

# DOOSAN

Mini Excavators |  
DX62R-3 / DX63-3



Maximum power: 48.5 hp  
Operating weight: 6.25 / 6.37 t  
Max. bucket capacity: 0.175 m<sup>3</sup>



# All-round versatility and improved fuel efficiency

## Two models with novel features

Whatever your application you can rely on the DX62R-3 ideal working range with reduced tail swing and 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-centr 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 DX62R-3 & DX63-3 offer 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

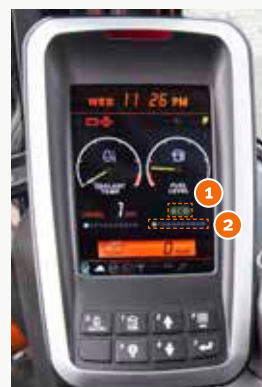
The machine can be precisely controlled in single and complex operations and the front hydraulic flow matched to the work load. This contributes to great fuel economy and smooth operation.

# 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 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 (12)
- Anti-theft function
- Maintenance schedule
- Diagnostic ability

1. Eco symbol
2. Eco gauge



Right controls



Proportional joystick with auxiliary thumb control



Dozer float function and travel mode switch

# The ideal workspace – designed around you

## ▣ The cabin has been ergonomically designed with comfort in mind

The DX62R-3 & DX63-3 are 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.

# 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 DX62R-3 & DX63-3 are 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

	DX62R-3	DX63-3
Model	Yanmar 4TNV94L 4-cycle water-cooled, direct injection	
No. of cylinders	4	
Rated power at 2200 rpm (SAE J1349)	36.2 kW (48.5 hp)	
Max. torque at 1400 rpm	21 kgf·m (207 Nm)	
Idle (low - high)	1050 [± 25] - 2350 [± 25] rpm	
Piston displacement	3054 cm <sup>3</sup>	
Bore × stroke	94 mm × 110 mm	
Starter	12 V / 3.0 kW	
Batteries – Alternator	12 V / 100 Ah – 12 V, 80 A	
Air filter	Double element with automatic dust evacuation	

## Fluid capacities

	DX62R-3	DX63-3
Fuel tank	78 l	
Cooling system (radiator capacity)	10 l	
Hydraulic oil tank	65 l	
Engine oil	10.2 l	
Travel device	2 × 1.4 l	

## Environment

Noise levels comply with environmental regulations (dynamic values).

### Noise emission

	DX62R-3	DX63-3
Noise level LwA (2000/14/EC)	Guaranteed: 97 dB(A) Measured: 96 dB(A)	
Noise level LpA (ISO 6396)	73 dB(A)	

## 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 (option) made of induction-hardened alloy with triple grouser. Heat-treated connecting pins. Hydraulic track adjuster with shock-absorbing tension mechanism.

### Number of rollers and track shoes per side

	DX62R-3	DX63-3
Upper rollers	1 (Ø 130 mm)	
Lower rollers	5 (Ø 154 mm)	
Number of track shoes	39	
Overall track length	2500 mm	

## 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
0.175	724	654	141	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.

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

### Maximum system pressure

	DX62R-3	DX63-3
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

### Swing speed & torque

	DX62R-3	DX63-3
Maximum swing speed	9.4 rpm	
Maximum 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.

### Speed & traction

	DX62R-3	DX63-3
Travel speed (low - high)	2.6 - 4.7 km/h	
Maximum traction	5.6 t	
Maximum gradeability	30° / 58%	

## Hydraulic cylinders

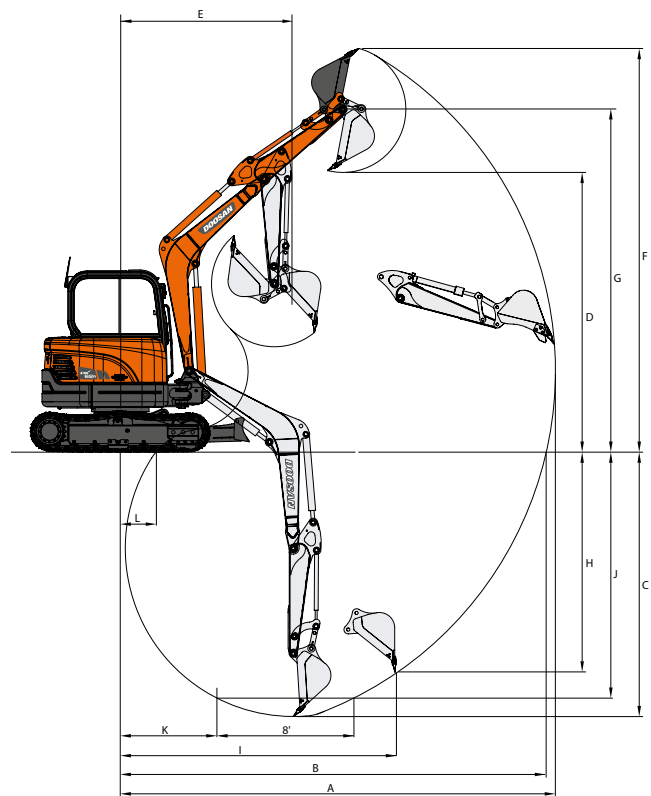
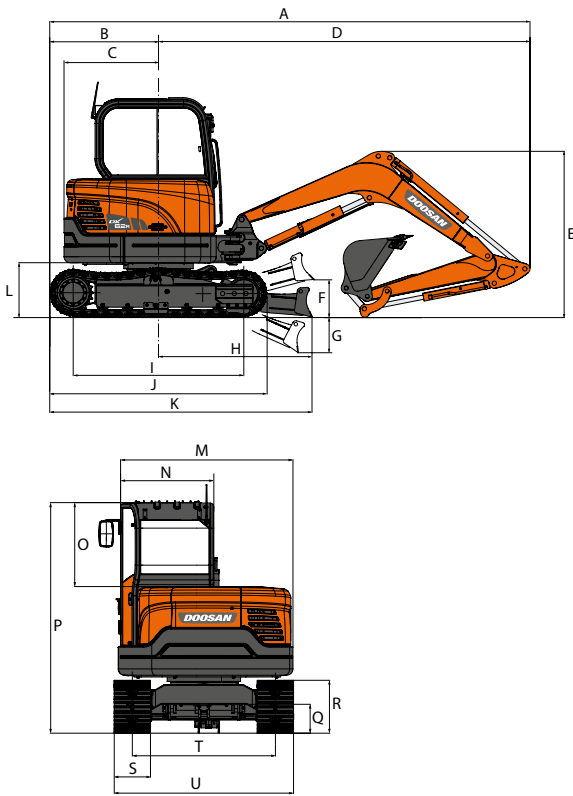
Piston rods and cylinder bodies of high-strength steel. Shock-absorbing mechanism fitted in cylinders for shock-free operation and extended life.

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

## Digging forces (ISO)

Boom length - mm		2900	
Arm length - mm		1900	1600
Bucket - m <sup>3</sup>		0.175	0.210
Bucket	t	4.41	4.41
	kN	43.2	43.2
Arm	t	2.62	2.93
	kN	25.7	28.7

# Dimensions & working range



## Dimensions

	mm	DX62R-3		DX63-3	
		2900	1900	1600	1900
<b>Boom length</b>	<b>mm</b>				
<b>Arm length</b>	<b>mm</b>				
A Shipping length	mm	5670	5670	5670	5685
B Rear length	mm	1270	1270	1270	1285
C Tail swing radius	mm	1100	1115	1270	1285
D Front length	mm	4400	4400	4230	4230
E Shipping height (boom)	mm	2135	2350	2135	2350
F Shipping height (hose)	mm	2175	2370	2175	2370
G Dozer height	mm	410	410	410	410
H Dozer cut below grade	mm	440	440	440	440
I Center line to blade	mm	1870	1870	1870	1870
J Tumbler distance	mm	1990	1990	1990	1990
K Track length	mm	2500	2500	2500	2500
L Track length to dozer	mm	3150	3150	3150	3150
M Counterweight clearance	mm	635	635	635	635
N Upperstructure width	mm	1920	1920	1920	1920
O Cab width	mm	1030	1030	1030	1030
P Cab height above bonnet	mm	930	930	930	930
Q Height over cab	mm	2550	2550	2550	2550
R Ground clearance	mm	310	310	310	310
S Track height	mm	590	590	590	590
T Shoe width std.	mm	400	400	400	400
U Track gauge	mm	1580	1580	1580	1580
Overall width	mm	1980	1980	1980	1980
Boom swing distance, left	mm	605	605	605	605
Boom swing distance, right	mm	829	829	829	829

## Working range

	mm	DX62R-3		DX63-3	
		2900	1900	1600	1900
<b>Boom length - mm</b>	<b>mm</b>				
<b>Arm length - mm</b>	<b>mm</b>				
<b>Bucket capacity - m<sup>3</sup></b>	<b>m<sup>3</sup></b>				
A Max. digging reach	mm	6230	6525	6060	6355
B Max. digging reach (ground)	mm	6100	6400	5930	6230
C Max. digging depth	mm	3815	4115	3815	4115
D Max. loading height	mm	4045	4260	4045	4260
E Min. swing radius	mm	2530	2645	2360	2475
F Max. digging height	mm	5785	6005	5785	6005
G Max. bucket pin height	mm	4930	5145	4930	5145
H Max. vertical wall depth	mm	3125	3435	3125	3435
I Max. radius vertical	mm	3965	4020	3795	3850
J Max. digging depth (8° level)	mm	3425	3765	3425	3765
K Min. radius 8° line	mm	1095	1080	925	910
L Min. digging reach	mm	340	-20	170	-190

## Weight

	Arm (mm)	Bucket (m <sup>3</sup> )	Shoe width (mm)	Operating weight (kg)	Ground pressure (kgf/cm <sup>2</sup> )
Rubber	1900	0.175	400	6250	0.36
Steel	1900	0.175	400	6250	0.36

# Lifting capacities

## DX62R-3 / DX63-3

### Standard configuration - Dozer up • Standard track width: 1980 mm • W/O Bucket

Unit: 1000 kg	A		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		Max. lift		
	B		☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	A (m)
One-piece boom: 2900 mm Arm: 1600 mm Shoe: 400 mm		4.0 m							1.17	0.98			1.02	0.85	4.32
		3.0 m							1.16	0.96			0.8	0.67	4.95
		2.0 m					1.75	1.42	1.11	0.92	0.78	0.65	0.71	0.59	5.27
		1.0 m					1.62	1.3	1.05	0.87	0.75	0.62	0.68	0.56	5.34
		0.0 m					1.56	1.24	1.02	0.83	0.74	0.61	0.7	0.58	5.18
		-1.0 m	2.56 *	2.56 *	3.16 *	2.39	1.55	1.24	1	0.82			0.79	0.65	4.77
		-2.0 m	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 • W/O Bucket

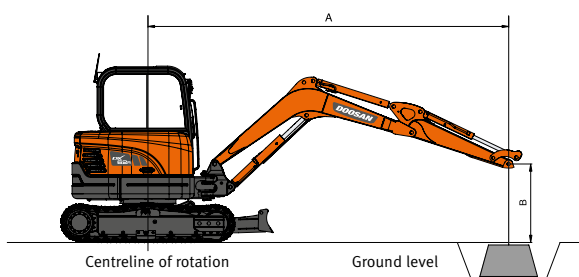
Unit: 1000 kg	A		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		Max. lift		
	B		☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	A (m)
One-piece boom: 2900 mm Arm: 1600 mm Shoe: 400 mm		4.0 m							1.34 *	1.29			1.23 *	1.13	4.32
		3.0 m							1.38 *	1.28			1.13 *	0.9	4.95
		2.0 m					2.18 *	1.94	1.65 *	1.23	1.44 *	0.87	1.13 *	0.8	5.27
		1.0 m					2.98 *	1.81	1.96 *	1.18	1.55 *	0.85	1.19 *	0.77	5.34
		0.0 m					3.27 *	1.74	2.15 *	1.14	1.60 *	0.83	1.35 *	0.79	5.18
		-1.0 m	2.56 *	2.56 *	3.16 *	3.16 *	3.11 *	1.74	2.09 *	1.13			1.56 *	0.89	4.77
		-2.0 m	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 • W/O Bucket

Unit: 1000 kg	A		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		Max. lift		
	B		☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	A (m)
One-piece boom: 2900 mm Arm: 1900 mm Shoe: 400 mm		5.0 m											1.26 *	1.17	3.65
		4.0 m							1.14 *	1.03			0.93	0.78	4.69
		3.0 m							1.22	1.02	0.83	0.7	0.75	0.63	5.27
		2.0 m					1.86	1.51	1.17	0.97	0.81	0.68	0.68	0.56	5.56
		1.0 m					1.71	1.38	1.1	0.91	0.79	0.65	0.65	0.54	5.63
		0.0 m					1.62	1.3	1.06	0.87	0.76	0.63	0.67	0.55	5.49
		-1.0 m	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 m	3.39 *	3.39 *	3.38	2.5	1.62	1.29	1.05	0.86			0.93	0.76	4.39
		-3.0 m			2.47 *	2.47 *	1.41 *	1.37					1.33 *	1.33 *	3.05

### Option 1 - Dozer down • Standard track width: 1980 mm • W/O Bucket

Unit: 1000 kg	A		1.0 m		2.0 m		3.0 m		4.0 m		5.0 m		Max. lift		
	B		☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	☺	☹	A (m)
One-piece boom: 2900 mm Arm: 1900 mm Shoe: 400 mm		5.0 m											1.26 *	1.26 *	3.65
		4.0 m							1.14 *	1.14 *			1.03 *	1.03 *	4.69
		3.0 m							1.22 *	1.22 *	1.26 *	0.93	0.95 *	0.84	5.27
		2.0 m					1.88 *	1.88 *	1.50 *	1.29	1.34 *	0.91	0.95 *	0.76	5.56
		1.0 m					2.76 *	1.89	1.85 *	1.23	1.48 *	0.88	1.00 *	0.73	5.63
		0.0 m					3.21 *	1.81	2.09 *	1.18	1.58 *	0.86	1.11 *	0.75	5.49
		-1.0 m	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 m	3.39 *	3.39 *	4.66 *	3.74	2.74 *	1.81	1.81 *	1.17			1.48 *	1.04	4.39
		-3.0 m			2.47 *	2.47 *	1.41 *	1.41 *					1.33 *	1.33 *	3.05



☺ : Rating over front  
☹ : Rating over side or 360°

- 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.

# Standard and optional 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, 1st auxiliary 2 way & 2nd auxiliary 2 way	●

## 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 for arm, boom, bucket and swing, with sliding proportional control for attachments and auxiliary hydraulic buttons	●
Travel pedals and hand levers	●
Master key	●
MP3/USB radio with CD player (kit)	○

## Safety

Boom and arm cylinder safety valves	●
Overload warning device	●
Rotating beacon	●
Hydraulic safety lock lever	●
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	●
FOGS cab - top and front cab guards (ISO 10262) (kit)	○
Front window upper and lower guards	○

## 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	●
Long arm: 1900 mm with counterweight: 934 kg	○
Hydraulic piping for crusher, quick coupler, clamshell, tilting and rotating buckets	○

## Undercarriage

Fixed undercarriage	●
Hydraulic track adjuster	●
Rubber tracks 400 mm	●
Dozer blade (width: 1980 mm & height: 410 mm)	●
Dozer double check valve (kit)	○
Steel tracks 400 mm	○
Greased and sealed track links	○
3rd auxiliary clamshell	○

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.

