

Product Specifications For M316



Engine

Engine Power - ISO 14396	110 kW
Engine Power - ISO 14396 (DIN)	150 hp (metric)
Engine Model	Cat® C4.4
Net Power - ISO 9249	104.9 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 2,000 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**

18400 kg

**Operating Weight
Minimum**

17000 kg

Note (1)

Operating weight includes full fuel tank, operator, bucket 700 kg (1,543 lb) and dual pneumatic tires. Weight varies depending on configuration. Typical configurations include 2500 mm (8'2") stick, 3300 kg (7,280 lb) counterweight, bucket and 220 kg (485 lb) quick coupler.

Drive

Maximum Travel Speed

35 km/h

Hydraulic System

Main System - Maximum Flow - Implement

275 L/min

Maximum Pressure - Implement Circuit - Normal

35000 kPa

Maximum Pressure - Implement Circuit - Heavy Lift

37000 kPa

Maximum Pressure - Implement Circuit - Travel Circuit

35000 kPa

Swing Mechanism

Maximum Swing Speed*

10.2 r/min

Maximum Swing Torque	43.8 kN·m
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Note (1) *For CE-marked machine default value may be set lower.

Service Refill Capacities

Fuel Tank	350 l
Diesel Exhaust Fluid (DEF)	20 l
Cooling System	24 l
Hydraulic Tank	120 l
Hydraulic System - Including Tank	260 l

Dimensions

Boom	Variable Adjustable Boom 5.2 m (17'1")
Stick	2.2 m (7'3")
Bucket	GD 0.8 m³ (1.05 yd³)
Shipping Height - Top of Cab	3300 mm
Shipping Length	8640 mm
Support Point	3870 mm
Tail Swing Radius	2350 mm
Counterweight Clearance	1301 mm
Ground Clearance	395 mm
Undercarriage Length	4970 mm
Wheel Base	2550 mm

Working Ranges And Forces

Boom	Variable Adjustable Boom 5.2 m (17'1")
Stick	2.2 m (7'3")
Bucket	GD 0.8 m ³ (1.05 yd ³)
Maximum Cutting Height	10110 mm
Maximum Loading Height	7140 mm
Maximum Digging Depth	5630 mm
Maximum Vertical Wall Digging Depth	4410 mm
Maximum Reach at Ground Level	8970 mm
Bucket Forces (ISO)	119 kN
Stick Forces (ISO)	75 kN
Note (1)	Range values are with dual pneumatic tires (10.00-20). Range values are calculated with a GD bucket (CW) and CW-30 quick coupler with a tip radius of 1484 mm (4'10"). Force values are calculated with heavy lift on, a GD bucket (pin-on) and a tip radius of 1378 mm (4'6").

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 0.9 kg (2 lb) of refrigerant which has a CO ₂ equivalent of 1.287 metric tonnes (1.418 tons). If equipped with R1234yf (Global Warming Potential = 0.5), the system contains 0.75 kg (1.65 lb) of refrigerant which has a CO ₂ equivalent of 0.0004 metric tonnes (0.0004 tons).
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M316 Standard Equipment

NOTE

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

BOOM AND STICKS

5.2 m (17'1") Variable Adjustable Boom

ELECTRICAL SYSTEM

LED lights on boom and cab
Programmable time-delay LED working lights
Roading and indicator lights, front and rear
Maintenance-free batteries
Centralized electrical disconnect switch

ENGINE

Cat C4.4 Single Turbo diesel 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

Boom, stick and bucket drift reduction valves
Automatic hydraulic oil warm up
Heavy lift mode
Boom and stick lowering check valves

SAFETY AND SECURITY

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

SERVICE AND MAINTENANCE

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

CAT TECHNOLOGY

VisionLink™

Remote Flash and Remote Troubleshoot

UNDERCARRIAGE AND STRUCTURES

Automatic brake/axle lock
3300 kg (7,280 lb) counterweight
All wheel drive

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

M316 Optional Equipment

NOTE

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

BOOM AND STICKS

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

ELECTRICAL SYSTEM

Electrical refueling pump
LED lights on chassis (left-hand, right-hand) and counterweight

HYDRAULIC SYSTEM

Bucket cylinder check valves
Two-slider joysticks
Joystick steering

SAFETY AND SECURITY

360° visibility
Travel alarm
Inspection lighting
2D E-fence
Cab Avoidance

SERVICE AND MAINTENANCE

Automatic lubrication system for implement and swing system

CAT 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

11.00-20 dual tires

315/70R 22.5, no gap dual tires

445/70R 19.5, single tires

300-80-22.5 dual pneumatic, spacerless tires

CAB

Operator Protective Guards (OPG)