

NEW

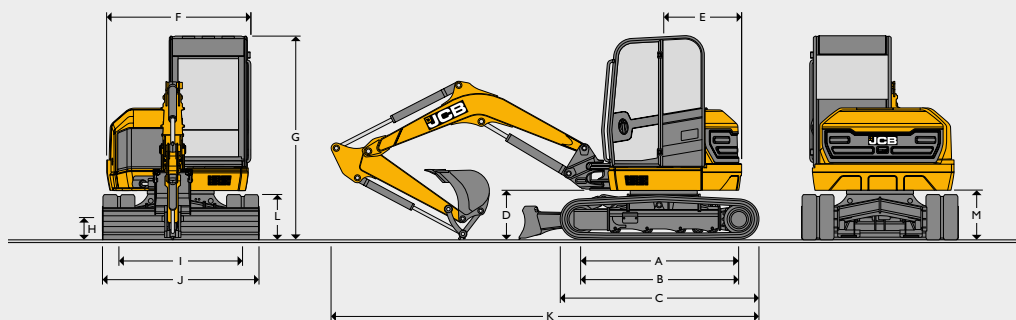


MINI EXCAVATOR | 48Z-I/51R-I/55Z-I/57C-I

Operating weight: 4792/5112/5366/5483kg | Net engine power: 33.1/33.4kW



STATIC DIMENSIONS



Machine model	48z-i	51R-i	55z-i	57C-i
A Sprocket idler centres	mm 1985			
B Track length on ground	mm 1985			
C Undercarriage overall length – rubber	mm 2490			
Undercarriage overall length – steel	mm 2490			
D Kingpost clearance	mm 631			
E Tailswing radius	mm 975	1030	1000	1300
F Overall width of superstructure	mm 1820	1850	1845	
G Height over cab	mm 2551			2561
H Ground clearance	mm 300			
I Track gauge	mm 1550			
J Width over tracks	mm 1950			
K Transport length with standard dipper	mm 5353	5349	5518	5495
L Track height	mm 560			
M Counterweight clearance	mm 618			

ENGINE

Machine model	Standard		Optional	
	48z-i, 51R-i, 55z-i, 57C-i		48z-i, 51R-i, 55z-i, 57C-i	
Model	Stage 3A 404D-22		Tier 4 Final KDI 1903	
Fuel	Diesel			
Cooling	Water cooled			
Gross power ISO 14396	kW 35.7 (@ 2600rpm)	36 (@ 2200rpm)		
Net power	kW 33.1 (@ 2600rpm)	33.4 (@ 2200rpm)		
Gross torque ISO 14396	Nm 143 (@ 1800rpm)	225 (@ 1500rpm)		
Displacement	cc 2179		1903	
Gradeability	degrees 35	30		
Starter motor	kW 2		2	
Battery	volt / amps 12V / 75Ah	12V / 75Ah		
Alternator	amps (Air con) 85	100		

UNDERCARRIAGE

Machine model	48z-i	51R-i	55z-i	57C-i
No of top rollers	1			
No of bottom rollers	4			
Track width rubber (STD)	mm 400			
Track width steel	mm 400			
Ground bearing pressure (400mm tracks)	kg/cm ² 0.30	0.32	0.35	0.36
Ground bearing pressure (550mm tracks)	kg/cm ² 0.22	0.23	0.25	0.26
Track tensioning	Grease			
Travel speed – low	kph 3			
Travel speed – high	kph 4.6			
Tractive effort	kN 35.7	36.5	38.1	40

HYDRAULIC SYSTEM

Machine model	48z-i	51R-i	55z-i	57C-i
Pump	cc 63			
Nominal output @ 2000rpm	lpm 126			
Excavator/track main relief pressure	bar 240		265	
Slew main relief pressure	bar 216			
Auxiliary hydraulic pressure (Low)	bar 190			
Auxiliary hydraulic pressure (High)	bar 190			
Auxiliary hydraulic flow (Low)	lpm 40			
Auxiliary hydraulic flow (High)	lpm 90			
Hydraulic pump	Piston			

WEIGHTS

Machine model	48z-i	51R-i	55z-i	57C-i
Operating weight* (400mm rubber tracks)	kg 4792	5112	5366	5483
Shipping** weight (400mm rubber tracks)	kg 4662	4982	5236	5353
With FOGs guard – stage I	kg + 16			
Aircon (includes FOGS guard-stage I)	kg + 61		+ 66	
With steel tracks (400mm)	kg + 154			
With steel tracks (550mm)	kg + 276			
With Geo grip tracks (400mm)	kg + 176			
With 4 way dozer	kg + 219			
Hydraulic quickhitch installation weight	kg + 72.5			

* Operating weight to ISO 6016 including cab, rubber tracks, standard dipper, 600mm bucket, full tanks and a 75kg operator.

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

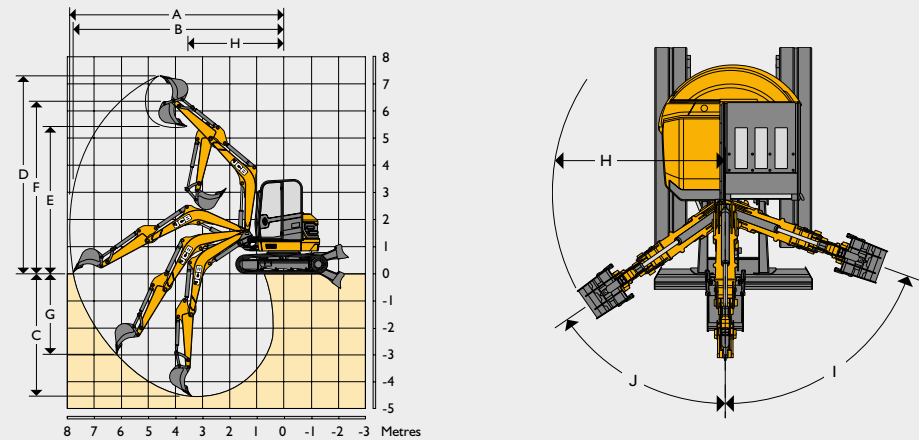
SERVICE CAPACITIES					
Machine model		48z-1	51R-1	55z-1	57c-1
Fuel tank	ltr	76			
Engine coolant	ltr	Stage 3A: 12 / Tier 4: 9.2			
Engine oil	ltr	Stage 3A: 9.1 max / Tier 4: 8 max			
Hydraulic system	ltr		100		112
Hydraulic tank	ltr		55		62

OPERATOR ENVIRONMENT					
Machine model		48z-1	51R-1	55z-1	57c-1
Cab/canopy height	mm		2551		2561
Cab/canopy height with FOGS guard LEVEL I	mm		2575		2585
Cab/canopy length	mm		1291		1491
Cab/canopy width	mm		1020		
Door aperture width	mm		552		595

STANDARD EQUIPMENT	
Fully glazed ROPS & TOPS certified cab with programmable Intermittent wiper with wash/wipe, 3 speed heater/demister with 4 adjustable air vents, Colour LCD display, Digital clock, Internal lockable toolbox, Cup holder, Coat hook, stowage net, 12v accessory socket, Interior light, Full audio/visual warning systems, Auto idle throttle, Below idle system, one touch idle, 4 power bands(light, eco, heavy & heavy plus), ISO servo controls with electro-hydraulic dozer lever, Electro-proportional thumb controlled high flow single acting auxiliary, 10 selectable auxiliary flow rates, Joystick mounted hammer switch, Neutral start, Full control isolation, "2GO" hydraulic isolation, Midback suspension seat, removable floormat, Beacon ready kit, Two speed tracking, Auto-kickdown track motors, 400mm 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, 500 hour dig end greasing intervals, Heavy duty boom cylinder guard, Protected boom worklight, Quick release auxiliary couplers, 100% steel bodywork, dedicated tie down and lifting points, JCB Livelink, CESAR datatag (UK only).	

OPTIONAL EQUIPMENT	
Air-conditioning with 8 adjustable air vents, Adjustable sunblind, FOPS guard stage I, 400mm or 550mm steel tracks, 400mm Geo GripRoad Liner tracks, Fan 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 eco buckets, Ditch/grading eco buckets, Hydraulic hammers, Rotating/strobe beacon, Travel alarm, Toolkit, Greasegun & cartridge, Fire extinguisher, Exterior cab mounted mirrors, Interior mirror, Electric refuelling pump, JCB Immobiliser (Unique key or keypad system), Dozer float, 4-way angled dozer blade, Dual pattern controls (ISO/SAE change-over), Thumb ready dipper, Special paint options, LED or Halogen worklights (either, with follow me home function), ROPS & TOPS certified canopy, Tilt rotate ready installation, Media socket, Radio ready kit, Worklight guards (cab), Dipper/crowd Ram guards, Rearview camera, Rearview angled mirror, JCB impact protection front screen, Bushed kingpost, Electronic single-double acting change over valve.	

WORKING RANGE


















		48z-1	51R-1	55z-1	57c-1
Dipper length	mm	1450	1570	1820	
Boom length	mm	2700		2866	
A Max digging reach	mm	5846	5962	6119	6260
B Max digging reach on ground	mm	5714	5832	5995	6144
C Max digging depth – dozer up	mm	3327	3447	3606	3856
Max digging depth – dozer down	mm	3532	3652	3843	4077
D Max digging height	mm	5387	5473	5664	5846
E Max dump height	mm	4001	4088	4274	4456
F Max height to dipper nose pivot pin	mm	4679	4764	4970	5152
G Max vertical wallcut depth	mm	1971	2069	2052	2254
H Min front swing radius (no offset)	mm	2599	2631	2641	2608
Min front swing radius (fully offset)	mm	2123	2151	2160	2155
I Boom swing left	degrees				70
J Boom swing right	degrees				55
Bucket rotation	degrees				181
Dipper rotation	degrees				121
Bucket tearout	kN	38		42	
Dipper tearout	kN	22	21	29	26
Slew speed	rpm				8.3
















DOZER


Machine model		48z-1	51R-1	55z-1	57c-1
Dozer length	mm	1141			
Max height above ground	mm	433			
Dig depth below ground	mm	464			
Approach angle	degrees	31			
Width	mm	1962			
Height	mm	400			


LIFT CAPACITIES – 400MM RUBBER TRACKS, 2700MM BOOM, 1450MM DIPPER, NO BUCKET. 48Z-I

Load Point	2.0m			3.0m			4.0m			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
4.0													842*	842*	606	3.88
3.5							852	959*	582				739	784*	501	4.3
3.0				1190*	1190*	922	847	964*	577				651	777*	438	4.6
2.5				1321	1442*	873	832	1016*	564				594	747*	396	4.82
2.0				1260	1719*	820	812	1098*	546				556	706*	367	4.97
1.5				1208	1949*	775	790	1192*	525	544	899*	357	536	761*	352	5.04
1.0				1174	2085*	744	768	1280*	505	536	1009*	350	526	751*	343	5.06
0.5				1155	2125*	727	750	1347*	489	530	883*	345	529	812*	344	5.01
0.0				1148	2084*	721	738	1379*	477				544	866*	353	4.9
-0.5	1975*	1975*	1415	1150	1965*	723	731	1365*	471				574	922*	373	4.72
-1.0	2493	2824*	1425	1161	1756*	733	732	1288*	472				628	992*	408	4.46
-1.5	2517	2907*	1444	1184	1400*	753	743	1090*	483				720	1009*	469	4.1
-2.0	2269*	2269*	1476										898	958*	585	3.59
-2.5													754*	754*	754*	2.83
-3.0																

LIFT CAPACITIES – 400MM RUBBER TRACKS, 2700MM BOOM, 1570MM DIPPER, NO BUCKET. 51R-I

Load Point	2.0m			3.0m			4.0m			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
4.0							874*	874*	683				792*	792*	669	4.04
3.5							899*	899*	691				697*	697*	562	4.45
3.0							913*	913*	685				682*	682*	499	4.74
2.5							970*	970*	672				666*	666*	456	4.95
2.0				1361*	1361*	1036	951	1055*	653	652	941*	444	631	657*	428	5.09
1.5				1477	1645*	982	928	1154*	632	645	964*	437	609	636*	411	5.17
1.0				1423	1892*	935	905	1249*	611	636	988*	429	601	681*	404	5.18
0.5				1384	2052*	901	886	1324*	594	629	1003*	422	605	742*	405	5.13
0.0				1362	2115*	881	872	1366*	581	625	886*	418	619	742*	415	5.03
-0.5	1869*	1869*	1686	1352	2095*	873	864	1365*	574				653	856*	437	4.85
-1.0	2622*	2622*	1696	1352	1996*	872	863	1306*	572				707	885*	473	4.6
-1.5	2929	3086*	1714	1360	1811*	880	870	1152*	579				799	971*	535	4.26
-2.0	2485*	2485*	1743	1380	1497*	897							933*	933*	648	3.78
-2.5	1578*	1578*	1578*	879*	879*	879*							790*	790*	790*	3.09
-3.0																
















 Lift capacity over front.

 Lift capacity full circle.

- Notes:**
1. 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.
 2. Lift capacities assume that the machine is on firm level ground and equipped with an approved lifting point.
 3. A bucket must be fitted when lifting, the weight of this bucket must be deducted from the above lift capacities.
 4. Lift capacities may be limited by local regulations. Please refer to your dealer.
















LIFT CAPACITIES – 400MM RUBBER TRACKS, 2866MM BOOM, 1570MM DIPPER, NO BUCKET.

55Z-1

Load Point	2.0m			3.0m			4.0m			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
4.5													1100*	1100*	816	3.74
4.0							1059	1356*	738				939	976*	651	4.26
3.5							1060	1322*	739				807	905*	557	4.64
3.0							1049	1368*	729				725	869*	497	4.92
2.5				1681	1756*	1142	1030	1466*	712	702	1280*	480	671	859*	457	5.12
2.0				1616	2141*	1085	1006	1597*	690	694	1375*	473	636	881*	354	5.25
1.5				1546	2544*	1023	979	1738*	665	684	1416*	463	616	910*	414	5.32
1.0				1487	2862*	971	954	1866*	642	673	1455*	453	605	893*	405	5.34
0.5				1448	3032*	937	932	1960*	622	664	1476*	444	608	983*	406	5.29
0.0				1426	3066*	917	917	2003*	608	657	1464*	438	622	1020*	414	5.19
-0.5	2355*	2355*	1763	1416	2992*	909	907	1987*	599	655	1235*	436	652	1138*	434	5.02
-1.0	3048	3342*	1771	1416	2826*	909	904	1897*	597				701	1215*	467	4.78
-1.5	3069	4098*	1787	1424	2560*	915	909	1706*	601				784	1341*	523	4.45
-2.0	3104	3398*	1814	1441	2158*	931	929	1289*	619				926	1277*	618	4.01
-2.5	2334*	2334*	1858	1475	1499*	960							1115*	1115*	810	3.39
-3.0																

LIFT CAPACITIES – 400MM RUBBER TRACKS, 2866MM BOOM, 1820MM DIPPER, NO BUCKET.

57C-1

Load Point	2.0m			3.0m			4.0m			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
4.5							922*	922*	900				884*	884*	884*	4.01
4.0							1206*	1206*	917				826*	826*	748	4.47
3.5							1192*	1192*	916				774*	774*	655	4.82
3.0							1241*	1241*	905	851	1051*	614	753*	753*	595	5.08
2.5							1230	1335*	888	848	1253*	611	825	1221*	594	5.27
2.0				1844*	1844*	1353	1205	1461*	865	839	1288*	603	715*	715*	525	5.4
1.5				1863	2221*	1292	1177	1600*	840	827	1335*	592	716	769*	510	5.46
1.0				1799	2554*	1235	1150	1734*	815	815	1381*	581	705	752*	501	5.48
0.5				1749	2780*	1191	1126	1840*	793	804	1415*	570	707	775*	501	5.44
0.0				1717	2883*	1163	1107	1905*	775	796	1423*	562	723	837*	511	5.34
-0.5	2395*	2395*	2171	1700	2879*	1148	1094	1918*	764	791	1386*	558	753	921*	532	5.18
-1.0	3193*	3193*	2179	1694	2778*	1143	1088	1867*	758				802	987*	566	4.96
-1.5	3614	3863*	2195	1697	2582*	1146	1090	1734*	759				883	1133*	623	4.65
-2.0	3646	3690*	2220	1710	2270*	1157	1101	1463*	770				1015	1236*	714	4.25
-2.5	2834*	2834*	2259	1736	1776*	1180							1151*	1151*	883	3.7
-3.0	1559*	1559*	1559*										883*	883*	883*	2.9



Lift capacity over front.

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 capacity full circle.



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