COMPACT EXCAVATOR

E18ZS

FORCE

THAT FITS
Two-speed travel with automatic shifting provides faster transport speeds across large work areas or to the next job.

SMOOTH CONTROL
Load-sensing hydraulic system efficiently manages power for multiple functions, delivering smooth machine control with less effort.

EASY FIT
Variable-width undercarriage can be hydraulically retracted to access tight quarters where handwork was once required, then easily extended to provide a stable working platform.

DIG AND GO
Two-speed travel with automatic shifting provides faster transport speeds across large work areas or to the next job.
FIT IN
MORE WORK

Featuring a zero-tail-swing design and retractable undercarriage, the ultra-capable yet compact E18ZS squeezes more work out of areas where you would normally need a shovel. Load-sensing hydraulics provide smooth control. Plus its two-speed travel with automatic shifting and small size make this excavator quick and maneuverable, so you can easily move on to the next job.

GET IN CLOSE
Zero-tail-swing design lets the operator rotate the machine in tight spaces without worrying about hitting walls or obstacles.

BUILT TOUGH
Boom cylinder is positioned above the boom where it’s better protected from impact. Durable, tight-fitting steel bushings are easily interchangeable, further minimizing downtime.

SIMPLIFY SERVICE
Large door allows wide-open, ground-level access to daily checkpoints, for fast service. Grease fittings are also within easy reach.
## Engine
- **E18ZS**
- **Manufacturer and Model**: Yanmar 3TNV76-SNSE 12
- **Non-Road Emission Standard**: EU Stage IIIA
- **Gross Rated Power (ISO 14396)**: 13.8 kW at 2,200 rpm
- **Maximum Gross Torque (SAE J1995 and ISO 3046)**: 65.8 Nm @ 1,600 ±100 rpm
- **Cylinders**: 3
- **Piston Displacement**: 1.116 L

## Cooling
- Pusher-type cooling fan

## Hydraulics
- Designed for high digging capacity, productivity, and operating precision, and excellent fuel economy; summation system, boom and swing priority, and boom and arm regeneration provide optimum performance
- **Main Pump**: Variable-displacement pump
- **Maximum Discharge Flow**: 1 x 39.6 l/m (1 x 18 cc/rev at 100% efficiency)
- **Pilot Pump**: External pilot unit with safety valve and 2-speed control valve
- **System Operating Pressure**
  - Circuits: 24.0 MPa
  - Travel: 24.0 MPa
  - Swing: 15.0 MPa
  - Pilot: 3.0 MPa
  - Auxiliary: Preset to 24.0-MPa 1-way mode
- **Controls**: Hydraulic pilot controls with hydraulic-enable lever

## Powertrain
- **Travel Motor**: Axial piston motor
- **Maximum Drawbar Pull**: 12.9 kN
- **Travel Speeds**
  - High: 4.5 km/h
  - Low: 2.6 km/h

## Cylinders
- **Boom (2)**: Bore Diameter 65 mm, Rod Diameter 32 mm, Stroke 490 mm
- **Arm (1)**: Bore Diameter 55 mm, Rod Diameter 30 mm, Stroke 365 mm
- **Bucket (1)**: Bore Diameter 55 mm, Rod Diameter 30 mm, Stroke 344 mm

## Swing System
- **Motor**: Gerotor
- **Speed**: 9.5 rpm
- **Torque**: 1828 Nm

## Undercarriage
- Includes lubricated rollers, idlers, track adjusters (with shock-absorbing spring), and greased and sealed track chain with rubber track
- **Center Frame**: X-leg type with forged swing-bearing support integrally welded with reinforced box-section track frames
- **Track Frame**: Pentagonal box type
- **Number of Shoes (each side)**: 36
- **Rollers (each side)**: 3
- **Carrier**
  - **Track**: 3
  - **Track Guides (each side)**: 2
- **Shoe Width**: 230 mm

## Weight and Ground Pressure
- Standard configuration with 940-mm arm; 420-mm, 0.05-m³ bucket; and rubber track
- **Operating Weight**: 1836 kg
- **Ground Pressure**: 29.4 kPa
- **Counterweight**: 146 kg

## Electrical System
- **Alternator Rating**: 55 amp
- **Work Lights**: 3 front lights (2 on canopy, 1 on boom) and 1 rear light on canopy

---

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.
### Serviceability

<table>
<thead>
<tr>
<th>Refill Capacities (standard fill)</th>
<th>E18ZS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Tank</td>
<td>22 L</td>
</tr>
<tr>
<td>Engine Coolant</td>
<td>3.5 L</td>
</tr>
<tr>
<td>Engine Oil</td>
<td>3.5 L</td>
</tr>
<tr>
<td>Travel Final Device (each side)</td>
<td>0.33 L</td>
</tr>
<tr>
<td>Hydraulic System</td>
<td>21 L</td>
</tr>
<tr>
<td>Hydraulic Tank</td>
<td>11 L</td>
</tr>
</tbody>
</table>

### Operating Dimensions

<table>
<thead>
<tr>
<th>Arm Length</th>
<th>940 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Force</td>
<td></td>
</tr>
<tr>
<td>Bucket</td>
<td>18.7 kN</td>
</tr>
<tr>
<td>Arm</td>
<td>9.1 kN</td>
</tr>
<tr>
<td>Tooth</td>
<td></td>
</tr>
<tr>
<td>Maximum Reach</td>
<td>3899 mm</td>
</tr>
<tr>
<td>Maximum Reach at Ground Level</td>
<td>3848 mm</td>
</tr>
<tr>
<td>Maximum Digging Depth</td>
<td>2326 mm</td>
</tr>
<tr>
<td>Maximum Cutting Height</td>
<td>3462 mm</td>
</tr>
<tr>
<td>Maximum Loading Height</td>
<td>2436 mm</td>
</tr>
<tr>
<td>Minimum Slew Radius</td>
<td>1372 mm</td>
</tr>
<tr>
<td>Maximum Vertical Wall Digging Depth</td>
<td>1713 mm</td>
</tr>
<tr>
<td>Tail-Swing Radius</td>
<td>660 mm</td>
</tr>
</tbody>
</table>

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.
E18ZS

E18ZS Lift Capacities

Boldface type indicates stability-limited capacity; lightface type indicates hydraulically limited capacities, in kg. Ratings at bucket pivot with no bucket installed; machine equipped with 940-mm arm, no bucket, and rubber track, and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc.; capacities are based on ISO 10567.

<table>
<thead>
<tr>
<th>LOAD POINT HEIGHT</th>
<th>1.5 m</th>
<th>2.0 m</th>
<th>2.5 m</th>
<th>3.0 m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blade Down</td>
<td>Telescopic Travel Gear Extended</td>
<td>Blade Atop</td>
<td>Blade Down</td>
</tr>
<tr>
<td>2.5 m</td>
<td>781</td>
<td>410</td>
<td>374</td>
<td>469</td>
</tr>
<tr>
<td>2.0 m</td>
<td>716</td>
<td>376</td>
<td>339</td>
<td>431</td>
</tr>
<tr>
<td>1.0 m</td>
<td>1034</td>
<td>602</td>
<td>555</td>
<td>511</td>
</tr>
<tr>
<td>Ground Line</td>
<td>614</td>
<td>614</td>
<td>567</td>
<td>540</td>
</tr>
<tr>
<td>–1.0 m</td>
<td>614</td>
<td>614</td>
<td>567</td>
<td>540</td>
</tr>
<tr>
<td>–1.5 m</td>
<td>614</td>
<td>614</td>
<td>567</td>
<td>540</td>
</tr>
</tbody>
</table>

Machine Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>E18ZS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm Length</td>
<td>940 mm</td>
</tr>
<tr>
<td>Overall Length</td>
<td>3584 mm</td>
</tr>
<tr>
<td>Overall Height</td>
<td>2362 mm</td>
</tr>
<tr>
<td>Overall Width (over tracks)</td>
<td>990 mm</td>
</tr>
<tr>
<td>Maximum</td>
<td>1300 mm</td>
</tr>
<tr>
<td>Tail-Swing Radius</td>
<td>660 mm</td>
</tr>
<tr>
<td>Tumbler Distance</td>
<td>1223 mm</td>
</tr>
<tr>
<td>Overall Length of Crawler</td>
<td>1251 mm</td>
</tr>
<tr>
<td>Counterweight Clearance</td>
<td>448 mm</td>
</tr>
<tr>
<td>Overall Height (to top of cab)</td>
<td>2362 mm</td>
</tr>
<tr>
<td>Ground Clearance</td>
<td>156 mm</td>
</tr>
<tr>
<td>Overall Width of Upperstructure</td>
<td>980 mm</td>
</tr>
<tr>
<td>Track Gauge</td>
<td>760 mm</td>
</tr>
<tr>
<td>Shoe Width</td>
<td>230 mm</td>
</tr>
</tbody>
</table>

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.
### Key:
- Standard
- Optional or special

See your John Deere dealer for further information.

### E18ZS Engine
- Meets EU Stage IIIA emissions
- Engine coolant to –37 deg. C
- Engine preheater
- Fan guard
- Fuel/water separator
- Full-flow oil filter
- Isolation mounted
- Key start switch with electric fuel shutoff
- Single dry-type air filter
- Under-hood muffler

### E18ZS Upperstructure (continued)
- TOPS/FOPS (canopy)
- Vandal protection for service doors and fuel cap
- Zero-tail-swing configuration

#### Front Attachments
- Arm, 940 mm
- Backfill blade, 990-mm minimum to 1300-mm maximum
- Boom length, 1780 mm

#### Operator's Station
- Horn
- Hour meter
- Instrumentation lights
- Monitor system: Preheat indicator / Engine oil pressure warning light / Alternator charge warning light / Fuel gauge / Engine coolant warning light / Hour meter
- Work lights switch
- Propel levers and foldable pedals
- 2 travel speeds with automatic shifting
- Seat belt, 51 mm, retractable
- Seat fore/aft adjustment
- Vinyl seat (canopy only)

#### Electrical
- 12-volt accessory outlet
- Alternator, 55 amp
- Low-maintenance battery
- Blade-type multi-fused circuits
- Positive-terminal battery covers

#### Lights
- Work lights: Halogen / 2 mounted on operator's station / 1 mounted on boom

#### Hydraulic System
- Auxiliary function foot control
- Auxiliary hydraulic lines to end of boom
- Auxiliary return-flow selector valve
- Axial-piston swing motor
- Boom-swing foot control
- Open center with 1 variable-displacement pump and 1 fixed-gear pump
- Hydraulic pilot-operated controls for boom, arm, bucket, swing, boom swing, blade, travel, and auxiliary functions
- Mechanical swing brake
- Hydraulic-adjustable variable width (990–1300 mm)
- Planetary final drive
- Propel motor shield
- 2-speed axial-piston propel motors
- Rubber track, 230 mm
- Steel track, 230 mm

#### Undercarriage
- 360-deg. rotation
- Counterweight, 146 kg
- Hinged service-access doors

---

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.
While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.