

NEW

JSI30 | HYDRAULIC EXCAVATOR

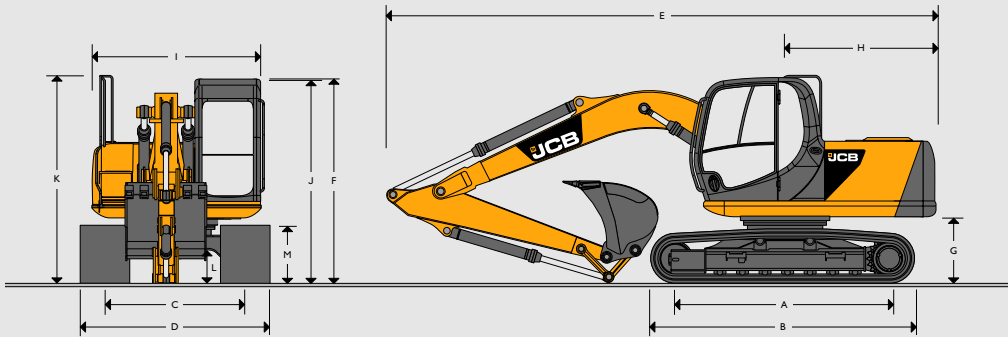


Hydraulic Excavator JSI30 LC

Engine Power: 81kW (109hp) | Bucket Capacity: 0.34 – 0.85m³ | Operating weight: 13,183 – 13,762kg



STATIC DIMENSIONS



A	Track length on ground	mm	2865
B	Undercarriage overall length	mm	3605
C	Track gauge	mm	1990
D	Width over tracks (500mm trackshoes)	mm	2490
D	Width over tracks (600mm trackshoes)	mm	2590
D	Width over tracks (700mm trackshoes)	mm	2690
D	Width over tracks (850mm trackshoes)	mm	2840
Dipper lengths			
		2.5m	3.0m*
E	Transport length with Monoboom	mm	7620
F	*Transport height with Monoboom	mm	3289
G	*Counterweight clearance	mm	905
H	Tail swing radius	mm	2200
I	Width of superstructure	mm	2410
J	*Height over cab	mm	2845
K	*Height over grab rail	mm	2867
L	*Ground clearance	mm	425
M	Track height	mm	811

*Machine in transport position * Height with upperstructure safety rails: 2967mm.

ENGINE

Model	JCB EcoMAX 444 TCA 81 EU Stage IIIB, EPA Tier 4 interim compliant.
Type	Water cooled, 4-stroke, 4-cylinder in-line, common rail direct injection, turbocharged variable geometry intercooled diesel.
Rated power (ISO 14899 (SAE J1995))	81 kW (109hp) at 2050rpm.
Piston Displacement	4.399 litres
Injection	13.8
Air Filtration	Dry
Cooling	Large capacity radiator.
Starting system	24 volt – 4kW.
Batteries	2 x 12 volt.
Alternator	24 volt 55 amp.
Refuelling pump	Electric type (optional).

SWING SYSTEM

Swing motor	Axial piston type.
Swing brake	Hydraulic braking plus automatic spring applied disc type parking brake.
Final drive	Planetary reduction.
Swing speed	12.8 rpm.
Swing gear	Large diameter, internally toothed fully sealed grease bath lubricated.
Swing lock	Multi position switchable brake.

UNDERCARRIAGE

	Fully welded, "X" frame type with central bellyguarding and sloping sidemembers with dirt relief holes under top rollers.
Recovery point	Front and rear.
Upper & lower rollers	Heat treated, sealed and lubricated.
Track adjustment	Grease cylinder type.
Track type	Sealed and lubricated.
Track idler	Sealed and lubricated, with spring cushioned recoil.
Track shoes	500mm triple grouser.
	600mm triple grouser.
	700mm triple grouser.
	850mm triple grouser.
Rollers and Shoes (each side)	Upper rollers: 2
	Lower rollers: 7
	Track shoes: 44

TRACK DRIVE	
Type	Fully hydrostatic, three speed with autoshift between high and medium speed.
Travel motors	Variable swash axial piston type, fully guarded within undercarriage frame.
Final drive	Planetary reduction, bolt-on sprockets.
Service brake	Hydraulic counter balance valve to prevent overspeeding on gradients.
Park brake	Disc type, spring applied, automatic hydraulic release.
Gradeability	70% (35 deg) continuous.
Travel speed	High – 5.2 km/h Mid – 3.1 km/h Low – 2.6 km/h
Tractive effort	128kN

HYDRAULIC SYSTEM	
Pumps	
Main pumps	2 variable displacement axial piston type.
Maximum flow	2 x 134 L/min
Servo pump	Gear type.
Maximum flow	21 L/min
Control valve	
A combined four and five spool control valve with auxiliary service spool as standard.	
Relief valve settings	
Boom/Arm/Bucket	318 bar
With power boost	343 bar
Swing circuit	279 bar
Travel circuit	343 bar
Pilot control	40 bar
Filtration	
In tank	150 micron, suction strainer.
Main return line	10 micron, fibreform element.
Plexus Bypass line	1.5 micron, paper element.
Pilot line	10 micron, paper element.
Hydraulic hammer return	10 micron, reinforced microform element.

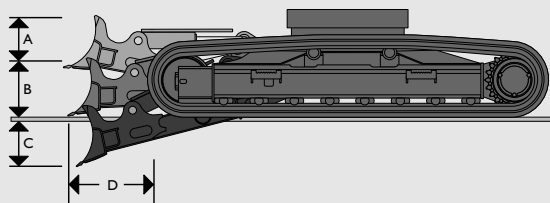
SERVICE CAPACITIES	
Machine model	Litres
Fuel tank	253
Engine coolant	19.7
Engine oil	20.4
Swing reduction gear	2.2
Track reduction gear (each side)	3.5
Hydraulic system	124.0
Hydraulic tank	73.0

WEIGHTS AND GROUND BEARING PRESSURES		
Machine equipped with 4.7m Monoboom, 2.5m Dipper, Standard Excavating Bucket, operator and full fuel tank.		
Shoe Width	Operating Weight	Bearing Pressure
500mm	13183kg	0.42kg/sq. cm.
600mm	13373kg	0.36kg/sq. cm.
700mm	13564kg	0.31 kg/sq. cm.
850mm	13762kg	0.27kg/sq. cm.

BUCKET AND ARM COMBINATION									
Arm length	No Q/Hitch Fitted				Q/Hitch Fitted*				Bucket weight
	2.1m	2.5m	2.7m	3.0m	2.1m	2.5m	2.7m	3.0m	
GP bucket 610mm. 0.34m ³	☐	☐	☐	☐	☐	☐	☐	☐	368kg
GP bucket 762mm. 0.46m ³	☐	☐	☐	☐	☐	■	■	●	460kg
GP bucket 914mm. 0.59m ³	☐	☐	■	●	●	●	✘	✘	511kg
GP bucket 1067mm. 0.718m ³	☐	■	■	✘	●	✘	✘	✘	579kg
GP bucket 1219mm. 0.85m ³	■	■	●	✘	✘	✘	✘	✘	625kg

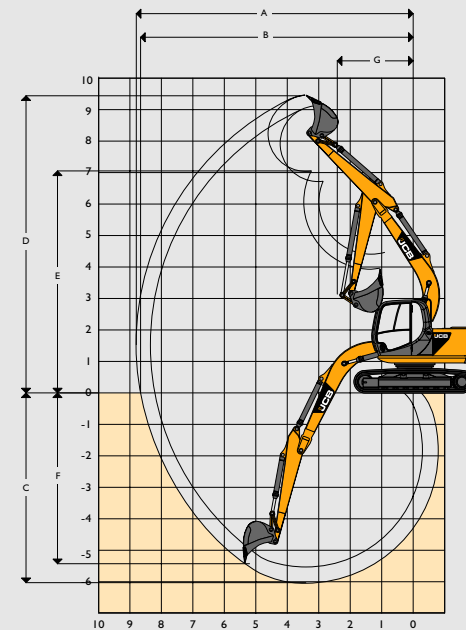
- ☐ = Suitable for general excavating (materials up to 2000kg/cu.m).
 - = Suitable for light excavating (materials up to 1600kg/cu.m.)
 - = Suitable for grading & loading materials up to 1200kg/cu.m).
 - ✘ = Not recommended
- * Bucket capacity using JCB quickhitch only (quickhitch = 186kg).

OPTIONAL BLADE



A	Blade height	mm	490
B	Blade lift above ground	mm	440
C	Blade cut below ground	mm	510
D	Blade forward of track	mm	440
	Dozer width – 500mm tracks	mm	2510
	Dozer width – 600mm tracks	mm	2610
	Dozer width – 700mm tracks	mm	2710
Additional machine weight with blade			
	500mm tracks	kg	747
	600mm tracks	kg	753
	700mm tracks	kg	759

WORKING RANGE



Boom length:		4.70m	
Dipper length:		2.50m	
A	Maximum digging reach	mm	8340
B	Maximum digging reach (on ground)	mm	8197
C	Maximum digging depth	mm	5530
D	Maximum digging height	mm	9118
E	Maximum dumping height	mm	6729
F	Maximum vertical wall cut depth	mm	3625
G	Minimum swing radius	mm	2231
	Bucket rotation		182°
	Maximum dipper tearout (ISO 6015)	kgf	6680
	Maximum bucket tearout (ISO 6015)	kgf	9375
Dipper length:		3.00m	
A	Maximum digging reach	mm	8796
B	Maximum digging reach (on ground)	mm	8660
C	Maximum digging depth	mm	6028
D	Maximum digging height	mm	9440
E	Maximum dumping height	mm	7041
F	Maximum vertical wall cut depth	mm	4050
G	Minimum swing radius	mm	2591
	Bucket rotation		182°
	Maximum dipper tearout (ISO 5016)	kgf	5970
	Maximum bucket tearout (ISO 5016)	kgf	9375