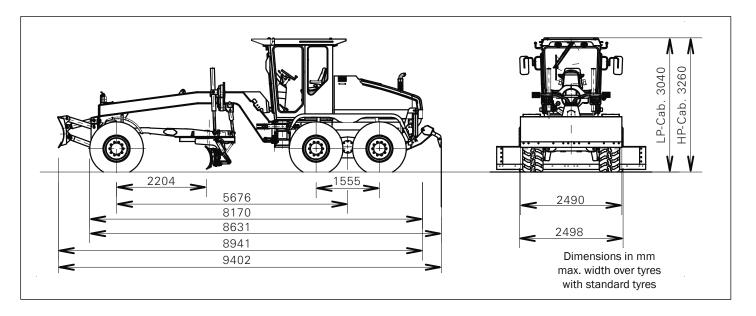




Motor Grader

BG 160 T-4 (6x4) / BG 160 TA-4 (6x6)







Engine Data

Make/Model CUMMINS/diesel engine
Type 4 cycle, direct injection, turbo charged, water-cooled, intercooled
Rated ned horsepower (SAE J1995) at 2200 rpm 129 kW/176 HP
at 2000 rpm 133 kW/181 HP
No. of cylinder in line 6
Bore & stroke 107 x 124 mm

Engine equipped with a dual element, dry type air cleaner with dust ejector. 24 V starting and electrical system. 70 Amp alternator and 24 V starter with 3.7 kW (5.0 HP). 2 batteries 74 Ah each.



Speeds (all wheel drive and rear axle drive systems)

Forward	km/h
1.	4.3
2.	6.7
3.	11.0
4.	17.2
5.	25.0
6.	40.0
Reverse	
1.	4.3
2.	11.0
3.	25.0

Acoustic back up alarm in reverse driving



Displacement

Operating Weight

Total weight approx. 16000 kg
On rear wheels approx. 11000 kg
On front wheels approx. 5000 kg

Weights shown include cab, all operating fluids, 4-teeth rear ripper, front dozer blade



6.7 litres

Rear Axle

Oscillating tandem axle with axle insert.

Operator controlled wet multiple disc lock/unlock differential.

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



All Wheel Drive System

Hydrodynamic rear axle drive with 6-speed Ergopower transmission and torque converter (make ZF 6 WG) with freely selectable microprocessor controlled hydrostatic front axle drive. Power train is controlled appropriate to tyre traction.



Tandems

Drive via roller chains. Torsion-proof box section.

 Height
 550 mm

 Width
 184 mm

 Thickness of walls
 20 mm

 Wheel base
 1555 mm

 Oscillation
 ± 15°

 Ground clearence
 435 mm



Rear Axle Drive System

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



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 operator warning system.

Parking brake

Independent electrically operated, acting on power shift, hydraulic spring accumulated single disc type.



Front Axle

2 types are available

Oscillation15° up and downSteering angle45°Wheel lean±17°Ground clearance546 mm

Non driven with wheel lean (T version)

Stable welded steel beam with wheel lean.

Driven with wheel lean (TA version)

Stable welded steel beam with wheel lean and radial piston engines in wheel hubs, pulling power on surface conditions. Electronically adjustable (infinitely variable), possibility to fit in the hydraulic differential lock.



Steering

Hydraulic power steering

Minimum turning radius without dozer blade

Minimum turning radius with dozer blade

Steering angle

6900 mm
7650 mm
45°



Frame

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

Front: Fully welded box section

Minimum dimensions of box section $$270\,\mathrm{x}\,270\,\mathrm{mm}$$ Plate thickness $$20\,\mathrm{mm}$$

Rear: Fully welded box section

Dimensions (solid main bars) 250 x 80 mm Hydraulic articulated frame steering (left & right) 30°



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.

Circle diameter 1348 mm
Tool widht 78 mm
Height 130 mm



Circle Drive

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

Rotation 360°



Drawbar

Y-shaped fully welded construction.

Dimensions (solid sections) 30 x 175 mm



Moldboard (standard)

 $\begin{array}{ll} \mbox{Moldboard (12 ft)} & 3660 \times 580 \times 20 \mbox{ mm (12' x 22,8'' x 0,8'')} \\ \mbox{Blade material} & \mbox{High carbon steel} \\ \mbox{Blade pull (at a friction factor of 0.8)} \end{array}$

BG 160 T-4 80 kN BG 160 TA-4 105 kN



Blade Range

Reach outside tyres without articulation (RH&LH) blade resting on 2220 mm/1780 mm levelled surface Reach outside tyres with articulation (RH&LH), blade resting on levelled surface 3050 mm/2610 mm 1250 mm Blade side shift Blade tilt range 35°-76° Bank sloping angle (RH&LH) 90° Lift above ground 480 mm Cut below ground 520 mm Distance blade/front axle 2204 mm

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



Operator's Platform

Dimensions
Width 1150 mm
Depth 1400 mm

Avaiblable with various options as listed under "Optional equipment", moldboard control acc. to EURO standard.



Capacities

Fuel	300.0 litres
Hydraulic oil	170.0 litres
Engine oil	19.0 litres
Ergopower transmission	34.0 litres
Axle drive rear	13.5 litres
Planetary gears and brakes	16.0 litres
Tandem case (2 x 21 litres)	42.0 litres
Circle drive	6.0 litres
Coolant	33.0 litres



Light Equipment

2 head lights at the front, every 2 indicator lights (including hazard warning lights) at the front and rear, 2 rear lights, 2 brake lights, 1 backup light plus every 2 working lights at the top and bottom at the front of the cab, 2 working lights at the top at the rear of the cab, and 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 205 bar Oil flow, max. 132I/min



Optional Equipment

Cab, standard, tiltable

Integrated ROPS/FOPS cab mounted on isolators to limit vibration and noise entering the cab. Excellent all-round visibility. Roomy and comfortable. Adjustable steering pedestal with EURO control lever arrangement. Interior of cab fully lined, floor covering. Tinted safety glass windows, sliding doors left and right with lockable intermediate positions, fresh air heating with pre-filter, air circulation. Adjustable, mechanical spring mounted driver's seat with safety belt. One inside mirror and two folding outside mirrors.

Front window washer. Wipers front and rear. Blinds front and rear.

Height / Width / Depth 1980 / 1470 / 1700 mm

Cab, low-profile, tiltable

Height / Width / Depth 1760 / 1470 / 1700 mm

Air-cushioned driver's seat
Recording speedometer
Cooling box
Stereo radio with CD-Player
Sliding side windows
Protective grids for lights and cabin

Moldboard (14 ft) 4267 x 580 x 20 mm (14' x 22,8'' x 0,8'')

Cover plate for upper guide rail of moldboard Adjustable moldboard corner shoes, left or right

Moldboard extension, left or right (1 ft) 305 mm

Float position for both moldboard lift cylinders Electric fuel pump with automatic switch-off Towing device, tiltable

Front dozer blade with position indicator, parallel guided

Width / Height 2490 x 703 mm
Cut below ground 250 mm
Lift above ground 605 mm
Weight 691 kg

Rear ripper with depth indicator, 4 teeth (max. 7)

Ripping width 2120 mm
Ripping depth 285 mm
Lift above ground 580 mm
Weight 610 kg

Rear ripper with depth indicator, medium heavy, 4 teeth (max. 7)

Ripping width 2120 mm
Ripping depth 420 mm
Lift above ground 560 mm
Weight 804 kg

Push-Pull block, in front 556 kg

Mudguardson front wheelsMudguardson rear wheels

Protective cover for powershift transmission

Ergopower transmission with torque converter and lock-up clutch

Fuel tank pump with automatic switch-off

Speed limitation at 25 km/h possible





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Edition 12/16 Technical data are subject to alteration.