2806E 4x4 16 000 L Articulated Water Tanker

ENGINE

Manufacturer Mercedes Benz

Model OM906LA

Configuration Inline 6, turbocharged and intercooled.

Gross Power 205 kW (275 hp) @ 2 200 rpm

Net Power 198 kW (265 hp) @ 2 200 rpm

Gross Torque 1 100 Nm (811 lbft) @ 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 optional retarder.

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 BOX

Manufacturer Kessler

Series W1400

Layout

Remote mounted

Gear Layout Three in-line helical gears

Output Differential Permanent interaxle differential lock

AXLES

High torque, low speed suitable for dual wheels.

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 Wet disc brakes.

Maximum Brake Force: 132 kN (29 675 lbf) with standard tyres.

Park & Emergency Spring applied air released, driveline mounted disc

Maximum Brake Force: 242 kN (54 400 lbf)

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

Maximum Retardation 165 kW (221 hp) Standard continuous 539 kW (723 hp) with Maximum retarder option

WHEELS

Standard Tyre: Size 23.5 X 25 SRG

Standard Tyre: Type

Radial Earthmover

FRONT SUSPENSION

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

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)

5 microns

Filter

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

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	8 km/h	5 mph
2nd	15 km/h	9 mph
3rd	20 km/h	12 mph
4th	28 km/h	17 mph
5th	37 km/h	23 mph
6th	43 km/h	27 mph
R	6 km/h	3 mph

WATER TANK

Tank capacity 16 000 Litres

WATER TANKER PLUMBING

Centrifugal water pump

Rate of Flow 1 800 L/min

Head 50 m

CAB

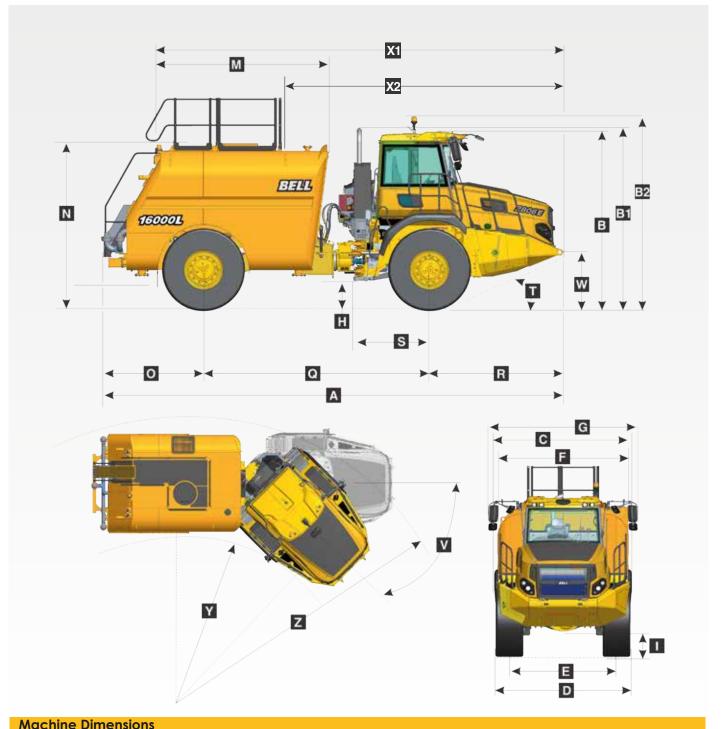
ROPS/FOPS certified 74 dBA internal sound level measured

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN	kg (lb)	LADEN (No sinkage)			
Front	10 163 (22 405)		kPa (Psi)	Rated Payload	16 000 litres
Rear	9 009 (19 861)	Front	255 (36)		(4 200 gallons)
Total	19 172 (42 267)	Rear	445 (64)		
LADEN	kg (lb)				
Front	12 635 (27 855)				
Rear	17 075 (37 644)				
Total	35 148 (77 488)				

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Dimensions

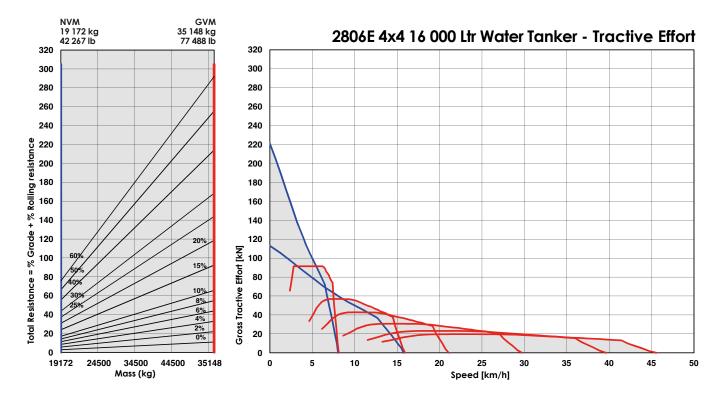


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А	Length - Transport Position	8 946 mm	(29 ft. 4 in.)
В	Height - Transport Position	3 436 mm	(11 ft. 3 in.)
B1	Height-Rotating Beacon	3 548 mm	(11 ft. 8 in.)
B2	Height-Exhaust	3 517 mm	(11 ft. 6 in.)
С	Width over Mudguards	2 984 mm	(9 ft. 9 in.)
D	Width over Tyres-23.5R25	2 926 mm	(9 ft. 7 in.)
Е	Tyre Track Width-23.5R25	2 325 mm	(7 ft. 8 in.)
F	Width over Tank / Bowser	2 840 mm	(9 ft. 4 in.)
G	Width over Mirrors - Operating Position	3 260 mm	(10 ft. 8 in.)
Н	Ground Clearance - Artic	563 mm	(22.17 in.)
	Ground Clearance - Front Axle	470 mm	(18.5 in.)
Κ	Ground Clearance - Under Run Bar	N/A	
Μ	Tank / Bowser Length	3 368 mm	(11 ft. 1 in.)

Ν	Maximum Tank Height	3 074 mm	(10 ft. 1 in.)
0	Rear Axle Centre to Bowser / Tank Rear	1 950 mm	(6 ft. 5 in.)
Q	Mid Axle Centre to Front Axle Centre	4 395 mm	(14 ft. 5 in.)
R	Front Axle Centre to Machine Front	2 601 mm	(8 ft. 6 in.)
S	Front Axle Centre to Artic Centre	1 363 mm	(4 ft. 5 in.)
Т	Approach Angle	26°	
V	Maximum Articulation Angle	45°	
V W	Maximum Articulation Angle Front Tie Down Height	45° 1 092 mm	(3 ft. 7 in.)
=	ě	1 092 mm	(3 ft. 7 in.) 22 ft. 11 in.)
W	Front Tie Down Height	1 092 mm 6 996 mm (· /
W X1	Front Tie Down Height Tank Lifting Centres	1 092 mm 6 996 mm (4 853 mm	22 ft. 11 in.)

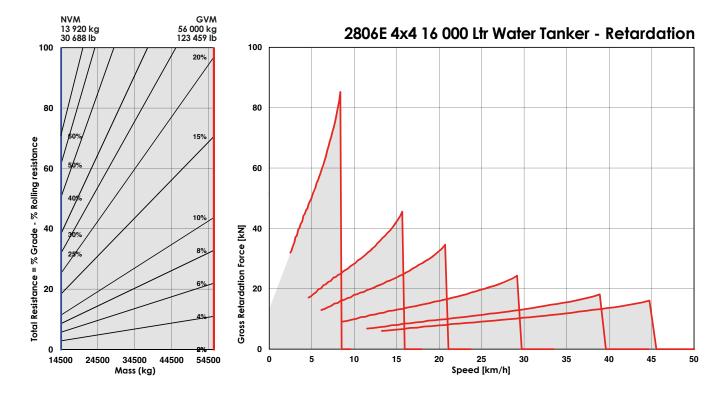
Gradeability/Rimpull

- 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

