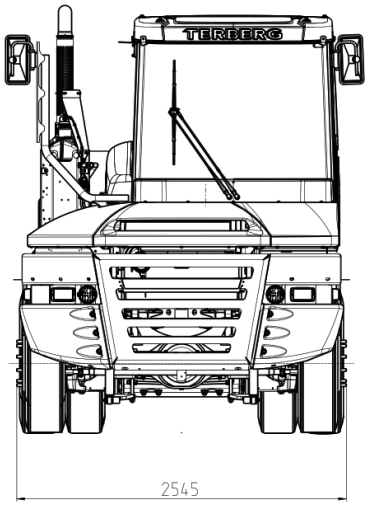
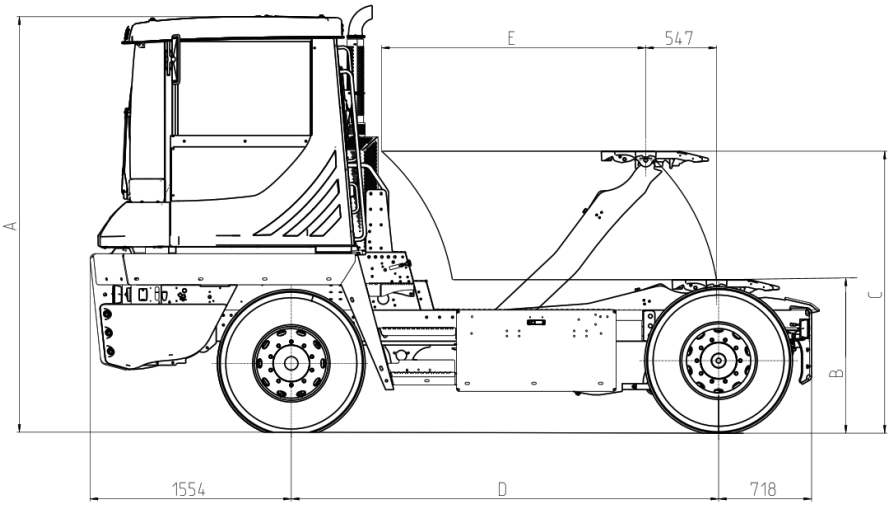
TT223, 4x2 Technical specification





Tyres	A ±15mm	B ±15mm	C ±15mm	Wheel base D	E (mm)
295/60R22.5	3228	962	2035	3200	2140
11R22.5 295/80R22.5	3280	1078	2098	3300	2240
13R22.5	3318	1146	2136	3500	2440

ENGINE

Volvo TAD880VE (Stage V)
Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.
Engine equipped with engine brake.
Engine equipped with Volvo Penta (AdBlue) system including DOC, DPF and SCR-catalyst.
Displacement: .....7,7 dm^3
Output:.... 160 kW (218 hp) at 2200 rpm
Torque:.....1050 Nm at 1000-1400 rpm
Acc. to ISO 3046

Volvo TAD881VE (Stage V)
Six-cylinder four-stroke direct-injection diesel engine with turbo charging and intercooler.
Engine equipped with engine brake.
Engine equipped with Volvo Penta (AdBlue) system including DOC, DPF and SCR-catalyst.
Displacement: .....7,7 dm^3
Output:.... 185 kW (252 hp) at 2200 rpm
Torque:.....1150 Nm at 1100-1500 rpm
Acc. to ISO 3046

Only for use outside EU/US/Canada:

Volvo TAD850VE (Tier 3/Stage 3A)
Six cylinder four-stroke direct injection diesel engine with turbo charging and intercooler.
Engine equipped with engine brake (not in combination with ZF 3WG171).
Engine equipped with normal silencer.
Displacement: .....7,7 dm^3
Bore: ..... 110 mm
Stroke: ..... 135 mm
Compression ratio: 17,5:1
Output:.... 160 kW (218 hp) at 2200 rpm
Torque:.....1050 Nm at 1000-1400 rpm
Acc. to ECE R24

Only for use inside US/Canada:
- **Volvo TAD870VE-160kW (Tier 4f)**
- **Volvo TAD871VE-185kW (Tier 4f)**

GEARBOX

ZF, type 3WG171
Powershift transmission with high efficiency torque converter and 3 gears forward and 3 gears reverse.

Gear ratio's	*theoretical speed (km/h)*
4.578F+R	8 (F+R)
2.396F+R	15 (F+R)
0.994F+R	36 (F+R)

(Tyre size 11R22.5, axle ratio 11.98)

Optional:
ZF, type 6WG211 + Kessler W1000 dropbox (not with TTA 70 rear axle)
Powershift transmission with standard Lock-Up clutch ensuring the lowest possible fuel consumption with 6 speeds forward and 3 gears reverse.

Transfer case/dropbox

Kessler, type W1000
Transfer case standard locked to function as dropbox. Reduction ratio 1.371:1

FRONT AXLE

Volvo FA8.2
Non-driven steering axle
Capacity 11.000 kg (20 km/h)*

* Actual axle load capacity depending on tyre load rating.

REAR AXLE

Terberg TTA 70-11
Capacity 30.000 kg (20 km/h)*
Reduction ratio 11.98:1
Differential lock : Lockable type

Optional:
Terberg TTA71 (10.0/12.17/16.22:1)
Kessler D81PL478 (12.73/16.13:1)
Kessler D81PL477 (13.2/16.36:1)
* Actual axle load capacity depending on tyre load rating.

SUSPENSION

Front: Parabolic leaf springs in rubber mountings with 2 telescopic shock absorbers and additional rubber stops. Maintenance-free system.
Rear: Directly bolted to chassis frame.
Optional:
- Air suspension with rubber stops.

RIMS AND TYRES

Tyres: 11R22.5 (6 pieces)
Rims: 10 stud disc wheels 22.5 x 8.25

STEERING SYSTEM

Fully hydrostatic orbitrol steering system with priority valve and double acting steering cylinders.
Emergency steering property.
Steering wheel fully adjustable in height and angle.
Steering wheel diameter 350 mm

Turning circle over front bumper* (m)

Wheelbase [mm]	Driver side	Non driver side
3200	13.170	12.740
3300	13.430	12.990
3500	13.950	13.520

*Tyres 11R22,5

5th WHEEL

2" Terberg cast steel plate
Technical capacity 36.000 kg.
Lifting capacity 35.000 kg*.
Pneumatic unlocking of 5th wheel, operated from cabin.
Indicator light for positive locking inside the cabin.
Fully welded extremely strong and stable lifting frame construction.
All rotating points equipped with generously sized oscillating bearings.

Optional:
- 3,5" 5th wheel
- Cardanic mounted 5th wheel (2" or 3,5")

*Actual lifting capacity depending on axle type, tyre load ratings, vehicle speeds and 5th wheel height.

HYDRAULIC SYSTEM

Engine driven load sensing hydraulic pump for steering and lifting 5th wheel plate, directly mounted to gearbox, with priority valve for the steering system.
Hydraulic oil tank protected mounted inside the chassis frame.
Tank capacity 105 dm^3.
Working pressure 230 bar.
2 heavy-duty hydraulic single stage, double acting lift rams.

CHASSIS

Heavy Duty, torsional stiff, fully welded construction.
Air reservoirs and fuel tank protected mounted inside the chassis, fully bolted access steps with anti-slip surface integrated in chassis.
Towing pin for 40 and 50 mm tow hitches at front and rear of chassis.

BRAKE SYSTEM

Full air brake system with split front and rear axle and parking brake circuits.
Volvo front axle with Z-cam brake and Terberg rear axle with S-cam brake.
Kessler D81PL478 rear axle with simplex wedge brake system.
Kessler D81PL477 rear axle with high capacity single jaw dry disk brake system.
Automatic slack adjusters front and rear.
Air reservoirs: 2 x 40 dm^3, 1 x 30 dm^3. Total 110 dm^3.

2 Line trailer brake system mounted on rear side of cabin, with yellow and red spiral hoses with glad-hands.
Air dryer with integrated air pressure regulator.
Brake cylinders: front axle diaphragm only. Spring brake cylinders on rear axle.
Brake pressure: 7,8 – 8,5 bar.

FUEL TANK

Capacity 200 dm^3 and integrated with hydraulic tank.

COOLING SYSTEM

Fin and tube type radiator of heavy-duty construction mounted on rubber silent blocks with separate air to air transmission oil cooler and engine intercooler all mounted side by side.

EXHAUST

Silencer with vertical pipe.
Exhaust system in critical area protected with steel grille.

ELECTRICAL SYSTEM

24 Volt negative earth.
Alternator : 28 V/110 A
Batteries : 2 x 12 Volt / 140 Ah
Output starter : 5.5 kW
Fuses and relays mounted in central electrical box.
Can-Bus system allowing multiple options/flexibility and easy fault tracing.
All wiring with code numbers and easy readable/visible mounted in easily accessible electrical box.
7 pin SAE socket at rear of cab for trailer connection (DIN ISO 1185).

LIGHTING

H4 headlights with dipped and main beam and direction indicators.
LED rear lights on rear of chassis, with direction indicators and brake lights.
5th wheel floodlight behind cabin.
Mounting for rotating beacon light.
Interior light in cabin with integrated spotlight.

CABIN

1 person - left hand drive position.
With 180° swivelling seat.

Dimensions inside:
- width : 1520 mm
- length : 1670 mm
- height : 1660 mm

Cabin construction of overdimensioned strong steel profiles to comply to latest Rops/Fops regulations.
Cab comfortable mounted on 3 anti-vibration mounts.
Entrance to cab by rear sliding door with rubber mounted window pane.

Vertical electric sliding window at driver's side with "Comfort" control.
Cabin can be tilted with hydraulic hand pump to 73°.
Large windows for excellent visibility.
All window panes safety glass and tinted.
Front window pane layered with a total thickness of 6,76 mm.
Noise insulation exceeds international standards.
ISRI driver's seat with air suspension and fully adjustable, mounted on a 180° swivelling seat assembly for easy entrance/exit to/from driver's position.
Swivelling seat assembly equipped with 2 brake pedals and 1 accelerator pedal.

Demister/heater with variable speed blower, recirculation system and all around demisting including 4 adjustable outlet louvers.

Side dashboard:
- Parking brake lever.
- Heater controls.
- Switches for:
  - Ignition
  - Wiper rear
  - Differential lock transfer case
  - Work light(s)
  - Hazard lights
  - Lighting
  - Differential lock rear axle

Steering console:
- Steering wheel fully adjustable in height and angle.
- Combi switch for:
  - Direction indicators
  - Wiper front 2 speed
  - High/low beam+head lights flasher
  - Horn
- Gearbox selector
- Switches for:
  - 5th wheel up/down
  - 5th wheel unlocking
  - Unlocking swivelling seat
  - Electrically operated driver side window with "Comfort" control.
- Terberg Driver Information Module connected to the CAN-Bus system incorporating main indicator lights, gauges and vehicle information.