

Specifications R180W-9A

ENGINE

MODEL	CUMMINS QSB6.7	
Type	Water cooled, 4 cycle Diesel, 6-Cylinders in line, direct injection, turbocharged, charged air cooled and low emission	
Rated flywheel horse power		
SAE	J1995 (gross)	165 HP (123 kW) / 2,200 rpm
	J1349 (net)	155 HP (115 kW) / 2,200 rpm
DIN	6271/1 (gross)	167 PS (123 kW) / 2,200 rpm
	6271/1 (net)	157 PS (115 kW) / 2,200 rpm
Max. torque	74.7 kgf.m (540 lbf.ft) / 1,500 rpm	
Bore x stroke	107 x 124 mm (4.21" x 4.88")	
Piston displacement	6,700 cc (409 in ³)	
Batteries	2 x 12 V x 100 AH	
Starting motor	24 V - 4.8 kW	
Alternator	24 V - 95 Amp	

* This engine meets the EPA (Tier 4 interim) / EU (Stage III-B) Emission regulation.

HYDRAULIC SYSTEM

MAIN PUMP	
Type	Two variable displacement piston pumps
Max. flow	2 x 172 l/min (45.4 US gpm / 37.8 UK gpm)
Sub-pump for pilot circuit	Gear pump

Cross-sensing and fuel saving pump system

HYDRAULIC MOTORS

Travel	Variable displacement piston motor with brake valve
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING

Implement circuits	350 kgf/cm ² (4,970 psi)
Travel	380 kgf/cm ² (5,400 psi)
Power boost (boom, arm, bucket)	380 kgf/cm ² (5,400 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 1090 mm (4.5" x 42.9")
	Arm : 1-120 x 1355 mm (4.7" x 53.3")
	Bucket : 1-110 x 995 mm (4.3" x 39.2")
	Blade : 2-110 x 235 mm (4.3" x 9.3")
	Outrigger : 2-125 x 463 mm (4.9" x 18.2")
	2PC-boom

DRIVES & BRAKES

4-wheel hydrostatic drive. Constant mesh, helical gear transmission provides 2 forward and reverse travel speeds.

Max. drawbar pull	11,000 kgf (24,250 lbf)	
Travel speed	1st	9.5 km/h
	2nd	35 km/h
Gradeability	35° (70 %)	

Parking brake : Independent dual brake, front and rear axle full hydraulic power brake.
- Spring actuated and hydraulic released
- Wet type multiple disk brake

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)
Engine throttle	Electric, Dial type

AXLE & WHEEL

Free oscillation front axle which can be blocked automatically or manually. Fixed rear axle for max. stability.

Tires	10.00 - 20 - 14PR, Dual (tube type)
(optional)	10.00 - 20, Dual (solid type)

SWING SYSTEM

Swing motor	Fixed displacement axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc (pin lock type)
Swing speed	9.1 rpm

STEERING SYSTEM

Hydraulically actuated, orbitrol type steering system.

Min. turning radius	6.3 m (20' 8")
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COOLANT & LUBRICANT CAPACITY

	liter	US gal	UK gal	
Fuel tank	270	71.3	59.4	
Engine coolant	19.5	5.2	4.3	
Engine oil	23.7	6.3	5.2	
Swing device - gear oil	5	1.3	1.1	
Axle	Front	15.5	4.1	3.4
	Rear	17.5	4.6	3.9
Hydraulic system (including tank)	270	71.3	59.4	
Hydraulic tank	160	42.3	35.2	

UNDERCARRIAGE

Reinforced box-section frame is all-welded, low-stress. Dozer blade and outriggers are available. A bolt-on design.

Dozer blade	A very useful tool for leveling, back filling or clean-up work.
Outrigger	Maximum stability for digging and lifting work, can be installed on the front and/or rear side.

OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 5,200 mm (17' 1") Mono boom, 2,600 mm (8' 6") arm, SAE heaped 0.76 m³ (0.99 yd³) backhoe bucket, lubricant, coolant, full fuel tank, full hydraulic tank and all standard equipments.

MAJOR COMPONENT WEIGHT	
Upperstructure	4,590 kg (10,120 lb)
Mono boom (with arm cylinder)	1,275 kg (2,810 lb)
Hydraulic adjustable boom (with adjust cylinder and arm cylinder)	1,780 kg (3,920 lb)

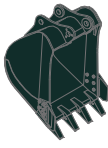
OPERATING WEIGHT		
Undercarriage	Mono boom	Hyd. adjustable boom
Rear dozer blade	17,280 kg (38,100 lb)	17,750 kg (39,130 lb)
Rear outriggers	17,430 kg (38,430 lb)	17,900 kg (39,460 lb)
Front outriggers and rear blade	18,400 kg (40,560 lb)	18,870 kg (41,600 lb)
Front blade and rear outriggers	18,340 kg (40,430 lb)	18,810 kg (41,470 lb)
Four outriggers	18,580 kg (40,960 lb)	19,050 kg (42,000 lb)

BUCKETS R180W-9A

All buckets are welded with high-strength steel.



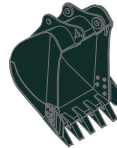
0.39 (0.51)



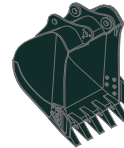
0.50 (0.65)



0.64 (0.84)



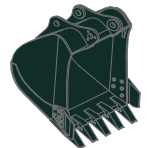
0.76 (0.99)



0.89 (1.16)



1.05 (1.37)



● 0.69 (0.90)

SAE heaped m³ (yd³)

Capacity m ³ (yd ³)		Width mm (in)		Weight kg (lb)	Recommendation m (ft.in)				
SAE heaped	CECE heaped	Without side cutters	With side cutters		5.2 (17' 1") Mono Boom			5.1 (16' 1") Hydraulic Adjustable Boom	
					2.2 (7' 3") Arm	2.6 (8' 6") Arm	3.1 (10' 2") Arm	2.2 (7' 3") Arm	2.6 (8' 6") 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 (1040)	●	●	●	●	●
0.64 (0.84)	0.55 (0.72)	920 (36.2)	1,040 (40.9)	510 (1120)	■	■	▲	■	■
0.76 (0.99)	0.65 (0.85)	1,060 (41.7)	1,180 (46.5)	570 (1260)	■	▲	▲	■	▲
0.89 (1.16)	0.77 (1.01)	1,220 (48.0)	1,340 (52.8)	610 (1340)	▲	▲	-	▲	▲
1.05 (1.37)	0.90 (1.18)	1,400 (55.1)	1,520 (59.8)	680 (1500)	▲	-	-	▲	-
● 0.69 (0.90)	0.62 (0.81)	990 (39.0)	-	700 (1540)	■	▲	▲	■	▲

● Heavy duty bucket
Note: Dozer Blade down

● : Applicable for materials with density of 2,000 kg/m³ (3,370 lb/yd³) or less
 ■ : Applicable for materials with density of 1,600 kg/m³ (2,700 lb/yd³) or less
 ▲ : Applicable for materials with density of 1,100 kg/m³ (1,850 lb/yd³) or less

ATTACHMENT R180W-9A

Booms and arms are welded, a low-stress, full-box section design.

5.2 m (17' 1") boom & 5.1 m (16' 1") Hydraulic Adjustable Boom and 2.2 m (7' 3"); 2.6 m (8' 6") & 3.1 m (10' 2") arms are available.

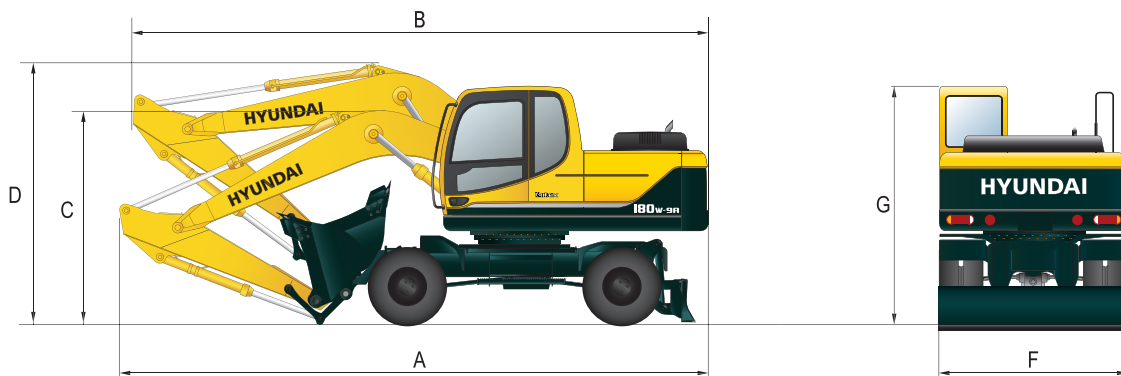
DIGGING FORCE R180W-9A

Boom	Length	mm (ft.in)	5,200 (17' 1")			Remarks
	Weight	kg (lb)	1,240 (2,730)			
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]	77.3 [83.9]	
		kgf	8,890 [9,650]	7,880 [8,560]	7,880 [8,560]	
		lbf	19,600 [21,280]	17,270 [18,860]	17,270 [18,860]	
	ISO	kN	91.0 [98.8]	80.3 [87.2]	80.3 [87.2]	
		kgf	9,280 [10,080]	8,190 [8,890]	8,190 [8,890]	
		lbf	20,460 [22,210]	18,060 [19,600]	18,060 [19,600]	

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

Dimensions & Working Ranges

DIMENSIONS R180W-9A

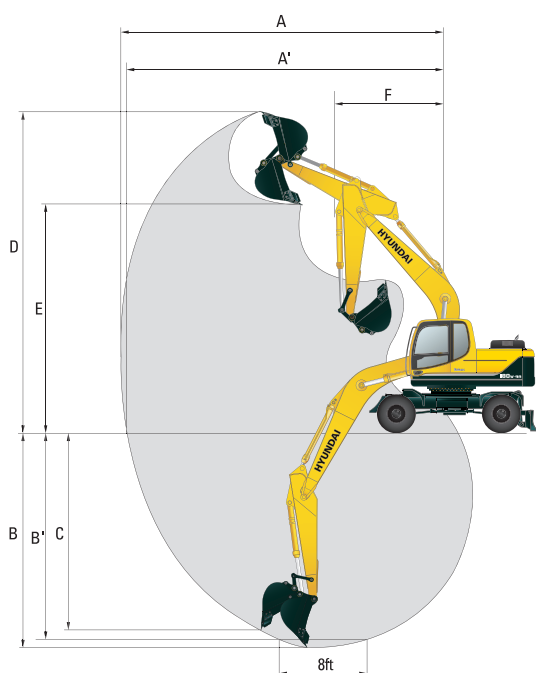


mm (ft · in)

Mono Boom	5,200 (17'1")		
Arm	2,200 (7'3")	2,600 (8'6")	3,100 (11'1")
A Overall length - shipping position	8,650 (28'5")	8,760 (28'9")	8,760 (28'9")
B Overall length - traveling position	8,590 (28'2")	8,710 (28'7")	8,480 (27'10")
C Height of attachment - shipping position	3,060 (10'0")	3,180 (10'6")	3,150 (10'4")
D Height of attachment - traveling position	3,610 (11'10")	3,540 (11'8")	3,900 (12'10")
F Overall width	2,500 (8'2")	2,500 (8'2")	2,500 (8'2")
G Overall height of cab	3,190 (10'6")	3,190 (10'6")	3,190 (10'6")

WORKING RANGES R180W-9A

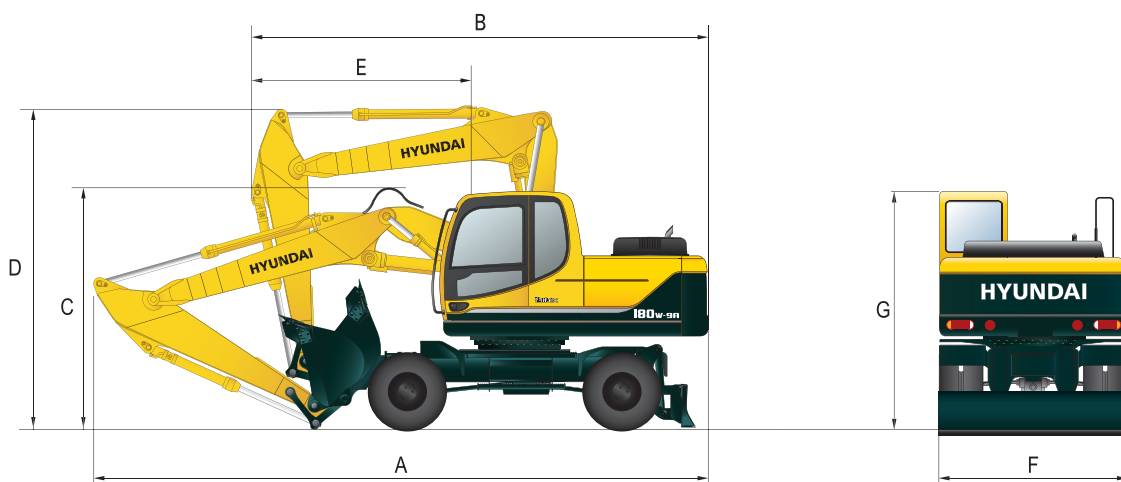
mm (ft · in)



Boom length	5,200 (17'1")		
Arm length	2,200 (7'3")	2,600 (8'6")	3,100 (10'2")
A Max. digging reach	8,820 (29'1")	9,200 (30'3")	9,450 (31'0")
A' Max. digging reach on ground	8,615 (28'4")	9,000 (29'7")	9,250 (30'4")
B Max. digging depth	5,500 (18'2")	5,900 (19'5")	6,320 (20'9")
B' Max. digging depth (8' level)	5,280 (17'5")	5,700 (18'9")	6,130 (20'1")
C Max. vertical wall digging depth	4,850 (16'1")	5,310 (17'6")	5,470 (17'11")
D Max. digging height	9,180 (30'3")	9,300 (30'7")	9,220 (30'3")
E Max. dumping height	6,520 (21'5")	6,660 (21'8")	6,620 (21'9")
F Min. front swing radius	3,290 (10'9")	3,230 (10'8")	3,160 (10'4")

Dimensions & Working Ranges

DIMENSIONS R180W-9A / HYDRAULIC ADJUSTABLE BOOM

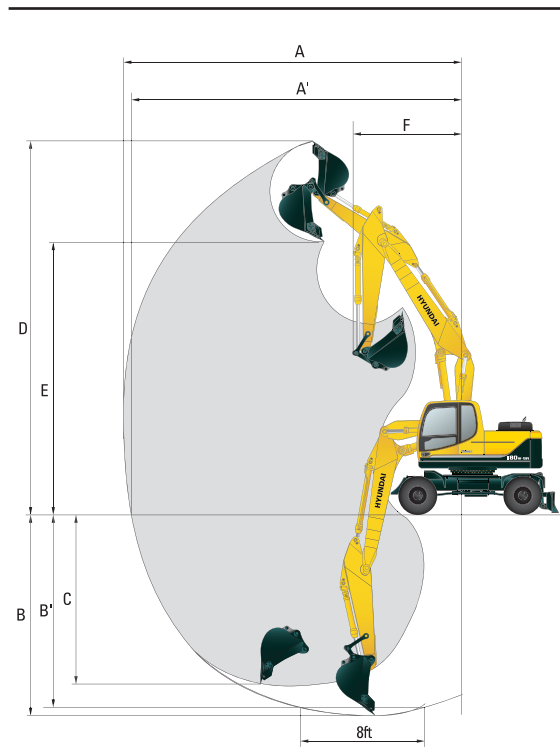


mm (ft · in)

Hydraulic adjustable boom	5,200 (17' 1")	
Arm	2,200 (7' 3")	2,600 (8' 6")
A Overall length - shipping position	8,650 (28' 5")	8,750 (28' 8")
B Overall length - traveling position	6,630 (21' 9")	6,620 (21' 9")
C Height of attachment - shipping position	2,900 (9' 6")	2,920 (9' 7")
D D - Height of attachment - traveling position	3,980 (13' 1")	3,960 (13' 0")
E End of attachment to steering wheel	3,300 (10' 10")	3,290 (10' 10")
F Overall width	2,500 (8' 2")	2,500 (8' 2")
G Overall height of cab	3,190 (10' 6")	3,190 (10' 6")

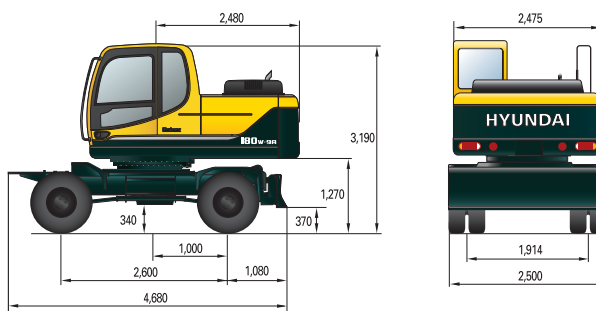
WORKING RANGES R180W-9A / HYDRAULIC ADJUSTABLE BOOM

mm (ft · in)

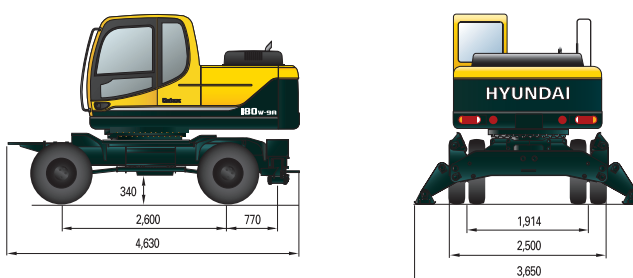


Boom length	5,200 (17' 1")	
Arm length	2,200 (7' 3")	2,600 (8' 6")
A Max. digging reach	8,760 (28' 9")	9,110 (29' 11")
A' Max. digging reach on ground	8,550 (28' 1")	8,910 (29' 3")
B Max. digging depth	5,220 (17' 2")	5,620 (18' 5")
B' Max. digging depth (8' level)	5,120 (16' 10")	5,520 (18' 1")
C Max. vertical wall digging depth	4,430 (14' 6")	4,780 (15' 8")
D Max. digging height	9,630 (31' 7")	9,820 (32' 3")
E Max. dumping height	6,930 (22' 9")	7,130 (23' 5")
F Min. front swing radius	3,100 (10' 2")	2,970 (9' 9")

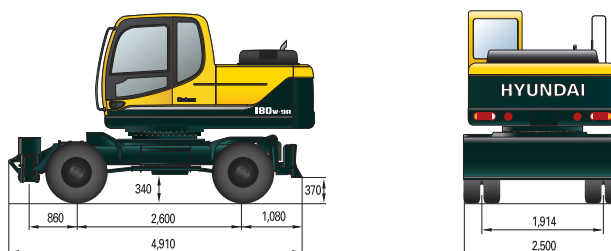
R180W-9A WITH REAR DOZER BLADE AND BUCKET REST



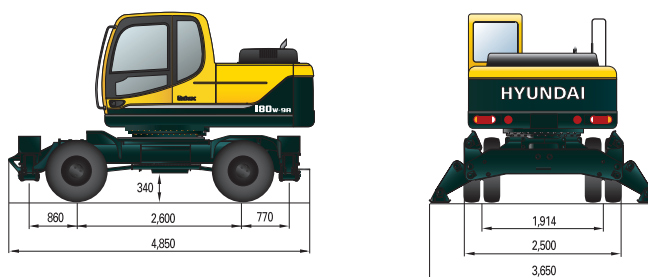
R180W-9A WITH REAR OUTRIGGERS AND BUCKET REST



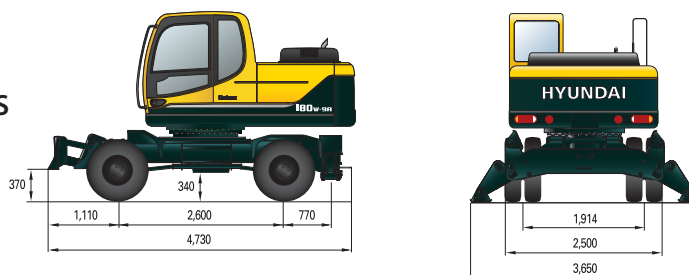
R180W-9A WITH REAR DOZER BLADE AND FRONT OUTRIGGERS



R180W-9A WITH REAR AND FRONT OUTRIGGERS



R180W-9A WITH REAR OUTRIGGERS AND FRONT DOZER BLADE



Lifting Capacities

R180W-9A / HYDRAULIC ADJUSTABLE BOOM

Rating over-front Rating over-side or 360 degrees

Boom : 5.1 m (16'9") / Arm : 2.2 m (7'3") / Bucket : 0.76 m³ (0.99 yd³) SAE heaped / Dozer blade down with 3,150 kg counterweight

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)	
6.0 m (20 ft)	kg											*3710	2210	7.22
	lb											*8180	4870	(23.7)
4.5 m (15 ft)	kg						*4210	3020				*3680	1810	7.92
	lb						*9280	6660				*8110	3990	(26.0)
3.0 m (10 ft)	kg				*6040	4550	*4690	2860				3660	1620	8.25
	lb				*13320	10030	*10340	6310				8070	3570	(27.1)
1.5 m (5 ft)	kg				*7120	4180	*5190	2700	*3430	1820		3610	1590	8.26
	lb				*15700	9220	*11440	5950	*7560	4080		7960	3510	(27.1)
Ground Line	kg			*6770	*6770	*7590	3980	*5450	2580			*3750	1680	7.94
	lb			*14930	*14930	*16730	8770	*12020	5690			*8270	3700	(26.0)
-1.5 m (-5 ft)	kg	*6880	*6880	*10730	7600	*7310	3940	*5230	2560			*3640	1980	7.26
	lb	*15170	*15170	*23660	16760	*16120	8690	*11530	5640			*8020	4370	(23.8)
-3.0 m (-10 ft)	kg			*8720	7820	*6110	4040					*3140	2750	6.05
	lb			*19220	17240	*13470	8910					*6920	6060	(19.8)

Boom : 5.1 m (16'9") / Arm : 2.6 m (8'6") / Bucket : 0.76 m³ (0.99 yd³) SAE heaped / Dozer blade down with 3,150 kg counterweight

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)	
6.0 m (20 ft)	kg											*3410	2000	7.63
	lb											*7520	4410	(25.0)
4.5 m (15 ft)	kg											*3410	1650	8.29
	lb											*7520	3640	(27.2)
3.0 m (10 ft)	kg						*4420	2870	*3380	1910		3400	1480	8.60
	lb						*9740	6330	*7450	4210		7500	3260	(28.2)
1.5 m (5 ft)	kg			*6600	*6600	*6800	4200	*4980	2680	*4050	1830	3350	1440	8.61
	lb			*14550	*14550	*14990	9260	*10980	5910	*8930	4030	7390	3170	(28.2)
Ground Line	kg			*7410	*7410	*7460	3950	*5340	2550	*3830	1780	3530	1520	8.31
	lb			*16340	*16340	*16450	8710	*11770	5620	*8440	3920	7780	3350	(27.3)
-1.5 m (-5 ft)	kg	*6550	*6550	*10600	7470	*7390	3870	*5290	2490			*3520	1760	7.66
	lb	*14440	*14440	*23370	16470	*16290	8530	*11660	5490			*7760	3880	(25.1)
-3.0 m (-10 ft)	kg	*10160	*10160	*9480	7640	*6500	3930	*4440	2550			*3240	2350	6.54
	lb	*22400	*22400	*20900	16840	*14330	8660	*9790	5620			*7140	5180	(21.5)
-4.5 m (-15 ft)	kg			*6100	*6100	*3870	*3870							
	lb			*13450	*13450	*8530	*8530							

- Lifting capacity is based on SAE J1097, ISO 10567.
- 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.
- The load point is a hook located on the back of the bucket.
- (*) indicates the load limited by hydraulic capacity.

STANDARD EQUIPMENT R180W-9A

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)
One key fits all lockable doors
Hot & cool box
Storage compartment & Ashtray
Radio / MP3 Player with remote control and USB-input
Handsfree mobile phone system with USB-charging device
Transparent cabin roof-cover
12 volt power outlet (24V DC to 12V DC converter)
Sun visor
Rain guard - front window

Computer aided power optimization (CAPO) system

3-power modes, 2-work modes, User mode
Auto & one-touch deceleration system
Auto warm-up system
Overheat prevention system

Automatic temperature 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
Clock
Gauges
- Fuel level gauge
- Engine coolant temperature gauge
- Hyd. oil temperature gauge
Warning lamps
- Engine warning
- Overload
- Communication error
- Low battery
- Air filter clogging
Indicators
- Max power
- Low speed/High speed
- Fuel warmer
- Auto deceleration
Rearview camera

Door and cab locks, one key

Two outside rearview mirrors

Mechanical suspension seat with heater

Adjustable joysticks

Console box tilting system

Four front working lights

Electric horn

Batteries (2 x 12V x 100 AH)

Battery master switch

Removable clean-out screen for coolers

Automatic swing brake

Fuel pre-filter with fuel warmer

Boom holding system

Arm holding system

Accumulator for lowering work equipment

Lower frame under cover

Viscous fan clutch

Rear-blade (550 mm x 2,500 mm)

Dual tires (10.00-20-14PR)

Travel alarm

Fuel filler pump (35 l/min)

Safety lock valve for boom cylinder with overload warning device

Double-acting piping kit (clamshell, etc.)

Travel alarm

Boom

5.20 m; 17' 1"

Arm

2.6 m; 8' 6"

Cabin ROPS (ISO 12117-2)

ROPS (Roll Over Protective Structure)

Hi-mate (Remote Management System)

OPTIONAL EQUIPMENT R180W-9A

Beacon lamp

Safety lock valve for arm cylinder

Single-acting piping kit (breaker, etc.)

Quick coupler

Boom

5.1 m; 16' 9" - hydraulic adjustable

Arms

2.2 m; 7' 3"

3.1 m; 10' 2" - not for hydraulic adjustable boom

Cabin FOPS/FOG (ISO/DIS 10262 Level II)

FOPS (Falling Object Protective Structure)

FOG (Falling Object Guard)

Cabin roof-steel cover

Cabin guard front

Wire net

Fine net

Cabin lights

Undercarriage

Rear outriggers

Rear dozer blade and front outriggers

Rear and front outriggers

Rear outriggers and front dozer blade

Additional lower frame - reinforced under cover

Seat

Adjustable air suspension seat with heater

Dual tires - solid (10.00 - 20)

Fenders (Mudguards)

Pattern change valve (2 patterns)

- * 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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