Engine	E130		
Manufacturer and Model	John Deere PowerTech E 4045		
Non-Road Emission Standard	China Stage III and EU Stage II dual certified		
Gross Rated Power (SAE J1995 and ISO 3046)	80 kW at 1,800 rpm (109hp)		
Net Rated Power (ISO 9249)	79 kW at 1,800 rpm (109hp)		
Maximum Gross Torque (SAE J1995 and ISO 3046)	445 Nm at 1,400 rpm		
Maximum Net Torque (ISO 9249)	437 Nm at 1,400 rpm		
Cylinders	4		
Piston Displacement	4.5 L		
Type	ECU controlled, 2 valves per cylinder, HPCR fuel system, wastegated turbocharger, air-to-air charge-air cooled		
Cooling	**E130 LC**		
Cool-on-demand, electronically controlled, variable-speed, suction-type cooling fan			
Hydraulics			
Main Pumps	Tandem variable-displacement, electrohydraulic (EH)-controlled, axial-piston pumps		
Maximum Discharge Flow	2 x 126 L/m (2 x 70 cc/rev. at 100% efficiency)		
Pilot Pump	Gear type		
Maximum Discharge Flow	1 x 18 L/m (1 x 10 cc/rev. at 100% efficiency)		
System Operating Pressure			
Circuits			
Implement	32.4 MPa	Swing	27 MPa
Travel	35.3 MPa	Pilot	3.9 MPa
Pressure Boost	35.3 MPa		
Auxiliary Circuit	Preset to 21.0 MPa 1-way mode / 32.4 MPa 2-way mode		
Travel System			
Fully hydrostatic, 2-speed axial-piston motor with spring-applied hydraulic-release brake			
Maximum Travel Speed			
Low	3.1 km/h		
High	5.8 km/h		
Maximum Drawbar Pull	139 kN		

Cylinders			
	Bore Diameter	Rod Diameter	Stroke
Boom (2)	105 mm	70 mm	979 mm
Arm (1)	115 mm	80 mm	1195 mm
Bucket (1)	100 mm	70 mm	875 mm

Swing System	
Motor	Axial piston with spring-applied hydraulic-release brake
Speed	12.5 rpm
Torque	35.8 kNm

Undercarriage	E130
Includes lubricated rollers, idlers, track adjusters (with shock-absorbing spring), and greased and sealed track chain with triple-grouser shoes	
Center Frame	X-leg type
Track Frame	Pentagonal box type
Shoes, Triple Grouser (each side)	43
Rollers (each side)	
Carrier	1
Track	6
Track Guides	0 (1 per side optional)
Triple Grouser Shoe Width	
Standard	500 mm
Optional	—

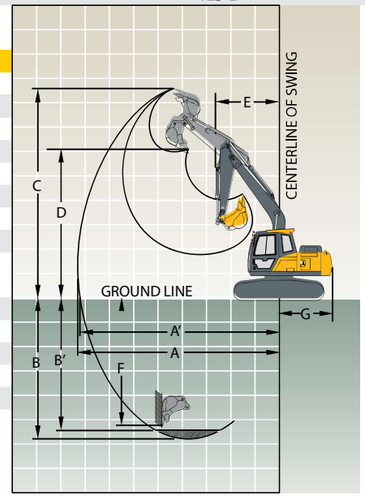
Ground Pressure	
Triple-Grouser Shoes	
500-mm Standard	43.6 kPa
600-mm Optional	—

Electrical	E130 / E140 LC
Number of Batteries	2 – 12 volt (24 volt)
Battery Capacity	950 CCA
Reserve Capacity	165 min.
Alternator Rating	80 amp

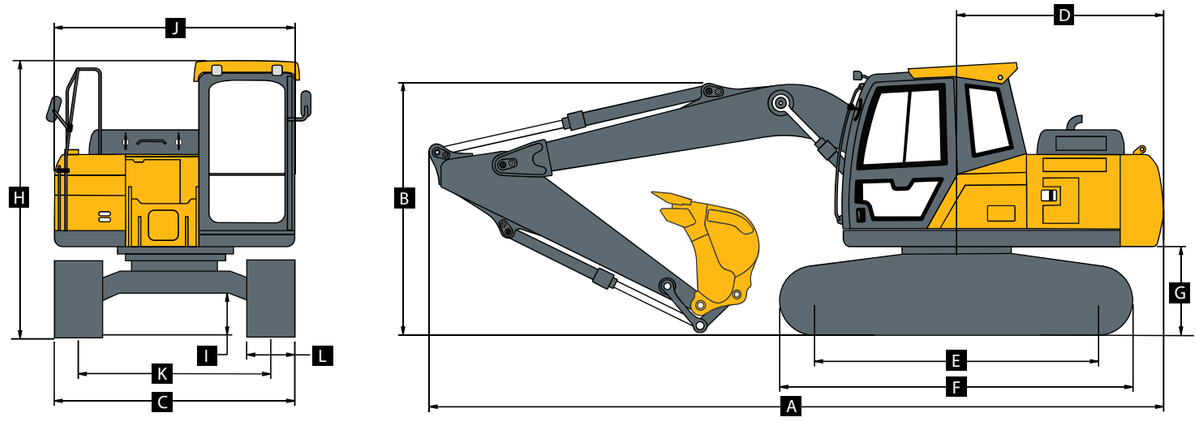
Operating Weights	E130
Standard Configuration	0.53-m³ General-Purpose Bucket
Triple-Grouser Shoes	
500-mm Standard	13 500 kg
600-mm Optional	—
Counterweight	2100 kg

Refill Capacities (standard fill)	
Fuel Tank	240 L
Engine Coolant	18.2 L
Engine Oil	14.7 L
Swing Mechanism	1.8 L
Travel Final Device (each side)	2.2 L
Hydraulic System	185 L
Hydraulic Tank	125 L

Operating Dimensions		
Arm Length	2.52 m with 4.6-m Boom	
Tool Force		
Bucket	101 kN	
Arm	70 kN	
	Tooth	Cutting Edge
A Maximum Reach	8351 mm	8199 mm
A' Maximum Reach at Ground Level	8214 mm	8059 mm
B Maximum Digging Depth	5764 mm	5613 mm
B' Maximum Depth Cut for 2.44-m Level Bottom	5483 mm	5255 mm
C Maximum Cutting Height	8568 mm	8465 mm
D Maximum Loading Height	6030 mm	6181 mm
E Minimum Slew Radius	2626 mm	2626 mm
F Maximum Vertical Wall Digging Depth	5107 mm	4857 mm
G Tail-Swing Radius	2236 mm	2236 mm



Machine Dimensions	E130
Arm Length	2.52 m with 4.6-m Boom
A Overall Length	7632 mm
B Overall Height (over boom)	2740 mm
C Overall Width (over tracks)	2500 mm
D Tail Length	2151 mm
Tail-Swing Radius	2236 mm
E Tumbler Distance	2780 mm
F Overall Length of Crawler	3501 mm
G Counterweight Clearance	888 mm
H Overall Height (to top of cab)	2841 mm
I Ground Clearance	434 mm
J Overall Width of Upperstructure	2500 mm
K Track Gauge	2000 mm
L Shoe Width	500 mm



E130 Lift Capacities

Boldface typeindicates stability-limited capacity; lightface type indicates hydraulically limited capacities, in kg. Ratings at bucket pivot/arm nose; machine equipped with 2.52-m arm with 4.6-m boom and 500-mm triple-grouser shoes; and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine. All lift capacities are based on ISO 10567.

	HORIZONTAL DISTANCE FROM CENTERLINE OF ROTATION								Lift Capacity at Maximum Reach		Maximum Reach (m)
	1.5 m		3.0 m		4.5 m		6.0 m				
LOAD POINT HEIGHT	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side	
6.0 m					3480	3480			3060	2730	5.39
4.5 m					3660	3660	3180	2330	2800	2040	6.37
3.0 m			5980	5980	4390	3450	3040	2210	2430	1760	6.89
1.5 m			8340	5770	4520	3190	2930	2100	2290	1650	7.05
Ground Line			6850	5450	4330	3010	2840	2020	2340	1670	6.89
–1.5 m	4750	4750	8450	5430	4260	2950	2820	2000	2600	1860	6.37
–3.0 m	9270	9270	7330	5560	4330	3010			3350	2380	5.40

E130 Bucket Selection Guide*

	General Purpose (GP)	Heavy Duty (HD)
Bucket Capacity	0.53 m³	0.5 m³
Bucket Mass	493 kg	506 kg
Bucket Width (Cutter Plate)	940 mm	900 mm
Earth Loam / Pulverized Gypsum (1200 kg/m³)	Yes	Yes
Packed Earth / Crushed Stone (1500 kg/m³)	Yes	Yes
Wet Earth / Broken Rock (1800 kg/m³)	Yes	Yes
Wet Gravel / Dense Earth (2000 kg/m³)	Yes	Yes

Yes – Indicates suitable for use with material of this material density; No – Indicates not suitable for use with this material density.

*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials, and volume loading applications such as mass-excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.