

## Technical Data

### ENGINE

**Type**  
John Deere POWERTECH™ 6068H

**Non-road emissions standard**  
Certified to EPA Tier 2 emissions

**Cylinders**  
6 (2 valves per cylinder)

**Displacement**  
6,8 L

**Net Peak Power**  
122 kW @ 1 900 rpm

**Net Peak Torque**  
659 Nm @ 1 600 rpm

**Fuel System**  
High Pressure Common Rail

**Aspiration**  
Turbocharged, charge air cooled

**Air Cleaner**  
Dual-element dry type, restriction indicator in cab monitor for service.

**Fan Drive**  
Hydraulically driven, proportionally controlled, fan aft coolers.

**Lubrication**  
Full-flow spin-on filter and integral coolers.

**ELECTRICAL SYSTEM**  
24 volt with 80 amp alternator (100 amp alternator optional).

**Batteries (2 by 12V)**  
750 CCA (each)

**TRANSMISSION**  
**Type**  
Countershaft-type PowerShift™

**Torque Converter**  
Single stage, single phase

**Shift Control**  
Electronically modulated, adaptive, load and speed dependant.

**Operator Interface**  
Joystick-mounted FNR and gear select lever, kick-down button on Joystick.

**Shift Modes**  
Manual/auto (1st-D or 2nd-D); quick-shift button with two selectable modes: kick down or kick up/down; and three clutch cutoff settings adjustable on switch pad.

**Travel Speeds**  
Forward Maximum  
1st 5,8 km/h  
2nd 12 km/h  
3rd 18,6 km/h  
4th 27,7 km/h  
5th 40 km/h  
Reverse Maximum  
1st 6,3 km/h  
2nd 12,7 km/h  
3rd 29,1 km/h

**AXLES /BRAKES**  
**Final Drive**  
Heavy-duty outboard planetary

**Differentials**  
Manual locking front, conventional rear.

**Rear Axle Oscillation, Stop to Stop**  
24°

**Brakes (conform to SAE J1473, ISO3450)**  
Service Brakes  
Hydraulically actuated, inboard sun-shaft mounted, oil cooled, self-adjusting retractors, multi disc.  
Parking Brakes  
Automatic spring applied, hydraulically released, driveline mounted, sealed wet, multi-disc.

**TYRES**  
**Standard Sizes**  
20.5 x 25, L5, 12 Ply

**REFILL CAPACITY**  
**Fuel Tank (with ground-level fueling)**  
325 L

**Cooling System**  
23 L

**Engine Oil with Vertical Spin-on Filter**  
19 L

**Transmission Fluid with Vertical Filter**  
18,5 L

**Axle Oil (front and rear, each)**  
17 L

**Hydraulic Reservoir and Filters**  
92 L

**Park Brake Oil (wet disc)**  
0,3 L

**HYDRAULIC SYSTEM / STEERING**  
**Pump (Loader and Steering)**  
Variable-displacement, load-sensing axial-piston pump; closed-centre, pressure-compensating system.

**Maximum Rated Flow**  
188 l/m @ 6 895 kPa and 2 200 rpm

**System Relief Pressure (Loader and Steering)**  
25 166 kPa

**Loader Controls**  
Two-function valve; single- or dual lever controls; control lever lockout feature; optional third- and fourth-function valve with auxiliary lever.

**Steering (conforms to SAE J1511)**  
**Type:**  
Power, fully hydraulic

**Articulation Angle:**  
80° arc (40° each direction)

**Hydraulic Cycle Times Standard Z-Bar**  
**Raise:**  
5,8 sec

**Dump:**  
1,2 sec

**Lower (float down):**  
3,2 sec

**Total:**  
10,2 sec

**Turning Radius(measured to centreline of outside tyre)**  
5,00 m

**STANDARD Z-BAR PIN-ON**  
**Type Bucket Information**  
Standard Z-Bar linkage, with pin-on general-purpose bucket with bolt-on, segments and teeth.

**Bucket Type/Size**  
Capacity, Heaped:  
2,3 m³

Capacity, Struck:  
2,0 m³

Bucket Weight:  
1 046 kg

Bucket Width:  
2,55 m

Breakout Force:  
10 115 kg

Tipping Load, Straight:  
11 103 kg

Tipping Load, 40° Full Turn:  
9 019 kg

Safe Operating Load:  
4 809 kg

Reach, 45° Dump, Clearance (2,13 m):  
1,46 m

Reach, 45° Dump, Full Height:  
•• 0,99 m

Dump Clearance, 45°, Full Height:  
• 2,76 m

Overall Length, Bucket on Ground:  
••• 7,43 m

Loader Clearance Circle, Bucket Carry Position:  
11,65 m

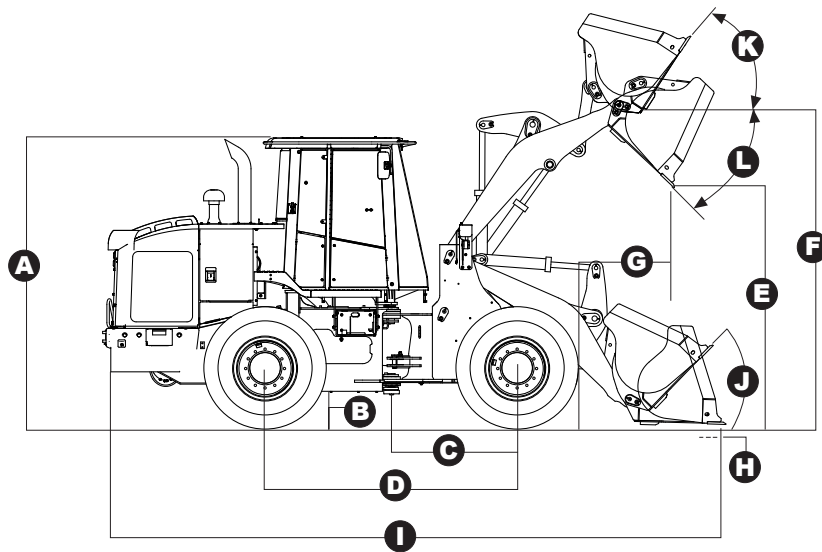
Operating Weight:  
13 121 kg

## Material

LOOSE MATERIAL					
	kg/m³		kg/m³		kg/m³
Caliche	1 250	Earth, wet, excavated	1 600	Sand and gravel, dry	1 720
Cinders	590	Granite, broken or large crushed	1 660	Sand and gravel, wet	2 020
Clay and gravel, dry	1 420	Gravel, dry	1 510	Sand, dry	1 420
Clay and gravel, wet	1 540	Gravel, dry 13 to 50 mm	1 690	Sand, wet	1 840
Clay, dry	1 480	Gravel, pit run (graveled sand)	1 930	Sandstone, broken	1 510
Clay, natural bed	1 660	Gravel, wet 13 to 50 mm	2 020	Shale	1 250
Clay, wet	1 660	Gypsum, crushed	1 600	Slag, broken	1 750
Coal, anthracite, broken	1 100	Limestone, broken or crushed	1 540	Stone, crushed	1 600
Coal, bituminous, broken	830	Magnetite, iron ore	2 790	Topsoil	950
Earth, dry, packed	1 510	Phosphate rock	1 280		
Earth, loam	1 250	Pyrite, iron ore	2 580		

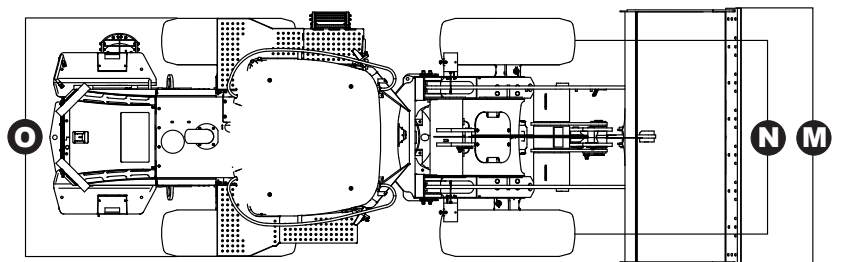
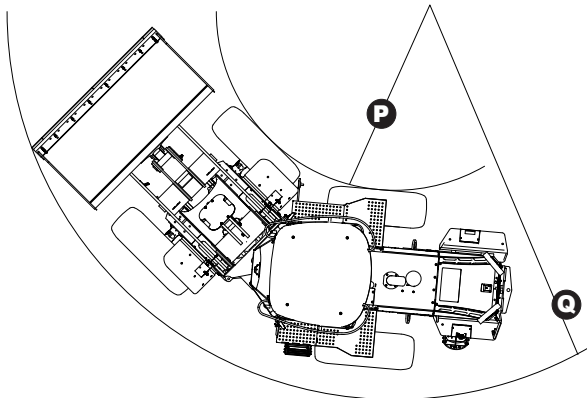
## I Dimensions with Pin-on Bucket Attachment Options

Standard Z-Bar Linkage, with Pin-On General-Purpose Bucket with Bolt-On Segments and Teeth



### Machine Dimensions

A	Height to Top of Cab and Canopy	3,24 m
B	Ground Clearance	0,40 m
C	Length from Centreline to Front Axle	1,45 m
D	Wheelbase	2,93 m
E	Dump Clearance •	2,76 m
F	Height to Hinge Pin, Fully Raised	3,82 m
G	Dump Reach ••	0,99 m
H	Maximum Digging Depth	0,095 m
I	Overall Length •••	7,43 m
J	Maximum Rollback at Ground Level	42°
K	Maximum Rollback, Boom Fully Raised	55°
L	Maximum Bucket Angle, Fully Raised	49°
M	Overall Bucket Width	2,550 m
N	Wheel Track	1,947 m
O	Outside Wheel Width	2,470 m
P	Full Turn Radius, Inside	4,545 m
Q	Full Turn Radius, Outside	5,800 m



## I Attachment Options

BUCKET OPTION				
Size	Type	Blade/Lip	Teeth	Cutting Edge
2,3 m <sup>3</sup>	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
2,3 m <sup>3</sup>	GP	Straight	None	4 Piece Bolt-on
1,5 m <sup>3</sup>	High Density	Straight	Bolt-on 2 strap, male adaptors	Segments
1,5 m <sup>3</sup>	High Density	Straight	None	4 Piece Bolt-on
1,6 m <sup>3</sup>	High Density	Spade	None	Weld-on Half Arrows
2,7 m <sup>3</sup>	Low Density	Straight	None	4 Piece Bolt-on
3,6 m <sup>3</sup>	Coal	Straight	None	4 Piece Bolt-on
4,5 m <sup>3</sup>	Wood Chip	Straight	None	4 Piece Bolt-on
QUICK ATTACH BUCKETS				
Size	Type	Blade/Lip	Teeth	Cutting Edge
2,3 m <sup>3</sup>	GP	Straight	Bolt-on 2 strap, male adaptors	Segments
QUICK ATTACH IMPLEMENTS		Quick attach pallet fork frame		
		Quick attach materials handling boom		
		Quick attach cane grab		