

LOVOL

FB878M BACKHOE LOADER

| | |
|---|---------------------------------------|
| Rated payload/kg | 2000kg |
| Rated power/kW | 74kW |
| Standard bucket capacity/m ³ | 1.0m ³ /0.18m ³ |



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LOVOL HEAVY INDUSTRY GROUP CO.,LTD.


Machine Parameters

| | |
|---|----------------|
| Rated payload/kg | 2000 |
| Curb weight/kg | 8230 |
| Maximum traction force/kN | 80 |
| Maximum breakout force of arm cylinder at loading end/kN | 44 |
| Maximum breakout force of boom cylinder at loading end/kN | 30 |
| Overall dimensions (L×W×H)/mm | 7330×2420×3500 |
| Minimum ground clearance/mm | 350 |
| Wheel base/mm | 2170 |
| Front wheel track/mm | 1880 |
| Rear wheel track/mm | 1730 |
| Departure angle° | 17 |
| Front axle swing angle° | 11 |
| Minimum turning radius of bucket outside/mm | 6340 |
| Minimum turning radius of tire center/mm | 5120 |

Loading Working Device

| | |
|---|----------------|
| Maximum discharging height/mm | 2710 |
| Discharging distance/mm | 770 |
| Hinge pin height/mm | 210 |
| Boom length/mm | 2500 |
| Discharging angle° | 45 |
| Bucket rollback angle° | 45 |
| Standard bucket capacity/m³ | 1.0 |
| Standard bucket dimensions (L×W×H)/mm (hinge joint to bucket teeth front) | 2420X1918X1221 |
| Bucket weight/kg | 1064 |

Excavation Working Device

| | |
|-------------------------------|-----------|
| Maximum excavation height/mm | 5110/5815 |
| Maximum excavation depth/mm | 4340/5500 |
| Maximum excavation radius/mm | 5370/6460 |
| Maximum discharging height/mm | 3470/4170 |
| Standard bucket capacity/m³ | 0.18 |
| Bucket weight/kg | 143 |

Engine

| | |
|---|-----------------------|
| Model | WEICHAI WP4.1G100E311 |
| Emission standard | Tier II / III |
| Engine intake method | Supercharger |
| Number of cylinders - cylinder diameter × stroke/mm | 4-105×118 |
| Displacement/L | 4.088 |
| Rated power/kW | 74 |
| Rated speed/rpm | 2200 |
| Maximum torque/N·m | 420 |

Transmission

| | |
|--------------------------|--|
| Brand | CARRARO |
| Transmission type | Oil bath brake(Wet Brake) |
| Type of torque converter | Single-stage single-phase hydraulic torque converter |
| Torque coefficient | 2.64 |
| Gear shift | 4/4 |
| Forward speed ratio | 5.603/3.480/1.584/0.793 |
| Reverse speed ratio | / |
| Forward I (km/h) | 5 |
| Forward II (km/h) | 8 |
| Forward III (km/h) | 18 |
| Forward IV (km/h) | 28 |
| Reverse I (km/h) | 5 |
| Reverse II (km/h) | 8 |
| Reverse III (km/h) | 18 |
| Reverse IV (km/h) | / |

Front Axle

| | |
|---------------------------------------|--------------------|
| Type | 4 Wheel drive(4WD) |
| Input torque/speed/transmission ratio | 04 1800/3000/14.77 |

Rear axle

| | |
|---------------------------------------|---------------------|
| Type | 4 Wheel drive(4WD) |
| Input torque/speed/transmission ratio | 04 2000/3000/16.154 |

Front Tire

| | |
|-------------------------|-----------------|
| Specifications | 14-17.5-14PR TL |
| Ply rating | 14 |
| Front tire pressure/Mpa | 0.29±0.01 |

Rear Tire

| | |
|------------------------|-----------------|
| Specifications | 19.5-24-12PR TL |
| Ply rating | 12 |
| Rear tire pressure/Mpa | 0.29±0.01 |

Steering Hydraulic System

| | |
|--------------------------------|--|
| Steering hydraulic system type | Load sensing full hydraulic steering system/ single pump split flow |
| System working pressure/Mpa | 16 |
| Steering pump model | HP3V80 |
| Displacement/L | 75 |

Loading End

| | |
|---|--|
| Control mode | Mechanical manipulation |
| Hydraulic working system type | Load sensing full hydraulic steering system/ single pump split flow |
| System working pressure/Mpa | 25 |
| Working pump model | HP3V80 |
| Displacement/L | 75 |
| Multi-way valve model | MX12-C18-XB02 |
| Pilot working pressure/Mpa | / |
| Boom cylinder - cylinder diameter × stroke/mm | 75-50×713 |
| Bucket cylinder - cylinder diameter × stroke/mm | 70-40×733 |
| Boom lifting time/s | 4.6 |
| Discharging/s | 2.0 |
| Boom lowering time/s | 3.2 |
| Total time/s | 9.8 |

Excavator End

| | |
|---|-------------------------------|
| Control mode | Pilot manipulation |
| Hydraulic working system type | Load sensing hydraulic system |
| System working pressure/Mpa | 25 |
| Working pump model | HP3V80 |
| Displacement/L | 75 |
| Multi-way valve model | MX18-G61-XA00 |
| Pilot working pressure/Mpa | 4 |
| Boom cylinder - cylinder diameter × stroke/mm | 110-60×971 |
| Arm cylinder - cylinder diameter × stroke/mm | 100-60×748 |
| Bucket cylinder - cylinder diameter × stroke/mm | 90-60×687 |

Braking

| | |
|--------------------|---------------------------------------|
| Service brake | Hydraulic power brake |
| Parking brake | Mechanical caliper disc parking brake |
| Brake pressure/Mpa | 4.1-5.3 |

Air Conditioner

| | |
|----------------------------|---------------|
| Working medium (heat/cool) | Coolant/R134a |
| Cooling capacity/kW | 4.5 |

Appliances

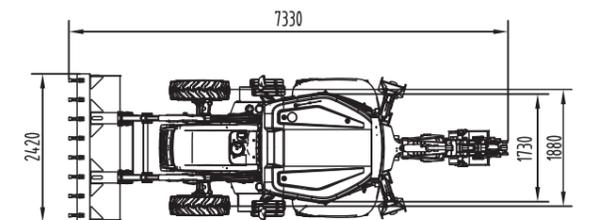
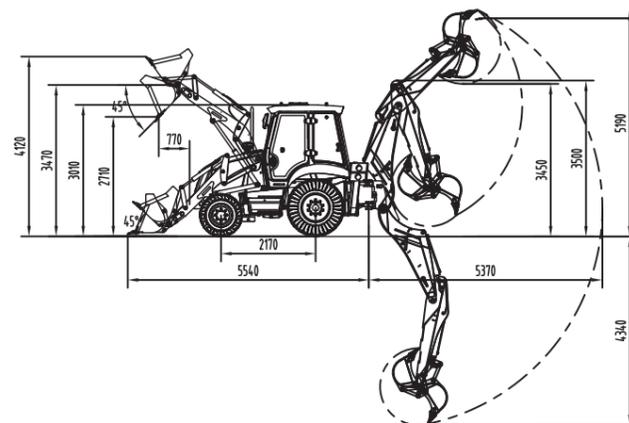
| | |
|-------------------------------|-------|
| System voltage/bulb voltage/V | 12 |
| Battery | 180Ah |

Body

| | |
|-----------------------------------|----------------|
| Cab overall dimensions (L×W×H)/mm | 2063X2270X1947 |
| Cab weight/kg | 813 |

Oil

| | |
|---|---|
| Fuel tank (geometric volume)/L | 120 |
| Hydraulic oil tank (midline of level gauge)/L | 100 |
| Engine oil/L | 10 |
| Transmission oil/L | 14 |
| Front axle/L | Final reduction drive: 5.7 hub reduction gear: 0.7X2 |
| Rear axle/L | Final reduction drive: 10 hub reduction gear: 1.5X2 |
| Antifreeze/L | 14 |

FB878M


TECHNICAL SPECIFICATIONS



Engine

| | |
|---------------------|------------------|
| Engine Model | 6BTAA5.9-C178-II |
| Number of Cylinders | 6 |
| Max. Torque/Speed | 708N·m/1500rpm |
| Displacement | 5.9L |



Hydraulic system

| | |
|----------------------------|--------------|
| Max. Main Pump Flow | 500L/min |
| Main Safety Valve Pressure | 34.3/37.3MPa |



Main Performance

| | |
|----------------------|---------|
| Bucket Digging Force | 143kN |
| Arm Digging Force | 116kN |
| Max. Traction Force | 217kN |
| Max. Walking Speed | 4.9km/h |
| Min. Walking Speed | 2.7km/h |
| Rotary Speed | 12r/min |
| Gradeability | 35° |
| Ground Pressure | 47.5kPa |



Oil Capacity

| | |
|----------------|------|
| Fuel Tank | 385L |
| Hydraulic Tank | 220L |
| Engine Oil | 20L |



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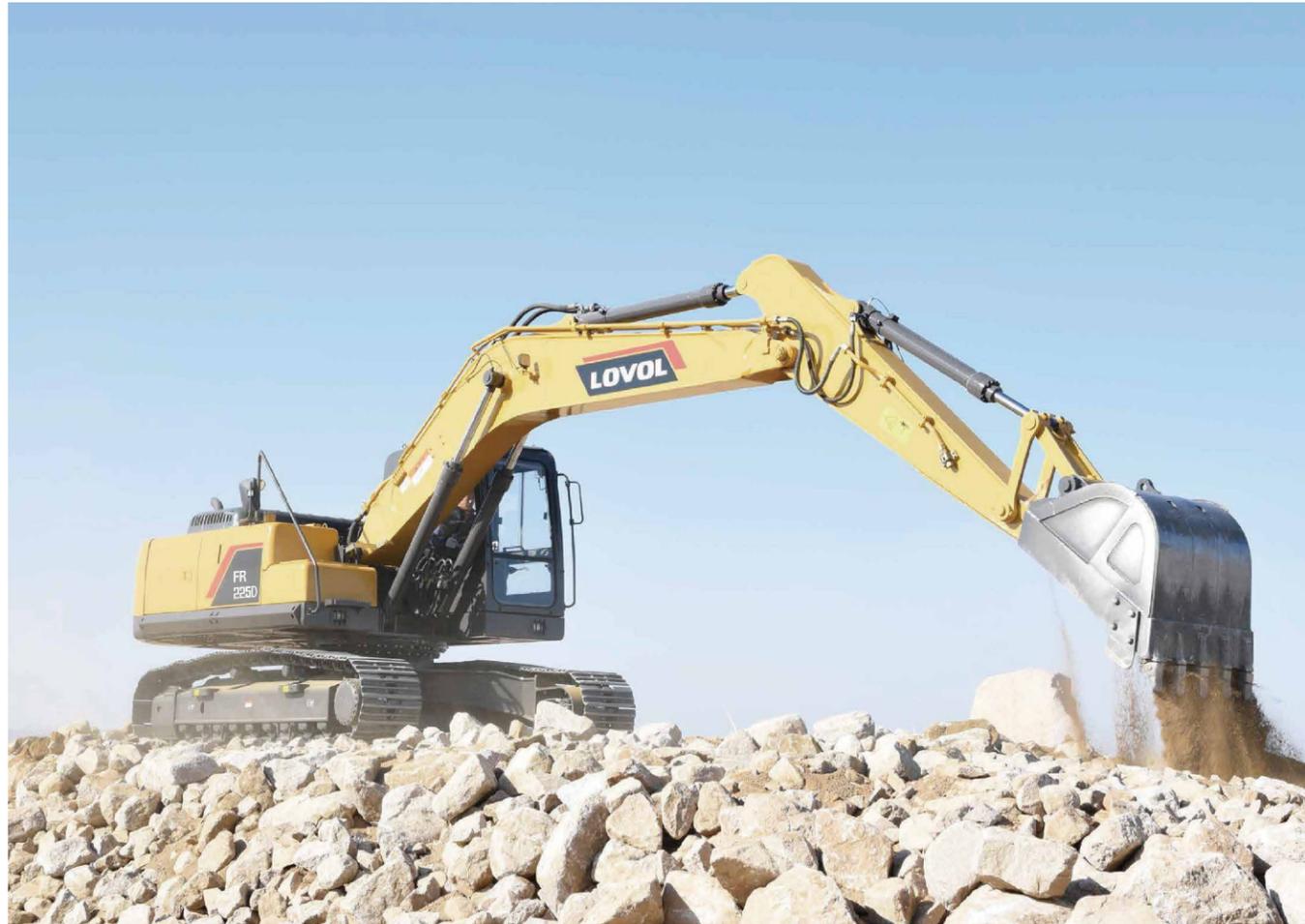
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As manufacturer, LOVOL has right to constantly upgrade and improve our products without informing to customers. The pictures in literatures are for reference only, the detailed specifications are subject to real products.



Rated Power **133kW/2000rpm**
 Operating Weight **22900kg**
 Bucket Capacity **1.1 m³**

FR225D
 EXCAVATOR



ENERGY-SAVING

Low Fuel-Consumption Engine

Equipped with Cummins turbo-charged engine which adopts mechanical high-pressure fuel pump and other technologies features strong power, low noise and low fuel consumption. Automatic idle function can reduce fuel consumption and noise dramatically.

Optimal Control System

Adopt original Kawasaki KC-MB-10 controller which adds automatic diagnostic function, the optimal control system makes rational match between the engine and main pump, making machines work efficiently with low fuel consumption.

Optimal Operating Mode

The crushing mode is added to help operator use hydraulic hammer, thus get outperformance with low fuel consumption. The pipelines are also optimized through new design to reduce energy waste of hydraulic system.



RELIABILITY

Upgraded Hydraulic System

The hydraulic pipelines adopt upgraded high-pressure hoses to avoid damage and oil leakage. Pilot oil filter is adopted which makes hydraulic system more reliable.

Reinforced Structures

The advanced stress analysis technology and Q345 materials make whole structures more reliable. The front and rear support of boom are made of cast steel which effectively reduces concentration of stress, key positions are also reinforced by welding strength plate, which makes arm more robust.

Reliable Electrical System

All the wiring harnesses adopt waterproof and dustproof connector, which has high security level and high reliability. Shut-down protection is added to reduce the failure possibility for electrical elements when power was cut-out.

COMFORT



Large Spacious Cab

Equipped with spacious cab which provides operator large space to operate machine. The premium suspension seat with armrests is very comfortable and it can reduce the working fatigue dramatically. Big LCD screen is easy to read all data when working. Air conditioning can provide comfortable feeling in cab.

Ergonomic Design

The proportional joystick delivers sensitivity, accuracy and smoothness in operation. This joystick is specially designed to meet different operating conditions. Intelligent control system is standard which could control diverse attachments such as bucket, hammer, scarifier and hydraulic scissors.

Low Noise and Low Vibration

In order to reduce work fatigue and improve productivity, the noise inside of cab has been controlled to the lowest level. The cab is attached to the frame with buffer that dampens vibrations and sound levels to enhance operator comfort.

SERVICEABILITY



Display Screen

Add trouble code diagnostic and maintenance monitor functions which are convenient for operator to find the failure and do the routine maintenance on time.

Engine Hood and Panels

The large engine hood enlarges maintenance space for operator to check and maintain the engine. The tool box is big with big opening angle which can put grease bucket and special tools easily. One key can open all locks of machine, it is very convenient for the operator.

Filters and Maintenance Period

All the filters are fixed at ground level position, it is very convenient to do routine maintenance. The maintenance interval is also extended to save time and cost.

INCREASE YOUR PRODUCTIVITY AND PROFIT WITH LOVOL ATTACHMENTS

You can easily expand the performance of your machine by utilizing any of the variety of LOVOL Attachments. Each LOVOL Attachments is designed to fit the weight and horsepower of LOVOL Excavator for improved performance, safety, and stability.



STANDARD CONFIGURATION

Engine

- Turbocharged 4 stroke water-cooling direct injection type
- Complying with China Stage II emissions
- Automatic idle system
- Engine oil pan drain valve
- Radiator with protective net
- Double filter elements dry air filter element
- Air pre-filter
- Air intake heater
- Fan guard

Hydraulic System

- Automatic hydraulic system (confluence system)
- Anti-swing valve
- Boom and arm block valve
- Multi-stage filtration system
- Cylinder buffer device
- Auxiliary hydraulic valve
- Automatic two-speed travel motor

Electronic Control System

- 24V power supply
- Diagnostic interface
- Emergency stop switch
- Display brightness adjustment
- Maintenance tips
- Automatic diagnostic system
- Automatic idle system
- One-touch pressure augmentation
- Safe stop / start function
- Main power switch
- Anti-theft system
- Engine starting protection
- Multilingual display

Cab

- Ashtray
- Cigar lighter
- Seat belt
- Front sunshade
- Storage box
- Escape hammer
- Thermostatically controlled air conditioner
- Shock absorber (silicone oil and rubber pad)
- Flexible antenna
- Radio (with interfaces of MP3 and USB)
- Hydraulic safety lock
- Sun-protection safety glass
- Floor mat
- Large storage area
- Pull-up front window
- Removable lower windshield
- Sunshade window
- Front-bottom glass protective screening
- Wipers
- Open skylight

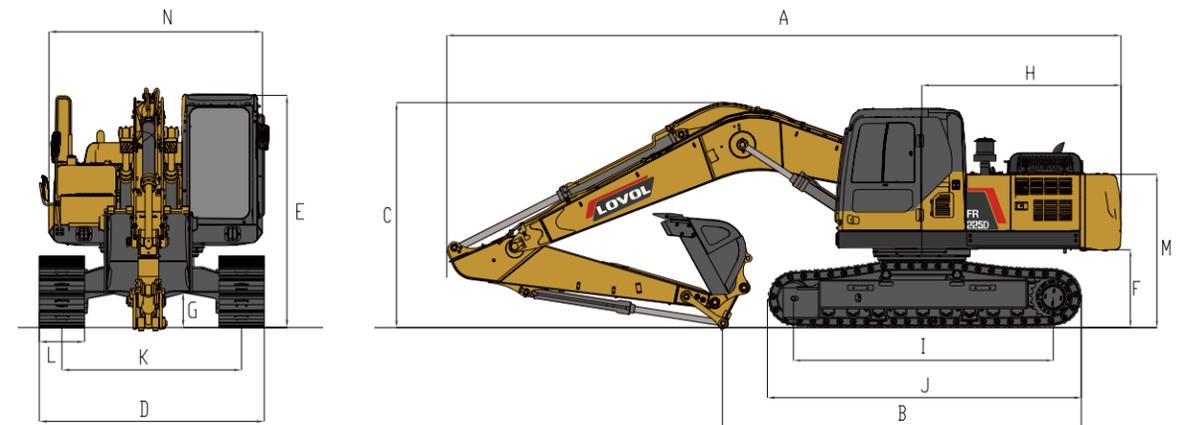
Swing Platform

- Passage with railing
- Tool box
- Anti-skid plate
- Large pedal
- Large armrest
- Bottom protection plate
- Anti-collision beam

Chassis

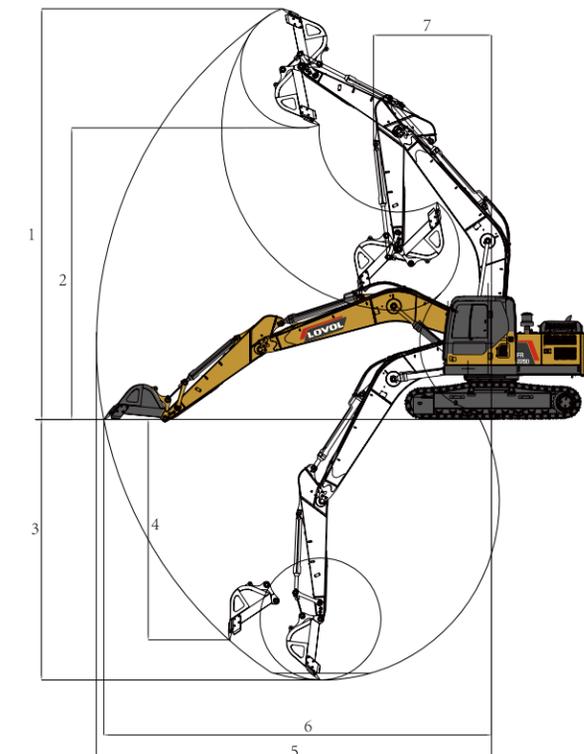
- Fixed chassis
- 600mm, three-tooth track shoe

TECHNICAL SPECIFICATIONS



Scope of Work

| | | |
|-----------------------------|---|---------|
| Max. Digging Height | 1 | 10196mm |
| Max. Dumping Height | 2 | 7274mm |
| Max. Digging Depth | 3 | 6496mm |
| Max. Vertical Digging Depth | 4 | 5980mm |
| Max. Digging Radius | 5 | 9866mm |
| Max. Ground Digging Radius | 6 | 9690mm |
| Min. Turning Radius | 7 | 2910mm |



Dimensions

| | | |
|------------------------------------|---|--------|
| Shipping Length | A | 9580mm |
| Shipping Ground Length | B | 5620mm |
| Boom Height | C | 3060mm |
| Shipping Width | D | 2980mm |
| Cab Height | E | 3200mm |
| Ground Clearance of Counter Weight | F | 1090mm |
| Min. Ground Clearance | G | 443mm |
| Tail Turning Radius | H | 2820mm |
| Length to Center of Rollers | I | 3640mm |
| Track Length | J | 4385mm |
| Track Gauge | K | 2380mm |
| Track Shoe Width | L | 600mm |
| Hood Height | M | / |
| Rotary Platform Width | N | 2700mm |

Other Specifications

| | |
|----------------------------------|--------|
| Boom Length | 5700mm |
| Arm Length | 2925mm |
| Track Section Number (each side) | 49 |

SHANTUI

SG21-B6

Motor Grader



Engine Model: Cummins 6CTAA8.3-C215
Gross Power: 160kW @ 2200rpm
Operating Weight: 17000kg

We Level Subgrade Fast and Flat
easy operation and maintenance

SG21-B6 SPECIFICATIONS

ENGINE

| | |
|------------------------|---|
| Model | Cummins 6CTAA8.3-C215 |
| Number of cylinders | 6 |
| Type | 4-cycle, direct injection, water-cooled |
| Bore x stroke | 114*135mm |
| Displacement | 8.3L |
| Gross power | 160kW @ 2200rpm |
| Max. traction | 93.3kN |
| Max. torque | 980N.m @ 1500rpm |
| Rated fuel consumption | 223g/kW.h |
| Emission | China-II |

POWER TRAIN

| | |
|------------------|--|
| Transmission | Fixed-axistype,electro-hydrauliccontrol |
| Torque converter | Single-stage,single-phase,threebasicelements |
| Rear axle | Modular,planetaryreduction,"no-Spin"anti-skid differential |
| Tandem drive | Roller chain. Oscillating angle:±15° |
| Tire | 17.5-25PR12 |
| Front axle | Oscillating angle:±16° Tilting angle:±18° |

STEERING

| | |
|----------------------------|-----------------|
| Type | Hydraulic power |
| Front wheel steering angle | ±50° |
| Articulation angle | ±23° |
| Min. turning radius | 7500mm |

BRAKES

| | |
|---------------|---|
| Service brake | Drumtype,foot operated,single circuit,hydraulicallyactuatedonfourtandemwheels |
| Parking brake | Drum type, manually actuated |

MOLDBOARD

| | |
|----------------------------------|------------------|
| Rotation | 360° |
| Moldboard width | 3660/3965/4270mm |
| Moldboard height | 620mm |
| Moldboard thickness | 20mm |
| Moldboard tip angle | 22~73° |
| Max. cutting depth | 970mm |
| Max. lifting height | 480mm |
| Max. shoulder reach (left/right) | 1900/1950mm |
| Max. tilting angle (left/right) | ±90° |

SPEED

| | |
|-------------|---------------------------------|
| Forward,1-6 | 5.5\9.1\12.2\20.7\26.5\39.2km/h |
| Reverse,1-3 | 5.3\12.4\26.1km/h |

HYDRAULICS

| | |
|-----------------------------------|----------------------------------|
| Tandem pump | Gearpump.32ml/r\Pistonpump75ml/r |
| Reliefpressureforworkingequipment | 18MPa / 24MPa |
| Relief pressure for steering | 16.5MPa |
| Relief pressure for brakes | 10MPa |

CAPACITIES

| | |
|--------------------|------|
| Fuel tank | 360L |
| Hydraulic oil tank | 85L |
| Engine crank case | 19L |
| Engine coolant | 33L |

ELECTRICAL SYSTEM

| | |
|---------------|-------------|
| Battery | 2x12V,105Ah |
| Alternator | 28V,70A |
| Starter motor | 24V,6kW |

OPERATING WEIGHT

| | |
|--------------------------------|---------|
| Standard | 17000kg |
| With front blade | 17860kg |
| With rear ripper | 18450kg |
| With front blade & rear ripper | 18900kg |

RIPPER (OPTIONAL)

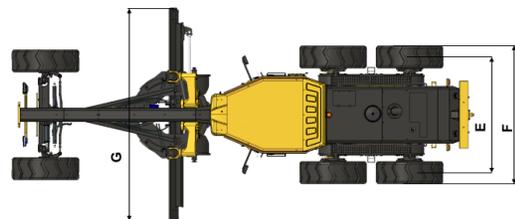
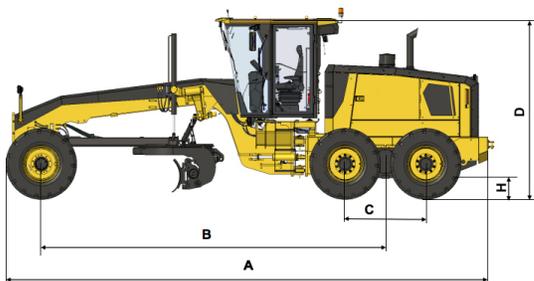
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|-----------------------|--------|
| Ripping depth | 425mm |
| Shank supports | 5 |
| Shank support spacing | 520mm |
| Working width | 2080mm |

FRONT BLADE (OPTIONAL)

| | |
|---------------------|------------|
| Width x height | 2740x890mm |
| Thickness | 12mm |
| Max. lifting height | 660mm |
| Max. digging depth | 425mm |

DIMENSIONS

| | |
|--|------------------|
| A Overall length: Standard | 9700mm |
| A Overall length: With rear ripper | 11050mm |
| A Overall length: With front blade | 10380mm |
| A Overall length: With front blade & rear ripper | 11140mm |
| B Length: Front axle to mid tandem | 6560mm |
| C Length: Between tandem axles | 1550mm |
| D Height: Cab | 3358mm |
| E Tread | 2155mm |
| F Width: Outside tires | 2600mm |
| G Moldboard width | 3660/3965/4270mm |
| H Minimum ground clearance | 400mm |



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SHANTUI
LET'S MAKE CONSTRUCTION EASIER

2023-V1.0

SHANTUI

SR12-B6

Road Roller



Engine Model: Weichai WP4G130E22
Gross Power: 97.5kW @ 2200rpm
Operating Weight: 12,000kg

Focus on soil compaction
road construction expert

SR12-B6 SPECIFICATIONS

ENGINE

| | |
|------------------------|---|
| Model | Weichai WP4G130E22 |
| Number of Cylinders | 4 |
| Type | 4-cycle, Direct Injection, Water-cooled |
| Aspiration | Turbocharged |
| Bore x Stroke | 105*130mm |
| Displacement | 4.5L |
| Gross Power | 97.5kW @ 2200rpm |
| Max. Torque | 560N.m @ 1400~1600rpm |
| Rated Fuel Consumption | 215g/kW.h |
| Emission | China-II |

POWER TRAIN

| | |
|--------------------|---|
| Type | Hydrostatic, All-wheel Drive |
| Driving Pump | Mechanical Control, Variable Piston Pump 75ml/r |
| Axle Drive | Variable Piston Motor |
| Drum Drive | Constant Piston Motor |
| Tire | 23.1-26-8PR/20.5-25-16PR |
| Max. Grade Ability | 48% |
| Forward, I, II | 0~5.3km/h, 0~9.9km/h |
| Reverse, I, II | 0~5.3km/h, 0~9.9km/h |

STEERING

| | |
|---------------------|---------------------------------------|
| Type | Hydraulic Power, Articulated Steering |
| Steering Angle | ±33° |
| Oscillating Angle | ±12° |
| Min. Turning Radius | 6400mm |

BRAKES

| | |
|-----------------|--|
| Service Brake | Hydraulic Inertia Brake |
| Parking Brake | Multi-disc Brake, Hydraulic Control |
| Emergency Brake | Hydraulic Inertia Brake & Multi-disc Brake |

DRUM

| | |
|----------------------|--------|
| Width | 2130mm |
| Diameter | 1500mm |
| Drum Shell Thickness | 20mm |

VIBRATION

| | |
|----------------------------|-------------------------------|
| Type | Hydrostatic, Electric Control |
| Vibration Pump | Variable Piston Pump |
| Vibration Motor | Constant Piston Motor |
| Frequency, Low | 30Hz |
| Frequency, High | 36Hz |
| Amplitude, High | 2mm |
| Amplitude, Low | 1mm |
| Centrifugal Force, Maximum | 290kN |
| Centrifugal Force, Minimum | 200kN |

CAPACITIES

| | |
|--------------------|------|
| Fuel Tank | 260L |
| Hydraulic Oil Tank | 100L |
| Engine Coolant | 17L |
| Engine Crank Case | 11L |

ELECTRICAL SYSTEM

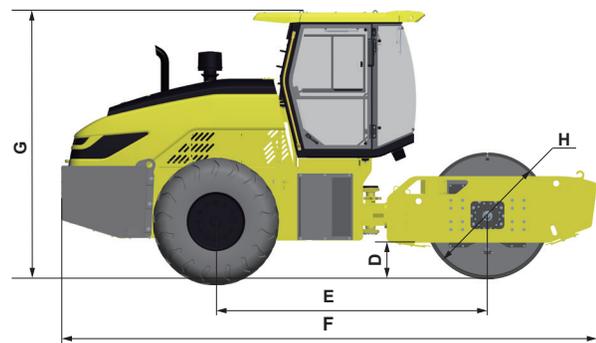
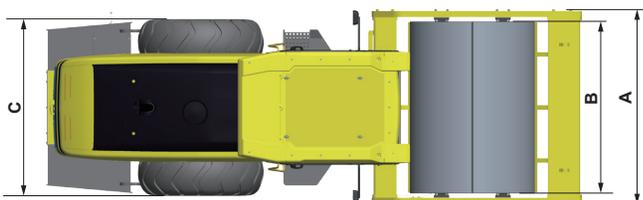
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|---------------|--------------|
| Battery | 2x12V, 120Ah |
| Alternator | 28V, 80A |
| Starter Motor | 24V, 6kW |

WEIGHT

| | |
|------------------------------|---------|
| Operating Weight | 12000kg |
| Axle Load, Drum | 7000kg |
| Axle Load, Wheel | 5000kg |
| Static Linear Load (at Drum) | 327N/cm |

DIMENSIONS

| DIMENSIONS | CAB |
|------------|--------|
| A | 2305mm |
| B | 2130mm |
| C | 2180mm |
| D | 360mm |
| E | 3100mm |
| F | 5890mm |
| G | 3160mm |
| H | 1500mm |



* THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. THE PICTURES MAY INCLUDE OPTIONS. THE ACTUAL COLOR & APPEARANCE OF THE PRODUCT MAY DIFFER FROM WHAT IS SHOWN.

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