

**NEW**

## Mini Excavator 8018 CTS



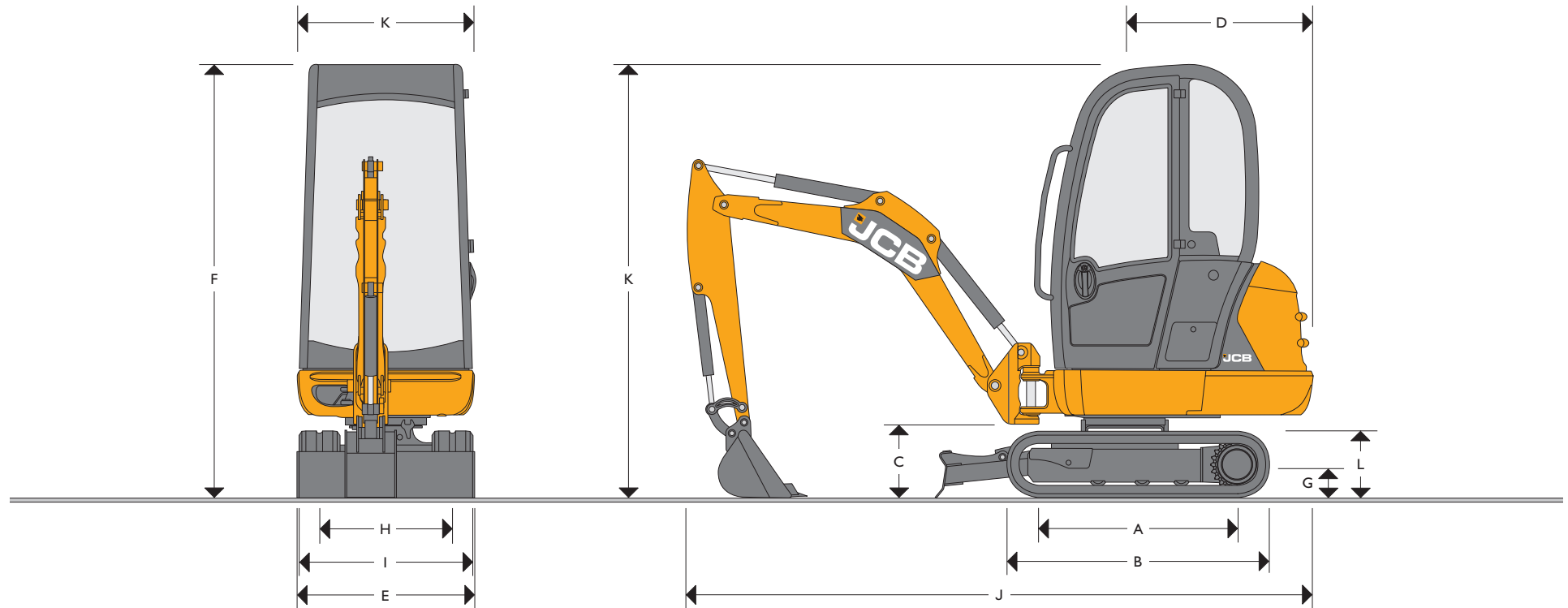
Operating Weight: 1822 kg (4016 lb) Net Engine Power: 14.2 kW (19 hp)

A Product of Hard Work





OPERATING WEIGHT: 1822 kg (4016 lbs) NET ENGINE POWER: 14.2 kW (19hp)



STATIC DIMENSIONS

Machine model	8018 CTS
	mm (ft-in)
A Sprocket idler centres	1127 (3-8)
B Undercarriage overall length	1484 (5-10)
C Kingpost clearance	394 (1-3½)
D Tailswing radius	1059 (3-5¼)
E Overall width of superstructure	996 (3-3¼)
F Height over cab	2318 (7-7)
G Ground clearance	158 (0-6)
H Track gauge	750 to 1110 (2-5½ to 3-7¼)

Machine model	8018 CTS
	mm (ft-in)
I Width over tracks (retracted)	980 (3-2½)
Width over tracks (extended)	1340 (4-5)
J Transport length – Standard dipper	3523 (11-6¾)
J Transport length – Long dipper	3467 (11-4½)
J Transport length – Gravemaster dipper	3265 (10-8½)
K Transport height with FOGS guard	2340 (7-8¼)
K Transport height without FOGS guard	2318 (7-7¼)
L Track height	366 (1-2)



**ENGINE**

Machine Model		8018 CTS
Model		403D-11 Tier III
Fuel		Diesel
Cooling		Water cooled
Gross power ISO 14396	kW (hp) @ 2200 rpm	14.7 (19.7)
Nett power	kW (hp) @ 2200 rpm	14.2 (19)
Gross torque ISO 14396	Nm (lbf ft) @ 1600 rpm	66.8 (49.27)
Nett torque	Nm (lbf ft) @ 1600 rpm	64.2 (47.35)
Displacement	cc / litres	1131 / 1.131
Gradeability	degrees	35
Starter motor	kW (hp)	1.1 (1.48)
Battery	volt / Ah	12v / 60
Alternator	amps	40

**UNDERCARRIAGE**

Machine model		8018 CTS
No of bottom rollers		3
Track width	mm (in)	230 (9)
Ground bearing pressure	kg/cm <sup>2</sup> (lb/in <sup>2</sup> )	0.33 (4.69)
Ground clearance	mm (in)	158 (6)
Track tensioning		Grease
Travel speed – low	kph (mph)	2.2 (1.37)
Travel speed – high	kph (mph)	3.9 (2.42)
Tractive effort	kN (lbf)	13.8 (3102)

**HYDRAULIC SYSTEM**

		Standard gear pump	Optional variable pump
Pump		Triple section Gear	1 Variable (2 Ports) / 1 Gear
Nominal output	lpm	43.6 (15.7 x 15.7 x 12.2)	46.9 (17.1 x 17.1 x 12.7)
Nominal output	UK gal/min	11.5 (3.6 x 3.6 x 3.2)	12.4 (4.5 x 4.5 x 3.4)
Excavator/track main relief	bar (psi)	230 (3336)	230 (3336)
Slew main relief	bar (psi)	160 (2321)	160 (2321)
Auxiliary hydraulic flow	litres (UK gal)	26 (6.8)	26 (6.8)
Hydraulic motors		Piston	Piston

**STANDARD EQUIPMENT**

ROPS & TOPS certified canopy, full audio/visual warning systems, slew travel lock, control isolator, external lockable toolbox, 12v power socket, lifting points, rubber tracks, 2 speed tracking, hydraulically extending undercarriage, ISO servo controls, static seat, boom worklight, double acting auxiliary circuit, triple section gear pump, extendable dozer blade, 1161mm (3ft-10in) dipper, bushed kingpost, steel bushes in dipper nose and bucket link, tilting cab.

**OPTIONAL EQUIPMENT**

ROPS & TOPS certified fully glazed cab with steel lower door (includes heater, interior light, door holdback latch with internal/external release, gas strut assisted front screen), suspension seat, dual pattern controls (ISO/SAE change-over), cab/canopy mounted worklights, 1261mm (4ft-2in) long dipper, 1500mm (4ft-11in) Gravemaster dipper\*, dipper pipework, hand held tool circuit, variable displacement pump, engine fan guard kit, FOPS roof guard, mirror, track pedals, toolkit, radio, biodegradable hydraulic oil, fire extinguisher, sunblind (cab builds), battery isolator, travel alarm, immobiliser, yellow roof moulding, 9 digging buckets (160mm to 760mm (6in to 30in)), 2 ditching/grading buckets (900mm & 1000mm (35in and 39in)), hydraulic breakers, earthdrills, mechanical quickhitch, hydraulic kerb-lifter, rotating or strobe beacon, toolkit and greasegun, heavy-duty track tension, JCB impact protection front screen.

\* Auxiliary pipework is not available with Gravemaster dipper option.

**OPERATOR ENVIRONMENT**

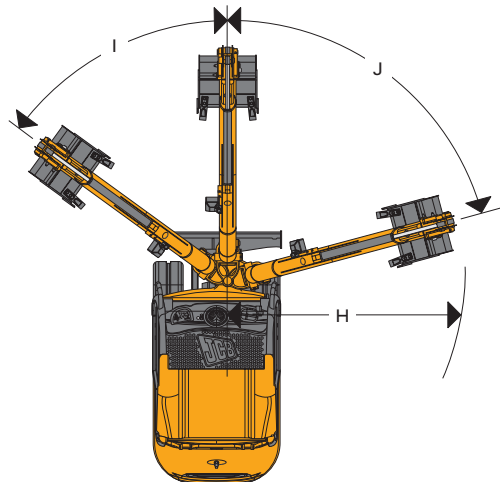
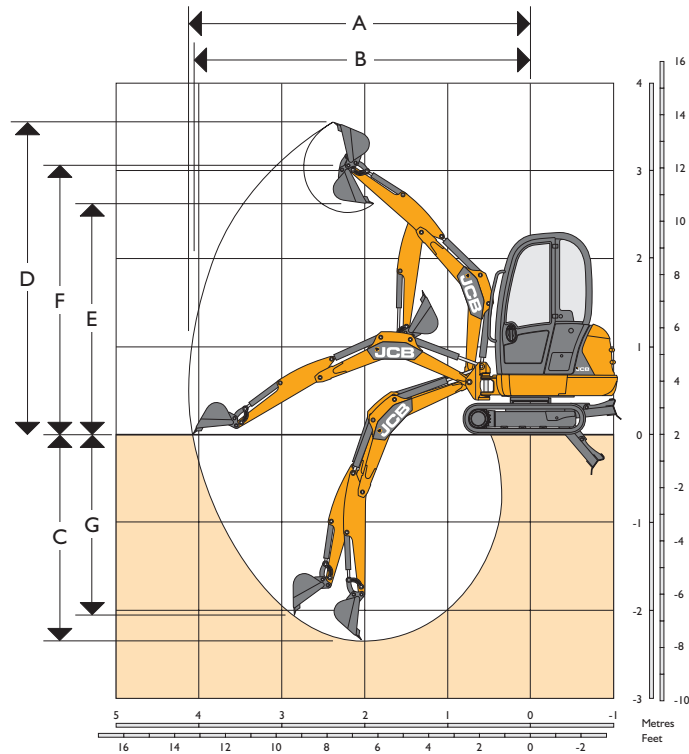
		External	Internal
Cab/canopy height with FOGS guard	mm (ft-in)	2318 (7-7)	2269 (7-5)
Cab/canopy height no FOGS guard	mm (ft-in)	2304 (7-6½)	2269 (7-5)
Cab/canopy length	mm (ft-in)	1171 (3-11)	1073 (3-6)
Cab/canopy width	mm (ft-in)	974 (3-2)	888 (2-11)
Distance from seat base to roof	mm (ft-in)	1223 (4-0)	
Door aperture width	mm (ft-in)	624 (2-0½)	

**SERVICE CAPACITIES**

Machine model		8018 CTS
Fuel tank	litres (US gal)	23.5 (6.2)
Engine coolant	litres (US gal)	5 (1.3)
Engine oil	litres (US gal)	4 (1.0)
Hydraulic system	litres (US gal)	28 (7.4)
Hydraulic tank	litres (US gal)	25 (6.6)

**EEC NOISE LEVELS (95/27/EC DYNAMIC)**

Machine model		8018 CTS
Cab external sound	dB (LwA)	93
Cab internal sound	dB (LpA)	77


**WORKING RANGE**

Machine model		8018 CTS		
Boom length	mm (ft-in)	1807 (5-11¼)	1807 (5-11¼)	1807 (5-11¼)
Dipper length	mm (ft-in)	1161 (3-10)	1261 (4-2)	1500 (4-11)
A Max digging reach	mm (ft-in)	4121 (13-6½)	4222 (13-10¼)	4449 (14-7¼)
B Max digging reach on ground	mm (ft-in)	4073 (13-4¼)	4170 (13-8¼)	4401 (14-5¼)
C Max digging depth – dozer up	mm (ft-in)	2343 (7-8¼)	2442 (8-0¼)	2682 (8-9½)
Max digging depth – dozer down	mm (ft-in)	2736 (8-11¾)	2836 (9-3¾)	3075 (10-1)
D Max digging height	mm (ft-in)	3555 (11-8)	3620 (11-10½)	3774 (12-4½)
E Max dump height	mm (ft-in)	2628 (8-7½)	2692 (8-10)	2846 (9-4)
F Max height to dipper nose pivot pin	mm (ft-in)	3054 (10-0¼)	3118 (10-2¾)	3272 (10-8¾)
G Max vertical wallcut depth	mm (ft-in)	2053 (6-8¾)	2148 (7-0½)	2376 (7-9½)
H Min. front swing radius (no offset)	mm (ft-in)	1638 (5-4¼)	1654 (5-5¼)	1693 (5-6¾)
Min. front swing radius (fully offset)	mm (ft-in)	1427 (4-8¼)	1442 (4-8¾)	1477 (4-10¼)
I Boom swing left	degrees	55	55	55
J Boom swing right	degrees	75	75	75
Bucket rotation	degrees	198	198	198
Dipper rotation	degrees	121	121	131
Bucket tearout	kN (lbf)	16.2 (3642)	16.2 (3642)	13.7 (3079)
Dipper tearout	kN (lbf)	9.2 (2068)	8.3 (1866)	7.1 (1596)
Slew speed	rpm	8.1	8.1	8.1

**MACHINE WEIGHTS**

Machine model		8018 CTS
Operating weight*	kg (lb)	1822 (4016)
Transport weight	kg (lb)	1747 (3851)
With canopy	kg (lb)	-80 (-176)
With FOGS guard	kg (lb)	+25 (+55)
With long dipper	kg (lb)	+2 (+4½)
With Gravemaster dipper	kg (lb)	+7 (+15½)

\*Operating weight to ISO 6016 including cab, rubber tracks, standard dipper, 300mm (12in) bucket, full tanks and a 75kg (165lb) operator.

**DOZER BLADE**

Machine model		8018 CTS
Max height (above ground)	mm (ft-in)	168 (0-6½)
Dig depth (below ground)	mm (ft-in)	454 (1-6)
Approach angle	degrees	17
Width	mm (ft-in)	1000 (3-3)
Width (extended)	mm (ft-in)	1380 (4-6¼)
Height	mm (ft-in)	248 (0-9¾)
Reach in front of tracks	mm (ft-in)	404 (1-4)

**8018 CTS LIFT CAPACITIES – Standard Dozer, 230mm (9in) Rubber Tracks, 1161mm (3ft 10in) dipper, No bucket.**

Load Point	Reach from slew centre																					
	1.5m (4ft 11in)				2.0m (6ft 7in)				2.5m (8ft 2½in)				3.0m (9ft 10in)				Capacity at maximum reach					
Height	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Distance	
m (ft-in)	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm (ft-in)
1.5 (4-11)									335*	232	335*	335*	323*	179	323*	240	245	152	303*	187	3400 (11-2)	
1 (3-3)					518*	330	518*	518*	418*	239	418*	310	357*	182	357*	229	235	146	296*	177	3500 (11-5¼)	
0.5 (1-8)	665	402			493	296	666*	375	351	222	451*	286	279	173	352*	218	227	140	284*	175	3550 (11-7¼)	
Ground Level	620	390	870*	526	447	285	644*	361	350	218	485*	278	271	172	346*	203	227	151	266*	172	3500 (11-5¼)	
-0.5 - (1-8)	664	377	761*	510	427	276	588*	360	327	215	445*	276	327*	172	327*	214	270*	153	270*	185	3550 (11-7¼)	
-1 - (3-3)	624*	344	624*	473	505*	269	505*	356	375*	212	375*	269	269*	175	269*	209	243*	175	243*	243*	3100 (10-2)	

**8018 CTS LIFT CAPACITIES – Standard Dozer, 230mm (9in) Rubber Tracks, 1261mm (4ft 2in) dipper, No bucket.**

Load Point	Reach from slew centre																					
	1.5m (4ft 11in)				2.0m (6ft 7in)				2.5m (8ft 2½in)				3.0m (9ft 10in)				Capacity at maximum reach					
Height	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Extended	Retracted	Dozer down	Dozer up	Distance	
m (ft-in)	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm (ft-in)
1.5 (4-11)									305*	305*	305*	252	306*	188	306*	232	235	146	291*	186	3500 (11-5¼)	
1 (3-3)					466*	323	466*	466*	388*	232	388*	353	338*	184	338*	231	224	135	279*	176	3650 (11-1½)	
0.5 (1-8)					510	300	613*	377	370	224	467*	280	295	176	351*	212	221	133	270*	165	3650 (11-1½)	
Ground Level	620	398	896*	488	455	293	665*	360	342	215	476*	274	270	172	372*	218	221	139	264*	167	3650 (11-1½)	
-0.5 - (1-8)	615	360	748*	471	443	277	584*	345	335	210	429*	266	279	167	328*	213	254*	144	254*	184	3450 (11-3¼)	
-1 - (3-3)	600*	356	600*	475	521*	261	521*	352	383*	207	383*	269	287*	165	287*	216	246*	158	246*	246*	3200 (10-6)	

Lift capacity front and rear.

Lift capacity full circle.

- Notes:**
- Lifting capacities are based on ISO 10567, that is: 75% of minimum tipping load or 87% of hydraulic lift capacity, whichever is the less. Lifting capacities marked\* are based on hydraulic capacity.
  - Lift capacities assume that the machine is on firm, level ground and equipped with an approved lifting point.
  - A bucket must be fitted when lifting, the weight of this bucket must be deducted from the above lift capacities.
  - Lift capacities may be limited by local regulations. Please refer to your dealer.

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By making constant and massive investments in the latest production technology, the JCB factories have become some of the most advanced in the world.

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