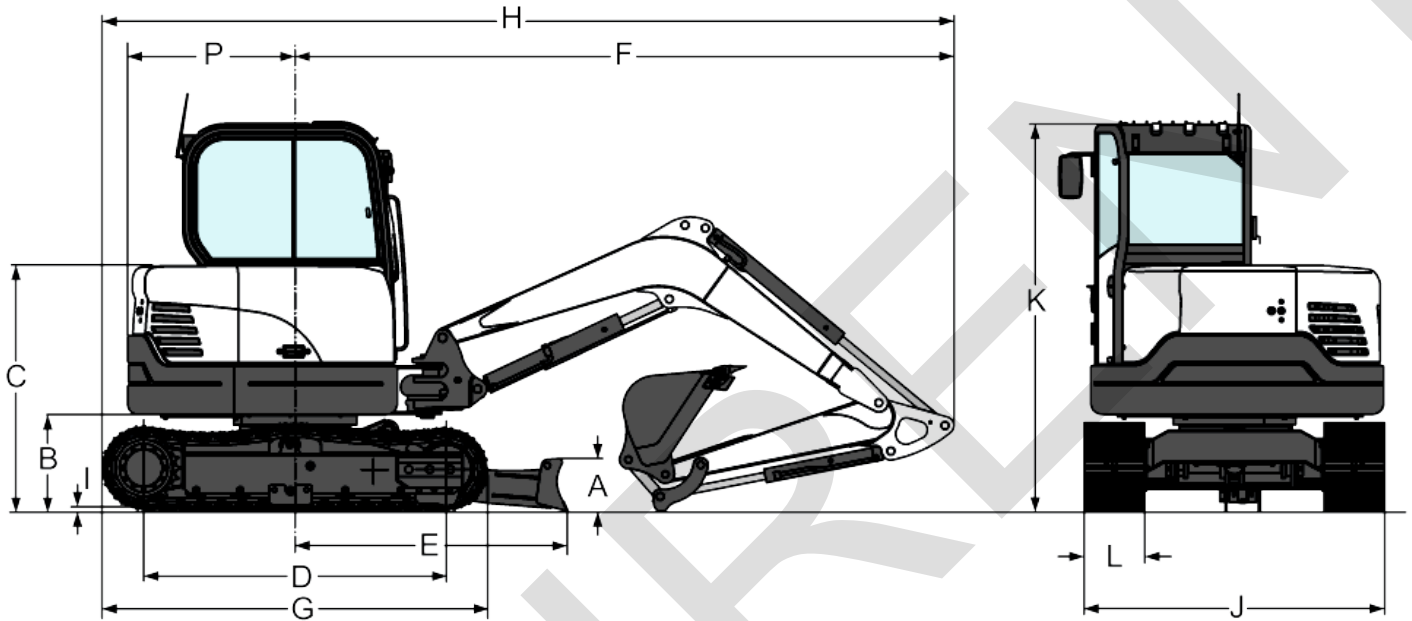
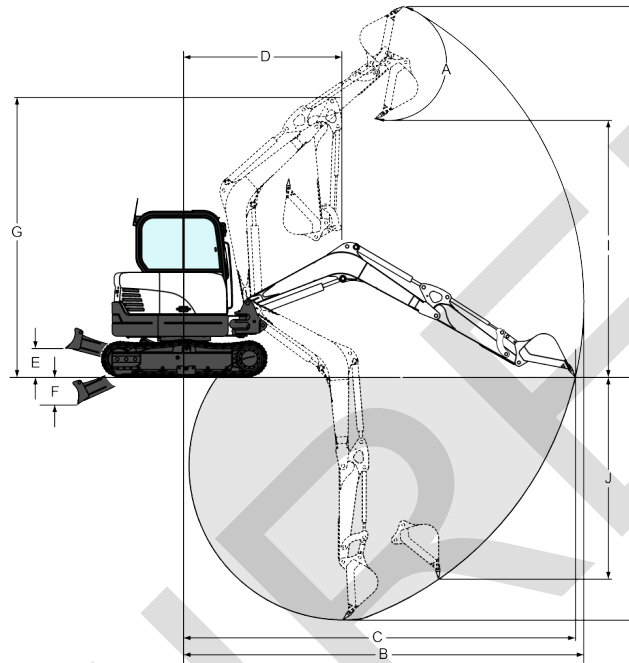


Dimensions



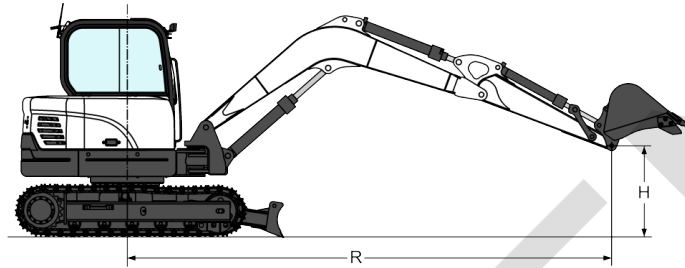
(A) Blade height	410.0 mm
(B) Clearance, upper structure to ground line	635.0 mm
(C) Ground line to top of engine cover	1620.0 mm
(D) Length of track on ground	1990.0 mm
(E) Machine centre line to blade	1870.0 mm
(F) Minimum radius in travel position	4400.0 mm
(F) Minimum radius in travel position, long dipperstick	4399.0 mm
(G) Overall length of track assembly	2500.0 mm
(H) Overall length in travel position	5670.0 mm
(H*) Overall length in travel position, long dipperstick	5669.0 mm
(I) Track lug height	21.0 mm
(J) Blade width	1980.0 mm
(K) Height	2550.0 mm
(L) Track width	400.0 mm
(M) Machine centre line to working equipment centre line, left-hand rotation	605.0 mm
(N) Machine centre line to working equipment centre line, right-hand rotation	829.0 mm
(O) Minimum turning radius	2530.0 mm
(O) Minimum turning radius, long dipperstick	2645.0 mm
(P) Swing clearance, rear	1100.0 mm
(Q) Working width at maximum right-hand rotation	2147.0 mm
(•) Boom length (boom pivot to arm pivot)	2900.0 mm
(•) Standard arm length (arm pivot to bucket pivot)	1600.0 mm
(•) Optional arm length (arm pivot to bucket pivot)	1900.0 mm
<i>(Values with a "*" are for the long dipperstick)</i>	

Working Range



(A) Bucket pivot angle	179°
(B) Maximum reach of working equipment	6230.0 mm
(B) Maximum reach of working equipment, long dipperstick	6525.0 mm
(C) Maximum reach at ground level	6100.0 mm
(C*) Maximum reach at ground level, long dipperstick	6400.0 mm
(D) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted	2530.0 mm
(D*) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted, long dipperstick	2645.0 mm
(E) Maximum blade height	460.0 mm
(F) Maximum blade depth	440.0 mm
(G) Maximum height of working equipment with dipperstick retracted	4381.0 mm
(G) Maximum height of working equipment with dipperstick retracted, long dipperstick	4386.0 mm
(H) Maximum bucket tooth height	5785.0 mm
(H*) Maximum bucket tooth height, long dipperstick	6005.0 mm
(I) Maximum dump height	4045.0 mm
(I*) Maximum dump height, long dipperstick	4260.0 mm
(J) Maximum depth of vertical wall which can be excavated	3125.0 mm
(J) Maximum depth of vertical wall which can be excavated, long dipperstick	3435.0 mm
(K) Maximum digging depth	3815.0 mm
(K*) Maximum digging depth, long dipperstick	4115.0 mm

(Values with a "" are for the long dipperstick)*

Lift Capacity (Standard dipperstick - Object handling applications excluded)

Rated lift capacity over blade, blade down

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
4000	4320	1230*	-	1340*	-
3000	4950	1130*	-	1380*	-
2000	5270	1130*	2180*	1650*	1440*
1000	5340	1190*	2980*	1960*	1550*
Ground	5180	1350*	3270*	2150*	1600*
-1000	4770	1560*	3110*	2090*	-

* Rated hydraulic lift capacity

Rated lift capacity over blade, blade up

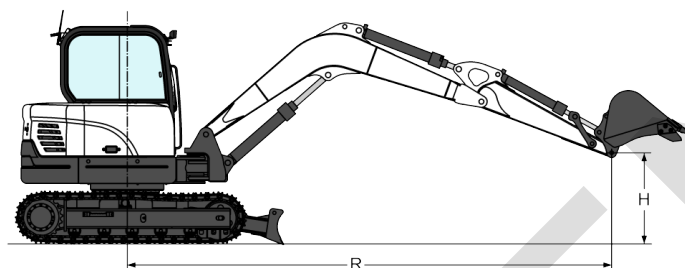
Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
4000	4320	1020	-	1170	-
3000	4950	800	-	1160	-
2000	5270	710	1750	1110	780
1000	5340	680	1620	1050	750
Ground	5180	700	1560	1020	740
-1000	4770	790	1550	1000	-

* Rated hydraulic lift capacity

Rated lift capacity over side, blade up

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
4000	4320	1130	-	1290	-
3000	4950	900	-	1280	-
2000	5270	800	1940	1230	870
1000	5340	770	1810	1180	850
Ground	5180	790	1740	1140	830
-1000	4770	890	1740	1130	-

* Rated hydraulic lift capacity

Lift Capacity (Long dipperstick - Object handling applications excluded)

Rated lift capacity over blade, blade down

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
5000	3650	1260*	-	-	-
4000	4690	1030*	-	1140*	-
3000	5270	950*	-	1220*	1260*
2000	5560	950*	1880*	1500*	1340*
1000	5630	1000*	2760*	1850*	1480*
Ground	5490	1110*	3210*	2090*	1580*
-1000	5100	1340*	3180*	2120*	1510*

* Rated hydraulic lift capacity

Rated lift capacity over blade, blade up

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
5000	3650	1260*	-	-	-
4000	4690	930	-	1140*	-
3000	5270	750	-	1220*	830
2000	5560	680	1860	1170	810
1000	5630	650	1710	1100	790
Ground	5490	670	1620	1060	760
-1000	5100	740	1600	1040	760

* Rated hydraulic lift capacity

Rated lift capacity over side, blade up

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
5000	3650	1170	-	-	-
4000	4690	780	-	1030	-
3000	5270	630	-	1020	700
2000	5560	560	1510	970	680
1000	5630	540	1380	910	650
Ground	5490	550	1300	870	630
-1000	5100	610	1280	850	630

* Rated hydraulic lift capacity

Performance

Digging force, dipperstick (ISO 6015)	29300 N
Digging force, long dipperstick (ISO 6015)	26200 N
Digging force, bucket (ISO 6015)	44100 N
Drawbar pull	55000 N
Ground pressure with rubber tracks	34.40 kPa
Ground pressure with steel tracks	35.20 kPa
Ground pressure with long dipperstick and rubber tracks	35.00 kPa
Ground pressure with long dipperstick and steel tracks	35.90 kPa

Cycle Times

Boom raise time	2.2 s
Boom lower time	2.1 s
Bucket curl time	2.1 s
Bucket dump time	3.1 s
Dipperstick retract time	2.6 s
Dipperstick extend time	2.8 s
Boom swing left time	6.7 s
Boom swing right time	8.7 s
Blade raise time	2.1 s
Blade lower time	2.9 s
Slew rate	9.6 RPM

Weights

Operating weight with ROPS cab , rubber tracks, standard dipperstick, standard bucket (SAE J732):	6130 kg
Additional weight for steel tracks	196 kg
Standard arm length (arm pivot to bucket pivot)	1600.0 mm
Additional weight for long dipperstick	127 kg
Boom length (boom pivot to arm pivot)	2900.0 mm

Engine

Make / model	Yanmar / 4TNV94L-ZXSDB
Fuel	Diesel
Cooling	Liquid
Maximum power at 2200 RPM (DIN 6271)	36.2 kW
Maximum governed speed	2200.0 RPM
High idle speed	2350.0 RPM
Low idle speed	1050.0 RPM
Maximum net torque at 1400 RPM (SAE J1995)	206.0 Nm
Number of cylinders	4
Displacement	3054 cm ³
Bore	94.0 mm
Stroke	110.0 mm
Air filter	Dry, dual element, replaceable paper cartridge
Ignition	Diesel-compression
Starting aid	Intake air heater

Electrical

Alternator	12 V — 80 A
Battery	12 V — 100 Ah
Starter	12 V — 3.0 kW

Hydraulic System

Pump type	One engine-driven tandem axial piston pump
Pump capacity	132.00 L/min
System relief pressure for implement and travel circuits:	250.00 bar
System relief pressure for auxiliary circuits	210.00 bar
Load sensing relief pressure:	230.00 bar
Control valve	9 spool
Hydraulic filter	Full-flow replaceable — 10 µm
Fluid lines	SAE standard tubelines, hoses, and fittings
Auxiliary flow	85.00 L/min

Hydraulic Cylinders

Boom cylinder	Cushion up
Boom cylinder bore	105.0 mm
Boom cylinder rod	60.0 mm
Boom cylinder stroke	731.0 mm
Dipperstick cylinder	Cushion retract and extend
Dipperstick cylinder bore	85.0 mm
Dipperstick cylinder rod	55.0 mm
Dipperstick cylinder stroke	856.0 mm
Bucket cylinder	No cushion
Bucket cylinder bore	80.0 mm
Bucket cylinder rod	50.0 mm
Bucket cylinder stroke	600.0 mm
Boom swing cylinder	No cushion
Boom swing cylinder bore	110.0 mm
Boom swing cylinder rod	55.0 mm
Boom swing cylinder stroke	550.0 mm
Blade cylinder	No cushion
Blade cylinder bore	110.0 mm
Blade cylinder rod	60.0 mm
Blade cylinder stroke	183.0 mm

Buckets

Width (mm)	Weight (kg)	Struck capacity (m³)	Heaped capacity (m³)
300	85	-	0.062
400	105	-	0.091
450	110	-	0.107
500	115	-	0.122
600	130	-	0.155
700	145	-	0.183
750	155	-	0.202
800	160	-	0.214
900	175	-	0.245
1000	190	-	0.280

Slew System

Boom swing, left	70°
Boom swing, right	50°
Slew circle	Single row shear-type ball bearings with internal gear
Slew drive	Axial piston motor with brake

Drive System

Travel motor	Each track is driven by a dual speed hydraulic axial piston motor
Drive reduction	Planetary gear reduction 53.706:1

Traction

Track width	400.0 mm
Track adjusters	Grease type with shock absorbing recoil springs
Track type, standard	Rubber
Track type, optional	Steel
Travel speed, low range	2.7 km/h
Travel speed, high range	4.4 km/h
Undercarriage	Crawler-type tractor design with reinforced box-section track roller frame and sealed track rollers
Number of track rollers per side	1 top, 5 bottom
Gradeability	30°

Brakes

Slew brake	Spring applied, hydraulically released, multi-disk brake
Travel brake	Spring applied, hydraulically released, multi-disk brake

Fluid Capacities

Cooling system	10.00 L
Engine lubrication plus oil filter	10.20 L
Fuel reservoir	78.00 L
Hydraulic reservoir	65.00 L
Hydraulic system	111.00 L
Final drive case (each)	1.40 L

Fluid Specifications

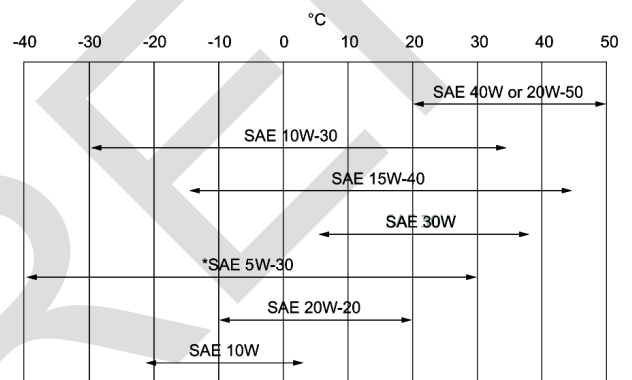
Engine coolant

Ethylene glycol/water mix (50% - 50%) with freeze protection to -37°C

5 L can - 6987803A, 25 L container - 6987803B, 209 L drum - 6987803C, 1000 L tank - 6987803D

Engine oil

Oil must meet API Service Classification of CD, CE, CF4, CG4, CI4 or better. Recommended SAE viscosity number for anticipated temperature range.



Hydraulic fluid

* Can be used only when available with appropriate diesel rating. For synthetic oil use the recommendation from the oil manufacturer.

Bobcat Superior SH, 5 L can - 6987791A, 25 L container - 6987791B, 209 L drum - 6987791C, 1000 L tank - 6987791D.

Bobcat Bio Hydraulic, 5 L can - 6987792A, 25 L container - 6987792B, 209 L drum - 6987792C, 1000 L tank - 6987792D

Controls

Engine

Hand dial on the right hand side. Electronically controlled Engine. Auto idle system to reduce fuel consumption. Key type starter switch and shutdown.

Starting

Right hand lever.

Blade

Right joystick.

Boom swing

Two joysticks control boom, bucket, dipperstick and upper structure slew.

Hydraulics

Electronic switch on the right hand joystick.

Auxiliary hydraulics

Upper structure slew lock for holding and service

Hydraulic lock on motor.

Steering

Direction and speed controlled by two hand levers or two foot pedals.

Instrumentation

- Engine coolant temperature gauge
- Engine coolant temperature warning indicator
- Fuel gauge
- Low fuel indicator
- Air filter restriction indicator

- Charging system indicator
- Engine oil pressure indicator
- Air intake heater indicator
- Two-speed range indicator
- Hour meter
- Work light indicator
- Overload warning indicator
- Water in fuel filter warning indicator
- Engine check warning indicator

Serviceability

Fuel filter is external and has key lock for vandal proofing

Access is available to the following through the rear tailgate or side access hood:

- Air cleaner with indicator
- Battery
- Cooling system (engine oil and hydraulic oil coolers) for cleaning
- Control valve
- Engine oil and fuel filters
- Engine oil level
- Fuel filler
- Hydraulic valve bank
- Starter
- Sight gauges for hydraulic level

Central grease point for swing bearing, swing pinion, and offset cylinder

Tailgate and access cover have locks for vandal-proofing.

Easy access to all grease points.

Standard Features

- 1980 mm dozer blade
- 400 mm rubber track
- 5.7 inch LCD screen
- Engine/hydraulic monitor with shutdown
- Fingertip auxiliary hydraulic control
- Control console locks
- Hydraulic joystick controls
- Two-speed travel
- Lockable storage compartment
- Horn
- Work lights
- Retractable seat belt
- Suspension seat with high back
- Consoles with forwards/backwards adjustable displacement
- TOPS/ROPS cab ¹
- Boom & arm safety valves
- Harness for rotating beacon
- Fully adjustable air conditioning
- Overload warning device
- Sun visor
- Left rear view mirror
- Electric refueling pump
- Auto idle
- Auto shift travel

- Auxiliary hydraulics (1st and 2nd circuits)
- Auxiliary line on arm with quick couplers
- Warranty: 12 months, 2000 hours (whichever occurs first)

Options

Options

- Steel tracks
- Third auxiliary hydraulic line (Clamshell Piping)
- Long dipperstick

Attachments

- Augers
- Breakers
- Clayspade Buckets, Klac
- Clayspade Buckets, Lehnhoff
- Clayspade Buckets, Pin-on
- Digging Buckets, Klac
- Digging Buckets, Lehnhoff
- Digging Buckets, Pin-on
- Tilt Buckets, Klac
- Tilt Buckets, Lehnhoff
- Tilt Buckets, Pin-on
- X-Change couplers

Environmental

Noise level LpA(EU Directive 2000/14/EC)	73 dB(A)
Noise level LWA(EU Directive 2000/14/EC)	97 dB(A)
Whole body vibration (ISO 2631–1)	0.35 ms ⁻²
Hand-arm vibration (ISO 5349–1)	0.94 ms ⁻²

Safety

Retractable seat belt, standard
Operator cab, standard

Should always be worn when operating the excavator
Four post cabin shall meet Rollover Protective Structure (ROPS) in accordance with ISO 3471 and Tip Over Protective Structure (TOPS) in accordance with ISO 12117.

Grab handles, standard
Safety tread, standard
Front working lights, standard
Control lockout, standard

Should always be used when entering/exiting excavator.

Upper carriage slew lock, standard

Use for indoor and low light operation.

Pedal lock, standard
Travel motion alarm, optional
Special applications kit, optional
Operator's handbook, standard

Operator console locks out work group and travel functions when in the upright position.

An automatic disc brake locks the upper structure to the undercarriage for transport.

Prevents activation of the boom swing function.

Weather-resistant operator handbook attached to the inside of the cabin, providing operational instructions and warning decals with pictorials and international symbols.

1. Tip Over Protective Structure (TOPS) – Meets requirements of ISO 12117