

ENGINE

Model	CUMMINS 4BTA 3.9C
Type	Water cooled 4 cycle Diesel, 4 - cylinders in line, direct injection type turbocharged
Rated flywheel horse power (DIN 6270 gross)	109PS at 2,200rpm
(SAE J1349gross)	110PS at 2,200rpm
Piston displacement	3920 cc(239 cu in)
Maximum torque	448 N.m at 1,700rpm (330lb.ft at 1,700rpm)
Bore and stroke	112mm X 120mm (4.41" X 4.72")
Starting system	12V-2.9Kw
Batteries	2X12VX100AH
Alternator	45Amp

HYDRAULIC SYSTEM

Main pumps	2 variable displacement axial piston pumps
Max. oil flow	2X130 l /min (34.6US gpm/28.8 Imp gpm)
Steering and brake pump	2 gear pump
Max. oil flow, each pump	29 l /min (7.7 US gpm/6.4 Imp gpm)
Pilot pump	1 gear pump
Max. oil flow	21 l /min (5.5 US gpm/4.61 Imp gpm)
Relief valve settings	
Boom/Arm/Bucket	280kgf/cm ² (3,980psi)
Swing circuit	220kgf/cm ² (3,310psi)
Travel circuit	320kgf/cm ² (4,550psi)
Steering circuit	150kgf/cm ² (2,140psi)
Brake circuit	150kgf/cm ² (240psi)
Pilot circuit	40kgf/cm ² (570psi)

- Slow return valve and make-up valves employed to ensure smooth control of the front-end attachment.
- Extra spool provided for special application.

HYDRAULIC CYLINDERS

Cylinder	Q'ty	Bore dia X Rod dia X Stroke
Boom	2	100 X 65 X 1080mm (3.9 X 2.6 X 42.5in)
Arm	1	100 X 75 X 1195mm (4.3 X 3.0 X 47.0in)
Bucket	1	100 X 65 X 890mm (3.9 X 2.6 X 35.0in)
Dozer blade	2	100 X 65 X 210mm (3.9 X 2.6 X 8.27in)
Steering	1	80 X 40 X 184mm (3.5 X 1.6 X 7.2in)
Oscillation lock	2	90 X 90 X 135mm (3.5 X 3.5 X 5.3in)
Outtrigger	2	100 X 65 X 360mm (3.9 X 2.6 X 14in)

SWING SYSTEM

The swing system is powered by a hydraulic driven motor through spur and planetary gears.
Single row, shear type ball bearing with induction hardened internal gears are built into the swing circle.
Internal gear and pinion immersed in lubricant.
Pin type swing lock and automatic swing holding brake are provided.
Swing speed13.1rpm
Tail swing radius2,200mm(7'3")

DRIVES

4-wheel hydrostatic drive. Constant mesh, helical gear transmission provides 2 forward and reverse travel speeds.
Maximum drawbar pull6,600kg(14,546 lb)
Gradeability31° (60%)

Travel speed

Speeds	Forward	Reverse
1st	9.5km/h(5.9mph)	9.5km/h(5.9mph)
2nd	32.5km/h(21.4mph)	32.5km/h(21.4mph)

AXLES AND WHEELS

Full floating front axle is supported by center pin for oscillation. It can be locked by oscillation lock cylinders.
Rear axle is fixed on the chassis.
Tires9.00-20-14prX8ea

STEERING SYSTEM

Hydraulically actuated, orbitrol type steering system actuates on front wheels through the steering cylinders.
Minimum turning radius7,077mm(22' 3")

BRAKES

Service brake ; independent, powerful brake on front and rear axles.
- Spring released and hydraulically applied wettype multiple disc brake.
- Transmission is automatically locked in neutral for parking.

SERVICE REFILL CAPACITIES

	liters	Us gal	Imp gal
Fuel tank.....	200	58.1	48.4
Engine coolant.....	16	4.2	3.5
Engine oil.....	11	2.9	2.4
Swing device.....	2.2	0.6	0.5
Transmission.....	2.0	0.5	0.4
Differential(front).....	10	2.6	2.2
(rear).....	10	2.6	2.2
Hydraulic system.....	250	66.1	55.0
Hydraulic tank.....	170	44.9	37.4

CONTROLS

ENGINE

- Start and stop with key controlled switch
- Speed control : simple touch control system for effortless operation
- One-touch quick deceleration system improves fuel saving capabilities.

ATTACHMENT

- Pilot operated 2-joystick lever (ISO type)
 - LH lever Swing and Arm
 - RH lever Boom and Bucket
 - Lever at control panel Blade or outrigger
 - 2 pedal for two piece boom operation

SAFETY FEATURES

- Visible and audible safety system
 - Joystick locking system
 - Double horn, electric
 - Swing lock for transportation
 - Turn signals
 - Rotating beacon (optional)

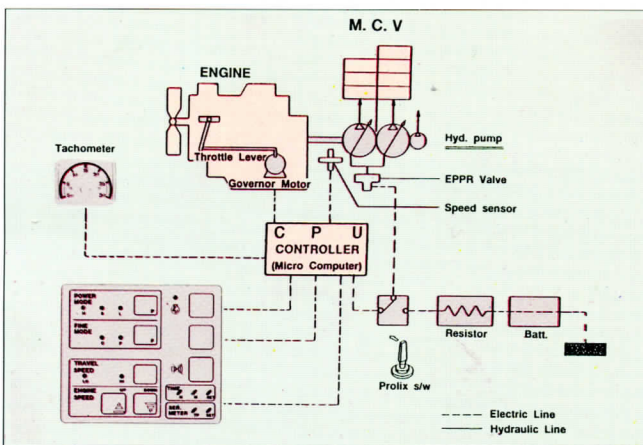
HYDRAULIC SYSTEM

- LOFS system applied for faster speed and maximum productivity
- LOFS : Logical Oil Flow Summation

TRAVEL & STEERING

- Pilot operated foot pedal valve
- Orbitrol valve and steering wheel.
- Special arrangement is available for joystick operation pattern

MODE SELECTION SYSTEM APPLIED



CAPO : Computer Aided Power Optimization system

CAPO, a new combined system of electronics, hydraulics and mechanics, is designed with three power modes and two fine modes. CAPO is controlled by two simple touch buttons on control panel allowing for maximum performance and economical operation.

THREE POWER MODES

H mode(Heavy duty)

is for hard ground excavating and rock handling in quarries.

S mode(standard operation)

is suitable for general excavation and maximum productivity.

L mode(Light duty)

is for efficiency in horizontal and sloped ground finishing work.

TWO FINE MODES

F mode(Fine control)

is designed for precise operations such as pipe laying, material loading and unloading operations.

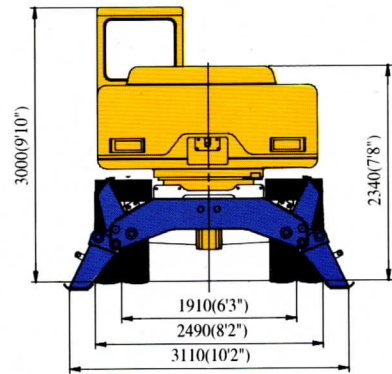
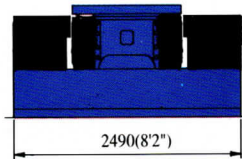
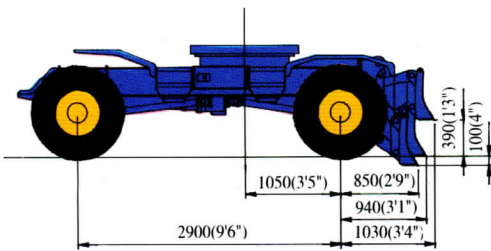
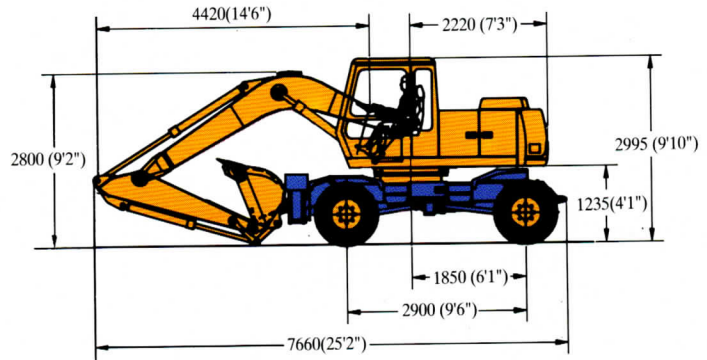
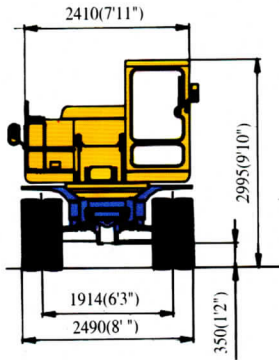
C mode(lifting control)

is applicable for lifting work to make safe and efficient operation.

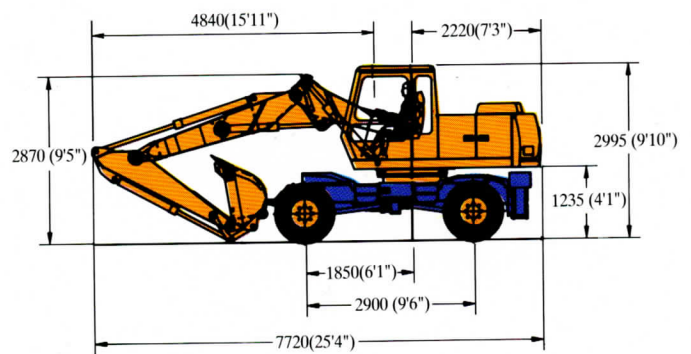
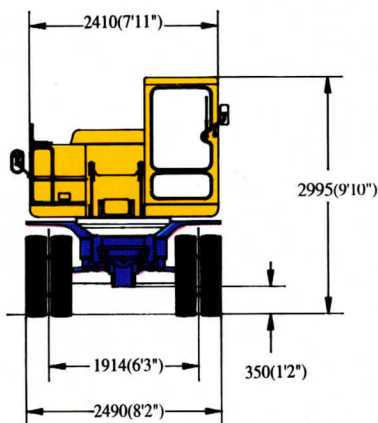
DIMENSIONES

MONO BOOM

mm(ft · in)

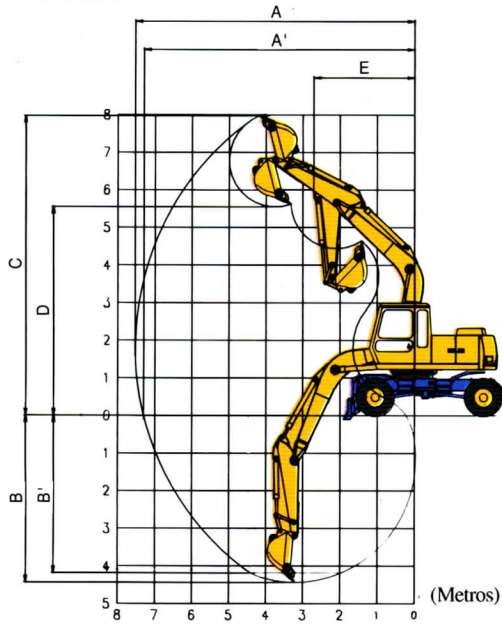


TWO PIECE BOOM, Cylinder type

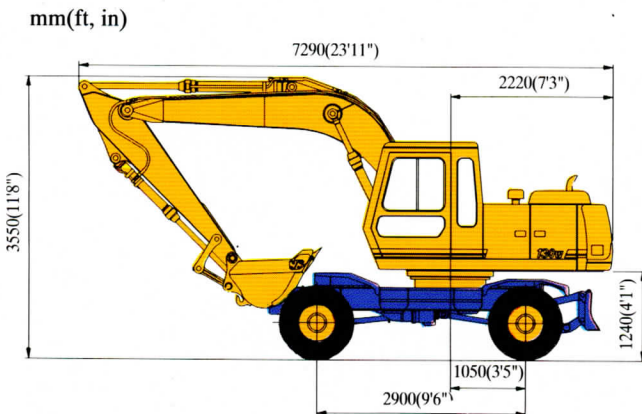


WORKING RANGE

MONO BOOM



	DESCRIPTION	2.0m Arm (6' 7")	2.4m Arm (7' 10")	3.0m Arm (9' 10")
A	Max. digging reach	7,530mm (24' 8")	7,930mm (26' 0")	8,395mm (27' 7")
A'	Max. digging reach on ground	7,300mm (23' 11")	7,715mm (25' 4")	8,190mm (26' 10")
B	Max. digging depth	4,435mm (14' 7")	4,835mm (15' 10")	5,435mm (17' 10")
B'	Max. digging depth (8ft level)	4,185mm (13' 9")	4,615mm (15' 2")	5,245mm (17' 2")
C	Max. digging height	7,975mm (26' 2")	8,290mm (27' 2")	8,420mm (27' 7")
D	Max. dumping height	5,550mm (18' 3")	5,840mm (19' 2")	5,990mm (19' 8")
E	Min. swing radius	2,680mm (8' 10")	2,675mm (8' 9")	2,795mm (9' 2")
Bucket digging force		72KN 7,250Kgf 15,980 lbf	72KN 7,250Kgf 15,980 lbf	72KN 7,250Kgf 15,980 lbf
Arm crowd force		57KN 5,730Kgf 12,630 lbf	50KN 5,100Kgf 11,240 lbf	46KN 4,690Kgf 10,340 lbf



Travelling position with 2.4m(7'10")

LIFTING CAPACITIES

ROBEX130W

With dozer blade

4.3m (14' 1") mono boom. 2.0m(6' 7")arm. Equipped with 0.51m³(PCS)

Load point height m(ft in)	Load radius									
	2 (6' 7")		3 (9' 10")		4 (13' 1")		5 (16' 5")		6 (19' 8")	
	⊖	⊕	⊖	⊕	⊖	⊕	⊖	⊕	⊖	⊕
5m (16' 5")							2.45 (5.40)	2.16 (4.76)		
4m (13' 1")					2.81 (6.19)	5.81 (12.8)	2.65 (5.84)	2.1 (4.63)	1.84 (4.06)	1.47 (3.24)
2m (6' 7")			5.94 (13.1)	4.4 (9.70)	4.21 (9.28)	2.76 (6.08)	3.41 (7.52)	1.91 (4.21)	2.99 (6.59)	1.39 (3.06)
0m (ground)	4.62 (10.2)	4.62 (10.2)	7.33 (16.2)	4.02 (9.26)	5.22 (11.5)	2.52 (5.56)	4.05 (8.93)	1.76 (3.88)	3.16 (6.97)	1.31 (2.89)
-2m (-6' 7")	8.91 (19.6)	8.91 (19.6)	6.88 (15.2)	4.05 (8.93)	5.10 (11.2)	2.5 (5.51)	3.89 (8.58)	1.76 (3.88)		
-3m (-9' 10")	8.39 (18.5)	8.39 (18.5)	5.92 (13.1)	4.17 (9.19)	4.32 (9.52)	2.58 (5.69)				

With dozer blade

4.3m (14' 1") mono boom. 2.4m(7' 10") arm. Equipped with 0.51 m³(PC

Load point height m(ft in)	Load radius									
	2 (6' 7")		3 (9' 10")		4 (13' 1")		5 (16' 5")		6 (19' 8")	
	⊖	⊕	⊖	⊕	⊖	⊕	⊖	⊕	⊖	⊕
6m (19' 8")							2.10 (4.63)	2.10 (4.63)		
5m (16' 5")							2.12 (4.67)	2.12 (4.67)	1.58 (3.4)	1.52 (3.35)
4m (13' 1")							2.35 (5.18)	2.14 (4.72)	2.3 (5.18)	1.5 (3.31)
2m (6' 7")			5.94 (11.6)	4.53 (9.99)	3.85 (8.49)	2.81 (6.20)	3.16 (6.97)	1.93 (4.25)	2.79 (6.15)	1.39 (3.06)
0m (ground)	4.46 (9.83)	4.46 (9.83)	7.14 (15.7)	4.01 (8.84)	5.04 (11.1)	2.51 (5.53)	3.91 (8.62)	1.75 (3.86)	3.15 (6.94)	1.29 (2.84)
-2m (-6' 7")	7.81 (17.2)	7.81 (17.2)	7.09 (15.6)	3.97 (8.75)	5.2 (11.5)	2.44 (5.38)	4.01 (8.84)	1.71 (3.77)		
-3m (-9' 10")	9.31 (20.5)	9.20 (20.3)	6.39 (14.1)	4.06 (8.95)	4.71 (10.4)	2.49 (5.49)				

With dozer blade

4.3m (14' 1") mono boom. 3.0m(9' 10") arm. Equipped with 0.51 m³(PC

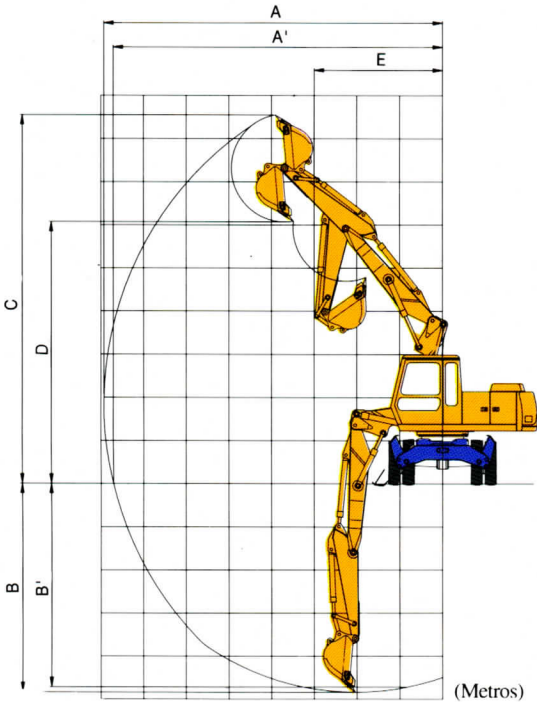
Load point height m(ft in)	Load radius									
	2 (6' 7")		3 (9' 10")		4 (13' 1")		5 (16' 5")		6 (19' 8")	
	⊖	⊕	⊖	⊕	⊖	⊕	⊖	⊕	⊖	⊕
6m (19' 8")									1.51 (3.33)	1.51 (3.33)
5m (16' 5")									1.84 (4.06)	1.57 (3.46)
4m (13' 1")									1.97 (4.34)	1.53 (3.37)
2m (6' 7")			4.29 (9.46)	4.29 (9.46)	3.27 (7.21)	2.89 (6.37)	2.77 (6.11)	1.96 (4.32)	2.49 (5.49)	1.4 (3.09)
0m (ground)	4.58 (10.1)	4.58 (10.1)	6.71 (14.8)	4.06 (8.95)	4.71 (10.4)	2.52 (5.56)	3.66 (8.07)	1.75 (3.86)	3.05 (6.72)	1.27 (2.80)
-2m (-6' 7")	6.98 (15.4)	6.98 (15.4)	7.22 (15.9)	3.9 (8.60)	5.22 (11.5)	2.39 (5.27)	4.03 (8.88)	1.65 (3.64)	3.08 (6.79)	1.22 (2.69)
-3m (-9' 10")	9.00 (19.8)	8.98 (19.8)	6.88 (15.2)	3.95 (8.71)	5.03 (11.1)	2.41 (5.31)	3.85 (8.49)	1.68 (3.70)		
-4m (-13' 1")	8.68 (19.1)	8.68 (19.1)	5.90 (13.0)	4.06 (8.95)	4.28 (9.44)	2.49 (5.49)				

Notes

- Lifting Capacity Ratings are based on SAE J1097.
- Lifting Capacity of the ROBEX Series does not exceed 75% of tipping load with the machine on firm

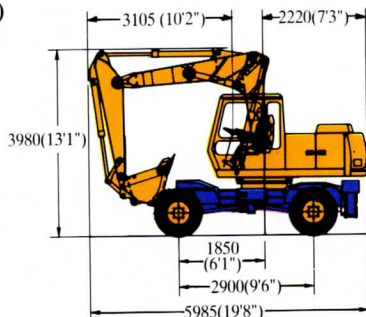
WORKING RANGE

TWO PIECE BOOM, CYLINDER TYPE



	DESCRIPTION	20m Arm (6' 7")	24m Arm (7' 10")	30m Arm (9' 10")
A	Max. digging reach	7,930mm (26' 0")	8,320mm (27' 3")	8,880mm (9' 10")
A'	Max. digging reach on ground	7,710mm (25' 3")	8,110mm (26' 7")	8,680mm (28' 6")
B	Max. digging depth	4,850mm (15' 11")	5,240mm (17' 2")	5,840mm (19' 2")
B'	Max. digging reach (8ft level)	4,720mm (15' 6")	5,130mm (16' 10")	5,730mm (18' 9")
C	Max. digging height	8,560mm (28' 1")	8,830mm (28' 11")	9,140mm (29' 12")
D	Max. dumping height	6,080mm (19' 11")	6,350mm (20' 10")	6,660mm (21' 10")
E	Min. swing radius	3,000mm (9' 10")	3,220mm (10' 7")	3,730mm (12' 3")
	Bucket digging force	72KN 7,250Kgf 15,980 lbf	72KN 7,250Kgf 15,980 lbf	72KN 7,250Kgf 15,980 lbf
	Arm crowd force	57KN 5,730Kgf 12,630 lbf	50KN 5,100Kgf 11,240 lbf	46KN 4,690Kgf 10,340 lbf

mm(ft, in)



Travelling position with 2.4m(7'10")

LIFTING CAPACITY

ROBEX 130W

With dozer blade & 1.9ton c/weight

2PCS-CYL TYPE boom. 2.0m(6' 7") arm. Equipped with 0.51m³ (PCS

Load point height m(ft in)		Load radius							
		1.5m (4' 11")		3.0m (9' 10")		4.5m (14' 9")		6.0m	
6.0m (5'2")	kg lb								
4.5m (14'9")	kg lb					*2.02 (4.45)	*2.02 (4.45)	*2.02 (4.55)	*2.02 (4.55)
3.0m (9'10")	kg lb			*4.03 (8.88)	*4.03 (8.88)	*2.73 (6.02)	2.55 (5.62)	*2.31 (5.11)	*2.31 (5.11)
1.5m (4'11")	kg lb			*5.58 (12.30)	4.33 (9.55)	*3.57 (7.87)	2.31 (5.09)	*2.71 (6.02)	*2.71 (6.02)
0m (ground)	kg lb			*6.34 (13.98)	4.14 (9.13)	*4.21 (9.28)	2.16 (4.76)	*3.01 (6.75)	*3.01 (6.75)
-1.5m (-4'11")	kg lb	*5.31 (11.71)	*5.31 (11.71)	*7.05 (15.54)	4.15 (9.15)	*4.47 (9.85)	2.12 (4.67)	*2.81 (6.19)	*2.81 (6.19)
-3.0m (-9'10")	kg lb			*6.44 (14.20)	4.31 (9.50)	*4.13 (9.11)	2.21 (4.87)		

With dozer blade & 1.9ton c/weight

2PCS-CYL TYPE boom. 2.4m(7' 10") arm. Equipped with 0.51m³ (PCS

Load point height m(ft in)		Load radius							
		1.5m (4' 11")		3.0m (9' 10")		4.5m (14' 9")		6.0m	
6.0m (5'2")	kg lb							*1.51 (3.35)	*1.51 (3.35)
4.5m (14'9")	kg lb							*1.81 (3.97)	*1.81 (3.97)
3.0m (9'10")	kg lb			*3.29 (7.25)	*3.29 (7.25)	*2.40 (5.29)	*2.40 (5.29)	*2.11 (4.65)	*2.11 (4.65)
1.5m (4'11")	kg lb			*5.48 (12.08)	4.47 (9.85)	*3.28 (7.23)	2.34 (5.16)	*2.51 (5.56)	*2.51 (5.56)
0m (ground)	kg lb			*5.87 (12.94)	4.14 (9.13)	*4.01 (8.84)	2.16 (4.76)	*2.91 (6.48)	*2.91 (6.48)
-1.5m (-4'11")	kg lb	*4.34 (9.57)	*4.34 (9.57)	*7.04 (15.52)	4.09 (9.02)	*4.40 (9.70)	2.09 (4.61)	*3.11 (6.99)	*3.11 (6.99)
-3.0m (-9'10")	kg lb			*6.71 (14.79)	4.20 (9.26)	*4.31 (9.50)	2.13 (4.70)		

With dozer blade & 1.9ton c/weight

2PCS-CYL TYPE boom. 3.0m(9' 10") arm. Equipped with 0.51m³ (PCS

Load point height m(ft in)		Load radius							
		1.5m (4' 11")		3.0m (9' 10")		4.5m (14' 9")		6.0m (5' 2")	
6.0m (5'2")	kg lb							*1.36 (3.00)	*1.36 (3.00)
4.5m (14'9")	kg lb							*1.46 (3.22)	*1.46 (3.22)
3.0m (9'10")	kg lb					*1.94 (4.28)	*1.94 (4.28)	*1.79 (3.95)	1.58 (3.48)
1.5m (4'11")	kg lb					*2.87 (6.33)	2.39 (5.27)	*2.26 (4.98)	1.45 (3.20)
0m (ground)	kg lb			*6.21 (13.69)	4.17 (9.19)	*3.70 (8.16)	2.16 (4.76)	*2.71 (5.97)	1.33 (2.93)
-1.5m (-4'11")	kg lb	*4.10 (9.13)	*4.14 (9.13)	*6.90 (15.21)	4.02 (8.86)	*4.23 (9.33)	2.05 (4.52)	*3.04 (6.71)	1.27 (2.80)
-3.0m (-9'10")	kg lb	*6.41 (14.13)	*6.41 (14.13)	*6.89 (15.19)	4.07 (8.97)	*4.36 (9.61)	2.05 (4.52)	*3.01 (6.72)	1.29 (2.84)

Notes

1. Lifting Capacity Ratings are based on SAE J1097.

2. Lifting Capacity of the ROBEX Series does not exceed 75% of tipping load with the machine on firm