

B30E Articulated Dump Truck

ENGINE

Manufacturer
Mercedes Benz

Model
OM926LA

Configuration
Inline 6, turbocharged and intercooled.

Gross Power
240 kW (322 hp) @ 2 200 rpm

Net Power
228 kW 95% (306 hp) @ 2 200 rpm

Gross Torque
1 300 Nm (959 lbft) @ 1 200 -1 600 rpm

Displacement
7,2 litres (439 cu.in)

Auxiliary Brake
Exhaust Valve Brake
Engine Valve Brake

Fuel Tank Capacity
379 litres (100 US gal)

Certification
OM926LA meets EU Stage II/EPA Tier 2 emissions regulations.

Torque Control
Hydrodynamic with lock-up in all gears.

Total Retardation Power
265 kW (355 hp) Continuous
494 kW (662 hp) Maximum

DUMPING SYSTEM

Two double-acting, single stage, dump cylinders

Raise Time
14 s

Lowering Time
7 s

Tipping Angle
70° standard, or any lower angle programmable

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.

WHEELS

Type
Radial Earthmover

Tyre
23.5 R 25

FRONT SUSPENSION

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

PNEUMATIC SYSTEM

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

REAR SUSPENSION

Pivoting walking beams with laminated rubber suspension blocks

System Pressure
810 kPa (117 psi)

TRANSMISSION

Manufacturer
Allison

Model
3400P ORS

Configuration
Fully automatic planetary transmission

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

AXLES

Manufacturer
Bell

Model
18T

Differential
High input limited slip differential with spiral bevel gears.

Final Drive
Outboard heavy duty planetary on all axles

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.

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

BRAKING SYSTEM

Service Brake
Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system.

Maximum brake force:
187 kN (42 000 lbf)

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

Maximum brake force:
251 kN (56 400 lbf)

Auxiliary Brake
Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.

Pump Type

Variable displacement load sensing piston.

Flow
165 l/min (44 gal/min)

Pressure
28 Mpa (4 061 psi)

Filter
5 microns

VEHICLE SPEEDS

	km/h	mph
1st	8	5
2nd	14	9
3rd	20	12
4th	29	18
5th	43	26
6th	50	31
R	8	5

STEERING SYSTEM

Double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns
4,1

Steering Angle
45°

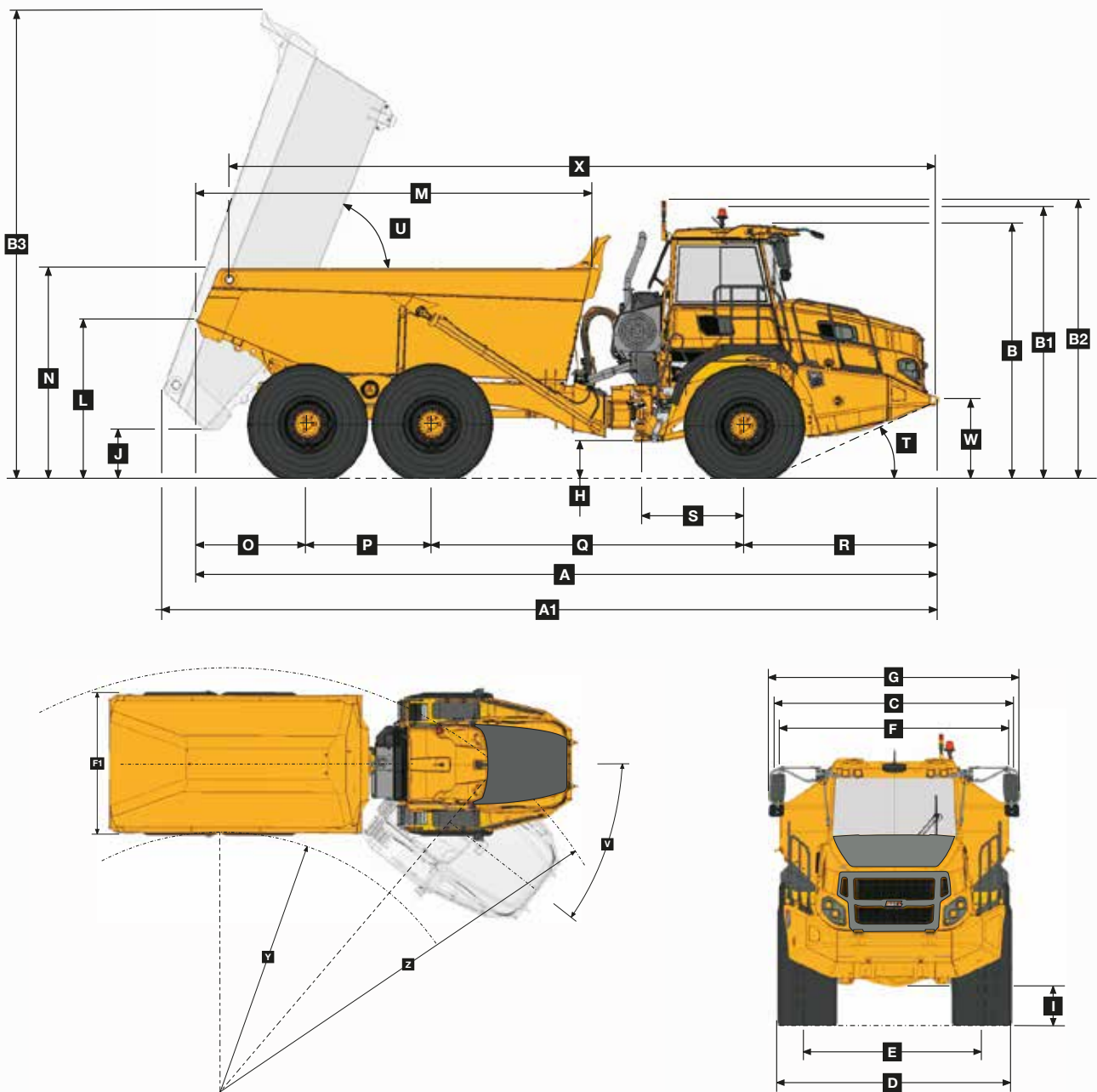
CAB

ROPS/FOPS certified 72 dBA internal sound level measured according to ISO 6396.

Load Capacity & Ground Pressure

*OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN (No sinkage)		BODY	m ³ (yd ³)	kg (lb)	
Front	10 472 (23 087)	23.5 R 25	kPa (Psi)	Struck Capacity	14 (18,3)	Bin liner	1 182 (2 606)
Middle	4 990 (11 001)	Front	280 (41)	SAE 2:1 Capacity	17,5 (22,9)	Tailgate	825 (1 819)
Rear	4 530 (10 444)	Middle	378 (55)	SAE 1:1 Capacity	21 (27,5)	Extra wheelset	565 (1 246)
Total	19 990 (44 070)	Rear	378 (55)	SAE 2:1 Capacity with tailgate	18 (23,5)		
LADEN	kg (lb)	LADEN (15% sinkage)					
Front	13 120 (28 925)	23.5 R 25	kPa (Psi)	Rated Payload	28 000 kg		
Middle	17 495 (38 570)	Front	240 (35)		(61 729 lbs)		
Rear	17 375 (38 305)	Middle	314 (46)				
Total	47 990 (105 800)	Rear	314 (46)				

Dimensions

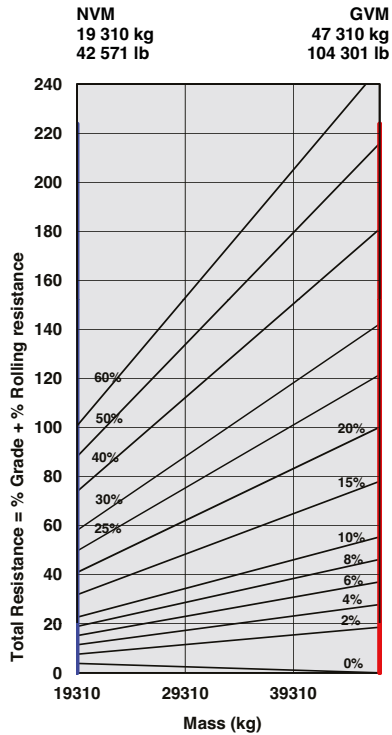


Machine Dimensions

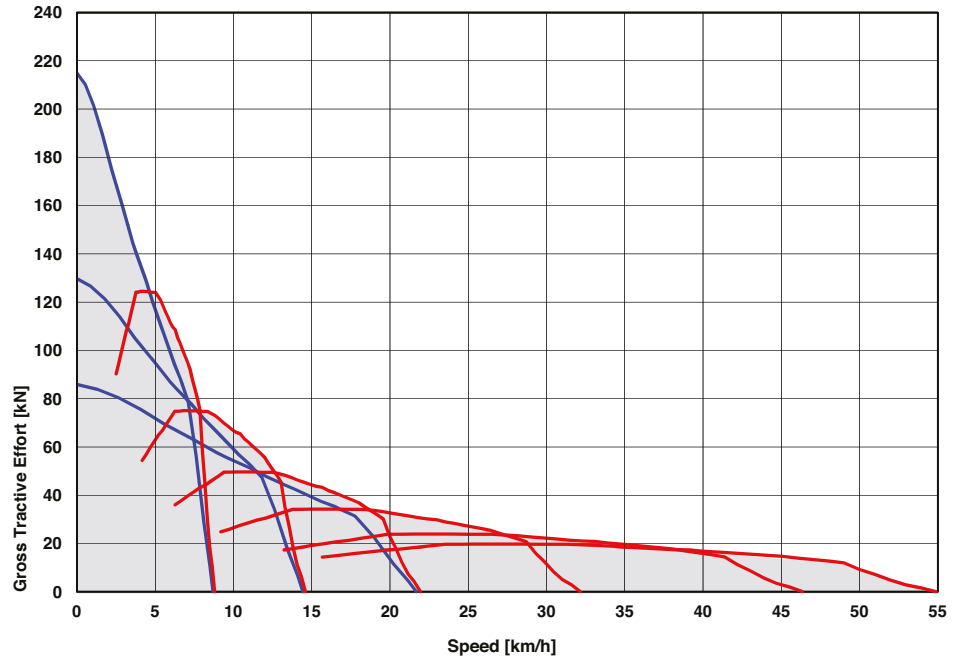
A	Length - Transport Position	9 953 mm (32 ft. 7 in.)	L	Bin Lip Height - Transport Position	2 176 mm (7 ft. 1 in.)
A1	Length - Bin Fully Tipped	10 395 mm (34 ft. 1 in.)	M	Bin Length	5 294 mm (17 ft. 4 in.)
B	Height - Transport Position	3 426 mm (11 ft. 2 in.)	N	Load over Height	2 864 mm (9 ft. 4 in.)
B1	Height - Rotating Beacon	3 661 mm (12 ft.)	O	Rear Axle Centre to Bin Rear	1 500 mm (4 ft. 11 in.)
B2	Height - Load Light	3 747 mm (12 ft. 3 in.)	P	Mid Axle Centre to Rear Axle Centre	1 670 mm (5 ft. 5 in.)
B3	Bin Height - Fully Tipped	6 307 mm (20 ft. 8 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 - 23.5R25	2 940 mm (9 ft. 7 in.)	S	Front Axle Centre to Artic Centre	1 362 mm (4 ft. 5 in.)
D1	Width over Tyres - 750/65 R25	2 998 mm (9 ft. 10 in.)	T	Approach Angle	25°
E	Tyre Track Width - 23.5R25	2 356 mm (7 ft. 8 in.)	U	Maximum Bin Tip Angle	70°
E1	Tyre Track Width - 750/65 R25	2 260 mm (7 ft. 4 in.)	V	Maximum Articulation Angle	45°
F	Width over Bin	2 968 mm (9 ft. 8 in.)	W	Front Tie Down Height	1 075 mm (3 ft. 6 in.)
F1	Width over Tailgate	3 268 mm (10 ft. 8 in.)	X	Machine Lifting Centres	9 443 mm (30 ft. 11 in.)
G	Width over Mirrors - Operating Position	3 260 mm (10 ft. 8 in.)	Y	Inner Turning Circle Radius - 23.5R25	4 110 mm (13 ft. 5 in.)
H	Ground Clearance - Artic	537 mm (21.14 in.)	Y1	Inner Turning Circle Radius - 750/65 R25	4 081 mm (13 ft. 4 in.)
I	Ground Clearance - Front Axle	488 mm (19.21 in.)	Z	Outer Turning Circle Radius - 23.5R25	8 000 mm (26 ft. 2 in.)
J	Ground Clearance - Bin Fully Tipped	670 mm (26.38 in.)	Z1	Outer Turning Circle Radius - 750/65 R25	8 029 mm (26 ft. 4 in.)
K	Ground Clearance - Under Run Bar	N/A			

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.

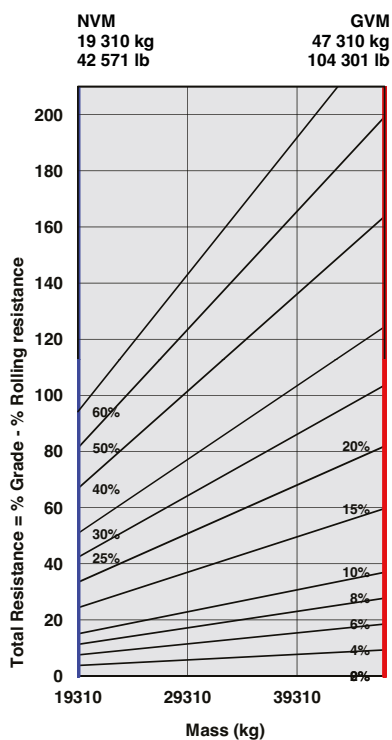


ADT, B30E 6X6 - Tractive Effort

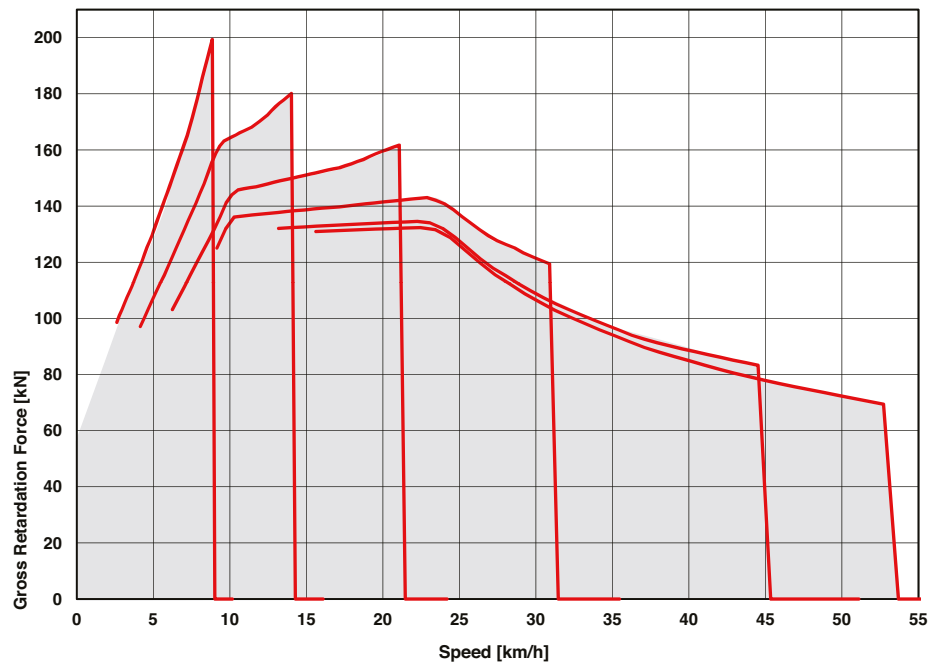


Retardation

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.



ADT, B30E 6X6 - Retardation



B18E	B25E (6x4)	B25E	B30E	
ENGINE				
●	●	●	●	Engine valve brake and exhaust brake
●	●	●	●	Dual element air cleaner with dust ejector valve
●	●	●	●	Precleaner with automatic dust scavenging
●	●	●	●	Water separator
●	●	●	●	Serpentine drive belt with automatic tensioner
COOLING				
●	●	●	●	Crankshaft mounted electronically controlled viscous fan drive
●	●	●	●	Fan guard
PNEUMATIC SYSTEM				
●	●	●	●	Engine-mounted compressor
●	●	●	●	Air drier with heater
●	●	●	●	Integral unloader valve
ELECTRICAL SYSTEM				
●	●	●	●	Battery disconnect
●	●	●	●	Drive lights
●	●	●	●	Air horn
●	●	●	●	Reverse alarm
▲	▲	▲	▲	White noise reverse alarm
●	●	●	●	Rotating beacon
●	●	●	●	Pitch Roll sensor
▲	▲	▲	▲	LED Artic reverse light
▲	▲	▲	▲	Halogen Artic reverse light
●	●	●	●	LED reverse light
STEERING SYSTEM				
▲	▲	▲	▲	Bi-directional ground driven secondary steering pump
●	●	●	●	Ground-driven secondary steering pump
CAB				
●	●	●	●	ROPS/FOPS certification
●	●	●	●	Tilt cab
●	●	●	●	Gas strut-supported door
●	●	●	●	I-Tip programmable dump-body tip settings
●	●	●	●	HVAC Climate control system
▲	▲	▲	▲	AM/FM radio with Aux + USB
●	●	●	●	Rear window guard
●	●	●	●	Wiper/washer with intermittent control
▲	▲	▲	▲	Extra wide wiper system
●	●	●	●	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


B18E	B25E (6x4)	B25E	B30E	
CAB (continued)				
▲	▲	▲	▲	Remote battery jump start
●	▲	▲	▲	High visibility mirrors
●	●	●	●	12-volt power outlet
●	●	●	●	Cup holder
▲	▲	▲	▲	Electric adjustable and heated mirrors
●	●	●	●	Cooled/heated lunch box
●	●	●	●	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
●	●	●	●	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 / Trip counter / Trip timer / Trip distance / Metric/English units / Service codes/diagnostics
DUMP BODY				
●	●	●	●	Partial up dump-body mechanical lock
▲	▲	●	●	Fully up dump-body mechanical lock
▲	▲	▲	▲	Body liner
▲	▲	▲	▲	Tailgate
▲	▲	▲	▲	Body heater
▲	▲	▲	▲	Less dump body and cylinders
OTHER				
●	●	●	●	Automatic Traction Control (ATC)
●	●	●	●	20.5R25 Radial earthmover tyres
●	●	●	●	23.5R25 Radial earthmover tyres
●	●	●	●	Remote grease banks
▲	▲	▲	▲	Automatic greasing
●	●	●	●	Onboard weighing
▲	▲	▲	▲	Load lights: stack
▲	▲	▲	▲	Comfort ride suspension (Front)
▲	▲	▲	▲	Comfort ride suspension (Rear)
▲	▲	▲	▲	Reverse camera
▲	▲	▲	▲	Hand rails
●	●	●	●	Cab peak
▲	▲	▲	▲	High pressure hydraulic filter
▲	▲	▲	▲	Fuel heater
●	●	●	●	Belly cover
▲	▲	▲	▲	Cross member cover
▲	▲	▲	▲	Remote transmission filters
▲	▲	▲	▲	Window smash button
●	●	●	●	Electronic bonnet opening


All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change technical data and design without prior notice. Photographs featured in this brochure may include optional equipment. Blu@vantage™ is a trademark of Bell Equipment Co. (PTY) Ltd AdBlue® is a registered trademark of VDA.


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