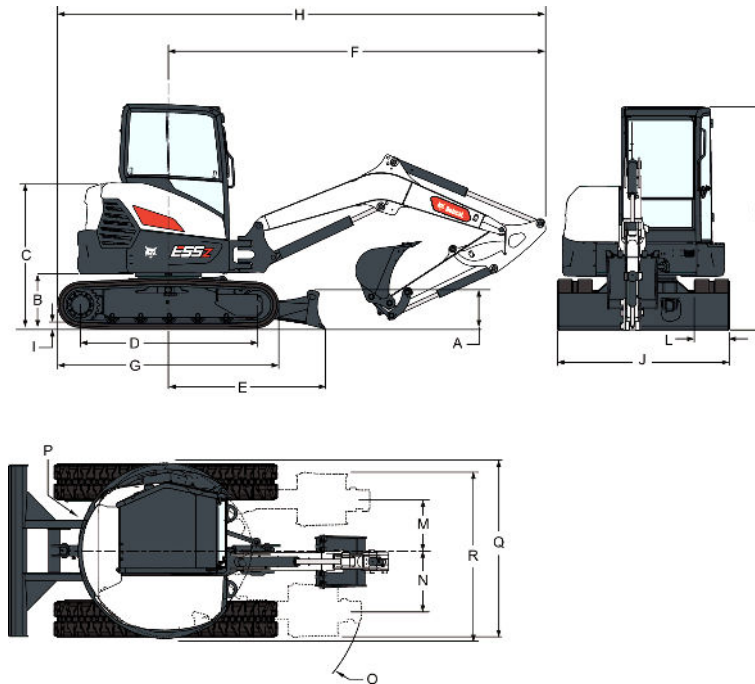


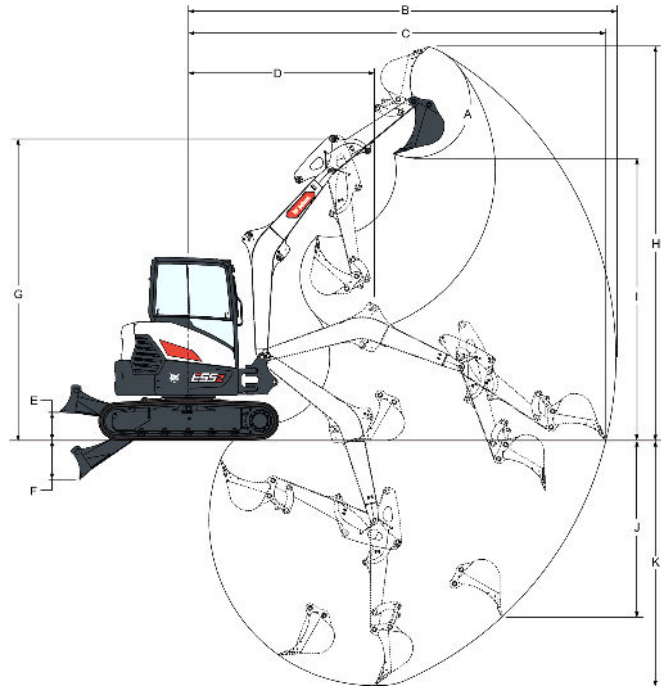
Dimensions



(A) Blade height	422.0 mm
(B) Clearance, upper structure to ground line	627.0 mm
(C) Ground line to top of engine cover	1659.0 mm
(D) Length of track on ground	2004.0 mm
(E) Machine centre line to blade	1784.0 mm
(F) Minimum radius in travel position	4300.0 mm
(F*) Minimum radius in travel position, long dipperstick	4297.0 mm
(G) Overall length of track assembly	2523.0 mm
(H) Overall length in travel position	5561.0 mm
(H*) Overall length in travel position, long dipperstick	5558.0 mm
(I) Track lug height	24.0 mm
(J) Blade width	1959.0 mm
(K) Height	2566.0 mm
(L) Track width	400.0 mm
(M) Machine centre line to working equipment centre line, left-hand rotation	586.0 mm
(N) Machine centre line to working equipment centre line, right-hand rotation	872.0 mm
(O) Minimum turning radius	2027.0 mm
(P) Swing clearance, rear	1000.0 mm
(P*) Swing clearance, rear heavy counterweight	1071.0 mm
(Q) Working width at maximum right-hand rotation	1976.0 mm
(Q*) Working width at maximum right-hand rotation, long dipperstick	2046.0 mm
(R) Working width at maximum left-hand rotation	1881.0 mm
(R*) Working width at maximum left-hand rotation, long dipperstick	2035.0 mm
(•) Boom length (boom pivot to arm pivot)	2775.0 mm
(•) Standard arm length (arm pivot to bucket pivot)	1525.0 mm
(•) Optional arm length (arm pivot to bucket pivot)	1925.0 mm

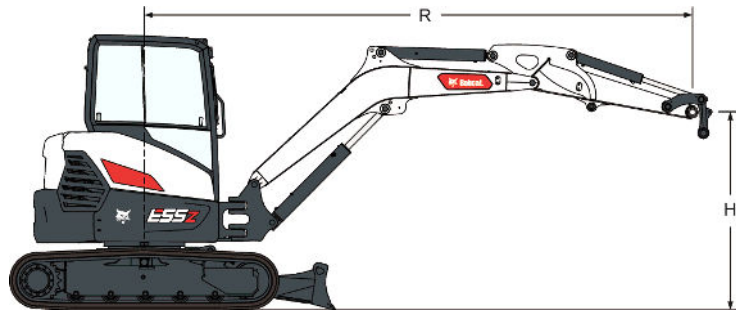
(Values with a "" are for the long dipperstick)*

Working Range



(A) Bucket pivot angle	186.0°
(B) Maximum reach of working equipment	5983.0 mm
(B) Maximum reach of working equipment, long dipperstick	6361.0 mm
(C) Maximum reach at ground level	5843.0 mm
(C*) Maximum reach at ground level, long dipperstick	6232.0 mm
(D) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted	2541.0 mm
(D*) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted, long dipperstick	2638.0 mm
(E) Maximum blade height	390.0 mm
(F) Maximum blade depth	547.0 mm
(G) Maximum height of working equipment with dipperstick retracted	4272.0 mm
(G*) Maximum height of working equipment with dipperstick retracted, long dipperstick	4273.0 mm
(H) Maximum bucket tooth height	5513.0 mm
(H*) Maximum bucket tooth height, long dipperstick	5768.0 mm
(I) Maximum dump height	3558.0 mm
(I*) Maximum dump height, long dipperstick	4213.0 mm
(J) Maximum depth of vertical wall which can be excavated	2485.0 mm
(J*) Maximum depth of vertical wall which can be excavated, long dipperstick	2878.0 mm
(K) Maximum digging depth	3434.0 mm
(K*) Maximum digging depth, long dipperstick	3834.0 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	4040	1230*		1197*	
3000	4750	1239*		1185*	
2000	5100	1276*	1791*	1405*	1283*
1000	5170	1351*	2509*	1695*	1388*
Ground	5030	1435*	2802*	1887*	1444*
-1000	4570	1508*	2731*	1882*	

* 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 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
4000	4040	889		899	
3000	4750	714		931	
2000	5100	635	1417	922	658
1000	5170	616	1355	900	652
Ground	5030	657	1371	896	662
-1000	4570	768	1421	929	

* 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 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
4000	4040	811		826	
3000	4750	634		839	
2000	5100	565	1255	818	581
1000	5170	545	1171	789	572
Ground	5030	558	1154	772	564
-1000	4570	661	1198	788	

* Rated hydraulic lift capacity

Lift capacity (Long dipperstick, additional counterweight - 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	4550	1063*		922*	
3000	5170	1074*		971*	1063*
2000	5470	1136*	1423*	1227*	1143*
1000	5540	1190*	2264*	1553*	1277*
Ground	5410	1266*	2705*	1815*	1408*
-1000	5020	1350*	2760*	1926*	1362*

* 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	4550	824		922*	
3000	5170	694		971*	728
2000	5470	636	1423*	1029	729
1000	5540	614	1530	1003	719
Ground	5410	636	1519	986	710
-1000	5020	739	1568	1003	743

* 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	4550	749		922*	
3000	5170	621		935	686
2000	5470	563	1423*	928	662
1000	5540	543	1337	891	641
Ground	5410	563	1295	863	632
-1000	5020	631	1315	864	634

* Rated hydraulic lift capacity

Performance

Digging force, dipperstick (ISO 6015)	30993 N
Digging force, long dipperstick (ISO 6015)	26301 N
Digging force, bucket (ISO 6015)	44297 N
Ground pressure with rubber tracks	30.00 kPa
Ground pressure with steel tracks	30.80 kPa
Ground pressure with long dipperstick and rubber tracks	31.30 kPa
Ground pressure with long dipperstick and steel tracks	32.10 kPa

Cycle Times

Boom raise time	6.5 s
Boom lower time	5.8 s
Bucket curl time	2.7 s

Bucket dump time	2.2 s
Dipperstick retract time	3.3 s
Dipperstick extend time	3.5 s
Boom swing left time	4.5 s
Boom swing right time	4.8 s
Blade raise time	3.2 s
Blade lower time	2.7 s
Slew rate	9.3 RPM

Weights

Operating weight with ROPS canopy , rubber tracks, counterweight, 610 mm bucket (SAE J732)	5271 kg
Additional weight for cab with HVAC	19 kg
Additional weight for steel tracks	125 kg
Additional weight for segmented tracks	243 kg
Additional weight for long dipperstick and heavy counterweight	229 kg
Additional weight for angle blade	176 kg

Engine

Make / model	Bobcat 1.8L, 97/68 EC Stage V
Fuel	Diesel
Cooling	Liquid, forced circulation
Maximum NET power (ISO 9249)	36.4 kW
Maximum governed speed	2200.0 RPM
High idle speed	2200.0 RPM
Low idle speed	1050.0 RPM
Maximum NET torque (ISO 9249)	180.0 Nm
Number of cylinders	3
Displacement	1.79 L
Bore	90.0 mm
Stroke	94.0 mm
Air filter	Dual dry replacement paper elements
Ignition	Diesel-compression
Crankcase ventilation	Closed breathing
Glow plug resistance	
Lubrication	Forced lubrication/cartridge type

Electrical

Alternator	12 Volts 90 Amps, open frame with internal regulator
Battery	12 Volts negative ground, cold cranking current 700 Amps at -18OC, 110 min. reserve capacity at 25 Amps
Starter	12 Volt 2.0 kW reduction drive

Hydraulic System

Pump type	Single outlet variable displacement piston pump with gear pumps
Piston pump capacity	138.60 L/min
Swing lock release pressure	210.00 bar
System relief pressure for blade circuit	260.00 bar
System relief pressure for implement circuits	250.00 bar

Port relief pressure for boom, bucket and dipperstick circuits	290.00 bar
Boom port relief base and rod end	290.0 - 290.0 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 (AUX1) flow	80.50 L/min
Auxiliary (AUX2) flow	45.40 L/min

Hydraulic Cylinders

Boom cylinder	Cushion up
Boom cylinder bore	101.6 mm
Boom cylinder rod	57.2 mm
Boom cylinder stroke	697.2 mm
Dipperstick cylinder	Cushion up & cushion retract
Dipperstick cylinder bore	88.9 mm
Dipperstick cylinder rod	57.2 mm
Dipperstick cylinder stroke	757.4 mm
Bucket cylinder	No cushion
Bucket cylinder bore	82.6 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
Angle Blade cylinder	No cushion
Angle Blade cylinder bore	63.5 mm
Angle Blade cylinder rod	38.1 mm
Angle Blade cylinder stroke	422.9 mm

Buckets

Width	Weight (kg)	Rated capacity (L)
STD 30 cm	84	63
STD 40 cm	100	92
STD 45 cm	107	107
STD 50 cm	113	122
STD 60 cm	130	155
STD 70 cm	146	138
STD 75 cm	152	203
STD 80 cm	159	214
STD 90 cm	175	246
Grading STD 100 cm	147	195
Grading STD 130 cm	183	258
Grading STD 150 cm	207	301
Tilt STD 120 cm	205	175
Tilt STD 140 cm	220	206
Tilt STD 150 cm	228	222
Tilt STD 155 cm	353	280

Slew System

Boom swing, left	75.0°
Boom swing, right	50.0°
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 hydraulic axial piston motor
Drive reduction	Two-stage planetary gear reduction 58.943:1

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; Segmented
Travel speed, low range	2.9 km/h
Travel speed, high range	4.6 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	29.0°

Brakes

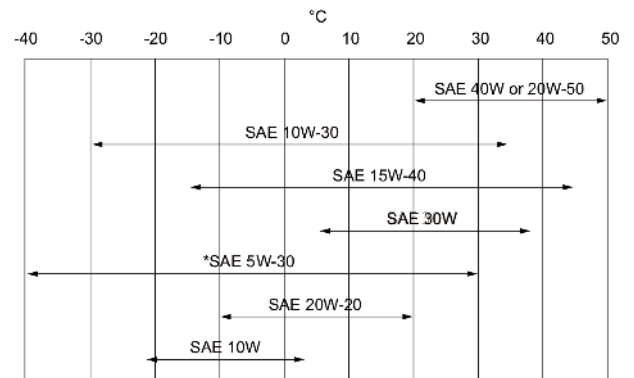
Slew brake	Spring applied, hydraulically released
Travel brake	Hydraulic lock on motor

Fluid Capacities

Cooling system	7.60 L
Engine lubrication plus oil filter	6.30 L
Fuel reservoir	72.00 L
Hydraulic reservoir	15.10 L
Final drive case (each)	1.00 L

Fluid Specifications

Engine coolant	Propylene glycol/water mix (53% - 47%) with freeze protection to -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.



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

Hydraulic fluid	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 Motor oil is not an acceptable alternative fluid.
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Controls

Engine	Hand dial on right hand side. Electronically controlled. Auto idle system to reduce fuel consumption.
Starting	Key type starter and shutdown switch
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 second auxiliary)
Upper structure slew lock for holding and service	Hydraulic lock on motor
Steering	Direction and speed controlled by two pilot-operated hand levers or two foot pedals

Instrumentation

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

Serviceability

Fuel filler 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
- 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

- 1960 mm dozer blade

- 400 mm rubber track
- 5 inch display
- Auto idle
- Adjustable double acting auxiliary hydraulic (AUX1) with QC on ARM
- Battery disconnect switch
- Blade float feature
- Clamp ready
- Control console locks
- Cupholders
- Dual Direction Detent
- Dual flanged rollers
- Engine/hydraulic monitor with shutdown
- Foldable and ergonomic pedals
- Full fuel warning alarm
- Horn
- Hydraulic joystick controls
- Machine IQ (telematic)
- Proportional fingertip auxiliary and boom swing offset hydraulic control
- Retractable seat belt
- Selectable auxiliary hydraulic flow
- Suspension seat with high back
- Storage compartment
- Tool box
- TOPS/ROPS/FOPS cab * 1
- Two-speed travel with Auto shift
- Upper structure tie down
- LED Work lights
- Warranty: 24 months, 2000 hours (whichever occurs first)

Options

- Air conditioning (Cab with HVAC)
- Auto Air conditioning (Cab with Auto HVAC)
- 7" touch screen
- Keyless ignition
- Long dipperstick with heavy counterweight
- 2nd Auxiliary hydraulics
- Case drain line
- Clamp with AUX1 valve
- Tilt coupler lines (AUX4)
- Hydraulic coupler lines (AUX5)
- Deluxe textile suspension seat
- Heated Deluxe textile suspension seat with head rest
- Boom safety valve with overload warning
- Boom & arm safety valves with overload warning
- AM/FM MP3 stereo radio with Bluetooth
- FOGS kit (Overhead guard)
- Lifting chain kit
- Travel motion alarm
- 400 mm Steel tracks
- 400 mm Segmented tracks

1. Roll Over Protective Structure (ROPS) – Meets requirements of ISO 3471. Tip Over Protective Structure (TOPS) – Meets requirements of ISO 12117. Falling Object Protective Structure (FOPS) - Meets requirements of ISO 3449.

- Beacon kit
- Left and right mirror kit
- Fire extinguisher
- Additional LED work light kit
- Rubber bolt-on pads for steel tracks
- Special applications kit (Front windscreen protection)
- Bucket valves (AUX3) kit
- Depth Check kit

Attachments

- Auger Accessories
- Augers
- Breaker Accessories
- Breakers
- Clayspade Buckets, Klac
- Clayspade Buckets, Pin-on
- Clayspade Buckets, SW
- Digging Buckets, German Profile
- Digging Buckets, Klac
- Digging Buckets, Pin-on
- Flail Mowers
- Grading Buckets, German Type
- Grading Buckets, Klac
- Grading Buckets, Pin-on
- Klac
- Laser Equipment
- Rotary Grinders
- Skeleton Bucket, Klac
- Skeleton Bucket, Pin-On
- Skeleton Bucket, SW
- Tilt Buckets, Klac
- Tilt Buckets, Pin-on
- Tilt Buckets, SW

Safety

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
A four-post canopy or optional closed cab. Meets SAE J1040 for Roll Over Protection Structure (ROPS) and ISO 12117 for Tip Over Protective Structure (TOPS).
An optional top Falling Object Guard Structure (FOGS) meeting ISO 10262 Level 1 * is available.

Should always be used when entering/exiting excavator.
Slip resistant tread on canopy threshold to 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.

A lock pin is provided to lock the upper structure to the undercarriage for transport.

For use when required

Restricts objects and material from entering cab openings.

Operator manual providing operational instructions and warning decals with pictorial and international symbols.