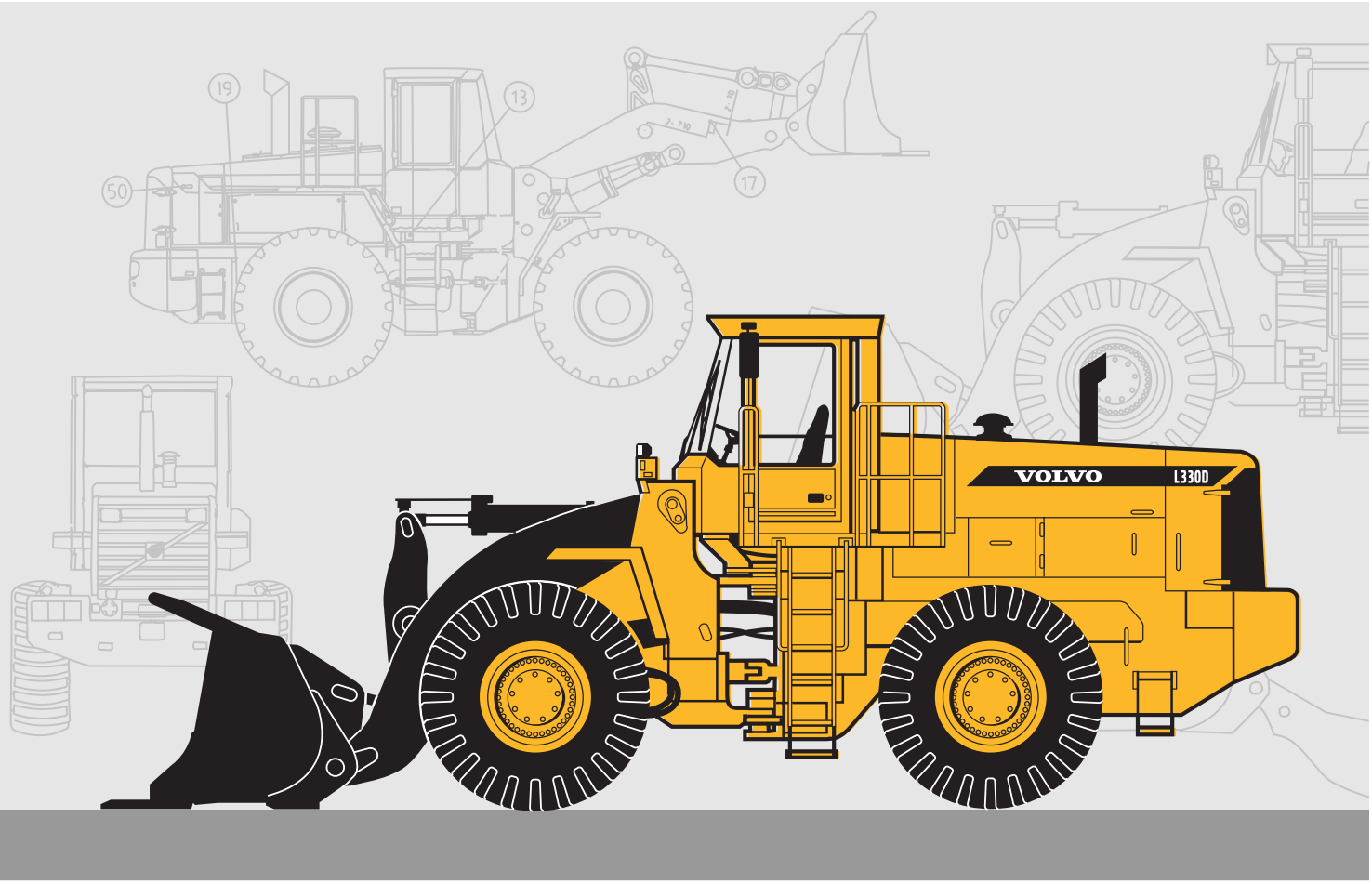
VOLVO WHEEL LOADER

L330D



- **Engine output SAE J1995:** gross 370 kW **(503 hp)** **ISO 9249, SAE J1349:** net 366 kW **(498 hp)**
- **Operating weight: 48,5–52,0 t**
- **Buckets: 6,1–13,5 m³**
- **Volvo high performance low emission engine,** with exellent low rpm performance.
- **Wet disc brakes** – fully sealed, forced oil-cooled, outboard mounted
- **Posi-Torq** limited-slip differentials in front and rear axles
- **Care Cab II** – pressurized cab with high comfort and safety
- **Contronic II** monitoring system
- **Load-sensing hydraulic system** – working and steering hydraulics
- Pilot-operated working hydraulics

Optional equipment

- Long boom
- Boom Suspension System
- Comfort Drive Control

VOLVO

SERVICE

The Contronic II monitoring system provides information on scheduled service intervals and machine condition. Minimizes time required for troubleshooting.

Service accessibility: Large, easy-to-open service doors with gas springs. Swing-out radiator grille, fan and radiator. Possibility to log and analyze data to facilitate troubleshooting.

Refill capacities			
Fuel tank	693 l	Engine oil	61 l
Engine coolant	90 l	Transmission	92 l
Hydraulic tank	336 l	Wheel hubs, ea.	20,8 l
Hydraulic system	552 l	Differentials, ea.	68,1 l
		Midmount bearing	4,7 l

ENGINE

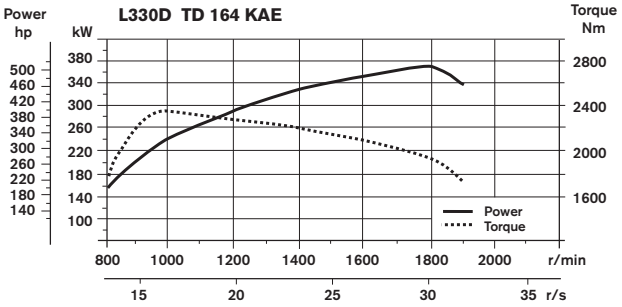
The Volvo engine offers high torque and quick response at low rpm. The machine operates efficiently at low engine speeds which contributes to good fuel economy, less noise, reduced wear and longer life.

Engine: High performance - Low emission, 4-stroke, 6-cylinder in-line diesel engine with direct injection, turbo charger and intercooler. Wet replaceable cylinder liners.

Air cleaning: three-stage

Cooling system: Hydrostatic fan with separate circuit for the intercooler.

Engine		Volvo TD 164 KAE	
Max power at		30,0 r/s	(1800 r/min)
SAE J1995	gross	370 kW	(503 hp)
ISO 9249, SAE J1349	net	366 kW	(498 hp)
Max torque at		16,7 r/s	(1000 r/min)
SAE J1995	gross	2370 Nm	
ISO 9249, SAE J1349	net	2340 Nm	
Displacement		16,12 l	



ELECTRICAL SYSTEM

Contronic II monitoring system with increased function control. Electrical system with circuit boards, well protected by fuses. The system is pre-wired for installation of optional equipment.

Central warning system: Central warning light for the following functions, (buzzer with gear engaged): Engine oil pressure, transmission oil pressure, brake pressure, parking brake, hydraulic oil level, brake cooling oil temperature, steering system pressure, coolant temperature, transmission oil temperature, hydraulic oil temperature, overspeeding in engaged gear, brake charging.

Voltage	24	V
Batteries, series/parallel	4x12	V
Battery capacity, total	238	Ah
Cold cranking capacity, ea	1250	A
Reserve capacity, ea	320	min
Alternator rating	2240	W / 80 A
Starter-motor output	7,5 kW	(10.0 hp)

DRIVETRAIN

Drivetrain and working hydraulics well-matched to achieve optimum productivity. Dependable well proven design throughout the whole drivetrain.

Torque converter: Single-stage.

Transmission: Power shift, countershaft with single lever control. Directional and range modulation provide fast and smooth shifting.

Shifting system: Volvo Automatic Power Shift (APS II) with mode selector.

Axles: Fully floating axle shafts with planetary-type heavy duty hub reductions. Cast-steel axle housing. Fixed front axle and oscillating rear axle. Posi-Torq limited-slip differentials in front and rear axle.

Torque Converter	C9672	
Transmission	C8421H	
Torque multiplication	2,29:1	
Speeds, max		
1 forward/reverse	6,6	km/h
2 forward/reverse	11,6	km/h
3 forward/reverse	19,9	km/h
4 forward/reverse	34,2	km/h

Measured with tires	35/65R33 XLD D1* L-4	
Front axle and rear axle	21D 5568	
Oscillation, rear axle	±12	°
Total	564	mm

BRAKE SYSTEM

Simple, reliable system ensures high availability and safety. Self-adjusting, forced oil-cooled wet disc brakes give long service life.

Service brakes: Fully hydraulic operated system with outboard mounted oil-cooled, wet disc brakes at each wheel. Filtered and cooled oil circulates through each brake when engine is running. Transmission declutch during braking can be pre-selected by a switch on the instrument panel.

Secondary brake: Dual circuit axle-by-axle system. Actuated by service brake pedal. Low pressure alarm. Dead engine braking capability provided by three nitrogen-charged accumulators.

Parking brake: Dry disc type mounted on front axle input shaft. Spring applied, electro-hydraulically released via a switch on the instrument panel. Applies automatically when the key is turned off.

Pump: Two variable-flow axial piston pumps common with the main hydraulic system.

Standards: The brake system complies with the requirements of ISO 3450, SAE J1473.

Brake pressure setting	6,55	MPa
Number of discs/wheel	6	
Number of accumulators	3	
Accumulators, volume 2x	4,0	l
1x	0,5	l

STEERING SYSTEM

Easily operated steering results in fast work cycles. The power-efficient system results in good fuel economy, good directional stability and a smooth ride.

Steering system: Load-sensing hydrostatic articulated steering.

System supply: The steering system has priority feed from a load-sensing axial piston pump.

Pump: Axial piston pump with variable displacement.

Steering cylinders: Two double-acting cylinders.

Steering cylinder	2	
Bore	125	mm
Piston rod diameter	70	mm
Stroke	493	mm
Relief pressure	26,0	MPa
Max. flow	325	l/min.
Articulation	± 35°	

Standards: Steering system complies with ISO 5010 and SAE J1511

CAB

Care Cab II with wide door opening and comfortable instep. Inside of cab lined with noise-absorbent materials. Noise and vibration suppressing suspension. Good all-round visibility through large glass areas. Curved front windshield of green-tinted glass. Ergonomically positioned controls and instruments permit a comfortable operating position.

Instrumentation: All important information is centrally located in the operator's field of vision. Display for Contronic II monitoring system.

Heater and defroster: Heater coil and air conditioner with filtered fresh air and fan with four speeds. Defroster vents for all window areas cab air can be recirculated.

Operator's seat: Operator's seat with adjustable suspension and retractable seatbelt. The seat is mounted on a bracket on the rear cab wall. The forces from the retractable seatbelt are absorbed by the seat rails.

Standard: The cab is tested and approved according to ROPS (ISO/CD 3471, SAE J1040), FOPS (ISO 3449, SAE J231). The cab meets with requirements according to ISO 6055 ("protective roof for high-lift vehicles") and SAE J386 ("Operator Restraint System").

Emergency exits	2	
Sound level in cab according to ISO 6396	LpA 76 dB (A)	
External sound level according to ISO 6395 (meets also directive 2000/14/EC)	LwA 110 dB (A)	
Ventilation	9	m^3/min
Heating capacity	11	kW
Air conditioning (optional Equipment)	8	kW

HYDRAULIC SYSTEM

The Load-sensing hydraulics deliver the exact amount of oil required for the function used. At the same time, complete control of the hydraulics is achieved throughout the entire lifting range. The high capacity of the pumps results in quick and smooth movements.

System supply: Two load-sensing axial piston pumps with variable displacement. The steering function always has priority from one of the pumps.

Valves: Double-acting 2-spool valve. The main valve is controlled by a 2-spool pilot valve.

Lift function: The valve has four positions; raise, hold, lower and float position. Inductive/magnetic automatic boom kickout can be switched on and off and is adjustable to any position between maximum reach and full lifting height.

Tilt function: The valve has three functions; rollback, hold and dump. Inductive/magnetic automatic tilt can be adjusted to the desired bucket angle.

Cylinders: Double-acting cylinders for all functions.

Filter: Full flow filtration through 20 micron (absolute) filter cartridge.

Relief pressure maximum, pump 1	26	MPa	
Flow	340	l/min	
at	10	MPa	
and engine speed	30,0	r/s	(1 800 r/min)
Relief pressure, pump 2	26	MPa	
Flow	250	l/min	
at	10	MPa	
and engine speed	30,0	r/s	(1 800 r/min)
Pilot system			
Relief pressure	3,5	MPa	
Cycle times			
Raise*	8,3	s	
Tilt*	1,9	s	
Lower, empty	4,4	s	
Total cycle time	14,6	s	

** with load as per ISO 5998 and SAE J818*

LIFT-ARM SYSTEM

The Z-bar system is a dependable linkage with good breakout qualities. Ideal for a primary production unit.

Lift cylinder	2	
Bore	200	mm
Piston rod diameter	110	mm
Stroke	1170	mm
Tilt cylinder	2	
Bore	170	mm
Piston rod diameter	90	mm
Stroke	808	mm

OPERATIONAL DATA VOLVO L330D (STANDARD BOOM)

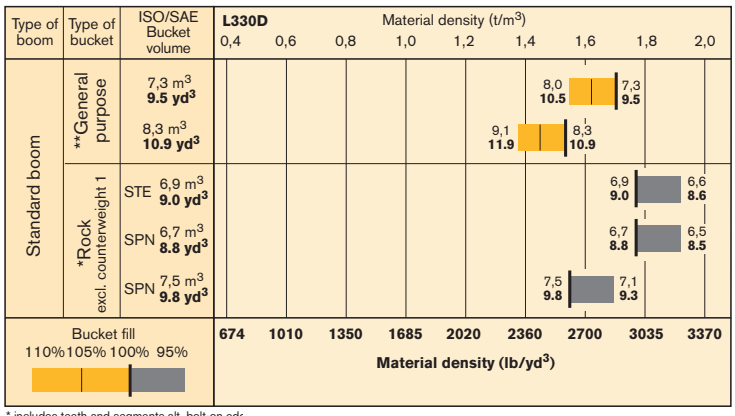
		Rock handling								Material handling	
Tires 35/65 R33 RL–5K L5 GY		Straight edge, STE, BOE**	STE with teeth	STE w/teeth & segments	Spade nose, SPN, BOE**	SPN with teeth	SPN w/teeth & segments	SPN with BOE**	SPN w/teeth & segments	Straight edge, STE, BOE**	STE with BOE**
Volume, heaped	m^3	6,9	6,6	6,9	6,7	6,6	6,7	7,5	7,5	7,3	8,3
Bucket weight	kg	5 030	4 860	5 210	5 640	5 411	5 760	5 940	6 070	4 700	4 950
Static tipping load, straight	kg	35 580	36 140	35 330	35 100	35 220	34 640	34 170	33 690	35 920	35 220
Static tipping load, at full turn	kg	31 740	32 290	31 490	31 250	31 360	30 790	30 370	29 890	32 090	31 420
Breakout force	kN	469,5	499,1	458,2	373,6	392,2	366,1	348,1	341,4	462,5	422,1
A	mm	10 230	10 500	10 530	10 630	10 900	10 930	10 780	11 070	10 250	10 410
L	mm	7 330	7 330	7 330	7 210	7 210	7 210	7 360	7 350	7 060	7 200
J	mm	4 700	4 710	4 670	4 700	4 710	4 670	4 690	4 660	4 700	4 690
H*	mm	3 720	3 540	3 510	3 450	3 280	3 250	3 350	3 150	3 700	3 590
M	mm	1 680	1 900	1 880	1 990	2 210	2 190	2 090	2 290	1 690	1 800
N	mm	2 450	2 630	2 600	2 690	2 880	2 820	2 760	2 880	2 460	2 540
T	mm	105	91	133	106	94	135	119	148	105	119
E	mm	1 270	1 480	1 510	1 580	1 800	1 830	1 700	1 950	1 280	1 410
Operating weight	kg	50 530	50 360	50 710	51 140	50 910	51 260	51 440	51 570	50 200	50 450

**Measured to the tip of the bucket teeth or bolt-on edge at 45° dump angle. Dump height to bucket edge (acc. SAE) + approx. 250 mm*
***BOE – Bolt-on edges.*
Maximum grading angle = 46°

BUCKET SELECTION CHART

The volume handled varies with the bucket fill and is often greater than indicated by the bucket's ISO/SAE volume. The table shows optimum bucket choice with regard to the material density.

Material	**Bucket fill %**	**Density t/m³**
Earth	100–115	1,4–1,6
Clay	110–120	1,4–1,6
Sand	100–110	1,6–1,9
Gravel	100–110	1,7–1,9
Rock	75–100	1,5–1,9



* includes teeth and segments alt. bolt-on edg
** includes bolt-on edges

BUCKET DIMENSIONS

Bucket dimensions		Straight edge, STE, BOE**	STE with teeth	STE w/teeth & segments	Spade nose, SPN, BOE**	SPN with teeth	SPN w/teeth & segments	SPN with BOE**	SPN w/teeth & segments	Straight edge, STE, BOE**	STE with BOE**
b	mm	1 920	2 200	2 200	2 320	2 600	2 600	2 450	2 740	1 940	2 090
c	mm	1 860	1 840	1 880	1 830	1 810	1 850	1 910	1 930	1 820	1 890
d	mm	1 490	1 770	1 770	1 910	2 190	2 190	2 050	2 330	1 530	1 680
e	mm	3 900	3 900	3 900	3 900	3 900	3 900	3 900	3 900	3 830	3 830
V	mm	3 970	3 970	3 970	3 970	3 970	3 970	3 970	3 970	3 970	3 970
y	mm	65	65	65	65	65	65	65	65	65	65
a_1 clearance circle	mm	17 910	18 040	18 040	18 090	18 220	18 220	18 160	18 290	17 920	17 980

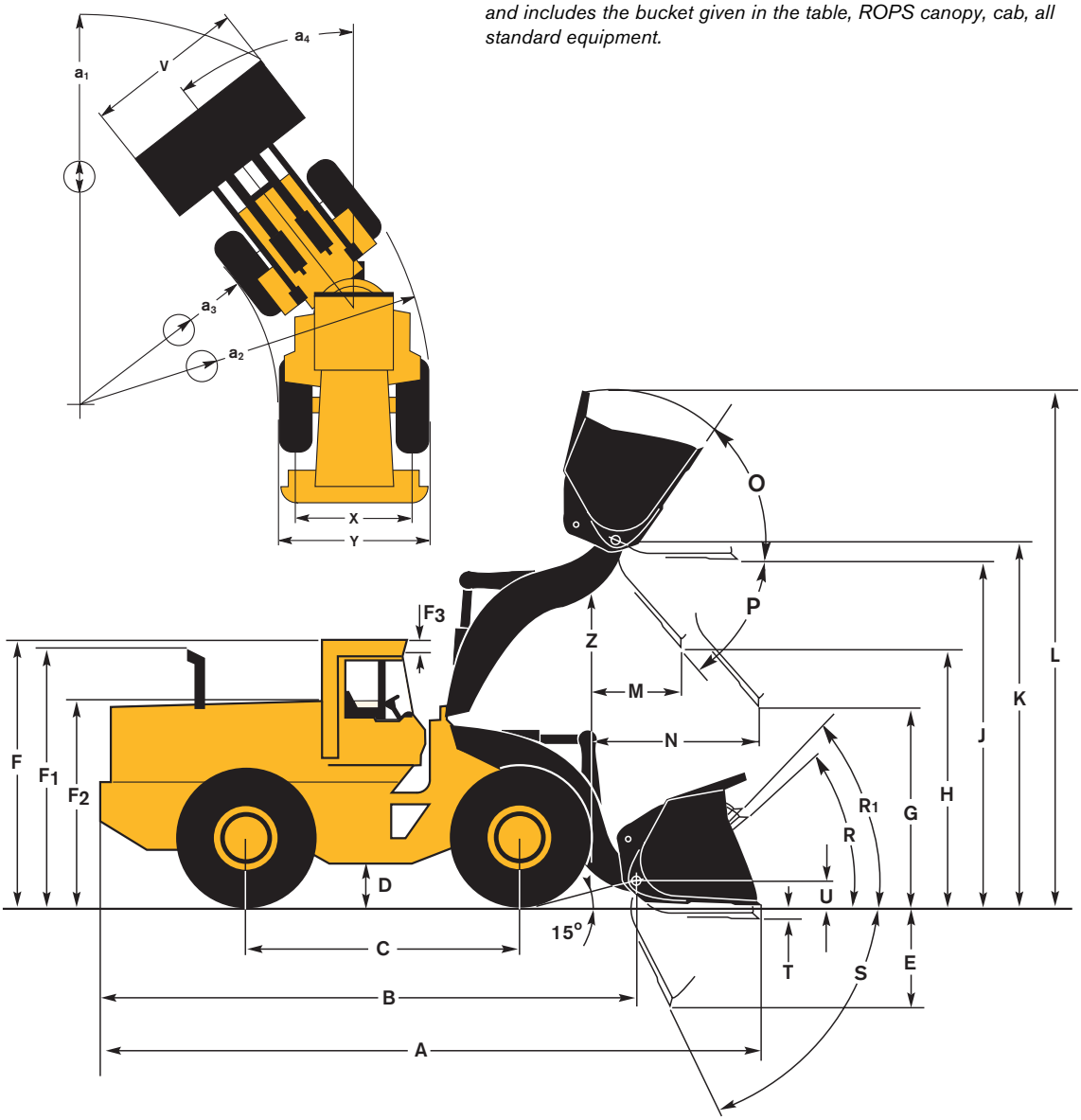
OPERATIONAL DATA & DIMENSIONS (STANDARD BOOM)

Tires 35/65 R33 RL–5K L5 GY

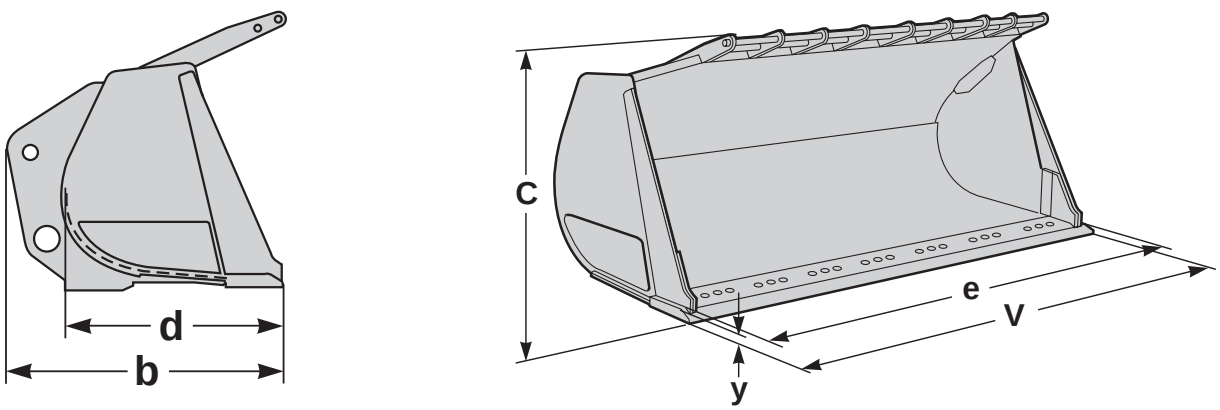
B	8 590	mm
C	4 060	mm
D	540	mm
F	4 190	mm
F1	3 850	mm
F2	3 160	mm
F3	40	mm
G	2 132	mm
K	5 070	mm
O	66	°
P	48	°
R	47	°
R_1*	51	°
S	57	°
U	660	mm
V	3 970	mm
X	2 720	mm
Y	3 630	mm
Z	4 150	mm
a_2	8 250	mm
a_3	4 630	mm
a_4	±35	°

** Carry position SAE*

Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 5998, SAE J818, ISO 8313.
Changes from the standard configuration may change machine dimensions and operating data. Operating weight is approximate and includes the bucket given in the table, ROPS canopy, cab, all standard equipment.



BUCKET DIMENSIONS



SUPPLEMENTAL OPERATING DATA (STANDARD BOOM)

Tires 35/65 R33 RL-5K L5 GY

SUPPLEMENTAL OPERATING WEIGHT		Change in operating weight	Change in static tipping load, straight	Change in static tipping load, full turn
ROPS canopy (removal) (for shipping only)	kg	– 760		
Optional tires:				
35/65-33 (30PR) L-4 Firestone	kg	– 580	– 380	– 320
35/65-33 (30PR) L-4 Goodyear	kg	– 225	+ 35	+ 80
35/65 R33 XLD D1* L-4 Michelin	kg	– 1 010	– 650	– 600
35/65 R33 XLD D2* L-5 Michelin	kg	– 365	– 360	– 330

SUPPLEMENTAL OPERATING DIMENSIONS		Change in height dimensions	Change in width
Optional tires:			
35/65-33 (30PR) L-4 Firestone	mm	+ 36	– 8
35/65-33 (30PR) L-4 Goodyear	mm	+ 7	+ 2
35/65 R33 XLD D1* L-4 Michelin	mm	– 32	+ 9
35/65 R33 XLD D2* L-5 Michelin	mm	– 8	+ 9

SUPPLEMENTAL SHIPPING DIMENSIONS		Height dimensions without ROPS canopy	Height dimensions
Lower center hinge – top of cab	mm	3 560	
Rear frame – top of cab	mm	3 550	
Bottom of planetary – top of cab	mm	3 530	
Bottom of differential – top of cab	mm	3 500	
Bottom of wooden wheels – top of cab	mm	3 730	
Bottom of wooden wheels – planetary	mm		200
Bottom of wooden wheels – differential	mm		235

OPERATIONAL DATA VOLVO L330D (LONG BOOM)

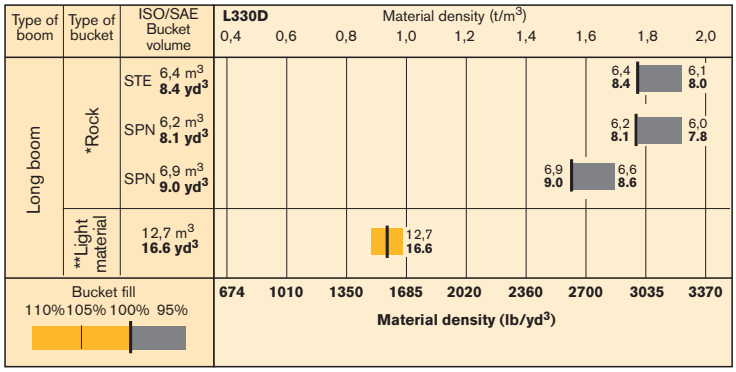
Tires 35/65 R33 RL–5K L5 GY		Rock handling								Material handling
		Straight edge, STE, BOE**	STE with teeth	STE w/teeth & segments	Spade nose SPN, BOE**	SPN with teeth	SPN w/teeth & segments	SPN with BOE**	SPN w/teeth & segments	STE with BOE**
Volume, heaped	m^3	6,4	6,1	6,4	6,2	6,1	6,2	6,9	6,9	12,7
Bucket weight	kg	4 870	4 700	5 050	5 630	5 410	5 760	5 820	5 940	5 860
Static tipping load, straight	kg	31 990	32 460	31 740	30 370	30 490	29 940	30 060	29 620	29 660
Static tipping load, at full turn	kg	28 430	28 880	28 190	26 900	27 010	26 470	26 600	26 150	26 190
Breakout force	kN	517,3	552,8	504,7	373,7	392,1	366,8	357,3	350,9	358,8
A	mm	10 460	10 730	10 760	11 000	11 280	11 300	11 100	11 400	10 080
L	mm	7 550	7 550	7 550	7 600	7 600	7 590	7 690	7 690	7 810
J	mm	5 090	5 100	5 060	5 070	5 080	5 040	5 060	5 030	5 070
H*	mm	4 190	4 020	3 980	3 830	3 650	3 620	3 760	3 560	3 740
M	mm	1 660	1 880	1 860	2 070	2 290	2 270	2 130	2 330	2 100
N	mm	2 680	2 870	2 840	3 010	3 180	3 150	3 050	3 190	2 970
T	mm	106	92	134	120	107	149	129	158	118
E	mm	1 110	1 290	1 320	1 500	1 700	1 730	1 570	1 800	1 560
Operating weight	kg	50 680	50 510	50 860	51 440	51 220	51 570	51 630	51 750	51 670

**Measured to the tip of the bucket teeth or bolt-on edge at 45° dump angle. Dump height to bucket edge (acc. SAE) + approx. 250 mm*
***BOE – Bolt-on edges.*
Maximum grading angle = 46°

BUCKET SELECTION CHART

The volume handled varies with the bucket fill and is often greater than indicated by the bucket's ISO/SAE volume.The table shows optimum bucket choice with regard to the material density.

Material	Bucket fill %	Density t/m^3
Earth	100–115	1,4–1,6
Clay	110–120	1,4–1,6
Sand	100–110	1,6–1,9
Gravel	100–110	1,7–1,9
Rock	75–100	1,5–1,9



* includes teeth and segments alt. bolt-on ed
** includes bolt-on edges

BUCKET DIMENSIONS

Bucket dimensions		Straight edge, STE, BOE**	STE with teeth	STE w/teeth & segments	Spade nose SPN, BOE**	SPN with teeth	SPN w/teeth & segments	SPN with BOE**	SPN w/teeth & segments	STE with BOE**
b	mm	1 780	2 060	2 060	2 320	2 600	2 600	2 410	2 690	2 400
c	mm	2 070	2 050	2 090	2 110	2 100	2 130	2 190	2 210	2 290
d	mm	1 370	1 650	1 650	1 910	2 190	2 190	2 000	2 280	1 990
e	mm	3 900	3 900	3 900	3 900	3 900	3 900	3 900	3 900	4 370
V	mm	3 970	3 970	3 970	3 970	3 970	3 970	3 970	3 970	4 500
y	mm	65	65	65	65	65	65	65	65	65
a_1 clearance circle	mm	18 140	18 270	18 270	18 400	18 550	18 550	18 450	18 590	18 930

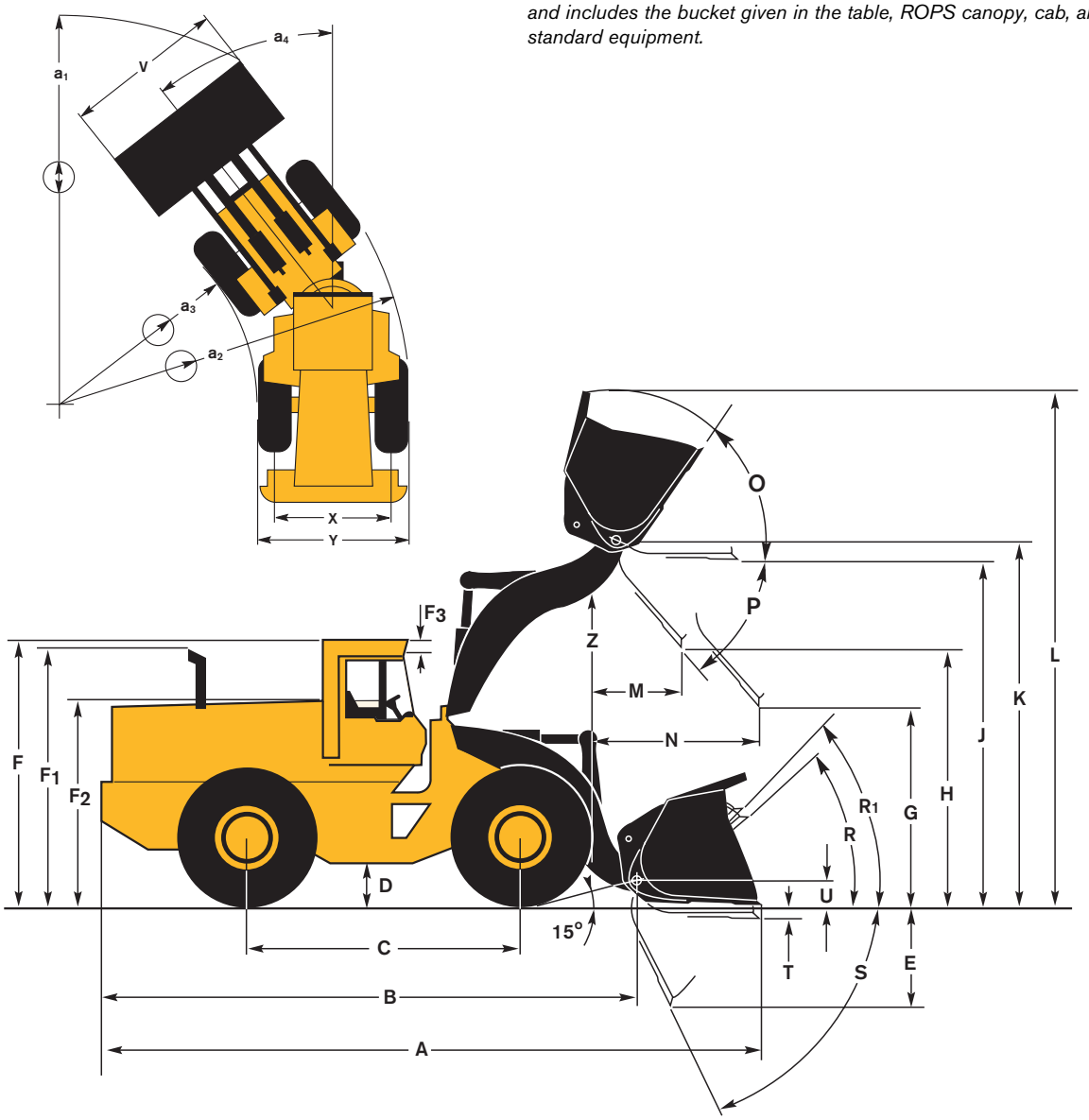
OPERATIONAL DATA & DIMENSIONS (LONG BOOM)

Tires 35/65 R33 RL–5K L5 GY

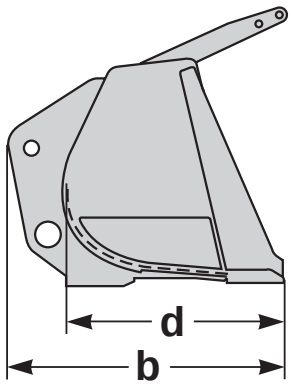
B	8 960	mm
C	4 060	mm
D	540	mm
F	4 190	mm
F1	3 850	mm
F2	3 160	mm
F3	40	mm
G	2 135	mm
K	5 440	mm
O	66	°
P	47	°
R	47	°
R_1*	52	°
S	51	°
U	770	mm
V	3 970/4 500	mm
X	2 720	mm
Y	3 630	mm
Z	4 340	mm
a_2	8 250	mm
a_3	4 630	mm
a_4	±35	°

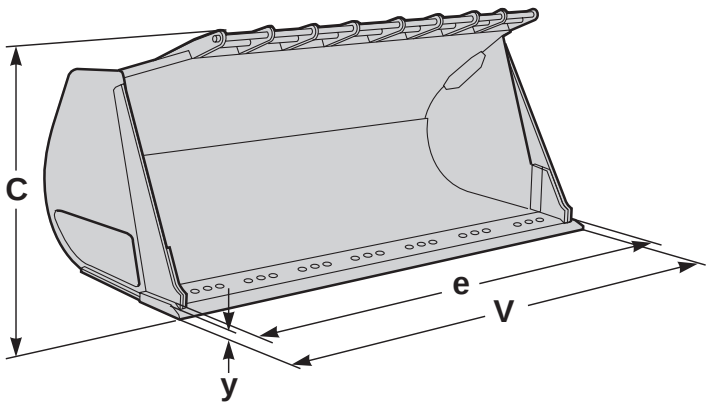
** Carry position SAE*

Where applicable, specifications and dimensions are in accordance with ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 5998, SAE J818, ISO 8313.
Changes from the standard configuration may change machine dimensions and operating data. Operating weight is approximate and includes the bucket given in the table, ROPS canopy, cab, all standard equipment.



BUCKET DIMENSIONS





SUPPLEMENTAL OPERATING DATA (LONG BOOM)

Tires 35/65 R33 RL–5K L5 GY

SUPPLEMENTAL OPERATING WEIGHT		Change in operating weight	Change in static tipping load, straight	Change in static tipping load, full turn
ROPS canopy (removal) (for shipping only)	kg	– 760		
Optional tires: 35/65-33 (30PR) L-4 Firestone	kg	– 585	– 330	– 275
35/65-33 (30PR) L-4 Goodyear	kg	– 225	+ 30	+ 70
35/65 R33 XLD D1* L-4 Michelin	kg	– 1 010	– 610	– 555
35/65 R33 XLD D2* L-5 Michelin	kg	– 365	– 310	– 290

SUPPLEMENTAL OPERATING DIMENSIONS		Change in height dimensions	Change in width
Optional tires: 35/65-33 (30PR) L-4 Firestone	mm	+ 36	– 8
35/65-33 (30PR) L-4 Goodyear	mm	+ 7	+ 2
35/65 R 33 XLD D1* L-4 Michelin	mm	– 32	+ 9
35/65 R 33 XLD D2* L-5 Michelin	mm	– 8	+ 9

SUPPLEMENTAL SHIPPING DIMENSIONS		Height dimensions without ROPS canopy	Height dimensions
Lower center hinge – top of cab	mm	3 560	
Rear frame – top of cab	mm	3 550	
Bottom of planetary – top of cab	mm	3 530	
Bottom of differential – top of cab	mm	3 500	
Bottom of wooden wheels – top of cab	mm	3 730	
Bottom of wooden wheels – planetary	mm		200
Bottom of wooden wheels – differential	mm		235

STANDARD EQUIPMENT

Service and maintenance
Engine oil remote drain and fill
Lubrication manifolds, ground accessible
Radiator remote drain and fill
Transmission remote drain and fill
Pressure test ports: transmission and hydraulic, quick connect, grouped on console for easy access
Fan, hydraulic driven, swing out
Grille, rear, swing out
Fuel fill strainer

Engine
Air cleaner, dry type, dual element, with exhaust aspirated precleaner
Coolant filter
Coolant level sight gauge
Engine intake manifold pre-heater
Exhaust rain protection
Flat-round radiator
Low emission

Electrical System
24 volt – prewired for optional equipment
Alternator, 24 Volt, 80 Amp
Back-up alarm, acoustic
Battery disconnect switch, lockable
Gauges:
- engine temperature
- fuel level
- transmission temperature

Hourmeter
Horn, electric
Lights:
- instrument lighting
- parking lights
- stop/tail combination (2 rear)
- turn signals with hazard warning switch
- working lights, 70 watt
- halogen (6 front and 2 rear)

Contronic II, Monitoring System, ECU with log and analysis system
Contronic II display
Engine shutdown to idle in case of malfunction indication:
- High engine coolant temperature
- Low engine oil pressure
- High transmission oil temperature

Start interlock when gear is enchanged
Brake test
Test function for warning and indicator lights
Warning and indicator lights:
- Charging
- Oil pressure, engine
- Oil pressure, transmission
- Brake pressure
- Parking brake
- Hydraulic oil level
- Brake cooling oil temperature
- Primary steering
- Secondary steering
- High beams
- Turn signals
- Rotating beacon
- Preheating coil
- Coolant temperature
- Transmission oil temperature
- Brake charging

Drivetrain
Countershaft transmission with directional and range modulation
Single lever control
Automatic Power Shift (APS II)
Operator controlled declutch
Kickdown to 1st switch on shift lever and hydraulic console
Brakes, full hydraulic, wet disc, continuous oil-cooled, 4 wheel dual-circuit, axle by axle
Secondary brake system, accumulator supplied
Differentials: Posi-Torq limited-slip front and rear
Switch F/R at hyd. controls

Tyres and rims
35/65-33

Cab and ROPS Canopy
ROPS Canopy (ROPS, SAE J1040, ISO 3471) FOPS, SAE J231, ISO 3449)
Cab (ROPS, SAE J1040, ISO 3471)
Acoustical lining
Air conditioner, 7kW, 24,000 Btu/h
Ashtray
Cigarette lighter
Door lockable (left side access)
Door-open struts
Heater/defroster/pressurizer 11 kW (37,500 Btu/h) with four speed blower fan
Filtered air for cab
Floor mat
Instrument panel with symbols
Interior light
Mirror, rearview interior
Mirror, rearview, exterior (2)
Operator seat, ISRI, air suspended, heated
Safety glass, tinted
Seat belt (SAE J386) retractable
Steering wheel, telescoping, adjustable tilt
Windshield washers front/rear
Beverage holder
Adjustable lever console
Storage compartment
Sun visor
Windshield wiper, front and rear
Window openable, right-hand side
Wiper, intermittent, front
Cab access steps, hand rails, service platforms with anti-skid surfaces (SAE J185)

Hydraulic System
Main, load-sensing valves, 2 spool, pilot-operated
Pilot valve, 2 spool
Three variable-flow axial piston pumps (1 have steering priority)
Boom and bucket control levers, fingertip
Boom lever detents
Boom lowering system
Boom kickout, automatic, adjustable
Bucket lever detents
Bucket leveler, automatic, adjustable
Control lever safety latch
Steer, load-sensing valve Orbitrol, hydrostatic
Hydraulic pressure test ports, quick connect
Hydraulic fluid level sight gauge
Hydraulic oil cooler

External
Drawbar with pin
Isolation mounts: cab, engine, transmission, radiator
Lifting lugs
Side panels, engine hood
Steering frame lock
Tie-down locations
Vandalism lock, provision for, batteries, engine coolant, fuel, hydraulic fluid, transmission/torque converter fluid, engine side panels
Boom to buckets pins with dual double-tapered roller bearings
Fenders, front
Mudflap

OPTIONAL EQUIPMENT *(May be standard in certain markets)*

Service and maintenance
Tool kit
Tool box, lockable
Automatic lubrication system

Engine equipment
Engine block heater, 120 V (US)
Engine block heater, 240 V 2500W (US)
Engine block heater, 220 V 1500W (Europ)
Air. pre-cleaner, oil bath type
Radiator and hyd. oil cooler, corrosionprotected

Electrical system
Rotating beacon
Working lights rear, extra
Battery for extrem cold weather

Tyres and rims
35/65-33 (30 PR) L4 FS
35/65-33 (36 PR) L4 FS
35/65-33 (42 PR) L4 FS
35/65-33 (30 PR) L5 FS
35/65-33 (30 PR) L4 GY
35/65-33 (30 PR) L5 GY
35/65R33 RL-5K* L5 GY
35/65R33 XLD DI* L4 MI
35/65-33 XLD D2* L5 MI
35/65R33 XMINE D2* L5 MI
35/65R33 XRDNA L3 MI
35/65R33 VSDL L5 BR
Wood protected rims
Heavy duty rims

Cab
Armrest (left) for ISRI operator seat
Dual brake pedals
Steering knob
Instructor's seat
Radio installation kit
Noise reduction kit
Seat belt 3in
Asbestos dust protection filter
Lunch box holder
Radio with tape recorder
Sliding window, door
Sliding window right side
Sound reduction kit
Throttle, lockable
Single key door/start
Sunblinds, side windows
Sunblinds, front/rear windows

Hydraulic system
Attachment locking, without bracket
Biodegradable hydraulic fluid
Boom Suspension System
Hydraulic function, 3rd
Hydraulic function, 4rd
Artic kit

External equipment
Counterweight for block handling

Protective equipment
Guards for stop/tail lights
Guards for std. working light rear
Guards for headlights front
Windshield guard
Window guards side and rear window
Protection plates under cab
Belly guard front and rear
Hose protection for boom cyl.hoses
Radiator grill guards

Other equipment
Comfort Drive Control, CDC
Long boom
Secondary steering
Logger version

Under our policy of continuous product improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

Volvo Construction Equipment Group

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