

Technical data



Diesel engine

Rating	
per SAE J1349	148 HP (110 kW) at 1,800 rpm
per ISO 9249	150 HP (110 kW) at 1,800 rpm
Torque	682 Nm at 1,400 rpm / 503 lbf ft at 1,400 rpm
Model	Liebherr D924 A7-04
Type	4 cylinder in-line
Bore / Stroke	104 / 132 mm / 4.1 / 5.2 in
Displacement	4.5 l / 275 in³
Engine operation	4-stroke diesel Common-Rail injection system Turbo-charged and after-cooler
Air cleaner	Dry-type air cleaner with pre-cleaner, primary and safety elements
Engine idling	Sensor controlled
Electrical system	
Voltage	24 V
Batteries	2 x 145 Ah / 12 V
Alternator	Three-phase current 28 V / 140 A
Tier 4 Final	
Harmful emissions values	In accordance with 40CFR1039 (EPA) / 13CCR (CARB)
Emission control	Liebherr DOC + SCR technology
Fuel tank	243 l / 64 gal
Urea tank	46 l / 12 gal



Cooling system

Diesel engine	Water-cooled Compact cooling system comprising cooling unit for water, hydraulic oil and charge air with stepless, thermostatically controlled fan, retractable thermostatic fan for radiator cleaning
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Hydraulic controls

Power distribution	Via control valves with integrated safety valves, simultaneous and independent actuation of undercarriage, swing drive and equipment
Servo circuit	
Equipment and swing	With electro-hydraulic pilot control and proportional joystick levers
Travel	Electro-proportional via foot pedal
Additional functions	Via switch or electro-proportional foot pedals
Proportional control	Proportionally acting transmitters on the joysticks for additional hydraulic functions



Hydraulic system

Hydraulic pump	Liebherr, variable displacement, swashplate pump
Max. flow	300 l/min. / 79 gpm
Max. pressure	350 bar / 5,076 psi
Hydraulic pump regulation and control	Liebherr-Synchron-Comfort-system (LSC) with electronic engine speed sensing regulation, pressure and flow compensation, torque controlled swing drive priority
Hydraulic tank	135 l / 36 gal
Hydraulic system	max. 300 l / max. 79 gal
Filtration	1 main return filter with integrated partial micro filtration (5 µm / 2,500 mesh)
MODE selection	Adjustment of engine and hydraulic performance via a mode pre-selector to match application, e.g. for especially economical and environmentally friendly operation or for maximum digging performance and heavy-duty jobs
S (Sensitive)	Mode for precision work and lifting through very sensitive movements
E (Eco)	Mode for especially economical and environmentally friendly operation
P (Power)	Mode for high performance with low fuel consumption
P+ (Power-Plus)	Mode for highest performance and for very heavy duty applications, suitable for continuous operation
Engine speed and performance setting	Stepless adjustment of engine output and hydraulic power via engine speed
Additional function	Tool Control: 20 pre-adjustable pump flows and pressures for add-on attachments



Swing drive

Drive	Liebherr swashplate motor with integrated brake valve and torque control
Transmission	Liebherr compact planetary reduction gears
Swing ring	Liebherr, sealed race ball bearing swing ring, internal teeth
Swing speed	0-10.0 rpm stepless
Swing torque	54 kNm / 39,828 lbf ft
Holding brake	Wet multi-disc (spring applied, pressure released)
Additional function	Positioning swing brake automatic



Cab

Cab	ROPS safety cab structure (roll-over protection system) with individual windscreens or featuring a slide-in subpart under the ceiling, headlights integrated in the ceiling, a door with a sliding window, large stowing and depositing possibilities, shock-absorbing suspension, sound damping insulating, laminated safety glass, separate window shades for the sunroof window and windscreen
Operator's seat Comfort	Air cushioned operator's seat with 3D-adjustable armrests, headrest, lap belt, seat heater (2-stage), adjustable seat cushion inclination and length, lockable horizontal suspension, automatic weight adjustment, pneumatic low frequency suspension, adjustable suspension stiffness, pneumatic lumbar vertebrae support and passive seat climatization with active coal
Operator's seat Premium (Option)	In addition to operator's seat Comfort: active electronic weight adjustment (automatic readjustment) and active seat climatization with active coal and ventilator
Arm consoles	Joysticks with control consoles attached to the seat, folding left control console
Operation and displays	Large high-resolution operating unit, intuitive, color display with touchscreen, haptic feedback, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters, separate display for rear view and side view monitoring
Air-conditioning	Automatic air-conditioning, recirculated air function, fast de-icing and demisting at the press of a button, air vents can be operated via a menu; recirculated air and fresh air filters can be easily replaced and are accessible from the outside; heating-cooling unit, designed for extreme outside temperatures, sensors for solar radiation, inside and outside temperatures (country-dependent)



Undercarriage

LC	Gauge 2,250 mm / 7'5"
Drive	Liebherr swashplate motor with brake valves on both sides
Transmission	Liebherr compact planetary reduction gear
Maximum travel speed	2.7 km/h / 1.7 mph low range 5.9 km/h / 3.7 mph high range
Drawbar pull on crawler	188 kN / 42,264 lbf
Track components	B60, maintenance-free
Track rollers / Carrier rollers	7 / 2
Tracks	Sealed and greased
Track pads	Triple grouser
Holding brake	Wet multi-disc (spring applied, pressure released)
Brake valves	Integrated into travel motor
Lashing eyes	Integrated



Equipment

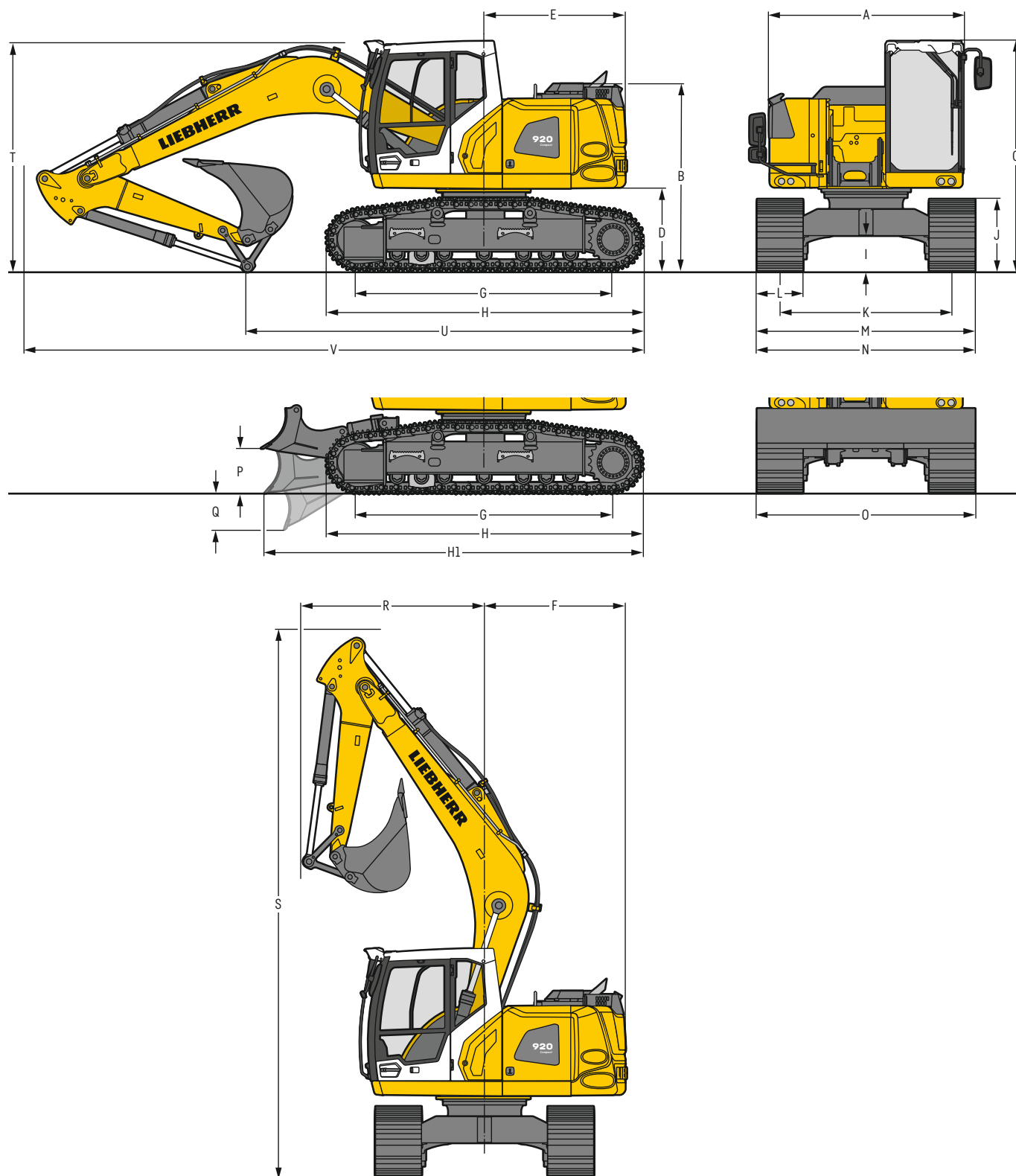
Type	High-strength steel plates at highly-stressed points for the toughest requirements. Complex and stable mountings of equipment and cylinders
Hydraulic cylinders	Liebherr cylinders with seal and guidance systems
Bearings	Sealed, low maintenance



Complete machine

Lubrication	Liebherr central lubrication system for uppercarriage and equipment
Noise emission	
ISO 6396	70 dB(A) = L _{pA} (inside cab)
2000/14/EC	101 dB(A) = L _{WA} (surround noise)

Dimensions



		LC	mm / ft in	LC with blade	mm / ft in
A	Uppercarriage width		2,525 / 8' 3"		2,525 / 8' 3"
B	Uppercarriage height		2,470 / 8' 1"		2,470 / 8' 1"
C	Cab height		3,025 / 9'11"		3,025 / 9'11"
D	Counterweight ground clearance		1,105 / 3' 8"		1,105 / 3' 8"
E	Rear-end length		1,850 / 6' 1"		1,850 / 6' 1"
F	Tail swing radius		1,850 / 6' 1"		1,850 / 6' 1"
G	Wheelbase		3,370 / 11' 1"		3,370 / 11' 1"
H	Undercarriage length		4,150 / 13' 7"		4,150 / 13' 7"
H1	Undercarriage length with blade		-		4,945 / 16' 3"
I	Undercarriage ground clearance		485 / 1' 7"		370 / 1' 3"
J	Track height		965 / 3' 2"		965 / 3' 2"
K	Track gauge		2,250 / 7' 5"		2,250 / 7' 5"
L	Track pad width		600 / 24" 750 / 30" 900 / 35"		600 / 24" 750 / 30" 900 / 35"
M	Width over tracks		2,850 / 9' 4" 3,000 / 9'10" 3,150 / 10' 4"		2,850 / 9' 4" 3,000 / 9'10" 3,150 / 10' 4"
N	Width over steps		2,780 / 9' 1" 2,980 ¹⁾ / 9' 9" ¹⁾ 3,080 ¹⁾ / 10' 1" ¹⁾		2,780 / 9' 1" 2,980 ¹⁾ / 9' 9" ¹⁾ 3,080 ¹⁾ / 10' 1" ¹⁾
O	Blade width		-		-
P	Max. blade height		-		590 / 1'11"
Q	Max. blade depth		-		470 / 1' 7"

¹⁾ width with removable steps

		Stick length	Mono boom 5.00 m / 16'5"
		m / ft in	direct mounting
R	Front swing radius	2.25 / 7'5"	2,400 / 7'10"
		2.45 / 8'	2,400 / 7'10"
		2.65 / 8'8"	2,450 / 8'
S	Height with boom up		7,200 / 23' 7"
T	Boom height	2.25 / 7'5"	3,000 / 9'10"
		2.45 / 8'	3,050 / 10'
		2.65 / 8'8"	3,150 / 10' 4"
U	Length on ground	2.25 / 7'5"	5,200 / 17' 1"
		2.45 / 8'	5,100 / 16' 9"
		2.65 / 8'8"	4,900 / 16' 1"
V	Overall length		8,100 / 26' 7"
	Bucket		0.80 m ³ / 1.05 yd ³

Transport dimensions

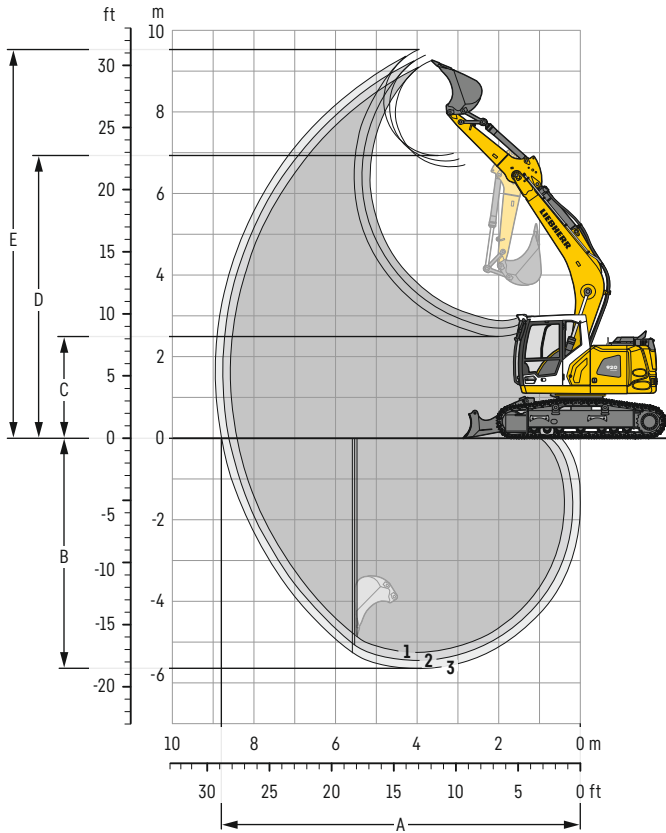
removable elements disassembled

	Mono boom 5.00 m / 16'5"	mm / ft in
Pad width	600 / 24" 750 / 30" 900 / 35"	
Transport width	2,850 / 9' 4" 3,000 / 9'10" 3,150 / 10' 4"	

	Stick	LC	LC with blade
	m / ft in	mm / ft in	mm / ft in
Transport length		8,100 / 26'7"	9,000 / 29'6"
	2.25 / 7'5"		3,025 / 9'11"
Transport height	2.45 / 8'		3,050 / 10'
	2.65 / 8'8"		3,150 / 10' 4"
Bucket			0.80 m ³ / 1.05 yd ³

Backhoe bucket

with mono boom 5.00 m / 16'5"



Digging envelope

without quick coupler		1	2	3
Stick length	m / ft in	2.25 / 7' 5"	2.45 / 8'	2.65 / 8' 8"
A Max. reach at ground level	m / ft in	8.42 / 27' 7"	8.61 / 28' 3"	8.79 / 28' 10"
B Max. digging depth	m / ft in	5.25 / 17' 3"	5.45 / 17' 11"	5.65 / 18' 6"
C Min. dumping height	m / ft in	2.89 / 9' 6"	2.70 / 8' 10"	2.50 / 8' 2"
D Max. dumping height	m / ft in	6.66 / 21' 10"	6.80 / 22' 4"	6.94 / 22' 9"
E Max. cutting height	m / ft in	9.26 / 30' 5"	9.39 / 30' 10"	9.53 / 31' 3"

Forces

without quick coupler		1	2	3
Stick digging force (ISO 6015)	kN / lbf	83 / 18,660	78 / 17,540	74 / 16,640
Bucket digging force (ISO 6015)	kN / lbf	98 / 22,030	98 / 22,030	98 / 22,030
Stick digging force (SAE J1179)	kN / lbf	79 / 17,760	75 / 16,860	71 / 15,960
Bucket digging force (SAE J1179)	kN / lbf	89 / 20,010	89 / 20,010	89 / 20,010

Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 3.9 t / 8,600 lb, mono boom 5.00 m / 16'5", stick 2.65 m / 8'8" and backhoe bucket 0.80 m³ / 1.05 yd³ (480 kg / 1,060 lb).

Undercarriage		LC		
Pad width	mm / in	600 / 24"	750 / 30"	900 / 35"
Weight	kg / lb	18,730 / 41,290	19,330 / 42,620	19,730 / 43,500
Ground pressure	kg/cm ² / psi	0.43 / 6.1	0.36 / 5.1	0.31 / 4.4

Undercarriage		LC with blade		
Pad width	mm / in	600 / 24"	750 / 30"	
Weight	kg / lb	20,030 / 44,160	20,630 / 45,480	
Ground pressure	kg/cm ² / psi	0.46 / 6.5	0.38 / 5.4	

Backhoe bucket Machine stability per ISO 10567* (75 % of tipping capacity)

	Cutting width	Capacity ISO 7451	Weight ³⁾	LC undercarriage (with track pads 750 mm / 30")						LC undercarriage with blade (with track pads 750 mm / 30")					
				Stick length (m / ft in)						Stick length (m / ft in)					
				without quick coupler			with quick coupler			without quick coupler			with quick coupler		
				2.25 7'5"	2.45 8'	2.65 8'8"	2.25 7'5"	2.45 8'	2.65 8'8"	2.25 7'5"	2.45 8'	2.65 8'8"	2.25 7'5"	2.45 8'	2.65 8'8"
STD ¹⁾	500	0.30	290	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1'8"	0.39	640												
	650	0.42	350	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	2'2"	0.55	770												
	850	0.60	400	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	2'9"	0.78	880												
	1,050	0.80	480	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
HD ²⁾	3'5"	1.05	1,060												
	1,250	0.95	525	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	4'1"	1.24	1,160												
	500	0.30	320	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1'8"	0.39	710												
	650	0.42	390	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	2'2"	0.55	860												
HD ²⁾	850	0.60	450	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	2'9"	0.78	990												
	1,050	0.80	540	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	3'5"	1.05	1,190												
	1,250	0.95	595	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
HD ²⁾	4'1"	1.24	1,310												

* indicated loads are based on ISO 10567, at maximum reach, and may be swung 360° on firm and even ground

¹⁾ Standard backhoe bucket with Liebherr teeth Z 50

²⁾ HD backhoe bucket with Liebherr teeth Z 50

³⁾ backhoe bucket for direct mounting or mounting to quick coupler

Other backhoe buckets available upon request

Max. material weight ▲ = 2.0t/m³ / 3,400lb/yd³

Lift capacities

with mono boom 5.00 m / 16'5", counterweight 3.9 t / 8,600 lb and track pads 750 mm / 30"

Stick 2.25 m / 7'5"

	Under- carriage	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		m ft in	
											
LC	7.5 m t									3.7*	3.7*
	25 ft lb									8.3*	8.3*
	6.0 m t			4.8*	4.8*					3.1*	3.1*
	20 ft lb			10.7*	10.7*					6.9*	6.9*
	4.5 m t	6.6*	6.6*	5.4*	5.4*	3.5	4.9*			2.9	2.9*
	15 ft lb	14.2*	14.2*	11.8*	11.8*	7.5	10.7*			6.5*	6.5*
	3.0 m t			5.1	6.6*	3.3	5.1			2.6	3.0*
	10 ft lb	20.6	22.0*	11.1	14.3*	7.2	10.9			5.7	6.6*
	1.5 m t			4.8	7.7	3.2	4.9			2.4	3.2*
	5 ft lb			10.3	16.5	6.9	10.6			5.4	7.0*
	0 m t	5.7*	5.7*	4.6	7.4	3.1	4.8			2.5	3.6*
	0 ft lb	13.2*	13.2*	9.8	16.0	6.6	10.3			5.5	7.9*
LC Blade up	-1.5 m t	8.5	10.4*	4.5	7.4	3.0	4.7			2.7	4.2
	-5 ft lb	18.3	23.7*	9.7	15.8	6.6	10.2			6.1	9.4
	-3.0 m t	8.7	9.4*	4.6	6.7*					3.5	5.1*
	-10 ft lb	18.7	20.4*	9.9	14.4*					7.8	11.3*
	7.5 m t									3.7*	3.7*
	25 ft lb									8.3*	8.3*
	6.0 m t			4.8*	4.8*					3.1*	3.1*
	20 ft lb			10.7*	10.7*					6.9*	6.9*
	4.5 m t	6.6*	6.6*	5.4*	5.4*	3.7	4.9*			2.9*	2.9*
	15 ft lb	14.2*	14.2*	11.8*	11.8*	8.0	10.7*			6.5*	6.5*
	3.0 m t			5.5	6.6*	3.6	5.1			2.8	3.0*
	10 ft lb	22.0*	22.0*	11.8	14.3*	7.7	11.1			6.1	6.6*
LC Blade down	1.5 m t			5.1	7.8*	3.4	5.0			2.6	3.2*
	5 ft lb			11.1	16.7	7.4	10.7			5.8	7.0*
	0 m t	5.7*	5.7*	4.9	7.5	3.3	4.9			2.7	3.6*
	0 ft lb	13.2*	13.2*	10.6	16.2	7.2	10.5			5.9	7.9*
	-1.5 m t	9.2	10.4*	4.9	7.5	3.3	4.8			3.0	4.3
	-5 ft lb	19.7	23.7*	10.5	16.1	7.1	10.4			6.6	9.5
	-3.0 m t	9.4	9.4*	4.9	6.7*					3.8	5.1*
	-10 ft lb	20.1	20.4*	10.7	14.4*					8.4	11.3*
	7.5 m t									3.7*	3.7*
	25 ft lb									8.3*	8.3*
	6.0 m t			4.8*	4.8*					3.1*	3.1*
	20 ft lb			10.7*	10.7*					6.9*	6.9*
	4.5 m t	6.6*	6.6*	5.4*	5.4*	3.9	4.9*			2.9*	2.9*
	15 ft lb	14.2*	14.2*	11.8*	11.8*	8.4	10.7*			6.5*	6.5*
	3.0 m t			5.8	6.6*	3.8	5.3*			2.9	3.0*
	10 ft lb	22.0*	22.0*	12.5	14.3*	8.2	11.6*			6.5	6.6*
	1.5 m t			5.5	7.8*	3.6	5.8*			2.8	3.2*
	5 ft lb			11.8	16.8*	7.8	12.6*			6.1	7.0*
	0 m t	5.7*	5.7*	5.2	8.3*	3.5	6.1*			2.8	3.6*
	0 ft lb	13.2*	13.2*	11.3	17.9*	7.6	13.1*			6.2	7.9*
	-1.5 m t	9.9	10.4*	5.2	8.0*	3.5	5.8*			3.1	4.4*
	-5 ft lb	21.2	23.7*	11.2	17.2*	7.5	12.5*			7.0	9.8*
	-3.0 m t	9.4*	9.4*	5.3	6.7*					4.0	5.1*
	-10 ft lb	20.4*	20.4*	11.4	14.4*					8.9	11.3*

Stick 2.45 m / 8'

	Under- carriage	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft		m ft in	
											
LC	7.5 m t									3.3*	3.3*
	25 ft lb									7.4*	7.4*
	6.0 m t			4.6*	4.6*					2.8*	2.8*
	20 ft lb			10.1*	10.1*					6.2*	6.2*
	4.5 m t			5.2*	5.2*	3.5	4.7*			2.7*	2.7*
	15 ft lb			11.2*	11.2*	7.5	10.3*			5.9*	5.9*
	3.0 m t	9.7*	9.7*	5.2	6.4*	3.3	5.1			2.5	2.7*
	10 ft lb	20.7*	20.7*	11.1	13.8*	7.2	10.9			5.4	5.9*
	1.5 m t			4.8	7.6*	3.2	4.9			2.3	2.9*
	5 ft lb			10.3	16.4*	6.9	10.6			5.1	6.3*
	0 m t	6.0*	6.0*	4.5	7.4	3.1	4.8			2.4	3.2*
	0 ft lb	13.9*	13.9*	9.8	15.9	6.6	10.3			5.2	7.1*
LC Blade up	-1.5 m t	8.5	10.0*	4.5	7.3	3.0	4.7			2.6	3.9*
	-5 ft lb	18.1	22.8*	9.7	15.7	6.5	10.2			5.8	8.6*
	-3.0 m t	8.6	9.8*	4.5	6.9*					3.3	5.0*
	-10 ft lb	18.5	21.2*	9.8	14.9*					7.3	11.0*
	7.5 m t									3.3*	3.3*
	25 ft lb									7.4*	7.4*
	6.0 m t			4.6*	4.6*					2.8*	2.8*
	20 ft lb			10.1*	10.1*					6.2*	6.2*
	4.5 m t			5.2*	5.2*	3.7	4.7*			2.7*	2.7*
	15 ft lb			11.2*	11.2*	8.0	10.3*			5.9*	5.9*
	3.0 m t	9.7*	9.7*	5.5	6.4*	3.6	5.2			2.7	2.7*
	10 ft lb	20.7*	20.7*	11.9	13.8*	7.7	11.1			5.9	5.9*
LC Blade down	1.5 m t			5.1	7.6*	3.4	5.0			2.5	2.9*
	5 ft lb			11.1	16.4*	7.4	10.7			5.6	6.3*
	0 m t	6.0*	6.0*	4.9	7.5	3.3	4.8			2.6	3.2*
	0 ft lb	13.9*	13.9*	10.6	16.2	7.1	10.4			5.6	7.1*
	-1.5 m t	9.1	10.0*	4.8	7.4	3.3	4.8			2.8	3.9*
	-5 ft lb	19.5	22.8*	10.4	16.0	7.0	10.3			6.2	8.6*
	-3.0 m t	9.3	9.8*	4.9	6.9*					3.5	5.0*
	-10 ft lb	19.9	21.2*	10.6	14.9*					7.9	11.0*
	7.5 m t									3.3*	3.3*
	25 ft lb									7.4*	7.4*
	6.0 m t			4.6*	4.6*					2.8*	2.8*
	20 ft lb			10.1*	10.1*					6.2*	6.2*
	4.5 m t			5.2*	5.2*	3.9	4.7*			2.7*	2.7*
	15 ft lb			11.2*	11.2*	8.5	10.3*			5.9*	5.9*
	3.0 m t	9.7*	9.7*	5.8	6.4*	3.8	5.2*			2.7*	2.7*
	10 ft lb	20.7*	20.7*	12.6	13.8*	8.2	11.3*			5.9*	5.9*
	1.5 m t			5.5	7.6*	3.6	5.7*			2.7	2.9*
	5 ft lb			11.8	16.4*	7.8	12.4*			5.9	6.3*
	0 m t	6.0*	6.0*	5.2	8.2*	3.5	6.0*			2.7	3.2*
	0 ft lb	13.9*	13.9*	11.3	17.8*	7.6	13.1*			6.0	7.1*
	-1.5 m t	9.8	10.0*	5.2	8.0*	3.5	5.9*			3.0	3.9*
	-5 ft lb	21.1	22.8*	11.1	17.4*	7.5	12.6*			6.6	8.6*
	-3.0 m t	9.8*	9.8*	5.2	6.9*					3.7	5.0*
	-10 ft lb	21.2*	21.2*	11.2	14.9*					8.3	11.0*



Height



Can be slewed through 360°



In longitudinal position of undercarriage



Max. reach

* Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 750 mm / 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 228 kg / 500 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Stick 2.65 m / 8'8"

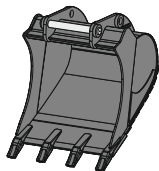
	Under-carriage	3.0 m 10 ft		4.5 m 15 ft		6.0 m 20 ft		7.5 m 25 ft				m ft in
												
LC	7.5 m t			3.7*	3.7*					2.9*	2.9*	4.7
	25 ft lb									6.6*	6.6*	15'
	6.0 m t			4.3*	4.3*	3.4*	3.4*			2.5*	2.5*	6.2
	20 ft lb			9.5*	9.5*	5.9*	5.9*			5.6*	5.6*	20'1"
	4.5 m t			4.9*	4.9*	3.5	4.6*			2.4*	2.4*	7.0
	15 ft lb			10.7*	10.7*	7.5	10.0*			5.4*	5.4*	23'
	3.0 m t	9.1*	9.1*	5.2	6.2*	3.4	5.0*			2.4	2.4*	7.5
	10 ft lb	19.5*	19.5*	11.2	13.3*	7.2	11.0			5.2	5.4*	24'6"
	1.5 m t			4.8	7.4*	3.2	4.9	2.3	3.4*	2.2	2.6*	7.6
	5 ft lb			10.3	16.1*	6.9	10.6			4.9	5.7*	25'
	0 m t	6.3*	6.3*	4.5	7.4	3.0	4.8			2.3	2.9*	7.4
	0 ft lb	14.4*	14.4*	9.8	15.9	6.6	10.2			5.0	6.4*	24'5"
	-1.5 m t	8.4	9.6*	4.4	7.3	3.0	4.7			2.5	3.5*	6.9
	-5 ft lb	18.0	21.9*	9.6	15.7	6.4	10.1			5.5	7.7*	22'8"
	-3.0 m t	8.5	10.2*	4.5	7.1*					3.1	4.8	6.0
	-10 ft lb	18.3	22.0*	9.7	15.3*					6.8	10.6	19'6"
LC Blade up	7.5 m t			3.7*	3.7*					2.9*	2.9*	4.7
	25 ft lb									6.6*	6.6*	15'
	6.0 m t			4.3*	4.3*	3.4*	3.4*			2.5*	2.5*	6.2
	20 ft lb			9.5*	9.5*	5.9*	5.9*			5.6*	5.6*	20'1"
	4.5 m t			4.9*	4.9*	3.7	4.6*			2.4*	2.4*	7.0
	15 ft lb			10.7*	10.7*	8.1	10.0*			5.4*	5.4*	23'
	3.0 m t	9.1*	9.1*	5.5	6.2*	3.6	5.0*			2.4*	2.4*	7.5
	10 ft lb	19.5*	19.5*	12.0	13.3*	7.8	11.0*			5.4*	5.4*	24'6"
	1.5 m t			5.2	7.4*	3.4	5.0	2.5	3.4*	2.4	2.6*	7.6
	5 ft lb			11.1	16.1*	7.4	10.7			5.3	5.7*	25'
	0 m t	6.3*	6.3*	4.9	7.5	3.3	4.8			2.5	2.9*	7.4
	0 ft lb	14.4*	14.4*	10.6	16.1	7.1	10.4			5.4	6.4*	24'5"
	-1.5 m t	9.0	9.6*	4.8	7.4	3.2	4.8			2.7	3.5*	6.9
	-5 ft lb	19.4	21.9*	10.4	15.9	7.0	10.2			5.9	7.7*	22'8"
	-3.0 m t	9.2	10.2*	4.8	7.1*					3.3	4.8*	6.0
	-10 ft lb	19.7	22.0*	10.5	15.3*					7.3	10.8	19'6"
LC Blade down	7.5 m t			3.7*	3.7*					2.9*	2.9*	4.7
	25 ft lb									6.6*	6.6*	15'
	6.0 m t			4.3*	4.3*	3.4*	3.4*			2.5*	2.5*	6.2
	20 ft lb			9.5*	9.5*	5.9*	5.9*			5.6*	5.6*	20'1"
	4.5 m t			4.9*	4.9*	3.9	4.6*			2.4*	2.4*	7.0
	15 ft lb			10.7*	10.7*	8.5	10.0*			5.4*	5.4*	23'
	3.0 m t	9.1*	9.1*	5.9	6.2*	3.8	5.0*			2.4*	2.4*	7.5
	10 ft lb	19.5*	19.5*	12.7	13.3*	8.2	11.0*			5.4*	5.4*	24'6"
	1.5 m t			5.5	7.4*	3.6	5.6*	2.6	3.4*	2.6	2.6*	7.6
	5 ft lb			11.8	16.1*	7.8	12.2*			5.6	5.7*	25'
	0 m t	6.3*	6.3*	5.2	8.1*	3.5	6.0*			2.6	2.9*	7.4
	0 ft lb	14.4*	14.4*	11.2	17.6*	7.5	12.9*			5.7	6.4*	24'5"
	-1.5 m t	9.6*	9.6*	5.1	8.0*	3.4	5.9*			2.8	3.5*	6.9
	-5 ft lb	20.9	21.9*	11.0	17.4*	7.4	12.7*			6.3	7.7*	22'8"
	-3.0 m t	9.9	10.2*	5.2	7.1*					3.5	4.8*	6.0
	-10 ft lb	21.3	22.0*	11.1	15.3*					7.8	10.8*	19'6"

 Height
  Can be slewed through 360°
  In longitudinal position of undercarriage
  Max. reach
 * Limited by hydr. capacity

The load values are quoted in tons (t) / lb x 1,000 at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 750 mm / 30" wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via *). Without bucket cylinder, link and lever the lift capacities will increase by 228 kg / 500 lb. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

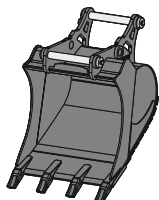
Determine maximum load lift from load lift chart displayed in the operator's cab or from load lift chart detailed in the operator's manual supplied with the machine.

Attachments



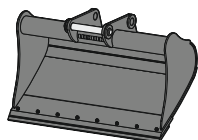
Backhoe bucket TL 03

Mounting	direct mounting, SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink								
Cutting width	mm / ft in	300 ³⁾ / 1' ³⁾	400 ³⁾ / 1'4" ³⁾	500 ⁴⁾ / 1'8" ⁴⁾	650 / 2'2"	750 / 2'6"	850 / 2'9"	1,050 / 3'5"	1,250 / 4'1"
Capacity	m ³ / yd ³	0.17 ⁵⁾ / 0.22 ⁵⁾	0.24 ⁵⁾ / 0.31 ⁵⁾	0.32 / 0.42	0.42 / 0.55	0.50 / 0.65	0.60 / 0.78	0.80 / 1.05	0.95 / 1.24
Weight ²⁾	kg / lb	270 / 595	290 / 639	295 / 650	375 / 827	395 / 871	435 / 959	510 / 1,124	555 / 1,224



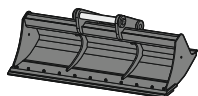
2in1 bucket HTL 03

Mounting	SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink								
Cutting width	mm / ft in	300 ³⁾ / 1' ³⁾	400 ³⁾ / 1'4" ³⁾	500 ²⁾ / 1'8" ²⁾	650 ²⁾ / 2'2" ²⁾	850 ²⁾ / 2'9" ²⁾	1,050 ²⁾ / 3'5" ²⁾	1,250 ²⁾ / 4'1" ²⁾	
Capacity	m ³ / yd ³	0.17 / 0.22	0.24 / 0.31	0.32 / 0.42	0.42 / 0.55	0.60 / 0.78	0.80 / 1.05	0.95 / 1.24	
Weight	kg / lb	280 / 617	290 / 639	413 / 911	450 / 992	510 / 1,124	584 / 1,287	628 / 1,385	



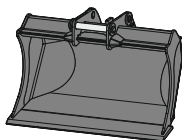
Universal bucket

Mounting	SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink								
UL 03									
Cutting width	mm / ft in	1,500 / 4'11"							
Capacity	m ³ / yd ³	0.60 / 0.78							
Weight ¹⁾	kg / lb	368 / 811							
UL 04									
Cutting width	mm / ft in	1,600 / 5'3"				1,600 / 5'3"			
Capacity	m ³ / yd ³	0.80 / 1.05				1.00 / 1.31			
Weight ²⁾	kg / lb	473 / 1,043				496 / 1,093			



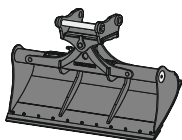
Ditch cleaning bucket GRL rigid 02

Mounting	direct mounting, SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink								
Cutting width	mm / ft in	1,500 / 4'11"			2,000 / 6'7"			2,000 / 6'7"	
Capacity	m ³ / yd ³	0.50 / 0.65			0.48 / 0.63			0.65 / 0.85	
Weight ¹⁾	kg / lb	362 / 798			351 / 774			385 / 849	



Grading bucket PL 03

Mounting	SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink								
Cutting width	mm / ft in	1,400 / 4'7"				1,600 / 5'3"			
Capacity	m ³ / yd ³	0.65 / 0.85				0.75 / 0.98			
Weight ¹⁾	kg / lb	350 / 772				390 / 860			



Ditch cleaning bucket with hydraulic cylinder GRL 90

Mounting	direct mounting, SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink											
Cutting width	mm / ft in	1,600 / 5'3"	1,600 / 5'3"	2,000 / 6'7"	2,000 / 6'7"	2,000 / 6'7"	2,200 / 7'3"	2,200 / 7'3"	2,200 / 7'3"	2,400 / 7'10"	2,400 / 7'10"	2,800 / 9'2"
Capacity	m ³ / yd ³	0.55 / 0.72	0.80 / 1.05	0.50 / 0.65	0.70 / 0.92	1.00 / 1.31	0.80 / 1.05	1.15 / 1.50	1.40 / 1.83	0.85 / 1.11	1.25 / 1.63	1.85 / 2.42
Weight ²⁾	kg / lb	690 / 1,521	850 / 1,874	695 / 1,532	875 / 1,929	935 / 2,061	910 / 2,006	985 / 2,172	995 / 2,194	890 / 1,962	1,000 / 2,205	1,090 / 2,403
Tilt angle		2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°

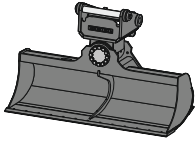
¹⁾ based on an attachment in a standard design with SWA 33 Solidlink quick coupler mounting

²⁾ based on an attachment in a standard design with SWA 48 Solidlink quick coupler mounting

³⁾ limited digging depth due to mounting for SWA 33 quick coupler

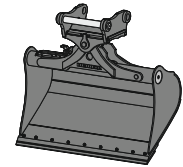
⁴⁾ limited digging depth due to mounting for SWA 48 quick coupler

⁵⁾ reduced capacity with direct mounting



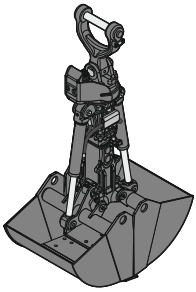
Ditch cleaning bucket with rotary motor GRLM 20

Mounting	SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink				
Cutting width	mm / ft in	1,600 / 5'3"	1,800 / 5'11"	2,000 / 6'7"	2,200 / 7'3"
Capacity	m ³ / yd ³	0.55 / 0.72	0.65 / 0.85	0.70 / 0.92	0.80 / 1.05
Weight ¹⁾	kg / lb	688 / 1,517	720 / 1,587	753 / 1,660	785 / 1,731
Tilt angle		2 x 50°	2 x 50°	2 x 50°	2 x 50°



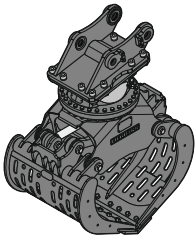
Tilt bucket with hydraulic cylinder SL 90

Mounting	direct mounting, SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink						
Cutting width	mm / ft in	1,400 / 4'7"	1,500 / 4'11"	1,500 / 4'11"	1,600 / 5'3"	1,600 / 5'3"	1,600 / 5'3"
Capacity	m³ / yd³	0.55 / 0.72	0.60 / 0.78	1.20 / 1.57	0.80 / 1.05	1.00 / 1.31	1.35 / 1.77
Weight ²⁾	kg / lb	715 / 1,576	738 / 1,627	970 / 2,138	820 / 1,808	890 / 1,962	970 / 2,138
Tilt angle		2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°	2 x 50°



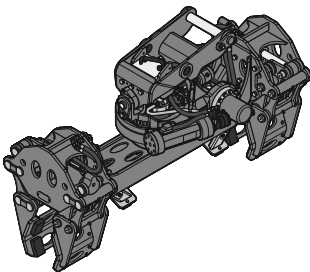
Clamshell grab

Mounting	direct mounting, SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink					
GMZ 18 Clamshell buckets						
Shell width	mm / ft in	320 / 1'1"	400 / 1'4"	600 / 2'	800 / 2'7"	
Capacity ³⁾	m³ / yd³	0.17 / 0.22	0.22 / 0.29	0.30 / 0.39	0.40 / 0.52	
Opening width	mm / ft in	1,462 / 4'10"	1,462 / 4'10"	1,392 / 4'7"	1,392 / 4'7"	
Weight ⁴⁾	kg / lb	670 / 1,477	705 / 1,554	715 / 1,576	765 / 1,687	
GMZ 22 Clamshell buckets						
Shell width	mm / ft in	300 / 1'	400 / 1'4"	600 / 2'	800 / 2'7"	1,000 / 3'3"
Capacity ³⁾	m³ / yd³	0.14 / 0.18	0.20 / 0.26	0.30 / 0.39	0.42 / 0.55	0.54 / 0.71
Opening width	mm / ft in	1,502 / 4'11"	1,502 / 4'11"	1,502 / 4'11"	1,502 / 4'11"	1,502 / 4'11"
Weight ⁴⁾	kg / lb	680 / 1,499	710 / 1,565	780 / 1,720	855 / 1,885	935 / 2,061



Sorting grab

Mounting	direct mounting, SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink								
SG 20B									
Shell type	perforated					closed			
Shell width	mm / ft in	800 / 2'7"	1,000 / 3'3"	1,200 / 3'11"	1,400 / 4'7"	800 / 2'7"	1,000 / 3'3"	1,200 / 3'11"	1,400 / 4'7"
Capacity	m³ / yd³	0.40 / 0.52	0.50 / 0.65	0.60 / 0.78	0.70 / 0.92	0.40 / 0.52	0.50 / 0.65	0.60 / 0.78	0.70 / 0.92
Max. closing force	kN / lbf	40 / 8,992	40 / 8,992	40 / 8,992	40 / 8,992	40 / 8,992	40 / 8,992	40 / 8,992	40 / 8,992
Weight ⁵⁾	kg / lb	750 / 1,653	795 / 1,753	840 / 1,852	885 / 1,951	765 / 1,687	810 / 1,786	850 / 1,874	895 / 1,973
SG 20B with universal shell									
Shell width	mm / ft in	650 / 2'2"							
Capacity	m³ / yd³	0.15 / 0.20							
Max. closing force	kN / lbf	57 / 12,814							
Weight ⁶⁾	kg / lb	831 / 1,832							



Parallel grab GMP 25 with pole clamp⁸⁾

Mounting	SWA Solidlink 33-9	
Clamp diameter min.	mm / in	250 / 10"
Clamp diameter max.	mm / ft	600 / 2'
Weight ⁷⁾	kg / lb	1,470 / 3,241

¹⁾ based on an attachment in a standard design with SWA 33 Solidlink quick coupler mounting

²⁾ based on an attachment in a standard design with SWA 48 Solidlink quick coupler mounting

³⁾ capacity specifications are theoretically determined values; fill level varies depending on the material being loaded

⁴⁾ without suspension

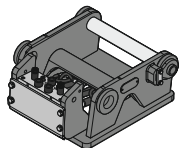
⁵⁾ with standard bolt-on cutting edge, without quick coupler mounting

⁶⁾ with Liebherr teeth Z 35 C, without quick coupler mounting

⁷⁾ based on an attachment in a standard design with SWA Solidlink 33-9 quick coupler mounting

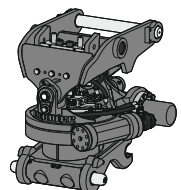
⁸⁾ on the machine side, a 14-pin signal contact strip and a power socket on the stick, switchable via signal contacts are always required

Attachments



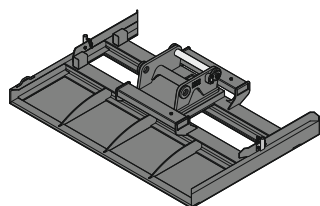
Adapter plate

SWA 33 / SWA 48					
Version		SWA 33	SWA 33 XL	SWA 48	SWA 48 XL
Weight ¹⁾	kg / lb	102 / 225	140 / 309	153 / 337	225 / 496
SWA 33 Solidlink / SWA 48 Solidlink					
Version		SWA 33 Solidlink	SWA 33 Solidlink XL	SWA 48 Solidlink	SWA 48 Solidlink XL
Weight ²⁾	kg / lb	145 / 320	182 / 401	210 / 463	281 / 619
					SWA 48 Solidlink XXL
					338 / 745



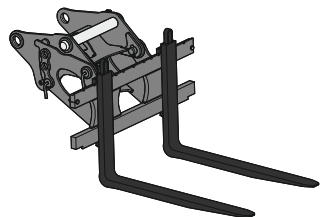
Tiltrotator TR 25

Mounting machine side		SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink			
Mounting attachment side		SWA 33 mechanical, SWA 33 hydraulic, SWA 48 mechanical, SWA 48 hydraulic			
Weight ³⁾	kg / lb	787 / 1,735			
Rotation		360°			
Tilt		2 x 50°			



Grading beam PB 20

Mounting		SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink			
Cutting width	mm / ft in	2,500 / 8'2"			
Weight ⁴⁾	kg / lb	627 / 1,382			



Pallet fork

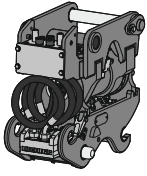
PG SWA 33 FEM III			
Mounting		SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink	
Fork length	mm / ft in	1,200 / 3'11"	
Max. width pallet fork	mm / ft in	1,500 / 4'11"	
Lift capacity (ISO 2328)	t / lb	5.0 / 11,023	
Weight	kg / lb	579 / 1,276	
PG SWA 48 FEM II			
Mounting		SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink	
Fork length	mm / ft in	1,200 / 3'11"	
Max. width pallet fork	mm / ft in	1,245 / 4'1"	
Lift capacity (ISO 2328)	t / lb	2.5 / 5,512	
Weight	kg / lb	345 / 761	
PG SWA 48 FEM III			
Mounting		SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink	
Fork length	mm / ft in	1,200 / 3'11"	
Max. width pallet fork	mm / ft in	1,500 / 4'11"	
Lift capacity (ISO 2328)	t / lb	5.0 / 11,023	
Weight	kg / lb	585 / 1,290	

¹⁾ based on a standard adapter plate with opening and with SWA 33 / SWA 48 quick coupler mounting

²⁾ based on a standard adapter plate with opening, with full hydraulic assignment and with SWA 33 Solidlink / SWA 48 Solidlink quick coupler mounting

³⁾ based on standard tiltrotator TR 25 with SWA 48 Solidlink quick coupler mounting machine side and SWA 48 hydraulic quick coupler mounting on the underside tiltrotator

⁴⁾ based on an attachment in a standard design with SWA 33 Solidlink quick coupler mounting



Tilt unit LiTiU 33²⁾

Mounting machine side	SWA 33 Solidlink
Mounting attachment side	SWA 33 hydraulic, SWA 33 Solidlink
Weight ³⁾	kg / lb 410 / 904
Tilt	2 x 50°



Load chain / Spreader bar

Load chain for SWA 33 quick coupler, with load hook		
Lift capacity (WLL)	t / lb	6.7 / 14,771
Overall height	mm / ft in	536 / 1'9"
Weight	kg / lb	6 / 13
Load chain for SWA 33 quick coupler, without load hook		
Lift capacity (WLL)	t / lb	6.7 / 14,771
Overall height	mm / ft in	246 / 10"
Weight	kg / lb	2 / 4
Spreader bar for SWA 33 quick coupler, with load hook		
Lift capacity (WLL)	t / lb	10.0 / 22,046
Overall height	mm / ft in	745 / 2'5"
Weight	kg / lb	21.7 / 48



Load hook / Lifting shackle

Mounting	SWA 33 mechanical, SWA 33 hydraulic, SWA 33 Solidlink, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink	
Version	Single load hook	Double load hook
Load hook		
Lift capacity (WLL)	t / lb	12.5 / 27,558
Height	mm / ft in	545 / 1'9"
Weight ³⁾	kg / lb	67 / 148
Load hook on rotary drive		
Lift capacity (WLL)	t / lb	12.5 / 27,558
Height	mm / ft in	1,032 / 3'5"
Weight ³⁾	kg / lb	344 / 758
Lifting shackle		
Lift capacity (WLL)	t / lb	35 / 77,162
Height	mm / in	226 / 9"
Weight ³⁾	kg / lb	26 / 57

¹⁾ based on standard tilt unit LiTiU 33 with SWA 33 Solidlink quick coupler mountings on both sides (underside of tilt unit and machine side quick coupler mounting)

²⁾ on the machine side, a 14-pin signal contact strip is always required; switching takes place between tilting the LiTiU and the grab rotation circle for the attachment

³⁾ without suspension