



Dimensions & Weight

Overall dimensions

| | |
|--------------------------------|--------------|
| A Transport wheelbase | 3250 mm |
| Wheelbase certified | 4800-6900 mm |
| G Overall chassis length | 8894 mm |
| I Front overhang | 2500 mm |
| J Rear overhang | 3144 mm |

Steering wheel location

| | |
|------------------|---------|
| N steering | 1818 mm |
| C steering | 1648 mm |

Approach angle (N-steer) 7.8 °

Departure angle 7.8 °

Frame height in front 653 mm

X Frame height at rear 1688 mm
based on tyre 295/80R22.5

Track width with tyres 295/80R22.5"
and steel disc rim 8.25"x22.5"

M Track, front 2069 mm

N Track, rear 1817 mm

K Overall width front wheels ... 2364 mm

Overall width rear wheels 2436 mm

Weights

Permitted front axle load 6500 kg

Permitted rear axle load 11500 kg

Permitted GVW 18000 kg

Driveline - Engine

6-cylinder, 4-stroke turbo-charged diesel with overhead valves and electronically controlled injection. Common Rail fuel system. Volvo EMS2 engine control system. Electronic oil level sensor. Fan with electronic thermostat. Crank case ventilation closed or open with pipe. On-off fan clutch. Engine software protection and on-board

diagnostic to detect, warn and to take action for malfunctions leading to increased emission. Operation altitude up to 1500m above the sea level. Engine fulfils Euro 3 emission requirements.

D7E 290 hp

| | |
|--------------------|--------------------------|
| Bore | 108 mm |
| Stroke | 130 mm |
| Displacement | 7.14 dm ³ (l) |

Output ISO 1585 213 kW (290 hp)
at 35r/s (2100 r/m)

Torque ISO 1585 1200 Nm (122kpm)
at 17.5-27.5 r/s (1050-1650 r/m)

Compression ratio 18:1

Weight 645 kg

Idling speed 600+50 rpm

High idle speed 2650 rpm

Oil change volume 28 l

Oil change intervals up to 60000 km

Specific fuel consumption 193 g/kWh

Optional Fuel water separator

Optional Engine block heater

Optional Engine brake

Fuel tanks

There is a choice of three fuel tanks with volumes: 2x150, 300 and 400 l. Mounted behind front axle, on the right and left hand side.

Transit tank 50 l

Driveline - Exhaust and Cooling System

Stainless steel exhaust system with oxidising catalytic converter and exhaust filter. Catalytic converter is integrated with the

silencer. Fluid cooled, pressurized cooling system.

Optional Cyclone air filter

Driveline - Transmission

Volvo EGS-VVR

Mechanical 8 speed fully synchronized. Electropneumatic system for easy gear shift. With or without Volvo VR3250 compact retarder. Short gear lever for minimal driver effort.

ZF 6S-1380BD

Mechanical 6 speed fully synchronized. With or without Voith 120 retarder.

ZF 6HP554-N

Fully automatic 6 speed gearbox with electronic control system, torque converter of first stage and integrated retarder. NBS - neutral on bus stop function.

Voith D864.5

Fully automatic 4 speed gearbox with integrated retarder and electronic control system. The torque converter also functions as a retarder. ANS - auto neutral at stop function.

| | ZF | Volvo |
|----------------|-----------|---------|
| | 6S-1380BD | EGS-VR |
| 1st gear | 6.98:1 | 9.13:1 |
| 2nd gear | 4.06:1 | 6.42:1 |
| 3rd gear | 2.74:1 | 4.77:1 |
| 4th gear | 1.89:1 | 3.75:1 |
| 5th gear | 1.31:1 | 2.44:1 |
| 6th gear | 1.00:1 | 1.71:1 |
| 7th gear | - | 1.27:1 |
| 8th gear | - | 1.00:1 |
| Reverse | 6.43:1 | 13.69:1 |

| | ZF6HP 554N | Voith D864.5 |
|------------------------|---------------|-----------------|
| Torque converter | 2.16:1 | - |
| 1st gear | 3.43:1 | 5.04:1 |
| 2nd gear | 2.01:1 | 1.36:1 |
| 3rd gear | 1.42:1 | 1.00:1 |
| 4th gear | 1.00:1 | 0.73:1 |
| 5th gear | 0.83:1 | - |
| 6th gear | 0.59:1 | - |
| Reverse | 4.84:1 | 4.80:1 |

Driveline - Rear axle and tyres

Rear axle

The Volvo RS 1228B single reduction axle with seven alternative ratios available. The casing designed for higher ground clearance, lightweight and quiet operation.

Max speed km/h at max engine revs with tyre 295/80R22.5:

| | | | |
|----------------------|--------|-----------|-----------|
| Ratio: | 3.08:1 | .. 3.36:1 | .. 3.70:1 |
| Volvo EGS-V/VR | 134 | 126 | 115 |
| ZF 6S-1380BD | - | 126 | 115 |

| | |
|----------------------|--------|
| Ratio: | 4.11:1 |
| Volvo EGS-V/VR | 103 |
| ZF 6S-1380BD | 103 |

| | | | |
|--------------------|--------|-----------|-----------|
| Ratio: | 4.63:1 | .. 5.29:1 | .. 5.63:1 |
| 6HP554N | - | 120 | 98 |
| Voith D864.5 | 119 | 104 | 97 |

Tyres & Rims

10-stud steel or aluminium disc wheels. Dual driving axle wheels.

| Rims | Tyres |
|-------------------|--------------|
| 8.25"x22.5" | 295/80R22.5" |
| 7.5"x22.5" | 275/70R22.5" |
| | 11R22.5" |
| | 12R22.5" |

Optional

Suspension and Steering

Rigid front suspension with stabilizer and four reaction rods. Improved roll stability and small turning circle. Stabilizer rear. Double-acting, hydraulic telescopic shock absorbers, two front, four rear.

| Numbers | Front | Rear |
|------------------------|-------|---------|
| Air bellows | 2 | 4 |
| Levelling valves | 2 | 2 |

Steering gear

Power steering of ball and nut type with built-in servo unit. Approx. 4.5 turns of wheel from lock to lock.

| | |
|-----------------------------|---------------|
| Max outer wheel angle | 44.2 ° |
| Max inner wheel angle | 53 ° |
| Steering wheel diameter .. | 450 or 500 mm |

Optional

Optional

Air and Brake system

Disc brakes combined with electronic braking system EBS5, which controls ABS/ASR functions. Separate circuits for front and rear wheels. Lining wear sensing and analysis. Gear driven air compressor. Available features: brake blending, drag torque control, hill start aid, brake temperature warning, poor brake performance warning, doorbrake.

Brake disc diameter:

| | |
|-------------|--------|
| Front | 434 mm |
| Rear | 434 mm |

Friction area:

| | |
|------------------------------|-----------------------|
| Front axle, disc brake | 2x200 cm ² |
| Rear axle, disc brake | 2x200 cm ² |

System operating pressure

Compressor capacity at 10 bar and engine speed 33 r/s (2000 r/m)

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Compressor ratio

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