

SPECIFICATION



TRACKED EXCAVATORS | 131X

Max engine power: 55kW (74hp) Max operating weight: 14,819kg Max bucket capacity: 0.89m³



I31X JCB Tracked Excavator

Our engineering teams have once again obsessed over every minute detail of this new world-class small tracked excavator and used the same quality materials and proven components. The result is another machine in the JCB X Series range to be taken seriously.



EXTREMELY EASY

The I31X has been designed to have best-in-class ease of use when working in any application.



EXTREME STRENGTH

It's taken 4 years of development and thousands of hours of extreme endurance testing to build a machine that not only looks strong, it is strong.

EXTREME COMFORT

With ride comfort and low noise levels to rival the best in the business, there's enough to make any operator happy.



EXCELLENT CONTROL

4 years of hydraulic development combined with proven Japanese components have delivered the very best balance of controllability and efficiency.

EXPERIENCE GREATER PERFORMANCE

We've invested years of research and development, listening to thousands of customers like you to build a machine that will perform in the most extreme conditions.

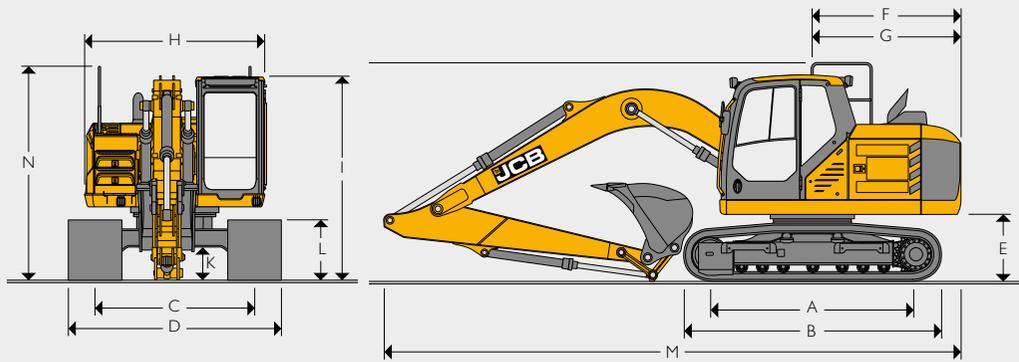
JCBUX

We've updated our spacious, class-leading JCB CommandPlus cab to give you even more comfort and control by introducing JCB UX. A new 10" full colour touch screen display, updated switchgear and new keyless start make operating easier and faster than ever, while a revised menu interface give you the ability to control functions via multiple inputs, for more productive and efficient working.



SPECIFICATION I31X

STATIC DIMENSIONS



STATIC DIMENSIONS

| Model | I31X LC | | | |
|-------|-------------------------------------------|----|-------------|------|
| A | Track length on ground | mm | 2865 | |
| B | Undercarriage overall length | mm | 3590 | |
| C | Track gauge | mm | 1990 | |
| D | Width over tracks (500 mm trackshoes) | mm | 2490 | |
| D | Width over tracks (600 mm trackshoes) | mm | 2590 | |
| D | Width over tracks (700 mm trackshoes) | mm | 2690 | |
| D | Width over tracks (850 mm trackshoes) | mm | 2840 | |
| E | Counterweight clearance | mm | 905 | |
| F | Tail length | mm | 2103 | |
| G | Tail swing radius | mm | 2150 | |
| H | Width of upper superstructure | mm | 2490 | |
| I | Height over cab | mm | 2866 | |
| I | Height over cab (vandal guard – optional) | mm | 3172 | |
| I | Height over cab (FOPS guard) | mm | 2965 | |
| J | Height over grab rail | mm | 3002 | |
| K | Ground clearance | mm | 425 | |
| L | Track height | mm | 811 | |
| | | | Mono | |
| | | | 2.5m | |
| | | | 3.0m | |
| M | Transport length | mm | 7659 | 7604 |
| N | Transport height | mm | 3002 | 3289 |

ENGINE

| | |
|---------------------|--------------------------------------------------------------------------------------------------|
| Model | JCB Dieselmax 430 TCA EU Stage V Compliant |
| Type | 4-stroke, 4-cylinder in-line, common rail, direct injection, turbocharged and intercooled diesel |
| Rated power | 55kW (74 hp) at 2200rpm (ISO 14396) |
| Piston displacement | 3.0 Litres |
| Air filtration | Dry element with secondary safety element and in cab warning indicator |
| Starting system | 24 volt |
| Batteries | 2 x 12 volt |
| Alternator | 24V 100A |
| Maximum torque | 400Nm |
| Bore and stroke | 92mm & 112mm |

SWING SYSTEM

| | |
|--------------|-------------------------------------------------------------------------|
| Swing motor | Axial piston |
| Swing brake | Hydraulic braking plus automatic spring applied disc type parking brake |
| Swing torque | 36.0 kNm |
| Swing speed | 13.1 rpm |
| Swing gear | Large diameter, internally toothed fully sealed grease bath lubricated |
| Dipstick | Remote |

TRACK DRIVE

| | |
|---------------------|----------------------------------------------------------------------------|
| Type | Fully hydrostatic, two speed with autoshift |
| Travel motors | Variable swash axial piston type, fully guarded within undercarriage frame |
| Final drive | Planetary reduction, bolt-on sprockets |
| Service brake | Hydraulic counter balance valve |
| Park brake | Disc type, spring applied, automatic hydraulic release |
| Gradeability | 70% (35 deg) continuous |
| Travel speed | LC |
| | High – 6.6 km/h |
| | Low – 3.8 km/h |
| Tractive effort | 116 kNm |

SPECIFICATION I31X

HYDRAULIC SYSTEM

Pumps

| | |
|-------------------------|-------------------------------------------|
| Main pumps | 2 variable displacement axial piston type |
| Maximum flow | 2 X 130 l/min |
| Servo pump | Gear type |
| Servo pump maximum flow | 30 l/min |

Control valve

A combined four and five spool control valve with auxiliary service spool as standard

Relief valve settings

| | |
|------------------|---------|
| Boom/Arm/Bucket | 314 bar |
| With power boost | 343 bar |
| Swing circuit | 279 bar |
| Travel circuit | 343 bar |
| Pilot control | 40 bar |

Filtration

| | |
|-------------------------|-----------------------------------------|
| In tank | 105 micron, suction strainer |
| Main return line | 10 micron, glass fibre element |
| Pilot drain line | 10 micron, glass fibre element |
| Pilot line | 10 micron, glass fibre element |
| Hydraulic hammer return | 10 micron, reinforced microform element |

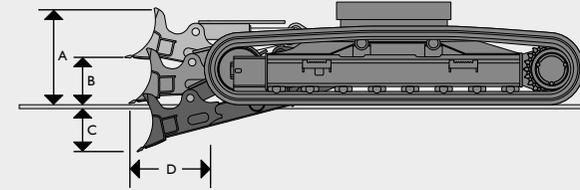
Hydraulic cylinders

| | Quantity | Bore mm | Rod diameter mm |
|--------|----------|---------|-----------------|
| Boom | 2 | 100 | 75 |
| Arm | 1 | 115 | 80 |
| Bucket | 1 | 95 | 70 |

SERVICE CAPACITIES

| | | |
|----------------------------------|--------|------|
| Fuel tank | Litres | 260 |
| Engine coolant | Litres | 19.7 |
| Engine oil | Litres | 14 |
| Swing reduction gear | Litres | 2.2 |
| Track reduction gear (each side) | Litres | 3.5 |
| Hydraulic system | Litres | 126 |
| Hydraulic tank | Litres | 133 |

OPTIONAL BLADE



| | | | |
|---|----------------------------|----|------|
| A | Blade height | mm | 901 |
| B | Blade lift above ground | mm | 448 |
| C | Blade cut below ground | mm | 508 |
| D | Blade forward of track | mm | 412 |
| | Dozer width – 500mm tracks | mm | 2490 |
| | Dozer width – 600mm tracks | mm | 2610 |
| | Dozer width – 700mm tracks | mm | 2710 |

Additional machine weight with blade

| | | | |
|--|--------------|----|-----|
| | 500mm tracks | kg | 806 |
| | 600mm tracks | kg | 814 |
| | 700mm tracks | kg | 821 |

SOUND LEVEL

| | |
|------------------------------------------------------------------------|-----------|
| Sound level in cab according to ISO 6396 | 67 dB LpA |
| External sound level according to ISO 6395 and EU Directive 2000/14/EC | 99 dB LwA |

SPECIFICATION I31X

UNDERCARRIAGE

| | | | | |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|
| Carriage options | LC – Long Carriage. | | | |
| Construction | Fully welded 'X' frame type with central bellyguarding and sloping sidemembers with dirt relief holes under top rollers. | | | |
| Recovery point | Front and rear. | | | |
| Track type | Sealed and lubricated. | | | |
| Upper and lower rollers | Heat treated, sealed and lubricated. | | | |
| Track adjustment | Grease cylinder type. | | | |
| Track idler | Sealed and lubricated, with spring cushioned recoil. | | | |
| Track shoe options | 500mm | 600mm | 700mm | 850mm |
| | •▲■ | •■ | • | • |
| No. of upper rollers (per side) | 2 | | | |
| No. of lower rollers (per side) | 7 | | | |
| No. of track guides (per side) | 1 | | | |
| No. of track shoes (per side) | 44 | | | |

- TRIPLE GROUSER ●
- GEOGRIP ▲
- RUBBER SHOES ■

WEIGHTS AND GROUND BEARING PRESSURES

Figures include standard 442kg bucket, operator, full fuel tank and 2.5m dipper.

| | | 500mm shoes | 600mm shoes | 700mm shoes |
|-------------------------|--------------------|-------------|-------------|-------------|
| I31 LC Monoboam | | | | |
| Machine weight | kg | 14388 | 14604 | 14819 |
| Ground bearing pressure | kg/cm ² | 0.50 | 0.42 | 0.37 |

BUCKET AND ARM COMBINATION

| Bucket options | | GP Bucket | | | | | | | | HD Bucket | | | | | | Ditch Maintenance | | HD Bucket | | | | | | |
|----------------------------------|----------------|-----------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|-------|-------|-------|-------|-------------------|-------|-----------|-------|-------|-------|-------|-------|-------|
| | | 450 | 600 | 700 | 800 | 900 | 1000 | 1250 | 1350 | 458 | 610 | 762 | 915 | 991 | 1219 | 1524 | 1836 | 600 | 700 | 800 | 1000 | 1200 | 1300 | |
| Bucket width | mm | 450 | 600 | 700 | 800 | 900 | 1000 | 1250 | 1350 | 458 | 610 | 762 | 915 | 991 | 1219 | 1524 | 1836 | 600 | 700 | 800 | 1000 | 1200 | 1300 | |
| Bucket capacity | m ³ | 0.21 | 0.35 | 0.42 | 0.50 | 0.54 | 0.66 | 0.81 | 0.89 | 0.20 | 0.26 | 0.34 | 0.43 | 0.50 | 0.61 | 0.65 | 0.79 | 0.35 | 0.42 | 0.50 | 0.66 | 0.81 | 0.89 | |
| Bucket weight | kg | 307 | 342 | 366 | 401 | 425 | 460 | 506 | 542 | 275 | 310 | 357 | 402 | 424 | 493 | 475 | 535 | 336 | 364 | 402 | 455 | 520 | 547 | |
| I31X LC | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.5 m Quickhitch (No Quickhitch) | | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ■ (●) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ■ (■) | ■ (●) |
| 3.0 m Quickhitch (No Quickhitch) | | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ■ (●) | ● (X) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ■ (●) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ■ (●) | ● (X) |
| I31X LCD | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.5 m Quickhitch (No Quickhitch) | | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ■ (■) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (■) | ■ (●) |
| 3.0 m Quickhitch (No Quickhitch) | | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ■ (●) | ● (●) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ■ (●) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ☐ (☐) | ■ (●) | ● (●) |

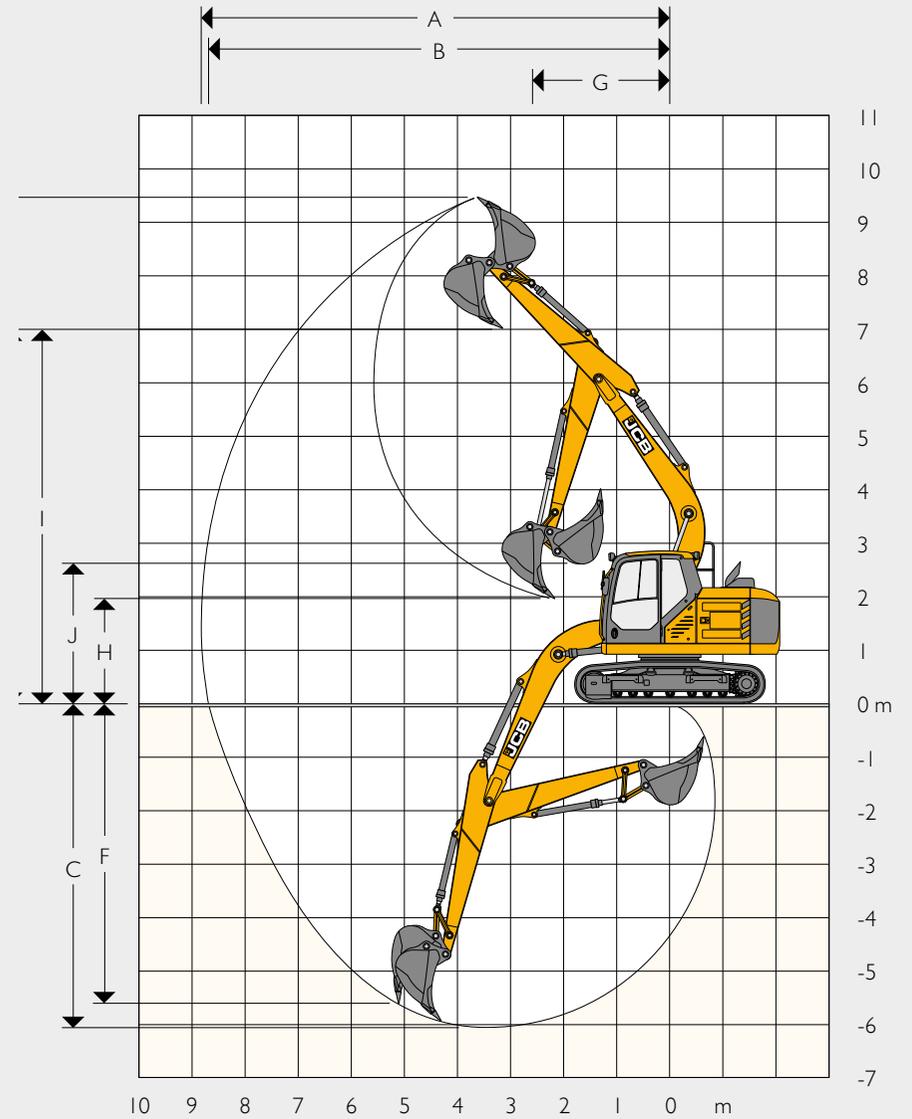
- ☐ = Suitable for general excavating materials up to 1800kg/m³.
- = Suitable for grading and loading materials up to 1500kg/m³.
- = Suitable for light excavating materials up to 1200kg/m³.
- X = Not recommended.

These recommendations are given as a guide based on typical operating conditions. Please contact your distributor for the correct selection of buckets and attachments to suit the application.

SPECIFICATION I31X

WORKING RANGE – MONOBOOM 4.7M

| Dipper length: | | 2.5m | 3.0m | |
|----------------|-----------------------------------|---------|------|------|
| A | Maximum digging reach | mm | 8385 | 8841 |
| B | Maximum digging reach (on ground) | mm | 8240 | 8704 |
| C | Maximum digging depth | mm | 5564 | 6063 |
| D | Maximum digging height | mm | 9164 | 9503 |
| E | Maximum dumping height | mm | 6684 | 7007 |
| F | Maximum vertical wall cut depth | mm | 5098 | 5592 |
| G | Minimum swing radius | mm | 2212 | 2575 |
| H | Minimum dumping height | mm | 2393 | 1975 |
| I | Maximum swing height | mm | 6707 | 7034 |
| J | Minimum swing height | mm | 3108 | 2630 |
| K | Bucket struck radius | mm | 1248 | 1248 |
| L | Bucket rotation | degrees | 182 | 182 |
| | Maximum dipper tearout | Kgf | 6587 | 5986 |
| | Maximum bucket tearout | Kgf | 9432 | 9432 |



SPECIFICATION I31X

LIFT CAPACITIES – DIPPER LENGTH: 2.5M, MONOBOOM: 4.7M, TRACKSHOES: 500MM, NO BUCKET

I31X LC MONO

| Reach | 3m | | 4m | | 5m | | 6m | | Capacity at Max. Reach | | |
|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
| |  |  |  |  |  |  |  |  |  |  | |
| Load Point Height | kg | kg | kg | kg | kg | kg | kg | kg | kg | kg | mm |
| 6m | | | 2776* | 2776* | 2975* | 2975* | | | 2230* | 2230* | 5539 |
| 4.5m | | | 3173* | 3173* | 3086* | 3086* | 3071* | 2520 | 2065* | 2065* | 6484 |
| 3m | 5341* | 5341* | 4192* | 4192* | 3628* | 3218 | 3322* | 2441 | 2049* | 1912 | 6984 |
| 1.5m | 7036* | 6272 | 5387* | 4138 | 4306* | 3022 | 3194 | 2332 | 2147* | 1802 | 7137 |
| 0m | 6455* | 5975 | 5286 | 3914 | 4145 | 2877 | 3453 | 2243 | 2383* | 1829 | 6965 |
| - 1.5m | 8294* | 5946 | 5366 | 3844 | 4238 | 2819 | 3454 | 2213 | 2865* | 2024 | 6442 |
| - 3m | 7287* | 6056 | 5598* | 3898 | 3757 | 2866 | | | 3251 | 2564 | 5468 |

LIFT CAPACITIES – DIPPER LENGTH: 3.0M, MONOBOOM: 4.7M, TRACKSHOES: 500MM, NO BUCKET

I31X LC MONO

| Reach | 3m | | 4m | | 5m | | 6m | | Capacity at Max. Reach | | |
|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
| |  |  |  |  |  |  |  |  |  |  | |
| Load Point Height | kg | kg | kg | kg | kg | kg | kg | kg | kg | kg | mm |
| 6m | | | | | 2515* | 2515* | 2376* | 2376* | 2038* | 2038* | 6121 |
| 4.5m | | | 2650* | 2650* | 2701* | 2701* | 2728* | 2555 | 1913* | 1913* | 6985 |
| 3m | 4421* | 4421* | 3673* | 3673* | 3271* | 3259 | 3038* | 2458 | 1907* | 1719 | 7451 |
| 1.5m | 6885* | 6425 | 4945* | 4193 | 4005* | 3040 | 2995 | 2331 | 1995* | 1624 | 7594 |
| 0m | 7085* | 5961 | 5876* | 3904 | 3974 | 2861 | 3322 | 2221 | 2196* | 1639 | 7434 |
| - 1.5m | 8386* | 5847 | 5336 | 3785 | 4196 | 2770 | 3447 | 2163 | 2232 | 1785 | 6947 |
| - 3m | 7705* | 5912 | 5033 | 3800 | 3963 | 2780 | 3089 | 2196 | 2968 | 2173 | 6055 |



Lift capacity front and rear.



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.
3. Lift capacities may be limited by local regulations. Please refer to your dealer.

SPECIFICATION I31X

LIFT CAPACITIES – DIPPER LENGTH: 2.5M, MONOBOOM: 4.7M, TRACKSHOES: 500MM, NO BUCKET **I31X LCD MONO**

| Reach | 3m | | 4m | | 5m | | 6m | | Capacity at Max. Reach | | |
|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
| |  |  |  |  |  |  |  |  |  |  | |
| Load Point Height | kg | kg | kg | kg | kg | kg | kg | kg | kg | kg | mm |
| 6m | | | 2776* | 2776* | 2975* | 2975* | | | 2230* | 2230* | 5539 |
| 4.5m | | | 3173* | 3173* | 3086* | 3086* | 3071* | 2647 | 2065* | 2065* | 6484 |
| 3m | 5341* | 5341* | 4192* | 4192* | 3628* | 3377 | 3322* | 2568 | 2049* | 2018 | 6984 |
| 1.5m | 7036* | 6597 | 5387* | 4352 | 4306* | 3182 | 3194 | 2458 | 2147* | 1906 | 7137 |
| 0m | 6455* | 6299 | 5286 | 4126 | 4145 | 3037 | 3453 | 2371 | 2383* | 1936 | 6965 |
| - 1.5m | 8294* | 6270 | 5366 | 4058 | 4238 | 2978 | 3454 | 2340 | 2865* | 2141 | 6442 |
| - 3m | 7287* | 6380 | 5598* | 4112 | 3757 | 3026 | | | 3251 | 2706 | 5468 |

LIFT CAPACITIES – DIPPER LENGTH: 3.0M, MONOBOOM: 4.7M, TRACKSHOES: 500MM, NO BUCKET **I31X LCD MONO**

| Reach | 3m | | 4m | | 5m | | 6m | | Capacity at Max. Reach | | |
|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|
| |  |  |  |  |  |  |  |  |  |  | |
| Load Point Height | kg | kg | kg | kg | kg | kg | kg | kg | kg | kg | mm |
| 6m | | | | | 2515* | 2515* | 2376* | 2376* | 2038* | 2038* | 6121 |
| 4.5m | | | 2650* | 2650* | 2701* | 2701* | 2728* | 2682 | 1913* | 1913* | 6985 |
| 3m | 4421* | 4421* | 3673* | 3673* | 3271* | 3271* | 3038* | 2585 | 1907* | 1817 | 7451 |
| 1.5m | 6885* | 6749 | 4945* | 4407 | 4005* | 3199 | 2995 | 2458 | 1995* | 1720 | 7594 |
| 0m | 7085* | 6285 | 5066 | 4118 | 3974 | 3020 | 3322 | 2348 | 2196* | 1737 | 7434 |
| - 1.5m | 8386* | 6171 | 5336 | 3999 | 4196 | 2930 | 3447 | 2290 | 2232 | 1892 | 6947 |
| - 3m | 7705* | 6236 | 5033 | 4014 | 3963 | 2938 | 3089 | 2323 | 2968 | 2299 | 6055 |



Lift capacity front and rear.



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.
3. Lift capacities may be limited by local regulations. Please refer to your dealer.







ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

TRACKED EXCAVATOR 131X

Max engine power: 55kW (74hp) Max operating weight: 14,819kg Max bucket capacity: 0.98m³

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 Download the very latest information on this product range at: www.jcb.com

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