

DOOSAN
ELECTRIC

Mini Excavator

DX19 Electric

Rated power	15 kW
Operating weight	2,1 t
Bucket capacity	71 l



All-round versatility

Adaptable and smooth

The Doosan DX19 Electric open center hydraulic system with variable displacement pumps uses the energy power more effectively, maximising pump output and offering more comfort, smoothness and accuracy.

- Fast cycle times, together with class-leading breakout forces, ensure maximum productivity.
- Boom and arm cylinder cushioning increases overall smoothness.
- Retractable undercarriage lets you enter buildings through the doors.
- Variety of attachments provides maximum versatility.



Retractable undercarriage

The retractable undercarriage enables you to enter buildings through the doors. Side-shifted work group provides excellent working visibility. New easy-to-operate durable blade extensions. Left-hand side-mounted offset cylinder to minimise chance of damaging surrounding objects.

Transportability

The Doosan DX19 Electric fits easily on a conventional trailer. Easier transportability with new integrated upper structure tie-down points.

Lift more, lift higher

The superior dumping height makes loading trucks easy, while the reach at ground level means you don't need to reposition as often when digging. With enhanced stability and lifting capacity, combined with best-in-class proportional auxiliary flow, the Doosan DX19 Electric offers you the highest versatility in operating a wide range of attachments.

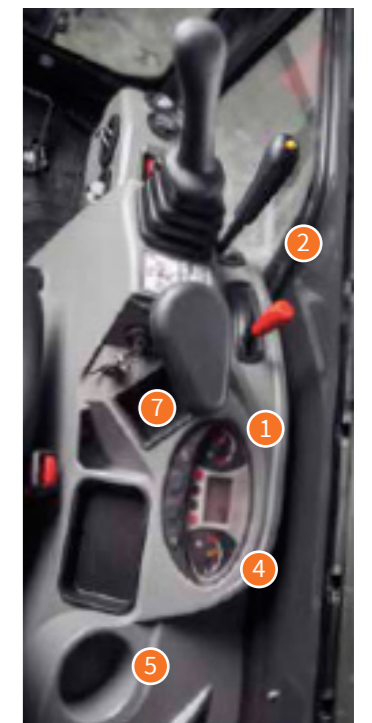
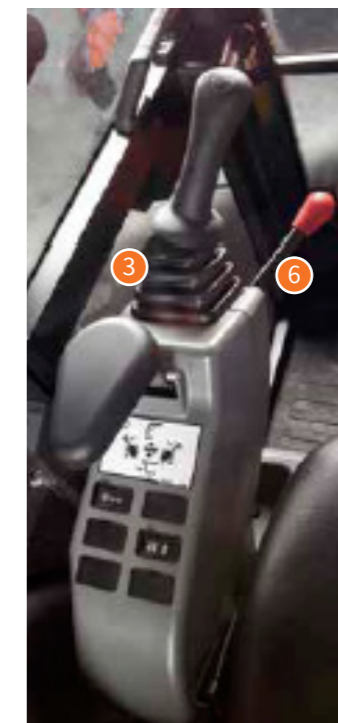
Extendable blade: Long blade for extra stability and easy dustpanability.



Maximum control in every situation

Ergonomics lower effort and raise efficiency

Proportional auxiliary flow means that the excavator's power is matched by smooth, confident manoeuvres. Using 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 and positioned according to the frequency with which they are used. The highest standards of efficiency are just a finger's reach away.



Display

All parameters checked in one view with new control panel (auto electro motor shutdown, auto cab lights switch-off, audible alarm in case of malfunction).

1. Hour meter, service codes, voltage, maintenance clock, RPM
2. General warning
4. Two speeds
5. Electro motor warning
6. Lights
7. Battery meter and alarm
8. Seat belt
9. Hydraulic warning
10. Info button - display menu

Right panel

1. Dozer lever and fast speed switch
2. Travel mode switch
3. Proportional joystick (option)
4. Control panel
5. Cup holder
6. Lock out lever for hydraulics
7. Storage compartment

Left panel

Proportional joystick (option) (including horn button) and undercarriage expandable width switch.

Charging options

Charging time

The battery comes with a type 2 HV charging connector and an on-board charge of 6.6 kW. The charging time is 6 hours (380V/32A) or 12 hours (220V/16A). You can therefore easily charge the machine completely overnight.

Battery

Battery pack LFP 105 | 350 V / 32 kWh with capacity meter and LED indicator. High voltage system resulting in less loss and greater efficiency and higher digging power.

Employability

The Doosan DX19 Electric has an operating time of ten hours. Based on field test results.



Certifications

Guaranteed safety: Everything you need to know about safety requirements and certifications

Working with electric machines requires compliance with many laws and regulations. This is extremely important to guarantee your health and safety, also for our own technicians. We would like to briefly explain some of these certifications to you.



Security requirements

Since the 1st of April 2011, electric vehicles only receive a type approval if they meet specific safety requirements when they are built electric or converted into electric powered or hybrid electric vehicles. EMC R10 automotive, IP65 and NEN ISO 5006 standards are examples of specific safety requirements. What do these certifications mean?

EMC R10 automotive

'EMC' stands for Electro Magnetic Compatibility, "R10" is a component and "automotive" stand for the motor vehicle industry. The EMC R10 Automotive certification includes a variety of approval tests. This means that a machine is tested for all European car electric regulations such as emissions and immunity.

IP

An Ingress Protection (IP)-classification is a method of indicating the degree of protection of the material of enclosures (or other objects). For example, an IP value indicates whether the material is resistant to the penetration of water, objects or dust. This is important to protect the mechanical equipment.

NEN ISO 5006-standard

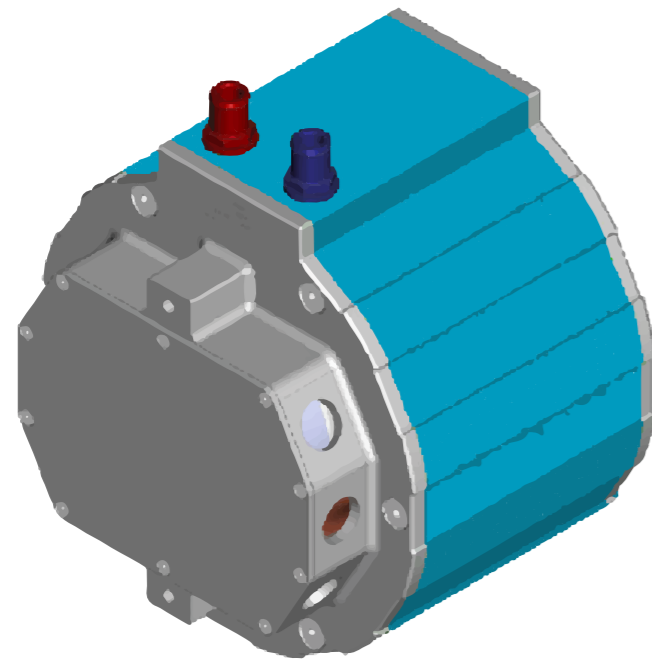
This international standard specifies a test method for determining and evaluating operator visibility. Because the batteries of our electric machines are compact, the operator's field of view from his cab remains optimal.



Perfect performance and capacity

The capacity to be more productive

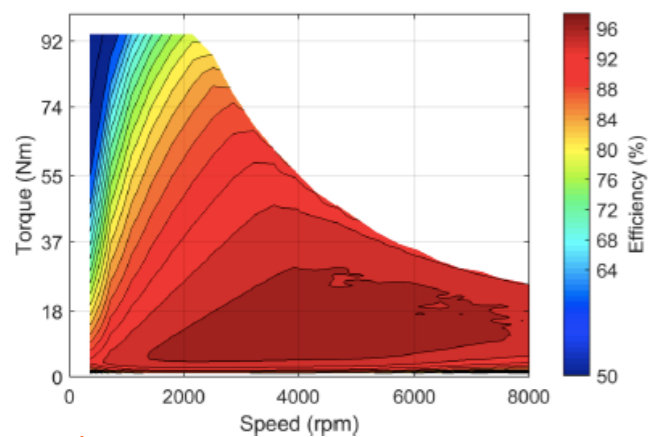
The electric motor of the Doosan DX19 Electric has a high constant power motor also called PM (permanent magnet). The motor has been specially developed for the Doosan DX19 Electric so that the machine can deliver a high torque hand in hand with high efficiency and is also maintenance free.



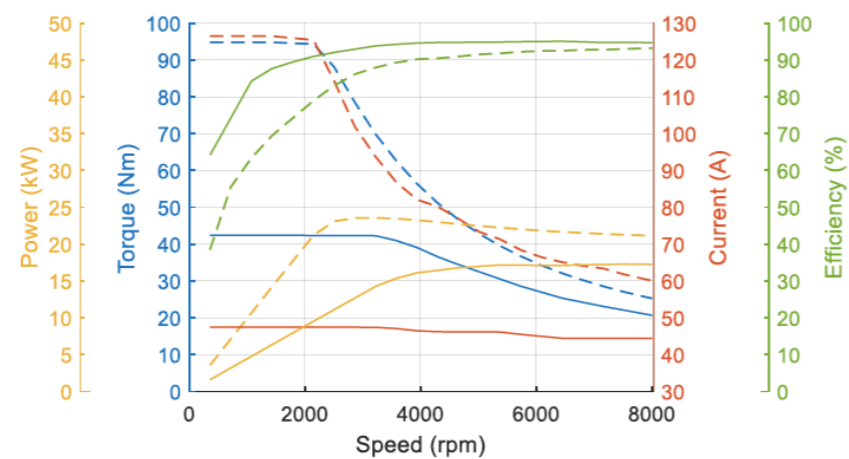
Water cooled electric motor with 15 kW continuous power



Simulated efficiency of the motor application



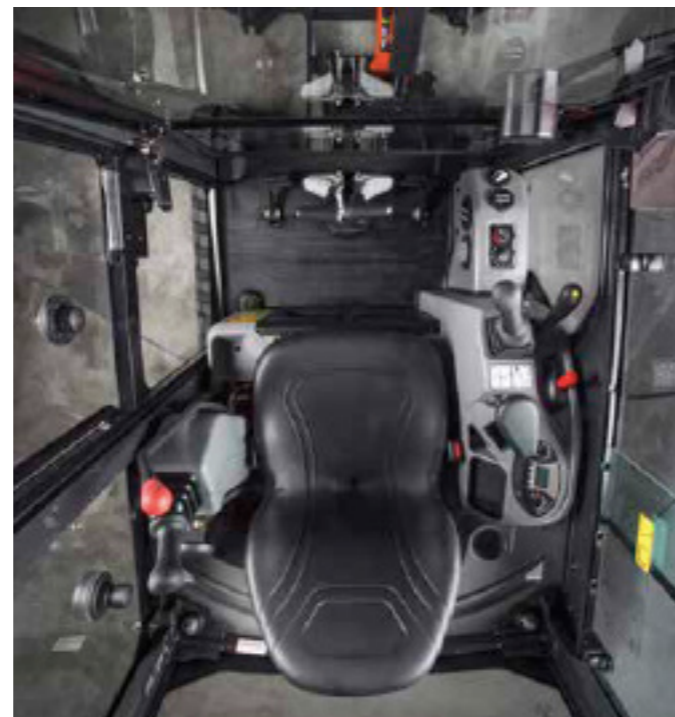
Simulated characteristic motor parameters



The ideal workspace

Operating in comfort

The sophisticated pressurised ISO-certified ROPS cab - together with excellent visibility and stability - provide optimal operator comfort and safety. Comfortably seated, you have easy access to several storage compartments and a clear all-round view of the worksite. Noise and vibration levels are minimised.



Enhanced all-round visibility

The new cab design features large windows and narrow pillars to maximise all-around visibility. Easy to open gas spring-assisted light and rigid front window.

Ergonomic operator environment

Spacious cab with ample leg room, robust ergonomic pedals, large and flat floor, cup holder, storage box, etc.

Cab floor panels

Easy tool-free removable cab floor panels for convenient service.

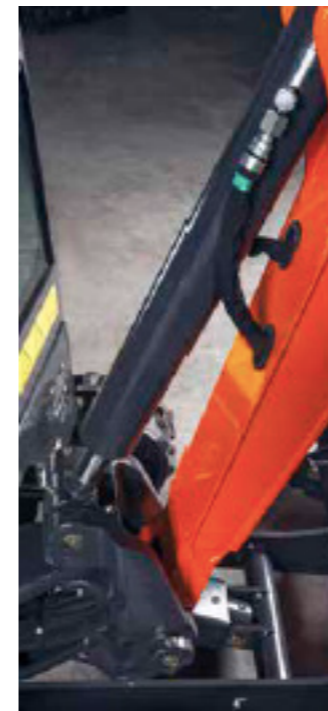


Cab accessibility: The operator can enter & sit down with ease thanks to the wide door.

More durability and less maintenance

Dependable performance for low lifetime cost

Reinforced chassis and optimized design boom ensure even load distribution and great durability. Top quality materials, the most advanced computer-aided design methods and endurance test under the toughest conditions give you the confidence that your excavator will last. The Doosan DX19 Electric is designed for low maintenance with long intervals so that the machine has higher availability. In addition, experienced VOP NEN - 1940 certified and Doosan trained technicians are available to provide additional support if required.



Boom swing

The swing bracket and the boom swing cylinder size ensure powerful and stable performance.

Blade with cylinder and hoses

The blade is extendable to comply with the undercarriage width. The blade cylinder hoses are split near the cab to make their replacement easy.

Undercarriage: Reinforced and expandable undercarriage from 980 mm to 1360 mm.



Cylinders and protected pipes

The cylinder is mounted above the boom to ensure its protection. The pipes and hoses are well routed and protected inside the boom.

Centralised greasing points

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

Technical specifications

Electro motor

Permanent magnet	Motor with high constant power
Nominal power	15 kW
Maximum torque	95 Nm

Hydraulic system

Pump type	Dual piston pump with gear pump
Pump capacity	41,3 l/min
Pump 1 capacity at 2500 RPM	11,3 l/min
Pump 2 capacity at 2500 RPM	15 l/min
Pump 3 capacity at 2500 RPM	15 l/min
Auxiliary flow	30 l/min
Auxiliary relief	180 bar

Performance

Bucket digging force (ISO 6015)	20835 N
Arm digging force (ISO 6015)	10371 N
Long arm digging force (ISO 6015)	9297 N
Drawbar pull	19380 N
Travel speed fast/slow	4,0 / 2,5 km/u
Gradeability	30°

Weights

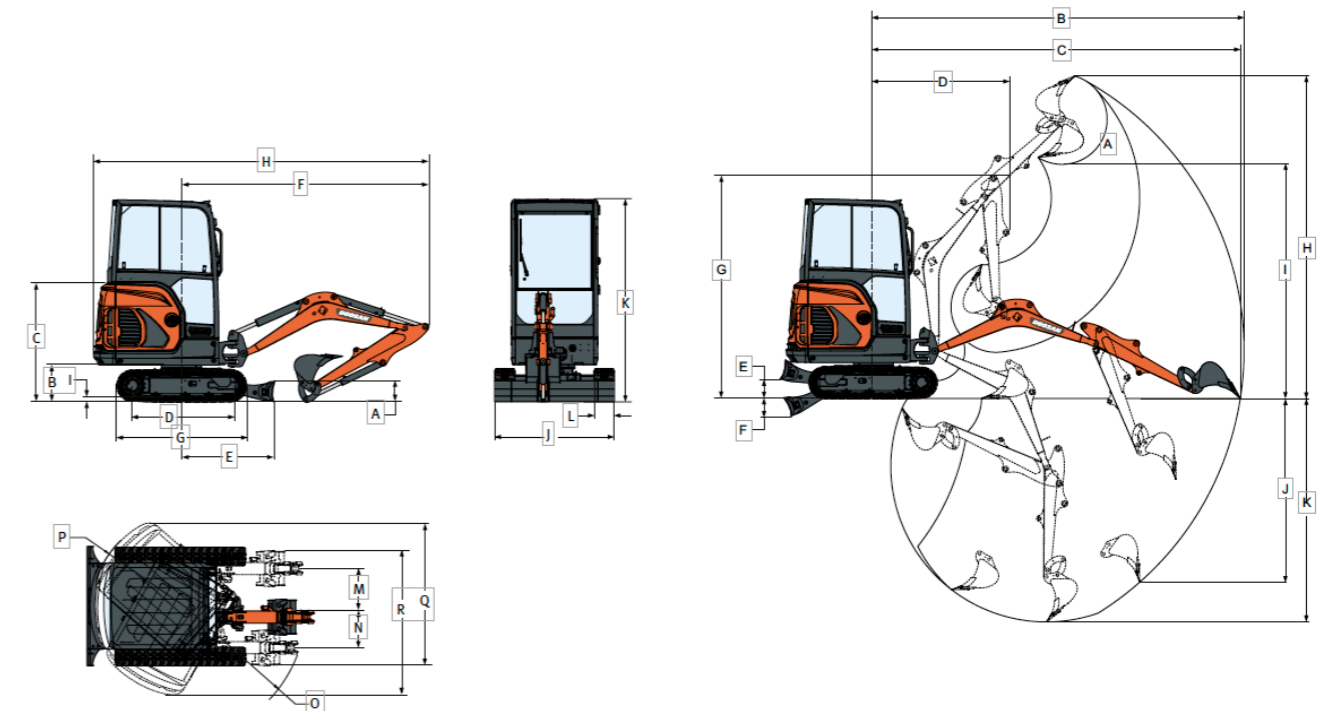
Operating weight with cab	2120 kg
Operating weight with canopy	2024 kg

Fluid capacities

Hydraulic system	19 l
Final drive (each)	0,4 l

Swing mechanism

Swing speed	8,4 tpm
Boom swing angle L/R	80° / 60°
Swing drive	Orbitmotor



Dimensions

A. Blade height	235 mm
B. Ground clearance	419 mm
C. Motor cover height	1340 mm
D. Length of track on ground	1114 mm
E. Machine centre line of blade	1252 mm
F. Min. radius in travel position	2812 mm
G. Overall track length	1476 mm
H. Shipping length	3812 mm
I. Track lug height	25 mm
J. Blade width (retracted)	1360 (980) mm
K. Overall height	2299 mm
L. Track width	230 mm
M. LH boom offset	433 mm
N. RH boom offset	589 mm
O. Min. turning radius	1154 mm
P. Swing clearance, rear	1009 mm
Q. Working width at max. RH rotation	1801 mm
R. Working width at max. LH rotation	1645 mm

Working range

A. Bucket pivot angle	196°
B. Max. reach	4257 mm
C. Max. reach at ground level	4214 mm
D. Min. swing radius	1561 mm
E. Max. blade height	300 mm
F. Max. blade depth	254 mm
G. Max. height at min. swing radius	2564 mm
H. Max. digging height	3701 mm
I. Max. dump height	2693 mm
J. Max. vertical wall depth	2115 mm
K. Max. digging depth	2565 mm



Specifications and design are subject to change without notice. Images of Doosan product may deviate from standard vision.

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