304 CR Mini Hydraulic Excavator

Engine

Mitsubishi S4L2-E2 naturally aspirated, watercooled, four stroke, four cylinder, diesel engine.

kW	hp
27.3	37
26.5	36
26.5	36
	27.3

Dimensions

Bore	78 mm	3.07 in
Stroke	92 mm	3.62 in
Displacement	1760 cm ³	107 in ³

- Meets EPA Tier 2 and EU Stage II offhighway emission regulations
- Glow plugs in each cylinder for easier cold-weather starting
- Gradeability (continuous) 25°

Hydraulic System

Open-center system with two crosssensing, variable displacement pumps and single gear pump for maximum output and efficiency.

flow)	
43.4 L/min	9.5 gpm
40.7 L/min	8.9 gpm
10.5 L/min	2.3 gpm
es	
245 bar	3550 psi
245 bar	3550 psi
206 bar	2990 psi
(maximum)	
34.1 L/min	18.5 gpm
245 bar	3550 psi
t cutting edg	(e)
36.6 kN	8228 lbf
23.9 kN	5373 lbf
20.9 kN	4699 lbf
	43.4 L/min 40.7 L/min 10.5 L/min es 245 bar 245 bar 206 bar maximum) 34.1 L/min 245 bar t cutting edg 36.6 kN 23.9 kN

- Stick regeneration circuit enables high stick-in speeds
- Boom confluence valve combines pump flows for faster lift speed
- Boom drift reduction valve minimizes boom movement for lifting duties

Electrical System

System voltage	12V
Alternator output	50 amp
Starter motor	2.0 kW
Battery	650 CCA, 55 amp/h

- Maintenance-free battery
- Sealed electrical connectors
- Abrasion and flame resistant braiding on harnesses
- Circuit breaker for overload protection

Undercarriage

- X-shaped, fabricated carbody for strength and durability
- Sloping track roller frames and dirt relief holes reduce build-up of debris
- Track tension adjustment by grease filled cylinder
- Four bottom rollers and one top roller per side
- Ground clearance 335 mm (13 in)

Travel System

Travel speed		
High	4.6 km/h	2.9 mph
Low	2.6 km/h	1.6 mph

Traction force

41.2 kN 9260 lbf

- Compact drive modules within track width for protection
- Straight-line travel possible when tracking and operating front linkage together
- Built-in balance valves prevent over speed conditions when traveling down slopes

Swing System

Independent swing circuit maintains swing speed and force while operating the front linkage.

Machine swing speed	9.3 rpm
Boom swing angles	
Left (min stop position)	55°
Left (max stop position)	80°
Right	50°

- Self lubricating swing speed reduction gear
- Grease bath lubricated pinion
- Automatic, spring applied, parking brake prevents swing drift on slopes and during machine transportation

Cab and Canopy

- Both cab and canopy structures meet FOPS, ISO 10262 (Level 1) and TOPS, ISO 12117
- Tinted cab glass with front window wiper and washer standard
- All major controls are pilot hydraulic operated
- All hydraulic controls are isolated including the travel function by lift up console

Weights

With rubber track, bucket, operator and additional counterweight 190 kg (418 lb). Weights vary depending on machine configuration.

Connigaration		
Cab	4490 kg	9896 lb
Canopy	4440 kg	9786 lb

Service Refill Capacities

	Liters	Gallons
Cooling system	6.0	1.58
Engine oil	8.4	2.2
Fuel tank	62	16
Hydraulic tank	70	18
Hydraulic system	91	24

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Dimensions and Working Range







		Α	В	C	D	Е	F	G	H*	I	J	К	L	М
Standard Stick	(mm)	3350	2840	5560	5710	5220	3580	2470	990	450	430	1720	2595	625
	(ft/in)	11'0"	9'4"	18'3"	18'9"	17'2"	11'9"	8'1"	3'3"	1'6"	1'5"	5'8"	8'6"	2'1"
Long Stick	(mm)	3750	3240	5950	6080	5440	3810	2470	990	450	430	2070	2595	625
	(ft/in)	12'4"	10'10"	19'6"	19'11"	17'10"	12'6"	8'1"	3'3"	1'6"	1'5"	6'8"	8'6"	2'1"

		Ν	0	Р	0	R	S
Standard Stick	(mm)	2450	5180	910	650	400	1980
	(ft/in)	8'0"	17'0"	3'0"	2'2"	1'4"	6'6"
Long Stick	(mm)	2450	5280	910	650	400	1980
	(ft/in)	8'0"	17'4"	3'0"	2'2"	1'4"	6'6"

*Additional counterweight increases this dimension by 100 mm (4 in).

Standard Equipment

Standard equipment may vary. Consult your Caterpillar dealer for specifics.

Automatic swing parking brake	Hour meter
Boom cylinder guard	Low maintenance linkage
Boom drift reduction valve	joints
Canopy to TOPS and	Maintenance free battery
FOPS standards	Rubber tracks
Double element air filter	Seatbelt, 50 mm (2 in) wide
Dozer blade with float function	Standard stick
Floor mat	Two speed travel
Gauges/indicators for fuel,	Vinyl suspension seat
engine oil pressure and	
coolant temperature, air	
cleaner, alternator and	
glow plugs	

Optional Equipment

Optional equipment may vary. Consult your Caterpillar dealer for specifics.

- Additional counterweight,
190 kg (418 lb)Control
FabricAir conditionerFront sAuxiliary hydraulic lines for
front linkageand
Long sBoom mounted lightsMechaCab, fully glazed to TOPS
and FOPS standards with
heater, interior light, front
radio-ready kitSeatbe
Travel
Work to
- Control pattern changer Fabric Suspension seat Front screen guard for cab and canopy Long stick Mechanical quick coupler Seatbelt, 75 mm (3 in) wide Steel tracks Travel alarm Travel foot pedals Work tools