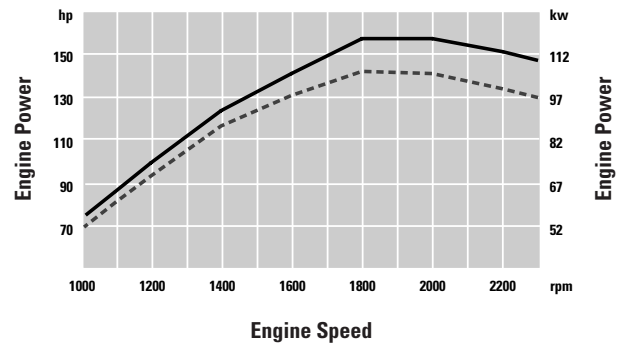
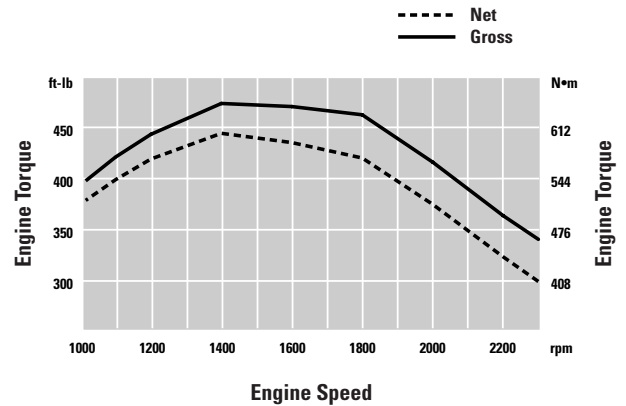


Engine

Model	Cat 3056E DIT ATAAC	
Flywheel Power	97.8 kW	131 hp
Max. Flywheel Power	107 kW	144 hp
Caterpillar	98 kW	131 hp
ISO 9249 (1997)	98 kW	131 hp
EEC 80/1269	98 kW	131 hp
SAE J1349:90	98 kW	131 hp
Bore	100 mm	3.94 in
Stroke	127 mm	5 in
Displacement	6 L	366 in ³

- Ratings at 2300 RPM.
- Net power shown is the power available at the flywheel when the engine is equipped with air cleaner, fan, muffler and alternator.
- No derating required up to 3000 m (9,843 ft) altitude.
- Auto Derate protects the engine, hydraulic and transmission systems.
- The Caterpillar 3056E DIT ATAAC engine meets Tier 2 off-highway emission regulations.
- Features:
 - Electronically controlled rotary fuel pump
 - Three-ring, controlled expansion, lubricated pistons
 - Gear-driven water and oil pumps
 - One-piece cast iron cylinder heads with two valves per cylinder
 - Fuel priming pump and fuel/water separator
 - S•O•S sampling port for engine oil
 - Replaceable dry liners
 - Cast aluminum valve cover
 - Radiator is easily accessed for cleaning

Engine Torque



Weights

Operating Weight	12 134 kg	26,751 lb
------------------	-----------	-----------

- Specifications shown are the IT28G with optional counterweight, standard lubricants, full fuel tank, ROPS cab, 2.0 m³ (2.6 yd³) bucket with bolt-on cutting edge, 80 kg (176 lb) operator and 20.5 - 25 12PR (L2) tires.

Steering

Minimum turning radius (over tire)	5233 mm	206 in
Steering angle, each direction	40°	
Steering cylinders, two, bore	69.9 mm	2.75 in
Hydraulic output at 2300 engine rpm and 6900 kPa (1000 psi)	104 L/min	27 gal/min
Maximum working pressure	20 700 kPa	3,000 psi

- Fully hydraulic power steering.
- Center-point frame articulation.
- Front and rear wheels track.
- Separate variable displacement piston pump provides steering power at all engine and ground speeds.
- Tilt steering console.
- High-impact rubber steering stops.
- Secondary steering system available to meet roading regulations in various countries, and to meet ISO 5010.

Loader Hydraulic System

Output at 2300 engine rpm and 6900 kPa (1000 psi) with SAE 10W oil at 65°C (150°F)	151.6 L/min	40.3 gal/min
--	-------------	--------------

Hydraulic cycle time:

Raise	6.1 Seconds	
Dump	1.4 Seconds	
Lower, empty, float down	2.8 Seconds	
Total	10.3 Seconds	

Relief valve setting	22 100 kPa	3,200 psi
----------------------	------------	-----------

Lift cylinders, double acting:

Bore	120.6 mm	4.75 in
Stroke	685 mm	27 in

Tilt cylinder, double acting:

Bore	101.6 mm	4 in
Stroke	755 mm	29.7 in

- Open-centered system.
- Fixed displacement vane-type implement pump.
- Low effort, hydraulic joystick controls.
- Electronic pilot shut-off switch disables implement functions for added safety.
- Hydraulic couplings with O-ring face seals.
- Optional heavy-duty oil cooler.
- Improved Ride Control System available to provide improved ride with less spillage from bucket during load & carry operations and better hard bank capability.

Service Refill Capacities

Fuel tank	216 L	57.1 gal
Cooling system	42 L	11.1 gal
Crankcase	21 L	5.5 gal
Transmission	34.5 L	9.1 gal

Differentials and final drives:

Front	26 L	6.9 gal
Rear	25 L	6.6 gal

Hydraulic system (including tank)	125 L	33 gal
-----------------------------------	-------	--------

Hydraulic tank	70 L	18.5 ga
----------------	------	---------

Transmission

Standard transmission, max travel speeds:

Forward 1	7.9 kph	4.9 mph
Forward 2	12.6 kph	7.8 mph
Forward 3	25.8 kph	16 mph
Forward 4	37.7 kph	23.4 mph
Reverse 1	7.9 kph	4.9 mph
Reverse 2	12.6 kph	7.8 mph
Reverse 3	25.8 kph	16 mph

- Electronically-controlled Caterpillar countershaft transmission with full on-the-go directional and speed change capability.
- High-energy friction materials and thick reaction plates for better tolerance of heat.
- High-contact ratio spur gears are precision ground and heat treated for quiet, reliable operation.
- Electronic autoshift is standard.
- Button on implement control lever allows downshifting on demand.
- Computer controlled modulation provides smoother transitions.

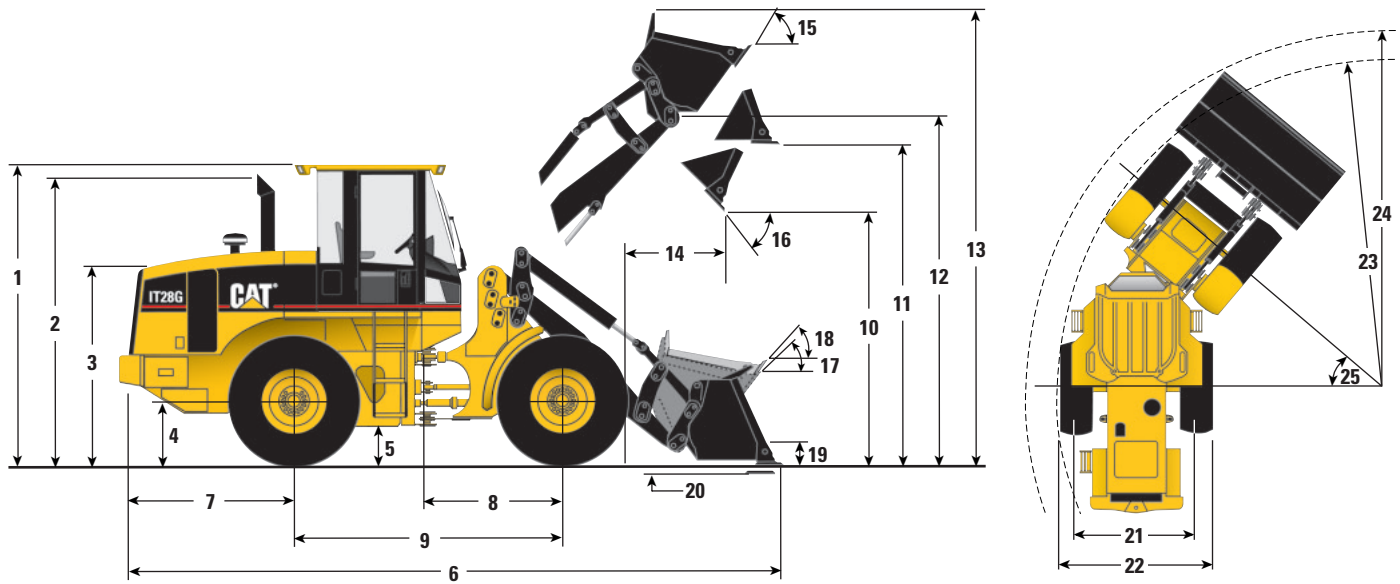
Axles

Features:

- Fixed front, oscillating rear ($\pm 11^\circ$) allows rear movement of 480 mm (18.9 in).
- Caterpillar axle with fully-enclosed brakes and final drives.
- Patented Duo-Cone Seals between axle and housing.
- Limited Slip Differentials are optional on front, rear or both axles.
- Rear axle trunnion has remote lubrication fitting.
- Planetary final drives are lubricated from the main oil sump.
- High contact ratio gearset reduces noise levels during meshing.

Dimensions with Bucket

All dimensions are approximate. Dimensions vary with bucket. Refer to Operating Specifications chart.



1	Height to top of ROPS/FOPS	3268 mm	(10 ft 8 in)
2	Height to top of exhaust stack	3184 mm	(10 ft 5 in)
3	Height to top of hood	2197 mm	(7 ft 3 in)
4	Height to center of axle	684 mm	(2 ft 3 in)
5	Ground clearance	407 mm	(1 ft 4 in)
6	Overall length	7256 mm	(23 ft 10 in)
7	Length – rear axle to bumper	1973 mm	(6 ft 6 in)
8	Center line of front axle to hitch	1450 mm	(4 ft 9 in)
9	Wheel base length	2900 mm	(9 ft 6 in)
10	Dump clearance at maximum lift and 45° dump	2967 mm	(9 ft 9 in)
11	Bucket clearance at maximum lift and level	3694 mm	(12 ft 1 in)
12	Bucket pin height at maximum lift	3980 mm	(13 ft 1 in)
13	Overall height – bucket raised	5045 mm	(16 ft 7 in)
14	Reach at maximum lift and 45° dump	958 mm	(3 ft 2 in)
15	Rack back angle at maximum lift		55°
16	Dump angle at maximum lift		45°
17	Rack back angle at ground		53°
18	Rack back angle at carry		56°
19	Carry height	382 mm	(1 ft 3 in)
20	Digging depth	108 mm	(4.3 in)

Dimensions listed are for machines equipped with 20.5-25 12PR (L-2) tires and 1.8 m³ (2.3 yd³) general purpose bucket with bolt-on cutting edge. Refer to Operating Specifications for bucket variations.

	17.5-25 12PR (L-2) Tires		20.5-25 12PR (L-2) Tires	
21	Overall width over tires	2427 mm (96 in)	2537 mm (100 in)	
22	Width at tread center	1950 mm (77 in)	1950 mm (77 in)	
23	Minimum turning radius over tire	5228 mm (17 ft 2 in)	5233 mm (17 ft 2 in)	
24	Minimum turning radius over bucket	–	5662 mm (18 ft 7 in)	
25	Steering angle – left/right	40°	40°	
	Change in vertical dimension	–64 mm (–2.5 in)	–	–

Operating Specifications with Bucket

		General Purpose Buckets									Waste/Ag
		With Bolt-On Cutting Edge			With Bolt-On Teeth & Segments*			With Bolt-On Teeth*			With Bolt-On Cutting Edge
Rated bucket capacity (§)	m ³	1.8	2.0	2.3	1.8	2.0	2.3	1.7	1.9	2.2	2.8
	yd ³	2.3	2.6	3.0	2.3	2.6	3.0	2.25	2.5	2.9	3.6
Struck capacity (§)	m ³	1.5	1.7	1.9	1.5	1.7	1.9	1.5	1.6	1.8	2.3
	yd ³	2.0	2.25	2.5	2.0	2.25	2.5	2.0	2.1	2.35	3.0
Bucket width		2549	2549	2549	2549	2549	2549	2532	2532	2532	2550
		8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"	8'4"
10 Dump clearance at full lift and 45° discharge (§)	mm	2967	2911	2849	2855	2799	2737	2855	2799	2737	2860
	ft/in	9'9"	9'7"	9'4"	9'4"	9'2"	8'11"	9'4"	9'2"	8'11"	9'5"
14 Reach at full lift and 45° discharge (§)	mm	958	1014	1021	1052	1109	1116	1052	1109	1116	1222
	ft/in	3'2"	3'4"	3'4"	3'5"	3'8"	3'8"	3'5"	3'8"	3'8"	4'0"
Reach at 45° discharge and 2130 mm (7'0") clearance (§)	mm	1537	1567	1546	1578	1605	1580	1578	1605	1580	1754
	ft/in	5'1"	5'2"	5'1"	5'2"	5'3"	5'2"	5'2"	5'3"	5'2"	5'9"
Reach with lift arms horizontal and bucket level	mm	2303	2383	2431	2449	2529	2577	2449	2529	2577	2546
	ft/in	7'7"	7'10"	7'11"	8'0"	8'4"	8'5"	8'0"	8'4"	8'5"	8'4"
20 Digging depth (§)	mm	108	108	143	122	122	156	122	122	156	112
	in	4.3"	4.3"	5.6"	4.8"	4.8"	6.1"	4.8"	4.8"	6.1"	4.4"
6 Overall length	mm	7256	7336	7435	7402	7482	7496	7380	7460	7496	7504
	ft/in	23'10"	24'1"	24'5"	24'3"	24'7"	24'7"	24'3"	24'6"	24'7"	24'7"
13 Overall height with bucket at full raise (§)	mm	5045	5080	5238	5045	5080	5238	5045	5080	5238	5352
	ft/in	16'7"	16'8"	17'2"	16'7"	16'8"	17'2"	16'7"	16'8"	17'2"	17'7"
24 Loader clearance radius with bucket in carry position (§)	mm	5662	5680	5770	5712	5731	5831	5712	5731	5831	5845
	ft/in	18'7"	18'8"	18'11"	18'9"	18'10"	19'2"	18'9"	18'10"	19'2"	19'2"
Static tipping load straight (§)	kg	8619	8530	8093	8532	8456	8014	8710	8628	8196	8351
	lb	19,002	18,805	17,842	18,810	18,642	17,668	19,202	19,022	18,069	18,411
Static tipping load full 40° turn (§)	kg	7469	7388	6973	7381	7313	6894	7550	7476	7065	7214
	lb	16,466	16,288	15,373	16,272	16,122	15,199	16,645	16,482	15,576	15,904
Breakout force (§)	kg	11 492	10 631	9640	11 419	10 567	9565	12 306	11 340	10 246	8889
	lb	25,340	23,441	21,253	25,179	23,300	21,087	27,135	25,005	22,589	19,597
Operating weight	kg	12 116	12 134	12 312	12 185	12 194	12 374	12 100	12 109	12 288	12 178
	lb	26,711	26,751	27,143	26,863	26,883	27,280	26,676	26,696	27,090	26,848

Specifications shown are for machine with optional counterweight, standard lubricants, full fuel tank, ROPS cab, 80 kg (176 lb) operator and 20.5-25 12PR (L-2) tires.

* Dimensions are measured to the tip of the bucket teeth to provide accurate clearance data. SAE standards specifies the cutting edge.

(§) Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers (SAE), including SAE Standards J732 JUN92 and J742 FEB85 governing loader ratings.