

NEW

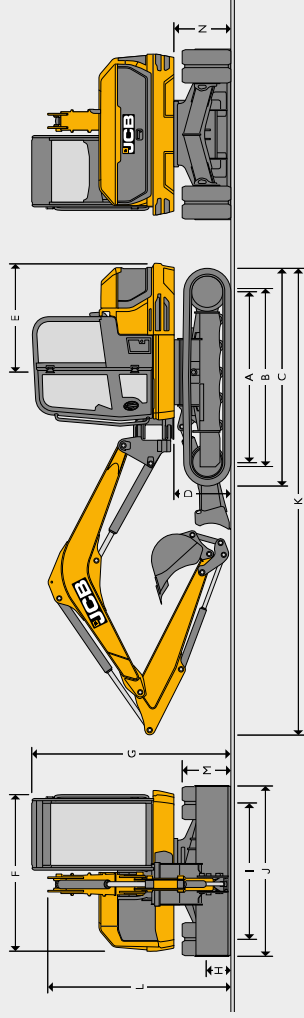


MIDI EXCAVATOR | 85Z-2/86C-2/90Z-2/100C-2

Operating weight: 8300/9750kg Net engine power: 45.4kW



STATIC DIMENSIONS



Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
A Sprocket idler centres	mm	2325	2325	2325	2187
B Track length on ground	mm	2325	2325	2950	2900
C Undercarriage overall length – rubber	mm	793	1600	1145	1601
D Undercarriage overall length – steel	mm	2168	2187	1145	1601
E Kingpost clearance	mm	2706	350	1850	2706
F Talking radius	mm	350	1850	2300	2706
G Overall width of superstructure	mm	5833	6435	6585	6860
H Height over cab	mm	650	706	650	650
I Track gauge	mm	762	762	762	762
J Width over tracks (450 shoes)	mm				
K Transport length with standard dipper	mm				
L Transport height with standard dipper	mm				
M Track height	mm				
N Counterweight clearance	mm				

ENGINE

Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Model	Stage V KDI 2504 TCR	Stage V KDI 2504 TCR	Stage V KDI 2504 TCR	Stage V KDI 2504 TCR	Stage V KDI 2504 TCR
Fuel	Diesel	Diesel	Diesel	Diesel	Diesel
Cooling	Water cooled	Water cooled	Water cooled	Water cooled	Water cooled
Gross power ISO	4396 kW (hp) @ 2200 rpm	48 kW (hp) @ 2200 rpm	48 kW (hp) @ 2200 rpm	55 kW (hp) @ 2200 rpm	55 kW (hp) @ 2200 rpm
Net power	4396 kW (hp) @ 2200 rpm	45.4 kW (hp) @ 2200 rpm	45.4 kW (hp) @ 2200 rpm	52.4 kW (hp) @ 2200 rpm	52.4 kW (hp) @ 2200 rpm
Gross torque ISO	14396 Nm @ 1500 rpm	305 Nm @ 1500 rpm	305 Nm @ 1500 rpm	305 Nm @ 1500 rpm	305 Nm @ 1500 rpm
Displacement	cc / litres	2500 cc / 2500 litres	2500 cc / 2500 litres	2500 cc / 2500 litres	2500 cc / 2500 litres
Gradeability	degrees	30 degrees	30 degrees	30 degrees	30 degrees
Starter motor	kW (hp)	3.2 kW (hp)	3.2 kW (hp)	3.2 kW (hp)	3.2 kW (hp)
Battery	volt / Ah	12V, 750 Ah	12V, 750 Ah	12V, 750 Ah	12V, 750 Ah
Alternator	volt / amps	12V, 100 A	12V, 100 A	12V, 100 A	12V, 100 A

UNDERCARRIAGE

Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
No of top rollers		1	1		
No of bottom rollers		5	5		
Track width	mm	450	450		
Track width optional	mm	600	600		
Ground clearance	mm	350	350		
Track tensioning		Grease	Grease		
Travel speed – low	kph	2.5	2.5		2.4
Travel speed – high	kph	5	5	4.6	4.4
Tractive effort	kN	61	65	58	59.8

HYDRAULIC SYSTEM

Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Nominal output @ 2200	lpm	158.4	158.4	148	148
Excavator/track main relief pressure	bar	300	300		
Slew main relief pressure	lpm	226	226		
Auxiliary low flow	lpm	40	40		
Auxiliary high flow	lpm	100	100		
Auxiliary low flow	bar	190	190		
Auxiliary high flow	bar	190	190		

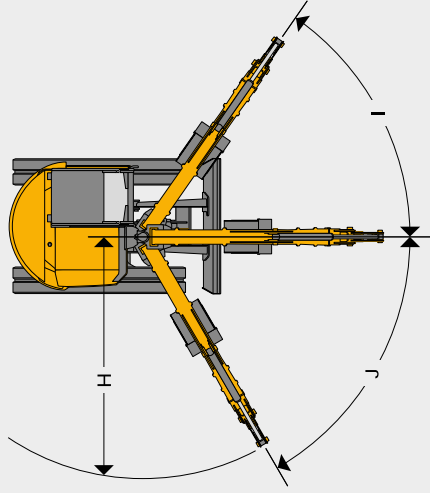
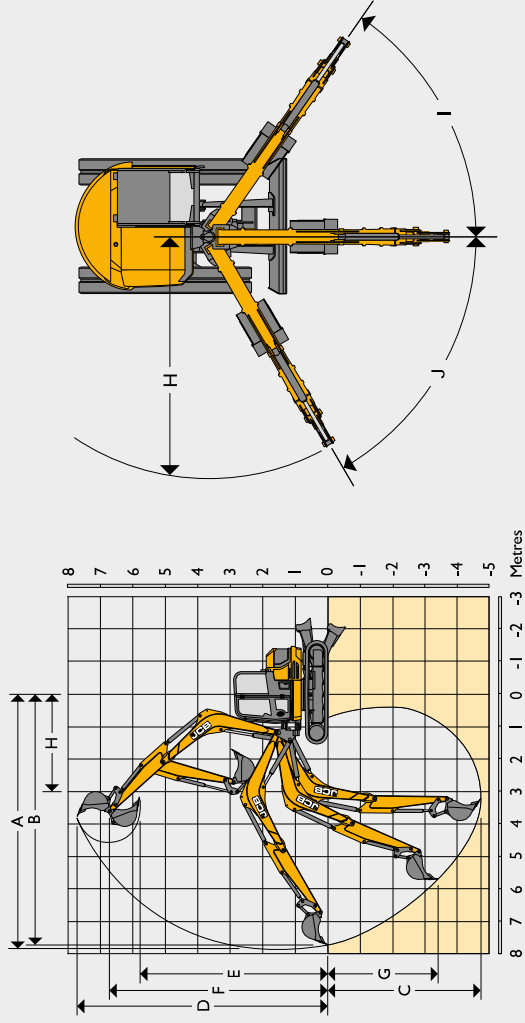
WEIGHTS

Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Operating weight* (450mm rubber tracks)	kg	8300	8600	8900	9750
Shipping** weight (450mm rubber tracks)	kg	7950	8720	9400	9400
With FOGS guard roof – Stage 1	kg	+14	+14	+14	+14
With FOGs guard roof – Stage 1 HVAC	kg	+49	+49	+49	+49
With FOGS guard front – Stage 2	kg	+38	+38	+38	+38
With FOGS guard roof – Stage 2	kg	+60	+60	+60	+60
With steel tracks (450mm)	kg	+195	+195	+195	+195
With steel tracks (600mm)	kg	+408	+408	+408	+408
With Bridgestone geogrips	kg	+134	+134	+134	+134
With wide dozer (2470mm)	kg	+18	+18	+18	+18
With narrow dozer (2220mm)	kg	-17	-17	-17	-17
With 4 way dozer	kg	+205	+205	+205	+205
Mechanical Quickhitch	kg	+95	+95	+95	+95
Hydraulic Quickhitch	kg	+67	+67	+67	+67
With Long Dipper (2250mm)	kg	+16	+16	+16	+16
With short dipper (1650mm)	kg	-48	-48	-48	-48
Ground bearing pressure (450mm rubber tracks)	kg/cm ²	0.40	0.41	0.41	0.46
Ground bearing pressure (450mm steel tracks)	kg/cm ²	0.40	0.42	0.42	0.47
Ground bearing pressure (600mm steel tracks)	kg/cm ²	0.31	0.32	0.31	0.35

*Operating weight to ISO 6016 including Cab, Rubber Tracks, Standard dipper, 450mm bucket (85z-2, 86c-2, 86c-2 TAB), 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.

WORKING RANGE



	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Boom length	mm	3360	Boom in = 2828 Boom out = 3917	3360	3682
Dipper length	mm		1650 / 2100 / 2250		
A Max digging reach	mm	6815 / 7244 / 7387	7246 / 7844 / 7989	6940 / 7542 / 7495	7065 / 7475 / 7560
B Max digging reach on ground	mm	6635 / 7075 / 7225	7409 / 7691 / 7840	6807 / 7269 / 7389	6888 / 7315 / 7438
C Max digging depth - dozer up	mm	3931 / 4381 / 4531	4022 / 4472 / 4622	3931 / 4381 / 4531	4221 / 4670 / 4820
D Max digging depth - dozer down	mm	3922 / 4372 / 4522	4013 / 4463 / 4613	4218 / 4668 / 4818	4491 / 4940 / 5090
E Max digging height	mm	6848 / 7181 / 7293	7776 / 8180 / 8315	6853 / 7181 / 7297	7018 / 7321 / 7478
F Max dump /load-over height	mm	5061 / 5395 / 5506	5900 / 6304 / 6439	4970 / 5320 / 5419	5186 / 5490 / 5660
G Max height to dipper nose pivot pin	mm	5914 / 6248 / 6359	6832 / 7236 / 7371	5914 / 6248 / 6357	6128 / 6435 / 6537
H Max vertical walkout depth	mm	2736 / 3151 / 3289	3366 / 3782 / 3920	3239 / 2890 / 3821	1877 / 2257 / 3507
I Min, front swing radius (no offset)	mm	2554 / 2679 / 2721	2223 / 2272 / 2288	2958 / 3102 / 3156	2705 / 2863 / 2906
J Min, front swing radius (fully offset)	mm	2478 / 2660	1919 / 1963 / 1978	2364 / 2508 / 2562	2162 / 2360 / 2408
I Boom swing left	degrees		55		
J Boom swing right	degrees		60		
Bucket rotation	degrees		188		
Dipper rotation	degrees	114	126	114	122
Bucket tearout	kN	57.1		57.1	72.2
Dipper tearout	kN		49.9 / 42.3 / 40.3		
Slow speed	rpm	10		7.9	8.2

DOZER

Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Dozer length	mm	1497			
Max height above ground	mm	471			
Dig depth below ground	mm	461			
Approach angle	degrees	27.8			
Width	mm	2320			
Height	mm	473			
Reach in front of tracks	mm	615			

OPERATOR STATION

Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Cab/canopy height	mm	1554			
Cab/canopy height with FOGS guard LEVEL 1	mm	1643			
Cab/canopy height with FOGS guard LEVEL 2	mm	1730			
Cab/canopy length	mm	1942			
Cab/canopy width	mm	1040			
Distance from seat base to roof	mm	1120			
Door aperture width	mm	612			

SERVICE CAPACITIES

Machine model	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Fuel tank	l	112			
Engine coolant	l	11		12.1	
Engine oil	l	11.2			
Hydraulic system	l	118			
Hydraulic tank	l	66			

NOISE/VIBRATION (85Z-2, 86C-2)

	85z-2	86c-2	86c-2 TAB	90z-2	100c-2
Noise at the operator station (Lpa)	76 dB	(KpA)		0 dB	Measurement Conditions
Noise emission from the machine (Lwa)	95 dB	(KwA)		3dB	ISO 6396: 2008 ISO 6395: 1988
Hand Arm Vibration (m/s ²)	≤ 2.5	(K)			EN ISO 5349-2: 2001*
Tracking duty	≤ 2.5	(K)			EN ISO 5349-2: 2001*
Low idle and excavating duty	0.3	(K)			ISO 2631-1: 1997*
Whole body vibration (m/s ²)					

*Based upon a test cycle defined in SAE J1166

NOISE/VIBRATION (90Z-2, 100C-2)

	90z-2	100c-2
Noise at the operator station (LpA)	78 dB	(KpA)
Noise emission from the machine (LwA)	97 dB	(KwA)
Hand arm vibration (m/s ²)	≤ 2.5	(K)
Tracking duty	≤ 2.5	(K)
Low idle	0.4	(K)
Whole body vibration (m/s ²)		

*Based upon a test cycle defined in SAE J1166

EQUIPMENT		OPERATOR STATION (CONTINUED)	EXTERNAL EQUIPMENT
SERVICE AND MAINTENANCE			
500 hours dig end greasing intervals	•	Below idle system	Advanced lift overload system
Greasegun & cartridge	+	Four digging powerbands	Mechanical quickhitch
Toolkit	+	Electronic single/double acting auxiliary changeover valve	Hydraulic quickhitch
Block heater 110/240V	+	Midback suspension seat	Hydraulic quickhitch ready pipework
2 speed auto-kickdown motors	•	2 piece removable floor mat	General purpose digging buckets
Colour coded hydraulic hoses	•	10 different attachment flow settings	Ditch/grading buckets
Auto warm	•	One touch idle	Hydraulic breakers
Electric refuelling pump	+		Exterior cab mounted mirrors
CESAR datatag (UK only)	•		Thumb ready dipper
		HYDRAULICS	Special paint options
TRACKS AND UNDERCARRIAGE		Low flow, double acting auxiliary	Worklight guards (cab)
450mm or 600mm steel tracks	+	High flow double acting auxiliary	Twin pair of front roof mounted worklights
450mm Geo Grip Road Liner tracks	+	Bucket-to-grab change over valve	Short & long dipper options
4-way angled dozer blade	+	Electronic single/double acting auxiliary changeover valve	Beacon ready kit
Dozer float	+	Dual pattern controls (ISO/SAE change-over)	2 position speed & power bucket tipping link
450mm short pitch rubber tracks	+	ISO servo controls with electro-hydraulic dozer lever	Bushed kingpost
		Hydraulic slew braking with disc type park brake	Protected boom worklight
		ORFS hydraulics	100% steel bodywork
OPERATOR STATION		Tool Select	
Interior mirror	+	Tilt rotate ready installation	
Air-conditioning	+	Auto vent	STANDARD • OPTIONAL +
Adjustable sunblind	•		* Region specific
High back seat or deluxe heated high back air suspension seat	+		
Radio installation with media socket	+	PROTECTION AND SAFETY	
Media socket	+	FOGS guard stage 1 or 2	
Face fan	+	Fan & chaff guards	
Tilting cab	•	Battery isolator*	
Intermittent wiper with wash/wipe	•	Beacon kits	
Roof mounted front and rear worklights	•	LED worklights (with follow me home function)	
3 speed heater/demister with 9 adjustable air vents	•	Travel alarm	
Colour LCD display	•	Fire extinguisher	
Digital clock	•	JCB Immobiliser (unique key or keypad system)	
Internal lockable toolbox	•	Rearview camera	
Interior light	•	Rearview angled mirror	
Cup holder	•	Dipper/crowd Ram guards	
Coat hooks	•	White noise alarm	
12v accessory socket	•	Front screen guard (fine or course)	
Full audio/visual warning systems	•	Neutral start	
Radio ready kit	•	Full control isolation	
Auto idle throttle	•	*2 go" hydraulic isolation	
		Livelink	
		Health check system	