

8. SPECIFICATIONS FOR MAJOR COMPONENTS

ENGINE

Item	Specification
Model	Mitsubishi S6S-DT
Type	4-cycle turbocharged diesel engine, low emission
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	94 × 120mm(3.70" × 4.72")
Piston displacement	4996cc(305cu in)
Compression ratio	19.5 : 1
Rated gross horse power(SAE J1995)	126Hp at 2100rpm(94kW at 2100rpm)
Maximum torque at 1500rpm	42.5kgf · m(307lbf · ft)
Engine oil quantity	16.5 l (4.4U.S. gal)
Dry weight	355kg(783lb)
High idling speed	2200+ 50rpm
Low idling speed	950 ± 100rpm
Rated fuel consumption	169.3g/Hp · hr at 2100rpm
Starting motor	Mitsubishi 24V-5.0kW
Alternator	Mitsubishi 24V-50A
Battery	2 × 12V × 100Ah

MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 80cc/rev
Maximum pressure	330kgf/cm ² (4694psi) [360kgf/cm ² (5120psi)]
Rated oil flow	2 × 168 l /min (44.4U.S. gpm/ 37.0U.K. gpm)
Rated speed	2100rpm

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	35kgf/cm ² (500psi)
Rated oil flow	31.5 l /min(8.3U.S. gpm/7.0U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools mono-block
Operating method	Hydraulic pilot system
Main relief valve pressure	330kgf/cm ² (4695psi) [360kgf/cm ² (5120psi)]
Overload relief valve pressure	380kgf/cm ² (5550psi)

[]: Poer boost

5) SWING MOTOR

Item	Specification
Type	Two fixed displacement axial piston motor
Capacity	117.8cc/rev
Relief pressure	240kgf/cm ² (3414psi)
Braking system	Automatic, spring applied hydraulic released
Braking torque	56kgf · m(405lbf · ft)
Brake release pressure	20kgf/cm ² (284psi)
Reduction gear type	2 - stage planetary
Swing speed	12.0rpm

6) TRAVEL MOTOR

Item	Specification
Type	Variable displacement axial piston motor
Relief pressure	330kgf/cm ² (4695psi)
Reduction gear type	Planetary & differential type
Braking system	Automatic, spring applied hydraulic released
Brake release pressure	6kgf/cm ² (85psi)
Braking torque	40.6kgf · m(294lbf · ft)

7) REMOTE CONTROL VALVE

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

8) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Rod dia × Stroke	∅ 115 × ∅ 80 × 1090mm
	Cushion	Extend only
Arm cylinder	Bore dia × Rod dia × Stroke	∅ 120 × ∅ 85 × 1340mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Rod dia × Stroke	∅ 115 × ∅ 80 × 950mm
	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
R180LC-7	Option	500mm(20")	0.50kgf/cm ² (7.11psi)	51	2750mm(9' 0")
	Standard	600mm(24")	0.42kgf/cm ² (5.97psi)	51	2850mm(9' 4")
	Option	700mm(28")	0.36kgf/cm ² (5.12psi)	51	2950mm(9' 8")
	Option	800mm(32")	0.32kgf/cm ² (4.55psi)	51	3050mm(10' 0")

10) BUCKET

Item		Capacity		Tooth quantity	Width		
		SAE heaped	CECE heaped		Without side cutter	With side cutter	
R180LC-7	STD	0.76m ³ (0.99yd ³)	0.65m ³ (0.85yd ³)	5	1060mm(41.7")	1180mm(46.5")	
	OPT		0.39m ³ (0.51yd ³)	0.34m ³ (0.44yd ³)	3	620mm(24.4")	740mm(29.1")
			0.50m ³ (0.65yd ³)	0.44m ³ (0.58yd ³)	4	760mm(29.9")	880mm(34.6")
			0.64m ³ (0.84yd ³)	0.55m ³ (0.72yd ³)	5	920mm(36.2")	1040mm(40.9")
			0.89m ³ (1.16yd ³)	0.77m ³ (1.01yd ³)	6	1220mm(48.0")	1340mm(52.8")
			1.05m ³ (1.37yd ³)	0.90m ³ (1.18yd ³)	6	1400mm(55.1")	1520mm(59.8")
			◆0.69m ³ (0.90yd ³)	0.62m ³ (0.81yd ³)	5	990mm(39.0")	-

◆ : Heavy duty bucket