



Dimensions, mm

A	Wheelbase	3000	3200
TW	Theoretical wheelbase	3685	3885
CA	Centre of bogie axle group to back of air intake (for day cab add 557 mm)	2739	2939
EA	Centre of bogie axle group to back of exhaust (for day cab add 500 mm)	2140	2340
BBC	Bumper to back of cab (for day cab subtract 570 mm)	2230	2230
G	Overall cab/chassis length	6490	6690
J	Rear overhang	755	755
S	Calculate the chassis weight of the actual specification, then calculate "S"	195	200
	$S = (\text{Payload front axle} \times \text{theor. wheelbase} \div \text{payload total})$		
P	Exhaust height to top of pipe - unladen	4300	4300
O	Cab height to top of roof - unladen (+ 50 mm to air intake). Globetrotter cab + 397 mm)	3237	3237
R	Turntable mounting angle to ground above centre bogie - unladen	1110	1110

* Chassis height can vary $\pm 25\text{mm}$

Turning Diameter:

Turning circle diameter kerb to kerb	12776	13366
Turning circle diameter wall to wall	14308	14902

Weights:

Chassis weight, front	4873	4883
Chassis weight, rear	3290	3300
Chassis weight, total	8163	8183
Front suspension rating	6700	6700
Max. rear suspension bogie rating	17000	17000
Gross vehicle mass rating (GVM)*	23700	23700
Gross combination mass rating (GCM)	68000	68000

* 21,000 kg bogie rating and 27,700 GVM with RAL21

* GCM rating is dependant on the aftermarket fitment of ADR approved towing equipment.

Weight modifications kg: (tolerance $\pm 1.5\%$)

	Front	Rear	Total		Front	Rear	Total
RADD-BR RAL21	-	+ 14	+ 14	Steel disc wheels	+ 20	+ 7	+ 27
FUEL 2 x 505L fuel (full)	+ 520	+ 308	+ 828	Alloy disc wheels (ilo spoke)	- 10	- 113	- 123
FUEL 2 x 585L fuel (full)	+ 586	+ 400	+ 986	L1H1 Day cab	- 93	+ 8	- 85
FUEL 2 x 655L fuel (full)	+ 622	+ 478	+ 1100	L2H2 Globetrotter cab	+ 112	- 9	+ 103
Roof and Side deflectors	+ 104	+ 0	+ 104				

Chassis weights include:

Cab L2H1, Engine D12C460, Gearbox VT2514, rear axle CTEV87, FRAME77, UNLINER, rear bogie RADD-BR, bogie load RAL17, spoke wheels 8.25 - 22.5 with 295 / 80R22.5 front tyres and 11R22.5 rear, plastic rear bogie mudguards, oil and coolant, no fuel, tools and spare wheel.

FH12 6x4 Prime Mover Rear Leaf Suspension

Driveline

ENGINE

Six cylinder four stroke turbo charged and intercooled diesel engine with electronically controlled fuel delivery and injection timing. Four valves per cylinder and centrally located vertical unit injection controlled by an overhead camshaft.

■ D12C460

338 kW (460 hp)..... 1700 - 1800 rpm
2200 Nm (1620 lb.ft)..... 1100 - 1300 rpm
Economy speed range: 1100 - 1700 rpm
Max engine speed..... 1900 rpm
Engine brake power at 2300 rpm..... 285 kW
Bore & Stroke..... 131 x 150 mm
Compression Ratio..... 18.5:1
Displacement 12 dm³
Oil volume..... 36 litres
Cooling Volume..... 45 litres

CLUTCH

■ CL43S - O

Organic type, single plate clutch.

Diameter..... 430 mm
Total Area..... 2000 cm²

GEARBOX

■ VT2514

Easy shift gearbox with low clutch forces. 14 Forward speeds, 12 synchronized plus 2 crawler. Range change gearbox with splitter. Oil to water transmission cooler standard. Ratios:

Low Range: **1** **2** **3 Reverse**

Low split 11.13:1 7.16:1 4.68:1 15.06:1
High split 8.92:1 5.74:1 3.75:1 12.09:1

High Range:

Low split 2.97:1 1.91:1 1.25:1 4.02:1
High split 2.38:1 1.53:1 1.00:1 3.22:1

Crawler: **Low** 16.41:1 **High** 13.16:1

Oil Capacity..... 13 litres

FINAL DRIVE

■ **CTEV87** Single reduction hypoid axles. Differential lock and power divider lock.

Ratios:.....3.07, 3.36, 3.56
Axle rating..... 26,000 kg
Technical GCM..... 68,000 kg

Driveline Combinations

Engine	D12C	460
Recommended ratios	42t	3.07
Recommended ratios	68t	3.36

STEERING

Power steering with variable ratio.

Maximum wheel lock angle..... 50°
Number of turns of steering wheel..... 4.5
Steering wheel diameter..... 450 mm

Chassis

■ FRAME77 - ULINER

Constant frame width of 850 mm made of high strength steel. Flange width 90 mm. Paint finish black acran 2-pack standard. Web and flange thickness..... 7 mm
Section Height..... 300 mm

FRONT AXLE

Front axle is equipped with grease lubricated tapered unit bearings premounted in the hub for extended service life.

Front axle rating..... 7,100 kg

SUSPENSION

Front

Parabolic 2-leaf spring with double-action hydraulic shock absorbers and high stiffness anti-roll bar. .

Spring length..... 1890 mm

Spring width..... 100 mm

Rear

Parabolic spring system. Front and rear mounting with rubber cushion. Axle mounting with V-stay and reaction rods.

■ RADD-BR/RAL17*

Number of leaves..... 4

Spring width..... 75 mm

Spring length..... 1400 mm

Rating..... 17,000 kg

○ RADD-BR/RAL19*

Number of leaves..... 5

Spring width..... 75 mm

Spring length..... 1400 mm

Rating..... 19,000 kg

(*Road friendly certified)

○ RADD-BR/RAL21

Number of leaves..... 3

Spring width..... 75 mm

Spring length..... 1400 mm

Rating..... 21,000 kg

BRAKES

Dual circuit compressed air braking system with spring brake cylinder on the front and first drive axles. Steel air tanks and single tower air drier. Trailer park valve with hand controlled trailer brake. Gear driven compressor. Volvo Z-cam brakes with asbestos free lining and load sensing valve on drive axle.

Friction area:

Front (FAL6.7)..... 2750 cm²

Bogie axles..... 2 x 3140 cm²

■ 2 cyl. comp..... (850 l/min)

■ Front brake lining width..... 150 mm

■ Rear brake lining width..... 200 mm

■ Brake drum diameter..... 410 mm

○ Anti lock brake system

with 12V trailer supply.

(without load sensing valve)

Trailer options

○ Trailer brake connections - pogo stick suzi coil with air push on connections and electrical lead.

Chassis

FUEL TANKS

Cylindrical aluminium tanks.

■ Lockable cap

■ Diameter..... 710 mm

■ Battery box..... Across frame

■ Capacity 1010L..... WB3000 / 3200

Capacity LHS and RHS..... 505L

○ Capacity 1170L..... WB3000 / 3200

Capacity LHS and RHS..... 585L

○ Capacity 1310L..... WB3200

Capacity LHS and RHS..... 655L

WHEELS & TYRES

■ Spoke wheels

Six spoke spider hubs with demountable rims and steel belted radial tyres (10 off). Rim size: 8.25 inch width x 22.5 inch dia.

■ Plastic rear bogie mudguards.

○ Steel Disc wheels

10 stud ISO 335mm pitch circle diameter.

Rim size: 8.25 inch width x 22.5 inch dia.

○ Steel Disc wheels - wide steer

10 stud ISO 335mm pitch circle diameter.

Rim size: 11.75 inch width x 22.5 inch dia.

○ Alloy Disc wheels - polished

○ Alloy Disc wheels - unpolished

Alcoa aluminium wheels.

10 stud recessed nut ISO 335 mm pitch circle diameter.

Rim size: 8.25 inch width x 22.5 inch dia.

Front Tyres:

■ 295/80R22.5..... 8.25 inch rim width

○ 11R22.5..... 8.25 inch rim width

○ 385/65R22.5..... 11.75 inch rim width

Rear Tyres:

■ 11R22.5..... 8.25 inch rim width

○ 295/80R22.5..... 8.25 inch rim width

○ Spare wheel and tyre

ELECTRICAL EQUIPMENT

Voltage..... 24V

Cranking current..... 560 A

Reserve capacity..... 180 min

Alternator..... 80 A (2240W)

Starter motor..... 7.5 kW (10hp)

Semi-trailer lighting voltage supply.... 12 V

In cab accessory socket voltage..... 12V

Battery capacity according to AS2149 170 Ah

Circuit protection-automatic circuit breakers.

Electrical master switch.

Cab

■ Sleeper cab with textile trim

○ Sleeper cab with vinyl trim

○ Day cab with vinyl trim

○ Globetrotter with textile trim

For more detail information see separate Cab Specification sheet.

POWER TAKE OFFS

A full range of clutch independent and gearbox mounted power take offs together with a choice of hydraulic pumps are available.

■ = Standard equipment.

○ = Factory mounted optional equipment