DX210w  |  Wheeled Excavator

- 120 kW / 162 Hp at 2,000 rpm
- 20,417 - 20,899 kg
- 0,51 - 1,28 m³
DOOSAN DX210w hydraulic excavator:

Look at these innovations!

Performance 4
Handling 6
Comfort 7
Reliability 8
Maintenance 10
Technical Specifications 12
The key phrase used during the development of the DX210w was “giving optimum value to the end user”. This translates, in concrete terms, into:

- **Increased production** and **improved fuel economy** thanks to electronic optimization of the hydraulic system and the new generation DOOSAN engine (stage Ila).
- **Improved ergonomics**, increased comfort and excellent all round visibility ensuring a safe and pleasant working environment.
- **Improved reliability** through the use of high performance materials combined with new methods of structural stress analysis have lead to increased component life expectancy, thus reducing running costs.
- **Reduced maintenance** increases the availability of the excavator and reduces running costs.
Performance

The performance of the DX210w has a direct effect on its productivity. Its new “Common Rail” engine and new e-EPOS controlled hydraulic system have combined to create an unbeatable hydraulic excavator, with a cost/performance ratio that makes the DX210w even more appealing.

At the heart of the hydraulic excavator is the new “Common Rail” Doosan DL06 engine. It is combined with the new e-EPOS electronic control system, for optimum power and fuel saving.

The new engine produces 162 Hp (120kW/164Ps) at only 2,000 rpm, and more torque, due to its careful design combined with the use of common rail injection and 4 valves per cylinder. These features help optimize combustion and minimize pollution through reduced Nox & particulate emissions.

Increased torque allows efficient use of the power of the hydraulic system.
- Faster working cycles increase productivity.
- Increased torque means the excavator is able to move more easily.
- Energy efficiency reduces fuel consumption.

DOOSAN Infracore is aware of the importance of protecting the environment. Ecology was uppermost in the minds of the research workers right from the start of the design of the new machines. The new challenge for the engineers is to combine the protection of nature with equipment performance and to this end DOOSAN has been investing heavily.

The new DOOSAN engine respects and protects the environment, limiting all types of toxic emissions.

Hydraulic pumps
The main pumps have a capacity of 2 x 231.7 l / min reducing cycle time while a high capacity gear pump improves pilot line efficiency.

Swing drive
Shocks during rotation are minimized, while increased torque is available to ensure rapid cycles.
Excavator control

New e-EPOS system (Electronic Power Optimizing System)
The brains of the hydraulic excavator, the e-EPOS, have been improved and now can electronically link to the engine’s ECU (Electronic Control Unit), through a CAN (Controller Area Network) communication link, enabling a continuous exchange of information between the engine and the hydraulic system. These units are now perfectly synchronised.

The advantages of the new e-EPOS impacts at several levels.

Ease of operation and user-friendliness:
• The availability of a power mode and a normal operating mode guarantee maximum efficiency under all conditions.
• Electronic control of fuel consumption optimizes efficiency.
• The automatic deceleration mode enables fuel saving.
• Regulation and precise control of the flow rate required by the equipment are available as standard.
• A self-diagnosis function enables technical problems to be resolved quickly and efficiently.
• An operational memory provides a graphic display of the status of the machine.
• Maintenance and oil change intervals can be displayed.

New Drive Line Concept
The new travel motor and transmission control in the drive line provide comfortable travel due to increased smoothness, improve hydraulic retarding and improved gear shifting.

Heavy Duty Axles
The front axle offers wide oscillating and steering angles. The transmission is mounted directly on the rear axle for protection and optimum ground clearance.

Advanced Disc Brake System
The new improved system allows a more correct braking of the machine. This eliminates the rocking effect associated with working free on wheels. The new axle is designed for low maintenance and the oil change intervals have been increased from 1,000 to 2,000 hours further reducing owning and operating costs.

Undercarriage Design
A rigid, welded frame provides excellent durability. Efficient hydraulic lines routing, transmission protection and heavy duty axles make the undercarriage perfect for wheel excavator applications. Both outriggers and dozer blade are bolt-on for maximum flexibility. An oscillating axle lock is available.

Outriggers
Outriggers can be mounted on the front and/or rear for maximum operating stability when digging or lifting (control on option).

Dozer Blade
The bolt-on design allows the dozer blade to be mounted on the front and/or rear and is used for leveling, clean-up work and for stabilizing the machine during digging applications. The pressure on the ground is reduced to the minimum thanks to the lower design of parallel dozer.

Outriggers can be mounted on the front and/or rear for maximum operating stability when digging or lifting (control on option).
Handling

The hydraulic excavator’s power, durability, ease of servicing and its precise control increase its effectiveness and life expectancy. With the DX210w, DOOSAN offers an excellent return on investment.

Choice of operating modes

Work mode
- Digging mode: for general excavation, loading, lifting...
- Trenching mode: swing priority for trench work, canal digging, embankments...

Power mode
- Standard: uses 85% engine power for all work (optimum fuel efficiency)
- Power: uses 100% engine power for heavy work

Control lever

Very precise control of the equipment increases versatility, safety and facilitates tricky operations requiring great precision. Levelling operations and the movement of lifted loads in particular are made easier and safer.

The control levers have additional electrical buttons for controlling other additional equipment (for example, grabs, crushers, grippers, etc.).
Comfort

The work rate of the hydraulic excavator is directly linked to the performance of its operator. DOOSAN designed the DX210w by putting the operator at the centre of the development goals. The result is significant ergonomic value that improves the efficiency and safety of the operator.

More space, better visibility, air conditioning, a very comfortable seat... These are all elements that ensure that the operator can work for hours and hours in excellent conditions.

Control panel
Correct positioning with clear controls makes the operator’s task easier.

Visibility has been improved in all directions and the size of the cab has been increased.

The high performance air conditioning provides an air flow which is adjusted and electronically controlled for the conditions. Five operating modes enable even the most demanding operator to be satisfied.

Appropriate storage spaces show the attention given to the operator.

Comfortable fully adjustable seat
Control stand (Telescopic & Tilting Function)
Steering Column and cruz control button
Reliability

The reliability of an item of plant contributes to its overall lifetime operating costs. DOOSAN uses computer-assisted design techniques, highly durable materials and structures then test these under extreme conditions.

Durability of materials and longevity of structures are our first priorities.

Strengthened boom
The shape of the boom has been optimized by finite elements design, allowing the loads to be better distributed throughout the structure. This combined with increased material thickness means improved durability and reliability by limiting element fatigue.

Arm assembly
In the arm assembly greater strength has been gained by using cast elements and reinforcement around the bosses to give it an increased lifetime.

Bucket
Highly wear-resistant materials are used for the most susceptible elements such as the blades, teeth, rear and lateral reinforcement plates and corners of the bucket.

Bushing
A highly lubricated metal is used for the boom pivot in order to increase the lifetime and extend the greasing intervals to 250 hours. A rolled bushing with very fine grooves has been added to the arm to bucket pivot, so that greasing is only required every 50 hours.

Polymer shim
A polymer shim is added to the bucket, dozer and outrigger pivot to maintain precise control over the equipment.
Large reinforced protective covers have been adopted to completely protect the dozer and outrigger cylinders from falling stones etc, while the machine is operating.

A cast counterweight has been adopted to minimize deformation by external impact. In addition, operating stability has been increased by use of a low center of gravity design.

The use of LED type Stop Lamps ensures considerably improved average service life compared to the existing standard filament bulbs. Furthermore, the faster lighting speed helps contribute to accident prevention.
Maintenance

Short maintenance operations at long intervals increase the availability of the equipment on site. DOOSAN has developed the DX210w with a view to high profitability for the user.

Engine oil filter
The engine oil filter offers a high level of filtration allowing the oil change interval to be increased to 500 hours. It is easy to access and is positioned to avoid contaminating the surrounding environment.

Easy maintenance
Access to the various radiators is very easy, making cleaning easier. Access to the various parts of the engine is from the top and via side panels.

Hydraulic oil return filter
The protection of the hydraulic system is made more effective by the use of glass fibre filter technology in the main oil return filter. This means that with more than 99.5% of foreign particles filtered out, the oil change interval is increased.

Air cleaner
The large capacity forced air cleaner removes over 99% of airborne particles, reducing the risk of engine contamination and making the cleaning and cartridge change intervals greater.

Fuel filter
High efficiency fuel filtration is attained by the use of multiple filters, including a fuel pre-filter fitted with a water separator that removes most moisture from the fuel.

PC monitoring (DMS)
A PC monitoring function enables connection to the e-EPOS system, allowing various parameters to be checked during maintenance, such as pump pressures, engine rotation speed, etc, and these can be stored and printed for subsequent analysis.

Centralized front axle pin grease inlets for easy maintenance
The grease lubricating position of front axle pin is located in front of equipment for easy accessibility.
Technical specifications

* Engine

- **Model**
  Doosan DL06
  “Common Rail” engine with direct fuel injection and electronic control, 4 valves per cylinder, vertical injectors, water cooled, turbo charged with air to air intercooler. The emission levels are well below the values required for phase III

- **Number of cylinders**
  6

- **Nominal flywheel power**
  120 kW (164 Ps) at 2.000 rpm (DIN 6271, net)
  120 kW (162 HP) at 2.000 rpm (SAE J1349, net)

- **Max torque**
  72 kgf.m (706 Nm) at 1.400 rpm

- **Piston displacement**
  5,890 cc

- **Bore & stroke**
  100 mm x 125 mm

- **Starter**
  24 V / 4,5 kW

- **Batteries**
  2 x 12 V / 100 Ah

- **Air cleaner**
  Double element with auto dust evacuation.

* Hydraulic system

The heart of the system is the e-EPOS (Electronic Power Optimizing System). It allows the efficiency of the system to be optimized for all working conditions and minimizes fuel consumption. The new e-EPOS is connected to the engine electronic control via a data transfer link to harmonize the operation of the engine and hydraulics.

- The hydraulic system enables independent or combined operations.
- Two travel speeds offer either increased torque or high speed tracking.
- Cross-sensing pump system for fuel savings.
- Auto deceleration system.
- Two operating modes, two power modes.
- Button control of flow in auxiliary equipment circuits.
- Computer-aided pump power control.

- **Main pumps**
  2 variable displacement axial piston pumps
  Max flow: 2 x 231.7 l/min

- **Pilot pump**
  Gear pump – max flow: 27.4 l/min

- **Main relief valves**
  Boom/arm/bucket:
  - Normal mode: 330 kg/cm² (324 bar)
  - Power mode: 350 kg/cm² (343 bar)
  Travel: 350 kg/cm² (343 bar)
  Rotation: 270 kg/cm² (267 bar)

* Weight

<table>
<thead>
<tr>
<th>Boom (mm)</th>
<th>Arm (mm)</th>
<th>Bucket (m³)</th>
<th>Operating weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.400 (arti)</td>
<td>2.000</td>
<td>1.05</td>
<td>20.400</td>
</tr>
<tr>
<td>5.400 (arti)</td>
<td>2.400</td>
<td>0.86</td>
<td>20.600</td>
</tr>
<tr>
<td>5.600</td>
<td>2.750</td>
<td>0.86</td>
<td>19.900</td>
</tr>
<tr>
<td>5.600</td>
<td>3.000</td>
<td>0.86</td>
<td>20.800</td>
</tr>
</tbody>
</table>
Hydraulic cylinders

The piston rods and cylinder bodies are made of high-strength steel. A shock absorbing mechanism is fitted in all cylinders to ensure shock-free operation and extend piston life.

• Mono Boom

<table>
<thead>
<tr>
<th>Cylinders</th>
<th>Quantity</th>
<th>Bore x rod diameter x stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>120 x 85 x 1.225 mm</td>
</tr>
<tr>
<td>Arm (2,0m)</td>
<td>1</td>
<td>135 x 95 x 1.360 mm</td>
</tr>
<tr>
<td>Arm (2,4m)</td>
<td>1</td>
<td>135 x 95 x 1.450 mm</td>
</tr>
<tr>
<td>Bucket</td>
<td>1</td>
<td>120 x 80 x 1.060 mm</td>
</tr>
</tbody>
</table>

• Articulated Boom

<table>
<thead>
<tr>
<th>Cylinders</th>
<th>Quantity</th>
<th>Bore x rod diameter x stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>2</td>
<td>120 x 85 x 1.045 mm</td>
</tr>
<tr>
<td>Arti. Boom</td>
<td>1</td>
<td>170 x 105 x 748 mm</td>
</tr>
<tr>
<td>Arm (2,0m)</td>
<td>1</td>
<td>135 x 95 x 1.440 mm</td>
</tr>
<tr>
<td>Arm (2,4m)</td>
<td>1</td>
<td>135 x 95 x 1.538 mm</td>
</tr>
<tr>
<td>Bucket</td>
<td>1</td>
<td>120 x 80 x 1.060 mm</td>
</tr>
</tbody>
</table>

Undercarriage

Heavy-duty frame, all-welded stress-relieve structure. Top grade materials used for toughness. Specially heat-treated connecting pins, 10.00-20-16PR (OTR) double tires with tire spacer. Front axle oscillating hydraulically.

Environment

Noise levels comply with environmental regulations (dynamic values).

• Sound level guarantee
  103 dB(A) (2000/14/EC)

• Cab sound level
  73.8 dB(A) (ISO 6396)

Swing mechanism

• An axial piston motor with two-stage planetary reduction gear is used for the swing.
• Increased swing torque reduces swing time.
• Internal induction-hardened gear.
• Internal gear and pinion immersed in lubricant bath.
• The swing brake for parking is activated by spring and released hydraulically.

Swing speed: 0 to 11 rpm

Buckets

<table>
<thead>
<tr>
<th>Capacity (m³)</th>
<th>Width (mm)</th>
<th>Weight (Kg)</th>
<th>Recommended (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without side cutters</td>
<td>With side cutters</td>
<td>5.600 mm mono boom</td>
</tr>
<tr>
<td></td>
<td>2,750 mm</td>
<td>3,000 mm</td>
<td>2,000 mm</td>
</tr>
<tr>
<td>SAE 0.51</td>
<td>722</td>
<td>772</td>
<td>530</td>
</tr>
<tr>
<td>SAE 0.81</td>
<td>1,063,5</td>
<td>1,126</td>
<td>655</td>
</tr>
<tr>
<td>(std) 0.86</td>
<td>1,115</td>
<td>1,179</td>
<td>696</td>
</tr>
<tr>
<td>1.05</td>
<td>1,307,5</td>
<td>1,370</td>
<td>740</td>
</tr>
<tr>
<td>1.17</td>
<td>1,428</td>
<td>1,491</td>
<td>795</td>
</tr>
<tr>
<td>1.28</td>
<td>1,542</td>
<td>1,605</td>
<td>830</td>
</tr>
</tbody>
</table>

A. Suitable for materials with a density less than or equal to 2,000 kg/m³
B. Suitable for materials with a density less than or equal to 1,600 kg/m³
C. Suitable for materials with a density less than or equal to 1,100 kg/m³

Drive

The wheels are animated by an axial piston engine which involves a transmission Power shift two-speed. In addition to these two speeds, there is also the position creep speed. A button makes it possible to pass from high to low in work mode.

• Travel speed (fast/slow)
  Two travel speeds offer either increased torque or high speed tracking. 36 / 33 / 9 / 4 (high/econo/low/creep)

• Maximum traction force
  12.130 kgf

Refill capacities

• Fuel tank
  350 l

• Cooling system (radiator capacity)
  24 l

• Engine oil
  25 l

• Swing drive
  3.8 l

• Final drive
  10 l

• Hydraulic tank
  122 l

• Front Axle Case
  11 l

• Rear Axle Case
  14,5 l

• Transmission
  2.5 l
Undercarriage

* Undercarriage with front dozer and rear outrigger

* Undercarriage with front outrigger and rear dozer

* Undercarriage with front outrigger and rear outrigger
Standard and optional equipment

*Standard equipment*

- **Hydraulic system**
  - Boom and arm flow regeneration
  - Boom and arm safety valves
  - Swing anti-rebound valves
  - Spare ports (valve)
  - One touch power boost
  - Hydraulic piping for breaker

- **Cab & interior**
  - Cab mounted on viscous support
  - All weather sound suppressed type cab
  - Air conditioning with climat control
  - Adjustable suspension seat with adjustable head rest and arm rests
  - Sliding front window removable in two parts
  - Room light
  - Intermittent windshield wiper
  - Cigarette lighter and ashtray
  - Cup holder
  - Hot & cool box
  - LCD color monitor
  - Fuel control dial
  - Loudspeakers and connections for radio
  - Remote radio control on console
  - 12 V power outlet
  - PC interface port for Diagnostics
  - Hydraulic control levers with 3 switches
  - Sun visor
  - Sun roof
  - rainshield

- **Safety**
  - Large handrail and steps
  - Punched metal anti-slip plates
  - Seatbelt
  - Hydraulic safety lock lever
  - Safety glass windows
  - Hammer for emergency escape
  - Side mirrors
  - Reverse travel alarm
  - Emergency engine stop (switch)
  - Street lights with LED stop lamps
  - Overload warning device

- **Undercarriage**
  - Double tires 10-20 16PR
  - Rear individually control outriggers
  - Tool compartment
  - 4 speed (high, econo, low, creep)
  - Front axle oscillation auto lock
  - Cruise control
  - Front parallel dozer blade

- **Other**
  - Two-stage air cleaner with one safety element
  - Dust screen for radiators
  - Engine overheat prevention system
  - Engine restart prevention system
  - self-diagnostic system
  - Alternator 24V, 50A
  - Horn
  - Halogen working lights (chassis mounted 2, boom mounted 2)
  - Double fuel filter
  - Fuel tank filling pump

*Optional equipment*

Some of these optional equipments may be standard in some markets. Some of these optional equipments cannot be available on some markets. You must check with the local DOOSAN dealer to know about the availability or to release the adaptation following the needs of the application.

- **Safety**
  - Cabin Top/Front guard (ISO 10262, standard FOGS)
  - Rotating beacon
  - Mirror on counterweight
  - Swing alarm

- **Cab & interior**
  - Heated air suspension seat
  - Radio/CD
  - Radio/CD/MP3

- **Undercarriage**
  - Front bucket cradle
  - Front clamshell cradle
  - Front individually controlled outriggers
  - Rear parallel dozer blade

- **Other**
  - Hydraulic piping for crusher
  - Hydraulic piping for quick coupler
  - Hydraulic piping for clamshell
  - Hydraulic piping for tilting and rotating
  - Additional filter for breaker piping
  - Lower cabin windshield wiper
  - Fuel heater
  - Light Pack (4 front & 2 rear cabin lights, telescopic beacon, 80Ah alternator)
  - Video system with color LCD and 0 Lux camera
  - Upper guard for front glass
  - Lower guard for front glass
  - Centralize greasing system
### Dimensions

#### Articulated Boom – Boom: 5.400 mm - Arm: 2.000 / 2.400 mm

<table>
<thead>
<tr>
<th>Boom type (two pieces)</th>
<th>2.000 mm</th>
<th>2.400 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Shipping length</td>
<td>9.275 mm</td>
<td>9.210 mm</td>
</tr>
<tr>
<td>B Shipping width</td>
<td>2.500 mm</td>
<td>2.500 mm</td>
</tr>
<tr>
<td>C Shipping height (boom)</td>
<td>3.140 mm</td>
<td>3.140 mm</td>
</tr>
<tr>
<td>D Height over cabine</td>
<td>3.140 mm</td>
<td>3.140 mm</td>
</tr>
<tr>
<td>E Counter weight swing clearance</td>
<td>2.750 mm</td>
<td>2.750 mm</td>
</tr>
<tr>
<td>F Ground clearance</td>
<td>350 mm</td>
<td>350 mm</td>
</tr>
<tr>
<td>G Counter weight clearance</td>
<td>1.259 mm</td>
<td>1.259 mm</td>
</tr>
<tr>
<td>H Engine cover height</td>
<td>2.485 mm</td>
<td>2.485 mm</td>
</tr>
<tr>
<td>I Upper housing width</td>
<td>2.530 mm</td>
<td>2.530 mm</td>
</tr>
<tr>
<td>J Wheel base</td>
<td>2.850 mm</td>
<td>2.850 mm</td>
</tr>
<tr>
<td>K, L Tread width</td>
<td>1.914 mm</td>
<td>1.914 mm</td>
</tr>
</tbody>
</table>

#### Mono Boom – Boom: 5.600 mm - Arm: 2.750 / 3.000 mm

<table>
<thead>
<tr>
<th>Boom type (one piece)</th>
<th>2.750 mm</th>
<th>3.000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Shipping length</td>
<td>9.420 mm</td>
<td>9.400 mm</td>
</tr>
<tr>
<td>B Shipping width</td>
<td>2.500 mm</td>
<td>2.500 mm</td>
</tr>
<tr>
<td>C Shipping height (boom)</td>
<td>3.200 mm</td>
<td>3.490 mm</td>
</tr>
<tr>
<td>D Height over cabine</td>
<td>3.140 mm</td>
<td>3.140 mm</td>
</tr>
<tr>
<td>E Counter weight swing clearance</td>
<td>2.750 mm</td>
<td>2.750 mm</td>
</tr>
<tr>
<td>F Ground clearance</td>
<td>350 mm</td>
<td>350 mm</td>
</tr>
<tr>
<td>G Counter weight clearance</td>
<td>1.259 mm</td>
<td>1.259 mm</td>
</tr>
<tr>
<td>H Engine cover height</td>
<td>2.485 mm</td>
<td>2.485 mm</td>
</tr>
<tr>
<td>I Upper housing width</td>
<td>2.530 mm</td>
<td>2.530 mm</td>
</tr>
<tr>
<td>J Wheel base</td>
<td>2.850 mm</td>
<td>2.850 mm</td>
</tr>
<tr>
<td>K, L Tread width</td>
<td>1.914 mm</td>
<td>1.914 mm</td>
</tr>
</tbody>
</table>
Working ranges

Articulated Boom – Boom: 5.400 mm

*Working range

<table>
<thead>
<tr>
<th>Arm type</th>
<th>2.000 mm</th>
<th>2.400 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Max. digging radius (mm)</td>
<td>9.005</td>
<td>9.405</td>
</tr>
<tr>
<td>B. Max. digging depth (mm)</td>
<td>5.225</td>
<td>5.625</td>
</tr>
<tr>
<td>C. Max. digging height (mm)</td>
<td>10.210</td>
<td>10.560</td>
</tr>
<tr>
<td>D. Max. dumping height (mm)</td>
<td>7.275</td>
<td>7.620</td>
</tr>
<tr>
<td>E. Min. digging radius (mm)</td>
<td>3.380</td>
<td>3.185</td>
</tr>
</tbody>
</table>

* Working forces

Bucket (PCSA) 0.86 m³ (std)

Digging force* 12.500 kgf 99.5 kN

<table>
<thead>
<tr>
<th>Arm</th>
<th>2.000 mm</th>
<th>2.400 mm</th>
<th>2.750 mm</th>
<th>3.000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digging force*</td>
<td>12.100 kgf</td>
<td>10.800 kgf</td>
<td>9.700 kgf</td>
<td>9.300 kgf</td>
</tr>
<tr>
<td></td>
<td>91.3 kN</td>
<td>95.2 kN</td>
<td>105.95 kN</td>
<td>118.7 kN</td>
</tr>
</tbody>
</table>

* Max. force

Mono Boom – Boom: 5.600 mm

*Working range

<table>
<thead>
<tr>
<th>Arm type</th>
<th>2.750 mm</th>
<th>3.000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Max. digging radius (mm)</td>
<td>9.730</td>
<td>10.000</td>
</tr>
<tr>
<td>B. Max. digging depth (mm)</td>
<td>6.010</td>
<td>6.255</td>
</tr>
<tr>
<td>C. Max. digging height (mm)</td>
<td>9.800</td>
<td>10.050</td>
</tr>
<tr>
<td>D. Max. dumping height (mm)</td>
<td>7.020</td>
<td>7.250</td>
</tr>
<tr>
<td>E. Min. digging radius (mm)</td>
<td>3.375</td>
<td>3.440</td>
</tr>
</tbody>
</table>

* Digging forces (ISO)

Bucket (PCSA) 0.86 m³ (std)

Digging force* 12.500 kgf 99.5 kN

<table>
<thead>
<tr>
<th>Arm</th>
<th>2.000 mm</th>
<th>2.400 mm</th>
<th>2.750 mm</th>
<th>3.000 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digging force*</td>
<td>12.100 kgf</td>
<td>10.800 kgf</td>
<td>9.700 kgf</td>
<td>9.300 kgf</td>
</tr>
<tr>
<td></td>
<td>91.3 kN</td>
<td>95.2 kN</td>
<td>105.95 kN</td>
<td>118.7 kN</td>
</tr>
</tbody>
</table>

* Max. force
## Lifting capacity

### Standard configuration – Mono Boom

**Front outrigger and rear dozer down – Boom: 5,600 mm - Arm: 2,750 mm - Without bucket**

**Units:** 1,000 kg

<table>
<thead>
<tr>
<th>A (m)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>B</th>
<th>Max. Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.68</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>0 (Ground)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
</tbody>
</table>

**Front outrigger and rear dozer down – Boom: 5,600 mm - Arm: 3,000 mm - Without bucket**

**Units:** 1,000 kg

<table>
<thead>
<tr>
<th>A (m)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>B</th>
<th>Max. Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
<tr>
<td>0 (Ground)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.64</td>
</tr>
</tbody>
</table>

---

*Note: All values are in meters.*
### Standard configuration – Articulated Boom

**Front outrigger and rear outrigger – Boom: 5,400 mm - Arm: 2,000 mm - Without bucket**

<table>
<thead>
<tr>
<th>A (m)</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Max. Reach A (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7m</td>
<td>6,37</td>
<td>6,37</td>
<td>6,35</td>
<td>6,35</td>
<td>5,40</td>
<td></td>
</tr>
<tr>
<td>6m</td>
<td>6,49</td>
<td>6,49</td>
<td>6,17</td>
<td>6,17</td>
<td>6,17</td>
<td>6,17</td>
</tr>
<tr>
<td>5m</td>
<td>6,09</td>
<td>6,09</td>
<td>6,24</td>
<td>6,24</td>
<td>6,24</td>
<td>6,07</td>
</tr>
<tr>
<td>4m</td>
<td>7,23</td>
<td>7,23</td>
<td>6,21</td>
<td>6,21</td>
<td>6,21</td>
<td>6,12</td>
</tr>
<tr>
<td>3m</td>
<td>8,51</td>
<td>8,51</td>
<td>7,15</td>
<td>7,15</td>
<td>7,15</td>
<td>6,31</td>
</tr>
<tr>
<td>2m</td>
<td>8,30</td>
<td>8,30</td>
<td>6,30</td>
<td>6,30</td>
<td>6,30</td>
<td>6,50</td>
</tr>
<tr>
<td>1m</td>
<td>8,20</td>
<td>8,20</td>
<td>7,74</td>
<td>7,74</td>
<td>7,74</td>
<td>6,58</td>
</tr>
<tr>
<td>0 (ground)</td>
<td>10,27</td>
<td>10,27</td>
<td>8,15</td>
<td>8,15</td>
<td>8,15</td>
<td>6,49</td>
</tr>
<tr>
<td>-1m</td>
<td>7,06</td>
<td>7,06</td>
<td>10,90</td>
<td>10,90</td>
<td>9,00</td>
<td>8,15</td>
</tr>
<tr>
<td>-2m</td>
<td>11,43</td>
<td>11,43</td>
<td>9,89</td>
<td>9,89</td>
<td>8,24</td>
<td>8,24</td>
</tr>
</tbody>
</table>

1. Ratings are based on SAE J1097
2. The load point is a hook located on the back of the bucket.
3. * Rated loads are based on hydraulic capacity.
4. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

**Front dozer and rear outrigger – Boom: 5,400 mm - Arm: 2,400 mm - Without bucket**

<table>
<thead>
<tr>
<th>A (m)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Max. Reach A (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>6,07</td>
<td>6,07</td>
<td>5,80</td>
<td>5,80</td>
<td>5,80</td>
<td>4,72</td>
<td>4,02</td>
</tr>
<tr>
<td>7</td>
<td>7,51</td>
<td>7,51</td>
<td>6,60</td>
<td>6,60</td>
<td>6,60</td>
<td>6,04</td>
<td>6,04</td>
</tr>
<tr>
<td>6</td>
<td>7,35</td>
<td>7,35</td>
<td>5,96</td>
<td>5,96</td>
<td>5,96</td>
<td>6,45</td>
<td>6,45</td>
</tr>
<tr>
<td>5</td>
<td>7,97</td>
<td>7,97</td>
<td>6,18</td>
<td>6,18</td>
<td>6,18</td>
<td>6,03</td>
<td>6,03</td>
</tr>
<tr>
<td>4</td>
<td>10,45</td>
<td>10,45</td>
<td>8,78</td>
<td>8,78</td>
<td>8,78</td>
<td>9,15</td>
<td>9,15</td>
</tr>
<tr>
<td>3</td>
<td>10,27</td>
<td>10,27</td>
<td>8,89</td>
<td>8,89</td>
<td>8,89</td>
<td>7,37</td>
<td>7,37</td>
</tr>
<tr>
<td>2</td>
<td>9,00</td>
<td>9,00</td>
<td>9,32</td>
<td>9,32</td>
<td>9,32</td>
<td>7,96</td>
<td>7,96</td>
</tr>
<tr>
<td>1</td>
<td>8,67</td>
<td>8,67</td>
<td>8,67</td>
<td>8,67</td>
<td>8,67</td>
<td>7,75</td>
<td>7,75</td>
</tr>
<tr>
<td>0 (ground)</td>
<td>7,96</td>
<td>7,96</td>
<td>10,08</td>
<td>10,08</td>
<td>9,44</td>
<td>9,44</td>
<td>9,44</td>
</tr>
<tr>
<td>-1</td>
<td>7,40</td>
<td>7,40</td>
<td>11,30</td>
<td>11,30</td>
<td>9,18</td>
<td>9,18</td>
<td>9,18</td>
</tr>
<tr>
<td>-2</td>
<td>13,23</td>
<td>13,23</td>
<td>10,43</td>
<td>10,43</td>
<td>8,59</td>
<td>8,59</td>
<td>8,59</td>
</tr>
</tbody>
</table>

1. * Rating over front
2. Rating over side or 360 degree