

# 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) (SAE J1349)
<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. Track shoes (option) 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 links per side</b>	Upper rollers: 1 (ø 130 mm) Lower rollers: 5 (ø 154 mm) Number of links: 39 Overall track length: 2500 mm
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## \* 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

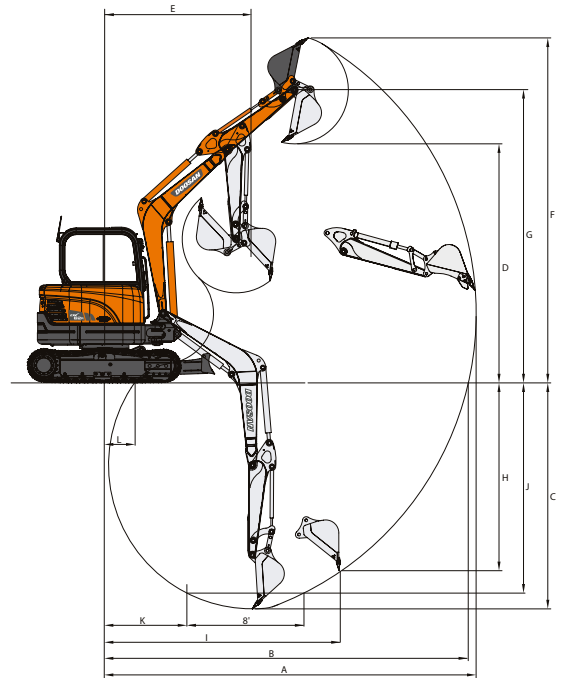
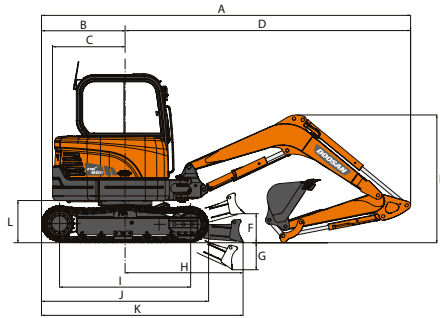
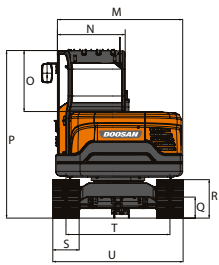
## • Maximum gradeability

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

	DX62R-3		DX63-3	
	2900		2900	
Boom length - mm				
Arm length - mm	1600	1900	1600	1900
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
E Shipping height (hose) - mm	2175	2370	2175	2370
F Dozer height - mm	410	410	410	410
G Dozer cut below grade - mm	440	440	440	440
H Center line to blade - mm	1870	1870	1870	1870
I Tumbler distance - mm	1990	1990	1990	1990
J Track length - mm	2500	2500	2500	2500
K Track length to dozer - mm	3150	3150	3150	3150
L Counterweight clearance - mm	635	635	635	635
M Upperstructure width - mm	1920	1920	1920	1920
N Cab width - mm	1030	1030	1030	1030
O Cab height above bonnet - mm	930	930	930	930
P Height over cab - mm	2550	2550	2550	2550
Q Ground clearance - mm	310	310	310	310
R Track height - mm	590	590	590	590
S Shoe width std. - mm	400	400	400	400
T Track gauge - mm	1580	1580	1580	1580
U 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

	DX62R-3		DX63-3	
	2900		2900	
Boom length - mm				
Arm length - mm	1600	1900	1600	1900
Bucket capacity - m <sup>3</sup>	0.175	0.175	0.175	0.175
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

With 1.90 m arm and 0.175 m<sup>3</sup> bucket

	Shoe width (mm)	Operating weight (kg)	Ground pressure (kgf/cm <sup>2</sup> )
Rubber	400	6250	0.36
Steel	400	6370	0.36

### \* Digging forces (ISO)

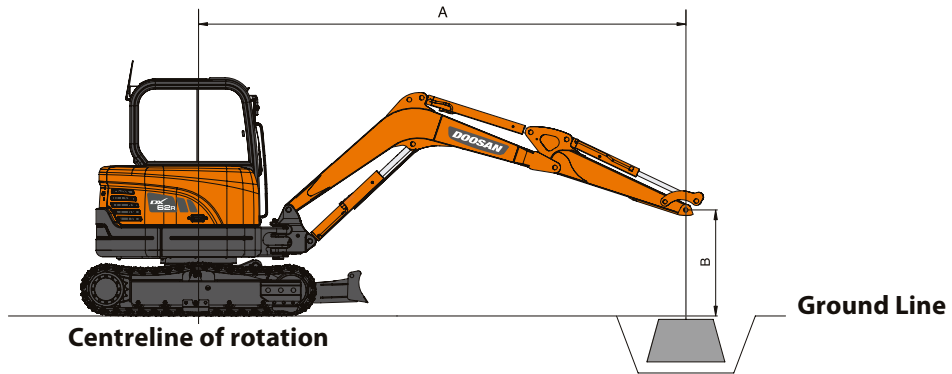
		Boom: 2.9 m Arm: 1.9 m Bucket: 0.175 m <sup>3</sup>	Boom: 2.9 m Arm: 1.6 m Bucket: 0.21 m <sup>3</sup>
		Bucket (SAE / ISO)	t
	kN	38.7 / 43.2	38.7 / 43.2
Arm (SAE / ISO)	t	2.55 / 2.62	2.84 / 2.93
	kN	25.0 / 25.7	27.8 / 28.7

### \* 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.

# Lifting capacities



## 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) \ B (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (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) \ B (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (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) \ B (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (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) \ B (m)	1.0		2.0		3.0		4.0		5.0		Max. lift		A (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 and optional equipment

## \* 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, 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
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
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
Rubber tracks 400 mm
Dozer blade (width: 1980 mm & height: 410 mm)

## \* Optional equipment

Cab & Interior
MP3/USB radio with CD player (kit)
Safety
FOGS cab - top and front cab guards (ISO 10262) (kit)
Front window upper and lower guards
Other
Long arm: 1900 mm with counterweight: 934 kg
Hydraulic piping for crusher, quick coupler, clamshell, tilting and rotating buckets
Undercarriage
Dozer double check valve (kit)
Steel tracks 400 mm
3rd auxiliary clamshell

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.

