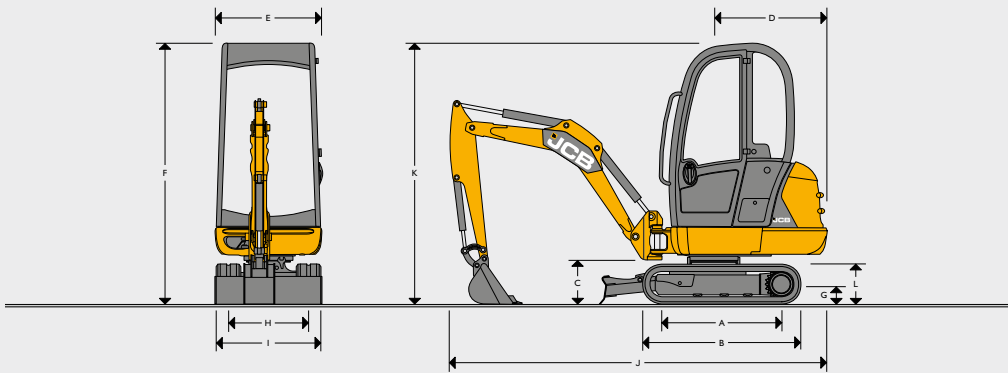


STATIC DIMENSIONS



Machine model		8018 CTS	8020 CTS	
A	Sprocket idler centres	mm	1127	1362
B	Undercarriage overall length	mm	1484	1724
C	Kingpost clearance	mm	394	435
D	Tailswing radius	mm		1059
	Tailswing over track	mm	569/389	558/378
E	Overall width of superstructure	mm		996
F	Height over cab	mm	2318	2355
G	Ground clearance	mm	158	148
H	Track gauge	mm	750 to 1110	752 to 1112
I	Width over tracks (retracted)	mm	980	1002
	Width over tracks (extended)	mm	1340	1362
J	Transport length – Standard dipper	mm	3523	3600
J	Transport length – Long dipper	mm	3467	N/A
J	Transport length – Gravemaster dipper	mm	3265	N/A
K	Transport height with FOGS guard	mm	2340	2377
K	Transport height without FOGS guard	mm	2318	2355
L	Track height	mm		366

ENGINE

Machine model		8018 CTS & 8020 CTS
Model		403D-11
Fuel		Diesel
Cooling		Water cooled
Gross power ISO 14396	kW (hp) @ 2200 rpm	14.7 (19.7)
Net power	kW (hp) @ 2200 rpm	14.2 (19)
Gross torque ISO 14396	Nm @ 1600 rpm	66.8
Net torque	Nm @ 1600 rpm	64.2
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	8020 CTS
No of bottom rollers		3	4
Track width	mm	230	250
Ground bearing pressure	kg/cm ²	0.35	0.30
Ground clearance	mm	158	148
Track tensioning		Grease	
Travel speed – low	kph	2.2	
Travel speed – high	kph	3.9	3.6
Tractive effort (nominal)	kN	13.8	16.8

HYDRAULIC SYSTEM

Machine model		8018 CTS	8020 CTS
		Standard gear pump	Optional variable pump
		Variable pump	
Pump		Triple section Gear	Variable (2 Ports) / 1 Gear
Nominal output	lpm	43.6 (15.7 x 15.7 x 12.2)	55.4 (22 x 22 x 11.4)
Excavator/track main relief	bar	230	
Slew main relief	bar	160	
Auxiliary hydraulic flow	lpm	26	44
Hydraulic motors		Piston	

OPERATOR ENVIRONMENT

Machine model		8018 CTS & 8020 CTS
Cab/canopy length	mm	1171
Cab/canopy width	mm	974
Distance from seat base to roof	mm	1223
Door aperture width	mm	624

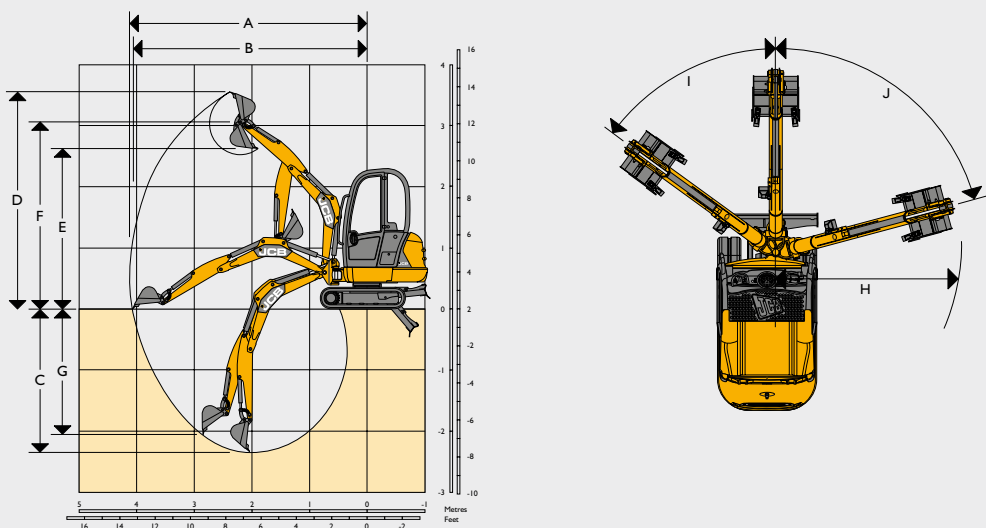
SERVICE CAPACITIES

Machine model		8018 CTS & 8020 CTS
Fuel tank	litres	23.5
Engine coolant	litres	5
Engine oil	litres	4
Hydraulic system	litres	28
Hydraulic tank	litres	25

DOZER BLADE

Machine model		8018 CTS	8020 CTS
Max height (above ground)	mm	246	308
Dig depth (below ground)	mm	380	201
Approach angle	degrees	25	
Width	mm	1000	
Width (extended)	mm	1362	
Height	mm	175	
Reach in front of tracks	mm	370	

WORKING RANGE



Machine model		8018 CTS		8020 CTS	
Boom length	mm	1807		1899	
Dipper length	mm	1161	1261	1500	1261
A Max digging reach	mm	4121	4222	4449	4308
B Max digging reach on ground	mm	4073	4170	4401	4252
C Max digging depth – dozer up	mm	2343	2442	2682	2504
Max digging depth – dozer down	mm	2736	2836	3075	2621
D Max digging height	mm	3555	3620	3774	3690
E Max dump height	mm	2628	2692	2846	2779
F Max height to dipper nose pivot pin	mm	3054	3118	3272	3194
G Max vertical wallcut depth	mm	2053	2148	2376	2187
H Min. front swing radius (no offset)	mm	1638	1654	1693	1737
Min. front swing radius (fully offset)	mm	1427	1442	1477	1519
I Boom swing left	degrees	55			
J Boom swing right	degrees	75			
Bucket rotation	degrees	198			
Dipper rotation	degrees	121			
Bucket tearout	kN	16.2		19	
Dipper tearout	kN	9.2	8.3	7.1	9.6
Slew speed	rpm	8.1			

EEC NOISE LEVELS (95/27/EC DYNAMIC)

Machine model		8018 CTS & 8020 CTS	
Cab external sound	dB (LwA)	93	
Cab internal sound	dB (LpA)	77	

MACHINE WEIGHTS

Machine model		8018 CTS	8020 CTS
Operating weight*	kg	1822	2067
With canopy	kg	-80	
With FOGS guard	kg	+25	
With long dipper	kg	+2	N/A
With Gravemaster dipper	kg	+7	N/A

*Operating weight to ISO 6016 including cab, rubber tracks, standard dipper, 300mm bucket, full tanks and a 75kg operator.

STANDARD EQUIPMENT

8018 CTS

ROPS & TOPS certified canopy, full audio/visual warning systems, slew travel lock, control isolator, external lockable toolbox, 12v power socket, lifting points, short pitch 230mm rubber tracks, 2 speed tracking, hydraulically extending undercarriage, ISO servo controls, static seat, boom worklight, double acting auxiliary circuit, triple section gear pump, straight line travel circuit, extendable dozer blade, top mounted boom ram, 1161mm dipper, bushed kingpost, steel bushes in dipper nose and bucket link, tilting cab, 3mm pressed steel bonnet.

8020 CTS

ROPS & TOPS certified canopy, full audio/visual warning systems, slew travel lock, control isolator, external lockable toolbox, 12v power socket, lifting points, short pitch 250mm rubber tracks, 2-speed auto shift tracking, hydraulically extending undercarriage, extendable dozer blade, heavy-duty recoil track tensioner, ISO servo controls, static seat, boom worklight, double acting auxiliary circuit, variable pump main hydraulics, straight line travel circuit, top mounted boom ram, 1261mm dipper, bushed kingpost, steel bushes in dipper nose and bucket link, tilting cab, 3mm pressed steel bonnet.

OPTIONAL EQUIPMENT

8018 CTS










ROPS & TOPS certified fully glazed cab with steel or glass lower door (includes heater, interior light, door holdback latch with internal/external release, gas strut assisted front screen), 230mm steel tracks, suspension seat, dual pattern controls (ISO/SAE change-over), cab/canopy mounted worklights, 1261mm long dipper, 1500mm Gravemaster dipper*, dipper auxiliary pipework extensions, hand held tool circuit, variable displacement pump, engine fan guard kit, FOPS roof guard, external mirror; track pedals, toolkit, radio, biodegradable hydraulic oil, fire extinguisher, sunblind (cab builds), battery isolator, travel alarm, immobiliser, external fuel filler with lockable cap, inclinometer kit, rotating or strobe beacon, toolkit and greasegun, heavy-duty recoil track tensioner, JCB impact protection front screen, dozer streetpads, counterweight protection bumper kit, front and rear bolt on tie down points, high visibility reflective decal kit, worklight guards, Ezidig cable detector ready kit, customised paint, object lifting kit, 9 digging buckets (160mm to 760mm), 2 ditching/grading buckets (900mm & 1000mm), hydraulic breakers, earthdrills, mechanical quickhitch, hydraulic kerb-lifter.

8020 CTS

ROPS & TOPS certified fully glazed cab with steel or glass lower door (includes heater, interior light, door holdback latch with internal/external release, gas-strut-assisted front screen), 250mm steel tracks, suspension seat, dual pattern controls (ISO/SAE change-over), cab/canopy mounted worklights, dipper auxiliary pipework extensions, handheld tool circuit, engine fan guard kit, FOPS roof guard, external mirror; track pedals, toolkit, radio, biodegradable hydraulic oil, fire extinguisher, sunblind (cab builds), battery isolator, travel alarm, immobiliser, external fuel filler with lockable cap, inclinometer kit, rotating or strobe beacon, toolkit and greasegun, JCB impact protection front screen, dozer streetpads, counterweight protection bumper kit, front and rear bolt on tie down points, high visibility reflective decal kit, worklight guards, customised paint, object lifting kit, 9 digging buckets (160mm to 760mm), 2 ditching/grading buckets (900mm & 1000mm), hydraulic breakers, earthdrills, mechanical quickhitch, hydraulic kerb-lifter.

LIFT CAPACITIES – Standard dozer, 230mm rubber tracks, I161mm dipper, no bucket.

8018 CTS

Load Point	Reach from slew centre																				Distance
	1.5m				2.0m				2.5m				3.0m				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	
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
1.5									335*	232	335*	335*	323*	179	323*	240	245	152	303*	187	3400
1					518*	330	518*	518*	418*	239	418*	310	357*	182	357*	229	235	146	296*	177	3500
0.5	665	402			493	296	666*	375	351	222	451*	286	279	173	352*	218	227	140	284*	175	3550
Ground Level	620	390	870*	526	447	285	644*	361	350	218	485*	278	271	172	346*	203	227	151	266*	172	3500
-0.5	664	377	761*	510	427	276	588*	360	327	215	445*	276	327*	172	327*	214	270*	153	270*	185	3350
-1	624*	344	624*	473	505*	269	505*	356	375*	212	375*	269	269*	175	269*	209	243*	175	243*	243*	3100



LIFT CAPACITIES – Standard Dozer, 230mm Rubber Tracks, I261mm dipper, No bucket.


8018 CTS


Load Point	Reach from slew centre																				Distance
	1.5m				2.0m				2.5m				3.0m				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	
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
1.5									305*	305*	305*	252	306*	188	306*	232	235	146	291*	186	3500
1					466*	323	466*	466*	388*	232	388*	353	338*	184	338*	231	224	135	279*	176	3650
0.5					510	300	613*	377	370	224	467*	280	295	176	351*	212	221	133	270*	165	3650
Ground Level	620	398	896*	488	455	293	665*	360	342	215	476*	274	270	172	372*	218	221	139	264*	167	3650
-0.5	615	360	748*	471	443	277	584*	345	335	210	429*	266	279	167	328*	213	254*	144	254*	184	3450
-1	600*	356	600*	475	521*	261	521*	352	383*	207	383*	269	287*	165	287*	216	246*	158	246*	246*	3200

LIFT CAPACITIES – Standard Dozer, 250mm Rubber Tracks, I261mm dipper, No bucket.

8020 CTS

Load Point	Reach from slew centre																				Distance
	1.5m				2.0m				2.5m				3.0m				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	
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
1.5													351*	239	351*	351*	260	173	323*	323*	3600
1					602*	422	602*	602*	470*	302	470*	470*	398*	230	398*	398*	254	167	319*	267	3700
0.5					582	379	729*	729*	437	275	527*	527*	335	220	409*	409*	246	151	294*	251	3750
Ground Level	752	479	990*	791	551	353	778*	618	402	263	580*	468	314	207	427*	353	233	153	301*	301*	3700
-0.5	743	484	862*	862*	539	347	684*	684*	390	257	517*	517*	309	203	402*	402*	291*	164	291*	291*	3500
-1	723*	458	723*	723*	573*	338	573*	573*	446*	251	446*	446*	329*	186	329*	329*	271*	179	271*	271*	3300

 Lift capacity front.

 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.