

DOOSAN

Mini Excavators |
DX19



Maximum power: 13.3 hp
Operating weight: 1.9 t
Max. bucket capacity: 65 l



All-round versatility and improved performance

▣ Adaptable & smooth

The DX19 open center hydraulic system with variable displacement pumps uses the engine's 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 DX19 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 DX19 offers you the highest versatility in operating a wide range of attachments.



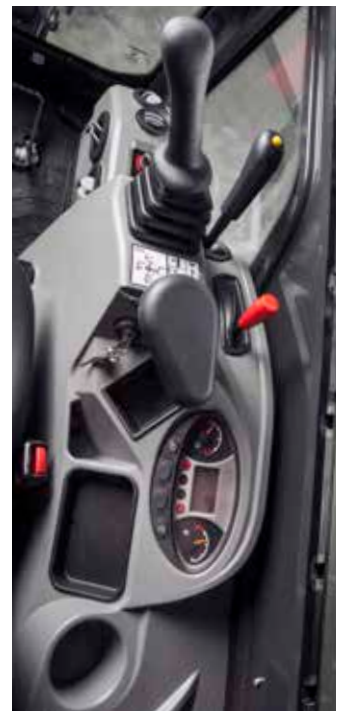
Extendable blade: Long blade for extra stability and easy dustpanability.

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 engine shutdown, auto cab lights switch-off, audible alarm in case of malfunction).

1. Engine hours, job hours, service codes, voltage, maintenance clock, countdown for glow plugs, RPM
2. General warning
3. Engine coolant temp
4. Two speeds
5. Engine warning
6. Lights
7. Fuel gauge and alarm
8. Seat belt
9. Hydraulic warning
10. Info button - Display menu

Right panel

- Dozer lever & fast speed switch
- Travel mode switch
- Proportional joystick
- New control panel

Left panel

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

The ideal workspace – designed around you

▣ 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 & 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 – less maintenance

▣ Dependable performance for low lifetime cost

The reinforced chassis provides strength, while the optimised boom shape ensures uniform load distribution for greater durability. Top quality materials, the most advanced computer-aided design, and endurance testing under the most demanding conditions ensure your excavator keeps on performing. The DX19 is designed for low maintenance with longer intervals - resulting in more machine availability on-site. Meanwhile, skilled Doosan-trained technicians are available to provide extra support when needed.



Boom swing

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

Blade with cylinder & 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.

Cylinders & 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.

Service tool connector

Enables you to have direct access to all maintenance data for easier service & troubleshooting.

Battery cut-off switch

For more safety and to maintain battery capacity.

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



Technical specifications

Engine

Model	Yanmar / 3TNV74F-SPBC (EU Stage V)
No. of cylinders	3
Piston displacement	0.993 l
Max. power @ 2400 RPM (ISO 14396)	11.0 kW (14.7 hp)
Max. torque @ 1800 RPM (SAE J1995)	5.11 kgf/m (50.2 Nm)
Bore × stroke	74 mm × 77 mm
Starter	12 V / 1.4 kW
Batteries - Alternator	12 V / 500 A – 12 V / 40 A
Air filter	Dual dry replaceable paper cartridge

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)	9279 N
Drawbar pull	19380 N
Travel speed fast / slow	4.0 / 2.5 km/h
Gradeability	30°

Weights

Operating weight with cab	1877 kg
Operating weight with canopy	1781 kg
Ground pressure	32.4 kPa

Swing mechanism

Swing speed	8.4 RPM
Boom swing angle L/R	80° / 60°
Swing drive	Orbit motor

Environmental

Noise level LpA (EU Directive 2006/42/EC)	79 dB(A)
Noise level LWA (EU Directive 2000/14/EC)	93 dB(A)
Whole body vibration (ISO 2631-1)	0.74 ms ⁻²
Hand-arm vibration (ISO 5349-1)	1.42 ms ⁻²
Hand-arm vibration (ISO 5349-1) Uncertainty	0.37 ms ⁻²

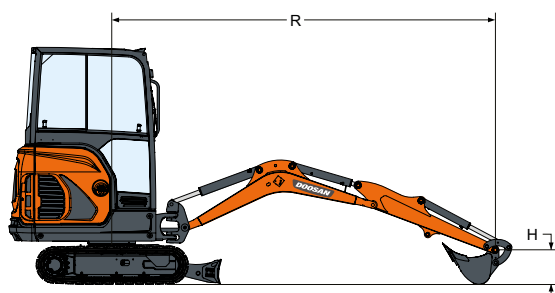
Fluid capacities

Fuel tank	19 l
Hydraulic system	19 l
Cooling system	3.3 l
Engine oil plus oil filter	3.3 l
Final drive (each)	0.4 l

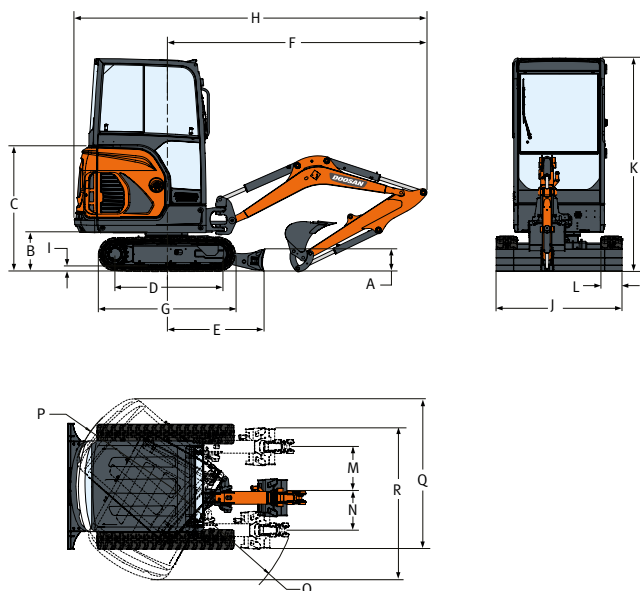
Lift capacities • with canopy • long arm • additional counterweight • without bucket

Lift Point Height [H]	Over blade, blade down			Over blade, blade up			Over side, blade up			Over side, blade up, retracted			Max. radius [R] (mm)
	Lift at max. radius (kg)	Lift radius [R] (kg)		Lift at max. radius (kg)	Lift radius [R] (kg)		Lift at max. radius (kg)	Lift radius [R] (kg)		Lift at max. radius (kg)	Lift radius [R] (kg)		
2.0 m	380 *	-	341 *	249	-	341 *	295	-	341 *	178	-	217	3372
1.0 m	372 *	496 *	412 *	208	496 *	282	244	496 *	334	147	373	208	3708
0.0 m	364 *	855 *	466 *	203	475	267	240	540	317	146	323	193	3691
-1.0 m	351 *	735 *	406 *	230	444	261	275	521	298	166	324	186	3315

- Lifting capacities are in compliance with ISO 10567:2007(E).
- 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.
- For lifting capacity with bucket, simply subtract the actual weight of the bucket from the values.
- The configurations indicated do not necessarily reflect the standard equipment of the machine.

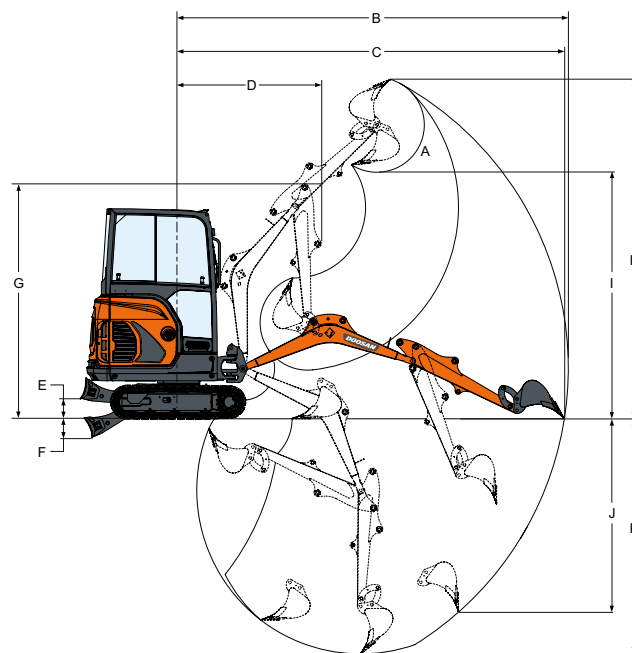


Technical specifications



Dimensions

A	Blade height	235 mm
B	Ground clearance	419 mm
C	Engine cover height	1340 mm
D	Length of track on ground	1114 mm
E	Machine centre line to blade	1252 mm
F	Min. radius in travel position	2812 mm
G	Overall track length	1476 mm
H	Shipping length - std arm	3812 mm
I	Shipping length - long arm	3831 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 - std arm	4084 mm
B	Max. reach - long arm	4257 mm
C	Max. reach at ground level - std arm	4039 mm
C	Max. reach at ground level - long arm	4214 mm
D	Min. swing radius - std arm	1542 mm
D	Min. swing radius - long arm	1561 mm
E	Max. blade height	220 mm
F	Max. blade depth	204 mm
G	Max. height at min. swing radius	2564 mm
H	Max. digging height - std arm	3573 mm
H	Max. digging height - long arm	3701 mm
I	Max. dump height - std arm	2566 mm
I	Max. dump height - long arm	2693 mm
J	Max. vertical wall depth - std arm	1948 mm
J	Max. vertical wall depth - long arm	2115 mm
K	Max. digging depth - std arm	2385 mm
K	Max. digging depth - long arm	2565 mm

Standard and optional equipment

Cab ROPS TOPS	○
Canopy	●
Extendable undercarriage	●
Track expansion switch	●
2 nd travel speed	●
Dozer blade with two blade extensions	●
1 st auxiliary line (double acting) on arm	●
Hydraulic joystick control	○
Stationary seat	●
Control console locks	●
Foldable & ergonomic pedals	●
Engine speed control lever	●
Retractable seat belt	●
Upper-structure four-point tie down	●
Advanced service diagnostics	●
Engine with overheat automatic shutdown	●
Full fuel warning alarm	●

Hydraulic and travel control lockouts	●
Battery switch off	●
Spark arrester muffler	●
Boom light metal protection	●
Storage compartment	●
Cup holders	●
Long blade	●
1090 mm arm	●
1270 mm arm	○

Standard: ●
Optional: ○

Some of these options may be standard in some markets. Some of these options may not be available for certain markets. Please check with your local DOOSAN dealer for more information about availability or to adapt your machine to your application needs.

Powered by Innovation

