



# DX63-3

Engine Power : 36.2 kW (48.5 HP) @ 2200 rpm

Operational Weight : 6140 - 6260 kg

Bucket capacity(SAE) : 0.069 - 0.21m<sup>3</sup>



## All-round versatility and improved fuel efficiency

Whatever your application you can rely on the DX63-3 compact conventional tail swing to take on all these tasks with efficient, dependable performance that saves you time and money.

- Improved load sensing closed-center hydraulic system uses the engine power more effectively, maximising pump output and offering more comfort, smoothness and accuracy regardless of the load
- Increased digging power, lifting capacity, travel speed and traction force for higher performance
- Improved fuel efficiency means you can keep costs down and reduce the environmental impact
- The standard dozer blade float function allows fast finishing work, simply by travelling backwards



### Higher gradeability and work capability

Thanks to the high tractive effort and strong swing torque, the DX63-3 offers excellent capability for working on slopes.



### Boom swing

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



### RPM dial / Auto idle

Thanks to the electronic control, the optimal engine rpm can be set per workload. The auto idle function applied as standard helps fuel efficiency and reduces noise levels.



### Main control valve

The machine can be precisely controlled in single and complex operations and the front hydraulic flow matched to the work load. This contributes to great fuel economy and smooth operation.

## The ideal workspace – designed around you

The DX63-3 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 and comfortable seat. Comfortably seated, you have easy access to several storage compartments and a clear all-round view of the worksite. Noise and vibration levels are reduced while air conditioning allows you to maximise your productivity and return on investment.



### Ergonomic operator environment

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



### Adjustable seat, head rest and arm rests

For more operator comfort.



### Air conditioning

Allows the operator to adjust the airflow to suit conditions.

## Maximum controllability in every situation

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 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.

### Colour LCD monitor panel

The new 5.7" colour LCD panel is located within the operator's line of sight. The monitor is user-friendly and gives access to machine settings, maintenance data and auxiliary flow control. Any abnormality is clearly displayed on the screen, allowing you to work safely and confidently with an accurate overview of all conditions.



### Gauges

- Engine coolant and hydraulic oil temperatures
- Engine speed
- Fuel level
- Eco symbol: changes colour when operating conditions change (idle, normal or loading)
- Eco gauge: shows the average fuel efficiency over the last minute of operation
- Warning symbols
- Anti-theft function
- Maintenance schedule
- Diagnostic ability



### Right controls



### Proportional joystick with auxiliary thumb control



### Dozer float function and travel mode switch

## More durability – less maintenance

A reinforced chassis provides strength, while the optimised boom shape ensures uniform load distribution for more durability. Top quality materials, the most advanced computer-aided design and endurance testing under the most demanding conditions ensure your excavator will keep on performing. The DX63-3 is designed for low maintenance with longer intervals resulting in more machine availability on site while skilled Doosan-trained technicians are available to provide extra support when needed.



### Tilting cab

To simplify access to maintenance components.



### Centralised greasing points

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



### Battery cut-off switch

For more safety and to maintain battery capacity.

# Technical specifications

## \* Engine

<b>• Model</b>	Yanmar 4TNV94L 4-Cycle Water-Cooled, Direct injection
<b>• No. of cylinders</b>	4
<b>• Rated power at 2200 rpm</b>	36.2 kW (48.5 HP) (Gross)
<b>• Max. torque at 1400 rpm</b>	21 kgf/m (207 Nm)
<b>• Idle (low - high)</b>	1050 [± 25] - 2350 [± 25] rpm
<b>• Piston displacement</b>	3054 cm <sup>3</sup>
<b>• Bore x stroke</b>	∅ 94 mm x 110 mm
<b>• Starter</b>	12 V / 3.0 kW
<b>• Batteries – Alternator</b>	12 V / 100 Ah – 12 V, 80 A
<b>• Air filter</b>	Double element with automatic dust evacuation.

## \* Fluid capacities

Fuel tank:	78 l
Cooling system (radiator capacity):	10 l
Hydraulic oil tank:	65 l
Engine oil:	10.2 l
Travel device:	2 x 1.4 l

## \* Environment

Noise levels comply with environmental regulations (dynamic values)

<b>• Noise level LwA</b>	Guaranteed: 97 dB(A) (2000/14/EC)
	Measured: 96 dB(A) (2000/14/EC)
<b>• Operator LpA</b>	73 dB(A) (ISO 6396)

## \* 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. Steel track shoes made of induction-hardened alloy with triple grouser. Heat-treated connecting pins. Hydraulic track adjuster with shock-absorbing tension mechanism.

### • Number of rollers and links per side

Upper rollers:	1 (∅ 130 mm)
Lower rollers:	5 (∅ 154 mm)
Number of links:	39
Overall track length:	2500 mm

## \* Hydraulic system

- The hydraulic system enables independent or combined operations
- Load sensing closed centre hydraulic with variable displacement piston pump
- Proportional joystick control
- Two travel speeds offer either increased torque or high speed
- Auto-idle
- Auto shift travel
- Control of flow in auxiliary hydraulic circuits

## \* Pumps

Pump	Type	Displacement (cm <sup>3</sup> /rev)	Max. flow @ 2200 rpm (l/min)
Main (load sensing)	Tandem, Axial piston	60	132

### • Maximum system pressure

Boom/arm/bucket:	296 kg/cm <sup>2</sup>
Work/travel:	255 kg/cm <sup>2</sup>
Swing:	265 kg/cm <sup>2</sup>

## \* Swing mechanism

- High-torque, axial piston motor with planetary reduction gear
- Swing bearing: single-row, shear type ball bearing with induction-hardened internal gear
- Internal gear and pinion immersed in lubricant
- Max. swing speed: 9.4 rpm
- Max. swing torque: 1317 kgf/m
- Boom swing angle L/R: 70° / 50°

## \* 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)

2.6 - 4.7 km/h

### • Maximum traction

5.6 t

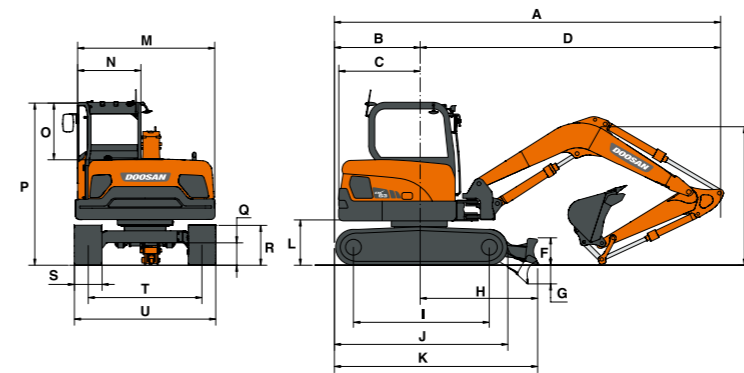
### • Maximum gradeability

30° / 58%

## \* Hydraulic cylinders

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

Cylinders	Quantity	Bore x rod diameter x stroke (mm)
Boom	1	105 x 60 x 731
Arm	1	85 x 55 x 856
Bucket	1	80 x 50 x 600
Dozer	1	110 x 60 x 183
Boom swing	1	110 x 55 x 550



## \* Dimensions

	DX63-3	
	1600	1900
<b>Boom length</b>	2900	
<b>Arm length</b>	1600	1900
A Shipping length	5670	5685
B Rear length	1270	1285
C Tail swing radius	1270	1285
D Front length	4230	4230
E Shipping height (boom)	2135	2350
E Shipping height (hose)	2175	2370
F Dozer height	410	410
G Dozer cut below grade	440	440
H Center line to blade	1870	1870
I Tumbler distance	1990	1990
J Track length	2500	2500
K Track length to dozer	3150	3150
L Counterweight clearance	635	635
M Upperstructure width	1920	1920
N Cab width	1030	1030
O Cab height above bonnet	930	930
P Height over cab	2550	2550
Q Ground clearance	310	310
R Track height	590	590
S Shoe width std.	400	400
T Track gauge	1580	1580
U Overall width	1980	1980
V Boom swing distance, left	605	605
W Boom swing distance, right	829	829

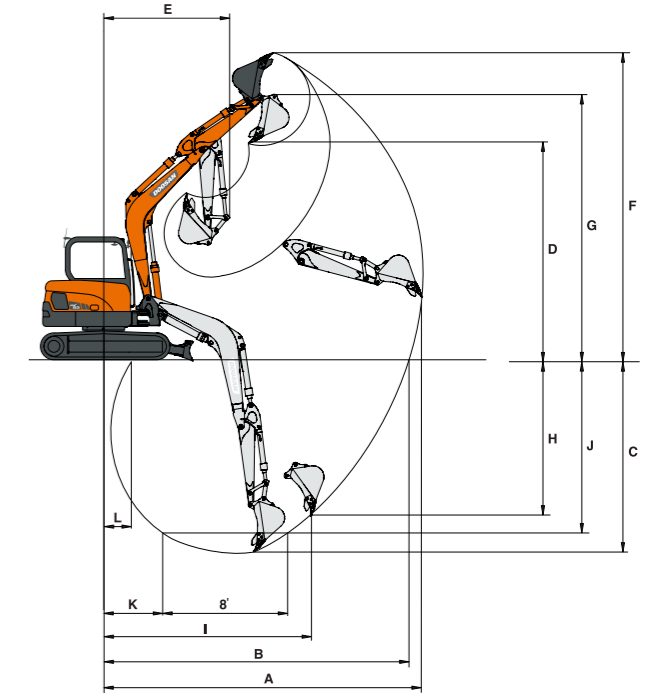
## \* Weight

With 1.60 m arm and 0.21 m<sup>3</sup> bucket

	Shoe width (mm)	Operating weight (kg)	Ground pressure (kgf/cm <sup>2</sup> )
Rubber	400	6140	0.36
Steel	400	6260	0.36

## \* Digging forces (ISO)

		Boom: 2.9 m	Boom: 2.9 m
		Arm: 1.9 m	Arm: 1.6 m
Bucket (SAE / ISO)	t	3.95 / 4.41	3.95 / 4.41
	kN	38.7 / 43.2	38.7 / 43.2
Arm (SAE / ISO)	t	2.55 / 2.62	2.84 / 2.93
	kN	25.0 / 25.7	27.8 / 28.7



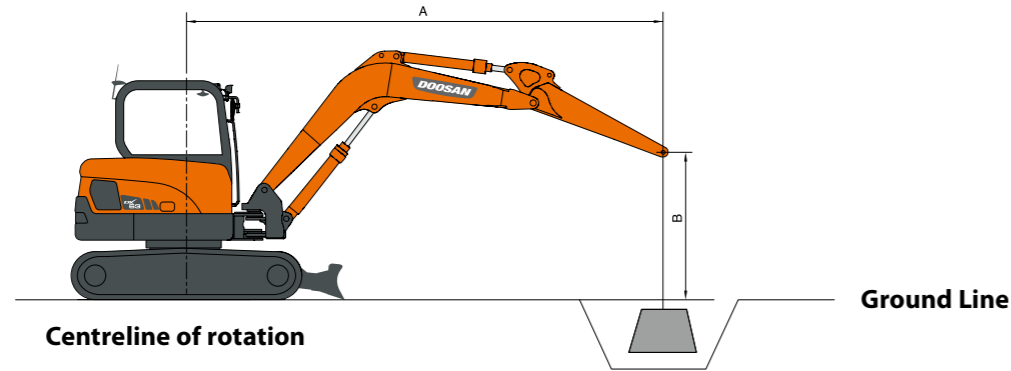
## \* Working range

	DX63-3	
	1600	1900
<b>Boom length</b>	2900	
<b>Arm length</b>	1600	1900
<b>Bucket capacity - m<sup>3</sup></b>	0.21	0.21
A Max. digging reach	6060	6355
B Max. digging reach (ground)	5930	6230
C Max. digging depth	3815	4115
D Max. loading height	4045	4260
E Min. swing radius	2360	2475
F Max. digging height	5785	6005
G Max. bucket pin height	4930	5145
H Max. vertical wall depth	3125	3435
I Max. radius vertical - mm	3795	3850
J Max. digging depth (8' level)	3425	3765
K Min. radius 8' line	925	910
L Min. digging reach	170	-190

## \* Buckets

Capacity (m <sup>3</sup> )	Width (mm)		Weight (kg)	Boom: 2900 mm	
	With side cutters	W/O side cutters		Arm: 1600 mm	Arm: 1900 mm
0.21	724	645	152	B	B
0.069	362	300	93.5	A	A

A: Suitable for materials with a density less than or equal to 2000 kg/m<sup>3</sup>  
 B: Suitable for materials with a density less than or equal to 1600 kg/m<sup>3</sup>  
 For reference only.



## Standard configuration - Dozer up

Standard track width: 1980 mm • Boom: 2900 mm • Arm: 1600 mm • W/O Bucket • Shoe: 400 mm

Units: 1000 kg

A (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (m)
B (m)	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	
4.0							1.17	0.98			1.02	0.85	4.32
3.0							1.16	0.96			0.8	0.67	4.95
2.0					1.75	1.42	1.11	0.92	0.78	0.65	0.71	0.59	5.27
1.0					1.62	1.3	1.05	0.87	0.75	0.62	0.68	0.56	5.34
0 (Ground)					1.56	1.24	1.02	0.83	0.74	0.61	0.7	0.58	5.18
-1.0	2.56 *	2.56 *	3.16 *	2.39	1.55	1.24	1	0.82			0.79	0.65	4.77
-2.0	4.07 *	4.07 *	3.3	2.45	1.58	1.26					1.04	0.85	3.98

## Standard configuration - Dozer down

Standard track width: 1980 mm • Boom: 2900 mm • Arm: 1600 mm • W/O Bucket • Shoe: 400 mm

Units: 1000 kg

A (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (m)
B (m)	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	
4.0							1.34 *	1.29			1.23 *	1.13	4.32
3.0							1.38 *	1.28			1.13 *	0.9	4.95
2.0					2.18 *	1.94	1.65 *	1.23	1.44 *	0.87	1.13 *	0.8	5.27
1.0					2.98 *	1.81	1.96 *	1.18	1.55 *	0.85	1.19 *	0.77	5.34
0 (Ground)					3.27 *	1.74	2.15 *	1.14	1.60 *	0.83	1.35 *	0.79	5.18
-1.0	2.56 *	2.56 *	3.16 *	3.16 *	3.11 *	1.74	2.09 *	1.13			1.56 *	0.89	4.77
-2.0	4.07 *	4.07 *	4.06 *	3.66	2.51 *	1.77					1.57 *	1.17	3.98

## Option 1 - Dozer up

Standard track width: 1980 mm • Boom: 2900 mm • Arm: 1900 mm • W/O Bucket • Shoe: 400 mm

Units: 1000 kg

A (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (m)
B (m)	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	
5.0											1.26 *	1.17	3.65
4.0							1.14 *	1.03			0.93	0.78	4.69
3.0							1.22	1.02	0.83	0.7	0.75	0.63	5.27
2.0					1.86	1.51	1.17	0.97	0.81	0.68	0.68	0.56	5.56
1.0					1.71	1.38	1.1	0.91	0.79	0.65	0.65	0.54	5.63
0 (Ground)					1.62	1.3	1.06	0.87	0.76	0.63	0.67	0.55	5.49
-1.0	2.16 *	2.16 *	2.80 *	2.45	1.6	1.28	1.04	0.85	0.76	0.63	0.74	0.61	5.10
-2.0	3.39 *	3.39 *	3.38	2.5	1.62	1.29	1.05	0.86			0.93	0.76	4.39
-3.0			2.47 *	2.47 *	1.41 *	1.37					1.33 *	1.33 *	3.05

## Option 1 - Dozer down

Standard track width: 1980 mm • Boom: 2900 mm • Arm: 1900 mm • W/O Bucket • Shoe: 400 mm

Units: 1000 kg

A (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (m)
B (m)	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	☺	☺*	
5.0											1.26 *	1.26 *	3.65
4.0							1.14 *	1.14 *			1.03 *	1.03 *	4.69
3.0							1.22 *	1.22 *	1.26 *	0.93	0.95 *	0.84	5.27
2.0					1.88 *	1.88 *	1.50 *	1.29	1.34 *	0.91	0.95 *	0.76	5.56
1.0					2.76 *	1.89	1.85 *	1.23	1.48 *	0.88	1.00 *	0.73	5.63
0 (Ground)					3.21 *	1.81	2.09 *	1.18	1.58 *	0.86	1.11 *	0.75	5.49
-1.0	2.16 *	2.16 *	2.80 *	2.80 *	3.18 *	1.79	2.12 *	1.16	1.51 *	0.85	1.34 *	0.83	5.10
-2.0	3.39 *	3.39 *	4.66 *	3.74	2.74 *	1.81	1.81 *	1.17			1.48 *	1.04	4.39
-3.0			2.47 *	2.47 *	1.41 *	1.41 *					1.33 *	1.33 *	3.05

- 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.

☺ : Rating over front  
☺\* : Rating over side or 360°

## \* Standard equipment

Engine
Yanmar Diesel engine combined with VCU System, direct injection, EU Stage IIIA compliant
Auto-idle
Hydraulic system
Spare ports (valve)
Breaker piping
Cylinder cushioning & contamination seals
Control of auxiliary hydraulic flow and settings from the display panel, 1 & 2 way auxiliary
Cab & Interior
Roll Over Protective Structure (ROPS)
Pressurised, sound-insulated cab
Adjustable seat with adjustable headrest and armrest
Air conditioning
Pull-up type front window and removable lower front window
Sliding right windows with lock
Ceiling light
Intermittent upper windshield wiper
Multiple storage compartments
Flat, spacious, easy-to-clean floor
Cup holder
Anti-theft protection
5.7" (14.5 cm) LCD colour monitor panel
Engine speed (RPM) control dial
Hydrostatic 2-speed travel system with manual or automatic shift
Radio-ready
12 V power socket
Serial communication port for laptop PC interface
Adjustable PPC joystick for arm, boom, bucket and swing, with sliding proportional control for attachments and auxiliary hydraulic buttons
Travel pedals and hand levers
Master key
Safety
Rotating beacon
Safety glass
Hammer for emergency escape
Right and left rearview mirrors
Emergency engine stop switch
Engine overheat and restart prevention system
Parking brake and cab swing lock automatic
Reinforced cast steel pivot points
Battery cut-off switch
Halogen work light (1 on cab top)
Lockable fuel cap
Alarm for travel
Other
Mono boom: 2900 mm – arm: 1600 mm
Counterweight: 830 kg
Fuel filler pump
Double element air cleaner
Engine hood with gas spring
Self-diagnostic function
Battery (12 V, 100 Ah), alternator (12 V, 80 A)
Electric horn
Remote greasing for swing circle and workgroup pivot points
Guards for boom lights
Undercarriage
Fixed undercarriage
Hydraulic track adjuster
Greased and sealed track links
Steel tracks 400 mm
Dozer blade (width: 1980 mm & height: 410 mm)

## \* Optional equipment

Cab & Interior
MP3/USB radio with CD player (kit)
Pattern change
Sun Visor
Suspension seat with heat
Hydraulic system
Quick Coupler piping
Clamshell piping
Rotating piping
Dozer lock valve piping
Safety
FOGS cab - top and front cab guards (ISO 10262) (kit)
Front window upper and lower guards
Overload warning device
Rear view camera
Roof guard
Boom and arm cylinder safety valves
Other
Long arm: 1900 mm with counterweight: 934 kg
Undercarriage
Dozer double check valve (kit)
Rubber tracks 400 mm

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.



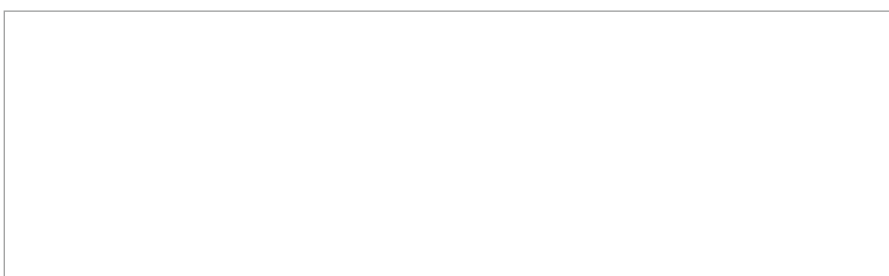


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