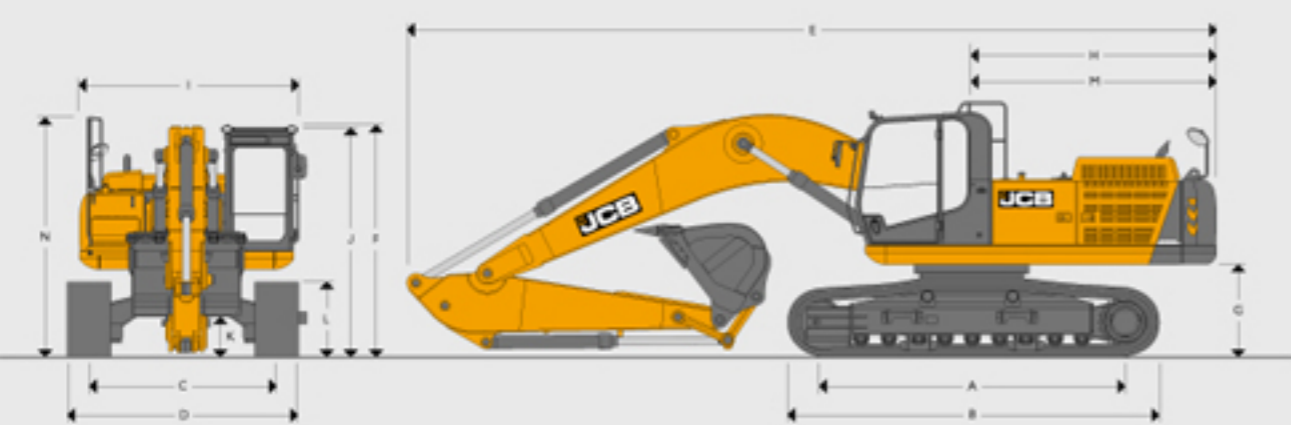


JS 305 LC JCB Excavator Specification

STATIC DIMENSIONS



STATIC DIMENSIONS

Model	LC	
A Track length on ground	mm	3990
B Undercarriage overall length	mm	4954
C Track gauge	mm	2600
J Width over tracks (600mm trackshoes)	mm	3200
D Width over tracks (700mm trackshoes)	mm	3300
D Width over tracks (800mm trackshoes)	mm	3400
D Width over tracks (900mm trackshoes)	mm	3500
G Counterweight clearance	mm	1223
H Tail swing radius	mm	3213
I Overall width of superstructure	mm	3067
J Height over cab	mm	3331
K Ground clearance	mm	550
L Track height	mm	1026
M Tail length	mm	3185
N Height over grab rail	mm	3374
Monoboom 6.2m		
Dipper lengths		2.5m 3.1m
E Transport length	mm	10755 10630
F Transport height	mm	3459 3344

TRACK DRIVE

Type	Fully hydrostatic, two speed with auto shift.
Travel motors	Variable swash axial piston type, fully guarded within undercarriage.
Final drive	Planetary reduction, bolt-on sprockets.
Service brake	Hydraulic counter balance valve.
Park brake	Disc type, spring applied, automatic hydraulic release.
Gradeability	70% (35 deg) continuous.
Travel speed	High – 5.2 km/h Low – 2.1 km/h
Tractive effort	246.3 kNm

HYDRAULIC SYSTEM

Open centered, negative control hydraulic system with twin variable flow piston pumps providing flow-on-demand.

Pumps	
Main pumps	2 variable displacement axial piston type.
Maximum flow	2 x 250 l/min.
Servo pump	Gear type.
Maximum flow	18 l/min.

Control valve	
A combined four and five spool control valve with auxiliary service spool as standard.	

Relief/Valve settings	
Boom/Arm/Bucket	343 bar MRV (392 bar ARV).
Swing circuit	290 bar.
Travel circuit	343 bar.
Pilot control	39 bar.

Filtration	
In tank	195 micron, suction strainer.
Main return line	10 micron.
Pilot line	10 micron.
Hydraulic hammer return	10 micron, aluminium housing with perbunan (NBR) seals.

SERVICE CAPACITIES

Fuel tank	Litres	590
Engine coolant	Litres	32
Engine oil	Litres	30
Swing reduction gear	Litres	16
Track reduction gear (each side)	Litres	5
Hydraulic system	Litres	430
Hydraulic tank*	Litres	239

*Deduction cylinder volumes and service fill (25 litres).

LIFT CAPACITIES – Dipper length: 2.5m, Boom: 6.2m, 600mm Trackshoes, No bucket.

Load Point	3.0m				4.5m				6.0m				7.5m				Capacity at Maximum Reach	
	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm		
6m					7460*	7460*	7170*	5430	7170*	5340	7565							
4.5m			10700*	10700*	8470*	7540	7480*	5280	7290	4540	8190							
3m			13600*	10590	9760*	7030	8080*	5040	6720	4130	8501							
1.5m					10880*	6610	7950	4820	6540	3980	8533							
0m					10900	6370	7790	4670	6740	4070	8291							
- 1.5m	13440*	13440*	15320*	9650	10830	6300	7760	4650	7420	4460	7748							
- 3m	18820*	18820*	13940*	9840	10520*	6410			8910	5400	6830							

LIFT CAPACITIES – Dipper length: 3.1m, Boom: 6.2m, 600mm Trackshoes, No bucket.

Load Point	3.0m				4.5m				6.0m				7.5m				Capacity at Maximum Reach	
	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm		
6m					6680*	6680*	6460*	5550	5290*	4690	8210							
4.5m			9450*	9450*	7740*	7700	6920*	5360	5340*	4050	8787							
3m			12380*	10980	9120*	7160	7610*	5090	5570*	3710	9077							
1.5m			14690*	10060	10400*	6680	7980	4830	5910	3580	9108							
0m			15670*	9640	10920	6370	7770	4640	6050	3640	8882							
- 1.5m	12510*	12510*	15600*	9550	10760	6240	7670	4560	6550	3920	8378							
- 3m	19540*	19540*	14640*	9660	10810	6270	7750	4630	7690	4590	7540							

ENGINE

Model	JCB DIESELMAX 672 mechanical engine
Type	Water cooled, 4-stroke, 6-cylinder in line, mechanical direct injection, turbocharged, intercooled.
Rated power	165kW (221hp) at 1800rpm
Piston displacement	7.2 litres.
Air filtration	Dry element with secondary safety element & in-cab warning indicator.
Starting system	24 volt.
Batteries	2 x 12 volt.
Alternator	24 volt, 55 ampere.

SLEW SYSTEM

Slew motor	Axial piston type.
Slew brake	Negative type, oil lubricated, multi-disc parking brake.
Slew torque	100.3 kNm
Slew speed	9.4 rpm
Slew gear	Large diameter, internally toothed fully sealed grease bath lubricated.

UNDERCARRIAGE

Carrage options	LC - Long Carrage.
Construction	Fully welded 'X' frame type with central belly guarding and sloping sidemembers with dirt relief holes under top rollers.
Recovery point	Front and rear.
Track shoe options	600mm 700mm 800mm 900mm
Upper and lower rollers	Heat treated, sealed and lubricated.
Track adjustment	Grease cylinder type.
Track idler	Sealed and lubricated, with spring cushioned recoil.
Track type	Sealed and lubricated.
Rollers and shoes (each side)	LC
No. of track guides	2 per side
No. of lower rollers	9 per side
No. of upper rollers	2 per side
No. of track shoes	50 per side

WEIGHTS AND GROUND BEARING PRESSURES

Figures include 1.49m³ (1364kg) bucket, 80kg operator, full fuel tank and 2.5m dipper.

		600mm shoes	700mm shoes	800mm shoes	900mm shoes
Machine weight	kg	31700	32054	32408	32762
Ground bearing pressure	kg/cm ²	0.66	0.57	0.51	0.46

BUCKET AND ARM COMBINATION

	mm	1360	1570	1660	1825
Bucket width	mm	1360	1570	1660	1825
Bucket capacity	m ³	1.24	1.49	1.61	1.80
Bucket weight	kg	1259	1364	1449	1532

LC	2.5m Quickhitch (No Quickhitch)	3.1m Quickhitch (No Quickhitch)	600mm shoes	700mm shoes	800mm shoes	900mm shoes
□	□ (□)	■ (□)	■ (□)	■ (□)	■ (□)	● (■)

□ = Suitable for general excavating (materials up to 1800kg/m³)

■ = Suitable for light excavating (materials up to 1500kg/m³)

● = Suitable for grading and loading (materials up to 1200kg/m³)

STANDARD / OPTIONAL EQUIPMENT

	Standard	Optional
Alarm	-	Travel alarm
Arm	2.5m Heavy duty arm	3.1m Heavy duty arm
Beacon	-	Warning beacon
Breaker	-	HM270T (includes mol & chisel)
Belly plate	6mm plate (undercarriage & revolving frame)	10mm plate (undercarriage & revolving frame)
Buckets	1.61m ³ HD	1.24m ³ HD, 1.49m ³ HD, 1.80m ³ HD
Camera	-	Rear-view camera with monitor
Climate control	Standard climate control	Carbon filter
Fire extinguisher	-	Fire extinguisher kit
Hydraulic oil	Hydraulic oil HP46	Hydraulic oil HP32, Hydraulic oil HP68
Lifting hook	-	Lifting hook on tipping link (hook or eye)
Lights	6 x Standard halogen worklights	Worklight guards
Pipework options	-	Hammer pipework Open/dose pipework (high flow double acting) Rotate pipework (low flow double acting) Merged high flow (double acting)
Quickhitch	-	Hydraulic quick hitch & installation kit
Track guides	Twin track guides	Full length track guides
Trackshoes	12mm Standard duty	600mm 700mm 800mm 900mm
		15mm Heavy duty
		600mm 700mm