B30E 6x6 27 000 L Articulated Water Truck

ENGINE

Manufacturer Mercedes Benz

Model OM926LA

Configuration Inline 6, turbocharged and intercooled.

Net Power 240 kW (322 hp) @ 2 200 rpm in accordance with UN ECE R120

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.

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 multidisc

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

181

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 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.

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

Type Radial Earthmover

Tyre 23.5 R 25

FRONT SUSPENSION Semi-independent, leading A-frame supported by hydropneumatic 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

165 l/min (44 gal/min) Pressure

28 Mpa (4 061 psi)

Filter 5 microns

STEERING SYSTEM

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

Lock to lock turns 4,1

Steering Angle 45°

PNEUMATIC SYSTEM

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

System Pressure 810 kPa (117 psi)

ELECTRICAL SYSTEM

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

WATER TANKER PLUMBING Standard centrifugal water pump

Rate of Flow 1 800 L/min

Head 50 m

CAB

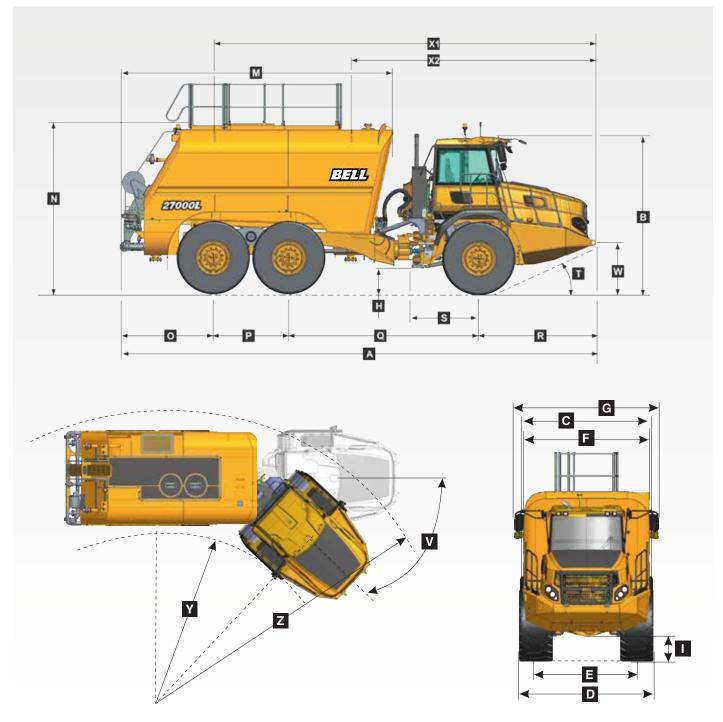
ROPS/FOPS certified 72 dBA internal sound level measured according to ISO 6396.

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN - kg (lb)		LADEN (No sinkage)			
Front	9 750 (21 495)	23.5 R 25	kPa (Psi)	Rated Payload	27 000 litres
Middle	4 800 (10 582)	Front	280 (41)		(7 100 gallons)
Rear	4 760 (10 494)	Middle	378 (55)		
Total	19 310 (42 571)	Rear	378 (55)		
LADEN - kg (lb)					
Front	13 120 (28 925)				
Middle	17 115 (37 732)				
Rear	17 075 (37 644)				
Total	47 310 (104 301)				



Dimensions



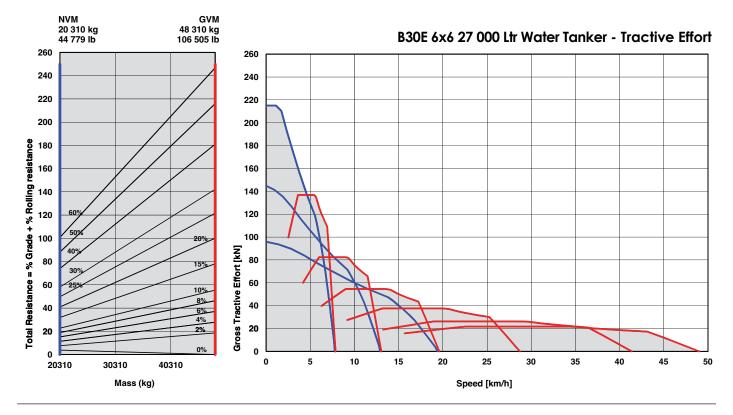
Machine Dimensions

А	Length - Transport Position	10 525 mm	(34 ft. 6 in.)
В	Height - Transport Position	3 436 mm	(11 ft. 3 in.)
С	Width over Mudguards	2 985 mm	(9 ft. 6 in.)
D	Width over Tyres - 23.5R25	2 940 mm	(9 ft. 8 in.)
Ε	Tyre Track Width - 23.5R25	2 356 mm	(7 ft. 9 in.)
F	Width over Tank / Bowser	2 855 mm	(9 ft. 4 in.)
G	Width over Mirrors - Operating Position	3 260 mm	(10 ft. 8 in.)
Н	Ground Clearance - Artic	537 mm	(1 ft. 9 in.)
I	Ground Clearance - Front Axle	488 mm	(1 ft. 7 in.)
М	Tank / Bowser Length	6 030 mm	(19 ft. 9 in.)
Ν	Maximum Tank Height	3 780 mm	(12 ft. 8 in.)
0	Rear Axle Centre to Bowser / Tank Rear	2 072 mm	(6 ft. 10 in.)

Р	Mid Axle Centre to Rear Axle Centre	1 670 mm	(5 ft. 6 in.)
Q	Mid Axle Centre to Front Axle Centre	4 181 mm	(13 ft. 9 in.)
R	Front Axle Centre to Machine Front	2 602 mm	(8 ft. 9 in.)
S	Front Axle Centre to Artic Centre	1 362 mm	(4 ft. 65 in.)
Т	Approach Angle	25°	
V	Maximum Articulation Angle	45°	
W	Front Tie Down Height	1 075 mm	(3 ft. 6 in.)
X1	Tank Lifting Centres	8 359 mm	(27 ft. 5 in.)
X2	Front Lifting Centre to Tank Lifting Centre	5 334 mm	(17 ft. 6 in.)
Y	Inner Turning Circle Radius - 23.5R25	4 110 mm	(13 ft. 6 in.)
Ζ	Outer Turning Circle Radius - 23.5R25	8 000 mm	(26 ft. 3 in.)

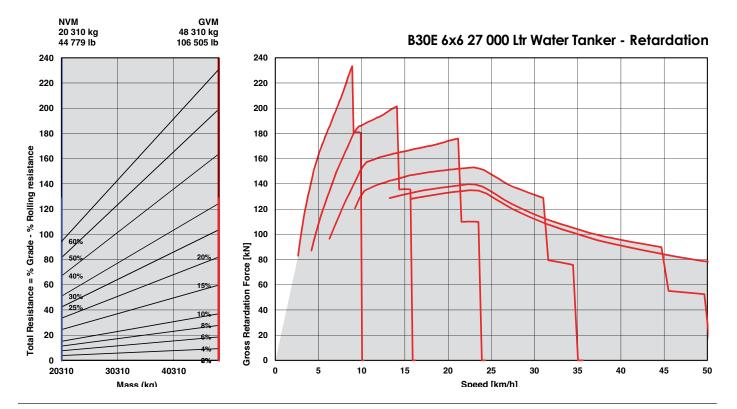
Gradeability/Rimpull

- 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.



Features and Options

16 0001 35 0001 33 0001 43 0001	/	16 0001 35 0001 33 0001 43 0001	
	ENGINE		CAB (continued)
	Engine valve brake and exhaust brake Dual element air cleaner with dust ejector valve Precleaner with auto dust scavenging Water separator Serpentine drive belt with automatic tensioner Provision for fast fill Wet-sleeve cylinder liners		12-volt power outlet Cup holder Cooled/heated lunch box Utility bin (removable) Manually adjustable mirrors Electric adjustable & heated mirrors Deluxe 10" colour LCD: Speedometer / Fuel gauge / Transmission oil temperature gauge /
	COOLING Crank-shaft mounted viscous-drive fan Fan guard		Engine coolant temperature gauge / LED function/warning indicators and audible alarm / Transmission gear selection / Tachometer / Battery voltage / Hour meter / Odometer /
	PNEUMATIC SYSTEM Engine-mounted compressor Air drier with heater Integral unloader valve	• • • • •	Fuel consumption / Trip timer / Trip distance / Metric/English units / Service codes/diagnostics Backlit sealed switch module
	ELECTRICAL SYSTEM Battery disconnect Drive lights Air horn Reverse alarm White noise reverse alarm Rotating beacon Pitch roll sensor LED drive lights LED artic reverse light	• • • • •	functions with: Wiper control / Lights / Heated mirrors / Retarding aggressiveness / Transfer case differential lock / Transmission gear hold / Airconditioner/ Heater controls / Preselected Speed Control Backlit Plumbing sealed switch module functions with: Battery / Spray / Pulse / Tank fill / Hose reel / Pump / Dribble bar
	LED reverse light		PLUMBING
	STEERING SYSTEM Uni-directional ground-driven secondary steering pump Bi-directional ground-driven secondary steering pump CAB ROPS/FOPS certification Tilt cab Gas strut-supported door		Dribble bar 1 800 lpm 50 m head pump 5 400 lpm 70 m head pump* Pressurised dribble bar system Pressurised dribble bar system with nozzles Spray valves (in-cab activation) Batter spray valves Fold down top rails Suction pipe for filling from dam
	HVAC Climate control system AM/FM radio/CD player + USB Rear window guard Wiper/washer with intermittent control		Step ladder access Inspection access Remote control water cannon Hose reel
	Tilt and telescoping steering wheel Centre-mount air-suspension seat Halogen work lights LED work lights Rotating beacon: seat belt installation Remote engine and machine isolation Remote battery jump start		OTHER 23.5 R 25 tyres 620/75 R26 tyres 29.5 R 25 Radial Earthmover tyres 875/65 R 29 Radial Earthmover tyres Automatic greasing Cab peak Belly cover Handrails Remote transmission filter
	High visibility mirrors Retractable 3-point seat belt Foldaway trainer seat with retractable seat belt		Reverse camera

* (Option only): Larger centrifugal pump available if suction pipe option is not fitted.

FEATURES OF THE ARTICULATED WATER TRUCK

• PRODUCTIVE: Powerful built-for hauling ADT drivetrains are well matched for pulling and retarding heavy loads. Nitrogen over oil strut suspension smooths the ride for operator and machine.

• ECONOMY: Modern fuel efficient engine, lockup torque converter and planetary transmission deliver more work per unit of fuel used

• EASY TO OPERATE: High quality cab is conducive to operator care.

Simple to use controls and electronic interfaces protect the machine from accidental misuse.



BATTER SPRAYS

- Two additional spray valves that expand the spray patterns reach on the sides of the tank
- Remotely activated from inside the cab

HOSE REEL

- 25 m hose reel
- Adjustable fog/ stream nozzle
- Spring retractable



DRIBBLE BAR

- Gravity fed dribble bar
- Remotely activated from inside the cab
- Even spread pattern covering the width of the vehicle



PENETRATION SPRAY BARS

- Available with nozzles or holes
- Remotely activated from inside the cab
- Pressurised by the pump to create a jet of water



REMOTE WATER CANNON

- Adjustable fog/stream pattern
- A variety of flow settings
- Remotely controlled via a joystick inside the cab
- High quality components built to last in heavy duty applications

