

SPECIFICATIONS

Operating weight 30,800 kg (67,902 lb)

Operating weight includes the machine weight with standard work device, no additional equipment or accessories, full fuel tank, all fluids at required level and an operator 75 kg (165 lb).

Bucket capacity 5.4 - 9 m³ (7 - 11.8 yd³)

ENGINE

Description

Engine: Cummins EPA Tier 4 final / EU Stage IV, 11.8 liter (3.1 gal), 6-cylinder straight turbocharged diesel engine with Common Rail fuel injection system without EGR.

DPF and SCR.

Integrated DEF controller.

Air cleaning: Cummins Direct Flow Air Filter.

Cooling system: Air-to-air intercooler, hydraulic motor drive and temperature-controlled fan.

Emission rating EPA Tier 4 final / EU Stage IV

Make Cummins

Model QSG12

Engine Output - Gross 276 kW (370 hp) @ 1,800 rpm

Engine Output - Net 262.2 kW @ 2,100 rpm

Peak torque 1,693 N·m (1,248.7 lbfft)

Displacement 11.8 L (3.1 gal)

Number of cylinders 6

Aspiration Turbocharged & air-to-air intercooled

AXLES

Model MTL3125II / MTL3115II (Wet type)

Differential front type Hydraulic lock differential

Differential rear type Conventional

Axle oscillation ±11°

TRANSMISSION

Description

Torque converter: single-stage, three elements; free wheel stator.

Transmission: ZF Ergopower 4WG310 countershaft transmission F4/R3, electro-proportional valve.

Gear shifting system: ZF Automatic Power Shift with auto modes (1~4/2~4) all start in gear 2; FNR and kick-down features included; two gear shifting modes of normal modes and speed priority modes.

Transmission type Countershaft, power shift

Torque converter Single stage, three elements, free wheel stator

Maximum travel speed, fwd 38.2 km/h (23.7 mph)

Maximum travel speed, rev 26.5 km/h (16.5 mph)

Number of speed, fwd 4

Number of speed, rev 3

STEERING

Description

Steering system: Load-sensing hydraulic articulated steering.

System supply: The steering system has priority feed from a load-sensing axial piston pump with variable displacement, dual-pump confluence & steering priority.

Steering cylinders: Two double-acting cylinders.

Steering configuration Articulated

Steering relief pressure 20.7 MPa (3002 psi)

Steering cylinders 2

Cylinder bore 100 mm (4")

Rod diameter 60 mm (2")

Stroke 578 mm (1' 11")

Maximum flow 120 L/min (31.7 gal/min)

Maximum articulation ±38°

Smallest turn (over tire) 7,011 mm (23')

HYDRAULIC SYSTEM

Description

System supply: Two load-sensing axial piston pumps with variable displacement and flow confluence. The steering function always has priority.

Valves: Double-acting 3-spool valve. The main valve is controlled by a 3-spool pilot valve.

Lift function: The valve has four positions: lift, hold, lower, and float. Inductive/magnetic automatic boom kick-out can be switched on and off and is adjustable to two positions: bucket at ground level and maximum reach full lifting height.

Tilt function: The valve has three functions: rollback, hold and dump.

Cylinders: Double-acting cylinders for all functions.

Filter: Full-flow filtration through 12 micron (absolute) filter cartridge.

Main pump type Piston

Main relief pressure 26 MPa (3,771 psi)

Raise 6 s

Dump time 1.6 s

Float down time 3.4 s

Fastest total cycle time 11 s

Controls 3 levers, finger control

BRAKES

Description

MICO brake solution:

Two independent brake circuits
Enclosed wet-disc

Service brake type Wet discs brake

Service brake actuation Hydraulic

Parking brake type Mechanical control

Parking brake actuation Hydraulic

ELECTRICAL SYSTEM

Description

Central warning system is a Contronic electrical system with central warning light and buzzer for the following functions: Serious engine fault, low steering system pressure, interruption in communication (computer failure). Central warning light and buzzer with the gear engaged for the following functions: Low engine oil pressure, high engine oil temperature, high charge air temperature, low coolant level, high coolant temperature, low transmission oil pressure, high transmission oil temperature, low brake pressure, engaged parking brake, brake charging failure, high hydraulic oil temperature.

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	2 x 120 Ah
Parking brake actuation	850 A
Reserve capacity	230 min
Alternator rating	1960W/70A
Starter motor output	8 kW (10.7 hp)

SERVICE REFILL CAPACITIES

Fuel tank	485 L (28.1 gal)
Engine oil	35 L (9.2 gal)
Cooling system	45 L (1.9 gal)
Hydraulic system	255 L (67.4 gal)
Transmission and torque converter	50 L (13.2 gal)
Axles, each	65 L (17.2 gal)

SOUND & ENVIRONMENT

Sound level in cab according to ISO 6396-2008/EN ISO 3744-1995	75 dB(A)-- Travel mode
Sound level in cab according to ISO 6396-2008/EN ISO 3744-1995	76 dB(A)-- Stationary work cycle mode
External sound level according to ISO 6395-2008	108 dB(A)-- Travel mode
External sound level according to ISO 6395-2008	109 dB(A)-- Stationary work cycle mode
Ventilation	9.2 m ³ (12 yd ³)
Heating capacity	5.8 kW (7.8 hp)
Air conditioning	6 kW (8 hp)

CAB

Description

Instrumentation: All important information is centrally located in the central instrument panel and operator's field of vision.

Large curved front glass, rear view camera and mirrors ensure great visibility.

Adjustable steering column, air suspension seat and armrest box, and Denso air conditioning with air outlets all around providing you the best working environment.

Pressurized cab with little noise inside.

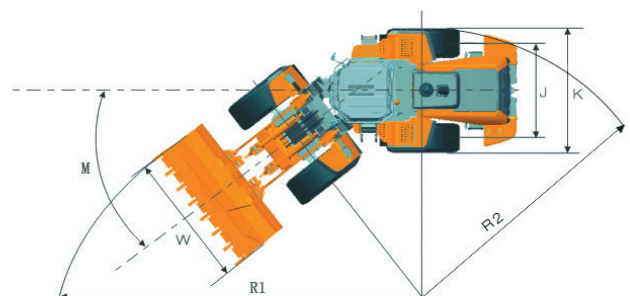
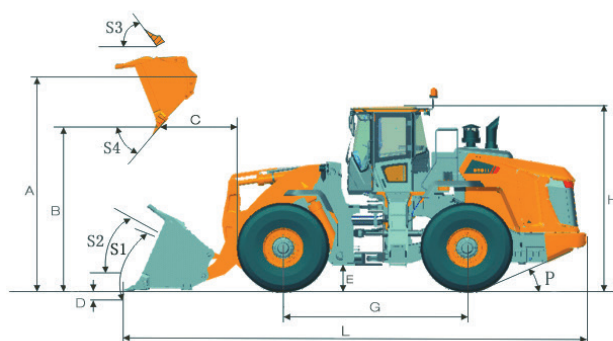
The cab is tested and approved according to ROPS (ISO 3471), FOPS (ISO 3449).

LOADER ARM PERFORMANCE WITH ATTACHMENT

Tipping load – straight	23,878 kg (52,642 lb)
Tipping load – full turn	20,600 kg (45,415 lb)
Bucket breakout force	245 kN (55,078 lbf)
A Maximum hinge pin height	4,572 mm (15')
B Dump clearance at full height discharge	3,330 mm (10' 11")
C Dump reach at full height discharge	1,479 mm (4' 10")
D Maximum digging depth, bucket level	142 mm (6")
S1 Bucket rollback at ground level	45°
S2 Bucket rollback at carry	49°
S3 Bucket rollback at maximum height	62°
S4 Maximum dump angle at full height	45°

DIMENSIONS

E Ground clearance	476 mm (1' 7")
G Wheelbase	3,700 mm (12' 2")
H Cab height	3,765 mm (12' 4")
J Wheel tread	2,420 mm (7' 11")
K Width over tires	3,170 mm (10')
L Length with bucket down	9,352 mm (30' 8")
M Turn angle, either side	38°
P Rear angle of departure	25°
R ₁ Turning radius, bucket carry	7,725 mm (25' 4")
R ₂ Turning radius, outside of tire	7,011 mm (23' 3")



TIRES

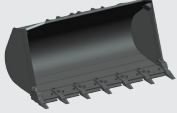
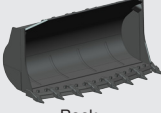
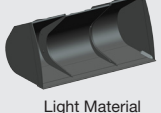
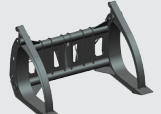
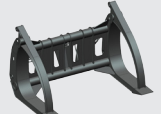
Choosing the right tires for your machine will become a key competitive advantage to achieve outstanding performance. Through close engineering and development cooperation with renowned and carefully selected suppliers, LiuGong can offer a full range of tires specially tailored for wheel loaders.

Code	Application	Patterns	Size	PR / *	Tube Type	Width	Overall Diameter	Tread Depth	Load Capacity, 50 km/h (31.1 mph) / 10 km/h (6.2 mph)
L3	<ul style="list-style-type: none"> In sand operation In all kind of load/carry operation The L3-tread is not as open as L2 and is consequently less self-cleaning 		29.5 - 25	28	TL	750 mm (2' 6")	1,975 mm (6' 6")	41 mm (2")	12,150 kg (26,786 lb) / 19,000 kg (41,888 lb)
			29.5 - 25	34	TL	750 mm (2' 6")	1,975 mm (6' 6")	41 mm (2")	14,000 kg (30,865 lb) / 21,200 kg (46,738 lb)
			29.5 - 25	40	TL	750 mm (2' 6")	1,975 mm (6' 6")	41 mm (2")	15,000 kg (33,069 lb) / 23,600 kg (52,029 lb)
			29.5 R 25	**	TL	748 mm (2' 5")	1,860 mm (6' 1")	40 mm (2")	14,000 kg (30,865 lb) / 22,400 kg (49,384 lb)
L4	<ul style="list-style-type: none"> In aggressive material such as blast rock where, to some extent, protection against cut damages is demanded 		29.5 - 25	28	TL	750 mm (2' 6")	2,025 mm (6' 8")	60 mm (2")	12,150 kg (26,786 lb) / 19,000 kg (41,888 lb)
L5	<ul style="list-style-type: none"> In very aggressive material where good protection against cut damages is demanded, e.g. in quarries or mines 		29.5 R 25	*	TL	775 mm (2' 6")	1,950 mm (6' 5")	100 mm (4")	18,000 kg (39,683 lb) @ 10 km/h (6.2 mph)
			29.5 R 25	**	TL	775 mm (2' 6")	1,950 mm (6' 5")	100 mm (4")	22,400 kg (49,384 lb) @ 10 km/h (6.2 mph)

Note: The radial tire-load bearing capacity is indicated by the number of stars (*). More stars, greater radial tire-load bearing capacity. For the specific radial tire sizes listed in the table above, 2 stars (**) represents the maximum radial tire-load bearing capacity.

ATTACHMENTS

LiuGong attachments with pin-on or quick-coupler ensure high quality. The integrated design of the system creates a perfect match to achieve superior productivity.

Type	Capacity	Width	Height	Digging Depth	Dump Clearance	Dump Reach	Description	
Standard	5.4 m ³ (7.1 yd ³)	3,486 mm (11' 5")	1,831 mm (6')	125 mm (3")	3,330 mm (10' 11")	1,479 mm (4' 10")	Anti-Wear Blade with Bolt-on Cutting Edge and Welded Teeth.	
General Purpose	5 m ³ (6.5 yd ³)	3,494 mm (11' 6")	1,777 mm (5' 10")	125 mm (3")	3,393 mm (11' 2")	1,416 mm (4' 8")	Anti-Wear Blade with Bolt-on Teeth.	
	5.7 m ³ (7.5 yd ³)	3,494 mm (11' 6")	1,838 mm (6')	125 mm (3")	3,329 mm (10' 11")	1,479 mm (4' 10")	Anti-Wear Blade with Bolt-on Cutting Edge and Bolt-on Teeth.	
Light Material	6.2 m ³ (8.1 yd ³)	3,494 mm (11' 6")	1,837 mm (6')	125 mm (3")	2,995 mm (9' 10")	1,233 mm (4' 1")	Anti-Wear Blade with Bolt-on Cutting Edge	
	6.7 m ³ (8.8 yd ³)	3,530 mm (11' 7")	1,837 mm (6')	125 mm (3")	3,075 mm (10' 1")	1,733 mm (5' 8")	Anti-Wear Blade with Bolt-on Cutting Edge.	
	7.2 m ³ (9.4 yd ³)	3,530 mm (11' 7")	1,878 mm (6' 2")	125 mm (3")	3,026 mm (9' 11")	1,782 mm (5' 10")	Anti-Wear Blade with Bolt-on Cutting Edge.	
Rock	9 m ³ (11.8 yd ³)	3,530 mm (11' 7")	2,011 mm (6' 7")	125 mm (3")	3,045 mm (10')	1,763 mm (5' 9")	Anti-Wear Blade with Bolt-on Cutting Edge.	
	4.5 m ³ (5.9 yd ³)	3,430 mm (11' 3")	1,658 mm (5' 5")	125 mm (3")	3,176 mm (10' 5")	1,632 mm (5' 4")	Anti-Wear Blade with Bolt-on Cutting Edge and Welded Teeth.	
Rock	6.2 m ³ (8.1 yd ³)	3,432 mm (11' 3")	1,838 mm (6')	125 mm (3")	3,040 mm (9' 12")	1,768 mm (5' 10")	Anti-Wear Blade with Bolt-on Cutting Edge and Welded Teeth.	
	Grapple	Φ1,350 mm (Φ 4' 5")	2,793 mm (9' 2")	2,000 mm (6' 7")	125 mm (3")	2,610 mm (8' 7")	1,678 mm (5' 6")	

STANDARD EQUIPMENT

ENGINE

- Cummins QSG12 Engine, EPA Tier 4 final / EU Stage IV, Engine output net 262 kW
Air to-air intercooled, 6 cylinders, 4 stroke
- EFI (Electric Fuel Injection)
- ECM faults inspecting system
- Pre-filter with waste separator
- Hydraulic driven reversible fan
- Grid heater

TRANSMISSION

- ZF Ergopower 4WG310 automatic power shift transmission
- Three modes: Manual, Powerful, Efficient
- ICCO (Intelligent Clutch Cut-Off)
- AEB clutch adjustment
- Kick-down function, FNR, F4/R3
- Secondary oil filter, oil stick
- Remote pressure taps for check
- Electronic controlled parking brake

AXLE

- ZF MT-L wet axles
- Differentials: front - DHL (differential hydraulic limited); rear - conventional
- Wet discs service brake system

HYDRAULIC SYSTEM

- Two piston pumps with variable displacement. Hydraulic load-sensing according to demand. Third valve and multipurpose lines
- Fingertip levers control, electronic proportional
- Easy simultaneous operating of lift & tilt
- Bucket positioner, automatic
- Lowering the lift boom without engine power

STEERING SYSTEM

- Load sensing system with mature technology of flow amplification and steering priority.
- Emergency steering system

TIRE & RIM

- 29.5R25 **/L3 Radial tire
- Full fender

CHASSIS FRAME

- Spacious central articulation arrangement with conic bearing
- Articulation locking bar
- Tow hitch
- Rubber cushion articulation stops

LINKAGE & ATTACHMENTS

- Double Z-bar linkage
- Quick coupler

ELECTRIC SYSTEM

- Two front lights with high/low beam
- Four front headlights on top of cab, LED
- Two rear headlights on top of cab, LED
- Turn signals with flasher
- Batteries, free of maintenance
- Cigarette lighter, 24 V power outlet
- Front and rear windshield wiper
- Electronic device compartment
- Back-up Alarm
- Radio/player with USB port
- Reversing warning light, automatic
- Rotating beacon

GAUGE GROUP

- Engine coolant temperature
- Transmission oil temperature
- Fuel level
- Hour meter
- Voltage
- Brake oil pressure

INDICATOR GROUP

- Air inlet heater
- Battery charging
- Parking brake applied
- Machine emergent stop
- Power cut-off
- Engine servicing
- Turning lights
- Engine starter running
- Beam of front light

CAB

- Certified FOPS (ISO 3449) and ROPS (ISO 3471) cab
- Grammer air suspension seat, armrest
- Adjustable steering column
- Large curved front glass
- Rubber cab mounts
- Cab fresh air filter
- One interior & dual exterior rear-view mirrors
- Rear-view camera display
- Air conditioner
- Cigar lighter
- Cab rear windshield defroster
- Sun visor
- Fire extinguisher

OTHER

- Automatic central lubrication
- Wedge block

OPTIONAL EQUIPMENT

ENGINE

- Cold start aid
- Multistage filters

HYDRAULIC SYSTEM

- Ride control

TIRE & RIM

- Bias tire
- Tire protective chain
- L5 Pattern

CAB

- Heated air suspension seat
- Heated external rear view mirrors

ELECTRIC SYSTEM

- Electric load weigher
- Front six headlights on top of cab, LED
- Rear headlights on top of cab, LED

LINKAGE & ATTACHMENTS

- Automatic greasing system
- Additional counterweight
- High lift linkage
- Bolt-on wear-resisted blade and teeth
- Light material bucket
- Rock bucket
- Grapple with aligned or crossed teeth



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