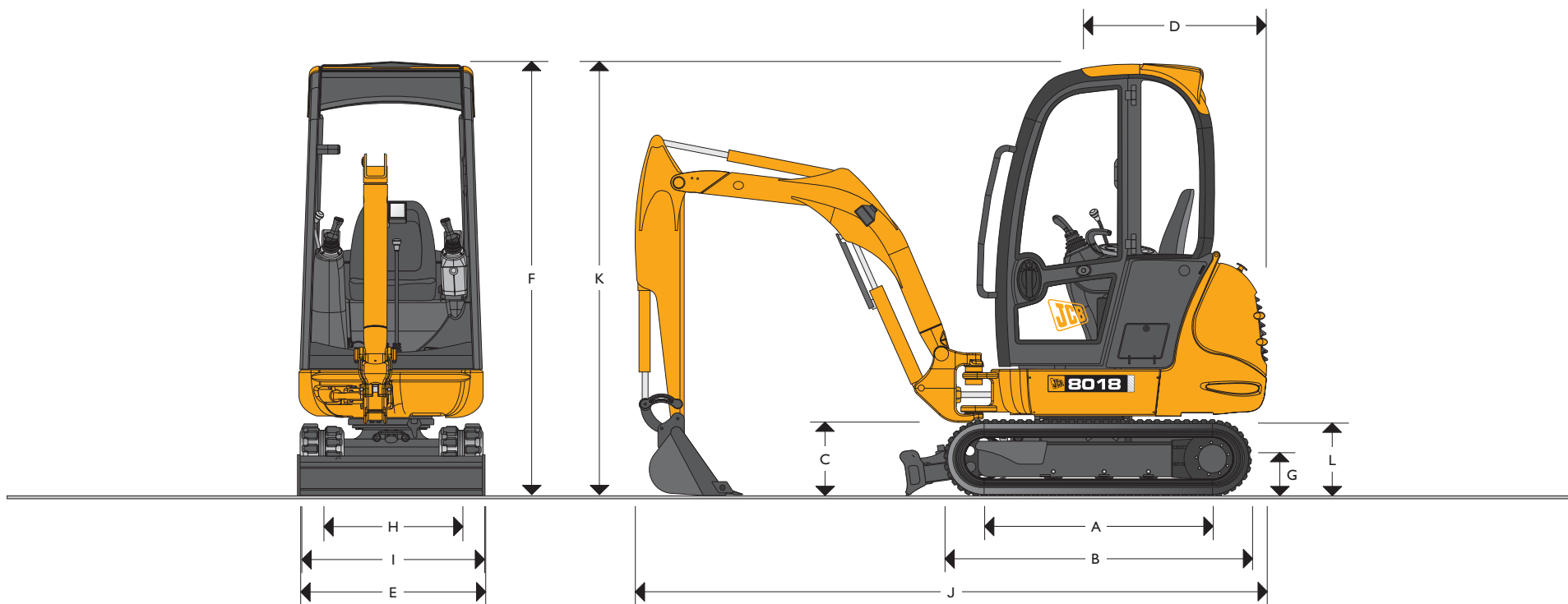




JCB MINI EXCAVATORS | 8016 & 8018



OPERATING WEIGHT: 1590 kg (3505 lbs) & 1662 kg (3664 lbs)
 NETT ENGINE POWER: 14.2 kW (19 hp)



STATIC DIMENSIONS

Machine model	8016 mm (ft-in)	8018 mm (ft-in)
A Sprocket idler centres	1127 (3-8)	1127 (3-8)
B Undercarriage overall length	1484 (5-10)	1484 (5-10)
C Kingpost clearance	376 (1-3)	376 (1-3)
D Tailswing radius	1028 (3-4½)	1028 (3-4½)
E Overall width of superstructure	980 (3-2½)	980 (3-2½)
F Height over cab	2318 (7-7)	2318 (7-7)
G Ground clearance	158 (0-6)	158 (0-6)
H Track gauge	742 (2-5)	750 to 1110 (2-5½ to 3-7¾)

Machine model	8016 mm (ft-in)	8018 mm (ft-in)
I Width over tracks (retracted)	972 (3-2)	980 (3-2½)
Width over tracks (extended)	N/A	1340 (4-5)
J Transport length – Standard dipper	3346 (10-11¼)	3418 (11-2½)
J Transport length – Long dipper	3261 (10-8¼)	3352 (11-0)
J Transport length – Gravemaster dipper	N/A	3219 (10-6¾)
K Transport height with FOGS guard	2318 (7-7)	2318 (7-7)
K Transport height without FOGS guard	2304 (7-6½)	2304 (7-6½)
L Track height	366 (1-2)	366 (1-2)



JCB MINI EXCAVATORS | 8016 & 8018



ENGINE

Machine Model	8016 & 8018	
Model	403C-11	
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 (lb ft) @ 1600 rpm	64.6 (47.64)
Nett torque	Nm (lb ft) @ 1600 rpm	62 (45.73)
Displacement	cc	1131
Gradeability	degrees	35
Starter motor	kW (hp)	1.1 (1.48)
Battery	volt / Ampere/hour	12v / 60Ah
Alternator	amps	40

UNDERCARRIAGE

Machine model	8016	8018
No of bottom rollers	3	3
Track width	mm (in)	230 (9)
Ground bearing pressure	kg/cm ² (lb/in ²)	0.3 (4.27)
Ground clearance	mm (in)	158 (6)
Track tensioning	Grease	Grease
Travel speed – low	kph (mph)	2 (1.24)
Travel speed – high	kph (mph)	3.8 (2.36)
Tractive effort	kN (lbf)	11.3 (2540)

HYDRAULIC SYSTEM – 8016

	Standard gear pump	Optional variable pump
Pump	Triple section Gear	1 Variable (2 Ports) / 1 Gear
Nominal output	lpm	39.2 (13.5 x 13.5 x 12.2)
Nominal output	UK gal/min	8.6 (2.95 x 2.95 x 2.7)
Excavator/track main relief	bar (psi)	230 (3336)
Slew main relief	bar (psi)	160 (2321)
Auxiliary hydraulic flow	litres (UK gal)	26.9 (5.9)
Hydraulic motors	Piston	Piston

HYDRAULIC SYSTEM – 8018

	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)
Nominal output	UK gal/min	9.6 (3.5 x 3.5 x 2.6)
Excavator/track main relief	bar (psi)	230 (3336)
Slew main relief	bar (psi)	160 (2321)
Auxiliary hydraulic flow	litres (UK gal)	31.3 (6.9)
Hydraulic motors	Piston	Piston



JCB MINI EXCAVATORS | 8016 & 8018



STANDARD EQUIPMENT – 8016

ROPS & TOPS certified canopy, full audio/visual warning systems, slew travel lock, control isolator, external lockable toolbox, 12v power socket, lifting points, rubber tracks, ISO servo controls, static seat, boom worklight, double acting auxiliary circuit, boom ram protection, triple section gear pump, dozer blade, 1161mm (3ft-10in) dipper.

OPTIONAL EQUIPMENT – 8016

ROPS & TOPS certified fully glazed cab (includes heater, interior light, cigar lighter, 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, 2 speed auto-shift tracking, long dozer blade, dipper pipework, hand held tool circuit, variable displacement pump, engine fan guard kit, FOGS roof guard, mirror, track pedals, toolkit, radio, biodegradable hydraulic oil, fire extinguisher, sunblind (cab builds), battery isolator, Datatag (UK, Italy and Holland only), 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.

STANDARD EQUIPMENT – 8018

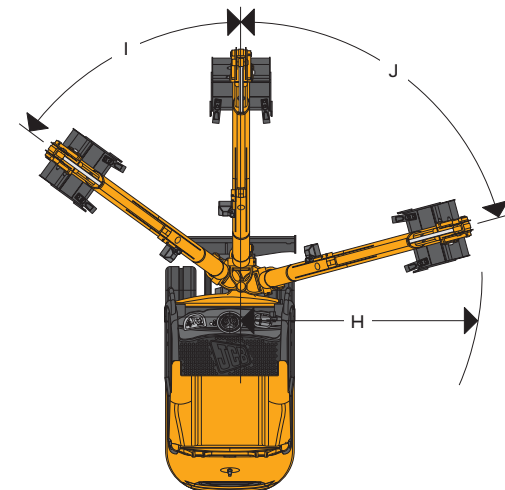
ROPS & TOPS certified canopy, full audio/visual warning systems, slew travel lock, control isolator, external lockable toolbox, 12v power socket, lifting points, rubber tracks, 2 speed auto-shift tracking, hydraulically extending undercarriage, ISO servo controls, static seat, boom worklight, double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

OPTIONAL EQUIPMENT – 8018

ROPS & TOPS certified fully glazed cab (includes heater, interior light, cigar lighter, 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*, long dozer blade, dipper pipework, hand held tool circuit, variable displacement pump, engine fan guard kit, FOGS roof guard, mirror, track pedals, toolkit, radio, biodegradable hydraulic oil, fire extinguisher, sunblind (cab builds), battery isolator, Datatag (UK, Italy and Holland only), 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.

* Auxiliary pipework is not available with Gravemaster dipper option.

WORKING RANGE

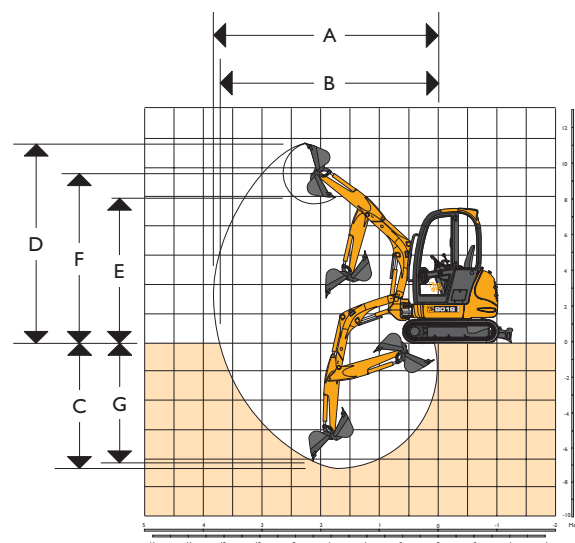
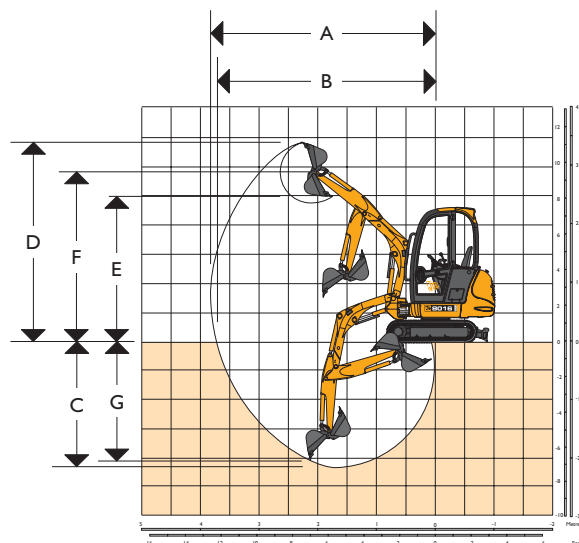




JCB MINI EXCAVATORS | 8016 & 8018



WORKING RANGE



WORKING RANGE

Machine model		8016	
Dipper length	mm (ft-in)	1161 (3-10)	1261 (4-2)
A Max digging reach	mm (ft-in)	3837 (12-7)	3933 (12-11)
B Max digging reach on ground	mm (ft-in)	3764 (12-4)	3847 (12-7½)
C Max digging depth – dozer up	mm (ft-in)	2044 (6-8½)	2144 (7-0½)
Max digging depth – dozer down	mm (ft-in)	2357 (7-9)	2457 (8-1)
D Max digging height	mm (ft-in)	3393 (11-2)	3454 (11-4)
E Max dump height	mm (ft-in)	2501 (8-2½)	2559 (8-5)
F Max height to dipper nose pivot pin	mm (ft-in)	2921 (9-7)	2965 (9-9)
G Max vertical wallcut depth	mm (ft-in)	1659 (5-5)	1754 (5-9)
H Min. front swing radius (no offset)	mm (ft-in)	1641 (5-4½)	1665 (5-6)
Min. front swing radius (fully offset)	mm (ft-in)	1457 (4-9)	1481 (4-10)
I Boom swing left	degrees	55	55
J Boom swing right	degrees	75	75
Bucket rotation	degrees	198	198
Dipper rotation	degrees	112	112
Bucket tearout	kN (lbf)	16.2 (3642)	16.2 (3642)
Dipper tearout	kN (lbf)	8 (1798)	7.25 (1630)
Slew speed	rpm	10	10

WORKING RANGE

Machine model		8018		
Dipper length	mm (ft-in)	1161 (3-10)	1261 (4-2)	1500 (4-11)
A Max digging reach	mm (ft-in)	3933 (12-11)	4028 (13-2½)	4254 (13-11½)
B Max digging reach on ground	mm (ft-in)	3865 (12-8)	3949 (12-11)	4184 (13-8¾)
C Max digging depth – dozer up	mm (ft-in)	2142 (7-0)	2242 (7-4)	2477 (8-1½)
Max digging depth – dozer down	mm (ft-in)	2470 (8-1)	2570 (8-5)	2805 (9-2½)
D Max digging height	mm (ft-in)	3460 (11-4)	3519 (11-6½)	3660 (12-0)
E Max dump height	mm (ft-in)	2568 (8-5)	2626 (8-7)	2765 (9-0¾)
F Max height to dipper nose pivot pin	mm (ft-in)	2973 (9-9)	3032 (9-11)	3172 (10-4¾)
G Max vertical wallcut depth	mm (ft-in)	1750 (5-9)	1845 (6-0½)	2082 (6-10)
H Min. front swing radius (no offset)	mm (ft-in)	1715 (5-7½)	1739 (5-8½)	1791 (5-10½)
Min. front swing radius (fully offset)	mm (ft-in)	1529 (5-0)	1552 (5-1)	1574 (5-2)
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	112	112	112
Bucket tearout	kN (lbf)	16.2 (3642)	16.2 (3642)	–
Dipper tearout	kN (lbf)	9.2 (2068)	8.3 (1866)	–
Slew speed	rpm	10	10	10



JCB MINI EXCAVATORS | 8016 & 8018



8016 LIFT CAPACITIES – Standard Dozer, 230mm (9in) Rubber Tracks, 1161 mm (3ft 10in) dipper, No bucket.

Load Point	Reach from slew centre																
	1.2m (3ft 11in)			1.5m (4ft 11in)			2m (6ft 7in)			2.5m (8ft 2½in)			Capacity at maximum reach				
Height	Dozer up		Dozer down	Dozer up		Dozer down	Dozer up		Dozer down	Dozer up		Dozer down	Dozer up		Dozer down		
m (ft-in)	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	mm (ft-in)
1.5 (4-11)													242*	252*	247*	188	3240 (10-7½)
1 (3-3)				499*	532*	499*	360*	370*	240	297*	314*	196	168	289*	177	3300 (10-10)	
0.5 (1-8)				505	819*	392	338	526*	241	247	388*	200	167	314*	149	3300 (10-10)	
Ground Level	593	1029*	495	449	857*	378	319	567*	266	249	439*	217	167	342*	183	3150 (10-4)	
- 0.5 - (1-8)	581	1062*	502	443	879*	351	317	615*	258	246	462*	215	204	370*	173	3000 (9-10)	
- 1 - (3-3)	566	1037*	574	407	758*	409	308	566*	244	236	398*	200	224	349*	161	2650 (8-8)	

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

Load Point	Reach from slew centre																								
	1.2m (3ft 11in)				1.5m (4ft 11in)				2m (6ft 7in)				2.5m (8ft 2½in)				Capacity at maximum reach								
Height	Dozer up		Dozer down	Retracted	Extended	Dozer up		Dozer down	Retracted	Extended	Dozer up		Dozer down	Retracted	Extended	Dozer up		Dozer down	Retracted	Extended	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)																	200*	203*	218*	217*	173	232*	144	235*	3430 (11-3)
1 (3-3)						345*	365*	345*	346*	305*	315*	305*	306*	259*	270*	251*	252*	201	247*	128	252*	3500 (11-5½)			
0.5 (1-8)						480*	567*	319	510*	393	465*	264	416*	276	335*	211	310*	173	271*	125	198	3500 (11-5½)			
Ground Level	477	760*	384	638	400	645*	316	524	330	501*	241	478*	261	378*	196	365*	164	273*	138	216	3360 (11-0¼)				
- 0.5 - (1-8)	464	940*	376	545	395	693*	314	502	307	544*	234	406	225	376*	182	308	173	294*	152	233	3140 (10-3½)				
- 1 - (3-3)	438	723*	373	558	332	618*	284	471	288	557*	236	384	222	393*	179	298	188	324*	151	255	2900 (9-6)				

 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.



JCB MINI EXCAVATORS | 8016 & 8018



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		8016	8018
Fuel tank	litres (UK gal)	23.5 (5.2)	23.5 (5.2)
Engine coolant	litres (UK gal)	5 (1.1)	5 (1.1)
Engine oil	litres (UK gal)	4 (0.9)	4 (0.9)
Hydraulic system	litres (UK gal)	28 (6.2)	28 (6.2)
Hydraulic tank	litres (UK gal)	25 (5.5)	25 (5.5)

MACHINE WEIGHTS

Machine model		8016	8018
Operating weight*	kg (lb)	1590 (3505)	1662 (3664)
Transport weight	kg (lb)	1515 (3340)	1587 (3499)
With canopy	kg (lb)	-80 (-176)	-80 (-176)
With FOGS guard	kg (lb)	+25 (+55)	+25 (+55)
With long dipper	kg (lb)	+2 (+4½)	+2 (+4½)
With Gravemaster dipper	kg (lb)	N/A	+7 (+15½)

*Operating weight to ISO 6016 including cab, rubber tracks, standard dipper, 460mm (18in) bucket, full tanks and a 75kg (165lb) operator.

DOZER BLADE

Machine model		8016		8018	
		Standard	Long	Standard	Long
Max height (above ground)	mm (ft-in)	178 (0-7)	270 (0-10½)	178 (0-7)	270 (0-10½)
Dig depth (below ground)	mm (ft-in)	292 (0-11½)	438 (1-5¼)	292 (0-11½)	438 (1-5¼)
Approach angle	degrees	26.5	22.5	26.5	22.5
Width	mm (ft-in)	1000 (3-3)	1000 (3-3)	1000 (3-3)	1000 (3-3)
Width (extended)	mm (ft-in)	N/A	N/A	1380 (4-6¼)	1380 (4-6¼)
Height	mm (ft-in)	225 (0-9)	273 (0-10¾)	225 (0-9)	273 (0-10¾)
Reach in front of tracks	mm (ft-in)	202 (0-8)	442 (1-5½)	202 (0-8)	442 (1-5½)

