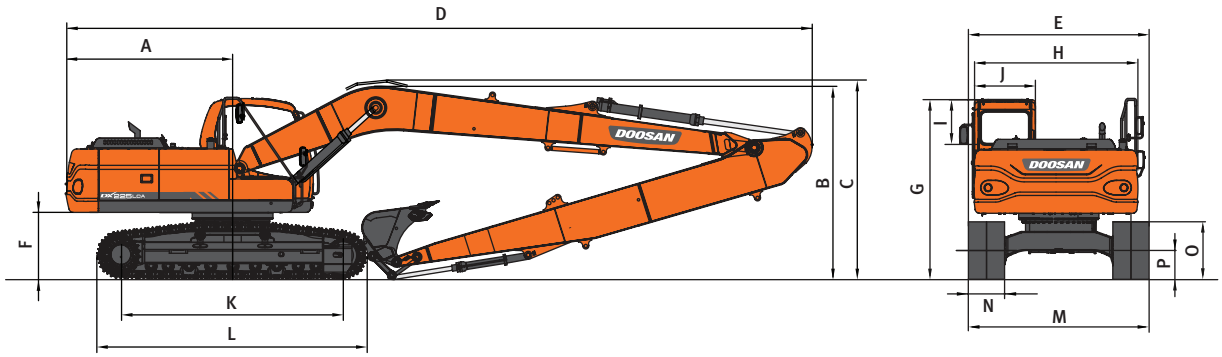
DOOSAN

Construction Equipment

DX225LCA SLR

Engine Power	SAE J1349, net 110kW (148HP) @ 1,900rpm
Operational Weight	23,200kg

DIMENSIONS



Dimensions

BOOM TYPE (ONE PIECE)	(mm)		8,500	8,500
ARM TYPE	(mm)		6,200	6,200
BUCKET TYPE (SAE/PCSA)	(m^3)		0.39	0.51
TAIL SWING RADIUS	(mm)	A	2,750	2,750
SHIPPING HEIGHT (BOOM)	(mm)	B	3,175	3,175
SHIPPING HEIGHT (HOSE)	(mm)	C	3,254	3,254
SHIPPING LENGTH	(mm)	D	12,317	12,317
SHIPPING WIDTH	(mm)	E	2,990	2,990
C/WEIGHT CLEARANCE	(mm)	F	1,055	1,055
HEIGHT OVER CAB.	(mm)	G	2,975	2,975
HOUSE WIDTH	(mm)	H	2,710	2,710
CAB. HEIGHT ABOVE HOUSE	(mm)	I	845	845
CAB. WIDTH	(mm)	J	960	960
TUMBLER DISTANCE	(mm)	K	3,650	3,650
TRACK LENGTH	(mm)	L	4,445	4,445
UNDERCARRIAGE WIDTH	(mm)	M	2,990	2,990
SHOE WIDTH	(mm)	N	600	600
TRACK HEIGHT	(mm)	O	947	947
CAR BODY CLEARANCE	(mm)	P	480	480

Digging Force (ISO)

BUCKET (SAE/PCSA)		0.39 m^3	0.51 m^3
DIGGING FORCE		10,000 kgf	11,000 kgf
		98.1 kN	107.91 kN
		22,046 lbf	24,251 lbf
ARM		6,200 mm	6,200 mm
DIGGING FORCE		5,980 kgf	5,980 kgf
		58.7 kN	58.7 kN
		13,183 lbf	13,183 lbf

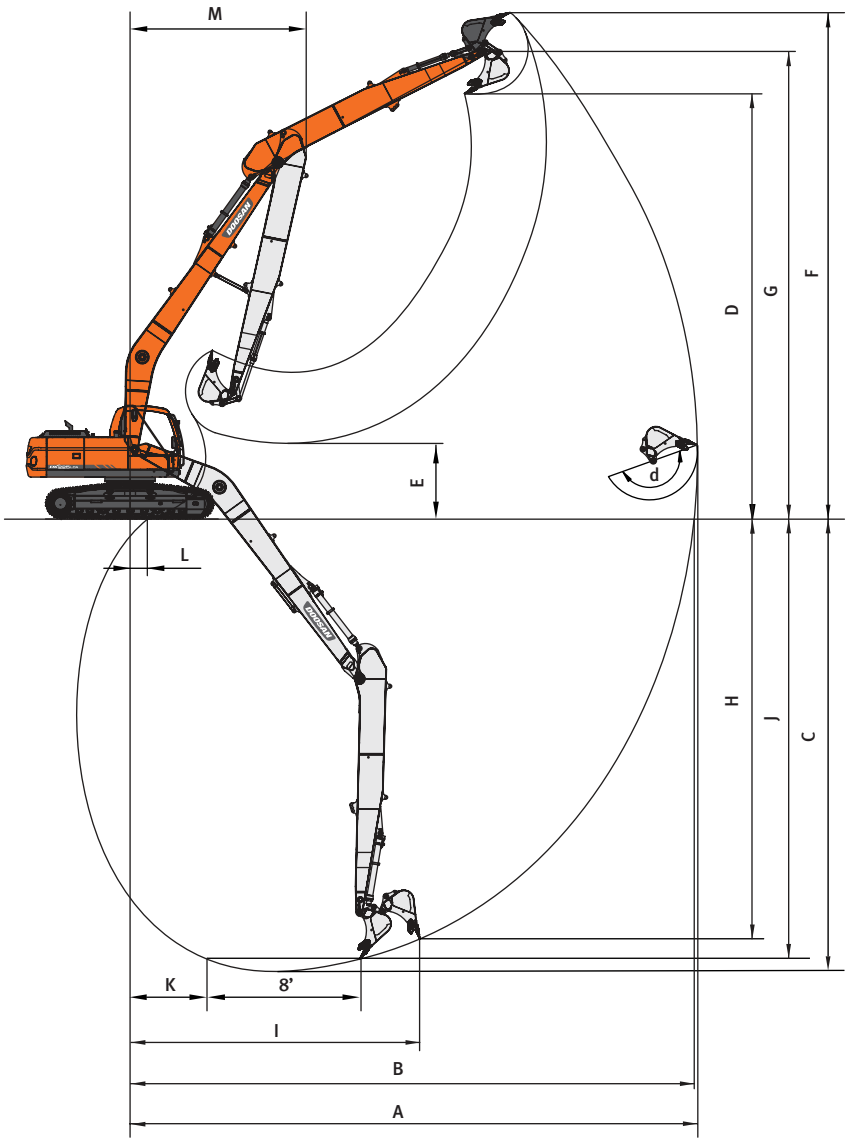
Weight

Boom : 8,500mm (27'11") Arm : 6,200mm (20'4") Bucket : SAE/PCSA 0.51m^3 (0.67yd^3)

SHOE TYPE	SHOE WIDTH	OPERATING WEIGHT	GROUND PRESSURE (kgf/cm^2)
TRIPLE GROUSER	600mm (2')	23,200kg (51,147lb)	0.49kgf/cm^2 (48.1kpa, 7.0psi)
	700mm (2'4")	23,500kg (51,809lb)	0.43kgf/cm^2 (42.2kpa, 6.1psi)
	800mm (2'8")	23,800kg (52,470lb)	0.38kgf/cm^2 (37.3kpa, 5.4psi)
	900mm (2'11")	24,100kg (53,131lb)	0.33kgf/cm^2 (32.4kpa, 4.7psi)

WORKING RANGES

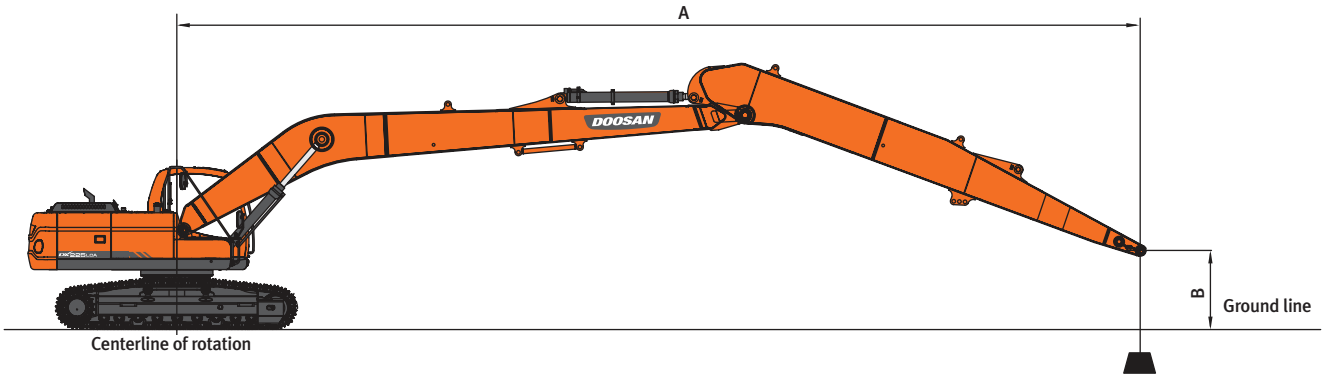
DX225LCA SLR



Working Ranges

BOOM TYPE (ONE PIECE)	(mm)		8,500	8,500
ARM TYPE	(mm)		6,200	6,200
BUCKET TYPE (PCSA)	(m^3)		0.39	0.51
MAX. DIGGING REACH	(mm)	A	15,379	15,379
MAX. DIGGING REACH (GROUND)	(mm)	B	15,268	15,268
MAX. DIGGING DEPTH	(mm)	C	11,661	11,661
MAX. LOADING HEIGHT	(mm)	D	11,148	11,148
MIN. LOADING HEIGHT	(mm)	E	2,009	2,009
MAX. DIGGING HEIGHT	(mm)	F	13,403	13,403
MAX. BUCKET PIN HEIGHT	(mm)	G	12,380	12,380
MAX. VERTICAL WALL DEPTH	(mm)	H	9,729	9,729
MAX. RADIUS VERTICAL	(mm)	I	10,064	10,064
MAX. DEPTH TO 8' LINE	(mm)	J	11,561	11,561
MIN. RADIUS 8' LINE	(mm)	K	4,854	4,854
MIN. DIGGING REACH	(mm)	L	196	196
MIN. SWING RADIUS	(mm)	M	4,714	4,714
BUCKET ANGLE	(deg)	d	166	166

LIFTING CAPACITY



Boom : 8,500mm Arm : 6,200mm Bucket : PCSA 0.51m³ Shoe : 600mm

Metric

unit : 1,000kg

A(m) / B(m)	2		3		4		5		6		7		8		9		10		11		12		13		14		Max. Reach		
																													A(m)
12																											*1.02	*1.02	@9.70
11																	*1.66	*1.66									*0.98	*0.98	@10.66
10																	*2.10	*2.10	*1.50	*1.50							*0.95	*0.95	@11.46
9																	*2.28	*2.28	*2.00	*2.00	*1.12	*1.12					*0.94	*0.94	@12.11
8																	*2.33	*2.33	*2.31	2.24	*1.74	*1.74					*0.94	*0.94	@12.66
7																	*2.42	*2.42	*2.39	2.21	*2.13	1.85	*1.12	*1.12			*0.94	*0.94	@13.10
6															*2.63	*2.63	*2.55	*2.55	*2.48	2.18	*2.44	1.83	*1.64	1.53			*0.96	*0.96	@13.46
5													*3.02	*3.02	*2.85	*2.85	*2.71	2.54	*2.60	2.13	*2.51	1.8	*2.01	1.52			*0.98	*0.98	@13.73
4											*3.69	*3.69	*3.35	*3.35	*3.09	2.96	*2.89	2.47	*2.73	2.08	*2.61	1.76	*2.30	1.5			*1.00	*1.00	@13.92
3					*7.66	*7.66	*5.88	*5.88	*4.84	*4.84	*4.16	*4.16	*3.69	3.44	*3.35	2.85	*3.08	2.4	*2.88	2.03	*2.72	1.72	2.43	1.47	*1.13	*1.13	*1.04	*1.04	@14.04
2					*5.32	*5.32	*6.86	6.52	*5.50	5.03	*4.64	4.03	*4.04	3.3	*3.60	2.75	*3.28	2.32	*3.02	1.97	2.75	1.68	2.4	1.44	*1.29	1.23	*1.08	*1.08	@14.09
1					*3.48	*3.48	*7.66	6.15	*6.08	4.78	*5.06	3.85	*4.36	3.17	*3.85	2.65	*3.46	2.25	3.11	1.91	2.7	1.64	2.37	1.41	*1.29	1.21	*1.13	*1.13	@14.07
0 (Ground)					*3.21	*3.21	*6.46	5.89	*6.54	4.58	*5.42	3.7	*4.63	3.06	*4.06	2.57	3.54	2.18	3.06	1.86	2.67	1.6	2.34	1.39			*1.20	*1.20	@13.97
1			*2.08	*2.08	*3.48	*3.48	*6.02	5.73	*6.85	4.44	*5.69	3.58	4.83	2.97	4.07	2.49	3.48	2.12	3.01	1.82	2.63	1.57	2.32	1.36			*1.27	1.22	@13.80
2	*2.14	*2.14	*2.77	*2.77	*4.00	*4.00	*6.20	5.64	*7.03	4.35	5.79	3.5	4.76	2.9	4.01	2.44	3.43	2.08	2.98	1.79	2.61	1.55	2.31	1.35			*1.36	1.26	@13.56
3	*2.88	*2.88	*3.51	*3.51	*4.69	*4.69	*6.74	5.6	*7.09	4.3	5.73	3.45	4.71	2.85	3.96	2.4	3.4	2.05	2.95	1.77	2.59	1.54	*2.14	1.35			*1.48	1.31	@13.23
4	*3.65	*3.65	*4.32	*4.32	*5.51	*5.51	*7.54	5.6	*7.03	4.28	5.7	3.43	4.68	2.82	3.94	2.38	3.38	2.03	2.94	1.76	2.59	1.53					*1.62	1.39	@12.82
5	*4.46	*4.46	*5.20	*5.20	*6.46	*6.46	*8.25	5.63	*6.86	4.29	5.7	3.43	4.68	2.82	3.94	2.37	3.38	2.03	2.95	1.76	2.61	1.55					*1.80	1.49	@12.31
6	*5.34	*5.34	*6.18	*6.18	*7.58	*7.58	*7.85	5.69	*6.58	4.32	*5.61	3.45	4.69	2.84	3.95	2.39	3.4	2.05	2.97	1.78							*2.04	1.64	@11.69
7	*6.31	*6.31	*7.30	*7.30	*8.84	8.21	*7.30	5.77	*6.16	4.38	*5.27	3.49	*4.55	2.87	*3.93	2.42	*3.37	2.09									*2.38	1.85	@10.95
8	*7.40	*7.40	*8.61	*8.61	*7.88	*7.88	*6.57	5.89	*5.57	4.47	*4.77	3.56	*4.09	2.94	*3.46	2.49	*2.80	2.16									*2.76	2.15	@10.05
9			*8.11	*8.11	*6.64	*6.64	*5.59	*5.59	*4.75	4.59	*4.04	3.67	*3.37	3.04													*2.67	2.62	@8.95
10							*4.24	*4.24	*3.56	*3.56	*2.87	*2.87															*2.46	*2.46	@7.53

Feet

unit : 1,000lb

A(ft) / B(ft)	10		15		20		25		30		35		40		45		Max. Reach		
																			A(ft)
40																	*2.27	*2.27	@31.16
35											*2.91	*2.91					*2.13	*2.13	@35.91
30											*4.65	*4.65					*2.07	*2.07	@39.46
25											*5.19	*5.19	*3.86	*3.86			*2.07	*2.07	@42.12
20									*5.73	*5.73	*5.49	5.1	*5.08	3.91			*2.10	*2.10	@44.05
15							*7.16	*7.16	*6.44	*6.44	*5.94	4.93	*5.59	3.81	*2.63	*2.63	*2.18	*2.18	@45.34
10			*14.23	*14.23	*10.43	*10.43	*8.45	8.2	*7.26	6.14	*6.46	4.73	*5.92	3.69	*3.63	2.88	*2.28	*2.28	@46.06
5			*16.00	15.8	*12.53	10.58	*9.73	7.67	*8.08	5.81	*7.00	4.52	5.86	3.56	*4.09	2.82	*2.43	*2.43	@46.22
0 (Ground)			*10.57	*10.57	*14.13	9.89	*10.81	7.23	*8.80	5.52	7.07	4.33	5.73	3.44	*3.94	2.75	*2.64	*2.64	@45.84
-5	*5.47	*5.47	*10.78	*10.78	*15.06	9.46	11.34	6.92	8.69	5.3	6.91	4.18	5.63	3.35			*2.90	2.73	@44.89
-10	*7.92	*7.92	*12.68	*12.68	*15.35	9.26	11.14	6.73	8.54	5.16	6.81	4.08	5.58	3.3			*3.27	2.9	@43.35
-15	*10.71	*10.71	*15.62	14.19	*15.06	9.22	11.08	6.67	8.48	5.11	6.78	4.06	5.6	3.31			*3.78	3.18	@41.14
-20	*13.97	*13.97	*18.66	14.42	*14.20	9.32	11.13	6.72	8.52	5.15	6.84	4.11					*4.55	3.66	@38.14
-25	*17.98	*17.98	*16.35	14.79	*12.63	9.55	*10.00	6.88	*7.90	5.3							*5.87	4.45	@34.16
-30	*17.09	*17.09	*12.84	*12.84	*10.01	9.93	*7.68	7.21									*5.83	*5.83	@28.77

1. Load point is the end of the arm.
2. Capacities marked with an asterisk(*) are limited by hydraulic capacities.
3. Lift capacities shown do not exceed 75% of minimum tipping loads or 87% of hydraulic capacities.
4. The least stable position is over the side.
5. Lift capacities are in compliance with ISO 10567.

TECHNICAL SPECIFICATIONS

DX225LCA SLR

Engine

Model	Doosan DB58TIS
Nominal flywheel power	110kW (148HP) @ 1,900rpm (SAE J1349, net)
Piston displacement	5,785 cc (353 cu.in)

Swing Mechanism

- An axial piston motor with two-stage planetary reduction gear is used for the swing.
- Increased swing torque reduces swing time.
- Internal induction-hardened gear.
- Internal gear and pinion immersed in lubricant bath.
- The swing brake for parking is activated by spring and released hydraulically.

Swing speed	0 to 11.0 rpm
Max. swing torque	6,477 kgf.m (46,631 lbf.ft)

Drive

Each track is driven by an independent axial piston motor through a planetary reduction gearbox.
Two levers with control pedals guarantee smooth travel with counter rotation on demand.

Travel speed (fast/slow)	5.5 / 3.0 km/h (3.4 / 1.9 mph)
Maximum traction force	11,500 / 21,800 kgf (25,353 / 48,061 lbf)
Maximum grade	35˚ (70 %)

Refill Capacities

Fuel tank	400 ℓ (105.7 US gal, 88 lmp gal)
Cooling system (Radiator capacity)	24 ℓ (6.3 US gal, 5.3 lmp gal)
Engine oil	28 ℓ (7.4 US gal, 6.2 lmp gal)
Swing drive	5 ℓ (1.32 US gal, 1.1 lmp gal)
Final drive (each)	3.3 ℓ (0.87 US gal, 0.73 lmp gal)
Hydraulic system	330 ℓ (87 US gal, 73 lmp gal)
Hydraulic tank	240 ℓ (63.4 US gal, 52.8 lmp gal)

Hydraulic System

The heart of the system is the EPOS™ (Electronic Power Optimizing System). It allows the efficiency of the system to be optimized for all working conditions and minimizes fuel consumption.

- The hydraulic system enables independent or combined operations.
- Two travel speeds offer either increased torque or high speed tracking.
- Cross-sensing pump system for fuel savings.
- Auto deceleration system.
- Two operating modes, two power modes.
- Button control of flow in auxiliary equipment circuits.
- Computer-aided pump power control.

Main pumps

2 variable displacement axial piston pumps
Max flow: 2 X 206.5 ℓ /min (2 X 55US gpm, 2 X 45lmp gpm)

Pilot pump

Gear pump - max flow: 28.5 ℓ /min (7.5US gpm, 6.3lmp gpm)

Maximum system pressure

Boom / Arm / Bucket :
- Normal mode : 330kgf/cm² (324bar)
- Power mode : 350kgf/cm² (343bar)

Travel : 330kgf/cm² (324bar)
Swing : 270kgf/cm² (265bar)

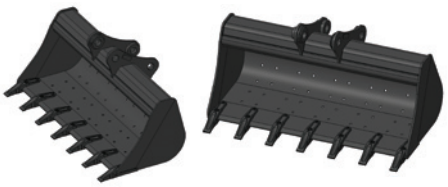
Hydraulic Cylinders

The piston rods and cylinder bodies are made of high-strength steel.
A shock absorbing mechanism is fitted in all cylinders to ensure shock-free operation and extend piston life.

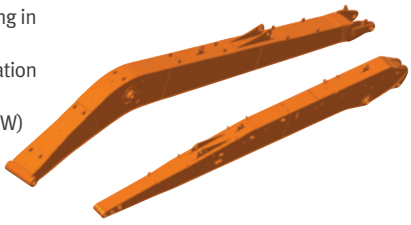
Cylinders	Quantity	Bore x Rod diameter x stroke
SLR Bucket	1	95 X 65 X 900mm (3.7" X 2.6" X 2'11")

Options

0.45 m³ bucket-ditch cleaning
0.54 m³ bucket-ditch cleaning
0.39 m³ GP bucket



Doosan SLR kit is designed for using in drainage canal construction and preservation and Light duty excavation at long distance.
(should be equipped additional C/W)



Bucket

Capacity		Width		Weight	Recommendation
					8,500mm (27'11") Boom
SAE/PCSA, heaped	CECE heaped	Without side cutters	With side cutters		6,200 (20'4") Arm
0.39 m³ (0.51 yd³)	0.35 m³	736 mm (2'5")	820 mm (2'8")	338 kg (745 lb)	A
0.51 m³ (0.67 yd³)	0.45 m³	907 mm (3')	991 mm (3'3")	393 kg (866 lb)	B

Based on ISO 10567 and SAE J296, arm length without quick change clamp

A : Suitable for materials with density of 2,100kg/m³ (3500lb/yd³) or less
B : Suitable for materials with density of 1,800kg/m³ (3000lb/yd³) or less
C : Suitable for materials with density of 1,500kg/m³ (2500lb/yd³) or less
D : Suitable for materials with density of 1,200kg/m³ (2000lb/yd³) or less

Doosan is

Since 1896, Doosan, the oldest company in Korea, has evolved with its people. The company grew up rapidly for last 10 years with reputation. For human-oriented vision, Doosan has been building constructions, energy, machines, infra structures globally. As a global leader of infra structure, Doosan continues its vision to make human-oriented future.

First in Korea, Doosan self-developed excavators in 1985 and continued building versatile construction machines including excavators, wheel loaders, articulated dump trucks to execute its human-oriented philosophy. Doosan became a global leader of heavy construction machine industry by achieving global sales line, producing line, and distribution line. Along with large production bases in Korea, China, USA, Belgium, Czech, Brazil, Doosan has 1400 dealer networks and Doosan is providing reliable products and trusted solutions for your stable business at no risk.

Published in July 2016_EN

Materials and Specifications in the catalogue are subject to change without notice.

Doosan Infracore Korea Office (HQ)
27F, Doosan Tower, 275, Jangchungdan-ro,
Jung-gu, Seoul, Korea(04563)
Tel : 82 2 3398 8114

www.doosaninfracore.com/ce/