



Cat[®] M316F

Wheeled Excavator

2017

Working hard has never been easier with Cat[®] F Series Wheeled Excavators. Enjoy the versatility offered by integrated solutions and technologies that do repetitive tasks for you. These machines are designed to help you take on the wide variety of challenges you face every day, and at a lower cost.

Performance

- Cat C4.4 ACERT[™] engine meets EU Stage IV emission standards. Emissions technology is transparent – no action required from the operator and no stopping for regeneration.
- Dedicated swing pump, allowing faster, smoother combined movements.
- Built-in fuel savers, eliminating waste with features like Auto Engine Speed Control, Engine Idle Shutdown and efficient Eco Mode.
- “On-Demand” Strategies, to consume just the right amount of fuel, with on-demand fan or new optimized demand-driven driveline.
- Highly mobile, the M316F can travel up to 35 km/h (22 mph).

Versatility

- Flexible configurations to meet all your needs with various booms/sticks, tires, undercarriages and counterweights.
- “Plug and Play” design, with complete integration of the whole portfolio of Cat attachments.
 - Auxiliary hydraulics, including high pressure, and quick coupler lines/circuits.
 - Readiness for all couplers, either Pin Grabber, Dedicated or hydraulic Auto Connect coupler.
 - The monitor can allow ten hydraulic pump flow and pressure settings at the same time.
 - Tiltrotator option including all required changes to accommodate the Cat Tiltrotator.
 - Trailer-ready package option. Just add your hitch and go.
- Joystick buttons/sliders can be set up per tool as desired by the operator.

Ease of Operation

- A complete package of smart technologies with features like Cruise Control or automatic brake and axle lock. Optional boosters like Ride Control, SmartBoom[™], joystick steering are available.
- Everything can be adjusted in the cab from the steering column height to the electrically adjustable mirrors.
- Ergonomic cab with controls kept to a minimum and conveniently located.
- Split-screen monitor to allow quick view of both cameras on the same display.

Safety

- Integrated devices to help enforce safe behavior, like seat belt indicator, or the speed limit setting when roading in reverse with the upper frame rotated.
- Visibility: large glass areas, rear/side cameras. LED lamps for all working lights and cameras.
- For added protection, the optional impact resistant windshield meets the EN356 P5A standard.
- Integrated pin code adds anti-theft security to your equipment.

Maintenance

- Ground level access to all routine maintenance (like fuel and engine oil filters).
- Easy access: clean, simple design. Radiators are all gathered together.
- Reduced maintenance: automatic features (like lubrication system) along with long greasing intervals. No Diesel Particulate Filter.

Cat Connect Technology

- Product Link[™] connects owners to their equipment, providing access to machine data such as location, hours, fuel consumption, idle time, events, and diagnostic codes.



Cat® M316F Wheeled Excavator

Engine

Engine Model	Cat C4.4 ACERT	
Ratings	2,000 rpm	
Engine Power		
Maximum Gross (ISO 14396)	110 kW	148 hp (150 hp/PS)*
Maximum Net (ISO 9249/SAE J1349)	105 kW	141 hp (143 hp/PS)*
Bore	105 mm	4.1 in
Stroke	127 mm	5.0 in
Displacement	4.4 L	268.5 in ³
Maximum Torque at 1,400 rpm	560 N·m	413 lbf·ft
Number of Cylinders – In line	4	
• Meets Stage IV emission standards.		
*Metric values.		

Transmission

Maximum Forward/Reverse – 2nd Gear	35 km/h	22 mph
Drawbar Pull	104 kN	23,380 lbf
Maximum Gradeability at 16 500 kg (36,380 lb)	78%	

Swing Mechanism

Swing Speed	9 rpm	
Swing Torque	38 kN·m	28,120 lbf·ft

Undercarriage

Ground Clearance	370 mm	14.6 in
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Service Refill Capacities

Fuel Tank (total capacity)	330 L	87.2 gal
Diesel Exhaust Fluid Tank	19 L	5 gal

Weights

Operating Weights*	15 910 to 17 850 kg	35,076 to 39,352 lb
VA Boom		
Rear Dozer Only	16 390 kg	36,134 lb
Rear Dozer, Front Outriggers	17 360 kg	38,272 lb
Front and Rear Outriggers	17 850 kg	39,352 lb
One-Piece Boom		
Front Dozer, Rear Outriggers	16 880 kg	37,214 lb
Front and Rear Outriggers	17 370 kg	38,294 lb
Offset Boom		
Rear Dozer, Front Outriggers	17 910 kg	39,485 lb
Front and Rear Outriggers	18 400 kg	40,565 lb
Counterweights	3200/3700 kg	7,055/8,157 lb

*Includes medium stick, 3200 kg (7,055 lb) counterweight, full fuel tank, operator, quick coupler (225 kg/496 lb), bucket (600 kg/1,323 lb), dual pneumatic tires. Weight varies depending on configuration.

Hydraulic System

System	240 L	63.4 gal
Maximum Pressure – Implement Circuit		
Normal and Travel Circuits	350 bar	5,076 psi
Heavy Lift	375 bar	5,439 psi
Maximum Pressure – Auxiliary Circuit		
High Pressure	350 bar	5,076 psi
Medium Pressure	185 bar	2,683 psi
Swing Mechanism	370 bar	5,366 psi
Maximum Flow – Implement/Travel Circuits	240 L/min	63 gal/min
Maximum Flow – Auxiliary Circuit		
High Pressure	240 L/min	63 gal/min
Medium Pressure	50 L/min	13.2 gal/min
Maximum Flow – Swing Mechanism	80 L/min	21.1 gal/min

Working Ranges

Boom Type	VA Boom								One-Piece Boom						Offset Boom			
	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in	mm	ft/in		
Stick Length	2100	6'11"	2400	7'10"	2600	8'6"	3100*	10'2"*	2100	6'11"	2400	7'10"	2600	8'6"	3100*	10'2"*	2400	7'10"
Digging Height	10 070	33'0"	10 250	33'8"	10 410	34'2"	8950	29'4"	9020	29'7"	9120	29'11"	9230	30'3"	7700	25'3"	10 300	33'10"
Dump Height	6920	22'8"	7110	23'4"	7270	23'10"	—	—	5980	19'7"	6080	19'11"	6200	20'4"	—	—	7150	23'5"
Digging Depth	5610	18'5"	5900	19'4"	6100	20'0"	5050	16'7"	5410	17'9"	5710	18'9"	5910	19'5"	4840	15'11"	5910	19'5"
Reach at Ground Level	8940	29'4"	9210	30'3"	9400	30'10"	8170	26'10"	8730	28'8"	8990	29'6"	9190	30'2"	7920	26'0"	9230	30'3"

• Range values are calculated with GD bucket 1100 mm (3'7"), 0.80 m³ (1.05 yd³) with tips K080 and CW-20-H.4.N quick coupler with a tip radius of 1574 mm (5'2").

*Industrial stick (no bucket linkage).

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