SOLAR 200W-v

DAEWOO NEW WHEEL TYPE EXCAVATOR

- Operating Weight : 19,500 kg (43,000 lb)
- Bucket Capacity (PCSA) : 0.50~1.18m³ (0.65~1.54cu·yd)
- Rated Engine Power : 153 HP / 2,200 rpm
  114 kw / 2,200 rpm

DAEWOO
DAEWOO HEAVY INDUSTRIES LTD.

Technical Data

Engine

Model ..... DAEWOO DB58TI
Type ..... Water-cooled, 4-cycle, 6-cylinder in line, direct injection chamber type diesel engine.

Rated flywheel horse power
DIN 6271, net ..... 114KW (155PS) at 2,200 rpm
SAE J1349, net ..... 114KW (153HP) at 2,200 rpm

Piston displacement 5,785cc (353cu.in)
Maximum torque ..... 56kgf.m (549Nm, 405 lbf.ft) at 1,600 rpm
Bore and stroke ..... 102mm×118mm (4.0"×4.6")
Starting system ..... 24V electric motor
Batteries ..... 2×12V×100 AH

Auto-idle system : Engine rpm is reduced automatically to the low idle rpm after a lapse of approx. 4 seconds with all control levers in neutral position, thus saving energy and reducing noise.

Hydraulic system

Daewoo's EPOS-V (Electronic Power Optimizing System) can achieve maximum job effciency and reduce fuel consumption.

- 3-power mode working system.
- 3-Working mode selection system.
- Computer aided engine pump control.
- Hydraulic system assures fully independent and combined operations.
- Cross-sensing and fuel saving pump system.
- Auto idle system.
- 2 speed travel system for high traction force and travel speed.
- Travel motor brake torque-up system.
- Cruise travel system.

Main pumps ..... 2 variable displacement axial piston pumps.
Max. oil flow ..... 2×239 l/min (2×63 US gpm, 2×52.6 lmp gpm)

Pilot pump ..... Gear pump
Max. oil flow ..... 22 l/min (5.8US gpm, 4.8 lmp gpm)
Pressure setting ..... 39 bar (569 psi, 40 kgf/cm²)

Brake pump ..... Gear pump
Max. oil flow ..... 20.9 l/min (5.5 US gpm, 4.6 lmp gpm)
Pressure setting ..... 157 bar (2,276 psi, 160 kgf/cm²)

Steering pump ..... Gear pump
Max. oil flow ..... 52.1 l/min (13.7 US gpm, 11.4 lmp gpm)
Pressure setting ..... 152 bar (2,205 psi, 155 kgf/cm²)

Main relief valves
Boom/Arm/Bucket ..... 343 bar (4,978 psi, 350 kgf/cm²)
Travel circuit ..... 314 bar (4,551 psi, 320 kgf/cm²)

Overload relief valves
Boom circuit ..... 353 bar (5,120 psi, 360 kgf/cm²)
Arm circuit ..... 353 bar (5,120 psi, 360 kgf/cm²)
Bucket circuit ..... 353 bar (5,120 psi, 360 kgf/cm²)

Swing motor relief valve ..... 275bar (3,982 psi, 280kgf/cm²)

Hydraulic cylinders

High-strength piston rods and tubes are used. Cylinder cushion mechanism is provided for boom, arm and bucket cylinders to assure shock-free operation and extend life of cylinder.

Cylinders	Q'ty	Bore×Rod dia.×Stroke
Boom	2	120×85×1,280 mm (4.7"×3.3"×50.4")
Arm	1	135×95×1,538 mm (5.3"×3.7"×60.5")
Bucket	1	115×75×1,050 mm (4.5"×2.9"×41.3")

Hydraulic filters

All hydraulic circuits have high-quality hydraulic filters for protection against oil contamination and longer life of hydraulic components. Suction filter is built in suction line, and 10μ full-flow filter in return circuit, drain filter in drain line, brake filter in brake circuit and pilot filter in pilot circuit.

Swing mechanism

High-torque, axial piston motor with planetary reduction gear bathed in oil. Swing circle is a single-row, shear type ball bearing with induction-hardened internal gear. Internal gear and pinion immersed in lubricant. Swing reactionless valve is attached. Spring applied hydraulically released parking brake. A swing lock clamps the superstructure for transportation.

Technical Data

- **Swing speed** ..... 0 to 12.2rpm(min^{-1})
- **Rear swing radius** ..... 2,750mm(9')

Drive

Fully hydrostatic driven, 2 speed power shift transmission, variable displacement, high torque, axial piston motor, foot pedal controls provide smooth travel, hub reduction type front steering axle and rear rigid axle.

Travel speed ..... 0 to 35 km/h(21.7 mph)

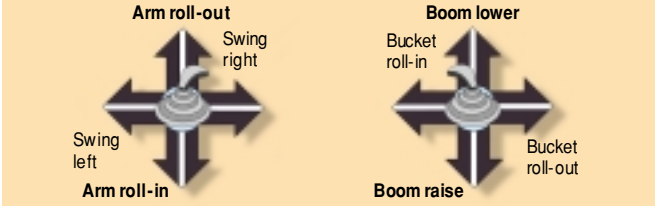
Maximum traction

force ..... 10,750 kgf (23,700 lbf)

Gradeability ..... 31.8°(60.8%) continuous

Controls 3 implement levers

Pilot pressure control type. Right lever is for boom and bucket control, left lever for swing and arm control. Left rear lever is for dozer and outrigger.



Super-structure revolving frame

A deep, full-reinforced box section.
Heavy-gauge steel plates used for ruggedness.

Operator's cab

Independent, shock and noise-free roomy ISO standard operator's cab. 4 side safety glass windows give all-round visibility. Front window slides up and stores in the roof. Left and right side windows opens for ventilation. Fully adjustable reclining seat : fwd./rev. and up/down. Cab cooler is optionally available.

Undercarriage

Heavy-duty frame, all-welded stress-relieved structure. Top grade materials used for toughness. Specially heat-treated connecting pins. 10.00-20-14PR(OTR) double tires with tire spacer. Front axle oscillating hydraulically.

Rear dozer as a standard or outrigger as an option.
Front outrigger as a standard. 18-19.5-14PR(OTR)
Tubeless single tire as on option.

Brake

Full sealed wet discs service brakes operated fully hydraulic and full sealed wet discs parking brake operated hydraulically.

Weight

Shipping weight-includes 10% fuel,
5,700mm(18'8") mono boom, 2,900mm(9'6") arm,
1,228mm(4') backhoe and rear dozer
..... 19,500 kg (43,000 lb)

Major component weight

	kg	lb
Arm : 2,900mm(9'6")	580	1,278
Mono boom : 5,700mm(18'8")	1,325	2,921
Upper structure	8,850	19,510
(INCL. Counter weight)		
Counter weight	3,500	7,716

Service refill capacities

	Liters	US gal	Imp gal
Fuel tank	300	79.26	66
Cooling system	49	12.94	10.78
Lubrication			
Engine oil	20.5	5.41	4.51
Swing drive	5	1.32	1.1
Final drive (each)	2.0	0.53	0.44
Hydraulic tank	160	42.27	35.2

Safety

- Swing lock for long-distance travel and transportation.
- Safety glass windows.
- Electric double horn.
- Spring-engaged/hydraulic-released disc type parking brake.
- Main relief valves.
- Overload relief valves.
- Window protector. ..... Optional.
- Lever lock.
- Circuit breaker.
- Preventing engine starting on gear shift.
- Monitor for operation.(Engine coolant temp., battery charge, engine oil press, air cleaner clogging, pilot oil filter clogging, brake oil filter clogging, drain filter clogging, Brake oil press, Engine speed)

Technical Data

Standard equipment

All weather steel cab with all-round visibility. Safety glass windows. Wide screen wiper. Sliding, fold-in front window. Sliding side window. Lockable door. Deluxe fully adjustable reclining seat. Lever lock. Cab heater. Two room lamps.

Backhoe attachments

Boom and arm are of all welded. Low stress, full box section design. Bucket of all welded, high-strength steel structure.

Optional equipment

Buckets, Arm, Air conditioner, Single Tire, Rear outrigger, Articulated boom, Fuel filler pump, Additional working lamp(on the top of cabin)

Instrument panel

Engine coolant temperature gauge. Electric hourmeter. Fuel meter. Tachometer. Voltagemeter. Hydraulic oil pump pressure gauge. Monitor for during operation(Engine oil pressure, battery charge, engine oil filter clogging, air cleaner clogging, brake filter clogging, pilot filter clogging and return filter clogging). Alarm buzzer(Engine oil pressure, engine coolant temperature and brake oil pressure). Working lights pilot lamp.

Miscellaneous

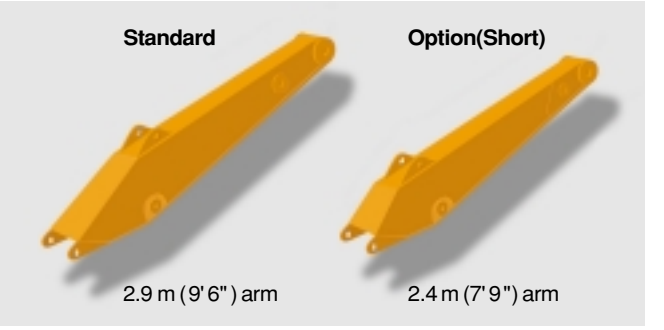
Car stereo. Electric double horn. Cigarette lighter. Ashtray. Magazine box. Swing lock. Lockable machine cover. Radiator reserve tank. Air cleaner evacuator. Hyd. oil filters. Woking lights(basic machine and boom).

Digging forces (Maximum radial tooth forces)

	2.9m (9'6") Arm	2.4m (7'9") Arm
Bucket digging force*	12, 028kgf	13,060 kgf
	118KN	128 KN
	26,520 lbf	28,800 lbf
Arm digging force*	10,124kgf	12,300 kgf
	99KN	121 KN
	22,300 lbf	27,100 lbf

*At power boost

Arm



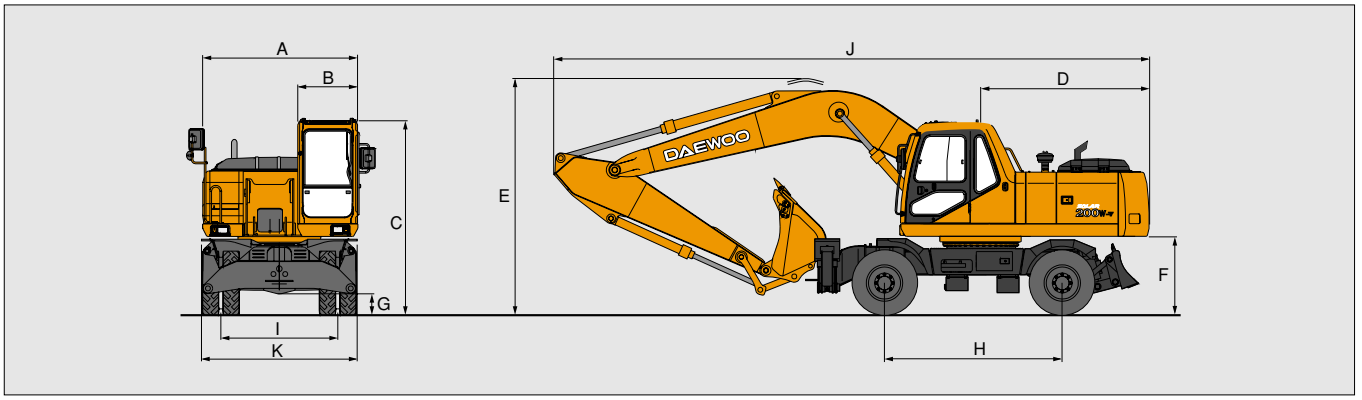
Buckets

Capacity		Width		Weight	Recommendation	
PCSA, heaped	CECE, heaped	Without side cutters	With side cutters		2.4m(7'9")Arm	2.9m(9'6")Arm
0.50m³ (0.65yd³)	0.45m³	688mm (27")	778mm (31")	500kg (1,100lb)	A	A
0.81m³ (1.06yd³)	0.7m³	1,058mm (42")	1,168mm (46")	660kg (1,460lb)	A	A
0.93m³ (1.22yd³)	0.8m³	1,180mm (46")	1,290mm (51")	710kg (1,570lb)	A	A
1.05m³ (1.37yd³)	0.9m³	1,302mm (51")	1,412mm (56")	760kg (1,680lb)	A	B
1.17m³ (1.53yd³)	1.0m³	1,428mm (56")	1,538mm (61")	800kg (1,760lb)	B	C
1.18m³ (1.54yd³)	1.1m³	1,560mm (61")	1,670mm (66")	855kg (1,880lb)	C	C

A. Suitable for materials with density of 3,370 lb/cu·yd (2,000 kg/m³) or less
B. Suitable for materials with density of 2,700 lb/cu·yd (1,600 kg/m³) or less
C. Suitable for materials with density of 1,850 lb/cu·yd (1,100 kg/m³) or less

Specifications & Working Ranges

■Dimensions



■General specifications

Operating Weight

Mono Boom	19,500kg (43,000lb)

Bucket

Heaped Capacity Range	PCSA 0.5~1.18m³ (0.65~1.54cu.yd)

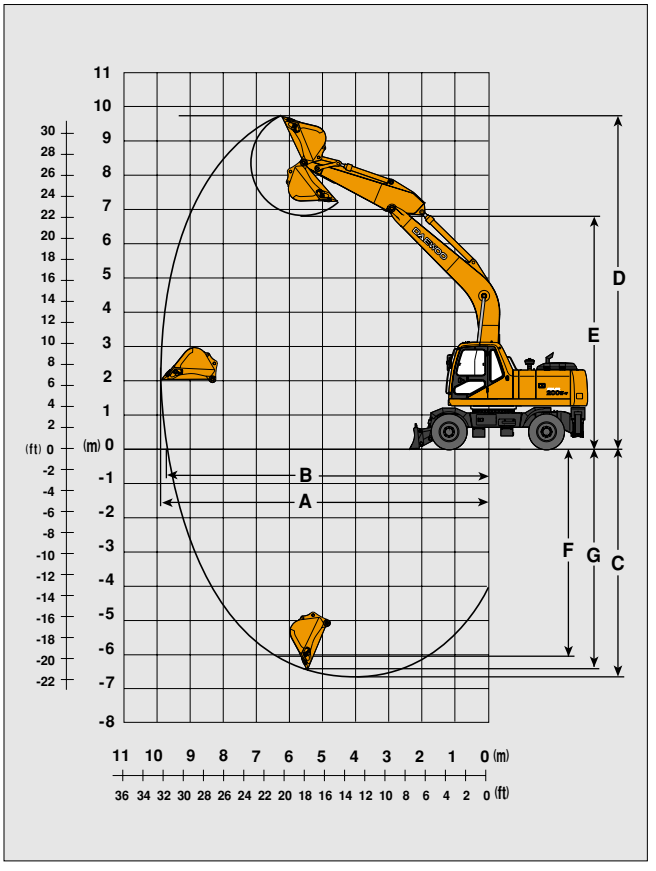
Maneuverability

Travel Speed	35 km/h (21.7 mph)
Gradeability	31.8°(60.8 %)
Ground Clearance	340mm (13")

Dimensions

A	Overall width of upper structure	2,490mm(8'2")
B	Overall width of cab	960mm(3'2")
C	Overall height of cab	3,116mm(10'3")
D	Tail swing radius	2,750mm(9'0")
E	Overall height of boom	3,790mm(12'5")
F	Clearance under counterweight	1,259mm(4'1")
G	Ground clearance	340mm(13")
H	Wheel base	2,850mm(9'4")
I	Tread	1,874mm(6'2")
J	Overall length	9,600mm(31'6")
K	Overall tire width with fender	
	Tire	2,470 mm(8'1")
	Fender	2,496 mm (8'2")

■Working ranges

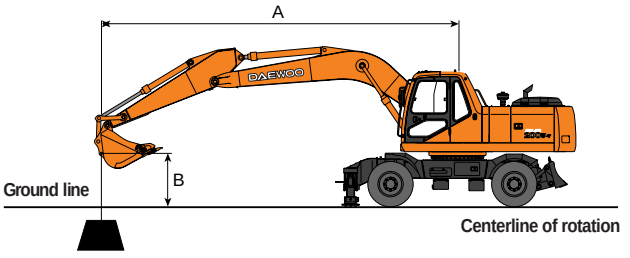


Working ranges- with mono block boom

Boom	Mono boom 5,700mm (18'8")
Arm	2,900mm (9'6")
Bucket	0.75m³ (1 1/8 cu.yd)
A. Max. digging reach	9,960mm (32'8")
B. Max. digging reach at ground level	9,737mm (31'11")
C. Max. digging depth	6,620mm (21'8")
D. Max. digging height	9,710mm (31'10")
E. Max. dump height	6,885mm (22'7")
F. Vertical wall digging depth	6,048mm (19'10")
G. Max. digging depth (8' Level)	6,420mm (12'1")

Lifting Capacities

■Standard



A : Load radius from centerline of rotation
B : Load point height

Metric (5.7m Mono Boom, 2.9m Arm)

Unit : 1,000kg

A(m) / B(m)	2		3		4		5		6		7		8		9		Max. Reach		
	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	A(m)
9							*3.96 / *3.96	3.85 / *3.96	*3.26 / *3.26	3.07 / *3.26							*3.33 / *3.33	3.12 / *3.33	5.89
8									*3.18 / *3.18	2.82 / *3.18	*3.06 / *3.06	2.33 / *3.06					*3.06 / *3.06	2.36 / *3.06	6.89
7									*3.18 / *3.18	2.87 / *3.18	*3.07 / *3.07	2.15 / *3.07					*2.97 / *2.97	1.92 / *2.97	7.76
6									*3.20 / *3.20	2.86 / *3.20	*3.15 / *3.15	2.13 / *3.15	*2.97 / *2.97	1.70 / *2.97			*2.95 / *2.95	1.66 / *2.95	8.31
5							*4.00 / *4.00	3.81 / *4.00	*3.28 / *3.28	2.81 / *3.28	*3.38 / *3.38	2.12 / *3.38	3.05 / *3.33	1.62 / *3.33			2.79 / *2.97	1.49 / *2.97	8.71
4					*5.28 / *5.28	5.15 / *5.28	*4.06 / *4.06	3.66 / *4.06	*3.87 / *3.87	2.74 / *3.87	*3.76 / *3.76	2.08 / *3.76	3.01 / *3.75	1.59 / 3.38	2.62 / *3.02	1.38 / 2.94	*2.64 / *3.04	1.39 / 2.97	8.89
3			*8.60 / *8.60	7.49 / *8.60	*6.24 / *6.24	4.92 / *6.24	*5.19 / *5.19	3.53 / *5.19	*4.58 / *4.58	2.64 / *4.58	3.77 / *4.23	2.03 / 4.23	2.99 / *4.05	1.57 / 3.36	2.53 / *3.13	1.32 / 2.85	2.52 / *3.12	1.31 / 2.84	9.14
2			*5.51 / *5.51	*5.51 / *5.51	*8.06 / *8.06	4.69 / *8.06	*6.29 / *6.29	3.37 / *6.29	4.74 / *5.32	2.56 / *5.32	3.70 / *4.74	1.98 / 4.16	2.96 / *4.38	1.54 / 3.33	2.50 / *3.35	1.29 / 2.82	2.48 / *3.26	1.28 / 2.79	9.18
1			*4.32 / *4.32	*4.32 / *4.32	*7.02 / *7.02	4.45 / *7.02	6.17 / *7.26	3.26 / 6.97	4.66 / *6.02	2.48 / 5.24	3.65 / *5.22	1.93 / 4.10	2.93 / *4.72	1.52 / 3.30	2.50 / *3.49	1.28 / 2.81	2.49 / *3.45	1.28 / 2.80	9.13
0 (Ground)	*3.33 / *3.33	*3.33 / *3.33	*4.06 / *4.06	*4.06 / *4.06	*7.43 / *7.43	4.31 / *7.43	6.07 / *8.10	3.16 / 6.86	4.59 / *6.60	2.43 / 5.17	3.61 / *5.65	1.89 / 4.06	2.92 / *5.03	1.50 / 3.29	2.55 / *3.70	1.31 / 2.87	2.57 / *3.77	1.33 / 2.90	8.89
-1	*3.48 / *3.48	*3.48 / *3.48	*4.71 / *4.71	*4.71 / *4.71	8.61 / *10.44	4.28 / 9.84	6.02 / *8.67	3.12 / 6.80	4.54 / *7.05	2.38 / 5.11	3.59 / *5.99	1.88 / 4.04	2.94 / *4.82	1.52 / 3.31			*2.67 / *4.04	1.38 / 3.01	8.68
-2	*5.43 / *5.43	*5.43 / *5.43	*8.11 / *8.11	6.57 / *8.11	8.58 / *11.47	4.26 / 9.80	5.97 / *8.96	3.08 / 6.75	4.52 / *7.32	2.36 / 5.09	3.60 / *6.07	1.88 / 4.05	2.98 / *4.66	1.55 / 3.35			2.89 / *4.53	1.51 / 3.25	8.27
-3	*8.45 / *8.45	*8.45 / *8.45	*11.62 / *11.62	6.63 / *11.62	8.61 / *10.94	4.29 / 9.83	5.99 / *8.71	3.10 / 6.78	4.54 / *7.00	2.38 / 5.11	3.63 / *5.76	1.91 / 4.09					3.24 / *5.24	1.71 / 3.64	7.69
-4	*11.75 / *11.75	*11.75 / *11.75	*12.86 / *12.86	6.75 / *12.86	8.73 / *9.90	4.38 / *9.90	6.08 / *7.76	3.17 / 6.87	4.60 / *6.13	2.44 / 5.18	3.84 / *5.88	2.05 / 4.31					3.87 / *5.86	2.07 / 4.34	6.89
-5	*16.10 / *16.10	*13.74 / *16.10	*11.22 / *11.22	6.98 / *11.22	*8.13 / *8.13	4.52 / *8.13	6.20 / *6.34	3.28 / *6.34	4.98 / *6.39	2.69 / 5.60							5.00 / *6.25	2.70 / 5.62	5.89

Feet (18'8" Mono Boom, 9'6" Arm)

Unit : 1,000 lb

A(ft) / B(ft)	5		7.5		10		12.5		15		17.5		20		22.5		25		27.5		30		Max. Reach		
	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	▯	▭	A(ft)
30											*8.06 / *8.06	7.61 / *8.06	*6.91 / *6.91	6.19 / *6.91									*6.81 / *6.81	5.64 / *6.81	20.90
25													*6.89 / *6.89	6.15 / *6.89	*6.68 / *6.68	4.86 / *6.68	*6.56 / *6.56	4.20 / *6.56					*6.54 / *6.54	4.14 / *6.54	25.76
20											*8.14 / *8.14	7.64 / *8.14	*7.00 / *7.00	6.10 / *7.00	*7.19 / *7.19	4.91 / *7.19	7.29 / *7.47	3.92 / *7.47	6.40 / *6.52	3.43 / *6.52			6.33 / *6.52	3.41 / *6.52	28.20
15			*21.95 / *21.95	*21.95 / *21.95			*12.21 / *12.21	12.18 / *12.21	*9.93 / *9.93	9.21 / *9.93	*9.20 / *9.20	7.27 / *9.20	*8.77 / *8.77	5.84 / *8.77	*8.51 / *8.51	4.74 / *8.51	7.26 / *8.39	3.89 / 8.14	6.16 / *7.69	3.22 / 6.93			5.74 / *6.71	3.02 / 6.44	29.62
10					*14.84 / *14.84	*14.84 / *14.84	*17.64 / *17.64	11.25 / *17.64	*14.35 / *14.35	8.62 / *14.35	*12.41 / *12.41	6.83 / *12.41	10.26 / *11.05	5.55 / *11.05	8.49 / *10.21	4.56 / 9.52	7.13 / *9.67	3.77 / 8.01	6.05 / *9.28	3.12 / 6.82	5.49 / *7.09	2.85 / 6.18	5.57 / *7.38	2.87 / 6.27	29.66
5					*9.48 / *9.48	*9.48 / *9.48	*13.56 / *13.56	10.39 / *13.56	15.61 / *18.36	8.10 / 17.67	12.26 / *15.35	6.49 / 13.82	9.98 / *13.38	5.31 / 11.22	8.29 / *11.95	4.38 / 9.31	7.00 / *10.95	3.65 / 7.87	6.02 / *9.69	3.09 / 6.79	5.51 / *7.72	2.84 / 6.21	5.55 / *7.88	2.85 / 6.24	29.67
0 (Ground)	*7.33 / *7.33	*7.33 / *7.33	*7.75 / *7.75	*7.75 / *7.75	*9.76 / *9.76	*9.76 / *9.76	*17.90 / *17.90	10.10 / *17.90	15.25 / *20.93	7.81 / 17.30	12.03 / *17.50	6.27 / 13.58	9.82 / *15.08	5.17 / 11.05	8.19 / *13.34	4.29 / 9.21	6.95 / *12.01	3.60 / 7.82	6.07 / *9.37	3.14 / 6.83			5.82 / *8.72	3.01 / 6.55	28.75
-5	*12.45 / *12.45	*12.45 / *12.45	*15.10 / *15.10	*15.10 / *15.10	*20.34 / *20.34	*14.16 / *20.34	20.59 / *26.36	10.14 / 23.60	15.18 / *21.81	7.75 / 17.23	11.92 / *18.44	6.19 / 13.46	9.73 / *15.84	5.10 / 10.97	8.19 / *13.58	4.30 / 9.22	7.06 / *11.31	3.70 / 7.93					6.56 / *10.38	3.44 / 7.37	26.65
-10	*22.11 / *22.11	*22.11 / *22.11	*26.35 / *26.35	21.17 / *26.35	*28.63 / *28.63	*14.48 / *28.63	20.83 / *23.43	10.34 / *23.43	15.35 / *19.53	7.89 / 17.41	12.07 / *16.24	6.32 / 13.62	9.88 / *13.54	5.23 / 11.12	8.38 / *12.82	4.46 / 9.41							8.15 / *12.78	4.35 / 9.15	23.28
-15			*32.84 / *32.84	24.18 / *32.84	*24.34 / *24.34	*15.19 / *24.34	*18.98 / *18.98	10.88 / *18.98	*15.46 / *15.46	8.34 / *15.46	12.58 / *14.09	6.77 / *14.09											12.46 / *14.06	6.72 / 14.01	17.96

Note
1. Ratings are based on SAE J1097.
2. Load point is the hook on the back of the bucket.
3. *Rated loads are based on hydraulic capacity.
4. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

▯ : Rated lift capacity-over front
▭ : Rated lift capacity-over side (free on wheel/outrigger on ground)

∗Specifications are subject to change without prior notice.

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