 000	18 000	18 000	18 000	18 000	16 000	
Permissible maximum vehicle mass (V)	16 500	25 500	25 500	16 500	25 500	25 500	25 700	25 500	25 500	25 500	25 500	33 000	23 700	
Permissible drawing vehicle mass (D/T)	44 000	65 000	65 000	44 000	75 000	75 000	88 800	65 000	65 000	65 000	56 400	65 000	65 000	
* Figures stated are estimates and exclude fuel and driver														

Vehicle dimensions														
1844LS/36	2644LS/33 (HYP)	2654LS/33 (HYP)	2658LS/33 (HYP)	2036S/36	3344S/33	3350S/33	3550S/33	2654L/45 (HYP)	3344/45	3350/45	3332/45	4144K/51	3344A/45	
A Overall length	5 815	6 865	6 865	6 015	6 825	6 825	6 825	9 190	9 190	9 190	9 455	9 055	9 455	
B Overall width	2 500	2 500	2 500	2 490	2 490	2 490	2 495	2 489	2 489	2 489	2 500	2 506	2 522	
C Vehicle height (unladen)	3 448	3 483	3 483	3 245	3 302	3 302	3 587	3 215	3 302	3 302	3 302	3 319	3 364	
W/B Wheelbase	3 600	3 975	3 975	3 600	3 975	3 975	3 975	5 175	5 175	5 175	5 175	4 925	5 105	
E 1st to 2nd rear axle	-	1 350	1 350	-	1 350	1 350	1 350	1 350	1 350	1 350	1 350	1 350	1 450	
F Chassis length from rear of cab	3 500	4 550	4 550	3 915	4 500	4 500	4 430	7 095	7 095	7 095	7 095	6 399	6 876	
CA Back of cab to centre of rear axle	2 730	3 105	3 105	2 945	3 105	3 105	3 035	4 520	4 520	4 520	4 520	4 824	4 301	
G Trailer connection frame to centre	2 655	3 030	3 030	2 655	3 030	3 030	3 030	-	-	-	-	-	-	
I Front overhang	1 440	1 440	1 440	1 440	1 440	1 440	1 440	1 440	1 440	1 440	1 440	1 440	1 510	
J Rear overhang	770	770	770	970	720	770	720	1 900	1 900	1 900	1 900	900	1 850	
K Track width, front	2 053	2 036	2 036	2 053	2 036	2 036	2 034	2 036	2 036	2 036	2 034	2 054	2 089	
L Track width, rear	1 804	1 804	1 804	1 802	1 804	1 804	1 804	1 804	1 804	1 804	1 804	1 804	2 039	
M1 Frame height, front	951	1 029	1 029	1 076	1 133	1 133	1 133	1 046	1 133	1 133	1 135	1 137	1 294	
M1 Frame height, front (laden)	938	952	952	984	1 041	1 041	1 041	964	1 041	1 041	1 041	1 049	1 205	
M2 Frame height, rear	967	1 025	1 025	1 144	1 134	1 134	1 137	1 043	1 130	1 130	1 130	1 154	1 315	
M2 Frame height, rear (laden)	945	1 000	1 000	997	1 044	1 044	1 047	1 018	1 040	1 040	1 040	1 083	1 240	
BBC Bumper to back of cab	2 310	2 310	2 310	2 095	2 310	2 310	2 310	2 095	2 095	2 095	2 095	2 389	2 314	
S Chassis width at rear	758	760	760	758	760	760	763	760	763	763	763	763	763	
Turning circle	15,2	16,0	16,0	14,9	16,0	16,0	16,0	19,8	19,8	19,8	19,8	21,5	23,5	



Model Overview

	184LS/36	2036S/36	2644LS/33 (HYP)	2654LS/33 (HYP)	3344S/33	3350S/33	350S/33	2654L/45 (HYP)	3332/45	3344/45	3350/45	4144K/51	3344A/45
Cab													
Standard day cab	•				○			•	•	•	•	•	•
Long cab (low roof)	○		○		○	•			○		○		
Premium sleeper cab	•	○	•	•	○		•		○	○	○		
Megaspace cab								•					
Engine													
Number of cylinders	OM 501 LA	OM 501 LA	OM 501 LA	OM 502 LA	OM 502 LA	OM 502 LA	OM 502 LA	OM 502 LA	OM 501 LA	OM 501 LA	OM 502 LA	OM 501 LA	OM 501 LA
Output kW /hp	V6	V6	V6	V8	V8	V8	V8	V8	V6	V6	V8	V6	V6
Output kW /hp	320 kW	265 kW	320 kW	395 kW	370 kW	370 kW	425 kW	395 kW	320 kW	320 kW	370 kW	320 kW	320 kW
	(435 hp)	(360 hp)	(435 hp)	(537 hp)	(503 hp)	(503 hp)	(580 hp)	(537 hp)	(435 hp)	(435 hp)	(503 hp)	(435 hp)	(435 hp)
@ 1/min	1 800	1 800	1 800	1 800	1 800	1 800	1 800	1 800	1 800	1 800	1 800	1 800	1 800
Torque Nm	2 100	1 850	2 100	2 500	2 400	2 400	2 700	2 500	1 650	2 100	2 400	2 100	2 100
@ 1/min	1 080	1 080	1 080	1 080	1 080	1 080	1 080	1 080	1 080	1 080	1 080	1 080	1 080
Transmission													
PTO - transmission	○	•	•	•	•	•	•	•	•	•	•	•	•

Rear axle

Ratio	2,846 : 1	4,143 : 1	3,583 : 1	3,583 : 1	4,143 : 1	4,833 : 1	3,583 : 1	4,333 : 1	4,333 : 1	4,333 : 1	5,333 : 1	5,333 : 1	5,333 : 1
-------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Brakes

Disc brakes all round	•		•		•	•	•	•	•	•	•	•	•
Drum brakes all round	•		•		•	•	•	•	•	•	•	•	•
Retarder	•	○	•	•	•	•	•	•	•	•	•	○	○

Suspension

Front parabolic spring (ton)	7,5	7,5	7,5	7,5	7,5	9,0	7,5	9,0	9,0	9,0	9,0	2 x 7,5	9,0
Rear parabolic spring (ton)			13,0		2 x 13,0	2 x 13,0	2 x 13,0		2 x 16,0	2 x 16,0	2 x 16,0	2 x 16,0	2 x 13,0
Rear air suspension (ton)					2 x 10,0	2 x 10,0	2 x 10,0	2 x 10,0					

Fuel tank

Capacity approx. (l)	650	550 + 280	650 + 280	650 + 280	550 + 280	550 + 280	550 + 280	400	400	400	400	400	400
Wheelbase mm	3 600	3 600	3 300	3 300	3 300	3 300	3 300	4 500	4 500	4 500	4 500	5 100	4 500
Manufacturer's GVM (kg)	18 000	20 000	27 500	27 500	33 000	33 000	38 000	27 500	33 000	33 000	33 000	41 000	27 000
Manufacturer's GCM (kg)	44 000	44 000	65 000	65 000	75 000	75 000	128 000	65 000	65 000	65 000	65 000	65 000	65 000

• = Standard equipment, ○ = Optional equipment  
Wheelbase measured from centre of front axle to centre of rear axle/unit

