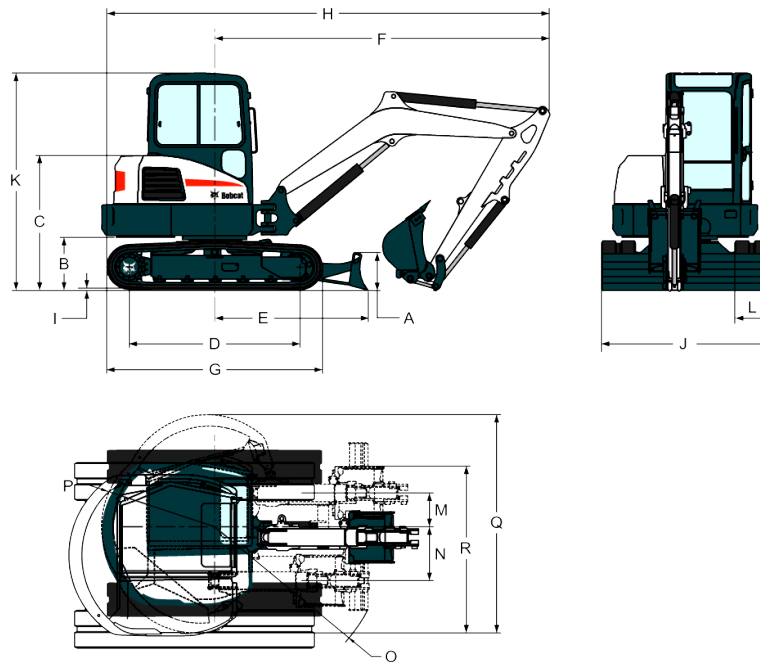


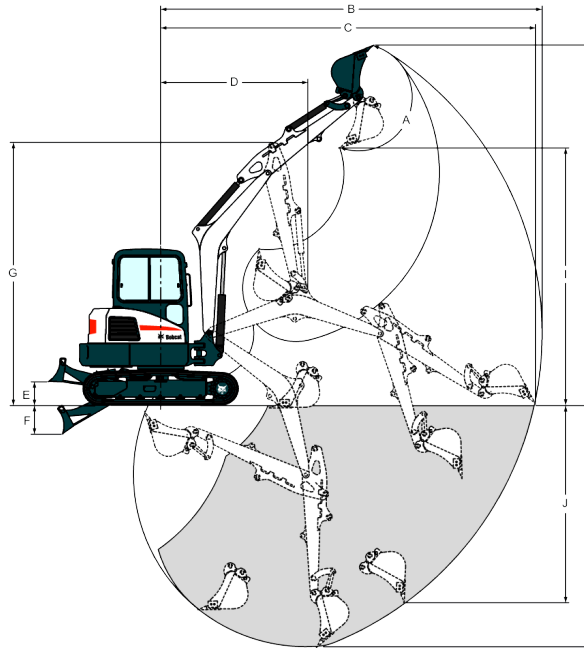
## Dimensions



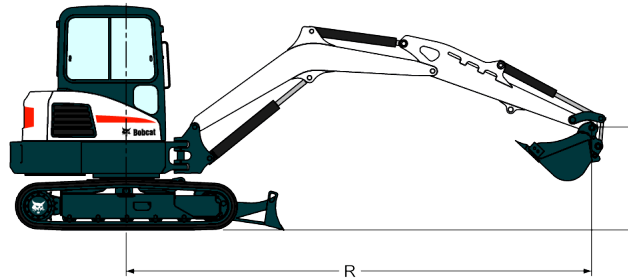
(A) Blade height	446.0 mm
(B) Clearance, upper structure to ground line	618.0 mm
(C) Ground line to top of engine cover	1575.0 mm
(D) Length of track on ground	1998.0 mm
(E) Machine centre line to blade	1796.0 mm
(F) Minimum radius in travel position	3872.0 mm
(G) Overall length of track assembly	3057.0 mm
(H) Overall length in travel position	5194.0 mm
(I) Track lug height	25.0 mm
(J) Blade width	1960.0 mm
(K) Height	2541.0 mm
(L) Track width	400.0 mm
(M) Machine centre line to working equipment centre line, left-hand rotation	394.0 mm
(N) Machine centre line to working equipment centre line, right-hand rotation	631.0 mm
(O) Minimum turning radius	2041.0 mm
(P) Swing clearance, rear	1322.0 mm
(Q) Working width at maximum right-hand rotation	2290.0 mm
(R) Working width at maximum left-hand rotation	1949.0 mm
(•) Boom length (boom pivot to arm pivot)	2775.0 mm
(•) Standard arm length (arm pivot to bucket pivot)	1925.0 mm

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

## Working Range



(A) Bucket pivot angle	185°
(B) Maximum reach of working equipment	6191.0 mm
(C) Maximum reach at ground level	6083.0 mm
(D) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted	2389.0 mm
(E) Maximum blade height	385.0 mm
(F) Maximum blade depth	465.0 mm
(G) Maximum height of working equipment with dipperstick retracted	4269.0 mm
(H) Maximum bucket tooth height	5850.0 mm
(I) Maximum dump height	4179.0 mm
(J) Maximum depth of vertical wall which can be excavated	3199.0 mm
(K) Maximum digging depth	3923.0 mm
<i>(Values with a "*" are for the long dipperstick)</i>	

**Lift Capacity (Standard dipperstick - Object handling applications excluded)**

**Rated lift capacity with counterweight over blade, blade down**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
4000	4315	908*	-	-	843*	-
3000	4947	959*	-	-	857*	-
2000	5246	1001*	-	1255*	1066*	1015*
1000	5283	1070*	-	1926*	1356*	1119*
Ground	5149	1147*	-	2309*	1571*	1210*
-1000	4738	1249*	3053*	2414*	1611*	-

\* Rated hydraulic lift capacity

**Rated lift capacity with counterweight over blade, blade up**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
4000	4315	871*	-	-	807*	-
3000	4947	781	-	-	823*	-
2000	5246	701	-	1208*	1021*	761
1000	5283	671	-	1832*	1077	747
Ground	5149	691	-	1650	1045	728
-1000	4738	773	2950*	1593	1024	-

\* Rated hydraulic lift capacity

**Rated lift capacity with counterweight over side, blade up**

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius	Lift at 5000 mm radius
4000	4315	959*	-	-	880*	-
3000	4947	669	-	-	902*	-
2000	5246	587	-	1289*	1090*	643
1000	5283	565	-	1405	900	625
Ground	5149	582	-	1342	873	614
-1000	4738	654	2567	1324	856	-

\* Rated hydraulic lift capacity

## Performance

Digging force, dipperstick (ISO 6015)	26100 N
Digging force, bucket (ISO 6015)	42000 N
Drawbar pull	52343 N
Ground pressure with rubber tracks	33.50 kPa
Ground pressure with steel tracks	34.30 kPa

## Cycle Times

Boom raise time	4.8 s
Boom lower time	4.6 s
Bucket curl time	2.6 s
Bucket dump time	1.8 s
Dipperstick retract time	3.1 s
Dipperstick extend time	3.1 s
Boom swing left time	8.8 s
Boom swing right time	8.1 s
Blade raise time	3.1 s
Blade lower time	2.7 s
Slew rate	9.0 RPM

## Weights

Operating weight with ROPS canopy , rubber tracks, counterweight, 610 mm bucket (SAE J732)	5501 kg
Reduction for rubber tracks	150 kg
Standard arm length (arm pivot to bucket pivot)	1925.0 mm
Additional weight for long dipperstick	115 kg
Boom length (boom pivot to arm pivot)	2775.0 mm

## Engine

Make / model	Kubota / V2403-M-D1-TE3B-BC-4
Fuel	Diesel
Cooling	Liquid
Maximum power	35.4 kW
Maximum net power at 2200 RPM (SAE J1349)	35.4 kW
Maximum governed speed	2200.0 RPM
High idle speed	2450.0 RPM
Low idle speed	1200.0 RPM
Maximum net torque at 1200 RPM (SAE J1349)	179.5 Nm
Number of cylinders	4
Displacement	2433 cm <sup>3</sup>
Bore	87.1 mm
Stroke	102.4 mm
Air filter	Dry, dual element, replaceable paper cartridge
Ignition	Diesel-compression
Starting aid	Intake air heater
Glow plug resistance	

## Electrical

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Alternator	12 V — 90 A — open frame with internal regulator
Battery	12 V — 530 A cold cranking at -18°C — 75 min reserve capacity at 25 A
Starter	12 V — gear reduction type — 2.0 kW

## Hydraulic System

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Pump type	Single outlet variable displacement, load sensing torque limited pump
Pump capacity	138.50 L/min
Swing lock release pressure	210.00 bar
System relief pressure for blade circuit	260.00 bar
Auxiliary relief	210.0 bar
Port relief pressure for boom, bucket and dipperstick circuits	290.00 bar
Control valve	9-spool, closed centre, individually compensated
Hydraulic filter	Full-flow replaceable — 3 µm synthetic media element
Fluid lines	SAE standard tubelines, hoses, and fittings
Auxiliary flow	75.70 L/min

## Hydraulic Cylinders

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Boom cylinder	Cushion up
Boom cylinder bore	101.6 mm
Boom cylinder rod	57.1 mm
Boom cylinder stroke	697.2 mm
Dipperstick cylinder	Cushion up & cushion retract
Dipperstick cylinder bore	88.9 mm
Dipperstick cylinder rod	57.1 mm
Dipperstick cylinder stroke	757.4 mm
Bucket cylinder	No cushion
Bucket cylinder bore	82.5 mm
Bucket cylinder rod	50.8 mm
Bucket cylinder stroke	524.0 mm
Boom swing cylinder	No cushion
Boom swing cylinder bore	95.3 mm
Boom swing cylinder rod	50.8 mm
Boom swing cylinder stroke	490.7 mm
Blade cylinder	No cushion
Blade cylinder bore	101.6 mm
Blade cylinder rod	50.8 mm
Blade cylinder stroke	195.1 mm

## Buckets

Width (mm)	Weight (kg)	Struck capacity (m³)	Heaped capacity (m³)
STD 300	84	-	0.063
STD 400	100	-	0.092
STD 450	107	-	0.107
STD 500	113	-	0.122
STD 600	130	-	0.155
STD 700	146	-	0.183
STD 750	152	-	0.203
STD 800	159	-	0.214
STD 900	175	-	0.246
grading 1000	147	-	0.195
grading 1300	183	-	0.258
grading 1500	207	-	0.301
tilt 1200	205	-	0.175
tilt 1400	220	-	0.206
tilt 1500	228	-	0.222
tilt 1550	353	-	0.280

## Slew System

Boom swing, left	75°
Boom swing, right	50°
Slew circle	Single row shear-type ball bearings with internal gear
Slew drive	Axial piston connected to a planetary drive

## Drive System

Travel motor	Each track is driven by a dual speed hydraulic axial piston motor
Drive reduction	Planetary gear reduction 56.4:1

## Traction

Track width	400.0 mm
Track adjusters	Grease type with shock absorbing recoil springs
Track type, standard	Half-pitch, rubber (directional type)
Track type, optional	Steel, triple grouser shoe
Travel speed, low range	3.1 km/h
Travel speed, high range	5.0 km/h
Undercarriage	Crawler X-frame 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

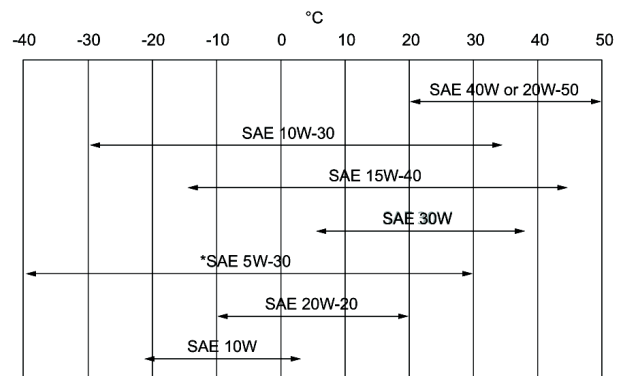
Slew brake	Spring applied, hydraulically released
Travel brake	Hydraulic brake on motor

## Fluid Capacities

Cooling system	8.30 L
Engine lubrication plus oil filter	7.10 L
Fuel reservoir	79.90 L
Hydraulic reservoir	15.10 L
Hydraulic system	54.90 L
Final drive case (each)	1.00 L

## Fluid Specifications

Engine coolant	Propylene glycol/water mix (53% &ndash; 47%) with freeze protection to &minus;37°C 5 L can - 6904844A, 25 L container - 6904844B, 209 L drum - 6904844C, 1000 L tank - 6904844D
Engine oil	Oil must meet API Service Classification of CD, CE, CF4, CG4, 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 - 6904842A, 25 L container - 6904842B, 209 L drum - 6904842C, 1000 L tank - 6904842D  
Bobcat Bio Hydraulic, 5 L can - 6904843A, 25 L container - 6904843B, 209 L drum - 6904843C, 1000 L tank - 6904843D

## Controls

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Engine	Hand dial on the right hand side. Electronically controlled Engine. Auto idle system to reduce fuel consumption.
Starting	Key type starter switch and shutdown.
Blade	Right hand lever.
Boom swing	Electric switch in left joystick
Hydraulics	Two joysticks control boom, bucket, dipperstick and upper structure slew.
Auxiliary hydraulics	Electric switch in right joystick (left joystick for 2nd auxiliary)
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

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- Charging system indicator
- Engine oil pressure indicator
- Engine coolant temperature gauge
- Fuel gauge
- Hour meter
- Hydraulic system indicator
- Tachometer
- Engine throttle dial
- Auto idle switch
- A/C control switches
- Windshield wiper/washer switch
- High travel speed indicator
- Work light switch
- Work light indicator
- Battery kill switch

## Serviceability

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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

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- Warranty: 12 months, 2000 hours (whichever occurs first)



- 1960 mm dozer blade
- 400 mm rubber track
- Auto idle
- Auto shift travel
- Auxiliary hydraulics with Quick Couplers
- Blade float feature
- Cab light
- Clamp ready
- Control console locks
- Cupholder
- Engine/hydraulic monitor with shutdown

## Options

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- Rubber tracks
- Second auxiliary hydraulic line (Rotation piping)
- Third auxiliary hydraulic line (Clamshell Piping)
- Long dipperstick with extra counterweight

## Attachments

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- 3 Tined Grapples
- Augers
- Breakers
- Clayspade Buckets, Klac
- Clayspade Buckets, Lehnhoff
- Clayspade Buckets, Pin-on
- Digging Buckets, Klac
- Digging Buckets, Lehnhoff
- Digging Buckets, Pin-on
- Grading Buckets, Pin-on
- Hydraulic Clamps
- Klac™ reversible adaptor
- Laser Equipment
- Packer Wheels
- Plate Compactors
- Rippers
- Rotary Grinders
- Skeleton Bucket, Klac
- Skeleton Bucket, Lehnhoff
- Skeleton Bucket, Pin-On
- Tilt Buckets, Klac
- Tilt Buckets, Lehnhoff
- Tilt Buckets, Pin-on
- Tilt Rotator
- Trenchers
- X-Change couplers

## Environmental

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Noise level LpA(EU Directive 2000/14/EC)	77 dB(A)
Noise level LWA(EU Directive 2000/14/EC)	97 dB(A)

## Safety

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Retractable seat belt, standard  
Operator cab, standard

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

Upper carriage slew lock, standard

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

Should always be used when entering/exiting excavator.

Use for indoor and low light operation.

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.