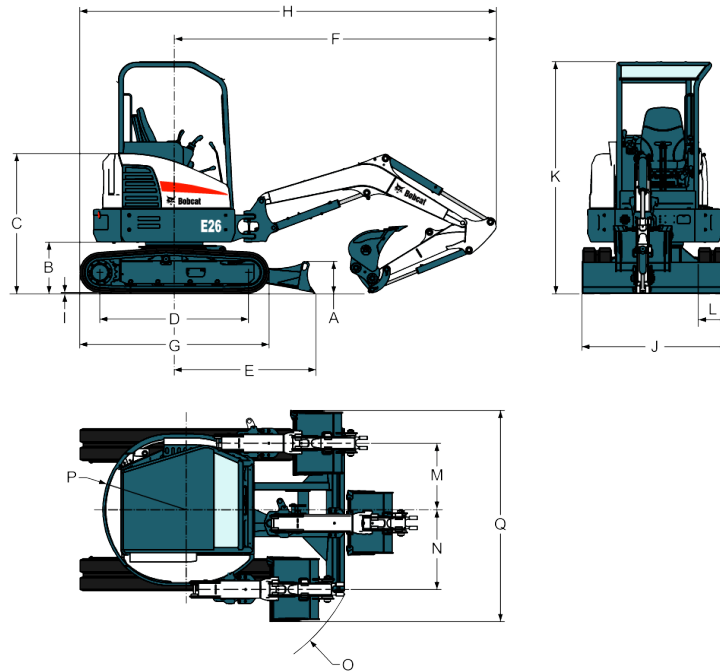


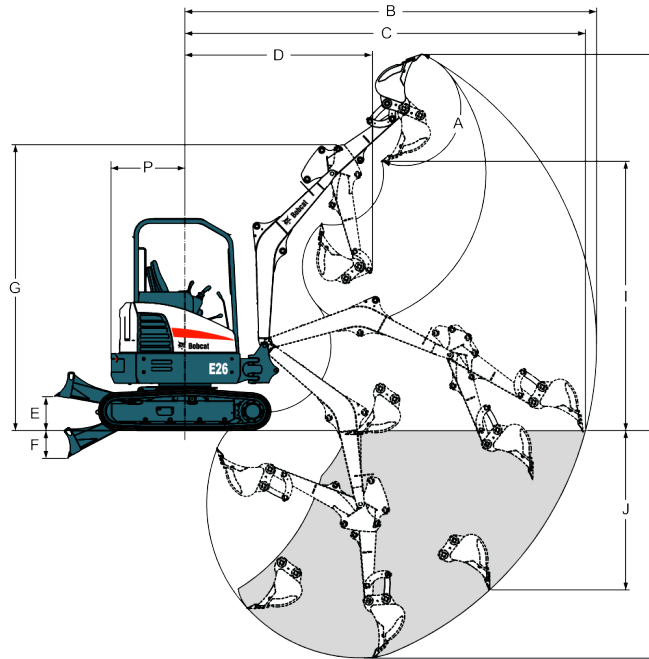
Dimensions



(A) Blade height	330.0 mm
(B) Clearance, upper structure to ground line	537.0 mm
(C) Ground line to top of engine cover	1456.0 mm
(D) Length of track on ground	1543.0 mm
(E) Machine centre line to blade	1462.0 mm
(F) Minimum radius in travel position	3345.0 mm
(F*) Minimum radius in travel position, long dipperstick	3688.0 mm
(G) Overall length of track assembly	1965.0 mm
(H) Overall length in travel position	4326.0 mm
(H*) Overall length in travel position, long dipperstick	4864.0 mm
(I) Track lug height	25.0 mm
(J) Blade width	1515.0 mm
(K) Height	2412.0 mm
(L) Track width	300.0 mm
(M) Machine centre line to working equipment centre line, left-hand rotation	614.0 mm
(N) Machine centre line to working equipment centre line, right-hand rotation	735.0 mm
(O) Minimum turning radius	1661.0 mm
(O*) Minimum turning radius, long dipperstick	1925.0 mm
(P) Swing clearance, rear	770.0 mm
(P) Swing clearance, rear with additional counterweight:	840.0 mm
(Q) Working width at maximum right-hand rotation	1949.0 mm
(R) Working width at maximum left-hand rotation	1675.0 mm

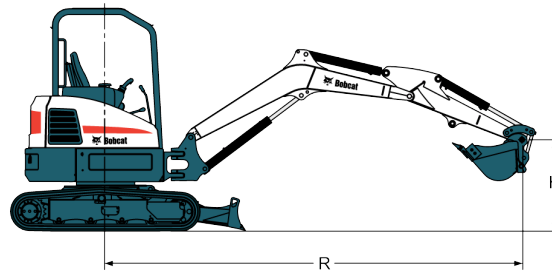
(Values with a "" are for the long dipperstick)*

Working Range



(A) Bucket pivot angle	185°
(B) Maximum reach of working equipment	4553.0 mm
(B) Maximum reach of working equipment, long dipperstick	4966.0 mm
(C) Maximum reach at ground level	4678.0 mm
(C*) Maximum reach at ground level, long dipperstick	4850.0 mm
(D) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted	2132.0 mm
(D*) Maximum working equipment radius with boom at maximum height and dipperstick fully retracted, long dipperstick	2135.0 mm
(E) Maximum blade height	385.0 mm
(F) Maximum blade depth	315.0 mm
(G) Maximum height of working equipment with dipperstick retracted	3246.0 mm
(G) Maximum height of working equipment with dipperstick retracted, long dipperstick	3239.0 mm
(H) Maximum bucket tooth height	4272.0 mm
(H*) Maximum bucket tooth height, long dipperstick	4473.0 mm
(I) Maximum dump height	3057.0 mm
(I*) Maximum dump height, long dipperstick	3239.0 mm
(J) Maximum depth of vertical wall which can be excavated	1809.0 mm
(J) Maximum depth of vertical wall which can be excavated, long dipperstick	2089.0 mm
(K) Maximum digging depth	2582.0 mm
(K*) Maximum digging depth, long dipperstick	2890.0 mm

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

Lift Capacity (Standard dipperstick - Object handling applications excluded)


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
3000	3230	542*	-	491*	-
2000	3840	556*	-	564*	-
1000	4030	595*	-	782*	596*
Ground	3880	639*	1758*	933*	-
-1000	3320	690*	1670*	868*	-

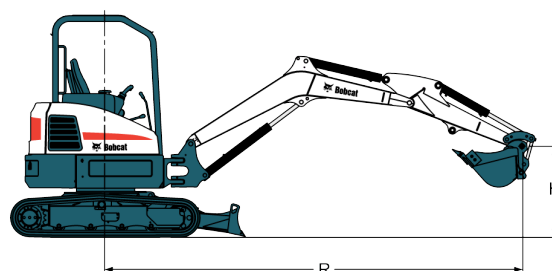
* Rated hydraulic lift capacity

Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3230	507*	-	463*	-
2000	3840	307	-	233	-
1000	4030	272	-	437	280
Ground	3880	282	781	407	-
-1000	3320	353	795	415	-

* 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	Lift at 4000 mm radius
3000	3230	335	-	393	-
2000	3840	258	-	389	-
1000	4030	233	-	364	235
Ground	3880	242	628	348	-
-1000	3320	309	665	353	-

* Rated hydraulic lift capacity

Lift capacity (Standard dipperstick, additional counterweight - Object handling applications excluded)


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
3000	3230	544*	-	499*	-
2000	3840	562*	-	569*	-
1000	4030	596*	-	778*	598*
Ground	3880	642*	1770*	925*	-
-1000	3320	694*	1610*	864*	-

* Rated hydraulic lift capacity

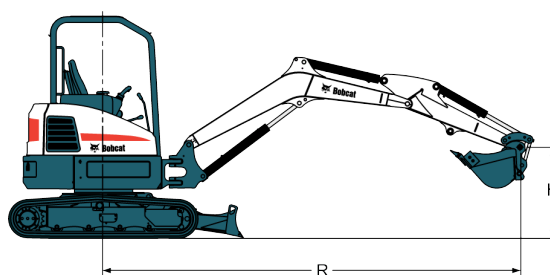
Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3230	524*	-	470*	-
2000	3840	371	-	537*	-
1000	4030	334	-	537	350
Ground	3880	361	957	511	-
-1000	3320	438	972	511	-

* 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	Lift at 4000 mm radius
3000	3230	406	-	489*	-
2000	3840	317	-	549*	-
1000	4030	290	-	449	295
Ground	3880	304	762	432	-
-1000	3320	386	815	440	-

* Rated hydraulic lift capacity

Lift Capacity (Long dipperstick - Object handling applications excluded)



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
3000	3570	470*	-	-	-
2000	4120	483*	-	447*	473*
1000	4300	522*	-	683*	539*
Ground	4190	570*	1765*	888*	605*
-1000	3670	630*	1927*	898*	-
-2000	2600	656*	1861*	-	-

* Rated hydraulic lift capacity

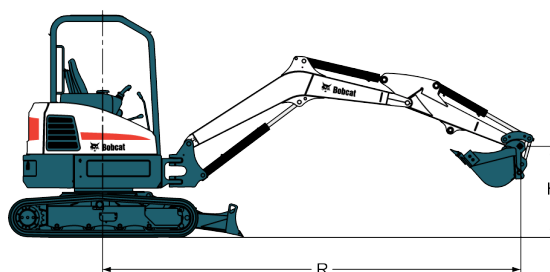
Lift point height [H] (mm)	Maximum radius [R] (mm)	Lift at max. radius (kg)	Lift at 2000 mm radius	Lift at 3000 mm radius	Lift at 4000 mm radius
3000	3570	414*	-	-	-
2000	4120	258	-	411*	281
1000	4300	240	-	428	273
Ground	4190	243	788	402	256
-1000	3670	289	811	403	-
-2000	2600	502	753	-	-

* 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	Lift at 4000 mm radius
3000	3570	282	-	-	-
2000	4120	220	-	372	235
1000	4300	200	-	352	227
Ground	4190	209	628	339	222
-1000	3670	259	706	341	-
-2000	2600	488	736	-	-

* Rated hydraulic lift capacity

Lift capacity (Long dipperstick, additional counterweight - Object handling applications excluded)



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
3000	3570	472*	-	-	-
2000	4120	500*	-	463*	485*
1000	4300	534*	-	707*	554*
Ground	4190	579*	1794*	903*	611*
-1000	3670	627*	1845*	904*	-
-2000	2600	637*	1736*	-	-

* 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	Lift at 4000 mm radius
3000	3570	451*	-	-	-
2000	4120	337*	-	432*	363
1000	4300	294*	-	522	339
Ground	4190	303*	995	494	317
-1000	3670	353*	873	483	-
-2000	2600	682*	879	-	-

* 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	Lift at 4000 mm radius
3000	3570	344	-	-	-
2000	4120	277	-	465*	302
1000	4300	256	-	450	293
Ground	4190	269	759	438	286
-1000	3670	327	895	437	-
-2000	2600	595	1072	-	-

* Rated hydraulic lift capacity

Performance

Digging force, dipperstick (ISO 6015)	15800 N
Digging force, long dipperstick (ISO 6015)	13200 N
Digging force, bucket (ISO 6015)	22200 N
Drawbar pull	30200 N
Ground pressure with rubber tracks	25.50 kPa
Ground pressure with steel tracks	26.70 kPa
Ground pressure with long dipperstick and rubber tracks	25.60 kPa
Ground pressure with long dipperstick and steel tracks	26.80 kPa

Cycle Times

Boom raise time	3.4 s
Boom lower time	4.2 s
Bucket curl time	2.4 s
Bucket dump time	1.6 s
Dipperstick retract time	1.7 s
Dipperstick extend time	2.4 s
Boom swing left time	3.2 s
Boom swing right time	4.6 s
Blade raise time	1.7 s
Blade lower time	2.4 s
Slew rate	9.6 RPM

Weights

Operating weight with ROPS canopy , rubber tracks, counterweight, 610 mm bucket (SAE J732)	2565 kg
Additional weight for cab with heating	130 kg
Additional weight for steel tracks	119 kg
Additional weight for long dipperstick	10 kg
Additional weight with counter weight	183 kg

Engine

Make / model	Kubota / D1105-E2B-BCZ-2
Fuel	Diesel
Cooling	Liquid, forced circulation
Maximum power (TECH)	15.5 kW
Maximum governed speed	2400.0 RPM
High idle speed	2550.0 RPM
Low idle speed	1150.0 RPM
Maximum torque at 1400 RPM	71.2 Nm
Maximum net torque at 1400 RPM (SAE J1995)	71.2 Nm
Number of cylinders	3
Displacement	1123 cm ³
Bore	78.0 mm
Stroke	78.4 mm
Air filter	Dry, dual element, replaceable paper cartridge with safety element and restriction indicator
Ignition	Diesel-compression

Electrical

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

Pump type	Dual outlet variable displacement piston pump with gear pumps
Piston pump capacity	28.80 L/min
Piston pump capacity	28.80 L/min
Gear pump capacity	19.20 L/min
Gear pump capacity	6.50 L/min
Swing lock release pressure	191.00 bar
Auxiliary relief	180.0 bar
Port relief pressure for boom, bucket and dipperstick circuits	290.00 bar
Control valve	10-spool, parallel series type, open center
Hydraulic filter	Full-flow replaceable — 3 µm synthetic media element
Fluid lines	SAE standard tubelines, hoses, and fittings
Auxiliary flow	48.00 L/min

Hydraulic Cylinders

Boom cylinder	Cushion up
Boom cylinder bore	69.9 mm
Boom cylinder rod	41.3 mm
Boom cylinder stroke	546.1 mm
Dipperstick cylinder	Cushion up & cushion retract
Dipperstick cylinder bore	69.9 mm
Dipperstick cylinder rod	41.3 mm
Dipperstick cylinder stroke	546.1 mm
Bucket cylinder	No cushion
Bucket cylinder bore	57.2 mm

Bucket cylinder rod	31.8 mm
Bucket cylinder stroke	445.0 mm
Boom swing cylinder	Cushion left and right
Boom swing cylinder bore	69.9 mm
Boom swing cylinder rod	38.1 mm
Boom swing cylinder stroke	385.3 mm
Blade cylinder	No cushion
Blade cylinder bore	82.6 mm
Blade cylinder rod	44.5 mm
Blade cylinder stroke	145.0 mm

Buckets

Width	Weight (kg)	Rated capacity (L)
STD 23 cm	44.9	24
STD 30 cm	51.4	35
STD 40 cm	60.9	52
STD 45 cm	64.7	60
STD 50 cm	68.6	69
STD 60 cm	78.1	86
STD 70 cm	87.5	103
HD 30 cm	53.2	35
HD 60 cm	70.4	69
HD 70 cm	79.9	86

Slew System

Boom swing, left	60°
Boom swing, right	60°
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 42.9:1

Traction

Track width	300.0 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	2.4 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, 4 bottom
Gradeability	30°

Brakes

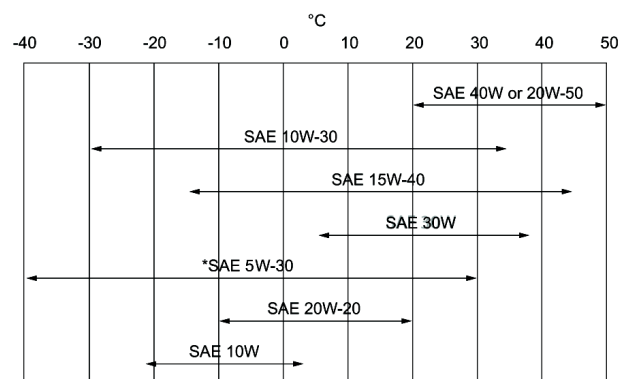
Parking brake	Spring applied, hydraulically released, multi-disk brake
Slew brake	Spring applied, hydraulically released
Travel brake	Hydraulic brake on motor

Fluid Capacities

Cooling system	4.60 L
Engine lubrication plus oil filter	5.10 L
Fuel reservoir	34.60 L
Hydraulic reservoir	14.70 L
Hydraulic system	25.00 L
Final drive case (each)	0.60 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 lever on right hand side
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
- Auto idle switch
- Windshield wiper/washer switch
- High travel speed indicator
- Work light switch
- Work light indicator
- Battery kill switch

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

- 1515 mm dozer blade
- 300 mm rubber tracks

- Auto shift travel
- Auxiliary hydraulics with Quick Couplers
- Blade float feature
- Cab light
- Clamp ready
- Control console locks
- Cupholder
- Engine/hydraulic monitor with shutdown
- Fingertip auxiliary hydraulic control
- Horn
- Hydraulic joystick controls
- Lockable storage compartment
- Radio/MP3 ready
- Retractable seat belt
- Suspension seat with high back
- TOPS/ROPS* canopy ¹
- Two-speed travel
- Work lights (boom and upperstructure)
- Warranty: 12 months, 2000 hours (whichever occurs first)

Options

Options

- Air conditioning (Cab with HVAC)
- Heating (Cab with heater)
- 2nd Auxiliary hydraulics
- Long dipperstick
- Deluxe textile suspension seat
- Boom safety valve with overload warning
- Boom & arm safety valves with overload warning
- AM/FM MP3 stereo radio
- FOGS kit (Overhead guard)
- Lifting chain kit
- Travel motion alarm
- 300 mm steel tracks
- Beacon kit
- Left and right mirror kit
- Additional work light kit
- Rubber bolt-on pads for steel tracks
- Special applications kit (Front windscreen protection)
- Fuel filter with transparent water separator

Attachments

- Breakers
- Clayspade Buckets, Klac
- Clayspade Buckets, Lehnhoff
- Clayspade Buckets, Pin-on
- Digging Buckets, Klac
- Digging Buckets, Lehnhoff
- Digging Buckets, X-Change
- Grading Buckets, Klac
- Grading Buckets, Lehnhoff
- Grading Buckets, X-Change

1. Roll Over Protective Structure (ROPS) – Meets requirements of ISO 3471. Tip Over Protective Structure (TOPS) – Meets requirements of ISO 12117.

Environmental

Noise level LpA(EU Directive 2000/14/EC)	77 dB(A)
Noise level LWA(EU Directive 2000/14/EC)	93 dB(A)
Whole body vibration (ISO 2631–1)	0.17 ms ⁻²
Hand-arm vibration (ISO 5349–1)	0.63 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. 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.
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 disk 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	Weather-resistant operator handbook attached to the inside of the cab, providing operational instructions and warnings decals with pictorials and international symbols.