

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Cummins B3.9-C
Type	4-cycle turbocharged and after cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	4 cylinders, in-line
Firing order	1-3-2-4
Combustion chamber type	Direct injection type
Cylinder bore x stroke	102 x 120mm(4.02" x 4.72")
Piston displacement	3920cc(239cu in)
Compression ratio	18.0 : 1
Rated gross horse power	125hp at 2200rpm
Maximum gross torque at 1300rpm	52kgf · m(376lbf · ft)
Engine oil quantity	11 (2.9 U.S. gal)
Dry weight	338kg(745lb)
High idling speed	2420 ± 50rpm
Low idling speed	1000 ± 50rpm
Rated fuel consumption	231g/kw · hr
Starting motor	Nippondenso 228000-7902 (24V-3.7kw)
Alternator	Delco Remy 22SI(24V-70Amp)
Battery	2 x 12V x 100Ah

2) MAIN PUMP

Item	Specification
Type	Fixed displacement helical gear pump
Capacity	36+28.5cc/rev
Maximum operating pressure	210kgf/cm ² (2990psi)
Rated operating speed	2200rpm
Rated output flow	140 /min(40U.S.gpm)

3) FAN AND BRAKE PUMP

Item	Specification	
	Fan	Brake
Type	Fixed displacement tandem helical gear pump	
Capacity	16.8cc/rev	8.2cc/rev
Maximum operating pressure	100kgf/cm ² (1422psi)	150kgf/cm ² (2130psi)
Rated operating speed	2200rpm	
Rated output flow	35 /min(9.2U.S.gpm)	17 /min(4.5U.S.gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	2 spool(sectional block)
Operating method	Hydraulic pilot assist
Main relief valve set pressure	210kgf/cm ² (2990psi)
Overload relief valve set pressure	240kgf/cm ² (3414psi)

5) REMOTE CONTROL VALVE

Item	Specification	
Type	Joystick(or with aux lever)	
Control pressure	Minimum	3.7kgf/cm ² (52.6psi)
	Maximum	30kgf/cm ² (427psi)

6) CYLINDER

Item	Specification
Boom cylinder	Bore dia × Rod dia × Stroke Ø 105 × Ø65 × 772mm
Bucket cylinder	Bore dia × Rod dia × Stroke Ø 120 × Ø70 × 510mm
Steering cylinder	Bore dia × Rod dia × Stroke Ø 60 × Ø35 × 412mm

7) DYNAMIC POWER TRANSMISSION DEVICES

Item		Specification
Torque converter	Model	ZF 4WG130
	Type	Single-stage, single-phase
Transmission	Type	Full-automatic power shift
	Gear shift	Forward fourth gear, reverse third gear
	Adjustment	Electrical single lever type, kick-down system
Axle	Drive devices	4-wheel drive
	Front	Front fixed location
	Rear	Oscillation $\pm 13^\circ$ of center pin-loaded
Wheels	Tires	17.5-25, 12PR(L3)
Brakes	Travel	Four-wheel, wet-disc type, full hydraulic
	Parking	Spring applied, hydraulic released brake in front axle
Steering	Type	Full hydraulic, articulated
	Steering angle	40° to both right and left angle, respectively