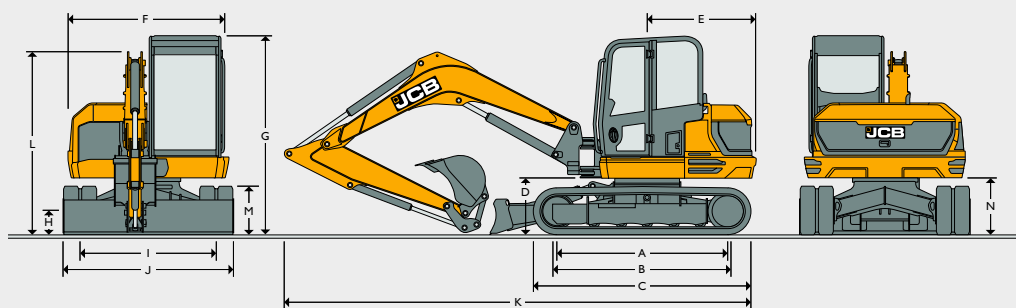


STATIC DIMENSIONS



Machine model		100c-1	90z-1
A	Sprocket idler centres	mm	2325
B	Track length on ground	mm	2325
C	Undercarriage overall length – rubber	mm	2950
	Undercarriage overall length – steel		2900
D	Kingpost clearance	mm	793
E	Tailswing radius	mm	1601
			1145
F	Overall width of superstructure	mm	2187
G	Height over cab	mm	2706
H	Ground clearance	mm	350
I	Track gauge	mm	1850
J	Width over tracks (450 shoes)	mm	2300
K	Transport length with standard dipper	mm	6860
			6585
L	Transport height with standard dipper	mm	2593
			2580
M	Track height	mm	650
N	Counterweight clearance	mm	762

ENGINE

Machine model		100c-1	90z-1
Model		Stage IIIB / Tier 4 Final KDI 2504 TCR	
Fuel		Diesel	
Cooling		Water cooled	
Gross power ISO 14396	kW @ 2000 rpm	55.0	
Net power	kW @ 2000 rpm	52.4	
Gross torque ISO 14396	Nm @ 1500 rpm	305.0	
Displacement	cc	2500	
Gradeability	degrees	30	
Starter motor	kW	2.0	
Battery	volt / amps	12V / 750CCA	
Alternator	volt / amps	12V / 80A	

UNDERCARRIAGE

Machine model		100c-1	90z-1
No of top rollers		1	
No of bottom rollers		5	
Track width rubber (STD)	mm	450	
Track width steel	mm	450/600	
Ground clearance	mm	350	
Track tensioning		Grease	
Travel speed – low	kph	2.4	2.5
Travel speed – high	kph	4.4	4.6
Tractive effort	kN	59.8	58

HYDRAULIC SYSTEM

Machine model		100c-1	90z-1
Nominal output @ 2000rpm	lpm	148	
Excavator/track main relief pressure	bar	300	
Slew main relief pressure	lpm	226	
Auxiliary low flow	lpm	25	
Auxiliary high flow	lpm	100	
Auxiliary low flow	bar	190	
Auxiliary high flow	bar	190	
Hydraulic motors		Piston	

WEIGHTS

Machine model		100c-1	90z-1
Operating weight* (450mm rubber tracks)	kg	9733	8923
Shipping** weight (450mm rubber tracks)	kg	9565	8755
With FOGS guard – Stage 1	kg		+14
With FOGS guard – Stage 2	kg		+97
With FOGs Guard – Stage I HVAC	kg		+49
With steel tracks (450mm)	kg		+184
With steel tracks (600mm)	kg		+367
With Geo grip tracks (450mm)	kg		+134
Ground bearing pressure (450mm tracks)	kg/cm ²	0.46	0.41
Ground bearing pressure (600mm tracks)	kg/cm ²	0.35	0.31
With narrow dozer (2220mm)	kg		-5
With wide dozer (2470mm)	kg		+18
With 4way dozer	kg		+217
With long dipper (2250mm)	kg		+16
With short dipper (1650mm)	kg		-48
With quickhitch	kg		+95

*Operating weight to ISO 6016 including cab, rubber tracks, standard dipper, 600mm bucket (90z), 900mm (100c adding 43kg of weight), full tanks and a 75kg operator.

** Shipping weight to ISO 6016 is mass of the base machine without an operator, with fuel level at 10% of tank capacity.

SERVICE CAPACITIES

Machine model	100c-1	90z-1
Fuel tank	112	112
Engine coolant	12.1	12.1
Engine oil	11.2	11.2
Hydraulic system	118	118
Hydraulic tank	66	66

OPERATOR STATION

Machine model	100c-1	90z-1
Cab/canopy height	mm 1554	mm 1554
Cab/canopy height with FOGS guard LEVEL 1	mm 1643	mm 1643
Cab/canopy height with FOGS guard LEVEL 2	mm 1730	mm 1730
Cab/canopy length	mm 1942	mm 1942
Cab/canopy width	mm 1040	mm 1040
Distance from seat base to roof	mm 1120	mm 1120
Door aperture width	mm 612	mm 612

NOISE & VIBRATION

		Uncertainty	Measurement Conditions
Noise at the operator station (Lpa)	74 dB (Kpa)	1 dB	ISO 6396:2008
Noise emission from the machine (Lwa)	96 dB (Kwa)	2 dB	ISO 6395:1988
Hand Arm Vibration (m/s²)			
Tracking duty	3.3* (k)	1.6	EN ISO 5349-2:2001 (based upon a test cycle defined in SAE J 1166)
Low idle and excavating duty	≤ 2.5 (k)	**	EN ISO 5349-2:2001 (based upon a test cycle defined in SAE J 1166)
Whole body vibration (m/s ²)	0.46 (k)	0.23	ISO 2631-1:1997

* Using foot operation for long periods of tracking will prevent exposure to Hand-Arm Vibration above the action level.
 ** Based on 50% uncertainty of measurement.

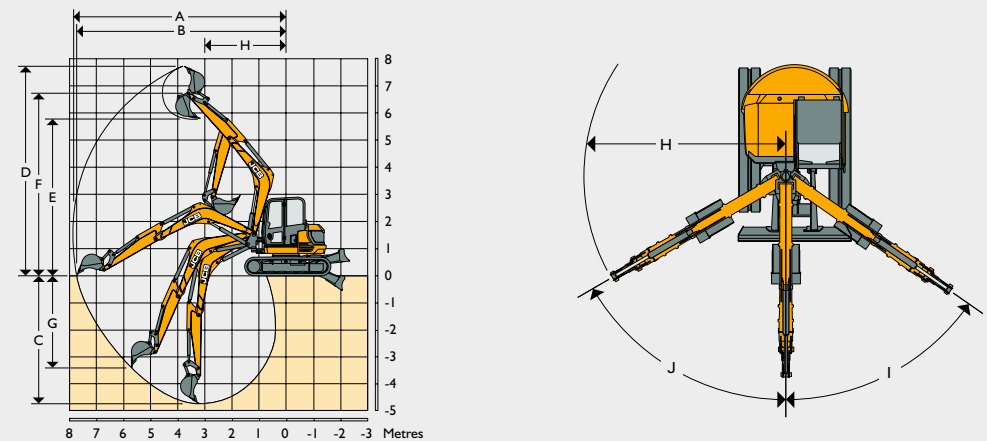
STANDARD EQUIPMENT

Tilting cab, Fully glazed TOPS certified cab with JCB Impact Protection front screen, 2 speed intermittent wiper with wash/wipe, Roof mounted worklights, 3 speed heater/demister with 9 adjustable air vents, Colour LCD display, Digital clock, Adjustable sunblind, Internal lockable toolbox, Cup holder, Coat hook, 12v accessory socket, Interior light, Full audio/visual warning systems, Radio ready kit, Auto idle throttle, Below idle system, 2 digging modes (Eco and Heavy), ISO servo controls with electro-hydraulic dozer lever, Electro-proportional thumb controlled high flow double acting auxiliary, 10 selectable auxiliary flow rates, Joystick mounted hammer switch, Electronic single/double acting auxiliary changeover valve, Neutral start, Full control isolation, "2 go" hydraulic isolation, Midback suspension seat, 2 piece removable floor mat, Beacon ready kit, Two speed tracking, Auto-kickdown track motors, 450mm short pitch rubber tracks, Double element air cleaner, Heavy-duty alternator, Heavy-duty battery, Hydraulic slew braking with disc type park brake, ORFS hydraulics, Colour coded hydraulic hoses, Bushed kingpost, 500 hour dig end greasing intervals, Heavy-duty boom cylinder guard, Protected boom worklight, 2100mm dipper, 2 position bucket tipping link – Speed and Power, Quick release auxiliary couplers, 100% steel bodywork, CESAR datatag (UK only).

OPTIONAL EQUIPMENT

Air-conditioning, FOGS guard stage 1 or 2, 450mm or 600mm steel tracks, 450mm Geo Grip Road Liner tracks, Fan & chaff guards, Battery isolator (standard for EU), High back seat or deluxe heated high back air-suspension seat, Radio installation, Electro-proportional thumb controlled low flow auxiliary, Hose burst check valve lifting kit (dozer, boom & dipper), Bucket-to-grab change over valve, Mechanical quickhitch, Hydraulic quickhitch, Hydraulic quickhitch ready pipework, General purpose digging buckets, Ditch/grading buckets, Hydraulic hammers, Rotating/strobe beacon, Travel alarm, White noise alarm, Face fan, Toolkit, Greasegun & cartridge, Fire extinguisher, Exterior cab mounted mirrors, Interior mirror, Electric refuelling pump, JCB Immobiliser (Unique key or keypad system), Dozer float, Angled dozer blade, Dual pattern controls (ISO/SAE change-over), Front screen guard (Fine or coarse), Twin pair of front LED roof mounted worklights, Short and long dipper options, Thumb ready dipper, Livelink, Special paint options, Block heater 110/240V.

WORKING RANGE

















		100c-1	90z-1
Dipper length	mm	1650 / 2100 / 2250	1650 / 2100 / 2250
Boom length	mm	3682	3360
A Max digging reach	mm	7065 / 7475 / 7560	6940 / 7542 / 7495
B Max digging reach on ground	mm	6888 / 7315 / 7438	6807 / 7269 / 7389
C Max digging depth - dozer up	mm	4121 / 4571 / 4575	3527 / 4153 / 4119
Max digging depth - dozer down	mm	4105 / 4555 / 4559	3511 / 4137 / 4103
D Max digging height	mm	7018 / 7321 / 7478	6853 / 7181 / 7297
E Max dump height	mm	5186 / 5490 / 5660	4970 / 5320 / 5419
F Max height to dipper nose pivot pin	mm	6128 / 6435 / 6537	5914 / 6248 / 6357
G Max vertical wallcut depth	mm	1877 / 2257 / 3507	3239 / 2890 / 3821
H Min front swing radius (no offset)	mm	2705 / 2863 / 2906	2958 / 3102 / 3156
Min front swing radius (fully offset)	mm	2162 / 2360 / 2408	2364 / 2508 / 2562
I Boom swing left	degrees		55
J Boom swing right	degrees		60
Bucket rotation	degrees		188
Dipper rotation	degrees	122	114
Bucket tearout (power position)	kN	72.2	57.1
Dipper tearout	kN	49.9 / 42.3 / 40.3	
Slew speed	rpm	8.2	7.9

DOZER

Machine model	100c-1	90z-1
Dozer length	mm 1497	mm 1497
Max height above ground	mm 471	mm 471
Dig depth below ground	mm 461	mm 461
Approach angle	degrees 27.8	degrees 27.8
Width	mm 2320	mm 2320
Height	mm 473	mm 473
Reach in front of tracks	mm 615	mm 615

LIFT CAPACITY – 450MM RUBBER TRACKS, 3682MM BOOM, 1650MM DIPPER, NO BUCKET

100C

Load Point	2.0m			3.0m			4.0			5.0m			Capacity at maximum reach			Distance
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m
5.0							1856*	1759*	1856*				1945	1842	1646	4.68
4.0							1986*	1882*	1986*	1907	1807	1488	1745	1818	1308	5.43
3.0				3310*	3136*	3076	2419*	2292*	2015	1960	1956	1460	1537	1833	1151	5.87
2.0							2656	2825*	1926	1916	2187	1420	1442	1869	1077	6.08
1.0							2579	3214*	1856	1875	2387*	1382	1419	1914	1057	6.10
0.0				2599*	2462*	2599	2542	3318*	1823	1849	2466	1358	1472	1969	1093	5.91
-1.0	3050*	2890*	3050*	4033	4398*	2753	2537	3161*	1819	1844	2357	1353	1623	2020	1199	5.50
-2.0	5738*	5436*	5577	3916*	3710*	2787	2560	2706*	1839				1980	2049	1452	4.79
-3.0				2536*	2402*	2536							2029	1922	2029	3.55

LIFT CAPACITY – 450MM RUBBER TRACKS, 3682MM BOOM, 2100MM DIPPER, NO BUCKET


100C


Load Point	2.0m			3.0m			4.0			5.0m			Capacity at maximum reach			Distance
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m
5.0							1545*	1464*	1545*	1695*	1605*	1533	1742	1650	1421	5.24
4.0							1700*	1610*	1700*	1705*	1615*	1528	1568	1651	1182	5.90
3.0				2630*	2492*	2630*	2132*	2020*	2066	1896*	1796*	1495	1405	1677	1057	6.31
2.0				4189*	3969*	2938	2704	2582*	1970	1946	2057*	1448	1330	1717	998	6.50
1.0				2102*	1991*	2102*	2607	3067*	1882	1896	2304*	1401	1312	1767	982	6.51
0.0				3017*	2859*	2724	2551	3299*	1831	1860	2451*	1368	1348	1823	1006	6.34
-1.0	2747*	2603*	2747*	4000	4647*	2725	2532	3263*	1814	1845	2438*	1354	1460	1887	1086	5.96
-2.0	4870*	4613*	4870*	4031	4157*	2752	2543	2960*	1824	1854	2182*	1362	1705	1942	1260	5.33
-3.0	5124*	4855*	5124*	3332	3156*	2811	2344	2221*	1868				2062	1954	1700	4.30

LIFT CAPACITY – 450MM RUBBER TRACKS, 3682MM BOOM, 2250MM DIPPER, NO BUCKET

100C

Load Point	2.0m			3.0m			4.0			5.0m			Capacity at maximum reach			Distance
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m
5.0										1607*	1522*	1549	1685	1596	1361	5.42
4.0										1600*	1516*	1600*	1637*	1551*	1541	6.06
3.0							2031*	1924*	2031*	1835*	1739*	1507	1368	1631	1031	6.45
2.0				2407*	2281*	2407*	2633*	2495*	1986	1957	2009*	1458	1296	1671	975	6.64
1.0				3951*	3743*	2976	2619	3008*	1893	1904	2271*	1409	1279	1721	958	6.65
0.0				2497*	2366*	2497*	2556	3280*	1836	1865	2438*	1372	1313	1779	981	6.48
-1.0	2647*	2507*	2647*	3102*	2939*	2725	2532	3284*	1814	1846	2453*	1355	1412	1839	1051	6.12
-2.0	4558*	4318*	4558*	3992	4496*	2719	2538	3026*	1820	1851	2246*	1360	1630	1900	1207	5.51
-3.0	5610*	5315*	5547	4020	4284*	2742	2514*	2382*	1858				2041	1933	1582	4.53
















 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.

LIFT CAPACITIES – 450MM RUBBER TRACKS, 3360MM BOOM, 1650MM DIPPER, NO BUCKET **90Z**

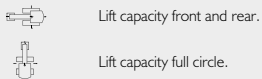
Load Point	2.0m			3.0m			4.0			5.0m			Capacity at maximum reach			Distance
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m
5.0							1454*	1664*	1398				1514	1733	1225	4.32
4.0							1441*	1650*	1389*	1388	1655*	971	1323	1674	925	5.14
3.0				2137*	2446*	2059*	1690*	1935*	1350	1374	1717*	958	1139	1674	794	5.61
2.0				2968	3654*	1921	1881	2367*	1280	1340	1891*	928	1059	1700	735	5.83
1.0				1826*	2090*	1760*	1810	2731*	1218	1306	2058*	897	1039	1737	718	5.85
0.0				2799	3458*	1782	1771	2865*	1185	1283	2124*	877	1083	1782	746	5.65
-1.0	2799*	3204*	2698*	2809	3914*	1790	1765	2733*	1179	1281	1980*	876	1213	1822	832	5.21
-2.0	4212*	4821*	3669*	2778*	3179*	1824	1790	2222*	1202				1539	1802	1046	4.45
-3.0																

LIFT CAPACITY – 450MM RUBBER TRACKS, 3360MM BOOM, 2100MM DIPPER, NO BUCKET **90Z**

Load Point	2.0m			3.0m			4.0			5.0m			Capacity at maximum reach			Distance
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m
5.0							1188*	1360*	1145*				1341	1535	1027	4.92
4.0							1225*	1402*	1181*	1269*	1453*	1011	1168	1515	822	5.64
3.0							1481*	1695*	1395	1368*	1566*	990	1033	1526	725	6.06
2.0				2708*	3099*	2006	1880*	2152*	1319	1369	1771*	954	970	1555	677	6.26
1.0				2875	3434*	1844	1839	2590*	1244	1326	1982*	916	952	1593	662	6.28
0.0				2798	3616*	1781	1783	2834*	1195	1294	2114*	887	985	1643	682	6.09
-1.0	2395*	2741*	2308*	2788	4156*	1772	1762	2826*	1177	1281	2091*	876	1076	1687	742	5.70
-2.0	4140*	4738*	3585	2815	3615*	1795	1773	2519*	1187	1298	1740*	890	1288	1713	884	5.03
-3.0	3361*	3847*	3240*	2170*	2483*	1856						1429	1429	1635	1287	3.89

LIFT CAPACITY – 450MM RUBBER TRACKS, 3360MM BOOM, 2250MM DIPPER, NO BUCKET **90Z**

Load Point	2.0m			3.0m			4.0			5.0m			Capacity at maximum reach			Distance
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
m	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	m
5.0										1268*	1451*	1016	1294	1481	976	5.11
4.0										1150*	1317*	1109*	1215*	1391*	1023	5.80
3.0							1407*	1610*	1356*	1322*	1513*	1001	1002	1482	704	6.21
2.0				2544*	2911*	2036	1812*	2073*	1333	1379	1727*	963	942	1511	659	6.41
1.0				2896	3953*	1862	1850	2534*	1254	1334	1951*	923	927	1551	646	6.42
0.0				2803	3679*	1784	1789	2812*	1200	1299	2102*	891	955	1599	663	6.24
-1.0	2286*	2617*	2204*	2783	4211*	1769	1763	2844*	1178	1283	2109*	877	1037	1646	717	5.86
-2.0	3850*	4406*	3560	2806	3734*	1787	1769	2590*	1183	1292	1848*	885	1226	1684	843	5.21
-3.0	3788*	4335*	3651*	2379*	2722*	1842	1562*	1788*	1228				1427	1633	1172	4.15



- 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.