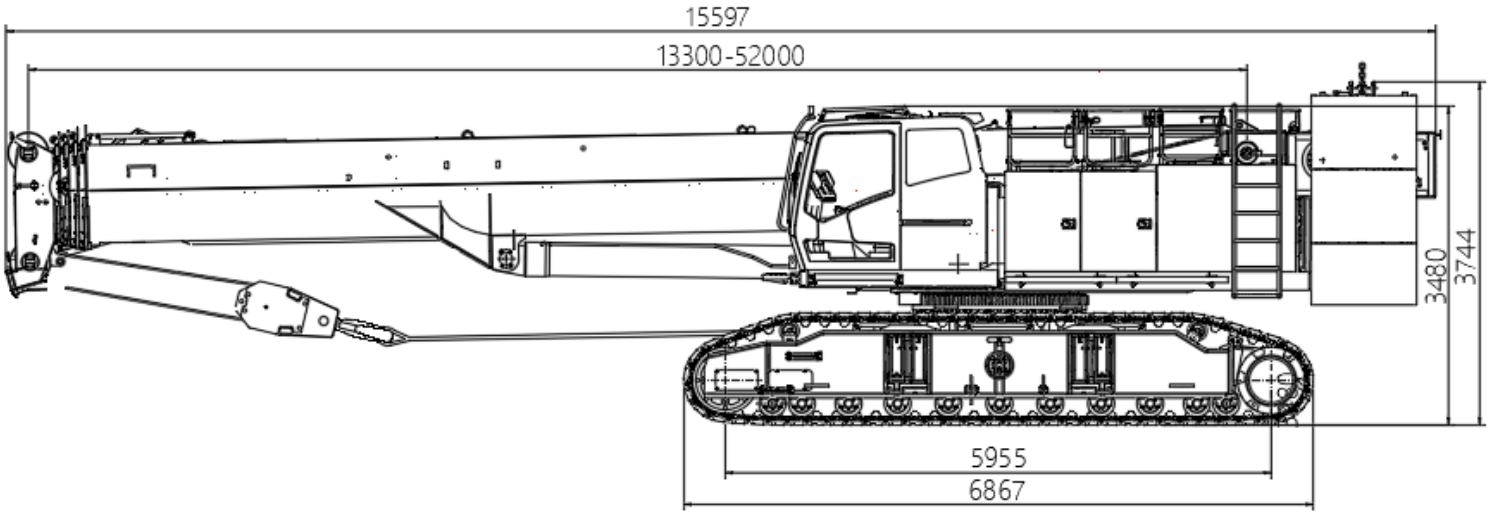
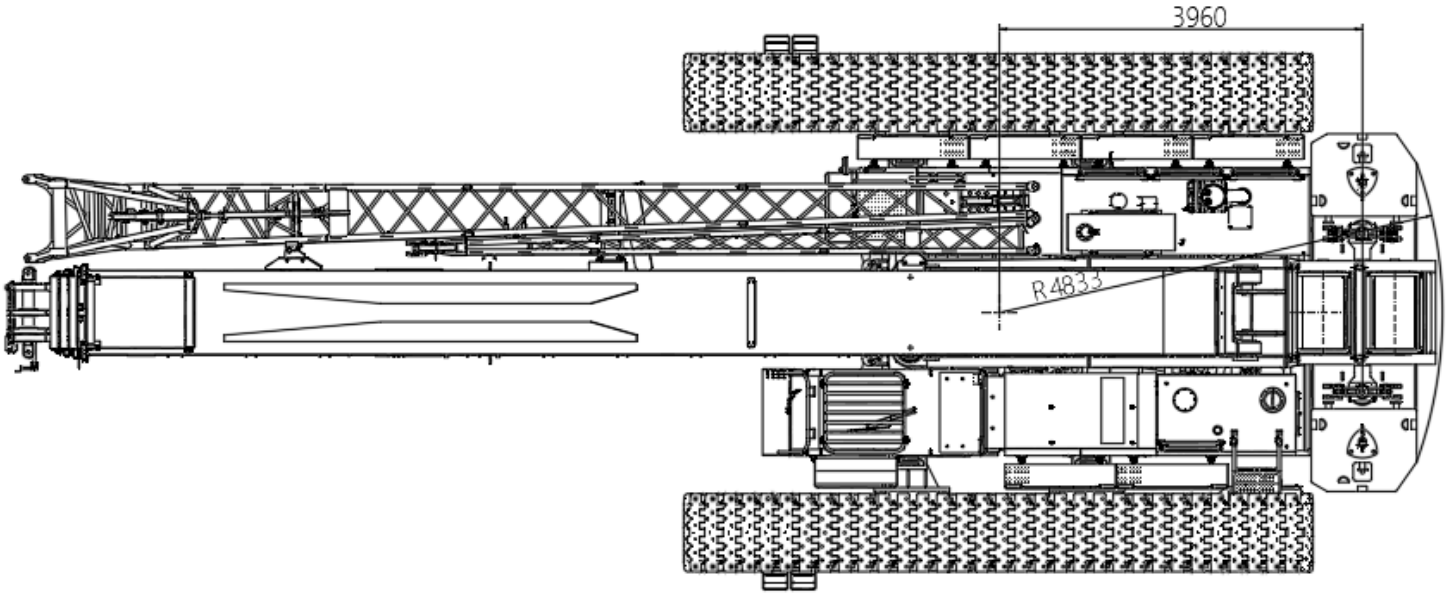
# XGTC100 CRAWLER CRANE

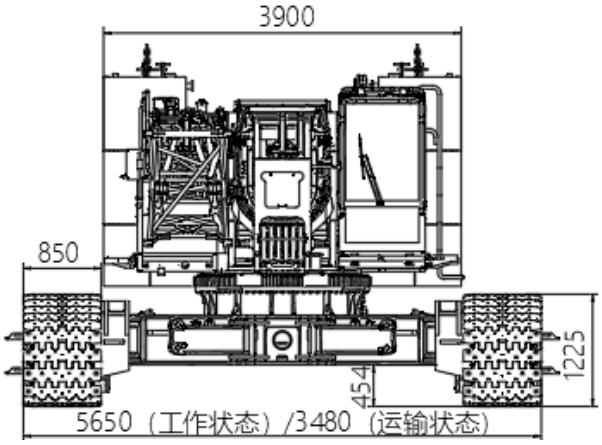
## Technical specification

# Contents

# Dimensions (mm)



# Technical specifications

## ➢ Operator’s cab

- The cab is spacious and comfortable, with steel frame structure. The front is integral laminated glass, while others are tempered glass. The cab is equipped with adjustable seat, ergonomic designed instruments and control devices, air conditioner (for heating and cooling), radio, fire extinguisher and closed-circuit monitoring system.

## ➢ Engine

- Brand & model: Cummins, QSL9;
- Emission standard: Stage V/Tier 4 final;
- Type: in-line six-cylinder, turbocharged and inter-cooled;
- Rated power: 252kW;
- Rated speed: 1800rpm;
- Max. output torque: 1526N·m;
- Speed at the maximum output torque: 1400rpm;
- Fuel tank capacity: 500L.

## ➢ Hydraulic system

- Hydraulic proportional valve control, with features of accurate control, good fine motion and wide range of speed adjustment. Hydraulic systems of boom telescoping, luffing, hoisting and travel share one constant-power and loading-sensitive pump. The oil supply of slewing system and pilot system is provided by independent gear pump.
- Hydraulic parts adopted are mature and reliable, with advanced and highly efficient hydraulic driving control techniques. Easy to operate and convenient to maintain. Hydraulic system and electrical system cooperate with each other to ensure the safety and stability of the basic machine.

## ➢ Electrical system

- Intelligent computer integrated programming control system is the key technology of this product. It uses PLC programmable controller as the core of control system. The system is made up of engine control, safety control, pilot control, load moment limiter control and auxiliary functions control, these parts work together to realize the automatic control of crane, greatly increase the safety, reliability and efficiency for crane operation.
- The operation of this crane is shown by a big computer screen, easy for man-machine dialog.

| Battery model | Qty. | Total rated voltage | Total rated capacity |
|---|---|---|---|
| 6-QAW-180D | 2 | 24V | 180Ah |

# Technical specifications

## ➢ Hoisting system

- Hoisting system includes main hoisting and aux. hoisting. Main and auxiliary hoisting systems adopt built-in reducers and driven independently. They are installed on turntable tail by flanges. The reducer is installed with normally-closed disc brake, safe and reliable; the reducer is lubricated by splashing oil, free of maintenance. Hoisting systems also have features of easy oil replacement, low noise, high efficiency, long service life and good fine motion performance.
- Hoisting system uses wire rope with high breaking force, the parameters are as follows:

| | | | | | |
|---|---|---|---|---|---|
| Main hoisting system | Diameter of wire rope | 20mm | Auxiliary hoisting system | Diameter of wire rope | 20mm |
| | Rated single line pull | 8.5t | | Rated single line pull | 6.5t |
| | Wire rope length | 295m | | Wire rope length | 165m |

## ➢ Luffing cylinder

- Luffing cylinder is driving device for boom/jib radius change which is realized by luffing cylinder telescoping. Luffing cylinder is also the device to keep boom/jib angle for when lifting a load.

## ➢ Slewing system

- Slewing system is arranged at the right part of turntable (two reducers), driven by motor.
- Planetary reducer is externally meshed with slewing bearing for slewing, with functions of hydraulic buffering and free sliding, ensure safe operation. The reducer is installed with normally-closed disc brake, reliable in work and easy for maintenance.
- Slewing bearing: single-row four-points contact ball type slewing bearing; its bearing capacity is very strong which can ensure a safe and stable 360° superstructure slewing.

## ➢ Travel system

- It includes track beam, track roller, drive sprocket, idler, carrier roller and track shoe. Track frame is box type structure, its connection with car-body is strengthened partially, and cross panel is installed in the middle of it. The two track frames are symmetrically distributed. The rollers and track shoes are all made of high strength alloy cast steel.
- Crawler travel unit has built-in planetary reducer, driven by axial piston variable displacement motor. The reducer is set with hydraulic release travel brake, safe and reliable. The two travel systems can be operated synchronously or separately to realize straight travel and turning.

## ➢ Hook block

- Hook block configuration is as follows:

| Name | 80t block | 7t hook | 100t hook (optional) | 35t hook (optional) |
|---|---|---|---|---|
| Weight (Kg) | 700 | 150 | 955.7 | 473.8 |
| Qty. | 1 | 1 | 1 | 1 |
| Number of pulleys | 6 | / | 7 | 3 |

# Technical specifications

## ➢ Counterweight

- Car-body counterweight is 9t (2×4.5t), respectively installed on the front and rear part of car-body.
- Turntable counterweight has four combinations: 0t, 11t, 18.5t and 26t. Turntable counterweight combinations are shown in table below:

| No. | Weight of turntable counterweight (t) | Counterweight tray (t) | Turntable counterweight slab (t) |
|---|---|---|---|
| 1 | 0 | 0 (counterweight not installed) | 0 |
| 2 | 11 | 11 | 0 |
| 3 | 18.5 | 11 | 2×3.75 |
| 4 | 26 | 11 | 4×3.75 |

## ➢ Turntable

- Turntable is formed by main structure and two side panels, welded by high-strength steel plate. This structure has strong bending and torsion resistance, with good stability. At the same time, the space of turntable is very large, convenient for crane repair and maintenance. Turntable is connected to undercarriage through slewing bearing. Many important parts are installed on turntable, such as operator’ s cab, main and aux. hoisting winches, engine, turntable counterweight and boom system.

## ➢ Car-body

- Car-body is made of high-strength steel plate and welded in box type structure, cross panel is set in the middle to strengthen its torsion stiffness, simple structure, high load bearing capacity and good rigidity, with outriggers.

## ➢ Boom system

- Five boom sections, U-shaped cross section, with dual-cylinder rope arrangement telescoping system, single-plate boom head, compact boom tail and embedded slide block.
- Main boom length is 13.3m ~ 52m. The crane has main boom arbitrary extension/retraction function, richer operation mode combinations, and higher boom length switching efficiency.
- Two side-mounted jib sections are double pendant lattice structure. Jib has three offset angles: 0°, 15° and 30°, available jib lengths: 10.5m and 17.5m.

## ➢ Safety devices

- Safety devices include: load moment indicator, rope end limiter, hook latch, closed-circuit monitoring system, height mark lamp, electronic level indicator, buzzer and warning light, function interlock, emergency function, automatic fault diagnosis system, power-off protection and etc.

# Optional parts

➢ **Optional parts**

| No. | Item |
|---|---|
| 1 | 100t hook |
| 2 | 35t hook |
| 3 | Cold start device |
| 4 | Centralized lubrication system |
| 5 | Fixed jib |

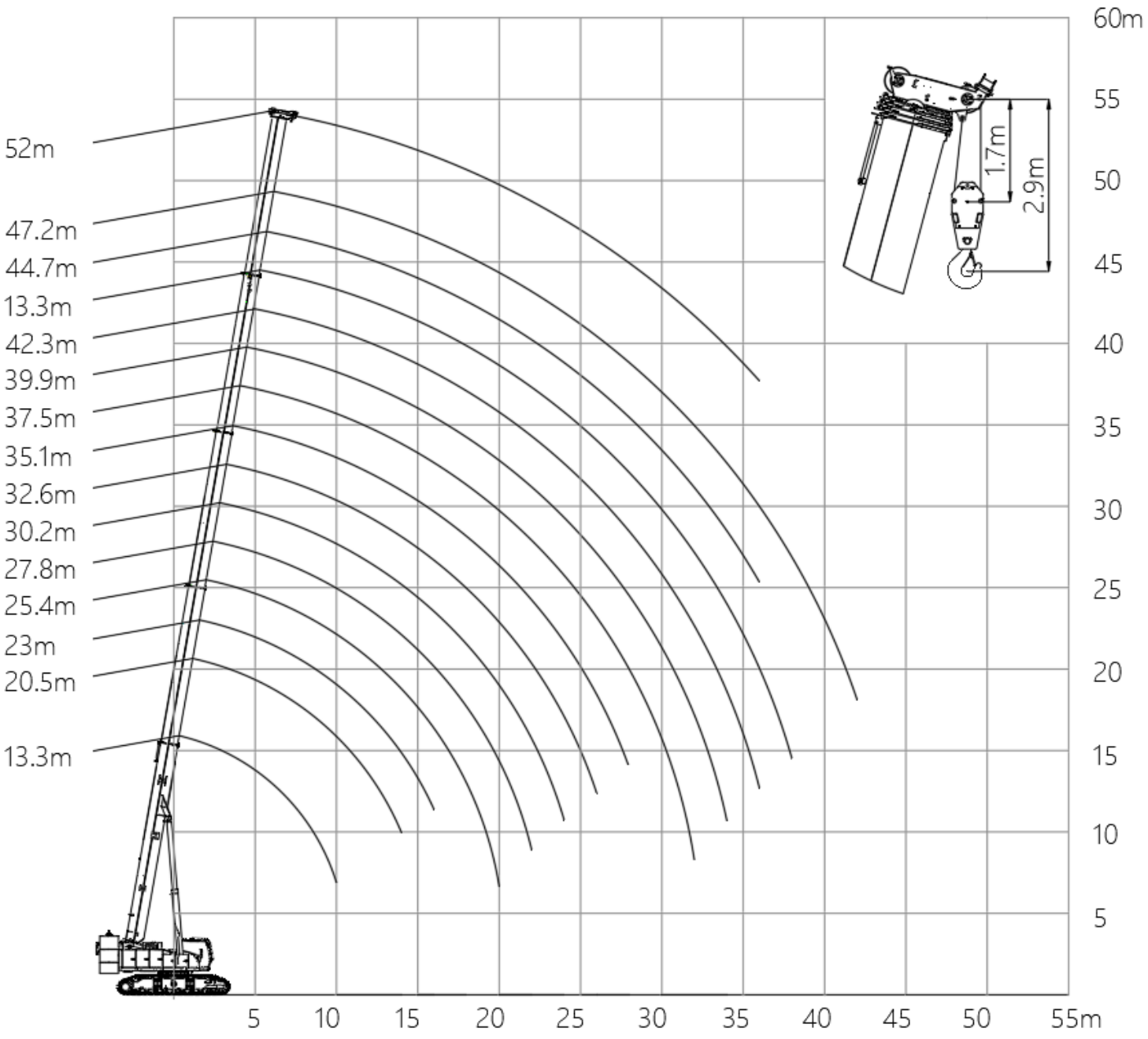
# Main technical parameters

| Item | | | Unit | Value |
|---|---|---|---|---|
| Lifting performance parameters | Max. rated lifting capacity | Main boom | t | 100 |
| | | Jib | t | 6.5 |
| | Max. lifting moment | | t.m | 360(60t@6m) |
| | Length | Main boom | m | 13.3~52 (Five boom sections) |
| | | Jib | m | 10.5/17.5 (two jib sections) |
| | | Max. main boom and jib combination | m | 69.5 (52+17.5) |
| Weight parameters | Total crane weight | | t | 99.8 |
| | Ground pressure | | Mpa | 0.097 |
| Dimension parameters | Max. dimension of single piece in transport state (with crawler tracks) | | m | 15.59×3.496×3.49 |
| | Outline dimension of the crane | | m | 15.59×5.65×3.49 |
| | Min. slewing radius | | m | 4.83 |
| | Crawler chassis width (wide gauge/narrow gauge) | | m | 5.65/3.496 |
| | Crawler shoe width | | m | 0.85 |
| Wire rope | Diameter/single line pull | | mm/t | Φ20/8.5 (aux. winch 6.5) |
| Speed parameters | Lifting speed | Main winch | m/min | 130 |
| | | Aux. winch | m/min | 130 |
| | Slewing speed | | r/min | 1.49 |
| | Travel speed | | km/h | 1.7 |
| | Grade ability | | % | 45 |
| Power system | Engine brand | | / | Cummins |
| | Power/rated speed | | kW/rpm | 252/1800 |
| | Fuel tank capacity | | L | 500 |
| | Emission standard | | / | EURO V |

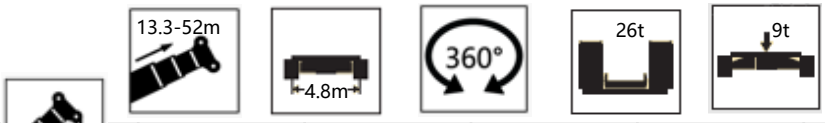
# Operation modes and lifting performance

| Main boom | Main boom + boom end single pulley | Main boom + fixed jib |
|---|---|---|
| 13.3 ~ 52m | Main boom: 13.3 ~ 52m | Main boom: 13.3 ~ 52m<br>Fixed jib: 10.5m/17.5m |

# Operation modes and lifting performances-main boom operation mode



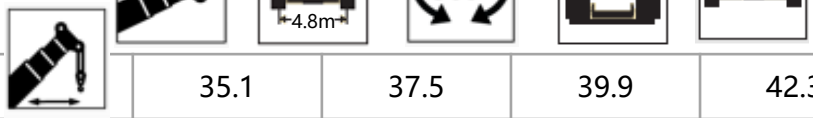
# Operation modes and lifting performances-main boom operation mode




**Main boom 13.3~32.6m**

| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 | 30.2 | 32.6 |
|---|---|---|---|---|---|---|---|---|
| 2.5 | 100* | | | | | | | |
| 3 | 90.0 | 78.0 | 46.0 | 58.0 | | | | |
| 3.5 | 87.0 | 78.0 | 46.0 | 58.0 | | | | |
| 4 | 83.0 | 78.0 | 46.0 | 58.0 | 45.0 | | | |
| 4.5 | 78.0 | 78.0 | 46.0 | 58.0 | 45.0 | 41.0 | | |
| 5 | 70.0 | 70.0 | 46.0 | 58.0 | 45.0 | 41.0 | 42.0 | |
| 6 | 60.0 | 59.0 | 46.0 | 57.4 | 45.0 | 41.0 | 42.0 | 42.0 |
| 7 | 50.0 | 50.0 | 46.0 | 46.8 | 45.0 | 41.0 | 42.0 | 42.0 |
| 8 | 41.4 | 41.0 | 43.7 | 38.8 | 40.3 | 41.0 | 37.2 | 37.7 |
| 9 | 33.7 | 33.4 | 36.8 | 32.4 | 34.0 | 35.1 | 31.3 | 32.0 |
| 10 | 28.0 | 27.8 | 31.0 | 27.5 | 29.2 | 30.3 | 26.8 | 27.7 |
| 12 | | 20.0 | 23.0 | 19.8 | 22.2 | 23.6 | 20.4 | 21.4 |
| 14 | | 14.8 | 17.8 | 14.7 | 17.1 | 19.0 | 16.0 | 17.1 |
| 16 | | | 14.1 | 11.1 | 13.4 | 15.3 | 12.9 | 14.0 |
| 18 | | | | 8.4 | 10.7 | 12.5 | 10.2 | 11.6 |
| 20 | | | | 6.3 | 8.5 | 10.3 | 8.1 | 9.6 |
| 22 | | | | | 6.8 | 8.6 | 6.4 | 7.9 |
| 24 | | | | | | 7.2 | 5.1 | 6.6 |
| 26 | | | | | | | 3.9 | 5.4 |
| 28 | | | | | | | | 4.4 |
| Parts of line | 12 | 12 | 10 | 10 | 8 | 8 | 6 | 6 |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% | 100% | 50% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |

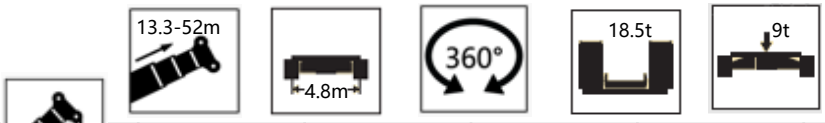
# Operation modes and lifting performances-main boom operation mode




**Main boom 35.1~52m**

| | 35.1 | 37.5 | 39.9 | 42.3 | 44.7 | 47.2 | 52 |
|---|---|---|---|---|---|---|---|
| 7 | 22.5 | 38.2 | | | | | |
| 8 | 22.5 | 34.4 | 22.0 | | | | |
| 9 | 22.5 | 29.2 | 22.0 | | | | |
| 10 | 22.5 | 25.1 | 22.0 | 21.2 | 17.6 | 19.5 | 17.2 |
| 12 | 22.1 | 19.3 | 19.8 | 19.2 | 14.0 | 17.7 | 13.8 |
| 14 | 17.9 | 15.3 | 15.9 | 16.3 | 11.4 | 14.3 | 10.9 |
| 16 | 14.8 | 12.4 | 13.1 | 13.6 | 9.4 | 11.8 | 8.8 |
| 18 | 12.5 | 10.2 | 10.9 | 11.5 | 7.9 | 9.8 | 7.2 |
| 20 | 10.7 | 8.5 | 9.2 | 9.8 | 6.6 | 8.3 | 6.0 |
| 22 | 9.2 | 7.1 | 7.9 | 8.5 | 5.6 | 7.1 | 5.0 |
| 24 | 7.8 | 6.0 | 6.8 | 7.5 | 4.7 | 6.1 | 4.2 |
| 26 | 6.7 | 4.9 | 5.9 | 6.6 | 4.0 | 5.3 | 3.5 |
| 28 | 5.7 | 4.0 | 5.1 | 5.8 | 3.4 | 4.6 | 3.0 |
| 30 | 4.8 | 3.1 | 4.3 | 5.2 | 2.9 | 4.0 | 2.5 |
| 32 | 4.1 | 2.4 | 3.5 | 4.5 | 2.4 | 3.5 | 2.1 |
| 34 | | 1.8 | 2.9 | 3.9 | 1.9 | 3.1 | 1.8 |
| 36 | | | 2.3 | 3.3 | | 2.7 | 1.5 |
| 38 | | | | 2.8 | | 2.3 | |
| 40 | | | | | | 1.8 | |
| 42 | | | | | | 1.4 | |
| Parts of line | 6 | 6 | 5 | 5 | 5 | 4 | 4 |
| The 2nd boom section | 0% | 100% | 50% | 0% | 100% | 50% | 100% |
| The 3rd boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 4th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 5th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |

# Operation modes and lifting performances-main boom operation mode




**Main boom 13.3~32.6m**

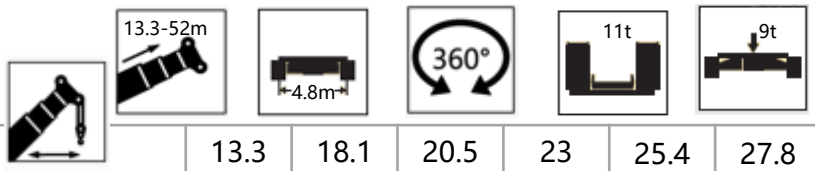
| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 | 30.2 | 32.6 |
|---|---|---|---|---|---|---|---|---|
| 2.5 | 100.0 | | | | | | | |
| 3 | 90.0 | 78.0 | 46.0 | 58.0 | | | | |
| 3.5 | 87.0 | 78.0 | 46.0 | 58.0 | | | | |
| 4 | 83.0 | 78.0 | 46.0 | 58.0 | 45.0 | | | |
| 4.5 | 78.0 | 78.0 | 46.0 | 58.0 | 45.0 | 41.0 | | |
| 5 | 70.0 | 69.0 | 46.0 | 58.0 | 45.0 | 41.0 | 42 | |
| 6 | 58.0 | 53.4 | 46.0 | 48.6 | 45.0 | 41.0 | 42 | 42.0 |
| 7 | 44.6 | 43.0 | 45.3 | 39.4 | 41.1 | 38.9 | 37.7 | 38.2 |
| 8 | 35.0 | 34.6 | 37.2 | 32.3 | 33.9 | 35.0 | 30.9 | 31.6 |
| 9 | 28.2 | 27.9 | 31.2 | 26.7 | 28.4 | 29.6 | 25.9 | 26.7 |
| 10 | 23.2 | 23.0 | 26.2 | 22.5 | 24.2 | 25.5 | 22 | 22.9 |
| 12 | | 16.2 | 19.2 | 16 | 18.3 | 19.6 | 16.5 | 17.5 |
| 14 | | 11.7 | 14.7 | 11.6 | 13.9 | 15.7 | 12.7 | 13.8 |
| 16 | | | 11.4 | 8.5 | 10.7 | 12.6 | 10 | 11.1 |
| 18 | | | | 6.1 | 8.3 | 10.2 | 7.9 | 9.1 |
| 20 | | | | 4.2 | 6.5 | 8.3 | 6 | 7.6 |
| 22 | | | | | 5.0 | 6.8 | 4.6 | 6.1 |
| 24 | | | | | | 5.5 | 3.4 | 4.9 |
| 26 | | | | | | | 2.4 | 3.9 |
| 28 | | | | | | | | 3.0 |
| Parts of line | 12 | 12 | 10 | 10 | 8 | 8 | 6 | 6 |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% | 100% | 50% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |

# Operation modes and lifting performances-main boom operation mode


**Main boom 35.1~52m**

| | 35.1 | 37.5 | 39.9 | 42.3 | 44.7 | 47.2 | 52 |
|---|---|---|---|---|---|---|---|
| 7 | 22.5 | 34.3 | | | | | |
| 8 | 22.5 | 28.4 | 22.0 | | | | |
| 9 | 22.5 | 23.9 | 22.0 | | | | |
| 10 | 22.5 | 20.5 | 20.8 | 21.0 | 18.2 | 18.2 | 10.1 |
| 12 | 18.2 | 15.5 | 16.0 | 16.3 | 13.9 | 14.0 | 7.8 |
| 14 | 14.6 | 12.1 | 12.7 | 13.1 | 10.8 | 11.1 | 6.1 |
| 16 | 12.0 | 9.6 | 10.3 | 10.8 | 8.6 | 9.0 | 4.8 |
| 18 | 10.0 | 7.7 | 8.5 | 9.0 | 7 | 7.4 | 3.8 |
| 20 | 8.5 | 6.3 | 7.0 | 7.6 | 5.7 | 6.2 | 3.1 |
| 22 | 7.3 | 5.1 | 5.9 | 6.5 | 4.6 | 5.2 | 2.4 |
| 24 | 6.2 | 4.2 | 5.0 | 5.6 | 3.8 | 4.3 | 1.9 |
| 26 | 5.1 | 3.4 | 4.2 | 4.9 | 3.1 | 3.7 | |
| 28 | 4.3 | 2.5 | 3.6 | 4.3 | 2.5 | 3.1 | |
| 30 | 3.5 | 1.8 | 2.9 | 3.8 | 2 | 2.6 | |
| 32 | 2.9 | | 2.3 | 3.3 | | 2.2 | |
| 34 | | | 1.7 | 2.7 | | 1.8 | |
| 36 | | | | 2.2 | | 1.5 | |
| 38 | | | | 1.8 | | | |
| Parts of line | 6 | 6 | 5 | 5 | 5 | 4 | 4 |
| The 2nd boom section | 0% | 100% | 50% | 0% | 100% | 50% | 100% |
| The 3rd boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 4th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 5th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |

# Operation modes and lifting performances-main boom operation mode




**Main boom 13.3~42.3m**

| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 | 30.2 | 32.6 | 35.1 | 37.5 | 39.9 | 42.3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.5 | 100.0 | | | | | | | | | | | |
| 3 | 90.0 | 78.0 | 46.0 | 58.0 | | | | | | | | |
| 3.5 | 87.0 | 78.0 | 46.0 | 58.0 | | | | | | | | |
| 4 | 83.0 | 78.0 | 46.0 | 58.0 | 45.0 | | | | | | | |
| 4.5 | 75.1 | 66.7 | 46.0 | 58.0 | 45.0 | 41.0 | | | | | | |
| 5 | 65.3 | 57.3 | 46.0 | 51.2 | 45.0 | 41.0 | 42.0 | | | | | |
| 6 | 49.4 | 43.9 | 46.0 | 39.8 | 41.5 | 41.0 | 37.7 | 38.7 | | | | |
| 7 | 36.7 | 35.0 | 37.5 | 31.9 | 33.8 | 34.8 | 30.4 | 31.0 | 22.5 | 27.3 | | |
| 8 | 28.5 | 28.1 | 30.6 | 25.8 | 27.5 | 28.6 | 24.7 | 25.4 | 22.5 | 22.3 | 22.0 | |
| 9 | 22.7 | 22.4 | 25.5 | 21.1 | 22.9 | 24.1 | 20.4 | 21.3 | 21.8 | 18.6 | 18.9 | |
| 10 | 18.4 | 18.2 | 21.5 | 17.5 | 19.3 | 20.6 | 17.2 | 18.1 | 18.8 | 15.8 | 16.2 | 16.4 |
| 12 | | 12.4 | 15.5 | 12.2 | 14.3 | 15.7 | 12.6 | 13.6 | 14.4 | 11.7 | 12.2 | 12.6 |
| 14 | | 8.6 | 11.5 | 8.5 | 10.8 | 12.3 | 9.4 | 10.5 | 11.4 | 8.8 | 9.5 | 9.9 |
| 16 | | | 8.7 | 5.8 | 8.1 | 9.9 | 7.2 | 8.3 | 9.2 | 6.8 | 7.5 | 8.0 |
| 18 | | | | 3.8 | 6.0 | 7.8 | 5.4 | 6.6 | 7.5 | 5.3 | 6.0 | 6.6 |
| 20 | | | | 2.2 | 4.4 | 6.2 | 4.0 | 5.3 | 6.3 | 4.1 | 4.8 | 5.5 |
| 22 | | | | | 3.1 | 4.9 | 2.7 | 4.2 | 5.3 | 3.1 | 3.9 | 4.6 |
| 24 | | | | | | 3.8 | | 3.2 | 4.4 | 2.3 | 3.2 | 3.8 |
| 26 | | | | | | | | 2.3 | 3.6 | | 2.5 | 3.2 |
| 28 | | | | | | | | | 2.9 | | 2.0 | 2.7 |
| 30 | | | | | | | | | 2.2 | | | 2.3 |
| 32 | | | | | | | | | 1.6 | | | 2.0 |
| 34 | | | | | | | | | | | | 1.6 |
| Parts of line | 12 | 12 | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 6 | 5 | 5 |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% | 75% | 50% | 75% | 100% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% | 75% | 50% | 75% | 100% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% | 75% | 50% | 75% | 100% |

# Operation modes and lifting performances-main boom operation mode

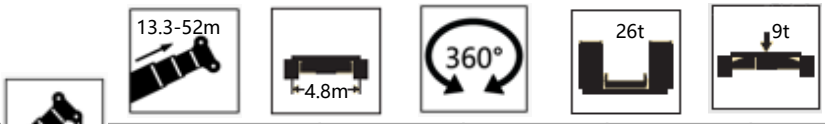

**Main boom 13.3~27.8m**

| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 |
|---|---|---|---|---|---|---|
| 2.5 | 100.0 | | | | | |
| 3 | 90.0 | 78.0 | 46.0 | 58.0 | | |
| 3.5 | 84.2 | 69.4 | 46.0 | 58.0 | | |
| 4 | 66.8 | 56.4 | 46.0 | 48.8 | 45.0 | |
| 4.5 | 54.9 | 47.0 | 46.0 | 41.2 | 42.8 | 41.0 |
| 5 | 46.2 | 40.0 | 42.5 | 35.3 | 37.2 | 38.5 |
| 6 | 34.3 | 30.0 | 32.9 | 26.8 | 29.0 | 30.4 |
| 7 | 25.2 | 23.4 | 26.1 | 21.0 | 22.7 | 23.9 |
| 8 | 19.0 | 18.3 | 20.9 | 16.3 | 18.1 | 19.3 |
| 9 | 14.7 | 14.4 | 17.2 | 12.9 | 14.7 | 16.0 |
| 10 | 11.4 | 11.2 | 14.3 | 10.3 | 12.1 | 13.5 |
| 12 | | 6.9 | 9.9 | 6.6 | 8.5 | 9.9 |
| 14 | | 4.0 | 7.0 | 3.9 | 6.0 | 7.5 |
| 16 | | | 4.8 | | 4.2 | 5.7 |
| 18 | | | | | 2.6 | 4.4 |
| 20 | | | | | | 3.2 |
| 22 | | | | | | 2.2 |
| Parts of line | 12 | 12 | 10 | 10 | 8 | 8 |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% |

# Operation modes and lifting performances-boom end single pulley operation mode

**Main boom combination in boom end single pulley operation mode**

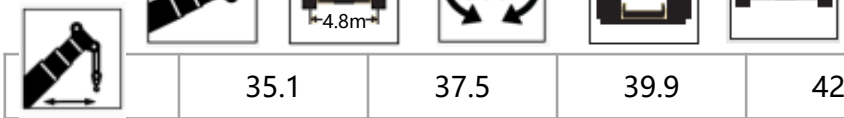
- Main boom lengths in boom end single pulley operation mode are the same with those in main boom operation mode.
- Boom end single pulley is installed on main boom top section.
- Refer to the working range of the crane in main boom operation mode for the working range of the crane in boom end single pulley operation mode.




**Main boom 13.3~32.6m**

| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 | 30.2 | 32.6 |
|---|---|---|---|---|---|---|---|---|
| 2.5 | 6.5 | | | | | | | |
| 3 | 6.5 | 6.5 | 6.5 | 6.5 | | | | |
| 3.5 | 6.5 | 6.5 | 6.5 | 6.5 | | | | |
| 4 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | | | |
| 4.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | | |
| 5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| 6 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 7 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 8 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 9 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 10 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 12 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 14 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 16 | | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 18 | | | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 20 | | | | 5.3 | 6.5 | 6.5 | 6.5 | 6.5 |
| 22 | | | | | 6.0 | 6.5 | 5.6 | 6.5 |
| 24 | | | | | | 6.4 | 4.3 | 5.8 |
| 26 | | | | | | | 3.2 | 4.7 |
| 28 | | | | | | | | 3.8 |
| Parts of line | 1 | | | | | | | |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% | 100% | 50% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |

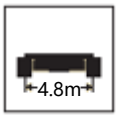
# Operation modes and lifting performances-boom end single pulley operation mode

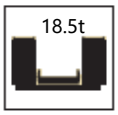


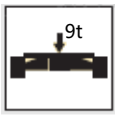

**Main boom 35.1~52m**

| | 35.1 | 37.5 | 39.9 | 42.3 | 44.7 | 47.2 | 52 |
|---|---|---|---|---|---|---|---|
| 7 | 6.5 | 6.5 | | | | | |
| 8 | 6.5 | 6.5 | 6.5 | | | | |
| 9 | 6.5 | 6.5 | 6.5 | | | | |
| 10 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 12 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 14 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 16 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 18 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.1 | 6.1 |
| 20 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 5.0 | 5.0 |
| 22 | 6.5 | 6.2 | 6.5 | 6.5 | 5.7 | 4.1 | 4.1 |
| 24 | 6.5 | 5.2 | 6.0 | 6.5 | 4.8 | 3.4 | 3.4 |
| 26 | 6.0 | 4.2 | 5.1 | 5.8 | 4.0 | 2.8 | 2.8 |
| 28 | 5.0 | 3.3 | 4.4 | 5.1 | 3.3 | 2.3 | 2.3 |
| 30 | 4.2 | 2.5 | 3.7 | 4.5 | 2.8 | 1.9 | 1.9 |
| 32 | 3.5 | 1.8 | 3.0 | 4.0 | 2.3 | 1.5 | 1.5 |
| 34 | | 1.2 | 2.4 | 3.4 | 1.9 | 1.2 | 1.2 |
| 36 | | | 1.8 | 2.8 | 1.4 | 1.0 | 1.0 |
| 38 | | | | 2.3 | | 6.5 | |
| 40 | | | | | | 6.5 | |
| 42 | | | | | | 6.5 | |
| Parts of line | 1 | | | | | | |
| The 2nd boom section | 0% | 100% | 50% | 0% | 100% | 50% | 100% |
| The 3rd boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 4th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 5th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |

# Operation modes and lifting performances-boom end single pulley operation mode






**Main boom 13.3~32.6m**

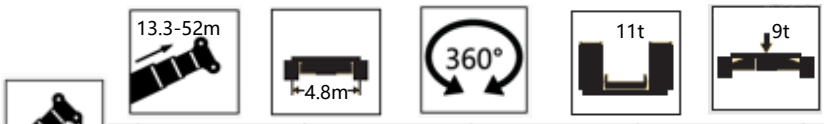
| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 | 30.2 | 32.6 |
|---|---|---|---|---|---|---|---|---|
| 2.5 | 6.5 | | | | | | | |
| 3 | 6.5 | 6.5 | 6.5 | 6.5 | | | | |
| 3.5 | 6.5 | 6.5 | 6.5 | 6.5 | | | | |
| 4 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | | | |
| 4.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | | |
| 5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| 6 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 7 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 8 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 9 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 10 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 12 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 14 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 16 | | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 18 | | | | 5.0 | 6.5 | 6.5 | 6.5 | 6.5 |
| 20 | | | | 3.3 | 5.5 | 6.5 | 5.1 | 6.5 |
| 22 | | | | | 4.1 | 5.9 | 3.7 | 5.3 |
| 24 | | | | | | 4.8 | 2.6 | 4.1 |
| 26 | | | | | | | 1.7 | 3.2 |
| 28 | | | | | | | | 2.4 |
| Parts of line | 1 | | | | | | | |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% | 100% | 50% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |

# Operation modes and lifting performances-boom end single pulley operation mode


**Main boom 35.1~52m**

| | 35.1 | 37.5 | 39.9 | 42.3 | 44.7 | 47.2 | 52 |
|---|---|---|---|---|---|---|---|
| 7 | 6.5 | 6.5 | | | | | |
| 8 | 6.5 | 6.5 | 6.5 | | | | |
| 9 | 6.5 | 6.5 | 6.5 | | | | |
| 10 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 12 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 14 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.4 |
| 16 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 4.9 |
| 18 | 6.5 | 6.5 | 6.5 | 6.5 | 5.9 | 6.3 | 3.8 |
| 20 | 6.5 | 5.3 | 6.0 | 6.5 | 4.7 | 5.2 | 2.9 |
| 22 | 6.4 | 4.2 | 5.0 | 5.6 | 3.7 | 4.3 | 2.2 |
| 24 | 5.4 | 3.3 | 4.2 | 4.8 | 3.0 | 3.5 | 1.6 |
| 26 | 4.4 | 2.6 | 3.5 | 4.1 | 2.3 | 2.9 | 1.1 |
| 28 | 3.6 | 1.9 | 2.9 | 3.6 | 1.8 | 2.4 | |
| 30 | 2.9 | 1.2 | 2.3 | 3.1 | 1.3 | 2.0 | |
| 32 | 2.3 | | 1.7 | 2.7 | | 1.6 | |
| 34 | | | 1.2 | 2.2 | | 1.3 | |
| 36 | | | | 1.7 | | 1.0 | |
| 38 | | | | 1.3 | | | |
| Parts of line | 1 | | | | | | |
| The 2nd boom section | 0% | 100% | 50% | 0% | 100% | 50% | 100% |
| The 3rd boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 4th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |
| The 5th boom section | 75% | 50% | 75% | 100% | 75% | 100% | 100% |

# Operation modes and lifting performances- boom end single pulley operation mode




**Main boom 13.3~32.6m**

| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 | 30.2 | 32.6 |
|---|---|---|---|---|---|---|---|---|
| 2.5 | 6.5 | | | | | | | |
| 3 | 6.5 | 6.5 | 6.5 | 6.5 | | | | |
| 3.5 | 6.5 | 6.5 | 6.5 | 6.5 | | | | |
| 4 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | | | |
| 4.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | | |
| 5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| 6 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 7 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 8 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 9 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 10 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 12 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 14 | | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 16 | | | 6.5 | 4.6 | 6.5 | 6.5 | 5.9 | 6.5 |
| 18 | | | | 2.7 | 5.0 | 6.5 | 4.3 | 5.5 |
| 20 | | | | 1.2 | 3.5 | 5.3 | 3.1 | 4.3 |
| 22 | | | | | 2.3 | 4.1 | 1.9 | 3.4 |
| 24 | | | | | | 3.1 | | 2.4 |
| 26 | | | | | | | | 1.6 |
| Parts of line | 1 | | | | | | | |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% | 100% | 50% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% | 25% | 50% |

# Operation modes and lifting performances-boom end single pulley operation mode


**Main boom 35.1~42.3m**

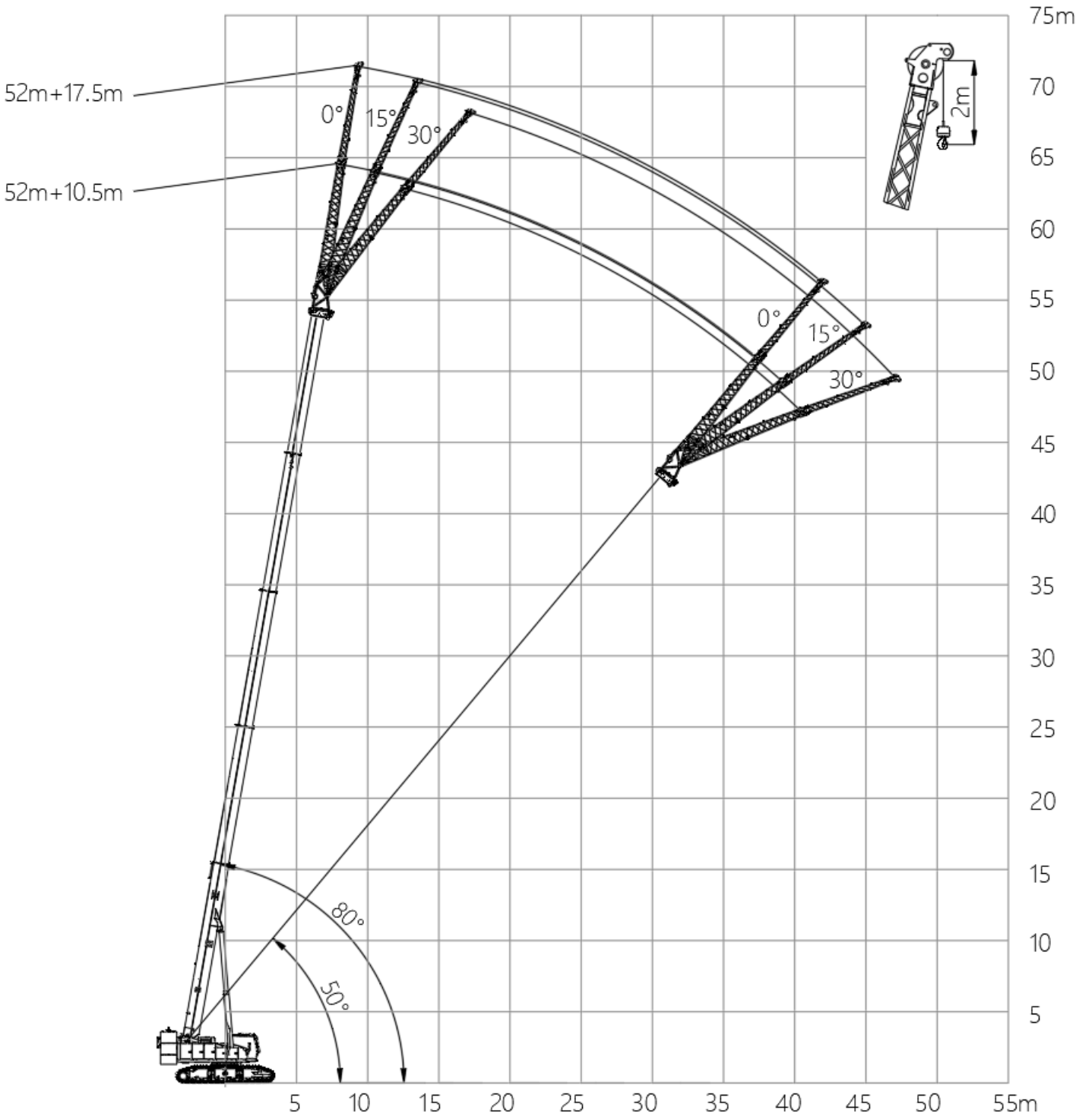
| | 35.1 | 37.5 | 39.9 | 42.3 |
|---|---|---|---|---|
| 7 | 6.5 | 6.5 | | |
| 8 | 6.5 | 6.5 | 6.5 | |
| 9 | 6.5 | 6.5 | 6.5 | |
| 10 | 6.5 | 6.5 | 6.5 | 6.5 |
| 12 | 6.5 | 6.5 | 6.5 | 6.5 |
| 14 | 6.5 | 6.5 | 6.5 | 6.5 |
| 16 | 6.5 | 5.5 | 6.2 | 6.5 |
| 18 | 6.4 | 4.1 | 4.9 | 5.5 |
| 20 | 5.3 | 3.1 | 3.8 | 4.5 |
| 22 | 4.3 | 2.2 | 3.0 | 3.7 |
| 24 | 3.6 | 1.5 | 2.3 | 3.0 |
| 26 | 2.9 | | 1.8 | 2.5 |
| 28 | 2.2 | | 1.3 | 2.0 |
| 30 | 1.6 | | | 1.7 |
| 32 | 1.1 | | | 1.3 |
| 34 | | | | 1.1 |
| Parts of line | 1 | | | |
| The 2nd boom section | 0% | 100% | 50% | 0% |
| The 3rd boom section | 75% | 50% | 75% | 100% |
| The 4th boom section | 75% | 50% | 75% | 100% |
| The 5th boom section | 75% | 50% | 75% | 100% |

# Operation modes and lifting performances-boom end single pulley operation mode


**Main boom 13.3~27.8m**

| | 13.3 | 18.1 | 20.5 | 23 | 25.4 | 27.8 |
|---|---|---|---|---|---|---|
| 2.5 | 6.5 | | | | | |
| 3 | 6.5 | 6.5 | 6.5 | 6.5 | | |
| 3.5 | 6.5 | 6.5 | 6.5 | 6.5 | | |
| 4 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | |
| 4.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 6 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 7 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 8 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 9 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 10 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 12 | | 5.2 | 6.5 | 4.7 | 6.5 | 6.5 |
| 14 | | 2.6 | 5.5 | 2.5 | 4.5 | 6.0 |
| 16 | | | 3.6 | | 2.9 | 4.4 |
| 18 | | | | | 1.6 | 3.3 |
| 20 | | | | | | 2.3 |
| 22 | | | | | | 1.4 |
| Parts of line | 1 | | | | | |
| The 2nd boom section | 0% | 50% | 0% | 100% | 50% | 0% |
| The 3rd boom section | 0% | 0% | 25% | 0% | 25% | 50% |
| The 4th boom section | 0% | 0% | 25% | 0% | 25% | 50% |
| The 5th boom section | 0% | 0% | 25% | 0% | 25% | 50% |

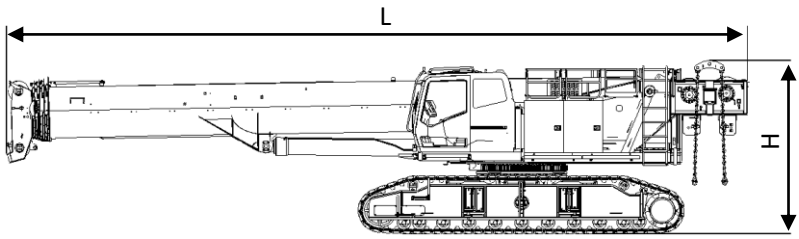
# Operation modes and lifting performances-fixed jib operation mode



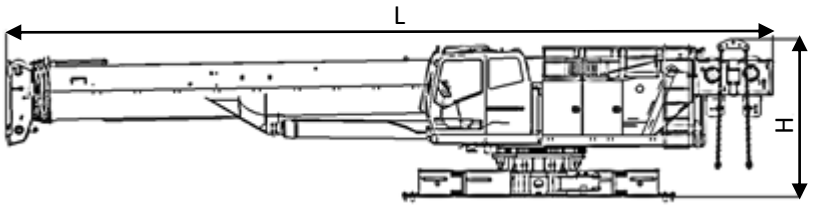
# Operation modes and lifting performances-fixed jib operation mode


|  | 52+10.5 | | | 52+17.5 | | |  |
|---|---|---|---|---|---|---|---|
| | 0° | 15° | 30° | 0° | 15° | 30° | |
| 80° | 6.5 | 6.5 | 4.7 | 5.2 | 3.8 | 2.6 | 80° |
| 78° | 6.5 | 6.5 | 4.7 | 5 | 3.7 | 2.5 | 78° |
| 75° | 6.5 | 6.4 | 4.7 | 4.5 | 3.4 | 2.3 | 75° |
| 72° | 6.5 | 6.2 | 4.7 | 4.3 | 3.3 | 2.3 | 72° |
| 70° | 6.5 | 5.9 | 4.6 | 4.1 | 3.2 | 2.2 | 70° |
| 65° | 5.3 | 4.8 | 4.1 | 3.6 | 3 | 2 | 65° |
| 60° | 3.4 | 3.1 | 3 | 2.3 | 2 | 1.9 | 60° |
| 55° | 2.1 | 2 | 1.9 | 1.3 | 1.2 | 1.2 | 55° |
| 50° | 1.3 | 1.2 | 1.2 | 1 | 1 | 1 | 50° |
| Parts of line | 1 | | | | | | |

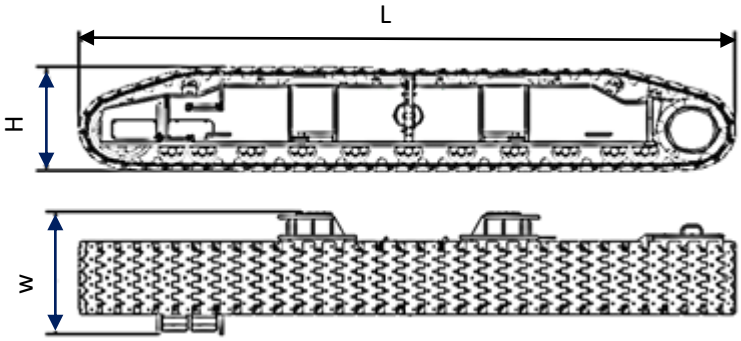
# Dimensions of transported components



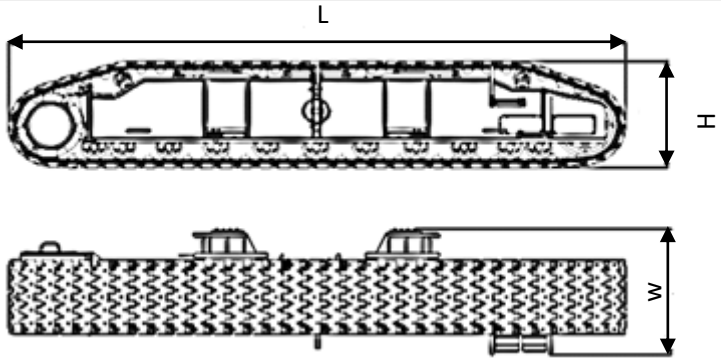

| Basic machine (with jib) | ×1 |
|---|---|
| L | 15597 mm |
| W | 3496 mm |
| H | 3644 mm |
| Weight | 45800 kg |



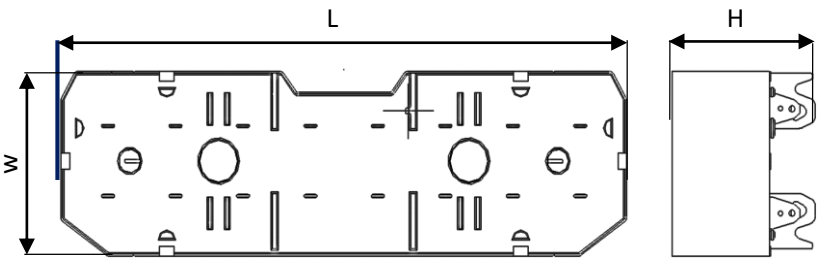

| Main body (with jib) | ×1 |
|---|---|
| L | 15597 mm |
| W | 3140 mm |
| H | 3190 mm |
| Weight | 43600 kg |




| Left track frame | ×1 |
|---|---|
| L | 6867 mm |
| W | 1438 mm |
| H | 1225 mm |
| Weight | 10700 kg |

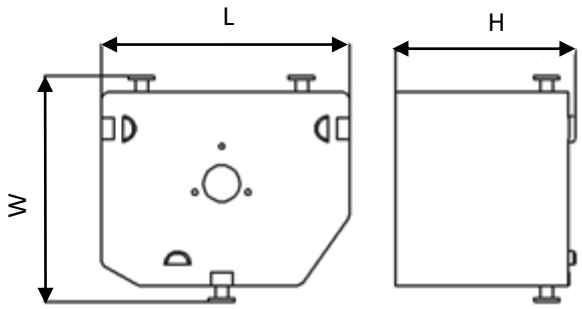
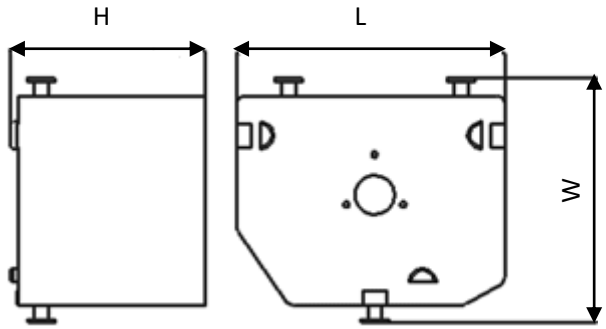
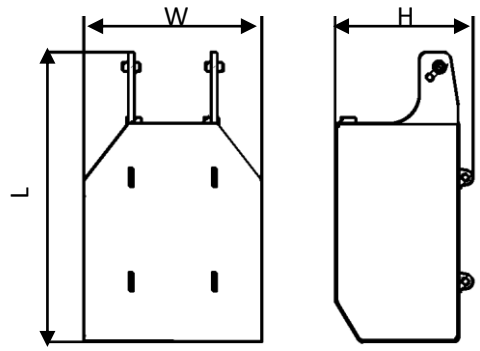
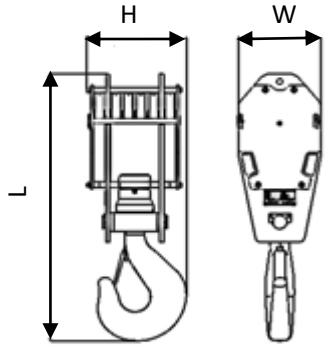
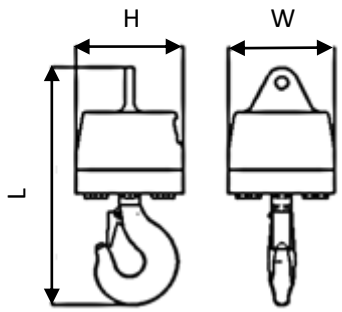



| Right track frame | ×1 |
|---|---|
| L | 6867 mm |
| W | 1438 mm |
| H | 1225 mm |
| Weight | 10700 kg |

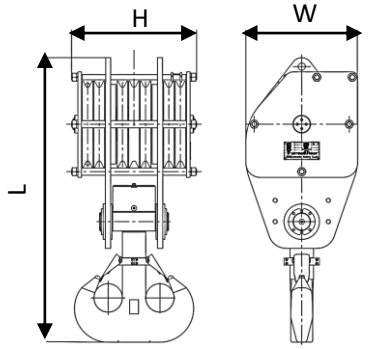
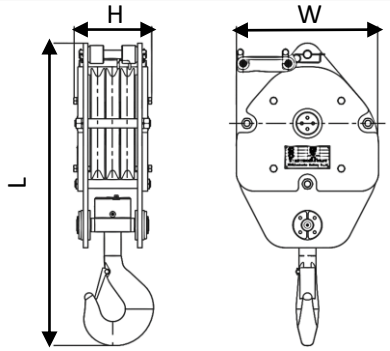



| Turntable counterweight tray | ×1 |
|---|---|
| L | 3900 mm |
| W | 1150 mm |
| H | 985 mm |
| Weight | 11000 kg |

# Dimensions of transported components

| | | |
|---|---|---|
|  | Turntable counterweight slab I | ×2 |
| | L | 1150 mm |
| | W | 1050 mm |
| | H | 835 mm |
| | Weight | 3750 kg |
|  | Turntable counterweight slab II | ×2 |
| | L | 1150 mm |
| | W | 1050 mm |
| | H | 835 mm |
| | Weight | 3750 kg |
|  | Central counterweight slab | ×2 |
| | L | 1953 mm |
| | W | 1200 mm |
| | H | 928 mm |
| | Weight | 4500 kg |
|  | 80t hook block | ×1 |
| | L | 1756 mm |
| | W | 520 mm |
| | H | 630 mm |
| | Weight | 700 kg |
|  | 70t hook block | ×1 |
| | L | 718 mm |
| | W | 320 mm |
| | H | 320 mm |
| | Weight | 150 kg |

# Dimensions of transported components

| | |
|---|---|
|  | 100t hook block (optional) ×2 |
| | L 1605 mm |
| | W 630 mm |
| | H 705 mm |
| | Weight 955.7 kg |
|  | 35t hook block (optional) ×1 |
| | L 1317 mm |
| | W 630 mm |
| | H 336 mm |
| | Weight 473.8 kg |

# Symbols

| | |
|---|---|
|  | 360° slewing |
|  | Turntable counterweight |
|  | Central counterweight |
|  | Track gauge |

| | |
|---|---|
|  | Main boom angle |
|  | Fixed jib |
|  | Main boom working radius |
|  | Main boom length |

# Points for attention

1. This document and all information are for reference only. Do not rely on it to operate the crane! For correct operating instructions of the crane, please refer to "Operation Manual" and "Rated Lifting Capacity Manual".

2. The crawler tracks must be fully extended (track gauge 4800mm) when the crane is working.

3. The lifting capacity listed in the lifting performance table is “t”. It is the maximum total lifting capacity that the crane can guarantee on a stable and horizontal surface with gradient not more than 1% under the current boom length and radius, including the weight of the hook and sling. The actual weight of the load is the value after the weight of the above items is subtracted.

4. The working radius in the lifting performance table is the horizontal distance from the center of gravity of the lifted load to the slewing axis of the crane when the load is lifted off the ground.

5. Operate the crane within the range of main boom elevation angle, do not exceed this range even though no load is lifted.

6. The design of this crane meets standard EN 13000: 2010+A1:2014.

7. This product has multiple operation modes, and the product images in the document may not be standard configurations. Each functional component can be customized and purchased according to different needs.

8. This printed material does not belong to the contract. We reserve the right to make changes to product models, parameters and configurations without notice due to the need of continuous product improvement. The pictures are for reference only, please prevail to the actual product.

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