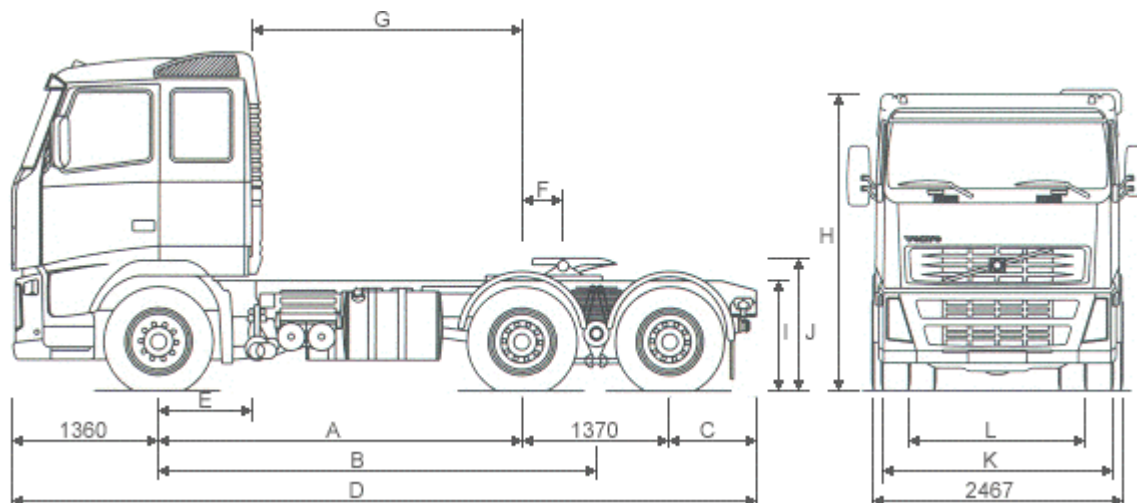


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Dimensions (mm)

Tyres 295/80R22,5

Tractors

Cab	L2H1	L2H1 (std)
A -Wheelbase	3200	3600
B -Theoretical Wheelbase	3885	4285
C -Rear overhang	805	805
D -Total length	6735	7135
E -Front axle to back of the cab	865	865
F -5 th wheel position to rear axle	-375	375
G -Back of the cab to rear axle	2825	3225
H -Total height (L2H2 + 400 mm)	3365	3365
I -Chassis height	1120	1120
J -5 th wheel height (unloaded)	1400	1400
K -Front axle width	2030	2030
L -Rear axle width	1875	1875
Turning radius	7555	8160

*Air suspension

Cab

Cab made of high tensile steel. Hot dip galvanized external panels. Cab treated with electrophoretic anti-rust protection.

	L1H1 (day cab)	L2H1 (sleeper cab)	L2H2 (Globetrotter)
Internal height(mm)	1550	1550	1930
Length(mm)	1660	2230	2230
Width (mm)	2430	2430	2430

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Weight (kgf)

Reference: SCV Package		Tyres295/80R22,5
	Tractors	
Cab	L2H1	L2H1
Wheelbase	3200	3600
Kerb weight front axle	4905	4955
Kerb weight rear axle	4375	4420
Kerb weight total	9280	9375
Front axle load capacity	7100	7100
Rear axle load capacity	26000	26000

Note: Kerb weight: Vehicle in ready to drive condition, with full fuel tank, an 80 kgf driver on board, without spare wheel.

Weight Changes (kgf)

Reference: WB3200mm

From:	To:	Front Axle	Rear Axle	Total
L1H1	L2H1	+103	+9	+112
L2H1	L2H2	+78	+1	+79
w/o power take off in the gear box	With power take off	+10	0	+10
CS40D-O Dual Disc Clutch	CS43S-OR Monodisc Clutch	-23	-20	-43
Steel wheels	Aluminium Wheels	-42	-168	-210
Tyres 295/80R22,5	Tyres 11,00R22*	+34	+136	+170
CTN372/FRAME88P/RAL26/ LINERP	RS2370A/FRAME77/RAL21/ ULINER	+40	-624	-584

* With Steels Wheels

Engine

Diesel, 4 strokes, 6 cylinder head in one piece, 4 valves per cylinder, cylinder head camshaft, turbocharger, intercooler, electronic digital fuel injection, unit injectors vertically positioned in the center of the cylinders. Power output and torque in agreement with NBR 5484 and ISO 1585.

Model/Type	D12D 380	D12D 420	D12D 460
Power (hp-kW(rpm))	380-279(1450-1800)	420-309(1500-1800)	460-338(1500-1800)
Torque(Nm-kgfm (rpm))	1850-189(1050-1450)	2000-204(1050-1450)	2200-225(1050-1450)
Volume(dm ³)	12,1	12,1	12,1
Bore (mm)	131	131	131
Stroke (mm)	150	150	150
Compression ratio	18,1:1	18,1:1	18,1:1
Economy range (rpm)	1100-1700	1100-1700	1100-1700
Specific fuel consumption (g/hph-g/kWh)	140-191	140-191	140-191
Oil (liter)	36	36	36
Cooling (liter)	44	44	44

Engine brake

VEB 390 - An exclusive Volvo design, the Volvo Engine Brake uses 2 of the 4 engine strokes (compression and exhaust) combining the retarding effect of an exhaust brake with that of an engine compression brake (which modifies valve timing to create "over-pressure" in the cylinders to brake the crankshaft). Maximum braking power of 390 hp at 2300 rpm, but high power outputs are also achieved in low engine speeds, 246 hp at 1500 rpm and 287 hp at 1800 rpm.

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Clutch

Model/Type	CS43B - OR 6x4 w/ reduction	CD40B-O 6x4 whith hub reduction and option w/ hub reduction
	Reinforced plate	Double dry plate Pull-type
Operation	Hydropneumatic	
Disc diameter (mm)	430	400

Gearbox Volvo

Models/Type	VT 2214 B 380 and 420	VT 2514B 460
Power output(cv)		
Gearbox Ratios	C)16,86:1 13,51:1 1 st)11,13:1 5 th) 1,91:1 8,92:1 1,53:1 2 nd)7,16:1 6 th)1,25:1 5,74:1 1,00:1 3 rd)4,68:1 Rev)4,02:1 3,75:1 3,22:1 4 th)2,97:1 Lowrev)15,06:1 2,38:1 12,09:1	C)16,41:1 13,16:1 1 st)11,13:1 5 th)1,91:1 8,92:1 1,53:1 2 nd)7,16:1 6 th)1,25:1 5,74:1 1,00:1 3 rd)4,68:1 Rev)4,02:1 3,75:1 3,22:1 4 th)2,97:1 Lowrev)15,06:1 2,38:1 12,09:1
Oil (liter)	13,6	13,6

*For 4x2/6x2 and GCW of 45 t.

Power Take Off

Model/Type	PTR-FL (VT 2214B and 2514B)
Assembling	In the gearbox
Ratios	0,73/0,91
Maximum torque (N.m)	400
Rotation	anticlockwise

Rear Axle

Model/Type	RTS2370A (Leaf suspension)	CTN372 (Leaf suspension)
	Single reduction	Hub reduction
Differential lock	Std	Std
Maximum load capacity(ton)	78**	100
Ratios	3,09/3,40/3,78/4,50:1	3,76/4,12/4,55/5,41:1
Oil capacity (liters)	34	65

*For 6x2 legal ratification Volvo transiting in optimizations conditions (that is long haul with smooth conditions, predominant flat where overloads are not accepts.)

Front Axle

Models/Type	FATYPE 7.1
Heat treated, drop forged I-beam section, maintenance-free, grease-lubricated wheel hubs.	
Technical load capacity (kgf)	7100.

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Front Suspension

	FAL 7.1
Model/Type	Parabolic springs, with articulated bolt at the front and shackle at the back, and standard anti-roll bar.
Shock absorbers	double action
Number of leaves	2
Technical load capacity (kgf)	7100

Rear Suspension

	RST – PAR1 (6x4w/o hub reduction)	RST – MUL (6x4w/hub reduction)
Model/Type	Mechanical, axles in tandem, parabolic springs and anti-roll bar.	Mechanical, axles in tandem, semi elliptic springs and anti-roll bar.
Number of elastic elements	2 x 3 lsprings	2 x 9 springs
Shock absorbers	double action	double action
Technical load capacity (kgf)	21000	26000

Steering

	STG 20.0
Model/Type	ZF Servocon worm screw and sector gear with hydraulic power assistance.
Steering wheel diameter (mm)	450
Fluid capacity (l)	4,5

Chassis

	FRAME 77	FRAME 88
	LNE 60 structural steel frame. High strength steel, low weight U-profile frame.	
Frame width(mm)	850	850
Side member heigth(mm)	300	300
Side member flange width(mm)	90	90
Side member web thickness (mm)	7	8
Inerliner thickness(mm)	-	5

Brakes

Dual-circuit air-compressed Z-cam brakes, with automatic slack adjuster and non-asbestos linings. Parking brake with spring accumulator cylinder.

Braking area (cm²)	
Front axle (cm ²)	2750
Front axle (cm ²)	3140
Second axle	3140
Total (cm ²)	9030
Air tank capacity(dm ³)	105 (30+60+15)

Note: on vehicles with ABS, add 15 litres.

Wheels and Tyres

	Standard	Option	
	Steel disk wheels	Aluminum disk wheels	Steel disk wheels
Wheel dimensions	8,25x22,5	8,25x22,5	8,00x22
Tyre	295/80R22,5	295/80R22,5	11,00R22

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Onboard Computer

Description	LCD display located in the middle of the dashboard, just in front of the driver, provides the driver with information about the truck operation. It shows a number of functions such as check-up, storing and helping in the diagnosis and correction of faults which eventually occurs during the vehicle operation.
Instruments	In addition to the conventional analogic instruments, such as the tachometer, speedometer, front and rear brakes air pressure gauge, coolant temperature gauge and turbocharger pressure gauge, the dashboard has also the following gauges: engine oil temperature, transmission temperature, battery voltage and amperemeter.
Self-test	Lamps, audible signal, analogical gauges and onboard computer display.
Autodiagnosis system	Displays any faults stored in the eletronic modules of the vehicle.
Fuel Economy	Trip consumption, average consumption, autonomy forecast (mileage).
Trip information	Time/date, alarm clock, two independent tripmeters, two independent average speed settings, mileage back counter with estimated time of arrival.

Eletric/Eletronic Plataform

Voltage: 24V

Communication net between the electronic management modules of the vehicle, "Data Bus". Network minimum configuration: engine module (EMS), cab (VECU), onboard computer (LCD) and light control (LCM). Additional modules can be added to the system, if the vehicle is equipped with any other equipment controlled by eletronic modules. The optimised electrical center with a reduced number of fuses and relays is located under the dashboard central part.

Alternator	80A
Battery	2x170Ah/12V
Engine Starter	Melco, with 4 planetary reduction and 5,5 kW.
Headlights	70W

Fuel Tanks

	Aluminum	Steel
Shape	Cylindrical, (660 mm diam)	Rectangular
Capacity (l)	190,310,360 and 425	200,300 and 400
Assembly alternatives	1 or 2, according to the needs or wheelbase limitation	

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