STANDARD EQUIPMENT

- ISO Standard cabin
  - All-weather steel cab with 360° visibility
  - Safety glass windows
  - Rise-up type windshield wiper
  - Sliding fold-in front window
  - Sliding side window(LH)
  - Lockable door
  - Hot & cool box
  - Storage compartment & Ashtray
  - Radio & USB player
  - Cabin roof-steel cover
  - 12 volt power outlet (24V DC to 12V DC converter)
- Computer aided power optimization (New CAPO) system
  - 3-power mode, 2-work mode, User mode
  - Auto deceleration & one-touch deceleration system
  - Auto warm-up system
  - Auto overheat prevention system
- Automatic climate control
  - Air conditioner & heater
  - Defroster
- Self-diagnostics system
- Starting Aid (air grid heater) for cold weather
- Centralized monitoring
  - LCD display
  - Engine speed or Trip meter/Accel.
  - Clock
  - Gauges
  - Fuel level gauge
  - Engine coolant temperature gauge
  - Hyd. oil temperature gauge
  - Warnings
  - Overload
  - Communication error
  - Low battery
  - Air cleaner clogging
  - Indicators
  - Max power
  - Low speed/High speed
  - Fuel warmer
  - Auto idle
- Door and cab locks, one key
- Two outside rearview mirrors
- Fully adjustable suspension seat with seat belt
- Pilot-operated slidable joystick
- Four front working lights
- Electric horn
- Batteries (2 x 12V x 100 AH)
- Battery master switch
- Removable clean-out screen for oil cooler
- Automatic swing brake
- Removable reservoir tank
- Fuel pre-filter
- Boom holding system
- Arm holding system
- Track shoes (600mm, 24")
- Track rail guard
- Accumulator for lowering work equipment
- Electric transducer
- Lower frame under cover (Normal)

OPTIONAL EQUIPMENT

- Fuel filler pump (35 L/min)
- Beacon lamp
- Single-acting piping kit (breaker, etc.)
- Double-acting piping kit (clamshell, etc.)
- Quick coupler
- Travel alarm
- Boom
  - 5.1 m, 16′ 9″
- Arms
  - 2.2 m, 7′ 3″
  - 2.6 m, 8′ 6″
  - 3.1 m, 10′ 2″
- Cabin FOPS/FOG (ISO/DIS 10262 Lebel II)
  - FOPS (Falling Object Protective Structure)
  - FOG (Falling Object Guard)
- Cabin lights
- Cabin front window rain guard
- Sun visor
- Track shoes
  - Triple grousers shoe (500mm, 20″)
  - Triple grousers shoe (700mm, 28″)
  - Triple grousers shoe (800mm, 32″)
- Lower frame under cover (Additional)
- Tool kit
- Operator suit
- Rearview camera
- Seat
  - Mechanical suspension seat with heater
- Hi-mate (Remote Management System)
- Fuel warmer
- Air compressor
- Cabin-winenet guard / Finenet guard
- Blade
  - 640mm (2′ 1″) x 2,750mm (9′ 1″)
  - 640mm (2′ 1″) x 2,850mm (9′ 5″)
  - 640mm (2′ 1″) x 3,050mm (10′ 1″)

* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards.
* The photos may include attachments and optional equipment that are not available in your area.
* Materials and specifications are subject to change without advance notice.
* All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT

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We build a better future

Robex 180LC-9S

With Tier 2 Engine installed



*Photo may include optional equipment.

HYUNDAI HEAVY INDUSTRIES CO.,LTD.

Pride at Work

Hyundai Heavy Industries strives to build state-of-the art earthmoving equipment to give every operator maximum performance, more precision, versatile machine preferences, and proven quality. Take pride in your work with Hyundai!

Robex 180LC-9S



*Photo may include optional equipment.

Machine Walk-Around

Engine Technology

Easy & Simple Serviceability / Auto engine warm up feature / Anti-restart feature

Hydraulic System Improvements

New patented hydraulic control for improved controllability / Improved control valve design for added efficiency and smoother operation / New auto boom and swing priority system for optimum speed / New auto power boost feature for additional power when needed / Improved arm-in and boom-down flow regeneration system for added speed and efficiency

Pump Compartment

Industry-leading, powerful, reliable Kawasaki designed, variable volume in-line axial piston pumps
New compact solenoid block equipped with 4 solenoid valves, 1 EPPR valves, 1 check valve accumulator and pilot filter - controls 2 speed travel, power boost, boom priority, safety lock

Enhanced Operator Cab

Improved Visibility
Enlarged cab with improved visibility
Larger right-side glass, now one piece, for better right visibility
Safety glass windows on all sides - less expensive than (polycarbonate) and won't scratch or fade
Closeable sunshade for operator convenience / Reduced front window seam for improved operator view

Improved Cab Construction
New steel tube construction for added operator safety, protection and durability
New window open/close mechanism designed with cable and spring lift assist and single latch release

Improved Suspension Seat / Console Assembly
Ergonomic joysticks with auxiliary control buttons for attachment use - now with new sleek styling
New joystick consoles - now adjustable in height by way of dial at bottom
Adjustable arm rests - turn dial to raise or lower for optimum comfort

Advanced 7" Color Cluster
New Color LCD Display with easy to read digital gauges for hydraulic oil temperature, water temperature, and fuel / Simplified design makes adjustment and diagnostics easier. Also, new enhanced features such as rear-view camera are integrated into monitor.
3 power modes : (P) Power, (S) Standard, (E) Economy, 2 work modes : Dig & Attachment, (U) User mode for operator preference
Enhanced self-diagnostic features with GPS / satellite technology
One pump flow or two pump flow for optional attachment is now selectable through the cluster.
/ New anti-theft system with password capability
Boom speed and arm regeneration are selectable through the monitor.
Auto power boost is now available - selectable (on/off) through the monitor.
Powerful air conditioning and heat with auto climate control, 20% more heat and air output than 7 series!
RMS (Remote Management System) works through GPS/satellite technology to ultimately provide better customer service and support.

Undercarriage

Sealed track chain (urethane seals) / Standard track rail guard / Comfortable bolt-on steps
Large upper roller cut-outs for debris clean-out / Tapered side frames for debris clean-out
Grease-type track tensioner

Preference

Operating a 9S Series is unique to every operator. Operators can fully customize their work environment and operating preferences to fit their individual needs.

*Photo may include optional equipment.



Wide Cabin with Excellent Visibility

The newly designed cabin was conceived for more space, a wider field of view and operator comfort. Special attention was given to a clear, open and convenient interior with plenty of visibility on the machine surroundings and the job at hand. This well balanced combination of precision aspects put the operator in the perfect position to work safely and securely.

Operator Comfort

In 9S Series cabin you can easily adjust the seat, console and armrest settings to best suit your personal operating preferences. Seat and console position can be set together and independent from each other. Other preference settings that add to overall operator comfort include the fully automatic high capacity airconditioning system and the radio / USB player.





Reduced Stress

Work is stressful enough. Your work environment should be stress free. Hyundai's 9S Series provides improved cab amenities, additional space and a comfortable seat to minimize stress to the operator. A powerful climate control system provides the operator with optimum air temperature. An advanced audio system with USB player, AM/FM stereo is perfect for listening to music favorites.



Operator - Friendly Cluster

The advanced new cluster with 7 inch wide color LCD screen and toggle switch allows the operator to select his personal machine preferences. Power and work mode selection, self diagnostics, optional rear-view camera, maintenance check lists, start-up machine security, and video functions were integrated into the cluster to make the machine more versatile and the operator more productive.



Precision

Innovative hydraulic system technologies make the 9S Series excavator fast, smooth and easy to control.

*Photo may include optional equipment.

Computer Aided Power

The engine horsepower and hydraulic horsepower together in unison through the advanced CAPO(Computer Aided Power Optimization) system, flow for the job at hand. Operator can set their own preferences for boom or swing priority, power mode selection and optional work tools at the touch of a button.
The CAPO system also provides complete self diagnostic features and digital gauges for important information like hydraulic oil temperature, water temperatures and fuel level. This system interfaces with multiple sensors placed throughout the hydraulic system as well as the hydraulic flow.

Power Mode

P (Power Max) mode maximizes machine speed and power for mass production.
S (Standard) mode provides a reduced, fixed rpm for optimum performance and improved fuel economy. For maximum fuel savings and improved control, E (Economy) mode provides precise flow and power based on load demand. Three unique power modes provide the operator with custom power, speed and fuel economy.

Work Mode

The work mode allows the operator to select single flow attachments like a hydraulic breaker or bi-directional flow attachments like a crusher. Flow settings unique to each attachment can be programmed from within the cluster.

User Mode

Some jobs require more precise machine settings. Using the versatile U (User) mode, the operator can customize engine speed, pump output, idle speed and other machine settings for the job at hand.

Improved Hydraulic System



To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and improved controllability. Improved pump flow control reduces flow when controls are not being used to minimize fuel consumption.
Improved spool valves in the control valve are engineered to provide more precise flow to each function with less effort.
Improved hydraulic valves, precision-designed variable volume piston pumps, fine-touch pilot controls, and enhanced travel functions make any operator running a 9S Series look like a smooth operator. Newly improved features include arm-in and boom-down flow regeneration, improved control valve technology and innovative auto boom and swing priority for optimal performance in any application.



Auto Boom-swing Priority

This smart function automatically and continuously looks the ideal hydraulic flow balance for the boom and swing motions of the machine. The advanced CAPO system monitors the hydraulic system and adjusts its settings to maximize performance and productivity.

Performance

9S Series is designed for maximum performance to keep the operator working productively.

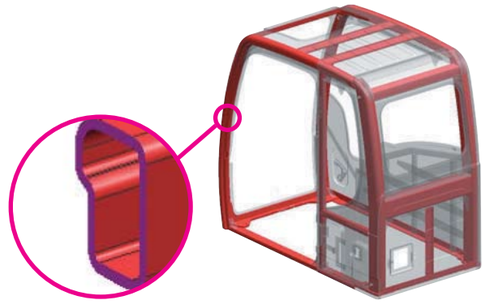


*Photo may include optional equipment.



Track Rail Guard & Adjusters

Durable track rail guards keep track links in place. Track adjustment is made easy with standard grease cylinder track adjusters and shock absorbing springs.



Structure Strength

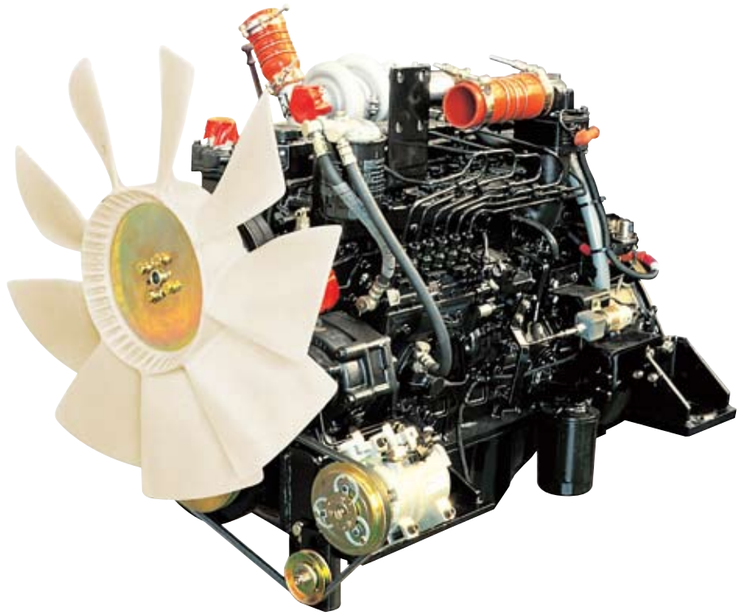
The 9S Series cabin structure has been fitted with stronger but slimmer tubing for more safety and improved visibility. Low-stress, high strength steel is integrally welded to form a stronger, more durable upper and lower frame. Structural integrity was tested by way of FEM (Finite Elements Method) analysis and long-term durability tests.

Mitsubishi S6S-DT

The six cylinders turbo-charged and charged air cooled, engine is built for power, reliability and economy. This engine meets EPA tier II and EU stage II emission regulation.

Reliability You Can Depend On

Mitsubishi S6S-DT engine is ideal solution for the toughest work environment. The engine is built from a cast iron, skirted block with main bearing support between each cylinder. This combination provides maximum strength, rigidity, and crankshaft support. Special liquid cooling results in uniform temperature distribution.
The compact size of the engine makes it easier to service than other engines. The low engine height allows easy access for maintenance due to a side-mounted, gear-driven camshaft.



Profitability

9S Series is designed to maximize profitability through improved efficiencies, enhanced service features and longer life components.



*Photo may include optional equipment.

Fuel Efficiency

9S Series excavators are engineered to be extremely fuel efficient. New innovations like three-stage auto decel system and the new economy mode help to conserve fuel and reduce the impact on the environment.



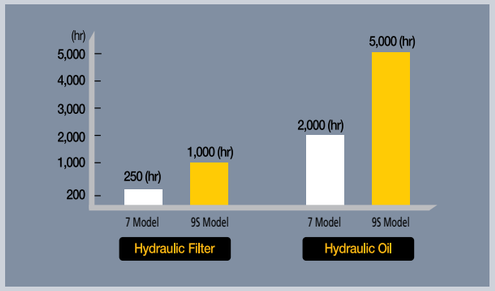
Hi-mate (Remote Management System)

Hi-mate, Hyundai's proprietary remote management system, provides operators and dealer service personnel access to vital service and diagnostic information on the machine from any computer with internet access. Users can pinpoint machine location using digital mapping and set machine work boundaries, reducing the need for multiple service calls. Hi-mate saves time and money for the owner and dealer by promoting preventative maintenance and reducing machine downtime.



Easy Access

Ground-line access to filters, lube fittings, fuses, machine computer components and wide open compartments makes service more convenient on the 9S Series.



Extended Life Components

9S Series excavators were designed with bushings designed for extended lube intervals (250 hrs) & polymer shims (wear resistant, noise reducing), extended-life hydraulic filters (1,000hrs), long-life hydraulic oil (5,000hrs), more efficient cooling systems and integrated preheating systems which extend service intervals, minimize operating costs and reduce machine downtime.

Specifications

ENGINE

MODEL			Mitsubishi S6S-DT
Type			Water cooled, 4 cycle Diesel, 6-cylinders in line, direct injection, turbocharged charger and air cooled
Rated flywheel horse power	SAE	J1995 (gross)	126 HP (94 kW)/ 2,100 rpm
		J1349 (net)	116 HP (87 kW)/ 2,100 rpm
	DIN	6271/1 (gross)	128 PS (94 kW)/ 2,100 rpm
		6271/1 (net)	118 PS (87 kW)/ 2,100 rpm
Max. torque			42.5 kgf·m(307 lbf·ft)/ 1,500 rpm
Bore X stroke			94 x 120 mm (3.70" x 4.72")
Piston dispalcement			4,996cc (305 in^3)
Batteries			2 X 12V X 100AH
Starting motor			24V- 5.0kW
Alternator			24V- 50Amp

HYDRAULIC SYSTEM

MAIN PUMP	
Type	Two variable displacement piston pumps
Rated flow	2 X 160L /min (42.3 US gpm / 35.2 UK gpm)
Sub-pump for pilot circuit	Gear pump

Cross-sensing and fuel saving pump system.

HYDRAULIC MOTORS	
Travel	Two speed axial pistons motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING	
Implement circuits	350 kgf/cm^2 (4,980 psi)
Travel	350 kgf/cm^2 (4,980 psi)
Power boost (boom, arm, bucket)	380 kgf/cm^2 (5,410 psi)
Swing circuit	285 kgf/cm^2 (4,050 psi)
Pilot circuit	40 kgf/cm^2 (570 psi)
Service valve	Installed

HYDRAULIC CYLINDERS	
No. of cylinder bore X stroke	Boom: 2-115 X 1,090 mm (4.5" X 42.9")
	Arm: 1-120 X 1,355 mm (4.7" X 53.3")
	Bucket: 1-110 X 995 mm (4.3" X 39.2")
	Blade: 2-110 X 320 mm (4.3" X 12.6")

DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	17,000 kgf (37,500 lbf)
Max. travel speed(high) / (low)	5.5 km/hr (3.4 mph) / 3.2 km/hr (2.0 mph)
Gradeability	30^0 (58 %)
Parking brake	Multi wet disc

CONTROL

Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless and fatigueless operation.

Pilot control	Two joysticks with one safety lever (LH): Swing and arm, (RH): Boom and bucket(ISO)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, Dial type

SWING SYSTEM

Swing motor	Two fixed displacement axial pistons motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	11 rpm

COOLANT & LUBRICANT CAPACITY

Refilling	liter	US gal	UK gal
Fuel tank	270	71.3	59.4
Engine coolant	17.5	4.6	3.8
Engine oil	16.5	4.4	3.6
Swing device-gear oil	5.0	1.3	1.1
Final drive(each)-gear oil	5.8	1.5	1.3
Hydraulic system(including tank)	270	71.3	59.4
Hydraulic tank	160	42.3	35.2

UNDERCARRIAGE

The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing springs and sprockets, and a track chain with double or triple grouser shoes.

Center frame	X - leg type	
Track frame	Pentagonal box type	
No. of shoes on each side	51	46
No. of carrier roller on each side	2	2
No. of track roller on each side	8	8
No. of rail guard on each side	2	2

OPERATING WEIGHT (APPROXIMATE)

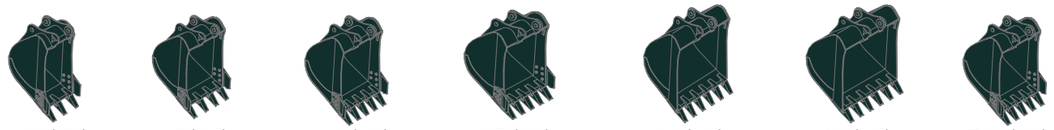
Operating weight, including 5,100mm (16' 9") boom, 2,600mm (8' 6") arm, SAE heaped 0.76m^3 (0.99 yd^3) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

MAJOR COMPONENT WEIGHT	
Upperstructure	4,980 kg (10,980 lb)
(5.1m (16' 9")mono boom(with arm cylinder)	1,250 kg (2,760 lb)

OPERATING WEIGHT				
Shoes			Operating weight	Ground pressure
Type	Width mm(in)		kg(lb)	kgf/cm^2(psi)
Triple grouser	500 (20")	R180LC-9S	18,350(40,450)	0.51(7.25)
		R180LCD-9S	19,350(42,660)	0.53(7.54)
		R180NLC-9S	18,260(40,260)	0.50(7.11)
	600 (24")	R180LC-9S	18,600(41,010)	0.43(6.11)
		R180LCD-9S	19,600(43,210)	0.45(6.40)
		R180NLC-9S	18,510(40,810)	0.43(6.11)
	700 (28")	R180LC-9S	18,850(41,560)	0.37(5.26)
		R180LCD-9S	19,850(43,760)	0.39(5.55)
		R180NLC-9S	18,760(41,360)	0.37(5.26)
	800 (32")	R180LC-9S	19,100(42,110)	0.33(4.69)
		R180LCD-9S	20,100(44,310)	0.35(4.98)
		R180NLC-9S	19,010(41,910)	0.33(4.69)

BUCKETS

All buckets are welded with high-strength steel.



SAE heaped m^3 (yd^3)	0.39(0.51)	0.50(0.65)	0.64(0.84)	0.76(0.99)	0.89(1.16)	1.05(1.37)	▣0.69(0.90)

Capacity m^3 (yd^3)		Width mm (in)		Weight kg (lb)	Recommendation mm (ft·in)		
					5,100 (16' 9") Mono Boom		
SAE heaped	CECE heaped	Without sidecutters	With sidecutters		2,200 (7' 3") Arm	2,600 (8' 6") Arm	3,100 (10' 2") Arm
0.39(0.51)	0.34(0.44)	620(24.4)	740(29.1)	410(900)	●	●	●
0.50(0.65)	0.44(0.58)	760(29.9)	880(34.6)	470(1,040)	●	●	●
0.64(0.84)	0.55(0.72)	920(36.2)	1,040(40.9)	510(1,120)	●	●	■
0.76(0.99)	0.65(0.85)	1,060(41.7)	1,180(46.5)	570(1,260)	●	■	▲
0.89(1.16)	0.77(1.01)	1,220(48.0)	1,340(52.8)	610(1,340)	■	▲	–
1.05(1.37)	0.90(1.18)	1,400(55.1)	1,520(59.8)	680(1,500)	▲	–	–
▣ 0.69(0.90)	0.62(0.81)	990(39.0)	-	700(1,540)	●	■	▲

▣ Heavy duty bucket

● : Applicable for materials with density of 2,000 kg /m^3 (3,370 lb/ yd^3) or less

■ : Applicable for materials with density of 1,600 kg /m^3 (2,700 lb/ yd^3) or less

▲ : Applicable for materials with density of 1,100 kg /m^3 (1,850 lb/ yd^3) or less

ATTACHMENT

Booms and arms are welded, a low-stress, full-box section design. 5.1m(16' 9") boom and 2.20m(7' 3"), 2.60m(8' 6"), 3.10m(10' 2") arms are available.

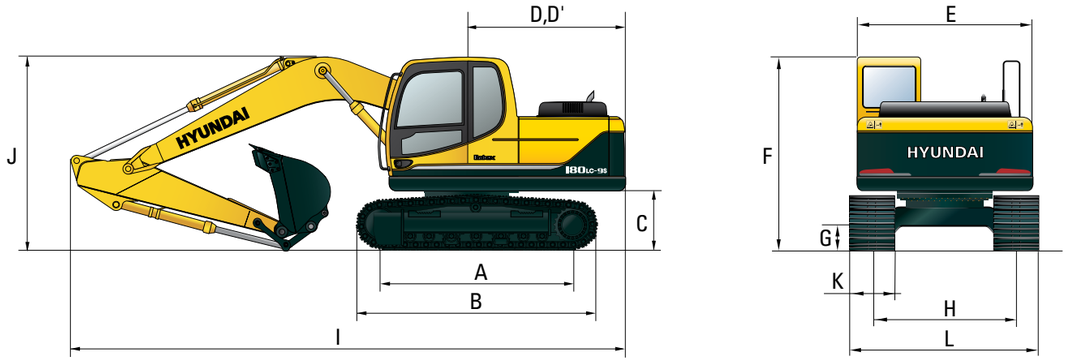
DIGGING FORCE

Boom	Length	mm (ft·in)	5,100 (16' 9")			Remarks
	Weight	kg (lb)	1,250 (2,760)			
Arm	Length	mm (ft·in)	2,200 (7' 3")	2,600 (8' 6")	3,100 (10' 2")	
	Weight	kg (lb)	750 (1,560)	810 (1,790)	890 (1,960)	
Bucket digging force	SAE	kN	107.9 [117.2]	107.9 [117.2]	107.9 [117.2]	[ ]: Power Boost
		kgf	11,000 [11,940]	11,000 [11,940]	11,000 [11,940]	
		lbf	24,250 [26,330]	24,250 [26,330]	24,250 [26,330]	
	ISO	kN	123.6 [134.2]	123.6 [134.2]	123.6 [134.2]	
		kgf	12,600 [13,680]	12,600 [13,680]	12,600 [13,680]	
		lbf	27,780 [30,160]	27,780 [30,160]	27,780 [30,160]	
Arm crowd force	SAE	kN	87.2 [94.7]	77.3 [83.9]	69.0 [74.9]	
		kgf	8,890 [9,650]	7,880 [8,560]	7,030 [7,630]	
		lbf	19,600 [21,280]	17,370 [18,860]	15,500 [16,830]	
	ISO	kN	91.0 [98.8]	80.3 [87.2]	71.4 [77.5]	
		kgf	9,280 [10,080]	8,190 [8,890]	7,280 [7,900]	
		lbf	20,460 [22,210]	18,060 [19,600]	16,050 [17,430]	

Note: Boom weight includes arm cylinder, piping, and pin
Arm weight includes bucket cylinder, linkage, and pin

Dimensions & Working Range

R180LC-9S DIMENSIONS



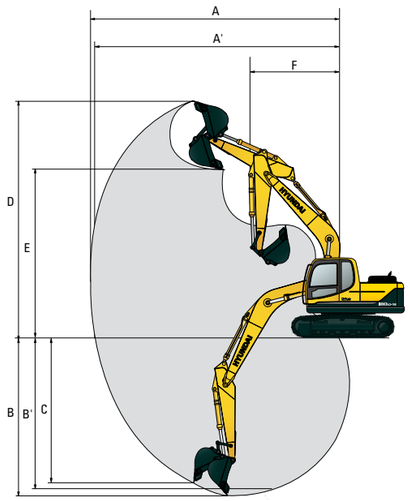
mm (ft·in)

A	Tumbler distance	3,360 (11′ 0″)
B	Overall length of crawler	4,150 (13′ 7″)
C	Ground clearance of counterweight	1,055 (3′ 6″)
D	Tail swing radius	2,530 (8′ 4″)
D′	Rear-end length	2,480 (8′ 2″)
E	Overall width of upperstructure	2,475 (8′ 1″)
F	Overall height of cab	2,980 (9′ 9″)
G	Min. ground clearance	460 (1′ 6″)
H	Track gauge	2,250 (7′ 5″)

mm (ft·in)

	Boom length	5,100(16′ 9″)		
	Arm length	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
I	Overall length	8,660 (28′5″)	8,650 (28′ 5″)	8,650 (28′5″)
J	Overall height of boom	3,010 (9′ 11″)	2,990 (9′ 10″)	3,150 (10′ 4″)
K	Track shoe width	500 (20″)	600 (24″)	700 (28″)
L	Overall width	2,750 (9′ 1″)	2,850 (9′ 5″)	2,950 (9′ 9″)

R180LC-9S WORKING RANGE

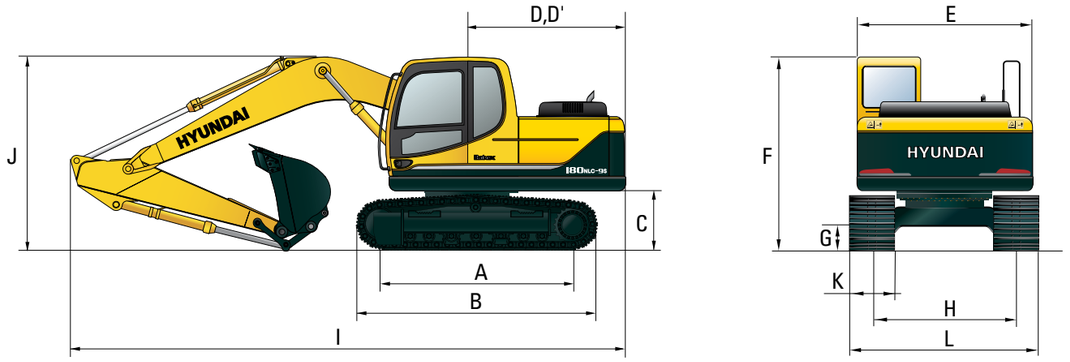


mm (ft·in)

	Boom length	5,100 (16′ 9″)		
	Arm length	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
A	Max. digging reach	8,690 (28′ 6″)	9,020 (29′ 7″)	9,450 (31′ 0″)
A′	Max. digging reach on ground	8,530 (27′ 12″)	8,860 (29′ 1″)	9,300 (30′ 6″)
B	Max. digging depth	5,660 (18′ 7″)	6,060 (19′ 11″)	6,560 (21′ 6″)
B′	Max. digging depth (8' level)	5,430 (17′ 10″)	5,850 (19′ 2″)	6,370 (20′ 11″)
C	Max. vertical wall digging depth	5,120 (16′ 10″)	5,380 (17′ 8″)	5,710 (18′ 9″)
D	Max. digging height	8,750 (28′ 8″)	8,840 (29′ 0″)	8,980 (29′ 6″)
E	Max. dumping height	6,110 (20′ 1″)	6,220 (20′ 5″)	6,390 (21′ 0″)
F	Min. swing radius	3,180 (10′ 5″)	3,170 (10′ 5″)	3,170 (10′ 5″)

Dimensions & Working Range

R180NLC-9S DIMENSIONS



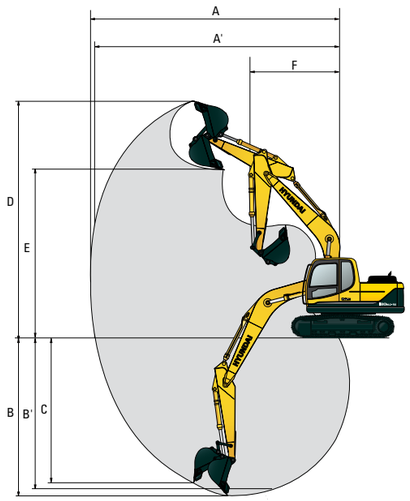
mm (ft·in)

A	Tumbler distance	3,360 (11′ 0″)
B	Overall length of crawler	4,150 (13′ 7″)
C	Ground clearance of counterweight	1,055 (3′ 6″)
D	Tail swing radius	2,530 (8′ 4″)
D′	Rear-end length	2,480 (8′ 2″)
E	Overall width of upperstructure	2,475 (8′ 1″)
F	Overall height of cab	2,980 (9′ 9″)
G	Min. ground clearance	460 (1′ 6″)
H	Track gauge	2,000 (6′ 7″)

mm (ft·in)

	Boom length	5,100(16′ 9″)		
	Arm length	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
I	Overall length	8,660 (28′5″)	8,650 (28′ 5″)	8,650 (28′5″)
J	Overall height of boom	3,010 (9′ 11″)	2,990 (9′ 10″)	3,150 (10′ 4″)
K	Track shoe width	500 (20″)	600 (24″)	700 (28″)
L	Overall width	2,500 (8′ 2″)	2,600 (8′ 6″)	2,700 (8′ 10″)

R180NLC-9S WORKING RANGE

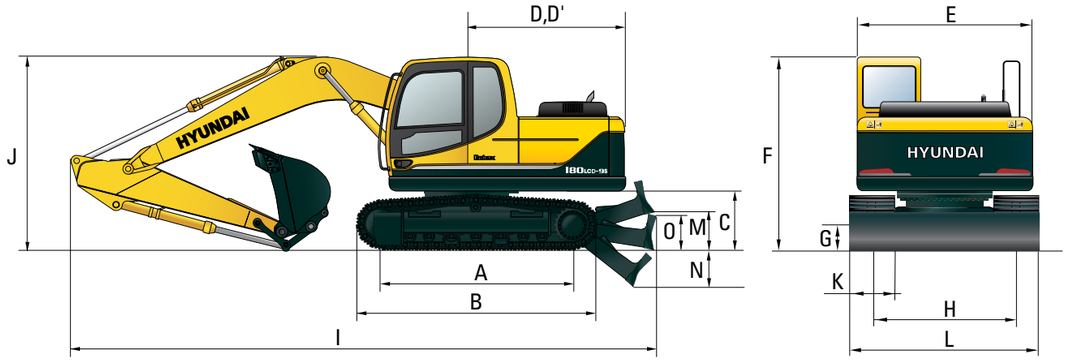


mm (ft·in)

	Boom length	5,100 (16′ 9″)		
	Arm length	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
A	Max. digging reach	8,690 (28′ 6″)	9,020 (29′ 7″)	9,450 (31′ 0″)
A′	Max. digging reach on ground	8,530 (27′ 12″)	8,860 (29′ 1″)	9,300 (30′ 6″)
B	Max. digging depth	5,660 (18′ 7″)	6,060 (19′ 11″)	6,560 (21′ 6″)
B′	Max. digging depth (8' level)	5,430 (17′ 10″)	5,850 (19′ 2″)	6,370 (20′ 11″)
C	Max. vertical wall digging depth	5,120 (16′ 10″)	5,380 (17′ 8″)	5,710 (18′ 9″)
D	Max. digging height	8,750 (28′ 8″)	8,840 (29′ 0″)	8,980 (29′ 6″)
E	Max. dumping height	6,110 (20′ 1″)	6,220 (20′ 5″)	6,390 (21′ 0″)
F	Min. swing radius	3,180 (10′ 5″)	3,170 (10′ 5″)	3,170 (10′ 5″)

Dimensions & Working Range

R180LCD-9S DIMENSIONS



mm (ft·in)

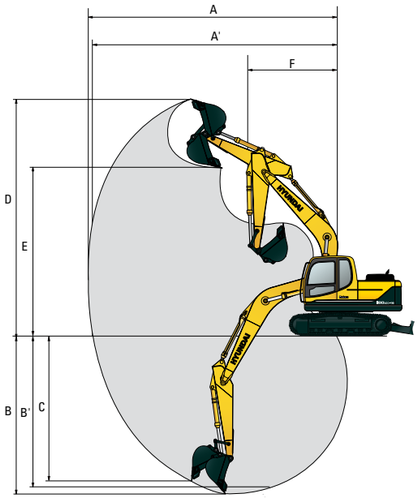
A	Tumbler distance	3,360 (11′ 0″)
B	Overall length of crawler	4,150 (13′ 7″)
C	Ground clearance of counterweight	1,055 (3′ 6″)
D	Tail swing radius	2,530 (8′ 4″)
D′	Rear-end length	2,480 (8′ 2″)
E	Overall width of upperstructure	2,475 (8′ 1″)
F	Overall height of cab	2,980 (9′ 9″)
G	Min. ground clearance	460 (1′ 6″)
H	Track gauge	2,250 (7′ 5″)
M	Ground clearance of blade up	615 (2′ 0″)
N	Depth of blade down	675 (2′ 3″)
O	Height of blade	640 (2′ 1″)

mm (ft·in)

	Boom length	5,100(16′ 9″)		
	Arm length	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
I	Overall length	9,110 (29'11'')	9,100 (29′ 10″)	9,100 (29'10'')
J	Overall height of boom	3,010 (9′ 11″)	2,990 (9′ 10″)	3,150 (10′ 4″)

K	Track shoe width	500 (20″)	600 (24″)	700 (28″)	800 (32″)
L	Overall width	2,750 (9′ 1″)	2,850 (9′ 5″)	2,950 (9′ 9″)	3,050 (10′ 1″)

R180LCD-9 WORKING RANGE



mm (ft·in)

	Boom length	5,100 (16′ 9″)		
	Arm length	2,200 (7′ 3″)	2,600 (8′ 6″)	3,100 (10′ 2″)
A	Max. digging reach	8,690 (28′ 6″)	9,020 (29′ 7″)	9,450 (31′ 0″)
A′	Max. digging reach on ground	8,530 (27′ 12″)	8,860 (29′ 1″)	9,300 (30′ 6″)
B	Max. digging depth	5,660 (18′ 7″)	6,060 (19′ 11″)	6,560 (21′ 6″)
B′	Max. digging depth (8' level)	5,430 (17′ 10″)	5,850 (19′ 2″)	6,370 (20′ 11″)
C	Max. vertical wall digging depth	5,120 (16′ 10″)	5,380 (17′ 8″)	5,710 (18′ 9″)
D	Max. digging height	8,750 (28′ 8″)	8,840 (29′ 0″)	8,980 (29′ 6″)
E	Max. dumping height	6,110 (20′ 1″)	6,220 (20′ 5″)	6,390 (21′ 0″)
F	Min. swing radius	3,180 (10′ 5″)	3,170 (10′ 5″)	3,170 (10′ 5″)

Lifting Capacity

R180LC-9S

Rating over-front Rating over-side or 360 degree

Boom : 5.10 m (16′ 9″) / Arm : 2.20 m (7′ 3″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius								At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		Capacity		Reach
												m (ft)
7.5 m	kg									*3750	*3750	5.60
(25 ft)	lb									*8270	*8270	(18.4)
6.0 m	kg									*3660	2920	6.98
(20 ft)	lb									*8070	6440	(22.9)
4.5 m	kg					*4570	*4570	*4110	3690	*3690	2370	7.76
(15 ft)	lb					*10080	*10080	*9060	8140	*8140	5220	(25.5)
3.0m	kg			*9100	*9100	*5790	5620	*4600	3550	3360	2130	8.15
(10 ft)	lb			*20060	*20060	*12760	12390	*10140	7830	7410	4700	(26.7)
1.5 m	kg					*7030	5250	*5160	3390	3280	2060	8.20
(5 ft)	lb					*15500	11570	*11380	7470	7230	4540	(26.9)
Ground	kg			*7120	*7120	*7680	5030	5250	3270	3420	2150	7.94
Line	lb			*15700	*15700	*16930	11090	11570	7210	7540	4740	(26.0)
-1.5 m	kg	*7040	*7040	*11150	9670	*7590	4970	5200	3230	3900	2450	7.31
(-5 ft)	lb	*15520	*15520	*24580	21320	*16730	10960	11460	7120	8600	5400	(24.0)
-3.0 m	kg	*11230	*11230	*9630	*9630	*6670	5030			*3750	3240	6.19
(-10 ft)	lb	*24760	*24760	*21230	*21230	*14700	11090			*8270	7140	(20.3)
-4.5 m	kg			*6270	*6270							
(-15 ft)	lb			*13820	*13820							

Boom : 5.10 m (16′ 9″) / Arm : 2.60 m (8′ 6″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius										At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
														m (ft)
7.5 m	kg											*3380	*3380	6.11
(25 ft)	lb											*7450	*7450	(20.0)
6.0 m	kg							*3020	*3020			*3360	2660	7.37
(20 ft)	lb							*6660	*6660			*7410	5860	(24.2)
4.5 m	kg							*3770	3720			*3410	2190	8.11
(15 ft)	lb							*8310	8200			*7520	4830	(26.6)
3.0m	kg			*7910	*7910	*5310	*5310	*4300	3560	*2810	2420	3130	1970	8.48
(10 ft)	lb			*17440	*17440	*11710	*11710	*9480	7850	*6190	5340	6900	4340	(27.8)
1.5 m	kg			*8120	*8120	*6650	5270	*4920	3380	*3650	2350	3050	1900	8.53
(5 ft)	lb			*17900	*17900	*14660	11620	*10850	7450	*8050	5180	6720	4190	(28.0)
Ground	kg			*7910	*7910	*7500	5010	5220	3240	*3470	2280	3170	1970	8.28
Line	lb			*17440	*17440	*16530	11050	11510	7140	*7650	5030	6990	4340	(27.2)
-1.5 m	kg	*6710	*6710	*10690	9550	*7620	4900	5140	3170			3560	2220	7.69
(-5 ft)	lb	*14790	*14790	*23570	21050	*16800	10800	11330	6990			7850	4890	(25.2)
-3.0 m	kg	*9990	*9990	*10280	9680	*6960	4930	*4870	3200			*3750	2830	6.64
(-10 ft)	lb	*22020	*22020	*22660	21340	*15340	10870	*10740	7050			*8270	6240	(21.8)
-4.5 m	kg			*7470	*7470	*4960	*4960							
(-15 ft)	lb			*16470	*16470	*10930	*10930							

Boom : 5.10 m (16′ 9″) / Arm : 3.10 m (11′ 1″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius										At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
														m (ft)
7.5 m	kg											*3000	*3000	6.73
(25 ft)	lb											*6610	*6610	(22.1)
6.0 m	kg							*2870	*2870			*3020	2360	7.88
(20 ft)	lb							*6330	*6330			*6660	5200	(25.9)
4.5 m	kg							*3350	*3350	*2130	*2130	*3100	1970	8.57
(15 ft)	lb							*7390	*7390	*4700	*4700	*6830	4340	(28.1)
3.0m	kg					*4710	*4710	*3930	3580	*3090	2420	2870	1780	8.91
(10 ft)	lb					*10380	*10380	*8660	7890	*6810	5340	6330	3920	(29.2)
1.5 m	kg			*10220	*10220	*6160	5330	*4620	3380	3730	2330	2790	1710	8.96
(5 ft)	lb			*22530	*22530	*13580	11750	*10190	7450	8220	5140	6150	3770	(29.4)
Ground	kg			*8670	*8670	*7210	5010	*5180	3220	3640	2250	2880	1760	8.73
Line	lb			*19110	*19110	*15900	11050	*11420	7100	8020	4960	6350	3880	(28.6)
-1.5 m	kg	*6310	*6310	*10330	9460	*7580	4850	5090	3120	*3230	2210	3190	1960	8.17
(-5 ft)	lb	*13910	*13910	*22770	20860	*16710	10690	11220	6880	*7120	4870	7030	4320	(26.8)
-3.0 m	kg	*8950	*8950	*10900	9520	*7200	4830	5080	3110			*3630	2430	7.21
(-10 ft)	lb	*19730	*19730	*24030	20990	*15870	10650	11200	6860			*8000	5360	(23.7)
-4.5 m	kg	*12430	*12430	*8640	*8640	*5790	4950					*3370	*3370	5.59
(-15 ft)	lb	*27400	*27400	*19050	*19050	*12760	10910					*7430	*7430	(18.3)

1. Lifting capacity is based on SAE J1097, ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
4. (*) indicates the load limited by hydraulic capacity.

Lifting Capacity

R180NLC-9S

Rating over-front Rating over-side or 360 degree

Boom : 5.10 m (16′ 9″) / Arm : 2.20 m (7′ 3″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius								At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		Capacity		Reach
												m (ft)
7.5 m	kg									*3750	*3750	5.60
(25 ft)	lb									*8270	*8270	(18.4)
6.0 m	kg									*3660	2550	6.98
(20 ft)	lb									*8070	5620	(22.9)
4.5 m	kg					*4570	*4570	*4110	3230	3680	2060	7.76
(15 ft)	lb					*10080	*10080	*9060	7120	8110	4540	(25.5)
3.0m	kg			*9100	*9100	*5790	4880	*4600	3100	3340	1830	8.15
(10 ft)	lb			*20060	*20060	*12760	10760	*10140	6830	7360	4030	(26.7)
1.5 m	kg					*7030	4530	*5160	2940	3260	1770	8.20
(5 ft)	lb					*15500	9990	*11380	6480	7190	3900	(26.9)
Ground	kg			*7120	*7120	*7680	4320	5220	2820	3400	1840	7.94
Line	lb			*15700	*15700	*16930	9520	11510	6220	7500	4060	(26.0)
-1.5 m	kg	*7040	*7040	*11150	8100	*7590	4250	5160	2780	3870	2110	7.31
(-5 ft)	lb	*15520	*15520	*24580	17860	*16730	9370	11380	6130	8530	4650	(24.0)
-3.0 m	kg	*11230	*11230	*9630	8250	*6670	4310			*3750	2800	6.19
(-10 ft)	lb	*24760	*24760	*21230	18190	*14700	9500			*8270	6170	(20.3)
-4.5 m	kg			*6270	*6270							
(-15 ft)	lb			*13820	*13820							

Boom : 5.10 m (16′ 9″) / Arm : 2.60 m (8′ 6″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius										At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
														m (ft)
7.5 m	kg											*3380	3290	6.11
(25 ft)	lb											*7450	7250	(20.0)
6.0 m	kg							*3020	*3020			*3360	2320	7.37
(20 ft)	lb							*6660	*6660			*7410	5110	(24.2)
4.5 m	kg							*3770	3250			*3410	1890	8.11
(15 ft)	lb							*8310	7170			*7520	4170	(26.6)
3.0m	kg			*7910	*7910	*5310	4930	*4300	3100	*2810	2090	3110	1690	8.48
(10 ft)	lb			*17440	*17440	*11710	10870	*9480	6830	*6190	4610	6860	3730	(27.8)
1.5 m	kg			*8120	*8120	*6650	4550	*4920	2930	*3650	2020	3030	1620	8.53
(5 ft)	lb			*17900	*17900	*14660	10030	*10850	6460	*8050	4450	6680	3570	(28.0)
Ground	kg			*7910	*7910	*7500	4290	5180	2790	*3470	1960	3150	1680	8.28
Line	lb			*17440	*17440	*16530	9460	11420	6150	*7650	4320	6940	3700	(27.2)
-1.5 m	kg	*6710	*6710	*10690	7980	*7620	4190	5110	2720			3540	1900	7.69
(-5 ft)	lb	*14790	*14790	*23570	17590	*16800	9240	11270	6000			7800	4190	(25.2)
-3.0 m	kg	*9990	*9990	*10280	8100	*6960	4210	*4870	2750			*3750	2440	6.64
(-10 ft)	lb	*22020	*22020	*22660	17860	*15340	9280	*10740	6060			*8270	5380	(21.8)
-4.5 m	kg			*7470	*7470	*4960	4390							
(-15 ft)	lb			*16470	*16470	*10930	9680							

Boom : 5.10 m (16′ 9″) / Arm : 3.10 m (11′ 1″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius										At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
														m (ft)
7.5 m	kg											*3000	2790	6.73
(25 ft)	lb											*6610	6150	(22.1)
6.0 m	kg							*2870	*2870			*3020	2050	7.88
(20 ft)	lb							*6330	*6330			*6660	4520	(25.9)
4.5 m	kg							*3350	3280	*2130	*2130	*3100	1690	8.57
(15 ft)	lb							*7390	7230	*4700	*4700	*6830	3730	(28.1)
3.0m	kg					*4710	*4710	*3930	3120	*3090	2090	2850	1520	8.91
(10 ft)	lb					*10380	*10380	*8660	6880	*6810	4610	6280	3350	(29.2)
1.5 m	kg			*10220	8620	*6160	4600	*4620	2930	3700	2000	2770	1450	8.96
(5 ft)	lb			*22530	19000	*13580	10140	*10190	6460	8160	4410	6110	3200	(29.4)
Ground	kg			*8670	8030	*7210	4290	5160	2760	3610	1920	2860	1500	8.73
Line	lb			*19110	17700	*15900	9460	11380	6080	7960	4230	6310	3310	(28.6)
-1.5 m	kg	*6310	*6310	*10330	7890	*7580	4140	5060	2670	*3230	1880	3170	1670	8.17
(-5 ft)	lb	*13910	*13910	*22770	17390	*16710	9130	11160	5890	*7120	4140	6990	3680	(26.8)
-3.0 m	kg	*8950	*8950	*10900	7950	*7200	4120	5040	2660			*3630	2080	7.21
(-10 ft)	lb	*19730	*19730	*24030	17530	*15870	9080	11110	5860			*8000	4590	(23.7)
-4.5 m	kg	*12430	*12430	*8640	8170	*5790	4240					*3370	3230	5.59
(-15 ft)	lb	*27400	*27400	*19050	18010	*12760	9350					*7430	7120	(18.3)

1. Lifting capacity is based on SAE J1097, ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
4. (*) indicates the load limited by hydraulic capacity.

Lifting Capacity

R180LCD-9S

Rating over-front Rating over-side or 360 degree

Boom : 5.10 m (16′ 9″) / Arm : 2.20 m (7′ 3″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius								At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		Capacity		Reach
												m (ft)
7.5 m	kg									*3750	*3750	5.60
(25 ft)	lb									*8270	*8270	(18.4)
6.0 m	kg									*3660	3070	6.98
(20 ft)	lb									*8070	6770	(22.9)
4.5 m	kg					*4570	*4570	*4110	3880	*3690	2510	7.76
(15 ft)	lb					*10080	*10080	*9060	8550	*8140	5530	(25.5)
3.0m	kg			*9100	*9100	*5790	*5790	*4600	3740	*3760	2260	8.15
(10 ft)	lb			*20060	*20060	*12760	*12760	*10140	8250	*8290	4980	(26.7)
1.5 m	kg					*7030	5530	*5160	3580	3740	2190	8.20
(5 ft)	lb					*15500	12190	*11380	7890	8250	4830	(26.9)
Ground	kg			*7120	*7120	*7680	5310	*5520	3460	3910	2280	7.94
Line	lb			*15700	*15700	*16930	11710	*12170	7630	8620	5030	(26.0)
-1.5 m	kg	*7040	*7040	*11150	10180	*7590	5240	*5450	3420	*3960	2600	7.31
(-5 ft)	lb	*15520	*15520	*24580	22440	*16730	11550	*12020	7540	*8730	5730	(24.0)
-3.0 m	kg	*11230	*11230	*9630	*9630	*6670	5300			*3750	3420	6.19
(-10 ft)	lb	*24760	*24760	*21230	*21230	*14700	11680			*8270	7540	(20.3)
-4.5 m	kg			*6270	*6270							
(-15 ft)	lb			*13820	*13820							

Boom : 5.10 m (16′ 9″) / Arm : 2.60 m (8′ 6″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius										At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
														m (ft)
7.5 m	kg											*3380	*3380	6.11
(25 ft)	lb											*7450	*7450	(20.0)
6.0 m	kg									*3020	*3020	*3360	2800	7.37
(20 ft)	lb									*6660	*6660	*7410	6170	(24.2)
4.5 m	kg									*3770	*3770	*3410	2320	8.11
(15 ft)	lb									*8310	*8310	*7520	5110	(26.6)
3.0m	kg			*7910	*7910	*5310	*5310	*4300	3750	*2810	2570	*3500	2090	8.48
(10 ft)	lb			*17440	*17440	*11710	*11710	*9480	8270	*6190	5670	*7720	4610	(27.8)
1.5 m	kg			*8120	*8120	*6650	5550	*4920	3570	*3650	2490	3490	2020	8.53
(5 ft)	lb			*17900	*17900	*14660	12240	*10850	7870	*8050	5490	7690	4450	(28.0)
Ground	kg			*7910	*7910	*7500	5280	*5380	3430	*3470	2430	3630	2100	8.28
Line	lb			*17440	*17440	*16530	11640	*11860	7560	*7650	5360	8000	4630	(27.2)
-1.5 m	kg	*6710	*6710	*10690	11060	*7620	5180	*5460	3360			*3810	2360	7.69
(-5 ft)	lb	*14790	*14790	*23570	22180	*16800	11420	*12040	7410			*8400	5200	(25.2)
-3.0 m	kg	*9990	*9990	*10280	10180	*6960	5200	*4870	3390			*3750	3000	6.64
(-10 ft)	lb	*22020	*22020	*22660	22440	*15340	11460	*10740	7470			*8270	6610	(21.8)
-4.5 m	kg			*7470	*7470	*4960	*4960							
(-15 ft)	lb			*16470	*16470	*10930	*10930							

Boom : 5.10 m (16′ 9″) / Arm : 3.10 m (11′ 1″) / Bucket : 0.76 m³ (0.92 yd³) SAE heaped / Shoe : 600mm(24″) triple grouser

Load point height m (ft)		Load radius										At max. reach		
		1.5 m (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		Capacity		Reach
														m (ft)
7.5 m	kg											*3000	*3000	6.73
(25 ft)	lb											*6610	*6610	(22.1)
6.0 m	kg									*2870	*2870	*3020	2490	7.88
(20 ft)	lb									*6330	*6330	*6660	5490	(25.9)
4.5 m	kg									*3350	*3350	*3100	2090	8.57
(15 ft)	lb									*7390	*7390	*6830	4610	(28.1)
3.0m	kg						*4710	*4710	*3930	3770	*3090	2570	*3200	1890	8.91
(10 ft)	lb						*10380	*10380	*8660	8310	*6810	5670	*7050	4170	(29.2)
1.5 m	kg					*10220	*10220	*6160	5600	*4620	3570	*3850	2470	3200	1830	8.96
(5 ft)	lb					*22530	*22530	*13580	12350	*10190	7870	*8490	5450	7050	4030	(29.4)
Ground	kg					*8670	*8670	*7210	5280	*5180	3410	*4100	2390	3310	1880	8.73
Line	lb					*19110	*19110	*15900	11640	*11420	7520	*9040	5270	7300	4140	(28.6)
-1.5 m	kg	*6310	*6310	*10330	9960	*7580	5120	*5420	3310	*3230	2350	*3570	2090	8.17
(-5 ft)	lb	*13910	*13910	*22770	21960	*16710	11290	*11950	7300	*7120	5180	*7870	4610	(26.8)
-3.0 m	kg	*8950	*8950	*10900	10020	*7200	5110	*5110	3300			*3630	2580	7.21
(-10 ft)	lb	*19730	*19730	*24030	22090	*15870	11270	*11270	7280			*8000	5690	(23.7)
-4.5 m	kg	*12430	*12430	*8640	*8640	*5790	5230					*3370	*3370	5.59
(-15 ft)	lb	*27400	*27400	*19050	*19050	*12760	11530					*7430	*7430	(18.3)

1. Lifting capacity is based on SAE J1097, ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
4. (*) indicates the load limited by hydraulic capacity.