

Pipelayer

RL 66

Litronic®

Preliminary Version

Max. Lift Capacity

98,100 kg / 216,273 lb

Engine

275 kW / 369 HP (SAE J1349)

275 kW / 374 HP (ISO 9249)

Stage IIIA / Tier 3

Stage IV / Tier 4f



LIEBHERR

Technical Data



Engine

| | |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Liebherr Diesel engine | D 946 A7 Emission regulations according to 97/68/EC, 2004/26/EC Stage IIIA/ Stage IV, EPA/CARB Tier 3/Tier 4f |
| Rated power ISO 9249 SAE J1349 | 275 kW/374 HP 275 kW/369 HP |
| Rated speed | 1,800 rpm |
| Displacement | 12 l/733 in ³ |
| Design | 6 cylinder in-line engine, water-cooled, turbocharged, air-to-air intercooler |
| Injection system | Direct fuel injection, Common Rail, electronic control |
| Lubrication | Pressurised lube system, engine lubrication guaranteed for inclinations up to 45° |
| Operating voltage | 24 V |
| Alternator | 140 A |
| Starter | 7.8 kW/11 HP |
| Batteries | 4 x 95 Ah/12 V |
| Air cleaner | Dry-type air cleaner with pre-cleaner, main and safety elements, control light in the operator's cab |
| Cooling system | Combi radiator, comprising radiators for water and charge air. Hydrostatic fan drive |



Hydraulics

| | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Hydraulic system | Load sensing (demand controlled) |
| Pump type | Swash plate piston pump |
| Pump flow max. | 283 l/min./74.7 gpm |
| Pressure limitation | 280 bar/4,060 psi |
| Control valve | 3 circuits, expandable to 6 |
| Filter system | Return filter with magnetic rod in the hydraulic tank |
| Control | Single joystick for hoist winch and adjustable boom cylinder, free all device of hook in case of danger. Further single joystick for counterweight. |



Travel Drive, Control

| | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------|
| Transmission system | Infinitely variable hydrostatic travel drive, independent drive for each track |
| Travel speed* | Continuously variable |
| Speed range 1 (reverse): | 0 – 4.0 km/h/2.5 mph (4.8 km/h/3.0 mph) |
| Speed range 2 (reverse): | 0 – 6.5 km/h/4.0 mph (7.8 km/h/4.8 mph) |
| Speed range 3 (reverse): | 0 – 10.5 km/h/6.5 mph (10.5 km/h/6.5 mph) |
| | * Travel speed ranges can be set on the travel joystick (memory function) |
| Electronic system | The electronic system automatically adjusts travel speed and drawbar pull to match changing load conditions |
| Steering | Hydrostatic |
| Service brake | Hydrostatic (self-locking), wear-free |
| Parking brake | Multi-disc brake, wear-free, automatically applied with neutral joystick position |
| Cooling system | Separate oil cooler, hydrostatic fan drive and thermostatically controlled |
| Filter system | Micro cartridge filter in the replenishing circuit |
| Final drive | Combination spur gear with planetary gear, double-sealed (duo cone seals) with electronic seal-integrity indicator |
| Control | Single joystick for all travel and steering functions |



Operator's Cab

| | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cab | Resiliently mounted cab with positive pressure ventilation, can be tilted with hand pump 40° to the rear. With integrated ROPS Rollover Protective Structure (EN ISO 3471) |
| Operator's seat | Air suspended comfort seat, fully adjustable |
| Monitoring | Touch screen: display of current machine information, automatic monitoring of operating conditions, individual setting of machine parameters |

Undercarriage

| | |
|-------------------------------------|------------------------------------------------------------------------------------|
| Design | Track frame, rigid |
| Mounting | Elastic components at a separate pivot |
| Track chains | Lubricated, single-grouser shoes, tensioning via steel spring and grease tensioner |
| Links, each side | 48 |
| Track rollers, each side | 9 |
| Carrier rollers, each side | 2 |
| Sprocket segments, each side | 5 |
| Track shoes | 914 mm/36" |

Sound Levels

| | |
|-------------------------------------------|-----------|
| Operator sound exposure ISO 6396 | |
| L _{PA} (in the cab) | 78 dB(A) |
| Exterior sound pressure 2000/14/EC | |
| L _{WA} (to the environment) | 108 dB(A) |

Refill Capacities

| | |
|-------------------------------|------------------|
| Fuel tank | 660 l/ 174.2 gal |
| Cooling system | 68 l/ 18.0 gal |
| Engine oil with filter | 43 l/ 11.4 gal |
| Splitter box | 8,5 l/ 2.2 gal |
| Hydraulic tank | 129 l/ 34.1 gal |
| Final drive, each side | 22 l/ 5.8 gal |

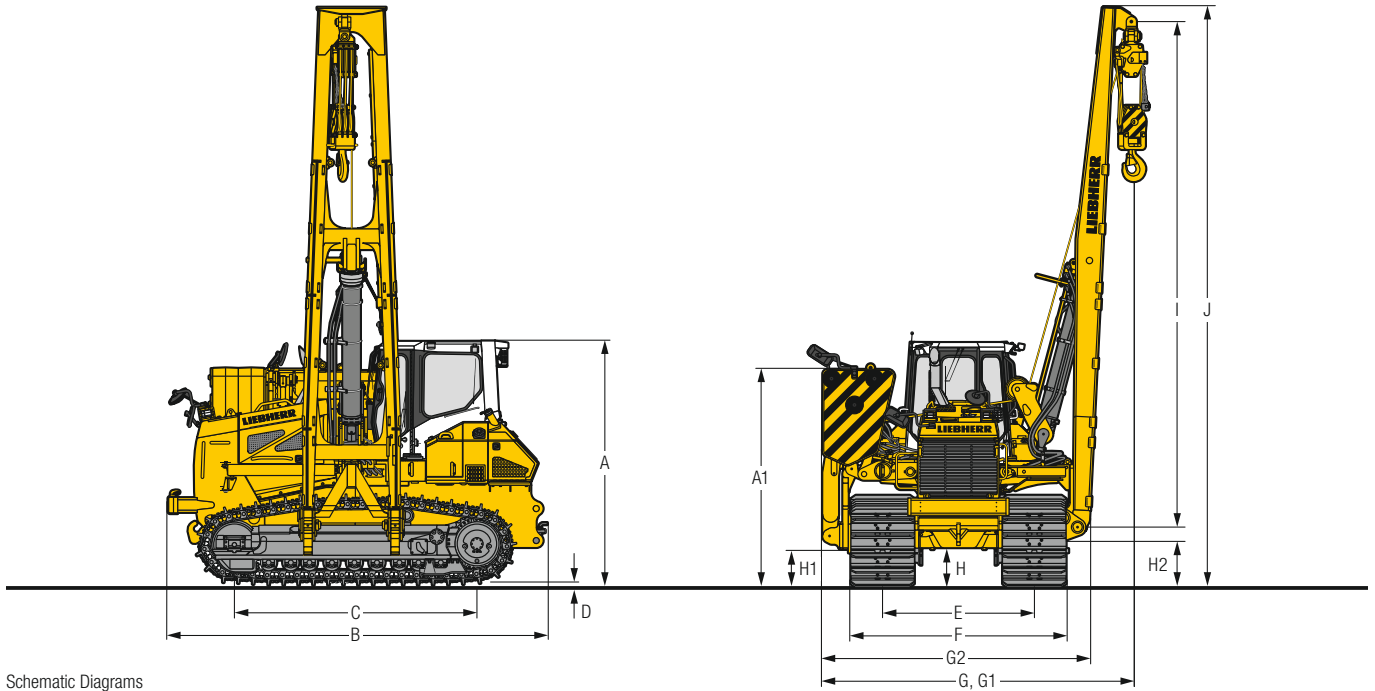
Hydraulic Winch

| | |
|------------------------------|----------------------------------------------------------------|
| Hoist winch | Variable flow hydraulic pump |
| Safety brake | Spring-loaded disk brake holds the load safely in any position |
| Drum diameter | 254 mm/ 10" |
| Drum length | 279 mm/ 10.98" |
| Flange diameter | 610 mm/ 24.02" |
| Cable diameter | 20 mm/ 0.8" |
| Cable length | 100 m/ 109.36 yd |
| Hook block | 4 sheaves |
| Hook speed (up, down) | 0 – 16.0 m/min/ 0 – 53 ft/min |
| Security | Free fall device |

Dawbar Pull

| | |
|-----------------------------|--------|
| Max. | 522 kN |
| at 1.5 km/h/ 0.9 mph | 522 kN |
| at 3.0 km/h/ 1.9 mph | 282 kN |
| at 6.0 km/h/ 3.7 mph | 141 kN |
| at 9.0 km/h/ 5.6 mph | 94 kN |

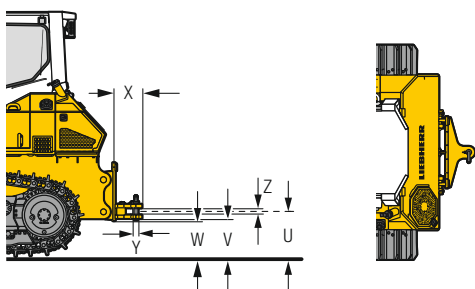
Dimensions and Weights



Schematic Diagrams

Dimensions

| Boom | | | Standard 8,500 mm | Optional 10,500 mm |
|-----------------------------|---------------------------------------------|------------|-------------------|--------------------|
| A | Height over cab | mm / ft-in | | 3,700 / 12'2" |
| A ₁ | Height over counterweight | mm / ft-in | | 3,543 / 11'7" |
| B | Overall length | mm / ft-in | | 5,795 / 19' |
| C | Length of track on ground | mm / ft-in | | 3,610 / 11'10" |
| D | Height of grousers | mm / in | | 84 / 3.31" |
| E | Track gauge | mm / ft-in | | 2,510 / 8'3" |
| F | Total width over undercarriage | mm / ft-in | | 3,348 / 11' |
| G | Width (counterweight retracted) | mm / ft-in | | 5,651 / 18'6" |
| G ₁ | Width (counterweight extended) | mm / ft-in | | 7,291 / 23'11" |
| G ₂ | Width (console to boom) | mm / ft-in | | 4,245 / 13'11" |
| H | Ground clearance | mm / ft-in | | 552 / 1'10" |
| H ₁ | Ground clearance of console | mm / ft-in | | 565 / 1'10" |
| H ₂ | Ground clearance of boom | mm / ft-in | | 682 / 2'3" |
| I | Boom length | mm / ft-in | 8,500 / 27'11" | 10,500 / 34'5" |
| J | Total height | mm / ft-in | 9,515 / 31'3" | 11,515 / 37'9" |
| K | Distance (outer edge of chain link to hook) | mm / ft-in | | 1,380 / 4'6" |
| Operating weight | | | 59,350 / 130,844 | 59,900 / 132,057 |
| Counterweight without frame | | | | 12,000 / 26,455 |
| Counterweight | | | | 15,985 / 35,241 |
| Weight of standard boom | | | 3,305 / 7,286 | 3,854 / 8,497 |

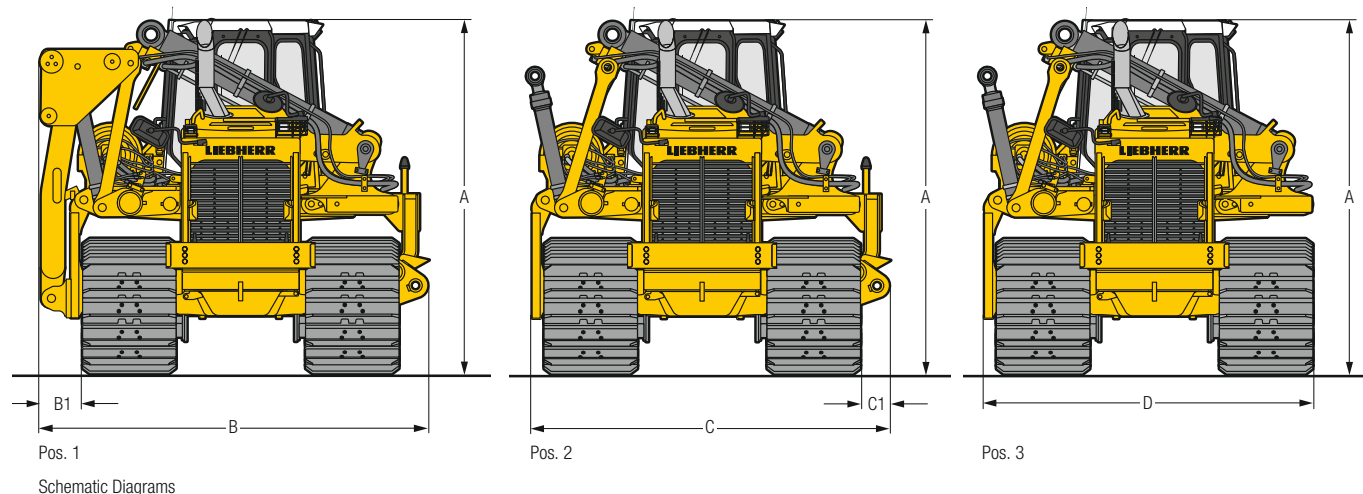


Schematic Diagrams

Drawbar

| | | | rigid |
|---|-------------------------------------------|------------|-------------|
| U | Height of jaw | mm / ft-in | 620 / 2' |
| V | Ground clearance below drawbar | mm / ft-in | 517 / 1'8" |
| W | Ground clearance below drawbar suspension | mm / ft-in | 467 / 1'6" |
| X | Additional length | mm / ft-in | 455 / 1'6" |
| Y | Socket pin diameter | mm / in | 60 / 2.36" |
| Z | Jaw opening | mm / in | 105 / 4.13" |
| | Weight | kg / lb | 577 / 1,272 |

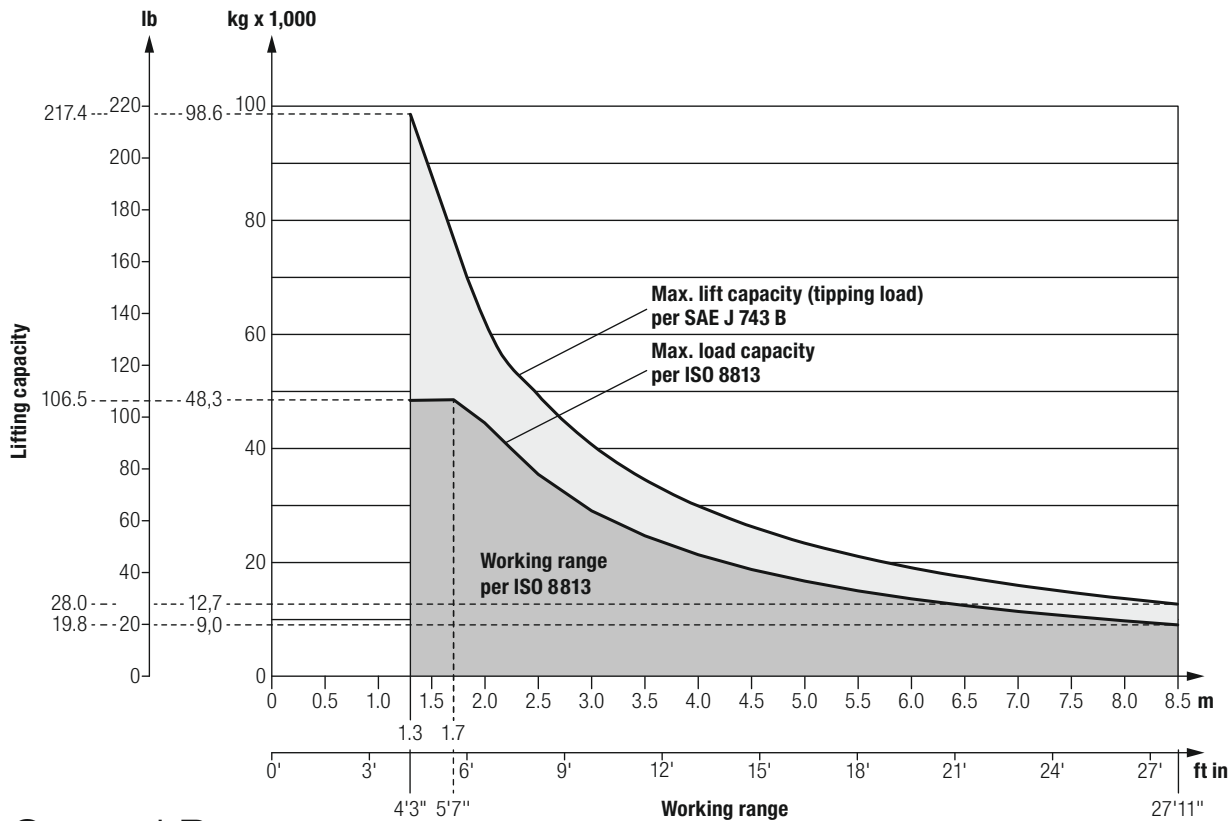
Transport Dimensions and Weights



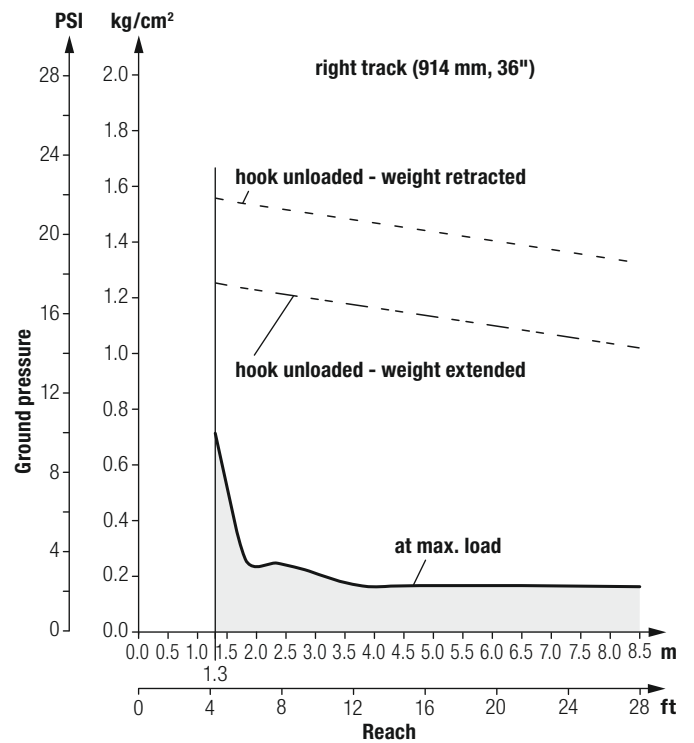
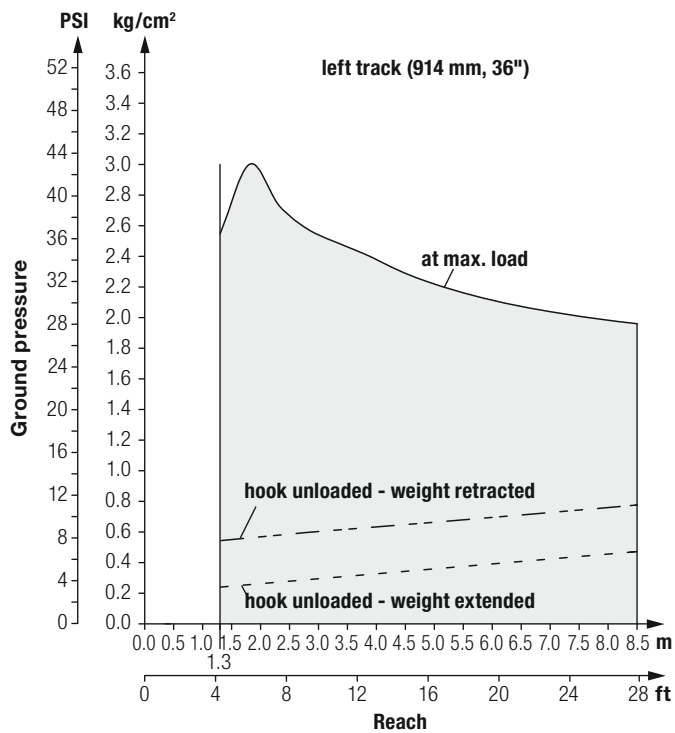
Transport Dimensions

| | | | displayed position |
|----------------------|--------------------------------------------|------------|--------------------|
| A | Total height | mm / ft-in | 3,700 / 12'2" |
| B | Overall width | mm / ft-in | 3,935 / 12'11" |
| B₁ | Width (from console to left track) | mm / ft-in | 481 / 1'7" |
| | Weight (Pos. 1) | kg / lb | 42,590 / 93,895 |
| C | Overall width | mm / ft-in | 3,824 / 12'7" |
| C₁ | Width (from console to right track) | mm / in | 327 / 12.87" |
| | Weight (Pos. 2) | kg / lb | 40,102 / 88,410 |
| D | Overall width | mm / ft-in | 3,497 / 11'6" |
| | Weight (Pos. 3) | kg / lb | 39,219 / 86,463 |

Lift Capacity (ISO 8813)



Ground Pressure (ISO 8813)



Equipment



Base Machine

| | |
|--------------------------------------------------------------------------------------------|----|
| Air filter with automatic dust ejector | + |
| Air filter, dry type, dual step, with pre-filter | • |
| Air pre-filter, Top Air | 1) |
| Battery compartment, lockable | • |
| Cooling fan front, tilt-out | • |
| Cooling fan rear, tilt-out | • |
| Cooling fan, hydraulically driven | • |
| Cooling fan, with safety guard | • |
| Data interface for data transmission (e.g. J1939) | 1) |
| DEF tank, lockable 2) | • |
| Diesel tank condensate drain | • |
| Double-glazing | + |
| Dust ejector, automatic | + |
| Dust ejector, manual | + |
| Dust extraction valve | • |
| Engine compartment doors, lockable | • |
| Engine cover, perforated | • |
| Engine doors, perforated | • |
| Fan reversal, manual (for operation at extremely low temperatures) | 1) |
| Filling with hydraulic fluid, cold resistant | + |
| Filling with Liebherr Basic 100 hydraulic fluid | + |
| Filling with Liebherr HVI hydraulic fluid | • |
| Fuel pre-filter, with electric heater | + |
| Fuel water separator | • |
| Fuel water separator with electric heater | + |
| Hot water heater with priority engine pre-heating and battery heating panel, disengageable | + |
| Insulation on battery compartment | + |
| Jump-start equipment | 1) |
| LiDAT – Data transmission system | + |
| Lifting cable | • |
| Load torque limitation | + |
| Lugs for crane lifting | + |
| Radiator guard heavy duty, front | • |
| Radiator guard hinged, front | • |
| Radiator, wide-meshed | • |
| Refuelling pump | + |
| Running gear components, cold-resistant | + |
| Simultaneous adjustment for travelling drive (dozer track) | 1) |
| Special paint, several colours | + |
| Special paint, single colour | + |
| Tarpaulins | + |
| Tool kit extended | + |
| Towing hitch rear | • |
| Towing lug front | • |



Tavel Drive

| | |
|--------------------------------|----|
| Electronic control | • |
| Emergency stop | • |
| Final drives planetary gear | • |
| Inch brake pedal | 1) |
| Load limit control, electronic | • |
| Oil cooler | • |
| Parking brake, automatic | • |
| Travel control, 3 speed ranges | • |
| Travel drive, hydrostatic | • |



Undercarriage

| | |
|---------------------------|---|
| Master link, two-piece | • |
| Pivot shaft, separate | • |
| Sprocket segments, bolted | • |
| Track frame, closed | • |
| Track frame, rigid | • |
| Track guide centre part | + |
| Tracks, oil-lubricated | • |



Operator's Cab

| | |
|------------------------------------------------------------------------------------------------------------|----|
| Air-conditioner | • |
| Armrests 3D adjustable | • |
| Cab heating | 1) |
| Coat hook | • |
| Dome light | • |
| Dormer window | • |
| Enclosed cab | • |
| Extension, seat back | + |
| Fire extinguisher in the cab | + |
| FOPS | 1) |
| Joystick control | • |
| Operator's seat Comfort, air-suspended | + |
| Operator's seat Premium, air-suspended | + |
| Operator's seat Standard, mechanical | • |
| Premium touchscreen display | • |
| Pressurised cab | • |
| Protective bracket for sensor on drive hydraulics | 1) |
| Protective bracket for sensor on operating hydraulics | 1) |
| Radio | + |
| Radio preparation kit | + |
| Rear mirror left and right | + |
| Rear mirror, inside | • |
| Rear view camera | + |
| ROPS integrated | • |
| Safety glass tinted | • |
| Sliding window for right-hand side windows | + |
| Socket 12 V | • |
| Sunblind, all around | + |
| Tilttable cab | • |
| Warm water heating | • |
| Warm water heating with priority for cab | + |
| Wide-angle interior mirror for reversing | • |
| Windshield wiper dormer window | 1) |
| Windshield wipers for all windows and doors in the cab without side window right and without dormer window | • |

• = Standard

+ = Option

1) on demand

2) only for stage IV/Tier 4f



Electrical System

| | |
|-------------------------------------------------------|----|
| 1 halogen working lights on right side on cable winch | • |
| 2 cold start batteries | • |
| 2 halogen working lights on engine hood, front | • |
| 2 halogen working lights on the cab, rear | • |
| 3 halogen working lights on left side | • |
| All working lights in LED version | + |
| Alternator 140 A | • |
| Amber beacon | + |
| Back-up alarm | + |
| Back-up alarm acoustic, disengageable | + |
| Battery main switch mechanical, lockable | • |
| Horn | • |
| Immobiliser, electronic | 1) |
| On-board voltage 24 V | • |
| Starter | • |



Control and Warning Lights

| | |
|-------------------------------------------------|---|
| Display engine coolant temperature | • |
| Display fuel level (digital) | • |
| Display travel speed ranges | • |
| Hour meter (digital) | • |
| Indicator light air filter contamination | • |
| Indicator light battery charge | • |
| Indicator light diesel engine | • |
| Indicator light hydraulic oil temperature | • |
| Indicator light oil filter contamination | • |
| Indicator light oil level in hydraulic oil tank | + |
| Indicator light pump replenishing pressure | • |
| Indicator parking brake | • |
| Overload warning system | + |



Hydraulic System

| | |
|----------------------------------|---|
| 3 additional circuit segments | + |
| 3 control blocks | • |
| Free fall device | • |
| Hydraulic control counterweight | • |
| Hydraulic control winch and boom | • |
| Hydraulic servo control | • |
| Hydraulic tank oil level control | + |
| Oil filter in hydraulic tank | • |
| Variable flow pump, load-sensing | • |



Attachments

| | |
|--------------------------------------------------------------------|----|
| Boom 27'10" | • |
| Boom 34'5" | + |
| Boom protection strips | + |
| Counterweight | • |
| Counterweight, rear | + |
| Drawbar rear, rigid with two lugs | + |
| Hook with rope | • |
| Hydraulic attachment kit for hydraulic pump, e.g. for crane | 1) |
| Hydraulic attachment kit for operation of generator and pipefacing | + |
| Mounting plate for third-party equipment | 1) |
| Winch, rear | 1) |

• = Standard

+ = Option

1) on demand

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

The Liebherr Group of Companies



Wide Product Range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services hold a high reputation in many industries. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

Exceptional Customer Benefit

Every product line provides a complete range of models in many different versions. With both their technical excellence and acknowledged quality, Liebherr products offer customers the highest benefits in practical applications.

State-of-the-art Technology

Liebherr attributes great importance to the product areas of core technology and components, in order to achieve its consistent, top-quality products. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for the construction equipment and mining trucks.

Worldwide and Family-Owned

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a group of more than 130 companies with over 41,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

www.liebherr.us

Liebherr-Werk Telfs GmbH

Hans Liebherr-Straße 35, A-6410 Telfs
☎ +43 50809 6-100, Fax +43 50809 6-7772
www.liebherr.com, E-Mail: sales.lwt@liebherr.com
www.facebook.com/LiebherrConstruction