

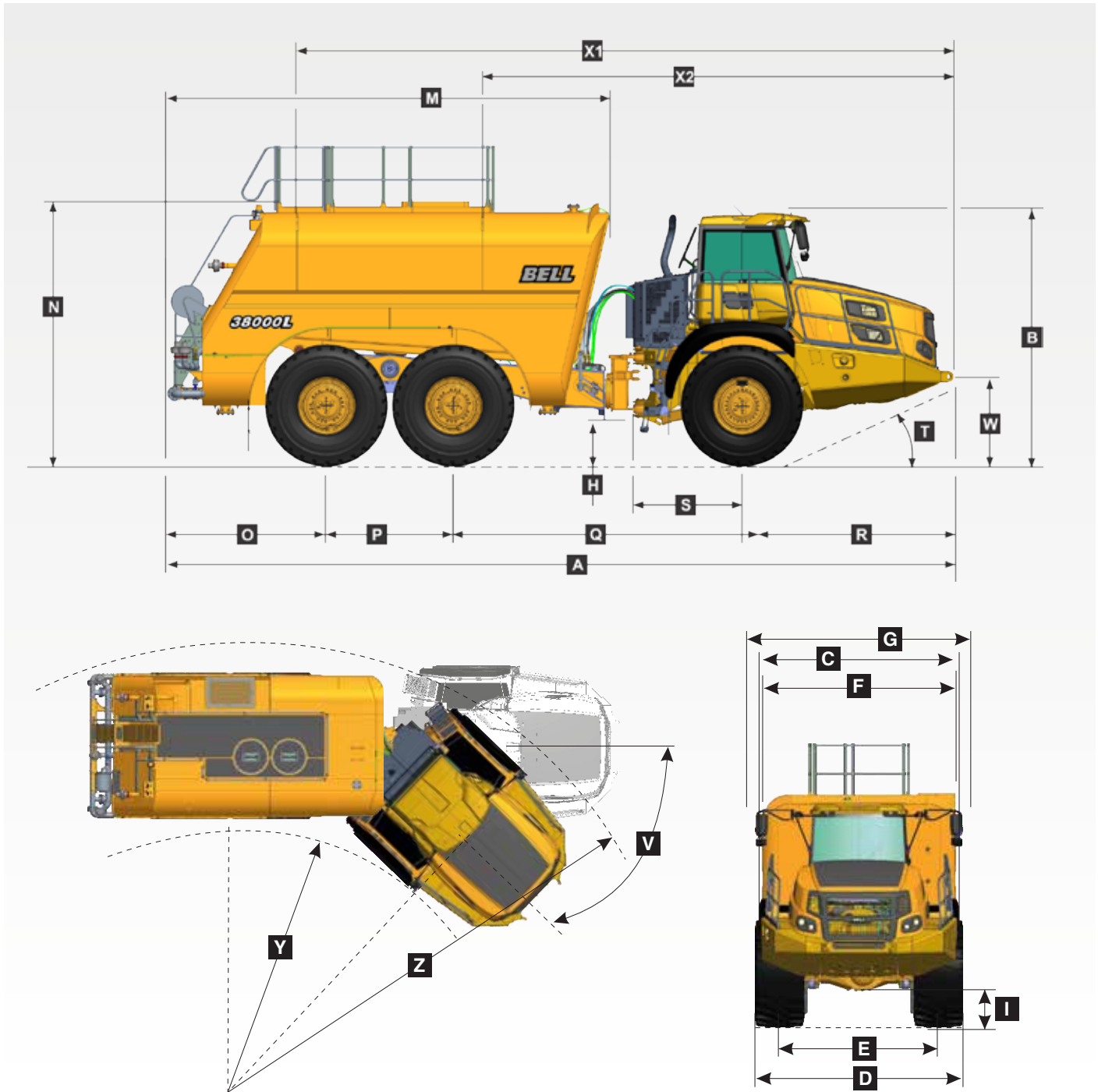
B45E 6x6 38 000 L Articulated Water Truck

<p>ENGINE</p> <p>Manufacturer Mercedes Benz (MTU)</p> <p>Model OM471LA (MTU 6R 1300)</p> <p>Configuration Inline 6, turbocharged and intercooled</p> <p>Net Power 390 kW (523 hp) @ 1 600 rpm</p> <p>Gross Torque 2 600 Nm (1 918 lbf) @ 1 300 rpm</p> <p>Displacement 12,8 litres (781 cu.in)</p> <p>Auxiliary Brake Jacobs Engine Brake®</p> <p>Fuel Tank Capacity 533 litres (140.8 US gal)</p> <p>Certification OM471LA (MTU 6R 1300) is EU Stage IIIA / EPA Tier 3 emission level equivalent</p>	<p>TRANSFER CASE</p> <p>Manufacturer Kessler</p> <p>Model W2400</p> <p>Layout Remote mounted</p> <p>Gear Layout Three in-line helical gears</p> <p>Output Differential Interaxle 29/71 proportional differential. Automatic inter-axle differential lock.</p>	<p>WHEELS</p> <p>Type Radial Earthmover</p> <p>Tyre 29.5 R 25 (875/65 R 29 optional)</p>	<p>PNEUMATIC SYSTEM</p> <p>Air drier with heater and integral unloader valve, serving park brake and auxiliary functions</p> <p>System Pressure 810 kPa (117 psi)</p>																								
<p>TRANSMISSION</p> <p>Manufacturer Allison</p> <p>Model 4700 ORS</p> <p>Configuration Fully automatic planetary transmission</p> <p>Layout Engine mounted</p> <p>Gear Layout Constant meshing planetary gears, clutch operated</p> <p>Gears 7 Forward, 1 reverse</p> <p>Clutch Type Hydraulically operated multi-disc</p> <p>Control Type Electronic</p> <p>Torque Control Hydrodynamic with lock-up in all gears</p>	<p>AXLES</p> <p>Manufacturer Bell</p> <p>Model 30T</p> <p>Differential High input controlled traction differential with spiral bevel gears</p> <p>Final Drive Outboard heavy duty planetary on all axles</p>	<p>FRONT SUSPENSION</p> <p>Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts</p> <p>Option: Electronically controlled adaptive suspension with ride height adjustment</p> <p>REAR SUSPENSION</p> <p>Pivoting walking beams with laminated rubber suspension blocks</p> <p>Option: Comfort Ride suspension walking beams, with two-stage sandwich block</p>	<p>ELECTRIC SYSTEM</p> <p>Voltage 24 V</p> <p>Battery Type Two AGM (Absorption Glass Mat) type</p> <p>Battery Capacity 2 X 75 Ah</p> <p>Alternator Rating 28V 80A</p>																								
	<p>BRAKING SYSTEM</p> <p>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.</p> <p>Maximum brake force: 330 kN (74 187 lbf)</p> <p>Park & Emergency Spring applied, air released driveline mounted disc</p> <p>Maximum brake force: 218 kN (49 008 lbf)</p> <p>Auxiliary Brake Jacobs Engine Brake®. Automatic retardation through electronic activation of wet brake system.</p> <p>Total Retardation Power Continuous: 442 kW (593 hp) Maximum: 854 kW (1 145 hp)</p>	<p>HYDRAULIC SYSTEM</p> <p>Full load sensing system serving the prioritised steering, body tipping and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system.</p> <p>Pump Type Variable displacement load sensing piston</p> <p>Flow 330 L/min (87 gal/min)</p> <p>Pressure 315 bar (4 569 psi)</p> <p>Filter 5 microns</p>	<p>MAX VEHICLE SPEED</p> <table border="1"> <tr><td>1st</td><td>4 km/h</td><td>2,5 mph</td></tr> <tr><td>2nd</td><td>9 km/h</td><td>6 mph</td></tr> <tr><td>3rd</td><td>17 km/h</td><td>11 mph</td></tr> <tr><td>4th</td><td>23 km/h</td><td>14 mph</td></tr> <tr><td>5th</td><td>33 km/h</td><td>21 mph</td></tr> <tr><td>6th</td><td>44 km/h</td><td>27,3 mph</td></tr> <tr><td>7th</td><td>51 km/h</td><td>32 mph</td></tr> <tr><td>R</td><td>7 km/h</td><td>4 mph</td></tr> </table>	1st	4 km/h	2,5 mph	2nd	9 km/h	6 mph	3rd	17 km/h	11 mph	4th	23 km/h	14 mph	5th	33 km/h	21 mph	6th	44 km/h	27,3 mph	7th	51 km/h	32 mph	R	7 km/h	4 mph
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		<p>STEERING SYSTEM</p> <p>Double acting cylinders, with ground-driven emergency steering pump</p> <p>Lock to lock turns 5</p> <p>Steering Angle 42°</p>	<p>WATER TANKER PLUMBING</p> <p>Centrifugal water pump</p> <p>Rate of Flow 5 400 L/min</p> <p>Head 70 m</p>																								
			<p>CAB</p> <p>ROPS/FOPS certified 76 dBA internal sound level measured according to ISO 6396</p>																								

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN		LADEN (No sinkage/Total Contact Area Method)			
	kg (lb)	29.5 R 25	kPa (Psi)		
Front	15 743 (34 707)	Front	321 (47)	Rated Payload	38 000 litres (10 000 gallons)
Middle	10 046 (22 147)	Middle	370 (54)		
Rear	9 528 (21 005)	Rear	370 (54)		
Total	35 317 (77 859)				
LADEN					
	kg (lb)	875/65 R29	kPa (Psi)		
Front	18 342 (40 438)	Front	294 (43)		
Middle	27 391 (60 386)	Middle	331 (48)		
Rear	27 584 (60 811)	Rear	331 (48)		
Total	73 317 (161 636)				

Dimensions

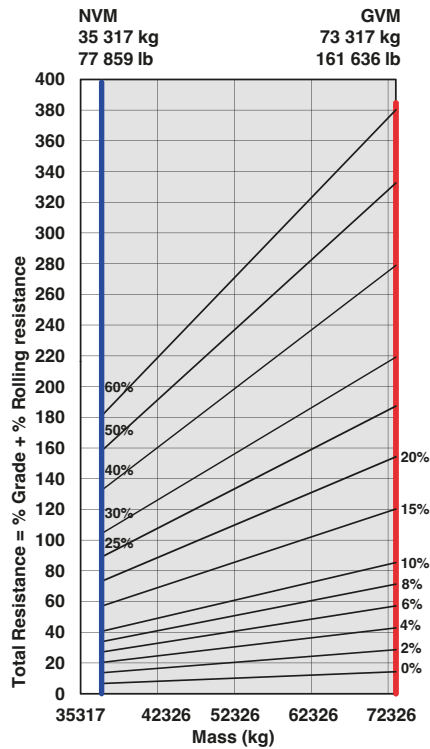


Machine Dimensions

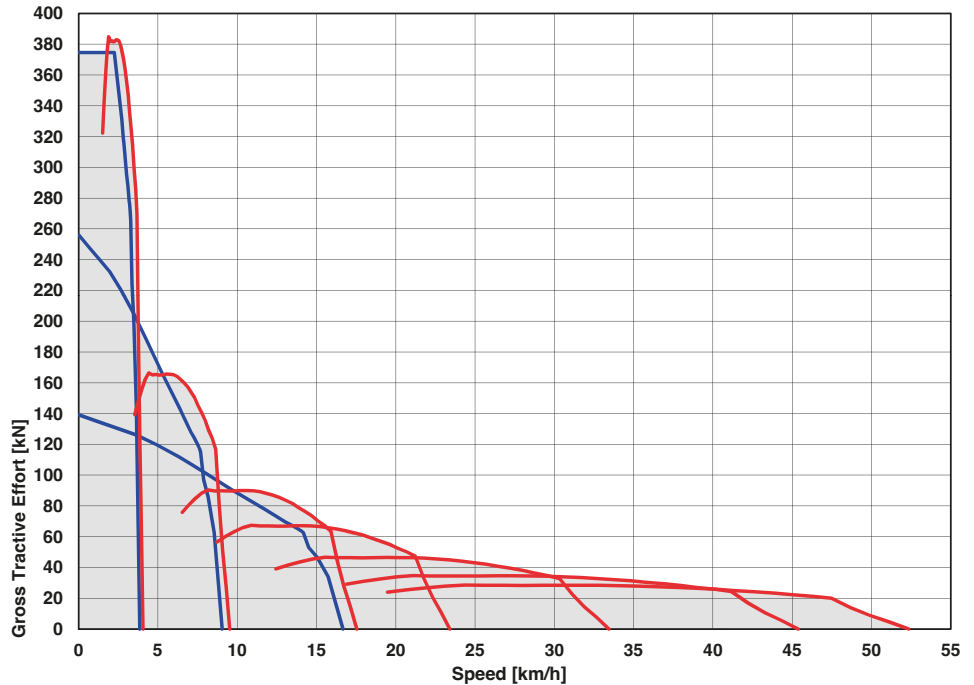
A	Length - Transport Position	12 084 mm	(39 ft. 8 in.)	P	Mid Axle Centre to Rear Axle Centre	1 950 mm	(6 ft. 5 in.)
B	Height - Transport Position	3 802 mm	(12 ft. 6 in.)	Q	Mid Axle Centre to Front Axle Centre	4 438 mm	(14 ft. 7 in.)
C	Width over Mudguards	3 495 mm	(11 ft. 6 in.)	R	Front Axle Centre to Machine Front	3 253 mm	(10 ft. 8 in.)
D	Width over Tyres - 875/65 R29	3 656 mm	(11 ft. 12 in.)	S	Front Axle Centre to Artic Centre	1 558 mm	(5 ft. 1 in.)
D	Tyre Track Width - 29.5R25	3 487 mm	(11 ft. 5 in.)	T	Approach Angle	25°	
E	Tyre Track Width - 875/65 R29	2 773 mm	(9 ft. 1 in.)	V	Maximum Articulation Angle	45°	
E	Tyre Track Width - 29.5R25	2 725 mm	(8 ft. 11 in.)	W	Front Tie Down Height	1 282 mm	(4 ft. 2 in.)
F	Width over Tank / Bowser	3 379 mm	(11 ft. 1 in.)	X1	Tank Lifting Centres	10 023 mm	(32 ft. 10 in.)
G	Width over Mirrors - Operating Position	4 027 mm	(13 ft. 3 in.)	X2	Front Lifting Centres to Tank Lifting Centre	7 173 mm	(23 ft. 6 in.)
H	Ground Clearance - Artic	545 mm	(1 ft. 9 in.)	Y	Inner Turning Circle Radius - 875/65 R29	4 782 mm	(15 ft. 8 in.)
I	Ground Clearance - Front Axle	543 mm	(1 ft. 9 in.)	Y	Inner Turning Circle Radius - 29.5R25	4 866 mm	(15 ft. 12 in.)
M	Tank / Bowser Length	6 797 mm	(22 ft. 4 in.)	Z	Outer Turning Circle Radius - 875/65 R29	9 320 mm	(30 ft. 7 in.)
N	Maximum Tank Height	4 002 mm	(13 ft. 2 in.)	Z	Outer Turning Circle Radius - 29.5R25	9 235 mm	(30 ft. 4 in.)
O	Rear Axle Centre to Bowser / Tank Rear	2 443 mm	(8 ft. 0 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.

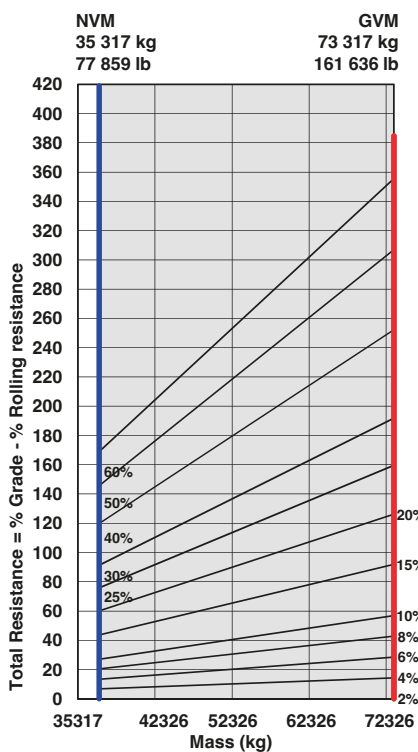


B45E 6x6 38 000 Ltr Water Tanker - Tractive Effort



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.



B45E 6x6 38 000 Ltr Water Tanker - Retardation

