

# Product Specifications For 249D3



## Engine

|                                     |               |
|-------------------------------------|---------------|
| Gross Power - SAE J1995:2014        | 50.1 kW       |
| Displacement                        | 2.2 l         |
| Bore                                | 84 mm         |
| Stroke                              | 100 mm        |
| Net Power - ISO 9249                | 49.6 kW       |
| Net Power                           | 49.1 kW       |
| Net Power - SAE 1349                | 49.1 kW       |
| Peak Torque - 1,500 rpm - SAE J1995 | 208 N·m       |
| Engine Model                        | Cat C2.2 CRDI |

## Operating Specifications

|                                                 |                     |
|-------------------------------------------------|---------------------|
| Rated Operating Capacities - 35% Tipping Load   | 790 kg              |
| Tipping Load                                    | 2260 kg             |
| Breakout Force - Tilt Cylinder                  | 1772 kg             |
| Ground Contact Area - With 320 mm/12.6 in Track | 0.89 m <sup>2</sup> |
| Ground Pressure - With 320 mm/12.6 in Track     | 39.3 kPa            |

|                                                                |                     |
|----------------------------------------------------------------|---------------------|
| <b>Ground Contact Area -<br/>With 400 mm/15.7 in<br/>Track</b> | 1.11 m <sup>2</sup> |
|----------------------------------------------------------------|---------------------|

|                                                        |          |
|--------------------------------------------------------|----------|
| <b>Ground Pressure - With<br/>400 mm/15.7 in Track</b> | 32.2 kPa |
|--------------------------------------------------------|----------|

|                                                              |         |
|--------------------------------------------------------------|---------|
| <b>Rated Operating<br/>Capacities - 50%<br/>Tipping Load</b> | 1130 kg |
|--------------------------------------------------------------|---------|

|             |                                                                                                                                                                                                                                                                                                                                               |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note</b> | Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, 1730 mm (68 in) low profile bucket, 320 mm (12.6 in) tracks, standard flow hydraulics, C0 cab (OROPS, static seat), 850 CCA battery, manual quick coupler, no self level and no optional counterweights (unless otherwise noted). |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                     |         |
|---------------------------------------------------------------------|---------|
| <b>Rated Operating<br/>Capacity with Optional<br/>Counterweight</b> | 1225 kg |
|---------------------------------------------------------------------|---------|

## Weights

|                             |         |
|-----------------------------|---------|
| <b>Operating<br/>Weight</b> | 3552 kg |
|-----------------------------|---------|

|             |                                                                                                                                                                                                                                                                                                                                               |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Dimensions

|                                     |         |
|-------------------------------------|---------|
| <b>Length - Track on<br/>Ground</b> | 1384 mm |
|-------------------------------------|---------|

|                               |         |
|-------------------------------|---------|
| <b>Overall Length - Track</b> | 1808 mm |
|-------------------------------|---------|

|                            |         |
|----------------------------|---------|
| <b>Height - Top of Cab</b> | 2039 mm |
|----------------------------|---------|

|                         |        |
|-------------------------|--------|
| <b>Ground Clearance</b> | 194 mm |
|-------------------------|--------|

|                                                     |         |
|-----------------------------------------------------|---------|
| <b>Departure Angle</b>                              | 34.5°   |
| <b>Maximum Dump Angle</b>                           | 48°     |
| <b>Vehicle Width (400 mm/15.7 in tracks)</b>        | 1756 mm |
| <b>Length - With Bucket on Ground</b>               | 3233 mm |
| <b>Maximum Overall Height</b>                       | 3831 mm |
| <b>Bucket Pin Height - Carry Position</b>           | 219 mm  |
| <b>Maximum Reach - With Arms Parallel to Ground</b> | 1317 mm |
| <b>Length - Without Bucket</b>                      | 2523 mm |
| <b>Turning Radius from Center - Machine Rear</b>    | 1458 mm |
| <b>Bucket Pin Height - Maximum Lift</b>             | 3002 mm |
| <b>Clearance at Maximum Lift and Dump</b>           | 2253 mm |
| <b>Vehicle Width (320 mm/12.6 in tracks)</b>        | 1676 mm |
| <b>Turning Radius from Center - Coupler</b>         | 1160 mm |

|                                            |                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reach - Maximum Lift/Dump</b>           | 727 mm                                                                                                                                                                                                                                                                                                                                        |
| <b>Rack Back Angle - Maximum Height</b>    | 87.5°                                                                                                                                                                                                                                                                                                                                         |
| <b>Turning Radius from Center - Bucket</b> | 2060 mm                                                                                                                                                                                                                                                                                                                                       |
| <b>Note</b>                                | Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, 1730 mm (68 in) low profile bucket, 320 mm (12.6 in) tracks, standard flow hydraulics, C0 cab (OROPS, static seat), 850 CCA battery, manual quick coupler, no self level and no optional counterweights (unless otherwise noted). |
| <b>Bucket Pin Reach - Maximum Lift</b>     | 311 mm                                                                                                                                                                                                                                                                                                                                        |

## Cab

|             |                       |
|-------------|-----------------------|
| <b>ROPS</b> | ISO 3471:2008         |
| <b>FOPS</b> | ISO 3449:2005 Level I |

## Hydraulic System

|                                                                  |           |
|------------------------------------------------------------------|-----------|
| <b>Hydraulic Flow - Standard - Loader Hydraulic Pressure</b>     | 23000 kPa |
| <b>Hydraulic Flow - High Flow - Loader Hydraulic Flow</b>        | 99 L/min  |
| <b>Hydraulic Flow - High Flow - Loader Hydraulic Pressure</b>    | 23000 kPa |
| <b>Hydraulic Flow - High Flow - Hydraulic Power (Calculated)</b> | 38 kW     |
| <b>Hydraulic Flow - Standard - Loader Hydraulic Flow</b>         | 69 L/min  |
| <b>Hydraulic Flow - Standard - Hydraulic Power (Calculated)</b>  | 26.5 kW   |

## Power Train

|                                                      |          |
|------------------------------------------------------|----------|
| <b>Travel Speed - Forward or Reverse - One Speed</b> | 8.1 km/h |
|------------------------------------------------------|----------|

Travel Speed - Forward or Reverse - Two Speed

12.2 km/h

## Service Refill Capacities

|                  |      |
|------------------|------|
| Engine Crankcase | 10 l |
|------------------|------|

|           |      |
|-----------|------|
| Fuel Tank | 57 l |
|-----------|------|

|                  |      |
|------------------|------|
| Hydraulic System | 45 l |
|------------------|------|

|                |      |
|----------------|------|
| Cooling System | 12 l |
|----------------|------|

|                |      |
|----------------|------|
| Hydraulic Tank | 34 l |
|----------------|------|

## Noise Level

|                |           |
|----------------|-----------|
| Outside Cab*** | 103 dB(A) |
|----------------|-----------|

|              |          |
|--------------|----------|
| Inside Cab** | 83 dB(A) |
|--------------|----------|

|                 |                                                                                                                                                         |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note (3)</b> | ***The labeled sound power level for the CE marked configurations when measured according to the test procedure and conditions specified in 2000/14/EC. |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|

|                 |                                                                                                                                                                                                                                                                     |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Note (2)</b> | **The declared dynamic operator sound pressure levels per ISO 6396:2008. The measurements were conducted with the cab doors and windows closed and at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds. |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                 |                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------|
| <b>Note (1)</b> | Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe. |
|-----------------|-----------------------------------------------------------------------------------------|

## Air Conditioning System (If Equipped)

|                         |                                                                                                                                                                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Air Conditioning</b> | The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.81 kg of refrigerant which has a CO2 equivalent of 1.158 metric tonnes. |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 249D3 Standard Equipment

### ELECTRICAL

12 volt Electrical System

80 ampere Alternator

Ignition Key Start/Stop Switch

Lights: Gauge Backlighting, Two Rear Tail Lights, Two Adjustable Front and Rear Halogen Lights, Dome Light

Backup Alarm

Heavy Duty Battery, 850 CCA

## **OPERATOR ENVIRONMENT**

Gauges: Fuel Level, Hour Meter

Operator Warning System Indicators: Air Filter Restriction, Alternator Output, Armrest Raised/Operator Out of Seat, Engine Coolant Temperature, Engine Oil Pressure, Glow Plug Activation, Hydraulic Filter Restriction, Hydraulic Oil Temperature, Park Brake Engaged

Adjustable Vinyl Seat

Fold In Ergonomic Contoured Armrest

Control Interlock System, when operator leaves seat or armrest raised: Hydraulic System Disables, Hydrostatic Transmission Disables, Parking Brake Engages

ROPS Cab, Open, Tilt Up

FOPS, Level I

Top and Rear Windows

Floor Mat

Interior Rearview Mirror

12 volt Electric Socket

Horn

Hand (Dial) Throttle, Electronic

Adjustable Joystick Controls

Anti-theft Security System with 6-button Keypad

Storage Compartment with Netting

## **POWER TRAIN**

Cat C2.2, Turbo Diesel Engine, Meeting Tier 4 Final and Stage V emission standards

Air Cleaner, Dual Element, Radial Seal

S-O-SSM Sampling Valve, Hydraulic Oil

Filters, Cartridge-type, Hydraulic

Filters, Canister-type, Fuel and Water Separator

ATAAC/Radiator/Hydraulic Oil Cooler (side-by-side)

Spring Applied, Hydraulically Released Parking Brakes

Hydrostatic Transmission, Two Speed Travel

Suspension – Independent Torsion Axles (4)

## **OTHER**

Engine Enclosure, Lockable

Extended Life Antifreeze, -36° C (-33° F)

Machine Tie Down Points (6)

Support, Lift Arm

Hydraulic Oil Level Sight Gauge

Radiator Coolant Level Sight Gauge

Radiator, Expansion Bottle

Cat ToughGuard™ Hose  
Auxiliary, Hydraulics, Continuous Flow  
Heavy Duty, Flat Faced Quick Disconnects with Integrated Pressure Release  
Split D-Ring to Route Work Tool Hoses Along Side of Left Lift Arm  
Electrical Outlet, Beacon  
Belly Pan Cleanout  
Variable Speed Demand Fan  
Product Link™ PL240, Cellular

## **MANDATORY EQUIPMENT**

Hydraulics, Standard or High Flow  
Quick Coupler, Mechanical or Powered  
High Visibility Seat Belt, 50 mm (2 in) or 75 mm (3 in)  
EU Preparation Package (Europe only)  
Steel Imbed Rubber Track – 320 mm (12.6 in) Block Tread or 400 mm (15.7 in) Bar Tread  
Dual Flange Front Idler/Single Flange Rear Idler

### **PERFORMANCE PACKAGES:**

- Performance Package H1: Standard Flow Hydraulics (No Self Level)
- Performance Package H2: Standard Flow Hydraulics, Dual Direction Electronic Self Level (Raise and Lower), Work Tool Return to Dig, Work Tool Positioner, and Electronic Snubbing (Raise and Lower)
- Performance Package H3: High Flow Hydraulics, Dual Direction Electronic Self Level (Raise and Lower), Work Tool Return to Dig, Work Tool Positioner, and Electronic Snubbing (Raise and Lower)

### **COMFORT PACKAGES**

- Open ROPS (C0): Static Seat (No Foot Throttle, Headliner, Heater or Door)
- Open ROPS (C1): Foot Throttle, Headliner, Cup Holder, and choice of Seat (Mechanical Suspension or High Back, Heated, Air Ride Seat) (No Heater or Door)
- Enclosed ROPS with Heater (C2): Foot Throttle, Headliner, Heater and Defroster, Side Windows, Cup Holder, Radio Ready, choice of Seat (Mechanical Suspension or High Back, Heated, Air Ride Seat) and Door (Glass or Polycarbonate)
- Enclosed ROPS with A/C (C3): C2 + Air Conditioner

## **249D3 Optional Equipment**

## **OPTIONAL EQUIPMENT**

Hand-Foot Style Controls  
External Counterweights  
Beacon, Rotating  
Engine Block Heater – 120V  
Oil, Hydraulic, Cold Operation  
Paint, Custom  
Product Link PL641, Cellular  
Ride Control  
Advanced Display with Rearview Camera: Full Color, 127 mm (5 in) LCD screen, Advanced Multi-operator Security System, On-screen Adjustments for Implement Response, Hystat Response, and Creep Control. (Standard Equipment in Europe Only)  
Work Tool Return to Dig and Work Tool Positioner  
Bluetooth® Radio with Microphone (AM/FM/Weather Band Receiver with USB and Auxiliary Input Jack)