

PRODUCT SPECIFICATIONS FOR 972M

ENGINE

Net Power - ISO 9249	222 kW
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Emissions	Tier 3/Stage IIIA
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Maximum Power - 1,800 rpm - ISO 14396 - Metric	242 kW
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Maximum Power - 1,800 rpm - SAE J1995	246 kW
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Engine Model	Cat C9.3
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Displacement	9.3 l
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Maximum Power - 1,800 rpm - ISO 14396	242 kW
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Maximum Net Power - 1,700 rpm - SAE J1349 - Metric	222 kW
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Maximum Power - 1,800 rpm - SAE J1995 - Metric	246 kW
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Maximum Net Power - 1,700 rpm - SAE J1349	222 kW
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Maximum Net Power - 1,700 rpm - ISO 9249	222 kW
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Maximum Net Power - 1,700 rpm - ISO 9249 - Metric	222 kW
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Maximum Net Torque - 1,000 rpm	1632 N·m
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Peak Gross Torque - 1,200 rpm - SAE J1995	1728 N·m
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Peak Gross Torque - 1,200 rpm - ISO 14396	1710 N·m
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WEIGHTS

Operating Weight	24897 kg
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Note	Weight based on a machine configuration with Michelin 26.5R25 XHA2 L3 radial tires, full fluids, operator, standard counterweight, cold start, roading fenders, Product Link™, manual diff lock/open axles (front/rear), power train guard, secondary steering, sound suppression and a 4.8 m ³ (6.28 yd ³) general purpose bucket with BOCE.
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BUCKETS

Bucket Capacities	3.20-9.94 m ³ (4.19-13 yd ³)
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OPERATING SPECIFICATIONS

Breakout Force	196 kN
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Static Tipping Load - Full 37° Turn - No Tire Deflection	17421 kg
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Static Tipping Load - Full 37° Turn - With Tire Deflection	16164 kg
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Note (1)	For a machine configuration as defined under ? Weight.?
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Note (2)	Full compliance to ISO 143971:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.
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TRANSMISSION

Reverse - 2	15 km/h
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Forward - 1	6.7 km/h
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Reverse - 1	7.6 km/h
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Forward - 4	39.5 km/h
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Forward - 3	23.2 km/h
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Forward - 2	13.1 km/h
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Reverse - 3	26.5 km/h
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Reverse - 4	39.5 km/h
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Note	Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm (32.5 in) roll radius.
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HYDRAULIC SYSTEM

Implement System - Maximum Operating Pressure	31000 kPa
Hydraulic Cycle Time - Total	10.7 s
Implement Pump Type	Variable Displacement Piston
Implement System - Maximum Pump Output at 2,200 rpm	360 l/min

SERVICE REFILL CAPACITIES

Differential - Final Drives - Rear	57 l
Transmission	58.5 l
Cooling System	71.6 l
Crankcase	24.5 l
Hydraulic Tank	125 l
Differential - Final Drives - Front	57 l
Fuel Tank	302 l

SOUND

With Cooling Fan Speed at Maximum Value - Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)
With Cooling Fan Speed at Maximum Value - Exterior Sound Pressure Level (SAE J88:2013)	76 dB(A)*
Note	*Distance of 15 m (49.2 ft), moving forward in second gear ratio.
With Cooling Fan Speed at Maximum Value - Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)

DIMENSIONS - STANDARD LIFT

Tread Width	2230 mm
Centerline of Rear Axle to Hitch	1775 mm
Hinge Pin Height at Carry	680 mm
Height - Top of ROPS	3587 mm
Ground Clearance	434 mm
Rack Back at Ground	41 degrees
Height - Top of Exhaust Pipe	3522 mm
Hinge Pin Height at Maximum Lift	4458 mm
Centerline of Rear Axle to Edge of Counterweight	2500 mm
Note	All dimensions are approximate and based on L3 XHA2 tires.
Wheel Base	3550 mm
Rack Back - Maximum Lift	56 degrees
Maximum Width over Tires	3009 mm
Lift Arm Clearance at Maximum Lift	3843 mm
Overall Length - Without Bucket	7774 mm
Rack Back - Carry Height	50 degrees
Height - Top of Hood	2818 mm

DIMENSIONS - HIGH LIFT

Height - Top of Hood	2818 mm
Overall Length - Without Bucket	8109 mm
Centerline of Rear Axle to Edge of Counterweight	2500 mm
Wheel Base	3550 mm
Maximum Width over Tires	3009 mm

Note	All dimensions are approximate and based on L3 XHA2 tires.
Ground Clearance	434 mm
Hinge Pin Height at Carry	778 mm
Rack Back - Carry Height	49 degrees
Tread Width	2230 mm
Rack Back at Ground	39 degrees
Hinge Pin Height at Maximum Lift	4793 mm
Centerline of Rear Axle to Hitch	1775 mm
Rack Back - Maximum Lift	71 degrees
Lift Arm Clearance at Maximum Lift	4140 mm
Height - Top of Exhaust Pipe	3522 mm
Height - Top of ROPS	3587 mm

BUCKET CAPACITIES

Bucket Range	3.20-9.94 m ³ (4.19-13 yd ³)
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ENGINE - TIER 3/STAGE IIIA EQUIVALENT

Emissions	Tier 3/Stage IIIA
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972M STANDARD EQUIPMENT

NOTE

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

POWER TRAIN

Engine, Cat C9.3 meets Tier 3/Stage IIIA equivalent or Tier 4 Final/Stage IV emission standards

Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF) and Diesel Exhaust Fluid (DEF) tank and pump (Tier 4 Final/Stage IV models)

Fuel priming pump (electric)

Fuel/water separator

Precleaner, engine air intake

Economy Mode (selectable)

Transmission, automatic planetary power shift (4F/4R)

Torque converter, locking clutch with free wheel stator

OPERATOR ENVIRONMENT

Cab, pressurized and sound suppressed (ROPS/FOPS)

Viscous mounts

Multi-function 18 cm (7 in) color touch-screen display for rear vision camera, clock and machine parameters

EH controls, SAL (single axis lever) lift and tilt function

Steering, EH joystick, speed sensing with force feedback

Radio ready (entertainment) includes antenna, speakers and converter (12V, 10-amp)

Air conditioner, heater, and defroster (auto temp and fan)

EH parking brake

Beverage holders (2) with storage compartment for cell phone/MP3 player

Bucket/work tool function lockout

Coat hook (2)

Cab air filter

Ergonomic cab access ladders and handrails

Horn, electric

Light, two dome (cab)

Mirrors, rearview external with integrated spot mirrors

Post mounted membrane 16 switch keypad

2 receptacles, 12V

Seat, Cat Comfort (cloth) air suspension

Seat belt, 51 mm (2 in) retractable, with indicator

Sun visor front

Cab vision, front

Wet-arm wipers/washers front and rear, intermittent front wiper

Window, sliding (left and right sides)

Cab tie-off

COMPUTERIZED MONITORING SYSTEM

With following gauges: Speedometer/tacometer; Digital gear range indicator; Diesel Exhaust Fluid (DEF) level (Tier 4 Final/Stage IV models); Temperature: engine coolant, hydraulic oil, transmission oil; Fuel level

With following warning indicators: Regeneration; Temperature: axle oil, engine intake manifold; Pressure: engine oil, fuel pressure hi/low, primary steering oil, service brake oil; Battery voltage hi/low; Engine air filter restriction; Hydraulic oil filter restriction; Hydraulic oil low; Parking brake; DEF low level (Tier 4 Final/Stage IV models); Transmission filter bypass

ELECTRICAL AND LIGHTING

Batteries (2), maintenance free 1,400 CCA

Ignition key; start/stop switch

Starter, electric, heavy duty

Starting and charging system (24V)

Lighting system: Four halogen work lights (cab mounted); Two halogen roading lights (with signals); Two halogen rear vision lights (hood mounted)

Alarm, back-up

Alternator, 145-amp brushed

Main disconnect switch

Receptacle start (cables no included)

CAT CONNECT TECHNOLOGIES

Link technologies: Product Link

Detect technologies: rear vision camera

LINKAGE

Linkage, Z-bar, cast crosstube/tile lever

Kickout, lift and tilt, automatic

HYDRAULICS

Hydraulic system, load sensing

Steering, load sensing

Ride control, 2V

Remote diagnostic pressure taps

Hoses, Cat XT™

Oil sampling valves

FLUIDS

Premixed extended life coolant with freeze protection to -34° C (-29° F)

OTHER STANDARD EQUIPMENT

Hood, non-metallic power tilting

Service centers (electrical and hydraulic)

Platform, window washing

Auto idle shutdown

Fenders, front with mud-flap/rear with extension

Ecology drains for engine, transmission, and hydraulics

Ether aid ready

Grill, airborne debris

Filters: fuel, engine air, engine oil, hydraulic oil, transmission

Fuel cooler

Grease zerks

Hitch, drawbar with pin

Precleaner rain cap

Sight gauges: engine coolant, hydraulic oil, and transmission oil level

Toolbox

Vandalism protection caplocks

972M OPTIONAL EQUIPMENT

NOTE

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

POWER TRAIN

Axles: Automatic front/rear differential locks; Axle oil cooler; Extreme temperature seals; Seal guards

Fan, VPF (variable pitch fan), automatic and manual control

Radiator, high debris with wider fin spacing

OPERATOR ENVIRONMENT

Door, remote opening system

Cover, HVAC metallic

EH controls, SAL 3rd function - Additional roller switch for 4th function

EH controls, joystick lift and tilt - Additional integrated roller switches for 3rd and 4th functions

Filter, carbon fresh air

Mirrors, heated rearview external with integrated spot mirrors

Precleaner, HVAC

Precleaner, HVAC (RESPA)

Radio, AM/FM/CD/USB/MP3 Bluetooth with Satellite Sirius and XM

Radio, CB ready

Seat, heated air suspension

Seat belt, 76 mm (3 in) retractable, with indicator

Steering, EH wheel with directional FNR shifter and gear selector - Additional FNR with implement controls

Roof, metallic

Steering, secondary

Sun visor, rear

Windows, rubber mounted

Windows, with front guard

Windows, with heavy duty front guard

Windows, with full guards front, rear and sides

ELECTRICAL AND LIGHTING

Four additional auxiliary halogen cab mounted work lights or

Two additional auxiliary front HI LED and two additional auxiliary rear LED cab mounted work lights with 2 LED work lights in the radiator grill and LED front turn signals also includes replacement of the standard four halogen cab mounted work lights with four LED work lights (the standard offering and only roading light

available is the halogen roading light)

Warning amber strobe beacon

Reversing strobes

External seat belt indicator light

Speed limiter - 20 km/h (Europe only)

STARTERS, BATTERIES, AND ALTERNATORS

Cold start - 120V

Cold start - 240V

CAT CONNECT TECHNOLOGIES

Link technologies: VIMS™

Payload technologies: Advanced Productivity subscription; Cat Production Measurement 2.0; Printer; Aggregate Autodig

Detect technologies: Cat Rear Object Detection

Machine Security System

LINKAGE

High lift

Extended capacity

Quick coupler ready

WORK TOOLS

Performance Series buckets

Fusion quick coupler

Forks, pallet

Forks, logging

HYDRAULICS

3rd function with Ride Control: Standard linkage; High lift linkage; Forestry linkage

4th function with Ride Control: Standard linkage; High lift linkage; Forestry linkage

FLUIDS

Premixed extended life coolant with freeze protection to -50° C (-58° F)

OTHER OPTIONAL EQUIPMENT

Cat Autolube System

Fenders, roading

Guard, power train

Oil change, high speed engine

Precleaner, turbine

Precleaner, trash

Wheel clocks

OPTIONAL APPLICATION SPECIFIC CONFIGURATIONS

Aggregate Handler

Industrial and Waste Handler

Steel Mill

Corrosion Resistance