

# SANDVIK LH204 UNDERGROUND LOADER

TECHNICAL SPECIFICATION

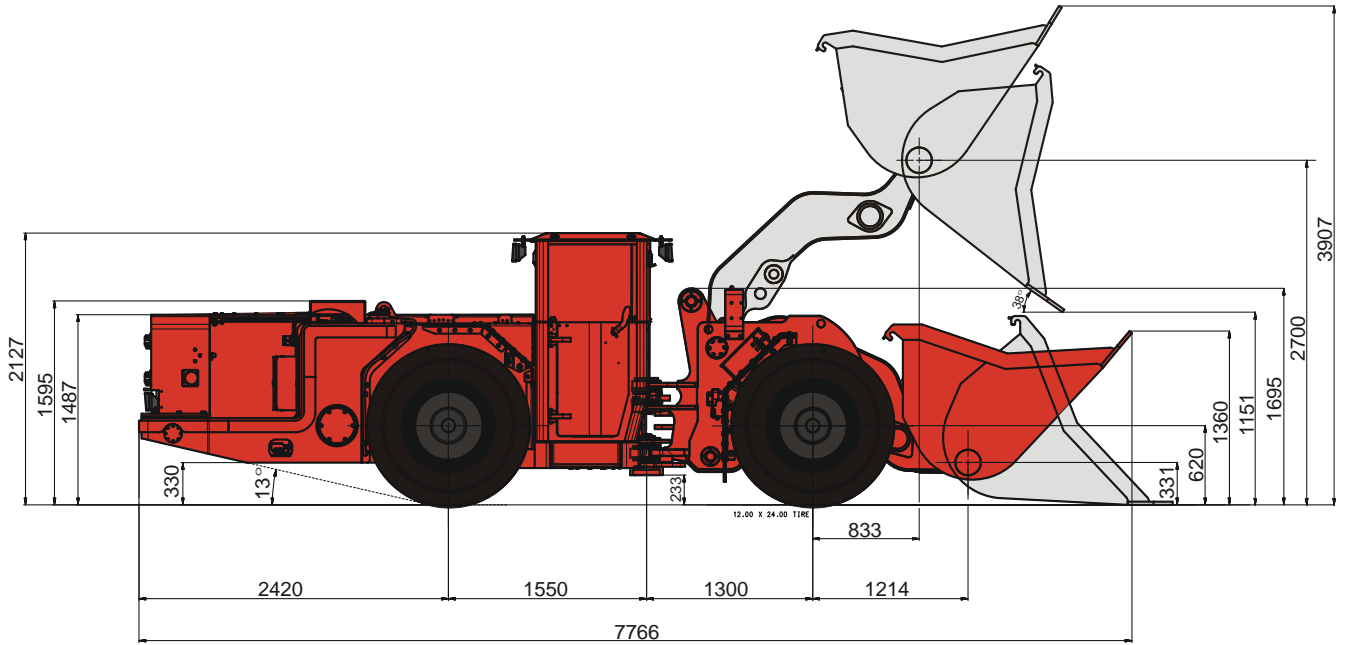


Sandvik LH204 is designed to give maximum tramming capacity in narrow mining and tunneling applications.

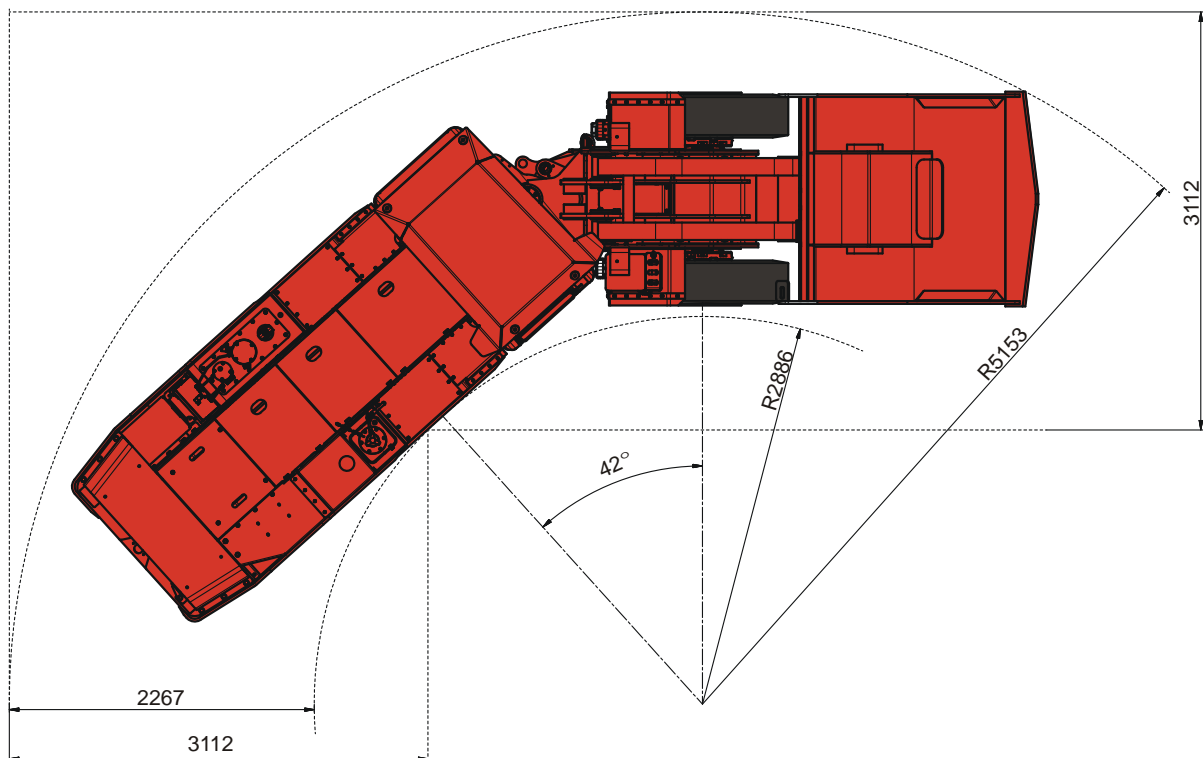
The hydrostatic drive system delivers high tractive effort for maximum penetration power in the muck pile while leaving space for a large operator's compartment. Sandvik LH204 offers excellent comfort and safety in narrow applications such as:

- Narrow vein ramp cut and fill
- Narrow vein open stope mining
- Construction of small tunnels and ramps

DIMENSIONS (SIDE VIEW)



DIMENSIONS (TOP VIEW)



## CAPACITIES

Tramming capacity	4000 kg	8820 lb
Break out force, lift	5350 kg	11800 lb
Break out force, tilt	7250 kg	15980 lb
Tipping load	10350 kg	22800 lb
Standard bucket	2.0 m <sup>3</sup>	2.6 yd <sup>3</sup>

## MAIN DIMENSIONS

Total length	7 766 mm	306"
Maximum width	1 600 mm	63"
Height with canopy	2 127 mm	84"

## OPERATING WEIGHTS

Total operating weight	13 300 kg	28 660 lb
Front axle	5 000 kg	11 023 lb
Rear axle	8 000 kg	17 637 lb

## LOADED WEIGHTS

Total loaded weight	17 000 kg	37 479 lb
Front axle	11 000 kg	24 251 lb
Rear axle	6 000 kg	13 228 lb

## BUCKET MOTION TIMES

Raising time	4.8 sec
Lowering time	3.4 sec
Dumping time	3.9 sec

## STANDARD OPERATORS COMPARTMENT

ROPS/FOPS certified safety canopy

## SPEEDS FORWARD &amp; REVERSE (LEVEL / LOADED)

Stepless	15 km/h	9.3 mph
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## HYDROSTATIC DRIVE SYSTEM

Pump drive	Stiebel
Drive pump	Rexroth
Gear unit	Stiebel
Drive motor	Rexroth

## ENGINE

Diesel engine	Deutz Dalian Engine BF4M2012C
Output	93 kW (125hp) @ 2500rpm
Torque	445 Nm @ 1500rpm
Number of cylinders	In-line 4
Displacement	4.04 l (247 cu in)
Cooling system	Liquid cooled
Combustion principle	4-stroke, turbo with intercooler
Air filtration	Donaldson PowerCore
Electric system	24V
Emissions	Euro Stage 2
Exhaust system	Double wall exhaust pipe with catalytic purifier / muffler
Average Fuel Consumption	14,5 l/h
Fuel Tank Capacity	150 (40 gal)

## AXLES

Front axle	Kessler D71, Spring applied hydraulically released brakes, no- spin differential, fixed
Rear axle	Kessler D71, Spring applied hydraulically released brakes, standard differential, oscillating ±8°

## TIRES

Tire size	12.00R24 L5S
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Tires are application approved. Brand and type subject to availability

## FRAME

Rear and front frame	Welded steel construction
Central hinge	Adjustable upper bearing

## TURNING RADIUS

Turning angle	±42 °	
Inner	2886 mm	114 "
Outer	5153 mm	203 "

**STEERING HYDRAULICS**

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

Main valve	Parker
Pilot control valve	Rexroth
Steering cylinders	1 pc, 125 mm (4,9 ")
Steering pump	Gear pump, Casappa

**BUCKET HYDRAULICS**

Joystick bucket and boom control (hydraulic), equipped with gear pump that delivers oil to the bucket hydraulic main valve. The oil flow from steering hydraulic pump is directed to bucket hydraulics when steering is not used. Interlock protection

Boom system	Straight boom
Lift cylinders	2 pcs, Ø125 mm (4.9")
Dump cylinder	1 pc ø 140 mm (5,5")
Pilot control valve	Rexroth
Main valve	Parker
Pump for bucket hydraulics	Gear pump, Casappa
Fittings	ORFS
Hydraulic oil tank	150 l (41 gal)

**BRAKES**

Service brakes are spring applied hydraulically released (SAHR) multi-disc brakes on all wheels with two separate circuits for the front and rear axles. Service brakes also function as an emergency brake, when the emergency brake system is engaged.

Pressure accumulator	Piston type with charging valve, Hydac
Brake valve	Foot operated pedal, fully modulated, Mico
Charging valve assembly	Rexroth
Automatic Brake Activation	ABA

**ELECTRICAL EQUIPMENT**

Alternator	80 A
Batteries	2x 12 V
Starter	24 V
Driving and working lights	2 pcs in front 65 W 2 pcs in rear 65 W
Parking lights	2 pcs in front (LED lights) 2 pcs in rear (LED lights)
Brake lights	2 pcs in rear (LED lights)
Parking and indicator (blinkers) lights	2 pcs in front (LED lights) 2 pcs in rear (LED lights)
Monitoring system	Electronic monitoring system with 5,7" color display

**OTHER STANDARD EQUIPMENT**

ROPS/FOPS tested operators compartment
Seat belt
Lockable main switch
Reverse alarm (CEN)
External shutdown, 2 pcs in rear
Decals in local language
Door interlock for boom, bucket and steering hydraulics
Low frequency suspension seat
Rotating beacon
Neutral brake
Fire extinguisher, 6kg (CEN)

**STANDARD MANUALS**

Operator's Manual	Hard copy, EU-languages
Maintenance Manual	Hard copy, EU-languages
Parts Manual	Hard copy, English
Service and Repair Manual	Hard copy, English
ToolMan CD (2 pcs)	Electronic, in pdf format, includes all the above manuals

**OTHER OPTIONS****Replaces standard equipment**

Ejector bucket size 1.6 m<sup>3</sup> (2 yd<sup>3</sup>), width 1600 mm (63"), HB500

Automatic central lubrication

**ADDITIONAL OPTIONS**

Fire suppression system ANSUL, one tank, 6 nozzles (CEN), incl. auto engine shut down

Fire suppression system ANSUL, one tank, 6 nozzles (CEN), CHECKFIRE, incl. auto engine shut down

RRC HBC, complete

RRC analogue interface, HBC

RRC recovery kit, electric (hook included)

Arctic package (engine and hydraulic tank heater)

Direction lights (RSA)

Jump start

CatBase/LinkOne spare part manuals and additional Instructions, Workshop, Spare part manuals, ToolMan CD's are available

Wiggins System (Fuel, engine oil, hydraulic oil)

Enclosed Cabin

Deutz Imported BF4M2012C, MSHA engine  
93 kW (125hp) @ 2500rpm, 445 Nm @ 1500rpm

Cover grilles for lamps

Cabin heater

Automatic central lubrication

**DALIAN DEUTZ ENGINE BF4M2012C, 93 KW**

Calculated with 2% rolling resistance

**Empty**

Percent grade	0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17
Ratio					1:12	1:10	1:8	1:7	
Speed (km/h)	14.5	14.2	14.0	12.6	9.9	8.3	6.8	6.1	5.3

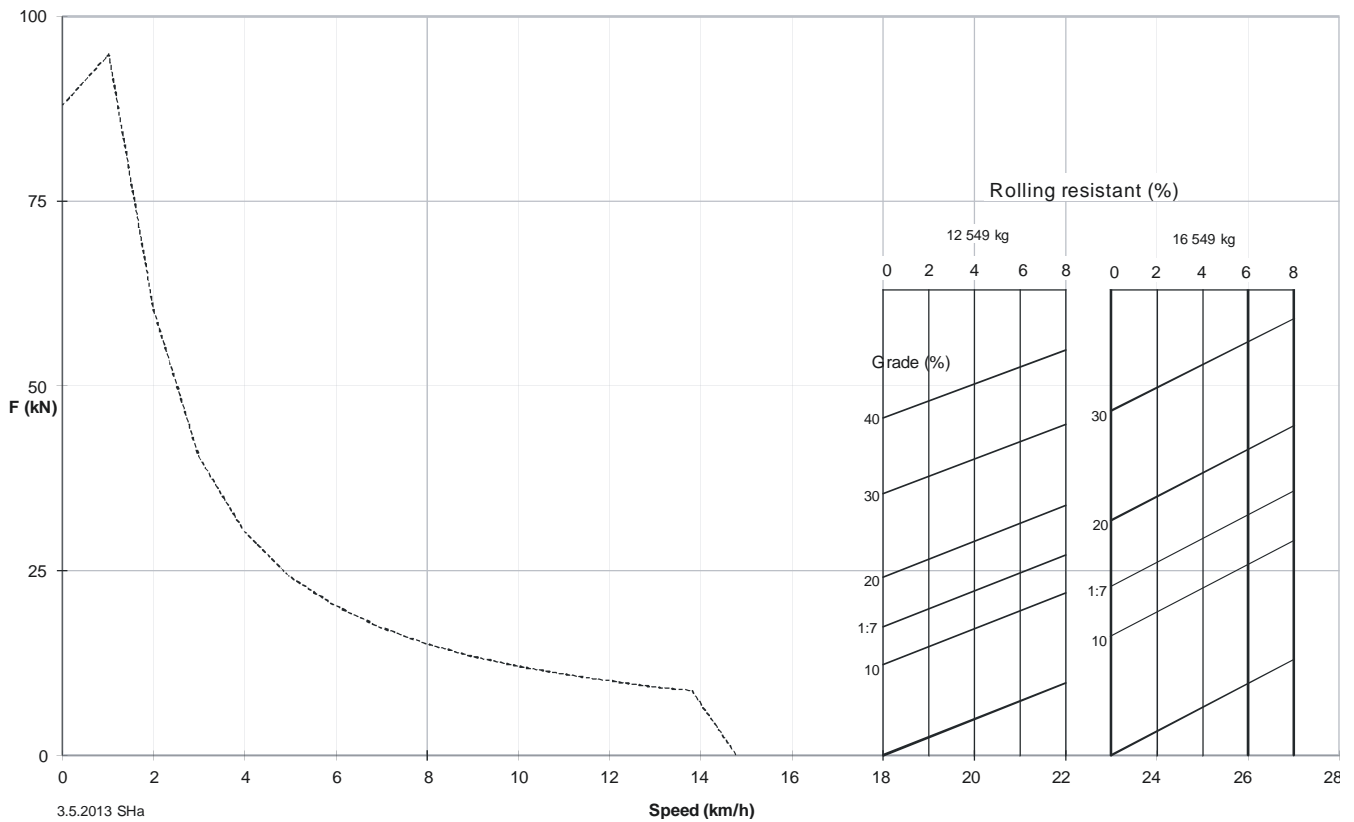
**Loaded**

Percent grade	0	2.0	4.0	6.0	8.0	10.0	12.5	14.3	17
Ratio					1:12	1:10	1:8	1:7	
Speed (km/h)	14.4	14.1	12.1	9.1	7.3	6.1	5.0	4.5	3.9

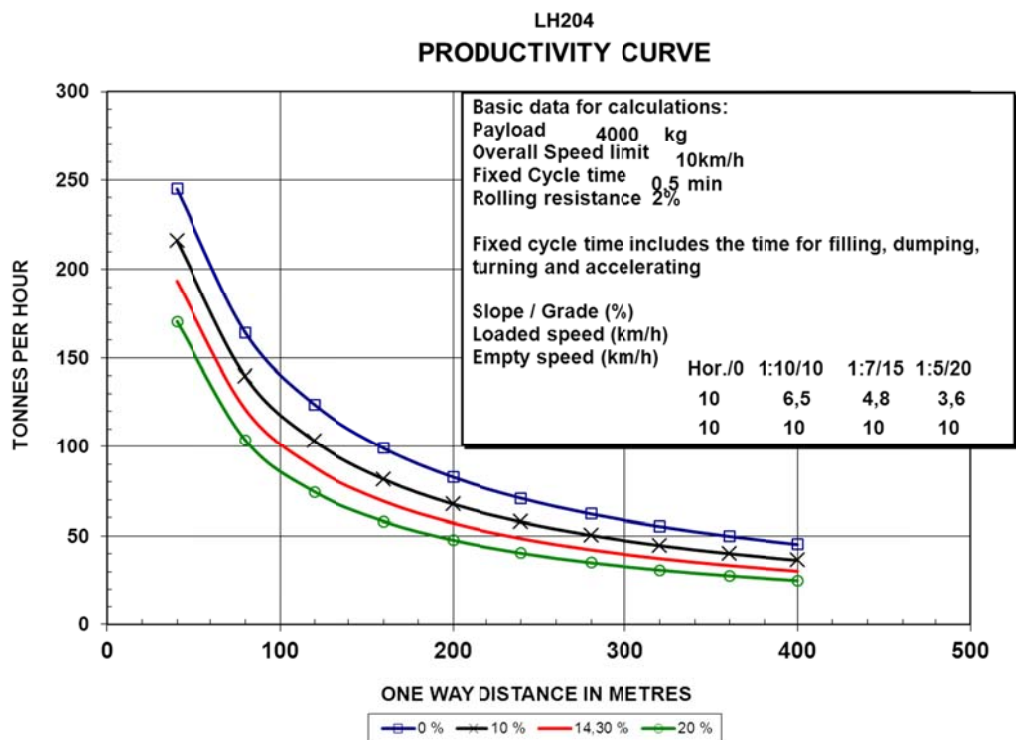
**TRACTIVE EFFORT CURVE**

**LH204**

Deutz BF4M2012C



PRODUCTIVITY CURVE (METRIC UNITS)



PRODUCTIVITY CURVE (IMPERIAL UNITS)

