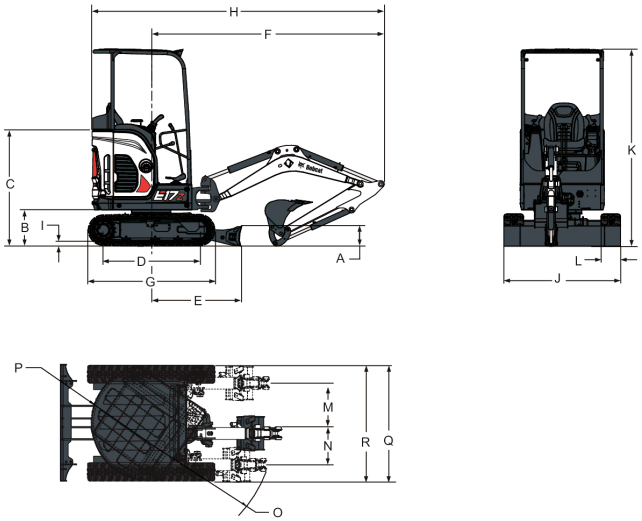
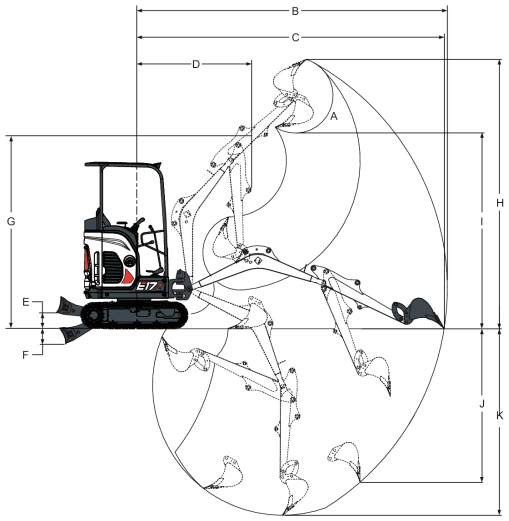
Dimensions



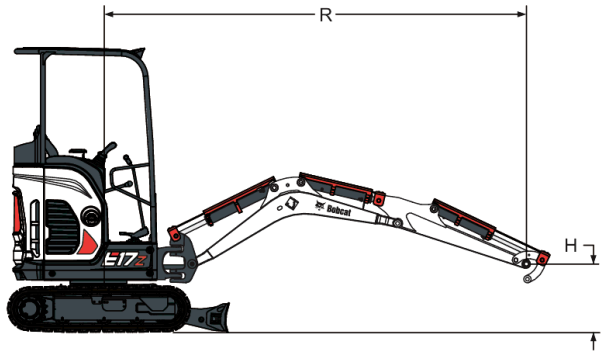
(A)	Blade height	235.0 mm
(B)	Clearance, upper structure to ground line	419.0 mm
(C)	Ground line to top of engine cover	1138.0 mm
(D)	Length of track on ground	1114.0 mm
(E)	Machine centre line to blade	1045.0 mm
(F)	Minimum radius in travel position	2715.0 mm
(G)	Overall length of track assembly	1476.0 mm
(H)	Overall length in travel position	3450.0 mm
(I)	Track lug height	25.0 mm
(J)	Blade width	980.0 mm
(J*)	Blade width (extensions extended)	1360.0 mm
(K)	Height	2297.0 mm
(L)	Track width	230.0 mm
(M)	Machine centre line to working equipment centre line, left-hand rotation	450.0 mm
(N)	Machine centre line to working equipment centre line, right-hand rotation	638.0 mm
(O)	Minimum turning radius	1190.0 mm
(P)	Swing clearance, rear	690.0 mm
(Q)	Working width at maximum right-hand rotation	1532.0 mm
(R)	Working width at maximum left-hand rotation	1370.0 mm

Working Range



(A)	Bucket pivot angle	196.0°
(B)	Maximum reach of working equipment	3971.0 mm
(C)	Maximum reach at ground level	3923.0 mm
(D)	Maximum working equipment radius with boom at maximum height and dipperstick fully retracted	1560.0 mm
(E)	Maximum blade height	220.0 mm
(E*)	Maximum blade height with long blade	300.0 mm
(F)	Maximum blade depth	204.0 mm
(F*)	Maximum blade depth with long blade	254.0 mm
(G)	Maximum height of working equipment with dipperstick retracted	2406.0 mm
(H)	Maximum bucket tooth height	3378.0 mm
(I)	Maximum dump height	2369.0 mm
(J)	Maximum depth of vertical wall which can be excavated	1810.0 mm
(K)	Maximum digging depth	2249.0 mm

Lift Capacity - Standard blade



Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius
2000	3000	344*	-	-
1000	3338	337*	438*	369*
Ground	3350	320*	742*	398*
-1000	2940	306*	609*	-
* Rated hydraulic lift capacity				

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius
2000	3000	233*	-	-
1000	3338	190*	425	229
Ground	3350	182*	380	214
-1000	2940	215*	363	-
* Rated hydraulic lift capacity				

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius
2000	3000	263	-	-
1000	3338	218	438*	264
Ground	3350	210	431	251
-1000	2940	249	425	-
* Rated hydraulic lift capacity				

Performance

Digging force, dipperstick (ISO 6015)	9108 N
Digging force, bucket (ISO 6015)	16177 N
Drawbar pull	19302 N
Ground pressure with rubber tracks	30.06 kPa

Cycle Times

Boom raise time	2.2 s
Boom lower time	1.5 s
Bucket curl time	1.7 s
Bucket dump time	1.1 s
Dipperstick retract time	2.2 s
Dipperstick extend time	1.6 s
Boom swing left time	3.7 s
Boom swing right time	3.0 s
Blade raise time	2.6 s
Blade lower time	2.6 s
Slew rate	10.1 RPM
Undercarriage expand time	4.1 s
Undercarriage retract time	3.5 s

Weights

Operating weight with cab and bucket (ISO 6016)	1749 kg
Transport mass (no attachment)	1632 kg
Additional weight for long dozer blade	9 kg

Engine

Make / model	Kubota / D722-E4B (Stage V)
Fuel	Diesel
Cooling	Liquid, forced circulation
Maximum power @ 2500 rpm (ISO 14396)	10.2 kW
Maximum torque (SAE)	43.5 Nm
Number of cylinders	3
Displacement	719 cm^3
Bore	67.0 mm
Stroke	68.0 mm
Air filter	Dual dry replaceable paper cartridge
Ignition	Diesel compression
Fuel filter	
Glow plug resistance	

Electrical

Alternator	12 V — 40 A — open frame with internal regulator
Battery	12 V — 500 A cold cranking current — 90 min reserve
Starter	12 V - 1.4 kW - positive shift drive

Hydraulic System

Pump type	Dual piston pump with gear pump
Total hydraulic capacity	41.30 L/min

Piston pump capacity	30.00 L/min
Gear pump capacity	11.30 L/min
Swing lock release presssure	137.00 bar
System relief pressure for slew circuits	137.0 bar
Auxiliary relief	180.0 bar
Port relief pressure for boom, bucket and dipperstick circuits	250.00 bar
Dipperstick port relief base and rod end	250.00 bar
Main hydraulic filter bypass	3.40 bar
Control valve	9-spool parallel type, open centre
Auxiliary flow	30.00 L/min

Hydraulic Cylinders

Boom cylinder	Cushion up
Boom cylinder bore	63.5 mm
Boom cylinder rod	38.1 mm
Boom cylinder stroke	438.9 mm
Dipperstick cylinder	Cushion up and down
Dipperstick cylinder bore	57.2 mm
Dipperstick cylinder rod	38.1 mm
Dipperstick cylinder stroke	419.9 mm
Bucket cylinder	No cushion
Bucket cylinder bore	50.8 mm
Bucket cylinder rod	31.8 mm
Bucket cylinder stroke	385.1 mm
Boom swing cylinder	No Cushion
Boom swing cylinder bore	60.3 mm
Boom swing cylinder rod	31.8 mm
Boom swing cylinder stroke	411.2 mm
Blade cylinder	No cushion
Blade cylinder bore	57.3 mm
Blade cylinder rod	31.8 mm
Blade cylinder stroke	107.9 mm
Undercarriage cylinder	No cushion
Undercarriage cylinder bore	44.5 mm
Undercarriage cylinder rod	25.4 mm
Undercarriage cylinder stroke	385.0 mm

Buckets

Width (mm)	Weight (kg)	Struck capacity (m³)	Rated capacity (m³)
150	26.3	-	0.011
230	30.4	-	0.017
300	34.5	-	0.025
400	41.7	-	0.036
450	44.8	-	0.041
500	47.7	-	0.047
600	55.2	-	0.058
800	62	-	0.051
1000	74	-	0.065

Slew System

Boom swing, left	80.0°
Boom swing, right	60.0°
Slew circle	Single row shear-type ball bearings with internal gear
Slew drive	Orbit motor

Drive System

Travel motor	Each track is driven by a hydraulic axial piston motor
Drive reduction	Two-stage planetary gear reduction 30.36:1

Traction

Track width	230.0 mm
Track adjusters	Grease type adjusters, rubber
Track type, standard	Half-pitch, rubber
Travel speed, low range	2.7 km/h
Travel speed, high range	4.2 km/h
Undercarriage	Sealed track rollers with box section track roller frame
Number of track rollers per side	3
Gradeability	30.0°

Brakes

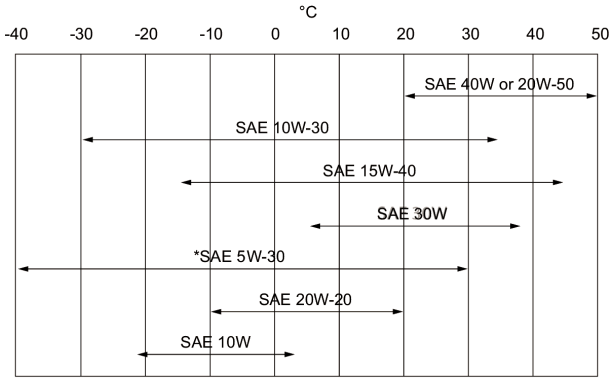
Parking brake	Hydraulic lock on motor
Slew brake	Spring applied, pressure released
Travel brake	Hydraulic lock on motor

Fluid Capacities

Fuel reservoir	19.00 L
Hydraulic reservoir	14.30 L
Final drive case (each)	0.40 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.

Controls

Engine	Hand lever on right hand side
Starting	Key-type starter switch and shutdown
Blade	Right hand lever
Boom swing	Right foot pedal
Hydraulics	Two joysticks control boom, bucket, dipperstick and upper structure slew
Auxiliary hydraulics	Left-hand foot pedal
Upper structure slew lock for holding and service	Hydraulic lock on motor
Holding brake for upper structure slew	Spring applied, pressure released
Steering	Direction and speed controlled by two hand levers or foot pedals

Instrumentation

- LCD display
  - Hour meter
  - Job clock
  - Engine RPM
  - Battery voltage
  - Service reminder
  - Service codes
  - Engine pre-heat and countdown for glow plugs (time depends on engine coolant temperature)
- Gauges
  - Fuel level
  - Engine coolant temperature
- Indicators
  - High travel speed indicator
  - Seat belt
  - Left console lockout
- Warning lights
  - General warning
  - Engine malfunction
  - Hydraulic system malfunction
- Buttons
  - Lights
  - Auxiliary (1 LED - Aux active, both LED's - detent active)
  - Information
- Left hand console
  - Windshield wiper/washer switch (optional)
  - Retractable undercarriage switch
  - Beacon / strobe switch (optional)
  - Overload warning device switch (optional)

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
- Engine oil and fuel filters
- Engine oil level
- Fuel filler
- Starter
- Sight gauges for hydraulic level
- Sight gauge for fuel 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

- 230 mm rubber track
- 980 mm dozer blade with two 190 mm blade extensions
- Battery disconnect switch
- Control console locks

- Counterweight
- Cupholders
- Double acting auxiliary hydraulics
- Engine monitor with auto shutdown
- Foldable and ergonomic travel pedals
- Full fuel warning alarm
- Grease gun holder
- Horn
- Hydraulic and travel control lockout
- Hydraulic joystick controls
- Hydraulically retractable undercarriage from 1360 mm to 980 mm
- Retractable seat belt
- TOPS/ROPS/FOPS canopy [1]
- Two speed travel
- Upper structure four point tie down
- Water separator
- Work light (boom)
- Warranty: 24 months, 2000 hours (whichever occurs first)

Options

- Demolition package (boom, arm, bucket cylinder covers & HD travel hoses guard)
- Object handling package (Valves, OWD, Lifteye)
- Long dozer blade
- AUX1 direct return to tank
- AUX1 on arm
- Keyless ignition
- Travel motion alarm
- Additional halogen lights
- Beacon
- Special Application kit
- L/R mirrors
- Fire extinguisher
- Klac C and MS01 couplers

Attachments

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

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.

Environmental

Noise level LpA(EU Directive 2006/42/EC)	81 dB(A)
Noise level LWA(EU Directive 2000/14/EC)	93 dB(A)
Whole body vibration (ISO 2631–1)	0.14 ms^{-2}
Hand-arm vibration (ISO 5349–1)	0.49 ms^{-2}

Safety

Retractable seat belt, standard	Should always be worn when operating the excavator
Operator cab, standard	A four-post canopy or optional closed cab. 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.
Grab handles, standard	Should always be used when entering/exiting excavator.
Safety tread, standard	Slip resistant tread on canopy threshold to be used when entering/exiting excavator.
Front working lights, standard	Use for indoor and low light operation.
Control lockout, standard	Operator console locks out work group and travel functions when in the upright position.
Upper carriage slew lock, standard	An automatic disc brake locks the upper structure to the undercarriage for transport.
Pedal lock, standard	Prevents activation of the boom swing function.
Travel motion alarm, optional	For use when required
Special applications kit, optional	Restricts objects and material from entering cab openings.
Operator's handbook, standard	