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# R 922 Litronic

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## LIEBHERR

Crawler excavator



**Generation**  
8

**Operating weight**  
22,250–24,550 kg

**Engine**  
120 kW / 163 HP  
Stage V

**Bucket capacity**  
0.55–1.65 m<sup>3</sup>



# Experience the progress R 922

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## ① Safety

- Panoramic visibility with no obstructions and camera on the rear and the right side equipment
- Liftable console for easy and safe access to cab
- ROPS-certified cab structure: rollover protection
- Emergency exit via the rear cab window whatever the configuration of the excavator
- Right window and windshield in laminated and tinted glass

## ② Equipment

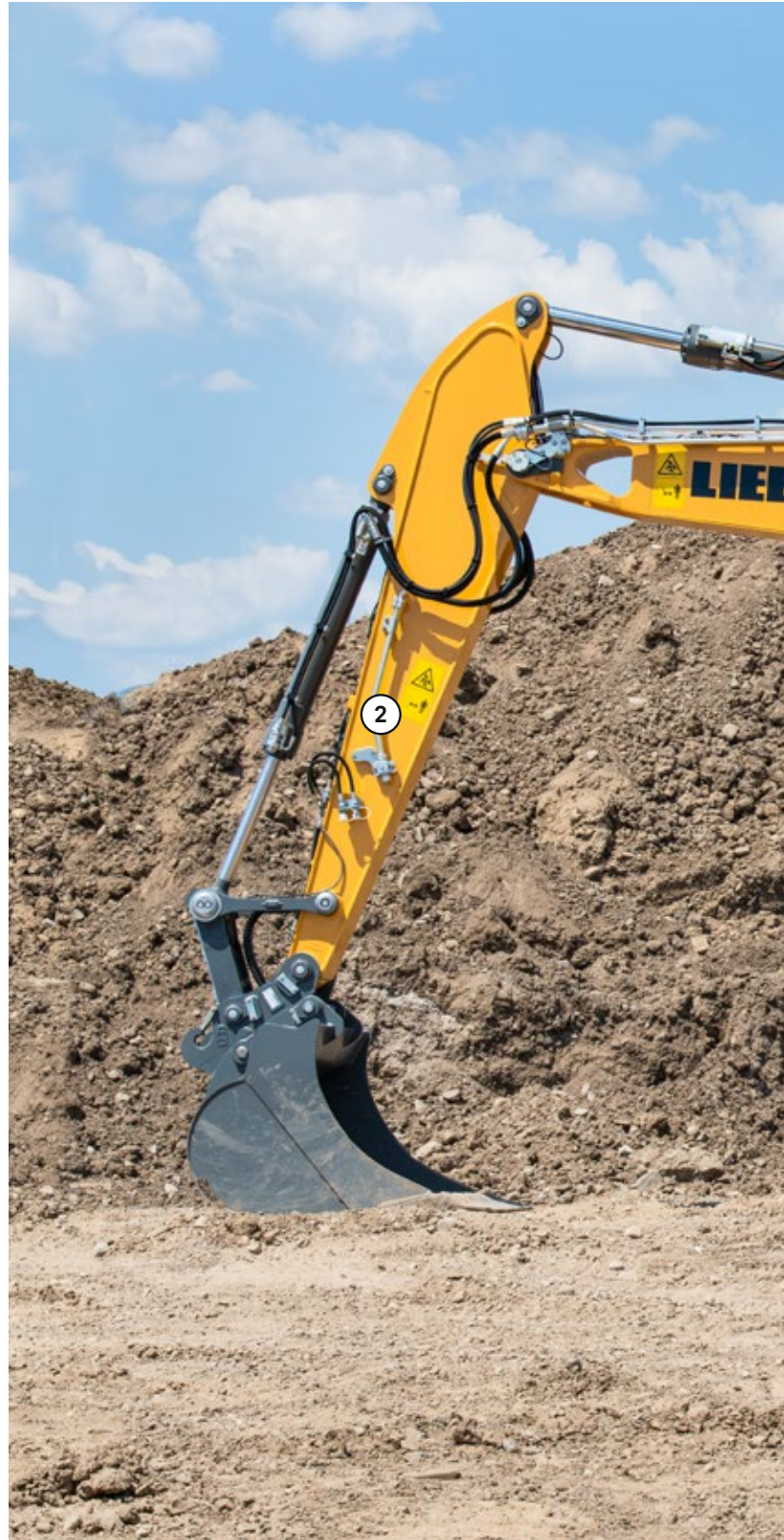
- Large choice of types and sizes of equipment
- Safety check valves for hoist and stick cylinders
- Longer lifespan of components and higher productivity thanks to automatic centralised lubrication system

## ③ Maintenance

- Innovative servicing concept, with service points accessible from ground level
- Lateral access to uppercarriage and large maintenance platform
- Engine oil, hydraulic oil, fuel and urea levels visible on the display

## ④ Comfort

- Spacious, air-conditioned work space
- Pneumatic seat with vertical and horizontal suspension
- Easy-to-use high resolution 9" colour touchscreen
- Completely retractable front cab window
- LED lighting as standard





## ⑤ Engine

- Liebherr engine that conforms with the Stage V European exhaust emissions standard
- Automatic engine idling and engine stop

## ⑥ Undercarriage

- Robust, reliable X-frame undercarriage, easy to secure thanks to its integrated eyelets
- Easy maintenance
- Maintenance-free travel gear and track rollers with lifetime lubrication
- Extra storage as an option



# Technical data



## Diesel engine

|                              |                                                                          |
|------------------------------|--------------------------------------------------------------------------|
| <b>Rating per ISO 9249</b>   | 120 kW (163 HP) at 1,800 RPM                                             |
| <b>Torque</b>                | 682 Nm at 1,400 RPM                                                      |
| <b>Model</b>                 | D924 A7-05 – FPT motor designed for Liebherr                             |
| <b>Type</b>                  | 4 cylinder in-line                                                       |
| <b>Bore</b>                  | 104 mm                                                                   |
| <b>Stroke</b>                | 132 mm                                                                   |
| <b>Displacement</b>          | 4.5 l                                                                    |
| <b>Engine operation</b>      | 4-stroke diesel<br>Common-Rail<br>Turbo-charged and after-cooler         |
| <b>Exhaust gas treatment</b> | Stage V<br>DOC + SCR Filter<br>Passive regeneration by thermo management |
| <b>Cooling system</b>        | Water-cooled and oil cooler, after-cooled and fuel cooled                |
| <b>Air cleaner</b>           | Dry-type air cleaner with pre-cleaner                                    |
| <b>Fuel tank</b>             | 400 l                                                                    |
| <b>Urea tank</b>             | 46 l                                                                     |
| <b>Electrical system</b>     |                                                                          |
| <b>Voltage</b>               | 24 V                                                                     |
| <b>Batteries</b>             | 2 x 135 Ah / 12 V                                                        |
| <b>Alternator</b>            | Three-phase current 28 V / 140 A                                         |
| <b>Engine idling</b>         | Sensor controlled                                                        |



## Hydraulic controls

|                               |                                                                                                        |
|-------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Power distribution</b>     | Via control valves, simultaneous and independent actuation of undercarriage, swing drive and equipment |
| <b>Electric servo circuit</b> | Electro-hydraulic control                                                                              |
| <b>Equipment and swing</b>    | Proportional via joystick levers                                                                       |
| <b>Travel</b>                 | – Proportional control via foot pedals or removable levers<br>– Automatic or manual speed adjustment   |
| <b>Additional functions</b>   | Proportional regulation via foot pedals or mini-joystick                                               |



## Hydraulic system

|                                             |                                                                                                                                                                                                                           |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hydraulic system</b>                     | Positive Control hydraulic system. Demand-based, double independent pump flows<br>Features high system dynamics and sensitivity provided by integrated system controlling                                                 |
| <b>Hydraulic pump</b>                       | For equipment and travel drive                                                                                                                                                                                            |
| <b>Max. flow</b>                            | Liebherr, variable displacement, swashplate double pump<br>2 x 210 l/min.                                                                                                                                                 |
| <b>Max. pressure</b>                        | 380 bar                                                                                                                                                                                                                   |
| <b>Pump management</b>                      | Electronic management synchronous to the control block. Open circuit for the rotation                                                                                                                                     |
| <b>Hydraulic tank</b>                       | 155 l                                                                                                                                                                                                                     |
| <b>Hydraulic system</b>                     | max. 320 l                                                                                                                                                                                                                |
| <b>Filtration</b>                           | 1 main return filter with integrated partial micro filtration (10 µm)                                                                                                                                                     |
| <b>Cooling system</b>                       | Compact cooler, consisting of a water cooler, sandwiched with hydraulic oil cooler and fuel and after-cooler cores and hydrostatically driven fan                                                                         |
| <b>MODE selection</b>                       | 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 |
| <b>Engine speed and performance setting</b> | Stepless adjustment of engine output and hydraulic power via engine speed                                                                                                                                                 |



## Swing drive

|                      |                                                                          |
|----------------------|--------------------------------------------------------------------------|
| <b>Drive</b>         | Liebherr swashplate motor with integrated brake valve and torque control |
| <b>Transmission</b>  | Liebherr compact planetary reduction gears                               |
| <b>Swing ring</b>    | Liebherr, sealed race ball bearing swing ring, internal teeth            |
| <b>Swing speed</b>   | 0–12.9 RPM stepless                                                      |
| <b>Swing torque</b>  | 74.3 kNm                                                                 |
| <b>Holding brake</b> | Wet multi-disc (spring applied, pressure released)                       |





## Cab

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Cab</b>                    | ROPS safety cab structure (roll-over protection system according to ISO 12117-2:2008) with windscreen, totally or partially retractable (only upper part), under cab roof, LED headlights integrated in the ceiling, a door with a sliding window (can be opened on both sides), large storing box and several stowing possibilities, shock-absorbing suspension, laminated right hand side and roof windows, all windows tinted, separate extensible window shades for the sunroof window and windscreen, cigarette lighter and 24 V plug, 12 V plug, cup holder, mobile phone storage net |
| <b>Operator's seat</b>        | Liebherr-Comfort seat, airsprung with automatic weight adjustment, vertical and longitudinal seat damping including consoles and joysticks. Seat and armrests adjustable separately and in combination (adjustable in length, height and inclination), seat heating as standard                                                                                                                                                                                                                                                                                                             |
| <b>Arm consoles</b>           | Oscillating consoles with seat, tiltable console left                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Operation and displays</b> | Large high-resolution operating unit, intuitive, colour display with touchscreen, video-compatible, numerous setting, control and monitoring options, e.g. air conditioning control, fuel consumption, machine and attachment parameters                                                                                                                                                                                                                                                                                                                                                    |
| <b>Air-conditioning</b>       | 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<br>The air conditioning system contains fluorinated greenhouse gases                                                                                                                                    |
| Refrigerant                   | R134a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Global warming potential      | 1,430                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Quantity at 25 °C*            | 1,260 g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| CO <sub>2</sub> equivalent    | 1.80 t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Vibration emission**</b>   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Hand / arm vibrations         | < 2.5 m/s <sup>2</sup> , according with ISO 5349-1:2001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Whole-body vibrations         | < 0.5 m/s <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Measuring inaccuracy          | According with standard EN 12096:1997                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Noise emission</b>         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| ISO 6396                      | 70 dB(A) = L <sub>PA</sub> (inside cab)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2000/14/EC                    | 102 dB(A) = L <sub>WA</sub> (surround noise)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



## Undercarriage

|                                        |                                                           |
|----------------------------------------|-----------------------------------------------------------|
| <b>Versions</b>                        |                                                           |
| NLC                                    | Gauge 2,000 mm                                            |
| SLC                                    | Gauge 2,240 mm                                            |
| LC                                     | Gauge 2,390 mm                                            |
| <b>Drive</b>                           | Liebherr swashplate motor with brake valves on both sides |
| <b>Transmission</b>                    | Liebherr planetary reduction gear                         |
| <b>Maximum travel speed</b>            | 3.1 km/h low range<br>5.9 km/h high range                 |
| <b>Drawbar pull on crawler</b>         | 236 kN                                                    |
| <b>Track components</b>                | B60, D6C, maintenance-free                                |
| <b>Track rollers / Carrier rollers</b> | 8 / 2                                                     |
| <b>Tracks</b>                          | Sealed and greased                                        |
| <b>Track pads</b>                      | Triple grouser                                            |
| <b>Holding brake</b>                   | Wet multi-disc (spring applied, pressure released)        |
| <b>Brake valves</b>                    | Integrated into travel motor                              |
| <b>Lashing eyes</b>                    | Integrated                                                |



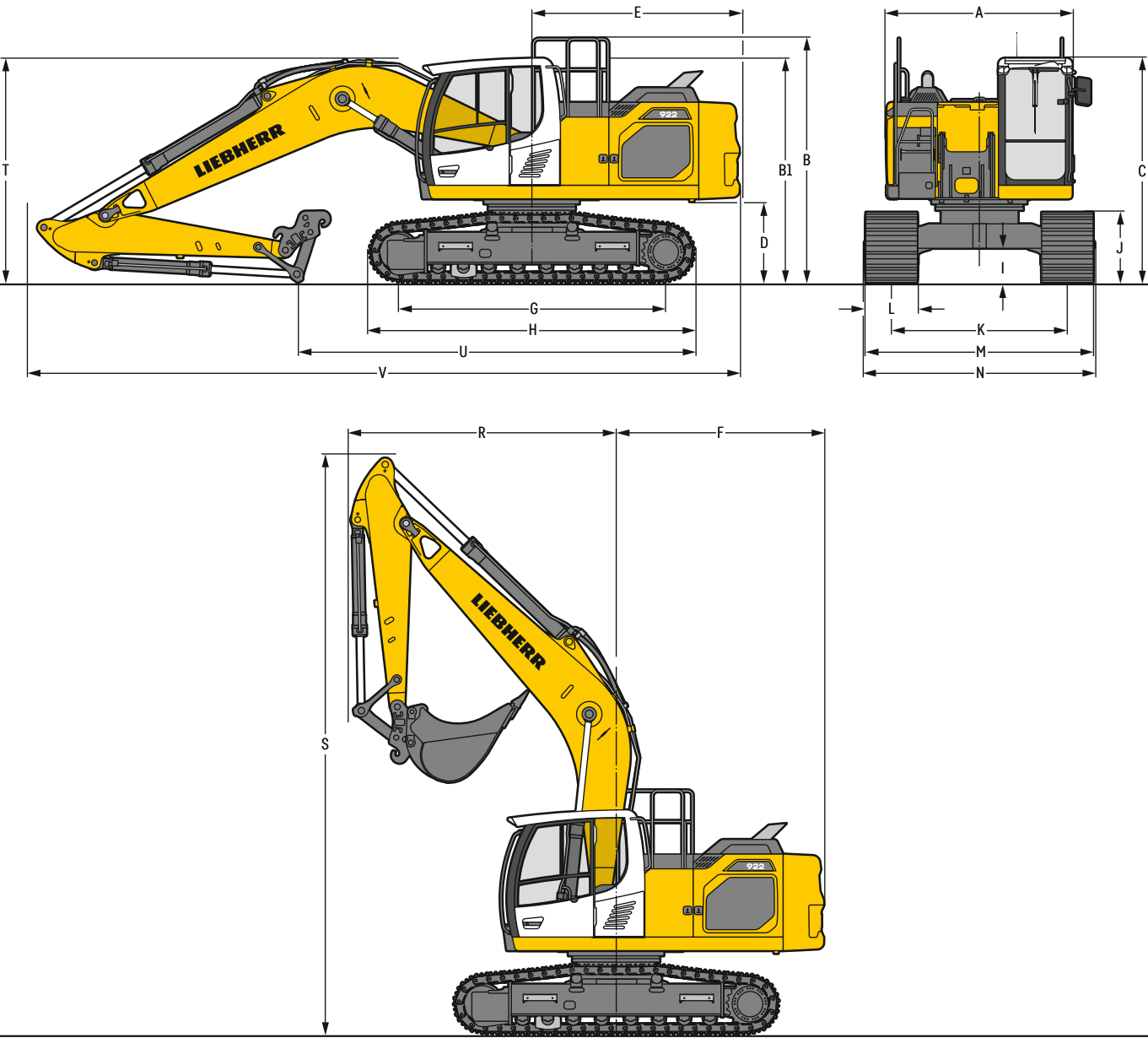
## Equipment

|                              |                                                                 |
|------------------------------|-----------------------------------------------------------------|
| <b>Type</b>                  | Combination of resistant steel plates and cast steel components |
| <b>Hydraulic cylinders</b>   | Liebherr cylinders with seal and guidance systems               |
| <b>Bearings</b>              | Sealed, low maintenance                                         |
| <b>Lubrication</b>           | Liebherr central lubrication system                             |
| <b>Hydraulic connections</b> | Pipes and hoses equipped with SAE split-flange connections      |
| <b>Backhoe buckets</b>       | Standard equipped with Liebherr tooth system                    |

\* valid for standard machine without operator's cab elevation and without height adjustable cab

\*\* for the risk assessment according to 2002/44/EC see ISO/TR 25398:2006

# Dimensions



|    |                                         | NLC   |       |                     |                     | mm                  |       |                     |                     | SLC                 |                     |       |       | mm                  |                     |                     |                     | LC |  |  |  | mm                  |  |  |  |
|----|-----------------------------------------|-------|-------|---------------------|---------------------|---------------------|-------|---------------------|---------------------|---------------------|---------------------|-------|-------|---------------------|---------------------|---------------------|---------------------|----|--|--|--|---------------------|--|--|--|
| A  | Uppercarriage width                     |       |       |                     |                     | 2,555 <sup>2)</sup> |       |                     |                     |                     |                     |       |       | 2,555 <sup>2)</sup> |                     |                     |                     |    |  |  |  | 2,555 <sup>2)</sup> |  |  |  |
| B  | Uppercarriage height                    |       |       |                     |                     | 3,335               |       |                     |                     |                     |                     |       |       | 3,335               |                     |                     |                     |    |  |  |  | 3,335               |  |  |  |
| B1 | Uppercarriage height (handrails folded) |       |       |                     |                     | 3,060               |       |                     |                     |                     |                     |       |       | 3,060               |                     |                     |                     |    |  |  |  | 3,060               |  |  |  |
| C  | Cab height                              |       |       |                     |                     | 3,060               |       |                     |                     |                     |                     |       |       | 3,060               |                     |                     |                     |    |  |  |  | 3,060               |  |  |  |
| D  | Counterweight ground clearance          |       |       |                     |                     | 1,100               |       |                     |                     |                     |                     |       |       | 1,100               |                     |                     |                     |    |  |  |  | 1,100               |  |  |  |
| E  | Rear-end length                         |       |       |                     |                     | 2,830               |       |                     |                     |                     |                     |       |       | 2,830               |                     |                     |                     |    |  |  |  | 2,830               |  |  |  |
| F  | Tail swing radius                       |       |       |                     |                     | 2,880               |       |                     |                     |                     |                     |       |       | 2,880               |                     |                     |                     |    |  |  |  | 2,880               |  |  |  |
| G  | Wheelbase                               |       |       |                     |                     | 3,640               |       |                     |                     |                     |                     |       |       | 3,640               |                     |                     |                     |    |  |  |  | 3,640               |  |  |  |
| H  | Undercarriage length                    |       |       |                     |                     | 4,435               |       |                     |                     |                     |                     |       |       | 4,435               |                     |                     |                     |    |  |  |  | 4,435               |  |  |  |
| I  | Undercarriage ground clearance          |       |       |                     |                     | 485                 |       |                     |                     |                     |                     |       |       | 485                 |                     |                     |                     |    |  |  |  | 485                 |  |  |  |
| J  | Track height                            |       |       |                     |                     | 960                 |       |                     |                     |                     |                     |       |       | 960                 |                     |                     |                     |    |  |  |  | 960                 |  |  |  |
| K  | Track gauge                             |       |       |                     |                     | 2,000               |       |                     |                     |                     |                     |       |       | 2,240               |                     |                     |                     |    |  |  |  | 2,390               |  |  |  |
| L  | Track pad width                         | 500   | 600   | 700                 | 750                 | 500                 | 600   | 700                 | 750                 | 800                 | 900                 | 500   | 600   | 700                 | 750                 | 800                 | 900                 |    |  |  |  |                     |  |  |  |
| M  | Width over tracks                       | 2,500 | 2,500 | 2,700               | 2,750               | 2,740               | 2,840 | 2,940               | 2,990               | 3,040               | 3,140               | 2,890 | 2,990 | 3,090               | 3,140               | 3,190               | 3,290               |    |  |  |  |                     |  |  |  |
| N  | Width over steps                        | 2,500 | 2,500 | 2,700 <sup>1)</sup> | 2,700 <sup>1)</sup> | 2,775               | 2,775 | 2,975 <sup>1)</sup> | 2,975 <sup>1)</sup> | 2,975 <sup>1)</sup> | 3,075 <sup>1)</sup> | 2,925 | 2,925 | 3,125 <sup>1)</sup> | 3,125 <sup>1)</sup> | 3,125 <sup>1)</sup> | 3,225 <sup>1)</sup> |    |  |  |  |                     |  |  |  |

<sup>1)</sup> width with removable steps

<sup>2)</sup> without door stop device and spacer

|          |                          | Stick length | Mono boom 5.70 m<br>with quick coupler |  |  |  | Mono boom straight 5.90 m<br>with quick coupler |  |  |  | Two-piece boom 5.90 m<br>with quick coupler |  |  |  | Mono boom offset 5.65 m<br>with quick coupler |  |  |  |
|----------|--------------------------|--------------|----------------------------------------|--|--|--|-------------------------------------------------|--|--|--|---------------------------------------------|--|--|--|-----------------------------------------------|--|--|--|
|          |                          | m            | mm                                     |  |  |  | mm                                              |  |  |  | mm                                          |  |  |  | mm                                            |  |  |  |
| <b>R</b> | Front swing radius       | 2.50         | 3,650                                  |  |  |  | 3,050                                           |  |  |  | 2,500                                       |  |  |  | 3,350                                         |  |  |  |
|          |                          | 2.90         | 3,650                                  |  |  |  | 3,050                                           |  |  |  | 2,600                                       |  |  |  | 3,350                                         |  |  |  |
|          |                          | 3.50         | 3,600                                  |  |  |  | 2,850                                           |  |  |  | 2,550                                       |  |  |  | 3,350                                         |  |  |  |
| <b>S</b> | Height with boom up      | 2.50         | 7,900                                  |  |  |  | 8,600                                           |  |  |  | 8,700                                       |  |  |  | 7,950                                         |  |  |  |
|          |                          | 2.90         | 3,050                                  |  |  |  | 2,850                                           |  |  |  | 2,800                                       |  |  |  | 2,900                                         |  |  |  |
|          |                          | 3.50         | 3,100                                  |  |  |  | 3,000                                           |  |  |  | 2,950                                       |  |  |  | 2,900                                         |  |  |  |
| <b>T</b> | Boom height              | 2.50         | 3,050                                  |  |  |  | 3,050                                           |  |  |  | 3,050                                       |  |  |  | 2,900                                         |  |  |  |
|          |                          | 2.90         | 5,400                                  |  |  |  | 5,900                                           |  |  |  | 5,900                                       |  |  |  | 8,050                                         |  |  |  |
|          |                          | 3.50         | 5,050                                  |  |  |  | 5,650                                           |  |  |  | 5,600                                       |  |  |  | 7,650                                         |  |  |  |
| <b>U</b> | Length on ground         | 2.50         | 7,150                                  |  |  |  | 5,000                                           |  |  |  | 5,000                                       |  |  |  | 7,000                                         |  |  |  |
|          |                          | 2.90         | 9,700                                  |  |  |  | 9,950                                           |  |  |  | 9,900                                       |  |  |  | 9,550                                         |  |  |  |
|          |                          | 3.50         | 1,15 m <sup>3</sup>                    |  |  |  | 1,15 m <sup>3</sup>                             |  |  |  | 1,15 m <sup>3</sup>                         |  |  |  | 1,15 m <sup>3</sup>                           |  |  |  |
| <b>V</b> | Overall length<br>Bucket | 2.50         | 9,700                                  |  |  |  | 9,950                                           |  |  |  | 9,900                                       |  |  |  | 9,550                                         |  |  |  |
|          |                          | 2.90         | 1,15 m <sup>3</sup>                    |  |  |  | 1,15 m <sup>3</sup>                             |  |  |  | 1,15 m <sup>3</sup>                         |  |  |  | 1,15 m <sup>3</sup>                           |  |  |  |
|          |                          | 3.50         | 1,15 m <sup>3</sup>                    |  |  |  | 1,15 m <sup>3</sup>                             |  |  |  | 1,15 m <sup>3</sup>                         |  |  |  | 1,15 m <sup>3</sup>                           |  |  |  |

## Transport dimensions

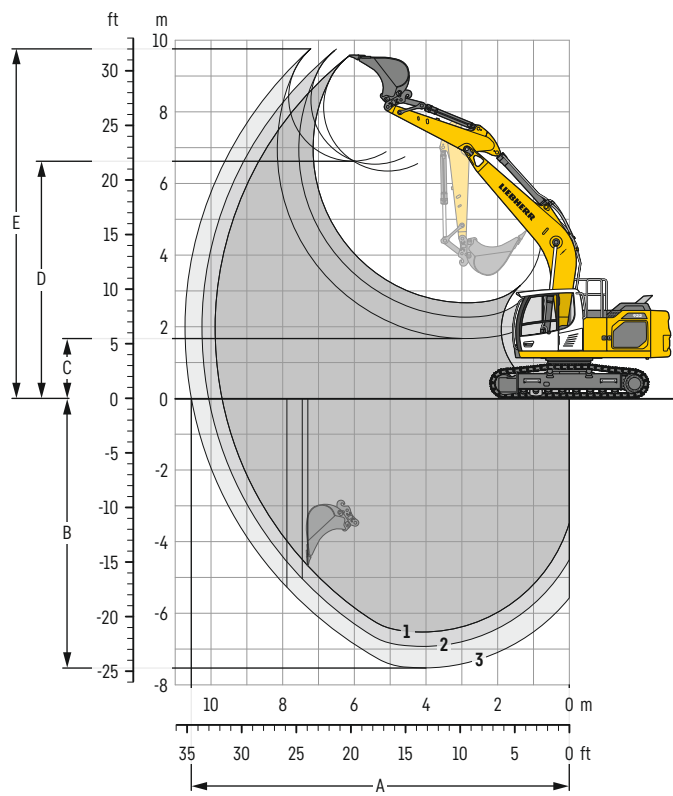
### removable elements disassembled

|                 | Undercarriage | Mono boom 5.70 m<br>mm |       |       |       |       |       | Mono boom straight 5.90 m<br>mm |       |       |       |       |       | Two-piece boom 5.90 m<br>mm |       |       |       |       |       | Mono boom offset 5.65 m<br>mm |       |       |       |       |       |
|-----------------|---------------|------------------------|-------|-------|-------|-------|-------|---------------------------------|-------|-------|-------|-------|-------|-----------------------------|-------|-------|-------|-------|-------|-------------------------------|-------|-------|-------|-------|-------|
| Pad width       |               | 500                    | 600   | 700   | 750   | 800   | 900   | 500                             | 600   | 700   | 750   | 800   | 900   | 500                         | 600   | 700   | 750   | 800   | 900   | 500                           | 600   | 700   | 750   | 800   | 900   |
| Transport width | NLC           | 2,555                  | 2,555 | 2,700 | 2,750 | -     | -     | 2,555                           | 2,555 | 2,700 | 2,750 | -     | -     | 2,555                       | 2,555 | 2,700 | 2,750 | -     | -     | 2,555                         | 2,555 | 2,700 | 2,750 | -     | -     |
|                 | SLC           | 2,740                  | 2,840 | 2,940 | 2,990 | 3,040 | 3,140 | 2,740                           | 2,840 | 2,940 | 2,990 | 3,040 | 3,140 | 2,740                       | 2,840 | 2,940 | 2,990 | 3,040 | 3,140 | 2,740                         | 2,840 | 2,940 | 2,990 | 3,040 | 3,140 |
|                 | LC            | 2,890                  | 2,990 | 3,090 | 3,140 | 3,190 | 3,290 | 2,890                           | 2,990 | 3,090 | 3,140 | 3,190 | 3,290 | 2,890                       | 2,990 | 3,090 | 3,140 | 3,190 | 3,290 | 2,890                         | 2,990 | 3,090 | 3,140 | 3,190 | 3,290 |

|                  | Undercarriage /<br>Stick<br>m | NLC / SLC / LC<br>mm |  |  |  | NLC / SLC / LC<br>mm |  |  |  | NLC / SLC / LC<br>mm |  |  |  | NLC / SLC / LC<br>mm |  |  |  |
|------------------|-------------------------------|----------------------|--|--|--|----------------------|--|--|--|----------------------|--|--|--|----------------------|--|--|--|
| Transport length |                               | 9,700                |  |  |  | 9,950                |  |  |  | 9,900                |  |  |  | 9,550                |  |  |  |
| Transport height | 2.50                          | 3,060                |  |  |  | 3,060                |  |  |  | 3,060                |  |  |  | 3,060                |  |  |  |
|                  | 2.90                          | 3,100                |  |  |  | 3,060                |  |  |  | 3,060                |  |  |  | 3,060                |  |  |  |
|                  | 3.50                          | 3,060                |  |  |  | 3,060                |  |  |  | 3,060                |  |  |  | 3,060                |  |  |  |

# Backhoe bucket

with mono boom 5.70 m



## Digging envelope

| with quick coupler           |   | 1    | 2     | 3     |
|------------------------------|---|------|-------|-------|
| Stick length                 | m | 2.50 | 2.90  | 3.50  |
| A Max. reach at ground level | m | 9.69 | 10.07 | 10.55 |
| B Max. digging depth         | m | 6.53 | 6.93  | 7.52  |
| C Min. dumping height        | m | 2.67 | 2.27  | 1.67  |
| D Max. dumping height        | m | 6.34 | 6.54  | 6.62  |
| E Max. cutting height        | m | 9.54 | 9.75  | 9.76  |

## Forces

| without quick coupler            |    | 1   | 2   | 3   |
|----------------------------------|----|-----|-----|-----|
| Stick digging force (ISO 6015)   | kN | 125 | 113 | 99  |
| Bucket digging force (ISO 6015)  | kN | 160 | 160 | 160 |
| Stick digging force (SAE J1179)  | kN | 120 | 109 | 95  |
| Bucket digging force (SAE J1179) | kN | 140 | 140 | 140 |

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 4.0t, mono boom 5.70 m, stick 2.90 m, quick coupler SWA 48 (250 kg) and backhoe bucket 1.15 m<sup>3</sup> (830 kg).

| Undercarriage   |                    | NLC    |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    |
| Weight          | kg                 | 22,250 | 22,500 | 22,750 | 22,850 |
| Ground pressure | kg/cm <sup>2</sup> | 0.57   | 0.48   | 0.41   | 0.39   |

| Undercarriage   |                    | SLC    |        |        |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    | 800    | 900    |
| Weight          | kg                 | 22,350 | 22,600 | 22,850 | 22,950 | 23,250 | 23,550 |
| Ground pressure | kg/cm <sup>2</sup> | 0.57   | 0.48   | 0.42   | 0.39   | 0.37   | 0.33   |

| Undercarriage   | LC     |        |        |        |        |        |        |
|-----------------|--------|--------|--------|--------|--------|--------|--------|
| Pad width       | mm     | 500    | 600    | 700    | 750    | 800    | 900    |
| Weight          | kg     | 22,450 | 22,700 | 22,950 | 23,050 | 23,350 | 23,650 |
| Ground pressure | kg/cm² | 0.57   | 0.48   | 0.42   | 0.39   | 0.37   | 0.34   |



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

|                   | Cutting width<br>mm | Capacity<br>ISO 7451<br>m <sup>3</sup> | Weight <sup>3)</sup><br>kg | Weight <sup>4)</sup><br>kg | NLC undercarriage<br>(with track pads 500 mm) |      |      |                    |      |      | SLC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      | LC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      |
|-------------------|---------------------|----------------------------------------|----------------------------|----------------------------|-----------------------------------------------|------|------|--------------------|------|------|-----------------------------------------------|------|------|--------------------|------|------|----------------------------------------------|------|------|--------------------|------|------|
|                   |                     |                                        |                            |                            | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                             |      |      |                    |      |      |
|                   |                     |                                        |                            |                            | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                        |      |      | with quick coupler |      |      |
|                   |                     |                                        |                            |                            | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                         | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 |
| STD <sup>1)</sup> | 650                 | 0.55                                   | 580                        | 590                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                                   | 620                        | 630                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ■    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,050               | 0.95                                   | 700                        | 710                        | ▲                                             | ■    | ▲    | ■                  | ▲    | △    | ▲                                             | ▲    | ■    | ▲                  | ▲    | ■    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,250               | 1.15                                   | 810                        | 830                        | ▲                                             | ■    | △    | ■                  | △    | —    | ▲                                             | ▲    | ■    | ■                  | ▲    | △    | ▲                                            | ■    | ▲    | ■                  | ■    | ■    |
|                   | 1,250               | 1.25                                   | 890                        | 910                        | ■                                             | △    | —    | △                  | △    | —    | ▲                                             | ■    | △    | ▲                  | △    | △    | ■                                            | ▲    | ■    | ■                  | ▲    | △    |
|                   | 1,400               | 1.35                                   | 850                        | 880                        | △                                             | △    | —    | △                  | —    | —    | ▲                                             | ■    | △    | ■                  | △    | —    | ■                                            | ▲    | △    | ▲                  | ■    | △    |
|                   | 1,400               | 1.50                                   | 950                        | 980                        | △                                             | —    | —    | —                  | —    | —    | △                                             | △    | —    | △                  | △    | —    | ■                                            | △    | △    | ■                  | △    | —    |
| HD <sup>2)</sup>  | 1,500               | 1.65                                   | 1,020                      | 1,030                      | —                                             | —    | —    | —                  | —    | —    | △                                             | —    | —    | △                  | —    | —    | △                                            | △    | —    | △                  | △    | —    |
|                   | 650                 | 0.55                                   | 640                        | 650                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                                   | 695                        | 705                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ■    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ■    |
|                   | 1,050               | 0.95                                   | 790                        | 800                        | ▲                                             | ■    | ■    | ■                  | ▲    | △    | ▲                                             | ▲    | ■    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ■    |
|                   | 1,250               | 1.15                                   | 910                        | 940                        | ■                                             | △    | △    | △                  | △    | —    | ■                                             | ▲    | ■    | ■                  | ■    | △    | ▲                                            | ■    | ▲    | ▲                  | ▲    | ■    |
|                   | 1,250               | 1.25                                   | 1,010                      | 1,030                      | △                                             | △    | —    | △                  | —    | —    | ▲                                             | ■    | △    | ■                  | △    | △    | ■                                            | ▲    | △    | ■                  | ■    | △    |
|                   | 1,400               | 1.35                                   | 970                        | 990                        | △                                             | —    | —    | △                  | —    | —    | ■                                             | △    | △    | ■                  | △    | —    | ▲                                            | ■    | △    | ▲                  | △    | △    |
|                   | 1,400               | 1.50                                   | 1,090                      | 1,120                      | —                                             | —    | —    | —                  | —    | —    | △                                             | △    | —    | △                  | —    | —    | ■                                            | △    | —    | △                  | △    | —    |

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

<sup>1)</sup> Standard backhoe bucket with teeth Z 40

<sup>2)</sup> HD backhoe bucket with teeth Z 40

<sup>3)</sup> backhoe bucket for direct mounting

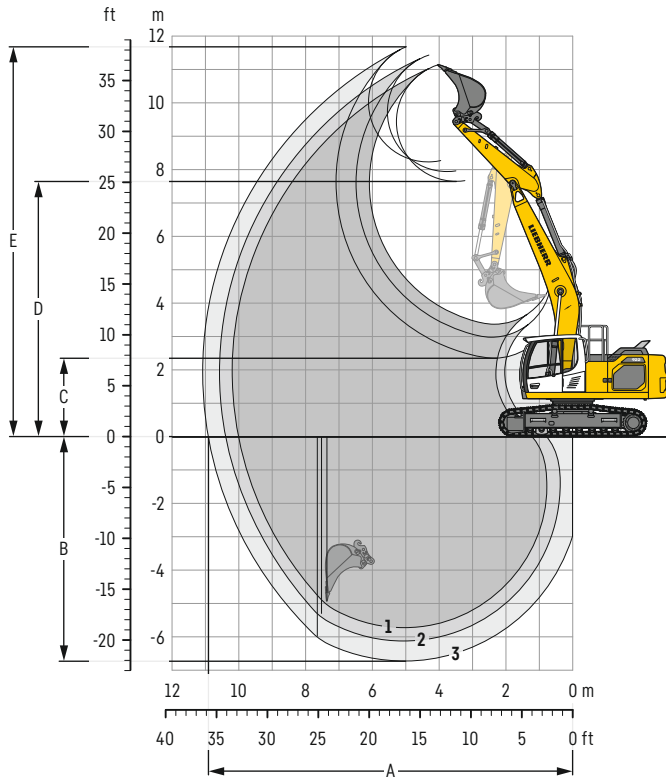
<sup>4)</sup> backhoe bucket for mounting to quick coupler SWA 48 (250 kg)

Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup>, — = not authorised

# Backhoe bucket

with mono boom straight 5.90 m



## Digging envelope

| with quick coupler           |   | 1     | 2     | 3     |
|------------------------------|---|-------|-------|-------|
| Stick length                 | m | 2.50  | 2.90  | 3.50  |
| A Max. reach at ground level | m | 10.01 | 10.40 | 10.91 |
| B Max. digging depth         | m | 5.73  | 6.13  | 6.73  |
| C Min. dumping height        | m | 3.37  | 2.98  | 2.35  |
| D Max. dumping height        | m | 7.65  | 7.94  | 8.23  |
| E Max. cutting height        | m | 11.14 | 11.43 | 11.63 |

## Forces

| without quick coupler            |    | 1   | 2   | 3   |
|----------------------------------|----|-----|-----|-----|
| Stick digging force (ISO 6015)   | kN | 125 | 113 | 99  |
| Bucket digging force (ISO 6015)  | kN | 160 | 160 | 160 |
| Stick digging force (SAE J1179)  | kN | 120 | 109 | 95  |
| Bucket digging force (SAE J1179) | kN | 140 | 140 | 140 |

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 4.0t, mono boom straight 5.90 m, stick 2.90 m, quick coupler SWA 48 (250 kg) and backhoe bucket 1.15 m<sup>3</sup> (830 kg).

| Undercarriage   |                    | NLC    |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    |
| Weight          | kg                 | 22,250 | 22,500 | 22,750 | 22,850 |
| Ground pressure | kg/cm <sup>2</sup> | 0.57   | 0.48   | 0.41   | 0.39   |

| Undercarriage   |                    | SLC    |        |        |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    | 800    | 900    |
| Weight          | kg                 | 22,350 | 22,600 | 22,850 | 22,950 | 23,250 | 23,550 |
| Ground pressure | kg/cm <sup>2</sup> | 0.57   | 0.48   | 0.42   | 0.39   | 0.37   | 0.33   |

| Undercarriage   |                    | LC     |        |        |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    | 800    | 900    |
| Weight          | kg                 | 22,450 | 22,700 | 22,950 | 23,050 | 23,350 | 23,650 |
| Ground pressure | kg/cm <sup>2</sup> | 0.57   | 0.48   | 0.42   | 0.39   | 0.37   | 0.34   |

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

|                   | Cutting width<br>mm | Capacity<br>ISO 7451<br>m <sup>3</sup> | Weight <sup>3)</sup><br>kg | Weight <sup>4)</sup><br>kg | NLC undercarriage<br>(with track pads 500 mm) |      |      |                    |      |      | SLC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      | LC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      |
|-------------------|---------------------|----------------------------------------|----------------------------|----------------------------|-----------------------------------------------|------|------|--------------------|------|------|-----------------------------------------------|------|------|--------------------|------|------|----------------------------------------------|------|------|--------------------|------|------|
|                   |                     |                                        |                            |                            | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                             |      |      |                    |      |      |
|                   |                     |                                        |                            |                            | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                        |      |      | with quick coupler |      |      |
|                   |                     |                                        |                            |                            | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                         | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 |
| STD <sup>1)</sup> | 650                 | 0.55                                   | 580                        | 590                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                                   | 620                        | 630                        | ▲                                             | ▲    | ■    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,050               | 0.95                                   | 700                        | 710                        | ■                                             | ▲    | △    | ▲                  | ■    | △    | ▲                                             | ▲    | △    | ▲                  | ■    | ■    | ▲                                            | ▲    | ■    | ▲                  | ▲    | △    |
|                   | 1,250               | 1.15                                   | 810                        | 830                        | ■                                             | △    | —    | △                  | —    | —    | ■                                             | ■    | △    | ▲                  | △    | △    | ■                                            | ▲    | ■    | ■                  | △    | △    |
|                   | 1,250               | 1.25                                   | 890                        | 910                        | △                                             | —    | —    | △                  | —    | —    | ■                                             | △    | △    | △                  | △    | —    | ▲                                            | ■    | △    | ▲                  | △    | △    |
|                   | 1,400               | 1.35                                   | 850                        | 880                        | △                                             | —    | —    | —                  | —    | —    | ■                                             | △    | —    | △                  | △    | —    | ▲                                            | △    | △    | ■                  | △    | —    |
| HD <sup>2)</sup>  | 1,400               | 1.50                                   | 950                        | 980                        | —                                             | —    | —    | —                  | —    | —    | △                                             | —    | —    | △                  | —    | —    | △                                            | △    | —    | △                  | —    | —    |
|                   | 1,500               | 1.65                                   | 1,020                      | 1,030                      | —                                             | —    | —    | —                  | —    | —    | —                                             | —    | —    | —                  | —    | —    | △                                            | —    | —    | △                  | —    | —    |
|                   | 650                 | 0.55                                   | 640                        | 650                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                                   | 695                        | 705                        | ▲                                             | ▲    | ■    | ▲                  | ■    | ■    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,050               | 0.95                                   | 790                        | 800                        | ■                                             | ■    | △    | ▲                  | △    | △    | ▲                                             | ■    | ▲    | ▲                  | ■    | ■    | ▲                                            | ▲    | ■    | ▲                  | ▲    | △    |
|                   | 1,250               | 1.15                                   | 910                        | 940                        | △                                             | △    | —    | △                  | —    | —    | ▲                                             | ■    | △    | ■                  | △    | —    | ■                                            | ▲    | △    | ▲                  | ■    | △    |
|                   | 1,250               | 1.25                                   | 1,010                      | 1,030                      | △                                             | —    | —    | —                  | —    | —    | ■                                             | △    | —    | △                  | △    | —    | ▲                                            | ■    | △    | ■                  | △    | —    |
|                   | 1,400               | 1.35                                   | 970                        | 990                        | —                                             | —    | —    | —                  | —    | —    | △                                             | △    | —    | △                  | —    | —    | ■                                            | △    | △    | △                  | △    | —    |
|                   | 1,400               | 1.50                                   | 1,090                      | 1,120                      | —                                             | —    | —    | —                  | —    | —    | △                                             | —    | —    | —                  | —    | —    | △                                            | △    | —    | △                  | —    | —    |

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

<sup>1)</sup> Standard backhoe bucket with teeth Z 40

<sup>2)</sup> HD backhoe bucket with teeth Z 40

<sup>3)</sup> backhoe bucket for direct mounting

<sup>4)</sup> backhoe bucket for mounting to quick coupler SWA 48 (250 kg)

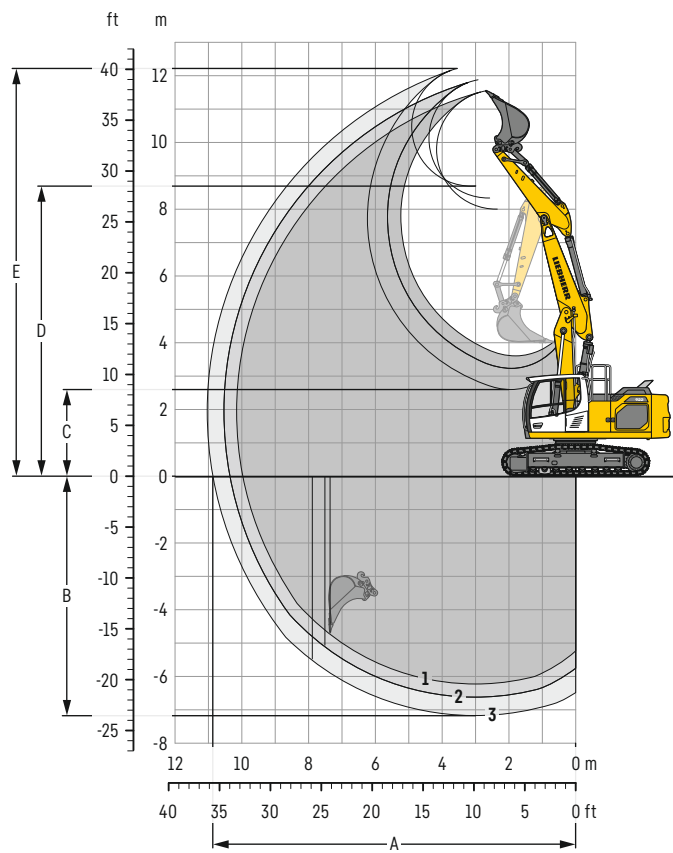
Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup>, — = not authorised



# Backhoe bucket

with two-piece boom 5.90 m



## Digging envelope

| with quick coupler           |   | 1     | 2     | 3     |
|------------------------------|---|-------|-------|-------|
| Stick length                 | m | 2.50  | 2.90  | 3.50  |
| A Max. reach at ground level | m | 9.97  | 10.36 | 10.87 |
| B Max. digging depth         | m | 6.23  | 6.62  | 7.17  |
| C Min. dumping height        | m | 3.61  | 3.23  | 2.60  |
| D Max. dumping height        | m | 8.00  | 8.33  | 8.69  |
| E Max. cutting height        | m | 11.55 | 11.88 | 12.22 |

## Forces

| without quick coupler            |    | 1   | 2   | 3   |
|----------------------------------|----|-----|-----|-----|
| Stick digging force (ISO 6015)   | kN | 125 | 113 | 99  |
| Bucket digging force (ISO 6015)  | kN | 160 | 160 | 160 |
| Stick digging force (SAE J1179)  | kN | 120 | 109 | 95  |
| Bucket digging force (SAE J1179) | kN | 140 | 140 | 140 |

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 4.0t, two-piece boom 5.90 m, stick 2.90 m, quick coupler SWA 48 (250 kg) and backhoe bucket 1.15 m<sup>3</sup> (830 kg).

| Undercarriage   |                    | NLC    |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    |
| Weight          | kg                 | 22,950 | 23,200 | 23,450 | 23,550 |
| Ground pressure | kg/cm <sup>2</sup> | 0.59   | 0.49   | 0.43   | 0.40   |

| Undercarriage   |                    | SLC    |        |        |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    | 800    | 900    |
| Weight          | kg                 | 23,050 | 23,300 | 23,550 | 23,650 | 23,950 | 24,250 |
| Ground pressure | kg/cm <sup>2</sup> | 0.59   | 0.50   | 0.43   | 0.40   | 0.38   | 0.34   |

| Undercarriage   |                    | LC     |        |        |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    | 800    | 900    |
| Weight          | kg                 | 23,150 | 23,400 | 23,650 | 23,750 | 24,050 | 24,350 |
| Ground pressure | kg/cm <sup>2</sup> | 0.59   | 0.50   | 0.43   | 0.40   | 0.38   | 0.35   |

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

|                   | Cutting width<br>mm | Capacity<br>ISO 7451<br>m³ | Weight <sup>3)</sup><br>kg | Weight <sup>4)</sup><br>kg | NLC undercarriage<br>(with track pads 500 mm) |      |      |                    |      |      | SLC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      | LC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      |
|-------------------|---------------------|----------------------------|----------------------------|----------------------------|-----------------------------------------------|------|------|--------------------|------|------|-----------------------------------------------|------|------|--------------------|------|------|----------------------------------------------|------|------|--------------------|------|------|
|                   |                     |                            |                            |                            | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                             |      |      |                    |      |      |
|                   |                     |                            |                            |                            | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                        |      |      | with quick coupler |      |      |
|                   |                     |                            |                            |                            | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                         | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 |
| STD <sup>1)</sup> | 650                 | 0.55                       | 580                        | 590                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                       | 620                        | 630                        | ▲                                             | ▲    | ■    | ▲                  | ■    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,050               | 0.95                       | 700                        | 710                        | ■                                             | ▲    | △    | ▲                  | △    | △    | ▲                                             | ▲    | ▲    | ▲                  | ■    | ■    | ▲                                            | ▲    | ■    | ▲                  | ▲    | ▲    |
|                   | 1,250               | 1.15                       | 810                        | 830                        | △                                             | △    | —    | △                  | —    | —    | ▲                                             | ■    | △    | ■                  | △    | △    | ■                                            | ▲    | ■    | ■                  | △    | △    |
|                   | 1,250               | 1.25                       | 890                        | 910                        | △                                             | —    | —    | —                  | —    | —    | ■                                             | △    | △    | △                  | △    | —    | ▲                                            | ■    | △    | ■                  | △    | △    |
|                   | 1,400               | 1.35                       | 850                        | 880                        | △                                             | —    | —    | —                  | —    | —    | △                                             | △    | —    | △                  | △    | —    | ▲                                            | △    | △    | ■                  | △    | —    |
| HD <sup>2)</sup>  | 1,400               | 1.50                       | 950                        | 980                        | —                                             | —    | —    | —                  | —    | —    | △                                             | —    | —    | —                  | —    | —    | △                                            | △    | —    | △                  | —    | —    |
|                   | 1,500               | 1.65                       | 1,020                      | 1,030                      | —                                             | —    | —    | —                  | —    | —    | —                                             | —    | —    | —                  | —    | —    | △                                            | —    | —    | —                  | —    | —    |
|                   | 650                 | 0.55                       | 640                        | 650                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                       | 695                        | 705                        | ▲                                             | ▲    | ▲    | ▲                  | ■    | ■    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ■    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,050               | 0.95                       | 790                        | 800                        | ▲                                             | ■    | △    | ■                  | △    | —    | ▲                                             | ■    | ▲    | ▲                  | ▲    | △    | ▲                                            | ▲    | ■    | ▲                  | ■    | ▲    |
|                   | 1,250               | 1.15                       | 910                        | 940                        | △                                             | △    | —    | △                  | —    | —    | ▲                                             | ■    | △    | ■                  | △    | —    | ■                                            | ▲    | △    | ▲                  | ■    | △    |
|                   | 1,250               | 1.25                       | 1,010                      | 1,030                      | △                                             | —    | —    | —                  | —    | —    | ■                                             | △    | —    | △                  | △    | —    | ▲                                            | △    | △    | ■                  | △    | —    |
|                   | 1,400               | 1.35                       | 970                        | 990                        | —                                             | —    | —    | —                  | —    | —    | △                                             | △    | —    | △                  | —    | —    | ■                                            | △    | △    | △                  | △    | —    |
|                   | 1,400               | 1.50                       | 1,090                      | 1,120                      | —                                             | —    | —    | —                  | —    | —    | △                                             | —    | —    | —                  | —    | —    | △                                            | △    | —    | △                  | —    | —    |

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

<sup>1)</sup> Standard backhoe bucket with teeth Z 40

<sup>2)</sup> HD backhoe bucket with teeth Z 40

<sup>3)</sup> backhoe bucket for direct mounting

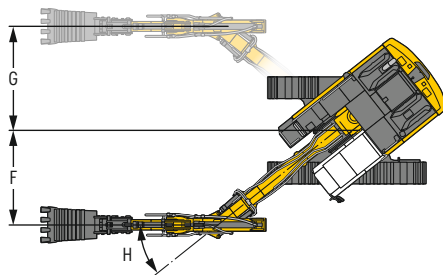
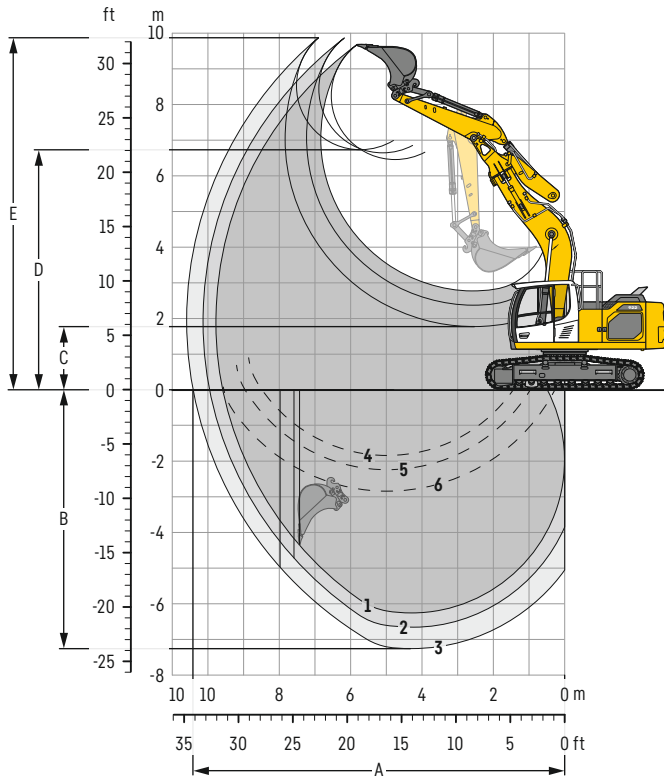
<sup>4)</sup> backhoe bucket for mounting to quick coupler SWA 48 (250 kg)

Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m³, ■ = ≤ 1.8t/m³, ▲ = ≤ 1.65t/m³, ■ = ≤ 1.5t/m³, △ = ≤ 1.2t/m³, — = not authorised

# Backhoe bucket

with mono boom offset 5.65 m



## Digging envelope

| with quick coupler           |   | 1    | 2    | 3     |
|------------------------------|---|------|------|-------|
| Stick length                 | m | 2.50 | 2.90 | 3.50  |
| A Max. reach at ground level | m | 9.58 | 9.95 | 10.42 |
| B Max. digging depth         | m | 6.26 | 6.66 | 7.26  |
| C Min. dumping height        | m | 2.77 | 2.37 | 1.77  |
| D Max. dumping height        | m | 6.45 | 6.64 | 6.72  |
| E Max. cutting height        | m | 9.66 | 9.85 | 9.87  |
| F Max. offset right          | m |      | 2.92 |       |
| G Max. offset left           | m |      | 2.92 |       |
| H Max. offset angle          | ° |      | 38.5 |       |

1 with stick 2.50 m

2 with stick 2.90 m

3 with stick 3.50 m

with set straight boom

4 with stick 2.50 m

5 with stick 2.90 m

6 with stick 3.50 m

at max. equipment offset with vertical ditch walls

## Forces

| without quick coupler            |    | 1   | 2   | 3   |
|----------------------------------|----|-----|-----|-----|
| Stick digging force (ISO 6015)   | kN | 125 | 113 | 99  |
| Bucket digging force (ISO 6015)  | kN | 160 | 160 | 160 |
| Stick digging force (SAE J1179)  | kN | 120 | 109 | 95  |
| Bucket digging force (SAE J1179) | kN | 140 | 140 | 140 |

## Operating weight and ground pressure

The operating weight includes the basic machine with counterweight 4.0 t, mono boom offset 5.65 m, stick 2.90 m, quick coupler SWA 48 (250 kg) and backhoe bucket 1.15 m<sup>3</sup> (830 kg).

| Undercarriage   |                    | NLC    |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    |
| Weight          | kg                 | 23,150 | 23,400 | 23,650 | 23,750 |
| Ground pressure | kg/cm <sup>2</sup> | 0.59   | 0.50   | 0.43   | 0.40   |

| Undercarriage   |                    | SLC    |        |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    | 800    |
| Weight          | kg                 | 23,250 | 23,500 | 23,750 | 23,850 | 24,150 |
| Ground pressure | kg/cm <sup>2</sup> | 0.59   | 0.50   | 0.43   | 0.41   | 0.39   |

| Undercarriage   |                    | LC     |        |        |        |        |
|-----------------|--------------------|--------|--------|--------|--------|--------|
| Pad width       | mm                 | 500    | 600    | 700    | 750    | 800    |
| Weight          | kg                 | 23,350 | 23,600 | 23,850 | 23,950 | 24,250 |
| Ground pressure | kg/cm <sup>2</sup> | 0.60   | 0.50   | 0.43   | 0.41   | 0.39   |

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

|                   | Cutting width<br>mm | Capacity<br>ISO 7451<br>m <sup>3</sup> | Weight <sup>3)</sup><br>kg | Weight <sup>4)</sup><br>kg | NLC undercarriage<br>(with track pads 500 mm) |      |      |                    |      |      | SLC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      | LC undercarriage<br>(with track pads 600 mm) |      |      |                    |      |      |
|-------------------|---------------------|----------------------------------------|----------------------------|----------------------------|-----------------------------------------------|------|------|--------------------|------|------|-----------------------------------------------|------|------|--------------------|------|------|----------------------------------------------|------|------|--------------------|------|------|
|                   |                     |                                        |                            |                            | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                              |      |      |                    |      |      | Stick length (m)                             |      |      |                    |      |      |
|                   |                     |                                        |                            |                            | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                         |      |      | with quick coupler |      |      | without quick coupler                        |      |      | with quick coupler |      |      |
|                   |                     |                                        |                            |                            | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                          | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 | 2.50                                         | 2.90 | 3.50 | 2.50               | 2.90 | 3.50 |
| STD <sup>1)</sup> | 650                 | 0.55                                   | 580                        | 590                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                                   | 620                        | 630                        | ▲                                             | ▲    | ■    | ▲                  | ■    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,050               | 0.95                                   | 700                        | 710                        | ■                                             | ▲    | △    | ▲                  | ■    | △    | ▲                                             | ▲    | △    | ▲                  | ■    | ■    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ■    |
|                   | 1,250               | 1.15                                   | 810                        | 830                        | △                                             | △    | —    | △                  | —    | —    | ■                                             | ■    | △    | ▲                  | △    | △    | ▲                                            | ▲    | ■    | ■                  | △    | △    |
|                   | 1,250               | 1.25                                   | 890                        | 910                        | △                                             | —    | —    | —                  | —    | —    | ■                                             | △    | △    | ■                  | △    | —    | ▲                                            | ■    | △    | ▲                  | △    | △    |
|                   | 1,400               | 1.35                                   | 850                        | 880                        | △                                             | —    | —    | —                  | —    | —    | ■                                             | △    | —    | △                  | △    | —    | ▲                                            | ■    | △    | ■                  | △    | △    |
| HD <sup>2)</sup>  | 1,400               | 1.50                                   | 950                        | 980                        | —                                             | —    | —    | —                  | —    | —    | △                                             | —    | —    | △                  | —    | —    | △                                            | △    | —    | △                  | △    | —    |
|                   | 1,500               | 1.65                                   | 1,020                      | 1,030                      | —                                             | —    | —    | —                  | —    | —    | —                                             | —    | —    | —                  | —    | —    | △                                            | —    | —    | △                  | —    | —    |
|                   | 650                 | 0.55                                   | 640                        | 650                        | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 850                 | 0.75                                   | 695                        | 705                        | ▲                                             | ▲    | ■    | ▲                  | ■    | ■    | ▲                                             | ▲    | ▲    | ▲                  | ▲    | ▲    | ▲                                            | ▲    | ▲    | ▲                  | ▲    | ▲    |
|                   | 1,050               | 0.95                                   | 790                        | 800                        | ■                                             | ■    | △    | ▲                  | △    | △    | ▲                                             | ■    | ■    | ▲                  | ■    | ■    | ▲                                            | ▲    | ■    | ■                  | ▲    | ▲    |
|                   | 1,250               | 1.15                                   | 910                        | 940                        | △                                             | △    | —    | △                  | —    | —    | ▲                                             | ■    | △    | ■                  | △    | —    | ■                                            | ▲    | ■    | ■                  | ■    | △    |
|                   | 1,250               | 1.25                                   | 1,010                      | 1,030                      | △                                             | —    | —    | —                  | —    | —    | ■                                             | △    | —    | △                  | △    | —    | ▲                                            | ■    | △    | ■                  | △    | △    |
|                   | 1,400               | 1.35                                   | 970                        | 990                        | —                                             | —    | —    | —                  | —    | —    | △                                             | △    | —    | △                  | —    | —    | ■                                            | △    | △    | ■                  | △    | —    |
|                   | 1,400               | 1.50                                   | 1,090                      | 1,120                      | —                                             | —    | —    | —                  | —    | —    | △                                             | —    | —    | —                  | —    | —    | △                                            | △    | —    | △                  | —    | —    |

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

<sup>1)</sup> Standard backhoe bucket with teeth Z 40

<sup>2)</sup> HD backhoe bucket with teeth Z 40

<sup>3)</sup> backhoe bucket for direct mounting

<sup>4)</sup> backhoe bucket for mounting to quick coupler SWA 48 (250 kg)

Other backhoe buckets available upon request

Max. material weight ▲ = ≤ 2.0t/m<sup>3</sup>, ■ = ≤ 1.8t/m<sup>3</sup>, ▲ = ≤ 1.65t/m<sup>3</sup>, ■ = ≤ 1.5t/m<sup>3</sup>, △ = ≤ 1.2t/m<sup>3</sup>, — = not authorised



# Lift capacities

with mono boom 5.70 m, counterweight 4.0 t and track pads 500 mm / 600 mm

## Stick 2.50 m

| Under-carriage | 3.0m  | 4.5m  | 6.0m  | 7.5m | 9.0m |     |      |
|----------------|-------|-------|-------|------|------|-----|------|
| m              |       |       |       |      |      |     | m    |
| 9.0            |       |       |       |      |      | 4.5 | 5.7* |
| 7.5            |       |       |       |      |      | 3.3 | 5.3* |
| 6.0            |       |       |       |      |      | 2.7 | 4.9  |
| 4.5            |       | 6.2   | 7.8*  |      |      | 2.5 | 4.5  |
| 3.0            |       | 5.7   | 10.0* | 3.8  | 7.0  | 2.4 | 4.3  |
| 1.5            |       | 5.2   | 10.6  | 3.6  | 6.7  | 2.4 | 4.4  |
| 0              |       | 5.0   | 10.3  | 3.4  | 6.5  | 2.6 | 4.9  |
| -1.5           | 9.3   | 11.1* | 5.0   | 10.3 | 3.4  | 3.2 | 6.1  |
| -3.0           | 9.5   | 15.4* | 5.1   | 10.4 | 3.5  | 4.9 | 7.5* |
| -4.5           |       | 5.4   | 8.3*  |      |      |     |      |
| 9.0            |       |       |       |      |      | 5.1 | 5.7* |
| 7.5            |       |       |       |      |      | 3.7 | 5.3* |
| 6.0            |       |       |       |      |      | 3.1 | 4.9  |
| 4.5            |       | 7.1   | 7.8*  | 4.8  | 6.1* | 2.8 | 4.5  |
| 3.0            |       | 6.5   | 10.0* | 4.3  | 7.1  | 2.7 | 4.4  |
| 1.5            |       | 6.0   | 10.7  | 4.1  | 6.8  | 3.0 | 5.0  |
| 0              |       | 5.8   | 10.4  | 3.9  | 6.6  | 3.0 | 4.5  |
| -1.5           | 11.0  | 11.1* | 5.8   | 10.4 | 3.9  | 3.7 | 6.1  |
| -3.0           | 11.3  | 15.4* | 5.9   | 10.6 | 4.0  | 5.7 | 7.5* |
| -4.5           |       | 6.2   | 8.3*  |      |      |     |      |
| 9.0            |       |       |       |      |      | 5.4 | 5.7* |
| 7.5            |       |       |       |      |      | 4.0 | 5.3* |
| 6.0            |       |       |       |      |      | 3.3 | 5.0  |
| 4.5            |       | 7.6   | 7.8*  | 5.1  | 6.1* | 2.9 | 4.4  |
| 3.0            |       | 7.0   | 10.0* | 4.6  | 7.1  | 3.0 | 4.5  |
| 1.5            |       | 6.5   | 10.7  | 4.4  | 6.8  | 3.0 | 4.5  |
| 0              |       | 6.3   | 10.5  | 4.2  | 6.7  | 3.2 | 5.0  |
| -1.5           | 11.1* | 11.1* | 6.3   | 10.5 | 4.2  | 4.0 | 6.1  |
| -3.0           | 12.4  | 15.4* | 6.4   | 10.6 | 4.3  | 6.1 | 7.5* |
| -4.5           |       | 6.7   | 8.3*  |      |      |     |      |

## Stick 2.90 m

| Under-carriage | 3.0m  | 4.5m  | 6.0m | 7.5m | 9.0m |     |      |
|----------------|-------|-------|------|------|------|-----|------|
| m              |       |       |      |      |      |     | m    |
| 9.0            |       |       |      |      |      | 4.3 | 5.6* |
| 7.5            |       |       |      |      |      | 4.1 | 5.6* |
| 6.0            |       |       |      |      |      | 3.8 | 5.1  |
| 4.5            |       | 6.3   | 7.1* |      |      | 2.7 | 4.9  |
| 3.0            |       | 5.7   | 9.3* | 3.8  | 7.0  | 2.6 | 4.8  |
| 1.5            |       | 5.2   | 10.6 | 3.5  | 6.7  | 2.5 | 4.7  |
| 0              | 5.7*  | 5.7*  | 4.9  | 10.3 | 3.4  | 2.5 | 4.7  |
| -1.5           | 9.1   | 10.5* | 4.9  | 10.2 | 3.3  | 2.4 | 4.5  |
| -3.0           | 9.3   | 16.3* | 4.9  | 10.3 | 3.3  | 2.8 | 5.4  |
| -4.5           | 9.7   | 13.0* | 5.2  | 9.3* |      | 4.1 | 7.4* |
| 9.0            |       |       |      |      |      | 4.8 | 5.6* |
| 7.5            |       |       |      |      |      | 4.8 | 5.6* |
| 6.0            |       |       |      |      |      | 4.6 | 5.1  |
| 4.5            |       | 7.1*  | 7.1* | 4.6  | 6.2* | 3.2 | 5.1  |
| 3.0            |       | 6.5   | 9.3* | 4.3  | 7.1  | 3.1 | 5.0  |
| 1.5            |       | 6.0   | 10.7 | 4.0  | 6.8  | 3.0 | 4.9  |
| 0              | 5.7*  | 5.7*  | 5.7  | 10.4 | 3.9  | 2.9 | 4.7  |
| -1.5           | 10.5* | 10.5* | 5.7  | 10.3 | 3.8  | 2.8 | 4.7  |
| -3.0           | 11.0  | 16.3* | 5.7  | 10.4 | 3.8  | 3.3 | 5.4  |
| -4.5           | 11.4  | 13.0* | 6.0  | 9.3* |      | 4.7 | 7.4* |
| 9.0            |       |       |      |      |      | 5.2 | 5.6* |
| 7.5            |       |       |      |      |      | 5.1 | 5.6* |
| 6.0            |       |       |      |      |      | 4.9 | 5.1  |
| 4.5            |       | 7.1*  | 7.1* | 4.6  | 6.2* | 3.4 | 5.2  |
| 3.0            |       | 7.1   | 9.3* | 4.6  | 7.1  | 3.3 | 5.0  |
| 1.5            |       | 6.5   | 10.8 | 4.4  | 6.8  | 3.2 | 4.9  |
| 0              | 5.7*  | 5.7*  | 6.2  | 10.4 | 4.2  | 3.1 | 4.8  |
| -1.5           | 10.5* | 10.5* | 6.2  | 10.3 | 4.1  | 3.1 | 4.7  |
| -3.0           | 12.2  | 16.3* | 6.2  | 10.4 | 4.2  | 3.5 | 5.5  |
| -4.5           | 12.6  | 13.0* | 6.5  | 9.3* |      | 5.0 | 7.4* |

## Stick 3.50 m

| Under-carriage | 3.0m  | 4.5m  | 6.0m | 7.5m  | 9.0m |      |      |
|----------------|-------|-------|------|-------|------|------|------|
| m              |       |       |      |       |      |      | m    |
| 9.0            |       |       |      |       |      | 3.4  | 3.7* |
| 7.5            |       |       |      |       |      | 2.7  | 3.5* |
| 6.0            |       |       |      |       |      | 2.3  | 3.5* |
| 4.5            |       |       |      |       |      | 2.0  | 3.6* |
| 3.0            | 10.8  | 12.8* | 5.9  | 8.3*  | 3.8  | 2.7  | 5.0  |
| 1.5            | 6.2*  | 6.2*  | 5.3  | 10.4* | 3.5  | 2.6  | 4.8  |
| 0              | 7.2*  | 7.2*  | 4.9  | 10.3  | 3.3  | 2.4  | 4.6  |
| -1.5           | 8.8   | 10.4* | 4.8  | 10.1  | 3.2  | 2.4  | 4.6  |
| -3.0           | 9.0   | 15.0* | 4.8  | 10.1  | 3.2  | 2.4  | 4.7  |
| -4.5           | 9.3   | 14.7* | 4.9  | 10.3* | 3.3  | 3.3  | 6.3  |
| 9.0            |       |       |      |       |      | 3.7* | 3.7* |
| 7.5            |       |       |      |       |      | 3.0  | 3.5* |
| 6.0            |       |       |      |       |      | 2.6  | 3.5* |
| 4.5            |       |       |      |       |      | 2.3  | 3.6* |
| 3.0            | 12.7  | 12.8* | 6.7  | 8.3*  | 4.4  | 2.2  | 3.7  |
| 1.5            | 6.2*  | 6.2*  | 6.1  | 10.4* | 4.1  | 2.3  | 3.8  |
| 0              | 7.2*  | 7.2*  | 5.7  | 10.4  | 3.8  | 2.4  | 4.1  |
| -1.5           | 10.4* | 10.4* | 5.5  | 10.2  | 3.7  | 2.8  | 4.7  |
| -3.0           | 10.7  | 15.0* | 5.6  | 10.2  | 3.7  | 2.8  | 4.7  |
| -4.5           | 11.0  | 14.7* | 5.7  | 10.3* | 3.8  | 3.8  | 6.4  |
| 9.0            |       |       |      |       |      | 3.7* | 3.7* |
| 7.5            |       |       |      |       |      | 3.2  | 3.5* |
| 6.0            |       |       |      |       |      | 2.8  | 3.5* |
| 4.5            |       |       |      |       |      | 2.5  | 3.6* |
| 3.0            | 12.8* | 12.8* | 7.2  | 8.3*  | 4.7  | 2.4  | 3.8  |
| 1.5            | 6.2*  | 6.2*  | 6.6  | 10.4* | 4.4  | 2.6  | 4.1  |
| 0              | 7.2*  | 7.2*  | 6.2  | 10.4  | 4.1  | 3.0  | 4.7  |
| -1.5           | 10.4* | 10.4* | 6.0  | 10.2  | 4.0  | 3.0  | 4.6  |
| -3.0           | 11.9  | 15.0* | 6.1  | 10.3  | 4.0  | 4.1  | 6.4  |
| -4.5           | 12.2  | 14.7* | 6.2  | 10.3* | 4.2  |      |      |

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) 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 600mm 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 320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

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.

<sup>1)</sup> Values are calculated with 500 mm wide track pads for the NLC-Undercarriage

# Lift capacities

with mono boom straight 5.90 m, counterweight 4.0 t and track pads 500 mm / 600 mm

## Stick 2.50 m

| Under-carriage | 3.0m | 4.5m | 6.0m | 7.5m | 9.0m |      |      |
|----------------|------|------|------|------|------|------|------|
| m              |      |      |      |      |      |      | m    |
| 9.0            |      |      |      |      |      | 6.9  | 7.2* |
| 7.5            |      |      |      |      |      | 3.9  | 5.9* |
| 6.0            |      |      |      |      |      | 2.9  | 5.3  |
| 4.5            |      |      |      |      |      | 2.5  | 4.5  |
| 3.0            |      |      |      |      |      | 2.3  | 4.1  |
| 1.5            |      |      |      |      |      | 2.2  | 4.0  |
| 0              |      |      |      |      |      | 2.2  | 4.2  |
| -1.5           | 8.3* | 8.3* |      |      |      | 2.5  | 4.6  |
| -3.0           |      |      |      |      |      | 3.0  | 5.5* |
| -4.5           |      |      |      |      |      |      |      |
| 9.0            |      |      |      |      |      | 7.2* | 7.2* |
| 7.5            |      |      |      |      |      | 4.4  | 5.9* |
| 6.0            |      |      |      |      |      | 3.3  | 5.3  |
| 4.5            |      |      |      |      |      | 2.8  | 4.6  |
| 3.0            |      |      |      |      |      | 2.6  | 4.2  |
| 1.5            |      |      |      |      |      | 2.5  | 4.1  |
| 0              |      |      |      |      |      | 2.6  | 4.2  |
| -1.5           | 8.3* | 8.3* |      |      |      | 2.8  | 4.6  |
| -3.0           |      |      |      |      |      | 3.4  | 5.5* |
| -4.5           |      |      |      |      |      |      |      |
| 9.0            |      |      |      |      |      | 7.2* | 7.2* |
| 7.5            |      |      |      |      |      | 4.7  | 5.9* |
| 6.0            |      |      |      |      |      | 3.6  | 5.3  |
| 4.5            |      |      |      |      |      | 3.0  | 4.6  |
| 3.0            |      |      |      |      |      | 2.8  | 4.2  |
| 1.5            |      |      |      |      |      | 2.7  | 4.1  |
| 0              |      |      |      |      |      | 2.8  | 4.2  |
| -1.5           | 8.3* | 8.3* |      |      |      | 3.0  | 4.7  |
| -3.0           |      |      |      |      |      | 3.7  | 5.5* |
| -4.5           |      |      |      |      |      |      |      |

## Stick 2.90 m

| Under-carriage | 3.0m | 4.5m | 6.0m | 7.5m | 9.0m |      |      |
|----------------|------|------|------|------|------|------|------|
| m              |      |      |      |      |      |      | m    |
| 9.0            |      |      |      |      |      | 5.5  | 5.8* |
| 7.5            |      |      |      |      |      | 3.4  | 4.9* |
| 6.0            |      |      |      |      |      | 2.7  | 4.5* |
| 4.5            |      |      |      |      |      | 2.3  | 4.1  |
| 3.0            |      |      |      |      |      | 2.1  | 3.8  |
| 1.5            |      |      |      |      |      | 2.0  | 3.7  |
| 0              |      |      |      |      |      | 2.0  | 3.8  |
| -1.5           | 8.1* | 8.1* |      |      |      | 2.2  | 4.2  |
| -3.0           |      |      |      |      |      | 2.6  | 4.9  |
| -4.5           |      |      |      |      |      |      |      |
| 9.0            |      |      |      |      |      | 5.8* | 5.8* |
| 7.5            |      |      |      |      |      | 3.9  | 4.9* |
| 6.0            |      |      |      |      |      | 3.0  | 4.5* |
| 4.5            |      |      |      |      |      | 2.6  | 4.2  |
| 3.0            |      |      |      |      |      | 2.4  | 3.9  |
| 1.5            |      |      |      |      |      | 2.3  | 3.8  |
| 0              |      |      |      |      |      | 2.4  | 3.9  |
| -1.5           | 8.1* | 8.1* |      |      |      | 2.6  | 4.2  |
| -3.0           |      |      |      |      |      | 3.0  | 5.0  |
| -4.5           |      |      |      |      |      |      |      |
| 9.0            |      |      |      |      |      | 5.8* | 5.8* |
| 7.5            |      |      |      |      |      | 4.1  | 4.9* |
| 6.0            |      |      |      |      |      | 3.2  | 4.5* |
| 4.5            |      |      |      |      |      | 2.8  | 4.2  |
| 3.0            |      |      |      |      |      | 2.6  | 3.9  |
| 1.5            |      |      |      |      |      | 2.5  | 3.8  |
| 0              |      |      |      |      |      | 2.5  | 3.9  |
| -1.5           | 8.1* | 8.1* |      |      |      | 2.8  | 4.3  |
| -3.0           |      |      |      |      |      | 3.3  | 5.0  |
| -4.5           |      |      |      |      |      |      |      |

## Stick 3.50 m

| Under-carriage | 3.0m | 4.5m  | 6.0m | 7.5m | 9.0m |      |      |
|----------------|------|-------|------|------|------|------|------|
| m              |      |       |      |      |      |      | m    |
| 9.0            |      |       |      |      |      | 4.3* | 4.3* |
| 7.5            |      |       |      |      |      | 3.0  | 3.8* |
| 6.0            |      |       |      |      |      | 2.4  | 3.5* |
| 4.5            |      |       |      |      |      | 2.0  | 3.5* |
| 3.0            |      |       |      |      |      | 1.9  | 3.5  |
| 1.5            |      |       |      |      |      | 1.8  | 3.4  |
| 0              |      |       |      |      |      | 1.8  | 3.5  |
| -1.5           | 5.0* | 5.0*  |      |      |      | 1.9  | 3.7  |
| -3.0           | 8.2* | 8.2*  |      |      |      | 2.2  | 4.3  |
| -4.5           | 8.9  | 12.8* |      |      |      | 2.9  | 4.7* |
| 9.0            |      |       |      |      |      | 4.3* | 4.3* |
| 7.5            |      |       |      |      |      | 3.3  | 3.8* |
| 6.0            |      |       |      |      |      | 2.7  | 3.5* |
| 4.5            |      |       |      |      |      | 2.3  | 3.5* |
| 3.0            |      |       |      |      |      | 2.1  | 3.5  |
| 1.5            |      |       |      |      |      | 2.1  | 3.4  |
| 0              |      |       |      |      |      | 2.1  | 3.5  |
| -1.5           | 5.0* | 5.0*  |      |      |      | 2.2  | 3.8  |
| -3.0           | 8.2* | 8.2*  |      |      |      | 2.6  | 4.4  |
| -4.5           | 10.7 | 12.8* |      |      |      | 3.4  | 4.7* |
| 9.0            |      |       |      |      |      | 4.3* | 4.3* |
| 7.5            |      |       |      |      |      | 3.6  | 3.8* |
| 6.0            |      |       |      |      |      | 2.9  | 3.5* |
| 4.5            |      |       |      |      |      | 2.5  | 3.5* |
| 3.0            |      |       |      |      |      | 2.3  | 3.5  |
| 1.5            |      |       |      |      |      | 2.3  | 3.5  |
| 0              |      |       |      |      |      | 2.3  | 3.5  |
| -1.5           | 5.0* | 5.0*  |      |      |      | 2.4  | 3.8  |
| -3.0           | 8.2* | 8.2*  |      |      |      | 2.8  | 4.4  |
| -4.5           | 11.8 | 12.8* |      |      |      | 3.6  | 4.7* |

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) 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 600mm 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 320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

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.

<sup>1)</sup> Values are calculated with 500 mm wide track pads for the NLC-Undercarriage

# Lift capacities

with two-piece boom 5.90 m, counterweight 4.0 t and track pads 500 mm / 600 mm

## Stick 2.50 m

| Under-carriage | 3.0m | 4.5m  | 6.0m | 7.5m  | 9.0m |      |      |
|----------------|------|-------|------|-------|------|------|------|
| m              |      |       |      |       |      |      | m    |
| 9.0            |      |       |      |       |      | 7.1* | 7.1* |
| 7.5            |      |       |      |       |      | 3.9  | 5.8* |
| 6.0            | 7.4* | 7.4*  | 6.9  | 8.6*  |      | 2.9  | 5.3  |
| 4.5            | 12.2 | 15.9* | 6.7  | 10.7* |      | 2.5  | 4.5  |
| 3.0            | 11.7 | 15.6* | 6.4  | 11.2  |      | 2.2  | 4.2  |
| 1.5            | 10.0 | 16.4* | 5.7  | 11.1  |      | 2.1  | 4.1  |
| 0              | 9.4  | 17.5* | 5.3  | 10.8  |      | 2.2  | 4.2  |
| -1.5           | 9.3  | 19.2* | 5.1  | 10.6  |      | 2.4  | 4.6  |
| -3.0           | 9.4  | 17.5* | 5.1  | 10.6  |      | 3.0  | 4.5* |
| -4.5           |      |       |      |       |      |      |      |
| 9.0            |      |       |      |       |      | 7.1* | 7.1* |
| 7.5            |      |       |      |       |      | 4.5  | 5.8* |
| 6.0            | 7.4* | 7.4*  | 7.7  | 8.6*  |      | 3.3  | 5.4* |
| 4.5            | 13.7 | 15.9* | 7.5  | 10.7* |      | 2.8  | 4.6  |
| 3.0            | 13.3 | 15.6* | 7.2  | 11.3  |      | 2.6  | 4.2  |
| 1.5            | 11.8 | 16.4* | 6.6  | 11.2  |      | 2.5  | 4.1  |
| 0              | 11.2 | 17.5* | 6.1  | 11.0  |      | 2.5  | 4.2  |
| -1.5           | 11.0 | 19.2* | 5.9  | 10.7  |      | 2.8  | 4.7  |
| -3.0           | 11.2 | 17.5* | 5.9  | 10.7  |      | 3.4  | 4.5* |
| -4.5           |      |       |      |       |      |      |      |
| 9.0            |      |       |      |       |      | 7.1* | 7.1* |
| 7.5            |      |       |      |       |      | 4.8  | 5.8* |
| 6.0            | 7.4* | 7.4*  | 8.2  | 8.6*  |      | 3.6  | 5.4* |
| 4.5            | 14.8 | 15.9* | 8.0  | 10.7* |      | 3.0  | 4.6  |
| 3.0            | 14.2 | 15.6* | 7.8  | 11.3  |      | 2.8  | 4.2  |
| 1.5            | 13.1 | 16.4* | 7.1  | 11.2  |      | 2.7  | 4.1  |
| 0              | 12.4 | 17.5* | 6.6  | 11.0  |      | 2.7  | 4.2  |
| -1.5           | 12.2 | 19.2* | 6.4  | 10.8  |      | 3.0  | 4.7  |
| -3.0           | 12.4 | 17.5* | 6.4  | 10.8  |      | 3.7  | 4.5* |
| -4.5           |      |       |      |       |      |      |      |

## Stick 2.90 m

| Under-carriage | 3.0m  | 4.5m  | 6.0m | 7.5m | 9.0m |      |      |
|----------------|-------|-------|------|------|------|------|------|
| m              |       |       |      |      |      |      | m    |
| 9.0            |       |       |      |      |      | 5.7  | 5.8* |
| 7.5            |       |       |      |      |      | 3.5  | 4.9* |
| 6.0            |       |       |      |      |      | 2.7  | 4.5* |
| 4.5            | 12.3  | 13.9* | 6.7  | 9.8* |      | 2.2  | 4.2  |
| 3.0            | 11.8  | 15.7* | 6.5  | 11.2 |      | 2.0  | 3.9  |
| 1.5            | 10.3  | 16.8* | 5.8  | 11.0 |      | 2.0  | 3.8  |
| 0              | 9.4   | 17.7* | 5.3  | 10.9 |      | 2.0  | 3.9  |
| -1.5           | 9.2   | 19.2* | 5.0  | 10.5 |      | 2.2  | 4.2  |
| -3.0           | 9.2   | 18.1* | 5.0  | 10.5 |      | 2.6  | 4.1* |
| -4.5           | 9.6   | 13.6* | 5.1  | 7.8* |      | 4.5  | 6.3* |
| 9.0            |       |       |      |      |      | 5.8* | 5.8* |
| 7.5            |       |       |      |      |      | 3.9  | 4.9* |
| 6.0            |       |       |      |      |      | 3.0  | 4.5* |
| 4.5            | 13.9  | 13.9* | 7.5  | 9.8* |      | 2.6  | 4.2  |
| 3.0            | 13.2  | 15.7* | 7.3  | 11.3 |      | 2.3  | 3.9  |
| 1.5            | 12.2  | 16.8* | 6.6  | 11.1 |      | 2.3  | 3.8  |
| 0              | 11.2  | 17.7* | 6.1  | 11.0 |      | 2.3  | 3.9  |
| -1.5           | 10.9  | 19.2* | 5.9  | 10.7 |      | 2.5  | 4.3  |
| -3.0           | 11.0  | 18.1* | 5.8  | 10.6 |      | 3.0  | 4.1* |
| -4.5           | 11.4  | 13.6* | 5.9  | 7.8* |      | 5.2  | 6.3* |
| 9.0            |       |       |      |      |      | 5.8* | 5.8* |
| 7.5            |       |       |      |      |      | 4.2  | 4.9* |
| 6.0            |       |       |      |      |      | 3.2  | 4.5* |
| 4.5            | 13.9* | 13.9* | 8.0  | 9.8* |      | 2.8  | 4.3  |
| 3.0            | 14.2  | 15.7* | 7.8  | 11.3 |      | 2.5  | 3.9  |
| 1.5            | 13.4  | 16.8* | 7.2  | 11.1 |      | 2.5  | 3.8  |
| 0              | 12.4  | 17.7* | 6.6  | 11.0 |      | 2.5  | 3.9  |
| -1.5           | 12.1  | 19.2* | 6.4  | 10.7 |      | 2.7  | 4.3  |
| -3.0           | 12.2  | 18.1* | 6.3  | 10.7 |      | 3.2  | 4.1* |
| -4.5           | 12.6  | 13.6* | 6.4  | 7.8* |      | 5.6  | 6.3* |

## Stick 3.50 m

| Under-carriage | 3.0m | 4.5m  | 6.0m | 7.5m  | 9.0m |      |      |
|----------------|------|-------|------|-------|------|------|------|
| m              |      |       |      |       |      |      | m    |
| 9.0            |      |       |      |       |      | 4.3* | 4.3* |
| 7.5            |      |       |      |       |      | 3.0  | 3.7* |
| 6.0            |      |       |      |       |      | 2.4  | 3.5* |
| 4.5            | 6.7* | 6.7*  | 6.8  | 7.3*  |      | 2.0  | 3.5* |
| 3.0            | 11.8 | 16.6* | 6.5  | 10.9* |      | 1.8  | 3.5  |
| 1.5            | 10.9 | 16.4* | 6.0  | 11.0  |      | 1.7  | 3.4  |
| 0              | 9.6  | 17.9* | 5.4  | 10.9  |      | 1.8  | 3.5  |
| -1.5           | 9.1  | 19.0* | 5.0  | 10.5  |      | 1.9  | 3.7  |
| -3.0           | 9.0  | 18.7* | 4.9  | 10.4  |      | 2.2  | 4.3* |
| -4.5           | 9.3  | 16.3* | 4.9  | 10.0* |      | 3.1  | 4.7* |
| 9.0            |      |       |      |       |      | 4.3* | 4.3* |
| 7.5            |      |       |      |       |      | 3.4  | 3.7* |
| 6.0            |      |       |      |       |      | 2.7  | 3.5* |
| 4.5            | 6.7* | 6.7*  | 7.3* | 7.3*  |      | 2.3  | 3.5* |
| 3.0            | 13.3 | 16.6* | 7.3  | 10.9* |      | 2.1  | 3.6  |
| 1.5            | 12.7 | 16.4* | 6.8  | 11.0  |      | 2.0  | 3.5  |
| 0              | 11.4 | 17.9* | 6.2  | 11.0  |      | 2.1  | 3.5  |
| -1.5           | 10.9 | 19.0* | 5.8  | 10.7  |      | 2.2  | 3.8  |
| -3.0           | 10.8 | 18.7* | 5.7  | 10.5  |      | 2.6  | 4.3* |
| -4.5           | 11.1 | 16.3* | 5.7  | 10.0* |      | 3.6  | 4.7* |
| 9.0            |      |       |      |       |      | 4.3* | 4.3* |
| 7.5            |      |       |      |       |      | 3.6  | 3.7* |
| 6.0            |      |       |      |       |      | 2.9  | 3.5* |
| 4.5            | 6.7* | 6.7*  | 7.3* | 7.3*  |      | 2.5  | 3.5* |
| 3.0            | 14.3 | 16.6* | 7.8  | 10.9* |      | 2.3  | 3.6* |
| 1.5            | 14.0 | 16.4* | 7.4  | 11.1  |      | 2.2  | 3.5  |
| 0              | 12.6 | 17.9* | 6.7  | 11.0  |      | 2.2  | 3.5  |
| -1.5           | 12.1 | 19.0* | 6.3  | 10.7  |      | 2.4  | 3.8  |
| -3.0           | 12.0 | 18.7* | 6.2  | 10.5  |      | 2.8  | 4.3* |
| -4.5           | 12.3 | 16.3* | 6.2  | 10.0* |      | 3.9  | 4.7* |

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) 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 600 mm wide track pads with adjusting cylinder in optimal position. 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 320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

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.

<sup>1)</sup> Values are calculated with 500 mm wide track pads for the NLC-Undercarriage

# Lift capacities

with mono boom offset 5.65 m, counterweight 4.0 t and track pads 500 mm / 600 mm

## Stick 2.50 m

| Under-carriage | 3.0m  | 4.5m  | 6.0m | 7.5m  | 9.0m | Max. reach |      |
|----------------|-------|-------|------|-------|------|------------|------|
| m              |       |       |      |       |      |            | m    |
| 9.0            |       |       |      |       |      | 4.6        | 5.7* |
| 7.5            |       |       |      |       |      | 3.2        | 5.3* |
| 6.0            |       |       |      |       |      | 2.5        | 4.8  |
| 4.5            | 11.2* | 11.2* | 6.1  | 8.0*  | 3.8  | 6.7*       | 2.6  |
| 3.0            |       | 5.3   | 9.9* | 3.5   | 6.8  | 2.5        | 4.7  |
| 1.5            |       | 4.6   | 10.1 | 3.2   | 6.4  | 2.3        | 4.6  |
| 0              | 5.4*  | 5.4*  | 4.4  | 9.7   | 3.0  | 6.2        | 2.2  |
| -1.5           | 8.2   | 12.1* | 4.3  | 9.7   | 2.9  | 6.1        | 2.3  |
| -3.0           | 8.5   | 13.5* | 4.5  | 9.9   | 3.1  | 6.2        | 2.9  |
| -4.5           |       |       |      |       |      |            | 5.9  |
| 9.0            |       |       |      |       |      | 5.2        | 5.7* |
| 7.5            |       |       |      |       |      | 3.6        | 5.3* |
| 6.0            |       |       |      |       |      | 2.9        | 4.9  |
| 4.5            | 11.2* | 11.2* | 6.9  | 8.0*  | 4.4  | 6.7*       | 3.0  |
| 3.0            |       | 6.1   | 9.9* | 4.0   | 6.9  | 2.8        | 4.8  |
| 1.5            |       | 5.4   | 10.2 | 3.7   | 6.5  | 2.7        | 4.6  |
| 0              | 5.4*  | 5.4*  | 5.2  | 9.8   | 3.5  | 6.2        | 2.6  |
| -1.5           | 9.9   | 12.1* | 5.1  | 9.8   | 3.4  | 6.2        | 2.7  |
| -3.0           | 10.3  | 13.5* | 5.3  | 10.0* | 3.6  | 6.3        | 3.4  |
| -4.5           |       |       |      |       |      |            | 6.0  |
| 9.0            |       |       |      |       |      | 5.5        | 5.7* |
| 7.5            |       |       |      |       |      | 3.9        | 5.3* |
| 6.0            |       |       |      |       |      | 3.2        | 4.9  |
| 4.5            | 11.2* | 11.2* | 7.5  | 8.0*  | 4.7  | 6.7*       | 3.2  |
| 3.0            |       | 6.6   | 9.9* | 4.4   | 6.9  | 3.1        | 4.8  |
| 1.5            |       | 6.0   | 10.2 | 4.0   | 6.5  | 2.9        | 4.6  |
| 0              | 5.4*  | 5.4*  | 5.7  | 9.9   | 3.8  | 6.3        | 2.8  |
| -1.5           | 11.1  | 12.1* | 5.6  | 9.8   | 3.8  | 6.2        | 3.0  |
| -3.0           | 11.4  | 13.5* | 5.8  | 10.0* | 3.9  | 6.4        | 3.7  |
| -4.5           |       |       |      |       |      |            | 6.0  |

## Stick 2.90 m

| Under-carriage | 3.0m  | 4.5m  | 6.0m | 7.5m | 9.0m | Max. reach |      |
|----------------|-------|-------|------|------|------|------------|------|
| m              |       |       |      |      |      |            | m    |
| 9.0            |       |       |      |      |      | 4.2        | 5.2* |
| 7.5            |       |       |      |      |      | 4.1        | 5.8* |
| 6.0            |       |       |      |      |      | 3.9        | 6.3* |
| 4.5            |       | 6.2   | 7.4* |      |      | 2.6        | 4.9  |
| 3.0            |       | 5.4   | 9.3* | 3.5  | 6.8  | 2.5        | 4.7  |
| 1.5            |       | 4.7   | 10.2 | 3.2  | 6.4  | 2.3        | 4.5  |
| 0              | 6.6*  | 6.6*  | 4.3  | 9.7  | 2.9  | 6.1        | 2.2  |
| -1.5           | 8.0   | 11.3* | 4.2  | 9.6  | 2.8  | 6.0        | 2.1  |
| -3.0           | 8.3   | 14.5* | 4.3  | 9.7  | 2.9  | 6.1        | 2.6  |
| -4.5           | 8.8   | 10.7* | 4.7  | 7.8* |      |            | 3.8  |
| 9.0            |       |       |      |      |      | 4.7        | 5.2* |
| 7.5            |       |       |      |      |      | 4.7        | 5.8* |
| 6.0            |       |       |      |      |      | 4.4        | 6.3* |
| 4.5            |       | 7.1   | 7.4* |      |      | 3.0        | 5.0  |
| 3.0            |       | 6.2   | 9.3* | 4.1  | 6.9  | 2.8        | 4.8  |
| 1.5            |       | 5.5   | 10.3 | 3.7  | 6.5  | 2.7        | 4.6  |
| 0              | 6.6*  | 6.6*  | 5.1  | 9.8  | 3.5  | 6.2        | 2.5  |
| -1.5           | 9.7   | 11.3* | 5.0  | 9.7  | 3.4  | 6.1        | 2.5  |
| -3.0           | 10.0  | 14.5* | 5.1  | 9.8  | 3.4  | 6.2        | 3.0  |
| -4.5           | 10.6  | 10.7* | 5.5  | 7.8* |      |            | 4.5  |
| 9.0            |       |       |      |      |      | 5.0        | 5.2* |
| 7.5            |       |       |      |      |      | 5.0        | 5.8* |
| 6.0            |       |       |      |      |      | 4.8        | 6.3* |
| 4.5            |       | 7.4*  | 7.4* |      |      | 3.2        | 5.0  |
| 3.0            |       | 6.8   | 9.3* | 4.4  | 6.9  | 3.1        | 4.8  |
| 1.5            |       | 6.0   | 10.3 | 4.0  | 6.5  | 2.9        | 4.6  |
| 0              | 6.6*  | 6.6*  | 5.6  | 9.8  | 3.8  | 6.2        | 2.8  |
| -1.5           | 10.8  | 11.3* | 5.5  | 9.7  | 3.7  | 6.1        | 2.7  |
| -3.0           | 11.1  | 14.5* | 5.6  | 9.9  | 3.7  | 6.2        | 3.3  |
| -4.5           | 10.7* | 10.7* | 6.0  | 7.8* |      |            | 4.9  |

## Stick 3.50 m

| Under-carriage | 3.0m  | 4.5m  | 6.0m | 7.5m  | 9.0m | Max. reach |      |
|----------------|-------|-------|------|-------|------|------------|------|
| m              |       |       |      |       |      |            | m    |
| 9.0            |       |       |      |       |      | 3.5        | 3.7* |
| 7.5            |       |       |      |       |      | 2.6        | 3.5* |
| 6.0            |       |       |      |       |      | 2.1        | 3.5* |
| 4.5            |       |       |      |       |      | 1.9        | 3.7* |
| 3.0            | 10.5  | 12.8* | 5.7  | 8.3*  | 3.6  | 6.6*       | 2.5  |
| 1.5            | 7.3*  | 7.3*  | 4.8  | 10.2* | 3.2  | 6.5        | 2.3  |
| 0              | 7.7   | 8.0*  | 4.3  | 9.7   | 2.9  | 6.1        | 2.1  |
| -1.5           | 7.7   | 11.1* | 4.1  | 9.5   | 2.8  | 5.9        | 2.0  |
| -3.0           | 7.9   | 15.7* | 4.2  | 9.5   | 2.8  | 5.9        | 2.2  |
| -4.5           | 8.4   | 12.6* | 4.4  | 9.0*  |      |            | 3.0  |
| 9.0            |       |       |      |       |      | 3.7*       | 3.7* |
| 7.5            |       |       |      |       |      | 2.9        | 3.5* |
| 6.0            |       |       |      |       |      | 2.4        | 3.5* |
| 4.5            |       |       |      |       |      | 2.2        | 3.7* |
| 3.0            | 12.3  | 12.8* | 6.5  | 8.3*  | 4.2  | 6.6*       | 2.9  |
| 1.5            | 7.3*  | 7.3*  | 5.7  | 10.2* | 3.7  | 6.6        | 2.7  |
| 0              | 8.0*  | 8.0*  | 5.1  | 9.8   | 3.4  | 6.2        | 2.5  |
| -1.5           | 9.4   | 11.1* | 4.9  | 9.6   | 3.3  | 6.0        | 2.4  |
| -3.0           | 9.6   | 15.7* | 4.9  | 9.6   | 3.3  | 6.0        | 2.6  |
| -4.5           | 10.1  | 12.6* | 5.2  | 9.0*  |      |            | 3.5  |
| 9.0            |       |       |      |       |      | 3.7*       | 3.7* |
| 7.5            |       |       |      |       |      | 3.2        | 3.5* |
| 6.0            |       |       |      |       |      | 2.6        | 3.5* |
| 4.5            |       |       |      |       |      | 2.4        | 3.7* |
| 3.0            | 12.8* | 12.8* | 7.1  | 8.3*  | 4.5  | 6.6*       | 3.1  |
| 1.5            | 7.3*  | 7.3*  | 6.2  | 10.2* | 4.1  | 6.6        | 2.9  |
| 0              | 8.0*  | 8.0*  | 5.6  | 9.9   | 3.8  | 6.2        | 2.7  |
| -1.5           | 10.5  | 11.1* | 5.4  | 9.6   | 3.6  | 6.0        | 2.6  |
| -3.0           | 10.7  | 15.7* | 5.4  | 9.6   | 3.6  | 6.0        | 2.8  |
| -4.5           | 11.3  | 12.6* | 5.7  | 9.0*  |      |            | 3.9  |

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

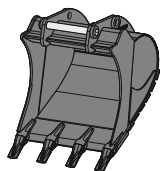
The load values are quoted in tons (t) at stick end (without bucket), and may be swung 360° on firm and even ground. Adjacent values are valid for the undercarriage when in the longitudinal position. Capacities are valid for 600mm wide track pads. Indicated loads are based on ISO 10567 standard and do not exceed 75% of tipping or 87% of hydraulic capacity (indicated via \*). Without bucket cylinder, link and lever the lift capacities will increase by 320 kg. Lifting capacity of the excavator is limited by machine stability and hydraulic capacity.

According to European Standard, EN 474-5: In the European Union excavators have to be equipped with an overload warning device, a load diagram and automatic safety check valves on hoist cylinders and stick cylinder(s), when they are used for lifting operations which require the use of lifting accessories.

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.

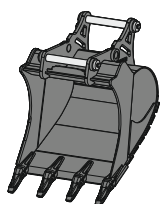
<sup>1)</sup> Values are calculated with 500 mm wide track pads for the NLC-Undercarriage

# Attachments



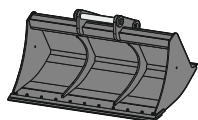
## Backhoe bucket

|                      |                                                                        |      |      |       |       |       |       |       |       |       |
|----------------------|------------------------------------------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|
| Mounting             | direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |      |      |       |       |       |       |       |       |       |
| TL 04-01             |                                                                        |      |      |       |       |       |       |       |       |       |
| Cutting width        | mm                                                                     | 650  | 850  | 1,050 | 1,250 | 1,400 |       |       |       |       |
| Capacity             | m³                                                                     | 0.55 | 0.60 | 0.80  | 1.00  | 1.15  |       |       |       |       |
| Weight <sup>1)</sup> | kg                                                                     | 520  | 560  | 640   | 740   | 795   |       |       |       |       |
| TL 04-02             |                                                                        |      |      |       |       |       |       |       |       |       |
| Cutting width        | mm                                                                     | 650  | 850  | 1,050 | 1,250 | 1,400 | 1,500 | 1,600 | 1,700 | 1,800 |
| Capacity             | m³                                                                     | 0.55 | 0.75 | 0.95  | 1.15  | 1.35  | 1.45  | 1.55  | 1.85  | 2.00  |
| Weight <sup>1)</sup> | kg                                                                     | 545  | 630  | 720   | 815   | 875   | 890   | 945   | 1,090 | 1,133 |



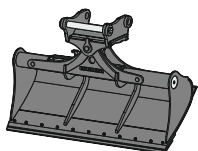
## 2in1 bucket

|                       |    |                                                       |      |       |       |       |       |       |       |       |  |
|-----------------------|----|-------------------------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|--|
| Mounting              |    | SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |      |       |       |       |       |       |       |       |  |
| HTL 04-01             |    |                                                       |      |       |       |       |       |       |       |       |  |
| Cutting width         | mm | 650                                                   | 850  | 1,050 | 1,250 | 1,400 |       |       |       |       |  |
| Capacity              | m³ | 0.55                                                  | 0.60 | 0.80  | 1.00  | 1.15  |       |       |       |       |  |
| Weight <sup>[1]</sup> | kg | 604                                                   | 627  | 707   | 807   | 879   |       |       |       |       |  |
| HTL 04-02             |    |                                                       |      |       |       |       |       |       |       |       |  |
| Cutting width         | mm | 650                                                   | 850  | 1,050 | 1,250 | 1,400 | 1,500 | 1,600 | 1,700 | 1,800 |  |
| Capacity              | m³ | 0.55                                                  | 0.75 | 0.95  | 1.15  | 1.35  | 1.45  | 1.55  | 1.85  | 2.00  |  |
| Weight <sup>[1]</sup> | kg | 612                                                   | 697  | 787   | 882   | 942   | 978   | 1,016 | 1,179 | 1,223 |  |



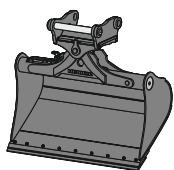
## Ditch cleaning bucket GRL rigid 04

|                      |                                                                        |       |       |  |       |  |       |  |  |  |
|----------------------|------------------------------------------------------------------------|-------|-------|--|-------|--|-------|--|--|--|
| Mounting             | direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |       |       |  |       |  |       |  |  |  |
| Cutting width        | mm                                                                     | 1,500 | 2,000 |  | 2,000 |  | 2,400 |  |  |  |
| Capacity             | m³                                                                     | 0.50  | 0.70  |  | 1.20  |  | 0.85  |  |  |  |
| Weight <sup>1)</sup> | kg                                                                     | 425   | 522   |  | 637   |  | 605   |  |  |  |



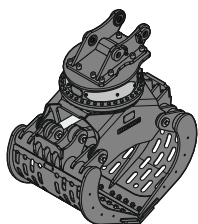
## Ditch cleaning bucket with hydraulic cylinder GRL 90

|                      |                                                                        |         |         |         |         |         |         |         |         |         |         |         |
|----------------------|------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Mounting             | direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |         |         |         |         |         |         |         |         |         |         |         |
| Cutting width        | mm                                                                     | 1,600   | 1,600   | 2,000   | 2,000   | 2,000   | 2,200   | 2,200   | 2,200   | 2,400   | 2,400   | 2,800   |
| Capacity             | m³                                                                     | 0.55    | 0.80    | 0.50    | 0.70    | 1.00    | 0.80    | 1.15    | 1.40    | 0.85    | 1.25    | 1.85    |
| Weight <sup>1)</sup> | kg                                                                     | 690     | 850     | 695     | 875     | 935     | 910     | 985     | 995     | 890     | 1,000   | 1,090   |
| 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° |



## Tilt bucket with hydraulic cylinder SL 90

|                      |                                                                        |         |         |         |         |         |         |         |
|----------------------|------------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Mounting             | direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |         |         |         |         |         |         |         |
| Cutting width        | mm                                                                     | 1,400   | 1,500   | 1,500   | 1,600   | 1,600   | 1,600   | 1,600   |
| Capacity             | m³                                                                     | 0.55    | 0.60    | 1.20    | 0.80    | 1.00    | 1.35    | 1.55    |
| Weight <sup>1)</sup> | kg                                                                     | 715     | 738     | 970     | 820     | 890     | 970     | 1,030   |
| Tilt angle           |                                                                        | 2 x 50° | 2 x 50° | 2 x 50° | 2 x 50° | 2 x 50° | 2 x 50° | 2 x 50° |



## Sorting grab SG 30B

|                      |                                                                        |       |       |       |                      |       |       |                      |                           |
|----------------------|------------------------------------------------------------------------|-------|-------|-------|----------------------|-------|-------|----------------------|---------------------------|
| Mounting             | direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |       |       |       |                      |       |       |                      |                           |
| Shell type           | perforated <sup>3)</sup>                                               |       |       |       | ribbed <sup>3)</sup> |       |       | closed <sup>3)</sup> | Stone shell <sup>4)</sup> |
| Shell width          | mm                                                                     | 1,000 | 1,200 | 1,400 | 1,000                | 1,200 | 1,400 | 1,000                | 1,020                     |
| Capacity             | m³                                                                     | 0.85  | 1.00  | 1.15  | 0.75                 | 0.90  | 1.05  | 0.85                 | 0.85                      |
| Max. closing force   | kN                                                                     | 80    | 80    | 80    | 80                   | 80    | 80    | 80                   | 80                        |
| Weight <sup>2)</sup> | kg                                                                     | 1.485 | 1.560 | 1.635 | 1.565                | 1.675 | 1.780 | 1.515                | 1.815                     |

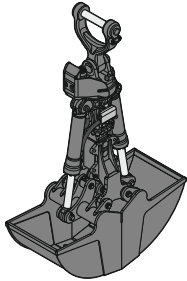
<sup>1)</sup> based on an attachment in a standard design with SWA 48 Solidlink quick coupler mounting

<sup>2)</sup> without quick coupler mounting

<sup>3)</sup> with standard bolt-on cutting edge

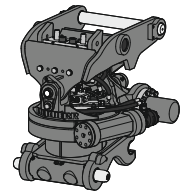
<sup>4)</sup> with Liebherr teeth Z 40 C





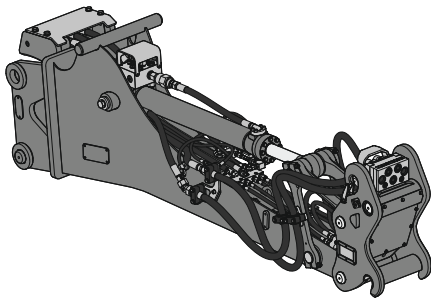
## Clamshell grab

|                          |    |                                                                        |       |       |       |       |       |
|--------------------------|----|------------------------------------------------------------------------|-------|-------|-------|-------|-------|
| Mounting                 |    | direct mounting, SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |       |       |       |       |       |
| GMZ 24 Clamshell buckets |    |                                                                        |       |       |       |       |       |
| Shell width              | mm | 320                                                                    | 400   | 500   | 600   | 800   | 1,000 |
| Capacity <sup>1)</sup>   | m³ | 0.16                                                                   | 0.22  | 0.28  | 0.34  | 0.46  | 0.60  |
| Opening width            | mm | 1,515                                                                  | 1,515 | 1,515 | 1,515 | 1,515 | 1,515 |
| Weight <sup>2)</sup>     | kg | 720                                                                    | 755   | 780   | 815   | 890   | 965   |
| GMZ 30 Clamshell buckets |    |                                                                        |       |       |       |       |       |
| Shell width              | mm | 600                                                                    | 800   | 1,000 | 1,200 |       |       |
| Capacity <sup>1)</sup>   | m³ | 0.38                                                                   | 0.52  | 0.65  | 0.80  |       |       |
| Opening width            | mm | 1,644                                                                  | 1,644 | 1,644 | 1,644 |       |       |
| Weight <sup>2)</sup>     | kg | 950                                                                    | 1,030 | 1,110 | 1,190 |       |       |



## Tiltrotator TR 25

|                          |    |                                                       |
|--------------------------|----|-------------------------------------------------------|
| Mounting machine side    |    | SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink |
| Mounting attachment side |    | SWA 48 mechanical, SWA 48 hydraulic                   |
| Weight <sup>5)</sup>     | kg | 787                                                   |
| Rotation                 |    | 360°                                                  |
| Tilt                     |    | 2 x 50°                                               |



## Stick extension

|                          |    |                                                                                                                                                                                                                                                                                             |       |
|--------------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Mounting machine side    |    | SWA 48 mechanical, SWA 48 hydraulic, SWA 48 Solidlink, SWA 48 Solidlink-10                                                                                                                                                                                                                  |       |
| LS 12                    |    |                                                                                                                                                                                                                                                                                             |       |
| Mounting attachment side |    | direct mounting, SWA 33 mechanical, SWA 33 mechanical Solidlink <sup>5)</sup> , SWA 33 hydraulic <sup>7)</sup> , SWA 33 Solidlink <sup>6)</sup> 7) 8)                                                                                                                                       |       |
| Length                   | m  | 2.25                                                                                                                                                                                                                                                                                        | 2.70  |
| Weight <sup>4)</sup>     | kg | 650                                                                                                                                                                                                                                                                                         | 700   |
| LS 18                    |    |                                                                                                                                                                                                                                                                                             |       |
| Mounting attachment side |    | direct mounting, SWA 33 mechanical, SWA 33 mechanical Solidlink <sup>5)</sup> , SWA 33 hydraulic <sup>7)</sup> , SWA 33 Solidlink <sup>6)</sup> 7) 8), SWA 48 mechanical, SWA 48 mechanical Solidlink <sup>5)</sup> , SWA 48 hydraulic <sup>7)</sup> , SWA 48 Solidlink <sup>6)</sup> 7) 8) |       |
| Length                   | m  | 2.65                                                                                                                                                                                                                                                                                        | 3.05  |
| Weight <sup>4)</sup>     | kg | 1,130                                                                                                                                                                                                                                                                                       | 1,190 |

<sup>1)</sup> capacity specifications are theoretically determined values; fill level varies depending on the material being loaded

<sup>2)</sup> without suspension

<sup>3)</sup> 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

<sup>4)</sup> based on standard stick extension LS 12/18 with SWA 33/48 Solidlink quick coupler mountings on both sides (underside of stick extension and machine side mounting) and electric switchover

<sup>5)</sup> attachment with high pressure circuit only possible with the manual switchover tipping cylinder or an extended hydraulic circuit on the carrier machine

<sup>6)</sup> attachment with high pressure circuit only possible with the electric / manual switchover tipping cylinder or an extended hydraulic circuit on the carrier machine

<sup>7)</sup> 14-pin signal contact strip is required, for example to control and monitor the hydraulic quick coupling system on the stick extension on the attachment side or to transfer electrical signals for the switchover

<sup>8)</sup> to use different hydraulic circuits, either Solidlink 33-9/ Solidlink 48-10 is required on the machine side, or a switchover system using the equipment power socket, controlled via the carrier machine's signal contact strip

# Serial equipment



## Undercarriage

Lashing eyes  
Sprocket with dirt ejector  
Track and carrier rollers, sealed and lifetime-lubricated



## Uppercarriage

Access platforms without protruding parts  
Anti-skid surfaces  
Automatic swing brake lock  
Centralised lubrication system (automatic)  
DEF tank filling indicator  
DEF tank lockable access hatch  
Engine hood with gas spring opening  
Filters accessible from ground level  
Handrails  
Hydraulic oil level, visible from ground level  
Lockable service doors  
Lockable storage and accessories compartment  
Lockable storage box  
Main switch, accessible from ground level  
Main switch, electric, with timer  
Main switch, manual, lockable  
Positioning swing brake manual  
Protection grid on radiator fan  
Safe uppercarriage side access platform  
Sound insulation  
Swing-out radiators  
Windshield washer fluid tank, accessible from ground level



## Hydraulic system

Filter with integrated fine filters  
Hydraulic pressure measuring ports  
Liebherr Positive Control system with 2 independent circuits  
Magnetic rod  
Pressure accumulator for controlled lowering of equipment with engine turned off



## Diesel engine

Air filter with automatic dust ejector  
Automatic engine idling / speed increase, controlled via joystick sensors  
Common-Rail injection system  
Engine oil level gauge  
Exhaust gas after-treatment system - DOC + SCR Filter  
Fixed geometry turbocharger  
Fuel fine filter  
Fuel pre-filter and water separator  
Fuel priming pump  
Intercooler  
Power Pack EU Stage V



## Cab

9" multifunction colour touchscreen  
Air conditioning, automatic, tri-zone, controlled via display  
Armrests adjustable in length, height and inclination  
Bottle holder  
Cab air filters housing, accessible from ground level  
Cab door sliding windows  
Cigarette lighter  
Coat hook  
DEF consumption on touchscreen  
DEF level on touchscreen  
Electric socket in cab (12V)  
Electric socket in cab (24V)  
Emergency hammer  
Engine coolant level, visible from the cab  
Engine oil level on touchscreen  
Fuel consumption on touchscreen  
Fuel level on touchscreen  
Hydraulic oil level on touchscreen  
Interior lighting  
Laminated right hand side window  
LiDAT Plus (Liebherr data transfer system)  
Mechanical hour meter, visible from ground level  
Mobile phone storage net  
Movement priority between swing and boom, adjustable via touchscreen  
Movement priority for stick-in, adjustable via touchscreen  
Operating modes  
Power modes  
Rain hood over front window opening  
Rearview mirror  
Rear view monitoring camera  
Rear window emergency exit  
Right hand side view monitoring camera  
Roll-down sun blinds for windscreen and roof window  
ROPS safety cab structure (ISO 12117-2)  
Rubber floor mat, fixed on floor and removable  
Shortcut buttons on joystick configurable  
Stepless adjustable engine speed  
Storage box  
Storage nets  
Storage spaces  
Swing braking torque adjustable via touchscreen  
Swing drive gearbox oil level, visible from the cab  
Tilttable console left  
Tinted windows  
Visco-elastic damping  
Windscreen wiper and washer



## Equipment

Anti-drift system boom cylinders  
Anti-drift system stick cylinder  
Boom cylinders regeneration  
Pipe fracture safety valve for stick cylinder  
Pipe fracture safety valves for boom cylinders  
Pivot points made of cast steel  
SAE split flanges on high pressure lines  
Stick cylinder regeneration

# Equipment standard / option

## Undercarriage

|                                                                  |   |
|------------------------------------------------------------------|---|
| Chain guide 1 piece                                              | ● |
| Chain guide 3 pieces                                             | + |
| Cover and base plate for undercarriage centre section            | ● |
| Reinforced cover and base plate for undercarriage centre section | + |
| Special painting                                                 | + |
| Steps                                                            | ● |
| Steps wide                                                       | + |
| Track chains cleaner                                             | + |
| Track pads triple grouser 500 / 700 / 750 / 800 / 900 mm         | + |
| Track pads triple grouser 600 mm                                 | ● |
| Track pads triple grouser reinforced 500 / 600 / 700 / 750 mm    | + |
| Tracks, sealed and greased                                       | ● |
| Tracks, sealed and greased, reinforced                           | + |
| Undercarriage LC                                                 | + |
| Undercarriage NLC                                                | + |
| Undercarriage SLC                                                | + |
| Undercarriage storage compartment                                | + |

## Uppercarriage

|                                                                             |     |
|-----------------------------------------------------------------------------|-----|
| Batteries high capacity                                                     | +   |
| Batteries standard capacity                                                 | ●   |
| Boxing ring                                                                 | +   |
| Catwalk tiltable front left                                                 | +   |
| Counterweight standard 4.0t                                                 | ●   |
| Electric socket on uppercarriage (24 V)                                     | +   |
| Extended tool set including tool box                                        | +   |
| External starting aid (24 V)                                                | +   |
| Front right rearview mirror                                                 | +1) |
| Fuel anti-theft protection                                                  | +   |
| Headlight on uppercarriage, front left, LED+, 1 piece, protection included  | +1) |
| Headlight on uppercarriage, front right, LED, 1 piece, protection included  | ●1) |
| Headlight on uppercarriage, front right, LED+, 1 piece, protection included | +1) |
| Headlight on uppercarriage, lateral left, LED+, 1 piece                     | +1) |
| Headlight on uppercarriage, lateral right, LED+, 1 piece                    | +1) |
| Headlights on uppercarriage, rear, LED+, 2 pieces                           | +1) |
| Lighting for tank area                                                      | +1) |
| Lighting for uppercarriage access                                           | +1) |
| Lockable fuel tank cap                                                      | ●   |
| Lockable fuel tank cap with padlock                                         | +   |
| Reflective warning stickers                                                 | +   |
| Rotating beacons on uppercarriage, rear, LED, 2 pieces                      | +   |
| Skyview 360°                                                                | +   |
| Special painting                                                            | +   |
| Tank refilling pump fuel                                                    | +   |
| Tool set including storage case                                             | ●   |
| Uppercarriage bottom and side protection                                    | +   |
| Uppercarriage bottom closure sheets                                         | ●   |



## Hydraulic system

|                                                                                |   |
|--------------------------------------------------------------------------------|---|
| Bypass filter for hydraulic oil                                                | + |
| Filter for hydraulic hammer return flow                                        | + |
| High pressure circuit bypass                                                   | + |
| High pressure circuit flow summation                                           | + |
| High pressure circuit switchable on pedals or mini-joystick                    | + |
| High pressure circuit with Tool Control (20 attachment adjustments on display) | + |
| Leak oil line for attachment                                                   | + |
| Liebherr hydraulic oil                                                         | ● |
| Liebherr hydraulic oil, adapted for extreme climate conditions                 | + |
| Liebherr hydraulic oil, biodegradable                                          | + |
| Medium pressure circuit                                                        | + |



## Diesel engine

|                                          |     |
|------------------------------------------|-----|
| Air pre-filter with cyclonical dust trap | +   |
| Automatic engine shutdown after idling   | +   |
| Engine shut-down with overrun            | +   |
| Lighting for engine compartment          | +1) |
| Preheating fuel                          | +   |
| Radiator fine mesh protection grid       | +   |
| Reversible fan drive                     | +   |

# Equipment standard / option



## Cab

|                                                              |                 |
|--------------------------------------------------------------|-----------------|
| 2" seat belt with retractor                                  | ●               |
| 3" seat belt with retractor, orange colour                   | +               |
| 4-points seat belt                                           | +               |
| Acoustic travel alarm deactivatable                          | +               |
| Auxiliary heater programmable                                | +               |
| Bottom windscreen wiper                                      | +               |
| Coming / Leaving Home                                        | + <sup>1)</sup> |
| Cool box (12 V)                                              | +               |
| Dark tinted windows                                          | +               |
| Electrically adjustable and heated outside rear-view mirrors | + <sup>1)</sup> |
| Electronic immobiliser                                       | +               |
| Emergency stop in cab                                        | +               |
| FGPS front guard                                             | +               |
| FGPS front guard tiltable                                    | +               |
| Fire extinguisher                                            | +               |
| First-aid box                                                | +               |
| Footrest                                                     | +               |
| FOPS top guard                                               | +               |
| FOPS top guard flat                                          | +               |
| Handrests elevated for joysticks                             | +               |
| Headlights on cab, front, LED, 2 pieces                      | ● <sup>1)</sup> |
| Headlights on cab, front, LED+, 2 pieces                     | + <sup>1)</sup> |
| Headlights on cab roof, front, LED+, 2 pieces                | + <sup>1)</sup> |
| Impact resistant one-piece windscreen                        | +               |
| Impact resistant roof window                                 | +               |
| Independent travel                                           | + <sup>1)</sup> |
| Integral protection guard                                    | +               |
| Laminated roof window                                        | +               |
| Lightbar on cab                                              | +               |
| Lighting for cab access                                      | + <sup>1)</sup> |
| Luminosity control (LED+ headlights)                         | + <sup>1)</sup> |
| Mini-joystick proportional                                   | +               |
| Movement restriction for boom                                | +               |
| Movement restriction for stick                               | +               |
| Operator's seat Comfort                                      | ●               |
| Operator's seat Premium                                      | +               |
| Overload warning system                                      | +               |
| Personalised operator profile                                | +               |
| Preparation for tiltrotator                                  | +               |
| Radio Comfort                                                | +               |
| Radio pre-installation                                       | ●               |
| Remote cab lock                                              | + <sup>1)</sup> |
| Retractable laminated two-piece windscreen                   | ●               |
| Roof sun shield                                              | +               |
| Roof window wiper                                            | +               |
| Rotating beacon on cab, LED, 1 piece                         | +               |
| Seat belt reminder                                           | +               |
| Smart Key                                                    | + <sup>1)</sup> |
| Special painting                                             | +               |
| Straight travel via mini-joystick                            | + <sup>1)</sup> |
| Sun visor                                                    | +               |
| Switch between high pressure and bucket cylinder controls    | +               |
| Travel speed management                                      | + <sup>1)</sup> |
| Windscreen bottom protection grid                            | +               |



## Equipment

|                                                      |                 |
|------------------------------------------------------|-----------------|
| Bucket cylinder rod protection                       | +               |
| Centralised lubrication extended for connecting link | +               |
| Floating boom                                        | +               |
| Grapple hydraulic lines (bucket cylinder inactive)   | +               |
| Headlight guard on boom, right                       | +               |
| Headlight guards on boom, right and left             | +               |
| Headlight on boom, left, LED+, 1 piece               | + <sup>1)</sup> |
| Headlight on boom, right, LED, 1 piece               | ● <sup>1)</sup> |
| Headlight on boom, right, LED+, 1 piece              | + <sup>1)</sup> |
| Headlight on stick, bottom, LED+, 1 piece            | + <sup>1)</sup> |
| Hydraulic hose guard Solidlink                       | +               |
| Liebherr bucket range                                | +               |
| Liebherr tooth system                                | +               |
| Load holding valve for bucket cylinder               | +               |
| Lubrication hoses protection on stick                | +               |
| Mono boom 5.70 m                                     | +               |
| Mono boom offset 5.65 m                              | +               |
| Mono boom straight 5.90 m                            | +               |
| Quick coupler SWA 48 hydraulic                       | +               |
| Quick coupler SWA 48 mechanical                      | +               |
| Solidlink electric signal plug                       | +               |
| Solidlink for quick coupler SWA 48 hydraulic         | +               |
| Special painting                                     | +               |
| Stick 2.50 m                                         | +               |
| Stick 2.90 m                                         | +               |
| Stick 3.50 m                                         | +               |
| Stick bottom protection                              | +               |
| Tool Management                                      | +               |
| Two-piece boom 5.90 m                                | +               |



## Assistance system

|                                                             |   |
|-------------------------------------------------------------|---|
| Machine control system Leica 2D passive – "3D ready"        | + |
| Machine control system Leica 2D semi-automatic – "3D ready" | + |
| Machine control system Leica 3D passive                     | + |
| Machine control system Leica 3D semi-automatic              | + |
| Preparation for machine control system                      | + |
| Preparation for weighing system                             | + |

● = Standard, + = Option

<sup>1)</sup> equipment not individually available, but only as predefined packages

Non-exhaustive list, please contact us for further information.

Options and / or special equipment, supplied by vendors other than Liebherr, are only to be installed with the knowledge and approval of Liebherr in order to retain warranty.

## Liebherr-France SAS

2 avenue Joseph Rey, B.P. 90287 • 68005 Colmar Cedex, France • Phone +33 389 213030  
info.lfr@liebherr.com • www.liebherr.com • www.facebook.com/LiebherrConstruction