FEATURES

24 SAE net hp (18 kW)
6300 lb. (2860 kg) standard operating weight
9 ft. 4 in. (2.85 m) maximum digging depth
14 ft. 11 in. (4.54 m) maximum reach at ground level
Excavator track-type undercarriage with hydraulic track adjustment—1.24 mph (2.0 km/h) maximum travel speed
50-degree pivot boom, left and right, allows tight-quarters digging and adds versatility
Standard dozer blade for backfilling and leveling
Standard walk-through canopy allows easy operator station access—optional high-visibility cab provides all-weather comfort
Exceptionally quiet operation
Easy daily maintenance
30 EXCAVATOR SPECIFICATIONS

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with PCSA and SAE Standards. Except where otherwise noted, these specifications are based on a unit with canopy (TOPS), 0.10 cu. yd. (0.8 m³) bucket, dozer blade, full fuel tank, 175-lb. (80 kg) operator and standard equipment.

<table>
<thead>
<tr>
<th>Rated Power @ 2350 rpm:</th>
<th>SAE</th>
<th>DIN 6270</th>
</tr>
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<tr>
<td>Net</td>
<td>24 hp (18 kW)</td>
<td>18 kW</td>
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Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 6270, using No. 2-D fuel at 35 API gravity. No derating is required up to 5000 ft. (1500 m) altitude.

**Engine:** Yanmar 3TN82-RJB

- Type: 4-stroke cycle, naturally aspirated diesel
- Bore and stroke: 3.23 x 3.39 in. (82 x 86 mm)
- No. of cylinders: 3
- Displacement: 83 cu. in. (1.362 L)
- Compression ratio: 18.06:1
- Maximum net torque @ 1600 rpm: 65 lb-ft (88 Nm) (9.0 kg-m)
- Lubrication: Pressure system w/full flow filter
- Cooling fan: Blower type
- Air cleaner: w/restriction indicator and safety element
- Electrical system: 12 volt w/alternator
- Battery: (12 volt)

**Swing Mechanism:**

- Max. oil flow: 2130 psi (14 700 kPa) (150 kg/cm²)
- System operating pressure: 2130 psi (14 700 kPa) (150 kg/cm²)
- Boom and Arm:
  - Chain: Heat-treated, lubricated
  - Sheave: Single flange lower track rollers
  - Undercarriage:
    - Propel motor and hydraulic line covers
    - Single flange lower track rollers
    - Bolt-on rock guards - front idler and drive sprocket

**Swing Speed:****

- Swing speed: 0-10 rpm
- Swing lock: Manual for transporting
- Turntable bearing: Single-row, shear-type ball bearing with induction-hardened, lubricated internal gear and pinion.

**Undercarriage:**

- Propelmotors (one for each side): Axial-piston hydraulic motors with planetary drives. Hydraulic brake valve. Independent drive to each track permits counterrotation.
- Dozer blade:
  - 3.5 in. (80 mm) high, 5 ft. (1.52 m) wide
  - 2700 psi (18 615 kPa) (190 kg/cm²)

- Boom and Arm:
  - 3.2 in. (80 mm) x 23.8 in. (510 mm)
  - 3.2 in. (80 mm) x 23.6 in. (508 mm)
  - 2700 psi (18 615 kPa) (190 kg/cm²)

- Boom and Arm:
  - 2.8 in. (70 mm) x 23.8 in. (510 mm)
  - 2.8 in. (70 mm) x 23.6 in. (508 mm)

**Track Frame:**

- Heavy-duty undercarriage frame with all-welded, stress-relieved construction. Side frames welded to track frame.

**Optional or Special Equipment:**

- Cab:
  - Cigarette lighter and ashtray
  - Coat hook
  - Floor mat
  - Integral TOPS structure
  - Interior light
  - Roof hatch
  - Vinyl seat with fore and aft adjustment
  - Windshield wiper

- Windows:
  - Wrap-around split-glass front window, top-half slides vertically
  - Roll-down cab door window
  - Sliding right-side window

- Auxiliary valve function - for optional attachments

- Additional Standard Equipment:
  - Canopy:
    - Horn
    - Positive position hand throttle
    - Operator's manual compartment
    - Monitor system:
      - Air cleaner restriction light
      - Alternator charge indicator light
    - Engine oil pressure warning light w/audible alarm
  - Gauges:
    - Engine coolant temperature
    - Fuel level
    - Hour meter
    - Glow (pre-heater) indicator light
  - Engine:
    - Cold weather (pre-heater) starting aid
    - Dual fuel filters
    - Automatic fuel air-bleed system
  - Lights:
    - (1) Frame mounted
    - Front attachment:
      - One-piece boom
      - Dirt seals on all bucket pins
      - Bolt-on bucket teeth
    - Undercarriage:
      - Propel motor and hydraulic line covers
      - Single flange lower track rollers
      - Bolt-on rock guards - front idler and drive sprocket
    - Seat bell
    - Lift hooks

- Battery: (12 volt)

- Reserve capacity: 120 minutes

- Battery (12 volt)

- Control conversion kit (to SAE pattern)
EXCAVATOR SPECIFICATIONS AND DIMENSIONS

Dimensions:
- Max. digging depth w/o blade: 8 ft. 8 in. (2.65 m)
- Max. digging depth w/ blade: 9 ft. 4 in. (2.85 m)
- Max. reach @ ground level: 14 ft. 11 in. (4.54 m)
- Max. dumping height: 9 ft. 3 in. (2.83 m)
- Max. swing angle right/left: 50°/50°
- Boom offset distance @ maximum:
  - right: 19.7 in. (500 mm)
  - left: 19.7 in. (500 mm)

Forces:
- Max. arm digging force: 2910 lb. (12.9 kN) (1320 kg)
- Max. bucket digging force: 4520 lb. (20.1 kN) (2050 kg)

Flotation:
- 13 in. (320 mm) Shoes
  - Average ground contact area: 1628 sq. in. (10 503 cm²)
  - Canopy:
    - Average ground pressure: 3.87 psi (26.7 kPa) (.272 kg/cm²)
  - Cab:
    - Average ground pressure: 4.05 psi (27.9 kPa) (.285 kg/cm²)

Performance:
- Swing speed: 0-10 rpm
- Travel speed: 1.24 mph (2.0 km/h)
- Gradability: 58 percent (30 degrees)

BUCKETS:

<table>
<thead>
<tr>
<th>Bite Width w/ Sidecutters</th>
<th>SAE Heaped</th>
<th>Weight</th>
</tr>
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<tbody>
<tr>
<td>18 in. (450 mm)</td>
<td>.10 cu. yd. (.08 m³)</td>
<td>145 lb. (66 kg)</td>
</tr>
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### 30 EXCAVATOR LIFT CAPACITIES WITH CAB

Ratings at bucket lift hook, machine equipped with 13-in. (320 mm) shoes, 0.10 cu. yd. (0.08 m³) PCSA heaped bucket, counterweight, situated on firm, uniform supporting surface. **Boldface** type indicates hydraulic-limited capacities, lightface type indicates stability-limited capacities, in lb. (kg). Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine.

**Blade on Ground**
- **Note:** Upper figure - lifting over front (blade end), lower figure - lifting over side or 360 degrees.

<table>
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<tr>
<th>Blade on Ground</th>
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<th>9 ft. 10 in. (3.0 m)</th>
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<td>9 ft. 10 in. (3.0 m)</td>
<td>—</td>
<td>925 (420)</td>
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<td>6 ft. 7 in. (2.0 m)</td>
<td>—</td>
<td>1102 (500)</td>
<td>1036 (470)</td>
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<tr>
<td>3 ft. 3 in. (1.0 m)</td>
<td>—</td>
<td>1500 (680)</td>
<td>1146 (520)</td>
</tr>
<tr>
<td>Ground</td>
<td>3175 (1440)</td>
<td>2105 (950)</td>
<td>1190 (540)</td>
</tr>
<tr>
<td>-3 ft 3 in. (-1.0 m)</td>
<td>2755 (1250)</td>
<td>1168 (530)</td>
<td>1278 (580)</td>
</tr>
<tr>
<td>-4 ft. 11 in. (-1.5 m)</td>
<td>2645 (1200)</td>
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<td>1389 (630)</td>
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**Blade Above Ground**
- **Note:** Upper figure - lifting over front or rear, lower figure - lifting over side or 360 degrees.

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### 30 EXCAVATOR LIFT CAPACITIES WITH CANOPY

Ratings at bucket lift hook, machine equipped with 13-in. (320 mm) shoes, 0.10 cu. yd. (0.08 m³) PCSA heaped bucket and counterweight, situated on firm, uniform supporting surface. **Boldface** type indicates hydraulic-limited capacities, lightface type indicates stability-limited capacities, in lb. (kg). Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine.

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Digging Depth and Reach:

Max. digging depth

1.4 in. (35 mm)
19.7 in. (500 mm)
19.7 in. (500 mm)
18 in. (450 mm)

Boom swing angle

4 ft. 7 in. (1.40 m)
5 ft. 0 in. (1.52 m)
1.4 in. (35 mm)
19.7 in. (500 mm)
19.7 in. (500 mm)
50°

Ground line

Max. digging