

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins QSC
Type	4-cycle turbocharged charger air cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	6 cylinders, in-line
Firing order	1-5-3-6-2-4
Combustion chamber type	Direct injection type
Cylinder bore × stroke	114 × 135 mm (4.49" × 5.32")
Piston displacement	8300 cc (505 cu in)
Compression ratio	17.5 : 1
Rated gross horse power (SAE J1995)	278 Hp at 1750 rpm (213 kW at 1750 rpm)
Maximum torque	123.7 kgf · m (1213 lbf · ft) at 1500 rpm
Engine oil quantity	35 l (9.2 U.S. gal)
Dry weight	723 kg (1594 lb)
High idling speed	1750+ 50 rpm
Low idling speed	700 ± 50 rpm
Rated fuel consumption	168.9 g/Hp · hr at 1750 rpm
Starting motor	Denso (24V-7.5 kW)
Alternator	Delco Remy 24V-50A
Battery	2 × 12V × 160Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 154 cc/rev
Rated oil flow	2 × 270 l /min (71.3 U.S. gpm / 59.4 U.K. gpm)
Rated speed	1750 rpm

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40 kgf/cm ² (570 psi)
Rated oil flow	26.3 l /min (6.9 U.S. gpm/5.8 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	9 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Overload relief valve pressure	400 kgf/cm ² (5690 psi)

[]: Power boost

5) SWING MOTOR

Item	Specification
Type	Axial piston motor
Capacity	169.4 cc/rev
Relief pressure	300 kgf/cm ² (4270 psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	70 kgf · m (505 lbf · ft)
Brake release pressure	26 kgf/cm ² (370 psi)
Reduction gear type	2 - stage planetary

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement bent-axis axial piston motor
Relief pressure	350 kgf/cm ² (4980 psi)
Capacity (max / min)	88.5/154.8 cc/rev
Reduction gear type	3-stage planetary
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	9 kgf/cm ² (128 psi)
Braking torque	40 kgf · m (290 lbf · ft)

7) REMOTE CONTROL VALVE

Item		Specification
Type		Pressure reducing type
Operating pressure	Minimum	6.5 kg/cm ² (92 psi)
	Maximum	26 kg/cm ² (370 psi)
Single operation stroke	Lever	61 mm (2.4 in)
	Pedal	123 mm (4.84 in)

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	∅ 150 × ∅ 105 × 1480 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 160 × ∅ 110 × 1685 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 140 × ∅ 100 × 1285 mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

9) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
R320LC-9	Standard	☆600 mm (24")	0.62 kgf/cm ² (8.82 psi)	48	3280 mm (10' 9")
	Option	☆700 mm (28")	0.54 kgf/cm ² (7.68 psi)	48	3380 mm (11' 1")
		☆800 mm (32")	0.48 kgf/cm ² (6.83 psi)	48	3480 mm (11' 5")
		☆900 mm (36")	0.43 kgf/cm ² (6.11 psi)	48	3580 mm (11' 9")
R320NLC-9	Standard	☆600 mm (24")	0.61 kgf/cm ² (8.67 psi)	48	2990 mm (9' 10")
R320LC-9 H/WALKER	Standard	☆600 mm (24")	0.67 kgf/cm ² (9.53 psi)	48	3470 mm (11' 5")
	Option	☆700 mm (28")	0.58 kgf/cm ² (8.25 psi)	48	3570 mm (11' 9")
		☆800 mm (32")	0.51 kgf/cm ² (7.25 psi)	48	3670 mm (12' 0")
		★710 mm (28")	0.58 kgf/cm ² (8.25 psi)	48	3580 mm (11' 9")

☆ : Triple grouser

★ : Double grouser

10) BUCKET

Item		Capacity		Tooth quantity	Width		
		SAE heaped	CECE heaped		Without side cutter	With side cutter	
R320LC-9 R320NLC-9 H/WALKER	Standard	1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	5	1380 mm (54.3")	1500 mm (59.1")	
	Option		0.9 m ³ (1.18 yd ³)	0.8 m ³ (1.05 yd ³)	3	950 mm (37.4")	1070 mm (42.1")
			1.14 m ³ (1.49 yd ³)	1.0 m ³ (1.31 yd ³)	4	1110 mm (43.7")	1230 mm (48.4")
			1.74 m ³ (2.28 yd ³)	1.5 m ³ (1.96 yd ³)	5	1620 mm (63.8")	1740 mm (68.5")
			2.10 m ³ (2.75 yd ³)	1.8 m ³ (2.35 yd ³)	5	1910 mm (75.2")	2030 mm (79.9")
		◆	1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	5	1470 mm (57.9")	-
		◎	1.44 m ³ (1.88 yd ³)	1.25 m ³ (1.63 yd ³)	5	1470 mm (57.9")	-
		◎	1.73 m ³ (2.26 yd ³)	1.5 m ³ (1.96 yd ³)	5	1710 mm (67.3")	-

◆ : Heavy duty bucket

◎ : Rock bucket (esco type)