

# LM™ 30 Skid Steer Core Drill



## Technical Data Sheet

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### PRODUCT OVERVIEW

The LM™ 30 skid steer builds from the already proven and versatile LM platform. By mounting the rig on a CAT skid steer it makes the rig very mobile and fast to set up.

The CAT® skid steer was chosen due to proven performance and a the global support network.

#### FEATURES:

- CAT 246C skid steer
- 400 series feed frame
- Auto break out
- Bent axis, variable displacement hydraulic motor provides automatic speed adjustment so that maximum hydraulic power can be used across a wide range of speeds
- Spring close foot clamp
- 360° turntable
- Dumping feed frame
- Regen circuit to ensure feed speed is maintained.



### DRILLING DEPTH GUIDELINES

The figures in these tables have been calculated, based on field experiences, and may be reasonably expected. Actual drilling capacity will depend on in-hole tools, conditions,

drilling techniques and equipment used. Depth ratings include allowances for breaking of the core (rock strength 10MPa). Down hole conditions may result in depth capacity variations.

BQ DRILL HEAD	HOLE DEPTH (METERS)			HOLE DEPTH (FEET)		
	Up	Horizontal	Down	Up	Horizontal	Down
LTK48 (AWJ 14.5kg/3m rod)	470	460	580	1,542	1,509	1,903
LTK60 (BWJ 18.0kg/3m rod)	280	350	350	919	1,148	1,148
LTK48 (AWJLT 10.4kg/3m rod)	600	620	750	1,968	2,034	2,461
LTK60 (BWJLT 15.0kg/3m rod)	350	450	500	1,148	1,476	1,640
BRQ/BQ (18.0kg/3m rod)	300	350	450	984	1,148	1,476

HQ DRILL HEAD	HOLE DEPTH (METERS)			HOLE DEPTH (FEET)		
	Up	Horizontal	Down	Up	Horizontal	Down
NRQ/NQ (23.4kg/3m rod)	180	300	250	590	984	820
HRQ/HQ (34.5kg/3m rod)	80	140	60	262	459	197

Note: depth capacity includes allowance for force required to break core using 10 MPa rock strength.

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### TECHNICAL SPECIFICATIONS

	METRIC SYSTEM	U.S. CUSTOMARY SYSTEM
<b>SKID STEER LOADER</b>		
<b>Standard Unit CAT 246C</b>	CAT 3044C DIT Diesel Engine	
Power	54 kW	73 hp
<b>FEED FRAME (400 SERIES)</b>		
<b>Feed stroke</b>	1,100 mm	3.6 ft
<b>Max. rated pushing force</b>	42 kN @ 26 MPa	9,440 lbf @ 3,770 PSI
<b>Max. rated pulling force</b>	40.3 kN @ 26 MPa	9,060 lbf @ 3,770 PSI
<b>Rated carriage speed</b>	0.5 m/s per complete cycle	1.64 ft/s per complete cycle
<b>Normal rod handling speed</b>	Approx. 15 m/min (actual rod handling speed may vary with working conditions)	Approx. 50 ft/min (actual rod handling speed may vary with working conditions)
<b>Note</b>	Feed cylinder cushioned at both ends. Dual load holding valves.	
<b>CHUCK AND ROD HOLDER (BQ)</b>		
	<b>BQ Chuck</b>	<b>BQ Rod Holder</b>
<b>Maximum opening</b>	60.0 mm (2.86 in) Diameter corresponding to the ID of the LTK60 guide bush	60.0 mm (2.36 in) Diameter corresponding to the ID of the LTK60 guide bush
<b>Type</b>	Closed hydraulically Opened mechanically Automatic synchronization w/rod holder	Closed mechanically Opened hydraulically Automatic synchronization with chuck Manual overdrive
<b>Jaws</b>	3, with tungsten carbide inserts	2, with tungsten carbide inserts
<b>Max. rated axial holding capacity</b>	Forward and reverse rotation 75.0 kN* (16,600 lbf*)	Forward and reverse rotation 60.0 kN* (13,300 lbf*)
<b>Max. rated static torsional holding capacity</b>	520 N-m (383 lbf)*	1,670 N-m (1,230 lbf)*
<i>*at 7 MPa (1,015 PSI) with new jaws and rods.</i>		
<b>CHUCK AND ROD HOLDER (HQ)</b>		
	<b>HQ Chuck</b>	<b>HQ Rod Holder</b>
<b>Maximum opening</b>	97.0 mm (3.82 in) Diameter corresponding to the ID of the HQ guide bush	97.0 mm (3.82 in) Diameter corresponding to the ID of the HQ guide bush
<b>Type</b>	Closed hydraulically Opened mechanically Automatic synchronization w/rod holder	Closed mechanically Opened hydraulically Automatic synchronization with chuck Manual overdrive
<b>Jaws</b>	3, with tungsten carbide inserts	2, with tungsten carbide inserts
<b>Max. rated axial holding capacity</b>	80.0 kN* (17,985 lbf*)	80.0 kN* (17,985 lbf*)
<b>Max. rated static torsional holding capacity</b>	Forward and reverse rotation 3,900 N-m (2,870 lbf)*	Forward and reverse rotation 3,900 N-m (2,870 lbf)*
<i>*at 7 MPa (1,015 PSI) with new jaws and rods.</i>		

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### TECHNICAL SPECIFICATIONS

	METRIC SYSTEM	U.S. CUSTOMARY SYSTEM
<b>DRILL HEAD (BQ)</b>		
<b>Forward Rotation</b>		
Chuck Speed	2,300 RPM, continuously variable. Speeds will vary with oil type and temperature are only approximate	
Chuck torque output	140 N-m @ 1,500 RPM 390 N-m @ 500 RPM	103 lb-ft @ 1,500 RPM 287 lb-ft @ 500 RPM
<b>Reverse Rotation</b>		
Chuck Speed	45 RPM, Fixed to help prevent rod thread damage	
Chuck torque output	1,230 N-m @ 26 MPa with break-out device	910 ft-lb @ 3,770 psi with break-out device
<b>DRILL HEAD (HQ)</b>		
<b>Forward Rotation</b>		
Chuck Speed	1,650 RPM, continuously variable. Speeds will vary with oil type and temperature are only approximate	
Chuck torque output	104 N-m @ 1,200 RPM 375 N-m @ 500 RPM	77 ft-lb @ 1,200 RPM 276 ft-lb @ 500 RPM
<b>Reverse Rotation</b>		
Chuck Speed	60 RPM, Fixed to help prevent rod thread damage	
Chuck torque output	1,825 N-m @ 26 MPa with break-out device	1,350 lb-ft @ 3,770 psi with break-out device
<b>HYDRAULIC SYSTEM</b>		
<b>High Flow XPS</b>		
Max Pressure	26 MPa	3,770 psi
Max Flow	80 l/min	21 gpm
<b>Control System PLC</b>		
<b>WATER PUMP</b>		
<b>Variable speed hydraulically driven piston pump</b>		
<b>WIRELINE HOIST (OPTIONAL)</b>		
<b>Variable speed hydraulically driven c/w 500 m (1,640 ft) cable</b>		
Type	All hydraulic, with proportional spooling control Power up, power down, hydraulically locked in neutral Free wheel override, chain driven spooling device.	
Line Pull		
Bare Drum	11.77 kN	2,649 lb
Full Drum	4.51 kN	1,015 lb
Line Speed		
Bare Drum	0 - 100 m/min	328 ft/min
Full Drum	0 - 254 m/min	833 ft/min
Drum Capacity		
5 mm	1400 m	4,600 ft
6 mm	1000 m	3,280 ft
1/4"	895 m	2,930 ft

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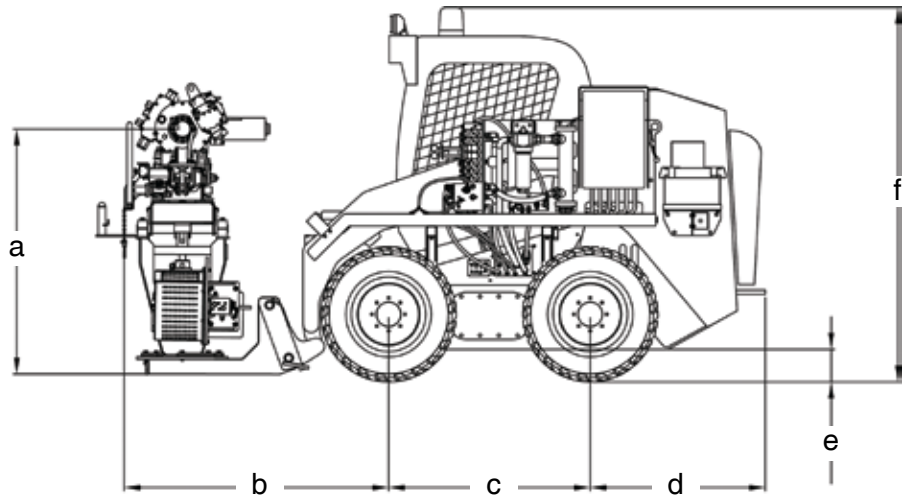
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### DIMENSIONS AND WEIGHTS\*

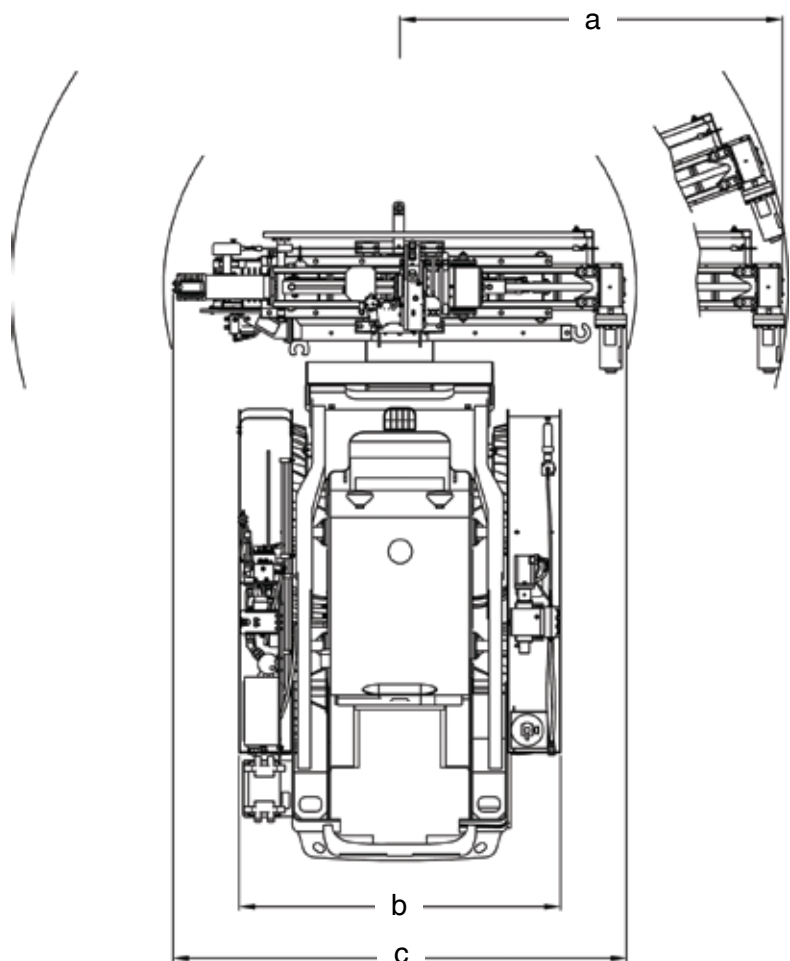
#### DRILL - SIDE VIEW

- a = 1,505 mm (59.25 in)
- b = 1,625 mm (63.98 in)
- c = 1,240 mm (48.82 in)
- d = 1,076 mm (42.36 in)
- e = 225 mm (8.86 in)
- f = 2,300 mm (90.55 in)



#### DRILL - TOP VIEW

- a = 2,393 mm (94.21 in) max. extension
- b = 2,010 mm (79.13 in)
- c = 2,836 mm (111.65 in)



\*Dimensions and weights may vary on options and should be checked before crating or lifting.

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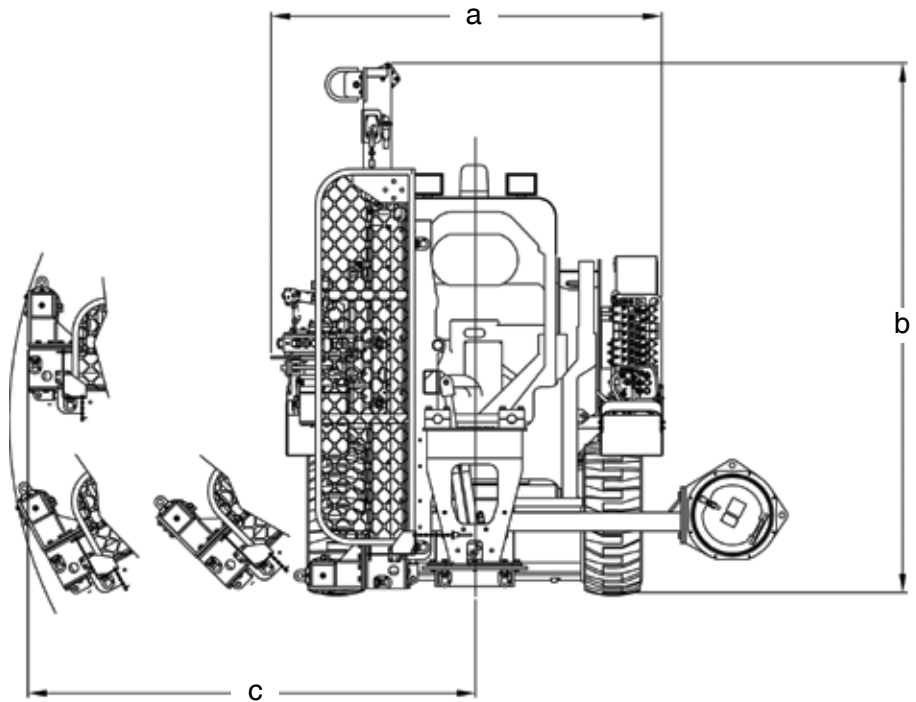
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### DIMENSIONS AND WEIGHTS\*

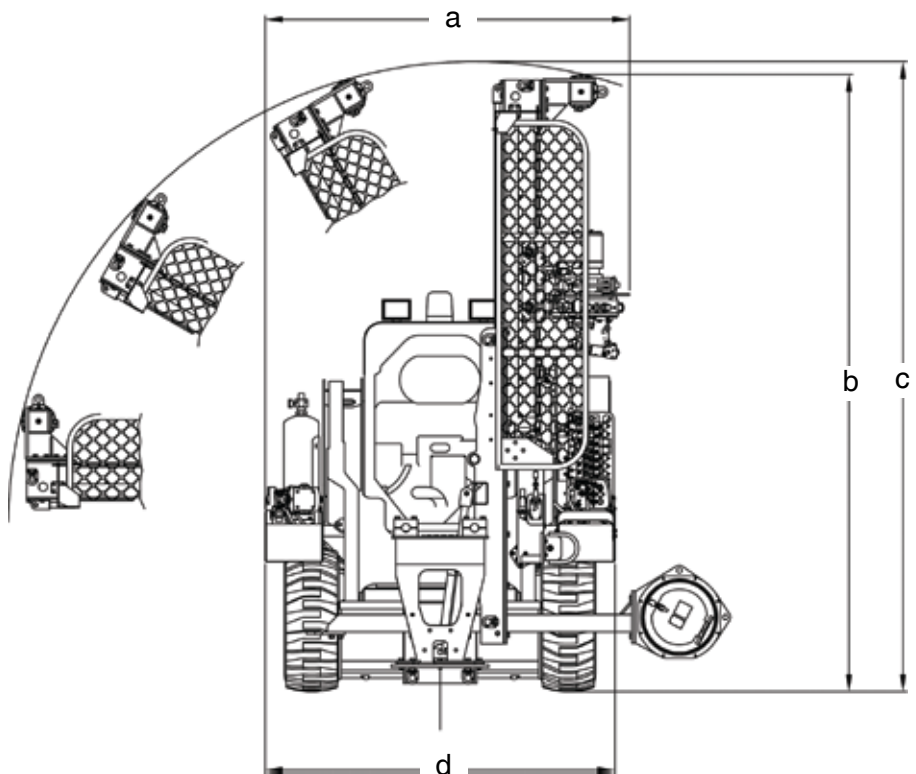
#### DRILL - FRONT VIEW

a = 2,085 mm (82.09 in)  
b = 2,830 mm (111.42 in)  
c = 2,390 mm (94.09 in) max. extension



#### DRILL - FRONT VIEW

a = 2,095 mm (82.48 in)  
b = 3,550 mm (139.76 in)  
c = 3,624 mm (142.68 in)  
d = 2,010 mm (79.13 in)



\*Dimensions and weights may vary on options and should be checked before crating or lifting.