



DIESEL ENGINE	No emission compliance	Stage IIIA / Tier 3	Stage IIIB / Tier 4 Interim
Model :	PERKINS series 1,104	PERKINS series 1,104	PERKINS series 854 E
Type :	Turbo	Turbo	Turbo
Total displacement, no Cylinders:	4,400cc - 4 in line	4,400cc - 4 in line	3,400cc - 4 in line + DPF
Injection :	mechanical control with direct injection	mechanical control with direct injection	Electronic control with direct injection
Cooling :	air water, dry air filter	air water, dry air filter	air water, dry air filter
Maximum power:	82.5 kW (112 Hp)	83 kW (113 Hp)	83 kW (113 Hp)
Adj. power :	82 kW (2,400 rpm)	83 kW (2,200 rpm)	83 kW (2,200 rpm)
Maximum torque:	404 Nm a 1,400 rpm	418 Nm a 1,400 rpm	450 Nm a 1,400 rpm
Alternator:	12 V - 65 A	12 V - 65 A	12 V - 80 A

ELECTRIC SYSTEM

Battery: 12 V - 132 Ah (600 A)
Road light system.

4X4 FOUR-WHEEL DRIVE

Hydrostatic "automotive" transmission with variable displacement pump and variable displacement hydraulic motor with electro-hydraulic control, and reverse gear control on the steering wheel.

Electro-hydraulically controlled mechanical gearbox for "working speed" and "road transfer" speed.

SPEED

4 forward gears 2 reverse gears
Ist 0 - 3.0 Km/h 0 - 3.0 Km/h
IInd 0 - 7.2 Km/h 0 - 3.0 Km/h
IIIRD 0 - 10.0 Km/h 0 - 10.0 Km/h
IVth 0 - 25.0 Km/h 0 - 10.0 Km/h
Traction / weight ratio 43%

AXLES AND WHEELS

Front and steering with planetary reduction gears on the wheel hubs and flanged gearbox.
Rear, oscillating ($\pm 6^\circ$) with planetary reduction gears on the wheel hubs.

Tyres 18-19.5 18 PR

BRAKES

Internal oil-bath disc service and emergency brakes acting on the 4 wheels, activation with miniservo pump on independent dual circuit.
Negative type parking brake, with internal oil-bath discs on the front axle and electro-hydraulically controlled release.

STEERING

Assisted by means of load-sensing power steering with double displacement on 4 steering wheels; steering selection device for: 2 steering wheels, 4 steering wheels - crab steering.

WATER SYSTEM

"Self-priming" volumetric water pump with quick-suction.

Max. capacity: 250 litres/min.
Maximum head: 4 bar

Two connected tanks positioned opposite each other made of polyethylene with a total capacity of 1,200 litres.
Water feeding to the drum controlled by means of electromagnetic flow meter and fed litre reading on the cabin display.

Water pump activation from the driver's seat.
Suction selection from the ground with quick-coupling pipes.

MIXING AND UNLOADING

Double-cone drum with double-spiral mixing screws and convex bottom.

Geometrical drum volume: 7,000 litres

Drum rotation speed: 19 rpm

Class S1 concrete produced as : 5.0 cu m

Drum rotation by means of a piston pump with variable flow rate and an orbital hydraulic motor in closed circuit with infinitesimal electrical control positioned in the cabin.

Unloading chute with hydraulic tilting by means of a double-acting jack and control placed inside the cabin.

1 unloading chute extension provided as standard equipment.

EQUIPMENT HYDRAULIC SYSTEM

Gear pump

Max. flow rate: 45 litres/min.

Maximum pressure: 230 bar

3-element distributor servo-controlled with multi-function joystick.

Aluminium heat exchanger for hydraulic oil cooling.

Pressurised closed-circuit intake with oil filter replaceable from the outside.

LOADER

Loading device with grab bucket and lifting arms controlled by double-acting hydraulic cylinders. Automatic unloading hatch driven by a mechanical lever.

Volumetric capacity: 680 litres

Number of loaderfuls per load: around 10

CAB

Closed cab with heating system, designed in accordance with ROPS & FOPS Level I standards.

Tilting front window.

Anatomic seat with flexible suspension and height adjustment, seat belts.

LCD TV display with camera for rear visibility.

SERVICE REFILL CAPACITIES

Fuel tank: 85 litres

Total hydraulic system capacity: 125 litres

Engine oil: 7.96 kg

WEIGHTS

Operating weight 6,800 kg

Max gross weight: 19,100 kg

load-carrying capacity: 12,300 kg