

Product Specifications For M315



Engine

Engine Power - ISO 14396	110 kW
Engine Power - ISO 14396 (DIN)	150 hp (metric)
Engine Model	Cat® C4.4
Net Power - ISO 9249	105 kW
Net Power - ISO 9249 (DIN)	143 hp (metric)
Bore	105 mm
Stroke	127 mm
Displacement	4.4 l
Biodiesel Capability	Up to B20 ¹
Emissions	Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
Note (1)	Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, Clean Emission Module (CEM) exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed. Rated speed 2,200 rpm. Advertised power is tested per the specified standard in effect at the time of manufacture.

Note (2)

¹Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) and are compatible* with ULSD blended with the following lower-carbon intensity fuels** up to: 20% biodiesel FAME (fatty acid methyl ester)*** or 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels. Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details. *While Caterpillar engines are compatible with these alternative fuels, some regions may not allow their use. **Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels. ***Engines with no aftertreatment devices are compatible with higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

Machine Weight

Operating Weight Maximum	18000 kg
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Operating Weight Minimum	15700 kg
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Note (1)

Operating weight includes full fuel tank, operator, General Duty (GD) bucket, and dual pneumatic tires. Weight varies depending on configuration. Typical configurations include 2.5 m (8'2") stick and 4000 kg (8,820 lb) counterweight.

Drive

Maximum Travel Speed	35 km/h
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Hydraulic System

Main System - Maximum Flow - Implement	275 L/min
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Maximum Pressure - Implement Circuit - Normal	35000 kPa
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Maximum Pressure - Implement Circuit - Heavy Lift	37000 kPa
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Maximum Pressure - Implement Circuit - Travel Circuit	35000 kPa
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Swing Mechanism

Maximum Swing Speed*	9.1 r/min
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Maximum Swing Torque	39 kN·m
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Note (1)

*For CE-marked machine default value may be set lower.

Service Refill Capacities

Fuel Tank	280 l
Diesel Exhaust Fluid (DEF)	20 l
Cooling System	24 l
Hydraulic Tank	92 l
Hydraulic System - Including Tank	220 l

Dimensions

Boom	Variable Adjustable Boom 5.02 m (16'6")
Stick	2.2 m (7'3")
Bucket	GD 0.76 m ³ (0.99 yd ³)
Shipping Height - Top of Cab	3280 mm
Shipping Length	8500 mm
Support Point	3480 mm
Tail Swing Radius	1750 mm
Counterweight Clearance	1260 mm
Ground Clearance	335 mm
Undercarriage Length	4870 mm
Wheel Base	2550 mm

Working Ranges And Forces

Boom	Variable Adjustable Boom 5.02 m (16'6")
Stick	2.2 m (7'3")
Bucket	GD 0.76 m ³ (0.99 yd ³)
Maximum Cutting Height	10140 mm
Maximum Loading Height	7400 mm
Maximum Digging Depth	5290 mm
Maximum Vertical Wall Digging Depth	4250 mm
Maximum Reach at Ground Line	8680 mm
Stick Forces (ISO)	71 kN
Bucket Forces (ISO)	106 kN

Note (1) Range values are with dual pneumatic tires (10.00-20). Range values are calculated with a GD bucket (CW) and CW quick coupler with a tip radius of 1387 mm (4'7"). Force values are calculated with heavy lift on, a GD bucket (pin-on) and a tip radius of 1224 mm (4'0").

Air Conditioning System

Note	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas. If equipped with R134a (Global Warming Potential = 1430), the system contains 0.8 kg (1.8 lb) of refrigerant which has a CO2 equivalent of 1.144 metric tonnes (1.261 tons). If equipped with R1234yf (Global Warming Potential = 0.5), the system contains 0.7 kg (1.5 lb) of refrigerant which has a CO2 equivalent of 0.0004 metric tonnes (0.0004 tons).
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Sustainability

M315 Standard Equipment

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

CAB

Sound-suppressed ROPS cab
Keyless push-to-start engine control
Height-adjustable console, infinite with no tool
High-resolution 254 mm (10 in) LCD touchscreen monitor

BOOM AND STICKS

5.2 m (17'1") Variable Adjustable Boom

ELECTRICAL SYSTEM

Programmable time-delay LED working lights
Roading and indicator lights, front and rear
Maintenance-free batteries
Centralized electrical disconnect switch
LED lights on chassis (left-hand, right-hand) and counterweight

ENGINE

Power mode selector
One-touch low idle with automatic engine speed control
Automatic engine idle shutdown
Up to 52°C (125°F) high-ambient cooling capacity
Cold start capability down to -18°C (0°F)
Double element air filter with integrated pre-cleaner

HYDRAULIC SYSTEM

Automatic hydraulic oil warm up
Heavy lift mode
Boom, stick, and bucket drift reduction valves
One-slider joystick

SAFETY AND SECURITY

Rear and right-side-view cameras
Wide angle mirrors
Lockable disconnect switch
Anti-skid plate and countersunk bolts on service platform

SERVICE AND MAINTENANCE

Integrated vehicle health management system
Scheduled Oil Sampling (S·O·SSM) ports

TECHNOLOGY

VisionLink™
Remote Flash and Remote Troubleshoot

UNDERCARRIAGE AND STRUCTURES

Automatic brake/axle lock
All wheel drive
4000 kg (8,820 lb) counterweight

M315 Optional Equipment

NOTE

Standard and optional equipment may vary. Consult your Cat dealer for details.

CAB

Operator Protective Guards (OPG)

BOOM AND STICKS

2.2 m (7'3") stick
2.5 m (8'2") stick

ELECTRICAL SYSTEM

Electrical refueling pump

HYDRAULIC SYSTEM

Boom/stick lowering check valves
Bucket cylinder check valves
Two-slider joystick
Joystick steering

SAFETY AND SECURITY

Signaling/warning horn
360° visibility
Inspection lighting
2D E-fence
Cab avoidance

SERVICE AND MAINTENANCE

Automatic lubrication system for implement and swing system

TECHNOLOGY

Cat Grade with 2D

Cat Grade with 2D with Attachment Ready Option (ARO)

Laser catcher

Cat Grade 3D ready

Cat Grade Connectivity

Cat Grade with Assist

Cat Payload

Cat Tiltrotator (TRS) Integration

UNDERCARRIAGE AND STRUCTURES

10.00-20 16 PR, dual tires

315/70R22.5, no gap dual tires

445/70R 19.5, single tires

300-80-22.5 dual pneumatic, spacerless tire (Europe only)