

\* | 93 kW (125 HP) @ 1950 rpm

▲ | 18040 - 19060 kg

📏 | 0.38 - 0.93 m<sup>3</sup>



## DX180LC-3 | Crawler Excavator





# DX180LC-3

DOOSAN

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# DO IT ALL WITH GREATER PRODUCTIVITY



## CAN YOU RELY ON YOUR MACHINE FOR YOUR VARIOUS APPLICATIONS DAY AFTER DAY?

The new DX180LC-3 is strong and robust enough to tackle your most demanding jobs, yet easy on the environment and your pocket. Keep profits up and costs down with a range of new features such as:

- A **new** generation Stage IIIB-compliant **engine**. Benefit from strong, responsive **power** with **reduced fuel consumption** and emissions
- **Top quality materials** and components. Count on long-term reliability and maximum uptime
- A brand new fully-featured, ergonomically designed **ROPS cab**. Work in top-class **comfort** with excellent all-round **visibility**
- The ultimate combination of **strength, stability** and **versatility**. A real return on your investment



# TAKE A TOUR

Large, heavy-duty boom and arm cylinders for smooth, powerful operation

Reinforced castings and forged steel pivot points

Reinforced heavy-duty arm and boom with new optional boom floating system


New work lights with improved illumination (standard: 2 front frame, 4 front & 2 rear cab-mounted, 2 boom mounted and 1 rear side)

All-round visibility with better view through the rear and right windows

Massive maximum bucket and arm digging forces of 13.1 and 10.8 ton

## EXPERT CONTROL

- Joystick and switches integrated in armrest for precise operation. All switches grouped together and ergonomically positioned to the right
- Jog shuttle switch to control various machine functions
- 4 working modes for maximum efficiency
- Proportional auxiliary flow to operate attachments smoothly and precisely
- New, user-friendly 7" TFT LCD colour monitor with full access to machine settings and maintenance data
- Rear camera and large side mirrors
- Straight travel pedal (optional)



Reliable and well protected hydraulic, electric and lubrication routings with simple, optimised layout

#### MAXIMUM EFFICIENCY

- New powerful DOOSAN DL06K "Common Rail", Stage IIIB compliant, EGR 6 cylinder engine
- e-EPOS System (Electronic Power Optimising System) and hydraulic power boost function for optimised combustion and minimised emissions
- Efficient conversion of engine output into hydraulic performance for better fuel efficiency and lower costs
- Electronic fan clutch that reduces fuel consumption and noise level while improving cooling performance

#### COMFORTABLE WORKSPACE

- Spacious, newly designed, pressurised ROPS cab with low noise and vibration levels
- Fully adjustable heated air suspension seat as standard
- Large sun roof for extra overhead visibility
- Air conditioning with climate control
- Extra-large door for easy access

#### EASY MAINTENANCE

- Easy access to all maintenance components
- Maintenance data available directly from control panel
- Fuel pre-filter with water separator
- PC access for maintenance and repairs
- Self-diagnosis function
- Reliable Doosan parts
- Battery cut-off switch and increased capacity (150 Ah)

#### SOLID STRENGTH

- Heavy-duty X-shaped undercarriage with integrated track spring and idler plus durable box section track frame
- Dozer blade available as an option
- Undercarriage narrow / standard: 2.49 / 2.80 m
- Increased drawbar pull of 17.4 ton

DX180LC-3



# All-round versatility and improved fuel efficiency

## ■ Expect the best out of your machine

Whatever your application - digging, trenching, levelling, road maintenance or landscaping – you can rely on the DX180LC-3 to take all these tasks in stride with efficient, dependable performance that saves you time and money.

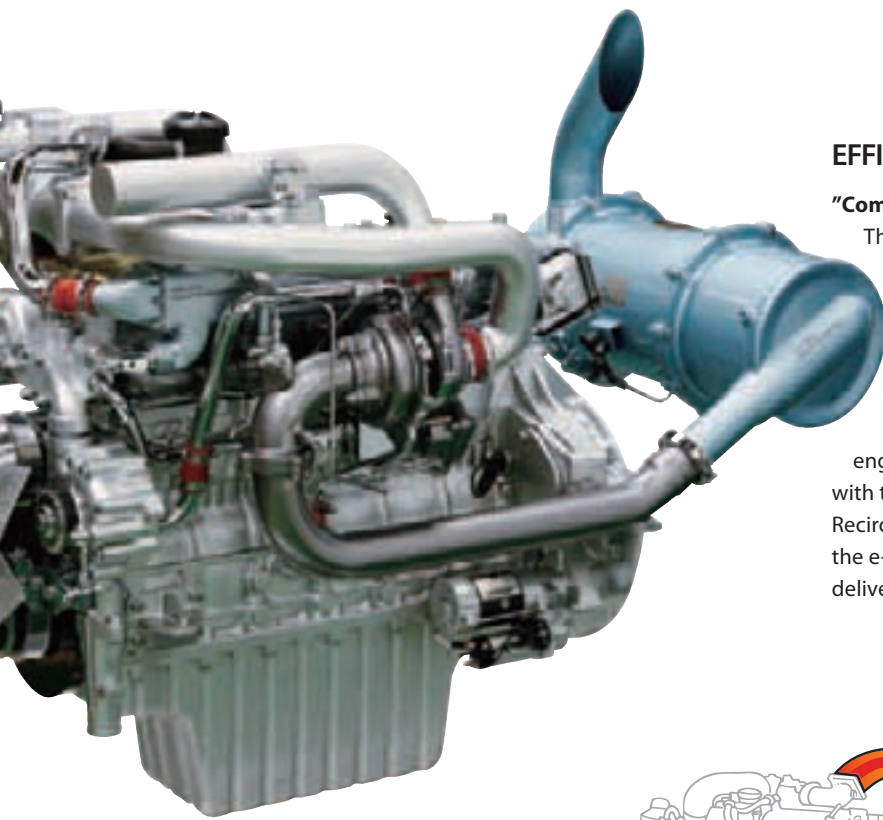
Improved fuel efficiency means you can keep costs down and reduce the environmental impact.



## 6 ASSETS TO YOUR BENEFIT!

- Power: 93kW (125 HP) 6 cylinder engine
- Productivity: side lifting capacity at 6 m reach and 3 m height: 3.37 ton
- Excavation: max. bucket digging force: 13.1 ton
- Traction: max. drawbar pull: 17.4 ton
- Max. digging depth (with 2600 mm arm): 6110 mm
- Size: Ideal dimensions and working range





## EFFICIENT MANAGEMENT OF FUEL AND HYDRAULICS

### "Common Rail" Doosan DL06K engine

The heart of the DX180LC-3 is the "Common Rail" DOOSAN DL06K 6 cylinder engine, carefully designed with common rail injection and 4 valves per cylinder. The engine delivers 125 HP (93 kW / 124 PS) at only 1950 rpm. Powerful torque allows efficient use of the hydraulic system and faster working cycles.

Already known for its outstanding reliability, the DOOSAN DL06K engine has been optimised for the DX180LC-3 and is now compliant with the Stage IIIB European regulations using EGR (Exhaust Gas Recirculation) and DPF (Diesel Particulate Filter). In combination with the e-EPOS electronic control system, it offers the ultimate in power delivery and fuel economy.

## ADVANCED TECHNOLOGY FOR OPTIMUM POWER MANAGEMENT

### e-EPOS system (Electronic Power Optimising System)

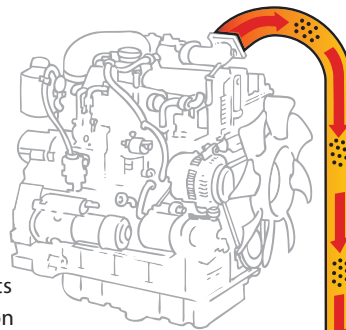
If the engine is the heart of the excavator, the e-EPOS is its brain. It provides a perfectly synchronised communication link between the engine's ECU (Electronic Control Unit) and the hydraulic system. A CAN (Controller Area Network) system enables a constant flow of information between the engine and hydraulic system, ensuring power is delivered exactly as needed.

### Simple and efficient

- Choice between 4 power modes and 4 working modes guarantees optimum performance in all conditions
- Proportional auxiliary control for attachments
- Electronic control of fuel consumption optimises efficiency
- Auto-idle function enables fuel saving
- Regulation and precise control of the flow rate required by the work group

### Quick and efficient

The main hydraulic pumps have an increased capacity of 2 x 152 l/min, reducing cycle times for heightened productivity. A high capacity gear pump improves pilot line efficiency.



### EGR with DPF

EGR, which requires enhanced cooling capacity, reduces NOx by recirculating exhaust back into the engine. This dilutes the amount of oxygen in the combustion chamber and lowers the combustion peak temperature.

Exhaust

Exhaust with higher PM concentration goes in.

DOC (Diesel Oxidation Catalyst) reacts with exhaust and transforms PM emissions into harmless substances.

DPF (Diesel Particulate Filter) filters exhaust to remove PM.

Cleaned exhaust with lower PM (Particulate Matter) concentration comes out.

- Self-diagnosis function allows technical problems to be resolved quickly and efficiently
- Operational memory provides a graphic display of the machine status
- Maintenance and oil change intervals can be displayed

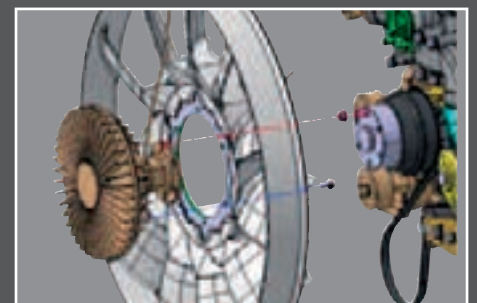
### Smooth and fast

The swing drive minimises shocks during rotation while making increased torque available to ensure rapid cycles.



### Separate radiator and oil cooler

For optimum cooling, fan speed is controlled electrically by a fan clutch, resulting in lower fan noise and better fuel efficiency.





# The ideal workspace – designed around you

The DX180LC-3 is designed to provide you with the best possible working conditions. The sophisticated pressurised ROPS cab is ISO-certified for your safety. Its spacious interior offers a fully adjustable, heated air suspension seat. Comfortably seated, you have easy access to several storage compartments and a clear all-round view of the worksite. Noise and vibration levels have been reduced while air conditioning and automatic climate control allow you to maximize your productivity and return on investment.



## Heated air suspension seat (standard)

As well as being adjustable and offering lumbar support, the seat has an air suspension system to reduce vibrations. It also features a button to activate the seat heating system. A storage box has been placed under the seat for extra convenience.



## Storage space

Plenty of storage space means you can keep all your personal belongings within reach. The new cab contains 7 storage spaces including one hot/cool box.



## Air conditioning with climate control

The electronically controlled air conditioning system features 5 different operating modes allowing the operator to adjust the airflow to suit conditions. A recirculated air function is also available.



## MP3/USB radio and USB port

A USB port (standard) allows connection of an MP3 player (MP3/USB radio with CD player optional).





## ERGONOMIC OPERATOR ENVIRONMENT

### Feel the comfort of a seat that fits you perfectly:

Using a dual positioning cursor, you can slide the seat back from the joysticks for the best working position. You can also slide the entire seat assembly to adjust the reach to the control pedals to your leg length.

- ① Large sun roof
- ② Sun visor
- ③ Straight ergonomic pedals
- ④ Flat, spacious, easy-to-clean floor
- ⑤ Upper front window is strut-assisted for easy, reliable adjustment and integrates a sun shade
- ⑥ Joysticks and switches are integrated in adjustable control consoles
- ⑦ Separate seat height adjustment lever and cushion tilting function
- ⑧ Storage compartment for sunglasses
- ⑨ Hot/cool box
- ⑩ Photo sensor detects radiant energy of the sun and adjusts temperature automatically

### Cab suspension

The cab features a new suspension system that combines high vibration dampening with outstanding protection against impact. The system absorbs shocks and vibrations much more effectively than a conventional viscous suspension system.





# Maximum controllability in every situation

Doosan's unique new jog shuttle switch gives you easy, precise control over all machine functions. Proportional auxiliary flow means that the excavator's huge power is matched by smooth, confident manoeuvres. Using highly sensitive joysticks and clear controls positioned for convenient access, you are able to work safely and confidently with minimum effort. Even the switches have been ergonomically placed on the right and positioned according to the frequency with which they are used. The highest standards of efficiency are just a finger's reach away.



## Jog shuttle control switch

- Power mode and Work mode
- Auto-idle / Buzzer Stop
- Adjustments of rpm, hydraulic flow and pressure for attachments
- Rear view camera
- Multimedia: - video: AVI (DivX®), MP4, WMV  
- audio: MP3
- Menu change or selection

## Colour LCD monitor panel

The upgraded 7" TFT LCD panel features a day and night display and has been relocated within the operator's line of sight. The monitor is user-friendly and gives full access to machine settings and maintenance data. Any abnormality is clearly displayed on the screen, allowing you to work safely and confidently with an accurate overview of all conditions. All functions are totally controllable, directly via the screen or using the Jog shuttle switch.



## 4 Work modes to suit your application

- 1-way mode and 2-way mode
- Digging mode and lifting mode

## 4 Power modes for maximum efficiency

- Power plus mode: uses 100% engine power
- Power mode: uses 95% engine power
- Standard mode: uses 92% engine power
- Economy mode: uses 83% engine power

## Gauges

- Engine coolant and hydraulic oil temperatures
- Fuel level
- Eco symbol: changes colour when operating conditions change (idle, normal or loading)
- Eco gauge: shows the average fuel efficiency for 1 minute of operation
- Warning symbols



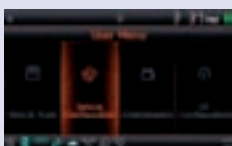
4 Work modes



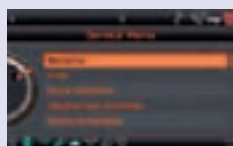
4 Power modes



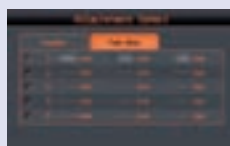
Auto-idle



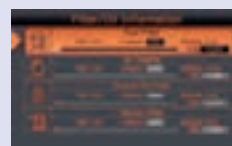
User menu



Service menu



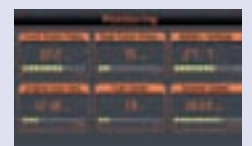
Attachment presets



Filter/oil information



Anti-theft protection

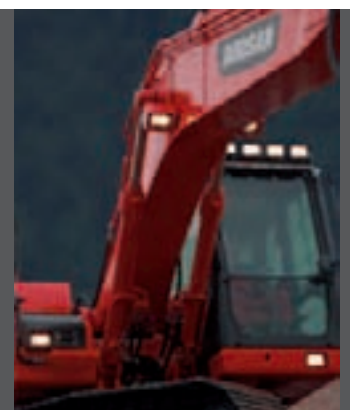


Monitoring

## Your safety – our biggest concern

- A rear view camera shows you a clear view of what's happening behind the machine. A side view camera is also available as an option for jobs requiring extra safety measures
- Cab and boom lights are fitted as standard, greatly enhancing safety on night-time jobs
- Large side mirrors improve all-round visibility (ISO compliant)

Other standard safety features include: automatic overheating prevention, low oil pressure sensor, engine emergency cut-off switch, auxiliary mode switch (to stop the pump if the control system malfunctions), overload warning device. An optional travel/swing alarm is also available.







### Simple operation

- “Short stroke” joysticks enable easy, precise control of all operations
- A thumb wheel switch and buttons on the joysticks allow proportional control of attachments such as grabs, crushers and grapples
- A straight travel pedal can be installed to facilitate operation when moving in a straight line

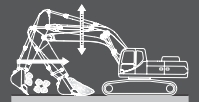


### Dynamic power management

- Automatic travel speed function
- Activation of the power boost control system increases digging power by 10%
- A one-touch deceleration button immediately reduces engine speed to low or idle
- Auto-idling starts after 4 seconds at low rpm. This decreases fuel consumption and reduces noise levels in the cab
- Jog shuttle dial for engine rpm

### Floating boom function (optional)

- The intelligent floating boom mode allows the boom to move up and down freely when external force is applied.
- The breaker mode restricts the boom to downward movement only. This means that the breaker can be operated using only the weight of the work group on the front, without additional force. The breaker remains in constant contact with the object. The result is reduced shock and vibration and longer breaker service life.
- During truck loading, the lowering of the boom can be controlled without hydraulic pump flow discharge. This increases productivity and fuel efficiency.





# The quality you can rely on

## ■ Designed for long-term all-round heavy duty operation

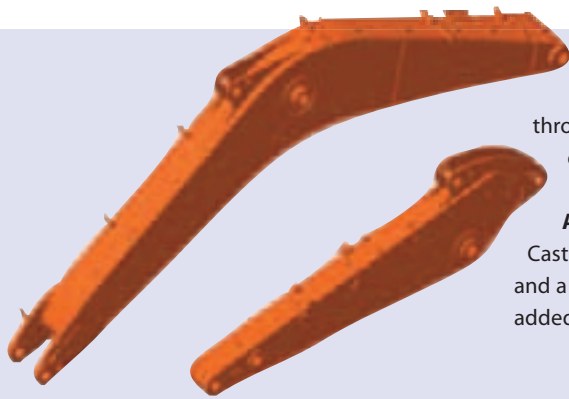
In your profession, you need equipment you can depend on. At DOOSAN, we use highly specialised design and analysis tools to make sure our machines are as robust and durable as can be. Our materials and structures undergo stringent testing for strength and resilience in the most extreme conditions.

### RESILIENT CHAIN FOR FIRST CLASS RELIABILITY

The DX180LC-3 is fitted with a super-strong chain.

The 19.0 cm link pitch, 3.8 cm pin diameter and heavy-duty running gear are ideally suited for long, trouble-free service in the roughest conditions.

- Track chains: the sealed and lubricated track chains are specifically designed for better pin and bushing retention. Exclusive heat treatment gives the links a consistent surface and strong core hardness, enhancing their durability
- Track guards: two guards per track frame (standard) protect against track derailment



#### Strengthened boom

Finite Element Analysis (FEA) has been used to calculate the best load distribution throughout the boom structure. Combined with increased material thickness, this means that element fatigue is limited and both reliability and component life are increased.

#### Arm assembly

Cast elements and reinforcements have been added to give the arm assembly greater strength and a longer lifetime. The arm centre and end boss have been strengthened and reinforced bars added to better protect the base of the arm.

#### Protected hydraulics

The hydraulic line routing is straight and simple for a neat, compact design that enhances its durability. The gap between the pipe flange and rubber cushion has been reduced to minimise slack.



#### Extra-strong X-chassis

The X-shaped undercarriage has been designed using Finite Element Analysis and 3D computer simulation to ensure optimum structural integrity and durability. The swing gear is solid and stable.



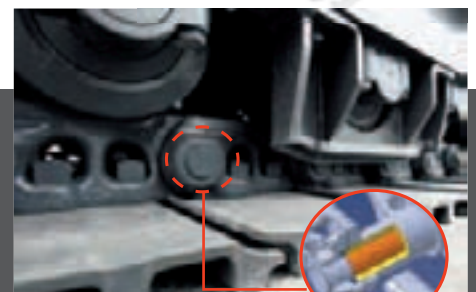
#### Heavy-duty sprocket

The sprocket is deep induction hardened and the depth pattern on the entire tooth profile is optimised for long-lasting service. Cast steel sprockets guarantee the highest resistance and durability even in the most severe applications. The sprocket tooth shape has been redesigned to prevent popping and increase component life.



#### Integrated track spring and idler

The track spring and idler have been joined together for long-lasting performance and convenient maintenance. A new seal and cylinder body rod have been used to avoid leakage. Special heat treatment ensures optimum hardness and long-lasting resistance to wear.



#### Tracks

For long-term dependability in all conditions, the chain is composed of sealed, self-lubricating links which are isolated from all external contamination. The tracks are locked by mechanically bolted pins. In areas subjected to great stress, the track link thickness has been reinforced.



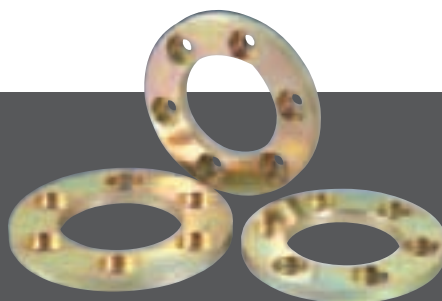


**The heavy-duty undercarriage provides excellent stability and durability. It is designed to excel in tough working environments.**



**Extra strong sintered bushings**

A highly lubricated metal is used for the boom pivot to increase the component lifetime and extend the greasing intervals. The bucket pivot features EM (Enhanced Macrosurface) bushings. These feature a tailored surface pattern and self-lubricating coating for optimised greasing and more efficient evacuation of debris.



**Ultra hard wear-resistant discs**

New materials have been used to enhance resistance to wear and to extend service intervals. Wear plates on the inside and the outside of the bucket lugs greatly increase disc lifetime.



**Polymer shim**

A polymer shim is added to the bucket pivot to maintain precise control over the equipment and extend greasing intervals.



# More value – less maintenance

Short maintenance operations at long intervals mean you can depend on your equipment being available on site when it's needed. The DX180LC-3 is designed for simple routine maintenance, while skilled Doosan technicians are available to provide extra support when you need it. You can choose the package you need from a broad range of service agreements to get the most out of your machine. Uptime, productivity and residual value are all maximised, making these excavators an economical and rewarding choice.



## Maintenance access made simple

- Large handrails are installed along with anti-slip steps and plates, for safer, easier access to the engine compartment
- The cab's air conditioning filter is lockable and placed on the side of the cab for easy access
- A battery cut-off switch makes it easy to disconnect the battery during long-term storage
- The hour meter display can be easily checked from ground level
- Cock valves have been fitted on the pre-filter piping line and fuel tank drain piping to make servicing easier and prevent pollution from leakage



## Access to components

- Engine parts can be easily reached via the top and side panels
- Access to the various radiators and filters is very easy, making maintenance routine easier



## Protective oil return filter

The protection of the hydraulic system is made more effective by the use of glass fibre technology in the main oil return filter. With more than 99.5% of foreign particles filtered out, the oil change interval is extended.



## Fuel pre-filter with water separator sensor

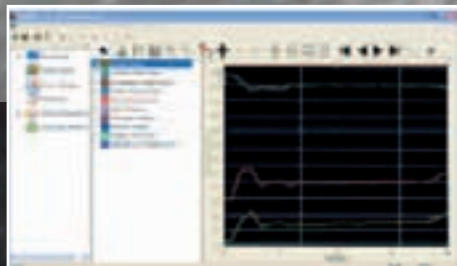
High efficiency fuel filtration is attained by the use of multiple filters. These include a fuel pre-filter fitted with a water separator that removes moisture, dirt and debris from the fuel. A warning sensor is added to each fuel filter to indicate when water draining is required.



## Engine oil filter

The engine oil filter offers a high level of filtration allowing a long interval between changes. It is easy to access and is positioned to avoid contaminating the surrounding environment.





#### PC monitoring

A PC monitoring function enables connection to the e-EPOS system. Thus, various parameters can be checked during maintenance, including pump pressures and engine speed. This information can be saved and printed for analysis.



#### Convenient fuse box

The fuse box is located in the storage compartment behind the seat, providing a clean environment and convenient access.



#### DPF regeneration switch

Regeneration is automatic and doesn't interfere with operation. When the level of soot is too high, a warning symbol alerts the operator that he can activate regeneration at any time.



#### Centralised greasing points

To make maintenance easier, the greasing points have been centralised.

# Technical specifications

## \* Engine

<b>• Model</b>	Doosan DL06K 4-Cycle Water-Cooled, Turbocharged, Common Rail Direct Injection, Exhaust Gas Recirculation
<b>• No. of cylinders</b>	6
<b>• Rated power at 1950 rpm</b>	91 kW (124 PS) (DIN 6271) 93 kW (125 HP) (SAE J1995) 91 kW (122 HP) (SAE J1349)
<b>• Max. torque at 1400 rpm</b>	54 kgf/m (530 Nm)
<b>• Idle (low - high)</b>	800 [± 20] - 2050 [+25/-50] rpm
<b>• Piston displacement</b>	5890 cm <sup>3</sup>
<b>• Bore x stroke</b>	100 mm x 125 mm
<b>• Starter</b>	24 V / 6.0 kW
<b>• Batteries</b>	2 x 12 V / 150 Ah
<b>• Air filter</b>	Double element and pre-filtered Turbo with automatic dust evacuation.

## \* Weight

Boom: 5200 mm • Arm: 2600 mm • GP Bucket: SAE 0.70 m<sup>3</sup> • Counterweight: 3000 kg

	Shoe width (mm)	Operating weight (ton)	Ground pressure (kgf/cm <sup>2</sup> )
Triple grouser	600 (Std)	18.0	0.43
	500	17.8	0.51
	700	18.4	0.38
	800	18.6	0.34
	900	18.9	0.30

## \* Undercarriage

Very robust construction throughout. All welded structures designed to limit stresses. High-quality, durable materials. Lateral chassis welded and rigidly attached to undercarriage. Track rollers lubricated for life. Idlers and sprockets fitted with floating seals. Track shoes made of induction-hardened alloy with triple grouser. Heat-treated connecting pins. Hydraulic track adjuster with shock-absorbing tension mechanism.

<b>• Number of rollers and track shoes per side</b>	
Upper rollers (standard shoe):	2
Lower rollers:	7
Number of links & shoes per side:	44
Overall track length:	3968 mm

## \* Hydraulic system

The brain of the excavator is the e-EPOS (Electronic Power Optimizing System). It allows the efficiency of the hydraulic system to be optimised for all working conditions and minimises fuel consumption. The e-EPOS is connected to the engine's electronic control unit (ECU) via a data transfer link to harmonise 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
- Cross-sensing pump system for fuel savings
- Auto deceleration system
- Four operating modes, four power modes
- Button control of flow in auxiliary hydraulic circuits
- Computer-aided pump flow control

### • Main pumps

Tandem, axial piston	
Max. flow:	2 x 152 l/min
Displacement:	80 cm <sup>3</sup> /rev.
Weight:	100 kg

### • Pilot pump

Gear pump – max. flow:	18.5 l/min
Displacement:	8.6 cm <sup>3</sup> /rev.
Relief valve pressure:	40 kgf/cm <sup>2</sup>

### • Maximum system pressure

Boom/arm/bucket	
Work/travel:	330 kg/cm <sup>2</sup> [+10/0]
Power:	350 kg/cm <sup>2</sup> [+10/0]

## \* Hydraulic cylinders

Piston rods and cylinder bodies of high-strength steel. Shock-absorbing mechanism fitted in all cylinders for shock-free operation and extended piston life.

### Mono boom

Cylinders	Quantity	Bore x rod diameter x stroke (mm)
Boom	2	115 x 80 x 1195
Arm	1	125 x 90 x 1470
Bucket	1	110 x 75 x 1025

### Articulated boom

Cylinders	Quantity	Bore x rod diameter x stroke (mm)
Lower	2	120 x 85 x 1030
Upper	1	160 x 95 x 760



### \* Swing mechanism

- High-torque, axial piston motor with planetary reduction gear bathed in oil
- Swing circle: single-row, shear type ball bearing with induction-hardened internal gear
- Internal gear and pinion immersed in lubricant
- Max. swing speed: 0 to 10.6 rpm
- Max. swing torque: 6450 kgf/m (Eff.=75%: 4864 kgf/m)

### \* Drive

Each track is driven by an independent, high-torque axial piston motor through a planetary reduction gearbox. Two levers / foot pedals guarantee smooth travel with counter-rotation on demand.

#### • Travel speed (low - high)

3.1 / 5.1 km/h

#### • Maximum traction (low - high)

(Eff.=81/85%) 10.2 / 17.4 ton

#### • Maximum gradeability

35° / 70%

### \* Fluid capacities

#### • Fuel tank

293 l

#### • Cooling system (radiator capacity)

21 l

#### • Hydraulic oil tank

180 l

#### • Engine oil

25 l

#### • Swing drive

5 l

#### • Travel device

2 x 3 l

### \* Environment

Noise levels comply with environmental regulations (dynamic values).

#### • Noise level LwA

Guaranteed / measured: 102 dB(A) / 101 dB(A) (2000/14/EC)

#### • Operator LpA

70 dB(A) (ISO 6396)

### \* Buckets

Bucket Type	Capacity (m <sup>3</sup> ) SAE	Width (mm)		Weight (kg)	Boom: 5200 mm Standard track / Narrow track			Arti boom: 5360 mm Standard track	
		With side cutters	Without side cutters		Arm: 2200 mm	Arm: 2600 mm	Arm: 3100 mm	Arm: 2300 mm	Arm: 2600 mm
GP	0.70	1063	1015	553	A / A	A / A	A / A	A	A
	0.38	640	604	428	A / A	A / A	A / A	A	A
	0.45	775	727	452	A / A	A / A	A / A	A	A
	0.57	913	865	507	A / A	A / A	A / B	A	A
	0.76	1127	1079	587	A / A	A / B	A / B	A	A
	0.80	1171	1123	601	A / A	A / B	B / C	A	A
	0.93	1315	1267	650	B / B	B / C	C / D	B	B
HD	0.66	994	916	692	A / A	A / A	A / B	A	A
	0.73	1064	986	732	A / A	A / B	B / C	A	A
	0.80	1142	1064	761	A / B	B / C	B / C	B	B

Based on ISO 10567 and SAE J296, arm length without quick-coupler. For reference only.

A: Suitable for materials with a density less than or equal to 2100 kg/m<sup>3</sup>

B: Suitable for materials with a density less than or equal to 1800 kg/m<sup>3</sup>

C: Suitable for materials with a density less than or equal to 1500 kg/m<sup>3</sup>

D: Suitable for materials with a density less than or equal to 1200 kg/m<sup>3</sup>

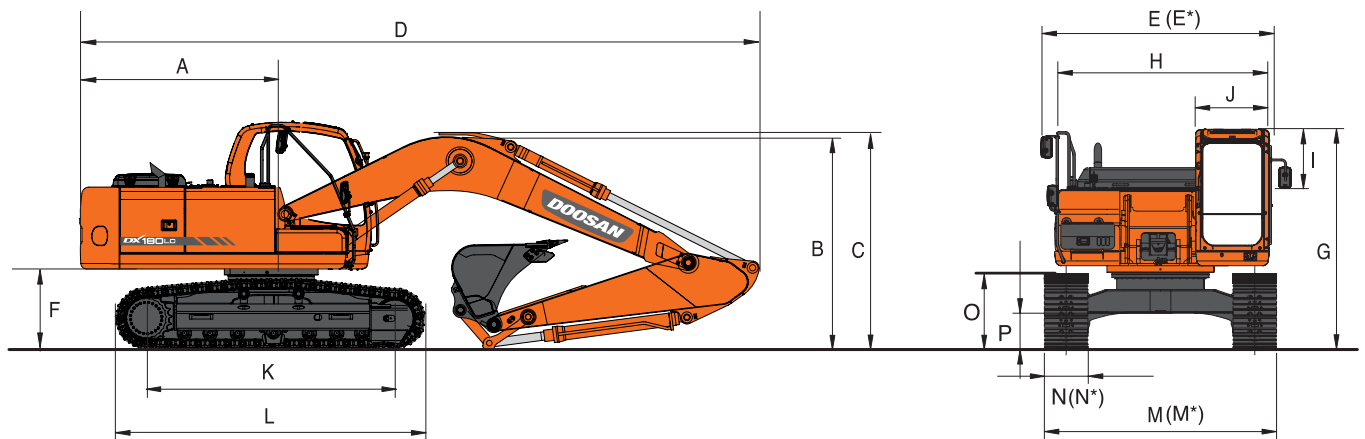
### \* Digging forces (ISO)

DX180LC-3 Shoe: 600 mm		Boom: 5200 mm Arm: 2600 mm Bucket 0.70 m <sup>3</sup>	Boom: 5200 mm Arm: 2200 mm Bucket 0.76 m <sup>3</sup>	Boom: 5200 mm Arm: 3100 mm Bucket 0.57 m <sup>3</sup>	Arti Boom: 5360 mm Arm: 2600 mm Bucket 0.70 m <sup>3</sup>	Arti Boom: 5360 mm Arm: 2300 mm Bucket 0.76 m <sup>3</sup>
BUCKET (Normal / Press. Up)	ton	12.3 / 13.1	12.3 / 13.1	12.3 / 13.1	12.3 / 13.1	12.3 / 13.1
	kN	120.6 / 128.4	120.6 / 128.4	120.6 / 128.4	120.6 / 128.4	120.6 / 128.4
ARM (Normal / Press. Up)	ton	8.7 / 9.3	10.2 / 10.8	8.1 / 8.6	8.7 / 9.3	9.4 / 10.0
	kN	85.3 / 91.2	100 / 105.9	79.4 / 84.3	85.3 / 91.2	92.1 / 98.1

### \* Dozer blade option

Shoe width (mm)	Dozer / undercarriage width (mm)
500	2700
600 (Std)	2800
700	2900
800	3000
900	3100

# Dimensions



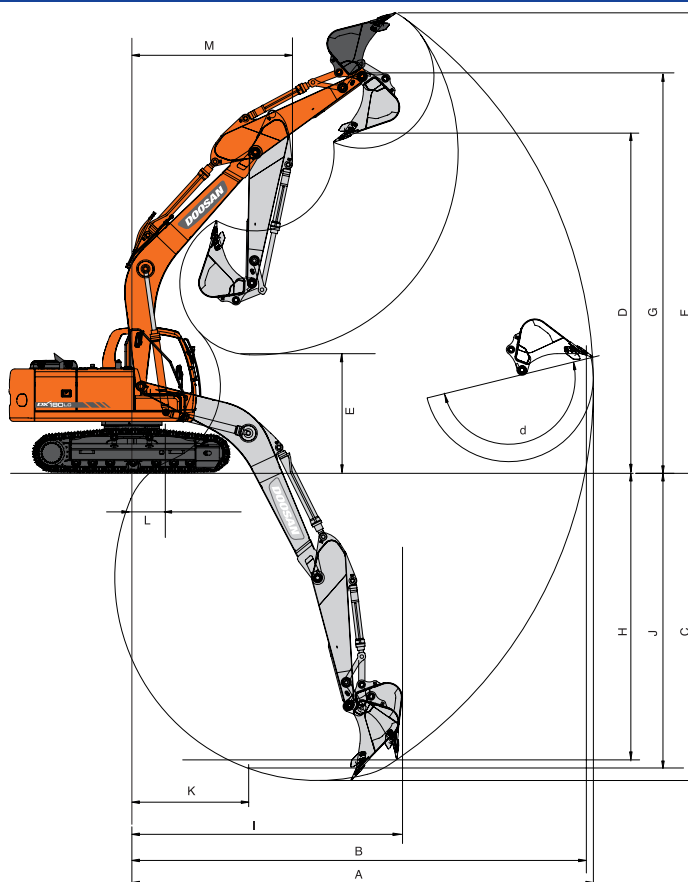
## \* Dimensions mono and articulated boom

		DX180LC-3				
		Mono: 5200			Arti: 5360	
Boom length - mm						
Arm length - mm		2600	2200	3100	2300	2600
Bucket capacity - m <sup>3</sup>		0.70	0.76	0.57	0.76	0.70
A	Tail swing radius - mm	2450	2450	2450	2450	2450
B	Shipping height (boom) - mm	2725	2855	2975	2815	2935
C	Shipping height (hose) - mm	2855	3005	3150	3060	3175
D	Shipping length - mm	8630	8700	8705	8805	8800
E	Shipping width std. - mm	2800	2800	2800	2800	2800
E'	Shipping width narrow - mm	2490	2490	2490	2490	2490
F	Counterweight clearance - mm	1035	1035	1035	1035	1035
G	Height over cab - mm	2925	2925	2925	2925	2925
H	House width - mm	2540	2540	2540	2540	2540
I	Cab height above house - mm	845	845	845	845	845
J	Cab width - mm	1010	1010	1010	1010	1010
K	Tumbler distance - mm	3180	3180	3180	3180	3180
L	Track length - mm	3968	3968	3968	3968	3968
M	Undercarriage width std. - mm	2800	2800	2800	2800	2800
M'	Undercarriage width narrow - mm	2490	2490	2490	2490	2490
N	Shoe width std. - mm	600	600	600	600	600
N'	Shoe width narrow - mm	500	500	500	500	500
O	Track height - mm	917	917	917	917	917
P	Ground clearance - mm	455	455	455	455	455

## \* Component weights

Item	unit	DX180LC-3	Remarks
Upper structure without front	kg	8204	with counterweight
Counterweight std. / for arti	kg	3000 / 3300	
Lower structure assembly	kg	6465	
Front assembly	kg	3350	
Boom (5200 mm)	kg	1136	including bushing
Arm (2600 mm)	kg	554	including bushing
Bucket (0.70 m <sup>3</sup> )	kg	553	
Boom cylinder (each)	kg	150	
Arm cylinder	kg	210	
Bucket cylinder	kg	136	
Dozer blade (2800 mm)	kg	847	for 600 mm shoe
Dozer cyl. (each)	kg	90	
Articulated boom (5360 mm)	kg	1379	length lower: 1.9 m / upper: 3.8 m
Articulated boom cylinder	kg	414	
Arm (2200 mm)	kg	536	
Arm (3100 mm)	kg	645	
Arm Arti (2300 mm)	kg	533	
Arm Arti (2600 mm)	kg	554	
Lower structure assembly	kg	6390	narrow track



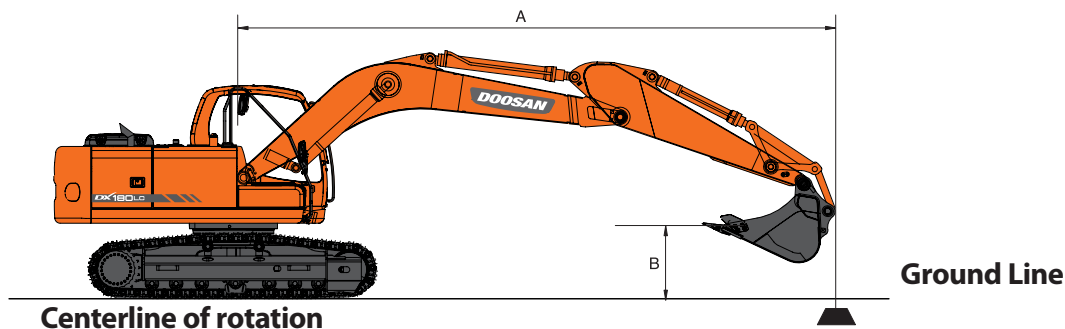


### \* Working range mono and articulated boom

		DX180LC-3				
		Mono: 5200			Arti: 5360	
Boom length - mm						
Arm length - mm		2600	2200	3100	2300	2600
Bucket capacity - m <sup>3</sup>		0.7	0.76	0.57	0.76	0.70
A	Max. digging reach - mm	9130	8750	9485	9130	9425
B	Max. digging reach (ground) - mm	8960	8575	9325	8960	9260
C	Max. digging depth - mm	6110	5710	6610	5745	6045
D	Max. loading height - mm	6500	6265	6500	7235	7475
E	Min. loading height - mm	2380	2798	1880	3157	2887
F	Max. digging height - mm	9170	8935	9090	10045	10285
G	Max. bucket pin height - mm	7920	7680	7915	8650	8890
H	Max. vertical wall depth - mm	4985	4610	5030	4805	5075
I	Max. radius vertical - mm	6105	5955	6590	5460	5585
J	Max. digging depth (8' level) - mm	5900	5470	6400	5640	5945
K	Min. radius 8' line - mm	2380	2360	2270	805	810
L	Min. digging reach - mm	315	1380	-270	1650	1500
M	Min. swing radius - mm	3150	3135	3155	2865	3015
d	Bucket angle - °	176	176	176	176	176



# Lifting capacities



## Standard configuration

Standard track width: 2800 mm • Boom: 5200 mm • Arm: 2600 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3000 kg

Units: 1000 kg

A (m) \ B (m)	1.5		3.0		4.5		6.0		7.5		Max. lift		A (m)	
7.5												* 5.13	4.72	5.07
6.0							* 4.76	3.60				4.65	3.19	6.41
4.5					* 5.55	* 5.55	* 4.94	3.53				3.80	2.59	7.19
3.0			* 10.52	9.77	* 6.84	5.21	4.98	3.37	3.49	2.36		3.41	2.30	7.61
1.5					7.46	4.83	4.79	3.20	3.42	2.30		3.28	2.20	7.71
0 (Ground)			* 6.95	* 6.95	7.21	4.60	4.65	3.08	3.37	2.25		3.37	2.25	7.51
-1.5	* 6.72	* 6.72	* 11.38	8.62	7.14	4.54	4.61	3.03				3.73	2.48	6.99
-3.0	* 11.51	* 11.51	* 10.42	8.80	7.22	4.61	4.69	3.11				4.64	3.08	6.06
-4.5			* 6.77	* 6.77								* 4.40	* 4.40	4.45

## Option 1

Standard track width: 2800 mm • Boom: 5200 mm • Arm: 2600 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3000 kg • Dozer up (rear)

Units: 1000 kg

A (m) \ B (m)	1.5		3.0		4.5		6.0		7.5		Max. lift		A (m)	
7.5												* 5.13	5.06	5.07
6.0							* 4.76	3.88				* 4.83	3.45	6.41
4.5					* 5.55	* 5.55	* 4.94	3.81				4.45	2.81	7.19
3.0			* 10.52	10.5	* 6.84	5.61	* 5.47	3.65	4.11	2.57		4.02	2.51	7.61
1.5					* 8.08	5.22	5.62	3.47	4.04	2.51		3.88	2.40	7.71
0 (Ground)			* 6.95	* 6.95	8.47	5.00	5.49	3.35	4.00	2.46		3.99	2.46	7.51
-1.5	* 6.72	* 6.72	* 11.38	9.35	8.40	4.94	5.44	3.31				4.41	2.71	6.99
-3.0	* 11.51	* 11.51	* 10.42	9.53	* 7.44	5.01	* 5.13	3.39				* 5.02	3.35	6.06
-4.5			* 6.77	* 6.77								* 4.40	* 4.40	4.45

## Option 2

Standard track width: 2800 mm • Boom: 5200 mm • Arm: 2200 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3000 kg

Units: 1000 kg

A (m) \ B (m)	3.0		4.5		6.0		Max. lift		A (m)
7.5							* 5.67	* 5.67	4.46
6.0							5.21	3.57	5.95
4.5			* 5.98	5.49	5.09	3.48	4.14	2.82	6.78
3.0			* 7.23	5.11	4.93	3.33	3.68	2.49	7.22
1.5			7.38	4.76	4.76	3.17	3.53	2.37	7.33
0 (Ground)			7.18	4.58	4.65	3.07	3.64	2.43	7.12
-1.5	* 11.65	8.69	7.16	4.56	4.63	3.06	4.09	2.72	6.57
-3.0	* 9.51	8.90	* 6.94	4.67			* 5.18	3.51	5.56



### Option 3

Standard track width: 2800 mm • Boom: 5200 mm • Arm: 2200 mm • W/O Bucket • Shoe: 700 mm • Counterweight: 3000 kg

Units: 1000 kg

A (m) \ B (m)	3.0		4.5		6.0		Max. lift		A (m)
7.5							* 5.67	* 5.67	4.46
6.0							* 5.21	3.62	5.95
4.5			* 5.98	5.57	5.17	3.53	4.21	2.87	6.78
3.0			* 7.23	5.19	5.01	3.38	3.74	2.53	7.22
1.5			7.51	4.84	4.84	3.23	3.59	2.41	7.33
0 (Ground)			7.31	4.66	4.73	3.12	3.71	2.48	7.12
-1.5	* 11.65	8.84	7.28	4.64	4.71	3.11	4.17	2.77	6.57
-3.0	* 9.51	9.04	* 6.94	4.75			* 5.18	3.57	5.56

### Option 4

Standard track width: 2800 mm • Boom: 5200 mm • Arm: 3100 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3000 kg

Units: 1000 kg

A (m) \ B (m)	1.5		3.0		4.5		6.0		7.5		Max. lift		A (m)
7.5											* 4.49	4.07	5.61
6.0							* 4.25	3.67			4.22	2.90	6.84
4.5							* 4.53	3.58	3.57	2.43	3.50	2.39	7.58
3.0			* 9.09	* 9.09	* 6.26	5.30	5.01	3.40	3.50	2.37	3.17	2.13	7.97
1.5			* 8.74	* 8.74	7.52	4.87	4.80	3.20	3.41	2.28	3.04	2.03	8.07
0 (Ground)			* 8.37	* 8.37	7.19	4.58	4.63	3.05	3.33	2.21	3.10	2.06	7.88
-1.5	* 6.77	* 6.77	* 11.44	8.46	7.07	4.47	4.55	2.97			3.39	2.24	7.38
-3.0	* 10.56	* 10.56	* 11.28	8.59	7.10	4.50	4.58	3.00			4.09	2.70	6.50
-4.5			* 8.31	* 8.31	* 5.77	4.69					* 4.85	4.00	5.05

### Option Arti

Standard track width: 2800 mm • Articulated Boom: 1940 mm LB + 3820 mm UB • Arm: 2600 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3300 kg

Units: 1000 kg

A (m) \ B (m)	3.0		4.5		6.0		7.5		Max. lift		A (m)
7.5			* 4.04	* 4.04					* 4.64	4.28	5.51
6.0			* 4.02	* 4.02	* 4.21	3.79			4.43	3.03	6.76
4.5			* 4.90	* 4.90	* 4.50	3.70	3.69	2.50	3.68	2.50	7.51
3.0			* 6.41	5.40	* 5.17	3.51	3.65	2.46	3.33	2.24	7.91
1.5			7.73	4.98	4.98	3.31	3.56	2.38	3.22	2.15	8.00
0 (Ground)			7.46	4.74	4.83	3.17	3.50	2.33	3.31	2.20	7.81
-1.5	* 9.46	8.90	7.40	4.68	4.78	3.13			3.65	2.43	7.31
-3.0			7.49	4.76	4.86	3.20			4.57	3.03	6.29

- Lifting capacities are in compliance with ISO 10567.
- The load point is at the end of the arm.
- \* = The nominal loads are based on hydraulic capacity.
- The nominal loads shown do not exceed 75% of tipping loads or 87% of hydraulic lifting capacity.
- Weight of all lifting accessories must be deducted from or added to the above lifting capacities.
- The configurations indicated do not necessarily reflect the standard equipment of the machine.

: Rating over front  
 : Rating over side or 360°

# Lifting capacities

## Option Narrow 1

Narrow track width: 2490 mm • Boom: 5200 mm • Arm: 2600 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3000 kg

Units: 1000 kg

A (m) \ B (m)	1.5		3.0		4.5		6.0		7.5		Max. lift		A (m)
7.5											* 5.13	4.34	5.07
6.0							* 4.76	3.31			4.65	2.93	6.41
4.5					* 5.55	5.13	* 4.94	3.24			3.80	2.37	7.19
3.0			* 10.52	8.75	* 6.84	4.75	4.98	3.09	3.49	2.16	3.41	2.10	7.61
1.5					7.46	4.38	4.79	2.92	3.42	2.09	3.28	2.01	7.71
0 (Ground)			* 6.95	* 6.95	7.21	4.16	4.65	2.80	3.37	2.05	3.37	2.05	7.51
-1.5	* 6.72	* 6.72	* 11.38	7.65	7.14	4.1	4.61	2.75			3.73	2.26	6.99
-3.0	* 11.51	* 11.51	* 10.42	7.82	7.22	4.17	4.69	2.83			4.64	2.80	6.06
-4.5			* 6.77	* 6.77							* 4.40	* 4.40	4.45

## Option Narrow 2

Narrow track width: 2490 mm • Boom: 5200 mm • Arm: 2200 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3000 kg

Units: 1000 kg

A (m) \ B (m)	3.0		4.5		6.0		Max. lift		A (m)
7.5							* 5.67	5.25	4.46
6.0							5.19	3.27	5.95
4.5			* 5.98	5.01	5.07	3.18	4.12	2.58	6.78
3.0			* 7.23	4.64	4.91	3.03	3.66	2.26	7.22
1.5			7.35	4.30	4.74	2.88	3.51	2.15	7.33
0 (Ground)			7.15	4.12	4.62	2.78	3.62	2.20	7.12
-1.5	* 11.65	7.69	7.12	4.1	4.61	2.76	4.07	2.47	6.57
-3.0	* 9.51	7.89	* 6.94	4.21			* 5.18	3.18	5.56

## Option Narrow 3

Narrow track width: 2490 mm • Boom: 5200 mm • Arm: 3100 mm • W/O Bucket • Shoe: 600 mm • Counterweight: 3000 kg

Units: 1000 kg

A (m) \ B (m)	1.5		3.0		4.5		6.0		7.5		Max. lift		A (m)
7.5											* 4.49	3.74	5.61
6.0							* 4.25	3.37			4.20	2.65	6.84
4.5							* 4.53	3.27	3.55	2.22	3.49	2.17	7.58
3.0			* 9.09	* 9.09	* 6.26	4.82	4.99	3.10	3.49	2.16	3.15	1.94	7.97
1.5			* 8.74	7.94	7.49	4.40	4.77	2.91	3.39	2.07	3.03	1.84	8.07
0 (Ground)			* 8.37	7.51	7.16	4.12	4.61	2.75	3.32	2.00	3.09	1.86	7.88
-1.5	* 6.77	* 6.77	* 11.44	7.46	7.03	4.01	4.53	2.68			3.37	2.02	7.38
-3.0	* 10.56	* 10.56	* 11.28	7.59	7.07	4.04	4.56	2.71			4.08	2.44	6.50
-4.5			* 8.31	7.90	* 5.77	4.23					* 4.85	3.62	5.05

- Lifting capacities are in compliance with ISO 10567.
- The load point is at the end of the arm.
- \* = The nominal loads are based on hydraulic capacity.
- The nominal loads shown do not exceed 75% of tipping loads or 87% of hydraulic lifting capacity.
- Weight of all lifting accessories must be deducted from or added to the above lifting capacities.
- The configurations indicated do not necessarily reflect the standard equipment of the machine.

: Rating over front  
 : Rating over side or 360°



## \* Standard equipment

Hydraulic system
Boom and arm flow regeneration
Swing anti-rebound valves
Spare ports (valve)
One-touch power boost
Breaker piping
Cylinder cushioning & contamination seals
Cab & Interior
Roll Over Protective Structure (ROPS)
Pressurised, sound-insulated and CabSus mounted cab
Heated, adjustable air suspension seat with adjustable headrest and armrest
Jog shuttle switch
Air conditioning with climate control
Pull-up type front window with sun roller blind and removable lower front window
Ceiling light
Intermittent upper windshield wiper
Multiple storage compartments (e.g. document holder under seat)
Rain visor
Flat, spacious, easy-to-clean floor
Cigarette lighter and ashtray
Cup holder
Anti-theft protection
Hot and cool box
Fuel control dial
7" (18 cm) LCD colour monitor panel
Engine speed (RPM) control dial
Speed regulator (auto-idle)
Automatic rear window defroster
4 operating modes & 4 working modes
Control of auxiliary hydraulic flow and pressure
Remote radio ON/OFF switch
12 V spare power socket
Serial communication port for laptop PC interface
Adjustable PPC wrist control levers for arm, boom, bucket and swing, with sliding proportional control for attachments and auxiliary hydraulic buttons
USB port
DPF regeneration switch
Sliding left front and rear windows with lock
Tool storage area
Travel pedals and hand levers
Master key
Safety
Boom and arm cylinder safety valves
Overload warning device
Large handrails and step
Rotating beacon
Rear view camera
Punched metal anti-slip plates
Hydraulic safety lock lever
Safety glass
Hammer for emergency escape
Right and left rearview mirrors
Emergency engine stop
Reinforced cast steel pivot points
Lockable fuel cap and covers
Battery cut-off switch
Halogen work lights (2 front frame, 4 front cab-mounted, 2 rear cab-mounted, 2 boom-mounted and 1 rear side)
Other
Mono boom: 5200 mm – arm: 2600 mm
Counterweight: 3000 kg
DOOSAN DL06K turbocharged, Common Rail direct injection, EU Stage IIIB compliant, EGR Diesel engine combined with e-EPOS System
Auto shut-off fuel filler pump
Double element air cleaner
Fuel pre-filter with water separator sensor
Dry type pre-cleaner
Diesel particulate filter
Dust screen for radiator/oil cooler
Engine overheat prevention system
Engine restart prevention system
Self-diagnostic function
Alternator (24 V, 60 A)
Electric horn
Double element type air cleaner
Toolkit and spare parts for first service
Hydrostatic 2-speed travel system with automatic shift
Remote greasing for swing circle and workgroup pivot points
Attachment management system
Pilot control pattern change
Guards for work lights
Undercarriage
Hydraulic track adjuster
Normal track guards
Greased and sealed track links
600 mm triple grouser shoe

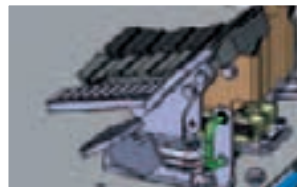
## \* Optional equipment

Cab & Interior
MP3/USB radio or MP3/USB radio with CD player
Safety
FOGS cab - top and front cab guards (ISO 10262)
Front window upper and lower guards
Side view camera
Other
Articulated boom: 5360 mm with 2300 or 2600 mm arm
Arms: 2200 mm or 3100 mm
Counterweight Arti: 3300 kg
Heavy-duty bottom cover
Doosan buckets: full range of GP, HD & Rock buckets
Doosan breaker: DXB260H and Doosan quick-couplers
Hydraulic piping for crusher, quick coupler, clamshell, tilting and rotating buckets
Additional filter for breaker piping
Floating boom function
Wiper for lower front window
Double pump flow
Water separator with heater
Engine coolant heater
Oil-washed air cleaner
Straight travel pedal
Telescopic rotating beacon
Bio oil
Centralised greasing
Undercarriage
Narrow undercarriage 2490 mm
500, 700, 800 & 900 mm triple grouser shoe
Dozer blade 2700, 2800, 2900, 3000 & 3100 mm
High track* (only mono boom and standard undercarriage without dozer)
*under development



### Dozer blade

For dozing and picking up debris and cleaning up the job site. It also increases stability.



### Straight travel pedal

Allows more operator comfort when multi-tasking.



### Engine coolant heater

Improves start-up ability in extremely cold conditions by heating coolant and fuel.



### Doosan buckets

A range of dependable Doosan buckets is available to cover several applications.



### Doosan breakers and quick-couplers

Doosan provides the tough, reliable equipment you need for demolition work.

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Machine Tools

Engines

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### Always a dealer near you

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- Large, dedicated staff of factory-trained aftermarket professionals in the field

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