



# SANDVIK LH115L LOW PROFILE LOADER

TECHNICAL SPECIFICATION



The LH115L is a 5.5 tonnes Low Profile loader, built on the proven base of its predecessor EJC115L, with modern safety improvements. Based on the reliable and simplified design, the LH115L has a high availability and it is easy to maintain, which results in optimized lifetime operational costs.

The LH115L complies with the latest safety requirements and with powerful drivetrain, robust frame designed for low profile operations and simplified electrics, is optimized to provide high levels of availability and unequalled productivity in the harshest African conditions.

## CAPACITIES

Tramming capacity	5 500 kg
Break out force, lift	9 075 kg
Break out force, tilt	11 930 kg
Standard bucket	2.2 m <sup>3</sup>

## SPEEDS FORWARD & REVERSE (LEVEL/LOADED) WITH DEUTZ BF4M2012C

1st gear	3.0 km/h
2nd gear	6.0 km/h
3rd gear	9.8 km/h

## BUCKET MOTION TIMES

Raising time	4.5 sec
Lowering time	3.0 sec
Dumping time	4.0 sec

## OPERATING WEIGHTS

Total operating weight	15 870 kg
Front axle	7 190 kg
Rear axle	8 680 kg

## LOADED WEIGHTS

Total loaded weight	21 370 kg
Front axle	15 222 kg
Rear axle	6 148 kg

## OPERATIONAL CONDITIONS AND LIMITS

Environmental temperature	From -20° C to +50° C
Standard operating altitude	Below 2500 m

## REQUIREMENTS AND COMPLIANCE

Compliance with 2006/95/EC Low voltage directive

Compliance with 2004/108/EC Electromagnetic compatibility directive

Design based on EN 1889-1. Machines for underground mines. Mobile machines working underground. Safety. Part 1: Rubber tyred vehicles.

Electrical system based on IEC 60204-1. Safety of machinery – Electrical equipment of machines – Part 1: General requirements

## POWER TRAIN

### ENGINE

Diesel engine	Deutz BF4M2012C
Output	86 kW @ 2200 rpm
Torque	445 Nm @ 1500 rpm
Number of cylinders	In-line 4
Displacement	4.0 l
Cooling system	Liquid cooled
Combustion principle	4-stroke, turbo with intercooler
Air filtration	Two stage filtration, dry type
Electric system	24 V
Emissions	Tier 2, Euro Stage II
Exhaust system	Double wall exhaust pipe with catalytic purifier/muffler
Average fuel consumption at 40 % load	11 l/h
Fuel tank refill capacity	100 l

### CONVERTER

Dana C272

### TRANSMISSION

Power shift transmission with modulation.	Dana R32421, hydraulic gear shift control, three gears forward and reverse
---	--

### AXLES

Front axle	Kessler D81, Spring applied hydraulically released brakes, Limited -slip differential, fixed
Rear axle	Kessler D81, Spring applied hydraulically released brakes, No-spin differential, oscillating

### TIRES

Tire size (Tires are application approved. Brand and type subject to availability.)	1400-24-20 ply TT L5S
---	-----------------------

## OPERATOR'S COMPARTMENT

### CANOPY

ROPS design according to EN ISO 3471, limited to low height DLV

FOPS design according to EN ISO 3449, limited to low height DLV

No high pressure hoses in the operators compartment

Emergency exit

Floor washable with water to reduce dust

### DASHBOARD AND DISPLAYS

Critical warnings and alarms displayed as warning lights

Instrument panel with electric gauges, diagnostic display for engine functions/info and illuminated switches

### OPERATOR'S SEAT

Low frequency suspension

Adjustment according to the operator's weight

Padded arm rests

Two-point seat belt

## FRAME

### REAR AND FRONT FRAME

Welded structure, high strength steel

Central hinge with adjustable upper bearing

Tanks bolted and tag welded

Centralized manual lubrication

## HYDRAULICS

Door interlock for brakes and boom, bucket, and steering hydraulics

Oil cooler for hydraulic and transmission oil

ORFS and SAE fittings

ORFS and SAE hoses

Hydraulic oil tank capacity 189 l

Sight glass for oil level, 2 pcs

### STEERING HYDRAULICS

Hydraulically operated, center-point articulation, power steering with one double acting cylinder. Steering controlled by hydraulic joystick. Interlock protection.

Steering main valve                      Open center type

Steering hydraulic cylinders            125 mm, 1 pc

Steering pump                                Gear type

Steering and servo hydraulic pumps    No additional steering pump or separate servo hydraulic pump.

## BUCKET HYDRAULICS

The oil flow from steering hydraulic pump is directed to bucket hydraulics when steering is not used.	Joystick bucket and boom control (hydraulic), equipped with gear pump that delivers oil to the bucket hydraulic main valve.
Boom system	Straight boom
Lift cylinders	160 mm, 2 pcs
Dump cylinder	160 mm, 1 pc
Main valve	Open center type
Pump for bucket hydraulics	Gear type

## BRAKES

Service brakes are spring applied; hydraulically released multidisc wet brakes on all wheels. Two independent circuits: one for the front and one for the rear axle. Service brakes also function as an emergency and parking brake. Brake system performance complies with requirements of EN ISO 3450, AS2958.1 and SABS 1589

Neutral brake
Automatic brake activation system, ABA
Emergency brake release pump, hand pump

## ELECTRICAL EQUIPMENT

### MAIN COMPONENTS

Alternator	24 V, 70 A
Batteries	2 x 12V
Starter	4 kW, 24 V
Driving lights	5 pcs in front, LED lights 4 pcs in rear, LED lights
Additional lights	Directional lights, red/green
Reverse alarm	
Flashing beacon	

## GRADE PERFORMANCE

Deutz BF4M2012C

### Empty

Percent grade	0.0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17.0
Ratio					1:12	1:10	1:8	1:7	
1st gear (km/h)	3.1	3	2.9	2.9	2.8	2.8	2.7	2.7	2.6
2nd gear (km/h)	6.1	5.9	5.6	5.5	5.3	5.2	4.9	4.7	4.3
3rd gear (km/h)	10.1	9.6	9.1	8.5	7.6	6.6	5.3		

### Loaded

Percent grade	0.0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17.0
Ratio					1:12	1:10	1:8	1:7	
1st gear (km/h)	3.0	2.9	2.8	2.8	2.7	2.7	2.6	2.6	2.5
2nd gear (km/h)	6.0	5.7	5.5	5.3	5.0	4.7	4.1	3.7	3.0
3rd gear (km/h)	9.8	9.2	8.3	7.0	5.6				

## INCLUDED SAFETY FEATURES

### FIRE SAFETY

Portable fire extinguisher, 2 x 9 kg
Heat insulation on exhaust manifold, turbo, and isolated exhaust pipe

### ENERGY ISOLATION

Lockable main switch, ground level access
Emergency stop push buttons according to EN ISO 13850
Pressure release in the radiator cap
Automatic discharge for pressure accumulators (brake system and pilot circuit)
Frame articulation locking device
Mechanical boom locking device
Wheel chocks and brackets

## DOCUMENTATION

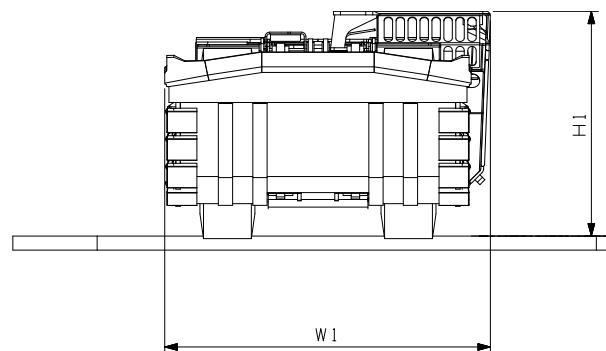
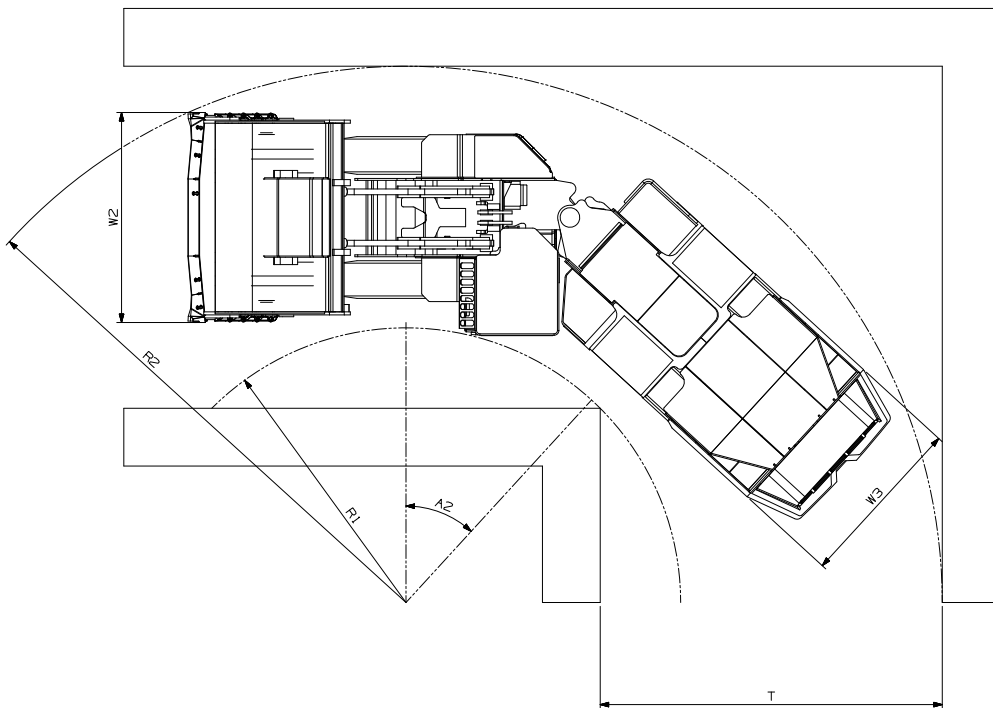
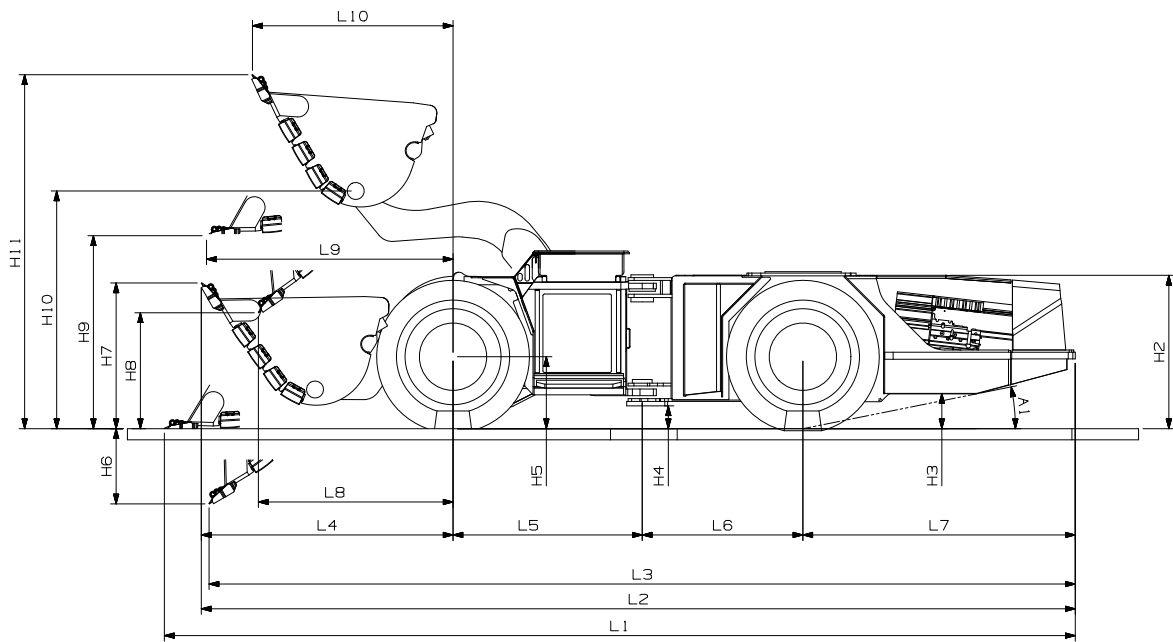
### STANDARD MANUALS

Operator's Manual	English
Maintenance Manual	English
Parts Manual	English
Service and Repair Manual	English
ToolMan	2 x USB stick in PDF format, includes all the manuals
Decals	English

## OPTIONS

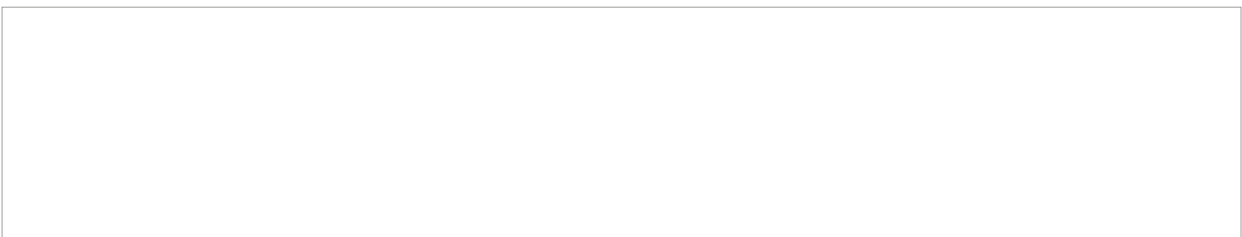
Proximity Detection System Interface
Fire suppression system ANSUL, 1 tank, 6 nozzles, including auto shutdown
Spare rim 10.00 x 24
Spare wheel 14.00-24 (foam filled)
Spare wheel 14.00-24 (air filled)
Foam filled tyres

DIMENSIONS



**DIMENSIONS**

	<b>Standard</b>
Bucket alternatives (m <sup>3</sup> )	2.2 m <sup>3</sup>
Lip plate type	Half Arrow
L1 (mm)	8196
L2 (mm)	7864
L3 (mm)	7794
L4 (mm)	2265
L5 (mm)	1703
L6 (mm)	1446
L7 (mm)	2451
L8 (mm)	1750
L9 (mm)	2217
L10 (mm)	1810
H1 (mm), open cabin, STD	1600
H1 (mm), open cabin, Low	1500
H2 (mm)	1380
H3 (mm)	313
H4 (mm)	188
H5 (mm)	650
H6 (mm)	677
H7 (mm)	1310
H8 (mm)	1048
H9 (mm)	1737
H10 (mm)	2185
H11 (mm)	3186
W1 (mm)	2317
W2 (mm)	2181
W3 (mm)	2122
A1	14°
A2	42.5°
R1, left turn (mm)	2853
R2, left turn (mm)	5569
T, left turn (mm)	3552
R1, right turn (mm)	3043
R2, right turn (mm)	5569
T, right turn (mm)	3418



Sandvik Mining and Rock Technology reserves the right to make changes to the information on this data sheet without prior notification to users. Please contact a Sandvik representative for clarification on specifications and options.