



- **TRUCK PLUS TRAILER** for long-distance transportation of, for example, mixed goods, insulated transport and petroleum products.
- **TRACTOR UNIT FOR SEMI-TRAILER** for the transportation of, for example, heavy machinery or long-distance cargoes.
- **Flexible** — forward control — power steering — 46° wheel lock — small turning circle — fully synchronized eight-speed gearbox — manual differential lock.
- **Safe** — all-steel cab — split circuit compressed air brakes — loss sensitive valve — exhaust brake — compressed air controlled parking brake — large brake friction surfaces.
- **Driving comfort** — double heater unit — sound absorbing cab upholstery — sprung driving seat.
- **Economical** — tilt cab — simplified servicing — low consumption Turbo engine — large payload — low running costs — revolute counter — wide range of gear ratios.

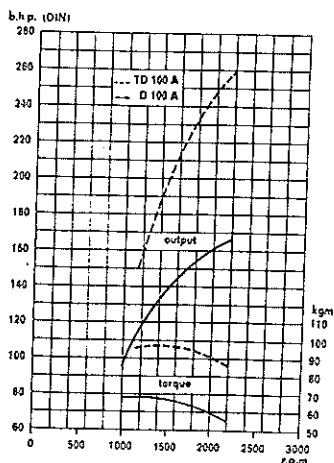
## ENGINE

### D 100 A engine

Output (DIN)	166 b.h.p. at 2,200 r.p.m.
Output (SAE)	185 b.h.p. at 2,200 r.p.m.
Torque (DIN)	68 kgm (491 lb.ft.) at 1,100 r.p.m.
Torque (SAE)	69 kgm (499 lb.ft.) at 1,100 r.p.m.

### TD 100 A engine

Output (DIN)	260 b.h.p. at 2,200 r.p.m.
Output (SAE)	270 b.h.p. at 2,200 r.p.m.
Torque (DIN)	94 kgm (680 lb.ft.) at 1,400 r.p.m.
Torque (SAE)	100 kgm (723 lb.ft.) at 1,400 r.p.m.



DIN output is measured with the engine driving all its auxiliary equipment. This method permits visible exhaust gases.

SAE output indicates the maximum engine output without any special demands being made on the exhaust smoke.

## General specifications

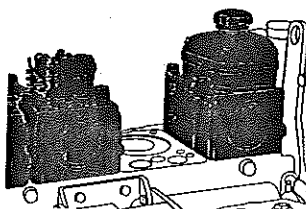
Bore	120.65 mm (4.125")
Stroke	140 mm (5.51")
Cylinder capacity	9.6 litres (586 cu.in.)
Compression ratio	17:1 (D 100 A)
Compression ratio	15.5:1 (TD 100 A)
Valves	Overhead

Six-cylinder, four-stroke Diesel engine with direct injection and with the combustion chambers mainly located in the piston crowns.

**Cylinder block.** The cylinder block and crankcase are integrally cast. Stress in the cylinder head bolts resulting from combustion pressure is transmitted through stiffening sections in the walls of the cylinder block directly to the main bearings. The sump is of all-pressed sheet-metal with a stamped sealing flange.

The cylinder heads, one for each cylinder, are interchangeable. The individual cylinder head gaskets are made of solid steel. Locating sleeves with seal rings are fitted in the water and oil channels.

The wet type cylinder liners are replaceable. There are double sealing rings at the lower end of each liner and one at the upper end.



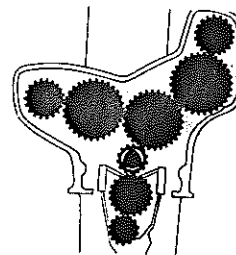
The separate cylinder head system provides individual sealing on each cylinder. This facilitates servicing.

The light-alloy pistons are each fitted with two oil control and three compression rings the upper of which is fitted in a cast-iron ring carrier of iron.

The crankshaft is drop-forged and particularly robustly dimensioned. It is statically and dynamically balanced and also fitted with a vibration damper. The crankshaft is carried in seven main bearings.

The seven-bearing gear-driven camshaft provides exact valve opening and closing times. The valve stem wear caps and the valve seats are replaceable.

**Timing gear.** The camshaft, fuel injection pump, lubricating pump, air compressor and servo steering pump are gear-driven from the crankshaft.



All the timing gears are made of high quality steel. Gear drive ensures more reliable running. The engine is more compact.

**Lubricating system.** All the bearings, the gudgeon pins, the valve mechanism, the timing gears and the fuel injection pump are pressure lubricated. The oil pump provides surplus lubrication under all conditions of operation. The capacity of the lubricating system is approximately 20 litres (17½ imp quarts = 21 US quarts).

Weights, kg (lb.)	F 88-32 ✓	F 88-38	F 88-49	F 88-56
Chassis weight, front axle	4,060 ( 8,950)	4,085 ( 9,010)	4,035 ( 8,900)	4,140 ( 9,120)
Chassis weight, rear axle	2,000 ( 4,410)	2,085 ( 4,600)	2,205 ( 4,860)	2,325 ( 5,120)
Chassis weight, total	6,060 (13,360)	6,170 (13,610)	6,300 (13,760)	6,465 (14,250)
Max. front axle pressure	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)	6,200 (13,700)
Max. rear axle pressure	13,000 (28,700)	13,000 (28,700)	13,000 (28,700)	13,000 (28,700)
Max. gross laden weight	19,000 (41,900)	19,000 (41,900)	19,000 (41,900)	19,000 (41,900)
Payload, including superstructure	12,900 (28,400)	12,800 (28,200)	12,700 (28,000)	12,500 (27,500)

The maximum axle pressure and gross laden weight apply on condition that they are approved by the transport authorities concerned.  
 Chassis weights include: TD 100 A engine, six 8.0×20" disc wheels with 11.00—20" tyres, tilt cab, water, oil, full fuel tank and tools but not the spare wheel or the spare wheel holder.

Weight modifications, kg (lb.)	Front	Rear	Total
D 100 A engine	—35 (80)	—	—35 (80)
Power take-off, rear	+10 (20)	—	+10 (20)
Power take-off, side	+10 (20)	+5 (10)	+15 (30)

Weight modifications, kg (lb.)	Front	Rear	Total
Spare wheel with tyre, 11.00—20" including spare wheel holder	—	—	+135 (300)
Hollow rubber springs MGF	—	+30 (70)	+30 (70)
Alternative rear springs MDFS	—	—100 (220)	—100 (220)
Tyres on rer axle	—	+80 (170)	+80 (170)

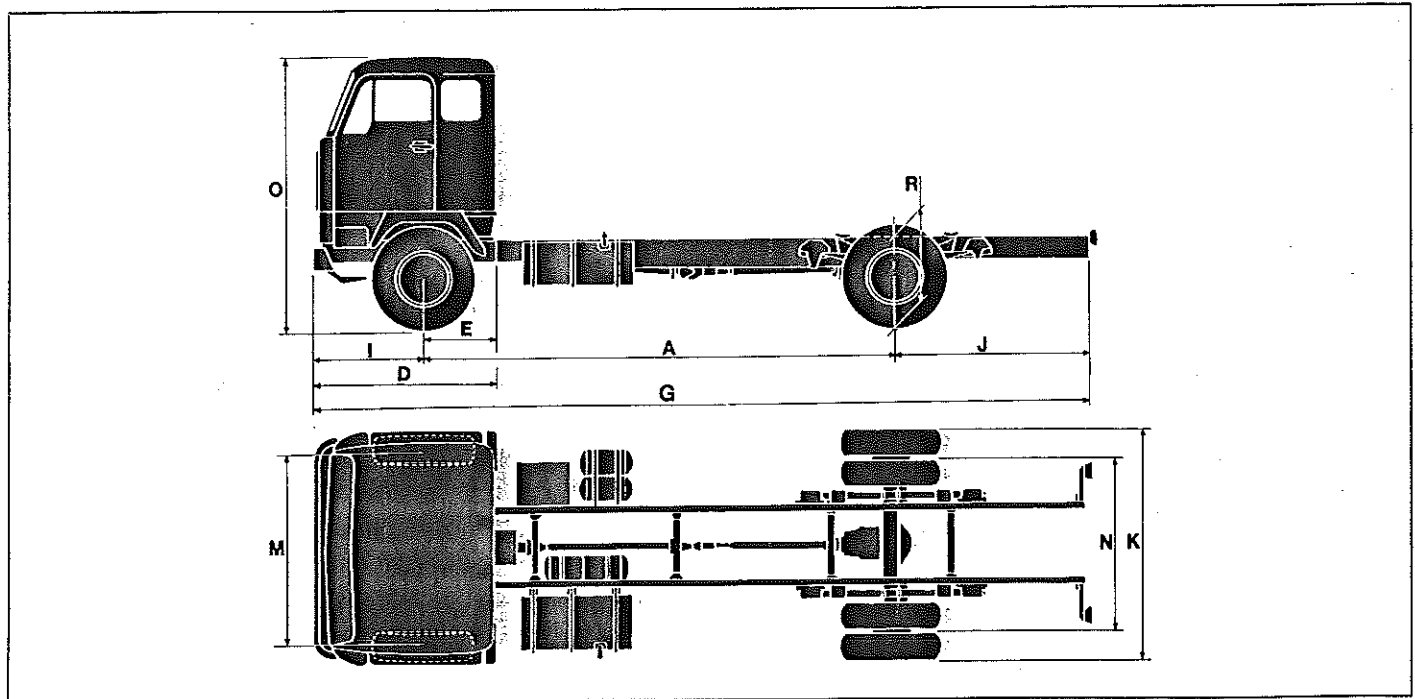
Length measurements, mm (in.)	F 88-32 ✓	F 88-38	F 88-49	F 88-56
A Wheelbase	3,200 (126)	3,800 (150)	4,900 (193)	5,600 (220)
D Front bumper—rear edge of cab	1,915 (75½)	1,915 (75½)	1,915 (75½)	1,915 (75½)
E Front axle centre—rear edge of cab	760 (30)	760 (30)	760 (30)	760 (30)
G Overall chassis length	5,398 (213)	6,258 (246)	8,518 (335)	9,740 (483)
I Front overhang	1,155 (45½)	1,155 (45½)	1,155 (45½)	1,155 (45½)
J Rear overhang	1,043 (41)	1,303 (51¼)	2,463 (97)	2,985 (118)
Platform length, approx.	—	4,800 (189)	6,600 (260)	7,800 (307)
Turning circle diameter	12,000 (36 ft. 6 in.)	13,600 (4 ft. 5 in.)	16,600 (54 ft. 6 in.)	18,800 (61 ft. 8 in.)

Platform length applies to standard chassis with given weights. Calculated with 100 mm (4") between rear wall of cab and headboard edge. Other equipment can give other values.

Height measurements, mm (in.)	Tyres	11.00—20"	12.00—20"
O Cab roof—ground*		2,915 (115)	2,930 (115½)
R Frame—ground		1,050 (41½)	1,065 (42)
R Frame—ground**		930 (36½)	945 (37¼)

\* At chassis weight \*\* At max. gross laden weight

Width measurements, disc wheels, mm (in.)	Wheels Tyres	8.0×20" 11.00—20"	8.0×20" 12.00—20"	8.5×20" 12.00—20"
Maximum width, front		2,483 (98)	2,483 (97¾)	2,483 (97¾)
A Max. modth, rear		2,476 (97¼)	2,491 (98)	2,496 (98¼)
M Track, front		2,022 (79½)	2,021 (79½)	2,021 (79½)
N Track, rear		1,840 (72½)	1,840 (72½)	1,840 (72½)



The factory reserves the right to modify design and equipment without previous notification.



**AB VOLVO**  
 GÖTEBORG • SWEDEN