www.doosaninfracore.com

SOLAR 035

- Operating Weight Canopy : 3,140kg (6,922 lb)
  Cabin : 3,240kg (7,140 lb)
- Bucket capacity (PCSA) : 0.10m³ (0.131cu · yd)
  (CECE) : 0.073m³ (0.095cu · yd)
- Engine Power :
  DIN 6271, net ..... 18kw (24.5PS) / 1,950rpm
  SAE J1349, net ..... 18kw (24.1HP) / 1,950 rpm

DOOSAN
Infracore

Courtesy of Machine Market

The highest performance is guaranteed in any working condition.

Powerful Digging Force (Bucket)

Powerful, efficient digging with bigger digging force Bucket

Digging force : (2,280 kgf)

ISUZU 3LD1 Engine

Solar 035, which has the powerful and eco-friendly Heart, always provides high operation efficiency and pleasant work condition.

Pilot Cut-off Switch

A hydraulic cut-off switch has been incorporated into the system for maximum safety. The cut-off switch will lock the front from being moved until it is turned back on and ensure the safety of the people around the machine.

E/G Control Lever

The engine control lever is placed in a very convenient location where the operator will be able to easily control the engine speed.

Powerful Digging & Lifting Force

Solar 035 armored with good front mechanism shows its strong digging & lifting capacity at the ranch and sewerage & piping work fields etc.

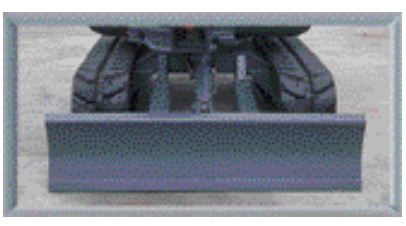
Doosan

Courtesy of Machine.Market

SOLAR 035

The most advanced hydraulic circuit mated with a very powerful engine provides for powerful excavation and work efficiency as well as the biggest pulling up and tractive forces.
As a result the Solar 035 provides outstanding performance, work efficiency and the ability to adapt to any work environment.

Daewoo Mini Solar 035 at Work

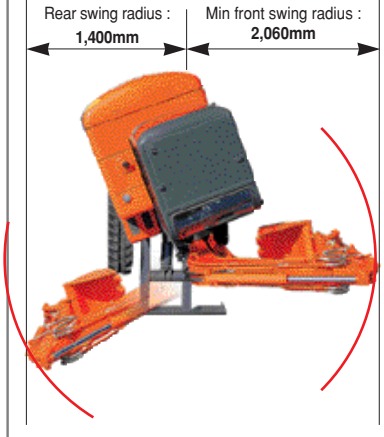


Dozer Blade

Welded, unitized blade provides durability under harsh working conditions
(1,525 x 340) 5'0"x1'1"

Boom Swing

The convenient boom swing function provides the ability to work in very narrow areas. The newly designed swing bracket and the increased boom cylinder size ensures powerful and stable boom swing performance.



Courtesy of Machine.Market

The cabin has been ergonomically redesigned with comfort in mind.

Comfortable Operating Cab

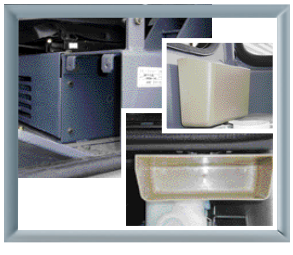
A roomy, independent, shock and low noise operator's cab with 4side safety glass windows give all-round visibility in front side up and down and right side windows opens for ventilation.

Monitor

The centralized digital display panel provides comprehensive information about the status of the machine in a easy to read format. The high quality display panel is waterproof and all information can be seen in a glance.

Control Stand

The left and right control stands are ergonomically laid out for convenient operation. The control stand surfaces have ample room to install several option switches. The uni-body plastic design provides the operator with a spacious and comfortable cabin space.



Console Box

The console box is neatly organized and intalled conveniently to make the cabin interior spacious and comfortable. The interior has many compartments to store tools, shoes and other personal items.

(Cabin Type : Two box
- Left side and under seat, Right side of seat)

(Canopy Type : One box
- Left and underneath of seat)

Defroster

The high capacity defroster is installed at the right and the front windows and provides excellent performance in both cold and hot conditions. Eliminating both frost and moisture very efficiently, provides a safer working condition for the operator in any weather condition.

(Cabin Type Only)

Arm Rest

The arm rests help the operator to be comfortable during long working days. The arm rests have been relocated to the control stand and provides more comfort to the operator than the other seats with the arm rests on the seats. The height is easily adjustable to any body types.

Joy Stick

The hydraulic joystick levers have very comfortable grips that allow the operator to perform precise operations very easily. We have located two switches on top of the joystick for convenient and diverse attachment options.

SOLAR 035

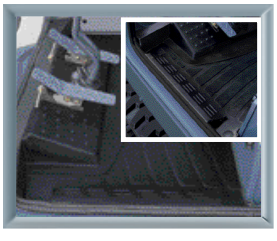
All conventional concepts were ruled out and the newly designed Solar 035 provides the operator with maximum comfort and various convenient features.
Solar 035 - The result of inovative technical design! The cabin space is more comfortable than any other excavator in its class.

Suspension Seat

The suspension can be adjusted to each operators physical characteristics.
In addition the shock absorbing characteristics of the seat provides excellent support and comfort to the operator in any working environment and long working hours.

Floor Plate (Rubber mat)

The breaker pedals(left) and boom swing pedals(right) are installed in a very spacious and convenient location. In addition, the rubber floor mats provide a very comfortable environment. The door opening has been increased by removing the lower lip and allows for easy cleaning of the interior.



Seat Cover

The waterproof seat covers prevent the seats from soaking up the water during rainy conditions. (Cabin / Canopy)

Switch

The ergonomically placed switches maximizes convenience for the operator.

Cup Holder

The conveniently located cup holders add to the comfort of the cabin.

Courtesy of Machine.Market

The status and condition of all components can be seen at a glance. The convenient and easy serviceability is really distinguished.

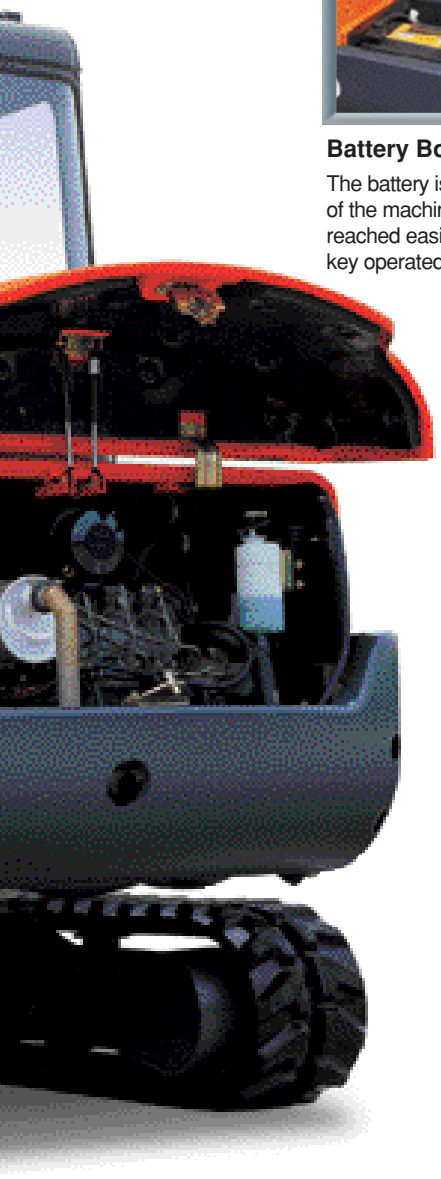
Engine Room

Engine compartment is designed for easier service and the sturdy rubber inside the ENGINE COVER reduces the noise to give comfortable environment to operator and the resident in urban areas

Courtesy of Machine.Market

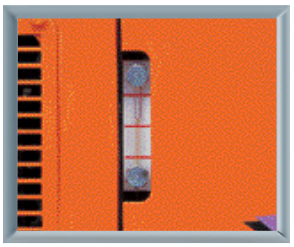
SOLAR 035

The powerful performance of excavator developed by the most advanced technology of Doosan Infracore Co, Ltd. is intergrated in the Solar 035 to ensure simple and easy maintenance. Providing operator with the highest service so that he can check for himself, Solar 035 maximizes work efficiency.



Battery Box

The battery is located on the side of the machine and can be reached easily by opening one key operated panel.



Oil Gauge

Easily check the measure of oil throughout oil gauge on the hydraulic tank side

Grease Piping

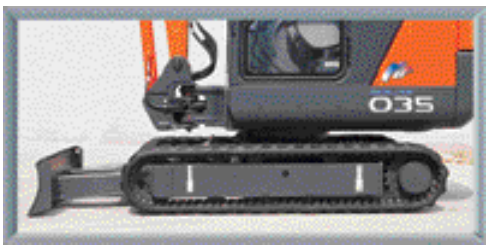
Integrated grease piping is designed to easily maintenance to swing bearing, boom swing cylinder.

Air Breather

We designed the hydraulic system for prevent the pump from cavitaion

Bucket

Hardened bucket claws provide outstanding durability and they can be easily unbolted for removal, straightening or replacing.



Rubber Shoe

Rubber shoe not only offer grader non-slip grip, but easier on sidewalks and road surface of urban environments than conventional steel shoe. These rubber shoe can be easily installed or removed with the idler, sprocket and other main parts.

Technical Data

Engine

Model ..... ISUZU 3LD1

Type ..... Water-cooled, 3-cycle, Indirect injection .

Aspiration ..... Natural

No. of cylinders 3

Rated flywheel horse power

DIN 6271, gross ..... 18.5 KW (25.2 PS) at 1,950 rpm

DIN 6271, net ..... 18 KW (24.5 PS) at 1,950 rpm

SAE J1995, gross ..... 18.5 KW (24.8 HP) at 1,950 rpm

SAE J1349, net ..... 18 KW (24.1 HP) at 1,950 rpm

Displacement ..... 1,496 cc (89.6 cu.in)

Maximum torque ..... 9.5 kgf.m (93.2 Nm, 20.9 lbf.ft) @1,700 rpm

Bore and stroke ..... ϕ83.1 mm × 92 mm (3.27" × 3.62")

Starting system ..... 12V Electric motor

Batteries ..... 12 V × 80 AH

Alternator ..... 12 V × 35 AH

Hydraulic system

2 Variable displacement axial piston tandem type pumps.
2 Gear pumps and control valve (9-spool) of section block construction.
This original design enables both independent and combined operations of all function, joystick control type operations.

Main pumps ..... 2 Variable displacement axial piston pump.

Max. oil flow ..... 37 ℓ/min (8.14 UK gpm, 9.77 US gpm)

Pilot pump ..... Gear pump

Max. oil flow ..... 9.7 ℓ/min (2.13 UK gpm, 2.56 US gpm)

Swing motor

Relief valve ..... 172 bar (2,490 psi, 175 kgf/cm²)

Main relief valves

Boom/Arm/Bucket ..... 196 bar (2,840 psi, 200 kgf/cm²)

Travel circuit ..... 196 bar (2,840 psi, 200 kgf/cm²)

Hydraulic cylinders

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

Cylinders	Q'ty	Bore ×Rod dia. ×Stroke
Boom	1	75 × 40 × 625mm (3" × 2" × 2'05")
Arm	1	75 × 35 × 600mm (3" × 1" × 2')
Bucket	1	70 × 35 × 500mm (3" × 1" × 1'8")
Dozer	1	90 × 60 × 125mm (4" × 2" × 5")
Boom swing	1	80 × 35 × 652mm (3" × 1" × 2'2")

Super-structure revolving frame

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

Operator's cab

A roomy, independent, shock and noise-free operator's cab, 4 side safety glass windows give all-round visibility. Front window slides up and stores in the roof and side window can be opened for ventilation. Fully adjustable suspension seat. Air conditioner. ISO standard cab.

Noise Levels (dynamic value)

L_{WA} External noise

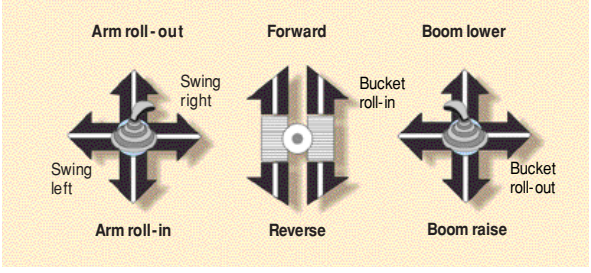
Guaranteed Sound Power Level **93.7 dB (A)** (2000/14/EC)

Measured Sound Power Level **96 dB (A)** (2000/14/EC)

L_{pA} Operator noise **77 dB (A)** (ISO 6396)

Controls. 2 implement levers

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



2 Travel levers

Mechanical control type. Independent drive at each track allows counter-rotation of the tracks. Levers are detachable.

Swing mechanism

High-torque, axial piston motor with planetary reduction gear bathed in oil. Swing circle is single-row, shear type ball bearing with induction-hardened internal gear. Internal gear and pinion gear immersed in lubricant. A two position swing lock secures the upper structure for trams portation.

- **Swing speed** ..... 0 to 9.4 rpm(min^{-1})
- **Rear swing radius** ..... 1,400 mm(4'7")

Drive

Each track is driven by an independent, high-torque, axial piston motor through planetary reduction gears. Two levers control provide smooth travel or counter-rotation upon demand.

Travel speed (High/Low) 4.2/2.7km/h (2.61/1.68mph)

Maximum traction force ..... 2,540kgf (5,600 lbf)

Gradeability ..... 30°(58%) continuous

Weight

Equipped with 2.5m(8'2") boom, 1.25m(4'1") arm, and 0.10m^3(0.131yd^3; PCSA heaped) bucket and 300mm(1') shoes.

Shoe type	Shoe width	Operating weight	Ground pressure
Triple grouser	300mm (1')	3,284 kg (7,240 lb)	0.30 kgf/cm^2 (4.27 psi)
Rubber	300mm (1')	3,240 kg (7,140 lb)	0.30 kgf/cm^2 (4.27 psi)

Undercarriage

Tractor type undercarriage. Heavy-duty track frame, all welded stress-relieved structure. Top grade materials are used for toughness. Side frames are welded, securely and rigidly, to the track frame. Lifetime-lubricated track rollers, idlers and sprockets with floating seals. Hydraulic track adjusters with shock-absorbing recoil springs.

Number of rollers and shoes (each side)

- Lower rollers 4
- Track shoes ..... Rubber shoe
- Overall track length ..... 2,080mm(6'10")
- Shoe width ..... 300mm(1')

Service refill capacities

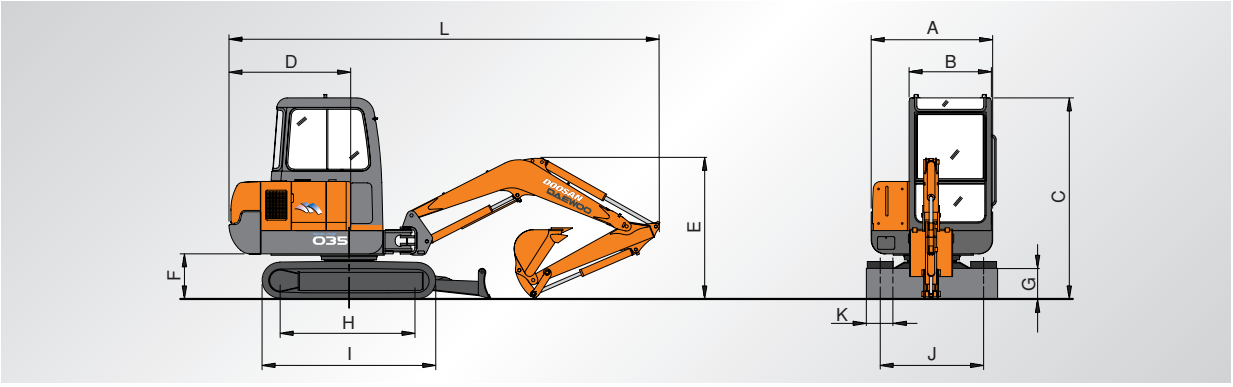
	Liters	US gal	UK gal
Fuel tank	35	9.25	7.7
Cooling system	7.0	1.85	1.54
Lubrication	**Liters**	**US gal**	**Imp gal**
Engine oil	6.3	1.66	1.39
Final drive(each)	1.2	0.31	0.26
Hydraulic tank	62	16.4	13.6

Buckets

Capacity		Width		Weight	Recommendation	
PCSA, heaped	CECE, heaped	Without side cutters	With side cutters		2.5 m (8'2") Boom	1.25 m (4'1") Arm
0.10 m^3 (0.131 yd^3)	0.073 m^3 (0.095 yd^3)	481 mm (1'7")	525 mm (1'9")	87 kg (191.8 lb)	–	–

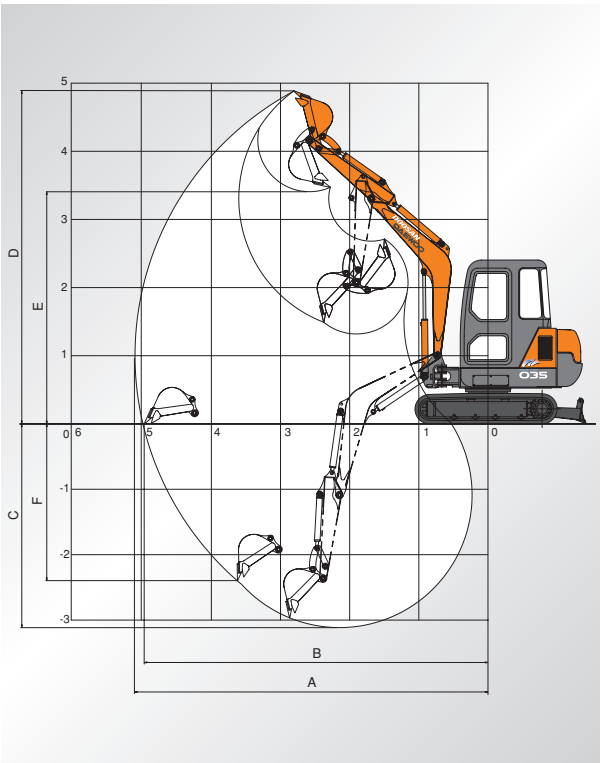
Dimensions & Working Ranges

Dimensions (2.5 m(8'2") Boom, 1.25 m(4'1") Arm, 300 mm(1') Shoe)



A	Overall width of upper structure	1,410 mm (4'8")
B	Overall width of cab	955 mm (3'2")
C	Overall height of cab	2,340 mm (7'8")
D	Tail swing radius	1,400 mm (4'7")
E	Overall height	1,635 mm (5'4")
F	Clearance under counterweight	525 mm (1'9")
G	Ground clearance	290 mm (11")
H	Tumbler distance	1,650 mm (5'5")
I	Track length	2,080 mm (6'10")
J	Track gauge	1,200 mm (3'11")
K	Track shoe width	300 mm (1')
L	Overall length	5,010 mm (16'5")

Working ranges



Digging forces (Maximum radial tooth forces)

	1.25m (4'1") Arm
Bucket digging force *	2,280 kgf
	22.4 kN
	5,030 lbf
Arm digging force *	1,520 kgf
	14.9 kN
	3,350 lbf

Boom length	2.5m (8'2")
Arm length	1.25m (4'1")
A. Max. digging reach	5,120 mm (16'10")
B. Max. digging reach at ground level	4,945 mm (16'3")
C. Max. digging depth	3,125 mm (10'3")
D. Max. digging height	4,950 mm (16'3")
E. Max. dumping height	3,465 mm (11'4")
F. Max. vertical wall digging depth	2,298 mm (7'6")

Standard & Optional Equipment

SOLAR 035

Standard equipment

Cabin & Interior

- All weather sound suppressed type cab
- Adjustable suspension seat with head rest
- Pull-up type front window and removable lower front window
- Room light
- Cigarette lighter
- Cup holder
- Joystick lever with 2 switches
- Heater and defroster
- Fresh air filter
- Storage box

Safety

- Seat belt
- Hydraulic safety lock lever
- Safety glass
- Hammer for emergency escape

Others

- Single element air cleaner
- Water separator
- Alternator (12V, 35 amps)
- Electric horn
- Halogen working lights (Boom mounted 1)
- Hydraulic track adjuster
- Piping for hammer (One way)
- Rubber shoe
- Maintenance free battery

Optional equipment

Safety

- Boom hose rupture protection valve
- Rotating beacon
- TOPS Cabin
- Accumulator

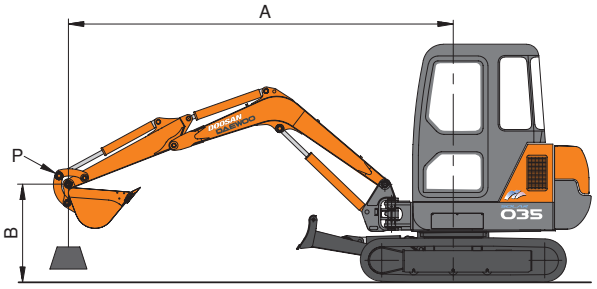
Others

- Piping for rotation (Two way)
- Canopy
- Steel shoe
- Track guards (Front)

Courtesy of Machine.Market

Lifting Capacities

Dozer Up



A : Reach from swing center line
B : Lift point height
P : Load Point

Boom : 2.5 m (8'2")
Arm : 1.25 m (4'1")
Bucket : PCSA 0.10m³ (CECE 0.073m³)
Rubber Shoe : 300mm (1')

Metric

Unit : 1,000 kg

A(m) / B(m)	1		2		3		4		5		Max. Reach		
													A(m)
4											*5.40	*5.40	2.66
3					*4.80	*4.80					*5.00	4.00	3.67
2			*8.80	*8.80	*5.90	5.40	*5.00	3.30			4.80	3.10	4.14
1					*7.60	4.90	5.00	3.10			4.50	2.80	4.29
0			*13.10	8.50	7.50	4.60	4.90	3.00			4.60	2.90	4.16
-1			*13.80	8.60	7.40	4.60					5.50	3.40	3.71
-2			*9.10	9.00							*5.80	5.60	2.75

Feet

Unit : 1,000 lb

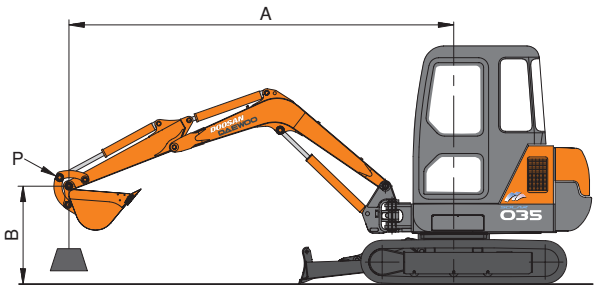
A(ft) / B(ft)	6'		8'		10'		12'		14'		Max. Reach		
													A(ft)
14'											*13.20	*13.20	7'16"
12'					*11.20	*11.20					*11.30	*11.30	10'18"
10'			*10.50	*10.50	*10.60	*10.60					*11.00	8.90	11'94"
8'			*12.80	*12.80	*11.60	*11.60	*11.00	8.70			*11.00	7.40	13'06"
6'	*25.70	25.30	*16.80	16.20	*13.40	11.40	*11.80	8.40			10.40	6.60	13'74"
4'			*21.50	15.00	*15.70	10.80	12.80	8.10	10.00	6.30	9.90	6.20	14'05"
2'			23.10	14.10	16.40	10.30	12.40	7.80	9.80	6.10	9.80	6.10	14'02"
0'	*22.30	21.60	22.70	13.80	16.10	10.00	12.20	7.60			10.10	6.30	13'65"
-2'	*36.20	21.80	22.70	13.70	16.00	9.90	12.20	7.60			11.00	6.90	12'89"
-4'	*31.90	22.10	*22.80	13.90	16.10	10.00					12.90	8.00	11'67"
-6'	*24.80	22.70	*18.00	14.40							*12.90	10.80	9'76"

Note 1. "*" Rated loads are based on hydraulic capacity.
2. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

: Rating over front
: Rating over side or 360 degree
0 : Ground

Courtesy of Machine.Market

Dozer Down (Must be equipped with dozer lock valve)



A : Reach from swing center line
B : Lift point height
P : Load Point

Boom : 2.5 m (8'2")
Arm : 1.25 m (4'1")
Bucket : PCSA 0.10m³ (CECE 0.073m³)
Rubber Shoe : 300mm (1')

Metric

Unit : 1,000 kg

A(m) / B(m)	1		2		3		4		5		Max. Reach		
													A(m)
4											*5.40	*5.40	2.66
3					*4.80	*4.80					*5.00	4.00	3.67
2			*8.80	*8.80	*5.90	5.40	*5.00	3.30			*5.00	3.10	4.14
1					*7.60	4.90	*5.50	3.10			*5.20	2.80	4.29
0			*13.10	8.50	*8.60	4.60	*5.80	3.00			*5.50	2.90	4.16
-1			*13.80	8.60	*8.20	4.60					*5.80	3.40	3.71
-2			*9.10	9.00							*5.80	5.60	2.75

Feet

Unit : 1,000 lb

A(ft) / B(ft)	6'		8'		10'		12'		14'		Max. Reach		
													A(ft)
14'											*13.20	*13.20	7'16"
12'					*11.20	*11.20					*11.30	*11.30	10'18"
10'			*10.50	*10.50	*10.60	*10.60					*11.00	8.90	11'94"
8'			*12.80	*12.80	*11.60	*11.60	*11.00	8.70			*11.00	7.40	13'06"
6'	*25.70	25.30	*16.80	16.20	*13.40	11.40	*11.80	8.40			*11.10	6.60	13'74"
4'			*21.50	15.00	*15.70	10.80	*12.90	8.10	*11.40	6.30	*11.40	6.20	14'05"
2'			*24.80	14.10	*17.60	10.30	*13.90	7.80	*11.70	6.10	*11.70	6.10	14'02"
0'	*22.30	21.60	*25.90	13.80	*18.60	10.00	*14.50	7.60			*12.10	6.30	13'65"
-2'	*36.20	21.80	*25.10	13.70	*18.50	9.90	*14.20	7.60			*12.60	6.90	12'89"
-4'	*31.90	22.10	*22.80	13.90	*16.90	10.00					*12.90	8.00	11'67"
-6'	*24.80	22.70	*18.00	14.40							*12.90	10.80	9'76"

Note 1. " * "Rated loads are based on hydraulic capacity.
2. Rated loads do not exceed 87% of hydraulic capacity or 75% of tipping capacity.

: Rating over front
: Rating over side or 360 degree
0 : Ground

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