



Chassis Dimensions mm ¹⁾

A	Wheelbase	3400	3700	4000	4300	4600	4900	5200	5600	6000	6300	6500	6700
B	Centre of rear axle to back of cab	2860	3160	3460	3760	4060	4360	4660	5060	5460	5760	5960	6160
C	Overall Chassis Length (maximum legal length 12m)	6655	7105	7505	8005	8505	8955	9455	10055	10655	11205	11555	11805
D Min	Rear Overhang (Min)	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395	1395
D Max	Rear Overhang (Max)	1895	2045	2145	2345	2545	2695	2895	3095	3295	3545	3695	3745
Largest fuel tank RHS with frame mounted exhaust (litres) ...		530	690	810	810	810	810	900	900	900	900	900	900

Chassis Weights kg ²⁾

Front Axle	4250	4260	4280	4300	4320	4340	4350	4370	4390	4450	4450	4460
Rear Axle	1830	1850	1880	1900	1930	1950	1970	1980	2010	2090	2120	2140
Kerb Weight	6080	6110	6160	6200	6250	6290	6320	6350	6400	6540	6570	6600

Turning Diameter mm

Turning Circle Diameter Kerb to Kerb	12200	13100	14000	14900	15800	16700	17700	18900	20100	21000	21600	22300
Turning Circle Diameter Wall to Wall	13800	14800	15700	16600	17500	18400	19400	20600	21800	22700	23300	24000

Plated Weights kg ³⁾

	Plated	Design
Gross Vehicle Weight	18000	20000
Gross Combination Weight	21500	23500
Front Axle	7100	7100
Rear Axle	11500	13000

Important Notes

1) Chassis Dimensions

Cab Height: -60mm for low roof sleeper cab L2H1-LOW, +96mm for sleeper cab L2H1, +533mm for Globetrotter L2H2.
Front axle to back of cab intake: +434mm for sleeper and Globetrotter cab.
Rear overhang used for vehicle weight calculation is the maximum rear overhang (D Max) for selected wheelbase.
Height can vary ± 10 mm for air suspension.
All dimensions are for unladen chassis.

2) Chassis Weights

Chassis weight includes oil, water, 70 litres fuel and without driver. Weights can vary ± 2% and vary depending on options chosen.

3) Plated Weights

To obtain an 8000kg front axle 315/80R22.5 tyres must be specified.
9000kg front axle available with 385/65 or 385/55R22.5 or tyres.
GCW with trailer brakes 40000kg legal - subject to driveline.

For more detailed weight information, including optional equipment weights, ask your Volvo sales contact to enter your specification into the Volvo Weight Information system (WIS).

Weights and dimensions based upon the following tyres -
Front: 295/80R22.5
Rear: 295/80R22.5

Do NOT use this drawing for bodybuilding.
Refer to Volvo Bodybuilder Instructions and chassis drawing 3199793 or 3199784.

FM 260 - 380 4x2 Rigid Rear Air Suspension - Euro3

Driveline

Key

- Standard equipment
- Factory mounted optional equipment

ENGINE D9A

Six cylinder four stroke turbo charged and intercooled diesel engine with electronically controlled fuel rate and injection timing. Four valves per cylinder, and centrally located vertical unit injection controlled by an overhead camshaft. Exhaust pressure regulator and viscous cooling fan standard. Electronic control includes top speed limiter & cruise control functions. Net output according to: ISO 1585.

- **D9A260** - max power 260hp (191kW)*
Torque 1250Nm (922lb.ft) @ 1000-1400rpm
 - **D9A300** - max power 300hp (220kW)*
Torque 1400Nm (1033lb.ft) @ 1100-1400rpm
 - **D9A340** - max power 340hp (250kW)*
Torque 1600Nm (1180lb.ft) @ 1200-1400rpm
 - **D9A380** - max power 380hp (279kW)*
Torque 1700Nm (1253lb.ft) @ 1200-1500rpm
- * Maximum power delivered @ 1900rpm.

Cylinder bore x stroke 120 x 138 mm
 Compression ratio 18.5:1
 Displacement 9.4 litres
 Oil change volume including filter 26 litres
 Cooling volume 36 litres
 Maximum engine speed 2100 rpm
 Economic rev range 12-1800rpm
 Emission level Euro3
 Inlet preheat for temperatures below -15°C
 Engine driven pto with flange or hydraulic drive, torque 650Nm on the move & 1000Nm stationary.

CLUTCH CS43B-OR

Type reinforced single plate
 Diameter 430mm
 Total area 2000cm²

MANUAL GEARBOXES

- V2009 9 speed range □ V1708 8 speed range
- V2214 14 speed range and splitter

GEARBOX V2009

9 speed range gearbox with eight forward gears, one forward crawler and two reverse gears

	1	2	3	4
Low range	10.18:1	7.16:1	5.05:1	3.75:1
High range	2.72:1	1.91:1	1.35:1	1.00:1
Reverse Low	16.41:1	High	4.38:1	
Crawler	16.85:1			

Oil change volume.....12litres

I-SHIFT AUTOMATED GEARBOX

- V2412IS 12 speed I-shift auto-mechanical gearbox with five programs to suit different operations
- Basic □ Comfort
- Fuel and Economy - featuring "Eco-Roll"
- Fuel and Economy & Comfort

AUTOMATIC GEARBOXES

- V1705PT Powertronic 5 speed automatic
 - V1906PT Powertronic 6 speed automatic
- Five or six-speed automatic gearbox with no power loss gear change function featuring a hydraulic torque converter with automatic lock up.

REAR AXLES

Single reduction cast hypoid axle with diff. lock.

- **RS1344B** Design capacity 44,000kg
Recommended ratio 3.08:1
Optional ratios 2.64, 2.85, 3.36:1
Oil capacity 18.5 litres
- **RS1356SV** Design capacity 56,000kg
Recommended ratio 3.10:1
Optional ratios 2.50, 2.79, 3.44:1
Oil capacity 18.5 litres

Check driveline suitability in VSS/PERF

Performance at 18tonne

Rear axle ratio	3.08	3.36	3.70
Engine revs at 56mph	1450	1582	1742
Startability in first %	3.08	3.36	3.70
D9A260	30.6	35.2	41.2
D9A300	31.4	36.1	42.0
D9A340	34.8	39.9	44.5
D9A380	36.9	41.4	45.4

Max. grade in top %	3.08	3.36	3.70
D9A260	2.4	2.9	3.5
D9A300	2.8	3.4	4.0
D9A340	3.5	4.1	4.8
D9A380	3.8	4.4	5.2

Calculations based on 295/80R22.5 tyres.

Chassis Features

FRAME

Constant frame width of 850 mm from 1900 mm behind the cab. Flange width 90 mm.

- Thickness 6 mm FRAME66
From wheelbase 3400 to 6000mm
- Thickness 7 mm FRAME77
mandatory with 9.0t front axle
- Thickness 8 mm FRAME88
From wheelbase 6300 to 6700mm
- 5mm Inner liner (FRAME88 only) FIL-TXEF
- Section Height 300mm FRAMEHIGH

STEERING

Integral power assisted steering with variable ratios and steering wheel lock. Recirculating ball and nut type. Steering angle of 50 degrees.

AXLES

- Front axle load 7100 kg FAL7.1
 - Front axle load 7500 kg FAL7.5
 - Front axle load 8000 kg FAL8.0
 - Front axle load 9000 kg FAL9.0
 - Rear axle load 13000 kg RAL13
- See frame & wheels & tyres section

SUSPENSION - FRONT

Parabolic leaf spring with stabiliser and shock absorbers.

- Spring leaves (FST-PAR) 2
- Spring leaves (FST-PAR) 9000kg 3
- Standard height - front axle FA-HIGH
- Front air suspension FST-AIR
with low front axle FA-LOW
- Air suspension adjustment +200/ -90mm
- Stiffer front stabiliser FSTAB3

REAR

Road friendly air suspended drive axle with shock absorbers and stabiliser. Electronic controlled suspension regulation.

- 4 bag air suspension RAD-A4/RST-AIR2
Adjustment chassis ht std +180 / -90mm

BRAKES

Compressed air and electronic brake system EBS. Separate circuits for front and rear. Steel air tanks, air drier and brake silencers.

Parking: spring brakes on front and drive axle.

- 2 cylinder compressor (1080 l/min)
- 1 cartridge air dryer
- Front and rear brake pad area 761cm²
- Front and rear disc diameter 430mm
- EC two line trailer brakes
- EBS-STD with Traction Control System
- EBS-MED with Hill hold & Brake assistant

Additional brake systems

- Exhaust brake max power 140kW (190hp) at 2100rpm.
- Volvo Engine Brake, max power 264kW (360hp) at 2400rpm.
- Powertronic gearbox retarder, max power 310kW (420 Hp) - n/a with Volvo engine brake.

FUEL TANKS

D-shaped aluminium tanks mounted on RHS. 710mm diameter tanks include:

- 330litre □ 450 litre □ 530 litre □ 650litre
- 690litre □ 730litre □ 810litre

See front page for maximum fuel volumes.

ELECTRICAL

Electronic integrated architecture based on data buses. 24 volt electrical system with main switch.

- Battery ... 2x170 Ah □ Battery . 2x225 Ah
- Alternator 90A □ Battery . 2x140 Ah
- ADR ADR-BAS2

WHEELS & TYRES

- Pressed steel wheels
 - Aluminium wheels - matt or polished
- | Tyre | Rim | F/axle load | Comment |
|---------------|-------|-------------|------------|
| ■ 295/80R22.5 | 8.25 | 7100kg | |
| □ 315/80R22.5 | 9.00 | 8000kg | |
| □ 385/65R22.5 | 11.75 | 9000kg | Front only |
| □ 385/55R22.5 | 11.75 | 9000kg | Front only |
| □ 315/70R22.5 | 9.00 | 7500kg | |

EXHAUST SYSTEM

- Horizontal exhaust right outlet . ESH-RIGHT
- Horizontal exhaust rear outlet .. ESH-REAR
- Horizontal exhaust vertical pipe ESH-VERT
- Vertical silencer ESV-VERT
- CRT Exhaust particulate trap CRT

CHASSIS MOUNTED EQUIPMENT

- Low air intake AIRIN-LO
- High air intake AIRIN-HI
- Three piece rear wings RFEND-B
- Jack and tools
- Chassis toolbox left side this option can be limited with some fuel tank options
- Sparewheel carrier on left side partially under battery box.
- One or two wheel chocks are available
- Rear underrun guard
- Sideguards
- Chassis side skirts

Cab¹⁾

- Day cab L1EH1
- Sleeper cab L2H1
- Low roof sleeper cab L2H1-LOW
- Globetrotter sleeper cab L2H2
- Six man, four door crew cab PCA80048
- Cab mounted airflow kit on sleeper cabs

Cab packages

- Fleet □ Comfort □ Prestige

Sleeping package

- 1 person □ 2 person

¹⁾ For more detailed information, see Cab data sheet.

Ancillary Equipment

POWER TAKE OFFS

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