

B25E 6x4 Supertruck Articulated Dump Truck

ENGINE

Manufacturer
Mercedes Benz

Model
OM906LA

Configuration
Inline 6, turbocharged and intercooled.

Maximum Net Power
205 kW (275 hp) @ 2 200 rpm in accordance with UN ECE R120

Gross Torque
1 100 Nm (811 lbf) @ 1 200 -1 600 rpm

Displacement
6,37 litres (389 cu.in)

Auxiliary Brake
Exhaust Valve Brake
Engine Valve Brake

Fuel Tank Capacity
379 litres (100 US gal)

Certification
OM906LA meets EU Stage II / EPA Tier 2 emissions regulations

TRANSMISSION

Manufacturer
Allison

Model
3500PR ORS

Configuration
Fully automatic planetary transmission with integral retarder.

Layout
Engine mounted

Gear layout
Constant meshing planetary gears, clutch operated

Gears
6 Forward, 1 Reverse

Clutch Type
Hydraulically operated multi-disc

Control Type
Electronic

Torque Control
Hydrodynamic with lock-up in all gears

TRANSFER CASE

Manufacturer
Kessler

Series
W1400

Layout
Remote mounted

Gear Layout
Three in-line helical gears

Output Differential
Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.

AXLES

Manufacturer
Bell

Model
15T

Differential
High input limited slip differential with spiral bevel gears

Final Drive
Outboard heavy duty planetary on all axles

BRAKING SYSTEM

Service Brake
Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers.

Maximum brake force:
175,5 kN (39 004 lbf)

Park & Emergency
Spring applied, air released driveline mounted disc.

Maximum brake force:
170 kN (38 217 lbf)

Auxiliary Brake
Automatic exhaust valve brake and engine valve brake. Automatic, adjustable, integral, hydrodynamic transmission retarder. Output shaft speed dependant.

Total Retardation Power
250 kW (335 hp) Continuous.
539 kW (723 hp) Maximum.

WHEELS

Type
Radial Earthmover

Tyre
20.5 R 25

FRONT SUSPENSION

Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.

REAR SUSPENSION

Pivoting walking beams with laminated rubber suspension blocks

HYDRAULIC SYSTEM

Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system.

Pump Type
Variable displacement load sensing piston

Flow
202 L/min (53 gal/min)

Pressure
310 Bar (4 500 psi)

Filter
5 microns

STEERING SYSTEM

Double acting cylinders, with ground-driven emergency steering pump

Lock to lock turns
4,1

Steering Angle
45°

DUMPING SYSTEM

Two double-acting, single stage, dump cylinders

Raise Time
12 s

Lowering Time
10 s

Tipping Angle
70° standard, or any lower angle programmable

PNEUMATIC SYSTEM

Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.

System Pressure
8,1 Bar (117 psi)

ELECTRICAL SYSTEM

Voltage
24 V

Battery Type
Two AGM (Absorption Glass Mat) type

Battery Capacity
2 X 75 Ah

Alternator Rating
28 V 80 A

VEHICLE SPEEDS

1st	9 km/h	6 mph
2nd	18 km/h	11 mph
3rd	27 km/h	17 mph
4th	41 km/h	25 mph
5th	50 km/h	31 mph
6th	50 km/h	31 mph
R	8 km/h	5 mph

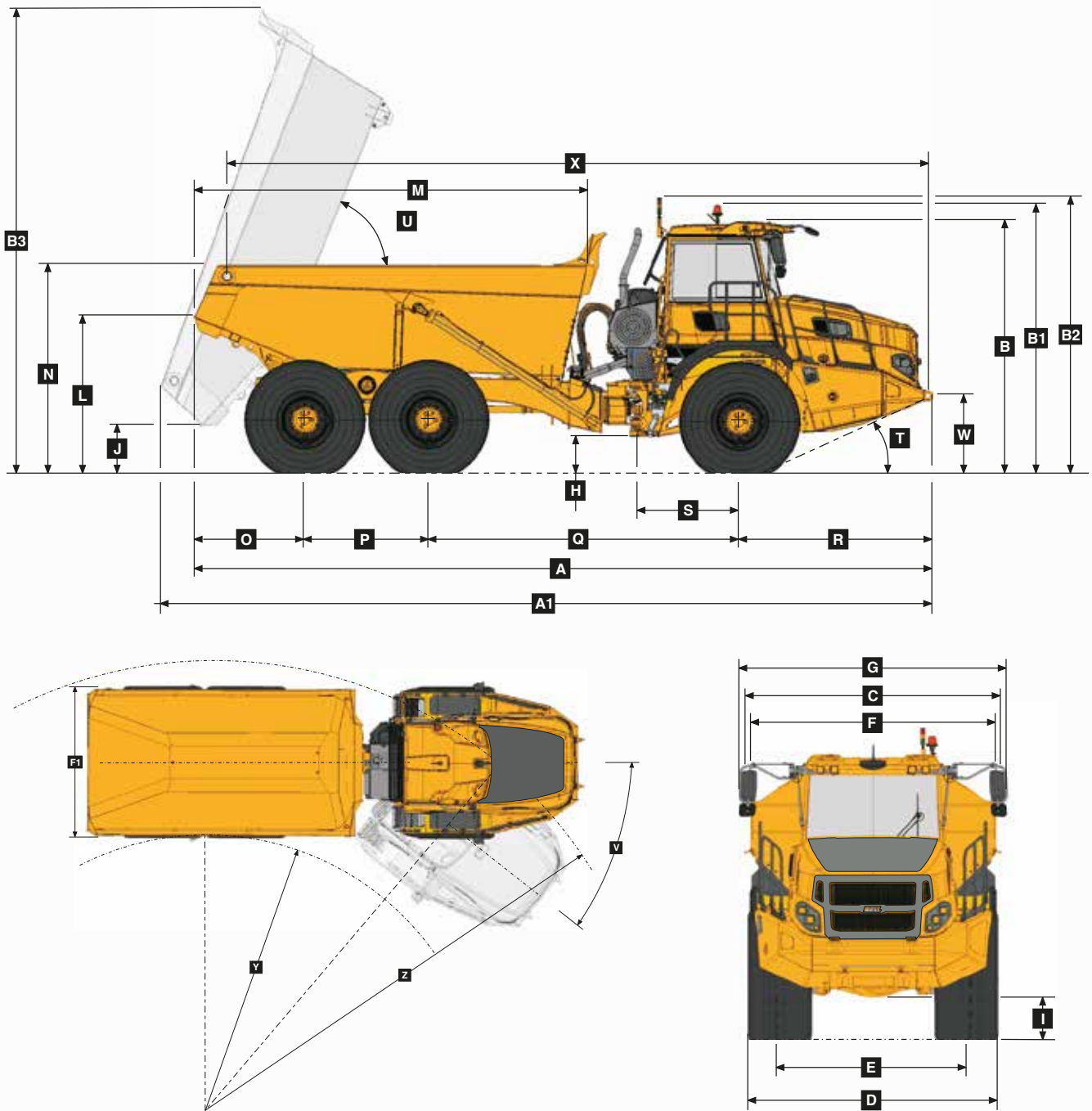
CAB

ROPS/FOPS certified 74 dBA internal sound pressure measured according to ISO 6396.

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN		BODY	m³ (yd³)	EXTRA WHEELSET	kg (lb)
Front	9 640 (21 256)	(No sinkage or Total Contact Area)		Struck Capacity	11,5 (15)	20.5 R 25	
Middle	4 190 (9 239)	20.5 R 25	kPa (Psi)	SAE 2:1 Capacity	15 (19,5)	(per vehicle) Add	156 (344)
Rear	3 930 (8 666)	Front	306 (44,4)	SAE 1:1 Capacity	18 (23,5)		
Total	17 760 (39 161)	Middle	359 (52)				
		Rear	359 (52)	Rated Payload	24 000 kg		
					(52 911 lbs)		
LADEN	kg (lb)						
Front	12 372 (27 276)						
Middle	14 760 (32 546)						
Rear	14 630 (32 259)						
Total	41 760 (92 081)						

Dimensions

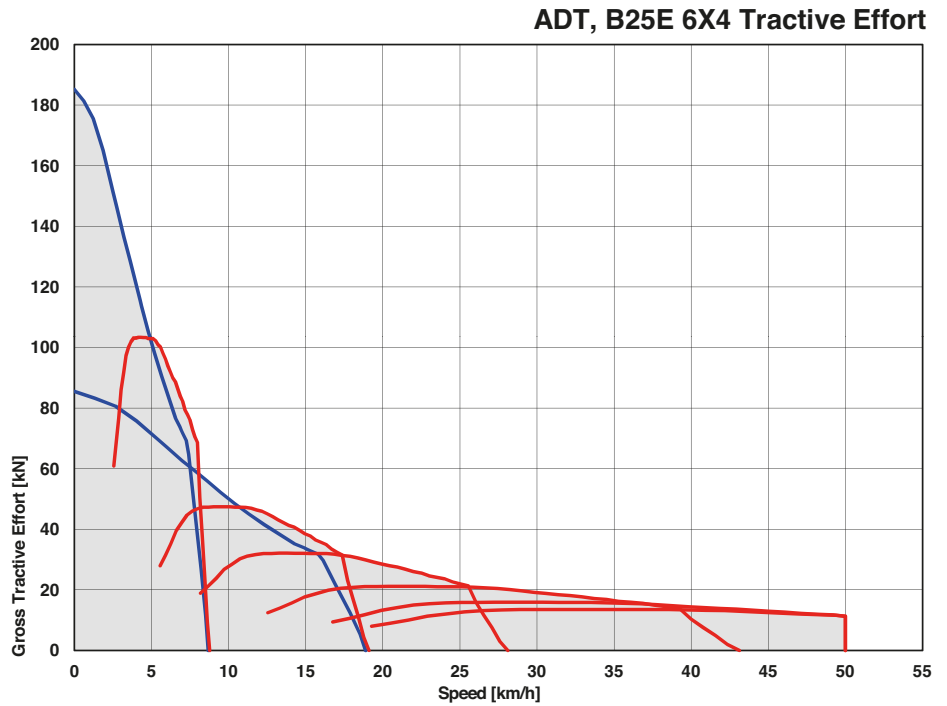
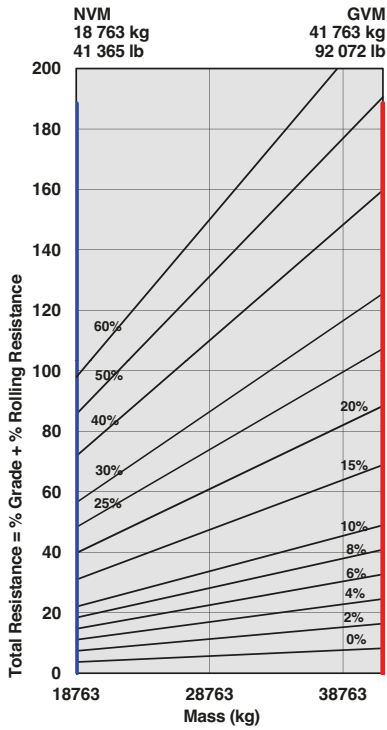


Machine Dimensions

A	Length - Transport Position	9 953 mm (32 ft. 7 in.)	L	Bin Lip Height - Transport Position	2 116 mm (6 ft. 11 in.)
A1	Length - Bin Fully Tipped	10 311 mm (33 ft. 9 in.)	M	Bin Length	5 272 mm (17 ft. 3 in.)
B	Height - Transport Position	3 373 mm (11 ft.)	N	Load over Height	2 703 mm (8 ft. 10 in.)
B1	Height - Rotating Beacon	3 598 mm (11 ft. 9 in.)	O	Rear Axle Centre to Bin Rear	1 500 mm (4 ft. 11 in.)
B2	Height - Load Light	3 693 mm (12 ft. 1 in.)	P	Mid Axle Centre to Rear Axle Centre	1 670 mm (5 ft. 5 in.)
B3	Bin Height - Fully Tipped	6 198 mm (20 ft. 4 in.)	Q	Mid Axle Centre to Front Axle Centre	4 181 mm (13 ft. 8 in.)
C	Width over Mudguards	2 985 mm (9 ft. 9 in.)	R	Front Axle Centre to Machine Front	2 602 mm (8 ft. 6 in.)
D	Width over Tyres - 20.5R25	2 550 mm (8 ft. 4 in.)	S	Front Axle Centre to Artic Centre	1 362 mm (4 ft. 5 in.)
E	Tyre Track Width - 20.5R25	2 022 mm (6 ft. 7 in.)	T	Approach Angle	24°
F	Width over Bin	2 540 mm (8 ft. 4 in.)	U	Maximum Bin Tip Angle	70°
G	Width over Mirrors - Operating Position	3 260 mm (10 ft. 8 in.)	V	Maximum Articulation Angle	45°
H	Ground Clearance - Artic	490 mm (1 ft. 7 in.)	W	Front Tie Down Height	1 024 mm (3 ft. 4 in.)
I	Ground Clearance - Front Axle	435 mm (1 ft. 5 in.)	X	Machine Lifting Centres	9 477 mm (31 ft. 1 in.)
J	Ground Clearance - Bin Fully Tipped	615 mm (2 ft.)	Y	Inner Turning Circle Radius - 20.5R25	4 155 mm (13 ft. 7 in.)
K	Ground Clearance - Under Run Bar	N/A	Z	Outer Turning Circle Radius - 20.5R25	7 955 mm (26 ft. 1 in.)

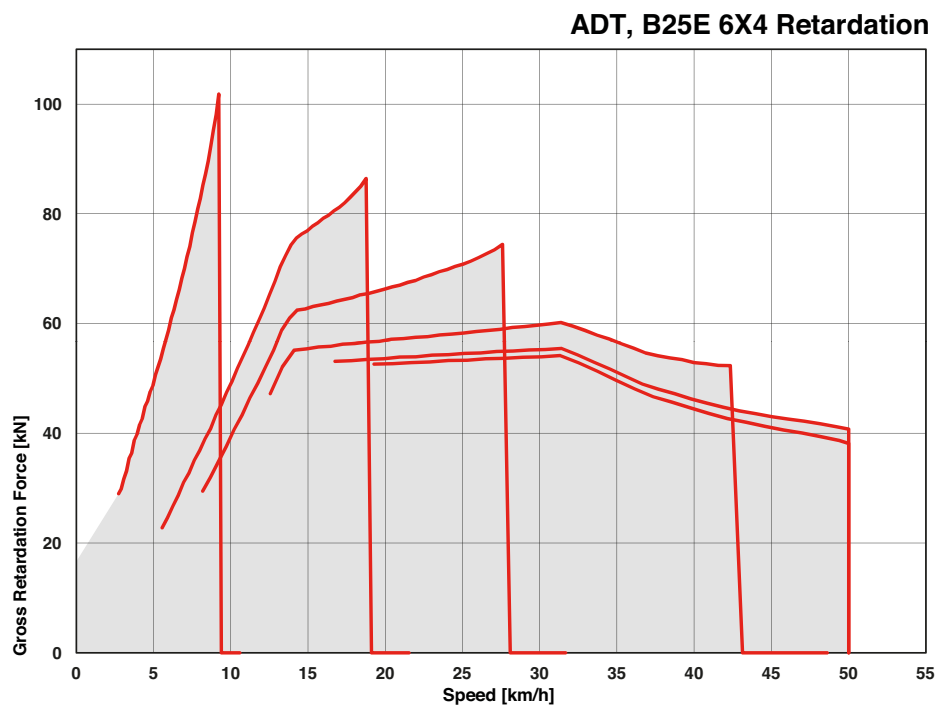
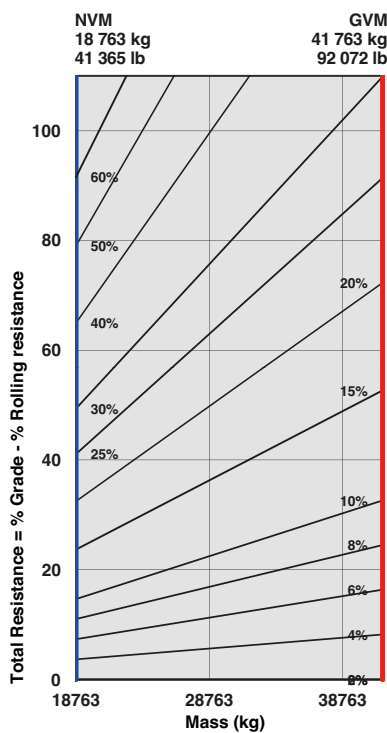
Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.



Retardation

1. Determine retardation force required by finding intersection of vehicle mass line.
2. From this intersection, move straight right across charts until line intersects the curve. NOTE: 2% typical rolling resistance is already assumed in chart.
3. Read down from this point to determine maximum speed.



B18E	B20E	B25E (6x4)	B25E	B30E		B18E	B20E	B25E (6x4)	B25E	B30E	
ENGINE						CAB (continued)					
●	●	●	●	●	Engine valve brake and exhaust brake	●	●	●	●	●	Remote battery jump start
●	●	●	●	●	Dual element air cleaner with dust ejector valve	●	●	▲	▲	▲	High visibility mirrors
●	●	●	●	●	Precleaner with automatic dust scavenging	●	●	●	●	●	12-volt power outlet
●	●	●	●	●	Water separator	●	●	●	●	●	Cup holder
●	●	●	●	●	Serpentine drive belt with automatic tensioner	▲	▲	▲	▲	▲	Electric adjustable and heated mirrors
COOLING						●	●	●	●	●	Cooled/heated lunch box
●	●	●	●	●	Crankshaft mounted electronically controlled viscous fan drive	●	●	●	●	●	Backlit sealed switch module functions with: Wiper control / Lights / Heated mirrors / Retarding aggressiveness / Transfer case differential lock / Transmission gear hold / Dump-body tip limit / Automatic dump-body tip settings / Airconditioner/Heater controls / Preselected Speed Control
●	●	●	●	●	Fan guard	●	●	●	●	●	Deluxe 10" colour LCD: Speedometer / Fuel gauge / Transmission oil temperature gauge / Engine coolant temperature gauge / LED function/warning indicators and audible alarm / Transmission gear selection / Tachometer / Battery voltage / Hour meter / Odometer / Fuel consumption / Tip counter / Trip timer / Trip distance / Metric/English units / Service codes/diagnostics
PNEUMATIC SYSTEM						DUMP BODY					
●	●	●	●	●	Engine-mounted compressor	●	●	●	●	●	Partial up dump-body mechanical
●	●	●	●	●	Air drier with heater	▲	▲	▲	●	●	Fully up dump-body mechanical lock
●	●	●	●	●	Integral unloader valve	▲	▲	▲	▲	▲	Body liner
ELECTRICAL SYSTEM						▲	▲	▲	▲	▲	Tailgate
●	●	●	●	●	Battery disconnect	▲	▲	▲	▲	▲	Body heater
●	●	●	●	●	Drive lights	▲	▲	▲	▲	▲	Less dump body and cylinders
●	●	●	●	●	Air horn	▲	▲	▲	▲	▲	Greedy boards (200 mm)
●	●	●	●	●	Reverse alarm	OTHER					
▲	▲	▲	▲	▲	White noise reverse alarm	●	●	●	●	●	Automatic Traction Control (ATC)
●	●	●	●	●	Rotating beacon	●	●	●	●	●	20.5R25 Radial earthmover tyres
●	●	●	●	●	Pitch Roll sensor	●	●	●	●	●	23.5R25 Radial earthmover tyres
▲	▲	▲	▲	▲	LED Artic reverse light	●	●	●	●	●	Remote grease banks
▲	▲	▲	▲	▲	Halogen Artic reverse light	▲	▲	▲	▲	▲	Automatic greasing
●	●	●	●	●	LED reverse light	●	●	●	●	●	Onboard weighing
STEERING SYSTEM						▲	▲	▲	▲	▲	Load lights: stack
▲	▲	▲	▲	▲	Bi-directional ground driven secondary steering pump	▲	▲	▲	▲	▲	Comfort ride suspension (Front)
●	●	●	●	●	Ground-driven secondary steering pump	▲	▲	▲	▲	▲	Comfort ride suspension (Rear)
CAB						▲	▲	▲	▲	▲	Reverse camera
●	●	●	●	●	ROPS/FOPS certification	▲	▲	▲	▲	▲	HSE hand rails
●	●	●	●	●	Tilt cab	●	●	●	●	●	Cab peak
●	●	●	●	●	Gas strut-supported door	▲	▲	▲	▲	▲	High pressure hydraulic filter
●	●	●	●	●	I-Tip programmable dump-body tip settings	▲	▲	▲	▲	▲	Fuel heater
●	●	●	●	●	HVAC Climate control system	●	●	●	●	●	Belly cover
●	●	●	●	●	AM/FM radio with Aux + USB	▲	▲	▲	▲	▲	Cross member cover
●	●	●	●	●	Rear window guard	▲	▲	▲	▲	▲	Remote transmission filters
●	●	●	●	●	Wiper/washer with intermittent control	▲	▲	▲	▲	▲	Window smash button
▲	▲	▲	▲	▲	Extra wide wiper system	●	●	●	●	●	Electronic bonnet opening
●	●	●	●	●	Tilt and telescoping steering wheel	▲	▲	▲	▲	▲	
●	●	●	●	●	Centre-mount air-suspension seat						
●	●	●	●	●	Retractable 3-point seat belt						
●	●	●	●	●	Foldaway trainer seat with retractable seat belt						
▲	▲	▲	▲	▲	Rotating beacon: seat belt installation						
●	●	●	●	●	Halogen work lights						
▲	▲	▲	▲	▲	LED work lights						
▲	▲	▲	▲	▲	Remote engine and machine isolation						