

Specifications

ENGINE

MODEL			CUMMINS QSB6.7 Engine
Type			Water cooled, 4 cycle Diesel, 6-cylinders in line, direct injection, turbocharged charger and air cooled
Rated flywheel horse power	SAE	J1995 (gross)	167HP (124kW)/ 1,950 rpm
		J1349 (net)	157HP (117kW)/ 1,950 rpm
	DIN	6271/1 (gross)	169PS (124kW)/ 1,950 rpm
		6271/1 (net)	159PS (117kW)/ 1,950 rpm
Max. torque			74.7kgf-m (540lbf-ft)/1,500rpm
Bore X stroke			107mm X 124mm (4.2" X 4.9")
Piston displacement			6,700cc (409 in ³)
Batteries			2 X 12V X 100AH
Starting motor			24V, 4.8kW
Alternator			24V, 95Amp

HYDRAULIC SYSTEM

MAIN PUMP	
Type	Variable displacement tandem axis piston pumps
Rated flow	2 X 228.2 L /min (60.3 US gpm/50.2 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: 2-120 X 1,290 mm (4.7" X 50.8")
	Arm: 1-140 X 1,510 mm (5.5" X 59.4")
	Bucket: 1-120 X 1,055 mm (4.7" X 41.5")

DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	21,400 kgf (47,180 lbf)
Max. travel speed(high) / (low)	5.8 km/hr (3.6mph) / 3.4 km/hr (2.1mph)
Gradeability	30° (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	Fixed displacement axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	10.7 rpm

COOLANT & LUBRICANT CAPACITY

Refilling	liter	US gal	UK gal
Fuel tank	320	84.5	70.4
Engine coolant	38	10	8.4
Engine oil	23.7	6.3	5.2
Swing device-gear oil	6.2	1.6	1.4
Final drive(each)-gear oil	6	1.6	1.3
Hydraulic system(including tank)	275	72.6	60.5
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	49 EA
No. of carrier roller on each side	2 EA
No. of track roller on each side	9 EA
No. of rail guard on each side	2 EA

OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 5,680mm (18' 8") boom, 2,920mm (9' 7") arm, SAE heaped 0.80m³ (1.05 yd³) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

MAJOR COMPONENT WEIGHT

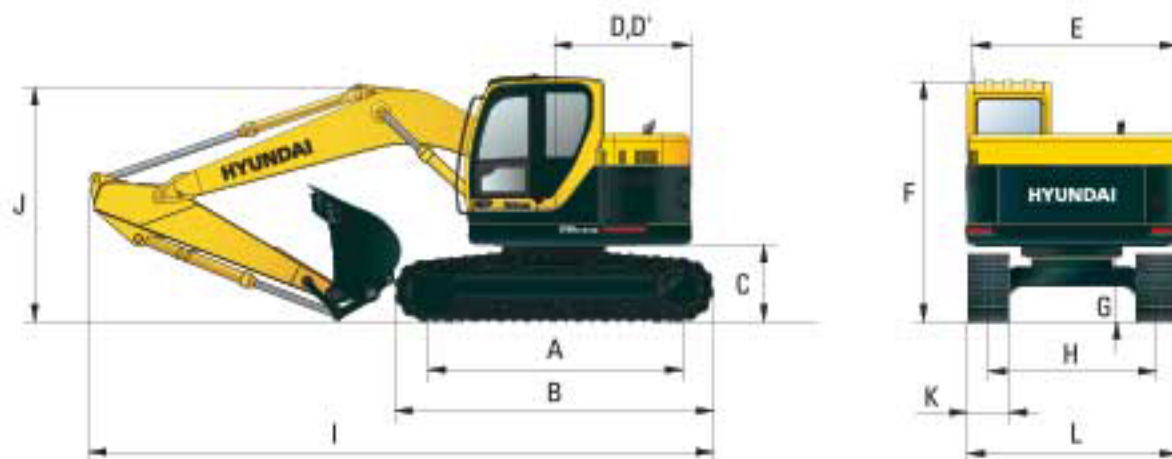
Upperstructure	5,600 kg (12,350 lb)
Boom(with arm cylinder)	1,950 kg (4,300 lb)
Arm(with bucket cylinder)	1,095 kg (2,410 lb)

OPERATING WEIGHT

Shoes		Operating weight	Ground pressure
Type	Width mm(in)	kg(lb)	kgf/cm ² (psi)
Triple grouser	600 (24")	23,800 (52,470)	0.51 (7.25)
	700 (28")	24,060 (53,040)	0.44 (6.26)
	800 (32")	24,320 (53,620)	0.39 (5.55)
	900 (36")	24,580 (54,190)	0.35 (4.98)

Dimensions & Working Range

R235LCR-9A DIMENSIONS

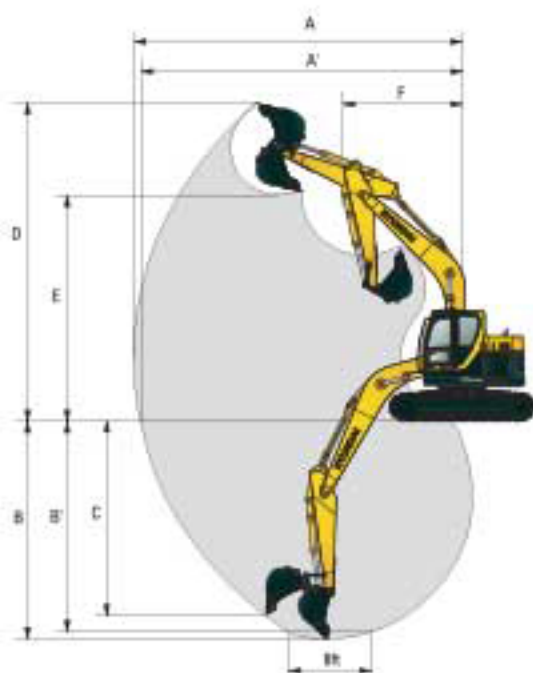


mm (ft-in)

A Tumbler distance	3,650 (11' 12")	Boom length	5,680 (18' 8")		
B Overall length of crawler	4,440 (14' 7")	Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")
C Ground clearance of counterweight	1,060 (3' 6")	I Overall length	9,040 (29' 8")	8,950 (29' 4")	8,910 (29' 3")
D Tail swing radius	1,780 (5' 04")	J Overall height of boom	3,200 (10' 6")	3,100 (10' 2")	3,020 (9' 11")
D' Rear-end length	1,780 (5' 04")				
E Overall width of upperstructure	2,980 (9' 9")	K Track shoe width	600 (24")	700 (28")	800 (32")
F Overall height of cab	2,950 (9' 8")	L Overall width	2,990 (9' 10")	3,090 (10' 2")	3,190 (10' 6")
G Min. ground clearance	480 (1' 7")			900 (36")	3,290 (10' 10")
H Track gauge	2,390 (7' 10")				

R235LCR-9A WORKING RANGE

mm (ft-in)



Boom length	5,680 (18' 8")		
Arm length	2,000 (6' 7")	2,400 (7' 10")	2,920 (9' 7")
A Max. digging reach	9,040 (29' 8")	9,430 (30' 11")	9,910 (32' 6")
A' Max. digging reach on ground	8,860 (29' 1")	9,260 (30' 5")	9,750 (31' 12")
B Max. digging depth	5,780 (18' 12")	6,180 (20' 3")	6,700 (21' 12")
B' Max. digging depth (B' level)	5,550 (18' 3")	5,980 (19' 7")	6,530 (21' 5")
C Max. vertical wall digging depth	5,140 (16' 10")	5,710 (18' 9")	6,270 (20' 7")
D Max. digging height	10,090 (33' 1")	10,420 (34' 2")	10,830 (35' 6")
E Max. dumping height	7,190 (23' 7")	7,510 (24' 8")	7,890 (25' 11")
F Min. swing radius	2,860 (9' 5")	2,550 (8' 4")	2,350 (7' 9")