



3090 Wheel loaders

Technical data

■ Electrical system

| | |
|-------------------|--------|
| Operating voltage | 12 V |
| Battery | 100 Ah |
| Alternator | 120 A |

■ Weights

| | |
|---|-------------------|
| Operating weight | 5,320 - 5,940 kg |
| Thrusting force (max.) | 5,000 - 5,200 daN |
| Thrust force (max.) | 8,135 daN |
| Lift capacity (max.) | 5,515 daN |
| Tipping load with bucket – machine straight, loading frame horizontal | 3,380 - 4,370 kg |
| Tipping load with bucket – machine pivoted, loading frame horizontal | 2,920 - 3,760 kg |
| Tipping load with bucket - machine straight, loading frame in lowest position | 5,010 - 6,660 kg |
| Tipping load with bucket - machine pivoted, loading frame in lowest position | 4,360 - 5,750 kg |
| Tipping load with pallet fork – machine straight, loading frame horizontal | 2,850 - 3,600 kg |
| Tipping load with pallet fork – machine pivoted, loading frame horizontal | 2,480 - 3,110 kg |
| Tipping load with pallet fork - machine straight, transport position | 3,430 - 4,430 kg |
| Tipping load with pallet fork - machine pivoted, transport position | 2,990 - 3,840 kg |

■ Driver's cab

| | |
|--------------|-----|
| Driver's cab | Cab |
|--------------|-----|

■ Filling levels

| | |
|---------------------------------|------|
| Tank capacity for fuel | 80 l |
| Tank capacity for hydraulic oil | 32 l |

■ Drive system

| | |
|---------------|--|
| Type of drive | ecDrive (Electronic Controlled Drive) |
| drive unit | hydrostatic via the transfer box and the drive shaft |

| | |
|-----------------------|--|
| Speed levels | 2 |
| Axle | PA 1422 |
| Travel speed Standard | 0-20 km/h |
| Travel speed Option 1 | 0-30 km/h |
| Travel speed Option 2 | 0-40 km/h |
| Operating brake | Drum brake (option: multi-disc brakes) |
| Parking brake | Drum brake (option: multi-disc brakes) |
| Differential lock | 100 % front axle + rear axle |

■ Hydraulic system

| | |
|--|-------------------|
| Drive hydraulics working pressure (max.) | 500 bar |
| Work hydraulics discharge volume (max.) | 93 (95-101) l/min |
| Work hydraulics working pressure (max.) | 235 bar |

■ Kinematics

| | |
|---------------------|-----------|
| Kinematics type | Z |
| Lifting cylinder | 1 |
| Tipping cylinder | 1 |
| Quick change system | hydraulic |

■ Steering

| | |
|-------------------|---|
| Steering type | hydraulically activated articulated pendulum steering |
| Steering cylinder | 1 |
| Oscillating angle | ± 10 degree |

■ Noise characteristic values

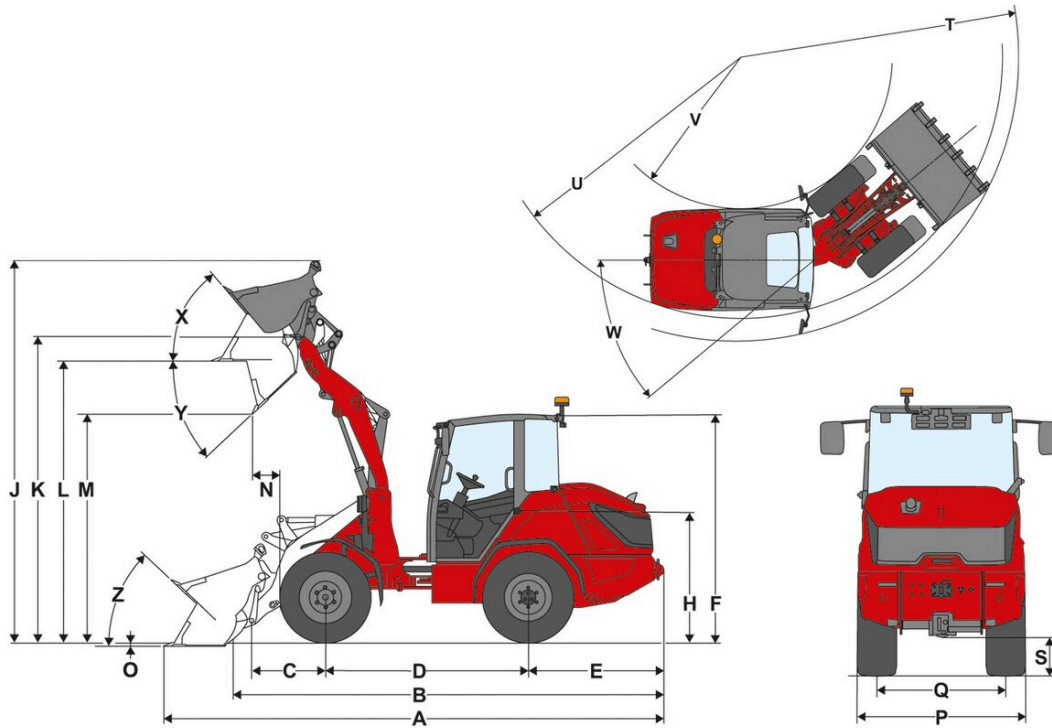
| | |
|--|------------|
| Average sound power level L _{WA} (cabin) | 99.5 dB(A) |
| Guaranteed sound power level L _{WA} (cabin) | 101 dB(A) |
| Specified sound pressure level L _{pA} (cabin) | 71 dB(A) |

■ Standard engine data

| | |
|---------------------|--------|
| Engine manufacturer | Rehiko |
|---------------------|--------|

| | | | |
|--------------|--------------|------------------------|-----------------------|
| Motor type | KDI 2504 TCR | Maximum torque | 310 Nm |
| Cylinder | 4 | Cylinder capacity | 2,482 cm ³ |
| Drive output | 55.4 kW | Type of coolant | Water |
| Drive output | 75 PS | Exhaust standard level | V |
| at max. rpm | 2,300 U/min | Exhaust aftertreatment | DOC/DPF |

Dimensions



| | | |
|---|--|----------|
| A | Total length | 5,590 mm |
| B | Total length without bucket | 4,880 mm |
| C | Bucket pivot point (to center of axle) | 1,120 mm |
| D | Wheel base | 2,150 mm |
| E | Rear overhang | 1,435 mm |
| F | Height with cab | 2,545 mm |
| H | Seat height | 1,520 mm |
| J | Total working height | 4,215 mm |
| K | Bucket pivot point (max. lift height) | 3,395 mm |
| L | Load-over height | 3,140 mm |
| M | Dumping height | 2,590 mm |
| N | Reach (at M) | 820 mm |
| O | Digging depth | 145 mm |
| P | Total width | 1,800 mm |
| Q | Track width | 1,440 mm |
| S | Ground clearance | 335 mm |
| T | Maximum external radius | 4,385 mm |
| U | Radius on the outer edge | 3,975 mm |
| V | Inner radius | 2,085 mm |
| W | Articulation angle | 40 ° |
| X | Rollback angle at max. lift height | 65 ° |
| Y | Dumping angle maximal | 45 ° |
| Z | Rollback angle on ground | 45 ° |

Standard components

Engine

- Rehlko KDI 2504 TCR, 55,4 kW / 75 PS (DOC/DPF), EU: Stage V

Steering system

- Hydraulic articulated pendulum steering
- Steering cylinder: 1

Operator's cab

- 1-door cabin, incl. heating and ventilation
- Generous amount of space in all driver's cabs
- Rearview mirrors (left and right)
- Ergonomically designed spacious entry
- 7-inch display incl. operation via Jog-Dial
- Adjustable steering column (tilt and height)
- Right armrest
- Heated rear windshield
- 1 socket: 3-pin 12V

Operator's seat

- Fabric seat, with mechanical suspension, safety belt, weight, backrest, and longitudinal adjustment

Lighting

- Lighting (halogen) compliant with StVZO road traffic regulations
- LED rear lights
- LED work lights, 2 front, 2 rear (1000 lm)

Drive system & Axles

- Axle: planetary axle PA1422
- Drive: Hydrostatic all-wheel drive, electronically controlled, ecDrive (Electronic Controlled Drive)
- Drive modes: Auto mode; ECO mode (reduction of engine speed when reaching the set speed)
- Differential lock: 100 %, electro-hydraulically controlled on the front and rear axles
- Speed: 20 km/h
- Speed stages: 2 | 10 km/h / 20 km/h
- Operating brake: Drum brake on front axle acting on rear axle via the driveshaft
- Parking brake: Drum brake - actuated using hand brake lever on the front axle, acting on the rear axle via the driveshaft

Tires

- 365 / 70 R 18 BKT Multimax MP 513 ET-10

Loading system

- Loader unit LS960
- Z-HV quickhitch facility (hydraulic)
- Kinematics: Z
- Lift cylinder: 1
- Tipping cylinder: 1
- Bucket status indicator
- Float position for lift cylinder

Hydraulics

- Electrically pilot-operated joystick with direction switch and integrated button for differential lock
- 3rd front control circuit, electrically proportional (flow-sharing) via joystick, incl. continuous function
- Oil flow adjustment 3rd control circuit via Jog-Dial through display
- Pressure release, 3rd front control circuit on the loader unit
- Joystick curve adjustment (loader unit sensitivity adjustable in 3 stages) via Jog-Dial on the display
- Hydraulic oil cooler

Other

- Exterior battery cut-off switch - mechanically isolating
- Fuel filler neck, right side in direction of travel

EquipCare (telematics)

- EquipCare 36 months

Options

Operator's cab & Cabine

- Two-piece cabin door
- Wide-angle rearview mirrors (left and right)
- Wide-angle rearview mirrors (left and right), power-adjustable and heated
- Seat fabric; air suspension; MSG297A/722
- Seat fabric; air suspension; heated seats; ventilated seats MSG297A/722 Premium
- Right and left armrests
- Headrest - Driver's seat
- Air conditioning
- DAB+ radio preparation (antenna, speakers)
- Full DAB+ Radio
- 2 outlets: 2xUSB / 3-pin
- Interior panoramic mirror
- Roman shade

Lighting

- LED lighting compliant with StVZO road traffic regulations
- LED Performance work lights (2000 lm) on roof, 2 front, 2 rear
- Active work lighting
- LED rotating beacon (orange), National regulations must be observed!

Approval & Road traffic

- Individual operating permit < 25 km/h
- Individual operating permit > 25 km/h
- Front and rear license plate bracket
- Triangular warning sign

Drive system & Axles

- Hand throttle
- Preheating: Coolant, hydraulic oil; 115 V, Type B plug
- Preheating: Cooling water, hydraulic oil; 230 V, Type E/F plug
- Preheating: Coolant, hydraulic oil; 230 V, Type J plug (Country: (CH))

Driving mode

- Driving Mode: Auto / Eco / Attachments
- Driving modes: Auto / Eco / M-Drive

Travel speed

- 30 km/h
- 40 km/h Power Drive
- Proportional speed limiter (slow-speed control device)
- Thrust limitation

Braking system

- Electro-hydraulic multi-disc brake, Spring-loaded actuator in the front axle, acting on the rear axle via a driveshaft, including hill-hold function

Tires

- 405/70 R 20 BKT Multimax MP 513 ET30, AS profile, width 1767 mm, height 2599 mm, 20/30/40 km/h
- 400/70 R 20 Trelleborg TH400 ET0, AS tread pattern, width 1844 mm, height 2593 mm, 20/30/40 km/h
- 550 / 45 - 22.5 Alliance 331 ET-50, AS tread pattern, width 2070 mm, height 2596 mm, 20/30/40 km/h
- 400/70 R 18 Alliance 585 ET0, EM profile, width 1824 mm, height 2569 mm, 20/30 km/h
- 445/70 R 19.5 Alliance 624 ET0, EM profile, width 1865 mm, height 2613 mm, 20/30/40 km/h
- 440 / 50 R 17 BKT TracSuper ET0, RP tread pattern, width 1861 mm, height 2496 mm, 20 km/h

Loading system

- Lowering brake valve (lift and tipping cylinder hose burst protection)
- Load arm damping
- Bucket level indicator
- Loader unit assistance package (automatic bucket retraction, lift height limit, shake function, Tilt-in-Assist)

Quick-change plates

- Weidemann HV/WL - L (hydraulic) (4080 / 5080)
- Euro (hydraulic - ISO23206 EURO HV) (incl. 2x SVK size 3)

Hydraulics

- Shell Panolin S4 HLP Synth46 (biohydraulic oil)

Hydraulics in front

- 3rd + 4th flow-sharing control circuit, operation: via control wheel at front on joystick
- Load Sensing - high-performance hydraulics 45 ccm (101 l/min)
- High Flow - high-performance hydraulics, single-acting (101 l/min)
- Unpressurized return line, front (1x Flatface size 3, plug) incl. overflow oil line (1x Flatface size 2, plug)
- Front quick coupling on 4th control circuit (Flatface size 2)
- Front quick coupling on 3rd control circuit (SVK size 3)
- Front quick coupling on 4th control circuit (SVK size 3)

Hydraulics in rear

- Rear hydro connection double-acting (2x SVK size 3), operation: via switch (1 - 0 - 2)
- Rear hydro connection double-acting via switch valve (2x SVK size 3), operation: via switch (0 - 1) + 3rd control circuit
- Rear hydro connection double-acting (2x SVK size 3) + double-acting via switch valve (2x SVK size 3)
- Unpressurized return line, rear (1x SVK size 3, plug) incl. overflow oil line (1x Flatface size 2, plug)

Electrical connections in front

- Front 13-pin socket, programmable function; E1 / E2; Lighting, Operation: Using the two buttons on the joystick

Electrical connections in rear

- 3-pin rear power outlet, Operation: Via switch; 1. Locking function, 2. Locking function
- 7-pin rear socket for lighting on rear-mounted equipment

Electrical system

Battery disconnect switch

- Battery disconnect switch in the driver's compartment - relay-operated
- Battery isolator with 2 circuits (Disconnects the vehicle electrical system and the alternator from the battery via 2 separate circuits)

Safety options

- Rear cross-traffic alert (audible)
- Rear Area Monitoring
- Seat belt monitoring
- Rearview camera
- Immobilizer ignition key, Operation: About coded ignition keys

Custom-made paint finish

- Special painting RAL single color - instead of Weidemann red
- Special painting RAL multicolored

Other

- Ballast weight base plate (200 kg)
- Toolbox incl. tool kit
- Combination bag (warning triangle / first aid kit)
- Fully automatic central lubrication system

Warranty extension

- Economy 24 months (2500 h)
- Economy 36 months (3000 h)
- Economy 48 months (3500 h)
- Economy 60 months (4000 h)
- Premium 24 months (3000 h)
- Premium 36 months (4000 h)
- Premium 48 months (5000 h)
- Premium 60 months (6000 h)

Trailer and recovery equipment

- Towing device 38 mm, automatic
- Shunting coupling (Not approved for use with trailers!)