



Electric Motor Grader

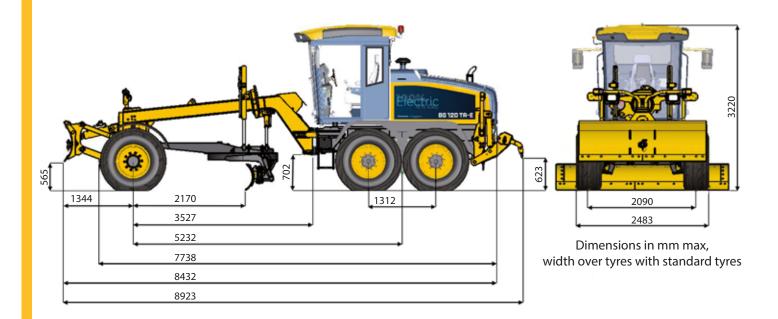


BG 120 TA-E

POWERED BY - I NULLUTSLIPP AS

zeroemission.no







E-motor Data

Engine make and type:

Siemens Electrical engine 110kW / 600Nm (software limited)

Battery capacity: 325kWh / 350V / 925Ah

On-board charger: 40kW

Charging time:

Two (2) hours at CCS2 fast-charge: 20-80 % Thirteen (13) hours at Type 2 400V / 32A 10-100 %

Working time duration of grader, work and load dependable; approximately 8 hours.



Operating Weight

Total weight: 16 800 kg
On rear wheels: 13 000 kg
On front wheels: 3 800 kg

Weights shown include cab, all operating fluids, front dozer blade, rear ripper (width 2120 mm).



All Wheel Drive System (TA type)

Hydrodynamic rear axle drive with 6-speed Ergopower transmission and torque converter (make ZF 6 WG 115) with freely selectable microprocessor controlled hydrostatic front axle drive.

Power train is controlled appropriate to tyre traction.



Rear Axle Drive System (Ttype)

Hydrodynamic rear axle drive with 6-speed Ergopower transmission (make ZF 6 WG 115) and torque converter.



Speeds (all wheel drive and rear axle drive systems)

| 1 Ol Wald | KIII/II |
|---|---------|
| 1. | 5.0 |
| 2. | 7.0 |
| 3. | 12.0 |
| 4. | 19.0 |
| 5. | 28.0 |
| 6. | 40.0 |
| Reverse | |
| 1. | 6.0 |
| 2. | 14.0 |
| 3. | 32.0 |
| Acoustic back-up alarm in reverse driving | |



Rear Axle

16 800 kg Oscillating tandem axle with axle insert.

No spin differential.

Multi-disc brakes in all four wheel hubs. Parking brake at powershift transmission.



Tandems

Drive via roller chains. Torsion-proof box sections.

Height: 545 mm
Width: 178 mm
Thickness of walls: 20/20 mm
Wheels base: 1312 mm
Oscilliation: ±15°
Ground clearence: 350 mm



Wheels & Tyres

Tyre size: 455/70 R24 radial Rim size: 13.00 x 24





Brakes

Service brake

Dual-circuit, power-boosted, multi-disc oil-bath type, effective on four wheels. Includes reserve power and operating warning system.

Parking brake

Independent electrically operated brake, acting on rear axle. Hydraulic spring accummulated single disc type.



Front Axle

Two (2) types are available

15° up and down Oscillation: Steering angle: ±17° Wheel lean: Ground clearance: 580 mm

Non driven with wheel lean (T type) Stable welded steel beam with wheel lean.

Driven with wheel lean (TA type)

Stable welded steel beam with wheel lean. Radial piston engines in wheel hubs.

Pulling power electronically adjustable (infinetely variable

depending on surface conditions).

Possibly to fit in the hydraulic differential lock.



Steering

Hydraulic power steering

Minimum turning radius without dozer blade: 6350 mm Minimum turning radius with dozer blade: 7000 mm Steering angle:



Frame

Front and rear frame sections are connected with an adjustment free articulation pin.

Front: fully welded rear box section.

240 x 240 mm Minimum dimensions of box section: 20/12 mm Plate thickness:

Rear: fully welded rear frame.

Dimensions (solid main bars): 430 x 60 mm

Hydraulic articulated frame steering (left & right):



Circle (closed version)

Hardened teeth, machine-cut on inside of circle for maximum strength and minimum wear. The circle is held positively in place by an adjustment free roller bearing.

Diameter: Tooth width: Height: Distance blade/front axle:

Circle Drive

Hydraulically driven worm gear transmission. Circle drive system fully protected against impact damage by an overload clutch.

Rotation: 30°



Drawbar

A-shaped fully welded construction.

Dimensions (solid sections): 30 x 170 mm



Moldboard (standard)

Moldboard (11 ft): 3355 x 505 x 15 mm (11' x 19,9" x 0,6") Blade material: High carbon steel Blade pull (at a friction factor of 0.8): BG 120 T-6 78.8 kN BG 120 TA-6 98.8 kN



Blade Range

Reach outside tyres, blade resting on levelled surface:

- without articulation (RH&LH): 2050 mm / 1200 mm
- with articulatuion (RH&LH): 2530 mm / 1680 mm

Circle shift: 1140 mm Blade side shift: 1000 mm 40°-80° Blade tilt range: 90° Bank sloping angle (RH&LH): Lift above ground: 495 mm Cut below around: 365 mm Distance blade/front axle: 2420 mm

All blade movements and positions can be controlled from the operator's seat.



Capacities

E-motors transmissions: 8.0 litres Hydraulic oil: 170.0 litres Ergopower transmission: 32.0 litres Axle drive rear: 13.5 litres Planetary gears and brakes: 4 x 4.0 litres Tandem case (2 x 18 litres): 36.0 litres Circle drive: 6.0 litres Coolant: 28.0 litres



Light Equipment

Two (2) head lights at the front.

Every two (2) indicator lights (including hazard warning lights) at the front and rear two (2) rear lights.

Two (2) brake lights.

1348 mm One (1) backup light plus every two (2) working lights at the 78 mm top and bottom at the front of the cab.

130 mm Two (2) working lights at the top at the rear of the cab.

2170 mm Two (2) tail lights on the sides.





Load-Sensing Hydraulics

The control valves of the working hydraulics may be actuated at a time and independent of each other. The load-sensing pump (axial piston pump) discharges only the required quantity of oil if a control valve is actuated.

When hydraulic power is not required system pressure is only 24 bar and ensures low oil temperature und fuel saving. Lock valves and brake valves prevent a cylinder drift under load.

Operating pressure: Max oil flow:

Cover plate for upper guide rail of moldboard Moldboard extension, left or right (1 ft): 305 mm Adjustable moldboard corner shoes, left or right Float position for both moldboard lift cylinders

Wheels and tyres

Tvre size: 13.00-24 diagonal Rim size: 10.00 x 24 205 bar Tyre size: 405/70 R24 radial 132l/m Rim size: 13.00 x 24

Other tyres on request

Cabin (tiltable)

Integrated ROPS/FOPS cabin mounted on isolators to limit vibration and noise entering the cabin.

Excellent all-round visibility. Roomy and comfortable. Adjustable steering pedestal with EURO control

lever arrangement. Interior of cab fully løined, floor covering. Tinted safety glass windows.

Sliding doors and windows LH and RH. Fresh air heating with pre-filter, air circulation, air conditioning (A/C).

Adjustable, air-suspended driver's seat with safety belt. One inside mirror as well as two electrically operated adjustable and heatable outside rearview mirrors. Wipers front and rear, with front window washer Blinds front and rear.

Height/width/depth (cabin inside): 1620/1450/1480 mm Front dozer blade with position indicator

2490 x 780 mm Width/Height: Cut below ground: 150 mm Lift above ground: 565 mm Weight 840 kg 840 ka

Rear ripper with depth penetration indicator, 4 teeth (max. 7) Width: 2120 mm Ripping dept: 260 mm Lift about ground: 450 mm Weight: 610 kg

Counter weight (push-pull block), in front: 556 kg Mudguards: on front wheels Mudguards: on rear wheels

Protective covers for transmission in different versions

Central lubricating unit

Biological oil in hydraulic system Articulation angle indicator

Fuel tank pump with automatic switch-off

Special paint

Beacon (orange)

Tool kit, wheel chocks, warning triangle, fire extinguisher and first aid kit

Automatic blade control Various 2D / 3D / GPS systems



Optional Equipment

EP control panel (joystick controls)

Lighting as LED design

Auxiliary heating

Automatic climate control (A/C)

Recording speedometer

Cooling box

Stereo radio various (CD player, bluetooth, DAB+)

Protective grids for cabin and lights

Moldboard (10 ft): 3050 x 505 x 15 mm (10' x 19,9" x 0,6") **CE Certificate**

Moldboard (12 ft): 3660 x 505 x 15 mm (12' x 19,9" x 0,6") Speed limitation at 20 km/h possible



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Edition 02/24 Technical data may be subject to alternations